

Contents

Acknowledgments	23
Abbreviations	25
1 Introduction	1
1.1 The Japhug language	1
1.2 The Japhug corpus	2
1.3 Structure of the grammar	4
1.4 Language and culture	4
2 A grammatical sketch	5
2.1 Phonology and word structure	5
2.2 Parts of speech	6
2.3 Nominal morphology	7
2.3.1 Non-attested nominal morphological categories	7
2.3.2 Number	7
2.3.3 Case marking	9
2.3.4 Possession	10
2.3.5 Compounding	13
2.3.6 Derivations	14
2.4 Verbal morphology	15
2.4.1 Overview	15
2.4.2 Indexation	16
2.4.3 Orientation preverbs and TAME	19
2.4.4 Non-finite verb forms	23
2.4.5 Associated motion	26
2.4.6 Voice	27
2.4.7 Denominal derivations	31
2.5 Core and oblique arguments	32
2.5.1 Neutral alignment	33
2.5.2 Nominative-accusative alignment	33
2.5.3 Subjecthood	33

Contents

2.5.4	Objecthood	34
2.5.5	Absolutive-ergative alignment	35
2.5.6	Ditransitive verbs	36
2.6	Word order	36
2.7	Subordination	36
2.7.1	Relative clauses	36
2.7.2	Complement clauses	37
2.7.3	Other subordinate clauses	38
2.8	Remarkable features	39
2.8.1	Consonant clusters	39
2.8.2	Direct-inverse	40
2.8.3	Inflectionalization	40
2.8.4	Prefixal chain	41
2.8.5	Hybrid indirect speech	41
2.8.6	The expression of degree and comparison	42
2.8.7	Japhug morphology and Trans-Himalayan comparative linguistics	43
3	Phonology	47
3.1	Introduction	47
3.2	Consonants	47
3.2.1	Onsets	47
3.2.2	Codas	50
3.3	Vowels and rhymes	52
3.3.1	Vowels	52
3.3.2	Rhymes	54
3.3.3	Historical phonology	55
3.4	Syllabic constraints	57
3.4.1	Rhotic dissimilation	57
3.4.2	Uvular harmony	58
3.5	Neutralization, quasi-neutralization and free variation	59
3.5.1	The contrast between /-ɔŋ/ and /-aŋ/	59
3.5.2	The contrast between /u/ and /i/ after palatal and alveolo-palatal consonants	60
3.5.3	The contrast between /ɤ/ and /e/ after palatal and alveolo-palatal consonants	65
3.5.4	The contrast between /ɤ/ and /a/	65
3.6	Speech errors and self-corrections	66

3.7 Suprasegmentals	67
3.8 Word structure	68
3.8.1 Wordhood	68
3.8.2 Non-final syllables	69
4 Consonant clusters and partial reduplication	71
4.1 Partial Reduplication	71
4.2 Inventory of consonant clusters	72
4.2.1 Preinitials	73
4.2.2 Medials	87
4.2.3 Summary	99
4.3 Sandhi	104
4.4 Tibetan script-based orthography	106
5 Nominal morphology	109
5.1 Possessive prefixes	109
5.1.1 Possessive paradigm	109
5.1.2 Inalienably possessed nouns	116
5.1.3 Indefinite vs. generic possessor	134
5.1.4 Prenominal modifiers	137
5.2 Unpossessible nouns	139
5.2.1 Place names	139
5.2.2 Colour nouns	142
5.2.3 Other unpossessible nouns	143
5.3 Personal names	144
5.3.1 Vocative	144
5.3.2 Tibetan names	144
5.3.3 Alienably possessed or unpossessible nouns?	145
5.3.4 Personal names and modifiers	146
5.4 Status constructus	148
5.4.1 Vowel alternations in non-final members of compounds	149
5.4.2 Other alternations	149
5.4.3 Final member of compounds	152
5.5 Compound nouns	154
5.5.1 Noun-Noun compounds	155
5.5.2 Verb-Verb compounds	158
5.5.3 Noun-Ideophone compounds	160
5.5.4 Adverb-Verb compounds	160
5.5.5 Noun-Verb compounds	161

Contents

5.5.6	Verb-Noun compounds	168
5.6	Noun class prefixes	169
5.6.1	Uvular animal name prefix	169
5.6.2	Velar animal name prefix	169
5.6.3	Uvular plant name prefix	171
5.6.4	Other uses of the uvular class prefix	171
5.6.5	Body part noun prefixes	171
5.7	Nominal derivations	171
5.7.1	Privative	172
5.7.2	Relative location	173
5.7.3	Diminutive	174
5.7.4	Augmentative	175
5.7.5	Derogatory	175
5.7.6	Inhabitant	176
5.7.7	Gender	176
5.7.8	Collective	176
5.7.9	Superlative	184
5.7.10	Unattested derivations	185
5.8	Denominal adverbs and postpositions	186
5.8.1	Comitative adverbs	186
5.8.2	Reduplicated perlative	189
5.8.3	-z suffix	189
5.8.4	s- prefix	189
6	Pronouns	191
6.1	Personal pronouns	191
6.1.1	Honorific plural	194
6.1.2	Personal pronouns as possessive markers	194
6.2	Generic pronouns	194
6.2.1	<i>tuzo</i> ‘one’	194
6.2.2	The generic noun <i>turme</i> ‘person’	196
6.3	Genitive forms	197
6.4	The emphatic use of pronouns	199
6.5	Interrogative pronouns	200
6.5.1	<i>tcʰi</i> ‘what’	201
6.5.2	<i>cui</i> ‘who’	205
6.5.3	<i>tʰystuy</i> ‘how many’ and <i>tʰyjtču</i> ‘when’	206
6.5.4	<i>ŋotču</i> ‘where’	208

6.6	Indefinite pronouns	210
6.6.1	<i>ci</i> ‘someone’	211
6.6.2	<i>tʰuci</i> ‘something’	212
6.6.3	<i>tsʰitsuku</i> ‘whatever’	215
6.6.4	<i>çumṛçu</i> ‘whoever, anybody’	216
6.6.5	<i>ciscʰiz</i> ‘somewhere’	216
6.6.6	Interrogative pronouns used as free-choice indefinites	217
6.7	Quantifiers	219
6.7.1	Universal quantifiers	219
6.7.2	Partitive pronouns	220
6.7.3	Distributive pronouns	221
6.8	Identity pronoun	222
6.9	Demonstrative pronouns	225
6.9.1	Anaphoric demonstrative pronouns	226
6.9.2	Medial and cataphoric pronoun	228
6.9.3	Locative forms of the demonstrative pronouns	230
7	Numerals and counted nouns	235
7.1	Plain numerals	235
7.1.1	Numerals 1-10	235
7.1.2	Tens	237
7.1.3	Numerals 11-19 and units	237
7.1.4	Hundred and above	239
7.1.5	Ordinals	240
7.1.6	Tibetan and Chinese numerals	242
7.1.7	Use of the numerals	245
7.2	Approximate numerals	246
7.3	Counted nouns	249
7.3.1	Numeral prefixes	250
7.3.2	Counted nouns in quantifying function	260
7.3.3	Counted nouns and semantic classes	270
7.3.4	Counted nouns and other parts of speech	272
7.4	Measures	278
7.5	Counting time	281
7.5.1	Temporal counted nouns	281
7.5.2	Time ordinals	284
7.5.3	Other derived time adverbs	289
7.5.4	Clock time	290

Contents

7.6 Basic arithmetic operations	291
7.6.1 Fractions	293
8 Postpositions and relator nouns	297
8.1 Absolutive	297
8.1.1 Intransitive subject	297
8.1.2 Transitive subject	298
8.1.3 Object	298
8.1.4 Sole argument of predicates of natural forces	299
8.1.5 Semi-object	300
8.1.6 Theme	301
8.1.7 Essive	302
8.1.8 Goal	305
8.1.9 Location	306
8.2 Postpositions	307
8.2.1 Independent words vs. clitics	307
8.2.2 Ergative	308
8.2.3 Genitive	317
8.2.4 Locative	327
8.2.5 Comitative	335
8.2.6 Additive	337
8.2.7 Standard marker	338
8.2.8 Exceptive	340
8.2.9 Terminative	341
8.2.10 Egressive	342
8.2.11 Other temporal postpositions	344
8.3 Relator nouns	348
8.3.1 Dative	349
8.3.2 Secutive	351
8.3.3 Deputative	352
8.3.4 Locative relator nouns	354
8.3.5 Temporal relator nouns	365
8.3.6 Semi-grammaticalized relator nouns	367
9 The noun phrase	371
9.1 Noun modifiers and determiners	371
9.1.1 Number	371
9.1.2 Demonstratives	378
9.1.3 Quantifiers	384

9.1.4	Indefinite and definite markers	391
9.1.5	Topic markers	397
9.1.6	Focus markers	405
9.1.7	Identity modifiers	417
9.1.8	Attributes	419
9.2	Noun coordination	425
9.2.1	Coordination or embedded phrase	425
9.2.2	Bare coordination	426
9.2.3	Disjunction	429
9.3	Word order in the noun phrase	430
10	Expressive words and sentence final particles	433
10.1	Ideophones	433
10.1.1	Ideophonic stem morphology	433
10.1.2	Regular derivations	434
10.1.3	Semantic categories	441
10.1.4	Irregularities	442
10.1.5	The phonology of ideophonic roots	444
10.1.6	The genesis of ideophones	449
10.1.7	Syntax of ideophones	451
10.1.8	Discourse function	457
10.2	Other expressive words	457
10.2.1	Interjections	457
10.2.2	Calling and chasing sounds	461
10.2.3	Deonomatopoeic expressive nouns	462
10.3	Speech fillers	464
10.4	Sentence final particles	464
10.4.1	Particles used in commands	465
10.4.2	Particles used in polar questions	466
10.4.3	Hearsay particle	469
10.4.4	Particles expressing epistemic modality	471
10.4.5	Particules expressing speaker attitude	474
11	The structure of the Japhug verb	477
11.1	Introduction	477
11.2	The prefixal chain	477
11.2.1	Outer prefixes	477
11.2.2	Inner prefixes	480
11.2.3	Stress	482

Contents

11.2.4	Phonotactic constraints	482
11.3	The suffixal chain	483
11.4	The peg circumfix	485
11.4.1	Morphology	485
11.4.2	Optionality of the suffixal element	486
11.4.3	Functions of the peg circumfix	486
11.5	Templatic vs. layered morphology	489
11.6	Wordhood	490
11.6.1	Criteria for wordhood	490
11.6.2	Enclitics	491
11.6.3	Bipartite verbs	493
12	Non-concatenative verbal morphology	499
12.1	Onset alternations	499
12.2	Stem alternations	499
12.2.1	Stem II	500
12.2.2	Stem III	501
12.2.3	Frozen -t suffix	504
12.3	Vowel contraction	505
12.4	Partial reduplication in verbal morphology	509
12.4.1	Initial reduplication	509
12.4.2	Verb stem reduplication as secondary exponence	515
12.4.3	Emphatic reduplication	516
13	Negation	519
13.1	Negative prefixes	519
13.1.1	Allomorphy	519
13.1.2	Suppletive negative verbs	521
13.1.3	Verbs requiring the negative prefixes	522
13.1.4	Lexicalized negation	523
13.2	Periphrastic negation	524
13.3	Double negation	525
13.4	Negation and parts of speech other than verbs	527
13.4.1	Nouns	527
13.4.2	Pronouns	527
13.4.3	Adverbs	528
14	Person indexation and argument structure	531
14.1	Introduction	531

14.2	Intransitive verbs	531
14.2.1	The intransitive paradigm	531
14.2.2	Irregular intransitive verbs	535
14.2.3	Semi-transitive verbs	536
14.2.4	Intransitive verbs with oblique arguments	540
14.2.5	Semi-transitive verbs with additional oblique arguments	541
14.2.6	Intrinsically non-singular subjects	542
14.2.7	Invariable intransitive verbs	544
14.3	Transitive verbs	546
14.3.1	The morphological marking of transitivity in Japhug	546
14.3.2	Polypersonal indexation and direction marking	549
14.3.3	The function of the direct/inverse contrast in non-local configurations	571
14.3.4	Transitive irregular verbs	582
14.3.5	Transitive verbs with dummy subjects	584
14.4	Ditransitive verbs	586
14.4.1	Indirective	586
14.4.2	Secundative	588
14.4.3	Causative of transitive verbs	590
14.4.4	Causative of semi-transitive verbs	593
14.5	Labile verbs	593
14.5.1	Transitive-intransitive labile verbs	593
14.5.2	Transitive-intransitive labile verbs with oblique arguments	600
14.5.3	Semi-transitive labile verbs	601
14.5.4	Ditransitive-monotransitive lability	602
14.6	Additional questions on the generic and number indexation	603
14.6.1	Agreement mismatch	603
14.6.2	Generic person vs. 3PL indexation	611
14.7	Person indexation on non-finite predicative words	615
14.7.1	Phatic expressions	615
14.7.2	Exclamative expressions	617
14.8	Historical perspectives	618
14.8.1	Indexation suffixes, pronouns and possessive prefixes	618
14.8.2	The inverse prefix	622
14.8.3	The origin of portmanteau prefixes	623

Contents

15 Orientation and associated motion	629
15.1 Orientation preverbs	629
15.1.1 Morphology	629
15.1.2 Orientable verbs	640
15.1.3 The tridimensional system	649
15.1.4 Extended uses of orientations	660
15.1.5 Lexicalized orientations	670
15.2 Associated motion	690
15.2.1 AM prefixes: morphology	690
15.2.2 Argument of motion	696
15.2.3 Motion verbs and AM prefixes	698
15.2.4 Orientation and AM	699
15.2.5 Round trips	701
15.2.6 The nature of the motion	702
15.2.7 Goal	704
15.2.8 Echo phenomena	706
15.2.9 The verb <i>ru</i> ‘fetch, bring’	709
15.2.10 Associated motion vs. motion verb construction	713
16 Non-finite verbal morphology	721
16.1 Participles	721
16.1.1 Subject participles	722
16.1.2 Object participles	740
16.1.3 Oblique participles	753
16.2 Infinitives	770
16.2.1 Velar infinitives	770
16.2.2 Bare infinitives	782
16.2.3 Dental infinitives	784
16.3 Degree nominals	786
16.3.1 Polarity prefixes	788
16.3.2 Argument structure	788
16.3.3 Nominal predicates	789
16.3.4 Degree construction	790
16.3.5 Complementation	790
16.4 Action nominals and abstract noun	791
16.4.1 <i>tu-</i> action nominals	791
16.4.2 <i>tr-</i> abstract nouns	793
16.4.3 Simultaneous	795

16.4.4	Denominalization of action nominals	796
16.4.5	Lexicalized action nominals	797
16.4.6	Inalienably possessed bare action nominals	799
16.4.7	Action nominal compounds	802
16.5	Other deverbal nouns	805
16.5.1	Nominalization <i>-z</i> suffix	805
16.5.2	Nominalization <i>y-/x-</i> prefix	807
16.6	Converbs	808
16.6.1	Gerund	808
16.6.2	Purposive	814
16.6.3	Immediate	816
16.6.4	Adverb from finite verb	818
16.7	Defective verbs	819
16.8	Historical perspectives	819
16.8.1	Velar non-finite prefixes	819
16.8.2	Sigmatic non-finite prefixes	822
16.8.3	Dental non-finite prefixes	824
17	Valency-increasing derivations	827
17.1	Introduction	827
17.2	Sigmatic causative	827
17.2.1	Regular allomorphy	827
17.2.2	Irregular allomorphs	830
17.2.3	Lexicalized sigmatic causatives	836
17.2.4	Morphosyntax	838
17.2.5	Semantics of the causative	846
17.2.6	Stative verbs	854
17.2.7	Recursion	855
17.2.8	Compatibility with other derivations	856
17.3	Velar causative	858
17.3.1	Irregular allomorphs	859
17.3.2	Morphosyntax	861
17.3.3	Semantics	864
17.3.4	Compatibilities with other derivations	867
17.4	Applicative	868
17.4.1	The syntactic and semantic functions of the promoted argument	868
17.4.2	Allomorphy	874

Contents

17.4.3	Lexicalized applicatives	874
17.4.4	Applicatives and other derivations	876
17.5	Tropative	877
17.5.1	Allomorphy	878
17.5.2	Past imperfective	879
17.5.3	Lexicalized tropatives	879
17.5.4	Compatibility with other derivations	881
17.5.5	Other tropative constructions	882
18	Valency-decreasing derivations	883
18.1	Passive	883
18.1.1	The interaction of the Passive derivation with Dynamicity and TAME	885
18.1.2	Lexicalized passives	886
18.1.3	Agent demotion	888
18.1.4	Passive from ditransitive verbs	891
18.1.5	Reduplicated passive	892
18.1.6	Compatibility with other derivations	892
18.2	Rogative	894
18.3	Reflexive	896
18.3.1	The reflexive prefix: form and basic function	896
18.3.2	Reflexive vs. anticausative	901
18.3.3	Lexicalized reflexives	903
18.3.4	Reflexive causative	904
18.3.5	Reflexive and autive	908
18.3.6	Reflexive, tropative and applicative	909
18.3.7	Historical origin	910
18.4	Reciprocal	911
18.4.1	Reduplicated reciprocal	911
18.4.2	Reciprocal <i>amuu-</i> prefix	917
18.4.3	Reciprocal <i>andz̥uu-</i> prefix	922
18.4.4	Verbs of co-participation	923
18.5	Anticausative	924
18.5.1	Morphology	924
18.5.2	Function	928
18.5.3	Anticausative and dummy subject constructions	929
18.5.4	Collocation	930
18.5.5	Volitionality	931

18.5.6	Compatibility with other derivations	933
18.5.7	Other cases of voicing alternation	936
18.6	Antipassive	936
18.6.1	<i>r</i> - antipassive	936
18.6.2	<i>s</i> - antipassive	940
18.6.3	Lexicalized antipassive	942
18.6.4	Antipassive forms of ditransitive verbs	943
18.6.5	Reduplicated antipassive	946
18.6.6	Antipassive and past imperfective	947
18.6.7	The uses of the antipassive derivations	948
18.6.8	Other strategies used to express indefinite patients	953
18.6.9	Compatibility with other derivations	956
18.7	Distributed property	958
18.8	Proprietive	960
18.8.1	Allomorphy	962
18.8.2	Proprietive derivation and generic marking	963
18.8.3	Proprietive derivations from semi-transitive verbs	964
18.8.4	Proprietive derivations from transitive verbs	966
18.8.5	Lexicalized proprietive	967
18.8.6	Compatibility with other derivations	968
18.8.7	Relationship with other derivations	968
18.9	Facilitative	969
18.9.1	Subject-oriented facilitative	969
18.9.2	Object-oriented facilitative	971
19	Other verbal derivations	975
19.1	Autive	975
19.1.1	The autive prefix and verb transitivity	975
19.1.2	Position in the verbal template and allomorphy	976
19.1.3	Autobenefactive/self-affectedness function	978
19.1.4	Spontaneous function	981
19.1.5	Permansive function	984
19.1.6	Lexicalized autives	986
19.1.7	Historical relationship with other derivations	990
19.2	Vertitive	990
19.3	Abilitative	991
19.3.1	Lexicalized abilitatives	993
19.3.2	Historical origin	994

Contents

19.4	Distributed action	995
19.4.1	Lexicalized distributed action verbs	1000
19.4.2	Irregular partial reduplication	1001
19.4.3	Compatibilities with other derivations	1002
19.5	Auto-evaluative	1003
19.6	Attenuative reduplication	1004
19.7	Fossil affixes and marginal derivations	1005
19.7.1	Volitional <i>mu-</i> prefix	1005
19.7.2	Applicative <i>-t</i> suffix	1006
19.7.3	Antipassive <i>-t</i> suffix	1008
19.7.4	Other detransitive prefixes	1009
19.7.5	<i>r̩-</i> prefix	1010
19.7.6	<i>yuu-/yy-</i> prefix	1012
19.7.7	<i>a-</i> prefix	1013
19.7.8	Abilitative <i>j-</i> prefix	1014
19.7.9	Prenasalization	1014
19.7.10	Comparative derivation?	1014
19.7.11	Reduplication	1016
19.7.12	Vowel alternation	1017
20	Denominal derivations	1019
20.1	Introduction	1019
20.1.1	Morphological properties of denominal prefixes	1020
20.1.2	Denominal derivations and light verb constructions	1020
20.2	Contracting prefixes	1022
20.2.1	Stative <i>a-</i>	1022
20.2.2	Similative <i>aru-</i>	1024
20.2.3	Proprietive <i>ar̩-</i>	1026
20.2.4	Proprietive <i>ayuu-</i>	1027
20.2.5	Collective <i>andzi-</i>	1032
20.3	Sigmatic denominal prefixes	1033
20.3.1	Proprietive <i>s̩r̩-</i>	1033
20.3.2	Causative/instrumental <i>sV-</i>	1035
20.4	Rhotic denominal prefixes	1039
20.4.1	Intransitive denominal verbs	1039
20.4.2	Transitive denominal verbs	1042
20.4.3	Pairing with other denominal prefixes	1044

20.5	Velar nominal prefixes	1046
20.5.1	Intransitive denominal verbs	1046
20.5.2	Transitive denominal verbs	1048
20.5.3	Pairing with other denominal prefixes	1050
20.6	Labial nasal denominal prefixes	1051
20.7	Dental nasal denominal prefixes	1054
20.7.1	Intransitive	1054
20.7.2	Transitive	1058
20.7.3	Pairing with other denominal prefixes	1060
20.8	Other denominal verbs	1061
20.8.1	Zero-derivation or backformation?	1061
20.8.2	Vowel alternation	1063
20.9	Deideophonic verbs	1064
20.9.1	<i>yṛ-</i> and <i>sṛ-</i> deideophonic verbs	1064
20.9.2	<i>nu-</i> deideophonic verbs	1066
20.9.3	<i>a-</i> and <i>nr-</i> deideophonic verbs	1067
20.10	The denominal origin of voice prefixes	1068
20.10.1	The origin of the <i>rr-</i> antipassive prefix	1068
20.10.2	The proprietive and antipassive <i>sṛ-</i> prefixes and their trophic counterpart	1072
20.10.3	Applicative, sigmatic causative and passive	1073
20.11	Loan verbs	1074
20.12	Compound verbs	1075
20.13	Incorporation	1078
20.13.1	Incorporation and denominal derivation	1078
20.13.2	Incorporation and other derivations	1083
20.13.3	Syntactic function of the incorporated word	1084
20.13.4	Incorporation and other constructions	1086
21	Tense, aspect, modality and evidentiality	1091
21.1	Introduction	1091
21.1.1	Preverbs	1092
21.1.2	Stem alternation	1095
21.1.3	Other affixes	1096
21.1.4	Evidentiality and person	1097
21.2	Imperfective	1097
21.2.1	Morphology	1098
21.2.2	Use in periphrastic TAME categories	1099

Contents

21.2.3	Use in temporal clauses	1103
21.2.4	Use in complement clauses	1104
21.2.5	Hortative	1105
21.2.6	Inchoative	1106
21.2.7	Perception verbs	1107
21.3	Non-past categories	1110
21.3.1	Factual Non-Past	1110
21.3.2	Sensory	1114
21.3.3	Egophoric Present	1122
21.3.4	Tripartite contrast	1127
21.4	Modal categories	1128
21.4.1	Irrealis	1128
21.4.2	Imperative	1136
21.4.3	Prohibitive	1140
21.4.4	Dubitative	1143
21.5	Past categories	1144
21.5.1	Aorist	1144
21.5.2	Inferential	1153
21.5.3	Past Imperfective and Inferential Imperfective	1162
21.5.4	Archaic form	1167
21.6	Secondary Aspectual categories	1168
21.6.1	Progressive	1168
21.6.2	Proximative	1175
21.7	Secondary Modal categories	1178
21.7.1	Apprehensive	1178
21.7.2	Probabilitative	1183
21.7.3	Rhetorical interrogative	1185
21.7.4	Interrogative	1189
21.8	Non-verbal TAME markers	1191
21.8.1	TAME adverbs	1191
21.8.2	Sentence-final particles	1191
21.8.3	Nouns and the expression of modality	1191
22	Simple clauses	1195
22.1	Word order	1195
22.1.1	Basic word order	1195
22.1.2	Overt and non-overt arguments	1201
22.1.3	Right dislocation	1205

22.2	Sentential adverbs	1208
22.2.1	Tense and aspect	1208
22.2.2	Quantification	1212
22.2.3	Identity	1216
22.2.4	Adverbial Intensifiers	1216
22.2.5	Epistemic modality	1218
22.2.6	Orientation adverbs	1218
22.2.7	Postverbal elements	1221
22.3	Non-verbal predicates	1222
22.4	Noun-verb collocations and light verb constructions	1223
22.4.1	Intransitive verbs	1224
22.4.2	Transitive verbs	1230
22.4.3	Frozen collocations	1244
22.5	Copulas and existential verbs	1249
22.5.1	Basic functions	1249
22.5.2	Possessive constructions	1253
22.5.3	Postverbal copulas	1256
22.5.4	Postverbal negative existential verb	1260
22.5.5	Verb doubling	1263
22.5.6	Other constructions	1263
23	Relative clauses	1265
23.1	Introduction	1265
23.2	Subtypes of relative clauses	1265
23.2.1	Participial relative clauses	1265
23.2.2	Finite relative clauses	1266
23.2.3	Genitival relative	1267
23.2.4	Relator nouns	1268
23.2.5	Interrogative pronouns and correlative constructions	1269
23.3	Morphosyntactic specificities of relative clauses	1271
23.3.1	Resumptive pronouns	1271
23.3.2	Totalitative reduplication	1272
23.3.3	Genitive possessor	1273
23.3.4	Possessive prefix neutralization	1274
23.3.5	Determiners	1275
23.3.6	Postverbal elements	1277
23.4	Position of the relativized element	1278
23.4.1	Headless	1279

Contents

23.4.2	Prenominal	1279
23.4.3	Head-internal	1279
23.4.4	Postnominal	1282
23.5	Function of the relativized element	1283
23.5.1	Intransitive subject	1283
23.5.2	Transitive subject	1285
23.5.3	Object	1286
23.5.4	Quasi-objects	1289
23.5.5	Goal and locative	1292
23.5.6	Instrument	1295
23.5.7	Comitative	1296
23.5.8	Dative	1297
23.5.9	Time adjuncts	1297
23.5.10	Possessor	1298
23.5.11	Relativization out of complement clause	1302
23.5.12	Constraints on relativizability	1306
23.6	Relative clauses and focalization	1307
23.6.1	Pseudo-cleft constructions	1307
23.6.2	Non-equative pseudo-cleft	1309
23.7	Quantification	1309
23.8	Relative vs. complement clauses	1312
23.8.1	Ambiguity (finite clauses)	1312
23.8.2	Ambiguity (non-finite clauses)	1314
23.8.3	Participial clauses in core argument function	1315
23.8.4	Relativized complement clauses	1316
24	Complement clauses	1319
24.1	Introduction	1319
24.2	Complement types	1319
24.2.1	Velar infinitive clauses	1320
24.2.2	Bare infinitives and dental infinitives	1322
24.2.3	Finite complements	1324
24.2.4	Multiclausal complements	1328
24.2.5	Reported speech	1330
24.3	Morphosyntactic properties of complement clauses	1335
24.3.1	Word order and constituency	1335
24.3.2	Case marking	1336
24.3.3	Determiners	1337

24.3.4	Restrictive and additive focus	1338
24.3.5	Raising of preverb orientation	1339
24.4	Complementation strategies	1341
24.4.1	Relative clauses in core argument function	1341
24.4.2	Participial clauses	1342
24.4.3	Action nominals	1348
24.4.4	Coordination	1352
24.5	Complement-taking verbs	1353
24.5.1	Causative verbs	1354
24.5.2	<i>pa</i> ‘do’	1360
24.5.3	Modal verbs	1360
24.5.4	Verbs of cognition	1367
24.5.5	Verbs of perception	1370
24.5.6	Phasal verbs and other aspectual auxiliaries	1372
24.5.7	Similative verbs	1377
24.5.8	Complement-taking adjectival verbs	1379
24.6	Complement-taking nouns	1380
24.6.1	Complement-taking nouns and denominal verbs	1381
24.6.2	Adnominal complement clause and possessor	1382
24.6.3	Overview of complement-taking nouns	1382
24.6.4	Relative clauses as a complementation strategy	1387
24.7	Syntactic errors	1389
25	Other types of multiclausal constructions	1391
25.1	Classification of multiclausal constructions	1391
25.1.1	Marked subordinate clauses	1391
25.1.2	Correlative clauses	1392
25.1.3	Periphrastic tenses and subordination	1393
25.1.4	Unmarked embedded clauses	1394
25.1.5	Serial verb constructions	1395
25.1.6	Coordination and parataxis	1395
25.1.7	Tail-head linkage	1396
25.2	Conditional constructions	1397
25.2.1	Real conditionals	1398
25.2.2	Necessary condition	1400
25.2.3	Concessive conditional	1400
25.2.4	Counterfactuals	1405

Contents

25.3	Temporal clauses	1406
25.3.1	Iterative coincidence	1406
25.3.2	Precedence	1406
25.3.3	Subsequence	1409
25.3.4	Concurrence	1412
25.4	Manner clauses	1415
25.4.1	Serial verb construction	1415
25.4.2	Manner conversbs	1418
25.5	Causality	1420
25.5.1	Consequence	1420
25.5.2	Cause	1421
25.5.3	Prerequisite	1423
25.5.4	Purposive clauses	1424
25.5.5	Justification clauses	1427
25.5.6	Precautioning clauses	1427
25.6	Other constructions	1429
25.6.1	Adversative	1429
25.6.2	Addition	1433
25.6.3	Exceptional	1436
25.6.4	Disjunction	1438
26	Degree and comparison	1439
26.1	Absolute degree and intensifiers	1439
26.1.1	Degree adverbs	1439
26.1.2	Degree nominals	1444
26.1.3	Serial verb construction	1448
26.1.4	Exceptional	1448
26.2	Comparative	1449
26.2.1	The postpositions <i>sız</i> and <i>kıu</i>	1449
26.2.2	Intensifier <i>tsa</i> ‘a little’	1451
26.2.3	The negative verb NEG+ <i>zıu</i> ‘(not) just be’	1452
26.2.4	The egressive postposition <i>cayıtar</i> ‘up from’	1453
26.2.5	Negative existential verbs	1454
26.3	Equative and similitive	1454
26.3.1	Entity equative	1454
26.3.2	Property equative	1458
26.3.3	Similitive	1459

26.4 Superlative	1461
26.4.1 Degree adverb	1461
26.4.2 Possessed participle	1462
26.4.3 Negative existential	1463
27 Kinship	1465
27.1 Introduction	1465
27.2 Kinship terms by generations	1467
27.2.1 Ascending generations	1467
27.2.2 Siblings	1469
27.2.3 Cousins	1471
27.2.4 Descending generations	1473
27.2.5 Spouses and affines	1477
27.3 Marriage rules	1477
27.4 Lineages	1478
27.5 Omaha skewing	1480
27.5.1 Skewing rules and merging rules	1480
27.5.2 Cross-cousin lineages	1483
27.5.3 Maternal parallel cousin lineages	1485
27.5.4 Application	1486
References	1489

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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	LNK	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
DAT	dative	PEG	peg circumfix
DEG	degree	PL	plural
DEM	demonstrative	POSS	possessive
DU	dual	PROB	probabilitative
DUB	dubitative	PROG	progressive
EMPH	emphatic	PROP	proprietic
ERG	ergative	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 *kymuu* village (干木鸟
¹¹ *gānmùniǎo*), henceforth written as Kamnyu.

Japhug is one of the four Core Gyalrong languages (J. T.-S. Sun 2000a), Tshob-dun, Zbu and Situ, represented in Figure 1.1. It is particularly closely related to the West Gyalrongs: Khroskyabs, Stau and Tangut (J. T.-S. Sun 2000b; Jacques et al. 2017).

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

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

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

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

² The 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].

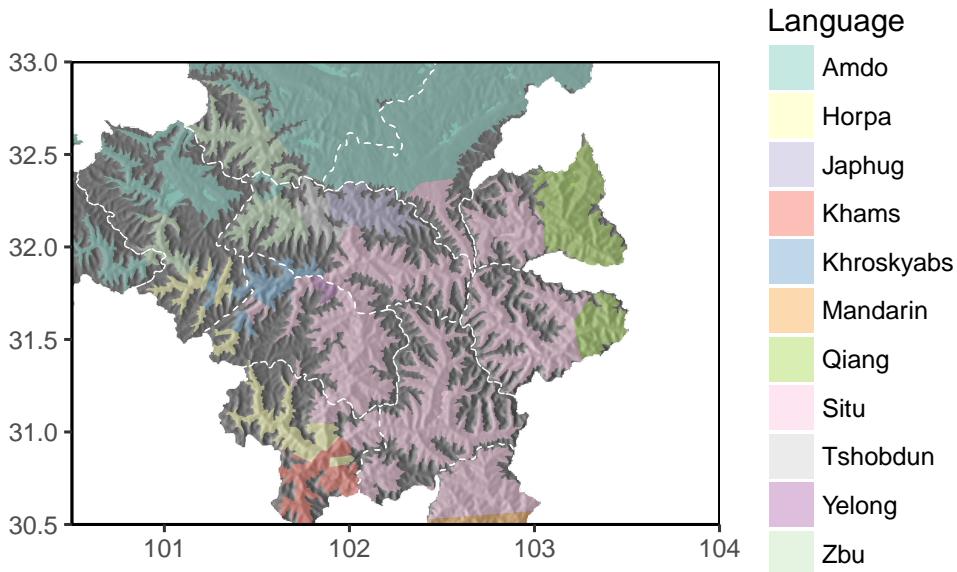


Figure 1.1: A map of Gyalrong languages

26 and sometimes also of Tshobdun and Zbu.³

27 1.2 The Japhug corpus

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

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

³ See for example 145 (§8.2.9), 35 (§23.3.6) and 126 (§24.5.3.1), where Tshendzin recounts her experience as a teacher in Tshobdun village, where she had to learn Tshobdun to make herself understood by the pupil's parents.

40 **Japhug&name=japhug.**

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

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

1.3 Structure of the grammar

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

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

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

1.4 Language and culture

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

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

¹⁰⁸ 2 A grammatical sketch

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

2 A grammatical sketch

¹³⁵ ceives stress (as the syllable *-z̥i-* in 1, §3.7) and allows the maximal number of
¹³⁶ vowel and consonant contrasts.

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 indexation
¹⁶⁰ 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 categories expressed by syntactic rather than morphological means within noun ¹⁷⁴ 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 The whole category of gender is completely absent from Japhug grammar; ¹⁸⁰ there are only suffixes for male and female animals, and even these are borrowed ¹⁸¹ from Tibetan (§5.7.7).

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

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

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

¹⁹⁴ 2.3.2 Number

¹⁹⁵ Number can be indicated by the dual *ni* (§9.1.1.1) and plural *ra* (§9.1.1.2) determin-¹⁹⁶ ers. These determiners are not mutually incompatible with numerals, as shown ¹⁹⁷ by (2), where the redundant *ɛnuz* ‘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.

2 A grammatical sketch

- 201 (2) *jla* (*βnuz*) *ni*
 male.hybrid.yak two DU
 202 ‘The two male hybrid yaks.’

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).

Table 2.1: Numeral prefixes of counted nouns

	Numeral	- <i>sji</i> ‘day’	
1	<i>ci</i>	<i>tu-sji</i>	‘one day’
2	<i>βnuz</i>	<i>βnuz-sji</i>	‘two days’
3	<i>χsum</i>	<i>χsu-sji</i>	‘three days’
4	<i>kuβde</i>	<i>kuβde-sji</i> , <i>kuβdʒ-sji</i>	‘four days’
5	<i>kumju</i>	<i>kumju-sji</i> , <i>kumjy-sji</i>	‘five days’
6	<i>kuutʃy</i>	<i>kuutʃy-sji</i>	‘six days’
7	<i>kuənuz</i>	<i>kuənu-sji</i>	‘seven days’
8	<i>kurcat</i>	<i>kurcə-sji</i>	‘eight days’
9	<i>kuungut</i>	<i>kuungu-sji</i>	‘nine days’
10	<i>sqi</i>	<i>squ-sji</i>	‘ten days’

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

- 211 (3) *tc^heme ci*
 girl one/INDEF
 212 ‘A/one girl’
- 213 (4) *tc^heme χsum*
 girl three
 214 ‘Three girls’

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

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

- (5) *tcʰeme tu-rdoꝝ*
 girl one-piece
 'One of the girls'; 'Each girl...'; 'One girl'

In addition, although a handful of 'classifiers' are indeed specific to a particular semantic category of nouns (§7.3.3), the generic 'classifier' *tu-rdoꝝ* '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-sŋi* 'one day' or *tu-rdoꝝ* 'one piece'.

2.3.3 Case marking

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

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

- (6) *[[w-pi ni] kuu] pya nuu pa-mto-ndzi*
 3SG.POSS-elder.sibling DU ERG bird DEM 3→3':AOR-see-DU
 'His two elder (brothers/sisters) saw the bird.'
- (7) *[[turme ra] yuu] nuu-fsapab*
 person PL GEN 3PL.POSS-cattle
 'People's cattle.'

²⁴⁴ In addition, it is possible to make a pause between the noun and the postposition *ku* or *yu* that follows: the postposition can be procliticized to the following
²⁴⁵ word. A considerable number of examples can be found in the corpus (§8.2.1).

²⁴⁷ While Situ Gyalrong does have locative suffixes (Lín 1993: 325–331), Japhug
²⁴⁸ only uses postpositions (§8.2.4.1) and/or relator nouns (§8.3.4.5) to express loca-
²⁴⁹ tion, goal and source of motion. The only traces of the proto-Gyalrong suffixes
²⁵⁰ are the locative postposition *zuu*, which was degrammaticalized from a suffix *-s
²⁵¹ (§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>tuu-ku</i> ‘head’	<i>kʰa</i> ‘house’
1SG	<i>a-</i>	<i>a-ku</i>	<i>a-kʰa</i>
2SG	<i>nɣ-</i>	<i>nɣ-ku</i>	<i>nɣ-kʰa</i>
3SG	<i>w-</i>	<i>w-ku</i>	<i>w-kʰa</i>
1DU	<i>tɕi-</i>	<i>tɕi-ku</i>	<i>tɕi-kʰa</i>
2/3DU	<i>ndʑi-</i>	<i>ndʑi-ku</i>	<i>ndʑi-kʰa</i>
1PL	<i>ji-</i>	<i>ji-ku</i>	<i>ji-kʰa</i>
2/3PL	<i>nu-</i>	<i>nu-ku</i>	<i>nu-kʰa</i>
indefinite	<i>tuu-/tɣ-/ta-</i>	<i>tuu-ku</i>	<i>kʰa</i>
generic	<i>tuu-</i>	<i>tuu-ku</i>	<i>tuu-kʰa</i>

²⁵⁶ The possessive paradigm is nearly the same for all nouns (Table 2.2), but some
²⁵⁷ nouns such as *tuu-ku* ‘head’ require a indefinite possessor prefix *tuu-*, *tɣ-* 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 possessor can be optionally added. For instance, the meaning ‘my cow’ can be expressed by the noun form *a-nuŋa* with a simple possessive prefix, but this noun can be additionally preceded by the genitive pronoun *azuy* (8) or even by the absolute *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 *nuŋa* ‘cow’. In (8), removing the *a-* prefix would result in an agrammatical form (†*azuy nuŋa*).

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

- 277 (9) [*a-mu* *a-wa* *ni*] (*yui*) *ndzi-nuŋa*
 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.

2 A grammatical sketch

- 294 (10) a. *nunja* (*yui*) *wi-lu*
cow GEN 3SG.POSS-milk
'(The/a) cow's milk.'
- 295 b. *luulu* (*yui*) *wi-ty-lu*
cat GEN 3SG.POSS-INDEF.POSS-milk
'The milk for the cat (given to the cat to drink).'
- 296 c. *(azo)* *a-ty-lu*
1SG 1SG.POSS-INDEF.POSS-milk
'My milk (for me to drink).'
- 297
- 298
- 299

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 *tuu-* (§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 kuu tu-se* *ku-ts^{hi}i* *ŋu*
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 *tuu-rpuu* 'one's mother's brother' (indefinite form *tr-rpuu*, §5.1.2.4) and the
318 transitive subject of the verb *tu-kuu-ti* 'one says' (§14.3.4).

- 319 (12) *tuu-rpuu* *yuu wi-rzaβ* *wi-cki* *tce*
GENR.POSS-mother's.brother GEN 3SG.POSS-wife 3SG.POSS-DAT LOC

- 320 “*a-taŋ*” *tu-kuu-ti* *ŋu*
 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. *kuaβ̥a ra yuu nui-nuiŋa kuu-dyn pɟy-tu*
 noble PL GEN 3PL.POSS-cow SBJ:PCP-be.many IFR.IPFV-exist
 ‘The nobles had many cows.’
 331 b. *kuaβ̥a ra yuu nui-tcui χsum pɟy-tu*
 noble PL GEN 3PL.POSS-son three IFR.IPFV-exist
 ‘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 *pɟy-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-tuŋga*.

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 *-r* or *-u* (§5.4.1). For instance, compounding *tu-ku* ‘head’ with *tr-rme*
 348 ‘hair’ yields *tr-ky-rme* ‘head hair’ with the *status constructus* *ky-* 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 *χpum-pu* ‘little monk’ from *χpum* ‘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 *wi-puu* ‘little one’ (§5.1.2.7) derived from *tr-puu*
359 ‘offspring, young’.

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

362 Not all suffixal derivations have transparent origins. The privative *-lu* suffix
363 (§5.7.1), which is not related to any independently attested nominal or verbal root,
364 turns an inalienably possessed noun into a non-possessive one mainly used as
365 postnominal modifier (§9.1.8.1), removing possessive prefixes and subjecting the
366 nominal stem to *status constructus* alternation (*tui-ku* ‘head’ → *kr-lu* ‘headless’).

367 Prefixal nominal derivations on the other hand do not originate from elements
368 of compounds, but rather from participial forms of denominal verbs (§20.2.4,
369 §20.2.5).

370 The social relation collective *kyndzi-* prefix (§5.7.8.1) occurs on the bare stem
371 of kinship terms and a few other terms of social relationship to indicate a group
372 of people. When the group members are related to each other by a symmetri-
373 cal relationship (*tr-xtry* ‘brother’ (of a male) → *kyndzi-xtry* ‘group of brothers’),
374 the social relation collective is based on only one nominal stem, but when the
375 relationship is asymmetrical, *kyndzi-* can be prefixed to two compounded noun
376 stems, as in *kyndzi-wymuu-snom* ‘group of siblings’ from *tr-wymuu* ‘brother’ (of a
377 female) and *tr-snom* ‘sister’ (of a male).

378 The comitative derivation (§5.8.1) is built by adding the prefixes *kŕ-* or *kryuu-* to
379 reduplicated noun stems. It derives an adverb meaning ‘together with X’ which
380 can have scope over the whole clause, or be restricted to a noun phrase. It can ap-
381 ply to both inalienably possessed nouns (*tui-ηga* ‘clothes’ → *kŕ-ηgu~ηga* ‘together
382 with his/her clothes’) or alienably possessed ones (*jla* ‘hybrid yak’ → *kŕ-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, *tr-rte* ‘hat’ has two comitative forms: *k̪-rtu~rte* ‘together with his/her hat’ (wearing it) and *k̪-tr-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 (J. T.-S. Sun 2004; Gong 2018) and Situ (Shuya Zhang 2018). Most alternations are productive and predictable, and irregular verbs are limited in number (§14.2.2, §14.3.4).

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

- (15) *a⁻⁶-my⁻⁵-yur⁻⁴-nur⁻³-tú⁻²-wy⁻¹-z-nx-re*
 IRR⁻⁶-NEG⁻⁵-CISL⁻⁴-PFV⁻³-2⁻²-INV⁻¹-CAUS-DENOM-laughter
 ‘Don’t let him come and make you laugh.’

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

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

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

Inflectional verbal morphology encodes person and number of one or two core arguments (chapter 14, §2.4.2.2), orientation (§15.1), associated motion (§15.2), 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 trans-
 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
 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	$\Sigma\text{-}a$	<i>mbyom-a</i>
1DU	$\Sigma\text{-}t̪i$	<i>mbyom-t̪i</i>
1PL	$\Sigma\text{-}ji$	<i>mbyom-i</i>
2SG	<i>tuu</i> - Σ	<i>tuu-mbyom</i>
2DU	<i>tuu</i> - Σ - <i>ndži</i>	<i>tuu-mbyom-ndži</i>
2PL	<i>tuu</i> - Σ - <i>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 *tu-* prefix (on the historical significance of this prefix, see
 433 Jacques 2012a and DeLancey 2014). There is no overt third person marker on in-
 434 transitive verbs. Number markers are shared by second and third person forms:
 435 absence of suffix for the singular, *-ndzi* for the dual and *-nu* for the plural. Slightly
 436 different forms are found in dialects of Japhug other than Kamnyu (§14.8.1). In
 437 addition to the paradigm in Table 2.3, a generic person *kua-* prefix also occurs on
 438 intransitive verbs (§14.3.2.5).

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

442 2.4.2.2 The transitive paradigm

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

449 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>kua-sat-a</i>		<i>tua-sat</i>	
3A	<i>yú-sat-a</i>	<i>tú-wy-sat</i>		<i>sat</i>
3’A			<i>yú-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 sub-
 452 ject, transitive subject or object. In the following, the person configurations are
 453 referred to by $X \rightarrow Y$, where X represents the subject and Y the object (for
 454 instance $1 \rightarrow 3$ means ‘first person subject, third person object’). The eight non-
 455 shaded cells of the paradigm in Table 2.4 can be divided into three groups.

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

2 A grammatical sketch

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

Third, 1→2 and 2→1 (without third person) are the the *local* configurations (§14.3.2.3). They are characterized by the presence of the portmanteau *ta-* and *ku-* prefixes (§14.8.3) not found in the intransitive paradigm.

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

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

The majority of transitive verbs (all verbs ending in closed syllables or with front vowels) are non-alternating like *sat* ‘kill’. However, about a third of all transitive verbs (those ending in -a, -u, -o and -ui) have stem alternation in the *direct* configurations with a singular subject in the Factual Non-Past and a few other 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>ku-ʂnduu-a</i>		<i>tuu-ʂndi</i>	
3A	<i>yú-ʂnduu-a</i>	<i>tú-wy-ʂnduu</i>		<i>ʂndi</i>
3'A			<i>yú-ʂnduu</i>	

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

In the Aorist (§21.5.1.1), a slightly different paradigm is found, illustrated in Table 2.6 with the *ʂnduu* ‘hit’. Unlike the Factual Non-Past shown in the previous tables, the Aorist requires an orientation preverb (§15.1.1.1), here the UPWARDS

488 *tr-*. There is no stem alternation marking the direct forms, but all verbs have a
 489 different series of preverbs (here *ta-*) in the direct 3→3' forms (§21.5.1.1, §15.1.1.1).
 490 In addition, the 1SG→3 and 2SG→3 forms require a *-t* suffix which redundantly
 491 encodes both person and tense-aspect (§11.3).

Table 2.6: The transitive paradigm (singular forms) of the verb *ənduw*
 'hit' in the Aorist

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

492 There is no ambiguity in person indexation in Japhug (unlike for instance in
 493 Khaling where 2→1 and 3→1 configurations are identical, Jacques et al. 2012),
 494 but there are strong restrictions on number indexation: unless the 1SG suffix
 495 is present, only one of the two arguments can be indexed for both person and
 496 number, the subject in direct configurations, and the object in inverse and local
 497 configurations. Double number indexation only occurs in forms with the 1SG *-a*
 498 suffix, to which additional number suffixes can be added (§14.3.2.6), for instance
 499 *yú-ənduw-a-nu* 'they will hit me' (3PL→1SG) where the plural morpheme *-nu*, in-
 500 dexing the number of the subject, follows the 1SG.

501 2.4.2.3 Person indexation and finiteness

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

508 2.4.3 Orientation preverbs and TAME

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

513 **2.4.3.1 The morphology of orientation preverbs**

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

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

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

Table 2.7: Orientation preverbs in Kamnyu Japhug

Dimension	Orientation	A	B
Vertical	Up	<i>tʂ-</i>	<i>tu-</i>
	Down	<i>pʊu-</i>	<i>pjʊu-</i>
Riverine	Upstream	<i>lʂ-</i>	<i>lu-</i>
	Downstream	<i>tʰu-</i>	<i>cʰu-</i>
Solar	Eastwards	<i>kʂ-</i>	<i>ku-</i>
	Westwards	<i>nʊ-</i>	<i>jnʊ-</i>
Unspecified		<i>jʂ-</i>	<i>ju-</i>

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

- 534 (17) *txŋe tx-loŋ*
 sun AOR:UP-come.up

535 ‘The sun rose.’

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

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

542 2.4.3.2 The morphology of TAME categories

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

548 In the finite TAME categories, the B-type preverbs are found in the Imper-
 549 perfective (§21.2) and the A-type preverbs in the Imperative (§21.4.2.1), the Irrealis
 550 (§21.4.1.1) and the Aorist (§21.5.1), though with slightly different vowel contrac-
 551 tion rules (§12.3). In the Aorist paradigm of transitive verbs, another series of
 552 preverbs (C) is found in the direct 3→3' forms (§2.4.2.2), based on the A-type
 553 preverbs but with -a vocalism instead of -u and -ɣ (originating from fusion with
 554 another prefix, §15.1.1.3). For instance, the 2PL→3 Aorist of *ndza* ‘eat’ is *tx-tu-*
 555 *ndza-nu* (AOR:UP-2-eat-PL ‘you_{pl} ate it’) with the UPWARDS A-type *tx-* preverb,
 556 but the corresponding 3PL→3' form is *ta-ndza-nu* (AOR:3→3':UP-eat-PL ‘they ate
 557 it’) with the C-type preverb *ta-*. It is the only case when an orientation preverb
 558 encodes person in addition to TAME.

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

563 Five TAME categories neutralize the orientation contrast, and require the same
 564 marker for all verbs: the Sensory evidential *n̩u-* (§21.3.2), from the B-type WEST-
 565 WARDS preverb (Table 2.7), the Egophoric Present *ku-* (§21.3.3), the Dubitative *ku-*
 566 (§21.4.4), from the B-type EASTWARDS preverb, the Past Imperfective *pu-* from the

2 A grammatical sketch

567 A-type DOWNWARDS preverb (§21.5.3.1, Y. Lin 2011), and the Inferential Imperfective *pjy-* from the D-type DOWNWARDS preverb (§21.5.3.1).

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

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

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

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

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

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

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

592 2.4.3.3 Stative vs. dynamic verbs

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

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

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

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

610 2.4.4 Non-finite verb forms

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

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

621 2.4.4.1 Participles

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

- 625 (20) a. *ny-kui-qur*
 2SG.POSS-SBJ:PCP-help
 ‘(The one/someone) who helps you.’
- 626 b. *ny-kr-qur*
 2SG.POSS-OBJ:PCP-help
 ‘(The one/someone) that you help.’

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

2 A grammatical sketch

- 629 c. *a-sy-t^hu*
 1SG.POSS-OBL:PCP-ask
630 ‘The (person) whom I ask.’

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

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

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

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

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

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

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

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

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

655 Another important function of participles is to build the purposive complements
 656 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-kua-rtoꝝ jy-ye*
 1SG.POSS-SBJ:PCP-look AOR-come[II]
 659 ‘S/he came to see me.’

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

662 2.4.4.2 Infinitives and converbs

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

- 667 (25) *ky-tas rga-a*
 INF-weave like:FACT-1SG
 668 ‘I like to weave.’

669 In addition to velar infinitives, two other types of infinitives are attested: the
 670 bare (§16.2.2) and the dental (§16.2.3) infinitives. These forms are only used in
 671 the complement clauses of a handful of verbs such as *za* ‘start’ (§24.2.2, §24.5.6,
 672 §24.5.1.3). Bare and dental infinitives are in complementary distribution (§14.3.1):
 673 the former is found with transitive verbs (26a), and the latter with intransitive
 674 ones (26b).

- 675 (26) a. *ui-ndza to-za*
 3SG.POSS-BARE.INF:eat IFR:UP-start
 676 ‘S/he/it started eating it.’
 b. *tui-rjas pŷr-za*
 INF:II-dance IFR:DOWN-start
 678 ‘S/he started dancing.’

679 In this construction (and a few other ones), the complement-taking verb takes
 680 the orientation that is lexically selected by the verb in the complement clause
 681 (§24.3.5), for instance UPWARDS like *ndza* ‘eat’ in (26a) and DOWNWARDS like *rjas*
 682 ‘dance’ in (26b).

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

691 2.4.4.3 Other nominalizations

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

696 Action nominals (§16.4.1) and abstract nouns (§16.4.2) can be formed by prefixa-
 697 tion of *tu-* and *tr-*, for instance the noun *tu-ṛjaś* ‘dance’ from the intransitive verb
 698 *ṛjaś* ‘dance’, and *tr-mtsur* ‘hunger’ from *mtsur* ‘be hungry’. These derivations are
 699 not rare, but not fully productive either. The *tu-* and *tr-* prefixes here are not
 700 analyzable as indefinite possessor prefixes with which they are homophonous
 701 (§5.1.1), as they cannot be replaced by definite possessor prefixes.

702 2.4.5 Associated motion

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

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

- 713 (27) a. *c-tr-xtur-t-a*
 TRAL-AOR-buy-PST:TR-1SG
 714 ‘I went and bought it.’

- ⁷¹⁵ b. *uŋ-kw̚-χt̚w̚* *jv-ari-a*
 3SG.POSS-SBJ:PCP-buy AOR-go[II]-1SG
⁷¹⁶ ‘I went to buy it.’

⁷¹⁷ **2.4.6 Voice**

⁷¹⁸ **2.4.6.1 Overview**

⁷¹⁹ The rich and redundant morphological expression of transitivity (§14.3.1) and the
⁷²⁰ rarity of labile verbs (§14.5) in Japhug are correlated with a highly productive
⁷²¹ system of voice derivations, treated in chapters 17, 18 and 19. There are eleven
⁷²² fully productive valency-changing prefixes,⁴ summarized in Table 2.8, to which a
⁷²³ certain number of non-productive derivations such as the applicative *n̚u-* (§17.4)
⁷²⁴ and the anticausative (§18.5) can be added.

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>yv-</i>	§17.3
Tropative	<i>nv(y)-</i>	§17.5
Passive	<i>a-</i>	§18.1
Reciprocal	<i>a-+reduplication</i>	§18.4.1
Reflexive	<i>zjv-</i>	§18.3
Antipassive	<i>r̚v-</i>	§18.6.1
	<i>s̚v-</i>	§18.6.2
Proprietive	<i>s̚v-</i>	§18.1
Facilitative	<i>yv-</i>	§18.9.1
	<i>nuyu-</i>	§18.9.2

⁷²⁵ All productive voice derivations are marked by prefixes (§11.2.2). Only fossil
⁷²⁶ traces of derivational suffixes are found (in particular the applicative *-t*, §19.7.2).
⁷²⁷ The anticausative is marked not by a prefix, but by an alternation whereby un-
⁷²⁸ voiced obstruents are converted into their voiced prenasalized counterparts (§18.5.1).

⁴ These 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.

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

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

733 2.4.6.2 Causative

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

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

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

- 746 (28) *rjylpu kuu ui-ma nua mk^hyrmag ra tu-z-nyme*
 king ERG 3SG.POSS-work DEM people PL IPFV-CAUS-do[III]
 747 *pjx-ηu*
 IFR.IPfv-be

748 ‘The king used to make the people do work for him.’

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

- 753 (29) *ki taqaꝝ ki kuu tu-ηga c^hy-suu-tṣuiꝝ*
 DEM.PROX needle DEM.PROX ERG INDEF.POSS-clothes IFR-CAUS-sew
 754 ‘S/he sewed the clothes with this needle.’

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

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

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

767 2.4.6.3 Tropative

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

- 774 (30) *nua-ta-nr-mpcyr*
 SENS-1→2-TROP-be.beautiful
 775 ‘I find you very beautiful.’

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

779 2.4.6.4 Antipassive

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

- 787 (31) a. *tc^heme nua ku^u c^hy-tṣuβ*
 girl DEM ERG IFR-sew
 788 ‘The girl sewed it.’

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

2 A grammatical sketch

- 789 b. *t^he^beme nur c^hγ-ry-t_øsuβ*
girl DEM IFR-APASS-sew
790 ‘The girl sewed (something) / did sewing.’

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

793 2.4.6.5 Reflexive and reciprocal

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

- 797 (32) *t^hw-zγy-rku-a*
AOR:DOWNTREAM-REFL-put.in-1SG
798 ‘I put myself (in the bag).’

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

- 801 (33) *tγ-zγy-sui-mpca-a*
AOR-REFL-CAUS-scold-1SG
802 ‘I got myself scolded.’

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

808 2.4.6.6 Autive

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

811 Its most basic function is self-affectedness or autobenefactive (§19.1.3). In par-
812 ticular, the autive on transitive verbs taking a inalienably possessed object can
813 be used to specify that the subject and the possessor of the object are coreferent
814 (34a), whereas the absence of the autive is generally interpreted as indicating the

⁶ If 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^hw-zγy-rku-t-a*.

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. *uizo kuu u-srob ko-nuu-ri*
 3SG ERG 3SG.POSS-life IFR-AUTO-save
 ‘S/he_i saved his/her_i own life.’
- b. *uizo kuu u-srob 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. *ty-rye pur-nuu-prat-a*
 INDEF.POSS-necklace AOR-AUTO-break-1SG
 ‘I broke the pearl necklace (by mistake).’
- b. *ty-rye pur-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).

2.4.7 Denominal derivations

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

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

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

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

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

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

862 2.5 Core and oblique arguments

863 The morphosyntactic properties of arguments can be studied from the point of
 864 view of flagging (§8, §8.2, §8.3) and indexation (§14.2, §14.3.2), but also relativization
 865 (§23.5) and coreference restrictions between complement and matrix clauses
 866 (§24.2).

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

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

879 Outside of verb indexation, the three basic core arguments (intransitive subject,
 880 transitive subject and object) are encoded in various ways, and present different types of alignments.
 881

882 2.5.1 Neutral alignment

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

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

892 2.5.2 Nominative-accusative alignment

893 2.5.3 Subjecthood

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

896 The first piece of evidence for this type of alignment in Gyalrong languages to
 897 have been proposed (J. T.-S. Sun 2003) is the fact that the *ku-* (subject) participle
 898 (§16.1.1.4) is the only form that can be used to relativize both intransitive (§23.5.1)
 899 and transitive subjects (§23.5.2). However, the *ku-* participles are not exclusively
 900 used to relativize intransitive and transitive subjects: they can also relativize
 901 possessors of intransitive subjects (§23.5.10), and are the only option to do so,
 902 resulting in ambiguities (see examples 175 and 176 in §22.5.2.1).

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

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

908 First, the argument performing the motion encoded by the associated prefixes
 909 (§15.2.1) is always the intransitive subject in the case of intransitive verbs, and
 910 the transitive subject in the case of transitive ones (§15.2.2), and can never be
 911 the object, a possessor of the subject or any oblique argument (but it can be the
 912 causee of a causative verb).

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

916 **2.5.4 Objecthood**

917 While evidence for *subjects* independent from person indexation can be identified,
 918 *objects* (as opposed to other non-subject arguments in absolute form, §8.1.5,
 919 §8.1.6, §8.1.8) are more elusive.

920 In subject participles of transitive verb, the object is marked by a possessive
 921 prefix (§16.1.1.1), obligatorily if no other prefix (of orientation, negation or asso-
 922 ciated motion) is present, as in (36b).

- 923 (36) a. *spjarkuu nur kur ca pnu-nuze*
 wolf DEM ERG meat SENS-eat[III]
 'The wolf eats meat.'
 b. *wi-kui-nuze*
 3SG.POSS-SBJ:PCP-eat
 '(the one/someone) who eats it'

927 However, possessive prefixes on subject participles cannot be used as evidence
 928 for objects outside of finite indexation, as they can mark other grammatical func-
 929 tions. For example the verb *rga* 'like' is conjugated intransitively as shown by
 930 (37b): its subject *spjarkuu* has no ergative marking, and no stem alternation is
 931 observed on the verb (a form like *tunu-rge* would be expected if this verb were
 932 transitive as in 36a, §12.2.2.1, §14.3.1). However, in addition to its subject, this
 933 verb takes an absolute argument (*ca* 'meat' in 37a) that cannot be indexed: the
 934 *semi-object*. This argument is also marked as a possessive prefix on the subject
 935 participle like a real object, as in (37b).

- 936 (37) a. *spjarkuu nur ca pnu-rga*
 wolf DEM meat SENS-like
 'The wolf likes meat.'
 b. *wi-kui-rga*
 3SG.POSS-SBJ:PCP-like
 '(The one/someone) who likes him/her/it.'

940 Moreover, objects do not have any relativization construction that is specific to
 941 them. They can be relativized by object participial relatives (§16.1.2.4) and finite

942 relatives (§23.2.2), but these categories of clauses can also be used to relativize
 943 semi-objects (§23.5.4.1, §16.1.2.5) and other participants such as goals (§23.5.5.2,
 944 §23.5.5.1) and possessors of objects (§23.5.10). For instance, headless participial
 945 clauses relativizing the object of *ndza* ‘eat’ (38a) or the semi-object of *rga* ‘like’
 946 (38b) have the same structure.

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

951 **2.5.5 Absolutive-ergative alignment**

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

955 Absolutive form (absence of postposition or relator noun) does indeed serve to
 956 mark intransitive subjects (§8.1.1) and objects (§8.1.3) by default, and transitive
 957 subjects normally take the ergative *kua* postposition (§8.2.2.1). However, both
 958 absolute (§8.1.5, §8.1.7, §8.1.8) and ergative forms (§8.2.2.4, §8.2.2.7) have many
 959 functions other than marking core arguments. In addition, there is some fluidity
 960 in the use of the ergative postposition: some intransitive subjects can also be
 961 marked by it (§8.2.2.3), in particular due to anticipation of a transitive verb in
 962 the following clauses (§8.2.2.2).

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

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

970 There is no case of syntactic pivot with exclusive neutralization of intransitive
 971 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) *lualu nuu kui 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).

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

2.7 Subordination

2.7.1 Relative clauses

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

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

1000 In the text corpus, an important proportion of relative clauses are headless
 1001 (§23.4.1). When the head noun is overt, it is either internal to the relative clause
 1002 (§23.4.3) or follows it (§23.4.2), depending in part on the syntactic function of the
 1003 relativized element and on the type of relative clause.

1004 Example (41) illustrates a head-internal finite relative: the relativized object *pya*
 1005 ‘bird’ is located between the transitive subject *lulu nuu kuu* and the finite verb (an
 1006 object participle *tx-kv-ndza* (AOR-OBJ:PCP-eat) would also be possible to express
 1007 the same meaning), at the position it would normally occupy in the correspond-
 1008 ing independent sentence (see 39 above).

- 1009 (41) [lulu nuu kuu **pya** ta-ndza] nuu
 cat DEM ERG bird AOR:3→3'-eat DEM
 1010 ‘The **bird** that the cat ate’

1011 In (42) on the other hand, the relative clause precedes the relativized transitive
 1012 subject *lulu* ‘cat’.

- 1013 (42) [pya u-tx-kuu-ndza] **lulu** nuu
 bird 3SG.POSS-AOR-SBJ:PCP-eat cat DEM
 1014 ‘The **cat** that ate the bird’

1015 2.7.2 Complement clauses

1016 Complement clauses in Japhug (chapter 24) occur in intransitive subject (43a,
 1017 §24.5.8), object (43b, §24.5.3.4) and semi-object (43c, §24.5.3.5) functions. There
 1018 are also complement-taking nouns (43d, §24.6).

- 1019 (43) a. [*kʰramba kv-βzu*] *mx-pe*
 lie INF-make NEG-be.good:FACT
 1020 ‘Telling lies is bad.’
 b. *uizo kuu* [*kʰramba kv-βzu*] *mx-spe*
 3SG ERG lie INF-make NEG-be.able[III]
 1022 ‘S/he is not able to tell lies.’
 c. *[uizo kuu kʰramba kv-βzu]* *mx-nvz*
 3SG ERG lie INF-make NEG-dare
 1024 ‘S/he does not dare to tell lies.’
 d. [*kʰramba kv-βzu*] *a-βjiz* *mx-yi*
 lie INF-make 3SG.POSS-wish NEG-come:FACT
 1026 ‘I do not want to tell lies.’

1027 As shown by (43c), when the complement-taking verb is semi-transitive (and
 1028 thus morphologically intransitive, §14.2.3), the verb in the complement clause is
 1029 transitive and they share their subjects, the subject can take ergative case follow-
 1030 ing the verb in the complement clause rather than absolute (§24.2.1.1).

1031 Not all complements are infinitive clauses as in (43) (§24.4.2, §24.2.1). Some
 1032 verbs are also compatible with finite complements (§24.2.3) as in (44), with sub-
 1033 ject coreference.

- 1034 (44) [pjui-ta-suxcyt] *pui-spe-a*
 1035 IPFV-1→2-teach SENS-be.able[III]-1SG
 ‘I am able to teach you.’

1036 Verbs of speech also take reported speech clauses (§24.2.5), which present mor-
 1037 phosyntactic properties different from regular finite complements (§24.2.5.2).

1038 Aside from complement clauses proper, various complementation strategies
 1039 are also found, including relative clauses in core argument function (which re-
 1040 semble, and can even be ambiguous with, complement clauses, §24.4.1), participi-
 1041 pial clauses (§24.4.2), action nominals (§24.4.3) and simple coordination (§24.4.4).

1042 2.7.3 Other subordinate clauses

1043 Subordinate clauses other than relative and complement clauses (treated in chap-
 1044 ter 25) tend to be expressed by finite clauses headed by a relator noun or a post-
 1045 position. For instance, clauses of temporal precedence (§25.3.2.1) require a finite
 1046 verb in the Imperfective regardless of the TAME category of the verb in the main
 1047 clause (§21.2.3) followed the postposition *cunŋgu* ‘before’ (§8.2.11) as in (45).

- 1048 (45) [cʰui-sta-nui cunŋgu] *tce, uzo cʰy-rvru*
 1049 IPFV-wake.up-PL before LNK 3SG IFR-get.up
 ‘S/he got up before they had woken up.’

1050 Converbial clauses do exist (§16.6), but are all in competition with a finite
 1051 clause type. For instance, the immediate converb (§16.6.3) illustrated in (46a) has
 1052 a corresponding construction (46b) with a finite verb in the Aorist (§25.3.3.2).

- 1053 (46) a. *tu-tui-tob*
 1054 IPFV:UP-IMM:CONV-come.out
 b. *ty-tob cimuma*
 1055 AOR:UP-come.out immediately.after
 ‘As soon as it comes out / immediately after it has come out’

1056 Some finite clauses not followed by postpositions or relator nouns still have
 1057 clues of a subordinate status. In particular, periphrastic TAME constructions
 1058 involving an Imperfective verb (§21.2) and a copula (§21.2.2), when they occur in
 1059 chains, tend to elide the auxiliary in the non-final clauses (§25.1.3), resulting in
 1060 constructions like (47), where the first clause *cyr tce tu-ryma* ‘it is active during
 1061 the night’ is incomplete (lacking the auxiliary *nui-ŋu*), and the copula *nui-ŋu* has
 1062 scope over the two clauses preceding it (see also 10, §21.2.2, for a example of the
 1063 same type with more than ten clauses sharing a single auxiliary).

- 1064 (47) *lulū nui, [cyr tce tu-ryma], sŋi tce ku-nui-ŋgwu nui-ŋu*
 cat DEM night LOC IPFV-work day LOC IPFV-AUTO-lie.down SENS-be
 1065 ‘The cat [is active during the during the night] and sleeps during the day.’

1066 We also find a special type of serial verb construction expressing manner
 1067 (§25.4.1), in which the verb in the manner clause (with a similative verb §25.4.1.2
 1068 or a deideophonic verb §25.4.1.1) shares the same TAME, subject (and often ob-
 1069 ject) as the verb in the other clause. In (48) for example, *stu* ‘do like’ and the
 1070 *χtci* ‘wash’ are in Aorist 1SG→3SG form (§21.5.1.1) and share *a-ŋga* ‘my clothes’ as
 1071 object (the demonstrative *ki* is semi-object, §14.4.2).

- 1072 (48) *a-ŋga nui ki ty-stu-t-a tce*
 1SG.POSS-clothes DEM DEM.PROX AOR-do.like-PST:TR-1SG LNK
 1073 *nui-χtci-t-a*
 AOR-wash-PST:TR-1SG
 1074 ‘I washed my clothes like this.’

1075 2.8 Remarkable features

1076 After this overview of the core features of Japhug grammar, this section presents
 1077 a selection of topics of particular interest to linguistic typology and comparative
 1078 grammar in Japhug.

1079 2.8.1 Consonant clusters

1080 The Kamnyu dialect of Japhug has over four hundred consonant clusters in onset
 1081 position (§4.2, Jacques 2019b), whose internal structure can be studied through
 1082 alternations in reduplication patterns (§4.1, Jacques 2007).

1083 In addition to the size of the inventory, which in itself is significant (Japhug is
 1084 one of the languages with the greatest number of clusters in the Trans-Himalayan

1085 family; only Khroskyabs boasts more clusters, Lai 2017: 101), the system of clusters
 1086 presents two main points of interest.

1087 First, syllable onsets in Japhug are rich in clusters violating the *sonority sequencing 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 (Nathan W Hill 2019: 212) and in Old Chinese in partic-
 1096 ular (Gong & Lai 2017).

1098 2.8.2 Direct-inverse

1099 Direct-inverse systems, while relatively well-attested in languages of the Ameri-
 1100 cas (Zúñiga 2006), are very rare in the Old World. Japhug and the other Gyalrong
 1101 languages (DeLancey 1981; Sun & Shidanluo 2002; Jacques 2010a; Gong 2014) are
 1102 in fact the only languages in Eurasia to have a near-canonical direct-inverse in-
 1103 dexation system (§14.3.2.8, Jacques & Antonov 2014), in particular with a direct-
 1104 inverse contrast in both mixed (§14.3.2.1) and non-local domains (§14.3.3).⁸

1105 Moreover, Japhug is unique among Gyalrong languages in lacking inverse
 1106 marking in the local 2→1 configuration (§14.3.2.3, §14.8.3, Jacques 2018c), and
 1107 possibly the only known language to use the inverse marker as the sole marker
 1108 of *generic transitive subject* (§14.3.2.5).

1109 2.8.3 Inflectionalization

1110 While person indexation is one of the defining properties of verbs in Japhug
 1111 (§2.4.2), a handful of expressions of nominal origin have acquired the ability to

⁸ Inverse-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 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).

1112 take dual *-ndzi* and plural *-nuu* indexation suffixes by analogy with imperative
 1113 verb forms (§14.7).

1114 For instance, the phatic expression *syrma* ‘good night’ (§14.7.1) has the dual
 1115 *syrma-ndzi* ‘good night (to both of you)’ when addressing two people. This un-
 1116 usual phenomenon has parallels in Indo-European (Viti 2015: 113–114).

1117 2.8.4 Prefixal chain

1118 Japhug, like other Gyalrong languages, has a large prefixal template (§11.2), al-
 1119 lowing more than seven or eight prefixes in a row (example 15, §2.4.1), while
 1120 the suffixal chain is much more restricted (§11.3). It is among the rare strongly
 1121 prefixal languages with strict verb-final order, alongside Ket (Werner 1997) and
 1122 Athabaskan (Rice 2000).

1123 While the verb-final word order is relatively ancient,⁹ there evidence that the
 1124 part of the prefixal chains in Gyalrongic languages have been recently innovated,
 1125 either through grammaticalization and integration of verb roots from serial-verb
 1126 constructions (Jacques 2013b), or the absorption of adverbs or clause-final parti-
 1127 cles occurring immediately before the verb into the verbal word (§21.5.4, §21.7.1.3;
 1128 see also Lai accepted on Khroskyabs).

1129 Japhug also has a few bipartite verbs, made from two verb stems with identical
 1130 TAME and person indexation cliticized to each other and with elision of either
 1131 the suffixal chain of the first verb as in (49), the prefixal chain of the second verb,
 1132 or both (§11.6.3, Jacques 2018a).

- 1133 (49) *a-ty-tui-stu=a-ty-tu-mbat-nuu*
 IRR-PFV-2-try.hard(1)=IRR-PFV-2-try.hard(2)-PL
 1134 ‘Do your best/try hard.’

1135 2.8.5 Hybrid indirect speech

1136 Reported speech in Japhug frequently presents mismatches in person indexa-
 1137 tion, with the main verb representing the point of view of the subject of the
 1138 complement-taking verb, and the nouns and possessive prefixes that of the cur-
 1139 rent speaker.

1140 For instance, in (50a), the verb *rtoꝝ* has 1PL indexation, reflecting the point
 1141 of view of the transitive subject of the complement-taking verb *tui-nuu-suso-nuu*

⁹ Reconstructing 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).

2 A grammatical sketch

1142 ‘you think, you want’ (the daughters-in-law, the addressee). On the other hand,
1143 the 2PL possessive prefixes on *nū-pʰama* ‘your parents’ and the other nouns cor-
1144 respond to the point of view of the father-in-law (the current speaker) – a 1PL
1145 possessor would be expected in the reported speech clause if no shift of point of
1146 reference had taken place, as in (50b).

1147 Three different translations of the Japhug sentence are proposed in (50a), the
1148 first in direct speech, the second in indirect speech (with shift toward the current
1149 speaker) and the third as a merger of the two (agrammatical in English), directly
1150 reflecting the original *hybrid indirect speech* (§24.2.5.2).

- 1151 (50) a. *a-me* *ra nuzora kumy*, (...) [*nū-kʰa*,
1152 1SG.POSS-daughter PL 2PL also 2PL.POSS-house
nū-mu *nū-pʰama* *ra cūrto*b*-i*]
1153 2PL.POSS-mother 2PL.POSS-parent PL TRAL-look:FACT-1SG
tū-nūi-suiso-nūi *cti* *tce jx-nūi-ce-nūi*
1154 2-AUTO-think:FACT-PL be.AFF:FACT LNK IMP-VERT-go-PL
1155 Direct: ‘My daughters in law_i, you_i think “Let us_i go and see our_i
house, our_i parents,” so go home.’
1156 Indirect: ‘My daughters in law_i, you_i want to go (home) and see
1157 your_i 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-kʰa*, *ji-mu* *ji-pʰama* *ra*
1161 1PL.POSS-house 1PL.POSS-mother 1PL.POSS-parents PL
*cūrto*b*-i* (*ra*)
1162 TRAL-look:FACT-1PL be.needed:FACT
‘(Let us) go and see our houses, our mothers, our parents.’

1163 Hybrid indirect speech is also found in Tibetic languages (Tournadre 2008),
1164 where it has contributed to confusion around the notion of “conjunct/disjunct”
1165 marking. The presence of person indexation makes this phenomenon more easily
1166 identifiable in Japhug than in Tibetan.

1167 2.8.6 The expression of degree and comparison

1168 Japhug lacks comparative and superlative derivations, but has a rich array of
1169 constructions expressing degree and comparison (chapter 26), some of which
1170 are rather uncommon at least in this part of the world.

1171 High degree can be marked by combining a finite adjectival stative verb with
 1172 a degree adverb (§26.1.1) as in (51a) as in most languages. However, the most
 1173 common construction conveying this meaning, illustrated in (51b), comprises a
 1174 degree nominal (§26.1.2, §16.3) serving as intransitive subject of a verb of degree
 1175 ‘be extremely’. Thus the neutral way in Japhug to say ‘*X* is very intelligent’ is
 1176 literally ‘*X*’s degree of intelligence (of being intelligent) is extreme.’

- 1177 (51) a. *wuma zo nui-cqraš*
 really EMPH SENS-be.intelligent
 ‘S/he is very intelligent.’
- 1178 b. *uu-tuu-cqraš nui-saxaš*
 3SG.POSS-NMLZ:DEG-be.intelligent SENS-be.extremely
 ‘S/he is extremely intelligent.’

1181 The main comparative construction in Japhug is unusual for a different reason.
 1182 In many languages including Tibetic (Zhou 2003: 239, Heine & Kuteva 2002: 29),
 1183 the ergative or the ablative are used to mark the standard of comparison. In
 1184 Japhug, as illustrated in (52), the standard has a dedicated postposition (§8.2.7),
 1185 whereas the ergative marker *kua* is used to mark the *comparee* instead (§8.2.2.7,
 1186 §26.2.1).

- 1187 (52) [u-*bi* *syz*] [u-*pi* *nui kui*]
 3SG.POSS-younger.sibling COMP 3SG.POSS-elder.sibling DEM ERG
 1188 *mpcyr*
 be.beautiful:FACT
 1189 ‘The elder (sister/brother) is more beautiful than the younger (sister/
 1190 brother).’

1191 This observation is all the more surprising given that *kui* is most likely bor-
 1192 rowed from Tibetan (Jacques 2016b).

1193 2.8.7 Japhug morphology and Trans-Himalayan comparative 1194 linguistics

1195 The rich verbal and nominal morphology of Japhug and other Gyalrongic lan-
 1196 guages comprises both archaisms and innovative features illustrating interesting
 1197 grammaticalization pathways.

1198 Among innovations, many voice prefixes (§11.2.2) have been created through
 1199 reanalysis of denominal derivation (§20.10). The clearest case of an innovating

1200 voice marker is the antipassive *rr-* (§18.6.1): irregular forms provide direct evi-
1201 dence that it originated from the intransitive denominal *rr-* (§20.4.1) applied to de-
1202 verbal nouns (§20.10.1.1, Jacques 2014b). Other representative innovations include
1203 the reflexive *zγr-* from an incorporated pronoun (§18.3.7, Jacques 2010b), the as-
1204 sociated motion prefixes grammaticalized from motion verbs (§15.2.1, Jacques
1205 2013b), the orientation preverbs from locational adverbs or nouns (§15.1.1.4) and
1206 the comitative adverbs (§5.8.1, Jacques 2017d).

1207 In addition to innovative affixes, Japhug also preserves morphological archaisms
1208 which go further back than proto-Gyalrongic, some potentially even up to proto-
1209 Trans-Himalayan.

1210 The antiquity of person indexation in Gyalrongic (§14.8.1) and the rest of Trans-
1211 Himalayan is a notoriously controversial topic (Bauman 1975; DeLancey 1989;
1212 LaPolla 1992; van Driem 1993b) but in any case a paradigm comprising a second
1213 person prefix with suffixes for first person and number of third and second per-
1214 son should at least be reconstructed back to the common ancestor of Gyalrongic,
1215 Kiranti and probably Jinghpao (Jacques 2012a; DeLancey 2014; Jacques 2016e).

1216 In a few cases, archaic morphology only remains as lexicalized traces in Ja-
1217 phug, in particular the applicative *-t* suffix, very prominent in Kiranti (Michailovsky
1218 1985; Jacques 2015a) for instance, which is only attested in two verbs (§19.7.2), or
1219 the nominalization *-z* (§16.5.1) suffix, which has cognates in Tibetan and Chinese
1220 (Jacques 2003; 2016c).

1221 In other cases, derivational processes that only exist as traces in most of the
1222 family are still productive in Japhug and other core Gyalrong languages, in partic-
1223 ular the sigmatic denominal and causative prefixes (§20.3, §17.2, Sagart & Baxter
1224 2012; Jacques 2015d), velar (§16.8.1) and sigmatic (§16.8.2) nominalization prefixes
1225 (Jacques 2014d; Konnerth 2016; Jacques 2018b), and the dental indefinite posses-
1226 sor prefix of inalienably possessed nouns (§5.1.3, §5.1.2).

1227 Gyalrong data is particularly relevant to the debate regarding the voicing al-
1228 ternation in Old Chinese and other Trans-Himalayan languages (Handel 2012).
1229 Old Chinese and many other languages have pair of verbs with a voicing con-
1230 trast correlated with transitivity, in which the unvoiced verb is transitive and
1231 the voiced one intransitive. It is not obvious which one is the derived form, and
1232 the direction of derivation is still being debated (Sagart & Baxter 2012; Mei 2012).

1233 Japhug and other Northern Gyalrong languages (Jacques 2004: 411–412, Gong
1234 2018: 271) however provide a crucial piece of evidence showing that the direc-
1235 tionality was from the transitive verb to the intransitive one (§18.5.1.2), confirming
1236 evidence from unrelated sources (Sagart 2003): the Tibetan borrowing *χtyr* ‘scat-
1237 ter’ (from རྩྚྱ ག୍ତୋ ཅ ལྔ ད୍ୱୁ ན ས୍ତୁ ད୍ୱୁ ན ས୍ତୁ ‘scatter’) has an intransitive counterpart *bndyr* ‘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, Nathan W 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).

¹²⁶⁵ 3 Phonology

¹²⁶⁶ 3.1 Introduction

¹²⁶⁷ Japhug syllables follow the template (C)(C)(C)V(C) with initial clusters contain-
¹²⁶⁸ ing at most three consonants, and at most one consonant in the coda. Given
¹²⁶⁹ the complexity of possible onsets, it is not practical to provide an exhaustive
¹²⁷⁰ list of possible syllables in the language (unlike Naish languages for instance,
¹²⁷¹ see [Michailovsky & Michaud 2006](#)); onsets and rhymes can however be listed
¹²⁷² exhaustively.

¹²⁷³ This chapter, partly based on previous publications (in particular [Jacques 2004](#)
¹²⁷⁴ and [Jacques 2019b](#)), presents the inventory of consonants and vowels, offers a fo-
¹²⁷⁵ cused discussion on syllabic structure and quasi-neutralization, and describes
¹²⁷⁶ suprasegmental phenomena and speech errors. The complete inventory of con-
¹²⁷⁷ sonant clusters is listed and analyzed in §4.2 in the following chapter.

¹²⁷⁸ This chapter does not treat the phonology of loanwords from Chinese (except
¹²⁷⁹ highly nativized ones). Non-nativized Chinese loanwords are represented in this
¹²⁸⁰ grammar in pinyin (even though this system is an imperfect way of rendering
¹²⁸¹ Sichuanese Mandarin) between angled brackets.

¹²⁸² 3.2 Consonants

¹²⁸³ 3.2.1 Onsets

¹²⁸⁴ There are fifty consonantal phonemes in Japhug (Table 3.1). All can occur as
¹²⁸⁵ simple onsets. Stops and affricates have a four-way contrast between voiceless
¹²⁸⁶ unaspirated, voiceless aspirated, voiced and prenasalized series.

¹²⁸⁷ The voiced fricatives /χ/ and /β/ should be classified as non-nasal sonorants
¹²⁸⁸ (§4.2.2), alongside the glides /j/ and /w/, the lateral /l/ and the rhotic /r/.

¹²⁸⁹ Table 3.2 provides examples of each of these phonemes, followed whenever
¹²⁹⁰ possible by the vowel /u/. Among these consonants, four are only attested in
¹²⁹¹ borrowings from Tibetan and/or ideophones: /ʂ/, /dʐ/, /dʐ/ and /g/.

¹²⁹² The phoneme /w/ is realized as a fricative [f] or [ɸ] before voiceless obstruents
¹²⁹³ and as [v] or [β] before voiced ones, and can also be fricativized when it occurs

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/	/ʈʂ/	/tç/				
	asp.		/ts ^h /	/ʈʂ ^h /	/tç ^h /				
	voi.		/dz/	/ɖʐ/	/dʒ/				
	pren.		/ndz/	/ɳɖʐ/	/ndz/				
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/						

1294 as coda. In the orthography used in this work, it is transcribed as <f> when
 1295 followed by an voiceless stop, affricate or fricative, and as <β> when followed by
 1296 a voiced one (§4.2.1.1), or in coda position (§3.2.2).

1297 As in many languages of the Tibetan area, the /r/ is a trilled retroflex voiced
 1298 fricative [ʈʂ] in onset position, sometimes realized as a simple voiced fricative [ʐ].
 1299 It is devoiced to [ʂ] (with neutralization of the contrast with /ʂ/) when followed
 1300 by a voiceless consonant in clusters (§4.2.1.4).

1301 The prenasalized voiced stops and affricates /mb/, /nd/, /ndz/, /ndz_v/,
 1302 /ɲ/, /ŋg/ and /NG/ all have voiceless and voiceless aspirated counterparts such
 1303 as /mp^(h)/, /nt^(h)/, /nts^(h)/, /ntç^(h)/, /ɳʈʂ^(h)/, /ŋk^(h)/ and /nq^(h)/ (§4.2.1.9).
 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 /zmbɾ/, /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 *tci*

Table 3.2: Examples of the consonant phonemes

/p/	/w-p <u>wu</u> /	'its young'	/t <u>ç</u> /	/w-t <u>çwu</u> /	'his boy'
/p ^h /	/w-p ^h <u>wu</u> /	'its price'	/t <u>ç</u> ^h /	/tot <u>ç</u> ^h <u>wu</u> /	'it gore him/her'
/b/	/bab <u>wu</u> /	'blackcurrant'	/d <u>z</u> /	/d <u>z</u> <u>wu</u> /	'it is oily'
/mb/	/mb <u>wu</u> /	'collapse'	/nd <u>z</u> /	/kond <u>z</u> <u>wu</u> /	's/he accused him/her'
/m/	/tw <u>m</u> <u>wu</u> /	'sky'	/ç/	/ç <u>wu</u> /	'who'
/w/	/w <u>w</u> <u>wu</u> /	'Boletus sp.'	/z/	/my <u>z</u> <u>wu</u> /	'not only'
/t/	/tw <u>b</u> <u>o</u> <u>s</u> /	'one group'	/c/	/c <u>wu</u> /	'stone'
/t ^h /	/t ^h <u>wu</u> /	'be serious' (of a disease)	/c ^h /	/t <u>ç</u> ^h <u>wu</u> /	'wedge'
/d/	/d <u>w</u> <u>d</u> <u>u</u> <u>t</u> /	'turtledove'	/j/	/w <u>a</u> <u>j</u> <u>wu</u> /	'earthquake'
/nd/	/nd <u>wu</u> /	'appear (rainbow)'	/ɲ/	/ɲ <u>wu</u> /	'open (it)'
/ts/	/kon <u>v</u> <u>ts</u> <u>wu</u> /	's/he hid it'	/p/	/p <u>u</u> <u>v</u> <u>n</u> <u>wu</u> /	'soft and powdery'
/ts ^h /	/ts ^h <u>w</u> <u>t</u> ^h <u>o</u> /	'kid'	/j/	/w-j <u>wu</u> /	'its handle'
/dz/	/dz <u>u</u> <u>r</u> <u>d</u> <u>z</u> <u>wu</u> /	'straight'	/k/	/ku <u>k</u> <u>i</u> /	'this'
/ndz/	/ndz <u>w</u> <u>p</u> <u>e</u> /	'way of sitting'	/k ^h /	/k ^h <u>w</u> <u>na</u> /	'dog'
/n/	/nu <u>ŋ</u> <u>ja</u> /	'cow'	/g/	/gu <u>ŋ</u> <u>gw</u> <u>y</u> /	'very dark (sky)'
/s/	/sum <u>at</u> /	'fruit'	/ŋ/	/u-ŋ <u>gw</u> <u>w</u> /	'inside'
/z/	/zu <u>m</u> <u>mi</u> /	'almost'	/ŋ/	/caŋ <u>wu</u> /	'heat (deer)'
/l/	/ru <u>l</u> <u>wu</u> /	'medicine'	/x/	/x <u>u</u> <u>r</u> <u>x</u> <u>wu</u> /	'round'
/ɿ/	/ɿ <u>w</u> <u>ŋ</u> <u>ŋ</u> <u>l</u> <u>wu</u> /	'breathing movement'	/ɣ/	/ɣ <u>wu</u> /	'genitive'
/tʂ/	/tʂ <u>u</u> <u>m</u> <u>p</u> <u>a</u> /	'apron'	/q/	/qu <u>ql</u> <u>i</u> /	'staring'
/tʂ ^h /	/tʂ ^h <u>w</u> <u>y</u> /	'maybe'	/q ^h /	/ku <u>s</u> <u>v</u> <u>q</u> ^h <u>w</u> <u>q</u> ^h <u>a</u> /	'naughty'
/dz/	/dʐ <u>u</u> <u>ŋ</u> <u>u</u> <u>z</u> <u>wu</u> /	'strong (of tea)'	/NG/	/mu <u>ŋ</u> <u>ng</u> <u>wu</u> /	<i>Ligularia fischeria</i>
/ndz/	/ndʐ <u>u</u> <u>ŋ</u> <u>u</u> <u>nb</u> <u>wu</u> /	'guest'	/χ/	/χ <u>u</u> <u>χ</u> <u>wu</u> /	'having big nostrils'
/ʂ/	/ʂ <u>u</u> <u>ŋ</u> <u>ʃ</u> <u>wu</u> /	'clear'	/ʁ/	/naŋ <u>χ</u> <u>wu</u> /	'shirt'
/r/	/ru/ (nomads)	'temporary place'	/h/	/han <u>u</u> <u>ni</u> /	'a little'

1315 'also' (§9.1.6.2), the highly polyfunctional *ci* 'one' (§6.6.1, §6.8, §6.7.2, §9.1.7, §7.1.1,
1316 §9.1.4.1 and §22.2.1) and the demonstrative *ki* 'this' (§6.9).

1317 The palatal stops /c/, /c^h/, /j/ and /ɲ/ cannot be analyzed as velar+/j/ clusters,
1318 as a clear contrast exists between the palatal series and velar stops followed by
1319 /j/ (§4.2.2.2), in minimal pairs such as *ŋyo* 'have damages' and *ŋgio* 'slip', 'glide'.¹
1320 That the onsets /ɲ-/ and /ŋj-/ have a different syllabic structure is confirmed
1321 by their reduplication patterns (§4.1): while in the former the palatalization is
1322 present on the reduplicant *pui-nŋ-ŋyu~ŋyo* 'have damages everywhere' (in the
1323 distributed action derivation, §19.4), in the latter the /j/ is not reduplicated as
1324 *pui-nŋ-ŋgu~ŋgio* 'he slipped everywhere'.

1325 The alveolo-palatal affricates /tç/, /tç^h/, /dz/ and /ndz/ are also contrastive

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

3 Phonology

1326 with dental affricates+j clusters, as shown by the minimal pair *ndziar* ‘be tight’
 1327 (of knot) vs. *ndzax* ‘swim’ (§4.2.2.2). There is also a contrast with dental stops+j,
 1328 though no good minimal pairs can be found due to the rarity of these clusters.

1329 The attested contrasts between coronal affricates and dorsal stops with and
 1330 without the *j* medial are illustrated in Table 3.3 in combination with the vowel
 1331 /o/.

Table 3.3: Palatalization contrasts in coronal and dorsal onsets

Onset	Example
/ts/	<i>tʂtsoʂ</i> ‘Potentilla anserina’
/tsj/	<i>tʂ-mtsioʂ</i> ‘beak’
/tʂ/	<i>tʂoʂ</i> ‘add water’
/tʂ/	<i>mtʂoʂ</i> ‘be sharp’
/c/	<i>co</i> ‘valley’
/k/	<i>ko</i> ‘prevail over’
/kj/	<i>kio</i> ‘cause to glide’
/q/	<i>rqoʂ</i> ‘hug’
/qj/	<i>qioʂ</i> ‘vomits’

1332 The voiceless lateral /ɬ/ (realized by some speakers as a postaspirated lateral
 1333 [l^h]), is a marginal phoneme in Japhug, which does not appear in clusters (except
 1334 heterosyllabic ones, as in /cuyɬaj/ ‘symptom in which the oral cavity becomes
 1335 white’) and is very rare in the native vocabulary. Yet, its phonemic status is justi-
 1336 fied by the fact that it contrasts with /lx/; there are no minimal pairs contrasting
 1337 the two, but the contrast can be indirectly illustrated by examples such as *alxaj*
 1338 ‘not properly put’ (of clothes) and *lxulxi* ‘thick and cumbersome’ on the one hand,
 1339 and *ɬyt* ‘become old’ and *ɬyndzi* ‘ghost’ on the other hand.

1340 3.2.2 Codas

1341 The inventory of consonants in coda position in Japhug is more restricted than in
 1342 initial position. In particular, the voicing and aspiration contrasts are neutralized
 1343 in codas.

1344 Only twelve consonants out of fifty appear as codas: /-p/, /-w/, /-m/, /-t/, /-z/,
 1345 /-n/, /-l/, /-r/, /-j/, /-ɣ/, /-ɳ/, /-ɳ/. The stop /-p/ is restricted to a few ideophones
 1346 (§10.1.5.2), and is not found in the inherited non-ideophonic vocabulary and in
 1347 Tibetan loanwords, except as first element of the heterosyllabic cluster /pt/ in the

1348 word /sqap.tury/ ‘eleven’ (§4.2.3.1). The codas /-n/, /-l/ and /-ŋ/ are extremely
 1349 rare (but not entirely absent) in the non-ideophonic native vocabulary.

1350 A list of possible combinations between codas and vowels in Japhug is de-
 1351 scribed in §3.3.2.

1352 In word-final position, codas are voiced when followed by a word beginning
 1353 with a voiced consonant or a vowel, but are devoiced in phrase-final position, be-
 1354 fore a pause or before a voiceless segment (even across word boundaries, §4.3). In
 1355 isolation, word-final /-z/, /-r/, /-j/, /-ɣ/ and /-β/ in particular are realized as [s],
 1356 [ɾ], [j], [x] and [χ], respectively. The coda /-β/ can also be realized alternatively
 1357 as pharyngealization of the preceding vowel.

1358 Since the voicing contrast between the voiceless fricatives /s/, /x/, /χ/ and
 1359 the voiced ones /z/, /ɣ/, /β/ is neutralized in coda position, it could seem bet-
 1360 ter to argue that the fricative codas, whatever their phonetic realization, are
 1361 archiphonemes {s,z}, {x,y} and {χ,β}, and that any discussion of their underly-
 1362 ing voicing is futile (Nathan W. Hill 2016). However, in the case of Japhug at
 1363 least, some morphophonological rules are easier to describe if one assumes that
 1364 fricative codas are underlyingly voiced.²

1365 First, when the 1SG -a suffix is added to a verb stem ending in a fricative coda,
 1366 that coda is resyllabified, becoming the onset of the syllable with a as rhyme.
 1367 In these cases, the voiced allophone always surfaces (§14.2.1.1): for instance the
 1368 1SG→3SG Imperfective of *ntçʰoz* ‘use’ is *tu-ntçʰóz-a*, syllabified as /tu.ntçʰo.za/. If
 1369 one were to assume that the fricative coda -z were voiceless or underspecified for
 1370 voicing, a context-specific voicing rule would have to be assumed to have taken
 1371 place, since Ŵsa is a permissible sequence in Japhug, as in *pj̚-wy-sat* IFR-INV-kill
 1372 (see for instance example 36 in §20.4.2). It is more economical to assume that -z
 1373 and the other fricative codas are underlyingly voiced, and become devoiced in the
 1374 same contexts as the sonorants.

1375 Second, the locative postposition *zuu* (§8.2.4.1) is the result of the degrammati-
 1376 cation of the locative *-s suffix still attested in Situ (§8.2.1). The fact that it has
 1377 a voiced, rather than an voiceless onset, suggests that the fricative was voiced
 1378 when it was a suffix.

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

1379 3.3 Vowels and rhymes

1380 3.3.1 Vowels

1381 3.3.1.1 Vowel phonemes

1382 Japhug has eight vowel phonemes, listed in Table 3.4. The mid-open unrounded
 1383 vowels /ɤ/ and /e/ are only marginally contrastive: /ɤ/ does not occur in word-
 1384 final open syllables except in unaccented clitics (like the additive *nɤ*, §8.2.6), and
 1385 /e/ only occurs in the last (accented) syllable of a word. They are clearly con-
 1386 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/	/tʂpɤy/	'radish'
/ɯ/	/ruɯɯ/	'medicine'
/y/	/qaɟy/	'fish'
/o/	/lo/	UPSTREAM
/u/	/tʂɿu/	'milk'

1387 Not all speakers of Kamnyu Japhug have a phoneme /y/ in the native vocabu-
 1388 lary. Even for those speakers, it is only attested in the word 'fish' and the verbs
 1389 derived from it. It nevertheless contrasts with /ɯ/ and /u/, as shown by the
 1390 quasi-minimal pairs /qaɟy/ 'fish', /wajɯ/ 'earthquake' and /juli/ 'flute'. Other
 1391 speakers pronounce 'fish' with a medial /w/ as /qaɟwi/. However, [y] is found in
 1392 the speech of all Japhug speakers in Chinese loanwords such as 洋芋 <yángyù>
 1393 'potato'.

1394 3.3.1.2 Vowel assimilation

1395 When followed by a syllable containing a rounded vowel (/u/ or /o/), the back
 1396 unrounded vowels /ɯ/ and /ɤ/ optionally undergo rounding harmony to [u] and
 1397 [o], respectively. For instance, /ɣɤʐu/ 'exist (sensory)' (§22.5.1.2) is generally
 1398 pronounced as [yoʐu], and the reduplicated form *tu~tu-dyn* 'more and more'
 1399 (§12.4.1.4) is realized as [tutudən].

1400 The phoneme /ɤ/ in prefixes tends to be pronounced more open as [e] when
 1401 followed by a syllable whose main vowel is /a/, making it sometimes difficult
 1402 to perceive the contrast, for instance between *ta-ma* ‘work’ and *tr̥-ma* ‘mother’
 1403 (honorific). In the verbal system, the 1SG -*a* suffix triggers obligatory regressive
 1404 assimilation *r* → *a* on the preceding syllable (see Table 14.2, §14.2.1.1).

1405 3.3.1.3 Synizesis

1406 While no true diphthongs exist in Japhug, when the 1SG -*a* suffix is added to a verb
 1407 stem ending in an open syllable, the two syllables undergo synizesis (§14.2.1.1).
 1408 When the verb stem contains the mid vowels /-e/ and /-o/, they become the cor-
 1409 responding high vowels /-i/ and /-u/ due to merging with *a*, and the contrasts
 1410 between /e/ and /i/ on the one hand, and *o* and *u* on the other hand, are neutral-
 1411 ized. For instance, *tso-a* [tsua] ‘I understand’ and *βze-a* [βzia] ‘I (will) do it’ are
 1412 homophonous with *tsu-a* ‘I have time’ and *βzi-a* ‘I (will) be drunk’, respectively.
 1413 Three pseudo-diphthongs are thus attested: *ia* (from *e-a* and *i-a*), *ua* (from *o-a* and
 1414 *u-a*) and *wa* (from *w-a*).

1415 Synizesis results in syllables homophonous to the rhymes -*wa* and -*ja* in clus-
 1416 ters ending in -*w*- (§4.2.2.1) or -*j*- (§4.2.2.2) followed by the vowel -*a*. For instance,
 1417 *aro-a* ‘I own’ (§14.2.3) is homophonous with *a-rwa* ‘my tent’ (§4.2.2.1).

1418 Apart from synizesis, two other types of vowel contraction are found in Japhug.
 1419 First, verb stems with initial *a-* have specific conjugation patterns, where initial
 1420 *a-* merges with the immediately preceding prefix following rules that are not
 1421 completely trivial (§12.3). Second, the 1SG -*a* suffix merges with -*a* stems as *a*,
 1422 without vowel lengthening in Kamnyu Japhug (§14.2.1.1).³

1423 3.3.1.4 Zero onset

1424 There are strong phonotactic restrictions on vowel-initial stems and words in
 1425 Japhug.

1426 In word-initial position, only *a-* and *u-* are found. These vowels can merge
 1427 with previous open syllables (§4.3), and no glottal stop appears, unlike in many
 1428 Trans-Himalayan languages such as Khaling (Jacques et al. 2012). Phonetic [u-],
 1429 [o-], [i-] do appear in word-initial position, but are preferably analyzed as /wu-/,
 1430 /wo-/ and /ji-/ with a glide.

1431 The only possible stem-initial vowel in verbal stems is *a-* (§12.3). It is relatively
 1432 common due to the fact that it appears in many derivational prefixes (§20.2, §18.1,

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

3 Phonology

§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 *†yw*- (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/	/ɣ/	/ŋ/	/β/
/a/	/aw/	/ap/	/am/	/at/	/an/	/az/	/al/	/ar/	/aj/		/ap/	/aŋ/
/e/					/et/							
/i/					/it/			/il/				
/r/	/ṛw/		/ṛm/	/ṛt/	/ṛn/	/ṛz/	/ṛl/	/ṛr/	/ṛj/	/ṛɣ/		
/u/	/uw/	/up/	/um/	/ut/	/un/	/uz/	/ul/	/ur/	/ur/	/wŋ/	/uŋ/	
/y/					/yt/							
/o/			/om/	/ot/	/on/	/oz/	/ol/	/or/	/oj/		/oŋ/	/oβ/
/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, /w/ is fronted and its contrast with /i/ is neutralized (§3.5.2.1). It

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

Vowel	Rhyme	Example	Meaning/Gloss
/a/	/at/	/tʂtuʂʂlat/ tʂ-tu-su-ʂla-t	'you boiled it' AOR-2-CAUS-boil-PST:TR
/e/	/et/	/tʂtuɳɳmʂlet/ tʂ-tu-nɳmʂle-t	'you did it' AOR-2-do-PST:TR
/i/	/it/	/tʂtuʂʂlit/ tʂ-tu-ʂli-t	'you reimbursed it' AOR-2-reimburse-PST:TR
/ɿ/	/ɿt/	/jɿtɿlɿt/ tɿ-tu-lɿt	'you threw it' AOR-2-release
/ɯ/	/ɯt/	/tʰɯtɯplɯt/ tʰɯ-tu-plɯt	'you destroyed it' AOR-2-destroy
/y/	/yt/	/lotuʐnɯqajt/ lo-tu-z-nɯ-qaj-t	'you let him fish' IFR-2-DENOM-fish-PST:TR
/o/	/ot/	/nuutuʂʂwlot/ nuu-tu-sʂβlo-t	'you took care of him' AOR-2-take.care-PST:TR
/u/	/ut/	/puutuɳɳlut/ puu-tu-nɳ-lu-t	'you milked it' AOR-2-DENOM-milk-PST:TR

¹⁴⁵⁸ is only maintained before /-t/ in forms with the past transitive -t suffix. For
¹⁴⁵⁹ instance, we find the minimal pair /tʂ-tuʂ-cwɪ-t/ 'you opened it' (AOR-2-open-PST)
¹⁴⁶⁰ and /ɿ-tuʂ-cɪt/ 'you moved' (AOR-2-move).

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

¹⁴⁶⁴ 3.3.3 Historical phonology

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

¹⁴⁶⁷ Comparison of inherited vocabulary between Japhug and extra-Rgyalrongic
¹⁴⁶⁸ languages shows that the codas *-l, *-n and *-ŋ have been lost in the native vo-
¹⁴⁶⁹ cabulary (Table 3.7). Words with these codas are either borrowed from Tibetan

3 Phonology

¹⁴⁷⁰ or have an ideophonic origin.

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

Japhug	Other languages
<i>qaçpa</i> ‘frog’	չաղա ‘ <i>sbal.pa</i> ‘frog’
<i>trjpa</i> ‘snow’	Dulong <i>tui</i> ³¹ <i>wān</i> ⁵³ ‘snow’ (H. Sun 1982)
<i>turm̩u</i> ‘dusk’	শুক্রাণু ‘ <i>mun.pa</i> ‘darkness’
<i>tu-mtsʰi</i> ‘liver’	ଓংকুৰ মটেশ্বৰ ‘ <i>mtcʰin.pa</i> ‘liver’
<i>pyo</i> ‘spin’	ଓংকুৰ প্ৰায় ‘ <i>pʰaj.ma</i> ‘spindle’
<i>mto</i> ‘see’	ওংকুৰ ম্তোঝ ‘ <i>mtʰoj</i> ‘see’
<i>zri</i> ‘be long’	ଶେଷ ‘ <i>rij.po</i> ‘long’
<i>tx-rmi</i> ‘name’	ଶେଷ ‘ <i>miŋ</i> ‘name’

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

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

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

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

¹⁴⁸³ The rhymes *-aj, *-oj and *-uj on the other hand have merged as -e, -e and -i,
¹⁴⁸⁴ respectively. These vowel fusions occurred before *-o → -u, as shown by the -u /
¹⁴⁸⁵ -e alternation in Stem III (§12.2.2.1, Jacques 2004: 357, Jacques 2008a: 234), which
¹⁴⁸⁶ is cognate to the ‘transitivity marker’ -ja in Tshobdun (J. T.-S. Sun 2003: 496), as
¹⁴⁸⁷ illustrated in Table 3.9.

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

¹⁴⁹³ The only other closed rhymes with o in the native vocabulary are -oz, which
¹⁴⁹⁴ originates from *-aŋs, as in soz ‘morning’, and -ot (in the case of verb stems in -o

Table 3.8: Unrounding of vowels in Tibetan loanwords

Japhug	Tibetan
<i>mtçʰytkʰo</i> ‘house shrine’	ཇྰ୍କ୍ୟାର୍ଦ୍ ମତ୍ତ୍ୟୋଡ଼.କ୍ହାଯ୍ ଶରୀନ୍, ଚାପେଳ୍’
<i>pjyl</i> ‘go around, cross, avoid’	ସ୍ର୍ଵା ବ୍ୟୋଳ୍ ତରୁଣ୍ ଗାଲ୍
<i>χtvr</i> ‘scatter’	ସର୍ତ୍ସ୍ ଗ୍ତୋର୍ ତରୁଣ୍ ଗାଲ୍
<i>slvβkʰaj</i> ‘school’	ସ୍ଲୋବ୍.କ୍ହାଯ୍ ଶରୀନ୍ ଶ୍କୁଲ୍’
<i>tukryz</i> ‘discussion’	ସ୍ଲୋବ୍.କ୍ହାଯ୍ ଗ୍ରୋସ୍ ତରୁଣ୍ ଗାଲ୍
<i>yot</i> ‘warm light’	ସ୍ଲୋବ୍.କ୍ହାଯ୍ ଫୋଟ୍ ତରୁଣ୍ ଗାଲ୍
<i>kʰanjkot</i> ‘architect’	ସ୍ଲୋବ୍.କ୍ହାଯ୍.ବ୍କୋଡ କ୍ହାଯ୍.ବ୍କୋଡ ତରୁଣ୍ ଗାଲ୍
<i>nor</i> ‘make a mistake’	ସ୍ଲୋବ୍.କ୍ହାଯ୍ ନୋର୍ ତରୁଣ୍ ଗାଲ୍
<i>spoz</i> ‘incense’	ସ୍ଲୋବ୍.କ୍ହାଯ୍ ସ୍ପୋଜ୍ ତରୁଣ୍ ଗାଲ୍

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’

¹⁴⁹⁵ with the past transitive -*t* suffix, §11.3).

3.4 Syllabic constraints

3.4.1 Rhotic dissimilation

¹⁴⁹⁸ The rhotic coda *-r* cannot co-occur with a rhotic or a retroflex consonant in the ¹⁴⁹⁹ onset: syllables of the type $\dagger CrVr$, $\dagger rCVr$ or $\dagger t\bar{ṣ}Vr$ are not attested. However, a *-r* ¹⁵⁰⁰ preinitial can be preceded by a syllable containing a /r/ or a retroflex fricative or ¹⁵⁰¹ affricate in its onset, in reduplicated forms such as *rdardul* ‘dust, dirt’ (§5.7.8.2), ¹⁵⁰² or a compound like *qrorni* ‘red ant’ (§5.4.3.2). Since the /r/ sounds in /rda.rdu¹/ and ¹⁵⁰³ /qro.rni/ are heterosyllabic, they do not violate the rhotic dissimilation constraint (§4.2.3.1).

1505 3.4.2 Uvular harmony

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

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

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

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

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

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

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

1538 An older example of uvular harmony is found in the noun *qʰaqʰu* ‘back of the
 1539 house’, ‘behind the house’ from *kʰa* ‘house’ and *u-qʰu* ‘behind’: this word has
 1540 a Tshobdun exact cognate *qʰvqʰu* (Sun & Blogros 2019: 172), showing that the

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

¹⁵⁴¹ assimilation occurred in the common ancestor of the two languages.

¹⁵⁴² 3.5 Neutralization, quasi-neutralization and free variation

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

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

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

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

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

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

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

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

3 Phonology

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՞ր: <i>raŋ.re</i> ‘each’
<i>fsraŋ</i> ‘protect, save’	<i>fsroŋ</i>	բա՞րույթ: <i>bsruŋs</i> ‘save’
<i>tsaŋka</i> ‘(gold, silver) coin’	<i>tsouŋka</i>	տա՞ն: <i>tam ka</i> ‘coin’
<i>çəŋ-</i> ‘egressive’	<i>çouŋ-</i>	

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

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

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

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

1589 3.5.2.1 Neutralization in closed syllables

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

1596 The proof that the underlying phoneme is /u/ rather than /i/ is provided by
1597 the rhyme reduplication of *mtçur* ‘turn’ in the distributed action form *nymtçurlur*
1598 ‘turn in all directions’ (§19.4.2.1): if /i/ had been the underlying vowel, a form
1599 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>rjuy</i> ‘run’	[rjuy]
-m	<i>jum</i> ‘be nice (of weather)’	[jim]
-n	<i>jaftçun</i> ‘stirrup’	[jaftçin]
-r	<i>mtçur</i> ‘turn’	[mtçir]
-l	<i>rjuul</i> ‘wither’	[rnil]

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

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

1610 3.5.2.2 Non-final elements of compounds

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

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

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

3 Phonology

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

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

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

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

1644 **3.5.2.2.3 *ci*° vs. *cui*°** Compounds comprising *cui* ‘stone’ or the root of *tu-ci*
1645 ‘water’ as non-final element are common, and the majority of these words have
1646 the variant *ci*°, even when the noun comes from *cui* ‘stone’ (for instance *ciχci*
1647 ‘stony earth’). Exceptions include *curmbui* ‘stone heap’, *scuibzuy* ‘appearance’
1648 (from གྲେ.ଘୁଗ୍ସ ‘*skʰe.gzugs* physical appearance’) and *yrcuiqʰluβ* ‘making noise (of
1649 water when agitated)’.⁵

1650 **3.5.2.2.4 *ci*° vs. *cui*°** Nouns with *ci*° or *cui*° include in particular Tibetan
1651 loanwords in གྲେ. *kʰi* ‘dog’. The form *ci*° occurs in most cases (for instance *cʰispu*
1652 ‘rabies’ from གྲେ. *kʰi.smio* ‘rabies’), but exceptions include *cʰumu* ‘female dog’, *cʰur-*
1653 *dom* ‘roaming dog’ and *nucʰura* ‘keep guard’ (rechecked using the minimal pair
1654 *cʰi* ‘be sweet’ vs. *tr-cʰu* ‘wedge’).

1655 **3.5.2.2.5 *ji*° vs. *jui*°** Words containing the status contructus of *ju* ‘bamboo’ can
1656 have either the vowel /i/ (as *jispjxt* ‘person making bamboo baskets’) or /u/

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

1657 (*jumgom* ‘bamboo tweezers’). Other words in *ji^o* include *jiga* ‘tortuous path’ and
 1658 its derived forms.

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

1663 3.5.2.2.6 *ji^o* vs. *ju^o* Compounds with non-final *ju^o* are extremely rare, limited
 1664 to the two Tibetan loanwords *juyi* ‘writing’ (from བྷྒྱା གྚྰྙྲྔ བྱྴྲྔ *ji.ge* ‘letter’) and *pjuruu*
 1665 ‘coral’ (from ཚୁରୁ བྱྴྲྔ *b'u.ru* ‘coral’).

1666 3.5.2.3 Verbal prefixes and reduplicated forms

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

1672 The prefixes in which this problem arises are few, and are exhaustively listed
 1673 in Table 3.12. For prefixes in *cV-* and *c^hV-*, testing the vowel is possible using
 1674 minimal pairs (*ciu* ‘who’ vs. *ci* ‘polar interrogative’ and *c^hi* ‘be sweet’ vs. *tx-c^hu*
 1675 ‘wedge’ as in § 3.5.2.2.4). For *pjV-* and *jV* prefixes, comparison is possible with
 1676 the first syllable of the nouns *juyi* ‘writing’ and *pjuruu* ‘coral’ (§ 3.5.2.2.6).

1677 The main consultants on the basis of whose expertise this work has been writ-
 1678 ten have presented conflicting judgments regarding the nature of the vowel in
 1679 these prefixes. After some hesitation, Tshendzin considers it to be *i* for all of these
 1680 prefixes (for instance, she considers the vowel of *pjuruu* ‘coral’ to be different
 1681 from that of *pjuu-yi* ‘he comes down’). I nevertheless keep here the orthographic
 1682 ‘etymological’ transcription with the vowel *u* for three reasons.

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

1688 Second, the prefixes in Table 3.12 are affected by vowel fusion (§ 12.3) and co-
 1689 alescence with the inverse prefix *-wy* (§ 14.3.2.7) like other prefixes in *Cuu-*, and
 1690 these morphophonological phenomena are easier to state by assuming the un-
 1691 derlying vowel *u* for all prefixes.

3 Phonology

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

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

Prefix	Function	Reference
<i>pju/i-</i>	Orientation prefix, B-type, downwards	§15.1.1.1
<i>c^hwi/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>cw<i>u</i>/i-</i>	translocative associated motion	§ §15.2.1.2
<i>cw<i>u</i>/i-</i>	apprehensive	§ §21.7.1
<i>cw<i>u</i>/i-</i>	causative	§17.2.2.1
<i>cw<i>u</i>/i-</i>	denominal	§20.3.2

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

1709 3.5.2.4 Verbal suffixes and possessive prefixes

1710 A few unstressed verb suffixes have alveolo-palatal onsets and high unrounded
 1711 vowels: the dual indexation suffixes 1DU *-tci* and 2/3DU *-ndzi* (§14.2.1.1, §14.3.2.1)
 1712 and the suffix *-ci* (§11.4). It is clear that these suffixes originally had a schwa-
 1713 like vowel rather than a front vowel as in most Gyalrong languages (see §14.8.1),

¹⁷¹⁴ but here too Tshendzin considers the vowel of these suffixes to be /i/ rather
¹⁷¹⁵ than /u/ (the suffix -ci, for instance, according to her resembles ci ‘one’ more
¹⁷¹⁶ than cuu ‘stone’), and since no vowel fusion or other phenomena takes place with
¹⁷¹⁷ these suffixes (unlike verbal prefixes), using an etymological notation was an
¹⁷¹⁸ unnecessary complication.

¹⁷¹⁹ In the prefixal possessive paradigm (§ §5.1.1), we also find a series of prefixes
¹⁷²⁰ with palatal and alveolo-palatal onsets and high unrounded vowels: 1DU *tɕi-*, 1PL
¹⁷²¹ *ji-* and 2/3DU *ndzi-*. Unlike verbal prefixes, but like the verbal indexation suffixes,
¹⁷²² possessive prefixes in the Kamnyu dialect of Japhug never undergo vowel fusion
¹⁷²³ and remain invariable. The vowel is phonologically /i/, as shown by the minimal
¹⁷²⁴ pair between *ndzunu* ‘Angelica’ and the dual possessive *ndzi-nu* ‘their_{du} breast’
¹⁷²⁵ (§ §3.5.2.2.2). For these reasons, a phonological (with -i) rather than etymological
¹⁷²⁶ (with -u) transcription was preferred for these prefixes.

¹⁷²⁷ 3.5.3 The contrast between /ɤ/ and /e/ after palatal and ¹⁷²⁸ alveolo-palatal consonants

¹⁷²⁹ The vowels /ɤ/ and /e/ in Kamnyu Japhug contrast in very few contexts. In word-
¹⁷³⁰ final stressed open syllables, only /e/ is found, /ɤ/ being attested only in clitics
¹⁷³¹ and unstressed final syllables in words such as *kunr* ‘also’. In closed syllables,
¹⁷³² /e/ is only found with the coda /-t/ in the past 2SG→3 of transitive -e stem verbs
¹⁷³³ (§3.3.2); the word-final -et vs. -rt are the only cases where /ɤ/ and /e/ are clearly
¹⁷³⁴ contrastive.

¹⁷³⁵ In non-final open syllables, there are no examples of minimal pairs involving
¹⁷³⁶ a contrast between /ɤ/ and /e/. Phonetic [e] is clearly heard after palatal and
¹⁷³⁷ alveolo-palatal consonants when the vowel of the following syllable is /e/, for
¹⁷³⁸ instance in words such as *tɕʰeme* ‘girl’ or *sʂryele* ‘extend (limbs)’, but in other
¹⁷³⁹ contexts I generally transcribe ɤ throughout, except when the word is an obvious
¹⁷⁴⁰ compound whose elements are recognized by the speakers (for instance *tɕetʰa*
¹⁷⁴¹ ‘soon’ from *tɕe* ‘then’ and *tʰa* ‘soon’).

¹⁷⁴² 3.5.4 The contrast between /ɤ/ and /a/

¹⁷⁴³ The contrast between /ɤ/ and /a/, while clear in most contexts, is difficult to
¹⁷⁴⁴ perceive in unstressed syllables when followed by a uvular (in particular when
¹⁷⁴⁵ followed by a cluster with a uvular preinitial) and in syllables containing a (due
¹⁷⁴⁶ to regressive assimilation of height, §3.3.1.2).

¹⁷⁴⁷ In slow syllable-by-syllable pronunciation, Tshendzin makes it clear that some
¹⁷⁴⁸ unstressed syllables preceding a uvular have /a/ rather than /ɤ/. This concerns

3 Phonology

1749 the indefinite possessor prefix in words such as *ta-bi* ‘younger sibling’, *ta-bru*
1750 ‘horn’, *ta-bri* ‘dirt’, *ta-χjuβ* ‘shadow’, *ta-brum* ‘light, shadow’, *ta-χpi* ‘shape, model’,
1751 *ta-χryt* ‘charcoal’, *ta-χaz* ‘soot’ and *ta-va* ‘free time’ (§ 5.1.2), and the fossilized
1752 prefix in nouns such as *taqab* ‘needle’. The noun *tr-bar* ‘wing’, however, has *tr-*
1753 rather *ta-*.

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

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

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

1771 3.6 Speech errors and self-corrections

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

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

1783 The phoneme /j/ is particularly prone to metathesis, either within initial clus-
1784 ters (*wjmjo* → *wmjyo*, with fusion of /j/ and /ŋ/ as /ɲ/, see § 4.2.1.9), or across

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-skyrma</i> ‘one cent’	nasal/oral	(150825 baishe zhuan, 72)
[tsʰo-]	<i>tsʰorzi</i> ‘jar’	dental/alveolo-	(160703 araR, 49)
[tçʰur-]	<i>tçʰurjum</i> ‘often’	palatal	(160630 abao, 112)
[sara-]	<i>saxaz</i> ‘it is extremely...’	rhotic/uvular	(160712 smAG, 21)
[qapri]	<i>qapi</i> ‘white stone’ ‘snake’		(160630 poucet1, 47)
[tʂrya]	<i>tʂrkəkci</i> ‘hunting dog’	velar/uvular	(niulan li de lu, 4)
[uwmno]	<i>uu-jmno</i> ‘his dream’	yod metathesis	(160630 abao, 114)
[pjvka]	<i>pʂjka</i> ‘squash’		(150827 mengjiangnv, 15)
[uʂri]	<i>uu-ʂruu uu-ntsi</i> ‘one of her horns’	vowels	(160715 nWNa, 10)

¹⁷⁸⁵ vowels (*pʂjka* → *pjvka*).

¹⁷⁸⁶ 3.7 Suprasegmentals

¹⁷⁸⁷ Unlike all other Rgyalrong languages, including Tshobdun (J. T.-S. Sun 2005), Situ (Y. Lin 2012) and Zbu (Gong 2018), Japhug has no tonal contrasts. However, there ¹⁷⁸⁸ is morphologically determined stress. Phonological words only have one stress, ¹⁷⁸⁹ which is located by default on the final syllable of the word (§3.8.1, §11.6.1).

¹⁷⁹⁰ The personal agreement suffixes (§14.2.1, §11.3) and the peg suffix -ci (§11.4) ¹⁷⁹¹ never receive stress, and their vowels are optionally devoiced. For instance, *tʂndza-t-a* ‘I ate it’ (AOR-eat-PST-1SG) is realized as [tʂndzátɑ] or [tʂndzáta]. Stress ¹⁷⁹² can be antepenultimate in the case of verb forms with two suffixes as in *to-k-ʂmu-¹⁷⁹³* *rpú-ndzi-ci* ‘they bumped into each other’ (IFR-PEG-RECIP-bump-DU-PEG).

¹⁷⁹⁴ There are only three verbal prefixes which can attract stress: the inverse -wy- ¹⁷⁹⁵

3 Phonology

1797 (§14.3.2.7), the negative Sensory *múj-* (§13.1.1, §21.3.2.1), and the interrogative
1798 *wu-* (§21.7.4.1). Outside of verbal morphology, the only other process that affects
1799 stress is the comitative adverb derivation (§5.8.1).

1800 Some ideophones have emphatic stress on the first syllable (§10.1.5.4), but it is
1801 not phonologically distinctive.

1802 A few function words have penultimate stress: *kúnv* ‘also’ (§9.1.6.1), *cínv* ‘not
1803 even one’ (§9.1.6.4), *nórmuz* and *kórmuz* ‘only after’ (§8.2.11).

1804 3.8 Word structure

1805 3.8.1 Wordhood

1806 Although no native expression exists to designate ‘words’ in Japhug (as in the
1807 immense majority of the world’s languages, Dixon & Aikhenvald 2002), speakers
1808 have an intuitive notion of a minimal unit which can be object of metalinguistic
1809 discourse, as opposed to prefixes and suffixes.

1810 The intuitive notion of ‘word’ can be correlated with some phonological and
1811 morphological criteria.

1812 The clearest phonological criterion for wordhood is stress. Stress is by de-
1813 fault word-final, and words have at most one stress. Most function words, in-
1814 cluding linkers (§25.1.6), determiners (§9.1), postpositions (§8.2) and even relator
1815 nouns (§8.3) lack stress (unless they receive special emphasis). In example (1), the
1816 stressed syllables are indicated by an acute accent, and the unstressed function
1817 words by a grave.

- 1818 (1) *tcè bz̥mí ci pjy-tú-ndzi tcè tʂ-rzáβ nù tamú*
LNK couple INDEF IFR.IPFV-exist-DU LNK INDEF.POSS-wife DEM ANTHR
1819 *pjy-rmí. tʂ-tɕú nù tsʰuráŋ pjy-rmí.*
IPFV.IPFV-be.called INDEF.POSS-son DEM ANTHR IPFV.IPFV-be.called
1820 ‘There was a couple, the wife was called Lhamo, and the man Tshering.’
1821 (28-qajdoskAt, 2)

1822 There are only three groups of exceptions to word-final stress placement (for
1823 instance the unstressed suffix *-ndzi* in 1), as seen in the previous section (§3.7).
1824 Given its predictability, stress is not noted in the transcription employed in this
1825 grammar, except on stress-attracting prefixes.

1826 Among the morphological criteria for wordhood (§11.6), the scope of partial
1827 reduplication can be employed, at least for the word classes that allow it. Initial
1828 reduplication, almost exclusively restricted to verb forms (§12.4.1), applies to the

1829 first syllable of the word almost without exception.⁶ In the case of verbs, several
 1830 additional morphological tests converge to indicate the same left boundary. For
 1831 the right boundary of the words, partial reduplication is less useful, as it only
 1832 applies to stems (§12.4.2): inflectional suffixes are never reduplicated.

1833 Inflectional suffixes (§11.3), in particular person indexation suffixes (§14.2.1.1,
 1834 §14.2.1.2), do present clitic-like properties, since they are not stressed, and are
 1835 outside the scope of reduplication. However, these morphemes cannot be iso-
 1836 lated, follow a rigid order, have non-adjacent dependencies with verbal prefixes
 1837 (§11.4), and no external element can be inserted between them. Moreover, the 1SG
 1838 marker -a, despite being unstressed when following consonant-final verb stems,
 1839 undergoes fusion with vowel-final stems (§3.3.1.3), causing vowel mergers. The
 1840 verbal word in Japhug is thus slightly larger than the prosodic domains of stress
 1841 and partial reduplication (Schiering et al. 2010).

1842 There are, however, three problems challenging the notion of ‘word’ in Japhug:
 1843 clitized sentence final particles (§11.6.2), bipartite verbs (§11.6.3) and prenominal
 1844 attributes (§9.1.8.2) when they receive no stress. These issues are discussed in
 1845 more details in the relevant sections.

1846 3.8.2 Non-final syllables

1847 Putting aside function words, monosyllables are considerably less common than
 1848 polysyllables in Japhug; in particular, verbs can be monosyllabic only in one form
 1849 of their paradigm (3sg Factual Non-past, §21.3.1.1), and inalienably possessed
 1850 nouns are always at least disyllabic (§5.1.2).

1851 The stem-final syllable (excluding inflectional suffixes), in addition to having
 1852 stress by default, is also generally the part of the word with the maximum of
 1853 phonological contrasts. Since polysyllabic roots are rare, non-final syllables are
 1854 in the immense majority of cases either prefixes or compound roots.

1855 Prefixes have strong phonotactic constraints: with the sole exception of some
 1856 orientation proverbs (§15.1.1.1), their main vowels are always /u/ (including [i])
 1857 in contexts where the contrast is neutralized or quasi-neutralized §3.5.2), /y/ and
 1858 /a/, and they cannot have aspirated or plain voiced consonants. Specific classes
 1859 of prefixes have even stricter constraints: productive nominalization prefixes can
 1860 only be obstruents (§16) and verbal derivation prefixes (Chapters 17, 18, 19 and
 1861 20) can only contain nine consonants: /m/, /n/, /s/, /z/, /c/, /t/, /r/, /j/ and /y/
 1862 (a subset of the consonants that occur as preinitials, §4.2).

⁶ The only exception is the reduplicated subject participle *ku~ku-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).

3 Phonology

1863 Roots occurring as non-final elements of compounds do not have such strin-
1864 gent constraints on consonants, but due to a process of rhyme reduction (*status
1865 constructus*, §5.4.1), most vowels are converted to either /u/ or /y/.

1866 Hence, in non-final syllables, the vowels are mostly restricted to /a/, /u/, or
1867 /y/, the latter two being subject to rounding by vowel harmony (§3.3.1.2) or as-
1868 similation with /w/ (§4.2.1.1, §4.2.2.4, §14.3.2.7). An example of a typical Japhug
1869 word is the verb form /at̪t̪tuzyyyyzó/ (2), which has a vowel other than /a/,
1870 /u/, or /y/ only in the last syllable.

1871 (2) *a-t̪-t̪u-zyy-yy-zo*
IRR-PFV-2-REFL-CAUS-be.light

1872 ‘Make yourself light.’ (from 59, §18.3.4.1)

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

¹⁸⁸² 4 Consonant clusters and partial ¹⁸⁸³ reduplication

¹⁸⁸⁴ 4.1 Partial Reduplication

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

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

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

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

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

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

4 Consonant clusters and partial reduplication

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

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

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

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

1927 4.2 Inventory of consonant clusters

1928 Japhug counts at least 422 clusters in syllable onset position: 319 clusters with
1929 two consonants and 103 with three consonants.¹ In addition, there are additional
1930 types of consonant clusters across syllable boundaries (§4.2.3.1) and secondary
1931 clusters due to vowel fusion (§3.3.1.3), which are too numerous to be systemati-
1932 cally surveyed. While the number of clusters in Japhug is considerably smaller
1933 than that of Khroskyabs, which counts as many as 757 (Lai 2017: 101), it is still
1934 much richer than most languages in the Trans-Himalayan family.

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

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

4.2.1 Preinitials

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

Clusters of this type have a limited number of possible consonants in first position: /w/, /s/-/z/, /ç/-/z/, /l/, /ʂ/-/r/, /j/, /x/-/ɣ/, /χ/-/v/, /n/, /m/ and the homorganic nasal, to which must be added a few clusters in stop+/ç/. These consonants, which correspond to both གྲྷ-ଘྱ- *sjon*.ⁿ*džug* ‘prefixed letter’ and གྷྣ-ଘྣ- *mgo.tcan* ‘superscript letter’ in Tibetan traditional phonology, and are referred to as *preinitial*. The last consonant of these clusters is called the *initial* (ଶିର୍ଦ୍ଧା ମିନ୍.ଗ୍ଜି *mir.gzi* ‘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 ([Shuya Zhang 2016](#): 44). The preinitial stops *p*- and *k*- in Situ regularly correspond to Japhug /w/- and /x/y/- or /χ/v/-, suggesting that a general rule of preinitial fricativization took place in Japhug ([Jacques 2004](#): 273).

4.2.1.1 /w/+C clusters

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

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

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

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-ftaʁ</i> ‘sign’
/d/	/wd/	<i>βduut</i> ‘demon’
/ts/	/wts/	<i>ftsɔʁ</i> ‘female hybrid yak’
/tsʰ/	/wtsʰ/	<i>ftsʰi</i> ‘feel better’
/s/	/ws/	<i>fsaŋ</i> ‘fumigation’
/z/	/wz/	<i>βzaŋsa</i> ‘friend’
/tʂ/	/wtʂ/	<i>ftʂar</i> ‘summer’
/tʂʰ/	/wtʂʰ/	<i>ftʂʰur</i> ‘put vertically’, ‘pour down’
/ç/	/wç/	<i>fçar</i> ‘repent’
/ʐ/	/wʐ/	<i>βʐar</i> ‘buzzard’
/tʂ/	/wtʂ/	<i>ftʂi</i> ‘melt’
/ç/	/wc/	<i>tuu-fcaʁ</i> ‘dorsal mat’
/ʃ/	/wʃ/	<i>βʃi</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>frtxn</i> ‘be trustworthy’
	/wsk/	<i>fskṛr</i> ‘go around’
	/wzg/	<i>βzgyr</i> ‘delay’
	/wzd/	<i>βzduu</i> ‘collect’
	/wzʃ/	<i>βzʃur</i> ‘transform’
	/wrʒ/	<i>βrʒay</i> ‘stretch’ (skin)

¹⁹⁷⁶ verb *wxti* ‘be big’ is the only item with this cluster.

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

1979 4.2.1.2 Sibilant+C clusters

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

¹⁹⁸² The contrast between /s/ and /z/ is neutralized before obstruents: we find *s-*
¹⁹⁸³ before unvoiced stops, fricatives and affricates and *z-* before voiced ones (includ-

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>tz̥zmbur</i> ‘silt’
/m/	/sm/	<i>smar</i> ‘river’
	/zm/	<i>zmaqʰu</i> ‘cause to be late’
/t/	/st/	<i>staꝝpu</i> ‘pea’
/tʰ/	/stʰ/	<i>stʰaꝝ</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’
/cʰ/	/scʰ/	<i>scʰyrt</i> ‘recede’ (water)
/j/	/zj/	<i>nuzju</i> ‘suffer losses’
/ɲ/	/zŋj/	<i>zŋja</i> ‘plant sp.’
/ɲ/	/sj/	<i>snajne</i> ‘fasting’
/k/	/sk/	<i>skym</i> ‘ox’
/kʰ/	/skʰ/	<i>rjyskʰi</i> ‘pan’
/g/	/zg/	<i>zga</i> ‘sauce’
/ŋg/	/zŋg/	<i>akʰyrga</i> ‘shout, call’
/ŋ/	/sŋ/	<i>sŋaꝝ</i> ‘curse’
/q/	/sq/	<i>sqamnuuz</i> ‘twelve’
/qᵇ/	/sqʰ/	<i>sqʰi</i> ‘tripod’

1984 ing prenasalized stops). With nasals, a contrast is found between *sm-* and *sn-* on
 1985 the one hand, and their voiced counterparts *zm-* and *zn-* on the other hand. The
 1986 latter are only found in morphologically complex nouns or verbs, as several sibi-
 1987 lant prefixes, including the causative (§17.2.1.1), the oblique participle (§16.1.3.1),
 1988 the gerund (§16.6.1.1), the abilitative (§19.3) have *z-* allomorphs when prefixed to
 1989 polysyllabic stems whose first syllable has a single sonorant followed by a vowel.
 1990 In particular, *zmaqʰu* ‘cause to be late’ and *znyja* ‘find X a shame’ in Table 4.2
 1991 are the causative derivations of *maqʰu* ‘be after’, ‘be late’ (§20.6) and *nyja* ‘be a
 1992 shame’ (§17.2.5.9), respectively.

1993 Before non-nasal sonorants, a voicing contrast is attested between /sj-/ vs.

4 Consonant clusters and partial reduplication

1994 /zj-/ (§4.2.2.2), /sl-/ vs. /zl-/ (§4.2.2.3), /sr-/ vs. /zr-/ (§4.2.2.4) and /sy-/ vs. /zy-/
1995 (§4.2.2.5).

1996 The sibilant preinitials are compatible with all stops, but do not occur with affri-
1997 cates, whether dental, alveolo-palatal or retroflex, except in heterosyllabic clus-
1998 ters (§4.2.3.1). The loanword *koxtçun* ‘brocade’ from گۆتچەن gos.tçʰen ‘brocade’ sug-
1999 gests that a sound change *stç- → xtç- has removed all instances of sibilant+alveolo-
2000 palatal clusters.

2001 The aspiration contrast in unvoiced stops and affricates is not neutralized after
2002 the s- preinitial, as shown, for instance, by the minimal pair *stʰor* ‘push’, ‘press’
2003 vs. *stor* ‘broad bean’.

2004 4.2.1.3 /l/+C clusters

2005 There are considerably fewer clusters with an /l/ preinitial than with other preini-
2006 tials. These clusters are listed in Table 4.3. They contain a high proportion of
2007 ideophones and Tibetan loanwords, as the genuine proto-Gyalrong *l- preinitial
2008 has changed to j- in most contexts (§4.2.1.6).

2009 A possible example of an additional cluster /lŋ-/ is found in the verb *nundzuyljuuz*
2010 ‘doze off’, but both /nɯ.ndzul.lŋwz/ and *nu.ndzu.lŋwz* are possible syllabifica-
2011 tions.

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

2014 4.2.1.4 /r/+C clusters

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

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

2021 However, a contrast between /r/ and /ʂ/ is found before sonorant initials, in
2022 particular with the palatal nasal (/ʂɲ-/ vs. /rɲ-/), the velar nasal (/ʂɳ-/ vs. /rɳ-/)
2023 and the velar fricative (/ʂy-/ vs. /ry-/ see §4.2.2.5).

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

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

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

/p/	/lp/	<i>tuu-lpγγ</i> ‘one piece’
/m/	/lm/	<i>tr̥lmuz</i> ‘straw covering the balcony’
/t/	/lt/	<i>ltr̥β</i> ‘fold’
/tʰ/	/ltʰ/	<i>ltʰumumi</i> ‘coming slowly (sleep)’
/d/	/ld/	<i>lduyi</i> ‘bharal’
/n/	/ln/	<i>lni</i> ‘wither’
/ts/	/lts/	<i>çrltsar</i> ‘leather coat’
/tsʰ/	/ltsʰ/	<i>ltsʰyltsʰyt</i> ‘small and weak’
/tç/	/ltç/	<i>rtr̥ltçar</i> ‘horse whip’
/tçʰ/	/ltçʰ/	<i>ltçʰyltçʰyt</i> ‘hanging’ (of fluffy objects)
/dʐ/	/ldʐ/	<i>ldʐayjkw</i> ‘green’
/dʐ/	/ldʐ/	<i>ldʐayldʐay</i> ‘hanging’ (big object)
/c/	/lc/	<i>lcuylcuy</i> ‘drenching’
/cʰ/	/lcʰ/	<i>tuu-lcʰuy</i> ‘one section’ (of a bag)
/ŋ/	/lŋ/	<i>lŋxlyyt</i> ‘hanging’ (fruit)
/x/	/lx/	<i>lxr̥βlxr̥β</i> ‘thick’ (clothes)
/q/	/lq/	<i>lqyrrqlqyt</i> ‘toddling’
	/lpɛ/	<i>qalpɛa</i> ‘open’ (fern leaf)

2028 4.2.1.5 Alveolo-palatal+C clusters

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

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

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

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

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>rmyʂβja</i> ‘peacock’
/t/	/ʂt/	<i>rtalu</i> ‘horse year’
/t ^h /	/ʂt ^h /	<i>w-pʂrt^hʂβ</i> ‘middle’
/d/	/rd/	<i>rdʂystaʂ</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^huʂjui</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>rjɑʂ</i> ‘dance’
/ɲ/	/rŋj/	<i>rŋjɑʂlo</i> ‘bolt’
/ɲ/	/ʂɲ/	<i>ʂnoʂʂnoʂ</i> ‘long and thin’
	/rɲ/	<i>rŋaj</i> ‘be ancient’
/k/	/ʂk/	<i>rko</i> ‘be hard’
/k ^h /	/ʂk ^h /	<i>tr-rk^hom</i> ‘feather rachis’
/g/	/rg/	<i>rga</i> ‘like’
/ɳg/	/rŋg/	<i>rŋgyr</i> ‘hard piece’
/ɳ/	/rŋ/	<i>tuu-rŋa</i> ‘face’
/q/	/ʂq/	<i>rqoʂ</i> ‘hug’
/q ^h /	/ʂq ^h /	<i>tr-rq^hu</i> ‘bark, skin’
/NG/	/rNG/	<i>ʂwurŋo</i> ‘Anisodus tanguticus’
/χ/	/ʂχ/	<i>ʂχwusʂi</i> ‘with big nostrils’

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

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

Unlike sibilant preinitials, alveolo-palatal preinitials are compatible with affricates of all places of articulation, even alveolo-palatal affricates in the cluster çtç- found in the noun syctçuy ‘strap’ (to carry children). There is evidence, however, that *cts^h- dissimilated to jts^h- in the irregular causative jts^hi ‘give to drink’ (§4.2.1.6, §17.2.2.5).

There are two examples of alveolo-palatal preinitials followed by a palatal segment: zñ- and çç^h-, but they are not stable and hence not included in Table 4.5. They only occur when the z- and ç- allomorphs of the translocative prefix are found before the B-type nuu- and c^hu- or the D-type ny- and c^hy- ‘westward’ and DOWNSTREAM orientation preverbs. These clusters are always in free variation with zñ- and çç^h-, respectively, which are considerably more common (Table 15.10, §15.2.1.2), since the translocative prefix generally undergoes a palatal dissimilation rule to a dental fricative s- or z- when it precedes a palatal consonant. The

4 Consonant clusters and partial reduplication

2055 non-dissimilated clusters *cc^h-* and *zŋ-* are extremely rare: the former is only at-
 2056 tested in one single example in the corpus (2), and the second in a handful of
 2057 verb forms (see for instance 178, §15.2.1.2). These non-dissimilated forms are
 2058 undoubtedly due to analogical levelling, which generalized the alveolo-palatal
 2059 allomorphs of the translocative.

2060	(2) <i>a-t^hu-u-y<nu>k^hu</i>	<i>cti</i>	<i>ma azo</i>
	IRR-PFV:DOWNSTREAM-<AUTO>call be.AFF:FACT LNK 1SG		
2061	<i>c-c^hu-zyx-βde-a</i>	<i>cti</i>	<i>ma</i>
	TRAL-IPFV:DOWNSTREAM-REFL-throw-1SG be.AFF:FACT LNK		

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

2063 Secondary clusters with alveolo-palatal preinitials are created by prefixes with
 2064 the shape *c-* or *z-*, including allomorphs of the translocative as mentioned above
 2065 (§15.2.1.2), but also irregular causatives (§17.2.2.3, §17.2.2.4) and perhaps lexical-
 2066 ized oblique participles (§16.1.3.10).

2067 4.2.1.6 /j/+C clusters

2068 Table 4.6 lists all consonant clusters with the semi-vowel /j/ as first element not
 2069 ending in a non-nasal sonorant. It cannot precede alveolo-palatal obstruents and
 2070 palatal stops.

2071 Most of these clusters violate the sonority sequencing principle (§4.2.3.2), but
 2072 those that are attested in verb roots (such as *jbum* ‘be thick’) can occur in word-
 2073 initial position in the Factual Non-Past (§21.3.1).

2074 Comparison with Zbu reveals that one of the sources of the Japhug *j-* preini-
 2075 tial is proto-Gyalrong **l-* (Jacques 2004: 271–272): for instance *jmut* ‘forget’, *tʂ-jtsi*
 2076 ‘pillar’, *tʂ-jme* ‘tail’ and *tʂ-jmjo* ‘dream’ correspond to Zbu *lmât*, *tltsí?*, *-lmé?* and
 2077 *-lmá?*, respectively (Gong 2018: 43; 53; 288). In other cases, *j-* comes from a dis-
 2078 similated coronal fricative, as in *jtsʰi* ‘give to drink’ (§17.2.2.5) and perhaps *jqu* ‘be
 2079 able to lift’ (§19.3.1).

2080 The group *jmŋ-* in *tʂ-jmjo* ‘dream’ has two preinitials /j/ and /m/. The labial
 2081 nasal is the ancient initial (as shown by the Zbu cognate *-lmá?*), and the nasal
 2082 velar arose as a trace of proto-Gyalrong vowel velarization **lmaŋy* → **jmyo* →
 2083 *-jmjo* (Jacques 2004: 44; on velarized vowels in proto-Gyalrong, see §4.2.2.5).

2084 When preceding sonorants, /j/ is preinitial in all cases: *jw-*, *jl-*, *jr-*, *jy-*, *jʂ-* and
 2085 *rʂ-* (§4.2.2.1, §4.2.2.3, §4.2.2.4, §4.2.2.5, §4.2.2.6).

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

/p/	/jp/	<i>jbum</i> ‘be thick’
/m/	/jm/	<i>jmut</i> ‘forget’
/t/	/jt/	<i>ajtu</i> ‘accumulate’
/nd/	/jnd/	<i>s̪yjndxt</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 /	/jts ^h /	<i>qajtʂ^ha</i> ‘vulture’
/ndz/	/jndz/	<i>jndz̪yz</i> ‘be thick’ (powder)
/k/	/jk/	<i>tr-jkuuz</i> ‘secret’
/ŋ/	/jŋ/	<i>tr-jŋor</i> ‘hook’
/q/	/jq/	<i>jqu</i> ‘be able to lift’
/χ/	/jχ/	<i>ajχor</i> ‘be flat’ (belly)
	/jmŋ/	<i>tua-jmjo</i> ‘dream’

2086 4.2.1.7 Velar+C clusters

2087 Table 4.7 lists all consonant clusters with the velar fricatives /x/ and /y/ as preini-
2088 tial and not ending in a non-nasal sonorant.2089 Velar preinitials are not compatible with dorsal (velar and velar) initial conso-
2090 nants, but are attested with all other places of articulations. The complementary
2091 distribution between *x* (before unvoiced segments) and *y* (before voiced segments,
2092 including obstruents and nasals) is complete, and the voicing contrast can be con-
2093 sidered to be completely neutralized in preinitial position.2094 Comparison with Situ shows that some of these velar fricative preinitials origi-
2095 nate from velar presyllables **kə-* (Jacques 2014b: 6). Two non-productive prefixes
2096 are sources of velar+C clusters: the animal velar prefix (§5.6.2) and the lexicalized
2097 participle *x/y-* prefix (§16.5.2). Another source of secondary velar preinitials is
2098 the intrusive *y* found as element of some derivation prefixes, including the *suy-*
2099 (§17.2.1.4) and *çuy-* (§17.2.2.2) allomorphs of the causative, the *nuy-* allomorph of
2100 the applicative (§17.4.2), the *nøy-* allomorph of the tropative (§17.5.1) and the *søy-*
2101 allomorph of the proprietive (§18.8.1).2102 In addition, the velar preinitial in some counted nouns like *tua-xpa* ‘one year’
2103 is due to a *fausse coupe* (§7.3.1.7).

4 Consonant clusters and partial reduplication

Table 4.7: List of consonant clusters with /x/ and /y/ 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>xtsṛṣṇa</i> ‘tip of boot’
/tsʰ/	/xtsʰ/	<i>xtsʰum</i> ‘be thin’
/s/	/xs/	<i>xsar</i> ‘goral’
/z/	/yz/	<i>yzu</i> ‘monkey’
/tç/	/xtç/	<i>xtçi</i> ‘be small’
/tçʰ/	/xtçʰ/	<i>xtçʰut</i> ‘can contain’
/ndʐ/	/yndʐ/	<i>yndʐṛβ</i> ‘fire’
/ç/	/xç/	<i>xçaj</i> ‘grass’
/ʐ/	/yz/	<i>yzo</i> ‘bee’
/tʂ/	/xtʂ/	<i>nyxtʂu</i> ‘bring in passing’
/ʂ/	/xʂ/	<i>xʂṛxʂṛt</i> ‘long and thin’
/c/	/xc/	<i>xcat</i> ‘be many’
/cʰ/	/xcʰ/	<i>tr̥lṛxčʰi</i> ‘curdled milk’
/j/	/yj/	<i>yjaβ</i> ‘churn’
/ɲ/	/yŋ/	<i>w-yŋaβ</i> ‘disaster’

2104 4.2.1.8 Uvular+C clusters

2105 Table 4.8 lists all consonant clusters with the uvular fricatives /χ/ and /ʁ/ as
2106 first element and not ending in a non-nasal sonorant. They cannot precede velars
2107 except in heterosyllabic clusters (§4.2.3.1).

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

2113 Some uvular preinitials come from the reduced allomorphs χ- and ʁ- of the

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/	ʁbʁbʁbʁβ ‘thick and big’
/mb/	/ʁmb/	ʁmbmbum ‘be concave’
/m/	/ʁm/	ʁmaʁ ‘army’
/t/	/χt/	χtxyrma ‘offerings’
/t ^h /	/χt ^h /	naxχt ^h ʁβ ‘seize the opportunity’
/d/	/ʁd/	ʁduy ‘umbrella’
/nd/	/ʁnd/	ʁndyṛ ‘scatter’ (anticausative)
/n/	/ʁn/	ʁnaʁna ‘both’
/ts/	/χts/	χtsø ‘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/	χtçøŋ ‘rheumatism’
/ç/	/χç/	χçø ‘be strong’
/z/	/ʁz/	ʁzʁwru ‘young man’
/tʂ/	/χtʂ/	χtʂuydʐa ‘butter tea’
/ʂ/	/χʂ/	χʂʂχʂyt ‘light (clothes)’
/c/	/χc/	χcoŋkronj ‘cross-legged (sitting)’
/c ^h /	/χc ^h /	χc ^h a ‘right’
/ʃ/	/ʁʃ/	ʁʃa ‘completely’
/ɲ/	/ʁɲ/	ʁɲɪɻɳɟɪ ‘enormous’
/ɲ/	/χɲ/	χɲɪχχɪrr ‘without energy’
	/ʁɲ/	ʁɲɪrpɑ ‘steward (monastery)’

2114 uvular animal prefix *qa-* (§5.6.1).

2115 4.2.1.9 Nasal+C clusters

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

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

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

2125 Second, **mr-* became *mbr-* by epenthesis, as shown by *mbro* ‘horse’, *mbro* ‘be
2126 high’ and *mbri* ‘cry, sing’ (in Burmese *mrañh*, *mrañ?* and *mraññ*, Nathan W Hill
2127 2019: 60;259).

2128 Additionally, nasal preinitials cannot be followed by any fricative. As in Ti-
2129 betan (Li 1933), this absence is due to the conversion of post-nasal fricatives to
2130 the corresponding affricates, as in *tu-mtsʰi* ‘liver’ (from **m-si*, Burmese *asaññh*,
2131 Nathan W Hill 2019: 56).

2132 While voiced stops and affricates with homorganic prenasalization are mono-
2133 phonemic (§3.2.1), unaspirated and aspirated ones (Table 4.9) are better analyzed
2134 as clusters. All places of articulation are possible, from labial (*mp(ʰ)-*) to uvular
2135 (*nq(ʰ)-*). The special case of *mpç-* is discussed in §4.2.1.10.

2136 Two non-homorganic prenasalized preinitials are also attested, /*m-*/ before all
2137 places of articulation except labials (where *m-* corresponds to the homorganic
2138 nasal preinitial), and /*n-*/ before (voiced) labials and velars (Table 4.10). When
2139 preceded by /*m-*/ or /*n-*/, the contrast between plain voiced and prenasalized
2140 voiced stops and affricates is neutralized; for instance the *b* in *nb-* stands for
2141 the archiphoneme {b,mb}. In the case of the cluster *mg-*, since the prenasalized
2142 phoneme /NG/ lacks a plain voiced counterpart (§3.2.1), the only analysis pos-
2143 sible is /MNG-/. In the orthography used in this grammar, the simplified (but
2144 non-ambiguous) transcription *mg-* is used.

2145 The other nasal phonemes /*j-*/ and /*ŋ-*/ are not attested as preinitials: for in-
2146 stance, clusters such as †*ŋp-* or †*jnt-* are prohibited.

2147 Some *m-* preinitials come from the nasalization of **w-* before nasal or prenasal-
2148 ized stops (as in the irregular causative *mwo* ‘prepare’ from *wo* ‘be ready’, see
2149 §17.3.1), a sound law accounting for the absence of preinitial /*w-* in this context

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^hγr</i> ‘neigh’ (of horse)
/tç/	/ntç/	<i>ntç^hoz</i> ‘use’
/tʂ/	/ntʂ/	<i>ntʂu</i> ‘weed’ (vt)
/c/	/ŋc/	<i>ŋcγr</i> ‘press’
/c ^h /	/ŋc ^h /	<i>ŋc^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’
	/mpç/	<i>mpçγr</i> ‘be beautiful’

2150 (§4.2.1.1). This sound law does not operate across syllables (§4.2.3.1), and hetero-
 2151 syllabic clusters with a non-nasalized coda -β followed by a nasal do exist.

2152 Some *n*-preinitials originate from former **t*- before nasal or prenasalized stops,
 2153 as in *tu-nja* ‘debt’ (§4.2.1.9; see also Jacques 2014b). Another source is a reduced
 2154 *n*-allomorph of denominal *nu-* (as in *ngo* ‘be ill’ from the noun *tu-ŋgo* ‘disease’,
 2155 §20.7.1).

2156 4.2.1.10 Stop+ç clusters

2157 A handful of onsets have an unvoiced stop followed by ç, including *kç-* (as in *kçilu*
 2158 ‘year of the dog’ from བཱུ k^hi.lo ‘year of the dog’, *pç-*, (*tupçi* ‘flax’) as well as *lpç-*
 2159 (§4.2.1.3) and *mpç-* (§4.2.1.9). These clusters, found in both native vocabulary and
 2160 borrowings from Tibetan, mainly originate from the combination of aspirated
 2161 stops *p^h* and *k^h* with the medial -j-.

2162 Evidence that these groups should not be synchronically analyzed as /k^hj-/ and
 2163 /p^hj/ underlyingly comes from two facts. First, the groups *p^hj-* and *k^hj-* are other-
 2164 wise attested (§4.2.2.2). Second, the clusters (C)(p|k)ç- are not affected by partial
 2165 reduplication; for instance *mpçγr* ‘be beautiful’ is reduplicated as *mpçuu~mpçγr*

4 Consonant clusters and partial reduplication

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

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

²¹⁶⁶ (see for instance 298, §21.8.3.2), not $\dagger mp^h u \sim mpçyr$ as would have been expected
²¹⁶⁷ if $mpçyr$ were really $\dagger /mp^h jyr/$.²

²¹⁶⁸ 4.2.2 Medials

²¹⁶⁹ This section deals with consonant clusters whose last consonant is one of the six
²¹⁷⁰ non-nasal sonorants (/r/, /l/, /j/, /w/, /y/ or /β/). These sonorants can either
²¹⁷¹ be medials (§4.1) or initials, depending on whether they are deleted when the
²¹⁷² cluster is partially reduplicated. They are always medials when the preceding
²¹⁷³ consonant is not one of the possible preinitials (§4.2.1). Clusters ending in a
²¹⁷⁴ non-nasal sonorant whose penultimate element is a possible preinitial (sibilant/
²¹⁷⁵ alveolo-palatal fricative or non-nasal sonorant)³ are referred to as *ambiguous*
²¹⁷⁶ *clusters*, as they need to be systematically tested with partial reduplication to
²¹⁷⁷ determine the phonological status of the final sonorant (initial or medial).

²¹⁷⁸ The secondary clusters with medial glides created by the effect of synizesis
²¹⁷⁹ (§3.3.1.3) with the 1SG suffix -a (§14.2.1.1) are not included in the listing below,
²¹⁸⁰ even though what is transcribed as *Ce|i-a* and *Co|u-a* in the orthography is ho-
²¹⁸¹ mophonous with *Cja* and *Cwa*, respectively. Including them would have the ef-
²¹⁸² fect of introducing an enormous number of secondary and predictable clusters.
²¹⁸³ In addition, synizesis of *Cu-a* generates the [uŋ] allomorph of /uŋ/, constituting
²¹⁸⁴ a seventh glide not found in the vocabulary.

²¹⁸⁵ 4.2.2.1 C+/w/ clusters

²¹⁸⁶ Table 4.11 lists all clusters ending in /w/. Clusters of this type are very rare, as a
²¹⁸⁷ combination of two sound changes have removed all instances of proto-Gyalrong
²¹⁸⁸ *Cw. First, the labiovelars, still preserved in Zbu, have merged with plain velars
²¹⁸⁹ (for instance *nuŋya* ‘cow’, Zbu *ŋwé?*, Gong 2018: 40), and the remaining instances
²¹⁹⁰ of *w have become y (as in *tu-çya* ‘tooth’ from *-çwa, §4.2.2.5).

²¹⁹¹ There are no clusters with labial consonants followed by w, but there is a triple
²¹⁹² contrast between *hw-*, *χw-* and *xw-*: it is the only context where minimal pairs
²¹⁹³ between the glottal /h/, the uvular /χ/ and the velar /x/ unvoiced fricatives can
²¹⁹⁴ be found.

² In addition, $mpçyr$ ‘be beautiful’ is probably borrowed from མཚོ ཡོຣ.པོ ‘handsome’, so that the analysis as $/mp^h j/$ is wrong even historically.

³ Nasal 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.

4 Consonant clusters and partial reduplication

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

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

2195 The combination of cluster-final /w/ with the rhyme -a is homophonous with
 2196 the result of synizesis of the 1SG -a with verb stems in -o and -u; for instance, the
 2197 1SG possessive *a-rwa* ‘my tent’ is not distinguishable from *aro-a* ‘I own’ (§3.3.1.3).
 2198 Both are phonetically realized as [arwa].

2199 Clusters in w are mainly found in ideophones and Chinese loanwords (includ-
 2200 ing nativized ones such as *kwitsut* ‘cupboard’ from 柜子 <guǐzǐ> ‘cupboard’ with
 2201 a mysterious coda -t). The only native clusters with w as final element are jw- (as
 2202 in *tr-jwaʂ* ‘leaf’) and zw- (*zwyr* ‘mugwort’), where the w comes from the lenition
 2203 of a voiced labial stop (Jacques 2004: 325–329).

2204 In ambiguous clusters, cluster-final -w- is a medial consonant in /zw/ and /lw/,
 2205 as shown by the distributed action derivation (§19.4) *nṛ-zuu~zwyr* ‘burn every-
 2206 where’ and *nṛ-lu~lwɔz* ‘spill everywhere’ from *zwyr* ‘burn’ and *lwɔz* ‘spill’ (not
 2207 †*nṛ-zwu~zwyr* or †*nṛ-lwu~lwɔz*).

2208 In *jw*, the labial glide is initial, as it is not deleted in reduplication, for example
 2209 in the comitative adverb *kṛ-jwu~jwaʂ* ‘together with (its) leaves’ (§5.8.1) from
 2210 *tr-jwaʂ* ‘leaf’.

2211 The cluster *rw* is intriguing, as it presents two alternative reduplication pat-
 2212 terns. The labial glide is treated as initial in the distributed action derivation *nṛ-*
 2213 *rwu~rwṛt* ‘dig everywhere’ from *rwṛt* ‘dig’ (not †*nṛ-ru~rwṛt*), but in the comi-
 2214 tative derivation, *rwa* ‘yak felt tent’ can either be reduplicated as *kṛ-ru~rwa* or
 2215 *kṛ-rwu~rwa* ‘together with the felt tent’.

2216 4.2.2.2 C+/j/ clusters

2217 Tables 4.12 and 4.13 list all clusters ending in /j/. This glide can follow consonants
 2218 of all places of articulation except palatals, alveolo-palatals and retroflex conso-
 2219 nants (other than /r/). In the orthographical system used in this grammar and
 2220 previous publications on Japhug, /j/ is transcribed as <j> after /v/, /γ/, labial
 2221 consonants and dental fricatives, and as <i> after velar and uvular stops, as well
 2222 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>bjubjuy</i> ‘hanging in great number’
/mb/	/mbj/	<i>mbjom</i> ‘be fast’
/w/	/wj/	<i>tçʰibja</i> ‘duck’
/d/	/dj/	<i>dioðdios</i> ‘evenly mixed’
/nd/	/ndj/	<i>ndivndirt</i> ‘gracious’
/ts/	/tsj/	<i>tsiajnṛtsiaj</i> ‘very tall, moving’
/ndz/	/ndzj/	<i>ndziaž</i> ‘be tight’ (knot)
/s/	/sj/	<i>sjajnṛsjaj</i> ‘shaking one’s head’
/z/	/zj/	<i>zjajzjaj</i> ‘big’
/l/	/lj/	<i>qaliaž</i> ‘eagle’
/r/	/rj/	<i>tu-rju</i> ‘word’
/k/	/kj/	<i>kio</i> ‘caused to glide’
/kʰ/	/kʰj/	<i>kʰukʰju</i> ‘oval’
/ŋg/	/ŋgi/	<i>ŋgio</i> ‘slip’, ‘glide’
/ɣ/	/ɣj/	<i>tu-ɣjṛn</i> ‘one time’
/q/	/qj/	<i>qiaž</i> ‘be bitter’
/qʰ/	/qʰj/	<i>qʰiuqʰiu</i> ‘blunt (colour)’
/NG/	/NGj/	<i>ngia</i> ‘come loose’
/v/	/vj/	<i>vjit</i> ‘think of’, ‘miss’, ‘remember’

2223 In ambiguous clusters, cluster-final /j/ is medial when following /r/, /l/ and
 2224 /s/ (/rj-/, /lj-/ and /sj-/) and initial when preceded by /w/, /ɣ/ and /v/ (/wj-/,
 2225 /ɣj-/ and /vj-/).

2226 There is in addition a highly unstable cluster *zj-* when the alveolo-palatal allo-
 2227 morph of the translocative prefix (§15.2.1.2) precedes the ‘unspecified’ orientation
 2228 preverbs. As in the case of the other palatal preverbs, the dissimilated dental allo-

4 Consonant clusters and partial reduplication

2229 morph *z-* is more commonly found (§4.2.1.5, §15.2.1.2). There is no example with
2230 *zj-* in the corpus, and all instances of this cluster come from elicitation of verb
2231 forms with the translocative.

2232 Clusters with velar stops+/j/ and dental affricates+/j/ are clearly distinctive
2233 with palatal stops (*kio* ‘cause to glide’ vs. *co* ‘valley’, cf. Table 3.2.1, §3.3) and
2234 alveolo-palatal affricates (*ndziaꝫ* ‘be tight’ (of knot), ‘be deep’ (of colour), ‘be com-
2235 pleted’ vs. *ndzax̥* ‘swim’). There are no perfect minimal pairs between alveolo-
2236 palatal affricates and dental stop+/j/ clusters, as they are very rare and restricted
2237 to a handful of ideophones, but quasi-minimal pairs such as *ndiyndirt* ‘gracious’
2238 and *ndzyxβ* ‘be burned’ (§18.5.1) suffice to establish the reality of this phonological
2239 contrast.

2240 Aspirated velar and labial stops followed by /j/ are rare, since pre-Japhug **kʰj-*
2241 and **pʰj-* have changed to *kç-* and *pç-*, respectively (§4.2.1.10). This sound change,
2242 however, did not affect the cluster *spʰj-* (Table 4.13), and new instances of /kʰj-/
2243 have been created from interjections.

2244 The combination of cluster-final /j/ with the rhyme *-a* is homophonous with
2245 the result of synizesis of the 1SG *-a* with verb stems in *-e* and *-i*.

2246 In triconsonantal groups, /j/ can co-occur with all preinitials except velar and
2247 alveolo-palatal fricatives and itself (Table 4.13).

2248 A group *cpj-* with alveolo-palatal preinitial does exist, but it is not completely
2249 stable. It only occurs when the *c-* allomorph of the translocative prefix (§15.2.1.2)
2250 precedes the B-type *pju-* or the D-type *pjv-* DOWNWARDS preverbs (§15.1.1.1), as in
2251 examples such as (117) (§8.2.4.2). It is in free variation with *spj-* in this context, as
2252 the translocative has another *s-* allomorph when preceding *pj-* and *cʰ-* (§15.2.1.2).
2253 For instance in (3) we find *s-pju-lxt-nuu* instead of *c-pju-lxt-nuu* (the more common
2254 form).

- 2255 (3) *tusqar tu-ndo-nuu tce, qrormbuŋ nui-car-nuu tce nuare*
tsampa IPFV-IPFV-take-PL LNK anthill IPFV-look.for-PL LNK DEM:LOC
2256 *s-pju-lxt-nuu ηgryl.*
TRAL-IPFV:DOWN-release-PL be.usually.the.case:FACT
2257 ‘(Faithful Buddhist people) take tsampa_i, look for an anthill_j and spill it_i
2258 there_j.’ (26-qro, 74)

4.2.2.3 C+/l/ clusters

2260 Tables 4.14 and 4.15 list all clusters ending in /l/. The lateral sonorant cannot
2261 follow retroflex affricates, dental stops and alveolo-palatal affricates.

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

/wsj/	<i>tx-fsjit</i> ‘whistle’
/wzj/	<i>βzjoz</i> ‘learns’
/spj/	<i>spjaŋkui</i> ‘wolf’
/sp ^h j/	<i>sp^hjar</i> ‘spread out to dry’
/stj/	<i>stiŋŋnystian</i> ‘jumping’
/sq ^h j/	<i>sq^hiar</i> ‘stretches’
/lt ^h j/	<i>lt^hisylt^hixt</i> ‘well-ironed (clothes)’
/lbj/	<i>lbjulbjuy</i> ‘hanging’
/ʂpj/	<i>rpjuu</i> ‘spoil’ (milk)
/rmbj/	<i>tx-rmbja</i> ‘flash of lightning’
/ʂtsj/	<i>rtsiaɻ</i> ‘be steep’ (road)
/sq ^h bj/	<i>tx-rq^hioɻ</i> ‘groove’
/rngj/	<i>aryrnŋioɻ</i> ‘be grooved’
/χtsj/	<i>χtsiu</i> ‘pint’
/χpj/	<i>χpjxt</i> ‘observe’
/χsj/	<i>w-χsjuuβ</i> ‘slough’
/mpj/	<i>mpja</i> ‘be warm’
/mtsj/	<i>tx-mtsioɻ</i> ‘beak’
/nqj/	<i>nqiaɻ</i> ‘dark side of the mountain’

2262 The cluster *zl-* is only attested when the translocative prefix occurs before UP-
 2263 STREAM preverbs (§15.2.1.2).

2264 In the clusters with the fricative /s/ or a sonorant as first element (/sl/, /wl/,
 2265 /jl/, /rl/, /yl/ and /vl/), /l/ is initial. For instance, the distributed action derivation
 2266 (§19.4) of *sloɻ* ‘dig’ and *yle* ‘rub’ are *nr-sluu~sloɻ* ‘dig everywhere with snout’
 2267 *nr-ylu~yle* “‘rub again and again’ (not †*nr-su~sloɻ* and †*nr-yuu~yle*), and the
 2268 comitative adverb (§5.8.1) from *jla* ‘male hybrid yak’ is *k̥-jlu~jla* ‘together with
 2269 his/her/their hybrid yak(s)’ (not †*k̥-ju~jla*).

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

⁴ In 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.

4 Consonant clusters and partial reduplication

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>sloz</i> ‘dig’ (with snout)
/z/	/zl/	<i>tuu-zloz</i> ‘one time’
/ç/	/çl/	<i>çlu</i> ‘plough’
/ʐ/	/ʐ/	<i>ʐ-lo-ru</i> ‘s/he went and looked upstream’
/r/	/rl/	<i>rlaʂ</i> ‘disappear’
/c/	/cl/	<i>clayclay</i> ‘round and smooth’
/j/	/jl/	<i>jla</i> ‘hybrid yak’
/k/	/kl/	<i>khukluy</i> ‘stiff’
/g/	/gl/	<i>glygly</i> ‘pressed’
/ŋg/	/ŋgl/	<i>cungluy</i> ‘pestle’
/ɣ/	/ɣl/	<i>ɣle</i> ‘knead’, ‘rub’
/q/	/ql/	<i>qlut</i> ‘break’ (vt)
/qʰ/	/qʰl/	<i>qʰluu</i> ‘naga’
/NG/	/NGL/	<i>nghlut</i> ‘break’ (vi)
/ʂ/	/ʂl/	<i>tuu-ʂla</i> ‘forearm’

2274 and their status is undecidable at the present moment.

2275 In triconsonantal clusters (Table 4.15), the medial /l/ co-occurs with dental,
 2276 alveolo-palatal and uvular fricatives, as well as /r/ and /m/. The only word with
 2277 a preinitial /r/ and a medial *l*, *arnghlum* ‘be caved in’, derives from *sqlum* ‘collapse’
 2278 by prenasalization alternation (§19.7.9): the *r-* originates here from rhotacism of
 2279 *s-* (through **z*).

2280 4.2.2.4 C+/r/ clusters

2281 The Tables 4.16, 4.17 and 4.18 list all clusters ending in /r/. The rhotic sonorant
 2282 can follow all places of articulations except retroflex fricatives and affricates.

2283 In the ambiguous clusters with a sonorant as first element (/wr/, /jr/, /yr/ and
 2284 /ʂr/), /r/ is initial, as shown by the perative *w-jruu~jroʂ* ‘following X’s trace’
 2285 (§5.8.2), the emphatic participle *kuu-wyruu~wyrum* ‘very white (one)’ (98, §5.5.1.2)
 2286 and the reciprocal *a-zyryruu~bʐe* ‘respect each other’ from *zyryre* ‘respect’.

4.2 Inventory of consonant clusters

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

/scl/	<i>sclaysclay</i> ‘bald’
/sql/	<i>sqlum</i> ‘collapse’
/sqʰl/	<i>asqʰlu</i> ‘be concave’
/çpl/	<i>çploççplos</i> ‘round and smooth’
/çkl/	<i>çklickli</i> ‘round and stiff’
/çql/	<i>çqluçbnycqluç</i> ‘walking in the water’
/çqʰl/	<i>çqʰlxt</i> ‘disappear’
/rncl/	<i>arnclum</i> ‘be caved in’
/χpl/	<i>χploχχplos</i> ‘round like a ball’
/ɛŋjł/	<i>ɛŋjliɛŋjli</i> ‘big and tall’
/mql/	<i>mqlax</i> ‘swallow’
/mcl/	<i>tua-mgla</i> ‘one step’

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

- (4) *ɛzwanu* *kui-zuu~zru* zo *kui-γyχsu~χsrui* zo
 young.man SBJ:PCP-EMPH~strong EMPH SBJ:PCP-EMPH~handsome EMPH
jy-k-yβzu-ci
 IFR-PEG-become-PEG
 '(The fox) became a strong and handsome young man.' (2012 qachGa, 187)

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

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

The retroflex affricates originate at least in part from clusters of dental stops

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

4 Consonant clusters and partial reduplication

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>kʰypʰru</i> ‘spraying water with the mouth’
/b/	/br/	<i>brubruuz</i> ‘having pimples’
/mb/	/mbr/	<i>mbrʌt</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’
/tɕ/	/tɕr/	<i>tɕruynxntɕruy</i> ‘crunching’
/ç/	/çr/	<i>çri</i> ‘leak’
/ʐ/	/ʐr/	<i>ʐru</i> ‘be strong’
/c/	/cr/	<i>cruycruy</i> ‘in a mess’
/c ^h /	/c ^h r/	<i>cʰrxβcʰrxβ</i> ‘messy and dirty’
/j/	/jr/	<i>jruyjruy</i> ‘gurgling’
/j/	/jɾ/	<i>tx-jroꝝ</i> ‘trace’
/k/	/kr/	<i>kry</i> ‘cut’, ‘shear’, ‘mow’
/k ^h /	/k ^h r/	<i>kʰro</i> ‘much’
/g/	/gr/	<i>gruβgruβ</i> ‘matsutake’
/ŋg/	/ŋgr/	<i>ŋgryl</i> ‘be usually the case’
/ɣ/	/ɣr/	<i>ɣro</i> ‘suffocate’
/q/	/qr/	<i>qro</i> ‘pigeon’
/NG/	/NGr/	<i>Ngrax</i> ‘be torn’
/β/	/βr/	<i>βrulu</i> ‘without horns’

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^hruβ</i> ‘dangling (of snot)’
/scr/	<i>scrakscrak</i> ‘very small’
/zjr/	<i>zjraŋzjraŋ</i> ‘soft and bloated’
/skr/	<i>skraskra</i> ‘impolite’
/sk ^h r/	<i>tua-sk^hru</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>çqraꝝ</i> ‘be intelligent’
/zNGR/	<i>zNGro</i> ‘Jew’s harp’
/jkr/	<i>jkrut</i> ‘congeal’
/jtsr/	<i>jtsraq</i> ‘delay departure’
/xpr/	<i>yxpxra</i> ‘dispatch’
/χpr/	<i>tç^hwχpri</i> ‘newt’
/vembr/	<i>taembrä</i> ‘jump’ (of horse)
/χsr/	<i>yχsru</i> ‘be handsome’
/vzr/	<i>vzrajvzraj</i> ‘dishevelled’
/χcr/	<i>χcuχcri</i> ‘thin, diluted’
/vjr/	<i>vjuvɔjri</i> ‘fat and soft’
/vgr/	<i>vgra</i> ‘enemy’

4 Consonant clusters and partial reduplication

followed by *r*; direct evidence for the sound change **tr-* → *ts-* comes from alternations between /*ts*/ and /*r*/, as that between the numeral *kutṣṛy* ‘six’ and *sqapṛy* ‘sixteen’ (§7.1.3) and between *tsu* ‘path’ and *ftṣṛyu* ‘path in the middle of the fields’ is a compound of *ftṣar* ‘summer’ and *tsu* ‘path’ (§5.4.3.2). The gap in the system caused by this sound change has been filled by some ideophones in *dr-* (§10.1.5.1); the only non-ideophone with a cluster of this type is *qumdroy* ‘crane’, whose onset can either be analyzed as /*dr*/ or as /*ndr*/, as the contrast between /*d*/ and /*nd*/ is neutralized due to assimilation with the /*m*/ coda of the preceding syllable.

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

/jcr/	<i>ncuŋcri</i> ‘thin, diluted’
/ŋkʰr/	<i>ŋkʰruļi</i> ‘screw’
/ngr/	<i>ngruβ</i> ‘accomplish’
/nqr/	<i>u-nqra</i> ‘shabby’
/m̥tsr/	<i>mum̥tsruy</i> ‘drink with a straw’
/mpʰr/	<i>mpʰrumuu</i> ‘divination’
/mkʰr/	<i>mkʰroy</i> ‘be reincarnated’
/mgr/	<i>mgrun</i> ‘treat’, ‘invite’
/nbr/	<i>nbraꝝ</i> ‘hoe’ (vt)

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

4.2.2.5 C+/y/ clusters

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

In ambiguous clusters, the /y/ is initial in /zy/ and when preceded by a non-nasal sonorant (/wy/, /jy/, /ly/ and /ry/), as illustrated by the distributed action derivation (§19.4) *nr-lyu~lyā* ‘dig everywhere’ from *lyā* ‘dig’ (not †*nr-lu~lyā*).

The velar sonorant is medial in /cy/, as shown by the comitative adverb (§5.8.1) *kṣ-čiu~čya* ‘together with its teeth’ (not †*kṣ-čiu~čya*) from *tu-čya* ‘tooth’.⁶ The group /zy/ cannot be tested with partial reduplication.

⁶ In Jacques (2004: 59), I claimed that /cy/ could be reduplicated either with or without deletion of /y/, 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/	/mby/	<i>mbyas</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>dyyrdyyr</i> ‘dumb’
/nd/	/ndy/	<i>ndyyndyyt</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>tçyas</i> ‘squeeze out’
/tç ^h /	/tç ^h y/	<i>tç^hyas tç^hyas</i> ‘completely’
/ndz/	/ndzy/	<i>ndzyas</i> ‘be squeezed out’
/ç/	/çy/	<i>tuu-çya</i> ‘tooth’
/z/	/zy/	<i>zyr-</i> reflexive prefix
/r/	/ry/	<i>tuu-ryi</i> ‘seed’
/ʂ/	/ʂy/	<i>ʂyrʂyrl</i> ‘transparent and round’
/ç ^h /	/ç ^h y/	<i>qac^hya</i> ‘fox’
/ɲʃ/	/ɲʃy/	<i>ɲʃyʂtʃyʂt</i> ‘plump and huge’
/j/	/jy/	<i>jyʂt</i> ‘come back’

4 Consonant clusters and partial reduplication

Table 4.20: List of consonant clusters with three elements ending in /γ/ (20)

/spγ/	<i>spyi</i> ‘storehouse’
/zbγ/	<i>trkṛzbyas</i> ‘headache’
/stγ/	<i>styrrnystyrr</i> ‘jumping’
/lcʰγ/	<i>lcʰyaṛlcʰyaṛ</i> ‘nice to wear’
/ldzy/	<i>stoṛldzyṛm</i> ‘straw from broad beans’
/cɒγ/	<i>cɒyo</i> ‘unit of measure’
/cpʰγ/	<i>cpʰyo</i> ‘flee with’
/jm̥γ/	<i>nxjm̥yom</i> ‘have vertigo’
/jp̥γ/	<i>jpyom</i> ‘freeze’
/jndy/	<i>nujndyo</i> ‘echo’ (vi)
/rm̥y/	<i>tr-rmyo</i> ‘drum’
/rp̥y/	<i>rpyo</i> ‘up on the mountain’
/χp̥y/	<i>tuu-χpyi</i> ‘thigh’
/b̥mb̥y/	<i>b̥mb̥yi</i> ‘sun’
/mpʰγ/	<i>mpʰyaṛmpʰyaṛ</i> ‘very tight’
/ntçʰγ/	<i>ntçʰyaṛ</i> ‘splash’
/ntʰγ/	<i>antʰyar</i> ‘bounce’
/ntsγ/	<i>ntsye</i> ‘sell’
/ntsʰγ/	<i>nvntsʰyṛz</i> ‘bump into’
/ŋcγ/	<i>ŋcyŋcγyt</i> ‘many people, very noisy’
/ŋcʰγ/	<i>ŋcʰyaṛ</i> ‘birchbark’

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

2329 Second, it originates from the lenition of velar stops in clusters with two stops
 2330 in proto-Gyalrong, as in *pyā* ‘bird’ (from *pk-, see Cogtse Situ *pkā*, [Huáng & Sūn
 2331 2002](#)).

2332 Third, it is a secondary trace of velarized vowels ([Jacques 2004](#): 231), as in
 2333 *trjpyom* ‘ice’ (from *tr-lpaṇ, see Zbu *talvám?*, [Gong 2018](#): 13).

2334 In triconsonantal clusters (Table 4.20), medial γ can occur with all preinitials

2335 except velar fricatives and the labial *w*- and *m*-, a further clue of its diachronic
 2336 origin from **w*. Combinations /-w.Cy-/ are possible, however, in heterosyllabic
 2337 clusters (§4.2.3.1), as in the noun *laβzyi* ‘steamed turnip’.

2338 **4.2.2.6 C+/v/ clusters**

2339 Clusters with *v* as last element are listed in Table 4.21. The uvular fricative is me-
 2340 dial only in a handful of clusters with dental or alveolo-palatal affricates, where it
 2341 contrasts with *y*, as shown by the minimal pair *tu-ndz̥i* ‘collar bone’ vs. *tu-ndz̥yi*
 2342 ‘fang’.

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

/w/	/wv/	βva ‘prevail’
/ndz/	/ndzv/	tu-ndz̥zi ‘collar bone’
/z/	/zv/	zv̥yjciu ‘sling’
/l/	/lv/	l̥va ‘gunny bag’
/tç/	/tçv/	tçv̥uzn̥ytçv̥uz ‘crunchy’
/tçʰ/	/tçʰv/	tçʰv̥uzn̥ytçʰv̥uz ‘crunchy’
/r/	/rv/	r̥vom ‘be rough’
/j/	/jv/	aj̥vu ‘be bowed’ (of legs, trees etc)

2343 In ambiguous clusters, with the dental fricative /zv/ and non-nasal sonorants
 2344 (/wv/, /lv/, /rv/ and /jv/), /v/ is always initial, as illustrated by *r̥v̥β̥v̥i~β̥va*
 2345 from *r̥v̥β̥v̥a* ‘roar’, *kui-v̥ru~r̥v̥om* ‘very rough (one)’ from *r̥v̥om* ‘be rough’ and *kui-*
 2346 *v̥jv̥u~jv̥u* ‘very bent (one)’ from *aj̥vu* ‘be bent’.

2347 One of the origins of cluster-final *v* is the result of the lenition of the uvular
 2348 stop **q* in double stop clusters, as in *β̥va* ‘prevail’ (from **pq*-, Jacques 2004: 330,
 2349 as shown by the Situ cognate *pkā*, Huáng & Sūn 2002: 603).

2350 **4.2.3 Summary**

2351 Table 4.22 summarizes the numbers of clusters identified in §4.2.1 and §4.2.2.
 2352 Since in ambiguous clusters (§4.2.2) partial reduplication is not always available
 2353 to determine whether the final non-nasal sonorant is medial or initial, no at-
 2354 tempt is made at distinguishing between [initial+medial] and [preinitial+initial]
 2355 clusters in this table.

2356 Clusters with four elements can appear at least at the phonetic level if the
 2357 last syllable of a verb stem with a triconsonantal onset undergoes synizesis with

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

the 1SG -a suffix (§3.3.1.3). The denominal verb *yyjm̥o* ‘dream of’ (§20.5.2) from the noun *tu-jm̥o* ‘dream’ (§4.2.1.6) provides examples like *pj̥-wȳ-yy-jm̥o-a* (IFR-INV-DENOM-dream-1SG) ‘s/he dreamed of me’ realized as [pj̥ó.ye.jm̥wa] with a complex onset [jm̥w] comprising four segments.

Attested ambiguous clusters are listed in Table 4.23. Grey shading indicates phonotactically impossible combinations, due for instance to the constraints against the combination of velars and uvulars (§4.2.2.5, §4.2.2.6), and against the combination of alveolo-palatals with /j/ (§4.2.1.6, §4.2.2.2). Orange colour indicates [initial+medial] clusters, whose final sonorant is removed in partial reduplication. Blue colour marks [preinitial+initial] clusters, whose final sonorant is unaffected by reduplication. Clusters left in white are those for which partial reduplication cannot be tested. The cluster *rw* has two possible reduplication patterns (§4.2.2.1) and is thus left unmarked.

Table 4.23: Ambiguous clusters

	/w/	/j/	/r/	/l/	/ɣ/	/β/
/ç/			/çr/	/çl/	/çɣ/	/çβ/
/z/			/zr/	/zl/	/zɣ/	
/s/		/sj/	/sr/	/sl/	/sɣ/	
/z/	/zw/	/zj/	/zr/	/zl/	/zɣ/	/zβ/
/l/	/lw/	/lj/			/lɣ/	/lβ/
/r/	/rw/	/rj/		/rl/	/rɣ/	/rβ/
/w/		/wj/	/wr/	/wl/	/wɣ/	/wβ/
/j/		/jw/		/jr/	/jl/	/jɣ/
/ɣ/			/ɣj/	/ɣr/	/ɣl/	
/β/			/βj/	/βr/	/βl/	

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/, /z/), the following sonorant is *medial*.
- If the first element of the ambiguous cluster is a glide (/w/, /j/) or a dorsal sonorant (/ɣ/, /β/), 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 *tɛʰɣṛpruu* ‘rain shelter’, a compound from Tibetan བྱର ‘tɕʰar’ ‘rain’ and the native

4 Consonant clusters and partial reduplication

2390 word *typru* ‘rain shelter’, has the sequence *-r.pr-*, which would be completely
2391 impossible as syllable onset (§3.4.1).

2392 The phoneme /w/, realized as -β in coda position (§3.2.2), does not become
2393 an unvoiced fricative when followed by an unvoiced obstruent in the next syllable,
2394 as in the noun *slvβkʰaj* ‘school’, which is not realized as †*slvfkʰaj* as would
2395 have been expected if the /w/ were in preinitial position (§4.2.1.1). The coda -β
2396 is generally deleted when it precedes labial stops, especially the voiced /b/ in
2397 ideophones. For instance, the pattern II ideophone (§10.1.2.2) from the root |*bvβ*|
2398 is *bvbvβ* ‘stubborn, bulky’; the alternative realization *bvbvbvβ* is also possible.

2399 Unlike /w/ in preinitial position (§4.2.1.9), the coda -β does not assimilate with
2400 nasals or prenasalized onsets that follow it. For instance, the coda -β in the last
2401 syllable of verb stems is not nasalized by the dual *-ndzi* or plural *-nuu* indexation
2402 suffixes (§14.2.1.2): *pjuu-fkaβ-nuu* (IPFV-cover-PL) ‘they cover it’ (example 163,
2403 §15.1.5.11) cannot be realized as †[pjifkámnw]. The same is true in noun com-
2404 pounds, for example *jlxβndzu* ‘weft stick’ from *tu-jlxβ* ‘weft’ and *ndzu* ‘stick’.

2405 A puzzling cluster *-p.t-* is observed in the numeral *sqaptuy* ‘eleven’ (§7.1.3). The
2406 *-p-* is a linking element between the bound form *sqa-* ‘ten’ and the following nu-
2407 meral, also found in other Gyalrongic languages (Jacques 2017c), but its expected
2408 form would be the preinitial *f-* (from /w/) in this position; it is better analyzed
2409 as the coda of the first syllable.

2410 The dental /t/, which exists as coda (§3.2.2), but not as preinitial (§4.2.1), is at-
2411 tested in heterosyllabic clusters followed by unvoiced labial or velar stops, mainly
2412 in Tibetan loanwords such as *rgvtpu* ‘old man’ (from རྒྱତ୍ପ ཉ རྒାଦ୍ དୋ ‘old man’) or
2413 *mtɕʰvṛtkʰo* ‘house shrine’ (on which see §3.3.3). In compounds, the coda /t/ is
2414 either lost in non-final syllables (§5.4.2.2), or nasalizes to [n] if the following seg-
2415 ment is a nasal sonorant or a prenasalized obstruent (§5.4.2.1), in particular with
2416 the dual *-ndzi* and plural *-nuu* indexation suffixes (§14.2.1.2), so that even hetero-
2417 syllabic clusters with /t/ a first element are infrequent.

2418 Exceptions to the loss of *-t* before coronal stops and affricates do exist, however,
2419 for instance *trçphṛtta*, the name of a type of sewing method, compound of *tr-çpʰṛt*
2420 ‘patch’ (§16.4.6) with the verb *ta* ‘put’ (§22.4.2.6). In this noun, a geminated *-t.t-*
2421 occurs across syllable boundaries.

2422 While dental fricative preinitials cannot precede affricates (§4.2.1.2), the coda
2423 /z/ does occur before the dental affricate *tsʰ-* in the cluster *-s.tsʰ-* in *mbrvstsʰi* ‘rice
2424 soup’ (from *mbrvz* ‘rice’ and *tutsʰi* ‘rice gruel’), assimilating in voice (§5.4.2.1).

2425 The preinitial /j/ is not compatible with palatal and alveolo-palatal initials
2426 (§4.2.1.6), but the coda /j/ can precede those segments across syllable boundary,
2427 as in *qajzmbraž* ‘ear of wheat’ from *qaj* ‘wheat’ and *zmbraž* ‘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 |gryγ| ‘curved; moving with difficulty’ is *grygry*, though *gryggy* is also possible. There is only one example of γ preceding a uvular segment even across syllable boundaries: the sigmatic causative *suyvər'* ‘cause to hatch’ from *vər'* ‘hatch’ (§17.2.1.4). The Tibetan form ཚྲୁଗ୍.ୡ୍ଲୁ “*brug.glog* ‘thunder and lightning’ would have been expected to yield †*mbruyv.zlob* in Japhug, but we find instead *mbruyvlob* (in dialects other than Kamnyu) or *mbyurlob* ‘thunderstorm’ in Kamnyu with irregular metathesis of γ and r.

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

When preceding unvoiced obstruents, the fricative codas /z/, /χ/ and /v/ assimilate in voice and are converted to [s], [x] and [v], 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 *ɛ*- as onset. For instance, we find *-n.l-* in *srunloꝝ* ‘ring’, *-m.y-* (instead of *-mbr-*) in *nvtsumyut* ‘take away and bring back’ (from *tsum* ‘take away’ and *yut* ‘bring’, §20.12), *-n.r-* in *smynruy* ‘medicinal plants’ (from *šm̥n̥r̥iṣṇa* *sman.rigs* ‘type of materia medica’) or *-mj-* (instead of *-mŋ-*) in *zumju* ‘barrel handle’ (compound of *zum* ‘bucket’ and *w-ju* ‘its handle’, from *žom* *zom* ‘bucket’ and *ju-va* *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) *kŷ-srunlu~nloꝝ* ‘together with his/her ring’ from *srunloꝝ* ‘ring’ (instead of *†kŷ-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 *χcun-rzi* ‘Yama’ (from གཅིນ་རྫེ་ *gcin.rdze* ‘Yama’, the Buddhist god of the underworld) and *-m.xts^h-* in *jbumxts^hum* ‘thickness’ (from *jbum* ‘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, བେଶ୍ୱା 'semantics' *sems.sduy* 'sadness, worry' is borrowed as *sumuzduy* 'worry' instead of expected †*sumzduy*, with the *u* breaking the cluster *-m.-zd-*.

4 Consonant clusters and partial reduplication

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-jŋor* ‘hook’ are compounded as *ɔymjor* ‘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

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 J. T.-S. 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/, /-v/, /-h/ 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 *rumentçʰyt* ‘offering to the mountain’ drops before the ç- translocative prefix and that of *lx̚t* merges with the following affricate *tç*.

- 2508 (7) *ruumtc^hyt c-c^htú-wy-lyt* tce
 mountain.offering TRAL-IPFV:DOWNSTREAM-INV-release LNK

2509 *pui-p^hyn*
 SENS-be.efficient

2510 ‘If you go and make offerings to the mountain (god), it will s

2511 problem).’ (Lobzang, 26)

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

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

2517 Third, when a [preinitial+initial] cluster is preceded by an open syllable, the
2518 preinitial can be resyllabified as coda of the previous syllable. In (§9) for instance,
2519 the preinitial χ - of $\chi\text{c}^h\text{o}\text{r}$ ‘right and left’ becomes the coda of -rna and voices to
2520 [r], and yields a sequence [-rnat χ . c^ho -]. This type of phenomenon is considerably
2521 rarer than the previous ones.

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

2525 Fourth, when a word ending in open syllable precedes a vowel-initial word
2526 (§3.3.1.4), the initial vowel *a-* and *u-* of the latter very commonly merge with
2527 the final vowel of the former. For instance, the sentence in (§10) is realized as

4 Consonant clusters and partial reduplication

2528 [amuxtsa:punu]: the *u-* prefix is elided by merging with the preceding *u*, and the
2529 -*a* rhyme of *u-xtsa* merges with the *a-* prefix of the following word, yielding a
2530 phonetically long [a:].

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

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

2534 4.4 Tibetan script-based orthography

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

2539 Concerning the vowels (§3.3.1), /i/, /u/, /e/ and /o/ can be represented using
2540 the གྱା-ୟୁଁ *gi.gu*, རྩା-ୟୁଁ *zabs.k'u*, གྱୈ-ୟୁଁ "green.bu and ཅ-ୟୁଁ *na.ro* symbols, respectively. The
2541 vowel /ʌ/, being very common word-internally, can be taken as base vowel of
2542 the aksharas. As for /w/, the Old Tibetan གྱା-ୟୁଁ-୧୦ *gi.gu.log* can be employed. Finally,
2543 the /a/ can be represented by the long vowel symbol ཅ-ୟୁଁ-୧୧ *fa.teʰuy*.

2544 A few consonants found in Japhug do not have Tibetan equivalents. The letter
2545 ພ *w* can be reserved for the velar fricative /ɣ/. The uvulars can be differentiated
2546 from the velars by the ຖ-ນଘା *tsʰa.rtgas*, for instance ນ /q/, ດ /ŋ/ and ບ /k/. In
2547 coda position however, the contrast between /ɣ/ and /k/ does not need to be
2548 transcribed, since these two codas are in complementary distribution with the
2549 preceding vowels (§3.3.2). The unvoiced velar fricative can be written as ຜ /x/
2550 and the uvular one as ຕ /χ/ in initial position (for the rare phoneme /h/ an additional
2551 diacritic symbol such as ດ̄ can be employed). In preinitial position, however
2552 (§4.2.1.7, §4.2.1.8), the voiced stop symbols should be preferred, since there is no
2553 contrast between fricatives and stops in this context.

2554 The retroflex affricates can be represented by the Sanskrit symbols for retroflex
2555 stops (ଡ /tʂ/, ପ /tʂʰ/ and ର /dʐ/) and the retroflex fricative by the corresponding
2556 Sankrit consonant (ଶ /ʂ/).

2557 The glide /w/ in initial position can be written as ວ /w/ with ຖ-ນଘା *tsʰa.rtgas*,
2558 but as medial (§4.2.2.1) the ພ-ນଘା *wa.zur* can be employed. Medial -y- and -k- can be
2559 represented by underscript ພ and ບ, for instance in ພ୍ୟାର *pyar* ‘turn over’ and ດ୍-ନ୍ଦ୍ଜୀ *tui-ndzzi* ‘collar bone’.

2561 The clusters with fricatives preceding prenasalized obstruents can be tran-
 2562 scribed by combining a prefixed ཡ marking prenasalization with a superfixed
 2563 letter marking the fricative, as in ཚୟେ ར୍ତ୍ତୁ ‘boat’, ཚୟେ ར୍ତ୍ତୁ ‘star’ or ཚୟେ ར୍ତ୍ତୁ ‘wall’.
 2564 Since the voicing contrast is neutralized in this position (§4.2.1.2, §4.2.1.5), the
 2565 unvoiced fricative symbols ཙ s and ཙ c can be used.

2566 The following examples illustrate how this script can be used to write complete
 2567 sentences.

- 2568 (11) *c-ty-χtui-t-a*
 TRAL-AOR-buy-PST:TR-1SG

2569 ཚୟେ ར୍ତ୍ତୁ

2570 ‘I went and bought it.’

- 2571 (12) *tx-rzaβ nui pjy-ry-cpʰyt*
 INDEF.POSS-wide DEM IFR.IPFV-APASS-patch

2572 ར୍ତ୍ତୁ ར୍ତ୍ତୁ ར୍ତ୍ତୁ

2573 ‘The wife was patching clothes.’

- 2574 (13) *wi-me nui kui andi paxci pui-ntsye nyu*
 3SG.POSS-daughter DEM ERG west apple IPFV-sell be:FACT

2575 ཨ୍ତେ ཨ୍ତେ ཨ୍ତେ ཨ୍ତେ ཨ୍ତେ

2576 ‘Her daughter is selling apples over there.’

²⁵⁷⁷ 5 Nominal morphology

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

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

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

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

²⁵⁸⁶ 5.1 Possessive prefixes

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

²⁵⁹² 5.1.1 Possessive paradigm

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

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

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

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

5 Nominal morphology

Table 5.1: Possessive prefixes in Japhug

Person	Kamnyu dialect	Tatshi dialect
1SG	<i>a-</i>	<i>a-</i>
2SG	<i>nγ-</i>	<i>na-</i>
3SG	<i>u-</i>	<i>ə-</i>
1DU	<i>tçi-</i>	<i>tsə-</i>
2/3DU	<i>ndz̥i-</i>	<i>ndzə-</i>
1PL	<i>ji-</i>	<i>ji-</i>
2/3PL	<i>nu-</i>	<i>nə-</i>
indefinite generic	<i>tuu-/tγ-/ta-</i> <i>tuu-</i>	<i>tə-/ta-</i> <i>tə-</i>

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

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

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

5.1.1.1 *a-* initial nouns

2614 Unlike verbs (see §12.3), nouns whose stem begins with a *a-* are extremely rare
 2615 in Japhug. Nevertheless, as is the case with verbs, the vowel *a-* merges with any
 2616 prefixed element, so that nouns of this type do not have regular possessive forms.
 2617 The only noun in *a-* to commonly receive possessive prefixes is *araγ* ‘liquor’ (a
 2618 loanword from အရာ *raγ* ‘liquor’). Its possessive forms are highly anomalous:
 2619 1SG *aγr-raγ*, 2SG *nγz̥r-nγ-raγ* and 2PL *nuz̥r-nu-raγ* (as in 1), combining the pronoun
 2620 in *status constructus* followed by the possessive prefix, which takes over the initial
 2621 *a-*.
 2622

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

- 2623 (1) *nuažy-nua-ras* *ú-rá*
 2PL-2PL.POSS-liquor QU-be.needed:FACT
 2624 ‘Do you need liquor?’ (elicited)

2625 To account for these forms, it is necessary to assume that the initial *a-* was re-
 2626 analyzed as a 1SG possessive prefix. However, this analysis did not occur directly.
 2627 The expected 1SG possessive form **a-aras* (1SG.POSS-liquor) would automatically
 2628 yield **a-ras* by vowel fusion (following the rule described in §12.3). The result-
 2629 ing 1SG **a-ras* then became the pivot for the analogical reshaping of the rest of
 2630 the paradigm, from which for instance **nx-ras* (2SG.POSS-liquor) was generated
 2631 (replacing putative earlier forms such as **nx-aras* */*naraš*/). Due to homophony
 2632 with the base noun *aras*, the 1SG pronoun *azo* was systematically added and **azo*
 2633 *a-ras* underwent morphological fusion to the attested *azx-ras*, followed by the
 2634 rest of the possessive paradigm.

2635 **5.1.1.2 The expression of possession**

2636 Possession cannot be expressed without a possessive prefix on the possessee,
 2637 except for a handful of constructions where a pronoun occurs instead (§6.1.2).

2638 Possessive prefixes can be used on nearly any noun (except the unpossessed
 2639 nouns, see §5.2), including recent borrowings from Chinese (or quasi-code switch-
 2640 ing), as 老家 *lǎojiā* ‘native place’ in (2). They also occur on several non-finite
 2641 verbal forms, including participles (see §16.1.1.1 and §16.1.2.1), bare infinitives
 2642 (§16.2.2) and degree nominals (§16.3).

- 2643 (2) *azo yuu a-<laojia>* *yuu ui-lycu* *naure ri*
 1SG GEN 1SG.POSS-old.house GEN 3SG.POSS-upstream there LOC
 2644 *ku-ryzi-nua* *ŋu*
 IPFV-stay-PL be:FACT
 2645 ‘They live in a place upstream from my old house.’ (14-siblings, 238)

2646 In the case of first or second person possessors, it is possible to have simply
 2647 a possessive prefix on the noun, (*a-ŋni* ‘my friend’, *a-mbro* ‘my horse’ and *a-ŋgra*
 2648 ‘my enemy’ in 3), a personal pronoun and a possessive prefix (same person and
 2649 number, as in 4) or even a pronoun, the genitive clitic *yuu* and a possessive prefix
 2650 as in (2) (§8.2.3.1).

- 2651 (3) *a-ŋpi* *ci* *tui~tui-ŋu* *nx, a-mbro*
 1SG.POSS-friend INDEF COND~2-be:FACT LNK 1SG.POSS-horse

5 Nominal morphology

- | | | | | | |
|------|---|---------------------------|-----------------------------|-----------|-------------------|
| 2652 | <i>ui-lwa</i> | <i>ui-taš ky-zo,</i> | <i>a-ugra</i> | <i>ci</i> | <i>tui~tui-ŋu</i> |
| | 3SG.POSS-mane | 3SG.ON IMP-land | 1SG.POSS-enemy | INDEF | COND~2-be:FACT |
| 2653 | <i>nŋ, a-mbro</i> | <i>ui-jme</i> | <i>ui-taš ky-zo</i> | | |
| | LNK | 1SG.POSS-horse | 3SG.POSS-tail | 3SG.ON | IMP-land |
| 2654 | 'If you are my friend, land on my horse's mane, if you are my enemy, land | | | | |
| 2655 | on my horse's tail.' (2002 qaCpa, 196) | | | | |
| 2656 | (4) <i>azo a-mbro</i> | <i>nŋrwurumbotčhi ŋu,</i> | <i>tui-sŋi xpaxtsʰyt ci</i> | | |
| | 1SG 1SG.POSS-horse | ANTHR | be:FACT | one-day | yojana INDEF |
| 2657 | <i>jnū-wy-tsum-a</i> | <i>cʰa</i> | | | |
| | IPFV:WEST-INV-take.away-1SG | can:FACT | | | |
| 2658 | 'My horse is Norbu Rinpoche, he can make me cross one yojana per day.' | | | | |
| 2659 | (2003smanmi2, 54) | | | | |

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).

- 2663 (5) *izo a-mu nuu t^hamt^ham kurcysqaptuy t^hur-azyut nyu.*
 1PL 1SG.POSS-mother DEM now 81 AOR-reach be:FACT
 2664 ‘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 *nɣ-ye* ‘my grandchild’, as I have noticed by participant observation. Nevertheless, the use of other possessive prefixes than 1sg in such contexts is not agrammatical, and systematically occurs in texts translated from Chinese (by calquing), as in (6).

- 2673 (6) *tci-tciu* *jui-syzauxpa*,
 1DU.POSS-son SENS-be.pitiful
 2674 ‘Our poor son!’ (150831 renshen wawa-zh, 17)

5.1.1.3 Definiteness and obviation

²⁶⁷⁶ Nouns with a definite possessor in Japhug can be indefinite, unlike in most languages of Europe. They can occur with an indefinite determiner (example 3

above). With a quantifier such as *tui-rdo_b* ‘one piece’ as in (7), a noun with a definite possessor is interpreted as referring to a certain number of persons out of a group (‘one of his X’).

- (7) *tr-tciu nuu kui uu-zda tui-rdo_b uu-p^he to-ti,*
 INDEF.POSS-son DEM ERG 3SG.POSS-companion one-CL 3SG-DAT IFR-say
tui-rdo_b nuu kui li ci uu-p^he tce
 one-CL DEM ERG again INDEF 3SG-DAT LNK
jy-k-y-sui-ymui-mts^huu~mts^hym-nuu
 IFR-PEG-RECIP-CAUS-RECIP-hear-PL
 ‘The boy told one of his companions, and that one another one, and (in
 this way) they informed each other.’ (2012Norbzang, 82)

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

- (8) *uu-rzaβ nuu kui na-βde*
 3SG.POSS-wife DEM ERG AOR:3→3'-throw.away
 ‘His_i wife left him_i.’ (14-siblings, 289)
- (9) *uu-rzaβ c^ho uu-tciu nuu ㅂ나ည나 kui nú-wy-βde*
 3SG.POSS-wife COMIT 3SG.POSS-son DEM both ERG AOR-INV-throw.away
 ‘His_i wife and his_i son left him_i.’ (14-siblings, 294)

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

5.1.1.4 Other uses of possessive prefixes

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

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

5 Nominal morphology

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

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

- 2709 (11) *azuy a-kuu-ra ci tu tce nuu 'ya'*
 1SG:GEN 1SG.POSS-SBJ:PCP-be.needed INDEF exist:FACT LNK DEM yes
 2710 *ty-ti ra*
 IMP-say be.needed:FACT
 2711 ‘There is one thing I need, and you have to say ‘yes’ to it.’ (140429 qingwa
 2712 wangzi-zh, 47)

- 2713 (12) *azuy kuu-ra me*
 1SG:GEN SBJ:PCP-be.needed not.exist:FACT
 2714 ‘I don’t need anything.’ (2005 Norbzang, 275)

- 2715 (13) *azuy uu-lu ra*
 1SG:GEN 3SG.POSS-milk be.needed:FACT
 2716 ‘I want its milk.’ (02-deluge2012, 12)

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

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

2726 5.1.1.5 The form of the 3SG possessive prefix

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

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

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

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

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

2736 This linker originates from a phrase combining the demonstrative *nuu* ‘this’ (on
 2737 which see §6.9.1, §9.1.2 and §9.1.5.4) with the 3SG possessed form of the noun *u-*
 2738 *ndza* ‘reason’ (§25.5.2). The form *núndza* possibly reflects earlier **nuu-w-ndza*, **w-*
 2739 being a frozen allomorph of the 3SG possessive prefix in non-initial position.³

2740 There is a possible trace of the expected allomorph *tyuu-* (from proto-Gyalrong
 2741 **wə-*) in the noun *yuufsu* ‘friend’, etymologically ‘his equal’; the inalienably pos-
 2742 sessed noun *u-fsu* ‘equal in size to’, which shares the same root, has a regular
 2743 possessive prefix that is coreferent with the standard of comparison (as in 15
 2744 with the 3PL; see §26.3.1.3 on this construction). The alienably possessed noun
 2745 *yuufsu* ‘friend’ is thus possibly a lexicalized equivalent of *u-fsu* ‘equal in size to’
 2746 (used in one of the equative constructions, §26.3.1.3), whose 3SG prefix was frozen
 before the change from **yuu-* to *u-* occurred.

- 2748 (15) *turme kui-mbro ra nuu-fsu jamar tu-zyuit ma*
 person SBJ:PCP-be.high PL 3PL.POSS-equ about IPFV-reach apart.from

3

5 Nominal morphology

2749 *my-cha*

NEG-can:FACT

2750 ‘It can only grow about as high as a tall human.’ (15-babW, 4)

2751 Furthermore, additional evidence for the idea that the third person prefix
2752 contained **w*- comes from the etymology of the reflexive prefix *zγr-*, which is argued
2753 to originate from the third person pronoun (§18.3.7).

2754 It remains unclear why the regular allomorph of the third person possessive is
2755 *w*- rather than expected *†yu-*. A possible explanation could be false segmentation,
2756 due to reanalysis with the genitive marker *yuu*, since the genitive can optionally
2757 occur between the possessor and the possessee, as in (16). A pre-Japhug form
2758 such as **qaçpa yuu-puu* could have been misanalyzed as *qaçpa yuu w-puu* due to vowel
2759 fusion sandhi (§4.3), and a new allomorph *w*- extracted from such constructions.⁴

2760 (16) *nunuu qaçpa yuu w-puu yu tce,*
DEM frog GEN 3SG.POSS-young be:FACT LNK

2761 ‘It (the tadpole) is the young of the frog.’ (hist-28-kWpAz, 220)

2762 5.1.2 Inalienably possessed nouns

2763 5.1.2.1 Morphology

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

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

2775 Inalienably possessed nouns are divided into four classes depending on their
2776 citation form. The indefinite possessor prefix has three allomorphs (*tu-*, *tr-*, *ta-*)
2777 whose distribution is not completely predictable on the basis of phonology or
2778 semantics (though some generalizations are provided below). In addition, some

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

inalienably possessed nouns only take definite possessor prefixes. The contrast between these four classes is neutralized when the noun takes a definite possessor prefix (unlike in Situ, see Lín 1993: 168–169 and Prins 2016: 118–119).

The most common allomorph of the indefinite possessor prefix is *tui-*. Inalienably possessed nouns selecting this allomorph, such as *tui-jas* ‘hand’, have identical indefinite and generic possessor forms (see §5.1.3).

The allomorph *tr-* is also very common, in particular with kinship terms and some body parts (see §5.1.2.3 and §5.1.2.4). The form *ta-* is a phonological variant of *tr-*, occurring mainly with nouns whose stem begins with a uvular such as *ta-bruu* ‘horn’ or *ta-zi* ‘younger sibling’. The contrast between /χ/ and /a/ in this prefix is very difficult to perceive before uvulars with some speakers (see §3.5.4), 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 *w-tʰor* ‘ground’ is only attested with the 3SG *w-* 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 *w-mdor* ‘colour’). Future research may reveal an indefinite possessor form for some of these nouns.

When denominal verbs are derived from inalienably possessed nouns, the vocalism of the denominal prefix tends to be the same as that of the indefinite possessor prefix (for instance *tr-βju* ‘mattress’ → *nγβju* ‘use as a mattress’, not *tnuβju*), though there are exceptions (*tui-rpas* ‘shoulder’ → *mrwpas* ‘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

5 Nominal morphology

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 *uu-ble* ‘reputation’, which originates from the alienably possessed *qa-le* ‘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).

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 *tuu-*. These include native words, but also borrowings from Tibetan such as *tuu-q'oxpa* ‘organs, state of mind’ from Tibetan ཕྱྲྱ ཀྭྱླ དྲྱླ ཁྱྲྱ ‘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 *tuu-*, for instance *tuu-ctsi* ‘sweat’), hair (*tr-rme* ‘hair, fur’, *tr-krrme* ‘hair (head)’) and some animal body parts (*tr-jme* ‘tail’, *tr-ykuu* ‘pig skin’, *tr-rk'om* ‘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 *tuu-ci* ‘water’ and *tr-ste* ‘bladder’ has a *tuu-* 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).

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

2853 5.1.2.4 Kinship terms

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

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

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

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

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

5 Nominal morphology

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

2885 Some kinship terms have an extended meaning when they take the indefinite
2886 possessor prefix: they can alternatively be used to denote a class of humans based
2887 on gender and age. The noun *ty-tçuu* ‘son’ also commonly means ‘boy’ or even
2888 ‘male human’ (regardless of age). The nouns *ty-wa* ‘father’ and *ty-mu* ‘mother’
2889 can denote older people without reference to their children; translations such as
2890 ‘old man’ and ‘old lady’ are more appropriate in these cases, for instance in (20).
2891 The same applies to *ty-wuu* ‘grandfather’ and *ty-wi* ‘grandmother’.

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

2896 5.1.2.5 Relator nouns

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

2903 5.1.2.6 Complement-taking nouns and relativizers

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

(Lai 2017: 519), former generic nouns have become fully grammaticalized as relativizers.

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

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

5.1.2.7 Property nouns

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

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

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

- (22) *k^ha w-nqra tce znde w-mbe ma t^ham*
 house 3SG.POSS-broken.one LNK wall 3SG.POSS-old.one apart.from now
kui-tu me.
 SBJ:PCP-exist not.exist:FACT

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

These phrases can be turned into compounds made of the first noun and a quasi-suffix corresponding to the property noun. All diminutive and derogatory suffixes described in §5.7.3 and §5.7.5 (Table 5.3) have corresponding property nouns. In the case of *sylanj^hyn w-puu* from example (21) for instance, it is possible to say *sylanj^hyn-puu* ‘little basin’ as one word. In some cases the corresponding noun has *status constructus* on the first element, as in *k^hynqra* ‘ruin’ from *k^ha* ‘house’ and *w-nqra* ‘broken one’, a form which occurs in (23), in the same text

5 Nominal morphology

2940 as (22) (referring to the same house). The opposite however is not always possi-
 2941 ble; for instance, lexicalized diminutives like *staxpuu* ‘pea’ from *stor* ‘broad bean’
 2942 cannot be turned into a phrase with *uu-puu* ‘little one’ as second element.

- 2943 (23) *tce nuu t̥tso̥sta nunu kʰyŋqra cti tʰam tce kuu-ryzi*
 2944 LNK DEM place.name DEM ruins be:AFF:FACT now LNK SBJ:PCP-stay
me
 2945 not.exist:FACT

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

2947 Property nouns are not necessarily always contiguous to the noun that they
 2948 follow. In (24), the indefinite determiner *ci* (§9.1.4.1) redundantly occurs both after
 2949 the constituent *yzuu kuu-xt̥cui~xt̥ci* (a relative clause, §9.1.8.3) and the property
 2950 noun *uu-puu* ‘the little one’. The nouns *yzuu* and *uu-puu* are thus separated by the
 2951 participle *kuu-xt̥cui~xt̥ci* and the determiner *ci*.

- 2952 (24) *wo nunu, yzuu kuu-xt̥cui~xt̥ci ci uu-puu*
 2953 INTERJ DEM monkey SBJ:PCP-emph~be.small INDEF 3SG.POSS-little.one
ci juu-cti
 2954 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>uu-puu</i> ‘little one’	- <i>puu</i> diminutive
<i>uu-nqra</i> ‘something broken’	- <i>nqra</i> derogatory
<i>uu-do</i> ‘someone one’	- <i>do</i>
<i>tr-mbe</i> ‘something old’	- <i>mbe</i>
<i>uu-kʰe</i> ‘something nasty’	
<i>uu-rquu</i> ‘cold thing’	- <i>rquu</i> other
<i>uu-xso</i> ‘something empty, normal’	
<i>uu-jlu</i> ‘something uncooked’	
<i>uu-maj</i> ‘in big groups’	
<i>uu-rkoz</i> ‘something special’	

2955 The property nouns *w-do* ‘old one’ and *tr-mbe* ‘old thing’ differ in that the
2956 former one is used for living things (including animals and plants), while the
2957 second occurs with inanimate objects. The quasi-suffix *-rqu* is mainly used in
2958 *tu-cirqu* ‘cold water’.

The noun *u-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: *u-puu* ‘little one’ derives from *tr-puu* ‘offspring, young’ (see §5.7.3), while *tr-mbe* ‘old thing’, *u-k^he* ‘nasty’ and *u-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 *u-maj* ‘in big groups’ derives from *maj* ‘be many’, itself from Tibetan ཡིག: *maj* ‘many’. Some *tr-*-prefixed nouns of verbal origin like *trk^he* ‘idiot, fool’ (from *k^he* ‘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 *kui-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 *u-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).

- 2978 (25) *wi-pa* *nui-kui-ce* *nui tce kumaq turme,*
 3SG.POSS-down IPFV:WEST-SBJ:PCP-go DEM LNK other people
 2979 *wi-xso* *turme ra nui-te^habra pji-ŋu*
 3SG.POSS-normal people PL 3PL.POSS-toilet IFR.IPFV-be
 2980 ‘The toilets for other people, for normal people (not lamas), were on the
 2981 (balcony) facing west under it.’ (08-kWqhi, 10)
 2982 (26) *nyzo turme wi-xso* *tui-mas*
 2SG people 3SG.POSS-normal 2-not.be:FACT
 2983 ‘You are not a normal human.’ (150829 taishan zhi zhu-zh, 40)
 2984 (27) *wi-xso* *ku-ryzi tce, wi-βri* *nunui scov-pui*
 3SG.POSS-normal IPFV-stay LNK 3SG.POSS-body DEM ladle-DIM

5 Nominal morphology

- 2985 *pur-ky-βbum* *zo* *fse*
AOR:DOWN-OBJ:PCP-COVER EMPH be.like:FACT
2986 ‘(The ladybug) usually stays (in one place), its body looks like a little
2987 laddle put upside down.’ (26-kWlAGpopo, 3)

2988 The meaning ‘empty’ is however also attested; in (28) it is used adverbially, and
2989 note that the possessive prefix is coreferent with the plural intransitive subject.

- 2990 (28) *tobde tce tcendyre, nuu-xso*
a.moment LNK LNK 3PL.POSS-empty
2991 *cʰy-nuu-tob-nuu.*
IFR:DOWNSTREAM-AUTO-come.out-PL
2992 ‘A moment later, they came out empty-handed.’ (140512 alibaba-zh, 34)

2993 The obsolete property nouns **uu-te* ‘big’ is not productive, but traces of it are
2994 still attested in some compounds (§5.7.4).

2995 5.1.2.8 Exclamative inalienably possessed nouns

2996 A small class of inalienably possessed nouns in Japhug occur as exclamative
2997 verbless nominal predicates (§22.3), sometimes with the sentence final particle
2998 *nuu* (§10.4.5). This class includes degree nominals (§26.1.2.1), as well as the non-
2999 derived *tuu-scawa* ‘poor *X*’ and *tuu-kʰi* ‘lucky *X*’.

3000 The inalienably possessed noun *tuu-scawa* ‘poor *X*’ only occurs in the exclama-
3001 tive constructions, as in (29) and (30). In example (29), the possessive prefix is
3002 coreferent with the entities that experience suffering (the pigs).

- 3003 (29) *tsuku kuu paŋndza juu-nuu-pʰut-nuu juu-ŋu ri, paŋ ra*
some ERG hogwash IPFV-AUTO-pluck-PL SENS-be LNK pig PL
3004 *nuu-scawa ma my-muum ma uu-tuu-qiaβ*
3PL.POSS-poor LNK NEG-be.tasty:FACT LNK 3SG.POSS-NMLZ:DEG-be.bitter
3005 *saxas zo.*
be.extremely:FACT EMPH
3006 ‘Some people use it (*Sambucus*) as hogwash, poor pigs, it is so bitter.’
3007 (12-ndZiNgri, 30-31)

3008 The possessive prefix on this noun can also be coreferent not with the per-
3009 son suffering, but rather with another person who caused it, and expresses his
3010 apologies in this manner, as in (30).

- 3011 (30) *wo a-tycime a-scawa, wo a-tycime a-scawa*
 INTERJ 1SG.POSS-lady 1SG.POSS-poor INTERJ 1SG.POSS-lady 1SG.POSS-poor
 3012 ‘My lady, sorry (for what) I (have done to you).’ (2014-kWLAG, 160)

3013 Alternatively, the indefinite possessive form *tuu-scawa* can occur, even if the
 3014 person/entity experiencing misfortune is definite and known, as in (31).

- 3015 (31) *wo tuu-scawa, ku-tuu-tso muu-puu-ra*
 INTERJ INDEF.POSS-poor IPFV-2-understand NEG-PST.IPFV-be.needed
 3016 ‘Alas and woe, you should not have known that.’ (2012 Norbzang, 166)

3017 The inalienably possessed noun *tuu-k^hi* ‘how lucky of X’ is another example
 3018 of the nominal exclamative construction, as in (32), with the possessive prefix
 3019 coreferent with the person experiencing good luck. This noun can also occur in
 3020 the idiom *tuu-k^hi + ηguu* ‘be lucky’, as in (33).

- 3021 (32) *cuu yuu ηu kuu, nuu-k^hi ye!*
 who GEN be:FACT SFP 3PL.POSS-how.lucky SFP
 3022 ‘Whose are these, how lucky they are!’ (2003 Kunbzang, 220)
- 3023 (33) *a-k^hi nuu-ηguu*
 1SG.POSS-lucky(1) SENS-be.lucky(2)
 3024 ‘I am lucky.’ (140425 shizi puluomixiusi he daxiang-zh, 41)

3025 5.1.2.9 Alienabilization

3026 It is possible to turn an inalienably possessed noun into an alienably possessed
 3027 one by adding a definite possessor prefix before the indefinite one; this is the
 3028 only case of possessive prefix stacking in Japhug. This process is very produc-
 3029 tive, and better illustrated by minimal pairs; the following examples involve the
 3030 inalienably possessed nouns *tuu-ci* ‘water’, *tx-lu* ‘milk’ and *tx-muj* ‘feather’.

3031 The noun *tuu-ci* ‘water’ with a definite possessor (*uu-ci* ‘its juice/water’) refers
 3032 either to the juice of a plant, or to water in which a plant has been soaked as in
 3033 (34)

- 3034 (34) *uozo tuu-ci kuu-sy-cke uu-ηguu pjut-wy-yv-la,*
 3SG INDEF.POSS-water SBJ:PCP-PROP-burn 3SG-in IPFV-INV-CAUS-soak
 3035 *tce nuu yuu uu-ci uu-ηguu nutcu tuu-mi*
 LNK DEM GEN 3SG.POSS-water 3SG-in DEM:LOC GENR.POSS-foot

5 Nominal morphology

- 3036 *pjuú-wy-yy-la* *tce numua, χtcon* *nua pua-p^hyn*
 IPFV-INV-CAUS-soak LNK DEM, rheumatism DEM SENS-be.efficient
 3037 *pua-ti-nua* *ri,*
 SENS-say-PL LNK
 3038 ‘One puts it in hot water, and then one puts one’s feet in that water, and it
 3039 is efficient against rheumatism, they say.’ (20-sWrna, 144)

3040 The alienabilized form *u-tu-ci* ‘its water’, as in (35), is used to talk about water
 3041 given to an animal to drink, or water absorbed by a plant.

- 3042 (35) *tceri u-tu-ci* *wuma zo na-bzzi* *tce,*
 but 3SG.POSS-INDEF.POSS-water really EMPH TROP-be.necessary:FACT LNK
 3043 *u-tu-ci* *nua mu-pjuu-mbryst* *pua-ra.*
 3SG.POSS-INDEF.POSS-water DEM NEG-IPFV-ACaus:break SENS-be.needed
 3044 ‘But it needs water a lot, it needs to have water continuously.’ (07-Zmbri,
 3045 11)

3046 When a definite possessor is present on the noun *tx-lu* ‘milk’ in a form such as
 3047 *u-lu* ‘her milk’, that prefix refers to the animal producing the milk, as in (36).

- 3048 (36) *tx-pi* *kua-wxti* *nua kua nuŋa yua u-lu*
 INDEF.POSS-elder.sibling SBj:PCP-be.big DEM ERG COW GEN 3SG.POSS-milk
 3049 *nua c^hondyre u-ca* *nua to-nua-ndo.*
 DEM COMIT 3SG.POSS-meat DEM IFR-AUTO-take
 3050 ‘The elder brother took the cow’s milk and meat.’ (02-deluge2012, 19)

3051 The form *u-tx-lu* ‘his/its milk’ with alienabilization is used on the other hand
 3052 when indicating the person or animal drinking the milk, as in (37).

- 3053 (37) *tce u-tx-lu* *pjuú-wy-rku* *tce numua*
 LNK 3SG.POSS-INDEF.POSS-milk IPFV:DOWN-INV-put.in LNK DEM
 3054 *pjuu-ts^hi* *q^he,*
 IPFV:DOWN-drink LNK
 3055 ‘People pour milk for it (the cat) to drink, and it drinks it.’ (21-lWLU, 47)

3056 The inalienably possessed noun *tx-muj* ‘feather’ takes as its possessor a bird
 3057 (or a bird body part such as ‘wings’), as in (38).

- 3058 (38) *jinde tce uu-kur-sat koŋla maje tce, nuu*
 nowadays LNK 3SG.POSS-SBJ:PCP-kill completely not.exist:C LNK DEM
 3059 *qarma uu-muj kuŋy tuŋ-jas muŋ-yi wo*
 crossoptilon 3SG.POSS-feather also GENR.POSS-hand NEG:SENS-come SFP
 3060 ‘Nowadays, nobody kills them, and one cannot get crossoptilon feathers.’
 3061 (23-qapGAmWmtW, 173)

3062 Its alienabilized form, such as *uu-tr-muj* ‘his feather’ in (39), is used when the
 3063 feather is detached from the body of the bird, and belongs to a human.

- 3064 (39) *txtcepui kuu-xtci nuu yuu uu-tr-muj nuu*
 boy:DIM SBJ:PCP-be.small DEM GEN 3SG.POSS-INDEF.POSS-feather DEM
 3065 *li uu-t^bob nuutcu pjy-nuu-jyvt*
 again 3SG.POSS-ground DEM:LOC IFR:DOWN-AUTO-go.back
 3066 ‘The younger boy’s feather fell back on the ground again.’ (140510 sanpian
 3067 yumao, 68)

3068 As the examples above show, alienabilized inalienably possessed nouns occur
 3069 to refer to disconnected or severed body parts, for instance body parts removed
 3070 from an animal that are used or owned by a human or another animal on which
 3071 they do not grow. They are also used for bodily fluids that have left the body,
 3072 or also clothes that are not worn but held in the hand. Similar phenomena are
 3073 observed in other Gyalrong languages (see J. T.-S. Sun 1998: 140 on Tshobdun).

3074 The referent marked by the possessive prefix can be beneficiary as in (37) or
 3075 possessor as in (39).

3076 Alienabilization is also observed with prenominal modifiers (§5.1.4), in com-
 3077 pounding, when the indefinite possessor prefix of an inalienably possessed noun
 3078 is preserved in the final member of the compound (see §5.4.3.1), in comitative ad-
 3079 verbs derived from inalienably possessed nouns (§5.8.1) and in conversion from
 3080 inalienably possessed noun to counted noun (§7.3.4.1). A related phenomenon is
 3081 also the optional neutralization of possessive prefixes in relative clauses (§23.3.4).

3082 A lexicalized way of alienabilizing nouns is by compounding with a generic
 3083 possessor. For instance, *pyŋmuj* ‘feather’ is an alienably possessed noun built from
 3084 the status constructus of *pya* ‘bird’ with the inalienably possessed noun *tr-muj*
 3085 ‘feather’. Here the first element of the compound *pyŋ-* saturates the inalienable
 3086 possessor without need to use the prefix *tr-*.

3087 5.1.2.10 Frozen indefinite possessors

3088 Alienably possessed nouns with a disyllabic root whose first element is *tu-* or *tr-*,
 3089 with the exception of loanwords such as *tursa* ‘grave’ (from དུར་ས དur.sa ‘grave’),
 3090 are mainly ancient inalienably possessed nouns whose indefinite possessor prefix
 3091 *tu-* has become frozen and reanalyzed as part of the root. Comparison with other
 3092 Gyalrong languages can demonstrate that such reanalysis took place in Japhug.

3093 For instance, the noun *turme* ‘man’ is alienably possessed in Japhug (as shown
 3094 by examples such as 40), but in Situ the 3SG form of *tə-rmɪ* ‘man’ is *wə-rmɪ* (Y.
 3095 Lin 2009: 183;197), showing that *tə-* is the indefinite possessor prefix, cognate of
 3096 Japhug *tu-*.

- 3097 (40) *ci nuu tx-tcuu nuu χawo, numuu azo a-turme nuu*
 one DEM INDEF.POSS-boy DEM INTERJ DEM 1SG 1SG.POSS-man DEM
 3098 *a-puu-ŋu ndyre, nuu u-tur-pe nuu*
 IRR-IPFV-be LNK DEM 3SG-NMLZ:DEG-be.good FSP
 3099 ‘That boy, if only he could be my man, it would be so nice.’ (2014-kWLAG,
 3100 418)

3101 This shift may be due to the fact that the 3SG form is used in Situ in construc-
 3102 tions where the non-possessed form is preferred in Japhug, such as in prenominal
 3103 relatives (Y. Lin 2009: 190), and was therefore less prone to lexicalization. The
 3104 stem *-rme* of *turme* ‘man’ is still attested as second element of compounds like
 3105 *tu-pyrme* ‘one year of life’ (whose first element *pyr-* is related to the stem of *tu-xpa*
 3106 ‘one year’, §7.3.1.7).

3107 The noun *txjmṛy* ‘mushroom’ is alienably possessed, but the stem *jmrṛy-* ap-
 3108 pears as first element of compounds such as *jmrṛyni* ‘russula’, suggesting that it
 3109 was formerly inalienably possessed and occurred without its indefinite posses-
 3110 sor prefix in this compound (see §5.4.2.4). The status of *txjmṛy* ‘mushroom’ as
 3111 a former inalienably possessed noun is less surprising if one takes into account
 3112 the likely etymological relationship with Chinese 帽 *mawH* ‘hat’ (from *m^fuk-s;
 3113 etymology suggested by L. Sagart; see also the Tibetan cognate ར୍ମୋ *rmog* ‘helmet’,
 3114 Zhang et al. 2019). If the noun for ‘mushroom’ in Japhug and other Gyalrongic
 3115 languages comes from ‘hat’ (cf Breton *tog touseg* ‘toad hat’ for ‘mushroom’), it is
 3116 expected that it would become an inalienably possessed noun (like *tx-rte* ‘hat’),
 3117 and for the indefinite possessor *tr-* to become frozen after the noun ceases to be
 3118 a term for head covers.

3119 5.1.2.11 Unusual inalienably possessed nouns in Japhug

3120 While it is crosslinguistic expected that nouns of body parts or kinship terms are
3121 inalienably possessed, we also find in Japhug inalienably possessed nouns denot-
3122 ing natural entities such as *tuu-ci* ‘water’, *tuu-mu* ‘sky, weather’ or *uu-tʰos* ‘ground’,
3123 a highly unusual fact. There is no grand insight about Gyalrong Weltanschau-
3124 ung to be gained from this observation however; explanations should be sought
3125 in the etymology of these words, and solved on an item per item basis.

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

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

The stative verb *aci* ‘be wet’ is then derived, after the semantic narrowing, from the noun *tu-ci* ‘water’ by denominal derivation (§20.2.1) – despite superficially looking like a passive of *ci* ‘pour completely (of grains or liquids)’ (§18.1), it is only indirectly derived from it.

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

- 3149 (41) *ui-ndzuu* *my-kui-syŋo* *u-μuu*
 3SG.POSS-instruction NEG-NMLZ-S/A-listen 3SG.POSS-sky
 3150 *mbut*
 ACAUS:take.off:FACT
 3151 ‘Those who do not listen to advice from other people d
 3152 (their sky falls).’ (elicited)

5 Nominal morphology

There is no clear explanation of how this noun come have become inalienably possessed, but I propose here a tentative etymology. Cognates of *tu-muu* ‘sky, weather’ are attested elsewhere in the Trans-Himalayan family, but mainly in languages that poorly preserve presyllables (for instance Yongning Na *myi*⁷, Michaud 2017: 132). Yet, in Rawang, among the conservative languages, has a word *dvmø* ‘celestial being’ (LaPolla & Poa 2001: 13), with the same vowel correspondence to Japhug /-u/ as *sharø* ‘bone’ with *çrruu* ‘bone’. Moreover, the name བྱ� ཏମୁ *dmu*, attested in Tibetan texts to refer to a type of divinity, is probably related to the Gyalrong etymon for ‘sky’ (Stein 1961: 63–64) and provides additional support for the antiquity of a dental presyllables in this etymon.

If *dvmø* and བྱ� *dmu* are indeed cognate with Japhug *tu-muu* ‘sky, weather’,⁵ this noun may originally have been disyllabic, and its first syllable reinterpreted as indefinite possessive; the form *u-muu* ‘his sky’ in (41) would then be a backformation, an idea compatible with its very marginal character.

The Japhug noun *u-t^hoꝝ* ‘ground’ cannot take any possessive prefix other than 3SG *u-*, not even the indefinite possessor prefix. It has no known cognates in other Gyalrongic languages, but it is a perfect match for a Tibetan word with the shape *t^hog* (compare the other borrowed noun *t^hoꝝ* ‘thunder’ from Tibetan རྩୟ དୗୱ ‘thunder’). Two etymologies accounting for the possessive prefix on *u-t^hoꝝ* can be proposed. On the one hand, it could be a bare action nominal (§16.4.6) from the transitive verb *t^hoꝝ* ‘stamp on’. On the other hand, it could alternatively be a borrowing from Tibetan, a hypothesis requiring a four step scenario.

First, Japhug borrowed the Tibetan relator noun རྩୟ བྱ� *t^hog(tu)* ‘on’ as *u-t^hoꝝ** ‘on’ (not attested), adding a third person possessive prefix like all relator nouns (see §8.3). This relator noun was in competition with the existing native equivalent *u-taꝝ* ‘on’.⁶

Second, it became restricted to the collocation **sytç^ha u-t^hoꝝ zuu* ‘on the ground’ (not attested), with the native locative *zuu* and the noun of Tibetan origin *sytç^ha* ‘earth’.

Third, the tautological collocation **sytç^ha u-t^hoꝝ zuu* ‘on the ground’ was reduced to *u-t^hoꝝ zuu* ‘on the ground’ (attested).

Fourth, the noun *u-t^hoꝝ* ‘ground’ was created by backformation from the locative phrase *u-t^hoꝝ zuu* ‘on the ground’. The fact that the locative postposition /*zuu*/ is always optional (§8.2.4.1) made this step less unlikely. Thus, Japhug possibly

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-rmøk* ‘thunder’ (Shuya Zhang 2016: 73).

⁶ It is not surprising in Japhug to have several competing relator nouns for the same functional slot; the same is true of the dative *u-çki* and *u-p^he*, see §8.3.1.

3187 attests an example of degrammatication (see Norde 2009: 135) from a relator noun
 3188 meaning ‘on’ (with or without motion) to a common noun meaning ‘ground’.

3189 The etymologies discussed above suggest that inalienably possessed nouns re-
 3190 ferring to natural phenomena in Japhug were created by unrelated pathways.

3191 5.1.2.12 Adverbial inalienably possessed nouns

3192 Some inalienably possessed nouns can be used adverbially (§22.2). In this func-
 3193 tion, the possessive prefix can be neutralized to indefinite possessor or third sin-
 3194 gular possessor, as *wi-stu* ‘truth, truly’ in (42), but in some cases it can also be
 3195 coreferent with an argument, and different inalienably possessed nouns display
 3196 different alignment patterns.

- 3197 (42) *konyla wi-stu zo a-pui-tui-ry-βzjoz, <zuoye>*
 really 3SG.POSS-truth EMPH IRR-PFV-2-ANTIP-study homework

3198 *a-pui-tui-βze,*
 IRR-PFV-2-do[III]

3199 ‘Study seriously, do your homework.’ (conversation 140501, 86)

3200 The prefix of the inalienably possessed noun *wi-stu* ‘truth, truly’ can be corefer-
 3201 ent with the singular or the transitive subject (like the 2SG prefix *ny-* in 43), but
 3202 never with the object, thus displaying an accusative alignment.

- 3203 (43) *nyzo ny-stu zo wi-nui-kui-nui-rga-a ny,*
 2SG 2SG.POSS-really EMPH QU-IPFV-2→1-APPL-like-1SG LNK

3204 ‘If you really love me,...’ (150907 yingning-zh, 147)

3205 On the other hand, *wi-βra* ‘it is X’s turn to...’ presents a neutral alignment
 3206 pattern: the possessive prefix can be coreferent with the intransitive subject, the
 3207 object (as in 44), or the transitive subject (45).

- 3208 (44) *icqʰa ny-zda nui pui-sat-a nyu tce, tʰam tce*
 just.before 2SG.POSS-companion DEM AOR-kill-1SG be:FACT LNK now LNK

3209 *nyzo ny-βra pjui-ta-sat ra*
 2SG 2SG.POSS-turn IPFV-1→2-kill be.needed:FACT

3210 ‘I just killed your companion, now it’s your turn.’ (elicited)

- 3211 (45) *nxj ny-βra ty-ndze*
 2SG 2SG.POSS-turn IMP-eat[III]

3212 ‘It is your turn to eat.’ (elicited)

5 Nominal morphology

3213 Thus, the alignment pattern of each adverbial inalienably possessed noun must
3214 be specified.

3215 5.1.2.13 Biactantial inalienably possessed nouns

3216 A few inalienably possessed nouns, such as words designating speech or presents,
3217 select more than one argument, and can be considered to be the nominal equiva-
3218 lent of ditransitive verbs (if alienably and inalienably possessed nouns are com-
3219 pared to intransitive and transitive verbs, respectively, §5.1.2.1). Since only one
3220 argument however is marked by a possessive prefix on the noun (possessive pre-
3221 fix stacking is not possible except for alienabilization, see §5.1.2.9) a choice has to
3222 be made as to which of the two arguments, the speaker/giver or the addressee/
3223 recipient, is marked on the noun.

3224 The possessive prefix of inalienably possessed noun *tr-pyro* ‘present’ always
3225 marks the giver; the recipient of the present (which is optional) receives genitive
3226 case.

3227 For instance, in (46) the genitive pronoun *nyzuy* encodes the recipient, and
3228 the 1SG possessive prefix on the noun is coreferent with the subject of the main
3229 verb. In (47), the recipient is not overt, and the 2SG prefix on the noun is again
3230 coreferent with the transitive subject of *yut* ‘bring’.

- 3231 (46) *nyzuy a-pyro tc^{hi} ju-yut-a ra?*
2SG:GEN 1SG.POSS-present what IPFV-bring-1SG be.needed:FACT
3232 ‘What present should I bring for you?’ (140504 huiguniang-zh, 28)

- 3233 (47) *nyzo duuxpa puu-tuu-tu ma li ny-pyro jy-tuu-yut!*
2SG hardship PST.IPFV-2-exist LNK again 2SG.POSS-present AOR-2-bring
3234 ‘Thank you, you brought another present (for me).’ (elicited)

3235 Other biactantial nouns use possessive prefixes to indicate the recipient rather
3236 than the agent. For instance, the inalienably possessed noun *tr-rkuz* ‘parting
3237 present’ (a rare example of -z nominalization suffix in Japhug, see §16.5.1) always
3238 marks the recipient, as in (48), never the agent – the form *ny-rkuz* ‘your parting
3239 present’ with 2SG possessive prefix can only mean ‘a parting present for you’,
3240 not ‘the parting present you give to me/him’.

- 3241 (48) *ktuki ny-rkuz yu*
DEM:PROX 2SG.POSS-parting.present be:FACT
3242 ‘This is a parting present for you.’ (28-smAnmi, 266)

3243 In other cases, the alignment of possessive prefixes on an inalienably possessed
 3244 noun depends on the particular construction where it appears. For instance, the
 3245 inalienably possessed noun *tuu-tçʰa* ‘news’ (about someone) marks the recipient
 3246 when used with the verbs *kʰo* ‘give’ or *tu* ‘exist’, but has neutral alignment in
 3247 other contexts. In (49), the indirective verb *kʰo* ‘give’ (§14.4.1) does not index
 3248 the recipient, whose only mark is the possessive prefix on *a-tçʰa* ‘news for me’.
 3249 Changing the prefix to the third singular *uu-* to refer to the subject here would be
 3250 ungrammatical (see however §2.8.5 and §24.2.5.2 on hybrid indirect speech).

- 3251 (49) *a-tcu* *ku* *a-tçʰa* *muu-na-kʰo*.
 1SG.POSS-son ERG 1SG.POSS-news NEG-AOR:3→3'-give
 3252 ‘I have not heard from my son (My son did not give me any response).’

3253 However, in other constructions, for instance with the verb *yut* ‘bring’ (§24.6.3.2),
 3254 there are no such constraints on the use of possessive prefixes on *tuu-tçʰa* ‘news’ (about
 3255 someone): for instance, in (50), although the recipient is second person dual, *uu-*
 3256 *tçʰa* takes the 3SG prefix, coreferent with the preceding complement clause (using
 3257 second person singular *ny-tçʰa* here would be ungrammatical).

- 3258 (50) *'ma-nu-tur-ywu-ndzi tce azo tu-ce-a* *tce atu*
 3259 NEG-IMP-2-cry-DU LNK 1SG IPFV:UP-go-1SG LNK up
c-tu-t^he-a *tce, ndzi-pa* *ndzi-ma* *ni*
 3260 TRAL-IPFV-ask[III]-1SG LNK 2DU.POSS-father 2DU.POSS-mother DU
uu-nu-nujbo-ndzi kur' uu-tçʰa *pjuu-yut-a*
 QU-IPFV-scold-DU QU 3SG.POSS-information IPFV:DOWN-bring-1SG
 3261 ‘Don’t cry, I will go up there, ask whether your parents will scold you and
 3262 come back to tell you.’ (2003-kWBRa, 15)

3263 Alignment effects are also found with alienably possessed nouns. For instance,
 3264 the alienably possessed *skurma* ‘present’ can also optionally take a possessive pre-
 3265 fix, which is always coreferent with the recipient, not with the agent, as shown
 3266 by (51), where *ny-mu yuu uu-skurma* means ‘a present (sent) to your mother’ and *a-*
 3267 *skurma* can only mean ‘a present sent to me’ (from a text explaining the meaning
 3268 difference between *skurma*, *tr-pyro* and *tr-rkuz*).⁷

⁷ Japhug has three words that can be translated as ‘present’: *tr-pyro* is used for presents one give to the recipient in person, *tr-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.

5 Nominal morphology

- 3269 (51) *ny-mu* *yuu t^huci* *tu-rke-a* *tce*
 3270 2SG.POSS-mother GEN something IPFV-put.in[III]-1SG LNK
 3270 *ju-tur-tsum* *tce numuu ny-mu* *yuu u-skurma*
 3271 IPFV-2-take.away LNK DEM 2SG.POSS-mother GEN 3SG.POSS-present
 3271 *ju-sua-yuit-a* *yu* *ny-mu* *kui a-tx-rke*
 3272 IPFV-CAUS-bring-1SG be:FACT 2SG.POSS-mother ERG IRR-PFV-put.in[III]
 3272 *tce, a-jy-tui-yuit* *tce, tce numuu li* *a-skurma*
 3273 LNK IRR-PFV-2-bring LNK LNK DEM again 1SG.POSS-present
 3273 *jy-kx-sui-yuit* *yu*
 3274 AOR-OBJ:PCP-CAUS-bring be:FACT
 3275 ‘When I prepare something for your mother and you take it to her, (I can
 3276 say) ‘I sent a present to you mother’, if your mother prepares something
 3276 and you bring it (to me), it is ‘a present sent to me.’’ (def-skWrma, 18-19)

3277 Other inalienably possessed nouns of this type include *tuu-nja* ‘debt’ (§16.4.6,
 3278 used with the verbs *tso* ‘pay’, *tor* ‘come out’ and *sti* ‘stop up’), which select as pos-
 3279 sessor the person owing money (rather than the one to whom one owes money),
 3280 and *u-p^hup^huu* ‘alms’, whose possessor is the person receiving alms (example 76,
 3281 §19.4.1).

3282 5.1.3 Indefinite vs. generic possessor

3283 The generic possessive prefix *tuu-* is formally identical to the indefinite possessor
 3284 prefix of some inalienably possessed nouns, but must be strictly distinguished
 3285 from it. Four criteria can be used to determine if a *tuu-* prefix is generic, rather
 3286 than indefinite.

3287 First, the generic possessor prefix appears on alienably possessed nouns, as in
 3288 example (52) with *tuu-k^ha* ‘one’s house’ and *tuu-la^htc^ha* ‘one’s things’, the generic
 3289 forms of *k^ha* ‘house’ and *la^htc^ha* ‘thing’.

- 3290 (52) *tce a^hynduundyt zo* *ku-zo* *qhe u-qe* *ku-lxt* *q^he*
 3290 LNK everywhere EMPH IPFV-land LNK 3SG.POSS-feces IPFV-throw LNK
 3291 *wuma zo* *tuu-k^ha* *c^ho* *tuu-la^htc^ha* *ra*
 3291 really EMPH GENR.POSS-house COMIT GENR.POSS-thing PL
 3292 *sui-nq^hi*.
 3292 CAUS-be.dirty:FACT
 3293 ‘(Flies) land everywhere, shit and make one’s houses and things dirty.’ (25
 3294 akWzgumba, 59)

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

- (53) *nur kuu-fse tce tuz̥o tu-rjit kuuny za*
DEM SBJ:PCP-be.like LNK GENR GENR.POSS-child also early
my-sci tu-ti-nur
NEG-FACT:be.born IPFV-say-PL
‘People say that in this way, one’s child will be born late.’ (27 qartshaz, 111)
- (54) *tu-rpuu u-rl̥it u-cki tce tce “a-rpuu*
GENR.POSS-uncle 3SG.POSS-offspring 3SG-DAT LNK LNK 1SG.POSS-uncle
a-las̥” tu-kuu-ti ηu.
1SG.POSS-aunt IPFV-GENR-say be:FACT
‘One has to say ‘my maternal uncle, my maternal aunt to one’s maternal uncle’s sons and daughters.’ (140425 kWmdza01, 69)

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

- (55) *n̥zo tr-rpuu u-rl̥it a-pu-tu-ηu, tce tce ažo kuu*
2SG INDEF.POSS-uncle 3SG.POSS-offspring IRR-IPFV-2-be LNK LNK 1SG ERG
‘a-rpuu’ tu-ti-a kuu-ra.
1SG.POSS-uncle IPFV-say-1SG SBJ:PCP-be.needed
‘If you are the maternal uncle’s son, (and I am the nephew) I have to say ‘my uncle’ (to you).’ (hist140425 kWmdza, 114)

Third, in the case of inalienably possessed nouns whose indefinite possessive is *tu-*, such as *tu-mtc^{hi}* ‘mouth’, the indefinite and generic forms are homophonous, but are nevertheless distinguishable. In the case of a generic form the generic pronoun *tuz̥o* ‘one’ (§6.2.1) can always be added as in (56).

- (56) *tuz̥o s̥yž kuu-mna, kui-yzuiχtso ra a-pu-ηu ny, tuz̥o*
GENR COMP SBJ:PCP-be.better SBJ:PCP-be.clean PL IRR-IPFV-be LNK GENR
tu-mtc^{hi} man̥taš nuatcu pu-łob ηu.
GENR.POSS-mouth upper.side DEM:PL IPFV-come.out be:FACT
‘If (one uses the bowl of) someone who is cleaner than oneself, the (pimple) will appear on one’s upper lip.’ (25-khArWm, 11)

5 Nominal morphology

3320 Additionally, a generic noun such as *turme* ‘person’ can occur as possessor of
3321 a noun with a generic possessive prefix as in (57). This usage is similar to that
3322 found in other generic constructions.

Even when the generic pronoun or a generic noun is not present, it is possible to identify generic possessors, as they are coreferent with the generic argument indexed on the verb (by *kua-* for intransitive subject and object and the inverse prefix *wyu-* for transitive subject, §14.3.2.5). For instance, in (58), we know that the *tu-* prefixes in *tu-mt̪hi* ‘one’s mouth’ and *tu-çya* ‘one’s teeth’ are generic and not indefinite possessor because they refer to the same generic human as the transitive subject of the verbs *pʰut* ‘take out’ and *ndza* ‘eat’ in the previous clause, marked by the inverse prefix.

- 3334 (58) *tce pú-wy-p^hut tce tú-wy-ndza ñgrxyl ri,*
LNK IPFV-INV-take.out LNK IPFV-INV-eat be.usually.the.case:FACT but

3335 *wuma zo tuu-mtc^hi c^ho tuu-cya ra*
really EMPH GENR.POSS-mouth COMIT GENR.POSS-tooth PL

3336 *pui-swy-ŋay ñu.*
IPFV-CAUS-be.black be:FACT

3337 ‘One can pluck it and eat it, but it causes one’s mouth and teeth to
become black.’ (11-qarGW, 70)

3338

3339 Fourth, possessed case markers such as the dative *w-cki* (§8.3.1) do not have
3340 indefinite possessive forms, and therefore if prefixed in *tu-*, it will always mark
3341 a generic possessor, as in (59) – such forms are often preceded by the generic
3342 pronoun *tuzo* ‘one’ anyway.

- 3343 (59) *ma tur-cki wuma zo zyy-sui-yrbat tce nündza*
LNK GENR-DAT really EMPH REFL-CAUS-be.near:FACT LNK for.this.reason
3344 *k^he tu-ti-nu^a nu-ŋu.*
stupid:FACT IPFV-say-PL SENS-be
3345 'It comes near humans a lot, so people call it 'stupid''. (23-scuz, 62)

3346 **5.1.3.1 The generic possessor as a first person marker**

3347 As in the generic verbal forms (§14.6.1.4, §14.6.2), the generic possessive prefixes
 3348 can be used as an indirect way to express first person singular or plural. In exam-
 3349 ple (60) the generic as first person and the first person are used in two contiguous
 3350 clauses, both referring to the narrator.

- 3351 (60) *tce tuu-mu tuu-wa ra tuu-rkui*
 LNK GENR.POSS-mother GENR.POSS-father RA NEG:SENS-stay-PL
 3352 *muáj-ryzi-nuu tce, azo a-wi puu-tu.*
 LNK 1SG 1SG.POSS-grandmother INDEF PST.IPFV-exist
 3353 ‘My parents were not by my side, but I had a grandmother (to take care of
 3354 me).’ (2010-09, 13)

3355 **5.1.3.2 Comparative perspectives**

3356 Indefinite and generic possessive dental stop prefixes are found in all Gyalrong
 3357 languages (J. T.-S. Sun 1998), but only indirect traces thereof exist in Khroskyabs
 3358 (Lai 2017: 155).

3359 Outside of Gyalrongic, potential cognates of these prefixes include the ‘rela-
 3360 tional prefix’ *tə-* in Ao (Coupe 2007: 84–85, as first noticed by Wolfenden 1929:
 3361 141–142) and some *d-* or *g-* prefixes in body parts in Tibetan (see Jacques 2014d).

3362 **5.1.4 Prenominal modifiers**

3363 When prenominal modifiers occur with inalienably possessed noun, this head
 3364 noun can either take a 3SG possessive prefix, or undergo alienabilization (§5.1.2.9).

3365 Thus in (61) we find *χsyrr tʂ-sno* ‘golden saddle’ with the indefinite possessor
 3366 prefix *tʂ-*; *χsyrr uʂ-sno* with the 3SG possessive prefix is also attested in the same
 3367 text. Neutralization of possessors of alienably possessed nouns is also attested in
 3368 relative clauses (§23.3.4).

- 3369 (61) *χsyrr tʂ-sno tʰa-nuu-ta puu-ɳu,*
 gold INDEF.POSS-saddle AOR:3→3'-put SENS-be
 3370 ‘He harnessed the golden saddle (on the horse).’ (2003qachga, 111)

3371 However, when the whole modifier+head noun complex is possessed, the pos-
 3372 sessor is rarely marked by a possessive prefix on the head noun; rather, the prefix
 3373 occurs on the leftmost noun of the phrase, as in (62), where the 1SG prefix *a-* oc-
 3374 curs on the modifier *χsyrr* ‘gold’, and alienabilization of the head noun *tʂ-rte* ‘hat’
 3375 (compare with the form *a-rte* ‘my hat’ when no prenominal modifier is present).

5 Nominal morphology

- 3376 (62) *a-rte, a-χsyr tx-rte ra kumy nyzury*
 1SG.POSS-hat 1SG.POSS-gold INDEF.POSS-hat PL also 2SG:GEN
 3377 *juu-k^ham-a jyy*
 IPFV-give[III]-1SG be.possible:FACT
 3378 ‘I will even give you my hat, my golden hat.’ (140429 qingwa wangzi-zh,
 3379 54)

3380 When the head noun is an alienably possessed noun, it is not usual either to
 3381 strand the modifier and the following noun by putting a possessive prefix on the
 3382 latter. The possessor is normally indicated by a possessive prefix on the leftmost
 3383 word. For instance in (63) the 2SG prefix *ny-* occurs on the modifier *χsyr* ‘gold’.

- 3384 (63) *ny-χsyr k^hutsa nuara ku-kui-sui-ntc^hoz-a*
 2SG.POSS-gold bowl DEM:PL IPFV-2→1-CAUS-use-1SG
 3385 ‘Let me use your golden bowl.’ (140429 qingwa wangzi-zh, 135)

3386 However, we do find cases with a stranded NP modifier when the possessor on
 3387 the head noun is first or second person, as in (64), where the prenominal modifier
 3388 *χsyr* ‘gold’ does appear before the possessive prefix *a-*.⁸ This construction, though
 3389 rarer, is considered to be acceptable by native speakers. Other examples are found
 3390 with unpossessible modifiers (§5.2.1).

- 3391 (64) *nunu a-kumtc^hu, χsyr a-kumtc^hu nunu ky-yuit a-pui-tur-c^ha*
 DEM 1SG.POSS-toy gold 1SG.POSS-toy DEM INF-bring IRR-IPFV-2-can
 3392 *q^he,*
 LNK
 3393 ‘If you can bring my toy, my golden toy back...’ (140429 qingwa
 3394 wangzi-zh, 52)

3395 Note that unlike the inalienably and alienably possessed noun modifiers dis-
 3396 cussed above, *pronominal* prenominal modifiers (§6.8) do not take possessive pre-
 3397 fixes that have scope over the head noun. For instance, with the modifier *kuma^h*
 3398 ‘other’, the possessive prefix must appear on the following noun, as second per-
 3399 son *ny-* on *slama* ‘student’ in (65).

- 3400 (65) *kuma^h ny-slama ci tu-tuu-ndym ju-tuu-yuit ú-nyu*
 other 2SG.POSS-student INDEF IPFV-2-take[III] IPFV-2-bring QU-be:FACT
 3401 ‘So you are bringing other students of yours?’ (conversation, 150418)

⁸ The alternative form *a-χsyr kumtc^hu* is possible to express the same meaning, and does occur in the same text.

3402 5.2 Unpossessible nouns

3403 In addition to inalienably and alienably possessed nouns seen in the previous sec-
 3404 tions, Japhug also has a category of unpossessible nouns, which includes names
 3405 of places and ethnic groups (as in Koyukon Athabaskan, Thompson 1996: 651),
 3406 colour terms of Tibetan origin and some derived nouns like the ‘social relation
 3407 collectives’ (§5.7.8.1). With the exception of colour terms (§5.2.2), these nouns can
 3408 modify other nouns and are one of the three classes of ‘property words’ (corre-
 3409 sponding to the adjectives of Standard Average European), alongside adjectival
 3410 stative verbs (§2.2) and property nouns (§5.1.2.7).

3411 5.2.1 Place names

3412 Place names (*mbarkʰom* ‘Mbarkham’, *kṣrmnyu* ‘Kamnyu’ etc) and names of ethnic
 3413 groups (such as *kuruu* ‘Tibetan, Gyalrong’ or *kupa* ‘Chinese’), like personal names,
 3414 cannot take possessive prefixes when used independently. They can only be used
 3415 with independent pronouns as in (66) or (72) below.

- 3416 (66) *izora ji-pʰe* *kṣrmnyu nutcu* <*xiaoxue*> <*yinianji*>
 1PL 1PL.POSS-DAT TOPO DEM:LOC primary.school first.grade
 3417 <*ernianji*> *pui-ndum-a*.
 second.grade AOR-read-1SG

3418 ‘I studied the first and second grade of primary school at our place in
 3419 Kamnyu.’ (140501 tshering skyid, 12)

3420 These types of nouns can serve as strictly prenominal modifiers (as in *kuruu*
 3421 *sṛtčʰa* ‘Tibetan areas’) and commonly occur as first member of nominal com-
 3422 pounds (as in *kuruucṣrmuydu* ‘traditional gun’, with *ṣrmuydu* ‘gun’ as second
 3423 element, see §5.5.1.1). Although these nouns are unpossessible by themselves,
 3424 when used as first members of a compound, or even as prenominal modifiers
 3425 (on which see §5.1.4), they can take a possessive prefix which has scope over the
 3426 head noun, as in examples (67) and (68), where the 1PL possessive prefix *ji-* occurs
 3427 prefixed on the name *kuruu* ‘Tibetan’ and on the place name *kṣrmnyu* ‘Kamnyu’.

- 3428 (67) *nutcu tce izora ji-kuruu-lysyr* *ŋu*
 3429 DEM:LOC LNK 1PL 1PL.POSS-Tibetan-new.year be:FACT
 ‘At that time, it is our Tibetan new year.’ (conversation, 150102)

5 Nominal morphology

- 3430 (68) *nyzo ji-kymjuu-skyt* *nunuu <quanshijie> zo*
 2SG 1PL.POSS-pl.n.-language DEM whole.world EMPH
 3431 *ju-tur-su-zyut* *ŋu*
 IPFV-2-CAUS-reach be:FACT
 3432 ‘You are spreading our Kamnyu language to the whole world.’
 3433 (conversation, 150618)
- 3434 The pair of examples in (69) and (71) illustrates the different behaviour of un-
 3435 possessible nouns as first elements of compounds on the one hand, and as noun
 3436 modifiers on the other. In (69), *kuruu-rmi* ‘Tibetan name’ constitutes a single com-
 3437 pound noun (from *kuruu* ‘Tibetan’ and *tr-rmi* ‘name’; the phrase *kuruu u-rmi* is
 3438 also possible).
- 3439 (69) *ny-kuruu-rmi*
 2SG:POSS-Tibetan-name
 3440 ‘Your Tibetan name.’
- 3441 (70) *†kuruu ny-rmi*
 Tibetan 2SG:POSS-name
- 3442 The possessive prefix occurs before *kuruu*. Stranding the modifier as in (70) is
 3443 considered to be agrammatical by native speakers.
- 3444 (71) *nyzuyy <faguo> ny-rmi*
 2SG:GEN France 2SG.POSS-name
 3445 ‘Your French name.’
- 3446 In (71) however, the modifier *faguo* ‘France, French’ (from Chinese) cannot be
 3447 compounded with *tr-rmi* ‘name’ and cannot take possessive prefixes. This is a
 3448 rare example where a noun modifier can be stranded from the stem of the head
 3449 noun by a definite possessor prefix (§5.1.4).
- 3450 Place names followed by the plural *ra* designate the people living in the place
 3451 (72), even without *-puu* suffixation (§5.7.6). Example (72) also shows that in this
 3452 usage, it is possible to use a personal pronoun in apposition as in *izo kymjuu ra*
 3453 ‘we Kamnyu people’.
- 3454 (72) *izo kymjuu ra kuu tc^hwuχpri tu-ti-j* *ŋu. rcaqo ra cho mŋŋi*
 1PL TOPO PL ERG salamander IPFV-say-1PL be:FACT TOPO PL COMIT TOPO
 3455 *ra kuu tc^hwuχpri tu-ti-nuu* *ŋu*
 PL ERG salamander IPFV-say-PL be:FACT
 3456 ‘We Kamnyu people call it *tc^hwuχpri*, and people from Rqakyo and Mangi

3457 call it *tɕʰuχpwuχpri*’ (25-tChWXpri, 20)

3458 Place names can take some prenominal modifiers such as *pʰa* ‘whole’ as in (73),
 3459 but no example of bare place names with prenominal demonstratives have been
 3460 found.

- 3461 (73) *pʰa bduրjyt nuŋ uŋ-ŋgu tce rqaco cʰo katča nuŋ stu*
 whole TOPO DEM 3SG.POSS-inside LNK TOPO COMIT TOPO DEM most
 3462 *yvndzo*
 cold:FACT

3463 ‘In the whole of Gdongbrgyad, Rqakyo and Kacha are the coldest.’
 3464 (140522 RdWrJAt, 104)

3465 Place names and ethnic names can be used as core arguments, or nominal
 3466 predicates with a copula, as in (74) and (75).

- 3467 (74) *a-wa nuŋuu kupa ŋu*
 1SG.POSS-father DEM Chinese be:FACT
 3468 ‘My father is Chinese.’ (140501 tshering skyid, 4)

- 3469 (75) *tce bnuŋ-tuŋuu nuŋuu taŋrdo ŋu*
 LNK two-household DEM TOPO be:FACT
 3470 ‘These two households are Taqrdo.’

3471 Like locative relator nouns (§8.3.4), bare place names can be used without post-
 3472 position to express motion (76) or static location (77), but are also found with
 3473 locative postpositions, most often *ri* as in (78) but also *tɕu* or *z̥uu* (as in 66 above).

- 3474 (76) *a-pi kuŋ tʂ-wy-ndo-a tce tce, mbarkʰom*
 1SG.POSS-elder.sibling ERG AOR-INV-take-1SG LNK LNK TOPO
 3475 *tʰuŋ-wy-yuŋ-a,*
 AOR:DOWNSTREAM-INV-bring-1SG
 3476 ‘My elder brother brought me to Mbarkham.’ (140501 tshering skyid, 28)

- 3477 (77) *kucunŋuu tce kymuu ŋuu kuŋnuz pʃy-tu.*
 former.days LNK TOPO watchtower seven IFR.IPFV-exist
 3478 ‘In former times, there were seven watchtowers in Kamnyu.’ (140522
 3479 GJW, 1)

5 Nominal morphology

- 3480 (78) *tce alo ts^huβdun ri pui-ryzi-j tce*
 LNK upstream TOPO LOC PST.IPFV-stay-1SG LNK
 3481 ‘We were living up there in Tshobdun.’ (28-kWpAz, 178)

3482 Toponyms hardly ever occur as transitive subjects with ergative marking (§8.2.2.1).
 3483 The only example in the corpus is (79), in the context of a mythological story as-
 3484 sociated with a cliff called *qaprγjar* in Kamnyu village.

- 3485 (79) *tce tuu-muu lxt tykha tce, qaprγjar*
 LNK INDEF.POSS-weather release:FACT at.the.time LNK placename
 3486 *uu-stu ri juu-kui-ru tce zdum ci*
 3SG.POSS-direction LOC IPFV:WEST-GENR:S/O-look LNK cloud INDEF
 3487 *tu-nuu-lob juu t^ham kumy zdum*
 IPFV:UP-AUTO-come.out be:FACT now also cloud
 3488 *tu-nuu-lob juu tce, nuu maka qaprγjar kui zdum*
 IPFV:UP-AUTO-come.out be:FACT LNK DEM at.all placename ERG cloud
 3489 *to-tcyr ra tu-ti-nuu*
 IFR-take.out PL IPFV-say-PL
 3490 ‘And when it is about to rain, when one looks towards Qaprangar, a cloud
 3491 comes out from it. Even now a cloud comes out, and (the elders) say
 3492 ‘Qaprangar released a cloud.’ (140522 Kamnyu zgo, 328-330)

3493 5.2.2 Colour nouns

3494 Colour names of Tibetan origin, such as *ldzanjku* ‘blue/green’ from རྩଙ୍ଗ རྩଙ୍ଗ *ldzan.j.gu*
 3495 ‘green’, *bm̥rsmy* ‘dark red’ from ད୍ଵାରସ୍ମୁ ད୍ଵାରସ୍ମୁ *dmar.smug* ‘dark red’ or *kʰato* ‘varie-
 3496 gated’ from ຂାଦ୍ର ຂାଦ୍ର *kʰa.dog* ‘colour, multicolour’ designate objects or animals with a
 3497 particular colour. To serve as predicates, they need an existential verb (80), like
 3498 participles of adjectival stative verbs of colour (81).

- 3499 (80) *uu-muj nura wuma zo mpcyr, kʰato zo*
 3SG.POSS-feather DEM:PL really EMPH be.beautiful variegated EMPH
 3500 *tu.*
 exist:FACT
 3501 ‘Its feathers are very beautiful and variegated.’ (24-kWmu, 68)
- 3502 (81) *qambalula rcanuu uu-mdob zakastaka zo kui-ηu*
 butterfly UNEXP:DEG 3SG.POSS-colour each EMPH SBJ:PCP-be

3503 *tu.* *kui-qarŋe* *tu,* *ldzajŋku* *tu,*
 exist:FACT SBJ:PCP-be.yellow exist:FACT blue/green exist:FACT
 3504 *kui-yrŋi* *tu,* *kui-jaŋ* *tu.*
 SBJ:PCP-be.green exist:FACT SBJ:PCP-be.black exist:FACT
 3505 ‘There are butterflies with all kinds of colours, yellow, green, blue/green,
 3506 black. (26-qambalWla, 6)

3507 These nouns are only very rarely used as postnominal modifiers (§9.1.8.1); (82)
 3508 is such an example.

3509 (82) *tx-ri* *k^hatoŋ* *nuu kui t^huu-ky-sui-βzu* *nuu*
 INDEF.POSS-thread variegated DEM ERG AOR-OBJ:PCP-CAUS-make DEM
 3510 *snalŋact^hγβ* *tu-kui-ti*
 multicolour.lace IPFV-GENR-say
 3511 ‘(The laces) that are made of multicoloured thread are called *snalŋact^hγβ*.’
 3512 (30-rkAsnom, 38)

3513 The adjectival stative verbs in *aru-* derived from them (for instance *aruldžanjku*
 3514 ‘be green’, see §20.2.2) are as common as the colour nouns, and their participles
 3515 are generally used as noun modifiers instead of the colour nouns.

3516 5.2.3 Other unpossessible nouns

3517 Unpossessible nouns other than proper names and colour terms include nouns
 3518 occurring as postnominal modifiers like *tulyt* ‘second sibling’⁹ as in (83), and
 3519 privative nouns in *-lu* described in (§5.7.1).

3520 (83) *nuu-me* *tulyt* *nuu pŋ-mbi-nuu*
 3PL.POSS-daughter second.sibling DEM IFR-give-PL
 3521 ‘They gave him their second daughter.’ (2002 qaCpa, 40)

3522 Numerals under 99 are also unable to take possessive prefixes and serve as
 3523 postnominal modifiers (§7.1.1), and can be considered to be a subclass of unpos-
 3524 sible nouns.

⁹ In *tulyt* ‘second sibling’ the *tu-* element in this word is originally an indefinite possessor prefix, but has become lexicalized.

3525 5.3 Personal names

3526 This section focuses on three topics: the absence of vocative forms, the Tibetan
 3527 origin of personal names, and their use with pronouns and possessive prefixes.

3528 5.3.1 Vocative

3529 Unlike other Gyalrong languages, Japhug does not have specific vocative forms
 3530 for personal names and kinship terms. In Tshobdun, [J. T.-S. Sun \(1998: 133\)](#) and
 3531 [J. T.-S. Sun \(2005: 53\)](#) reports that personal names in the vocative have stress
 3532 retraction. The same is found in Khroskyabs ([Lai 2017: 153](#)). In Situ, inalienably
 3533 possessed nouns have their possessive prefixes replaced by *a-* in vocative forms
 3534 ([Nagano 2003: 471](#), [Prins 2016: 177](#)).

3535 In Japhug, due to the almost complete loss of contrastive stress ([§3.7](#)) and the
 3536 fact that the 1SG possessive prefix has the form *a-* ([§5.1.1](#)) unlike in Tshobdun and
 3537 Situ (where it is *ŋa-/ŋə-*), there is no specific vocative form for either personal
 3538 names or kinship terms.

3539 A prefix *a-* does occur in the familiar form of personal names (reminding of
 3540 Lin's [1993: 162](#) description of this prefix as a 爱称 'pet name' marker), but not
 3541 exclusively in vocative use as in example (84) where we see the name *acvβ* as
 3542 transitive subject, familiar form of a Tibetan name with *scvβ* as second element
 3543 (see [§5.3.2](#) below).

- 3544 (84) *kui-lyy acvβ nuu kuu, u-p^hunγuu nuutcu*
 3545 SBJ:PCP-graze Askyabs DEM ERG 3SG.POSS-fold.of.clothes DEM:LOC
qapuutum ci na-rku nuu-ŋu,
 3546 pebble.from.flint INDEF AOR:3→3'-put.in SENS-be
 3547 'The shepherd Askyabs put a pebble in the folds of his clothes (to avoid
 forgetting what he had to told the king).' (Kunbzang 332)

3548 Since similar *a-* prefixes exist in Tibetan and Chinese, and since personal names
 3549 are exclusively borrowed from one of these languages (there are no clear rem-
 3550 nants of native personal names in Japhug), it is likely that the familiar form of
 3551 the names was also borrowed.

3552 5.3.2 Tibetan names

3553 Speakers of Japhug generally have Tibetan names (*kuruu u-rmi* or *kuruu-rmi*, [§5.2.1](#)),
 3554 and in addition a Chinese official name which may or may not be related to the
 3555 Tibetan one (see ?? [§5.2.1](#) on the use of ethnic or countries names as prenominal

modifiers with the inalienably possessed noun *tr-rmi* ‘name’). Buddhist or Bonpo monks are also given religious names (in Japhug *χpuun u-rmi*, see 85).

- (85) *tce χpuun u-rmi nua, azo a-rmi nuu stynbjipima*
 LNK monk 3SG.POSS-name DEM 1SG 1SG.POSS-name DEM ANTHR
tý-wy-syrm-i-a-nuu.
 AOR-INV-give.name-1SG-PL
 ‘They gave me the name Bstanpa'i nyima as my monk name.’ (160721 XpWN, 38)

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

- (86) *zryntciu turme ci pjy-tu, tuipci kui-rmi ci*
 mung.bean person INDEF IFR.IPFV-exist flax SBJ:PCP-call INDEF
pjy-tu, turme nuu-rmi nuu-ŋu ny
 IFR.IPFV-exist people 3PL.POSS-name SENS-be SFP
 ‘There was (a lady) was was called ‘Mung bean’, and (another one) called ‘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 *ltçym*, *rcit* or *mts^hu*, (from ལྷྱ ལྷྱ ‘lady, sister’, ས୍କୁ ས୍କୁ ‘happy’ and ພ ພ ‘mts^ho ‘lake’), and there are also non-gender specific suffixes like *scvβ* (from ས୍କୁଲ୍ ས୍କୁଲ୍ ‘protector’, for instance *ts^huraj scvβ* from བୋଲ୍ ས୍କୁଲ୍ *ts^he.rij.sk^habs* ‘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 ཀର୍ମା ‘*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 ແກ້ວດຳ ‘*kun.dga* ‘Ānanda’ is pronounced *kunga* without assimilation of the dental nasal to a velar nasal, and ແກ້ວະບຊາ ‘*kun.bzaŋ* ‘Sarv-abhadra’ is *kumuβzaŋ* 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,

5 Nominal morphology

3586 as in *taqrdo χpvltçin* ‘Dpalcan from Taqrdo’ (see 92 in §5.3.4)

3587 Personal names commonly occur preceded by kinship terms which, being in-
3588 alienably possessed nouns (§5.1.2.4), have a possessive prefix as in (87).

3589 (87) *a-nmaš χpvltçin*

1SG.POSS-husband ANTHR

3590 ‘My husband Dpalcan.’ (heard in context)

3591 It is considered impolite to address someone from an older generation than
3592 oneself without adding a kinship term – for instance, the author of this grammar,
3593 being much younger, has to address the aforementioned Dpalcan as *a-βyo χpvltçin*
3594 with the 1sg form of *tr-βyo* ‘father’s brother’.

3595 Although personal names rarely occur with possessive prefixes, there is no
3596 grammatical constraint against it. There is one such example in the whole cor-
3597 pus, in a conversation where a clarification was needed. Tshendzin asks about
3598 Dpalcan, younger brother of Tshering Sgrolma, but she does not understand at
3599 once, because Tshendzin’s husband is also called Dpalcan; thus Tshendzin says
3600 (88c) with the possessed form *nua-χpvltçin* ‘your_{pl} Dpalcan’ to disambiguate be-
3601 between the two.

3602 (88) a. *χpvltçin kumaš kua-nuuhuji muu-jo-ce ú-ŋu.*
3603 ANTHR other SBJ:PCP-do.work NEG-IFR-go QU-be:FACT
(Tshendzin): ‘Dpalcan did not go for another job, did he?’

3604 b. *ka?*

SFP

3605 (Tshering Sgrolma): ‘What?’

3606 c. *χpvltçin, nuzo nuu-χpvltçin nuu*
3607 ANTHR 2PL 2PL.POSS-ANTHR DEM

3608 (Tshendzin): ‘Dpalcan, your Dpalcan.’ (140510 tshering)

3609 Given the existence of such forms, personal names are treated as a subclass
3610 of alienably possessed nouns rather than as unpossessible nouns. Note that only
3611 plural forms (*ji-χpvltçin* ‘our Dpalcan’, *zara nuu-χpvltçin* ‘their Dpalcan’ etc) are
3612 possible; singular forms such as *ta-χpvltçin* are not grammatical.

3612 5.3.4 Personal names and modifiers

3613 Proper nouns are more often than not used without demonstratives and deter-
3614 miners (see §9.1.4.4). However, examples of person or place names taking the
3615 postnominal distal determiners *nuu* or *nunuu* (§9.1.2) are not rare (89 and 90))

- 3616 (89) *jimawozyr nuu kuu, srumanmuu nuu pjyr-ftual,*
 ANTHR DEM ERG râkshasî DEM IFR-subdue
 3617 ‘Nyima ’Odzer subdued the râkshasî.’ (2011-4-smanmi, 258)
- 3618 (90) <*dangshi*> *χpyltcin numuu snarndi ly-ari*
 at.that.time ANTHR DEM TOPO AOR:UPSTREAM-go[II]
 3619 ‘At that time (the Wenchuan earthquake, in 2008), Dpalcan had gone to
 3620 Snarndi.’ (180420 waJW, 14)
- 3621 It is possible to use a dual or a plural marker on a personal name to designate a
 3622 group of people sharing the same name, without any associative plural meaning,
 3623 as in (91).
- 3624 (91) *a-puu-ŋu tce, χpyltcin bnuuz, nuu maŋ ny χsum*
 IRR-IPFV-be LNK ANTHR two DEM not.be:FACT LNK three
 3625 *kui-fse kui-naχtcuuy tuuturca a-puu-ryzi-nuu tce,*
 NMZL:S/A-be.like NMZL:S/A-be.identical together IRR-IPFV-stay-PL LNK
 3626 ‘*χpyltcin ni, χpyltcin ra*” *nura tu-kui-ti kʰui.*
 ANTHR DU ANTHR PL DEM:PL IPFV-GENR-say be.possible:FACT
 3627 ‘For instance, if two or three (people called) Dpalcan live together, one
 3628 can say ‘the two Dpalcans’, ‘the Dpalcans’. (elicited)
- 3629 To distinguish between persons with the same name (a common occurrence
 3630 among speakers of Japhug, given the relatively limited inventory of Tibetan
 3631 names available), house names (*kʰa u-rmi*) are generally added as prenominal
 3632 modifiers, as in (92).
- 3633 (92) *χpyltcin u-kʰa nuu taṣrdo rmi tce taṣrdo χpyltcin*
 ANTHR 3SG.POSS-house DEM TOPO be.called:FACT LNK TOPO ANTHR
 3634 *tu-kui-ti.*
 IPFV-GENR-say
 3635 ‘Dpalcan’s house is called Taqrdo, so one (can) call him ‘Taqrdo Dpalcan’.
 3636 (elicited)
- 3637 If two persons from the same household have the same name, locational mod-
 3638 ifiers (§5.7.2) can be used instead, as illustrated in (93).
- 3639 (93) *nuu maŋ ny, ndzi-kʰa u-rmi kumy*
 DEM not.be:FACT LNK 3DU.POSS-house 3SG.POSS-name also
 3640 *a-puu-naχtcuuy tce, kʰa kundi, lotʰi kui-fse*
 IRR-IPFV-be.identical LNK house east.west up.down.stream SBJ:PCP-be.like

5 Nominal morphology

3641 *nura tce, manlo χpylcin, man^hi χpylcin, manku χpylcin,*
DEM:PL LNK upstream ANTHR downstream ANTHR east ANTHR
3642 *manndi χpylcin, nura tu-kui-ti ηgrvl.*
west ANTHR DEM:PL IPFV-GENR-say be.usually.the.case:FACT
3643 ‘Otherwise, if their house name is also the same, using the east-west or
3644 the upstream-downstream dimensions, one can say ‘Dpalcan from
3645 upstream, downstream, east or west.’ (elicited)

3646 Like other nouns, personal names can also occur as head of non-restrictive rel-
3647 atives, as in (94) and (95), though such uses are rather uncommon. No examples
3648 of personal names as heads of head-internal relatives have been found.

- 3649 (94) *tcendyre icq^ha ίlaŋsantc^hin χsum ma*
LNK the.aforementioned Gesar three apart.from
3650 *mui-ty-kui-rzaš nui,*
NEG-AOR-SBJ:PCP-pass.days DEM
3651 ‘Gesar, who was only three days old,’ (Gesar 81)
- 3652 (95) *nui cwaŋgau u-nmtaw puu-kui-ηu ts^huraŋ nui pjv-mto*
DEM before 3SG.POSS-husband PST-SBJ:PCP-be ANTHR DEM IFR-see
3653 ‘See saw Tshering, who had been her husband before.’ (2002qajdoskAt,

3654 5.4 Status constructus

3655 The term *status constructus* is used in Gyalrongic linguistics (Jacques 2012d, Lai
3656 2017: 163–164) to refer to the non-autonomous form of (mainly nominal, but also
3657 verbal and adverbial) roots occurring as non-final element of compounds. The
3658 use of this term, adopted from Semitic linguistics, differs from works such as
3659 Creissels (2006a) or Creissels (2017a) in which ‘construct form’ refers to a specific
3660 form that is obligatory on the head noun in specific noun-modifier constructions
3661 (including with a possessive marker).

3662 In Gyalrongic languages including Japhug, nominal compounds generally ex-
3663 hibit modifier-head order, which is the opposite of Semitic. Thus, the form under-
3664 going *status constructus* alternation in Japhug is often the modifier noun,¹⁰ except
3665 in Noun-Verb compounds where the second element is an adjectival stative verb.

¹⁰ In addition, in Japhug the possessed forms of nouns do not show morphological alternations (§5.1.1) with only one exception (§5.1.2.2).

3666 This section presents the various types of alternations attested for first or other
 3667 non-final members of compounds, in particular vowel alternation (the most com-
 3668 mon type). Additionally, exceptional changes to the final members of compounds
 3669 are discussed in §5.4.3.

3670 5.4.1 Vowel alternations in non-final members of compounds

3671 Regular *status constructus* is Japhug applies to open syllables, following the cor-
 3672 respondences in Table 5.4.

Table 5.4: Regular *status constructus* in Japhug

Base	SC	Example
/-a/	/-ɤ/	<i>βyɤsni</i> ‘mill axle’ from <i>βya</i> ‘mill’ + <i>tu-sni</i> ‘heart’
/-e/	/-ɤ/	<i>tçʰemɤpu</i> ‘little girl’ from <i>tçʰeme</i> ‘girl’ + <i>u-pu</i> ‘little one’
/-o/	/-ɤ/	<i>mbrɤsno</i> ‘horse saddle’ from <i>mbro</i> ‘horse’ + <i>tr-sno</i> ‘saddle’
/-u/	/-ɤ/	<i>tr-kɤrme</i> ‘head hair’ from <i>tu-ku</i> ‘head’ + <i>tr-rme</i> ‘hair’
/-i/	/-ɯ/	<i>smuiyot</i> ‘light of the fire’ from <i>smi</i> ‘fire’ + <i>yot</i> ‘light’

3673 Table 5.4 shows that vowels other than /i/ shift to /ɤ/, and /i/ to /ɯ/.

3674 In a few cases, /u/ can also alternate with /ɯ/, as in *ŋyrtçɯu-* which occurs in
 3675 the expression *ŋyrtçukṛti+kʰu* ‘obey to everything’ (more details on this form are
 3676 provided in §6.6.6), the *status constructus* of *ŋotçu* ‘where’.

3677 The vowel /i/ also alternates with /ɤ/ in *status constructus*, as in *qapryftsa*
 3678 ‘centipede’ from *qapri* ‘snake’ and *tr-ftsa* ‘nephew’ or *tu-mymnaʂ* ‘astragalus’ from
 3679 *tu-mi* ‘leg, foot’ and *tu-mnaʂ* ‘eye’.

3680 Nouns ending in /-ɯ/ never have a *status constructus* form that is different
 3681 from the base form, as for instance *tumuparʂ* ‘slug’ from *tu-muu* ‘sky, rain’ and
 3682 *parʂ* ‘pig’.

3683 Vowel alternation in closed syllables is very rare, and affects only a few stems
 3684 with /o/ as the main vowel (Table 5.5). The *status constructus* *çym-* of *çom* ‘iron’
 3685 occurs in a few other nouns, but the form *staʂ-* (with internal sandhi to *stax-*, cf
 3686 §5.4.2.1) from *storʂ* ‘broad bean’ is unique.

3687 5.4.2 Other alternations

3688 Apart from the regular vowel changes described above, four types of alternations
 3689 are observed in non-final member of compounds: internal sandhi, coda loss, re-

5 Nominal morphology

Table 5.5: Irregular *status constructus* in closed syllable stems

Base	SC	Example
/-ob/	/-ab/	<i>staxpuu</i> ‘pea’ from <i>stor</i> ‘broad bean’ + <i>u-puu</i> ‘little one’
/-om/	/-ym/	<i>çvmtshor</i> ‘iron nail’ from <i>çom</i> ‘iron’ + <i>tvtshor</i> ‘nail’

3690 duced forms and loss of the possessive prefix.

3691 5.4.2.1 Internal sandhi in compounds

3692 First, the first element of a cluster undergoes internal sandhi (§4.2.3.1, §4.3), with
3693 voicing and nasal assimilation as in Table 5.6.

Table 5.6: Internal sandhi in compounds

Type	Example
Nasal assimilation	/t/ → /n/ /_[+nasal]
	from <i>ts^hyt</i> ‘goat’ + <i>mu</i> ‘female’
Voicing assimilation	/y/ → /x/ /_[-voiced]
	from <i>zruuy</i> ‘louse’ + <i>u-puu</i> ‘little one’
	/v/ → /χ/ /_[-voiced]
	from <i>tu-jaxpa</i> ‘palm’
	/z/ → /s/ /_[-voiced]
	from <i>tuu-jaxpa</i> ‘arm, hand’ + <i>pa</i> ‘down’
	<i>mbrystsi</i> ‘rice soup’
	from <i>mbryz</i> ‘rice’ + <i>tutsi</i> ‘rice soup’

3694 There are cases of irregular internal sandhi attested only in lexicalized com-
3695 pounds. For instance *jajntsyrpa* ‘one-handed axe’ from *tuu-jax* ‘arm, hand’, *u-ntsi*
3696 ‘one of a pair’ and *tuu-rpa* ‘axe’, showing a nasal assimilation rule /v/ → /ŋ/ /_[+nasal]
3697 which is not productive in the language (as shown by words such *tuu-jaxndzu* ‘fin-
3698 ger’, also with *tuu-jax* ‘arm, hand’ as first element).

3699 5.4.2.2 Loss of codas in compounds

3700 Coda loss is not a regular process in first elements of compounds. The following
3701 is a list of some of the most representative examples.¹¹

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

- Loss of /-β/:

3703 *nqiaβ* ‘dark side of the mountain’ + *zwyr* ‘mugwort’ → *nqiazwyr* ‘*Artemisia*
3704 sp.’
- Loss of /-t/:

3705 *xtut* ‘be short’ + *rjyi* ‘be long’ → *xturyji* ‘length (n)’
3706
3707 *tsʰyt* ‘goat’ + *ta-yrui* ‘horn’ → *tsʰyrui* ‘goat horn’
- Loss of /-z/:

3708 *qartsʰaz* ‘deer’ + *tuu-ndzi* ‘skin’ → *qartsʰyndzi* ‘deer hide’
- Loss of /-r/:

3710 *zwyr* ‘mugwort’ + *wyrum* ‘be white’ → *zwyyrum* ‘*Artemisia* sp.’
3711
3712 *çyr* ‘night’ + *u-çycl* ‘middle’ → *çyxycl* ‘middle of the night’
- Loss of /-ɣ/:

3713 *trjmyy* ‘mushroom’ + *-sti* ‘alone’ → *jmyrsti* ‘species of mushroom’
3714
3715 *tuu-mtʰyy* ‘waist’ + *rjgyβ* ‘attach’ → *tuu-mtʰyrngyβ* ‘waistline of the trousers’
3716 (where one can tuck things in)
- Loss of /-y/:

3717 *çor* ‘buckwheat’ + *wyrum* ‘be white’ → *çyyrum* ‘type of buckwheat’
3718
3719 *par* ‘pig’ + *tr-qa* ‘paw’ → *pyqa* ‘stuffed pig feet’

3720 With the exception of the loss of *-t*, which is relatively common, the other cases
3721 are rare and cannot be predicted by any rule based on phonology (the presence
3722 of a cluster in the following element is irrelevant, for instance). Some of them
3723 occur with other alternations in the second syllable (cf §5.4.3.2).

3724 5.4.2.3 Reduced forms

3725 A handful of nouns have reduced *status constructus* forms when occurring as the
3726 first member of a compounds.

3727 The noun *nuja* ‘cow’ corresponds to the syllable *ŋy-* in the compounds *ŋyru*
3728 ‘udder’ (with *tuu-nu* ‘teat’ as second element), *ŋyqe* ‘cow dung’ (with *tuu-qe* ‘shit,
3729 dung’) and *ŋylitçasmbum* ‘dung beetle’ (on which see §5.4.3.2), which would be

5 Nominal morphology

3730 the regular *status constructus* from a stem *ŋa-*. The apparent ‘loss’ of a *nu-* element
3731 is due to the fact that the noun *nūja* ‘cow’ is itself an ancient compound
3732 comprising *tu-nu* ‘teat’ as first element (‘bovid with udders’).

3733 In the case of *kʰuna* ‘dog’, we find the *status constructus* *kʰu-* in the compounds
3734 *kʰundzi* ‘dog skin’ (with *tu-ndzi* ‘skin’ as second element), *kʰudo* ‘old dog’ (see
3735 §5.7.5), *kʰutsʰoꝝ* ‘hunting with dog’ (probably a noun-verb compound with *tsʰoꝝ*
3736 ‘attach’, see also the related incorporating verb in §20.13.1) and a few plant names
3737 such as *kʰulu* ‘Euphorbia helioscopia’ (a possessive compound meaning ‘(the
3738 plant) having dog milk’ – referring to its toxic juice, see §5.5.1.2) and *kʰurtsʰv̥z*
3739 ‘Polygonum sp.’ (‘dog lung’; the second element is *tu-rtsʰv̥z* ‘lung’). Unlike *nūja*
3740 ‘cow’, whose reduced *status constructus* corresponds to the second syllable, the
3741 syllable *kʰu-* corresponds to the first syllable of *kʰuna* ‘dog’, which must also be
3742 an obscured compound. The etymology of the element *-na* is unclear.

3743 5.4.2.4 Loss of possessive prefix

3744 Some inalienably possessed or alienabilized nouns lose their possessive prefix
3745 (or frozen indefinite possessive *tu-/tr-*, see §5.1.2.10), as for instance the noun
3746 *jmr̥rtas* ‘weevil’, which comes from *tr-jme* ‘tail’ and *artaꝝ* ‘be forked’ (‘forked
3747 tail’).¹² Its first element *tr-jme* ‘tail’ loses the prefix *tr-* and undergoes regular
3748 vowel alternation.

3749 Similar examples are particularly common with *tu-xtsa* ‘shoe’, as mainly parts
3750 of the shoes are referred to by alienably possessed noun compounds with *xts̥r-*
3751 as first element (*xts̥r̥çna* ‘tip of the shoe’, *xts̥rrkui* ‘sides of the shoe’ etc).

3752 In some derivations that originate from compounds, such as the privative
3753 (§5.7.1) or the derogatory (§5.7.5), the indefinite possessor prefix is also removed.

3754 5.4.3 Final member of compounds

3755 Morphological changes affecting the last members of compounds are less com-
3756 mon than those on the first members. The only productive morphological alter-
3757 nation in this context is the loss of possessive prefix when the last member is an
3758 inalienably possessed noun.

3759 5.4.3.1 Loss of possessive prefix

3760 In compounds with an inalienably possessed noun as final element, the indefinite
3761 possessor prefix is lost as a rule, as in for example in the plant name *kʰunajme*

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

³⁷⁶² ‘*Setaria viridis*’ from *kʰuna* ‘dog’ and *tr-jme* ‘tail’.¹³

³⁷⁶³ Exceptions are very few. They include compounds whose second element is itself a compound, such as *lyndzitrlvtsʰas* ‘*Delphinium sp.*’ from *lyndzi* ‘ghost’ and *tlvtsʰas* ‘milk filter’; the second element is from *tr-lu* ‘milk’ in *status constructus* and *tsʰas* ‘sieve’. In *lyndzitrlvtsʰas* ‘*Delphinium sp.*’, the indefinite possessor prefix *tr-* has become frozen when the compound *tlvtsʰas* ‘milk filter’ was formed, and is therefore not subject to deletion.

³⁷⁶⁹ Another exceptional example is *uu-qatašru* ‘hoof’ from *tr-qa* ‘paw’, ‘root’, ‘bottom’ and *ta-šru* ‘horn’, perhaps because the second element was perceived as being alienabilized, meaning ‘the horn-like thing on the foot’; in alienabilized possessive forms, definite possessor prefixes are stacked onto the indefinite possessive instead of replacing it, see §5.1.2.9).

³⁷⁷⁴ 5.4.3.2 Alternations

³⁷⁷⁵ Morphophonological alternations affecting last members of compounds are very rare in Japhug.

³⁷⁷⁷ Internal sandhi influencing the second member of a compound rather than the first occur when a root ending in /-s/ is followed by a cluster with a velar fricative as first element. Thus, the incorporating verb *amnaxtſʰum* ‘be petty’ is the denominal of a lost compound **mnaχtſʰum* comprising *tua-mnaš* ‘eye’ as first element and *xtsʰum* ‘be thin’: the combination of -s+xtsʰ- yields -χtſʰ-.

³⁷⁸² Several cases of alternations in the last member are found with animal nouns with the uvular class prefix *qa-*, which has a variant /χ-/ in this context in some compounds (see §5.6.1 and §5.6.4).

³⁷⁸⁵ Other alternations are restricted to specific lexical items, which are discussed below one by one (*rŋgyβ* ‘attach’, *yurni* ‘be red’, *tſu* ‘path’ and *tua-yli* ‘excrement, dung’).

³⁷⁸⁸ The inalienably possessed noun *tua-mtʰyrnčyβ* ‘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 *tua-mtʰy* ‘waist’ with the transitive verb *rŋgyβ* ‘attach’, which appears as a uvularized allomorph *-rŋčyβ* not attested elsewhere: it is unclear why uvularization took place in this word (dissimilation with the coda /-y/ of the previous root is unlikely).

¹³ The absence of the *status constructus* *kʰu-* is indicative in this case of a later loanword, perhaps calqued from Chinese 狗尾草 <gōuwěicǎo> ‘*Setaria viridis*’

5 Nominal morphology

- 3794 (96) *ts^{hi}* *tx-mda* *tce nuu uzo ur-c^hymdayru* *nur*
drink:FACT AOR-be.the.time LNK DEM 3SG 3SG.POSS-drinking.straw DEM
3795 *pjuu-nuu-rve* *tce pjuu-nuu-ts^{hi}*,
IPFV:DOWN-AUTO-insert LNK IPFV:DOWN-AUTO-drink
3796 *muu-na-ts^{hi}* *tce tce li tu-nuu-χcɔr* *tce*
NEG-AOR:3→3'-drink LNK LNK again IPFV:UP-AUTO-take.out LNK
3797 *ur-mt^hyrNGyβ c^huu-nuu-rve*
3SG.POSS-tuck IPFV:DOWNSTREAM-AUTO-insert
3798 ‘When it is time to drink, he inserts his straw (into the jar) and drinks
3799 from it, and when he does not drink any more, he takes it out and tucks it
3800 back into his trousers.’ (30-tChorzi, 45)

3801 The noun *ftçyrū* ‘path in the middle of the fields’ is a compound of *ftçar* ‘sum-
3802 mer’ and *tṣu* ‘path’ (such paths are made during summer to allow workers to
3803 work in the field without damaging the crops, see a definition in 87 in §16.1.3.6).
3804 The first element *ftçyr-* is the *status constructus* of *ftçar* (with loss of final conso-
3805 nant) and the form *-ru* for the second member of the compound is a clue that *tṣu*
3806 comes from earlier **t-ro* with a dental stop+/r/ cluster changing to a retroflex
3807 affricate (see §4.2.2.4 and §7.1.3) – the **t-* element being prefocal (perhaps a fos-
3808 silized indefinite possessor prefix).

3809 The noun *jmyyni* ‘russula’ clearly derives from *txjmyy* ‘mushroom’ and *yurni*
3810 ‘be red’, but while the loss of the *tx-* prefix can be explained (see §5.1.2.10), the
3811 form of the second element (without *r-* preinitial) is a mystery. The form *-rni*
3812 (without *yū-*, a prefix possibly of denominal origin, §20.5.1) is found in *qrorni*
3813 ‘red ant’ with *qro* ‘ant’ as first element (a late innovation specific to the Kamnyu
3814 dialect).

3815 The compound *ŋylitçasmbum* ‘dung beetle’, with the irregular *status construc-*
3816 *tus* *ŋy-* (see §5.4.2.3) of the noun *nurja* ‘cow’, contains a syllable *-li* clearly derived
3817 from the inalienably possessed noun *tu-yli* ‘excrement, dung’.¹⁴

3818 The examples above show that most of the forms with an irregular second
3819 member also present some irregularity in the first member of the compound.

3820 5.5 Compound nouns

3821 Nominal compounds in Japhug can be build by compounding nouns, but also
3822 verbs, adverbs and ideophones. In this section, compounds are first classified

¹⁴ The second part of the noun *-tçasmbum* contains *asmbum* ‘be concave’.

3823 by the part of speech of their elements, and then by the semantic relationship
 3824 between these elements.

3825 5.5.1 Noun-Noun compounds

3826 Noun-Noun compounds can be divided in three classes: Determinative, posses-
 3827 sive and coordinative compounds.

3828 5.5.1.1 Determinative compounds

3829 In determinative (or endocentric) compounds, the two elements either have a
 3830 genitival or an attributive relationship.¹⁵ Modifier-Head order is by far the most
 3831 common, but Head-Modifier is found in some compounds based on postnominal
 3832 modifiers.

3833 While genitive phrases are followed by a noun with a third person possessive
 3834 prefix (§8.2.3.1), in the corresponding compounds the possessive prefix is deleted
 3835 (except the indefinite possessor prefix in exceptional examples, see §5.4.3.1).

3836 In this type of compounds, the first element is most commonly in *status con-*
 3837 *structus* if from a word ending in open syllable, both for highly lexicalized com-
 3838 pounds *qaçpyrnɔꝫ* ‘wild strawberry’ (‘frog’s brain’, from *qaçpa* ‘frog’ and *tui-rnoꝫ*
 3839 ‘brain’) and more transparent ones (*jlyndzi* ‘hybrid yak hide’ from *jla* ‘hybrid yak’
 3840 and *tui-ndzi* ‘skin’).

3841 Among determinative compounds, we commonly find nouns denoting loca-
 3842 tions and places or ethnic names such as *kuru* ‘Tibetan’ and *kupa* ‘Chinese’ (as in
 3843 *kupanya* ‘Chinese-style clothes’ or *kupastaxpu* ‘soja’(with *staxpu* ‘pea’, on which
 3844 see §5.4.1).

3845 Some compounds comprise elements that are themselves compounds. For
 3846 instance, the first element *sun̥gu* ‘forest’ in *sun̥gurmryþja* ‘lophophorus’ (with
 3847 *rmyþja* ‘peacock’) and *sun̥gupyjka* ‘type wild squash’ (with *pýjka* ‘squash’) is a
 3848 compound from *si* ‘tree’ and *u-ŋgu* ‘inside’, and its original meaning was pre-
 3849 sumably ‘among the trees’.¹⁶

3850 Compounds also exist with specific placenames such as *tçʰitçun* ‘Jinchuan’, for
 3851 instance in *tçʰitçunpaxči* ‘pear’ (with *paxči* ‘apple’ as second element), a noun

¹⁵ I 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.

¹⁶ The noun *sun̥gu* ‘forest’ is better translated as ‘wild’ when occurring as prenominal modifier or first member of compounds.

5 Nominal morphology

which can undergo denominal derivation to *mutc^{hi}cumpaxci* ‘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 *kui-* (§16.1.1.7) and oblique participles in *sr-* (§16.1.3.10) are attested.

For instance, the compound *tsyvngyt* ‘crossroad’ combines the *status constructus* of *t_{su}* ‘path’ and the oblique participle *u-sr-N_{CV}t* ‘place where X part ways’ from *nuungyt* ‘part ways’.¹⁸ The obsolete noun *srq_Yr^ha* ‘alcohol offered to one’s guests’, comprises the oblique participle *u-sr-qu_Y* of the verb *qu_Y* ‘greet, welcome, receive’ and the noun *c^ha* ‘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 *qalekuuts^hi* ‘species of kite’ comes from *qale* ‘wind’ and the participle *u-kui-ts^hi* ‘blocking (it)’ (§16.1.1) of the transitive verb *ts^hi* ‘block’; the phrase *qale u-kui-ts^hi* (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 *zmbrukylu* ‘willow that does not grow high’ from *zmbri* ‘willow’ and the privative form *kylu* ‘headless’ (§5.7.1) of *tu-ku* ‘head’), a name explained in (97).

3874	(97)	<i>u-ta_Y ui-mnui</i>	<i>kuny kui-zri</i>	<i>tu-łor</i>
		3SG-on 3SG.POSS-new.twig	also SBJ:PCP-be.long IPFV:UP-come.out	
3875		<i>múj-c^ha</i>	<i>tce, nuu-ky-łndzyr</i>	<i>zo nuu-fse tce nuu</i>
		NEG:SENS-can	LNK AOR-OBJ:PCP-cut	EMPH SENS-be.like LNK DEM
3876		<i>zmbrukylu tu-kui-ti</i>	<i>ŋu. tce nuu u-ku</i>	
		plant.name IPFV-GENR-say	be:FACT LNK DEM 3SG.POSS-head	
3877		<i>kui-me</i>	<i>ky-ti nuu-ŋu. kylu nuu u-ku</i>	
		SBJ:PCP-not.exist INF-say	SENS-be headless DEM 3SG.POSS-head	
3878		<i>ky-ti</i>	<i>ŋu-ŋu.</i>	
		SBJ:PCP-not.exist INF-say	SENS-be	
3879		'Its new twigs cannot grow very long, and look like they have been sawed short, therefore it is called 'headless willow'. 'Headless' means		
3880				

¹⁷ I am indebted to Gong Xun for this observation.

¹⁸ This intransitive verb itself is the anticausative of *q_Yt* ‘separate’, with an additional *nuu-* prefix, §18.5.1.2.

3881 ‘without head’: (07-Zmbri, 34-36)

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

3889 5.5.1.2 Possessive compounds

3890 Possessive (or exocentric) compounds (*bahuvrīhi*-) are uncommon in Japhug, and
3891 tend to be synchronically obscure. All known examples appear to have Modifier-
3892 Head order, and are plant names.

The name *k^hulu* ‘*Euphorbia helioscopia*’ combines the reduced *status constructus* of *k^huna* ‘dog’ (§5.4.2.3) with *tx-lu* ‘milk’. It presumably means ‘(having) dog milk’, a reference to a whitish toxic liquid that comes from it (98).

- | | | | | |
|------|------|--|------------------------|------------------------|
| 3896 | (98) | <i>tce nur k^hwlu</i> | <i>nunuu syndyy.</i> | <i>uu-lu</i> |
| | | LNK DEM Euphorbia.helioscopia | DEM poisonous:FACT | 3SG.POSS-milk |
| 3897 | | <i>tu tce, tx-lu</i> | <i>kui-fse</i> | <i>kui-wyrui~wyrum</i> |
| | | exist:FACT LNK INDEF.POSS-milk | SBJ:PCP-be.like | SBJ:PCP-EMPH~be.white |
| 3898 | | <i>ŋu. koŋla zo, ptú-wy-qlut</i> | <i>tce, nure uu-lu</i> | |
| | | be:FACT completely EMPH IPFV-INV-break | LNK there | 3SG.POSS-milk |
| 3899 | | <i>tu.</i> | | |
| | | exist:FACT | | |

3900 ‘The *Euphorbia helioscopia* is toxic, it has a juice white like milk, when it
3901 is broken, there is milk in (the stalk). (19-khWlu, 20-22)

Another plant name, *qaprimdzu* ‘*Cicerbita roborskii*’, from *qapri* ‘snake’ and *tu-mdzu* ‘tongue’ is interpretable as a possessive compound ‘(having) a snake’s tongue’, referring to the shape of its leaves (99).

- 3905 (99) *wi-jwak nura qapri wi-mdzu wi-ts^hwya nu*
 3SG.POSS-leaf DEM:PL snake 3SG.POSS-tongue 3SG.POSS-shape DEM
 3906 *fse*
 be.like:FACT
 3907 ‘The shape of its leaves look like that of a snake tongue.’ (xsArW, 73)

5 Nominal morphology

3908 The compound *kungut̚ts̚rts̚sy* ‘Leonurus’, from the numeral *kungut* ‘nine’ and
3909 the noun *ts̚rts̚sy* ‘stairs’, can be analyzed as meaning ‘(plant having) nine stairs’,
3910 referring to the nodes on the stalk of this plant. The Numeral-Noun order in this
3911 compound is remarkable, since numeral normally follow the noun (see §7.1.7,
3912 §9.3) but similar to some quantifiers (§9.1.3). The same Numeral-Noun order is
3913 found in the more complex compound *kungut̚ts̚rq̚yNGaB* ‘Lonicera sp.’ discussed
3914 in §5.5.5.

3915 5.5.1.3 Coordinative compound

3916 Coordinative compounds are uncommon in Japhug, and are formally indistin-
3917 guishable from the previous classes. In this type of compounds, both elements
3918 are heads.

3919 This class includes the traditional traditional *dvandva-*, which are semantically
3920 intrinsically collectives, for instance *c̚y̚mt̚hum* ‘food and drinks’ from *c̚ha* ‘alco-
3921 hol’ and *ts̚-mt̚hum* ‘meat’, *sjic̚yr* ‘night and day’ from *tu-sji* ‘one day’ and *c̚yr*
3922 ‘night’ and *χc̚hoze* ‘right and left’ from *χc̚ha* ‘right’ and *ze* ‘left’, the latter two
3923 being mainly used as adverbs.

3924 An even rarer type of coordinative compound are the appositive compounds,
3925 the only clear example of which is *kurjukuyndzur* ‘harvestman’, a noun built
3926 from two subject participles, from the transitive verbs *rju* ‘parch’ and *yndzur*
3927 ‘grind’. The two elements of the compound refer to the actions supposedly per-
3928 formed by that type of chelicerate (‘the parcher-grinder’) like the participial form
3929 of a bipartite verb (§11.6.3).

3930 The compound *qajusmynba* ‘leech’, from *qajuu* ‘bug’ and *smynba* ‘doctor’, is pos-
3931 sibly interpretable as an appositive compound ‘bug acting as a doctor’ or ‘doctor
3932 who is a bug’, since its meaning is clearly not ‘doctor treating bugs’.

3933 5.5.2 Verb-Verb compounds

3934 There are two types of Verb-Verb nominal compounds in Japhug, action nomi-
3935 nals (involving transitive action verbs) and degree nouns (with adjectival stative
3936 verbs).

3937 5.5.2.1 Action nominals

3938 Action nominals built from two verb roots are not common in Japhug. Some
3939 of these action nominals are made from verbs with complementary or near-
3940 identical meanings, for instance *joβbzur* ‘tidying up’ from *joε* ‘raise’ and *βzur*

3941 ‘move’. This noun occurs in a light verb construction as in (100). The denominational
 3942 compound verb *rɔjɔbzur* ‘tidy up’ has a meaning verb close to this construction
 3943 (§20.12).

- 3944 (100) *jobzur tɔ-βzu-t-a*
 3945 tidying.up AOR-do-PST:TR-1SG
 ‘I did some tidying up.’ (elicited)

3946 Another type of verb-verb action nominals are made from verbs with opposite
 3947 meanings, for instance *βvynjo* ‘winning and losing’ from *βva* ‘win’ and *njo* ‘lose’,
 3948 which is used with existential verbs as in (101).¹⁹

- 3949 (101) *βvynjo maye-ndzi*
 3950 winning.and.losing not.exist:SENS-DU
 3951 ‘One cannot decide who (of the two of them) is winning and who is
 losing.’

3952 At an earlier stage, such compound action nominals may have been common,
 3953 as is suggested by the existence of denominational compound verbs without a corre-
 3954 sponding noun, such as *raxtutsye* ‘do commerce’ (from *χtu* ‘buy’ and *ntsye* ‘sell’,
 3955 §20.7.2 on the -n- element).

3956 5.5.2.2 Nouns of dimension

3957 The productive way of building degree nouns in Japhug is by adding the prefix
 3958 *tua-* to an adjectival stative verb (§16.3), but an alternative formation involves the
 3959 compounding of two antonymic verbs or location adverbs, such as *jpumxts'um*
 3960 ‘thickness’ from *jpum* ‘be thick’ and *xts'um* ‘be thin’. All known examples are
 3961 listed in Table 5.7 (note that whenever possible, the first member of these com-
 3962 pounds is in *status constructus*).

3963 In the case of *xtçuxte* ‘size’, the second element *xte* is a variant also found
 3964 in the derived verb *muxte* ‘be the majority’, probably the relic of a former *i/e
 3965 alternation still observed in the verb *yi* ‘come’ (§12.2.1.1).

3966 Locational adverbs/nouns can also be compounded to express the three spatial
 3967 dimensions encoded by verbal morphology and locative markers (§15.1.3, §22.2.6):
 3968 *taški* ‘up and down’ from *taš* ‘up’ and *aki* ‘down’, *lot'i* ‘upstream and downstream’

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

5 Nominal morphology

Table 5.7: Nouns of dimension

Compound	First verb	Second verb
<i>jbumxts^hum</i> ‘thickness’ (diameter)	<i>jbum</i> ‘be thick’	<i>xts^hum</i> ‘be thin’
<i>ja^zm^a</i> ‘thickness’ (of a sheet)	<i>ja^z</i> ‘be thick’	<i>m^a</i> ‘be thin’
<i>xturjⁱ</i> ‘length’	<i>xtut</i> ‘be short’	<i>rjⁱ</i> ‘be long’
<i>xt^çuuxte</i> ‘size’	<i>xt^çi</i> ‘be small’	<i>wxti</i> ‘be big’

3969 from *lo* ‘upstream’ and *t^hi* ‘downstream’ and *kundi* ‘east-west’ from *ku* ‘east’ and
 3970 *ndi* ‘west’. An example of the use of these nouns can be found in (93), §5.3.4
 3971 above.

3972 Nouns of dimension can further derive denominal verbs in *a-* meaning ‘of un-
 3973 equal *X*’ (§20.2.1).

3974 5.5.3 Noun-Ideophone compounds

3975 Nominal compounds comprising an ideophone (§10.1.1) are rare. Three examples
 3976 are attested.

3977 First, the noun *mciru^βru^β* ‘person whose saliva drips continuously’ is built
 3978 from the inalienably possessed *tu-mci* ‘saliva’ (§5.6.5) and the reduplicated ideo-
 3979 phonic root |*ru^β*|, found in the pattern III form (§10.1.2.3) *ru^βn^yru^β* meaning
 3980 ‘dripping (drop by drop) continuously’ (§10.1.4) and the deideophonic verb *y^yru^βru^β*
 3981 ‘drip continuously’. The collocation of *tu-mci* with both the ideophone and its de-
 3982 rived verb is commonly attested (see example 62, §21.3.2.3).

3983 Second, the bird name *ja^zm^yzd^zd^zo^z* contains the *status constructus* form of
 3984 *tu-ja^zm^y* ‘thumb’ and the pattern II ideophone *zd^zd^zo^z* meaning ‘small and ac-
 3985 tive’.

3986 Third, the name of the mushroom *salaborj^o* ‘puffball’ contains the pattern II
 3987 ideophone *borj^o* ‘ovoid’. The first part of this word is obscure.

3988 5.5.4 Adverb-Verb compounds

3989 Adverb-Verb compounds are relative marginal. Compounds with *kuzya* ‘a long
 3990 time; many times’ in *status constructus* *kuzyr-* followed by a verb are however
 3991 attested, as *kuzyr-çar* ‘searching for a long time’ from the verb *çar* ‘search’ in
 3992 (102). These compounds are studied in more detail in §16.4.7 (see also Jacques
 3993 2016a: 252).

- 3994 (102) *kui-xtci nuu yuu pjy-me tce, tcendyre rca*
 SBJ:PCP-be.small DEM GEN IFR.IPFV-not.exist LNK LNK UNEXP:DEG
 3995 *kuuzyy-car zo jy-βzu-nuu ri pjy-me.*
 long.time-search EMPH IFR-do-PL LNK IFR.IPFV-not.exist
 3996 ‘The (pigeon skin) of the youngest girl was not there, there looked for it
 3997 for a long time but it was not there.’ (the flood 2002, 55)

3998 5.5.5 Noun-Verb compounds

3999 Noun-Verb compounds include three main types, Subject-Verb, Object-Verb and
 4000 Adjunct-Verb compounds. Participles or other nominalized verbs forms are treated
 4001 in sections 5.5.1, but criteria to distinguish between ambiguous forms in cases of
 4002 homophony between noun and verb are provided in §5.5.2.

4003 5.5.5.1 Subject-Verb compounds

4004 Subject-Verb compounds occur exclusively with intransitive verbs, mainly ad-
 4005 jectival stative verbs. The noun is generally in *status constructus* (see Table 5.8
 4006 below). Based on their semantics, there three of subject-verb compounds can be
 4007 distinguished: attributive, possessive and action nominals.

4008 Attributive Subject-verb compounds are equivalent to a relative clause com-
 4009 prising a stative verb and its subject (§9.1.8.3, §16.1.1.4). If the nominal and verbal
 4010 elements are represented as *N* and *V*, an attributive *NV* compound means ‘*N*
 4011 which is *V*’. They are common with stative verbs of colour such as *jaꝝ* ‘be black’
 4012 or *wyrum* ‘be white’ as in Table 5.8.

Table 5.8: Examples of attributive Subject-Verb compound nouns

Compound	Base Noun	Verb
<i>tr̥eyjaꝝ</i> ‘black barley’	<i>tr̥ci</i> ‘barley’	<i>jaꝝ</i> ‘be black’
<i>tr̥eyyrum</i> ‘white barley’		<i>wyrum</i> ‘be white’
<i>mtsʰalzjaꝝ</i> ‘black nettle’	<i>mtsʰalu</i> ‘nettle’	<i>jaꝝ</i> ‘be black’
<i>mtsʰalzyrum</i> ‘white nettle’		<i>wyrum</i> ‘be white’
<i>qartsunjaꝝ</i> ‘cold winter’	<i>qartsuu</i> ‘winter’	<i>jaꝝ</i> ‘be black’
<i>pyyŋjaꝝ</i> ‘Pucrasia macrolopha’	<i>pya</i> ‘bird’	
<i>tr̥mtujnaꝝ</i> ‘deadlock’	<i>tr̥-mtu</i> ‘knot’	

4013 The compounds in Table 5.8 are highly lexicalized; in the case for instance of

5 Nominal morphology

4014 *pyyŋas* ‘*Pucrasia macrolopha*’, this bird is not even black as the speakers them-
 4015 selves point out (103).

4016 (103) *pyyŋas* *ky-ti* *ci* *tu* *tce, nunaŋ vo*
 Pucrasia.macrolopha OBJ:PCP-say INDEF exist:FACT LNK DEM ADVERS
 4017 *luuski* *li* *nua* *pya ŋu*, *tceri my-ŋas* *ma*
 of.course again DEM bird be:FACT but NEG-be.black:FACT LNK
 4018 *nua-mpcyr.* *uu-muj* *nura* *wuma zo*
 SENS-be.beautiful 3SG.POSS-feather DEM:PL really EMPH
 4019 *nua-mpcyr* *qʰe kuu-tu* *ra nua-nymbju* *zo*
 SENS-be.beautiful LNK SBJ:PCP-exist PL SENS-be.brilliant EMPH
 4020 ‘The *Pucrasia macrolopha* is of course also a bird (like the previous ones
 4021 we talked about), but it is not black, it is beautiful, its feathers are very
 4022 beautiful and those that are there (visible) are iridescent’.

4023 More complex NV compounds of this type are found, such as *tu-jaxndzumyŋpaxcyl*
 4024 ‘middle finger’ from *tu-jaxndzu* ‘finger’ and *mypaxcyl* ‘be in the middle’ (itself a
 4025 denominal verb from *u-χcyl* ‘middle’).

4026 In such compounds, some stative verbs occur with a -x- element in individual
 4027 forms. This is the case of *trlxch'i* ‘fresh milk’ from *tr-lu* ‘milk’ and *c'h'i* ‘be sweet’.
 4028 It is possible that this velar fricative represents the remnant of a participle prefix
 4029 *kuu-*. This -x- is however present in the causative (§17.2.1.4) and the tropative
 4030 (*nyxc'h'i* ‘to find sweet’, §17.5.1) derivations.

4031 Possessive NV compounds are equivalent to a participial relative with the
 4032 possessor of the subject as the relativized element (§23.5.10): In other words, a
 4033 possessive NV means ‘(person/animal/entity) whose N is V’. Examples are
 4034 considerably fewer than the previous ones.

4035 Table 5.9 illustrates a few Noun-Verb compounds based on the verb *aχa* ‘have
 4036 a hole, have a chip’, which surfaces as -χa with elision of the a- prefix.²⁰ Among
 4037 these examples, *eyyχa* ‘person lacking a tooth’ and *rnyftcwaχa* ‘whose ear has ten
 4038 holes’²¹ are possessive compounds, while *tsyχa* ‘chuckhole’ and *tu-jaxmyχa* (虎
 4039 □ <hükōu> ‘space between thumb and index’ are possessive compounds.

²⁰ It is however alternatively possible that the verb *aχa* is denominal from an unattested inalienably possessed noun *-χa ‘hole, chip, notch’, and that the compounds in Table 5.9 are also from that lost noun.

²¹ The compound *rnyftcwaχa* occurs exclusively as postnominal modifier (§9.1.8.1) in the fixed expression *qala rnyftcwaχa* ‘the rabbit with ten holes in his ear’, a trickster character found in traditional stories.

Table 5.9: Possessive compound nouns in *-χa*, derived from the verb *aχa* ‘have a hole, have a chip’

Compound noun	First element
<i>εγγχa</i> ‘person lacking a tooth’	<i>εγγ-</i> ← <i>tui-εγa</i> ‘tooth’
<i>rnrftcwχa</i> ‘whose ear has ten holes’	<i>rnr-</i> ← <i>tui-rna</i> ‘ear’
	<i>ftcw-</i> ← Tib. དྲ୍ བ୍ରୁ ‘ten’
<i>tsyχa</i> ‘chuckhole’	<i>tsy-</i> ← <i>tsu</i> ‘path’
<i>tui-javmtwχa</i> ‘space between thumb and index’	<i>tui-javmtw-</i> ← <i>tui-javmtu</i> ‘thumb’

4040 A particularly interesting Noun-Verb possessive compound is the plant name
 4041 *kunguttyrqʰγNGaB* ‘Lonicera sp.’, which comprises three elements: the numeral
 4042 *kungut* ‘nine’, the inalienably possessed noun *trqʰu* ‘skin, hull’ and the intransitive
 4043 verb *NGaB* ‘peel, shed skin’ (anticausative of *qab* ‘peel’, see §18.5.1). This
 4044 compound is to be parsed [*kungut-trqʰγ-*] [*NGaB*] from a morphological point
 4045 of view, as its meaning is ‘(plant) whose nine skins shed off’ as is explained in
 4046 the text excerpt in (104): the first element *kungut-trqʰγ-*²² corresponds to the
 4047 intransitive subject of *NGaB* ‘peel, shed skin’.

- 4048 (104) *kunguttyrqʰγNGaB u-rmi kura nuunu tcendyre,*
 Lonicera 3SG.POSS-name DEM:PROX:PL DEM LNK
 4049 *u-rqʰu kur-dui~dyn zo pjui-NGaB juu-ηu.*
 3SG.POSS-skin SBJ:PCP-EMPH~be.many EMPH IPFV-ACAU:peel SENS-be
 4050 *nuunu tui-mpcar nγ tui-mpcar, tui-mpcar nγ tui-mpcar,*
 DEM one-leaf LNK one-leaf one-leaf LNK one-leaf
 4051 *pui-NGaB qʰe u-ηgu li myzuu juu-βze qʰe,*
 AOR-ACAU:peel LNK 3SG.POSS-inside again yet IPFV-grow LNK
 4052 ‘As for the name of the *Lonicera* sp., (it is because) it has a lot of skins
 4053 that shed off, one after the other, and after one has shed off, another one
 4054 grows again inside.’ (14-sWNgWJu, 72-5)

4055 Yet, from a phonological point of view, the form should rather be parsed as
 4056 [*kungut-*] [*trqʰγ-NGaB*], as the phonological integration between *trqʰγ-* in *status*
 4057 *constructus* and the following verb root is stronger than that between the numeral
 4058 *kungut* ‘nine’ and the rest, as shown by the preservation of the final *-t* with a rare
 4059 heterosyllabic geminate (§4.2.3.1).

²² Note that this compound has Numeral-Noun order as in other examples (see §5.5.1.2).

5 Nominal morphology

4060 Additional less obvious examples of possessive compounds include *cn̥rsti* ‘per-
4061 son with a stuffy nose’ (from *tu-čna* ‘nose’ and *asti* ‘be blocked’, see the discussion
4062 in §5.5.5.2) and *čnaβndži* ‘snotty-nosed kid’ (from *tu-čnaβ* ‘snot’ and a verbal root
4063 *-ndži* attested in *nvndži* ‘have (snot)').

4064 Action nominals *NV* compounds are rare with intransitive verbs. Examples
4065 include *pyxmbri* ‘bird song’ from *pya* ‘bird’ and the intransitive *mbri* ‘cry, sing’ or
4066 *snupax* ‘harming people’ from *tu-sni* ‘heart’ and *nax* ‘be black’ (§20.13.1).

4067 5.5.5.2 Object-Verb compounds

4068 Object-Verb nominal compounds in Japhug are very productive, and can be clas-
4069 sified into two main types: actor *OV* compounds, and action *OV* compounds.

4070 Actor *OV* compounds are common in names of trades, animals and even
4071 plants, such as *rjulfci* ‘silversmith’, *þyrru* ‘miller’, *zruyndza* ‘praying mantis’ and
4072 *trtçuþraꝝ* ‘burdock’. The first of these examples, from the Tibetan loanword
4073 *rjul* ‘silver’ and the labile verb *fci* ‘forge’, requires little explanation. Some com-
4074 pounds present significant morphological alterations, as *þyrru* ‘miller’, which
4075 comes from the *status constructus* of *þya* ‘mill’ and the non-reduplicated form of
4076 the verb *ruru* ‘guard, look after’ (§19.7.11). In addition, some compounds of this
4077 type do not make much sense without some cultural background; as an illustra-
4078 tion of how the Japhug corpus can be used to better understand the origin of
4079 these compounds, I discuss below the latter two nouns.

4080 The compound *zruyndza* ‘praying mantis’ derives from *zruy* ‘louse’ and *ndza*
4081 ‘eat’, and literally means ‘louse eater’, a descriptive term based on the feeding
4082 habits of that insect, as described in (105).

- 4083 (105) *nua tu-taꝝ ri zruyndza kx-ndo-tci tce, tcendyre zruy*
DEM 3SG-on LOC praying.mantis AOR-take-1DU LNK LNK louse
4084 *rcanuu lxytſxy jamarzo u-cki kx-ta-tci. tce*
UNEXP:DEG five.or.six about EMPH 3SG-DAT AOR:EAST-put-1DU LNK
4085 *kua-mrku nura tce, tce zruy nua lonba zo cʰua-mqlas*
SBJ:PCP-be.first DEM:PL LNK LNK louse DEM ALL EMPH IPFV-swallow
4086 *tce tu-ndze nua-ŋu. tcendyre kua-maqʰu tce n̥ki*
LNK IPFV-eat[III] SENS-be LNK SBJ:PCP-be.after LNK DEM:CATAFH
4087 *nua-ŋu, tcendyre ku-numi kua-fse qhe, u-ŋgwa*
SENS-be LNK IPFV-suck[III] SBJ:PCP-be.like LNK 3SG.POSS-inside
4088 *numui, u-se nua lu-nur-tcxt qʰe*
DEM 3SG.POSS-blood DEM IPFV:UPSTREAM-AUTO-take.out LNK

- 4089 *cʰw̥-mqlab pwt-ŋu.*
 4090 IPFV-swallow SENS-be
 4091 '(When we were little, one of my classmate had a lot of lice, and) we took
 4092 a praying mantis (and put it on his clothes), then put five or six lice near
 4093 it; the first ones, it swallowed them whole, and the following ones, it did
 4094 the following: it would kind of suck them, drink the blood inside them,
 4095 and then swallow it (and then throw them away)' (26-zrWGndza, 25-35)

4095 The nouns *trt̥cuβraꝫ* 'burdock' from (*tr-t̥cu* 'son, boy' and *βraꝫ* 'attach') and
 4096 *tqʰemeβraꝫ* 'little burdock' (with *tqʰeme* 'girl' as first element) literally mean 'at-
 4097 taching boys/girls'; an explanation for these names from local folklore is pro-
 4098 vided in (106).

- 4099 (106) *trt̥cuβraꝫ tce, c̥w̥ kui pa-mto n̥amw̥ tce tce n̥ui yui w̥z̥y*
 4100 burdock LNK who ERG AOR:3→3'-see DEM LNK LNK DEM GEN 3SG:GEN
 4101 *mab̥ ny, w̥-kʰa yui mab̥ ny, w̥-kuemdza*
 4102 not.be:FACT LNK 3SG.POSS-house GEN not.be:FACT LNK 3SG.POSS-relative
 4103 *kui-fse ra yui, n̥ui-t̥cu mab̥ ny n̥ui-me*
 4104 SBJ:PCP-be.like PL GEN 3PL.POSS-son not.be:FACT LNK 3PL.POSS-daughter
 4105 *tu tu-ti-n̥ui pwt-ŋu. tce n̥ui n̥ui-kuemdza kui-fse*
 4106 exist:FACT IPFV-say-PL SENS-be LNK DEM 3PL.POSS-relative SBJ:PCP-be.like
 4107 *kui-yr̥cxt ra, n̥ui-skʰru my-kui-βdi a-pui-tu*
 4108 SBJ:PCP-be.related PL 3PL.POSS-body NEG-SBJ:PCP-be.well IRR-IPFV-exist
 4109 *tce, "wo ... w̥-r̥fit tr-t̥cu sci ma*
 4110 LNK INTERJ 3SG.POSS-child INDEF.POSS-son LNK be.born:FACT
 4111 *trt̥cuβraꝫ pwt-mto-t-a"*
 4112 burdock AOR-see-TR:PST-1SG
 4113 'The burdock, whoever saw it will have a boy or a girl, him or someone
 4114 from his house or among his relatives. If someone among his relatives is
 4115 pregnant, he will say 'her child will be a boy, as I saw a burdock.'
 4116 (26-NalitCaRmbWm, 109+)

- 4110 The object-verb compound *tʰylw̥r̥çsat* 'sparing earth' (107), from *tʰylwa* 'earth'
 4111 and the transitive *ççsat* 'spare', occurs as postnominal modifier (§9.1.8.1) of the
 4112 noun *qandze* 'earthworm', semantically equivalent to a post-nominal subject rela-
 4113 tive clause *tʰylwa w̥-kui-ççsat* (earth 3SG.POSS-SBJ:PCP-spare). This is the only case
 4114 of a Noun-Verb compound in which both the subject and the object of the base
 4115 verb are overt.

5 Nominal morphology

- 4116 (107) *nunu kui-myći* *kuny kui-ry-ctsat* *nui, qandže*
DEM SBJ:PCP-be.rich also SBJ:PCP-APASS-spare DEM earthworm
4117 *tʰylwy-ctsat* *tu-ti-nui.*
earth-sparing IPFV-say-PL

4118 ‘Someone who spares things (does not waste anything) even though he
4119 is rich, people call him an ‘earth-sparing earthworm’’ (25-akWzgumba,
4120 136-137)

4121 Like actor *OV* compounds, action nominal compounds comprise a nominal
4122 root and a transitive verbal root. The nominal root in *status constructus* corre-
4123 sponds to the object of the verb, as in the compound *cʰxtsʰi* ‘alcohol drinking’
4124 from *cʰa* ‘alcohol’ and *tsʰi* ‘drink’. This class of nouns, which occur in light verb
4125 constructions and serve as bases for incorporating denominal verbs (§20.13.1), is
4126 discussed in §16.4.7 and §24.4.3.3.

4127 Not all compounds whose second element originates from a transitive verb
4128 are Object-Verb (or Adjunct-Verb) compounds. Two potentially ambiguous cases
4129 must be pointed out.

4130 First, there are Noun-Noun compounds whose second element is a bare action
4131 nominal, deriving from a transitive verb (see §16.4.6), but which loses its pos-
4132 sessive prefix as is usual in compounding (§5.4.3.1). In such cases the resulting
4133 Noun-Noun compound is not formally distinguishable from a Noun-Verb com-
4134 pound, and only the meaning can be used to differentiate between the two classes.
4135 For instance, the plant name *tʂçpʰyt* ‘plantain’ has the *status constructus* of *tʂu*
4136 ‘path’ as a first element, while its second part *-çpʰyt* can be interpreted as either
4137 directly from the verb *çpʰyt* ‘patch’ (‘road patcher’) or from the derived noun *tr-*
4138 *çpʰyt* ‘patch (n.)’ (a piece of fabric used to patch worn clothes) (‘road patch’). In
4139 this particular case, the second interpretation is more likely, and hence *tʂçpʰyt*
4140 ‘plantain’ is better analyzed as a Noun-Noun compound.

4141 Second, when the second element of a Noun-Verb compound is a *a*- passive
4142 verb (see §18.1), the *a*-/*ry*- prefix is absorbed by the first element of the compound
4143 and becomes invisible. In the resulting form, the second element superficially
4144 looks similar to the transitive verb. For instance, the noun *cnrsti* ‘person with
4145 a stuffy nose’ appears to derive from *tu-cna* ‘nose’ and the transitive verb *sti*
4146 ‘block’. However, semantics rules out such a derivation: it is a possessive com-
4147 pound whose literal meaning is ‘whose nose is blocked’ (see §5.5.5.1), and cannot
4148 be interpreted as ‘(person) blocking noses’, the expected meaning of an Object-
4149 Verb compound. Since the passive *asti* ‘be blocked’ of *sti* ‘block’ is well-attested,
4150 as shown by (108), it is better to analyze *cnrsti* ‘person with a stuffy nose’ as a

⁴¹⁵¹ Subject-Verb possessive compound (§5.5.5.1) derived from that passive form.

- 4152 (108) *maka juú-wy-çuy-mu* *mu-pjy-c^ha* *ma mu-pjy-mts^hym*
 at.all IPFV-INV-CAUS-be.afraid NEG-IFR.IPFV-can LNK NEG-IFR-hear
 4153 *matci w-i-rna* *pjy-k-γ-sti-ci.*
 because 3SG.POSS-ear IFR.IPFV-PEG-PASS-block-PEG
 4154 ‘The noise could not frighten him, as he did not hear it, because his ears
 4155 were blocked.’ (140514 huishuohua de niao-zh, 203)

4156 5.5.5.3 Adjunct-Verb compounds

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

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

- 4166 (109) *mbala kui tš-wy-tc^huu-a*
 bull ERG AOR-INV-stab-1SG
 4167 ‘The bull gored me.’ (elicited)

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

- 4170 (110) *zgrutc^huu ty-lat-a*
 nudge AOR-throw-1SG
 4171 ‘I nudged (him).’ (elicited)

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

The compound *тұағыңтсақ* ‘grasshopper’ from *tuu-ңуақ* ‘eye’ and *mtsaқ* ‘jump’ is obscure, but unlikely to be a possessive compound ‘whose eyes jump’, and should rather be analyzed as an adjunct compound (maybe ‘jumping with (big) eyes’, as if from a comitative adverb like *kұртпұнтыңақ* ‘with eyes’ §5.8.1). If this analysis is correct, *тұағыңтсақ* is the only example of *actor* Adjunct-Verb compound.

4180 5.5.6 Verb-Noun compounds

4181 Verb-Noun compounds are extremely rare in Japhug, as they are in general in
 4182 Trans-Himalayan languages other than Chinese.

4183 Adjectival stative verbs nearly always occur as second element in compounds
 4184 with a noun (§5.5.5.1), but the opposite order is attested in *sṛṣṭaβdi* ‘unpleasant
 4185 smell’ from *tr-di* ‘smell’ and *sṛṣṭaβ* ‘be unpleasant’ (on which see §20.3.1) a noun
 4186 which can occur with the intransitive verb *mṇym* ‘smell’ as in (111).

4187 (111) *sṛṣṭaβ-di* _{zo} *nui-mṇym*
 be.unpleasant-smell EMPH SENS-smell

4188 ‘There is an unpleasant smell.’ (elicited)

4189 A possible example of Verb-Noun compound with a transitive verb is *ndzypri*
 4190 ‘brown bear’, comprising *pri* ‘bear’ and *ndza* ‘eat’ – as shown by (112) from a text
 4191 about bears, it is considered by some native speakers of Japhug as a man eater,
 4192 though this explanation could be folk-etymology. Note that this compound is
 4193 also anomalous in that when transitive verbs are used in compounds with a noun,
 4194 that noun is either an object (§5.5.5.2) or adjunct (§5.5.5.3), never the subject.

4195 (112) *tce ndzypri* _{ks-ti} *nui tce turme tu-kui-ndza*
 LNK brown.bear INF-say DEM LNK people IPFV-GENR:S/O-eat
 4196 *nui-ŋgryl*
 SENS-be.usually.the.case

4197 ‘It eats people, so is it called *ndzypri*.’ (21-pri, 94)

4198 We find several examples of nominal compounds whose structure is *tr-*+Verb+Noun,
 4199 where the verb is an adjectival stative verb. This category includes *trqiaβjmṛy*
 4200 ‘*Lactarius sp.*’, literally ‘bitter mushroom’, from the noun *trjmṛy* ‘mushroom’ (see
 4201 §5.1.2.10 concerning the lost of *tr-*) and the verb *qiaβ* ‘be bitter’, or *trmbextsa* ‘type
 4202 of shoes’ from *tu-xtsa* ‘shoe’ and *mbe* ‘be old’. These should not be analyzed as
 4203 Verb-Noun compounds however, as the first element originates from a nominal-
 4204 ized form of the verb (either a property noun deriving from a verb (§16.4.6) in
 4205 indefinite possessor *tr-* form (§5.1.2.7) or a *tr-* abstract noun, §16.4.2): they are
 4206 rather a subtype of Noun-Noun compounds.

4207 The same applies to compounds whose first element comes from a participle,
 4208 such as *kvṛṇijmṛy* ‘type of mushroom’ from *trjmṛy* ‘mushroom’ with the subject
 4209 participle *kui-ṛṛji* ‘green one’ /kvṛṇji/ from the verb *ṛṛji* ‘be green’ (see additional
 4210 examples in §16.1.1.7). Note that the compounding order is unexpected, as par-
 4211 ticiples of adjectival stative verbs generally follow the noun (§9.1.8.3).

4212 5.6 Noun class prefixes

4213 Noun class prefixes are prefixal elements that occur in some nouns, whose root
 4214 cannot occur on its own, except for a few rare exceptions (such as *qapyxmtumtu*
 4215 ‘hoopoe’ discussed in §5.6.1). Uvular *qa-/χ-/β-* and velar *ku-/x-/γ-* prefixes are
 4216 attested, and occur on animal names, plant names and nouns referring to tra-
 4217 ditional objects. Additional body part class prefixes, in particular *m-* are also
 4218 present in Japhug.

4219 Dental prefixal elements such as *tr-* or *tu-* are very common, but are better
 4220 interpreted as frozen indefinite possessor prefixes (see §5.1.2.10), rather than noun
 4221 class prefixes.

4222 5.6.1 Uvular animal name prefix

4223 The uvular animal prefix has a basic form *qa-* (Table 5.10) and a reduced allomorph
 4224 *χ-/β-*, attested in a few names like *βmbroŋ* ‘wild yak’, *rtçʰurju* ‘caterpillar’ and
 4225 *tçʰuχpri* ‘salamander’.

4226 Note that *βmbroŋ* ‘wild yak’ is a borrowing from Tibetan བྲୋ ལྷ ‘broŋ’ ‘wild yak’,
 4227 a fact that possibly suggests that the *χ-/β-* prefix has some degree of productivity
 4228 (see Jacques 2014d).

4229 The noun *qapyxmtumtu* ‘hoopoe’ is clearly a compound containing the *status*
 4230 *constructus* of *pja* ‘bird’ and the reduplicated form of the noun *u-mtu* ‘crest’, to
 4231 which the class prefix *qa-* has been added. The origin of this compound is still
 4232 transparent to native speakers (see 85, §25.5.2).

4233 The allomorph *qa-* is reduced to its non-syllabic variants *χ-/β-* when the pre-
 4234 fixed noun occurs as the second member of a compound. The nouns *tçʰuχpri*
 4235 ‘salamander’ and *rtçʰurju* ‘caterpillar’ are examples of this reduction. The for-
 4236 mer is a compound of *tçʰu*- (a syllable borrowed from Tibetan བྲୋ *tçʰu* ‘water’) and
 4237 *-χpri*, a variant of *qapri* ‘snake’. The latter comprises the syllable *rtçʰu*-, *status*
 4238 *constructus* of the unprefixed root of *turtçʰi* ‘type of vegetable (酸酸菜)’, and the
 4239 second *-rju* is the reduced variant of *qajuu* ‘worm’.

4240 5.6.2 Velar animal name prefix

4241 While most nouns beginning in *ku-* are frozen participles (see §16.1.1.7), there is a
 4242 residue of forms which cannot be analyzed as deverbal nouns: no corresponding
 4243 verb root is attested, and moreover some of them have cognates elsewhere in the
 4244 family. Table 5.11 presents animal names that are not derivable from any verb
 4245 root, and appear to bear a *ku-* class prefix, which is to be distinguished from the

5 Nominal morphology

Table 5.10: Animal name *qa-* prefix

<i>qacʰya</i> ‘fox’	<i>qandže</i> ‘earthworm’
<i>qacyi</i> ‘big fly’	<i>qandzi</i> ‘anadromous fish’
<i>qaçpa</i> ‘frog’	<i>qandzyi</i> ‘falcon’
<i>qajdo</i> ‘crow’	<i>qapi</i> ‘mole’
<i>qajtʂʰa</i> ‘aegyptius monachus’	<i>qapar</i> ‘dhole’
<i>qajuu</i> ‘worm’	<i>qapyxmtumtuu</i> ‘hoopoe’
<i>qafy</i> ‘fish’	<i>qapri</i> ‘snake’
<i>qala</i> ‘rabbit’	<i>qarma</i> ‘crossoptilon’
<i>qalias</i> ‘eagle’	<i>qartsʰaz</i> ‘deer’
<i>qambalula</i> ‘butterfly’	<i>qartsʰi</i> ‘cricket’
<i>qambruu</i> ‘male yak’	<i>qazo</i> ‘sheep’
<i>qamtçur</i> ‘shrew’	

4246 uvular one. Among these words, *kurtsʂy* ‘snow leopard’ has a Tibetan cognate
 4247 གཞིག་ གྗଙ୍ଗ ‘leopard’ with a *g-* preinitial, which is possibly related to the *ku-* prefix
 4248 in Japhug.

Table 5.11: Animal name *ku-* prefix

<i>kuçpaz</i> ‘marmot’
<i>kujka</i> ‘pyrrhocorax’
<i>kumu</i> ‘ <i>Tetraogallus tibetanus</i> ’
<i>kuþyʂ</i> ‘type of bug’
<i>kurtsʂy</i> ‘snow leopard’
<i>kurji</i> ‘beast’
<i>kurnuu</i> ‘mite’

4249 There is a handful of nouns with reduced allomorphs *y-*, *x-* or even metathesized as *þy-* in some words, corresponding to *kə-* in Situ (see the phonological
 4250 discussion in Jacques 2014b: 6), including *xçiri* ‘weasel’, *xtut* ‘wild cat’, *yʂu* ‘monkey’,
 4251 *yni* ‘flying squirrel’, *þyuʂ* ‘badger’ and *þyʂza* ‘fly’. The same allomorphy
 4252 is observed between the subject participle *ku-* (§16.1.1) and the nominalization
 4253 prefixes *x-/y-* (§16.5.2).

4255 5.6.3 Uvular plant name prefix

Some plant names have a uvular class prefix *qa-*, including both cultivated and wild plants (and even plant parts), such as *qaqtı* ‘peach’, *qaṛṛyi* ‘oat’, *qampʰos* ‘oak leaves’, *qandzi* ‘type of fir’, *qazmbri* ‘vine’, *qawuz* ‘edelweiss’ and many others.

4259 5.6.4 Other uses of the uvular class prefix

In addition to animal and plants names, the class prefix *qa-* appears on some tools (*qajo* ‘earthen pot’, *qase* ‘leather rope’, *qarxt* ‘rake’, *qapi* ‘flint stone’), names of periods of the year (*qartsuu* ‘winter’, *qartsyß* ‘harvest’), materials (*qandzi* ‘tin’, *qambut* ‘sand’) or natural forces like *qale* ‘wind’.

The reduced form *-s-* of the class prefix occurs with the noun *qale* 'wind' in some compounds such as *akuc^hoble* 'north/east wind' and the abstract inalienably possessed noun *u-sle* 'reputation' (and the verbs derived from it, such as *rastle* 'be polite').

4268 5.6.5 Body part noun prefixes

The identification of class prefixes in body parts mainly rests on comparative evidence. Other Trans-Himalayan languages that preserve clusters such as Tibetan have in some names for body parts cluster that do not match those found in Japhug, for instance མྕର୍ଷିଣ୍-པ ମୁହରିସପା ‘bile’ and ས୍ଵା- ସ୍କେ ‘neck’ corresponding to the Japhug inalienably possessed nouns *tu-čkrut* ‘bile’ and *tu-mke* ‘neck’ (see §5.1.2.3), suggesting that body part class prefixes such as *č-* and *m-* have been added to these words in Gyalrongic and Tibetan independently.

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

4278 5.7 Nominal derivations

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

4285 5.7.1 Privative

The suffix *-lu* can be combined with the *status constructus* form of body part nouns, without possessive prefix, to derive a noun meaning ‘...less’, ‘without ...’ that can be used as a modifier (§5.2). Examples attested in the corpus are indicated in Table 5.12, but this derivation appears to be productive.

Table 5.12: Privative *-lu* suffix

<i>ta-bru</i> ‘horn’	<i>brulu</i> ‘hornless’
<i>tx-jme</i> ‘tail’	<i>jmylu</i> ‘without tail’
<i>tu-jas</i> ‘hand’	<i>ja^zlu</i> ‘missing a hand’
<i>tu-ku</i> ‘head’	<i>kylu</i> ‘headless’

These privative forms can modify other nouns, and are placed after the nouns and before determiners such as demonstratives or numerals, as in (113) and (114).

- 4292 (113) *z̥ni yuu ftsor̥ b̥r̥alu ci ta-rku-nuu nu-ŋu*
 4293 3DU GEN female.hybrid.yak hornless INDEF AOR:3→3'-put.in-PL SENS-be
 4294 'They gave them a hornless female yak (to take with them back to the
 4295 husband's home.' (2005-stod, 243)

4296 Privative nouns are systematically glossed in Japhug with possessor participial
4297 relatives in *kuu-me* ‘not having’ (§23.5.10.1), as in (114) (see also example 97 from
4298 §5.5.1.1).

- 4299 (114) *tce kuiju jmylu numu turme pu-ŋu, w-jme kui-me*
LNK animal tailless DEM man SENS-be 3SG.POSS-tail SBJ:PCP-not.exist
4300 *nui tce, tce kuiju jmylu numu pu-spu cti tce nui*
DEM LNK LNK animal tailless DEM IPFV-be.crazy be:AFF:FACT LNK DEM
4301 *nui-spu tce tce icq^ha tu-ryi*
AOR-be.crazy LNK LNK the.aforementioned INDEF.POSS-seed
4302 *c^hwi-kui-χt̪rr nui nui-kui-spu tu-syrmi-nui.*
IPFV-SBJ:PCP-spread DEM AOR-SBJ:PCP-be.crazy IPFV-call-PL
4303 ‘The ‘tailless animal’ is the man, and ‘he becomes crazy’, (when the crow
4304 say) that (people) became crazy, it means that they are sowing seeds.’
4305 (22-qajdo, 47-9)

4306 The noun *ßejlu* ‘left-handed’ is not a privative noun deriving from *ße* ‘left’, but
 4307 rather a compound comprising the property noun *u-w-jlu* (§5.1.2.7) as second el-
 4308 ement, in its grammaticalized meaning as a restrictive focus marker (§9.1.6.5),
 4309 literally meaning ‘only (with) left (hand)’.

4310 5.7.2 Relative location

4311 The prefix *may-* can be used to derive nouns referring to the position of the refer-
 4312 ent on either the vertical, the riverine or the solar dimensions, which are encoded
 4313 in verbal morphology, postpositions, relator nouns and locative adverbs (§8.2.10,
 4314 §8.3.4.1, §15.1.3, §22.2.6). These nouns are homophonous with corresponding
 4315 verbs of relative location (§15.1.3.4).

Table 5.13: Nouns of relative location and corresponding locative ad-
 verbs

Locative adverb	Noun of location
<i>taš</i>	<i>maytaš</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>tʰi</i>	<i>maytʰi</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’

4316 The nouns of relative location can either occur as postnominal attributes, but
 4317 can also (less commonly) be used their own as illustrated by (115).

- 4318 (115) *icqʰa nwi, tʰi nwi, kuki cnat maytʰi*
 just.before DEM downstream de DEM.PROX heddle downstream.one
 4319 *ki tx-job-a puu-ŋu tce, tʰam tce maylo nura*
 DEM.PROX AOR-lift-1SG PST.IPFV-be LNK now LNK upstream.one DEM.PL
 4320 *tú-wy-job ra*
 IPFV-INV-lift be.needed:FACT
 4321 ‘Just before, I had lifted the heddle on the lower (downstream) side (of
 4322 the loom), now we have to lift the ones on the upper (upstream) side.’
 4323 (video 20140429090403, 71-72)

4324 5.7.3 Diminutive

4325 There are four diminutive formations in Japhug, with the quasi-suffixes *-puu*, *-tsa*,
 4326 *-t̪uu* and *-li*.

4327 The most productive is the *-puu* suffixation. This transparent suffix comes from
 4328 the noun *tr-puu* ‘offspring, young’ (from Tibetan བྲ ཚ དྲ ‘son’). A diminutive forma-
 4329 tion based on the same noun also exists in Tibetan (Uray 1952, Nathan W. Hill
 4330 2014b: 627); whether the diminutive formation was independently innovated, or
 4331 was borrowed from Tibetan is a question that needs to be further investigated. It
 4332 is also attested in Situ (Shuya Zhang 2016, Lai 2017: 151).

4333 Earlier diminutives are formed with the *status constructus* of the noun, for
 4334 instance *tčʰemxpuu* ‘young girl’ from *tčʰeme* ‘girl’, *staxpuu* ‘pea’ from *stor* ‘broad
 4335 bean’, or *kʰuzxpuu* ‘puppy’ from a non-attested form **kʰuza*, probably itself the
 4336 *-tsa* diminutive of *kʰuna* ‘dog’, borrowed from a Situ dialect.

4337 More recent diminutives are directly formed with the base form, such as *qapripuu*
 4338 ‘little serpent’. This formation is extremely productive, and applies to plants, an-
 4339 imals and even objects as in (116).

- 4340 (116) *tce srūnloꝝ-puu ci jnꝝ-kʰo tce*
 LNK ring-DIM INDEF IFR-give LNK
 4341 ‘He handed him a little ring.’ (2011-4-smanmi, 120)

4342 The suffix *-puu* is recursive: examples of doubly suffixed nouns are found in the
 4343 corpus, as in (117) for instance.

- 4344 (117) *tyndzi-puu-puu nura kuu, u-pʰoŋbu nura ko-svlyyuu-nuu ri,*
 demon-DIM-DIM DEM:PL ERG 3SG.POSS-body DEM:PL IFR-link-PL LNK
 4345 ‘The little demonlings put back his body together, but...’ (150909
 4346 xifangping-zh, 93)

4347 Suffixation with *-puu* is the fused variant of the property noun construction
 4348 with *u-puu* ‘little one’ described in §5.1.2.7.

4349 A diminutive that is common to all Gyalrongic languages is the suffix *-tsa/-za*
 4350 (Situ *-tsa* or *-za* (Lín 1993: 163), Khroskyabs *-ze* / *-zə* / *-za*, *-tsi* (Lai 2017: 158), Stau
 4351 *-zə*), found in fossilized forms in nouns such as *kʰutsa* ‘bowl’ and *þyrza* ‘fly’,²³ but
 4352 still visible in diminutive forms like *paxtsa* ‘piglet’ (from *pax* ‘pig’). It originates
 4353 from the noun ‘son’ that is lost in Japhug but still attested in Situ and Khroskyabs
 4354 (Wobzi *z̪i* ‘young man’).

²³ The noun *þyrza* ‘fly’ is cognate to Brag-dbar *kavâs*, Khroskyabs *javazá* (Shuya Zhang 2016, Lai
 2017: 156) and originates from proto-Gyalrong **kpos-tsa* (Jacques 2008a: 53).

In Japhug the *-tsa* diminutive is not very productive; it applies to some nouns that already have a *-puu* diminutive such as *sto₂tsa* ‘name of plant’ from *sto₂s* ‘broad bean’ (besides *sta₂xpuu* ‘pea’).

The third diminutive suffix *-tcu*, like the two preceding ones, originates from a noun meaning ‘offspring’, *tr-tcu* ‘son’, and requires *status constructus*.

It is used for animals (*kumpy₂xtcu* ‘sparrow’ from *kumpya* ‘fowl’) or inanimate objects (*k^hxtcu* ‘little house’ from *k^ha* ‘house’ or *lx₂xtcu* ‘little gunny bag’ from *lx₂a* ‘gunny bag’). It occurs in some lexicalized forms such as *mbrutcu* ‘knife’.²⁴

The suffix *-li* is the least productive of all diminutive formations, and the only one that cannot be traced to an existing noun. It appears in *tç^hem₂yl₂li* ‘little girl’ (a synonym of *tç^hem₂y₂puu* ‘little girl’) and in *rgali* ‘young cow’.

5.7.4 Augmentative

A handful of nouns, some of Tibetan origin, have an augmentative form in *-te*, originally from a property noun **u-te* ‘big’ (related to the verb *wxti* ‘be big’).

Augmentatives include *tçyomte* ‘cultivated xanthoxylum’ (from *tçyom* ‘xanthoxylum’), *tujite* ‘big field’ (from *tu-jī* ‘field’, name of several fields in Kamnyu), *tç^hute* ‘big river’ (from 水 *tç^hu* ‘water, river’) and the possessive compound *ŋgute* ‘person with a big head’ (with *ŋgu-* from Tibetan དྲྷ ཅ གྐྵ ‘head, top’; this stem is not attested in Japhug as an independent word).

5.7.5 Derogatory

There are three derogatory quasi-suffixes in Japhug, deriving designations of old or broken things: *-do* and *-mbe* ‘old X’ and *-ngra* ‘broken X’. These suffixes are the fused variants of the property nouns *u-ngra* ‘broken one’, *u-do* ‘old one’ and *tr-mbe* ‘old thing’ (see §5.1.2.7).

The suffixes *-do* and *-mbe*, like their corresponding property nouns, differ in that the former occurs with animals and plants (*nunja-do* ‘old cow’, *rjy₂lpu-do* ‘old king’), while the latter is used for inanimate objects.

In a few cases, the suffixed noun is in status constructus (as *k^hvngra* ‘ruin’ from *k^ha* ‘house’ and *-ngra*, or *k^hudo* ‘old dog’ (from *k^huna* ‘dog’ and *-do*, see §5.4.2.3)). When the suffixed noun is inalienably possessed, addition of a derogatory suffix does not turn it into an alienably possessed noun, as in *tu-rcymbe* ‘old jacket’ from *tu-rcu* ‘jacket’ and *-mbe*.

²⁴ The root of this noun is metathesized from **mbur*; its cognates have a *-tsa* diminutive in Situ (Brag-dbar *mbartsiē*, Shuya Zhang 2016: 228) and Khroskyabs (Wobzi (බඳු, Lai 2017: 115).

5 Nominal morphology

5.7.6 Inhabitant

The inhabitant suffix *-puu* derives from the same noun *tr-puu* ‘offspring, young’ from which the diminutive *-puu* ultimately originates (see §5.7.3). It is used to derive nouns referring to inhabitants of a certain place, and occurs without *status constructus*. For instance, from the village names of *kympuu* (the village whose speech is described in this grammar) and *snarndi* (a village in Tshobdun), one derives *kymnyupuu* ‘person from Kamnyu’ and *snarndipuu* ‘person from Snarndi’ (see the text 26-tshubdWnpW in the corpus). Given the high productivity of this derivation, these nouns are not indicated in the dictionary, as it would unnecessarily inflate the number of entries.

An alternative way to refer to the inhabitants of a place is by adding the plural *ra* to it (§5.2.1).

5.7.7 Gender

There is no morphological expression of gender in Japhug. For animals, the nouns *p^hu* ‘male’ and *mu* ‘female’ (from Tibetan ཕ p^ho ‘male’ and མ mo ‘female’) can be used on their own (as in 118) or occur as second member of compounds, as *kumpyap^hu* ‘rooster’ and *kumpyamu* ‘hen’ from *kumpya* ‘fowl’, or *lulymu* ‘female cat’ from *lulu* ‘cat’, with *status constructus* of the first noun.

(118) *t^hyk^he py^htcuu nd^hre p^hu mu sa^hsyl*
stupid bird:DIM on.the.other.hand male female be.clear:FACT

‘The male and the female of the ‘stupid bird’, as opposed (to the birds previously discussed), are easy to distinguish.’ (23-scuz, 45)

The suffixes *-pa* and *-mu* (from Tibetan *-pa* and *-mo*, respectively) also occur for a handful of nouns, some of Tibetan origin (*srunmu* ‘râkshasi’ from ສຸນມ ສຣິນມ o ‘râkshasi’) but also some local names such as *ngarpa* ‘male one quarter yak hybrid’ vs. *ngarmu* ‘female one quarter yak hybrid’.

The noun *pasju* ‘boar’ from *pas* ‘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).

5.7.8 Collective

While Japhug lacks number inflection, there are several collective derivations: the social relation collective, reduplicated collectives and the *dvandva* collective.

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>nurja</i> ‘cow’
<i>zraf</i> ‘he-goat’	(<i>tsʰyrnuu</i> ‘ewe’)

5.7.8.1 Social relation collective

The first type of collective is a noun prefixed in *kyndzi-* 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 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 *kyndzimbro* ‘horseman and his horse’ and *kyndziftsoꝝ* ‘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 (*kyndziye* ‘grandparents and grandchildren’) or the higher generation (*kyndzini* ‘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 (*kyndzipyrmdu* ‘paternal uncle and his nephews’).²⁶

²⁵ There is some doubt about whether this prefix should be transcribed as *kyndzuu-* or *kyndzi-*. See §3.5.2.2 on the question of the contrast between /i/ and /ɯ/ following palatals and alveolo-palatals in non-final syllables.

²⁶ In the case of *kyndziwylas* ‘maternal aunt and her nephews’, the origin of the element *-wyl-* is

5 Nominal morphology

Table 5.15: Reciprocal social relation collectives

Collective	Base noun
<i>krndziyuſsu</i> ‘friends’	<i>yuſsu</i> ‘friend’
<i>krndziβzajſa</i> ‘friends’	<i>βzajſa</i> ‘friend’
<i>krndzičaχpu</i> ‘friends’	<i>caχpu</i> ‘friend’
<i>krndzikumdza</i> ‘relatives’	<i>kumdza</i> ‘relative’
<i>krndzirya</i> ‘neighbours’	<i>tr-rya</i> ‘neighbour’
<i>krndzislamaχti</i> ‘classmates’	<i>slamaχti</i> ‘classmate’
<i>krndzisqʰaj</i> ‘sisters’	<i>tr-sqʰaj</i> ‘sister’ (of a female)
<i>krndzimytsa</i> ‘mother’s sister’s children’	<i>tr-mytsa</i> ‘mother’s sister’s child’
<i>krndzitṛtçuχti</i> ‘friends (between males)’	<i>trtçuχti</i> ‘friend (between males)’
<i>krndzitçʰemrχti</i> ‘friends (between female)’	<i>tçʰemrχti</i> ‘friend (between female)’
<i>krndzixtry</i> ‘brothers’	<i>tr-xtry</i> ‘brother’ (of a male)
<i>krndziχti</i> ‘companions’	<i>tu-χti</i> ‘companion’
<i>krndzizda</i> ‘companions’	<i>tu-zda</i> ‘companion’

4443 The collective nouns can be used as normal nouns and take case marking, nu-
 4444 mers and other modifiers, as in (119).

- 4445 (119) *kyndzi-xtry χſum pjr-tu-nu*
 COLL-brother three IFR.IPFV-exist-PL

4446 ‘There were three brothers.’ (07-deluge, 1)

4447 Social relation collectives are also found in Situ and Tshobdun (J. T.-S. Sun 1998:
 4448 107), where they have optional reduplication; in Japhug, partial reduplication (as
 4449 in §5.7.8.2) is used by some speakers, as *krndziftſuftsor* ‘female hybrid yak and
 4450 its owners’ in example (120), from a story by Kunbzang Mtsho.

- 4451 (120) *kyndzi-ftſur~ftſor χſum nu, tsʰuntsʰuŋ kui-pa*
 COLL-female.yak.hybrid three DEM IDPH(II):in.order INF:STAT-AUX
 4452 *ky-nu-ɬor-nu* *nu-ŋu,*
 AOR:EAST-AUTO-come.out-PL SENS-be
 4453 ‘(The girl, her husband) and their female hybrid yak crossed (the large
 4454 river) without damage.’ (2003 Kunbzang, 186)

not identifiable.

Table 5.16: Non-reciprocal social relation collectives

Collective	Base noun
<i>kvndziye</i> ‘grandparents and grandchildren’	<i>tr-ye</i> ‘grandchild’
<i>kvndzisi</i> ‘siblings’	<i>ta-zi</i> ‘younger sibling’
<i>kvndzime</i> ‘parents and daughter’	<i>u-me</i> ‘daughter’
<i>kvndzini</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>kvndziftso</i> ‘female hybrid yak and its owners’	<i>ftsos</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>kvndzits^hyt</i> ‘goat and its owners’	<i>ts^hyt</i> ‘goat’
<i>kvndzirpuftsa</i> ‘maternal uncle and his nephews’	<i>tr-rpuu</i> ‘mother’s uncle’ (1)
<i>kvndziw^hlas</i> ‘maternal aunt and her nephews’	<i>tr-ftsa</i> ‘sister’s son’ (2)
<i>kvndzipymdu</i> ‘paternal uncle and his nephews’	<i>tr-las</i> ‘mother’s sister’ (2)
<i>kvndziw^hmusnom</i> ‘brother and sisters’	<i>tr-βyo</i> ‘father’s brother’ (1)
	<i>tr-mdu</i> ‘brother’s child’ (2)
	<i>tr-w^hmuu</i> ‘brother’ (of a female) (1)
	<i>tr-snom</i> ‘sister’ (of a male) (2)

The lists in Tables 5.15 and 5.16 comprise most common social relation collectives, but are by no means complete lists. For instance, next to *kvndzirpuftsa* ‘maternal uncle and his nephews’ from *tr-rpuu* ‘mother’s uncle’ and *tr-ftsa* ‘sister’s son’, the terms *kvndzirpuu* ‘maternal uncle and his nephews’ and *kvndziftsa* ‘nephew with his maternal uncles and aunts’ are also possible though less common. However, some combinations are considered incorrect. For instance, Tshendzin considers that *†kvndzirzaβ* (from *tr-rzaβ* ‘wife’) is only found in children’s language (*nuu tr-pytsa ra ku tu-ti-nu ngryl* ‘children talk like that’), as the correct term is *bzyymi* ‘husband and wife’ from Tibetan དྱེ་མི་ *bza.mi* ‘husband and wife’.

There is in addition an irregular collective *kvtsa* ‘parents and children’, with the same element *-tsa* found in some diminutives (see §5.7.3), from an earlier word for ‘child’.

It can be used without any preceding noun as in (121), but more commonly serves as the modifier of a kinship term, as in (122) (note also *tr-tceu kvtsa* ‘father

5 Nominal morphology

4469 and son' and *tç^heme krytsa* 'mother and daughter' from *tx-tçui* 'son, boy' and *tç^heme*
4470 'girl').

- 4471 (121) *tce tx-mu* *nua kua u-puu* *nunua*
LNK INDEF.POSS-mother DEM ERG 3SG.POSS-young DEM
4472 *ju-cp^hyym* *tce, zara krytsa* *ra stuusti uja*
IPFV-flee.with[III] LNK 3PL parents.and.children PL alone completely
4473 *zo ce-nua* *nua-ra*.
EMPH go:FACT-PL SENS-be.needed
4474 'And the mother (lioness) flees with her cubs, and they (mother and
4475 children) have to go alone (without the father).' (20-sWNgi, 75)

- 4476 (122) *tx-mu* *krytsa* *ci* *pjy-tu-ndzi* *tce*
INDEF.POSS-mother parents.and.children INDEF IFR.IPFV-exist-DU LNK
4477 'There was a mother and her son.' (2003 tamukatsa, 1)

4478 Like comitative adverbs (§5.8.1), it is clear that social relation collectives orig-
4479 inate from participles of denominal verbs. The only example of the verbal de-
4480 nominal *andz̥u-* derivation from which they originate is *andz̥irya* 'be together
4481 as neighbours' from the inalienably possessed noun *tx-rya* 'neighbour' (§20.2.5).
4482 The social relation collective *kryndz̥irya* 'neighbours' can thus be analyzed as the
4483 participle of this verb *kua-vndz̥irya*.

4484 However, since the *andz̥i-* denominal derivation attested only in this single
4485 example, from a synchronic point of view it is better to consider this collective
4486 formation as a strictly nominal derivation.

4487 5.7.8.2 Reduplicated collectives

4488 The reduplicated collectives are built using partial reduplication. There are three
4489 different patterns.

4490 First, some nouns allow standard partial reduplication with *-u* in the reduplic-
4491 ated syllable (§4.1) expressing a vague collective. This reduplication can apply to
4492 loanwords from Tibetan, such as *χsui~χsyr* 'things in gold' and *rjui~rjul* 'things
4493 in silver' from *χsyr* 'gold' and *rjul* 'silver' (Tibetan རྒྱྲ གླྷ 'gold' and རྒྱྲ ཅླྷ 'silver').

- 4495 (123) *a-χsui~χsyr* *ra, a-rjui~rjul* *ra my-ra* *kua*
1SG.POSS-COLL~gold PL 1SG.POSS-COLL~silver PL NEG-be.needed:FACT ERG

- 4496 *com rjykskvt w-tab tu-ce-a ñu*
 iron stairs 3SG.POSS-ON IPFV:UP-go-1SG be:FACT
 4497 ‘I don’t need things in gold or silver, I will go up the iron stairs.’ (not the
 4498 golden or silver stairs, 2005-Kunbzang, 215)

4499 Some nouns, which only appear in a reduplicated form are presumably an-
 4500 cient collectives, like *k^hrambaxtuxtym* ‘lies’ from a possible non-reduplicated
 4501 form **k^hrambaxtym* (from ཁྲମྚྰୟ ཁྲମྚྰୟ ‘deceiving words’).

4502 Second, we find some reduplicated collectives with the vowel /a/, not /u/, in
 4503 the replicated syllable. There are only a few examples, as shown in Table 5.17,
 4504 but several of them are borrowings from Tibetan. In one case, *fçafçyt* ‘words’,
 4505 the base word is a transitive verb (*fçyt* ‘tell’).

Table 5.17: Collective noun derivation

Base form	Collective	Tibetan
<i>rdul</i> ‘dust, dirt’	<i>rdardul</i> ‘dust, dirt’	རྩ୍ୟ ຮදුල ‘dust’
<i>tu-ntç^hur</i> ‘fragment’	<i>tu-ntç^hantç^hur</i> ‘fragments’	ནྔ ཡନ୍ତ୍ୟ རୁ ‘fragment’
<i>wu-zuur</i> ‘side’	<i>wu-zarzur</i> ‘sides’	ଶର୍ଷ ଶର୍ଷର୍ଷ ‘side, corner’
<i>wu-rkui</i> ‘side’	<i>wu-rkarkui</i> ‘sides’	
<i>fçyt</i> ‘tell’	<i>fçafçyt</i> ‘words’	བ୍ୟାଦ ବ୍ୟାଦ ‘explain, tell’

4506 Reduplicated collective nouns in *a-* can be used without a number clitic, as in
 4507 (124), but they often appear with the *ra* ‘plural’ as in (125).

- 4508 (124) *znryama nu mt^ha w-kycu ñu. tce nunutcu*
 ANTHR DEM ANTHR 3SG.POSS-east be:FACT LNK DEM:PL
 4509 *tur-ji wu-ntchantchur pu-dyn, jinde k^hro*
 INDEF.POSS-field 3SG.POSS-fragment:COLL PST.IPFV-be:many now much
 4510 *jy-s-qapui-nu,*
 IFR-CAUS-be.fallow-PL
 4511 ‘Znargama (‘The place where one calls the rain’) is on the east of Mtha,
 4512 there used to be many little fragments of fields, but now people have left
 4513 them become fallow.’ (150903 kAmYW tWji3, 19)
- 4514 (125) *tce tyci nu tú-wy-χtci tc^hya₁t^hc^hya₂ zo tce,*
 LNK barley DEM IPFV-INV-wash IDPH(II):completely.clean EMPH LNK

5 Nominal morphology

- 4515 *rdardual naura juú-wy-yy-me tce*
 dush:COLL DEM:PL IPFV-INV-CAUS-not.exist LNK
 ‘Then one washes the barley very thoroughly, one removes all the dirt.’
 4516 (2002tWsqr, 118)

4518 The noun *rgargun* ‘old person’ has the form of a collective noun as those in
 4519 Table 5.17, but it is commonly used with singular or dual referents (as in 126). It
 4520 could be analyzed as the collective form of a loanword from Tibetan རྒା-པྼ རྒାଙྪྩ ‘old
 4521 person’, though the expected form would have been †*rga-rgyn*.

- 4522 (126) *rgargum ni kx-fstun puu-ra*
 old.person DU INF-serve PST.IPFV-be.needed
 ‘She had to take care of two old people.’ (14-siblings, 34)

4524 A third reduplicated collective derivation is only attested by one example, the
 4525 form *qajuaqaja* ‘all kinds of worms’ (see 127) which derives from *qajuu* ‘worm’ by
 4526 reduplicating the whole word and changing the last rhyme to /-a/, a reduplica-
 4527 tion template reminiscent of that found in Khroskyabs (see Lai 2013, Lai 2017:
 4528 22–24).

- 4529 (127) *tuu-ci uu-ŋgaa qajuaqaja tʰamtct, stuŋgaa yuu uu-ruudaa*
 INDEF.POSS-water 3SG-inside worm:COLL all forest GEN animal
 kui-xtci kui-wxti, myzui pya nunura lonba zo
 SBJ:PCP-be.small SBJ:PCP-be.big yet bird DEM:PL all EMPH
 kx-fsraŋ kui-ra nuu-cti ma
 INF-protect INF:STAT-be.needed SENS-be:AFF LNK
 ‘All the creatures in the water, the small and big animals of the forest,
 4532 and also the birds have to be protected.’ (160703 jingyu, 43)

4534 A fourth type of collective has the vowel -e in the reduplicated syllable. It is
 4535 attested in the noun *uu-ŋjøŋje* ‘all kinds of diluted drinks’ from *uu-ŋjø* ‘diluted drink’
 4536 (derived from the verb *ŋjø* ‘rinse’).

4537 5.7.8.3 Dvandva collective

4538 The *dvandva* collective is derived from two nouns, the first one in *status construc-*
 4539 *tus* followed by the element *-ly-* and then by the second noun stem without a
 4540 possessive prefix. All known forms, some of which have Tshobdun cognates,²⁷

²⁷ The nouns *tu-mxlyjaž* ‘limbs’ and *uu-kxlyjme* ‘head upside down’ correspond to *o-kolbjm̥* ‘head and tail’ (Sun & Blogros 2019: 533) and *o-melbja* ‘limbs’, respectively (Sun & Blogros 2019: 276).

⁴⁵⁴¹ are listed in Table 5.18.

Table 5.18: Dvandva collectives

Collective	First noun	Second Noun
<i>tui-kyllympas</i> ‘facial features’	<i>tui-ku</i> ‘head’	<i>tui-mpas</i> ‘eye’
<i>tui-mylyjas</i> ‘limbs’	<i>tui-mi</i> ‘leg, foot’	<i>tui-jas</i> ‘arm, hand’
<i>u-kyllyjme</i> ‘head upside down’	<i>tui-ku</i> ‘head’	<i>tv-jme</i> ‘tail’
<i>kumylyxso</i> ‘useless’	<i>kui-me</i> ‘not existing’	<i>u-xso</i> ‘empty, normal’

⁴⁵⁴² Among the examples in Table 5.18, *u-kyllyjme* ‘head upside down’ and *kumylyxso* ‘in vain’ are mainly used adverbially. The first one mostly occurs with verbs such as *ct^huz* ‘turn towards’ and *ru* ‘look’ at, as in (128).²⁸

- ⁴⁵⁴³ (128) *tce nuu ui-sta nuu lxtc^hom nuu juú-wy-*bj*o zo*
LNK DEM 3SG.POSS-place DEM churning.bucket DEM IPFV-INV-rinse EMPH
⁴⁵⁴⁴ *k^hruujk^hruuj zo q^he tce ui-kyllyjme*
IDPF:II:completely.clean EMPH LNK LNK 3SG.POSS-head.upside.down
⁴⁵⁴⁵ *pjuú-wy-ct^huz q^he, ui-mju nuu pa*
IPFV:DOWN-INV-turn.towards LNK 3SG.POSS-opening DEM down
⁴⁵⁴⁶ *pjuú-wy-ct^huz*
IPFV:DOWN-INV-turn.towards
- ⁴⁵⁴⁷ ‘One rinses the churning bucket very clean, and put it upside down at its place, the opening down.’ (30-macha, 66)

⁴⁵⁴⁸ The noun *kumylyxso* ‘useless’, ‘superfluous’, combines the subject participle of *me* ‘not exist’ with the property noun *u-xso* ‘empty, normal’ (a lexicalized 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).

- ⁴⁵⁴⁹ (129) *nuzora kumylyxso juu-tui-cti-nuu ma tui-nyma-nuu maje!*
2PL in.vain SENS-2-be.AFF LNK 2-work:FACT-PL not.exist:SENS
⁴⁵⁵⁰ ‘You are useless, you don’t do any work.’ (2003 Kunbzang, 322)

²⁸ See a definition of this noun in (150), §16.2.1.4.

5 Nominal morphology

- 4558 (130) *ndzi-<zuoye> pu-βzu-ndzi ra ma kumvlyxso*
 2DU.POSS-homework IMP-make-DU be.needed:FACT LNK in.vain
 4559 *ku-tui-ryzi-ndzi my-jy*
 IPFV-2-stay-DU NEG-be.allowed:FACT
 4560 ‘Do your homework, don’t stay there doing nothing.’ (conversation,
 4561 14-05-10)

4562 The *-l̥r-/-la-* element found in collective *dvandva*-s is also attested in approxi-
 4563 mate numerals (§7.2) and in adverbs such *tuxpalyskÿr* ‘during the whole year’
 4564 (from *tui-xpa* ‘one year’ and *fskyr* ‘turn around’) and *rtsuçaplaŋmtçyt* ‘all the plants’
 4565 (from *rtsuçay* ‘plant’ and *tʰamtçyt* ‘all’, respectively from Tibetan རྩྪ ཚିྱྴ *rtsi.ciŋ*
 4566 ‘plant’ and བླྲ བླྲ *tʰams.tcad* ‘all’). Another possible trace of this *l̥r-* element is
 4567 found in the adverb *lxqʰytymbyt* ‘(distance of) several mountain ranges’ (131),
 4568 which contains the noun *tymbyt* ‘mountain’ and perhaps the *status constructus*
 4569 $q^h\gamma$ - from *wi-qʰu* ‘after’, ‘behind’.

- 4570 (131) *ji-pṣrtʰyβ lxqʰytymbyt tu*
 1PL.POSS-between several.mountains exist:FACT
 4571 ‘There is a distance of several mountain ranges between us.’ (elicited)

4572 Another linking morpheme *-my-* instead of *-l̥r-* is found in the possessed noun
 4573 *wi-ŋgumypci* ‘the inside and the outside’ from the locative relator nouns *wi-ŋgu*
 4574 ‘inside’ and *wi-pci* ‘(the latter from Tibetan དྷ ཕ ཕ *pʰi* ‘outside’, §8.3.4.2).

4575 5.7.9 Superlative

4576 While there is no adjectival superlative derivation in Japhug (the available con-
 4577 structions to express this meaning are described in §26.4), we find nevertheless
 4578 a derivation applied to locative nouns (§8.3.4), expressing the furthest location.
 4579 As shown in Table 5.19, it is built by adding an element *-qwu-* followed by a com-
 4580 plete copy of the root of the noun without *status constructus* alternation or partial
 4581 replication; the resulting noun is still an inalienably possessed locative noun. Ex-
 4582 ample (132) illustrates the use of one of these forms.

- 4583 (132) *rjymtsʰu wi-qaciqa pjuu-ce tce, numu*
 ocean 3SG.POSS-bottom:SUPER IPFV:DOWN-go LNK DEM
 4584 *wi-ky-nv-mum nura c-tu-nu-tcyt*
 3SG.POSS-OBJ:PCP-TROP-be.tasty DEM:PL TRAL-IPFV-AUTO-take.out

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-rkuçurkua</i> ‘the furthest place on the side’
<i>u-zur</i> ‘side’	<i>u-zurçuzur</i> ‘the furthest place on the side’

- 4585 *pui-ŋu.*
 SENS-be
 ‘(The sperm whale) goes to the lowest depths of the ocean and catches
 4586 the things it likes to eat.’ (160703 jingyu, 24)

4588 5.7.10 Unattested derivations

4589 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).

4592 There is no nominal tense derivation corresponding to the English prefix *ex-*.
 4593 This meaning can only be expressed by participial relatives with the past imperfective participle of the copula *pui-kuu-ŋu* (133) (§16.1.1.2).

- 4595 (133) *u-nmaŋ* *pui-kuu-ŋu*
 3SG.POSS-husband PST.IPFV-SBJ:PCP-be

4596 ‘Her ex-husband (the one who used to be her husband).’ (several
 4597 attestations)

4598 In addition, although it is possible to derive abstract nouns from verbs (§16.3,
 4599 §16.4.2, §16.4.7), there is no direct way of deriving an abstract noun from a noun.
 4600 There is however an indirect way of doing it by building a denominal verb, and
 then to subjecting it to a nominalizing derivation. For instance, from the inalienably possessed *tr-mdzu* ‘thorn’, the proprietive verb *ayu-mdzu* “be thorny, have a
 lot of thorns” can be derived (§20.2.4) and its (productive) degree noun *u-tuu-xyuu-
 mdzu* ‘its degree of thornity’ is well attested in the degree construction (§26.1.2.1)
 as shown in (134).

- 4606 (134) *u-tuu-xyuu-mdzu* *saxaŋ*
 3SG.POSS-PROP:DENOM-thorn be.extremely:FACT
 ‘It is very thorny (its degree of having thorns is extreme).’ (18-NGolo, 75)

4608 5.8 Denominal adverbs and postpositions

4609 5.8.1 Comitative adverbs

4610 Comitative adverbs are productively derived from nouns. Their meaning is ‘having
 4611 *X*’ , ‘together with *X*’, ‘including *X*’ or in the case of clothes or covers
 4612 ‘wearing *X*’.

4613 Comitative adverbs are built by partially reduplicating the last syllable of the
 4614 noun stem (following the morphophonological rules in §4.1) and prefixing either
 4615 *kṛ-* or *kṛyu-*. This derivation applies to native words and loanwords from Tibetan.
 4616 From instance, *χčv̥lmuy* ‘glasses’ (from Tibetan ཚླୟ རେ ལୁ ། *cel.mig* ‘glasses’) yields *kṛ-*
 4617 *χčv̥lmu~lmuy* or *kṛyu-χčv̥lmu~lmuy* ‘together with glasses; wearing glasses’.²⁹

4618 No semantic difference between the comitative adverbs in *kṛ-* and those in
 4619 *kṛyu-* has been detected: Both are fully productive and can be built from the same
 4620 nouns. As argued in Jacques (2017d), the *kṛyu-* form is inherited (from proto-
 4621 Gyalrong **kṛwə-*), while *kṛ-* is borrowed from Tshobdun *ko-*, the exact cognate
 4622 of *kṛyu-* (J. T.-S. Sun 1998: 107). The prefix *kṛyu-* and its Tshobdun cognate *ko-*
 4623 both originate from the participle *kuu-* (§16.1.1) of the proprietive *ayu-* denominal
 4624 derivation (§20.2.4.4), attesting a PROPRIETIVE ⇒ COMITATIVE grammaticalization
 4625 pathway (Jacques 2017d).

4626 When the base noun is inalienably possessed, it is possible to build a comita-
 4627 tive adverb with the indefinite possessor prefix or with the bare stem. For in-
 4628 stance, from *tx-rte* ‘hat’ one can derive both *kṛ-rtu~rte* / *kṛyu-rtu~rte* ‘with his/
 4629 her hat’ and *kṛ-tx-rtu~rte* / *kṛyu-tx-rtu~rte* ‘with a/the hat’ with the indefinite
 4630 possessor prefix *tx-*. These two sets of forms have different meanings: the former
 4631 *kṛ-rtu~rte* / *kṛyu-rtu~rte* mean ‘wearing one’s hat’ (example 135), while the lat-
 4632 ter *kṛ-tx-rtu~rte* / *kṛyu-tx-rtu~rte* imply that the subject is not wearing the hat
 4633 (136); preserving the indefinite possessor in the derived form alienabilizes the
 4634 inalienably possessed noun (see §5.1.2.9).

- 4635 (135) *kṛyu-rtu~rte zo kʰa w-ŋgu l-ty-tu~ye*
 COMIT-hat EMPH house 3SG-inside AOR-2-come[II]
 4636 ‘You came inside the house wearing your hat.’ (You were expected to
 4637 take it off before coming in, elicited)

²⁹ Note that reduplication applies across morpheme boundaries, as the coda of *χčv̥l* ‘glass’ (from
 ՚ୱୟର *cel* ‘glass’) is reduplicated with the following syllable.

- 4638 (136) *laχtc^ha kÿyur-tv-rtu~rte zo ta-nđo*
 thing COMIT-INDEF.POSS-hat EMPH AOR:3→3'-take
 4639 'He took the hat along with the other objects.' (Not wearing it, elicited)

4640 The alienabilized comitative adverb *kÿt^hlulu* 'with milk' (from *tv-lu* 'milk') is
 4641 used as postnominal modifier in 'milk tea' (137). The inalienably possessed form
 4642 *kÿlulu* 'with its milk' is only compatible with the animal producing the milk (or
 4643 in the case of a plant producing a milk-like juice).

- 4644 (137) *ts^ha kÿ-tv-luu~lu*
 tea COMIT-INDEF.POSS-milk
 4645 'Milk tea.' (30-Com, 94)

4646 Comitative adverbs can be used as sentential adverbs, with scope over the
 4647 whole sentence (examples 135, 136).

4648 They also occur as noun modifiers (as in 137 above), and either follow (137, 138)
 4649 or precede (142, 140) the noun that they modify.

- 4650 (138) *tv-sno kÿ-jur~jab nu lu-ta-nu*
 INDEF.POSS-saddle COMIT-hand DEM IPFV-put-PL
 4651 '(Then), they put the saddle with its handles.' (30-tAsno, 77)

4652 The noun modified by a comitative adverb can have various syntactic functions
 4653 in the clauses, including object (137, 138, 140), intransitive subject (139, 142) or
 4654 even transitive subject (141). This last option is not attested in the text corpus,
 4655 but speakers have no trouble producing sentences of this type.

- 4656 (139) *kÿ-snui~sno zo kÿ-rŋgu*
 COMIT-saddle EMPH AOR-lie.down
 4657 '(The horse) slept with its saddle.' (elicited)

- 4658 (140) *kÿ-t^hylwui~lwa ui-zrym ra kurny c^htú-wy-yurt pjú-wy-ji ri*
 COMIT-earth 3SG.POSS-root PL also IPFV-INV-bring IPFV-INV-plant but
 4659 *maka tu-tos muái-c^ha*
 at.all IPFV-come.out NEG:SENS-can
 4660 'Even if one takes its root with earth (around it) and plant it, it cannot
 4661 grow.' (15-babW, 121)

- 4662 (141) *lulu kÿ-rfui~rfit ra kui zo βzui to-ndza-nui*
 cat COMIT-offspring PL ERG EMPH mouse IFR-eat-PL
 4663 'The cat and its young ate the mouse.' (elicited)

5 Nominal morphology

4664 The comitative adverbs have additional meanings in certain contexts. With
 4665 the verb *fse* ‘be like’, comitative adverbs from body parts occurring with names
 4666 of animals, as in (142) and (143), mean ‘to have a body part that looks like that of
 4667 the other animal’.

- 4668 (142) *pÿk^huu nuu ur-ku* *nunu lulu tsa* *juu-fse*,
 owl DEM 3SG.POSS-head DEM cat a.little SENS-be.like
 4669 *uu-mtsiou* *yÿzu* *ma* *kÿ-rnu~rna lulu*
 3SG.POSS-beak exist:SENS a.part.from COMIT-ear cat
 4670 *uu-tuu-fse* *juu-syre* *zo.*
 3SG.POSS-NMLZ:DEG-be.like SENS-be.extremely/be.funny EMPH
 4671 ‘The owl’s head looks a little like that of a cat, apart from the fact that it
 4672 has a beak, it looks very much like a cat with its ears.’ (22-pGAKhW, 7)

- 4673 (143) *li βzuu kÿ-mtc^huu~mtc^hi ci* *nuu juu-fse*
 again mouse COMIT-mouth INDEF DEM SENS-be.like
 4674 ‘(The bat’s) mouth is like that of a mouse.’ (literally ‘It looks like a mouse
 4675 with its mouth.’ 25-qarmWrwa, 12)

4676 Comitative adverbs connected to a noun can occur before the indefinite article
 4677 *ci* ‘a’ as in (143), but this article can also be repeated on both the noun and the
 4678 adverb, as in (§9.1.4.1).

- 4679 (144) *tce nuu jlykruu ci* *kÿ-rui~ri* *ci* *jny-rjo*,
 LNK DEM rake INDEF COMIT-thread INDEF IFR-borrow
 4680 ‘He borrowed a rake with a thread.’ (140427 qala cho kWrtsAG, 60)

4681 Nouns incorporated into comitative adverbs lose their nominal status and can-
 4682 not be determined by relative clauses (including attributive adjectives), numerals
 4683 or demonstratives. In a sentence such as 145 for instance, the attributive participi-
 4684 al relative [*kui~kui-ÿyn*] ‘all the ones who are evil’ does not determine *kÿyu~*
 4685 *ÿk^huu~ÿk^hor* ‘with his subjects’, a syntactic structure which would correspond to
 4686 the translation ‘with all his evil subjects’. Rather, it determines the head noun
 4687 together with the comitative adverb *rÿlpu kÿyu~ÿk^huu~ÿk^hor* ‘the king with his
 4688 subjects’, which implies the translation given below.

- 4689 (145) *rÿlpu kÿyu~ÿkhua~ÿkhor kui~kui-ÿyn* *zo* *to-ndo* *tce*,
 king COMIT-subjects TOTAL~SBJ:PCP-be.bad EMPH IFR-take LNK
 4690 *tcendxre kui-myku* *nuu syc^ha kui~kui-sy-scit*
 LNK SBJ:PCP-be.before DEM place TOTAL~SBJ:PCP-PROP-be.happy

- 4691 *zo jo-tsum pnu-ŋu ri ku-maq^hu tce,*
 EMPH IFR-take.away SENS-be LNK SBJ:PCP-be.after LNK
 4692 *kui~kui-sy-y-mu zo jo-tsum tce*
 TOTAL~SBJ:PCP-PROP-fear EMPH IFR-take.away LNK
 4693 ‘She took the king and his subjects, all the evil ones, in the beginning
 4694 she took them to nice places, but later she took them to fearful places.’
 4695 (2012 Norbzang, 390)

4696 Other denominal adverb formations are also attested in Japhug, but are de-
 4697 scribed in the sections on time nominals (§7.5.2) and locational nouns (§8.3.4) in
 4698 other chapters.

4699 5.8.2 Reduplicated perative

4700 Partial reduplication of nouns, in addition to the reduplicated collectives (§5.7.8.2),
 4701 can also derive location adverbs such as *tsutṣu* ‘along the road’ from *tsu* ‘road’
 4702 with a perative meaning, as in (146). A similar use of the reduplication appears
 4703 in Zbu, but with an additional *kə-* prefix (Gong 2018: 114).

- 4704 (146) *c^ha ra tsu~tsu kú-wy-nui-ts^hi tce*
 alcohol PL path~PERLATIVE IPFV-INV-AUTO-drink LNK
 4705 ‘One drinks alcohol along the way (back home).’ (2010-histoire10)

4706 Other examples of perative include *w-jru~jroꝝ* ‘following X’s trace’ from *tr-*
 4707 *jroꝝ* ‘trace’ (see example 74, §19.4.1).

4708 5.8.3 -z suffix

4709 The postposition *baz* ‘while ... still’, which is mainly used in a particular type of
 4710 temporal clause (§25.3.4.3), probably originates from the inalienably possessed
 4711 noun *tr-ka* ‘free time’ with the fossil locative suffix -z (related to the locative
 4712 postposition *zuu*, §8.2.4.1) cognate to Situ -s (Lin 1993: 330–331).

4713 5.8.4 s- prefix

4714 The adverbs *st^huci* ‘so much’ (§26.3.1.4) and *st^hamtꝝrt* ‘so much’ are derived from
 4715 the indefinite pronoun *t^huci* ‘something’ (§6.6.2) and the universal quantifier
 4716 *t^hamtꝝrt* ‘all’ (§9.1.3.1) by what appears to be a *s-* prefix.

4717 They are attested in derived forms such as *kust^huci* ‘this much’ and *nust^huci*
 4718 ‘that much’ (§26.1.1.3) with the prefixed demonstrative stems *kuu-* and *nuu-* (§6.9).

5 Nominal morphology

4719 The standard marker *star* ‘compared with’ and its variant *sustar* (§8.2.7) are
4720 clearly related to the locative relator noun *ui-tar* ‘on, above’ (§8.3.4.3). The prefix
4721 *s-* is doubled as *suu-s-* in the form *sustar*.

4722 The ultimate origin of the prefix *s-* in the adverbs and postpositions above is
4723 unclear, but it could be the result of the degrammaticalization of the locative *-s*
4724 suffix (§5.8.3; this suffix eventually became the locative postposition *zuu*, §8.2.4.1)
4725 and subsequent procliticization to the following host. For instance, in the case of
4726 *star*, the hypothesized process would be:³⁰

- 4727 1. **X-z (ui)-tar* (Suffix)
- 4728 2. **X zə=tar* (Procliticization)
- 4729 3. *X star* (monosyllabification and reanalysis as a postposition)

³⁰ The 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>w-</i>	<i>wzo</i>	<i>mi</i>
1DU	<i>tçi-</i>	<i>tçizo</i>	<i>tsəzō</i>
2DU	<i>ndzi-</i>	<i>ndzizo</i>	<i>ndzəzō</i>
3DU	<i>ndzi-</i>	<i>z̥ni</i>	<i>mindzō</i>
1PL	<i>i-</i>	<i>izo, izora, iżra</i>	<i>jizo</i>
2PL	<i>nu-</i>	<i>nuzo, nuzora, nuzzra</i>	<i>əzō</i>
3PL	<i>nu-</i>	<i>zara</i>	<i>mijo</i>
generic	<i>tua-</i>	<i>tuzo</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*).

6 Pronouns

4744 The first and second person singular pronouns *azo* and *nزو* also have the
4745 shorter monosyllabic forms *aj* and *nڻj*, respectively. These short forms are
4746 considerably less common in stories (in the reported speech of the characters), but
4747 appear frequently in free conversations.

4748 Japhug lacks any inclusive/exclusive distinction, unlike other Gyalrongic lan-
4749 guages such as Tshobdun, Situ or Khroskyabs (see J. T.-S. Sun 1998, Lin 1993: 177,
4750 Prins 2016: 92, Lai 2017: 170). Example (1) shows the dual pronoun *tcizo* ‘we (dual)’
4751 in inclusive use (it is clear from the context that the son tells his mother to come
4752 with him), and (2) illustrates the same pronoun in exclusive use. Similar pairs
4753 of examples can be found with the first plural pronoun *izo* ‘we (plural)’ and its
4754 variants.

- 4755 (1) *a-mu tcetʰa tcizo kunu ce-tci*
1SG.POSS-mother later 1DU also go:FACT-1DU
4756 ‘Mother, you and I will go too.’ (2003tWxtsa, 138)

- 4757 (2) *nuzora yuu nur-cymuydu cʰo kuu-fse nuu uu-tsʰyt nuu,*
2PL GEN 2PL.POSS-gun COMIT SBJ:PCP-be.like DEM 3SG-instead DEM
4758 *tcizo yuu tci-typi tui-ldzi puu-tu tce, nuu*
1DU GEN 1DU.POSS-staff one-long.object PST.IPFV-exist LNK DEM
4759 *ky-nuu-tʰuu-tci cti wo*
AOR-AUTO-spread-1DU be:AFF:FACT SFP
4760 ‘Instead of guns and other things like you, we_{DU.EXCL} only had a staff,
4761 and we_{DU.EXCL} used it as a bridge (to cross the river).’ (2003kunbzang,
4762 164)

4763 Third person pronouns can be used with inanimate referents, as the third per-
4764 son dual *ڙڻni* in example (3).

- 4765 (3) *tce rŋgur nuu to-k-ڙmui-rpu-ndzi-ci tce, tcendyre ڙڻni*
LNK boulder DEM IFR-PEG-RECIP-bump.into-DU-PEG LNK LNK 3DU
4766 *pjx-nuu-NGRUI-ndzi*
IFR-AUTO-ACAUS:shatter-DU
4767 ‘The boulders bumped into each other and they were pulverized.’
4768 (smanmi4.82-83)

4769 In some contexts, demonstrative pronouns rather than person pronouns are
4770 used to refer to a third person, even human (see §6.9).

4771 Personal pronouns are not used as head of relative clauses (as in Chinese
 4772 的你 <... de nǐ > ‘you who are ...’), though there are cases of relativization of first
 4773 or second person possessor, as in (4) (§23.5.10.1).

- 4774 (4) *azo nuu [a-mu kui-me] ŋu-a tce tce*
 1SG DEM 1SG.POSS-mother SBJ:PCP-exist be:FACT-1SG LNK LNK
 4775 ‘I am someone who does not have a mother.’ (2003Nyimawodzer2, 12)

4776 Personal pronouns can take determiners, in particular the demonstrative *nuu* as
 4777 in (4), numerals (§7.1.7) and can also precede a noun in apposition, in expressions
 4778 such as *izo kuruu* ‘we, Tibetans’ (5) or *nryzo qacpa* ‘you frog’ in (6).

- 4779 (5) *izo kuruu tce pŋjka tu-nuu-ti-j ŋu tce,*
 1PL Tibetan LNK species.of.squash IPFV-AUTO-say-1PL LNK
 4780 ‘We Tibetans call it *pŋjka*.’ (16-CWrNgo, 71)
- 4781 (6) *nryzo qacpa ny-rzaþ cua kuu tuá-wy-mbi*
 2SG frog 2SG.POSS-wife who ERG 2-INV-give:FACT
 4782 ‘Who will give you a wife, you frog.’ (2002 qaCpa, 15)

4783 The relationship between the pronouns and the following noun is not necessarily
 4784 appositional; for instance, in (7), despite the absence of possessive pre-
 4785 fix on the borrowing 土汉族 <tǔhànzú> ‘local Chinese’, the meaning of *izora*
 4786 <tuhanzu> is ‘the local Chinese living among us’ rather than ‘We local Chinese’.

- 4787 (7) *izora <tuhanzu> ra kuu, <qingyang> tu-ti-nuu ŋu.*
 1PL local.Chinese PL ERG bharal IPFV-say-PL be:FACT
 4788 ‘The local Chinese among us call it “qingyang”.’ (20-xsar, 40)

4789 As in most languages with polypersonal indexation, pronouns (especially first
 4790 and second person pronouns) are never obligatory, and a finite verb form without
 4791 overt argument NPs is a perfectly well-formed sentence (§22.1). Overt pronouns
 4792 are obligatorily overt as core arguments only when focalized (§22.1.2.3).

4793 Japhug presents a very common subtype of split ergativity: the ergative *kuu*
 4794 being obligatory on transitive subject third person pronouns (except in the case
 4795 of the emphatic use of pronouns, §6.4) but optional on first and second person
 4796 pronouns (§8.1.2 and §8.2.2.1).

4797 6.1.1 Honorific plural

4798 The second plural pronoun *nuzo* can be used as honorific pronoun, as in (8),
 4799 where the addressee is unambiguously singular.

- 4800 (8) *uityz nuzo t^ehi ui-rury tur-ŋu-nur?*
 actually 2PL what 3SG.POSS-race 2-be:FACT-PL
 4801 ‘Actually, which type of being are you?’ (2003smanmi, 162)

4802 This pronoun correlates with plural honorific indexation *-nuu* (§14.6.1.2). Note
 4803 that the plural *ra* also occurs as a honorific marker on nouns (§9.1.1.3).

4804 6.1.2 Personal pronouns as possessive markers

4805 Personal pronouns occur instead of possessive prefixes (§5.1) as first member of
 4806 compounds with the adverbs *-susoso* ‘as *X* wish’ (from the verb *susoso* ‘think’), as
 4807 in example (9) and *-sti* ‘*X* alone’.

- 4808 (9) *a-zda ra zara-susoso tu-nuu-nŋukunŋke-nuu*
 1SG.POSS-companion PL 3PL-as.wish IPFV-AUTO-go.here.and.there-PL
 4809 *nur-k^htu*
 SENS-be.possible
 4810 ‘The other (snakes) can go here and there as they wish.’ (The divination,
 4811 43)

4812 The noun *-βra* ‘it is *X*’s turn to’ can either take a regular possessive prefix, or a
 4813 pronoun in *status constructus* form as in (10), where the bound form *nŋzy-* occurs
 4814 instead of *nŋzo* ‘2SG’.

- 4815 (10) *wortc^hi nŋzy-βra a-ty-tur-ti ra*
 please 2SG.POSS-turn IRR-PFV-2-say be.needed:FACT
 4816 ‘It is your turn to say it.’ (2014-kWLAG, 90)

4817 These constructions are discussed in more detail in §5.1.2.12 and §22.2.2.4.

4818 6.2 Generic pronouns

4819 6.2.1 *tuzo* ‘one’

4820 The generic pronoun *tuzo* ‘one’ has the same morphological structure as personal
 4821 pronouns as seen in the previous section, combining the generic possessive prefix

4822 *tu-* with the pronominal root *-zo*. Note that this generic possessive has to be
 4823 strictly distinguished from the homophonous indefinite possessor prefix *tu-* (see
 4824 §5.1.3). It has a rare plural variant *tuzyra* ‘one’ (see §14.6.1.3, example 166).

4825 In Japhug, sentences have at most one generic human referent (§5.1.3). If this
 4826 referent is core argument, the verb has generic indexation (*ku-* for intransitive
 4827 subject and object and *wy-* for transitive subject, as in the following example,
 4828 §14.3.2.5). The generic argument can be realized as the generic pronoun *tuzo* as
 4829 in (11) or by a generic noun (such as *turme* ‘person’, §6.2.2).

- 4830 (11) *tui-zda* *pju-wy-z-yxtca*, *tuzo* *ntsuu*
 GENR.POSS-companion IPFV-INV-CAUS-be.wrong oneself always
 4831 *pju-kui-zyy-yxngi* *tce, pui-kui-nui-yxtca* *kuny*
 IPFV-GENR:S/O-REFL-be.right LNK AOR-GENR:S/O-AUTO-be.wrong also
 4832 *pju-kui-zyy-yxngi* *tce, ui-mbryzuu* *kui-tu*
 IPFV-GENR:S/O-REFL-be.right LNK 3SG.POSS-result SBJ:PCP-have
 4833 *me* *tu-kui-ti* *pui-ηu.*
 not.exist:FACT IPFV-GENR-say SENS-be
 4834 ‘If one considers that one’s companion is wrong, and always considers
 4835 himself to be right even if one is wrong, there is can be no good result.’
 4836 (Mouse and sparrow, 80-82)

4837 The generic pronoun can occur before a noun with the generic possessive as in
 4838 *tuzo tu-skrt* ‘one’s language’ in example (12); this contributes to disambiguating
 4839 between the indefinite possessive and the generic possessive in the case of in-
 4840 alienably possessed nouns (thus on its own *tu-skrt* can mean either ‘a language’
 4841 or ‘one’s language’).

- 4842 (12) *tcendyre tuzo tur-skrt* *zara yuu-suxcxt* *pui-ra,*
 LNK GENR GENR.POSS-language 3PL INV-teach:FACT SENS-be.needed
 4843 *zara nui-skrt* *tuzo kui-suxcxt* *pui-ra*
 3PL 3PL.POSS-language GENR GENR:S/O-teach:FACT SENS-be.needed
 4844 ‘One has to teach them one’s language, and they have to teach you their
 4845 language.’ (150901 tshuBdWnskAt, 29)

4846 When occurring in A function, the generic pronoun *tuzo* obligatorily receives
 4847 the ergative *kui* as in (13) (note that in example 12, although the generic referent
 4848 is A in the first clause, *tuzo* does not take ergative because it is a determiner of
 4849 *tu-skrt*).

6 Pronouns

- 4850 (13) *tua_{zo} kuu tua-χti pu-wy-nuu-car kuu-mab kuu,*
 GENR.ERG GENR.POSS-spouse IPFV-INV-AUTO-search INF:STAT-not.be ERG
 4851 *tua-p^hama ra kuu tua-χti puu-car-nuu*
 GENR.POSS-parent PL.ERG GENR.POSS-spouse IPFV-search-PL
 4852 ‘One could not choose one’s spouse, one’s parents chose one’s spouse.’
 4853 (14-siblings, 212-213)

4854 Relator nouns (§8.3), for example the dative *w-cki* (§8.3.1), are grammaticalized
 4855 from inalienably possessed nouns and like them, take a generic possessive prefix
 4856 (*tua-cki* or *tua-p^he* ‘to one’) when following *tua_{zo}*, as in example (14), which describes
 4857 the Omaha-type skewing rule in the kinship system (§27.5).

- 4858 (14) *tua-ni yuu w-rjiti nura kuu tua_{zo} tua-cki*
 GENR.POSS-FZ GEN 3SG.POSS-child DEM:PL.ERG GENR GENR-dat
 4859 “*a-rpuu*”, *ty-tcuu* *puu-kuu-ηu* *ny “a-rpuu”*
 1SG.POSS-MB INDEF.POSS-son PST.IPFV-GENR:S/O-be if 1SG.POSS-MB
 4860 *tu-ti-nuu*, *tc^heme puu-kuu-ηu* *ny “a-tab”* *tu-ti-nuu*
 IPFV-say-PL girl PST.IPFV-GENR:S/O-be if 1SG.POSS-MZ IPFV-say-PL
 4861 *kua-ra* *ηu*
 INF:STAT-be.needed be:FACT
 4862 ‘One’s father’s sister’s children have to call oneself “my maternal uncle” if
 4863 one is a boy, “my maternal aunt” if one is a girl.’ (140425kWmdza03, 1)

4864 As examples (11) to (14) illustrate, generic agreement between pronoun, pos-
 4865 sessive prefix and verb indexation is very systematic. Examples of 1PL indexation
 4866 with generic pronouns or vice-versa are, however, attested (§14.6.1.3).

4867 Due to the constraint against more than one generic argument per clause, the
 4868 only case that the generic pronoun can appear two times in the same clause
 4869 occurs in reflexive constructions (§18.3), as in (15).

- 4870 (15) *tua_{zo} kuu tua_{zo} tu-kua-nuu-zyyr-βri ra*
 GENR.ERG GENR IPFV-GENR:S/O-AUTO-REFL-protect be.needed:FACT
 4871 *ky-ti puu-ηu*
 INF-say SENS-be
 4872 ‘One has to protect oneself.’ (04-qala1, 25)

4873 6.2.2 The generic noun *turme* ‘person’

4874 The noun *turme* ‘person’, also attested to express indefinite humans (§6.6.1) or in
 4875 the meaning ‘someone else’ (§6.8), can occur as a marker of generic person, as in

4876 (16).

- 4877 (16) *turme kumy tú-wy-ndza sna.*
 people also IPFV-INV-eat be.good:FACT
 4878 ‘It is also good for people to eat.’ (12-Zmbroko, 31)

4879 In this function, *turme* ‘person’ can be indexed on the verb by either generic
 4880 person (as in 16) or 3PL markers, a question explored in more detail in §14.6.2.

4881 There is a slight difference of usage between *turme* ‘person’ and *tuzo* ‘one’
 4882 in clauses with a generic argument. Both can be followed by a noun or a case
 4883 marker taking the generic possessive prefix, as in (17) and (18).

- 4884 (17) *turme tua-fsu cantaš tu-mbro my-cʰa.*
 people GENR.POSS-equal.to until IPFV-be.big NEG-FACT:can
 4885 ‘It cannot grow as big as a person (as oneself).’ (11-qarGW, 24)

- 4886 (18) *u-tu-mbro nunui tuzo tua-fsu jamar tu-zyuit*
 3SG-NMLZ:DEG-be.high DEM GENR GENR-equal.to about IPFV:UP-reach
 4887 *cʰa.*
 can:FACT
 4888 ‘As for its size, it can reach one’s (a person’s) size.’ (16-CWrNgo, 18)

4889 However, *turme* ‘person’ as a generic noun can alternatively be used with a
 4890 possessee or a case marker with the third person singular *u-* prefix, as in (19),
 4891 while this option does not exist for *tuzo* ‘one’.

- 4892 (19) *turme u-fsu jamar tu-βze cʰa.*
 people 3SG-equal.to about IPFV-do[III] can:FACT
 4893 ‘It can grow about the size of a person.’ (12-ndZiNgri, 4)

4894 6.3 Genitive forms

4895 The form of pronouns and personal prefixes undergoes few morphophonological
 4896 changes in combination with postpositions and relational nouns. However,
 4897 in combination with the genitive postposition *yuu* (cf §8.2.3), some personal pro-
 4898 nouns have special forms indicated in Table 6.2.

4899 While some degree of variation exists with dual and plural pronouns (for in-
 4900 stance the regular *izo yuu* is found alongside *izyy* and *izrra yuu*), for the singular
 4901 pronouns only one form is attested.

Table 6.2: Pronouns and possessive prefixes

Free pronoun	Genitive	
<i>azo</i>	<i>azuuy</i>	1SG
<i>n̥z̥zo</i>	<i>n̥z̥uuy</i>	2SG
<i>w̥zo</i>	<i>w̥z̥y</i>	3SG
<i>t̥izo</i>	<i>t̥iz̥y</i>	1DU
<i>ndz̥izo</i>	<i>ndz̥iz̥y</i>	2DU
<i>z̥ni</i>	<i>z̥niyu</i>	3DU
<i>izo</i>	<i>iz̥y</i> , <i>iz̥ra yu</i>	1PL
<i>nuzo</i>	<i>nuz̥y</i> , <i>nuz̥ra yu</i>	2PL
<i>z̥ara</i>	<i>zaray</i> , <i>z̥ara yu</i>	3PL

- 4902 (20) *azuuy ndža yu ci, n̥zuuy ndža yu, aj*
 1SG:GEN reason be:FACT QU 2SG:GEN reason be:FACT 1SG
 4903 *mtúj-tso-a*
 NEG:SENS-understand-1SG
 4904 ‘I don’t know if it is because of me, or because of you.’ (that the phone
 4905 line is not working well) (phone conversation, 2011)

4906 In the genitive forms of the pronouns, the vowel of the genitive marker is
 4907 generally dropped, and the pronominal root *-zo* undergoes vowel change to *-zuy*
 4908 (in the case of first and second person) and *-zy* (in other forms). Note that *zaray*
 4909 is the only case of the rhyme /ay/ in Japhug.

4910 When genitive pronouns occur as determiners of nouns (including in the pos-
 4911 sessive existential construction, §22.5.2.1), these nouns almost always take a pos-
 4912 sessive prefix coreferent with the genitive pronoun, as in (21).

- 4913 (21) *tcižy tci-tʰyfkyl̥yi tur-ckat pur-tu tce, nu*
 1DU:GEN 2DU-plant.ash one-load PST.IPFV-exist LNK DEM
 4914 *ky-nu-χtyr-tci cti wo*
 AOR-AUTO-spread-1DU be:AFF:FACT SFP
 4915 ‘We had one load of ash, and we spilled it there.’ (2003 Kunbzang, 171)

4916 The genitive pronouns can be used as possessive pronouns ('mine', 'my own'
 4917 etc) and take the determiner *nu* and the plural *ra*, as in (22) and (23).

- 4918 (22) “*tce ynysqaptu-rzaš tu-tsu tce juš-kaš ḷu*” *juš-ti-nuš ri*,
LNK twenty.one-night IPFV-pass LNK IPFV-hatch be:FACT SENS-say-PL LNK
4919 *azwuy nuš ynysqamnuž tš-rzaš myctša muš-juš-kaš.*
1SG:GEN DEM twenty.two one-night until NEG-AOR-hatch
4920 ‘People say that (chicken eggs) hatch after twenty-one days, mine took
4921 twenty-two days to hatch.’ (150819 kumpGa)

4922 (23) *wzyy nura tu-nuš-yx-βdi tce, cuš-sy-sqyr*
3SG:GEN DEM:PL IPFV-AUTO-CAUS-be.well LNK TRAL-APASS-hire:FACT
4923 *mx-ra*
NEG-be.needed:FACT
4924 ‘He repairs his own (machines) himself, he does not need to ask other
4925 people.’ (14-siblings, 168)

4926 6.4 The emphatic use of pronouns

4927 In addition to their referential and anaphoric functions, pronouns in Japhug
4928 can be used in an emphatic way in combination with the emphatic particle *zo*
4929 (§26.1.1.5), as in (24).

- 4930 (24) *azo uzo zo kx-mto mu-pu-rpo-t-a.*
 1SG 3SG EMPH INF-see NEG-AOR-experience-PST:TR-1SG
 4931 ‘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).

- 4936 (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
 4937 *pjuu-nuu-tcxt-nuu* *pjx-nyu* *tce*
 IPFV-AUTO-take.out-PL IFR.IPFV-be LNK
 4938 ‘They planted crops, and earned their food on their own.’ (about lepers,
 4939 who were settled in the special place by the government, 25-khArWm, 70)

4940 The emphatic pronoun *ray* ‘oneself’ borrowed from Tibetan རྙ རྙ ‘oneself’,
4941 can also be used with any person, though this usage is not very common. It can
4942 occur with the autive (26) or without it (27).

6 Pronouns

- 4943 (26) *nyzo tu-tuu-ti my-ra ma azo ran tu-nuu-ti-a*
2SG IPFV-2-say NEG-be.needed do:FACT LNK 1SG oneself IPFV-AUTO-say-1SG
4944 *jyY*
be.possible:FACT
4945 ‘You don’t need to say it, I can say it myself.’ (elicited)
- 4946 (27) *azo ran zo ju-ce-a ra*
1SG oneself EMPH IPFV-go-1SG be.needed:FACT
4947 ‘I have to go there myself.’ (150830 afanti-zh, 96)

4948 6.5 Interrogative pronouns

4949 The interrogative pronouns in Japhug are indicated in Table 6.3. These pronouns
4950 are used in independent interrogative clauses (28), in subordinate clauses (29),
4951 and also in correlatives (30) (§23.2.5), and also occur to express non-specific ref-
4952 erents (these uses are described in § 6.6.6, after the indefinite pronouns).

- 4953 (28) *tce myzuu tc^hi puu-ŋu?*
LNK yet what PST.IPFV-be
4954 ‘What was there (after this one)?’ (12-ndZiNgri, 100)
- 4955 (29) *wizo tc^hi kuu-ŋu nuu ko-tso-nuu tce tce*
3SG what SBJ:PCP-be DEM IFR-understand-PL LNK LNK
4956 *c^hy-wy-tc^hyt*
IFR:DOWNSTREAM-INV-take.out
4957 ‘They understood what he was, and expelled him (from their group).’
4958 (140427 hanya yu gezi-zh, 19)
- 4959 (30) *wi-p^hoŋbu tc^hi kuu-fse nuu, ŋotcu wi-syz-ryz^hi*
3SG.POSS-body what SBJ:PCP-be.like DEM where 3SG-OBL:PCP-remain
4960 *nunuu yuu kuu-nutsa kur-fse nuu-cti tce*
DEM GEN SBJ:PCP-fit SBJ:PCP-be.like SENS-be:AFF LNK
4961 ‘The way its body is like is well-adapted to the place where it lives.’
4962 (19-rNamoN, 24)

4963 In addition to these pronouns, some indefinite pronouns are also marginally
4964 used in questions, see for instance (87) in §6.6.2.

Table 6.3: Interrogative pronouns

<i>tṣʰi</i> ‘what’
<i>čuu</i> ‘who’
<i>tʰystuy</i> ‘how many’
<i>tʰyjtču</i> ‘when’
<i>notču</i> ‘where’, <i>nɔj</i> ‘where’
<i>tṣʰindža</i> ‘why’

4965 6.5.1 *tṣʰi* ‘what’

4966 The interrogative pronoun ‘what’ considerably varies across Japhug dialects. In
 4967 Kamnyu we find *tṣʰi*, apparently borrowed from Tibetan *tṣʰi*. Neighbouring di-
 4968 alects of Gdongbrgyad area have either *tsʰi* (in Mangi) or *tʰi* (in Rqaco), which
 4969 represents the original Rgyalrongic root for this interrogative pronoun (cognate
 4970 with Tibetan བེ *tṣʰi* ‘what’ and Limbu *the*). Even in the Kamnyu dialect, the form
 4971 *tsʰi*- is directly attested in the indefinite *tsʰitsuku* ‘some’ (§6.6.3). Mangi Japhug
 4972 shares with Kamnyu the sound change **tʰi* → *tsʰi* which also affects the verb *tsʰi*
 4973 ‘drink’ (this sound change occurred after the pronoun **tʰi* underwent *status con-*
 4974 *structus* alternation to *tʰu-* and was used to build the indefinite pronoun *tʰuci*
 4975 ‘something’, see §6.6.2). Note that Kamnyu Japhug *tṣʰi* ‘what’ is homophonous
 4976 with the noun *tṣʰi* ‘tree-trunk stairs’ attested for instance in example (31) – the
 4977 readers of Japhug texts have to be aware of this potential ambiguity.

- 4978 (31) *com yʃu kui-mbur~mbro zo w-ymbaj zuu tṣʰi*
 iron tower SBJ:PCP-EMPH~be.high EMPH 3SG.POSS-side LOC treetrunk.stairs
 4979 *tu-kui-nduu ci pui-tu nui-ŋu*
 IPFV:UP-SBJ:PCP-ACAU:spread INDEF PST.IPFV-be SENS-be
 4980 ‘There was a huge iron toward, with a tree-trunk stairs on its side.’
 4981 (Norbzang05, 65)

4982 The Eastern dialects of Gsardzong and Datshang have *xto* instead, a word of un-
 4983 known etymology; these dialects, which share many additional morphosyntactic
 4984 and phonological commonalities, can be collectively referred to as “Xtokavian”.

4985 In the Kamnyu dialect, *tṣʰi* ‘what’ is by far the most common interrogative pro-
 4986 noun in the corpus. In interrogative clauses, it can be used to ask about objects,
 4987 non-human animals (32) and names of persons (33), and can occur as prenominal
 4988 determiner meaning ‘what (type of)’ as in (34).

6 Pronouns

- 4989 (32) *nyzo ny-mbro nuu tc^{hi} ηu*
2SG 2SG.POSS-horse DEM what be:FACT
4990 ‘Who is your horse?’ (about a sentient horse, 2003smanmi-tamu, 53)
- 4991 (33) *tc^{hi} tuu-rmi?*
what 2-be.called:FACT
4992 ‘What is your name?’ (heard in context)
- 4993 (34) *tcendyre myzui tc^{hi} cku tu*
LNK yet what allium exist:FACT
4994 ‘What other (plants of the genus) *Allium* are there?’ (07-Cku, 97)

4995 As in many languages, this interrogative pronoun (instead of the pronoun *cuu*
4996 ‘who’) is also used in questions about classification of persons (Idiatov 2007),
4997 including social affiliation (35, and 29 above) and biological affiliation (47).

- 4998 (35) *uityz nuuzo tc^{hi} ui-ruuy tuu-ηu-nuu?*
finally 2PL what 3SG.POSS-race 2-be:FACT-PL
4999 ‘Finally, what race (of being) are you?’ (smanmi2003, 172)

5000 There is no specific interrogative pronoun to ask about manner like English
5001 ‘how’, and Japhug expresses this meaning by combining *tc^{hi}* with the verbs *fse*
5002 ‘be like’ or *stu* ‘do like’ (§24.5.7) as in (36).

- 5003 (36) *ny-smyn ty-su-βzu-t-a ri maka*
3SG.POSS-medicine AOR-CAUS-make-PST:TR-1SG but at.all
5004 *muáj-p^hyn, tce tc^{hi} zo tú-wy-stu p^hyn*
NEG:SENS-be.efficient LNK what EMPH IPFV-INV-do.like be.efficient:FACT
5005 ‘I had medicine made for you but it does not work, how should we do for
5006 it to work?’ (nyima wodzer 2002, 22)

5007 When used with *tc^{hi}*, the simulative verbs often take an infinitival complement
5008 as in (37).

- 5009 (37) *a-βi, ki kuu-fse tyjpyom kuu-wxti*
1SG.POSS-younger.sibling this SBJ:PCP-be.like ice SBJ:PCP-be.big
5010 *nutcu, ky-ce tc^{hi} ty-tui-fse-ndzi?*
DEM:LOC INF-go what AOR-2-be.like-DU
5011 ‘Sister, how did you cross such a big block of ice?’ (Kunbzang 2005, 156)

5012 The pronoun *tç^{hi}* ‘what’ on its own can occur in questions about the reason or
 5013 the purpose of a particular state of affair, as in (38) and (39).

5014 (38) *azō tç^{hi} a-pu-ŋu-a?*

1SG what IRR-IPFV-be-1SG

5015 ‘How can it be me?’ (2003sras, 61)

5016 (39) *a-tycime, tç^{hi} nu-tui-nre ŋu?*

1SG.POSS-lady what SENS-2-laugh be:FACT

5017 ‘My lady, why are you laughing?’ (Not ‘what are you laughing at?’, 2002

5018 qaCpa, 102)

5019 When referring to purpose or reason, it is possible to combine *tç^{hi}* ‘what’ with
 5020 the nouns *u-spa* ‘its material’ and *u-ndzə* ‘its reason’ (as the pronoun *tç^hindzə*
 5021 ‘why’) , as in (40) and (41). Note that examples (39) and (41) are from the same
 5022 story, just a few lines away, in the same context; the construction in (41) is a more
 5023 explicit variant of that in (39).

5024 (40) *tce tç^{hi} u-spa pu-ŋu my-xsi ma tce nu*

LNK what 3SG.POSS-material PST.IPFV-be NEG-GENR:know LNK LNK DEM

5025 *kur-fse pjx-tu*

SBJ:PCP-be.like IFR.IPFV-exist

5026 ‘It is not known what it was for, but there was something like that.’

5027 (hist140522 GJW, 18)

5028 (41) *tç^hindzə nu-tui-yrwu ŋu?*

why SENS-2-cry be:FACT

5029 ‘Why are you crying?’ (2002 qaCpa, 94)

5030 The pronoun *tç^{hi}* takes case marking with genitive *yu* and the instrumental/
 5031 ergative *ku*, as in (42).

5032 (42) *tce tç^{hi} kur tu-su-βze ŋu myksi ma nu*

LNK what ERG IPFV-CAUS-make[III] be:FACT NEG-GENR-know LNK DEM

5033 *kur-fse nu, stuku ri ku-ndzob ŋu*

SBJ:PCP-be.like DEM top.of.trees LOC IPFV-ACAUS:attach be:FACT

5034 ‘I don’t what it (the wasp) uses to make it (its nest), it is attached on trees.’

5035 (26-ndzWrnaR, 55)

5036 In combination with the adverb *jarma* / *jamār* ‘about’, it can be used to indicate
 5037 a quantity, instead of *t^hrstuy* ‘how many’ (§6.5.3), as illustrated by (43), and (44).

6 Pronouns

- 5038 (43) *tu-ctsam-a tce tc^{hi} jamar zo yyzu kui?*
 IPFV-measure[III]-1SG LNK what about EMPH exist:SENS SFP
 'I will measure it with a scoop to see how much (gold) there is.' (140512
 5040 alibaba-zh, 59)
- 5041 (44) *k^hutsa u-ŋguw tu-ci tu-ru-nu tce, nunaŋtcu tyŋe*
 bowl 3SG-inside INDEF.POSS-water IPFV-put.in-PL LNK DEM:LOC sun
 5042 *nūw pjui-suŋ-nuŋc^hyr-nu tce, tce tc^{hi} jamar ko-ndza numu, numu*
 DEM IPFV-CAUS-illuminate-PL LNK LNK what about IFR-eat DEM DEM
 5043 *u-ŋguw naŋtcu pjui-ru-nu tce, numu tu-rtos-nu*
 3SG-inside DEM:LOC IPFV:DOWN-look.at-PL LNK DEM IPFV-see-PL
 5044 *pjy-ŋgryl.*
 IFR.IPFV-be.usually.the.case
 'They used to put water in a bowl and let the sunlight reflect into it; they
 5046 could see how much (of the sun) had been occulted ('eaten' by the
 5047 eclipse).' (29-mWBZi, 130)

5048 It is possible to combine *tc^{hi} jamar* with a adjective to express approximate
 5049 comparison, as in (45).

- 5050 (45) *lulu yuu tce uzo u-p^honju tc^{hi} kui-zri jamar*
 cat GEN LNK 3SG 3SG.POSS-body what SBJ:PCP-be.long about
 5051 *u-jme nuŋ kuan^y zri ri*
 3SG.POSS-tail DEM also be.longFACT but
 5052 'The cat, its body is about as long as its tail, but...' (27-qartshAz, 219)

5053 In correlative clauses, the pronoun *tc^{hi}* 'what' can also be used to refer to a
 5054 quantity without the adverb *jamar* 'about' (example 46).

- 5055 (46) *ty-riŋit tc^{hi} ty-kui-sci nuŋ zo yui-tcyt*
 INDEF.POSS-child what AOR-SBJ:PCP-be.born DEM EMPH INV-take.out:FACT
 5056 *kui-ra pjy-cti tce,*
 INF:STAT-be.needed IPFV.IFR-be:AFF LNK
 5057 'However many children were born, one had to raise them.' (tApAtso
 5058 kAnWBdaR I, 9)

5059 However, in independent interrogative clauses, *tc^{hi}* 'what' cannot refer to quantities.
 5060 Sentence (47) thus can only mean 'Was it a boy or a girl' not 'How many
 5061 children did she have?'.

- 5062 (47) *uu-rjiti tc^hi to-sci*
 3SG.POSS-child what IFR-be.born
 5063 ‘Was it a boy or a girl?’ (elicited)

5064 The interrogative *tc^hi* ‘what’ occurs in topicalized clauses with an adjective
 5065 stative verb in perfective form, meaning ‘as for how *X* it becomes’ as in examples
 5066 (48) and (49).

- 5067 (48) *tc^hi nur-jpum ki canṭaṣ puu-jpum muúj-c^ha*
 what AOR-be.thick DEM.PROX above IPFV-be.thick NEG:SENS-can
 5068 ‘As for how thick it can grow, it cannot grow thicker than this.’
 5069 (16-CWrNgo, 154)
- 5070 (49) *tc^hi tṣ-mbro, bñui-rtsy canṭaṣ tu-mbro muúj-c^ha.*
 what AOR-be.tall two-stairs above IPFV-be.tall NEG:SENS-can
 5071 ‘As for how tall it can grow, it cannot grow taller than two stairs.’
 5072 (07-paXCi, 8)

5073 6.5.2 *cuu* ‘who’

5074 The interrogative pronoun *cuu* ‘who’ occurs in questions about the identification
 5075 of a human referent. It can occur in all syntactic roles, and does not have special
 5076 ergative or genitive forms (see examples 51 and 52). It is the probable cognate of
 5077 a etymon widespread in the Trans-Himalayan family (for instance, Tibetan མ ‘su
 5078 ‘who’).

- 5079 (50) *ma-tu-nuqay ma cuu tur-ŋu my-xsi*
 NEG:IMP-2-fish LNK who 2-be:FACT NEG-GENR:know
 5080 ‘Don’t fish, I don’t who you are.’ (gesar, 369)
- 5081 (51) *my-ta-mbi nyzo qacpa cuu kuu tuú-wy-mbi*
 NEG-1→2-give:FACT 2SG frog who ERG 2-INV-give:FACT
 5082 ‘We won’t give her to you, who would give her to you, a frog?’ (2002
 5083 qaCpa, 09)
- 5084 (52) *cuu yuu zo puu-k^ham-a ra kuuye?*
 who GEN EMPH IPFV-give:III-1SG be.needed:FACT SFP
 5085 ‘Whom should I give (her) to (in marriage)?’ (140508 benling gaoqiang de
 5086 si xiongdi-zh, 222)

6 Pronouns

5087 The pronoun *cui* ‘who’ can be used in one context with non-human referents,
5088 when asking about which object (out of two or more) has the highest value as to
5089 a property described by the main verb, as in (53); in this construction, the verb
5090 receives non-singular indexation (§14.6.1.3), such as the dual *-ndzi* in this example.
5091 Concerning the use of the ergative *kui* in this sentence see §8.2.7, §26.2.1 and
5092 Jacques (2016b).

- 5093 (53) *nui nx-ku ui-tui-rŋŋji nui, aki ce-tci*
5094 DEM 2SG.POSS-head 3SG.POSS-NMLZ:DEG-be.long SFP down go:FACT-1DU
5095 *tce, mbro ui-jme cʰony tú-wy-syfsu, cui kui*
5096 LNK horse 3SG.POSS-tail COMIT IPFV-INV-compare who ERG
5097 *jui-zri-ndzi kui*
5098 SENS-be.long-DU SFP
5099 ‘Your hair is very long, let us go downstairs, and compare it with a
5100 horse’s tail.’ (2002 qaCpa, 292)

5098 Forms related to *cui* ‘who’ in Japhug include the indefinite pronoun *cumxrcui*
5099 ‘whoever, anybody’ (6.6.4) and *cunjarura* ‘each better than the other’.

5100 6.5.3 *tʰystuy* ‘how many’ and *tʰyjtci* ‘when’

5101 To ask about precise quantities, *tʰystuy* ‘how many’ (or ‘how much’) occurs rather
5102 than *tɕʰi jamar* as seen above (§43).

- 5103 (54) *nyzo tʰystuy tui-kʰym?*
5104 you how.much 2-give[III]:FACT
5105 ‘How much (money) do you give (for it)?’ (Bargaining, 13)

5106 It can be used for any countable quantity, including for people, as in (55).

- 5106 (55) *tsʰupa tʰystuy tui-tu-nui nyu?*
5107 village how.much 2-exist:FACT-PL be:FACT
5108 ‘How many (people) are you in the village?’ (conversation, 140501)

5108 The pronoun *tʰystuy* has a conjunct form *tʰystu-* when used with counted
5109 nouns, including Chinese borrowings (§7.3.1.4). For instance, in (56) and (57),
5110 it occurs with the classifiers *X-mač* ‘size of shoes’ (from Chinese 碼 *mǎ*), and in
5111 (57) with the non-nativized form of 点 <diǎn> ‘hour’ (the same meaning can be
5112 expressed without borrowing from Chinese, as in 59).

- 5113 (56) *ny-xtsa nui t^hystau-mab tu-tuu-ŋge ŋu*
 2SG.POSS-shoe DEM how.many-size IPFV-2-wear[III] be:FACT
 5114 ‘What is the size of your shoes?’ (Conversation, 2015)

- 5115 (57) *nuzo nutcu t^hystau-<dian> ŋu?*
 2PL DEM:LOC hour how.many-hour be:FACT
 5116 ‘What time is it at your place?’ (conversation 12-11-2018)

5117 Combined with the noun *ty-rzaš* ‘time’, *t^hystuy* can be used to ask about a
 5118 length of time (58).

- 5119 (58) *nyzo ty-rzaš t^hystuy jamar ty-tsú tce*
 you INDEF.POSS-time how.many about AOR-pass LNK
 5120 *ky-tur-spa-t?*
 AOR-2-be.able-PST:TR
 5121 ‘How long did it take you to learn it?’ (elicited)

5122 The phrase *ty-rzaš t^hystuy* (or alternatively *tuuts^hot t^hystuy*) in collocation with
 5123 the verb *zyut* ‘reach’, is also employed for asking about clock time, as in (59) (see
 5124 §7.5.4) or dates.

- 5125 (59) *ty-rzaš t^hystuy ko-zyut?*
 INDEF.POSS-time how.many IFR-reach
 5126 ‘What is the time?’ (heard in context)

5127 Questions about time can also be expressed by the pronoun *t^hyjtču* ‘when’, as
 5128 in (60) and (61).

- 5129 (60) *t^hyjtču ly-tuu-nuyę pur-ŋu ra ny?*
 when AOR-2-come.back[II] PST.IPFV-be PL SFP
 5130 ‘When did you come back home?’ (taRrdo conversation, 01)

5131 As shown by (61), *t^hyjtču* ‘when’ can be used with the genitive *yu*.

- 5132 (61) *<jipiao> nui, t^hyjtču yu ty-tuu-χtua-t?*
 plane.ticket DEM when GEN AOR-2-buy-PST:TR
 5133 ‘Your plane ticket, for what date did you buy it?’ (conversation,
 5134 2014.03.19)

5135 The pronoun *t^hyjtču* ‘when’ also occurs in the meaning ‘since when’ to express
 5136 impossible events as in (62).

6 Pronouns

- 5137 (62) *ny-wuu* *kua-ryrfit* *jy-ari* *kua ci*,
3SG.POSS-grandfather SBJ:PCP-have.a.child AOR-go[II] SFP QU
5138 *ty-tcuu* *c^huu-kua-ryrfit* *t^hyjtcu*
INDEF.POSS-son IPFV-SBJ:PCP-have.a.child when
5139 *pjy-ηgryl?*
IFR.IPFV-be.usually.the.case
5140 ‘(You say) that your father-in-law went away to give birth to a child,
5141 since when can a man bear children?’ (tAwa kWCqraR, 99)

5142 The element *t^hy-* in the pronouns *t^hyjtcu* ‘when’ and *t^hystu* ‘how many’ is the
5143 *status constructus* form of proto-Japhug **t^hi*, the inherited form of the pronoun
5144 ‘what’ (see §6.5.1). The element *-tcu* in *t^hyjtcu* ‘when’ is related to the locative *tcu*
5145 (§8.2.4.1).

5146 The prefixal form *cu*st*y-* instead of *t^hystu*- is attested in one story told by Kun-
5147 bzang Mtsho, probably influence from Tshobdun (63).

- 5148 (63) *nymk^ha cu*st*y-jom* *ku-nuu-tu* *kuuye?*
sky how.many-fathom DUBIT-AUTO-exist SFP
5149 ‘How many fathoms (high) is the sky?’ (tAwa kWCqraR, 106)

5150 6.5.4 *ŋotcu* ‘where’

5151 The interrogative pronoun *ŋotcu* ‘where’ and its variant form *ŋoj* (§8.2.4.4) can be
5152 used to ask either about a location (64), a direction towards (examples 65 and 66)
5153 or from (67) a certain place. The second syllable of this pronoun *-tcu* comes from
5154 the locative postposition *tcu*, but the first part is etymologically obscure.

- 5155 (64) *ŋotcu ku-tuu-ryzi?*
where PRES.EGOPH-2-stay
5156 ‘Where are you?’ (Conversation, 2005)

- 5157 (65) *ŋotcu tu-ce?*
where 2-go:FACT
5158 ‘Where are you going to?’ (Common greeting used when one meets
5159 someone on the road)

- 5160 (66) *qala ŋoj nui-ari?*
rabbit where AOR:WEST-go[II]
5161 ‘Where did the rabbit go?’ (qala2002, 21)

- 5162 (67) *nuaʒyra ɻotcu jɪ-tu-ye-nu?* *ɻotcu c-pu-tu-tu-nu?*
 2PL where AOR-2-come[II]-PL where TRAL-PST.IPFV-2-exist-PL
 5163 ‘Where are you from? Where have you been?’ (2003sras, 57)

5164 Likewise, with verbs of manipulation, *ɻotcu* can be used both from questions
 5165 about origin (as in 68) or destination.

- 5166 (68) *nunui ɻotcu nɪ-jab* *nɪ-ye* *ɻu,* *ɻotcu jɪ-tu-yut?*
 DEM where 2SG.POSS-hand AOR-come[II] be:FACT where AOR-2-bring
 5167 ‘Where did you get it from, from where did you bring it?’ (150831 renshen
 5168 wawa-zh, 53)

5169 With the determiner *nui*, the pronoun *ɻotcu* means ‘which (of several places)’,
 5170 as in (69) and (70).

- 5171 (69) *kʰa rayri yu zo u-ftaŋ pɟɪ-tu cti ma, tce*
 house each GEN EMPH 3SG.POSS-mark IFR.IPFV-exist be.AFF:FACT LNK LNK
 5172 *ɻotcu nui ɻu, ɻotcu nui maŋ mu-pɟɪ-saxsyl.*
 where DEM be:FACT where DEM be:FACT NEG-IFR.IPFV-be.clear
 5173 ‘There was a mark on each of the houses, and one could not tell which
 5174 (house) was (Alibaba’s) and which was not.’ (140512 alibaba-zh, 189-190)

- 5175 (70) *qapryftsa nunui, cici jɪ-ari tce u-ku*
 centipede DEM sometimes AOR-go LNK 3SG.POSS-head
 5176 *ju-z-myke, cici tce u-jme*
 IPFV-CAUS-be.first[III] sometimes LNK 3SG.POSS-tail
 5177 *ju-z-myke ju-cti tce ɻotcu nui u-ku*
 IPFV-CAUS-be.first[III] SENS-be:AFF LNK where DEM 3SG.POSS-head
 5178 *ɻu, ɻotcu u-jme ɻu, muj-saxsyl*
 be:FACT where 3SG.POSS-head be:FACT NEG.SENS-be.clear
 5179 ‘The centipede, when it moves, sometimes its head goes first, sometimes
 5180 its tail goes first, it is not each to tell which is its head and which is its
 5181 tail.’ (21-qaprAftsa, 12)

5182 With generic nouns such as *turme* ‘person’, *ɻotcu* can serve as prenominal
 5183 determiner to mean ‘a person from where’, as in (71).

- 5184 (71) *ɻotcu turme tua-ɻu?*
 where person 2-be:FACT
 5185 ‘Where are you from?’ (2011-05-nyima, 83)

6 Pronouns

5186 The pronoun *ŋotcu* however has non-spatial uses, in particular to ask about a
5187 particular individual (or a subgroup) within a group, as in (72) and (73).

- 5188 (72) *azō a-wa nuu ŋotcu zo nuu ŋu kuu?*
1SG 1SG.POSS-father DEM where EMPH DEM be:FACT SFP
5189 ‘Which one is my father?’ (150831 jubaopen-zh, 177)

- 5190 (73) *m̥z̥uu ŋotcu nuu zo syndy m̥-xsi ma*
more where DEM EMPH be.poisonous:FACT NEG-know:GENR LNK
5191 ‘(Apart from this one), I don’t which other (mushrooms) are poisonous.’
5192 (23-grWBgrWBftsa, 31)

5193 In participial relatives with subject participle (in *kua-*, see §16.1.1.4), *ŋotcu* ‘where’
5194 can occur to express relativization of locative adjuncts, as in (74); see §23.2.5 for
5195 a discussion of the other available constructions.

- 5196 (74) *kua-me nura qʰe me, ŋotcu kua-tu nuu qʰe*
SBJ:PCP-not.exist DEM:PL LNK not.exist:FACT where SBJ:PCP-exist DEM LNK
5197 *kua-du~dyn tu-łob ŋu.*
SBJ:PCP-EMPH~be.many IPFV-come.out be:FACT
5198 ‘In (places) where it is not found, there is none, but in (places) where it is
5199 found, it grows in great number.’ (21-jmAGni, 91)

5200 The pronoun *ŋotcu* ‘where’ is not exclusively used in question about place or
5201 direction, we also find it in the expression in (75).

- 5202 (75) *kuki ŋotcu puu-ŋgryl?*
this where IPFV-be.usually.the.case
5203 ‘How could this be possible?’ (qajdoskAt 2002, 32)

5204 This sentence is used to express indignation (as in Chinese 哪有这样的道
5205 理?).¹

5206 6.6 Indefinite pronouns

5207 Japhug has a handful of indefinite pronouns, indicated in Table 6.4. They do not
5208 form a complete paradigm, and other constructions, in particular generic nouns

¹ In 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>çumırçiu</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) *u-l̥cu n̥utcu qazo k̥xtsa ci, ci ku*
3SG.POSS-upstream DEM:LOC sheep parent.and.child INDEF one ERG

k̥y-ntsye tʰa-yut jnu-ŋu.
OBJ:PCP-sell AOR:3→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 p̥jy-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*.

² Examples such as ‘In Freiburg the weather is better than anywhere in Germany’ (Haspelmath 1997: 2) would not be expressible with an indefinite pronoun.

5228 6.6.2 *t^huci* ‘something’

5229 The indefinite pronoun *t^huci* ‘something’ derives from the *status constructus* of
 5230 the proto-Japhug pronoun **t^hi* ‘what’ (see §6.5.1 above) with the indefinite deter-
 5231 miner and numeral *ci* ‘one’. Note that vowel alternation bleeds the sound change
 5232 /**t^hi*/ → /*ts^hi*/, otherwise a form such as †*ts^huci* would have been expected. Its
 5233 reduplicated form *t^hut^huci* has an irregular vocalism // (†*t^hut^huci* would have
 5234 been expected instead).

5235 It can designate specific referents, whose nature is known to the speaker but
 5236 unknown to the addressee (as in 78),³.

- 5237 (78) *tu-nusman-a jyy ri, myzui ui-ftcaka tsuku*
 IPFV-treat-1SG be.possible:FACT but yet 3SG.POSS-manner some
 5238 *pjur-tu ra wo, tce t^hut^huci zo pjur-tu*
 IPFV-exist be.needed:FACT SFP LNK something EMPH IPFV-exist
 5239 *ra*
 be.needed:FACT

5240 ‘I can treat (your illness), but yet another method is needed, something
 5241 (else) is needed.’ (140427 qala cho kWrtsAg, 48-49)

5242 The pronoun *t^huci* also occurs to refer to things whose name is unknown to
 5243 the speaker (as in 79 and 80), even if he/she may have seen the object.

- 5244 (79) *tce nuu nuu-rte nuu tc^hi nyu ma t^huci ci “-za”*
 LNK DEM 3PL.POSS-hat DEM what be:FACT LNK something INDEF ...
 5245 *tu-ti nyu, χsyrza!*
 IPFV-say be:FACT golden.hat
 5246 ‘How is their hat (called), something in ‘za’.... yes, Ἀστράχαν gser.zʷa ‘golden
 5247 hat’!’ (30-mboR, 102)

- 5248 (80) *tce tr-ndzuuy nuu kumy, t^huci k^hutsa kuu-fse*
 LNK INDEF.POSS-resin DEM also something bowl SBJ:PCPbe.like
 5249 *uu-ŋguu tu-rku-nuu tce*
 3SG-inside IPFV-put.in-PL LNK
 5250 ‘The resin, people put it into something like a bowl.’ (07-tAtho, 44)

³ Example (78) is from a tale about a rabbit tricking a snow leopard; the difference of knowledge between the speaker and the addressee concerning the nature of the ‘something’ is crucial to the plot.

5251 It is also used for non-specific referents whose nature is entirely unknown, as
 5252 in (81) and (82).

- 5253 (81) *tce myzui t^hut^hyci ta-nnuu-rku-nu* *kuma*
 LNK yet something AOR:3→3'-AUTO-put.in-PL SFP
 5254 ‘They also probably gave them something else.’ (02-deluge2012, 120)
- 5255 (82) *t^huu-mqla_b t^huu-mqla_b ma t^huci fse ci ndza*
 IMP:swallow IMP:swallow LNK something be.like:FACT INDEF reason
 5256 *c^hui-ce cti*
 IPFV:DOWNSTREAM-go be.AFF:FACT
 5257 ‘Swallow it, swallow it, it comes down (into your throat) for some reason.’
 5258 (2005-stod-kunbzang, 87)

5259 The reduplicated form *t^huu~t^hyci*, especially in combination with *fse* ‘be like’,
 5260 can also mean ‘whatever (happened)’, as in (83).

- 5261 (83) *slama ra yuu t^hut^hyci kui-fse, ky-ry-βzjoz ra*
 student PL GEN something SBJ:PCP-be.like INF-ANTIPASS-learn PL
 5262 *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
 5263 *müj-nyma-nuu, numuara nuu-p^hama ra nu-cki kui-ryfcxt*
 NEG:SENS-do-PL DEM:PL 3PL.POSS-parent PL 3PL-DAT GENR:S/O-tell
 5264 *nuu-ra.*
 SENS-be.needed
 5265 ‘One has to tell the parents whatever concerns the students, whether they
 5266 study seriously and try hard or not.’ (150901 tshuBdWnskAt, 18)

5267 The non-reduplicated form *t^huci* occurs in a correlative construction with the
 5268 form *muci* to mean ‘this and that’, an expression that is used especially in re-
 5269 reporting speech from another person when the speaker does not want to bother
 5270 reporting in details the exact words that have been said.

- 5271 (84) *t^huci ny-me-a ra, muc*i* ny-me-a*
 something do[III]:fact-1SG be.needed:FACT something do[III]:fact-1SG
 5272 *ra*
 be.needed:FACT
 5273 ‘I have to do this and that (so I cannot do X).’ (elicitation)

6 Pronouns

5274 The pronoun *t^huci* ‘something’ can also occur as head of a relative clause as in
5275 (80) above with the relative *t^huci k^hutsa ku-fse* ‘something which is like a bowl’.
5276 This use is most common in texts translated from Chinese, with the indefinite
5277 article *ci* ‘one’ (§9.1.4.1) following relative clause, as in (85).

- 5278 (85) *laχci ci pjur-βzjoz-a, t^huci a-ky-spa ci*
5279 trade INDEF IPFV-learn-1SG something 1SG.POSS-OBJ:PCP-be.able INDEF
a-puu-tu puu-ra
5280 IRR-PFV-exist SENS-be.needed
5281 ‘I have to learn a trade, to have something I am able to do.’ (150902
luban-zh, 12)

5282 With stative verbs in the relative as in (86), this construction has a low degree
5283 meaning ‘a little X’.

- 5284 (86) *tce kuu-wyrum ui-ηguaz kuny t^huci*
5285 LNK SBJ:PCP-be.white 3SG.POSS-inside:LOC also something
kuu-ypyulu kui-fse ci ηu tce,
5286 SBJ:PCP-greyish SBJ:PCP-be.like INDEF be:FACT LNK
‘(Silver) is white with a little greyish colour.’ (30-Com, 176)

5287 The reduplicated form of the the indefinite pronoun *t^hut^hyci* can be used as
5288 an interrogative pronoun, as in (87). This construction is similar in meaning
5289 to Chinese 一些什么 <yíxīshénme> ‘what kinds of things’, and is attested in
5290 particular with the verbs *ti* ‘say’ and *ra* ‘have to, need’. By using this form, the
5291 speaker implies that the addressee necessarily knows the answer to the question.
5292 For instance, in (87), a sentence from a text enumerating the mountain names in
5293 Kamnyu, the names had been written before hand on a piece of paper, and I was
5294 reading them one by one to Tshendzin; given the fact that the name had been
5295 written down, it was obvious that I necessarily knew the answer to that question
5296 (on the use of the Inferential in this example, see §21.5.2.3).

- 5297 (87) *nui ui-pa t^hut^hyci to-ti-a?*
5298 DEM 3SG.POSS-down something IFR-say-1SG
‘What did I say after that?’ (140522 Kamnyu zgo, 58)

5299 There are very marginal examples of *t^huci* ‘something’ used as an indefinite
5300 prenominal determiner (§9.1.4.2).

5301 The pronoun *t^huci* ‘something’ can take various modifiers, for instance the
5302 identity modifier *kumaz* ‘other’ (§9.1.7) as in (88).

- 5303 (88) *ki mbro ki nuu-ky-ntsye tce, [kumab t^huci]*
DEM:PROX horse DEM:PROX IPFV-INF-sell LNK other something
5304 *nuu-ky-syndu to-nuakryz-ndzi*
IPFV-INF-exchange IFR-discuss-DU
5305 ‘They discussed about selling their horse, and exchanging it for
5306 something else.’ (150822 laoye zuoshi zongshi duide-zh, 41)

5307 No example of *t^huci* with topic markers contributing to mark definiteness such
5308 as *nuu* or *içq^ha* (§9.1.4.3) have been found in the corpus.

5309 6.6.3 *ts^hitsuku* ‘whatever’

5310 The pronoun *ts^hitsuku* ‘whatever’ combines the interrogative pronoun *ts^hi* ‘what’
5311 (replaced by *t^hi* ‘what’, a borrowing from Tibetan, in Kamnyu Japhug, but still
5312 attested in Mangi village, see §6.5.1 above) with the mid-scalar quantifier *tsuku*
5313 ‘some’ (see §9.1.3.2; also found as a partitive pronoun, §6.7.2). Unlike *t^huci* ‘some-
5314 thing’, is not used for specific referents. Example (89) illustrates its most common
5315 use. The variant form *t^hitsuku*, without the sound change **t^hi → ts^hi*, is also used
5316 by speakers of the Kamnyu dialect.

- 5317 (89) *ky-nuu-βluu tce ckryz wuma zo pe ma nuunu, nuunu*
INF-AUTO-burn LNK oak really EMPH be.good:FACT LNK DEM DEM
5318 *yuu ui-smumba nuu sycke, tcendyre ts^hitsuku kú-wy-sqa tce,*
GEN 3SG.POSS-flame DEM burning LNK whatever IPFV-INV-cook LNK
5319 *zaza zo ku-yy-smi c^ha, ts^hitsuku*
soon EMPH IPFV-CAUS-be.cooked can:FACT whatever
5320 *tú-wy-stu-ylā tce, zaza tu-suu-yle*
IPFV-INV-CAUS-be.boiling LNK soon IPFV-CAUS-CAUS-be.boiling[III]
5321 *c^ha.*
can:FACT
5322 ‘For burning, oak is very good, the flames (from its wood) are very hot,
5323 whatever one cooks, it cooks it quickly, whatever one boils, it boils it
5324 quickly.’ (08-CkrAz, 4-5)

5325 In many cases, it is better translated as ‘all kinds of things’, as in (90).

- 5326 (90) *tce nuutcu kumy ui-jas ui-ntsi t^hpi*
LNK DEM:LOC also 3SG.POSS-hand 3SG.POSS-one.of.a.pair staff
5327 *pjuu-sytse ui-jas ui-ntsi kuu ts^hitsuku*
IPFV-plant[III] 3SG.POSS-hand 3SG.POSS-one.of.a.pair ERG whatever

6 Pronouns

- 5328 *nua-z-nyme qhe, zara nua-ndz̥ts^hi tu-βze, fsapab ra*
5329 IPFV-CAUS-do[III] LNK 3PL 3PL.POSS-food IPFV-make[III] animal PL
5330 *nua-ndz̥ts^hi nua-βze*
5331 3PL.POSS-food IPFV-make[III]
5332 ‘Even like that, she supports herself with a staff in one hand, and with the
5333 other hand she does all kinds of things, makes their food, she makes food
5334 for the animals.’ (14-siblings, 54)
- 5335 As other indefinite pronouns, *ts^hitsuku* ‘whatever’ is not normally used with
5336 negation, but such sentences do occur in the corpus in translations from Chinese,
5337 as (91). They are not idiomatic Japhug, and only marginally grammatical.
- 5338 (91) *ts^hitsuku muu-to-ti, q^he tcendyre kui-rŋgu jo-nuace q^he*
5339 whatever NEG-IFR-say LNK LNK SBJ:PCP-lay.down IFR-go.back LNK
5340 *ko-nuu-rŋgu.*
5341 IFR-AUTO-lay.down
5342 ‘He did not said anything, went back to sleep and laid down in bed.’
5343 (150902 qixian-zh, 91)

5340 6.6.4 *cumycu* ‘whoever, anybody’

5341 There is no indefinite pronoun for human referents ‘somebody’ in Japhug corre-
5342 sponding to *t^huci* ‘something’ – a generic noun with the indefinite determiner
5343 *ci* ‘one’ such as *turme ci* ‘a man’ is used instead. There is nevertheless a free
5344 choice pronoun *cumycu* ‘whoever, anybody’ (see Haspelmath 1997: 48–52 on
5345 the differences with universal quantifiers), which, however, is not very common.
5346 As example (92) shows, it can take the ergative *kui*, and the verb receives plural
5347 indexation (§14.6.2).

- 5348 (92) *tcaχkyr k^hutsa nuu bo t^ham q^he cumycu kui ku-nuu-ntc^hoz-nuu*
5349 tin bowl DEM ADVERS now LNK anybody ERG IPFV-AUTO-use-PL
5350 *cti*
5351 be.AFF:FACT
5352 ‘Now anybody can use tin bowls.’ (unlike before, when only important
5353 people could use it, 160702 khWtsa, 26)

5352 6.6.5 *cisc^hiz* ‘somewhere’

5353 The indefinite pronoun *cisc^hiz* ‘somewhere’ comprises the indefinite *ci* ‘one’ and
5354 the approximate locative (*s)c^hiz* (see §8.2.4.2). It occurs with or without the loca-

5355 tive postposition *ri*, as in (93) and (94). It can refer to static location, or motion
 5356 from or towards a direction.

- 5357 (93) *cisc^hiz*, *t^hts^hob* *wi-ta^h* *kui-fse*, *tx-jtsi* *wi-ta^h*
 somewhere nail 3SG-ON SBJ:PCP-be.like, INDEF.POSS-pillar 3SG-ON
 5358 *kui-fse*, *nunura*, *nunutcu kú-wy-βra^h* *tce*,
 SBJ:PCP-be.like, DEM:PL DEM:LOC IPFV-INV-attach LNK
 5359 ‘One attaches (their noseband) somewhere, like on a nail, on a pillar.’
 5360 (150902 kAxtCAr, 6)
- 5361 (94) *nunu cisc^hiz* *ri* *tú-wy-z-nundzu^h* *tce* *juú-wy-ta^h*.
 5362 DEM somewhere LOC IPFV-INV-CAUS-be.vertical LNK IPFV:WEST-INV-put
 5363 ‘One puts it vertically somewhere.’ (14-tasa, 62)

5364 6.6.6 Interrogative pronouns used as free-choice indefinites

5365 Non-specific free-choice (Haspelmath 1997: 48) indefinite referents can be ex-
 5366 pressed by interrogative pronouns in Japhug. Constructions where this function
 5367 is attested include correlatives (§23.2.5), as in (95) and universal concessive con-
 5368 ditionals (§25.2.3.3) as in (96).

- 5369 (95) *a-purwui*, [*ŋotcu l^h-tua-rŋgwi* *zo* *q^he*], *nutcu*
 1SG-donkey where AOR:UPSTREAM-2-lay.down EMPH LNK DEM:LOC
 5370 *r^hzi-tci* *ŋu* *ma*,
 stay:FACT-1DU be:FACT because
 5371 ‘My donkey, we will stay wherever you lay down.’ (28-qAjdoskAt, 38)
- 5372 (96) [*t^hŋjtcu fsan* *k^h-ta* *tx-ra*] *zo* *tce* *nunu*
 when fumigation INF-put AOR-be.needed EMPH LNK DEM
 5373 *tu-βlui-nu^h* *tce*,
 IPFV-burn-PL LNK
 5374 ‘Whenever there is need to make fumigations, they burn it.’ (15-YaBrWG,
 5375 31)

5376 This meaning also occurs in infinitival subordinate clauses, in particular in the
 5377 expression *t^hci k^h-c^ha* ‘do whatever *X* can to *Y*’, as in example (97).

- 5378 (97) [*t^hci k^h-c^ha*] *zo* *c^hwi-p^hut-nu^h*,
 what INF-can EMPH IPFV-remove-PL
 5379 ‘People do whatever they can to remove (this plant).’ (12-Zmbroko, 119)

6 Pronouns

5380 In both correlative relatives and universal concessive conditionals, the interrogative pronoun often occurs with verb with partial reduplication on the last
 5381 syllable of the stem and/or the autive *nua-* prefix (§19.1.4, §25.2.3.3).

5383 With *tc^{hi}* ‘what’, this construction expresses the meaning ‘whatever; no matter what’ in intransitive subject (98), object (99) or semi-object (100, see §14.4.2)
 5384 functions.

- 5386 (98) *lú-wy-sti tce tce nua w-ŋgwi [tc^{hi} pui-nui-ŋw~ŋu] nua*
 5387 IPFV-INV-block LNK LNK DEM 3SG-inside what PST.IPFV-AUTO-be DEM
pui-mnyt múaj-c^ha
 5388 IPFV-be.spoiled NEG:SENS-can
 5389 ‘One seals (its opening) and whatever (food) is inside will not be spoiled.’
 (150828 kodAt, 14)

- 5390 (99) *[tc^{hi} t̪r-tua-nua-tur~tut] zo ju-yi cti*
 5391 what AOR-2-AUTO-say[II] EMPH IPFV-come be.AFF:FACT
 ‘Whatever you say will come.’ (2003twxtsa, 117)

- 5392 (100) *nyzo tc^{hi} kua-star~stu-a zo yu*
 5393 2SG what 2→1-do.like-1SG EMPH be:FACT
 ‘Whatever you do to me (will be fine).’ (28-qAjdoskAt, 40)

5394 With *çui* ‘who’, the construction means ‘whoever; regardless of who; no matter
 5395 who’. Examples are found with the non-specific referent in intransitive subject
 5396 (101), transitive subject (102), or oblique argument (103) functions. Note that it
 5397 often occurs with plural indexation.

- 5398 (101) *tusqar nua kuruu turme ra my-kua-rga maka zo*
 5399 tsampa DEM Tibetan person PL NEG-SBJ:PCP-like at.all EMPH
me, [çui pui-nua-ŋw~ŋu] zo, tusqar a-pui-tu q^he,
 5400 not.exist:FACT who PST.IPFV-AUTO-be EMPH tsampa IRR-IPFV-exist LNK
tcendyrre, nui-ky-ndza tu-rtaš cti,
 5401 LNK 3PL.POSS-OBJ:PCP-eat IPFV-be.enough be:AFF:FACT
 5402 ‘Among Tibetan people, everybody likes tsampa (‘there is no one who
 5403 does not like it’), no matter who, if they have tsampa, they have enough
 to eat.’ (2002tWsqr2, 9)
- 5404 (102) *tce [çui kua pa-nua-mtua~mto-nua] zo kuki yuu, nua-k^ha*
 5405 LNK who ERG AOR:3→3'-see-PL EMPH DEM.PROX GEN 3PL.POSS-house

- 5405 *yur nur-muntob nur c^hondyre nur-conj^hu nura tce, myzui*
 GEN 3PL.POSS-flower DEM COMIT 3PL.POSS-tree DEM:PL LNK yet
 5406 *nur-<cai> nura, pju-yymui-nui tce,*
 3PL.POSS-vegetable DEM:PL IPFV-praise-PL LNK
 5407 ‘Whoever saw it, the flowers and the trees and the vegetables of their
 5408 house, they praised it.’ (150824 yuanding-zh, 30)
- 5409 (103) *t^ccime ri tuu-rdo^s ma me, tcendyre nuzo [cui yu*
 lady also one-piece apart.from not.exist:FACT LNK 2PL who GEN
 5410 *nur-nuu-k^hur~k^ho-t-a] zo mu^j-nuututsan cti tce,*
 AOR-AUTO-give-PST:TR-1SG EMPH NEG:SENS-be.fair be.AFF:FACT LNK
 5411 ‘There is only one princess, and regardless of whom among you all I give
 5412 her hand to, it will be unfair.’ (140508 benling gaoqiang de si xiongdi-zh,
 5413 227)

5414 Universal concessive conditionals are found with the pronoun *ŋotcu* ‘where’,
 5415 with the meaning ‘no matter where, wherever’ (location or direction from or
 5416 to), as in (104). This free-choice indefinite meaning of *ŋotcu* is also found in the
 5417 delocutive expression *ŋytçuk^krti,k^hu* ‘obey to everything’, where the interrogative
 5418 pronoun occurs in *status constructus* form *ŋytçu-* with the infinitive of *ti* ‘speak’
 5419 (§16.2.1.9).

- 5420 (104) *[ŋotcu nu^j-wy-tur~ta] zo kuþyz nu^j-þze*
 where IPFV-INV-INDEFINITE~put EMPH type.of.bug IPFV-grow
 5421 *nu^j-cti*
 SENS-be.AFF
 5422 ‘Bugs will grow wherever you put (the meat).’ (28-kWpAz, 48)

5423 No example of multiple partitive use of interrogatives (as in French *qui appor-*
 5424 *tait un fromage, qui un sac de noix*, Haspelmath 1997: 177) is attested in the data
 5425 at hand; mid-scalar quantifiers such as *tsuku* ‘some’ occur instead as partitive
 5426 pronouns (§6.7.2).

5427 6.7 Quantifiers

5428 6.7.1 Universal quantifiers

5429 Several quantifiers meaning ‘all’ exist in Japhug (§9.1.3.1). Among them, *krysufse*
 5430 ‘all’ can be used in the meaning ‘everybody’, as in example (105).

6 Pronouns

- 5431 (105) *kysufse kuu zo ta-nuu mab*
all ERG EMPH put:FACT-PL not.be:FACT
5432 ‘Not everybody puts it.’ (160706 thotsi, 21)

5433 The less common form *mpururi* ‘everybody, each person’ (from Tibetan རූසුරී
5434 *mi.re.re* ‘each man’ also serves as a universal quantifier, as in (106).

- 5435 (106) *mpururi kuu ‘numuu pui-pe’ ntsuu to-ti-nuu*
everybody ERG DEM SENS-be.good always IFR-say-PL
5436 ‘Everybody said ‘It is nice!’ (140521 huangdi de xinzhuang, 214)

5437 The interrogative pronoun *tch'i* ‘what’, appears with the plural demonstrative
5438 determiner *kura* to mean ‘everything’, as in example (107). It is not possible to
5439 express meanings such as ‘everybody’ or ‘everywhere’ by combining the other
5440 pronouns *cuu* ‘who’ or *notcu* ‘where’ with the same demonstrative.

- 5441 (107) *uozo tc'h'i kura ko-tso*
3SG what DEM:PROX:PL IFR-understand
5442 ‘He understood everything.’ (2002qajdoskAt, 115)

5443 There are several words meaning ‘everywhere’, such as *avryndundyr* ‘every-
5444 where’, but they are treated as adverbs rather than pronouns (§22.2.2.2).

5445 6.7.2 Partitive pronouns

5446 The mid-scalar quantifier *tsuku* ‘some’ is used both as a noun determiner (§9.1.3.2)
5447 and as a partitive pronoun, taking case markers and determiners. This construc-
5448 tion expresses a meaning close to that obtained by combining a relative clause
5449 with an existential verb (‘there is someone who...’, §22.5.1.2), as can be seen in
5450 (108) where both constructions are used one after the other.

- 5451 (108) *tsuku kuu zgri tu-ti-nuu nyu, tsuku kuu murkuj*
some ERG plant.name IPFV-say-PL some ERG plant.name IPFV-say-PL
5452 *tu-ti-nuu nyu. murkuj tu-kur-ti tci*
plant.name IPFV-SBJ:PCP-say also exist:FACT plant.name
5453 *tu, zgri tu-kur-ti tci tu ma,*
IPFV-SBJ:PCP-say also exist:FACT LNK
5454 ‘Some call it *zgri*, some call it *murkuj*; there are people who call it *murkuj*,
5455 and also people who call it *zgri*.’ (19-qachGa mWntoR, 168)

5456 The quantifier *tsuku* ‘some’ used as a pronoun generally refers to humans in
 5457 the corpus, but (109) shows that it can also denote plants for instance.

- 5458 (109) *tsuku nar*, *tsuku aqarŋurje*,
 some be.black:FACT some be.light.yellow:FACT
 5459 ‘Some are black, some are light yellow.’ (140505 stonka mWntoR, 5)

5460 Numerals (in particular *ci* ‘one’) and also counted nouns (§7.3.2) can be used
 5461 without head noun with a partitive meaning ‘one of (a group)’ as in (110) and
 5462 (111).

- 5463 (110) *ci yuu tʂ-tcui*, *ci yuu tcʰeme* *tui~tʂ-tu* *nʂ*,
 one GEN INDEF.POSS-son one GEN INDEF.POSS-son COND~AOR-exist LNK
 5464 *βz̥y̥mi* *ku-kʂ-su-βzu*
 husband.and.wife IPFV-INF-CAUS-make
 5465 ‘If one of them has a boy, and the other one has a girl, let us make them
 5466 husband and wife.’ (zrAntCW 5)
- 5467 (111) *ci tʰur-kuu-rguu~rgvz* *juu-cti tce, ci*
 one AOR-SBJ:PCP-EMPH~be.old C-be.AFF LNK one
 5468 *kuu-xtcui~xtci* *juu-cti tce,*
 AOR-SBJ:PCP-EMPH~be.old C-be.AFF LNK
 5469 ‘One of them has grown very old, and one of them is very small.’
 5470 (2011-05-nyima, 140)

5471 This partitive function is also found in combination with personal pronouns,
 5472 as in (112).

- 5473 (112) *nuzora ci kuu a-tuci* *ci ju-tui-yut-nu*
 2PL one ERG 1SG.POSS-INDEF.POSS-water a.little IPFV-2-bring-PL
 5474 *tú-jy*
 QU-be.possible:FACT
 5475 ‘Could one of you bring me some water?’ (150904 zhongli-zh, 51)

5476 6.7.3 Distributive pronouns

5477 The pronoun *zaka* ‘each his own’ and its variant *zakastaka* ‘each his own’ occur
 5478 as pronouns, especially as possessors in an possessive existential construction. It
 5479 can be correlated with a third singular *u-* (113) or a third plural *nu-* (114) prefix
 5480 on the possesum.

- 5481 (113) *tce numaa li qazo nuu kui-jas tu,*
 LNK DEM again sheep DEM SBJ:PCP-be.black exist:FACT
 5482 *kui-wyrum tu, kui-ryuuuuçur kui-fse tu,*
 SBJ:PCP-be.white exist:FACT SBJ:PCP-be.reddish SBJ:PCP-be.like exist:FACT
 5483 *kui-yrñuulaz tu, tce numaa zaka u-mdob*
 SBJ:PCP-be.blueish exist:FACT LNK DEM each.his.own 3SG.POSS-colour
 5484 *tu ma*
 exist:FACT LNK
 5485 ‘There are black sheep, white ones, reddish ones, blueish ones, each has
 5486 his own colour (they come in all types of colors).’ (05-qaZo, 64-66)
- 5487 (114) *li zaka nuu-rmi tu,*
 again each.his.own 3PL.POSS-name exist:FACT
 5488 ‘Each have their own names.’ (150903 tWmNu, 11)

5489 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’
 5490 (which follows possessums, see §9.1.3.3).

5492 6.8 Identity pronoun

5493 The words *kumaa* ‘other’ and *kuçte* ‘other’ occur as prenominal determiners (see
 5494 §9.1.7, also for a discussion on the etymology of the former), but it can also be
 5495 used as a pronoun and take determiners as in (115).

- 5496 (115) *ma kumaa nuara aj muúj-suixsal-a ri, t̪ykʰepyxt̪eu nuu*
 LNK other DEM:PL 1SG NEG:SENS-recognize but bird.sp DEM
 5497 *suixsal-a*
 recognize:FACT-1SG
 5498 ‘The other ones I don’t recognize them, but the *t̪ykʰepyxt̪eu* bird, I do
 5499 recognize it.’ (23-scuz, 46)

5500 The interpretation of both *kumaa* ‘other’ and *kuçte* ‘other’ can be locative
 5501 ‘somewhere else’ as in (116), when the main verb (*ta* ‘put’ in this example) selects
 5502 a goal or a locative adjunct (since locative noun phrases are often unmarked,
 5503 §8.1.8, §8.1.9).

- 5504 (116) *kumaa/kuçte nuu-tuu-ta-t -yu ui-maa?*
 other AOR-2-put-TR:PST be:FACT QU-not.be:FACT
 5505 ‘Did you put it somewhere else?’ (elicitation)

5506 Adding the indefinite determiner *ci* ‘one’ is necessary in this context to convey
 5507 the meaning ‘something else’:

- 5508 (117) *kumab/kwicte ci nuu-tuu-ta-t* *ηu* *ui-taε?*
 other INDEF AOR-2-put-TR:PST be:FACT QU-not.be:FACT
 5509 ‘Did you put something else?’ (elicitation)

5510 Example (118) illustrates that both *kumab* and *kumab ci* can occur in the mean-
 5511 ing ‘another one’ in some contexts (here with the verb *car* ‘search’).

- 5512 (118) *χsui-sŋi my-kur-tsui* *qʰe li kumab ci ju-yuit qʰe,*
 three-day NEG-INF:STAT-pass LNK again other INDEF IPFV-bring LNK
 5513 *li ui-zda jnu-nui-car jnu-cti. tce nuunu*
 again 3SG.POSS-companion IPFV-AUTO-search SENS-be.AFF LNK DEM
 5514 *maka kuŋka nuu ηyn ma, ui-zda nui*
 completely pyrrhocorax DEM be.evil:FACT LNK 3SG.POSS-companion DEM
 5515 *nui-me ui-qʰu my-kui-nyrzak tce kumab*
 AOR-not.exist 3SG.POSS-after NEG-INF:STAT-spend.time LNK other
 5516 *nui-car jnu-cti tce muáj-pe tu-ti-nui*
 IPFV-search SENS-be.AFF LNK NEG:SENS-be.good IPFV-say-PL
 5517 *ŋgryl.*
 be.usually.the.case:FACT
 ‘Not even three days (after hunters kill its mate, the *Pyrrhocorax*) brings
 5519 another one, it looks for another mate. People say that the *Pyrrhocorax*
 5520 is not nice, because not long after its mate has died, it looks for another
 5521 one, it is not good.’ (22-CAGpGa, 84)

5522 The indefinite *ci* ‘one’ combined with the demonstrative determiner *nuu* (or
 5523 *nunuu*) has the meaning ‘the other one’ (the definite counterpart of *kumab* ‘other’),
 5524 as in (119) and (120).

- 5525 (119) *tce ui-jas kuu ki tu-ste*
 LNK 3SG.POSS-hand DEM:PROX IPFV-do.like[III] IPFV-reach.into[III]
 5526 *lu-z-naŋje jnu-ŋu ri, tce ci nuu kuu ui-jas*
 SENS-be but LNK INDEF DEM ERG 3SG.POSS-hand IPFV-bite
 5527 *ku-mtsuy jnu-cti qʰe,*
 SENS-be.AFF:FACT LNK
 ‘(The cat) reaches with its paw (into the whole) like this, but the other
 5529 one (the weasel) bites its paw.’ (27-spjaNkW, 48)

6 Pronouns

5534 Alternatively to the construction in (120) with *tu-rdo&* ‘one piece’ and *ci nu* to
5535 express the meaning ‘one of them and the other ...’, it is possible to use *ci nu*
5536 two times in the same sentence to refer to more than one persons or animals, as
5537 in (121).

- 5538 (121) *tce ci nuunu ju-ce ui-k^huuk^ha ci nuu kuu ui-pu*
 LNK INDEF DEM IPFV-go 3SG-while INDEF DEM ERG 3SG.POSS-intestine
 5539 *tu-ndze, c^hu-u-ryci.*
 IPFV-eat[III] IPFV-pull
 5540 ‘While one of the two (the prey) is (still) going, the other one (the
 5541 predator) eats and pulls its intestine.’ (20-RmbroN, 76)

5542 The dual *ci nuni* ‘the other two’ and plural *ci nura* ‘the other ones’ are also at-
5543 tested, as in (122), showing that *ci* is here completely bleached of numeral mean-
5544 ing.

- 5545 (122) *ci nuni yuu nuu, ndzi-ta-mar*
 INDEF DEM:DU GEN DEM 3DU.POSS-INDEF.POSS-butter tsampa
 5546 *rjy̥yi pjy̥-ηu tce tce nunuu uzo kuu to-ndza*
 IPFV.IFR-be:FACT LNK LNK DEM 3SG ERG IFR-eat
 5547 ‘The tsampa of the other two (sisters) was butter tsampa, and she ate it.’
 5548 (2003-kWBra, 20)

It is also possible in this function to use other modifiers such as numerals, as in (123) with *xsum* ‘three’.

- 5551 (123) *icq^ha ci χsum nuu muu-jo-yi-nuu kuu*
 the.aforementioned INDEF three DEM NEG-IFR-come-PL ERG
 5552 ‘The three other ones, without coming, (said...)’ (140515 congming de
 5553 wusui xiaohai-zh, 45)

As a prenominal determiner, *ci* also has the meaning ‘the other *X*’ (see §9.1.7).

Finally, the noun *turme* ‘person’ (which also occurs to express generic person, §6.2.2) can be used in the meaning ‘someone else’ or ‘other people’, in particular in genitival constructions as in (124).

- (124) *turme u-kʰy̥pa ztu, ki kuu-fse tuu-rzaš lu-znuifsoøspat-a ku-omdzui-a.*
 people 3SG.POSS-yard LOC DEM.PROX SBJ:PCP-be.like one-night
 IPFV-do.the.whole.night-1SG IPFV-sit-1SG
 ‘I would spend an entire night from dusk till dawn sitting in someone
 else’s animal yard.’ (2010-histoire09, 34)

6.9 Demonstrative pronouns

There are two basic demonstratives in Japhug, the proximal *ki* ‘this’ and the distal one *nu* ‘that’, which also occur as demonstrative determiners (see §9.1.2). Table 6.5 illustrates the various demonstrative pronouns that are derived from these basic forms, with reduplicated and emphatic forms. There is in addition a cataphoric pronoun *nyki*, discussed in §6.9.2.2.

Plural and dual forms, as in the case of determiners, are formed by adding *-ra* and *-ni* suffixes (§9.1.1) to the demonstrative root, which undergoes *status constructus* change /i/ → /u/ in the case of proximal demonstratives. Plural forms are given in the table; dual forms are attested but rare and can be predicted (*kuni* ‘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>nunu</i>	<i>uumunu</i>
Proximal, plural	<i>kura</i>	<i>kuukura</i>	<i>uukukura</i>
Distal, plural	<i>nura</i>	<i>nunura</i>	<i>uumunura</i>

The distal demonstratives, being the default forms, are simply glossed as DEM in the examples: only proximal demonstratives are explicitly marked as such in the glosses.

5576 6.9.1 Anaphoric demonstrative pronouns

5577 The basic demonstratives *ki* and *nui* are less often used as pronouns than the other
 5578 ones (they mainly occur as determiners). They nevertheless do occur in all syn-
 5579 tactic functions, including object (in particular with the verb *ti* ‘say’, as in 125,
 5580 where it refers to words that have been previously told to another animal), and
 5581 semi-object (in particular with the verb *stu* ‘do like’ as in 126).

- 5582 (125) *li nui to-ti ri*,
 again DEM IFR-say LNK

5583 ‘(Gesar) said the same thing to the (snow leopard).’ (gesar, 286)

- 5584 (126) *uu-mu nui ku-rqob tce ki tu-ste tce*

3SG.POSS-mother DEM IPFV-hug LNK DEM:PROX IPFV-do.like[III] LNK

5585 ‘It hugs its mother like that.’ (19-GzW, 30)

5586 The distal demonstratives *nui* and *nunu* serve as anaphoric pronouns with any
 5587 type of referent, including humans, but also abstract concepts, inanimate objects
 5588 or plants as in (127), though as mentioned in §6.1, third person pronouns such as
 5589 *uzo* ‘he’ can also have inanimate antecedents.

- 5590 (127) *ts^ha ky-nui-ta ty-ra, smi ky-bluu ty-ra*
 tea INF-AUTO-put AOR-be.needed fire AOR-burn AOR-be.needed
 5591 *pui-nui-ŋu, t^hamaka sko-nui pui-nui-ŋu, tce nui-nui*
 PST.IPFV-AUTO-be tobacco smoke:FACT-PL PST.IPFV-AUTO-be LNK DEM
 5592 *kui smi tu-sui-tcxt-nui.*
 ERG fire IPFV-CAUS-take.out-PL

5593 ‘When they need to boil tea, to make a fire or smoke tobacco, people
 5594 light up the fire with it.’ (15-babW, 226-229)

5595 When a third person mentioned in a discussion is present, the pronoun *uzo*
 5596 ‘he’ is not the optimal way of referring to him/her, and a proximal demonstra-
 5597 tive, in particular the reduplicated *kuki* ‘this one’, is used instead. It can occur to
 5598 present someone to someone else (128) (note that a similar usage exists in West-
 5599 ern languages such as English in the same context) and even to talk about the
 5600 actions of this person, as in (129) and (130).

- 5601 (128) *kuki a-slama ŋu*
 DEM.PROX 1SG.POSS-student be:FACT

5602 ‘This a (former) student of mine.’ (conversation 140510, 17)

- 5603 (129) *kuaiki kuu ta-βzu?*
DEM.PROX ERG AOR:3→3'-make
5604 ‘Did she make it?’ (conversation 140510, 152)

5605 As other pronouns (see §6.1), demonstrative pronouns can take the demonstra-
5606 tive determiner *nuu*, as in (130).

- 5607 (130) *muu~my-puu-jxy tce my-yi-tci ma*
COND~NEG-PST.IPFV-be.acceptable LNK NEG-come:FACT-1DU LNK
5608 *kuaiki nuu fstun-tci ra ma tci-βye*
DEM:PROX DEM serve:FACT-1DU be.needed:FACT LNK 1DU.POSS-orphan
5609 *uu-ku t^buu-kuu-yyrndi*
3SG.POSS-head AOR-SBJ:PCP-support
5610 ‘If it is not possible (to take the old man with us) we will not come, as
5611 we have to serve him, he is the one who adopted us orphans when we
5612 were in dire straits.’ (The old man is presumably present when this
5613 sentence is uttered; 2003nyima2, 122)

5614 The emphatic demonstrative pronouns (which are also used as determiners,
5615 §9.1.2) are built by combining the reduplicated forms of demonstratives with the
5616 third person possessive prefix *uu-*. They are about fifty times less common than
5617 corresponding reduplicated forms, but their function is essentially the same. In
5618 (131), *uumunu* is an anaphoric pronoun whose antecedent is present in the imme-
5619 diately preceding clause.

- 5620 (131) *tce uu-rq^hu kuu-fse ci yyzu tce, umunu kuu*
LNK 3SG.POSS-hull SBJ:PCP-be.like INDEF exist:SENS LNK DEM:EMPH ERG
5621 *uu-rdu nuu tu-cuu-fkaβ kuu-fse puu-ηu.*
3SG.POSS-eyeball DEM IPFV-CAUS-cover SBJ:PCP-be.like SENS-be
5622 ‘It has something like a membrane, and it covers its eyeball with it.’
5623 (description of the nictitating membrane of birds, 140513
5624 sWNgWrmABja, 9)

5625 The demonstrative *nuu* may not refer anaphorically to a particular entity , but
5626 also to an entire situation, as in (132) where it occurs as an adjunct in absolute
5627 form, meaning ‘this way, like that’ (in another version of the same story, we find
5628 *nuu kuu-fse* ‘like that’ instead of *nuu* in the same context).

- 5629 (132) *nunu u-mju nautcu zuu li, qapri, nyki, kui-pas*
DEM 3SG.POSS-bank DEM:LOC LOC again snake FILLER SBJ:PCP-be.black
5630 *nua kuu kuu-wýrum nua uu-qiuu zo c^hy-mqlab tce nua*
DEM ERG SBJ:PCP-be.white DEM 3SG.POSS-half EMPH IFR-swallow LNK DEM
5631 *pjy-ryzi-ndzi.*
IFR.IPFV-stay-DU
5632 ‘On the bank (of the lake), there was again a black snake that had
5633 swallowed half of a white snake, and they were staying (stuck) like that.’
5634 (28-smAnmi, 104)

5635 6.9.2 Medial and cataphoric pronoun

5636 6.9.2.1 Medial demonstrative

5637 In addition to the proximal and distal demonstratives, there is a considerably
5638 rarer medial demonstrative *nyki*, in examples such as (133) and (134), which means
5639 ‘your place, near you’, as opposed to ‘here’.

- 5640 (133) *kutcu ko-qanuu p^hor^bp^bob zo, nyki*
DEM.PROX:LOC IFR-be.dark IDPH(II):completely EMPH DEM:MEDIAL
5641 *nautcu uu-kó-qanuu?*
DEM:LOC QU-IFR-be.dark
5642 ‘Here it is already dark, is it (also) dark in your place?’ (conversation,
5643 referring to the time lag between Paris and Mbarkham)
- 5644 (134) *ki kura nua-k^ham-a tce nyki nua azwy*
DEM:PROX DEM:PROX:PL IPFV-give-1SG LNK DEM:MEDIAL DEM 1SG:GEN
5645 *nua-k^hym je*
IMP-give SFP
5646 ‘I give (you) these (toys), give me that one.’ (2012 Norbzang, 135)

5647 The medial demonstrative *nyki* can be historically analyzed as a combination
5648 of the proximal demonstrative *ki* with the second person possessive *ny-*. How-
5649 ever, equivalent dual or plural forms such as †*ndziki* or †*nuki* are impossible (the
5650 equivalent meaning can only be expressed with the dative, using a form such as
5651 *ndzizo ndzi-p^he* ‘at your_{du} place’, §8.3.1).

5652 6.9.2.2 Cataphoric pronoun

5653 In addition to its function as a medial demonstrative (§6.9.2.1), the demonstrative
 5654 *n̄ki* also occurs to express cataphoric reference. It occurs especially when the
 5655 speaker hesitates and uses it as a filler, followed by a clause with the same verb
 5656 (examples 135 and 136) or just with the same auxiliary (137).

- 5657 (135) *qra n̄u kui, mbala na-lxt ny tce n̄ki*
 female.yak DEM ERG male.young.bovid AOR:3→3' LNK LNK DEM:CATAPH
 5658 *n̄u-ŋu, jla n̄u-ŋu,*
 SENS-be male.hybrid.yak SENS-be
 5659 ‘When a female yak has a young (with a bull), it is..., it is a hybrid yak.’
 5660 (05-qambrW, 64)

- 5661 (136) *tce n̄u tuu-ci yuu u-taš nunutcu, n̄ki*
 LNK DEM INDEF.POSS-water GEN 3SG-on DEM:LOC DEM:CATAPH
 5662 *ny-χt̄r, ieq^ha <yujinxiang> ky-ti muntoš n̄u*
 IFR-spread the.aforementionned tulip OBJ:PCP-say flower DEM
 5663 *yuu uj-waš n̄u ny-χt̄r.*
 GEN 3SG.POSS-leaf DEM IFR-spread
 5664 ‘She spilled on the water... she spilled the petals of the flower called
 5665 “tulip”. (150818 muzhi guniang-zh, 69)

- 5666 (137) *tce nar-nuŋa ra n̄ki ny ci, tce*
 LNK 2SG.POSS-COW PL DEM:CATAPH be:FACT QU LNK
 5667 *n̄u-tuu-nym q^he, tce zara ku-n-nu-yi-n̄u*
 IPFV:WEST-2-chase[III] LNK LNK 3PL IPFV:EAST-AUTO-VERT-come-PL
 5668 *ny ci?*
 be:FACT QU
 5669 ‘And your cows, are they (still) like that, you let them out of the pen (in
 5670 the morning), and they come back home on their own (in the evening)?’
 5671 (taRrdo conversation, 28-29)

5672 It is also used when the speaker alerts the addressee that a long description
 5673 follows as in (138), as in English ‘(he said) the following’. Given the fact the
 5674 Japhug is strictly verb-final and has pre-verbal complements (§22.1.1), this is a
 5675 strategy employed to avoid relegating the main verb to the end of the description.

- 5676 (138) *k^hopi kuu nqiazwyr ci nuu-muum rca*
 ANTHR ERG bitter.wormwood INDEF SENS-be.tasty UNEXPECT
- 5677 *nuu-saχas zo tce nyki tu-stu-nuu nuu-ŋu*
 SENS-be.extremely EMPH LNK DEM:CATAPH IPFV-do.like-PL SENS-be
- 5678 *nuu-ti, nuu-p^hut-nuu q^he kuu-zri... ki jamar zo*
 SENS-say IPFV-take.out-PL LNK SBJ:PCP-be.long DEM:PROX about EMPH
- 5679 *kuu-zri nuu-p^hut-nuu q^he nyki, uu-ku*
 SBJ:PCP-be.long IPFV-take.out-PL LNK DEM:CATAPH 3SG.POSS-head
- 5680 *uu-mtuu kui-fse nuutcu kú-wy-ndo q^he tce*
 3SG.POSS-crest SBJ:PCP-be.like DEM:LOC IPFV-INV-take LNK LNK
- 5681 *uu-pa nuu, uu-jwaa nuu c^hui-χcos-uu*
 3SG.POSS-under DEM 3SG.POSS-leaf DEM IPFV:DOWNTSTREAM-take.out-PL
- 5682 *nuu-ŋu...*
 SENS-be
- 5683 ‘Kebei says that bitter wormwood is very tasty, and that they prepare it
 5684 in the following way: they pluck (wormwoods) that are this big, take it
 5685 by something that looks like a crest on the top, and prune away the
 5686 leaves under it... (continued by several paragraphs)’ (conversation
 5687 140510)

5688 The pronoun *nyki* is also used as a determiner (§9.1.2) and the speech filler *nyk-*
 5689 *inu* (§10.3) derives from the combination of *nyki* with the determiner *nuu*. There
 5690 are no plural or dual forms of *nyki*, but it can be combined with dual or plural
 5691 determiners as in (139).

- 5692 (139) *tce nyki nura, mk^hyrman^h ra pjy-ruususo-nuu tce,*
 LNK DEM:CATAPH DEM:PL people PL IFR-think-PL LNK
- 5693 ‘And these, the people thought about it.’ (150829 jidian-zh, 138)

5694 It is likely that the cataphoric demonstrative use of *nyki* derives from its func-
 5695 tion as a medial demonstrative, suggesting the historical pathway in (140).

- 5696 (140) 2SG+DEM:PROX ⇒ DEM:MEDIAL ⇒ DEM:CATAPHORIC ⇒ SPEECH FILLER

5697 6.9.3 Locative forms of the demonstrative pronouns

5698 The locative postposition *tču* (§8.2.4.1) can be combined with the demonstrative
 5699 pronouns *nuu* and *ki* and their reduplicated and emphatic forms, as shown in
 5700 Table 6.6.

5701 The locative pronouns in *-t̪eu* can be followed by the postposition *zui* as in (141),
5702 but not by the locative *ri*.

- 5703 (141) *mbrosta ci tu tce, nutcu zu mbro nu*
 stable INDEF exist:FACT LNK DEM:LOC LOC horse DEM
 5704 *a-ja.*
 PASS-keep.attached:FACT

5705 ‘There are stables (in this palace), and the horse is kept there.’ (140507
5706 jinniao, 174)

5707 The proximal demonstrative *ki* undergoes *status constructus* (§5.4) alternation
5708 and changes to *ku-* when combined with the locative postposition *tcu* (§8.2.4.1),
5709 with further assimilation to [u] due to the regressive vowel assimilation (§3.3.1.2)
5710 when followed by *-tcu*.

In addition to the locative pronouns in *-tɕu*, there is an entirely parallel series of pronouns in *-re*; this suffix is probably unrelated to the locative postposition *ri*, and may rather reflect the plural marker *ra* (which can be used to mark vague location, see §9.1.1.2) with the proto-Gyalrong locative suffix **-j* and regular vowel fusion (§8.2.4.4). These locative pronouns are much less commonly used in the corpus than those of the *-tɕu* 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>kure</i>	<i>kukuire</i>	—
DIST.SG	<i>nure</i>	<i>nunure</i>	<i>ununure</i>

Locative pronouns in *-re* can appear on their own as in (142), or with the locative postposition *ri* as in (143), but never with the other postpositions *zuu* and *tcuu*.

- 5720 (142) *azo muu-puu-ryzi-a, kure puu-cti-a.*
 1SG NEG-PST.IPFV-stay DEM.PROX:LOC PST.IPFV-be.AFF-1SG
 5721 'I was not present (there), I was here.' (conversation140510 , 84)

- 5722 (143) *tce kukutcu, <zhuānmen>, nykinuu, tuu-cya*
 LNK DEM.PROX:LOC specially FILLER INDEF.POSS-tooth
 5723 *uu-kuu-nusmyñ, tcet^{hi}, nduc^hu kure ri*
 3SG.POSS-SBJ:PCP-treat downstream west:APPROX.LOC DEM.PROX:LOC LOC
 5724 *ryzi ma, nūnū wuma zo mk^hyz tce,*
 stay:FACT LNK DEM really EMPH be.expert:FACT LNK
 5725 ‘Here (in Mbarkham), there is someone who specially treats teeth in the
 5726 west (of Mbarkham).’ (27-tApGi, 139-140)

5727 Locative adverbs, such as those based on the approximate locative *-c^hu* (§8.2.4.2)
 5728 can be combined with the locative pronouns in *-re* as shown by the phrase *nduc^hu*
 5729 *kure ri* ‘in the west side’ in (143).

5730 Both series of locative pronouns can express static location as in examples
 5731 (142) to (144), or motion towards a place as in (145) and (146).

- 5732 (144) *nūtcu ku-ryzi-nūi nūi-ηu.*
 DEM:LOC IPFV-stay-PL SENS-be
 5733 ‘They live there.’ (20-RmbroN, 4)

- 5734 (145) *azō akui kyntc^has ri ky-ari-a tce, nūi kōymiuaz*
 1SG east street LOC AOR:EAST-go[II]-1SG LNK DEM only.after
 5735 *kure nūi-nūi-ye-a*
 DEM.PROX:LOC AOR:WEST-VERT-come[II]-1SG
 5736 ‘I went there on the street, I just came back here.’ (conversation,
 5737 2013-12-02)

- 5738 (146) *βyytu nūi yūi uu-χcyl ri spor.* [...]
 upper.grindstone DEM GEN 3SG.POSS-middle LOC have.a.hole:FACT [...]
 5739 *nūnutcu tce ky-yndzur uu-spa nūra pjú-wy-lst.*
 DEM:LOC LNK OBJ:PCP-grind 3SG.POSS-material DEM:PL IPFV-INV-throw
 5740 ‘There is a hole in the middle of the upper grindstone, into which one
 5741 pours (the grains) that are to be ground.’ (160705 khABGa, 14)

5742 Apart from its locative uses, *nūtcu* can express a temporal meaning ‘at that
 5743 time’ as in (147) and (148).

- 5744 (147) *<qidian> tce ty-mjym ta-za a-pu-ηu tce, tce nūnū*
 seven.o'clock LNK AOR-hurt AOR:3→3'-start IRR-IPFV-be LNK LNK DEM
 5745 *tui-sŋi nūi tu-mjym, tui-rzaas nūi tu-mjym tce,*
 one-day DEM IPFV-hurt one-night DEM IPFV-hurt LNK

5746 *w-fso* <*qidian*> *mxct̪sa nur muíj-zí* *tce*
 3SG.POSS-tomorrow seven.o'clock until DEM NEG:SENS-subside LNK
 5747 ***nwt̪cu tce kui-xtcua~xtci*** *tua-zí* *ju-ze* *ju-ηu*
 DEM:LOC LNK SBJ:PCP-EMPH~be.small INF-subside IPFV-start[III] SENS-be
 5748 *tce*
 LNK
 5749 '(For instance), if (the headache) starts at seven o'clock, it hurts for one
 5750 day and one night, and subsides only in the next day at seven, **at that**
 5751 **time** it starts to subside a little.' (24-pGArtsAG, 93-96)

5752 (148) *nwt̪cu tuarme nura pxjkʰu pjy-me* *ju-ηu tce.*
 5753 DEM:LOC people DEM:PL yet IFR.IPFV-not.exist SENS-be LNK
 5754 'At that time (the time of the dinosaurs), humans did not exist yet.'
 (180421 bawanglong, 33)

5755 In addition, it can convey in some contexts a more abstract meaning like 'in
 5756 those circumstances', as in (149).

5757 (149) *tceri nwt̪cu kurny tcizo kyndzibzaŋsa nu*
 5758 but DEM:LOC also 1DU COLL:friend DEM
mu-pur-nu-qia-tci
 5759 NEG-AOR-AUTO-tear.down-1DU
 5760 'But even in those circumstances (working in different places, and
 5761 meeting only once a year), we did not lose our friendship.' (12-BzaNsa,
 42)

5762 As for *kut̪cu*, it is almost exclusively used for spatial location; a metaphorical
 5763 usage is attested in (150), where it means 'in this story'.

5764 (150) *icqʰa nykinu <piqiu> nuw ui-rmi* *ky-spa-t-a.*
 5765 FILLER FILLER ball DEM 3SG.POSS-name AOR-be.able-PST:TR-1SG
nxki, tsʰuβduun ra kui rgoylu tu-ti-nu ju-ηu. izora, tce
 5766 FILLER TOPO PL ERG ball IPFV-say-PL SENS-be 1PL LNK
kut̪cu tce nuw tu-ti-a ηu.
 5767 DEM.PROX:LOC LNK DEM IPFV-say-1PL be:FACT
 5768 'I have learned how to say "ball", people from Tshobdun call it *rgoylu*, we
 5769 (do not have this word but) this is how I am going to say it here (in this
 story). (140514 huishuohua de niao, 4)

6 Pronouns

5770 The forms *mutçu* and *nunutçu* following a noun phrase result from the fusion
5771 of the postnominal demonstrative determiners *nū* and *nūmu* with the locative
5772 postposition *tçu* (§8.2.4.1), and are not to be analyzed as locative pronouns.

5773 7 Numerals and counted nouns

5774 7.1 Plain numerals

5775 This section describes the morphology of cardinal and ordinal numerals in Ja-
5776 phug. Unlike some other languages of the Sino-Tibetan family, which have vi-
5777 gesimal features or subtractive numerals (Mazaudon 2002), Japhug has a strict
5778 decimal system.

5779 In addition to plain numerals, Japhug has a system of numeral prefixes (§7.3.1)
5780 which occur on a specific type of nouns, *counted nouns*, discussed in §7.3.

5781 7.1.1 Numerals 1-10

5782 The basic numerals from one to ten are indicated in Table 7.1. The corresponding
5783 numeral prefixes are discussed in §7.3.1.1.

5784 Some dialects of Japhug other than the Kamnyu variety use *tʂy* ‘one’ instead.
5785 In calculations (see §7.6), the generic counted noun *tuu-rdoʂ* ‘one piece’ (§7.3.2)
5786 with the numeral prefix ‘one’ (§7.3.1) is used instead of *ci* ‘one’ to express the
5787 number ‘one’.

5788 Apart from *ci* ‘one’ and *sqi* ‘ten’, these numerals have clear cognates in lan-
5789 guages outside of the Gyalrongic group, even in Tibetan and Chinese; Table 7.1
5790 includes the Tibetan equivalent of these numerals (the numerals that are *not*
5791 cognate with their Japhug equivalents are indicated between brackets) and the
5792 Japhug pronunciation of these Tibetan words in borrowed words (see §7.1.6.1, in
5793 particular Table 7.4).

5794 The numerals from 2 to 9 have a prefix, uvular *χ-/ʂ-* in ‘two’ and ‘three’ and
5795 velar *kʊu-* from ‘four’ to ‘nine’. These prefixes do not appear in some derived forms
5796 such as the numbers 11-19 (Table 7.1.3 below) or approximate numerals (§7.2).

5797 The numeral *ʂnuz* ‘two’ is etymologically related to the dual modifier *ni* (§9.1.1.1),
5798 though the latter lacks the uvular prefix and the sibilant suffix (the vowel differ-
5799 ence is expected, as after adding the suffix /*-s/, the proto-Gyalrong rhyme *-is
5800 regularly yields Japhug -uz). The adverb *ʂnaʂna* ‘both’ (§9.1.1.1) is also probably
5801 related, though its morphological relationship with *ʂnuz* ‘two’ does not fit any
5802 known pattern.

5803 The superficial resemblance between *bmuz* ‘two’ and *kučmuz* ‘seven’ could sug-
 5804 gest the existence of a former quinary system. However, the fact that these two
 5805 numerals have different vowels in Situ (Cogtse *kəniēs* ‘two’ and *kəčnās* ‘seven’,
 5806 from [Huáng & Sūn 2002](#)) makes this assumption less likely; it is in any case
 5807 irrelevant to the synchronic grammar of Japhug.

5808 Unlike the other numerals in Table 7.1, the free numeral *χsum* ‘three’ is iden-
 5809 tical to the form found in compound loans such as *kumtçʰoχsum* ‘triratna’ from
 5810 དཀོན་མཚོ་གླྙྡུ་ *dkon.mtcʰog.gsum* ‘triratna’. Therefore, one cannot exclude the possi-
 5811 bility that it is a borrowing from Tibetan ཁྲྪ ཁྲྪ *gsum* ‘three’ that replaced the native
 5812 numeral ‘three’ (which was cognate to the Tibetan form, and phonetically simi-
 5813 lar to it). In this hypothesis, the alternative forms *-fsum* and *fsu-* for ‘three’ found
 5814 in the numerals 11-19 (§7.1.3) and tens (§7.1.2) could be remnants of the native
 5815 numeral. Alternatively, it is possible that the native word and the borrowing are
 5816 true cognates, and happen to have the same form by coincidence.

5817 The numeral *kungut* ‘nine’ has a coda *-t* which is not found in the cognates
 5818 of this numeral in Situ and languages outside of Gyalrongic, suggesting analog-
 5819 ical spreading of the coda from *kurcat* ‘eight’. This innovation is shared by all
 5820 Northern Gyalrong languages: Tshobdun has *kón"gát* ([Sun & Blogros 2019](#)) and
 5821 Zbu *kən"gát* ([Gong 2018](#): 130). The same analogy independently occurred in the
 5822 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 གཅུག ‘one’	<i>χtciu</i>
2	<i>bmuz</i>	ཇ གນུས ‘two’	<i>βniz</i>
3	<i>χsum</i>	ཇྲྪ ཁྲྪ ‘three’	<i>χsum</i>
4	<i>kuβde</i>	ཇ བྱି ‘four’	<i>βzi</i>
5	<i>kumju</i>	ཇ སྤྱ ‘five’	<i>rja</i>
6	<i>kuṭṣy</i>	ཇ རྩ ‘six’	<i>tṣui</i>
7	<i>kučmuz</i>	(ཇ རྩ རྩ ‘seven’)	<i>βdun</i>
8	<i>kurcat</i>	ཇ རྩ རྩ ‘eight’	<i>βjrt</i>
9	<i>kungut</i>	ཇ རྩ ‘nine’	<i>rgu</i>
10	<i>sqi</i>	(ཇ རྩ རྩ ‘ten’)	<i>ftciu</i>

5823 Numerals from 1 to 99 are a subclass of unpossessible nouns (§5.2), and can-
 5824 not take possessive prefixes; they differ in this regard from the higher numerals

5825 (§7.1.4, §7.2).

5826 **7.1.2 Tens**

5827 The numerals for tens (Table 7.2) are relatively straightforward. With the exception of *yn̥sqi* ‘twenty’ and *fsusqi* ‘thirty’, they are predictable by combining
 5828 *sqi* ‘ten’ with the corresponding numeral prefix (§7.3.1). The numeral *kungusqi*
 5829 ‘ninety’ is ambiguous, as the same form can also mean ‘nine or ten’ (see Table 7.5).

5831 The element *yn̥-* in *yn̥sqi* ‘twenty’ is related to the numeral *ɛnuz* ‘two’, but has
 5832 a velar *y-* prefix instead of the uvular *ɛ-*, and has a different vowel. The adverb
 5833 *ɛnaɛna* ‘both’ is also relatable, but the alternations are not explainable from a
 5834 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>kuβd̥-sqi</i>
50	<i>kumj̥-sqi</i>
60	<i>kuṭṣ̥-sqi</i>
70	<i>kučny-<i>sqi</i></i>
80	<i>kurc̥-sqi</i>
90	<i>kungu-<i>sqi</i></i>

5835 Other numerals under one hundred are built by combining the tens in Table 7.2
 5836 (removing the *-sqi* element) with the units in Table 7.3. For instance, 37 can be
 5837 obtained by putting together *fsusqi* ‘thirty’ and *sqačnuz* ‘seventeen’ as *fsu-sqač-
 5838 nuz*.

5839 **7.1.3 Numerals 11-19 and units**

5840 The numerals 11-19, listed in Table 7.3, serve as the basis for indicating units in all
 5841 following numerals between 21 and 99, by replacing the *-sqi* element of the tens
 5842 (Table 7.2) by the appropriate form. As an example of how to build numerals
 5843 above 19 with a unit 1-9, Table 7.3 illustrates the formation of the numerals 21 to
 5844 29 from *yn̥sqi* ‘twenty’.

5845 The numerals 11-19 present three morphological changes in comparison with
 5846 the basic numerals 1-9.

Table 7.3: Numerals 11-19 and 21-29

10	<i>sqi</i>	20	<i>ynr̥sqi</i>
11	<i>sqa-p-tuγ</i>	21	<i>ynr̥-sqa-p-tuγ</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-rγy</i>	26	<i>ynr̥-sqa-p-rγy</i>
17	<i>sqa-čnuz</i>	27	<i>ynr̥-sqa-čnuz</i>
18	<i>sqa-rcat</i>	28	<i>ynr̥-sqa-rcat</i>
19	<i>sqa-ngut</i>	29	<i>ynr̥-sqa-ngut</i>

5847 First, the form *sqi* ‘ten’ alternates with *sqa-*. The origin of this Ablaut is un-
 5848 known, though it could be a type of *status constructus* (§5.4); some Gyalrongic
 5849 languages, such as Khroskyabs have a similar alternation (Lai 2017: 175–176).

5850 Second, the velar *ku-* and uvular *χ-/β-* prefixes found in the base numerals are
 5851 lost in all numerals 11-19.

5852 Third, a labial element /p/ (*sqaptuy* ‘eleven’, *sqapryy* ‘sixteen’), /m/ (*sqamnuz*
 5853 ‘twelve’), or /w/ (*sqafsum* ‘thirteen’) is inserted between the *sqa-* and the follow-
 5854 ing numeral root. It does not occur in seventeen, eighteen and nineteen (which
 5855 already have a cluster), fourteen and fifteen (which have a cluster with a labial
 5856 as first element).

5857 The form *sqaptuy* ‘eleven’ contains an ablauted form of *try* ‘one’ as second
 5858 element. The cluster *-pt-* in this word is the only case in the language of a /p/
 5859 followed by an obstruent (§4.2.3.1).

5860 In *sqamnuz* ‘twelve’, the labial linker is nasalized by the following *n*. This is
 5861 not a synchronic rule: for instance, a noun *čnaβndžyi* ‘snotty-nosed kid’ has *β*
 5862 allomorph of /w/ before a prenasalized obstruent (§5.5.5.1). However, there are
 5863 other cases of nasalization of labial consonants to /m/ before nasal or prenasal-
 5864 ized consonants in Japhug (see §17.3.1).

5865 In *sqapryy* ‘sixteen’, not only the prefix *ku-* is lost, the *tʂ* affricate of the base
 5866 form *kutʂyy* ‘six’ is replaced by /r/, preceded by the linking element *-p-*. This
 5867 /tʂ/ ~ /r/ alternation is evidence for a sound change **tr-* → /tʂ/ (§4.2.2.4). The
 5868 numeral *kutʂyy* ‘six’ contains two etymological prefixes, *ku-* and a prefix **t-* that
 5869 has fused with the root as *-tʂyy*. This **t-* prefix is possibly related to the *d-* of its
 5870 Tibetan cognate རྒྱା འྲྷྱ ‘six’ .

5871 The numeral prefixes corresponding to the numerals between 11 and 99 are
 5872 discussed in §7.3.1.2.

5873 7.1.4 Hundred and above

5874 There are two ways of expressing numbers above 99 in Japhug. First, the noun-
 5875 like numeral *yurza* ‘one hundred’ can occur on its own or be followed by another
 5876 numeral to express a number between 101 and 199, as in (1).

- 5877 (1) *azō kui-fse kui-yc^huic^ha zo bzuunuu yurza kurcat*
 1SG SBJ:PCP-be.like SBJ:PCP-be.capable EMPH young.man hundred eight
 5878 *ra*
 need:FACT

5879 ‘I need one hundred and eight able young men like me.’ (Norbzang, 16)

5880 The numeral *yurza* ‘one hundred’ cannot be combined with single digit nu-
 5881 mersals to express numbers between 200 and 900. The counted noun¹ *tu-ri* ‘one
 5882 hundred’ is used for this purpose, as in 2. The two suppletive roots for hun-
 5883 dreds are shared with Pumi (the numeral *či* ‘hundred’ vs. the counted noun *-čej*,
 5884 see Daudey 2014: 101; evidence for cognacy with *yurza* and *tu-ri* is presented in
 5885 Jacques 2017c).

- 5886 (2) *χsu-ri jamar ndyre tu-nuu ko, tui-tup^hu nuu*
 three-hundred about LNK exist:FACT-PL SFP one-hive DEM
 5887 ‘There are about three hundred of them, in one hive.’ (26-GZo, 53)

5888 Numerals above the hundreds are all borrowed from Tibetan: *stoytsu* ‘thou-
 5889 sand’, *k^hruutsu* ‘ten thousands’, *mbumχtyr* ‘hundred thousands’ originate from 藏语:
 5890 藏语: *stoy.ts^ho* ‘thousand’, 藏语: *k^hri.ts^ho* ‘ten thousands’ and 藏语: *"bum.t^her* ‘hundred
 5891 thousands’, respectively. Like other numerals, they are postnominal, as shown
 5892 by (3).

- 5893 (3) *NGOcna yuu nuu, w-puu stoytsu tu tu-ti-nuu*
 spider GEN DEM 3SG.POSS-young thousand exist:FACT IPFV-say-PL
 5894 *nuu-ŋu. qajuu yuu nuu, k^hruutsu tu tu-ti-nuu nuu-ŋu.*
 SENS-be fish GEN DEM ten.thousands exist:FACT IPFV-say-PL SENS-be
 5895 ‘People say that spiders have a thousand offspring, and fishes ten
 5896 thousands.’ (26-mYaRmtsaR, 122-123)

¹ Counted nouns are nouns that take an obligatory numeral prefix (§7.3).

5897 The numerals thousand and above can take other numerals as multiplicative
 5898 modifiers, as in (4), where *kutṣy* ‘six’ follows *stoŋtsu* ‘thousand’ to express ‘six
 5899 thousand’. This use illustrates the difference between the numerals *stoŋtsu* ‘thou-
 5900 sand’ and above with *yurza* ‘hundred’, as when the latter is followed by a numeral,
 5901 as *yurza kurcat* ‘one hundred and eight’, it can only be in additive, not multiplica-
 5902 tive, relation to it (see example 1 above). The multiplicative numeral modifier
 5903 to *stoŋtsu* ‘thousand’ cannot be preposed (Tshendzin says of a combination like
 5904 †*kutṣy stoŋtsu* that *nui my-sytso* ‘it does not make sense’).

- 5905 (4) *rŋul tu-xpa tce stoŋtsu kutṣy jarma nui-fsor nui-cʰa*
 money one-year LNK thousand six about IPFV-earn SENS-can
 5906 ‘He can earn about six thousand (renminbi) per year.’ (14-siblings, 178)

5907 To have an additive interpretation, the comitative *cʰo* ‘with’ (or *cʰondyre* ‘with’)
 5908 is used as in (5) and (6).

- 5909 (5) *stoŋtsu ci cʰo kutṣy-ri*
 thousand one COMIT six-hundred
 5910 ‘One thousand six hundred (1600).’ (elicited)
- 5911 (6) *stoŋtsu ci cʰondyre kutṣy*
 thousand one COMIT six-hundred
 5912 ‘One thousand and six (1006).’ (elicited)

5913 In (7), a multiplicative modifier *sqi* ‘ten’ following *kʰruatsu* ‘ten thousands’ is
 5914 used instead of *mbumxtyr* ‘hundred thousands’. The latter numeral, although
 5915 known to native speakers, is hardly ever used in speech.

- 5916 (7) *wi-ky-nukon nunu, rjylkʰyβ kʰruatsu sqi pjy-tu.*
 3SG.POSS-OBJ:PCP-rule DEM country ten.thousands ten IFR,IPFV-exist
 5917 ‘There were a hundred thousand countries under his rule.’ (140518 jinyin
 5918 chengbao-zh, 13)

5919 Unlike numerals under 100, *yurza* ‘one hundred’ and above are alienably pos-
 5920 sessed nouns and can take a third person possessive prefix *wi-* to express an ap-
 5921 proximate number (§7.2).

5922 7.1.5 Ordinals

5923 There are no native ordinal numbers in Japhug, even for ‘first’, which is ex-
 5924 pressed by combining the superlative *stu* ‘most’ (§26.4.1) with the subject par-
 5925 ticipial (§16.1.1) of the verb *myku* ‘be first’ (§20.6). This minimal participial relative

5926 *stu kuu-myku* (§23.5.1) can be used as prenominal modifier as in (8), but most com-
 5927 monly occurs adverbially as in (9).

- 5928 (8) *stu kuu-myku tuu-xpa nuu nuu-rumuntor ma, nuu ma*
 most SBJ:PCP-be.first one-year DEM IPFV-have.flower LNK DEM apart.from
 5929 *uu-mat me*
 3SG.POSS-fruit not.exist:FACT
 5930 ‘The first year, it has flowers, but no fruits.’ (08-qaCti, 35)

- 5931 (9) *stu kuu-myku nuu a-pi kuu piú-wy-sat-a, nuu*
 most SBJ:PCP-be.first DEM 1SG.POSS-elder.sibling ERG AOR-INV-kill-1SG DEM
 5932 *uu-q^hu tce, pyxtcuu ty-sci-a,*
 3SG.POSS-after LNK bird AOR-be.born-1SG
 5933 ‘First, my elder sister killed me, and then I was reborn as a bird.’
 5934 (2005-stod-kunbzang, 396)

5935 With counted nouns (§7.3), it is strictly prenominal, and the counted noun can
 5936 be converted to an inalienably possessed noun (§7.3.4.1); for instance, the noun
 5937 phrase (10) can be used instead of *stu kuu-myku tuu-xpa* in (8). The phrase *stu kuu-*
 5938 *myku* does not occur postnominally.

- 5939 (10) *stu kuu-myku uu-xpa*
 most SBJ:PCP-be.first 3SG.POSS-year
 5940 ‘The first year’ (elicitation based on 8)

5941 There is no specific word meaning ‘last’ in Japhug either, and the participial
 5942 relative *stu kuu-maq^hu* with the subject participle (§16.1.1) of *maq^hu* ‘be after’ is used
 5943 instead; as in the case of *stu kuu-myku*, counted noun to inalienably possessed
 5944 noun conversion is possible, and for instance both (11) and (12) exist.

- 5945 (11) *stu kuu-maq^hu tuu-sŋi*
 most SBJ:PCP-be.after one-day
 5946 (12) *stu kuu-maq^hu uu-sŋi*
 most SBJ:PCP-be.after 3SG.POSS-day
 5947 ‘The last day’ (elicited)

5948 Given the absence of native ordinals, Chinese ordinals are used (§7.1.6.2). Ti-
 5949 betan ordinals are only attested for names of months (§7.1.6.1) and even this use
 5950 is disappearing, as they are being replaced by their Chinese equivalents.

Unlike many languages of the Sino-Tibetan family, the system of birth-order ordinals is very rudimentary. The eldest son is simply called *stu kui-wxti* ‘the one who is the biggest’ as in (13).

- (13) *wu-rjit stu kui-wxti nuu ruunc^hum tṣoma rmi*
 3SG.POSS-child most SBJ:PCP-be.big DEM ANTHR ANTHR be.called:FACT
 ‘Her eldest child is called Rinchen Sgrolma.’ (12-BzaNsa, 62)

The only dedicated birth-order ordinal is *tulyt* ‘the second sibling’ (see §5.1.2.4 and §5.2.3). The inalienably possessed noun *wu-pa* ‘the one under’ can be used to designate any following sibling, and the youngest sibling is designated by the superlative form of the participle of *xtci* ‘be small’ (see example 14, which illustrates all these terms).

- (14) *stu kui-wxti c^hondyre nuu wu-pa nuu tulyt ni*
 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
 really EMPH IFR.IPFV-be.intelligent-DU LNK DEM 3DU.POSS-son most
kui-xtci nuunu, duuxpa ma wuma zo pjy-khe.
 SBJ:PCP-be.small DEM poor.of LNK really EMPH IFR.IPFV-be.stupid
 ‘The eldest son and the one under him, the second one, were very
 intelligent. Their smallest son, poor of him, was very stupid’ (140430 jin
 e-zh, 5-6)

7.1.6 Tibetan and Chinese numerals

In addition to the native numerals presented above, Tibetan and Chinese numerals commonly occur in Japhug stories and conversations.

7.1.6.1 Tibetan numerals

In Japhug, Tibetan numerals (see Table 7.1 above) are mainly used in fixed expressions.² Some of these expressions exclusively comprise Tibetan words, for instance *luskyr xtṣwaṇiz* ‘twelve year cycle’ from ལྷ་སྲକ ‘lo.skar’ ‘year of the cycle’ and བ୍ରୁ་ଘ୍ରିସ ‘btṣu.gnis’ ‘twelve’. Other compounds combine Tibetan numerals with Japhug roots, for instance the possessive compound *drnaftṣuχa* ‘having ears with

² Only 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.

ten holes' from *tu-ma* 'ear' (or Tibetan བྲୟ ཡା 'ear', the form is ambiguous between cognate and borrowing), the numeral *ftc̥u-* (from ད୍ଚୁ *bt̥cu* 'ten') and the verb *aχa* 'lacking a piece', which appears as postnominal modifier in the name of a trickster character *qala rmaftc̥uχa* 'the rabbit with ten holes in his ears'.

The Japhug form *-χt̥cuy-* of the Tibetan numeral གୋ གେ གେ *gt̥cig* 'one' occurs in compounds, but is not attested as an independent word; however, it is possible that it used to exist in Japhug at an earlier stage of the language (though perhaps not as a numeral), as the stative verb *naxt̥cuy* 'be the same' is a denominal derivation based on this numeral (§9.1.7, §20.7.1).

The Tibetan ordinal numbers up to ten (and the cardinal numbers for 'eleven' and 'twelve'), indicated in Table 7.4, can be used for months names. This usage is not attested in conversations, but does occur in texts when speakers consciously try to avoid using Chinese words. In example (15), Tshendzin first used the Chinese 三月份 <*sānyuèfèn*> 'third month' and then corrected it to its Tibetan equivalent.

- (15) <*sanyuefen*> *jamar zlawa χsumba jamar tce ci cʰtu-rypu*,
 third.month about month third about LNK one IPFV-have.young
 'It bears young once in the third month.' (21-IWLU, 64)

Table 7.4: Tibetan ordinals used in Japhug

	Japhug	Tibetan
1	<i>tarbu</i>	ད୍ୱାର୍ ཀ ཀ <i>daŋ.po</i> 'first'
2	<i>gnispa</i>	གୁସ୍ତା ཀ ཀ <i>gnis.pa</i> 'second'
3	<i>χsumba</i>	ସୁସ୍ତା ཀ ཀ <i>gsum.pa</i> 'third'
4	<i>βzupa</i>	ସ୍ତିର୍ ཀ ཀ <i>bzi.pa</i> 'fourth'
5	<i>rjapa</i>	ସ୍ତିର୍ ཀ ཀ <i>lja.pa</i> 'fifth'
6	<i>t̥suwpa</i>	ସ୍ତିର୍ ཀ ཀ <i>drug.pa</i> 'sixth'
7	<i>βduunpa</i>	ସ୍ତିର୍ ཀ ཀ <i>bdun.pa</i> 'seventh'
8	<i>βṛyt̥pa</i>	ସ୍ତିର୍ ཀ ཀ <i>br̥gad.pa</i> 'eighth'
9	<i>rgupa</i>	ସ୍ତିର୍ ཀ ཀ <i>dgu.pa</i> 'ninth'
10	<i>ft̥c̥upa</i>	ସ୍ତିର୍ ཀ ཀ <i>bt̥cu.pa</i> 'tenth'
11	<i>ft̥c̥uχt̥cuy</i>	ସ୍ତିର୍ ཀ ཀ ཀ <i>bt̥cu.gt̥cig</i> 'eleventh'
12	<i>ft̥c̥uχt̥cuy</i>	ସ୍ତିର୍ ཀ ཀ ཀ <i>bt̥cu.gnis</i> 'twelfth'

The ordinals can be used with the Tibetan word *zlawa* 'month' (from རླା འା *zla.ba*

5994 ‘moon, month’) as in (15), or without it as in (16) from the same text.

- 5995 (16) *rgupa jamar tce ci c^hu-rypuu nui-ηu.*
ninth about LNK one IPFV-have.young SENS-be

5996 ‘It bears young once in the ninth month.’ (21-IWLU, 66)

5997 In traditional stories of Tibetan origin, complete noun phrases in Tibetan in-
5998 cluding numerals can be found. For instance, in (17), the numeral *χsumrjatṣuuyftcu*
5999 from ཁྲྷྲ རྒྱା རྔྱྲ བྱླ བྱླ བྱླ ‘three hundred sixty’ occurs with the noun
6000 *pja* (from Tibetan དྲ དྲ ‘bird’; not normally used in Japhug except in compounds)
6001 and the adverb *mundzamuχtcuuy* ‘all kinds’ (from མྚ མྚ མྚ མྚ ‘mi.”dra.mi.gtçig ‘di-
6002 verse, different’, §9.1.3.5).

- 6003 (17) *pja mundzamuχtcuuy, χsumrjatsuuyftcuu kui pyymbri*
bird all.kinds 360 ERG bird.song
6004 *ŋcγyŋyŋcγyt zo to-lyt-nui,*
IDPH.III:very.noisy EMPH IFR-throw-PL
6005 ‘Three hundred sixty birds of all kinds sung bird songs.’ (2003smanmi,
6006 139)

6007 7.1.6.2 Chinese numerals

6008 Chinese numerals are ubiquitous in Japhug, and many younger people (born after
6009 1990) have trouble counting above twenty, even if they otherwise speak Japhug
6010 fairly fluently. Even the most fluent speakers use Chinese numerals (with their
6011 appropriate Chinese classifiers) when speaking normally.

6012 In examples (18) and (19), from a text describing the hamlets in the township of
6013 Gdong-brgyad, the Chinese expressions 全乡 <quánxiāng> ‘the whole township’,
6014 三千多人 <sānqiānduōrén> ‘three thousand people and a little more’ and 两个
6015 小队 <liǎnggèxiǎoduì> ‘two groups’ (with the generic classifier 个 <gè> ‘cl’) are
6016 used instead of Japhug native numerals and quantifiers to count the number of
6017 people in the area. Note the use of the Cultural Revolution term 小队 <xiǎoduì>
6018 ‘team, group’ as a counting unit. The use of Chinese here is due to the fact that
6019 administration-related counting, even in villages, is done in Chinese.

- 6020 (18) *nunuu udurjyt <quanxiang> nunuu <sandianduoren>*
DEM ANTHR the.whole.township DEM three.thousand.people
6021 *ma maye.*
apart.from not:exist:SENS
6022 ‘There are only a little more than three thousand people in the township

6023 of Gdong-brgyad.' (140522 RdWrJAt, 116)

- 6024 (19) *kvmpuu nuu <lianggexiaodui> ma maye*
 Kamnyu DEM two.groups apart.from not.exist:SENS

6025 'In Kamnyu there are only two *xiaodui*.' (140522 RdWrJAt, 119)

6026 Given the absence of ordinal numerals in Japhug (§7.1.5), Chinese expressions
 6027 with the ordinal marker 第 /dì/ are used instead. In example (20), the Chinese
 6028 phrase 第一名 <dìyímíng> 'the first (in a competition)' occurs, directly followed
 6029 by the participial clause *stu kuu-myku* 'the first one'.

- 6030 (20) *tce βzur nuu kuu <diyiming> tce stu kuu-myku pjx-mja.*
 LNK mouse DEM ERG first LNK most SBJ:PCP-be.first IFR-take
 6031 'The mouse obtained the first place.' (150826 shier shengxiao-zh, 97)

6032 7.1.7 Use of the numerals

6033 Japhug numerals can occur on their own when counting (*ci, znuuz, χsuu, kuβde...*)
 6034 or be used as postnominal attributive modifiers (§9.3). The noun can be elided
 6035 when the context is clear, especially when the same referent occurs in the previous
 6036 proposition as in (21) with *uu-rjut* 'her children' and (22) with 菜 <cài> 'dish'.
 6037 In this case the numeral constitutes the head of the noun phrase.

- 6038 (21) *uu-rjut kunguat tx-tu ri, kuitṣyy nuu-si*
 3SG.POSS-child nine AOR-exist LNK six AOR-die
 6039 'She had nine children, but six of them died.' (14-tApi taRi, 17)

- 6040 (22) <cài> *χsum tu-sui-lxt-i tce tce kuβde nuu kuu χsum*
 dish three IPFV-CAUS-throw-1PL LNK LNK four DEM ERG three
 6041 *tu-ndza-j kuu-fse.*
 IPFV-eat-1PL SBJ:PCP-be.like
 6042 'We used to order three dishes, and the four of us would eat (the) three
 6043 (of them).' (140501 tshering skyid, 92-3)

6044 Numerals can also be modifiers of dual and plural pronouns as in (23). Since
 6045 pronouns are never obligatory in Japhug (§22.1.2), it is also possible to use a bare
 6046 numeral in core argument function with first or second person indexation on the
 6047 verb, as in (22), where the verb *tu-ndza-j* 'we eat' of the second proposition has
 6048 the 1PL -*j* suffix indexing the transitive subject, coreferent with the ergatively-
 6049 marked phrase *kuβde nuu kuu* 'the four' (standing for *izo kuβde nuu kuu* 'the four of
 6050 us').

- 6051 (23) *tce izo kuβde nuu taturca ku-rvzi-j tce,*
 LNK 1PL four DEM together IPFV-stay-1PL LNK
 6052 ‘The four of us were living together.’ (140501 tshering skyid, 85)

6053 Numerals can be used in collocations with two light verbs: the intransitive
 6054 verb *pa* ‘pass X years’ (§22.4.1.4) and the transitive verb *ndo* ‘take’ (§22.4.2.4).

6055 The numeral *ci* ‘one’ occurs in many additional functions: as an identity pro-
 6056 noun ‘the other one’ (§6.8), as a partitive pronoun ‘one of them’ (§6.7.2), as an in-
 6057 definite article ‘a, one’ (postnominal, §9.1.4), as an identity modifier ‘the other X’
 6058 (prenominal, §9.1.7) and as an adverb meaning ‘once, one time, a little’ (§22.2.1).

6059 7.2 Approximate numerals

6060 To express an approximate number, it is possible in Japhug to use the adverb
 6061 *jamar* ‘about’ (from Tibetan ཡར་མར་ *jar.mar* ‘about, up and down’ and/or to combine
 6062 adjacent numerals in a row as in (24).

- 6063 (24) *tur-kʰyl nutcu ʂnuuz, ʐsum kuβde jamar ku-ndzob.*
 one-place DEM:LOC two three four about IPFV-ANTICAUS:attach
 6064 ‘Two, three or four (of its flowers) grow in one place.’ (16-RlWmsWsi, 9)

6065 However, Japhug also has five morphological devices to build approximate
 6066 numerals (Tables 7.5 and 7.6).

6067 First, for numerals under seven (Table 7.5), one can build approximate numer-
 6068 als by prefixing a *la-* or *lv-* element to one (or two) numeral root(s). Not all pos-
 6069 sibilities are attested (for instance there is no such approximate numeral *ʈlrvtsry*
 6070 derived from only *kutʂry* ‘six’). Prefixation of *la-* / *lv-* occurs with other morpho-
 6071 logical changes: (i) loss of the velar *kuu-* prefix (but not the uvular one in ‘two’
 6072 and ‘three’, §7.1.1) (ii) loss of the *m-* preinitial in *lvju* ‘about five’, but not of the
 6073 **t-* prefix of *kutʂry* (§7.1.3) in *lvŋvtsry* ‘five or six’ (otherwise *ʈlvŋvtsry* would be
 6074 have been found). The *la-* / *lv-* prefix is probably historically related to the *-lv-*
 6075 element found in *dvandva* collectives (§5.7.8.3).

6076 Above ‘seven’, the *lv-* prefix seem to have some productivity, as in example (25)
 6077 from a story translated from Chinese, it is found in the form *lv-kʰruutsu-sqi*, which
 6078 translates 数十万 <shùshíwàn> ‘several hundred thousands’. The normal way to
 6079 express this meaning in contemporary Japhug would be direct borrowing from
 6080 Chinese (§7.1.6.2), and this *Augenblicksbildung* was introduced to avoid using a
 6081 Chinese word.

- 6082 (25) <*zhanghan*> *kʂ-ti* *nunuu kur bmaʂmi lʂ-k^hruatsu-sqi* *jamar*
 ANTHR OBJ:PCP-SAY DEM ERG soldier about-10000-ten about
 6083 *zo to-ndo.*
 EMPH IFR-take
 6084 ‘The (general) called Zhang Han took several hundred thousand soldiers.’
 6085 (hist160721 pofuchenzhou-zh, 18)

6086 Second, some approximate numerals are built by compounding two numeral
 6087 roots (in some cases with the *la-* / *lʂ-* prefix, Table 7.5). The first numeral un-
 6088 dergoes *status constructus* vowel change (§5.4), with loss of the codas -z and -t
 6089 (§5.4.2.2). In the case of *cnycat* ‘seven or eight’ (illustrated by example 26), the
 6090 form *cny-* is irregular (†*cnu-* would be expected instead). Note that in this list
 6091 *kungusqi* ‘nine or ten’ is ambiguous: this form can also mean ‘ninety’ (see Ta-
 6092 ble 7.2).

- 6093 (26) *wzo nunuu cnycat* *ci tx-kʂ-supa* *jamar zo*
 6094 3SG DEM seven.or.eight one AOR-OBJ:PCP-CAUS-do about EMPH
qarma *wxti* *ri*,
 crossoptilon be.big:FACT but
 6095 ‘Although the crossoptilon is as big as about seven or eight of them
 6096 (weasels) put together.’ (27-spjaNkW, 56)

6097 Third, for tens (Table 7.6), approximate forms can be formed using the same
 6098 rule as tens from 40 to 90 (§7.1.2), by combining the *status constructus* of the unit
 6099 numeral with the root *sqi* ‘ten’, for instance *lʂyʂsqi* ‘about fifty’ from *lʂyʂ* ‘about
 6100 five’ like *kumyʂsqi* ‘fifty’ from *kumyʂ* ‘five’. These approximate numerals are rare
 6101 and not attested in the non-elicited corpus.

6102 Fourth, an alternative way of producing approximate tens is to add the nu-
 6103 meral prefix *tui-* (§7.3.1) to a ten, as for instance *tuiyʂsqi* ‘about twenty’ from
 6104 *yʂsqi* ‘twenty’ (see example 27).

- 6105 (27) *tuiyʂsqi* *jamar tutturca ju-yi-nuu* *ŋgrʂl*
 6106 about.twenty about together IPFV-come-PL be.usually.the.case:FACT
 6107 ‘They come in groups of about twenty individuals.’ (23-qapGAmtWmtW,
 105)

6108 Fifth, in the case of numerals above 99, approximate numerals are built by
 6109 prefixing a third singular possessive *u-* prefix, as *u-yurʐa* ‘several hundreds’ (28),
 6110 *u-stoŋtsu* ‘several thousands’ (29) and higher numerals.

Table 7.5: Approximate numerals in Japhug (one to ten)

Approximate Numeral	Base Numerals
<i>lañnuuz</i> ‘a few’	<i>ɛnuz</i> ‘two’
<i>lañnuχsum</i> ‘two or three’	<i>ɛnuz</i> ‘two’
	<i>χsum</i> ‘three’
<i>lɣβdelyju</i> ‘four or five’	<i>kubde</i> ‘four’
	<i>kumju</i> ‘five’
<i>lɣju</i> ‘about five’	<i>kumju</i> ‘five’
<i>lɣyrtʂy</i> ‘five or six’	<i>kumju</i> ‘five’
	<i>kutʂy</i> ‘six’
<i>cn̥cat</i> ‘seven or eight’	<i>kucnuz</i> ‘seven’
	<i>kurcat</i> ‘eight’
<i>kungusqi</i> ‘nine or ten’	<i>kungut</i> ‘nine’
	<i>sqi</i> ‘ten’

Table 7.6: Approximate numerals in Japhug (tens)

Approximate Numeral	Base Form
<i>tuynrsqi</i> ‘about twenty’	<i>ynrsqi</i> ‘twenty’
<i>tufsusqi</i> ‘about thirty’	<i>fsusqi</i> ‘thirty’
<i>tukuβdysqi</i> ‘about forty’	<i>kubdysqi</i> ‘forty’
<i>tuukumjysqi</i> ‘about fifty’	<i>kumjysqi</i> ‘fifty’
<i>tuukutʂysqi</i> ‘about sixty’	<i>kutʂysqi</i> ‘sixty’
<i>tukuçnrsqi</i> ‘about seventy’	<i>kucnrsqi</i> ‘seventy’
<i>tuukurcrsqi</i> ‘about eighty’	<i>kurcrsqi</i> ‘eighty’
<i>tuukuungusqi</i> ‘about ninety’	<i>kuungusqi</i> ‘ninety’
<i>lɣyrsqi</i> ‘about fifty’	<i>lɣju</i> ‘about five’
<i>lɣyrtʂysqi</i> ‘fifty or sixty’	<i>lɣyrtʂy</i> ‘five or six’
<i>cn̥crysqi</i> ‘seventy or eighty’	<i>cn̥cat</i> ‘seven or eight’

- 6111 (28) *u-yurza, χsui-ri jamar ndyre tu-nur ko,*
 6112 3SG.POSS-hundred three-hundred about TOP.ADVERS exist:FACT-PL SFP
tui-tuip^hu nu
 6113 one-hive DEM

6114 ‘In one hive, there are about several hundreds, about three hundred of them.’ (26-GZo, 51-2)

- 6115 (29) *tui-ŋga tui-rdo_B nu u-storjtsu u-p^hu*
 6116 INDEF.POSS-clothes one-piece DEM 3SG.POSS-thousand 3SG.POSS-price
kui-fse ŋu ma
 6117 SBJ:PCP-be.like be:FACT LNK
 6118 ‘One piece of clothes (made from it), its price is several thousand renminbi.’ (05-qaZo, 81)

6119 7.3 Counted nouns

6120 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 6121 they require a numeral prefix, whose paradigm is described in (§7.3.1). No other 6122 part of speech is compatible with these prefixes.

6123 For instance, the counted noun *-xpa* ‘year’ occurs in (30) with the prefix *χsui-*
 6124 ‘three’. It is not possible to express the same meaning by combining the bare 6125 stem of the noun *-(x)pa* with the corresponding numeral numeral *χsum* ‘three’
 6126 (something like †*xpa χsum* or †*pa χsum* would be ungrammatical).

- 6127 (30) *χsui-xpa*
 6128 three-year
 6129 ‘Three years’

6130 In this grammar, counted nouns are cited using the form with the numeral
 6131 prefix ‘one’ (*tui-xpa* in the case of ‘year’).³

6132 Numeral prefixes are bound forms historically derived from free numerals
 6133 (§7.3.1.7). These bound forms strictly precede the nominal stem, unlike free nu-
 6134 mers, which generally follow the nouns they modify (§7.1.7).⁴

³ One 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).

⁴ However, the numeral+noun order is attested in some compounds (§5.5.1.1, §5.5.1.2).

Only a highly restricted number of nominal stems can take numeral prefixes. For instance, the alienably possessed *mbro* ‘horse’ or the inalienably possessed *tr-pi* ‘elder sibling’ are not compatible with numerals prefixes. To express the meanings ‘three horses’ or ‘three brothers’, one cannot add the numeral prefix *χsui-*: forms such as †*χsui-mbro*, †*χsui-tr-pi* or †*χsui-pi* would be unintelligible. Instead, one must use the free numeral *χsum* ‘three’ (§7.1.7) as in (31)

- (31) *mbro χsum*
 horse three
 ‘Three horses’

A handful of alienably and inalienably possessed nouns can be *converted* to counted nouns and thus take numeral prefixes, but always with a semantic narrowing (§7.3.4.1, §7.3.4.2).

The class of ‘counted nouns’ in this grammar is similar to what have elsewhere in the literature been described as ‘classifiers’ (in Chinese 量词 *liàngcí* ‘measure words’). The morphology-based term ‘counted noun’, independent of meaning and function, is preferred over ‘classifier’ because it is highly contestable that classification is indeed the main function of this class of words (see for instance François 1999, and §7.3.3).

7.3.1 Numeral prefixes

In this section, numeral prefixes are described following several categories (1-10, 11-99, approximate numerals and prefixes derived from nouns) and irregular forms are discussed in a separated subsection (§7.3.1.5). A final subsection presents historical hypotheses to account for the numeral prefixal paradigm and its relationship to that of other Gyalrongic languages.

7.3.1.1 Numeral prefixes between 1 and 10

The paradigm of regular numeral prefixes from 1 to 10 in Kamnyu Japhug is indicated in Table 7.7. The prefixes are derived from the corresponding numeral by *status constructus* (§5.4), with loss of the coda and vowel alternation. Vowel alternation is optional for *kuβde* ‘four’ and *kumju* ‘five’.

Note that the forms of the numeral prefixes differ in some cases from the corresponding numeral prefixes in tens (cf. Table 7.2), compare *kuçnu-syj* ‘seven days’ with *kuçnyx-sqj* ‘seventy’.

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>ɛnuz</i>	<i>ɛnu-sŋi</i>
3	<i>χsum</i>	<i>χsu-sŋi</i>
4	<i>kuβde</i>	<i>kuβde-sŋi, kuβdʒ-sŋi</i>
5	<i>kumju</i>	<i>kumju-sŋi, kumjy-sŋi</i>
6	<i>kuṭʂy</i>	<i>kuṭʂ-sŋi</i>
7	<i>kuçnuz</i>	<i>kuçnu-sŋi</i>
8	<i>kurcat</i>	<i>kurcʒ-sŋi</i>
9	<i>kungut</i>	<i>kungu-sŋi</i>
10	<i>sqi</i>	<i>squ-sŋi</i>

6166 7.3.1.2 Numeral prefixes between 11 and 99

6167 Above ten, numeral prefixes present some variation. Table 7.8 shows the most
 6168 common forms of the numeral prefixes between 11 and 20 (from which all numerals
 6169 between 11 and 99 can be generated following the rules described in §7.1.2),
 6170 but many cases without vowel alternation or with preservation of the codas -z
 6171 (32) or -y (34) are attested, as in (32) for instance

- 6172 (32) *ma uu-me kumy ynysqamnuz-pyrme t^huu-azyut.*
 LNK 3SG.POSS-daughter also twenty.two-year.old AOR-reach
 6173 ‘Even his daughter is now twenty-two.’ (14-siblings, 317)

6174 In example (33), we observe the two alternative forms *-squ-* and *-sqi-* for the
 6175 tens in the same sentence. While for the numeral ten only the prefix *squ-* (or
 6176 its variant *sqy-*, see Table 7.10 below) is found, for tens between 20 and 90 vowel
 6177 alternation is optional and there is free variation between the two forms. In the
 6178 corpus, we find 15 examples of *-sqi-* and 14 of *-squ-*, suggesting that both are about
 6179 equally common.

- 6180 (33) *tui-p^huu nuu tce rcanuu, li, fsuisqi-ldzi jamar,*
 one-tree DEM LNK UNEXP:DEG again thirty-long.object about
 6181 *kuβdʒsqui-ldzi jamar tu.*
 forty-long.object about exist:FACT
 6182 ‘On one tree, there are about thirty or forty (branches).’ (14-sWNgWJu,

Table 7.8: 11-20 numeral prefixes in Japhug

Numeral	Free form	<i>-sŋi</i> ‘day’
11	<i>sqaptuŋ</i>	<i>sqaptuu-sŋi</i>
12	<i>sqamnuuz</i>	<i>sqamnuu-sŋi</i>
13	<i>sqafsum</i>	<i>sqafsum-sŋi</i>
14	<i>sqaβde</i>	<i>sqaβde-sŋi</i>
15	<i>sqamŋu</i>	<i>sqamŋu-sŋi</i>
16	<i>sqapryŋ</i>	<i>sqapryŋ-sŋi</i>
17	<i>sqačnuuz</i>	<i>sqačnuu-sŋi</i>
18	<i>sqarcat</i>	<i>sqarcv-sŋi</i>
19	<i>sqangut</i>	<i>sqanguu-sŋi</i>
20	<i>ynysqi</i>	<i>ynysqiu-sŋi</i>

6183 200)

6184 Example (34) illustrates three alternative forms with the counted noun *tx-rzaš*
 6185 ‘one night’: *ynysqaptu-rzaš* with regular loss of coda, *ynysqaptuy-rzaš* with preser-
 6186 vation of the coda, and *ynysqamnuuz tx-rzaš* as two words, the numeral being a
 6187 kind of prenominal modifier. The first form is regular, while the other ones each
 6188 are *hapax legomena*.

- 6189 (34) *tce nui ynysqaptuy-rzaš tu-tsū pui-ra.* “tce
 LNK DEM twenty.one-night IPFV-pass SENS-be.needed LNK
 6190 *ynysqaptu-rzaš tu-tsū tce pui-vaš ḷu” pui-ti-nui ri,*
 twenty.one-night IPFV-pass LNK IPFV-hatch be:FACT SENS-say-PL LNK
 6191 *azuy nui ynysqamnuuz tx-rzaš mꝝctṣa mui-nui-vaš.*
 1SG:GEN DEM twenty.two one-night until NEG-AOR-hatch
 6192 ‘(Eggs) need twenty-two days to hatch; people say ‘They hatch in
 6193 twenty-two days’ but mine only hatch after twenty two days.’ (150819
 6194 kumpGa, 34-36)

6195 7.3.1.3 Approximate numeral prefixes

6196 Approximate numerals also have corresponding prefixal forms. Table 7.9 presents
 6197 the forms attested in the corpus.

6198 By far the most commonly used approximate numeral prefix is *laŋnu-X*, whose
 6199 meaning is not ‘one or two’ as could have been expected from the use of the *l-*/

Table 7.9: Approximate numeral prefixes in Japhug

Approximate Numeral	Approximate Numeral Prefix
<i>la_nnu_z</i> ‘a few’	<i>la_nnu-</i>
<i>l_yβde_lŋju</i> ‘four or five’	<i>l_yβde_lŋju-</i>
<i>l_yŋju</i> ‘about five’	<i>l_yŋju-</i>
<i>l_yŋy_tʂy</i> ‘five or six’	<i>l_yŋy_tʂy-</i> , <i>l_yŋy_tʂy</i> -
<i>cnycat</i> ‘seven or eight’	<i>cnycr-</i>

6200 *la-* prefix in the other examples, but ‘a few’ (see example 35 – life expectancy of
 6201 goats and sheep is much above two years).

- 6202 (35) *ts^hyt qazo nunu tce la_nnu-xpa ma c^hu-mdu*
 goat sheep DEM LNK a.few-year apart.from IPFV-live.up.to
 6203 *mu^hj-ŋgryl ma tce c^hu-rgyz cti*
 NEG:SENS-be.usually.the.case LNK LNK IPFV-be.old be.AFF:FACT
 6204 ‘Goats and sheep only live for a few years, and then become old.’
 6205 (05-qaZo, 144)

6206 Just like approximate numbers can also be expressed by juxtaposition of nu-
 6207 mersals (§7.2), it is possible to juxtapose counted nouns (the same counted noun
 6208 with contiguous numeral prefixes, as in 36), or to combine a numeral with a
 6209 counted noun whose numeral prefix is contiguous to it, as in (37).

- 6210 (36) *tce nunu χsu-i-zum ku^hde-zum jamar ku-xtc^huit tu.*
 LNK DEM three-bucket four-bucket about SBJ:PCP-contain exist:FACT
 6211 ‘There are (jars) that can contain about three or four buckets (of water).’
 6212 (26-tChWra, 4)
- 6213 (37) <*tuolaji> tui-yjyn ju-yuit nu rcanu, ynysqi fsusqi-fkur*
 tractor one-time IPFV-bring DEM UNEXP:DEG twenty thirty-burden
 6214 *jamar ju-su-ʂyuit c^ha.*
 about IPFV-CAUS-reach can:FACT
 6215 ‘Each time the tractor brings (firewood), it can move about twenty or
 6216 thirty loads (the size a person can carry on his back).’ (140430 tWfkur,
 6217 23-24)

6218 Additionally, the paucal meaning can be expressed by converting the counted
6219 noun into an inalienably possessed noun with a third person possessive prefix
6220 and reduplication of the noun stem (see §7.3.4.1).

6221 7.3.1.4 Other numeral prefixes

6222 In addition to the numerals mentioned above, all higher and compound numerals,
6223 an interrogative pronoun and a participle form can appear as prefixes of counted
6224 nouns.

The numerals above 99 (§7.1.4) occur as numeral prefixes without vowel alternation, as *yurza-xpa* ‘a hundred years’ and *stoŋtsu-xpa* ‘a thousand years’ (from *yurza* ‘hundred’ and *stoŋtsu* ‘thousand’).⁵

The prefixal form of hundreds based on the counted noun *tu-ri* ‘one hundred’ have double numeral prefixes, such as *χsu-ri-xpa* ‘three hundred years’ in (38).

- 6230 (38) *tcendyre χsui-ri-xpa* *ty-tsu* *tce, li* *kuujju*
 LNK three-hundred-year AOR-pass LNK again oath

6231 *pua-ta-t-a* *tce,*
 AOR-put-TR:PST-1SG LNK

6232 ‘Three hundred years passed, and I made another oath.’

6233 mogui-zh, 92)

In the case of complex numerals, such as the very common *yurza kurcat* ‘one hundred and eight’, only the last one undergoes *status constructus*, as in (39) and (40), where we find *yurza* as a separate phonological word followed by the counted noun with the numeral prefix *kurcȳ-* (from *kurcat* ‘eight’).

- 6238 (39) *commbri yurza kurcy-jom*, [...] *comts^hoB*
 iron.chain hundred eight-length.of.two.outstretched.arms ... iron.nails
 6239 *yurza kurcy-ldzi ra*
 hundred eight-long.object be.needed:FACT
 6240 ‘(I) need a chain of one hundred and eight fathoms, and one hundred and
 6241 eight nails.’ (2003tWxtsa, 21)

⁵ Even in the absence of vowel alternation, the prefixal 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.

- 6242 (40) *yurza kurc_Y-ydx_T qapri nuu a-ty-ce ra*
 hundred eight-section snake DEM IRR-PFV:UP-go be.needed:FACT
 6243 'May the snake be cut into hundred and eight sections!' (2012 Norbzang,
 6244 280)

6245 The interrogative pronoun *t^hystuy* 'how many' has the prefixal form *t^hystuu-*
 6246 with counted nouns (§ 6.5.3).

6247 The subject participle *kuu-^hntc^huu* of the stative verb *antc^huu* 'be many', has the
 6248 prefixal form *kyntc^huu-*, as in (41). This prefix is very common in the corpus.

- 6249 (41) *tce nuuu kyntchuu-tupuu yuu nuu-tursa uu-sta puu-ηu*
 LNK dem many-household DEM 3PL.POSS-grave 3SG.POSS-place SENS-be
 6250 *ma*
 LNK
 6251 'It is the grave-place of many families.' (140522 kAmYW tWji, 96)

6252 It is however not possible to convert any noun, pronoun or quantifier into a
 6253 numeral prefix; with other words, it is necessary to convert the counted noun
 6254 to an inalienably possessed noun, with a third singular *uu-* prefix instead of the
 6255 numeral prefixes, see §7.3.4.1.

6256 The nouns *tu-sla* 'one month' and *tu-xpa* 'one year' can be used with a numeral
 6257 prefix *k^hrr^h-* not attested with other counted nouns (see §7.5.1).

6258 7.3.1.5 Irregular forms

6259 A handful of counted nouns, in particular *tr-rzab* 'one night', have an alternative
 6260 paradigm with /*r*/ instead of *uu* in the prefixes, as shown by the forms *bnr-rzab*
 6261 'two nights' and *χsr-rzab* 'three nights' in (42).

- 6262 (42) *bnr-rzab jamar, χsr-rzab jamar to-ts_U tce tcendyre cha*
 two-night about three-night about IFR-pass LNK LNK alcohol
 6263 *uu-di tu-mnym puu-ηu.*
 3SG.POSS-smell IPFV-have.a.smell SENS-be
 6264 'After two or three nights, one can smell the smell of alcohol.' (160703
 6265 araR, 40)

6266 The complete paradigm of this noun is presented in Table 7.10.

6267 There is however some degree of variation, and using the regular paradigm
 6268 is not considered erroneous. In the corpus, the numeral 'one' form *tu-rzab* 'one

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>tsnuz</i>	<i>tsnʂy-rzaš</i>
3	<i>χsum</i>	<i>χsʂy-rzaš</i>
4	<i>kuaʃde</i>	<i>kuaʃdʂy-rzaš</i>
5	<i>kumju</i>	<i>kumjyʂy-rzaš</i>
6	<i>kutʂy</i>	<i>kutʂy-rzaš</i>
7	<i>kuaʂnuz</i>	<i>kuaʂnyʂy-rzaš</i>
8	<i>kurcat</i>	<i>kurcʂy-rzaš</i>
9	<i>kungut</i>	<i>kungyʂy-rzaš</i>
10	<i>sqi</i>	<i>sqyʂy-rzaš</i>

night’ is more common than *tʂy-rzaš*, possibly because of the homophony with the inalienably possessed noun *tʂy-rzaš* ‘time’ found in examples such as (44). For other numerals, the forms in Table (7.10) are considerably more common than the regular ones. In addition, the *y* vocalism is also found with other numeral prefixes such as the interrogative (*tʰyʂtʂy-rzaš* ‘how many nights’).

(43) *tce qarma nui, tui-rzaš tce kuaʃde kumju jamar pjui-sat-nui,*
 LNK crossoptilon DEM one-night LNK four five about IPFV-kill-PL,
tua-rdoʂ, tuurme tua-rdoʂ kua
 one-piece person one-piece ERG
 ‘Crossoptilons, in one night, each of (the hunters) can kill four or five of them.’ (23-qapGAmtWmtW, 163)

(44) *tʂy-rzaš tʂy-ʂŋji tce, nui-ji ra*
 INDEF.POSS-time AOR-be.long LNK 3PL.POSS-field PL
kua-dui~dyn kua-juu~jom lo-pyay-nui, coŋtca
 SBJ:PCP-EMPH~be.many SBJ:PCP-EMPH~be.broad IFR-turn.over-PL timber
kua-dui~dyn pjy-pʰuat-nui
 SBJ:PCP-EMPH~be.many IFR-remove-PL
 ‘After some time/as time went on, (those people) had ploughed many broad fields for them, and chopped a lot of timber.’ (2002qajdoskAt, 90)

Apart from *tʂy-rzaš* ‘one night’, counted nouns following the paradigm in Table (7.10) are very rare. The counted nouns *tua-tya* ‘one span’ and *tua-rtʂy* ‘one story’

6285 have the irregular forms $\chi_{S\gamma}\text{-}tya$ ‘three spans’ and $\chi_{S\gamma}\text{-}r_{TS\gamma\gamma}$ ‘three stories’ (competing with regular $\chi_{S\gamma\gamma}\text{-}tya$ and $\chi_{S\gamma\gamma}\text{-}r_{TS\gamma\gamma}$) as in (45), but not for other numeral
6286 prefixes.
6287

- 6288 (45) *nui $\chi_{S\gamma}\text{-}tya$ ku β de-tya jamar tu- $r_{p\gamma}ji$ c^ha.*
DEM three-span four-span about IPFV-be.long can:FACT
6289 ‘It can grow three or four spans long.’ (14-sWNgWJu, 194)

6290 Another unrelated irregularity concerns the counted noun *tu- $\gamma\gamma\gamma n$* ‘one time’: 6291 free variation between *- $\gamma\gamma\gamma n$* and *- $\gamma\gamma\gamma\gamma n$* is observed for the numerals ‘two’ and
6292 ‘three’ (both $\chi_{S\gamma\gamma}\text{-} $$\gamma\gamma\gamma n$$ ‘three times’ and $\chi_{S\gamma\gamma}\text{-} $$\gamma\gamma\gamma\gamma n$$ are attested).$$

6293 A similar case is observed with counted noun *tu-xpa* ‘one year’; the form *-xpa*
6294 is obligatory for one to three (*γ nui-xpa* ‘two years’, $\chi_{S\gamma\gamma}\text{-}xpa$ ‘three years’), but
6295 for ‘four’ on, both stems *-xpa* and *-pa* are attested (both *squu-xpa* ‘ten years’ and
6296 *squu-pa* ‘ten years’ are possible, though the former is more common), including
6297 for approximate numerals (*cnyccy-pa* ‘seven or eight years’).

6298 The counted noun *tu-zlob* ‘one time’ (see §7.6 on its use) is attested in (46) with
6299 the special form *γ nui-zlob* ‘two times’ whose first element is a numeral prefix form
6300 *γ nui-* influenced by the Tibetan numeral ལྷིན་ *gnis* ‘two’ (in Japhug pronunciation
6301 *gniz-*). The regular form *γ nui-zlob* ‘two times’ also exists.

- 6302 (46) *a-zda yui ku-fse γ nui-zlob nui tu-ndze-a*
1SG.POSS-companion GEN SBJ:PCP-be.like two-times DEM IPFV-eat[III]-1SG
6303 *nui-tṣay*
SENS-be.fair
6304 ‘It would be fair if I had two times as much to eat as the other one.’
6305 (140426 lv he luozi-zh, 9)

6306 The stem *-zlob* looks like a blend from the two Tibetan words རྩྭ རྩྭ ‘turn
6307 around’ and རྩྭ རྩྭ ‘repeat’. Tibetan numerals are generally post-nominal, but
6308 prenominal numerals also exist as in ཉྱྱྱ ཉྱྱྱ *nis.ldab* ‘two times’.

6309 7.3.1.6 Distributed numeral prefixes

6310 The distributed form of counted nouns is built by reduplicating the numeral ‘one’
6311 prefix *tu-*, as *tu-tu-rdo* from the generic counted noun *tu-rdo* ‘one piece’ (see
6312 §7.3.3) in example (47).

- 6313 (47) *zuruzyri q^be, tce tu-tu-rdos nuu nuu-zyy-qyr-nuu q^be*
 progressively LNK LNK one-one-piece DEM IPFV-get.separated-PL LNK
 6314 ‘Progressively, some of them get separated (from the herd).’ (20-RmboN,
 6315 59)

6316 Example (48) with *tu-tu-xpa* ‘some years’ from *tu-xpa* ‘one year’ clearly illus-
 6317 trates the functional difference with approximate numerals (§7.2 and §7.3.1.3), as
 6318 the meaning of the distributed counted noun cannot be translated here as ‘a few
 6319 years’ – the years when the income is good are not necessarily contiguous in
 6320 time.

- 6321 (48) *tuu-tuu-xpa tce a-puu-pe tce, k^hruutsu tu-ro*
 one-one-year LNK IRR-IPFV-be.good LNK ten.thousand 3SG.POSS-excess
 6322 *jamar nuu-fsoe nuu-c^ha*
 about IPFV-earn SENS-can
 6323 ‘Some years if (his income) is good, he can earn more than ten thousands.’
 6324 (14-siblings, 180)

6325 An alternative distributed form involves partial reduplication of the stem of
 6326 the counted noun and replacing the numeral prefix by a third singular posses-
 6327 sive *uu-*, as in the conversion from counted noun to inalienably possessed noun
 6328 (§7.3.4.1). In (§49), the counted noun *tu-p^hu* ‘one tree’ is changed to *uu-p^hu~p^hu*
 6329 ‘some trees’. The other distributed form *tu-tuu-p^hu* could also be used in the same
 6330 context without meaning difference.

- 6331 (49) *zgoku kuu-mbro tce, ckyrz kuu-wxti ra nuu*
 mountain NMZL:S/A-be.tall LNK oak NMZL:S/A-be.big PL DEM
 6332 *uu-rc^hyβ ri uu-p^hu~p^hu zo tu tce*
 3SG.POSS-between LOC 3SG.POSS-PART~tree EMPH exist:FACT LNK
 6333 ‘On high mountains, among big oaks, there are some (of these little trees).’
 6334 (16-CWrNgo, 177)

6335 This distributed form puts emphasis on the non-contiguousness and spread
 6336 over distribution of the entities designated by the reduplicated counted noun: in
 6337 (§49) for instance, its presence implies that the little trees are not clustered, but
 6338 rather scattered among the oaks.

6339 Distributed counted nouns can also be repeated to put even more emphasis on
 6340 the scattered distribution (see §7.3.2.3).

6341 7.3.1.7 Historical perspectives on the numeral prefixal paradigm

6342 Most non-Tibetan languages of Western Sichuan/Northern Yunnan have counted
 6343 nouns (generally called ‘classifiers’, see §7.3.3) with numeral-counted noun order
 6344 (see for instance [Sihong Zhang 2014](#), [Michaud 2017](#): 163–194). It is striking
 6345 that among the quasi-isolating languages (Lolo-Burmese, Naish), numeral pre-
 6346 fix paradigms are commonly a pocket of irregular morphology ([Bradley 2005](#),
 6347 [Michaud 2011](#)); this is also true in some Hmong-Mien languages (see [Gerner &](#)
 6348 [Bisang 2010](#)).

6349 By contrast, while Japhug and the other Gyalrong languages have a richer mor-
 6350 phology in general, the numeral prefixal paradigms are, with only few exceptions
 6351 (§7.3.1.5), suspiciously regular. The historical interpretation of this observation is
 6352 not completely straightforward ([Jacques 2017c](#)), but in any case counted nouns
 6353 are morphologically like determinative compounds (§??) with a numeral as first
 6354 element, undergoing *status constructus* in the case of more integrated numerals
 6355 (some of the numerals under 100, see §7.3.1.1, §7.3.1.2 and §7.3.1.3) and immune
 6356 from it in the case of higher numerals (§7.3.1.4).

6357 One morphological alternation common to all numeral prefixes under 10 is the
 6358 loss of the codas, otherwise a rare phenomenon in noun compounds (see §5.4.2.2).
 6359 For numerals above 10, there is some degree of free variation in the preservation
 6360 of the codas (see for instance example 34 p.252); the forms preserving codas are
 6361 rarer, and may be ongoing analogical levelling.

6362 Even in the case of lower numerals, there are indirect traces of the former
 6363 existence of codas, in particular in irregularities (§7.3.1.5). A few counted nouns
 6364 like *tu-xpa* ‘one year’ and *tu-γjvn* ‘one time’ have velar fricative preinitials *x-/γ-*
 6365 which are lacking in some forms of the paradigm.

6366 In the case of *tu-xpa* ‘one year’, note the alternative stem *-pa* (*squ-xpa* ‘ten
 6367 years’ vs. *squ-pa* ‘ten years’), the time ordinals (§7.5.2), the adverb *pakuku* ‘every
 6368 year’ and the verb *pa* ‘pass X years’ (see example 117, §22.4.1.4) from which the
 6369 counted noun *tu-xpa* ‘one year’ is historically derived. Cognates of this root *-pa*
 6370 appear in other Burmo-Gyalrongic languages such as Naish ([Jacques & Michaud](#)
 6371 [2011](#)) but are restricted to time ordinals, and do not occur as counted nouns. Even
 6372 in the closely related Stau language, time ordinals such as *javə* ‘last year’ and *pəvə*
 6373 ‘this year’ have a root *-və* cognate to Japhug *-pa*, but the corresponding counted
 6374 noun *e-fku* ‘one year’ has a different root which left no trace in the Gyalrong
 6375 languages. The generalization of the *-pa* root to the counted paradigm is probably
 6376 a common Gyalrong innovation (see §7.3.4.3).

6377 A possible explanation for this *x-/γ-* element is that it originates from the coda
 6378 of the numeral ‘one’ (although replaced by *ci* ‘one’, this former numeral is still

6379 found in the element *-tuy* in *sqaptuy* ‘eleven’) through false segmentation (**tuk-*
 6380 *pa* → **tuk-kpa* → **tuk-xpa* ‘one year’) and subsequent generalization to the whole
 6381 paradigm.⁶ It is not an example of *x-/γ-* nominalization (§16.5.2).

6382 7.3.2 Counted nouns in quantifying function

6383 This section discusses the use of counted nouns in quantifying function, as noun
 6384 modifiers, head of a noun phrase or a sentential quantifier.

6385 The main functions of counted nouns include partitive, distributive, restrictive
 6386 and iterative meanings.

6387 7.3.2.1 Partitive

6388 When occurring as postnominal modifiers, most counted nouns are essentially
 6389 *partitive* in meaning, referring to a certain number of individuals from a group,
 6390 and are not used to express indefiniteness (§7.3.2.7): the determiner *ci* ‘one’ (§9.1.4.1)
 6391 occurs instead in this meaning.

6392 Thus, a phrase such as *turme tuu-rdoṣ* combining the noun *turme* ‘person’ with
 6393 the generic counted noun *tuu-rdoṣ* ‘one piece’ (see § §7.3.3 on counted noun se-
 6394 lection) is generally either to be translated as a partitive ‘one of them’ as in (50).

- 6395 (50) *turme bṇuaz pjy-tu tce, turme tuu-rdoṣ nuu rcanu,*
 6396 people two IFR.IPFV-exist LNK people one-piece DEM UNEXP:DEG
uu-styrju bja zo tu-βze tce,
 6397 3SG.POSS-truth completely EMPH IPFV-do[III] LNK

6398 ‘There were two persons, one of them always told the truth (and the other
 6399 one was a liar).’ (140427 yuanhou-zh, 2-3)

6399 The partitive meaning is found even when the individual counted noun occurs
 6400 on its own without overt head noun as in (51).

- 6401 (51) *uu-tcuu kuβde puu-tu ri, uu zo kur-fse*
 6402 3SG.POSS-son four PST.IPFV-exist but 3SG SBJ:PCP-be.like
kuu-cqraṣ tuu-rdoṣ ciny puu-me juu-ŋu
 6403 SBJ:PCP-be.intelligent one-piece even PST.IPFV-not.exist SENS-be
 6404 ‘He had four sons, but not even one of them was smart like him.’
 (2005tAwakWcqraR, 3)

⁶ Note 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.

6405 The partitive meaning is found in particular when counted nouns modify mass
 6406 nouns, such as *pax̄ca* ‘pork’ in (52).

- 6407 (52) *pakuku zo pax̄ca tui-rdoꝝ qʰe tce tce stor*
 every.year EMPH pork one-piece LNK LNK LNK broad.bean
 6408 *cʰui-yuit,*
 IPFV:DOWNTSTREAM-bring
 6409 ‘Every year, he would bring a piece of pork and broad beans.’ (140501
 6410 tshering scid, 35)

6411 7.3.2.2 Distributive

6412 Counted nouns can also have a distributive meaning ‘each of them’ when another
 6413 numeral or counted noun occurs in the same clause, indicating that each of the
 6414 members of the group performs the same action, the verb can either receive plu-
 6415 ral (as in 53 and 43) or singular indexation (example 54). This is a particular case
 6416 of fluid number indexation (§14.6.1).

- 6417 (53) *tce tce turme tui-rdoꝝ kur kʰuna bnuꝝ xsum jamar tu-ndo-nuꝝ*
 LNK LNK person one-piece ERG dog two three about IPFV-take-PL
 6418 ‘Each of them (of the hunters) takes two or three dogs.’ (150829
 6419 KAGWcAno)
- 6420 (54) *turme tui-rdoꝝ kur cʰymdꝝru tui-ldzi tu-nu-ndyꝝ*
 people one-piece ERG drinking.straw one-CL IPFV-AUTO-take[III]
 6421 ‘Each person takes one straw.’ (30-tChorzi, 40)

6422 Counted noun with a collective meaning (§7.3.3.2) such as *tui-tupuu* ‘one house-
 6423 hold’ also frequently have a partitive meaning, especially when combined with
 6424 a numeral.

- 6425 (55) *tce tui-tupuu tce, ui-qazo kurβdꝝsqi, kumyꝝsqi jamar*
 LNK one-household LNK 3SG.POSS-sheep forty fifty about
 6426 *pui-tu.*
 PST.IPFV-exist
 6427 ‘Each household used to have about forty or fifty sheep.’ (160712 smAG,
 6428 24)

6429 Temporal counted nouns such as *tu-sji* ‘one day’ (§7.5.1) are generally repeated
 6430 when used in distributive function in the meaning ‘every (day)’ (§7.3.2.3). How-
 6431 ever, in combination with other counted nouns, they can mean ‘per ...’ as in (56),
 6432 even without repetition.

- 6433 (56) *tu-sji tce tur-kʰutsa jamar tuu-rdoṣ kuu pjui-tsʰi juu-cʰa*.
 one-day LNK one-bowl about one-CL ERG IPFV-drink SENS-can
 6434 ‘One (cat) can drink about one bowl of milk per day.’ (21-IWLU, 48)

6435 When no other numeral or counted noun is present, the modifier of Tibetan
 6436 origin *rajri* ‘each’ (from རྙྩྰ· *raŋ.re* ‘each’; see also §9.1.3.3) can be used to specify
 6437 the distributive meaning as in (57).

- 6438 (57) *tur-tupuu rajri yuu, nuu-mbro pjy-tu...*
 one-household each GEN 3PL.POSS-horse IFR.IPFV-exist
 6439 ‘Each household used to have horses etc.’ (150820 kAnWCkat, 2)

6440 Counted nouns can have a combined distributive and partitive meaning ‘each
 6441 one of their...’, such as *tu-ntsi* ‘one of a pair’ in (58).

- 6442 (58) *tce tcʰeme ra kuu nuu-χpuum tur-ntsi ka-ta-nuu,*
 LNK girl PL ERG 3PL.POSS-knee one-of.a.pair AOR:3→3'-put-PL
 6443 *ty-tcuš ra kuu nuu-χpuum vnuuz ka-ta-nuu ri,*
 INDEF.POSS-son PL ERG 3PL.POSS-knee two AOR:3→3'-put-PL LNK
 6444 ‘The girls (in their group each) put one of their knees, the boys put their
 6445 two knees (as a support for the tea kettle).’ (2005-stod-kunbzang, 179)

6446 7.3.2.3 Repetition of counted nouns

6447 Repeating a counted nouns with the same numeral prefix has either a distributive
 6448 or a distributed meaning.⁷

6449 Example (59) illustrates the distributive meaning (‘each’, ‘each single’, ‘one by
 6450 one’) of counted noun repetition with an individual counted noun (*tu-ldža* ‘one
 6451 long object’) and also a partitive counted noun (*tu-spra* ‘one handful’). Repeated
 6452 counted nouns of measure can be used to refer to the unit in which a whole
 6453 mass of elements (here the hemp stalks) is divided into (‘into bundles’, ‘bundle
 6454 by bundle’).

⁷ If the numeral prefixes are different however, an approximate numeral interpretation results, see §7.3.1.3.

- 6455 (59) *tysymu nuu tce tuapcyā tú-wy-lst tce, [...] tuu-ldza*
 hemp DEM LNK sickle IPFV-INV-throw LNK one-long.object
 6456 *tuu-ldza juú-wy-p^hut tce tce numuu li tuu-spra*
 one-long.object IPFV-INV-pluck LNK LNK DEM again one-handful
 6457 *tuu-spra tú-wy-xtcyr.*
 one-handful IPFV-INV-tie
 6458 'As for hemp, one uses a sickle and cuts (the stalks) one by one and then
 6459 ties them into bundles.' (14-tasa, 51-43)

6460 The distributive meaning also occurs with repeated temporal counted nouns,
 6461 as in (60).

- 6462 (60) *tce tuu-xpa tuu-xpa tuu-lob q^he tce qartsui tce pjuu-k^hru*
 LNK one-year one-year IPFV-come.out LNK LNK winter LNK IPFV-be.dry
 6463 *cti.*
 be.AFF:FACT
 6464 'It grows every year (it is an annual plant), and dies in winter.' (140512
 6465 tAzraj, 10)

6466 Alternatively, rather than juxtaposing counted nouns, coordinating them with
 6467 the additive *ny* (§8.2.6) as in (62) also results in a distributive meaning.

- 6468 (61) *tce nurja ndyre uu-puu nuu tuu-rdo^b ny tuu-rdo^b*
 LNK cow TOP.ADVERS 3SG.POSS-offspring DEM one-piece ADD one-piece
 6469 *ma me tuu-xpa tuu-yjyn ma juu-rwpuu*
 apart.from not.exist:FACT one-year one-time apart.from IPFV-bear.young
 6470 *my-c^ha*
 NEG-can:FACT
 6471 'As for cows, they (have) their young only one by one, and can only bear
 6472 young once a year.'

- 6473 (62) *numuu muurmumbju nuu tuu-tc^ha ny tuu-tc^ha ntsui tuturca ntsui*
 DEM swallow DEM one-pair ADD one-pair always together always
 6474 *ku-ryzi-nuu ny tce*
 IPFV-stay-PL be:FACT LNK
 6475 'Swallows are always in pairs.' (03-mWrmWmbjW, 56)

6476 Repeated counted nouns also express a distributed meaning as in (63). Like the
 6477 distributed numeral prefixes (§7.3.1.6), this construction indicates that the entities
 6478 referred to by the counted nouns are scattered more or less homogeneously.

- 6479 (63) *tuu-rdoꝝ tuu-rdoꝝ kuu-fse tuu-tob nyu ma*
 one-piece one-piece SBJ:PCP-be.like IPFV-come.out be:FACT LNK
 6480 *my-aryk^humk^hył.*
 NEG-be.heterogeneously.distributed:FACT
 6481 ‘It grows in scattered fashion, not in clusters here and there.’
 6482 (22-BlamajmAG, 132)

6483 It is also possible to repeat counted nouns with distributed numeral prefixes
 6484 to emphasize even more the scattered distribution as in (64).

- 6485 (64) *tceri tuu-tuu-rdoꝝ tuu-tuu-rdoꝝ jnu-nyu ma kuu-yndzurya*
 LNK one-one-piece one-one-piece SENS-be LNK SBJ:PCP-be.neighbours
 6486 *kuu-fse kuu-yr^humk^hył kuu-fse*
 SBJ:PCP-be.like SBJ:PCP-be.heterogeneously.distributed SBJ:PCP-be.like
 6487 *mane.*
 not.exist:SENS
 6488 ‘They are scattered one by one, and are not together in clusters.’
 6489 (24-zwArqhAjmAG, 81)

6490 7.3.2.4 Restrictive

6491 The only context where the phrase *turme tuu-rdoꝝ* consistently means ‘one person’
 6492 is in restrictive constructions (‘only one person’) with the exceptive postposition
 6493 *ma* ‘apart from’ (§8.2.8), as in (65). In negative restrictive constructions with *ciny*
 6494 ‘not even one’, individual counted nouns with the numeral *tuu-* ‘one’ also occur
 6495 as in (66).

- 6496 (65) *t^ham turme tuu-rdoꝝ ma me*
 now people one-piece apart.from not.exist:FACT
 6497 ‘Now there is only one person (in that place).’ (140522 tshupa, 35)
- 6498 (66) *qartsui tce uu-jwas tuu-mpcar ciny uu-ku*
 winter LNK 3SG.POSS-leaf one-leaf not.even 3SG.POSS-head
 6499 *kuu-ndzor me.*
 SBJ:PCP-ANTICAUS:attach exist:FACT
 6500 ‘In winter, not even one leaf (remains) on it.’ (11-mYAm, 37)

6501 As illustrated by the following pair of examples (from a similar episode in two

6502 traditional stories), in this construction both noun+individual counted noun (67)⁸
 6503 or plain numeral (68) can occur.

- 6504 (67) *turme ʌnui-rdoꝝ ma manje-tci tce,*
 people two-piece apart.from not.exist:SENS-1DU LNK
 6505 *ky-ʌnundzʌquqyr my-nui-c^ha-tci,*
 INF-RECIP:eat.on.one's.own NEG-AUTO-can:FACT-1DU
 6506 'There are only two of us, we cannot eat on our own (without sharing
 6507 with each other).' (2003kunbzang, 100)

- 6508 (68) *tcizo ʌnuiꝝ ma manje-tci tce, zaka ky-nui-βzu*
 1DU two apart.from not.exist:SENS-1DU LNK each INF-AUTO-make
 6509 *my-rtaꝝ-cti*
 NEG-be.enough:FACT-1DU
 6510 'There are only two of us, there are not enough of us to each act on our
 6511 own.' (2002 qaCpa, 220)

6512 In examples (69) and (70), also with noun+individual counted noun, there is
 6513 no specific restrictive construction, but there is an implicit restrictive meaning
 6514 ('because of (just) one person', 'only one staff').

- 6515 (69) *turme tu-rdoꝝ u-ndža nuu zo to-stu-nuu cti*
 people one-piece 3SG.POSS-reason DEM EMPH IFR-do.like-PL be.AFF:FACT
 6516 *ri,*
 LNK
 6517 'They did all that because of one person.' (2003smanmi-tamu, 101)

- 6518 (70) *nuuzora yuu nuu-cymuydu c^ho kuu-fse nuu u-t^hyt nuu,*
 2PL GEN 2PL.POSS-gun COMIT SBJ:PCP-like DEM 3SG.POSS-instead DEM
 6519 *tcizo yuu tci-t^hypi tu-ldža puu-tu tce, nuu*
 1DU GEN 1DU.POSS-staff one-long.object PST.IPFV-exit LNK DEM
 6520 *ky-nui-t^hu-tci cti wo*
 AOR-AUTO-spread-1DU be.AFF:FACT FSP
 6521 'Instead of guns like you have, we (only) had one staff, and we laid it over
 6522 (the river to walk on it as a bridge).' (2003 Kunbzang, 188)

6523 Individual counted nouns can also express a combination of partitive and re-
 6524 strictive meaning, 'just X of them', as in (71).

⁸ The 1DU suffix on the existential verb *maje-tci* is a case of partitive indexation (§14.6.1.3).

- 6525 (71) *tuu-rdo& ma-p&u-wy-sat ra ma tce rcanu,*
 one-piece NEG.IMP-PFV-INV-kill be.needed:FACT LNK LNK UNEXP:DEG
 6526 *kyryxpa zo c^htu-car tce nuu u-zda nuu kuu*
 several.years EMPH IPFV-search LNK DEM 3SG.POSS-companion DEM ERG
 6527 *nuu-car ny nuu-car tce*
 IPFV-search LNK IPFV-search LNK
 6528 ‘One should not just kill one of them, otherwise it will look for it for
 6529 years, its mate will search and search for it.’ (22-qomndroN, 37-39)

6530 Another type of restricted meaning is, in the case of mass nouns such as *rdysta&*
 6531 ‘stone’, the meaning ‘in one piece’ as in example (72), with the individual counted
 6532 nouns *tuu-ldza* ‘one long object’ or *tuu-rdo&* ‘one piece’ (the storyteller hesitates
 6533 between the two) occurring here not as noun modifier, but as nominal predicates
 6534 with the participle of the copula *yu* ‘be’ (§22.5.1.1). In this example, *tuu-rdo&* is in
 6535 this analysis a noun phrase on its own.

- 6536 (72) *rdysta& tuu-ldza, tuu-rdo& kuu-yu kuu yju*
 stone one-long.object one-piece SBJ:PCP-be ERG watchtower
 6537 *χsui-ldza rjylsa u-wyri kutcu a-puu-tu,*
 three-long.object palace 3SG.POSS-front here IRR-IPFV-exist
 6538 ‘If from one monolith (a stone which is in one piece), three towers were
 6539 made here in front of the palace, (I would feel much better).’
 6540 (2003smanmi-tamu, 120)

6541 Unlike languages such as Chinese, where the meaning ‘alone’ can be expressed
 6542 by the numeral ‘one’ with a quantifier (一个人 <yīgèrén> ‘one person, alone’),
 6543 this meaning is not normally conveyed by counted nouns in Japhug, but rather
 6544 by the adverbial root *-sti* ‘alone’ (see §22.2.2.4).

6545 7.3.2.5 Sentential quantifying function

6546 Some counted nouns, rather than being used as postnominal quantifiers, can
 6547 have scope over the whole sentence. Two constructions can be distinguished: the
 6548 iterative/semelfactive construction, in which the counted nouns designate the
 6549 number of time that an action takes place, and the pseudo-object construction.

6550 Only a minority of counted nouns can be used in the iterative/semelfactive
 6551 construction. This group includes temporal counted nouns like *tuu-yj&n* ‘one time’
 6552 (§7.5.1), counted nouns derived from verbs (§7.3.4.3) such as *tuu-trtç^hu* ‘hitting

6553 with the hoe one time' (from *tçʰu* 'hit, gore') and *tu-twfskvr* 'one turn' (from *fskvr*
 6554 'turn around') or from ideophones (§7.3.4.4) such as *tu-ttxur* 'one turn'.

6555 Semelfactive counted nouns can either be used as objects of an auxiliary verb,
 6556 mainly *lxt* 'release' (§22.4.2.2), as in (73) and (74), or as sentential quantifiers
 6557 (§7.3.2.5), as in (75) with the intransitive verb *mtçur* 'turn'.

- 6558 (73) *qaꝝ kyntcʰuu-txteʰuu* *to-lxt*
 6559 hoe several-hitting.with.the.hoe IFR-release
 'He hit several times with the hoe.' (elicited)

- 6560 (74) *ηnu-ttxur to-lxt* *ηnu-ηu*
 6561 two-turn IFR-throw SENS-be
 'He ran two laps.' (2003ras, 210)

- 6562 (75) *χcʰa pcov laηnu-ttxur ku-mtçur, ve pcov laηnu-ttxur ku-mtçur*
 6563 right side a.few-turn IPFV-turn left side a.few-turn IPFV-turn
 6564 *ηu.*
 6565 be:FACT

6566 'It turns several times on the right, and several times one the left.' (150826
 6567 qro kWnWkhABGa, 4-5)

6568 In the pseudo-object construction, counted nouns semantically related to the
 6569 *patient* of the main verb (even in intransitive constructions lacking an object)
 6570 occur to express the meaning 'not even one ...' (in a negative construction) or
 6571 'a few...'. This construction is most clearly illustrated with intransitive verbs. In
 6572 examples (76) and (77), the intransitive verbs with *rundzvtsʰi* 'have a meal' and
 6573 *ruçmi* 'speak, utter words' cannot take overt object noun phrases (they are not
 6574 semi-transitive, see §14.2.4), but occur here with counted noun quantifiers referring
 6575 to the non-overt patients (the food in 76 and the words in 77), which would
 6576 be the object of the corresponding transitive verbs *ndza* 'eat' and *ti* 'say'.

- 6577 (76) *tr-pytso* *ra tui-mu* *wi-xçyt* *kua*
 6578 INDEF.POSS-child PL NMLZ:action-be.afraid 3SG.POSS-strength ERG
 6579 *tui-tui-kur* *ciny zo* *ky-rundzvtsʰi muu-pjy-cʰa-nuu*.
 6580 one-INDEF.POSS-mouth even EMPH INF-eat NEG-IFR.IPFV-can-PL
 6581 'The children were so afraid that they could not even eat one mouthful.'
 6582 (160704 poucet4-v2, 52)

- 6579 (77) *laṣṇu-ŋka ručmi-tci*
 few-word speak:FACT-1DU
 6580 ‘Let us speak a few words.’ (elicited)

6581 In these examples, adding an overt noun would be ungrammatical, and the quan-
 6582 tifiers *tu-tu-kur cinx zo* ‘not even one mouthful’ and *laṣṇu-ŋka* ‘a few words’
 6583 cannot be analyzed as objects. Rather, they are sentential adverbs, whose gram-
 6584 matical status is comparable to that of temporal counted nouns (§7.5.1).

6585 7.3.2.6 Other

6586 We also find examples of counted nouns without partitive, distributive, restricted
 6587 or iterative meaning.

6588 This is the case in particular for counted nouns with a collective meaning, denot-
 6589 ing a group of entities whose quantity can be precise (*tu-tč'a* ‘one pair’) or un-
 6590 specified (*tu-boč* ‘one group’, *tu-tupu* ‘one household’ or *tu-tupʰu* ‘one hive’). In
 6591 (78) for instance, *vnui-tupu* means ‘two households’, not ‘two of the households’
 6592 or ‘each of the households’. Note also the plural (rather than dual) indexation
 6593 on the verb *tu-nu*, showing the inherent collective meaning of the counted noun
 6594 *tu-tupu* ‘one household’. Plural indexation here is optional (§14.6.1.1). In this
 6595 example, *vnui-tupu* is *not* a modifier of the placename *tašrdo*: this placename is
 6596 an absolute locative adjunct (§8.1.9).

- 6597 (78) *tʰam tašrdo vnui-tupu tu-nu*
 now placename two-household exist-PL
 6598 ‘Now there are two households in Tarrdo.’ (140522 tshupa, 19)

6599 This neutral number quantification meaning is also attested with non-collective
 6600 counted nouns. For instance, in (79), *χsui-ldža* ‘three (long objects)’ occurs in the
 6601 same context as the numerals *ci* ‘one’ and *χsum* ‘three’. In (80) likewise, it is clear
 6602 from the context that neither a partitive, distributive, nor restrictive interpreta-
 6603 tion is possible.

- 6604 (79) *tcendyre t̚-tci nu kui typi ci na-car xcyclndzu*
 LNK INDEF.POSS-son dem ERG staff one AOR:3→3'-search twig
 6605 *χsui-ldža, qapi χsum kʰyzji w-ŋgwi*
 three-long.object white.stone three feedbag 3SG.POSS-inside
 6606 *pa-rku nu-ŋu.*
 AOR:3→3'-put.in SENS-be
 6607 ‘The boy looked for a staff, and put three twigs and three stones in the

6608 (horse's) feedbag.' (2005-stod-kunbzang, 148)

- 6609 (80) *tce nutcu tce tsu u-rkuu zuu si tuu-p^huu pjy-tu,*
 LNK DEM:LOC LNK path 3SG.POSS-side LOC tree one-tree IFR.IPFV-exist
 6610 'There, on the side of the road, there was a tree.' (The divination 2002, 10)

6611 However, this function is not very widespread in native texts.

6612 In texts translated from Chinese or elicited material however, this usage is very
 6613 common, as speakers will easily calque the Chinese noun+classifier construction.
 6614 In example (81) for instance *qajy tuu-ldzi* 'one fish' is very probably calqued from
 6615 Chinese 一条鱼 *yī-tiáo yú* (one-CL fish).⁹

- 6616 (81) *qajy tuu-ldzi c^hondyre qac^hya ci pjy-mto nuu-ŋu*
 fish one-long.object COMIT fox one IFR-see SENS-be
 6617 'He saw a fish and a fox.' (140505 xiaohaitu-zh, 41)

6618 Future studies on the use of counted noun as quantifiers should be therefore
 6619 exclusively based on texts not translated from Chinese and conversation, not on
 6620 translations and elicitation.

6621 7.3.2.7 Definiteness

6622 In Japhug, counted nouns are not specifically used to mark indefiniteness; they
 6623 can even occur with demonstratives such as *nuu* 'this' in noun phrases with a
 6624 definite referent. In (82) and (83) for instance, the bowl of oil and the tree in
 6625 question were mentioned earlier in the story and are clearly definite.

- 6626 (82) *k^ha c^hy-zyuit tce tuu-kri tuu-k^hutsa nuu*
 house IFR:DOWNSTREAM-reach LNK INDEF.POSS-oil one-bowl DEM
 6627 *ko-ckut.*
 IFR-drink.completely
 6628 'He arrived at the house and drank the bowl of oil.' (140501 mdzadi, 23)

- 6629 (83) *si tuu-p^huu nuu uu-p^ha_B uu-ntsi nuu*
 tree one-tree DEM 3SG.POSS-half 3SG.POSS-one.of.a.pair DEM
 6630 *pjy-rom zo, uu-p^ha_B uu-ntsi nuu*
 IFR.IPFV-be.dry EMPH 3SG.POSS-half 3SG.POSS-one.of.a.pair DEM

⁹ The original text from which (81) was translated is 不久，老三又看见了一条鱼和一只狐狸。The counted noun *tuu-ldzi* 'one long object' however is really applied to fishes, snakes and worms in Japhug even in non-translated texts (§7.3.3).

- 6631 *pjy-k-yrŋi-ci* *zo*,
 IFR.IPFV-PEG-be.green-PEG EMPH
 6632 ‘One half of that tree was dry and the other half was green.’ (The
 6633 divination 2002, 11)

6634 **7.3.3 Counted nouns and semantic classes**

6635 This section presents the semantic restrictions on the use of particular counted
 6636 nouns. It also discusses the cases of nouns that are compatible with several
 6637 counted nouns.

6638 **7.3.3.1 Non-collective counted noun**

6639 The counted noun *tu-rdoꝝ* ‘one piece’ can occur as postnominal modifier with
 6640 a considerable variety of nouns, designating people, animals, inanimate objects,
 6641 including mass nouns; it is the counted noun by default.

6642 A minority of nouns select other individual counted nouns referring to specific
 6643 shapes: *tu-ldza* ‘one long object’, *tu-mpçar* ‘one leaf’ and *tu-pʰu* ‘one tree’.

6644 The counted noun *tu-ldza* ‘one long object’, like Chinese 一条 <yítiáo> ‘one
 6645 long object’ or 一根 <yīgēn> ‘one long object’, occurs in the corpus with nouns
 6646 belonging to the following semantic categories:

- 6647 • Stick-like objects: *u-ru* ‘its stalk’, *tx-zrym* ‘root’, *txpi* ‘staff’, *taqab* ‘needle’,
 tumna ‘arrow’, *dyrbui* ‘fern’ or *ndzu* ‘little stick, chopsticks’ (ex. 84)
- 6649 • Limbs, hair and other protruding body-parts: *tu-mi* ‘leg, foot’, *tu-kyrme*
 ‘hair’, *tx-muj* ‘feather’, *ta-krui* ‘horn’.
- 6651 • Limbless animals: *qapri* ‘snake’, *qay* ‘fish’
- 6652 • Towers: *yju* ‘watchtower’

- 6653 (84) *tci-xcnyndzu χsui-ldza pui-tu tce*
 1DU.POSS-twigs three-long.object PST.IPFV-exist LNK
 6654 ‘We had three twigs.’ (2003kubzang, 204)

6655 The counted noun *tu-mpçar* ‘one leaf’ occurs with flat objects, including tree
 6656 leaves (with *tx-jwaꝝ* ‘leaf’ as in 85), sheets of cloth (with *raz* ‘cloth’) and snowflakes
 6657 (with *txjpa* ‘snow’).

- 6658 (85) *tu-jwas nuu snuu-mpcar ma me tce*
 3SG.POSS-leaf DEM two-leaf apart.from not.exist:FACT LNK
 6659 'It only has two leaves.' (16-CWrNgo, 188)

6660 The counted noun *tu-mpcar* 'one leaf' can also refer to money (in present-day
 6661 China, bank notes are by far more common than coins even for small amounts
 6662 of money), meaning 'one renminbi'.

6663 The counted noun *tu-phuu* 'one tree' occurs with the generic noun *si* 'tree' or
 6664 names of particular species.

6665 7.3.3.2 Collective counted noun

6666 Most nouns referring to humans and animals can occur with the counted noun
 6667 *tu-boꝝ* 'one group'. However, the collective counted noun *tu-juy* 'one pack' ap-
 6668 pears to be exclusively used with horses. Its only attestations in the corpus (for
 6669 instance 86) are found in a translated text.

- 6670 (86) *li nuu jamar ki a-jy-tuu-ce tce, tcendyre nutcu tce,*
 again DEM about DEM:PROX IRR-PFV-2-go LNK LNK DEM:LOC LNK
 6671 *myzui mbro tuu-juy tu tce,*
 more horse one-herd exist:FACT LNK
 6672 'Continue going again for about that distance, and there will be a pack of
 6673 horse.' (150824 kelaosi-zh, 205)

6674 7.3.3.3 Multiple counted nouns

6675 Some nouns are compatible with more than one counted noun postnominal mod-
 6676 ifier, with different connotations. For instance *zgo* 'mountain' can be used with
 6677 the generic counted noun *tu-rdoꝝ* 'one piece' as in (87), but also with *tu-ldza* 'one
 6678 long object' as in (88) in the meaning 'mountain range' and also with *tu-trymbaj*
 6679 'one side' to mean 'mountain face'.

- 6680 (87) *nur-kʰa u-rkuu zgo tuu-rdoꝝ puu-ri*
 DEM house 3SG.POSS-side mountain one-piece AOR-be.left
 6681 'When there was only one mountain left (on his way back) home'
 6682 (Lobzang03, 65)

- 6683 (88) *rngukyta nuu li zgo bnu-ldza tu tce,*
 TOPO DEM again mountain two-long.object exist:FACT LNK
 ‘(As for the placename) Rngukata, there are also two mountain ranges.’
 6685 (140522 Kamnyu zgo, 64)

6686 In other cases, the change of counted noun does not entail a radical semantic
 6687 contrast. For instance, the noun *si* ‘tree’, while generally used with *tu-pʰu* ‘one
 6688 tree’, is also attested with the counted noun *tu-ldza* ‘one long object’, as in (89),
 6689 without clear semantic difference.

- 6690 (89) *maka rdystas cʰo si rcanuu tu-ldza ciny zo*
 completely stone COMIT tree UNEXP:DEG one-long.object even.one EMPH
 6691 *kui-me scʰiz kʰ-azyut-ndzi jnu-ŋu,*
 SBJ:PCP-not.exist INDEF.LOC AOR:EAST-reach-DU SENS-be
 ‘They arrived at a place where there was no stones and not even one tree.’
 6693 (2003 Kunbzang, 195)

6694 7.3.4 Counted nouns and other parts of speech

6695 This section presents the derivations from other parts of speech (including other
 6696 nominal classes, such as inalienably and alienably possessed nouns) into counted
 6697 noun, and from counted noun into other classes.

6698 7.3.4.1 Counted nouns and inalienably possessed nouns

6699 Counted nouns and inalienably possessed nouns stand out among other nouns
 6700 in having an obligatory prefix. Since the citation form of both classes of nouns –
 6701 the numeral ‘one’ prefix *tu-* and the indefinite possessor prefixes *tu-/tʰ-* – are ho-
 6702 mophonous, it is not unexpected that conversion occurs between the two classes.

6703 Given the fact that numeral prefixes are a closed class (see §7.3.1 and in partic-
 6704 ular §7.3.1.4), when one needs to use a quantifier without numeral prefix equiv-
 6705 alent, it is necessary to convert the counted noun into an inalienably possessed
 6706 noun in third person singular form, with the quantifier before it. In example
 6707 (90), the quantifier *nua tʰamtçrt* ‘that many’ cannot be converted to a prefix, and
 6708 therefore the counted noun *tu-tupʰu* ‘one type’ is converted to an inalienably
 6709 possessed noun in 3SG possessive form *u-tupʰu*.

- 6710 (90) *tce pab tuu-yjyn pjú-wy-ntc^ha nuu nuu t^hamtct^h u-tup^hu*
 LNK pig one-time IPFV-INV-butcher DEM DEM all 3SG.POSS-type
 6711 *jnu-łor ra*
 IPFV-come.out be.needed:FACT
 6712 ‘Each time one kills a pig, one will get that many types (of foodstuff from
 6713 it).’ (05-paR, 93)

6714 Similarly, in (91), the more complex phrase *yurža u-ro* ‘more than one hundred’
 6715 with the emphatic *zo* occurs with the 3SG prefix.

- 6716 (91) *yurža u-ro zo u-tupuu tu-j*
 hundred 3SG.POSS-excess EMPH 3SG.POSS-household exist:FACT-1PL
 6717 ‘There are more than one hundred households of us.’ (22-kumpGatCW,
 6718 32)

6719 Example (92) illustrates a third case of conversion from counted noun to in-
 6720 alienably possessed noun: a third singular possessive on the converted counted
 6721 noun indicates here indefinite number, which makes it possible to specify the
 6722 quantity as the predicate (*pjy-k-xtc^hu-ci* ‘they used to be many’) instead of the
 6723 numeral prefix (*kxtc^hu-tupuu* ‘many households’, see §7.3.1.4).

- 6724 (92) *kuucwngua nuu, u-tupuu pjy-k-xtc^hu-ci ny,*
 former.time DEM 3SG.POSS-household IFR.IPFV-PEG-be.many-PEG SFP
 6725 ‘In former times, the households (there) were many.’ (140522 tshupa, 67)

6726 Conversion from counted noun to inalienably possessed noun is also observed
 6727 when a prenominal demonstrative or adnominal clause is present, as in (93) and
 6728 (94). Conversion is however not obligatory, as shown by (95) (see additional
 6729 examples in §7.1.5).

- 6730 (93) *nuu u-xpa nuu taxpa wuma pjy-pe*
 DEM 3SG.POSS-year DEM harvest really IFR.IPFV-be.good
 6731 ‘On that year, the harvest was really good.’ (02-montagnes-kamnyu, 72)

- 6732 (94) *[arco puu-ŋu] u-sŋi nuutcu tce*
 be.finished.up:FACT PST.IPFV-be 3SG.POSS-day DEM:LOC LOC
 6733 ‘The day when (the appointed time) was about to be finished,’ (2003 sras,
 6734 31)

- 6735 (95) *tcendyre nu_i tu-sŋi numaa mu-pjy-ko*
 LNK DEM one-day DEM NEG-IFR-defeat
 6736 ‘On that day, he failed in his attempt (to force her to take him with her).’
 6737 (02-deluge2012, 73)

6738 Finally, in the case of counted nouns expressing body-based units of length,
 6739 conversion to an inalienably possessed noun has a very specific meaning. These
 6740 units have a value that depends on the person of reference (few pairs of people
 6741 have exactly the same handspan). The possessive prefix serves to indicate the
 6742 person whose body part serves as the reference as in *a-tya* ‘my handspan’ in (96).
 6743 It is the only case that a counted noun converted to inalienably possessed noun
 6744 can take a possessive prefix other than 3SG.

- 6745 (96) *kua-zri nuara, tu-tya ma kuaki caytaꝝ*
 SBJ:PCP-be.long DEM:PL one-span apart.from DEM.PROX up.from
 6746 *my-zri, azo a-tya jamar ci ma me.*
 NEG-be.long:FACT 1SG 1SG.POSS-span about one apart.from not.exist:FACT
 6747 ‘As for its length, it is at most one handspan, only the length of my
 6748 handspan.’ (28-tshAwAre, 53)

6749 Conversion from inalienably possessed noun to counted noun also exists, but
 6750 is very marginal in Japhug. When inalienably possessed nouns are converted to
 6751 counted nouns referring to a quantity, they are alienabilized (§5.1.2.9) and the
 6752 numeral prefixes are added to the noun stem with its indefinite possessor prefix.
 6753 For instance, the counted noun *tu-tu-kur* ‘one mouthful’ (example 76 p.267) or *tu-
 6754 tx-ste* ‘one bladder of’ (97) are derived from the body part inalienably possessed
 6755 nouns *tu-kur* ‘mouth’ and *tx-ste* ‘bladder’.

- 6756 (97) *tce bduxpanaxpu yuu ui-me yuu nu_i, tu-ci*
 LNK ANTHR GEN 3SG.POSS-daughter GEN DEM INDEF.POSS-water
 6757 *tu-tx-ste, tyrcor surna ci to-rku-nui,*
 one-INDEF.POSS-bladder clay figurine INDEF IFR-put.in-PL
 6758 ‘They gave to Gdugpa Nagpo’s daughter a bladder full of water and a clay
 6759 figurine (to take with her on the road, as her dowry).’ (2003smanmi-tamu,
 6760 115)

6761 Direct conversion from inalienably possessed noun to counted noun without
 6762 alienabilization is rarer, and it is not always obvious whether the inalienably
 6763 possessed noun, or the counted noun is primary. For instance, the counted noun

6764 *tuu-qiu* ‘one half’ (see §7.6.1) is likely to have been derived from the inalienably
 6765 possessed noun *uu-qiu* ‘half’, but the other directionality cannot be excluded.

6766 Clearer cases are provided by the inalienably possessed *uu-mdor* ‘colour’ (from
 6767 Tibetan མດོག་ *mdog* ‘colour’), which derives a counted noun with the numeral pre-
 6768 fix *kyntc^huu-* ‘many’ (on which see §7.3.1.4) in (98), and the native inalienably pos-
 6769 sessed noun *tr-bar* ‘wing’ from which the counted noun *tuu-bar* ‘the length of one
 6770 arm’ originates (§7.4).

- 6771 (98) *tceri kyntc^huu-tuip^hu, kyntc^huu-mdor yyzu.*
 6772 but many-types many-colour exist:SENS
 6773 ‘There are many types (of the mushrooms called *tuqejmry*), and with
 many colours.’ (24-zwArqhAjmAG, 50)

6774 7.3.4.2 Counted nouns and alienably possessed nouns

6775 Alienably possessed nouns designating containers can be converted to a partitive
 6776 counted nouns by adding the numeral prefixes to the noun stem. For instance,
 6777 the noun *k^hutsa* ‘bowl’ has a corresponding counted noun *tuu-k^hutsa* ‘one bowl’
 6778 as in (99).

- 6779 (99) *tuu-kri tuu-k^hutsa p_{JY}-tu*
 6780 INDEF.POSS-oil one-bowl IFR.IPFV-exist
 ‘They had one bowl (full) of oil.’ (140501 mdzadi, 6)

6781 The same is true of nouns borrowed from Tibetan and Chinese such as *p^hoŋ*
 6782 ‘bottle’ (from 瓶 <píng> ‘bottle’). As an alienably possessed noun, *p^hoŋ* designates
 6783 the bottle itself (not its content), and takes postnominal numerals (as in 100).

- 6784 (100) *p^hoŋ kuβde yyzu*
 6785 bottle four exist:SENS
 ‘There are four bottles.’ (elicited; can refer for instance to empty bottles)

6786 Converted to a counted noun *tuu-p^hoŋ* ‘one bottle’ it refers to the quantity of
 6787 liquid contained in a bottle, and typically follows a mass noun as in (101).

- 6788 (101) *c^ha kuβde-p^hoŋ p_{JY}-k-γ-ta-ci.*
 6789 alcohol four-bottle IFR.IPFV-PEG-PASS-put-PEG
 ‘There were four bottles (full) of alcohol.’ (140510 sanpian sheye-zh, 51)

6790 The derivation process is quite productive, and potentially new counted nouns
 6791 meaning ‘a ... full of’ can be derived from any alienably possessed noun if a
 6792 meaning can be made out of it, as in *tuu-co* from *co* ‘valley’ in (102), which means
 6793 in this particular context ‘an entire valley full of ...’.

- 6794 (102) *mbro tuu-co kuu-fse, qazo tuu-co kuu-fse nuu,*
 horse one-valley SBJ:PCP-be.like sheep one-valley SBJ:PCP-be.like DEM
 6795 *fsapar rmurmi zo nuu tuu-co ny tuu-co zo*
 animal all.kinds EMPH DEM one-valley LNK one-valley EMPH
 6796 *pui-tu nuu-ηu.*
 PST.IPFV-exist SENS-be

6797 ‘There was one valley entirely for each species of animals, like one
 6798 valley full of horses, one valley full of sheep.’ (2005 Kunbzang, 189)

6799 7.3.4.3 Counted nouns and verbs

6800 The derivation of verbs into counted nouns and that of counted nouns into verbs
 6801 are both productive processes in Japhug.

6802 Counted nouns of verbal origin are either built by adding a numeral prefix
 6803 to the verb stem (as *tuu-fkur* ‘one load’ from *fkur* ‘carry on the back’) or to the
 6804 verb stem with an additional prefix *tr-* (*tuu-tr̥rmbui* ‘one heap’ from the transitive
 6805 verb *rmbui* ‘heap up’, §16.4). Note also the simultaneous action nominal with two
 6806 prefixes *tuu-tuu-*, which can be analyzed as involving a counted noun derived from
 6807 a verb (§16.4.3).

6808 Most deverbal counted nouns are from transitive verbs, but examples from
 6809 intransitive verbs are also found. For instance, in (103) the counted noun *tuu-*
 6810 *tsʰoz* ‘one complete set’ (from the stative intransitive verb *tsʰoz* ‘be complete’)
 6811 translates Chinese 一整套 <yīzhěngtào> ‘one complete set’.

- 6812 (103) *numuu kuu icqʰa rŋuil kuu tuu-ηga*
 DEM ERG the.aforementioned silver ERG INDEF.POSS-clothes
 6813 *tʰuu-ky-βzu ci tuu-tsʰoz pŋy-βde.*
 AOR-OBJ:PCP-make INDEF one-complete.set IFR-throw.down
 6814 ‘(The bird) threw her a complete set of clothes that had been made in
 6815 silver.’ (140504 huiguniang-zh, 111)

6816 Deverbal counted nouns are either partitive counted nouns (§7.3.2.1), designat-
 6817 ing a quantity of objects resulting from the action of the verb (for instance *tuu-fkur*
 6818 ‘one load’ or *tuu-tr̥rtsuy* ‘one pile’ from *rtsuy* ‘pile up’ as in 104) or semelfactive

6819 counted nouns (§7.3.2.5), referring to the number of time an iterative/semelfac-
 6820 tive action takes place (such as *tui-txte^huu* ‘hitting with the hoe one time’ from
 6821 *txe^huu* ‘hit, gore’).

- 6822 (104) *cyrui nuu bnui-tyrtswy to-βzu-ndzi tce*
 bone DEM two-pile IFR-make-DU LNK
 6823 ‘They had make two piles from the bones.’ (2002nyimavodzer, 126)

- 6824 (105) *qaε tuu-txte^hui ta-lxt*
 hoe one-hitting.with.hoe AOR:3→3'-throw
 6825 ‘He used the hoe one time.’ (2003qachga, 166)

6826 There also are more lexicalized and synchronically less obvious examples of
 6827 counted nouns derived from verbs. For instance the temporal counted noun *tui-*
 6828 *xpa* ‘one year’ originates from the intransitive verb *pa* ‘pass X years’ illustrated
 6829 in (106) (see also example 117 in §22.4.1.4 and the account of the -*x*- element in
 6830 *tui-xpa* proposed in in §7.3.1.7).

- 6831 (106) *k^ha na-βde nuu sqamnuuz to-pa tce*
 house AOR:3→3'-leave DEM twelve IFR-pass.X.years LNK
 6832 ‘Twelve years had passed since she had left home.’ (150828 huamulan-zh,
 6833 126)

6834 Since Situ, Zbu and Tshobdun all have cognates of *tui-xpa* ‘one year’, this non-
 6835 trivial derivation must have occurred at the time of their common ancestor, but
 6836 not earlier. Other Burmo-Gyalrongic languages, even Horpa and Khroskyabs
 6837 (Jacques et al. 2017) have a root related to Japhug *pa* ‘pass X years’ for time ordi-
 6838 nals (§7.5.2), but not for the corresponding counted noun.

6839 Derivation of transitive verbs from counted nouns with the denominal prefix
 6840 *ry-* is well-attested, for instance *rytya* ‘measure by handspan’ from *tui-tya* ‘one
 6841 span’. A complete list of these verbs and the various meanings of this derivation
 6842 is presented in §20.4.2.

6843 7.3.4.4 Counted nouns and ideophones

6844 Deideophonic counted nouns are quite common, and belong to all major func-
 6845 tional categories described above. In the following discussion, ideophones (§10.1)
 6846 are by default cited in pattern II (§10.1.2.2), though other patterns are mentioned
 6847 in some cases where appropriate.

6848 The collective counted nouns *tui-boꝝ* ‘one group’ and *tui-juy* ‘one pack’ origi-
 6849 nate from the ideophonic roots found in *boꝝboꝝ* ‘in group, in order’ and *juyjuy* ‘in
 6850 great number (of long objects)’, respectively. The presence of plain voiced initial
 6851 stops in these roots is a clue to their ideophonic origin (§10.1.5.1).

6852 The semelfactive/iterative counted noun *tui-trxur* ‘one turn’ comes from the
 6853 ideophonic root of *xurxur* ‘round’ (pattern III *xurnyxur* ‘turning around’) with
 6854 an additional prefix *tr-*. This prefix is possibly the trace of an intermediate stage
 6855 as an inalienably possessed noun, with a two-step derivation IDEOPHONE → in-
 6856 alienably possessed noun → counted noun.

6857 Direct derivation from ideophone to semelfactive counted noun is also attested,
 6858 for instance *tui-kum* ‘one period of sleep’ (107) from the root in *kumkum* ‘have a
 6859 nice sleep’ without the *tr-* prefix.

- 6860 (107) *li tufsyk^ha tce tui-kum pjv-nuzuβ tce li u-jmŋo*
 6861 again dawn LNK one-sleep IFR-sleep LNK again 3SG.POSS-dream
ko-ntc^hyr tce
 6862 IFR-appear LNK

6863 ‘(The mother was so worried she could not sleep all night.) At dawn, she
 had a little sleep and had again a dream.’ (Norbzang 2012, 186)

6864 7.4 Measures

6865 Measures of size, weight and volume are mainly expressed by counted nouns,
 6866 though some unpossessible nouns are also found.¹⁰ Most of these words are
 6867 falling out of use, and being replaced by Chinese words, or calques from Chinese.

6868 Table 7.11 presents the counted nouns used in Japhug for measures of lengths.
 6869 The obsolete forms are indicated in brackets. The counted nouns *tui-tya* ‘one span’
 6870 and *tui-jom* ‘the length of two outstretched arms’ are very commonly used in nar-
 6871 ratives and conversations (their Chinese equivalents are 一拃 <yīzhǎ> ‘one span’
 6872 and 一庹 <yītuō> ‘the length of two outstretched arms’, respectively). There are
 6873 two ways to measure the handspan, *ndzoxtya* ‘length between the thumb and the
 6874 forefinger’ and *naxtyi* ‘length between the thumb and the middle finger’; these
 6875 nouns are followed by the *tui-tya* when one wants to specify which of the mea-
 6876 sures one chooses, as in *naxtyi tui-tya*. The counted noun *tui-kar* ‘the length of one
 6877 arm’ (related to *tr-kar* ‘wing’) is less common than the other ones in Table 7.11
 6878 but attested for instance in (108).

¹⁰ Measures of time are discussed in §7.5.

- 6879 (108) *tsuku tce tce tui-jom* *kuny tu-zri*
 some LNK LNK one-length.of.two.outstretched.arms even IPFV-be.long
 6880 *muṭj-cʰa, tui-var jamar, tui-var tce tce kuki*
 NEG:SENS-can one-arm.length about one-arm.length LNK LNK DEM:PROX
 6881 *jamar, kuki jamar tu-zri jui-cʰa*
 about DEM:PROX about IPFV-be.long SENS-can
 6882 ‘Some of them cannot even grow up to the length of one fathom, they
 6883 can only grow up to the length of one arm, this much.’ (16-RIWmsWSi,
 6884 122-124)

Table 7.11: Units of length

	<i>tui-tya</i> ‘one span’ <i>(tui-kʰa</i> ‘one foot’) <i>tui-var</i> ‘the length of one arm’ <i>tui-jom</i> ‘the length of two outstretched arms’ <i>(tui-tumuna</i> ‘one mile’)
--	--

6885 The counted noun *tui-tumuna* ‘one mile’ derives from the *tui-* actional nominal (§16.4.1) of the verb *nuna* ‘rest’, designating a milestone on the road indicating 6886 travellers’ resting places (at regular intervals). Distances are counted now 6887 however only in kilometers using Chinese (including Chinese numerals), as for 6888 instance the expression 三公里 <sāngōnglǐ> ‘three kilometers’ in (109). 6889

- 6890 (109) *a-pi tcʰeme nuna mbarkhom u-rku*
 1SG.POSS-elder.sibling girl DEM Mbarkham 3SG.POSS-side
 6891 <xiaoshuigou> <sangongli> *nutcu tʰu-yē.*
 ANTHR three.kilometers DEM:LOC AOR:DOWNSTREAM-come[II]
 6892 ‘My elder sister came to Xiaoshuigou, three kilometers from Mbarkham.’
 6893 (140501 tshering scid, 40)

6894 Not all nouns of measure are counted nouns. In traditional stories, the unpos-
 6895 sessible noun *χpaχtsʰyt* ‘yojana’ from Tibetan ཇྭଣା dpag.tsʰad ‘yojana’ occurs to
 6896 designate a mythical measure of distance taken from Indian sources. Numerals
 6897 are indicated as postnominal numeral modifiers as in (110).

- 6898 (110) *tui-syi χpaχts^byt kungut nui-túr-wy-tsuum* *c^ha*
 one-day yojana nine IPFV:WEST-2-INV-take.away can:FACT
 6899 ‘(This horse) can carry you (west) nine yojana in one day.’ (2003smanmi,
 6900 57)

6901 For measuring the surface of fields, the term *tui-rkoŋcyl*, illustrated by example
 6902 (111), is still in use.

- 6903 (111) *myzuu tui-rkoŋcyl jamar tce ky-clu*
 more one-unit.of.field.surface about LNK INF-plow
 6904 *lu-jyy nui-ŋu*
 IPFV:UPSTREAM-finish SENS-be
 6905 ‘One more unit and the plowing will be finished.’ (elicited)

6906 In the traditional society, cereals were more often measured by volume (us-
 6907 ing containers of various size) than by weight, an action called *ctso* ‘measure by
 6908 scooping’. Table 7.12 presents the known units of volume.¹¹ Among them, *χtsiu*
 6909 ‘bushel’ and *cpyo* ‘ten bushels’ occurs as either alienably possessed or counted
 6910 nouns. The relationship between the units of volume is described in (112).

Table 7.12: Units of volume

<i>tui-χtsiu</i> ‘one bushel’
<i>tui-cpyo</i> ‘ten bushels’
<i>tui-yna</i> ‘thirty bushels’
<i>tui-po</i> ‘one dou’

- 6911 (112) *squ-χtsiu tce tce nui cpyo nui-ŋu. tce tur-cpyo*
 ten-bushel LNK LNK DEM ten.bushels SENS-be SENS-be ten.bushels
 6912 *nui-ŋu. cpyo numuu tce tce, myzuu fsuisqu-χtsiu*
 SENS-be ten.bushels DEM LNK LNK even.more thirty-bushel
 6913 *a-tv-ypwpa tce tce numuu tui-yna. tce nui*
 IRR-PFV-accumulate LNK LNK DEM one-thirty.bushels LNK dem

¹¹ Among these units, *tui-po* ‘one dou’ apparently comes from Tibetan རු དෝ ‘unit of measure’ corresponding to Chinese 一斗 <yídòu> ‘one dou’ (about ten liter in the metric system). The other units are native words.

- 6914 *tui-yña* *pjy-ηu* *tce tce nu* *cantab*
 one-thirty.bushels IFR.IPFV-be LNK LNK DEM up.from
 6915 *ui-sy-ctsø* *pjy-me* *tce,*
 3SG.POSS-NMLZ:oblique-measure IFR.IPFV-not.exist LNK
 6916 ‘Ten bushels was a *cpyo*, after the *cpyo*, thirty bushels put together was a
 6917 *tu-yña*. After that, there was no container used to measure (grains).’
 6918 (140515 rJama, 29-33)

6919 The units of weight include *tu-sraŋ* ‘one ounce’ (from Tibetan དྲ སྙ ཟ ཉ ‘ounce’),
 6920 *rjypt̪cxt̪* ‘half pound’ (from the first syllable of ར୍ྗ ཕ མ ཉ ‘scales’ with པ བ ‘half’) and the counted noun *tu-turpa* ‘one pound’ derived from *turpa* ‘axe’ (see
 6921 §7.3.4.2).¹²

- 6923 (113) *kucungu* *rjama* *ui-taꝝ* *tce, kurcꝝ-sraŋ tce*
 6924 in.former.times weighing.scales 3SG.POSS-on LNK eight-pound LNK
rjypt̪cxt̪, sqapry-sraŋ tce tu-turpa pjy-ηu.
 6925 half.pound sixteen-ounce LNK one-pound IFR.IPFV-be
 6926 ‘In former times, on the scales, one half pound was eight ounces, and
 one pound was sixteen ounces.’ (140515 rJama, 2-3)

6927 7.5 Counting time

6928 7.5.1 Temporal counted nouns

6929 Japhug has native counted nouns for time durations related to solar and lunar
 6930 cycles: *tu-xpa* ‘one year’, *tu-sla* ‘one month’, *tu-sŋi* ‘one day’, *tr-rzaꝝ* ‘one night’
 6931 (also used to express 24 hours). There are no native concepts for ‘weeks’ or ‘ten
 6932 days’; the expression of hours is presented in §7.5.4. Other temporal counted
 6933 nouns include *tu-mn̪utsi* ‘one lifetime’ (from ཡ ན གྷ ཉ ‘human life’), *tu-tupcūrtç̪aꝝ*
 6934 ‘one generation’ and *tu-rzuy* ‘one section, one instant’, and *tu-skyrma* ‘one minute’
 6935 (from Tibetan ག ཁ ཉ ‘star, minute’)

6936 The temporal counted nouns *tu-sŋi* ‘one day’ and *tr-rzaꝝ* ‘one night’ are com-
 6937 monly used in apposition with the same numeral prefix to express the meaning
 6938 ‘X days and X nights’, as in (114).

¹² This may be an ancient calque from 磅 <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 *skyr* ‘weigh’).

- 6939 (114) *χsur-sŋi χsy-rzaʂ zo pjy-ryzi*
 three-day three-night EMPH IFR.IPFV-stay
 6940 ‘He stayed there for three days and three nights.’ (2011-13-qala, 16)

6941 To express the meanings corresponding to English ‘after’ or ‘later’ with a time
 6942 span, the idiomatic way in Japhug is to use verbs such as *tsu* ‘pass (of time)’,
 6943 as shown by example (115) and (116). Note that *tsu* ‘pass (of time)’ is a semi-
 6944 transitive verb (§14.2.3) whose semi-object is the time period expressed by the
 6945 counted noun, and whose subject is the person affected by the passing of time
 6946 (see for instance 116 with 1SG indexation).

- 6947 (115) *wu-tuu-yy-wxti pŋy-saxaʂ zo tui-sŋi*
 3SG.POSS-NMLZ:DEG-FACIL-be.big IFR.IPFV-be.extremely EMPH one-day
 6948 *ty-tsu* *tce, χsu-sŋi ty-kui-tsu* *to-fse. χsu-sŋi*
 AOR-pass LNK three-days AOR-SBJ:PCP-pass IFR-be.like three-day
 6949 *ty-tsu* *tce, tui-sla ty-kui-tsu* *to-fse. tui-sla*
 AOR-pass LNK one-month AOR-SBJ:PCP-pass IFR-be.like one-month
 6950 *ty-tsu* *tce, tui-xpa ty-kui-tsu* *to-fse.*
 AOR-pass LNK one-year AOR-SBJ:PCP-pass IFR-be.like
 6951 ‘He grew extremely fast, one day after (he was born) he looked like (an
 6952 infant) who was three days old, after three days he looked like a (baby)
 6953 who was one month old, after one month he looked like a (toddler) who
 6954 was one year old.’ (2012 Norbzang, 120-123)

- 6955 (116) *tcʰorzi wu-ŋgu cʰwu-kui-rku-a, χsy-rzaʂ*
 jar 3SG.POSS-inside IPFV:DOWNSTREAM-2→1-put.in-1SG three-days
 6956 *ty-tsu-a tce ci a-ty-kui-rtɔʂ-a,*
 AOR-pass-1SG LNK once IRR-PFV-2→1-look-1SG
 6957 ‘Put me in a jar, and three days later have a look at me.’ (2003 Kunbzang,
 6958 385)

6959 The postposition *cunŋgu* ‘before’ (§8.2.11) occurs after temporal counted nouns
 6960 in examples such as (117) (see also 157 below); the relator noun *wu-qʰu* ‘after’
 6961 (§8.3.5) is not used in this way except in texts translated from Chinese (where
 6962 it is likely calqued) as in (118).

- 6963 (117) *kunguisqu-xpa cunŋgu nura tcʰeme ra wuma zo kui-tab*
 nine.ten-years before DEM:PL girl PL really EMPH SBJ:PCP-weave

6964 *pui-dyn*

PST.IPFV-be.many

6965 ‘Nine or ten years ago, there were many weavers among women.’

6966 (thaXtsa2002, 100)

- 6967 (118) *kui^bdy-xpa u-q^bu tce kutcu tu-ky-γwurwum*
 four-year 3SG.POSS-after LNK here IPFV-INF-RECIP:gather
 6968 *to-nuu-pa-nuu.*

IFR-AUTO-make-PL

6969 ‘They agreed to meet again at this place in four years.’ (140508 benling
 6970 gaoqiang de si xiongdi-zh, 23)

6971 In order to express meanings such as ‘beginning’ or ‘end’ of a time period
 6972 indicated by a counted noun, verbs such as *arco* ‘be finished’ are used as in (119)
 6973 instead of nouns or participles like *u-sryjry* ‘its end’.

- 6974 (119) *yuijpa tuu-xpa puu-yreco curγgu tce, <lunwen> ky-ryt*
 this.year one.year IPFV-be.finished before LNK dissertation INF-write
 6975 *puu-jyy puu-ra.*

IPFV-finish SENS-be.needed

6976 ‘He has to finish writing his dissertation before the end of this year.’
 6977 (elicitation)

6978 Temporal counted nouns are generally used on their own without head noun.
 6979 The counted noun *tuu-xpa* ‘one year’ however does occur with the noun *lu* ‘year’
 6980 (from Tibetan ལོ ‘year’) in some traditional stories as in (120).

- 6981 (120) *lu χsui-xpa pui-ŋke-j puu-ra ri,*
 year three-year PST.IPFV-walk-1SG PST.IPFV-be.needed LNK

6982 ‘We had to walk for three years.’ (sras2003, 58)

6983 The temporal counted nouns *tuu-sla* ‘one month’ and *tuu-xpa* ‘one year’ have
 6984 the special forms *kyrry-sla* ‘several months’ and *kyrry-sla* ‘several years’ as in (121)
 6985 and (122) with what appears to be a numeral prefix *kyrry-* ‘several’.¹³ This prefix
 6986 cannot however be used with any other counted nouns, even *tuu-sji* ‘one day’.

¹³ These two counted nouns are also compatible with the approximate numeral prefix *laṣnu-* ‘a few’ as in *laṣnu-sla* ‘a few months’ and *laṣnu-xpa* ‘a few years’ (§7.2).

- 6987 (121) *tua-ji* *ui-ŋguw* *kyyry-xpa* *zo*
 INDEF.POSS-field 3SG.POSS-inside several-years EMPH
 6988 *pua-a-nua-rku* *kuny, pjua-tsyi my-cʰa.*
 PST.IPFV-PASS-AUTO-put.in also IPFV-rot NEG-can:FACT
 6989 ‘Even if it remains in (the ground of) the field for several years, it does
 6990 not rot.’ (08-qajAGi, 37)
- 6991 (122) *kyry-sla* *zo* *tua-ŋga* *ra ma-nú-wy-χtci* *qʰe*
 several-months EMPH INDEF.POSS-clothes PL NEG:IRR-PFV-INV-wash LNK
 6992 *tce zruuy ku-βze* *cti.*
 LNK louse IPFV-grow be.AFF:FACT
 6993 ‘If one does not wash clothes for several months, lice will grow in it.’
 6994 (21-mdzadi, 51)

6995 7.5.2 Time ordinals

6996 Japhug has two series of time ordinals, one for days (Table 7.13) and another one
 6997 for years (Table 7.14). In the following discussion, I adopt Michailovsky’s (2003)
 6998 notations: $D^{-\alpha}$ ‘ α day(s) ago’, $D^{+\beta}$ ‘in β day(s)’, $Y^{+\gamma}$ ‘ γ year(s) ago’, $Y^{+\delta}$ ‘in δ
 6999 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>jyndi</i> ‘in four days’
+5	<i>βzindi</i> ‘in five days’
+6	<i>pr̩syndi</i> ‘in six days’

7000 The Japhug system has relatively few ordinals for past days and years (some
 7001 Kiranti languages have terms for up to D^{-6} and Y^{-4} , as shown by Michailovsky
 7002 2003), but stands out by having six ordinals for future years (no Kiranti languages
 7003 has more than D^{+6} and Y^{+4} in Michailovsky’s 2003 data). However, the D^{+5}

7004 *βzindi* ‘in five days’, *D⁺⁶ p̥r̥tsvndi* ‘in six days’ and the corresponding year ordinals
 7005 *Y⁺⁵* and *Y⁺⁶* are not used any more in day-to-day speech even by the eldest
 7006 speakers.

7007 The *D⁰* to *D⁻²* and *Y⁰* to *Y⁻²* ordinals have a prefix *ji-/ju-/ja-*, which is prob-
 7008 ably of demonstrative origin. This prefix also occurs in the derived ordinals
 7009 *juymur* ‘this evening’ and *juxčo* ‘this morning’ (see Tables 7.15 and 7.16 below),
 7010 as well as in some frozen adverbs, such as *j̥xts^hi* ‘this time’ (from *tu-xts^hi* ‘one
 7011 time’) and *jinde* ‘these days’. Cognates of this prefix are found in other time ordi-
 7012 nals elsewhere in Gyalrongic. In the case of *yujpa* ‘this year’, this prefix surfaces
 7013 as a preinitial *-j-* to the root *-pa* ‘year’ (see §7.3.1.7 on the etymology of this noun).
 7014 The *yuu-* (from *wə-) prefix may be cognate to the prefix *pə-* in *pəvə* ‘this year’ and
 7015 *pəsnə* ‘today’ in Stau.

Table 7.14: Japhug year ordinals

Year	Time ordinal expression
-2	<i>japandži</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>fsvndypa</i> ‘in two years’
+3	<i>q^hsvndypa</i> ‘in three years’
+4	<i>jvndypa</i> ‘in four years’
+5	<i>βzindypa</i> ‘in five years’
+6	<i>p̥r̥tsvndypa</i> ‘in six years’

7016 The expressions *juufcundži* ‘two days ago’ and *japandži* ‘two years ago’, which
 7017 are based on the *D⁻¹* and *Y⁻¹* forms with a suffix *-ndži*, can be analyzed as time
 7018 ordinals (*D⁻²* and *Y⁻²*, respectively), as in (123).¹⁴

- 7019 (123) *nua ma kui-dyn japa muu-tx-χtui-t-a.*
 DEM apart.from SBJ:PCP-be.many last.year NEG-AOR-buy-TR:PST-1SG
 7020 *japandži alo, taltcym kui z-pv̥-car tcendyre*
 two.years.ago upstream ANTHR ERG TRAL-IFR-search LNK
 7021 ‘Last year, it did not buy a lot (of edible fern). The year before, up there

¹⁴ This suffix *-ndži* is not attested elsewhere, but is probably related to the syllable *-ri* of the relator noun *w-βyri* ‘in front of; before’, from an earlier *-n-ri with epenthesis (*-ndri) and fricativization of the resulting *dr cluster.

7022 (in Kamnyu), Lhalcam collected some.' (conversation, 14.05.10)

7023 However, in many cases, they have less specific meanings such as 'a few days
 7024 ago' and 'a few years ago', as shown by (124), referring to an event that had
 7025 occurred more than one week before.¹⁵

7026 (124) *jufcundzi pui-tur-χcu-ndzi ma, a-ηga*
 last.days AOR-2-be.strong-DU LNK 1SG.POSS-clothes
 7027 *ly-tur-sui-yuit-ndzi nuu, a-xtsa nuu wuma pui-pe tce*
 AOR-2-CAUS-bring-DU DEM 1SG.POSS-shoe DEM really SENS-be.good LNK
 7028 *nuu ku-nui-ηge-a, a-xtsa wuma pui-βze*
 DEM PRS-AUTO-wear[III]-1SG.POSS-adapted really SENS-make[III]

7029 'Thank you both for the other day, the clothes that you have sent me, the
 7030 shoes are very nice, I wear them, they are my size.' (conversation,
 7031 15.04.18)

7032 Even the Y^{-1} ordinal *japa* 'last year' can have a less specific meaning if com-
 7033 bined with *dal* 'early' and the locative *ri* as *japa dal ri* 'a few years ago' as in (125).
 7034 No other time ordinal can be used with *dal* 'early' or other modifiers.

7035 (125) *japa dal ri, ftcar ri bimbyuzum yrzu pui-ti-nuu ma*
 last.year early LOC summer LOC solar.eclipse exist:SENS SENS-say-PL
 7036 'A few years ago, they said there was a solar eclipse during summer.'
 7037 (29-RmGWzWn2, 27)

7038 The day ordinals from D^{+2} to D^{+5} contain a suffix *-ndi*, which attaches to the
 7039 *status constructus* forms of *fso* 'tomorrow' in D^{+2} *fsyndi* and *u-qʰu* 'after' in D^{+3}
 7040 *qʰyndi*. The D^{+5} form *βzindi* contains the *status constructus* *βzuu-* of the Japhug
 7041 pronunciation *βzi* of the Tibetan numeral ད୍ୡ୧ *bzi* 'four' (see §7.1.1), presumably
 7042 meaning 'the fourth day after tomorrow'.

7043 Year ordinals from Y^{+2} to Y^{+5} (Table 7.14) are built by simply adding the root
 7044 *-pa* 'year' (see §7.3.1.7 and § 7.3.4.3) to the *status constructus* of the corresponding
 7045 day ordinals D^{+2} to D^{+5} . The Y^{+1} time ordinal *fsaqʰe* 'next year' comes from the
 7046 *status constructus* of *fso* 'tomorrow', and the second element may be from the
 7047 counted noun *u-qʰu* 'after' followed by the locative suffix **-j* with regular vowel
 7048 fusion (§8.2.4.4).

7049 In addition, there are morning ordinals (Table 7.15) which derive from the cor-
 7050 responding day ordinals by adding the noun *soz* 'morning' (with the exception

¹⁵ This use reminds of the English expression 'a couple of days ago', which can mean up to a week ago.

of *juxčo* ‘this morning’), and the evening and night ordinals (Table 7.16) which are built by adding the bound form *-mur* (found in *tū-ymur* ‘one evening’ and *murkurku* ‘every evening’). These ordinals are not attested after D^{+3} , though the forms could be built easily; note the absence of *status constructus*, except for D^{-1} , where *juſčur* ‘yesterday’ loses its coda, as in *juſčusož* ‘yesterday morning’.

Note the isolated *qʰuj* ‘this afternoon’ Table 7.16), which can refer to the time period between noon and the night (including the early evening).

Table 7.15: Morning ordinals

Day	Morning ordinal
-2	<i>juſčundzisož</i> ‘the morning of two days ago’
-1	<i>juſčusož</i> ‘yesterday morning’
0	<i>juxčo</i> ‘this morning’
+1	<i>fsosož</i> ‘tomorrow morning’
+2	<i>fsyndisož</i> ‘in two days in the morning’
+3	<i>qʰyndisož</i> ‘in three days in the morning’

As shown by (126), it is also possible to combine day ordinals with other time nouns such as *turmua* ‘dusk’ to indicate particular moments of previous or future days.

- (126) *juſčundz-i-mur n̥-pi kui-wxti u-taꝝ*
 two.days.ago-evening 2SG.POSS-elder.sibling SBJ:PCP-be.big 3SG.POSS-on
ko-nqoꝝ-a ri mu-i-tý-wy-tsum-a, juſčur turmu
 IFR-hang-1SG LNK NEG-AOR:UP-INV-take.away-1SG yesterday dusk
tce n̥-pi tulyt nuu u-taꝝ ko-nqoꝝ-a
 LNK 2SG.POSS-elder.sibling second.sibling DEM 3SG.POSS-on IFR-hang-1SG
ri mu-i-tý-wy-tsum-a tce, juymur ndyre n̥zo
 LNK NEG-AOR:UP-INV-take.away-1SG LNK this.evening TOP.ADVERS 2SG
tu-kui-tsum-a ra
 IPFV:UP-2→1-take.away-1SG be.needed:FACT
- ‘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)

Time ordinals can be used either on their own as (123), (124) or (126) above,

Table 7.16: Evening ordinals

Day	Evening	Night
-2	<i>jufçuundžimur</i> ‘the evening of two days ago’	
-1	<i>jufçumur</i> ‘yesterday evening’	<i>jufçucyr</i> ‘yesterday night’
0	<i>qʰuj</i> ‘this afternoon’, <i>juymur</i> ‘this evening’	
+1	<i>fsomur</i> ‘tomorrow evening’	
+2	<i>fsyndimur</i> ‘in two days in the evening’	
+3	<i>qʰyndimur</i> ‘in three days in the evening’	

7071 or be followed by the linker *tce* as in (127). They are never used with the loca-
 7072 tive postpositions *ri*, *zui*, or *tçu* (which are used to mark some temporal adjuncts,
 7073 §8.2.4.1), except for the D^{-1} , S^{-2} , Y^{-1} and Y^{-2} ordinals which can occur with
 7074 *ri*, as in (128).

- 7075 (127) *fsyndi tce li kumač ji-kx-nyma yyzu*
 in.two.days LNK again other 1PL.POSS-OBJ:PCP-work exist:SENS
 7076 ‘After tomorrow we have something else to do.’ (conversation, 2012.12)

- 7077 (128) *japa ri tce, <hongyuan> <caizhengju> ri pui-cʰa, <kaoshi>*
 last.year LOC LNK ANTHR finance.office LOC AOR-can exam
 7078 *pui-cʰa*
 AOR-can
 7079 ‘Last year, he succeeded at the finance office in Hongyuan, at the exam.’
 7080 (12-BzaNsa, 76)

7081 Time ordinals can be converted to inalienably possessed nouns with the third
 7082 singular prefix *wu-* to change the reference time from the present to a point of time
 7083 in the past or a to hypothetical time reference. For instance, from *fso* ‘tomorrow’
 7084 one can build *wu-fso* ‘the next day’ or *wu-fsosji* ‘the next day’ (by adding the counted
 7085 noun *tui-sŋi* ‘one day’), as in (129), (130) or (131).

- 7086 (129) *wu-fso-sŋi tce tce li pjx-nytsoh-nui tce*
 3SG.POSS-tomorrow-day LNK LNK again IFR-dig.up.silverweed-PL LNK
 7087 ‘The next day, they dug up again silverweed roots.’ (07-deluge, 544)

- 7088 (130) *nur tuu-rzab nuu a-puu-nuu-fse tce,*
 DEM one-night DEM IRR-IPFV-AUTO-be.like LNK
 7089 *uu-fso-soz tce uu-ci zo puu-tob*
 3SG.POSS-tomorrow-morning LNK 3SG.POSS-water EMPH IPFV-come.out
 7090 *puu-yu*
 SENS-be
 7091 ‘If you leave it one night, the next day in the morning the juice comes
 7092 out.’ (conversation 14.05.10)
- 7093 (131) *tce tuu-ji uu-ηguu pjui-nuu-ce tce,*
 LNK INDEF.POSS-field 3SG.POSS-inside IPFV:DOWN-AUTO-go LNK
 7094 *uu-fsaq^he tce li tu-tob puu-yu tce.*
 3SG.POSS-next.year LNK again IPFV:UP-come.out SENS-be LNK
 7095 ‘(Its seed) goes into (the soil of) the field, and it grows again the next
 7096 year.’ (13-NanWkWmtsWG, 111)

7.5.3 Other derived time adverbs

7097 Japhug has a series of distributive adverbs meaning ‘every/each *X*’ (Table 7.17).
 7098 These adverbs are derived from time nominals (mainly counted nouns, but also
 7099 alienably possessed nouns like *soz* ‘morning’) by adding a suffix *-ku* and then
 7100 applying partial reduplication (§4.1). If the nominal root has a coda such as that
 7101 of *-mur* ‘evening’ (as in *tuu-ymur* ‘one evening’), this coda is resyllabified and
 7102 undergoes reduplication together with the suffix, as in the form *murkurku* ‘every
 7103 evening’ (not †*murku**ku*).
 7104

7105 The /u/ of the preceding syllable tends to become [u] due to vowel assimila-
 7106 tion (§3.3.1.2); since vowel assimilation always occurs in the forms without
 7107 a reduplicated cluster, the transcriptions *spikuku* ‘every day’ and *pakuku* ‘every
 7108 year’ are used in this grammar (Table 7.17) instead of the more phonological rep-
 7109 resentations /spikuku/ and /pakuku/.

7110 These adverbs are commonly used with the emphatic marker *zo*, as in (132).

- 7111 (132) *murkurku zo kyntc^ha_B a-pi uu-p^he*
 every.evening EMPH street 1SG.POSS-elder.sibling 3SG.POSS-DAT
 7112 *kui-nyppri puu-yi-a, ... puu-yu.*
 SBJ:PCP-have.supper ... PST.IPFV-be
 7113 ‘Every evening, if would go in the town at my elder brother’s home to
 7114 have supper and...’ (140501 tshering skyid, 111)

7115 This morphological derivation is not productive, and cannot be used with any
 7116 other temporal counted noun, even *tuu-sla* ‘one month’ – the distributive modi-
 7117 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>soskuusku</i> ‘every morning’
<i>tuu-ymur</i> ‘one evening’	<i>murkurku</i> ‘every evening’
<i>tuu-sji</i> ‘one day’	<i>snikuku</i> ‘every day’
<i>tuu-xpa</i> ‘one year’	<i>pakuku</i> ‘every year’

7118 7.5.4 Clock time

7119 Japhug has a series of words borrowed from Tibetan that can be used to refer
 7120 to hours and minutes. The alienably possessed *tuts^hot* ‘time, hour, clock’ from
 7121 Tibetan དུ་ཚོད་ *dus.ts^hod* ‘time, hour’ (note that *tuu-* here is not a prefix, but repre-
 7122 sents the Tibetan syllable དུ་ *dus* ‘time’), if directly followed by a numeral (or the
 7123 generic counted noun *tuu-rdo_B* ‘one piece’) refers to hours, as in examples (133)
 7124 and (134).

- 7125 (133) *cyr tuts^hot sqamnuuz zo tce a-jy-tuu-z-nxtuy tce,*
 night hour twelve EMPH LNK IRR-PFV-2-CAUS-happen.to.be.at LNK
 7126 ‘You will have to make sure to be there at midnight.’ (2003qachga, 26)

- 7127 (134) *tce nunuu ci ta-cuu-mnyym nunuu tuts^hot tuu-rdo_B jamar*
 LNK DEM one AOR:3→3'-caus-hurt DEM hour one-piece about
 7128 *myctsa my-zhi.*
 until NEG-subside:FACT
 7129 ‘When (nettles) start to cause pain (to one’s body), it won’t stop for
 7130 about one hour.’ (11-mtshalu, 7-8)

7131 To express a length of time in minutes, the noun *tuts^hot* ‘time, hour, clock’ is
 7132 followed by the counted noun *tuu-skyrma* ‘one minute’, as in (135).

- 7133 (135) *tuts^hot sqamju-skyrma, ynysqi-skyrma jamar ty-tsuy tce*
 time fifteen-minute twenty-minute about AOR-pass LNK

- 7134 *ku-smi citi.*
 IPFV-be.cooked be.AFF:FACT
 7135 ‘After fifteen or twenty minutes, it is cooked.’ (160706 thotsi, 53)
- 7136 To ask about clock time, the interrogative pronoun *tʰystuy* ‘how many, how
 7137 much’ occurs with the verb *zyut* ‘reach’ as in (136) (see also §6.5.3).
- 7138 (136) *n̥ki nuu tuutsʰot tʰystuy ko-zyut?*
 DEM:DISTAL DEM hour how.many IFR-reach
 7139 ‘At your place, what time is it?’ (conversation, 14.12.24 – the question
 7140 refers to the time lag between Paris and Mbarkham)
- 7141 These expressions, although used in the everyday language in Japhug, are
 7142 calqued from Chinese since they follow modern time counting units and are all
 7143 recent. Another calque from Chinese includes *tu-tçulxβ* ‘one unit of tobacco’ as
 7144 in (137), from the expression 一斗烟的功夫 <yī dǒu yān de gōngfū> ‘time of one
 7145 unit of tobacco’.
- 7146 (137) *tʰamaka tuu-tçulxβ ky-sko uu-raŋ jamar*
 tobacco one-tobacco.unit INF-smoke 3SG.POSS-time about
 7147 *nuu-ra*
 SENS-be.needed
 7148 ‘One needs about the time of a tobacco smoke.’ (elicited)

7.6 Basic arithmetic operations

- 7149 Although Japhug lacks an elaborate mathematical vocabulary, is it possible to
 7150 express at least the basic arithmetic operations without recourse to Chinese.
 7151 The counted noun *tu-rdoz* ‘one piece’ is used instead of the numeral *ci* ‘one’ is
 7152 calculations (see 138 below).
 7153 Additions are expressed by the construction in (138) and (139),¹⁶ with the verb
 7154 *ta* ‘put’ (or alternatively, *yxyui* ‘add’) and the locative noun *uu-tax* ‘on top of’, lit-
 7155 erally ‘If one puts Y on the top of X, it makes Z’ corresponding to $X + Y = Z$.

¹⁶ The 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.

7157 (138) *kumju u-tas tuu-rdo& pju-wy-ta tce kutsyy tu-&zbe*
 five 3SG-on one-piece IPFV:DOWN-INV-put LNK six IPFV-do[III]

7158 *&ju.*
 be:FACT

7159 ‘Five plus one equals six.’ (gram140505 math, elicitation)

7160 (139) *nzyo kiacnu-kurcat nuu pu&punju ny, kiacnuaz u-tas kurcat*
 2SG seven-eight DEM as.for LNK seven 3SG-on eight
 7161 *pju-wy-ta tce sqamju nuu-&ju sqamju tce ju-tuu-nuu-ce*
 IPFV:DOWN-INV-put LNK fifteen SENS-be fifteen LNK IPFV-2-VERT-go
 7162 *nuu-&ju tce,*
 SENS-be LNK

7163 ‘As for the expression ‘seven eight’ (your father in law has told) you,
 7164 seven plus eight equals fifteen, (it means that) you go back (to your
 7165 husband’s home) in fifteen days.’ (2005tAwakWcqrar, 39)

7166 In the case of subtractions, the main verb is *tçyt* ‘take out’ combined with the
 7167 downstream orientation preverb (the preverb *c^hu-* in 140, §15.1.4.2). The minuend
 7168 (*tuu-rdo&* in 140) is the object of *tçyt* ‘take out’, and the subtrahend (*kumju* in 140)
 7169 is encoded with the relator noun *u-&gwa* ‘inside’ (§8.3.4.4). Alternatively, the verb
 7170 *suuxtç^ha&* ‘make diminish’, causative of *tç^ha&* ‘diminish’ (§17.2.1.4) can also occur
 7171 (selecting the DOWNWARDS orientation). The construction is exactly the same as
 7172 in (140), replacing *c^hu-wy-tçyt* by *pju-wy-suuxtç^ha&*.

7173 (140) *kumju u-&gwa tuu-rdo& c^hu-wy-tçyt tce kui&de ma*
 five 3SG-inside one-piece IPFV-INV-take.out LNK four apart.from
 7174 *nuu-me &ju*
 IPFV-not.exist be:FACT

7175 ‘If one takes out one from five, only four remain = five minus one equals
 7176 four’ (gram140505 math, elicitation)

7177 Japhug is rarely used for multiplication. The counted noun *tuu-zlos* ‘one time’
 7178 can convey a multiplicative meaning as in example (141). Note that this counted
 7179 noun of Tibetan origin has two alternative forms for ‘two times’, the regular *u&nu-*
 7180 *zlos* and the hybrid form *u&nu-zlos* with an irregular numeral prefix that seems
 7181 influenced by the Tibetan numeral ལྷିନ୍ ଗନ୍ୟ ‘two’ (see §7.1.6.1, §7.3.1.5). Divisions
 7182 are treated in the section on fractions (§7.6.1).

- 7183 (141) *kunguat nur χsum yuu χsu-zlob yu*
 nine DEM three GEN three-time be:FACT
 7184 ‘Nine is three times three.’ (gram140505 math, elicitation)

7185 **7.6.1 Fractions**

7186 Japhug does not have specific names for fractions other than *wi-qiuu* ‘half’. This
 7187 inalienably possessed noun has no prefixal form, and to express the meaning
 7188 ‘half a *X*’, the only available construction is the one illustrated in (142) and (143),
 7189 combining a counted noun with the numeral prefix ‘one’, the genitive *yuu* and
 7190 *wi-qiuu* ‘half’.

- 7191 (142) *tui-jom yuu wi-qiuu jamar*
 one-length.of.two.outstretched.arms GEN 3SG.POSS-half about
 7192 *nur-rŋji*
 SENS-be.long
 7193 ‘(Its tail) is about half a fathom (one arm) long.’ (24-ZmbrWpGa, 68)
- 7194 (143) *nunua tui-xpa yuu wi-qiuu nur ny-cq^hlyt.*
 DEM one-year GEN 3SG.POSS-half DEM IFR-disappear
 7195 ‘Half a year passed.’ (150907 laoshandaoshi-zh, 98)

7196 The denominational verb *nyqiuu* ‘pass half of’ (§20.7.1) can be used with temporal
 7197 counted nouns to express the same meaning (144).

- 7198 (144) *tui-sla ny-nyqiuu*
 one-month IFR-pass.half
 7199 ‘Half a month passed.’ (elicited)

7200 The additive interpretation ‘and a half’ can be expressed by coordinating the
 7201 counted noun and the inalienably possessed *wi-qiuu* ‘half’ using the comitative *c^ho*
 7202 ‘with’, as in (145).

- 7203 (145) *ki kui-fse tui-jom c^ho*
 DEM.PROX SBJ:PCP-be.like one-length.of.two.outstretched.arms COMIT
 7204 *wi-qiuu jamar kui-zri ra*
 3SG.POSS-half about SBJ:PCP-be.long be.needed:FACT
 7205 ‘They need (a piece of leather) long like one fathom and a half.’
 7206 (24-mbGo, 79)

7207 Alternatively, the additive meaning ‘and a half’ can be expressed with the
 7208 counted noun *tu-qiu* ‘one half’, which derives from *w-qiu* ‘half’ (§7.3.4.1).

- 7209 (146) *tce w-pyrt^hβ tce, tu-pyrme tu-qiu jamar, bniu-pyrme jamar*
 LNK 3SG.POSS-between LNK one-year one-half about, two-year about
 7210 *ma kui-me bja.*
 apart.from SBJ:PCP-not.exist completely

7211 ‘(Some women had thirteen or fifteen children); between each of them,
 7212 there was only one year and a half or two years.’ (140426 tApAtso
 7213 kAnWBdaR, 89; see the preceding sentence in example 55 in §9.1.3.2)

7214 For more complex fractions, the counted nouns *tu-tucur* ‘one part’, *tu-tyrsum*
 7215 ‘one part’ or *tu-tukro* ‘one part’ are used. Two related constructions are possible;
 7216 in the following discussion, *X* represents the numerator, *Y* the denominator (the
 7217 fraction $\frac{X}{Y}$).

7218 The first one is a noun phrase with the structure *Y-tucur w-ŋgu X-tucur*, liter-
 7219 ally ‘*X* parts among *Y* parts’, illustrated by example (147). This may be a calque of
 7220 the Chinese construction *Y分之X* (*Y-fēn zhī-X*) literally ‘*X* of *Y* parts’, a way
 7221 of expressing fractions attested from Han dynasty documents (Anicotte 2015) to
 7222 standard Mandarin.

- 7223 (147) *kumŋu-tucur w-ŋgu χsui-tucur*
 five-part 3SG-inside three-part
 7224 $\frac{3}{5}$ = ‘Three parts among five parts.’ (elicited)

7225 An alternative possibility is to use the auxiliary verb *lxt* ‘release’ as in (148), but
 7226 such construction is biclausal (the second clause lacks a verbal predicate, §22.3).

- 7227 (148) *χsur-tucur tú-wy-lxt tce tu-tucur*
 three-part IPFV-INV-release LNK one-part
 7228 $\frac{1}{3}$; literally ‘Making three parts, one part.’ (elicited)

7229 Divisions can be expressed using the constructions in (149a) and (149b).

- 7230 (149) a. *sqi nuu kumŋu-tucur tú-wy-lxt tce, bniuz ny bniuz*
 ten DEM five-part IPFV-INV-release LNK two LNK two
 7231 *pniú-wy-βzu kʰw*
 IPFV-INV-make be.possible:FACT

- 7232 b. *sqi nuu kumju-tukro puú-wy-lvt tce, bnuaz ny bnuaz*
 ten DEM five-part IPFV-INV-throw LNK two LNK two
 7233 *puú-wy-syβzu kʰw*
 IPFV-INV-transform be.possible:FACT

7234 $\frac{10}{5} = 2$; literally ‘Making 5 parts out of 10, one can make them in sets of
 7235 two’.

7236 In these examples, the numerator is a left-dislocated numeral followed by the
 7237 determiner *nuu*, the denominator a counted noun serving as object of *lvt* ‘release’
 7238 as in the fraction in (148), and the result of the computation is indicated by a
 7239 distributive repetition of the numeral with the additive postposition *ny* (§7.3.2.3).

⁷²⁴⁰ 8 Postpositions and relator nouns

⁷²⁴¹ Japhug is particularly poor in case-marking morphology, and grammatical relations are indicated by verbal morphology (treated in Chapter 14) combined with ⁷²⁴² postpositions and relator nouns.¹ In this chapter, I first present the various possible ⁷²⁴³ functions of bare (absolutive) noun phrases, and then describe the uses of all ⁷²⁴⁴ postpositions and relator nouns in combination with noun phrases. Some post-⁷²⁴⁵ positions and relator nouns also occur in various types of subordinate clauses ⁷²⁴⁶ (⁷²⁴⁷ §25.1.1).

⁷²⁴⁸ 8.1 Absolutive

⁷²⁴⁹ In Japhug *absolutive* refers to the bare form of a noun phrase, without postpo-⁷²⁵⁰ sition, relator noun or locative suffix. This form is used for intransitive subject, ⁷²⁵¹ object and various other grammatical functions described in this section, in par-⁷²⁵² ticular goals and some locative phrases, for which locative postpositions (§8.2.4) ⁷²⁵³ and relator nouns (§8.3.4) are optional.

⁷²⁵⁴ 8.1.1 Intransitive subject

⁷²⁵⁵ The only argument of morphologically intransitive and syntactically monoactant-⁷²⁵⁶ ial verbs, the intransitive subject (S), is in absolutive form and is indexed on the ⁷²⁵⁷ verb, as *tc^heme nura* ‘the women’ with plural indexation in (1).

- ⁷²⁵⁸ (1) *tc^heme nura t^hwu-sta-nuu*
woman DEM:PL AOR-wake.up-PL
⁷²⁵⁹ ‘The women woke up.’ (2005 Norbzang, 123)

⁷²⁶⁰ Apparent examples of ergative *kuu* with third person intransitive subjects are ⁷²⁶¹ due to the effect of long distance ergative marking (§8.2.2.2), due to bracketing ⁷²⁶² issues between main clause and complement clause (§24.3.2) or to errors, as in ⁷²⁶³ example (2): the intransitive *sta* ‘wake up’ only takes an absolute argument (as

¹ Word order also plays a minor role (§22.1).

8 Postpositions and relator nouns

7264 in 1 above), and the ergative *kuu* is preceded and followed by pauses, reflecting
7265 the hesitation of the narrator. As an isolated sentence, the use of ergative is
7266 considered to be ungrammatical in this example.

- 7267 (2) *nua jamar kóbmuz nua luulu nui, /kuu/, cʰy-sta.*
DEM about only.then DEM cat DEM ERG IFR-wake.up
7268 (150826 shier shengxiao, 147)

7269 Some morphologically intransitive verbs have a second argument, which can
7270 be either absolute (semi-objects §8.1.5 or goals §8.1.8) or oblique (dative with
7271 *ru* ‘look at’, genitive with *ra* ‘be needed’ and existential verbs §8.2.3.2, comitative
7272 with *naχtçuy* ‘be like’ §8.2.5), but in all these cases the argument indexed on the
7273 verb is always in absolute form.

7274 The intransitive subject can only be relativized using subject participial rela-
7275 tives (§23.5.1).

8.1.2 Transitive subject

7276 The transitive subject (A argument) is usually marked by the ergative postposi-
7277 tion *kuu* (§8.2.2). The ergative is optional with first and second person pronouns
7278 in transitive subject function, as shown by examples such as (3), where *mto* ‘see’
7279 is a transitive verb. The use of ergative on these pronouns is however possible,
7280 especially in the case of contrastive focalization (§8.2.2.1).

- 7282 (3) *azo nua muu-puu-mto-t-a ri nua uu-sŋi wuma zo*
1SG DEM NEG-AOR-see-TR:PST-1SG LNK DEM 3SG.POSS-day really EMPH
7283 *puu-yvndzo*
PST.IPPV-be.cold
7284 ‘I did not see it (the eclipse), but on that day it was very cold.’
7285 (29-RmGWzWn2, 26)

7286 Third person transitive subjects are obligatorily marked with the ergative (§8.2.2.1).
7287 Apparent counterexamples in the corpus are due to the emphatic use of third per-
7288 son pronouns (§6.4), or to errors involving hesitations.

8.1.3 Object

7290 Morphologically transitive verbs (§14.3.1) take an object (O argument) in abso-
7291 lutive form, indexed by the verb morphology (§14.3.2). For instance *tsuku turme*
7292 *ra* ‘some people’ in (4) has no case marking, and is coreferent with the plural

7293 indexation on *kú-wy-mtsuy-nu* ‘they are stung’ (with inverse marking, §14.3.2.8).
 7294 Only absolutive phrases can be indexed as objects; there are no verbs in Japhug
 7295 indexing a postpositional phrase other than an ergatively marked transitive sub-
 7296 jects.

- 7297 (4) *tsuku turme ra kú-wy-mtsuy-nuu tce muáj-þdwy*,
 some people PL IPFV-INV-bite-PL LNK NEG.SENS-be.serious
 7298 ‘Some people, when they are stung (by bees) are fine.’ (26-ndzWrnaR,
 7299 65-67)

7300 Objects can be relativized by object participial relatives (like semi-objects, §8.1.5)
 7301 or by finite relatives (like semi-objects, goals §8.1.8 and locative phrases §8.1.9).

7302 Most transitive verbs have a strict requirement on the semantic role of the
 7303 object. However, speakers can in limited cases select an object with a different
 7304 role with stylistic effect. For instance, the verb *zmbri* ‘play’ (an instrument), ‘make
 7305 noise with’ normally takes a object a musical instrument or any other noise-
 7306 making implement (§17.2.2.4), as in (5a). However, in the next sentence of the
 7307 same story (5b), this verb appears with the phrase *w-mu c^ho ndzi-ky-ndza ky-ts^hi kuu-*
 7308 *duu~dyn* ‘a lot of food and drink for (him) and his mother’ as object, a resultative
 7309 construction: the direct object is not the instrument used to make the noise, but
 7310 rather the boon obtained by making noise with the wish-granting *p^hantsut* ‘plate’.

- 7311 (5) a. *[icq^ha p^hantsut nuu] ta-zmbri nw-nu*
 the.aforementioned plate DEM AOR:3→3'-make.noise SENS-be
 7312 ‘He made noise with the (magical wish-granting) plate (by hitting on
 7313 it). (2003 tWxtsa, 134)
- 7314 b. *[w-mu c^ho ndzi-ky-ndza ky-ts^hi*
 3SG.POSS-mother COMIT 3DU.POSS-OBJ:PCP-eat OBJ:PCP-drink
 7315 *kui-duu~dyn zo nuu] ta-zmbri ny,*
 SBJ:PCP-EMPH~be.many DEM AOR:3→3'-make.noise ADD
 7316 ‘He (made appear) a lot of food and drink for him and his mother by
 7317 making noise (with the wish-granting plate).’ (2003 tWxtsa, 135)

7318 8.1.4 Sole argument of predicates of natural forces

7319 While some verbs referring to natural forces are intransitive (*mnu* ‘shake’ (as an
 7320 earthquake), §19.7.1), most are morphologically transitive auxiliary verbs (mainly
 7321 *lxt* ‘throw’, *þzu* ‘make’, *ta* ‘put’ and *rku* ‘put in’), used in collocation with a noun
 7322 in absolutive form, as in (6) and (7).

7323 The presence of the progressive *asu-* prefix in (6) and of the C-type Aorist
 7324 *ta-* preverb (§15.1.1.1) in (7) show that these verbs are morphologically transitive
 7325 (§14.3.1). The noun in these collocations is also relativized like a direct object
 7326 (§23.5.4).

7327 (6) *tua-muu jnu-ysuu-lxt*
 INDEF.POSS-sky SENS-PROG-release
 7328 ‘It is raining.’ (heard in context)

7329 (7) *clas zo c^htu-mda cuŋguu tce tce qale*
 IDPH(I):suddenly EMPH IPFV-be.the.time before LNK LNK wind
 7330 *ta-βzu tce tce c^htu-tṣaβ nyu tce,*
 AOR:3/fl3'-make LNK LNK IPFV-cause.to.fall be:FACT LNK
 7331 ‘When there is wind suddenly before (the barley or) is fully ripe, it
 7332 presses them (on the ground, and they cannot grow any more).’
 7333 (25-cWXCWz, 42)

7334 However, these constructions have intransitive-like properties: no ergatively
 7335 marked argument can occur, they are in dental infinitive rather than bare infinitive
 7336 form when used with phasal complement-taking verbs (see 186, §16.2.3 and
 7337 §24.2.2.1), and they are relativized like intransitive subjects (§23.5.3.4).

7338 8.1.5 Semi-object

7339 Some morphologically intransitive verbs in Japhug can take a second absolute
 7340 argument (§14.2.3, Jacques 2016d: 4–5, Jacques 2016a: 224). The verb *rga* ‘like’ is
 7341 such an example; in (9) the intransitive subject *pax ra* ‘pigs’ and *nuya* ‘cow’ are
 7342 in absolute form, with 3PL indexation on the verb for the first. The second argument
 7343 *cirngu* ‘Anisodus tanguticus’ is topicalized. In (9), the subject is topicalized,
 7344 and the second argument *nuu* ‘that one’ appears just before the verb, in absolute
 7345 form (in this particular case, the 1SG indexation suffix merges with the verb stem
 7346 in the Kamnyu dialect, §3.3.1.3).² This second argument is called *semi-object*.

² The 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.

- 7347 (8) *cirnco* *nunua, pas ra my-rga-nuu* *ri, nunja wuma*
 Anisodus.tanguticus DEM pig PL NEG-like:FACT-PL LNK cow really
 7348 *zo* *rga.*
 EMPH like:FACT

7349 ‘The Anisodus tanguticus, pigs don’t like it, but cows do.’ (16-CWrNgo, 9)

- 7350 (9) *azō bo* *nū my-rga-a*
 1SG TOP.ADVERS DEM NEG-like-1SG
 7351 ‘But as for me, I don’t like it.’

7352 Other verbs taking semi-objects include *tso* ‘understand’ (10), *syo* ‘listen’, *rmi*
 7353 ‘be called’.

- 7354 (10) *nayrzonj* *wi-nui-tui-tso?*
 interior.decoration QU-SENS-2-understand
 7355 ‘Do you understand (the word) ‘interior decoration’?’ (12-BzaNsa, 91)

7356 Semi-objects are relativized (§23.5.4.1) either with object participles in *kṛ-* (§16.1.2.4)
 7357 or with finite relative clauses (§23.2.2). Semi-objects are also found in some triac-
 7358 tantial verbs. In particular, the theme of secundative verbs is a type of semi-object
 7359 (§8.1.6).

7360 8.1.6 Theme

7361 There are both secundative and indirective ditransitive verbs in Japhug (§14.4).
 7362 In the case of indirective verbs, the theme is the object, while the recipient being
 7363 marked with an oblique case, as in example (11) with the verb *k^ho* ‘give, pass over’.
 7364 With this type of verbs, the theme is relativized in exactly the same way as the
 7365 object of a monotransitive verb (§14.4.1) and is indexed on the verb.

- 7366 (11) *wi-mu* *wi-cki* *tvt̪su nū jy-k^ho.*
 3SG.POSS-mother 3SG.POSS-DAT lamp DEM IFR-give
 7367 ‘He gave the lamp to his mother.’ (140511 alading-zh, 167)

7368 With secundative verbs, the recipient is the object and appears in absolute
 7369 form, with object indexation. The theme of these verb is also in the absolute,
 7370 as *a-me* ‘my daughter’ in (12).

- 7371 (12) *a-me* *ta-mbi* *ra*
 1SG.POSS-daughter 1→2-give:FACT be.needed:FACT
 7372 ‘I will give you my daughter.’ (28-smAnmi, 267)

7373 The theme of secundative verbs cannot be indexed by the verb morphology.
 7374 In (13), the theme is the numeral *vnuz* ‘two’, but dual indexation on *nu-ta-mbi*
 7375 ‘I gave X to you’ is not possible, as the form *nu-ta-mbi-ndzi* (AOR-1→2-give-DU)
 7376 can only mean ‘I gave X to both of you’, the number referring to the recipient
 7377 and not the theme (§14.4.2).

- 7378 (13) *mx-ta-mbi* *ma vnuz nu-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
 7379 *cti* *tce*
 be.AFF:FACT LNK
 7380 ‘I won’t give her (my youngest daughter) to you, as I gave you two (of my
 7381 daughters), and you sent them back.’ (2002 qaCpa, 56)

7382 The theme of secundative verb is however relativized like an object (see §16.1.2.4,
 7383 §23.5.4.2), and it can be considered as a sub-type of semi-object (§8.1.5).

7384 8.1.7 Essive

7385 Essive noun phrases are not arguments of the sentence, but are used to indicate
 7386 ‘the property of fulfilling the role of an N’ (Creissels 2014: 606; Jacques 2016a:
 7387 225).

7388 In Japhug, bare noun phrases without any case marker can be interpreted as
 7389 essive adjuncts, such as *nr-rzaβ* ‘your wife’ in (14) and *nr-kumtc^hu* ‘your toy’
 7390 (15). These adjuncts are neither recipients (in both examples the recipient is 2SG,
 7391 encoded as object of the ditransitive verb *mbi* ‘give’, §14.4.2) nor themes (in 14 the
 7392 theme is *ji-me* ‘our daughter’, and it serves as object of the indirective *k^ho* ‘give’,
 7393 §14.4.1; in 15 the theme is non-overt).

- 7394 (14) *ji-me* *nii nr-rzaβ* *nii-k^ho-tci* *je, nii-ta-mbi*
 1PL.POSS-daughter DEM 2SG.POSS-wife IPFV-give-1DU SFP IPFV-1→2-give
 7395 *je to-ti*
 SFP IFR-say
 7396 ‘He said: ‘We will give you our daughter in marriage.’ (150831 laoshu
 7397 jianv-zh, 58)
- 7398 (15) *nr-kumtc^hu nii-ta-mbi*
 2SG.POSS-toy IPFV-1→2-give
 7399 ‘I give it to you as a toy.’ (28-kWpAz, 180)

7400 Since essive adjuncts are formally indistinguishable from absolutive arguments
 7401 such as objects and intransitive subjects, some sentences may appear to be am-
 7402 biguous. In (16), the noun *turme* ‘person’ could be interpreted as the subject, and
 7403 the phrase *kuki stu ku-xtci ki* as a topic.

- 7404 (16) *kuki stu ku-xtci ki turme nui-pe tce*
 DEM.PROX most SBJ:PCP-be.small DEM.PROX person SENS-be.good LNK
 7405 ‘The smallest one is very nice as a person.’ (31-deluge, 124)

7406 That *turme* here is not the subject can be seen if one chooses a first or second
 7407 person form: in (17), the noun *turme* is still present despite 2SG indexation on the
 7408 verb. This piece of evidence demonstrates that the analysis as essive adjunct is the
 7409 only possible one.

- 7410 (17) *n₂z₀ turme wuma nui-tui-pe*
 2SG person really SENS-2-be.good
 7411 ‘You are very nice as a person.’ (elicited)

7412 It is common to have a related word as essive and as the subject or object which
 7413 it refers to. In (18), for instance, the inalienably possessed noun *tu-yli* ‘dung’
 7414 occurs as both intransitive subject of the verb *pe* ‘be good’ (with 3SG possessive
 7415 prefix) and as essive adjunct, in the latter in the specialized meaning ‘fertilizer’.
 7416 Note that the essive adjunct is closer to the verb than the oblique phrase in *u-tas*
 7417 (§22.1.1.1).

- 7418 (18) *ts^hyt nui yui u-yli nunu tx-ryku u-tas*
 goat DEM GEN 3SG.POSS-manure DEM INDEF.POSS-crops 3SG.POSS-on
 7419 *tu-yli wuma zo pe*
 INDEF.POSS-manure really EMPH be.good:FACT
 7420 ‘Goat manure is very good as a fertilizer for the crops.’ (05-qaZo, 32)

7421 In (19), the noun *mbro* ‘horse’ occurs both in the object of *rku* ‘put in’ (meaning
 7422 here ‘include the dowry’) and in the essive adjunct *a-mbro* ‘as a horse (for me)’.

- 7423 (19) *mbro tur-sk_ht kui-tso ci, a-mbro*
 horse c.POSS-speech SBJ:PCP-understand INDEF 1SG.POSS-horse
 7424 *tx-rku-nui ra*
 IMP-put.in-PL be.needed:FACT
 7425 ‘Give me a horse who understands human speech as my horse.’ (2003
 7426 kandzWsqhaj, 49)

The essive adjunct can be either closer to the verb than the core argument it refers to, as in (112), (18) and (19) above, or further away as in (20), where the intransitive subject of *mx-ra* ‘is not needed’, *rŋul* ‘silver’, occurs between the verb and the essive *u-pʰuu* ‘as its price’.

- (20) *azuy u-pʰuu rŋul mx-ra*,
 1SG:GEN 3SG.POSS-price silver NEG-be.needed:FACT
 ‘I don’t want money as the price (for these clothes).’ (140506 shizi he huichang de bailingniao-zh, 241)

With the monotransitive verb *pʰut* ‘cut, pluck’, an essive adjunct can be used to express the purpose of the action as in (21).

- (21) *tsuku kui paŋndza nua-nua-pʰut-nua nua-ŋu ri*,
 some ERG hogwash IPFV-AUTO-pluck-PL SENS-be LNK
 ‘Some people cut it (the Sambucus) as hogwash.’ (12-ndZiNgri, 30-31)

This essive phrase sometimes occurs with the noun *u-spa* ‘material’ with this verb as in (22), a construction that is in the process of grammaticalizing into a purposive construction when used with a participial clause (§24.4.2.2).

- (22) *zyy়mbu u-spa nua-nua-pʰut-nua ŋgryl*
 broom 3SG.POSS-material IPFV-AUTO-cut-PL be.usually.the.case:FACT
 ‘They cut it to make brooms. (=as a material for brooms.)’ (140505 sWjno, 22)

Some verbs, like *syrtsi* ‘consider as’ (§17.2.8), have an essive argument (rather than adjunct), which is not indexed on the verb and receive no case marking, as shown by (23), where the essive argument is *a-t̪eu* ‘my son’.

- (23) *azo a-t̪eu tu-ta-nua-syrtsi ŋu*
 1SG 1SG.POSS-son IPFV-1→2-AUTO-consider.as be:FACT
 ‘I consider you as my son.’ (elicited)

The transitive verb *wum* ‘gather’ can also select an essive argument different from the object when used in the meaning ‘take as a student’, as in (24).³ In this example the object is 1SG, and the essive is the noun *nŋ-slama*, with a possessive

³ This 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*.

7452 prefix coreferent with the subject. The verb *wum* in this meaning requires the
 7453 orientation EASTWARDS in its centripetal function (see example 92, §15.1.4.3).

- 7454 (24) *wortchi zo azo ny-slama ku-kui-wum-a*
 7455 please EMPH 1SG 2SG.POSS-student IPFV-2→1-gather-1SG
 'Please take me as your student.' (150907 laoshandaoshi-zh, 40)

7456 Verb ellipsis may explain the presence of essive noun phrases with verbs that
 7457 are not usually used with adjuncts of this type. For instance, in (25), the nouns
 7458 *pyṛtceu* 'bird' and *tx-mdzu* 'thorn' are not objects (there 1SG object indexation on
 7459 both *pú-wy-su-sat-a* and *t^hú-wy-su-sat-a*) and are analyzable as essive adjuncts
 7460 'me, as a bird/thorn', 'while I was a bird/thorn'.⁴

- 7461 (25) *a-pi kui nuara pui-fse tce, pyṛtceu ri*
 7462 1SG.POSS-elder.sibling ERG DEM:PL PST.IPFV-be.like LNK bird also
pú-wy-su-sat-a, tx-mdzu ri t^hú-wy-sur-sat-a
 AOR-INV-CAUS-kill-1SG INDEF.POSS-thorn also AOR-INV-CAUS-kill-1SG
 7463 'Your elder sister was like that, she had me killed (while I was a) bird, and
 7464 had also me killed (while I was a) thorn.' (2005 Kunbzang, 403-404)

7465 The presence of these adjuncts in this particular context is probably due to
 7466 the ellipsis of *tx-sci-a* 'I was born', an intransitive verb which takes essive noun
 7467 phrases with the meaning 'be reborn as, be reincarnated as' as in (26).

- 7468 (26) *nuu u-q^hu tce pyṛtceu tx-sci-a, nuu u-q^hu tce*
 7469 DEM 3SG.POSS-after LNK bird AOR-be.born-1SG DEM 3SG.POSS-after LNK
tx-mdzu tx-sci-a q^he
 INDEF.POSS-thorn AOR-be.born-1SG LNK
 7470 'After that I was reborn as a bird, and after that I was reborn as a thorn.'
 7471 (2003 Kunbzang, 454-455)

7472 8.1.8 Goal

7473 Motion verbs (*ce* 'go', *yi* 'come', *to* 'come out' etc), manipulation verbs (*yut*
 7474 'bring', *tsum* 'take away' etc) and some perception verbs (like *ru* 'look at') have
 7475 arguments referring to the location towards which the action is directed. These

⁴ This 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.

arguments are not indexed in the verb morphology (in particular, motion verbs are intransitive, see §14.2.4). They can be marked with locative postpositions (§8.2.4.1) or dative (§8.3.1), but also occur in absolutive form, as *turme-kʰa* ‘other people’s house’ in (27).

- (27) *tce nui-myrzaβ qʰe tce turme-kʰa jx-ari cti qʰe*
 LNK AOR-marry LNK LNk people-house AOR-go[II] be.AFF:FACT LNK
 ‘She married and went to (live at) other people’s (her in laws’) house.’
 (14-siblings, 10)

Goals can be relativized (§23.5.5) using oblique participial relatives (§16.1.3.5) or finite relatives (§23.5.5.1), but not object participial relatives except in a very restricted context (§23.5.5.2), unlike most absolutive arguments.

8.1.9 Location

In addition to goals, absolutive noun phrases expressing a static location are found in Japhug, in particular with the verb *rɔzi* ‘stay’ as in (28). Locative postpositions can also occur, but are optional (§8.2.4.1).

- (28) *tce pui-sy-suuxcat-a pui-ŋu tce, rqaco pui-rɔzi-a, tsʰuβdun pui-rɔzi-a.*
 LNK IPFV-ANTIPASS-teach-¢ PST.IPFV-be LNK TOPO PST.IPFV-stay-1SG
 TOPO PST.IPFV-stay-1SG
 ‘When I was teaching, I lived in Rqakyo and in Tshobdun.’ (150819
 kumpGa, 2)

Absolutive locative phrases are also found with some transitive verbs, as *nui-mtʰyy* ‘their waist’ with *rtyβ* ‘attach’ in (29).

- (29) *turme ra kuu nui-mtʰyy 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 absolutive 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 *nuu* (§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 *tce 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 p̪yjka yuu cʰo wuma zo naχtceuy.*
 LNK pumpkin GEN COMIT really EMPH be.similar:FACT
 ‘Its (little thorn-like things) are like those of the pumpkin.’

8.2.1 Independent words vs. clitics

Since other Gyalrongologists, in particular J. T.-S. Sun (1998; 2014a), treat the postpositions in related languages as clitics rather than as independent words as is done in the present work, a justification of the present analysis is necessary.

In Japhug, the postpositions *kuu* ‘ergative’ (§8.2.2) and *yuu* ‘genitive’ (§8.2.3) do have some clitic-like characteristics: they cannot be used without a preceding noun phrase (or a subordinate clause, §25.1.1), are unstressed, and in the case of the genitive have special irregular forms with pronouns (§6.3).

However, a pause can occur between these postpositions (31) and the noun phrase they follow. For instance, in example (31), a two second pause (with an inspiration) is found between the phrase *nunja ra* and the following ergative *kuu*.

- (31) *tce turtsi nuu pjú-wy-βzu tce, nunja ra, kuu*
 LNK cow.food DEM IPFV-INV-make LNK COW PL ERG
ny-mum-nuu cʰo wuma zo yuu-cai-fka-nuu
 TROP-be.tasty:FACT-PL COMIT really EMPH INV-CAUS-be.satiated:FACT-PL
 ‘They make cow food with flour, the cows find it tasty, and it satisfies
 their hunger.’ (140513 tWrtsi, 15)

A filler (§10.3) can even be inserted between the noun phrase and the following ergative, as in (32).

- 7531 (32) *tcendyre icq^ba* <*xifangping*> *nuu, nykinuu, kuu*
 LNK the.aforementioned ANTHR DEM FILLER ERG
 7532 ‘*uu-wa* *yuu nunuu t^buci* *uu-tutṣaŋ* *ci*
 3SG.POSS-father GEN DEM something 3SG.POSS-justice INDEF
 7533 *a-puu-tu* *ra’* *ntsuw* *pui-susym* *pjy-ŋu.*
 IRR-IPFV-exist be.needed:FACT always SENS-think[III] IFR-be
 7534 ‘Xi Fangping wanted to obtain justice for his father.’ (150909
 7535 *xifangping-zh*, 30)

7536 Such cases are by no means exceptional; at least 54+35 examples of ergative
 7537 and genitive preceded by a pause are attested in the corpus (they can be found
 7538 by searching *kuu* or *yuu* preceded by a comma). Most of these cases are found
 7539 in sentences where the speaker hesitates, and are especially common in texts
 7540 translated from Chinese.

7541 The same is true of all postpositions studied in this section. Examples of pause
 7542 between the noun phrase and the following postposition can be found for most
 7543 of them, for instance (33) for the locative *zuu* (§8.2.4.1).

- 7544 (33) <*bageda*> *kx-ti* *nunuatcu, zuu, nykinuu,*
 TOPO OBJ:PCP-say DEM:LOC LOC FILLER
 7545 ‘In the (place) called Bagdad...’ (140515 facaimeng-zh, 2)

7546 8.2.2 Ergative

7547 The ergative *kuu*, like genitive *yuu*, is borrowed from Tibetan (Jacques 2016b) and
 7548 shares with the Tibetan ergative the functions of marking transitive subject, in-
 7549 strument and cause. It has however a series of specific functions not found in
 7550 Tibetic languages, such as that of comparee (§8.2.2.7), distributive (§8.2.2.8), and
 7551 oblique argument (§8.2.2.10) marker. It is homophonous with the orientation
 7552 adverb *kuu* EASTWARDS (§22.2.6).

7553 Although postpositional phrases in *kuu* have a different syntactic status de-
 7554 pending on the various sub-functions of this marker (as can be shown with tests
 7555 like relativization), *kuu* is glossed as ERG in all cases.

7556 The postposition *kuu* does not appear in combination with the additive focus
 7557 marker *kunr* ‘also, even’ (§9.1.6.1), regardless of its function.

7558 8.2.2.1 Transitive subject

7559 The core function of *kuu* is marking the subject of morphologically transitive
 7560 verbs. Ergative is obligatory on third person transitive subjects as in (34), and

7561 is agrammatical on objects and intransitive subjects, except in the case of long
 7562 distance ergative (§8.2.2.2) and some semi-transitive verbs (§8.2.2.3). Apparent
 7563 counterexamples are speech errors (§8.1.1).

- 7564 (34) *tceri uu-tcuu nuu kuu nuu pjy-suiχsyl*
 LNK 3SG.POSS-son DEM ERG DEM IFR-recognized
 7565 ‘But the son realized it (that she was a râkshasî).’ (28-smAnmi, 21)

7566 Transitive subjects in the ergative most often precede the object as in (34), but
 7567 can also follow it as in (35), an example illustrating a third person inanimate
 7568 (*tusqar kuu* ‘tsampa’) acting on first/second person (§14.3.2.1).

- 7569 (35) *nyzo tusqar kuu nyki nuu t^huu-tú-wy-stu cti tce,*
 2SG tsampa ERG DEM.MEDIAL DEM AOR-2-INV-do.like be.AFF:FACT LNK
 7570 ‘Tsampa made you the (way you are now) = You grew that big by eating
 7571 tsampa.’ (2011-07-tWsqr, 4)

7572 While ergative is obligatory on third persons, it is optional on first and second
 7573 person pronouns, as shown by example (36) where *ažo* ‘1SG’ is in absolute form
 7574 with the transitive verb *mjo* ‘prepare’.

- 7575 (36) *maš ny, ažo tx-mjo-t-a, kuki kuu tci*
 not.be:FACT SFP 1SG AOR-prepare-PST:TR-1SG DEM.PROX ERG also
 7576 *mx-βze rca!*
 NEG-make[III]:FACT SFP
 7577 ‘No, it is I who prepared (our lunch), she does not do it.’ (Answer to the
 7578 question ‘Did she made (your lunch?’), conversation 140510)

7579 Using the ergative on a first or second person pronoun in transitive subject
 7580 function is however never impossible, as in (37), and more common in the case
 7581 of contrastive focus (§22.1.2.3).

- 7582 (37) *nuu kuu-fse tce tyscoz užo kuu pui-sui-yuit, ažo kuu*
 DEM SBJ:PCP-be.like LNK letter 3SG ERG IPFV:WEST-CAUS-bring 1SG ERG
 7583 *ku-sui-tsum-a tce,*
 IPFV:EAST-CAUS-take.away-1SG LNK
 7584 ‘And like that, she sent me letters (by mail), and I sent her letters.’
 7585 (12-BzaNsa, 26)

7586 Transitive subjects are relativized using subject *kuu*- participial relative clauses,
 7587 the participle taking a possessive prefix coreferent with the object (§16.1.1.1).

7588 8.2.2.2 Long distance ergative

7589 Postpositional phrases in *kuu* referring to the subject of a transitive verb can be
 7590 stranded from their verb by another clause with an intransitive verb.

7591 In (38), for instance, the clause *nuu ma u-kypa pjy-me q^he* ‘she had no other
 7592 way’ separates the subject *tycime nuu kuu* ‘the princess’ from the main verb *to-ti*
 7593 ‘she said’; note the presence of a pause and of the filler *nykinuu* after the transitive
 7594 subject. The transitive subject here also happens to be coreferent with the
 7595 possessor of *u-kypa* ‘her method, her way’ in the standing clause, resulting in a
 7596 surface case mismatch.

- 7597 (38) *tcendyre tycime nuu kuu, nykinuu, nuu ma u-kypa*
 LNK young.lady DEM ERG FILLER DEM apart.from 3SG.POSS-method
 7598 *pjy-me q^he jyy jyy jyy*
 IPFV.IFR-not.exist LNK be.possible:FACT be.possible:FACT be.possible:FACT
 7599 *to-ti nuu-ŋu.*
 IFR-say SENS-be
 7600 ‘The young lady had no other way but to say “yes, yes, yes”.’ (140428 mu e
 7601 guniang-zh, 92)

7602 Similarly in (39), the minimal clause *jo-yi* ‘he came’ consisting of a single verb
 7603 occurs between the subject *icq^ha rgvtpu nuu kuu* ‘the old man’ and the rest of the
 7604 main clause *tynndzi numuu jo-ts^hi* ‘he stopped the demon’.

- 7605 (39) *icq^ha rgvtpu nuu kuu, jo-yi tce, nyki, tynndzi numuu*
 the.aforementioned old.man DEM ERG IFR-COME LNK FILLER demon DEM
 7606 *jo-ts^hi*
 IFR-block
 7607 ‘The old man came and stopped the demon.’ (140512 fushang he
 7608 yaomo1-zh, 62)

7609 Here the intransitive subject of *jo-yi* ‘he came’ and the transitive subject of
 7610 *jo-ts^hi* ‘he blocked him’ happen to be coreferent. If analyzed superficially, (39)
 7611 could seem to be an example of ergative appearing on an intransitive subject.
 7612 In isolation, however, without context, a clause such as *rgvtpu nuu kuu jo-yi* is
 7613 not considered to be correct by native speakers, showing that it is preferable to
 7614 analyze *jo-yi* as an incision in this context rather than forming a constituent with
 7615 the preceding postpositional phrase in *kuu*.

7616 8.2.2.3 Intransitive subject

7617 Genuine examples of intransitive subjects with ergative appear to be nevertheless
 7618 attested at least with some semi-transitive verbs like *tso* ‘know, understand’
 7619 as in (40). It is optional and much less common than the absolute form.

- 7620 (40) *cuu kuu tso ma*
 who ERG understand:FACT LNK
 7621 ‘Who would know.’ (150909 xiaocui-zh, 65)

7622 Ergative marking on the subject of reflexive verbs (which are morphologically
 7623 intransitive, §18.3) is also attested for marking emphasis, with the same pronoun
 7624 preceding and following the ergative (for instance *tuzo kuu tuzo* in example 15,
 7625 §6.2.1).

7626 8.2.2.4 Instrumental

7627 In addition to marking the transitive subject, the postposition *kuu* occurs on instru-
 7628 ments, as in (41). It is possible to find examples with postpositional phrases
 7629 in *kuu*, one corresponding to the subject and the other one to the instrument, as
 7630 in (42). No good examples of instruments in *kuu* are found with an intransitive
 7631 main verb in the corpus (only manner or causal adjuncts are found, §8.2.2.5).

- 7632 (41) *u-puu nuu u-lu kuu c^huu-su-χse juu-ηu.*
 3SG.POSS-young DEM 3SG.POSS-milk ERG IPFV-CAUS-feed[III] SENS-be
 7633 ‘(The whale) feeds its young with milk.’ (160703 jingyu, 14)

- 7634 (42) *rjyłpu kuu nunu kuu u-βri a-pu-su-χtci ndyre,*
 king ERG DEM ERG 3SG.POSS-body IRR-PFV-CAUS-wash LNK
 7635 *myzui ny-sy-scit tʰanj ny!*
 even.more TROP-PROP-be.happy:FACT HYPOTH SFP
 7636 ‘If the king washes his body with this, he will find it even nicer.’ (140514
 7637 xizajiang he lifashi-zh, 88-89)

7638 When an instrument in *kuu* occurs in a clause, the main verb generally takes the
 7639 causative prefix as in (41) and (42), as if the instrument were a type of causee – it
 7640 differs from a causee however in that in the case of the latter the postposition *kuu*
 7641 is optional (§8.2.2.6). Causative marking in clauses with instruments is optional,
 7642 and one can find the two constructions with or without the causative marker
 7643 side by side in the same narrative, as shown by examples (43) and (44).

- 7644 (43) *qarts^haz ui-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
 7645 ‘They make (shoes) with deer hide, it is the most precious (type of skin).’
 7646 (30 mboR, 48)
- 7647 (44) *qarts^haz ui-ndzi ʂja kuu zo t^huu-kʂ-suu-βzu*
 deer 3SG.POSS-hide entirely ERG EMPH AOR-OBJ:PCP-CAUS-do
 7648 ‘(It is) entirely made of deer hide.’ (30 mboR, 53)

7649 The instrument is mainly a concrete object, but can also refer to an entire
 7650 action, as in (45) where the anaphoric *nuu* ‘that’ refers to the actions described in
 7651 the previous clauses.

- 7652 (45) *tx-tceu nuu kuu spikuku zo si z-lu-p^hut tce, nuu*
 INDEF.POSS-son DEM ERG every.day EMPH tree TRAL-IPFV-fell LNK DEM
 7653 *nuu-ntsye-ndzi tce, nuu kuu ndzi-xtu c^huu-suu-χsu-ndzi*
 IPFV-sell-DU LNK DEM ERG 3DU.POSS-belly IPFV-CAUS-feed-DU
 7654 *puu-ŋu puu-ŋu,*
 PST.IPFV-be SENS-be
 7655 ‘The son went every day to fell trees, they sold (the wood), and they fed
 7656 their bellies this way.’ (2003tWxtsa, 2-3)

7657 Instruments differ from transitive subjects in that they are relativized using
 7658 oblique participles in *syr(z)-* (§16.1.3) rather than subject participles.

7659 8.2.2.5 Manner and cause

7660 Postpositional phrases in *kuu* can also describe the manner in which an action
 7661 takes place, or its cause. Manner adjuncts in *kuu* are generally formed with ab-
 7662 stract nouns (§16.4.2) as *tx-mqe* ‘verbal fight’ and *tx-ndut* ‘dispute’ in (46) and
 7663 *txŋym* ‘pain’ in (47). Unlike instruments, manner adjuncts do not trigger the
 7664 addition of a causative prefix on the main verb, and are fully compatible with
 7665 intransitive verbs.

- 7666 (46) *kumpya c^ho k^huna ni li tx-mqe*
 chicken COMIT dog du again INDEF.POSS-verbal.fight
 7667 *tx-ndut kuu jo-yi-ndzi tce,*
 INDEF.POSS-dispute ERG IFR-come-DU LNK
 7668 ‘The chicken and the dog came fighting and arguing (with each other).’
 7669 (150826 shier shengxiao-zh, 120)

- 7670 (47) *trŋym kuu pjur-si jua-ra.*
 pain ERG IPFV-die SENS-be.needed
 7671 '(The animal that is devoured alive by the lions) dies in pain.' (20-sWNgi,
 7672 48)

7673 Causal adjuncts, like manner adjuncts, also take the postposition *kuu* without
 7674 causative form on the verb, as in (48). The inalienably possessed noun *u-nđza* 'its
 7675 cause' in particular is often used with the ergative to specify a cause (49).

- 7676 (48) *k^ha ui-wryum nuu kuu tce tce jua-yycu*
 house 3SG.POSS-shade DEM ERG LNK LNK SENS-be.cool
 7677 'Due to the shade of the buildings, (this road) is not exposed to the heat of
 7678 the sun.' (conversation 2014-05-10)
- 7679 (49) *qambalula nuu, nuu u-nđza kuu t^ha uβry-si ma*
 butterfly DEM DEM 3SG.POSS-cause ERG later RH.Q-die:FACT SFP
 7680 'The butterfly might die because of that.' (150818 muzhi guniang, 199)

7681 Various subordinate clauses with finite or non-finite verbs are also made with
 7682 the postposition *kuu* (see §25.5 and §25.6.1.2 for instance).

7683 8.2.2.6 Causee

7684 Causative verbs in *sui(y)-/z-* derived from transitive verbs have three arguments:
 7685 causer, causee and object (§14.4.3, §17.2.4.2). The causer is treated as the transitive
 7686 subject, and is marked with the ergative. The causee can also receive ergative
 7687 marking as *qapri kuu-paꝧ nuu kuu* 'the black snake' in (50) and *kuu-wryum nuu kuu*
 7688 'the white one' (51). The most common word order is to put the causee before the
 7689 object as in (50), but the opposite order is also attested as in (51).

- 7690 (50) *li mdaꝧzuuy ci to-lxt tce, tcendyre, nyki, qapri*
 again bow one IFR-release LNK LNK filler snake
 7691 *kuu-paꝧ nuu kuu kuu-wryum numu lo-sui-qioꝧ tce*
 SBJ:PCP-be.black DEM ERG SBJ:PCP-be.white DEM IFR-CAUS-vomit LNK
 7692 *tce ny-stu-ŋkylt.*
 LNK IFR-CAUS-detach
 7693 'He shot an arrow and caused the black snake to vomit the white one, and
 7694 separated it (from the other one).' (28-smAnmi, 106)

- 7695 (51) *to-lst tce tcend̩re numu qapri kui-pas nu,*
 IFR-release LNK LNK DEM snake SBJ:PCP-be.black DEM
 7696 *kui-wyrum nuu kui lo-suqioe tce jyr-suut-ta.*
 SBJ:PCP-be.white DEM ERG IFR-CAUS-vomit LNK IFR-CAUS-put
 7697 ‘He shot (an arrow) and caused the white one to vomit the black snake
 7698 and to release it.’ (28-smAnmi, 99)

7699 However, the presence of ergative on the causee is optional, as shown by exam-
 7700 ple (52) where the causee *u-t̩uu stu kui-xt̩ci nu* ‘his youngest son’ is in absolute
 7701 form.

- 7702 (52) *rjylpu kui u-t̩uu stu kui-xt̩ci nu e-ko-z-ruru.*
 king ERG 3SG.POSS-son most SBJ:PCP-be.small DEM TRAL-IFR-CAUS-guard
 7703 ‘The king had his youngest son (go and) guard (the tree).’ (140507
 7704 jinniao-zh, 39)

7705 When the object is third person, and the causee first or second, the causee is
 7706 obligatorily indexed, as in (53a) (see §17.2.4.2 for more examples), resulting in
 7707 a verb form that is identical with that when both causer and causee are third
 7708 person, and the object is first or second person as in (53b). With such ambiguous
 7709 verb forms, the presence of the ergative postposition on the causee as *a-t̩uu kui*
 7710 ‘my son’ in (53b) is a way to disambiguate from the interpretation of the noun as
 7711 object as in (53a).

- 7712 (53) a. *užo kui a-t̩uu ptú-wy-suut-mto-a*
 3SG ERG 1SG.POSS-son AOR-INV-CAUS-see-1SG
 7713 ‘He let me see my son.’ (elicitation)
 b. *užo kui a-t̩uu kui ptú-wy-suut-mto-a*
 3SG ERG 1SG.POSS-son ERG AOR-INV-CAUS-see-1SG
 7715 ‘He let my son see me.’ (elicitation)

7716 No minimal pair similar to (53a) and 53b), where the ergative on the causee
 7717 has a disambiguating function, is attested in the corpus.

7718 8.2.2.7 Comparee marker

7719 In the comparative construction (§26.2), in addition to the standard markers
 7720 (such as *syz* and its variants, see §8.2.7), the postposition *kui* can appear on the
 7721 comparee, although the comparee is syntactically an intransitive subject (in-
 7722 dexed on the stative adjectival predicate).

7723 The comparee with *kuu* can either precede (54) or follow the standard, but most
 7724 often this marker appears when no overt standard is present as in (55). In all of
 7725 these examples, including the last one, the marker *kuu* is optional.

- 7726 (54) *mahi nuunuu kuu azo syz c^ha*
 water.buffalo DEM ERG 1SG COMP can:FACT
 7727 ‘The water buffalo is stronger than me.’ (150831 laoshu jianv-zh, 59)
- 7728 (55) *ndzi-ts^huya nura wuma naxtcuy. tceri turgilan^hlay nuu kuu*
 2DU.POSS-form DEM:PL really be.similar:FACT but fir.cone DEM ERG
 7729 *xtci.*
 be.small:FACT
 7730 ‘Their shape is similar, but the fir cone is smaller.’ (08-tWrgi, 80)

7731 See Jacques (2016b) for a historical hypothesis explaining how the ergative
 7732 marker came to be used to mark the comparee.

7733 8.2.2.8 Distributive

7734 The postposition *kuu*, when occurring with a counted noun designating a quantity,
 7735 can be used to focus on the distributive meaning ('for one X', 'per'). It occurs in
 7736 constructions with intransitive verbs where no agent or instrument is present,
 7737 but exclusively to express the price of the quantity designated, as in (56) (see
 7738 additional examples in Jacques 2016b: 5–6). It cannot be used with time counted
 7739 nouns.

- 7740 (56) *tuu-turpa kuu sqi jamar juu-ra.*
 one-pound ERG ten about SENS-be.needed
 7741 ‘You need ten (yuans) per pound (of Angelica).’ (17 ndZWNW, 22)

7742 As argued in Jacques (2016b: 23), this construction results from the elision
 7743 of a verb such as *syndu* ‘exchange’, which can take as instrument (§8.2.2.4) the
 7744 counted noun expressing a quantity, as in (57).

- 7745 (57) *tuu-turpa kuu yurza jamar juu-wy-syndu juu-k^huu*
 one-pound ERG hundred about IPFV-INV-exchange SENS-be.possible
 7746 ‘One can exchange (sell) one pound for a hundred (yuans).’ (elicited)

7747 8.2.2.9 Partitive

7748 The intransitive verb *mtsʰyt* ‘be full’ generally has a dummy subject, and selects
 7749 a locative argument and a partitive argument, indicating the material / elements
 7750 that the location is full of. This partitive argument is generally in a absolutive
 7751 form, as in (58), but we also find examples with the ergative, as in (59).⁵

- 7752 (58) *tṣapa tʰamtçxt, nur-mbro nur-jla, nuŋja paŋ nuara*
 pen all 3PL.POSS-horse 3PL.POSS-hybrid.yak cow pig DEM:PL
 7753 *jnx-mtsʰyt.*
 IFR-be.full

7754 ‘All the pens had become full of horses, hybrid yak, cows and pigs.’
 7755 (28-qajdoskAt, 131)

- 7756 (59) *wi-pa nuatcu rca, kuu-nymyo kuu pjx-mtsʰyt*
 3SG.POSS-down DEM:LOC UNEXP:DEG SBJ:PCP-watch ERG IPFV.IFR-be.full
 7757 *zō*
 EMPH

7758 ‘Down (the stage), (the seats) were full of spectators.’ (150822 yan muouxi
 7759 de ren-zh, 55)

7760 Another verb with an optionally ergative partitive argument is the passive
 7761 *amar* ‘be smeared with’ (example 20, §18.1.3).

7762 8.2.2.10 Oblique argument

7763 The transitive verb *kʰyt* ‘do repeatedly’, ‘do for a long time’ and its causative
 7764 form *sui-kʰyt* ‘cause to do repeatedly’, ‘cause to do for a long time’ occur in a
 7765 construction with instrumental-like noun phrases marked with the ergative *kuu*,
 7766 indicating the action which is performed repeatedly or done over a long time.
 7767 These noun phrases can include either an action nominal derived from a verb
 7768 with the prefix *tuu-* (§16.4) as in (60), or an underived action noun, as in (61) and
 7769 (62).

⁵ Although (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.

- 7770 (60) *tuu-qios* *kui tó-wy-su-kʰyt* *zo* *tce, tce*
 NMLZ:ACTION-vomit ERG IFR-INV-CAUS-do.a.long.time EMPH LNK LNK
 7771 *nósmuuz ny tuuy nunu ló-wy-su-tcyt*
 only.then LNK poison DEM IFR-INV-CAUS-take.out
 7772 ‘(The medicine) caused (Gesar) to vomit a long time until he expelled the
 7773 poison.’ (Gesar, 266)
- 7774 (61) *ta-ma* *kui ta-kʰyt* *zo*
 INDEF.POSS-work ERG AOR:3→3'-do.a.long.time EMPH
 7775 ‘He did a lot of work.’ (elicited)

7776 Example (62), with the verb *kʰyt* ‘do repeatedly, do a long time’ taking 1SG→3
 7777 indexation (§14.3.2.1), shows that the ergative phrase cannot be analyzed as a
 7778 transitive subject; moreover, the fact that adding the causative in this case would
 7779 imply a real causative interpretation (‘cause X to repeatedly’) also indicates that
 7780 this phrase is not an instrumental adjunct (see §8.2.2.4).

- 7781 (62) *kʰycyl* *kui tx-kʰat-a* *zo*
 conversation ERG AOR-do.a.long.time-1SG EMPH
 7782 ‘I have a long conversation.’ (elicited)

7783 No other verb takes this type of oblique ergative phrase.

7784 8.2.3 Genitive

7785 With the exception of particular forms for some pronouns (§6.3), the genitive
 7786 postposition has the invariant form *yuu* in Kamnyu Japhug. Like the ergative *kui*,
 7787 it is likely borrowed from the Amdo clitic *-ya/-ka* (Haller 2004: 62). It is used in
 7788 possessive constructions, but also expresses beneficiary and recipient.

7789 8.2.3.1 Possession

7790 The genitive *yuu* occurs in various type of possessive constructions, including
 7791 genitival noun complements and possessive existential predicates (§22.5.2.1).

7792 Inside the noun phrase, the genitive occurs between possessor and possessum,
 7793 and a possessive prefix is found on the possessum (§5.1.1.2), as in (63).

8 Postpositions and relator nouns

- 7794 (63) *ri yz̥ndza yuu ui-jwab nura my-wxti ri,*
 LNK Agastache.rugosa GEN 3SG.POSS-leaf DEM:PL NEG-be.big:FACT LNK
 7795 *jwab zo qhe,*
 be.black:FACT EMPH LNK
 7796 ‘The leaves of the *Agastache rugosa* are not large and quite dark in colour.’
 7797 (11-qarGW, 137)
- 7798 Genitival phrases without possessive prefix on the possesum are rare but do
 7799 exist, in particular when the possesum is a noun borrowed from Chinese and
 7800 non-fully nativized like 国语 <guóyǔ> ‘national language’ in (64).
- 7801 (64) *iżo yuu <guoyu> jnu-ŋu tce, nunu kxsufse yuu*
 1PL GEN national.language SENS-be LNK DEM all GEN
 7802 *ji-rju jnu-ŋu tce,*
 1PL.POSS-speech SENS-be LNK
 7803 ‘(Chinese) is our national language, it is the language of all of us.’ (150901
 7804 tshuBdWnskAt, 15-16)
- 7805 For singular noun possessors, the presence or not of a third person possessive
 7806 prefix *w-* is not always easy to tell from recordings, as due to the external sandhi
 7807 (§4.3), *yuu w-* merges as /yuu/ when no pause occurs between the two. In careful
 7808 speech, the third person prefix is clearly audible.
- 7809 Nominal modifiers can sometimes be marked like possessors, with the genitive
 7810 and/or with a possessive prefix on the following head noun, see §8.2.3.3.
- 7811 The genitive can also appear between a noun phrase and a relator noun (§8.3),
 7812 and even be followed by focus markers in this position, as in (65).
- 7813 (65) *tua-ci kuu-wxti yuu kumy u-rkuu ri nura*
 INDEF.POSS-water SBJ:PCP-be.big GEN also 3SG.POSS-side LOC DEM:PL
 7814 *tu ŋgryl.*
 exist:FACT be.usually.the.case:FACT
 7815 ‘(Dragonflies) are also found near (large) rivers.’ (26-quspunmbro, 7)
- 7816 In these constructions, the genitive is always optional, and the prefix on the
 7817 possesum suffices to express possession, as in (66) (see §5.1.1.2).
- 7818 (66) *paxci ui-jwab tsa fse ri, nuu sz̥ny artuum,*
 apple 3SG.POSS-leaf a.little be.like:FACT LNK DEM COMP be.round:FACT
 7819 ‘(Its leaves) are a little like the leaves of an apple tree, but more round.’
 7820 (09-mi, 15)

When the possessum is elided however, the genitive postposition becomes obligatory, as in (67).

- (67) *wi-ryi numia, nyki, <beigua> yuu syz*
 3SG.POSS-seed DEM FILLER pumpkin GEN COMP
juu-jauja.
 SENS-be.thick.and.strong

'Its seeds are thicker than those of the pumpkin.' (16-CWrNgo, 130)

While there are transitive and semi-transitive verbs expressing possession (§22.5.2), the most common possessive construction involves an existential verb taking the possessum as subject, with the possessor marked by a possessive prefix on the possessum, and optionally with the genitive, as in (68).

- (68) *qarts^haz p^hu nuu yuu wi-bruu yyzu*
 deer male DEM GEN 3SG.POSS-horn exist:SENS
 'The male deer has horns.' (27-qartshAz, 32)

This construction is also used for abstract possession, as in (69).

- (69) *azuyi a-βlu tu*
 1SG:GEN 1SG.POSS-trick exist:FACT
 'I have an idea.' (140507 tangguowu-zh, 29)

The causative verbs *yrtu* 'cause to have' and *yrme* 'cause not to have, destroy' derived from *tu* 'exist' and *me* 'not exist' (§17.3.2.3) select an oblique argument with the genitive, as in (70). Although this argument could be considered to be a type of beneficiary (§5.1.1.4), we observe here stability in case marking of the possessor between the base construction and the derived causative one.

- (70) *wizo kui maka ky-ntc^hoz my-kui-yrco kui-fse*
 3SG.POSS ERG at.all INF-use NEG-INF:STAT-be.finished INF:STAT-be.like
zo turjur laxtc^ha wizo yuu tu-yr-te-a
 EMPH wealth thing 3SG.POSS GEN IPFV-CAUS-exist[III]-1SG
jy
 be.possible:FACT
 '(If someone saves me), I will make him have more wealth and riches than he can ever use.' (140512 yufu yu mogui-zh, 84)

7845 Not all combinations of existential verbs and genitival phrases are existential
 7846 possessive constructions. For instance, in (71), the second clause could appear to
 7847 contain a possessive construction meaning ‘the mouse only has half of it’, but
 7848 the context makes it clear that a different interpretation is necessary (§26.2.5).

- 7849 (71) *qamtcar nuu u-mtc^{hi} numuu βzui syzny myzui zo amtcoꝝ*
 shrew DEM 3SG.POSS-mouth DEM mouse COMP yet EMPH be.pointy
 7850 *tce nuu βzui yuu u-qiuu kumy me*
 LNK DEM mouse GEN 3SG.POSS-half even not.exist:FACT
 7851 ‘The shrew’s mouth is even sharper than that of the mouse, and (its size)
 7852 is not even half that of the mouse.’ (27-spjaNkW, 204-205)

7853 8.2.3.2 Recipient and beneficiary

7854 The genitive can be used to mark the recipient by the indirective verb *k^ho* ‘give,
 7855 pass over’, as in (72) and (73).

- 7856 (72) *cuu zo stu kuu-m^hku puu-tuu-mto-t nuuu, laχtcha*
 who EMPH most SBJ:PCP-be.first AOR-2-see-PST:TR DEM thing
 7857 *puu-nnuu-ηu, turme puu-nnuu-ηu nuu, azuy nuu-k^hym*
 PST.IPFV-AUTO-be person PST.IPFV-AUTO-be DEM 1SG:GEN IMP-give[III]
 7858 *tce tcendyre, azo puu-ta-lyt jyy*
 LNK LNK 1SG IPFV-1→2-release be.possible:FACT
 7859 ‘Give me the first thing you see (when you go back home), be it a person
 7860 or an object, and I will release you.’ (140506 shizi he huichang de
 7861 bailingniao-zh, 50-52)

- 7862 (73) *jy-tsum tce icq^ha nuu kuβba nuu yuu*
 IMP-take.away LNK the.aforementioned DEM noble DEM GEN
 7863 *a-nuu-tuu-k^hym*
 IRR-PFV-2-give[III]

7864 Take it and give it to the nobleman.’ (150831 renshen wawa-zh, 43)

7865 The recipient of the verb *k^ho* ‘give, pass over’ can alternatively also be marked
 7866 by a possessive prefix on the inalienably possessed noun *tuu-jas* ‘hand’ (with
 7867 the meaning ‘hand over’, §8.3.6) or, with the dative relator nouns *u-cki* or *u-p^he*
 7868 (§8.3.1).

7869 The genitive is selected by a few intransitive modal verbs to indicate the ex-
 7870 periencer/beneficiary, in particular *ra* ‘be needed’, ‘need’, *βzi* ‘be necessary’, as in
 7871 (74) and (75).

- 7872 (74) *azury u-cyrui ra*
 1SG:GEN 3SG.POSS-bone be.needed:FACT
 'I want its bones.' (07-deluge, 9)
- 7873 (75) *azury wuma zo bzi pui-ŋu, a-kv-ntc^hoz*
 1SG:GEN really EMPH be.necessary:FACT SENS-be 1SG.POSS-OBJ:PCP-use
sna pui-ŋu
 be.good:FACT SENS-be
 'It will be useful for me, it will have good use of it.' (150902 hailibu-zh,
 44-45)

7874 The experiencer/beneficiary can also be marked by possessive prefixes on the subject, without genitive, as in (76) (see also §5.1.1.4 for additional examples).

- 7875 (76) *azo a-rŋual a-χsyr ra my-ra*
 1SG 1SG.POSS-silver 1SG.POSS-gold PL NEG-be.needed:FACT
 'I don't need silver or gold.' (2014-kWLAG, 367)

7876 Other intransitive verbs selecting genitive arguments include *ŋgrui* 'succeed'.
 7877 In (77), in addition to the oblique 2SG argument *nŋzuy*, the verb takes the infinitival complement clause *βdaŋmu kv-ndo* as intransitive subject.

- 7878 (77) *[βdaŋmu kv-ndo] nŋzuy a-pui-ŋgrui q^he, tcendyre tu-tui-ŋke*
 queen INF-take 2SG:GEN IRR-PFV-succeed LNK LNK IPFV-2-walk
maka my-ra
 at.all NEG-need:FACT
 'If you succeed in becoming the queen, you will not need to walk
 anymore.' (140504 huiguniang-zh, 197-198)

7879 The genitive also occurs with beneficiaries/maleficiaries as adjuncts, not selected by the main verb, with transitive verbs such as *nŋma* 'do' (78) and *wum* 'collect' (81) or stative intransitive verbs such as *pe* 'be good' as in (79) with the meaning 'be favourable, advantageous to'. It is not the only possible way of expressing beneficiary; the relator noun *u-tar* also has this function in collocation with the stative verb *pe* 'be good' (§8.3.4.3), with the slightly different meaning 'be nice to'.

- 7880 (78) *nŋzuy tc^hi tu-nŋme-a ra, ty-ti*
 2SG:GEN what IPFV-do[III]-1SG be.needed:FACT IMP-say
 'Tell me what I shall do for you.' (140511 alading-zh, 175)

8 Postpositions and relator nouns

- 7898 (79) *w-fso t^hu-wxti tce azwy my-pe*
 3SG.POSS-tomorrow AOR-be.big LNK 1SG:GEN NEG-be.good:FACT
 7899 'In the future, when he will have grown up, he will cause me trouble.' ('he
 7900 will not be good to me', 2011-05-nyima, 22)

7901 The beneficiary adjunct is not necessarily contiguous with the verb on which
 7902 it depends, as in (80) where the genitive phrase *izora yuu* 'for us, on our behalf'
 7903 is separated from the verb *t^hu* 'ask' by a lengthy complement comprising two
 7904 clauses.

- 7905 (80) *izora yuu [t^chi tu-fse-j tce ji-tu-w-ci*
 1PL GEN what IPFV-be.like-1PL LNK 1PL.POSS-INDEF.POSS-water
 7906 *yyzu] tu-tur-t^he u-tuá-c^ha?*
 exist:SENS IPFV-2-ask[III] QU-2-can:FACT
 7907 'Can you ask on our behalf how we should do to have water?'
 7908 (2005tamukatsa, 14)

7909 Beneficiary genitive phrases can occur as predicates with a copula as *uzy*
 7910 '3SG:GEN' in (81).

- 7911 (81) *t^hobtym ka-wum tce, uzy pjr-mab ku, tcoxtsi rjylpu*
 taxes AOR:3→3'-collect LNK 3SG:GEN IFR.IPFV-not.be ERG ANTHR king
 7912 *yuu ku-wum,*
 GEN IPFV-collect
 7913 'The taxes that he had collected were not for himself, he was collecting
 7914 them for the king of Cogtse.' (150901 NAjstsa, 28)

7915 In this use too, it is alternatively possible to indicate the beneficiary as a pos-
 7916 sessive prefix on the object, without genitive postposition, as in (82).

- 7917 (82) *χsyr k^hutsa u-ŋgu nwtču a-tu-w-ci ci*
 gold bowl 3SG.POSS-inside DEM:LOC 1SG.POSS-INDEF.POSS-water a.little
 7918 *tr-rke ma wuma nwt-črau-a*
 IMP-put.in[III] LNK really SENS-be.thirsty-1SG
 7919 'Please pour some water in the golden bowl for me, I am thirsty.' (140428
 7920 mu e guniang-zh, 47)

7921 The genitive is also attested with a noun-verb collocations (§22.4), like *u-*
 7922 *kvnor+mtqur* 'feel dizzy', in which the possessor of the noun is an experiencer
 7923 as in (83). This example also illustrates the use of the genitive followed by a focus
 7924 marker, as (65) above.

- 7925 (83) *tceri fsapar yuu kumy u-kymob nuu-mtcur nuu-ŋu*
 LNK animal GEN also 3SG.POSS-head SENS-turn SENS-be
 7926 'But animals too can feel dizzy.' (29-tAmtshAzkAkWndo, 71)

7927 Finally, the experiencer subject argument demoted by the proprietive derivation
 7928 can also in some cases be optionally encoded with the genitive case (see
 7929 example 181, §18.8).

7930 **8.2.3.3 Other uses**

7931 The genitive *yuu* occurs with various types of noun complements which are se-
 7932 mantically neither possessive or beneficiaries/recipients.

7933 Nouns used as prenominal modifiers are in rare cases followed by a genitive
 7934 postposition before the head noun. If the head noun is an alienably possessed
 7935 noun, the presence of a third singular possessive prefix *uu-* is optional, as shown
 7936 by examples such as (84) and (85).

- 7937 (84) *χsyr yuu, nykinuu, kʰutsa ci to-nuu-ndo.*
 gold GEN FILLER bowl INDEF IFR-AUTO-take
 7938 'He took a golden bowl' (140508 shier ge tiaowu de gongzhu-zh, 158)

7939 This type of construction is most common in texts translated from Chinese, but
 7940 does also occur in more spontaneous material as in (85), with a complex modifier
 7941 *ftso& kungut uu-pʰuu* 'the price of nine female hybrid yaks'.

- 7942 (85) *tcendyre uu-jas nutcu [ftso& kungut uu-pʰuu] yuu*
 LNK 3SG.POSS DEM:LOC female.hybrid.yak nine 3SG.POSS-price GEN
 7943 *srunlo& pjx-k-ŋ-rku-ci*
 ring IFR.IPFV-PEG-pass-put.in-PEG
 7944 'She had a ring worth nine female hybrid yak in her hand.' (2003gesar,
 7945 239)

7946 In a construction with a prenominal modifier marker in the genitive, even
 7947 when a possessive prefix is present on the head noun (in particular when it is an
 7948 inalienably possessed noun), that prefix does not necessarily refer to the modi-
 7949 fier. For instance, in (86), the third plural possessive prefix *nuu-* on *nuu-mgozm̥yryβ*
 7950 'their vegetables' refers to the people eating the vegetable, not the modifier *tux-*
 7951 *palyskrr* 'the whole year' (on whose formation see §5.7.8.3) which would require
 7952 a third singular prefix instead (an option which is also attested with this noun).
 7953 Alternatively, it is also possible to have an indefinite possessor prefix on the head

8 Postpositions and relator nouns

7954 noun if inalienably possessed, as in (87). Note that both options are attested in the
 7955 construction with a prenominal modifier without the genitive, as seen in §5.1.4.

- 7956 (86) *tce nuunuu tuuxpalvskyr yuu nuu-mgozmvry^β nuu nuu ma*
 LNK DEM whole.year GEN 3PL.POSS-vegetable DEM DEM apart.from
 7957 *pjy-me.*
 IFR.IPFV-not.exist
 7958 ‘It was the only vegetable that they had the whole year.’ (140522 kAmYW
 7959 tWji, 23)
- 7960 (87) *tui-xpa yuu tui-yli nuu c^htú-wy-tcxt*
 one-year GEN INDEF.POSS-manure DEM IPFV:DOWNSTREAM-INV-take.out
 7961 *tú-wy-rmbuu*
 IPFV-INV-heap
 7962 ‘People take out (from the stable) the whole year’s manure and heap it
 7963 up.’ (2010-tArAku)

7964 Some apparently unclassifiable uses of the genitive can be accounted for to
 7965 some extent by assuming the elision of a head noun. For instance, in (88), the
 7966 phrase *izora yuu*, meaning ‘in our language’, can be explained as coming from
 7967 *izora yuu ji-sk^yt* ‘our language’ used as a absolutive locative phrase (§8.1.9) ‘in
 7968 our language’, with elision of the head noun. This example does not illustrate a
 7969 separate function of the genitive: it is simply a particular case of possessive.

- 7970 (88) <*longtoutan*> *nuu kupa-skyt cti. tce izora yuu tc^hi*
 TOPO DEM Chinese-language be.AFF:FACT LNK 1PL GEN what
 7971 *tu-kui-ti yu my-xsi.*
 IPFV-GENR-say be:FACT NEG-GENR:know
 7972 ‘Longtoutan is a Chinese word; I don’t know how it is said in our
 7973 (language).’ (150820 qaprANar, 32)

7974 The same is true of the use of the genitive with the verb *m^yym* ‘be painful’
 7975 and its causative *ciu^yym* ‘cause to be painful’, which take a body part (not the
 7976 person or animal feeling pain) as their subject and object, respectively. In (89),
 7977 the genitive first person *azuy* ‘1SG:GEN’ is not an oblique argument or even a
 7978 malefactive adjunct. Rather, its presence implies an elided noun *a-^βri* ‘my body’
 7979 (‘he caused pain to my body’). It is however likely that sentences like this are the
 7980 pivot constructions which made possible the reanalysis of possessive genitive
 7981 phrases as benefactive/malefactive adjuncts.

- 7982 (89) *azury ta-cu-mjym*, *azury a-laxte^ha ra*
 1SG:GEN AOR:3→3'-CAUS-be.painful 1SG:GEN 1SG.POSS-thing PL
 7983 *ja-nui-tsum-nuu*
 AOR:3→3'-VERT-take.away-PL
 7984 'He hurt me and took away my things.' (140426 luozi he qiangdao, 35)

7985 The genitive can also occur between prenominal relatives (§23.2.3) and their
 7986 head noun. In this construction the head noun generally does not take a posses-
 7987 sive prefix. This type of relative is particularly common in story translated from
 7988 Chinese, where it calques the prenominal relatives in 的 <de>, as in (90). The
 7989 same situation has been observed in Khroskyabs (Lai 2017: 640–643).

- 7990 (90) *[kuu-yyndzo ri kuu-me]*, *[kuu-sy-mtsur ri*
 SBJ:PCP-be.cold also SBJ:PCP-not.exist SBJ:PCP-PROP-be.hungry also
 7991 *kuu-me]*, *[ky-nuusumuzduay ri my-kuu-ra]* *yuu*
 SBJ:PCP-not.exist INF-worry also NEG-SBJ:PCP-be.needed GEN
 7992 *sxtc^ha nutcu jo-ce-ndzi puu-ηu.*
 place DEM:LOC IFR-go-DU SENS-be
 7993 'The two of them went to a place where they was cold cold and hunger,
 7994 and where one did not need to worry.' (140519 mai huochai de xiao
 7995 nvhai-zh, 182-183)

7996 However, this type of relative is also attested, though rarer, in non-translated
 7997 texts, for instance in (91) with intransitive subject relativization.

- 7998 (91) *tce [tui-xpa tu-kuu-łok]* *yuu sujno nuu ηu tce,*
 LNK one-year IPFV-SBJ:PCP-come.out GEN TOPO DEM be:FACT LNK
 7999 'It is an annual plant.' (18-NGolo, 105)

8000 Genitival prenominal relative clauses are to be distinguished from relatives as
 8001 possessors, as in (92), where the possessum *w-rjyŋgo* 'its radiating pain' is not an
 8002 argument of the relative *tui-cya kuu-mjym* 'a tooth that hurts'.

- 8003 (92) *tui-cya a-ty-mjym tce tce ty-rca*
 GENR.POSS-tooth IRR-PFV-be.painful LNK LNK INDEF.POSS-following
 8004 *tui-ymba, tui-ku nuara tu-mjym puu-ηu tce,*
 GENR.POSS-cheek GENR.POSS-head DEM:PL IPFV-be.painful SENS-be LNK
 8005 *nunuu "[tui-cya kuu-mjym]" yuu w-rjyŋgo*
 DEM INDEF.POSS-tooth SBJ:PCP-be.painful GEN 3SG.POSS-radiating.pain

8 Postpositions and relator nouns

- 8006 *yvzu*" *tu-kui-ti* *ŋu.*
 exist:SENS IPFV-GENR-say be:FACT
- 8007 'When one has a toothache, and that one feels pain in one's cheek or a
 headache, one says 'the toothache has a radiating pain." (140516
 WrJANgo, 3)
- 8010 Adnominal complement clauses (§24.6) can also take a genitive marker, as in
 (93).
- 8012 (93) [*donggua* *c^ho* *<qiezi>* *ni tc^hi zo* *muáj-naχtcuwy*] *yuu*
 gourd COMIT eggplant DU what EMPH NEG:SENS-be.the.same GEN
 u-te^ha *a-jy-tu-yut* *ra*
 3SG.POSS-information IRR-PFV-2-bring be.needed:FACT
 '(Go there and come back to) tell me in what way gourd and eggplant
 differ from each other.' (2010-02-yitian bi yitian-zh, 7)
- 8016 Some relative clauses can take possessors marked in the genitive, as in (94)
 and (95). It is debatable whether the genitival phrase belongs to the relative in
 this type of construction.
- 8019 (94) *tce paŋ yuu [stu u-ky-numga]*, *izora*
 LNK pig GEN most 3SG.POSS-OBJ:PCP-want.from 1PL
 ji-ky-numga *nui u-ca* *ŋu* *tce*
 1PL.POSS-OBJ:PCP-want.from DEM 3SG.POSS-meat be:FACT LNK
 'What is most wanted from pigs, what we want from them is their meat.'
 (05-paR, 13)
- 8023 (95) *slama ra yuu [t^huat^hyci kui-fse]*, *nui ky-ry-βzjoz* *ra*
 student PL GEN something SBJ:PCP-be.like DEM INF-ANTIPASS-learn PL
 nui-stu *muáj-stu* *nui, nui-stu* *nui-nyma-nui*
 SENS-be.assiduous SENS-be.assiduous DEM 3PL.POSS-truth SENS-work-PL
 muáj-nyma-nui, nuanura nui-p^hama *ra nui-cki*
 NEG:SENS-work-PL DEM:PL 3PL.POSS-parent PL 3PL.POSS-DAT
 kui-ry-fcyt *nui-ra*.
 GENR:S/O-ANTIPASS-tell:FACT SENS-be.needed
 'One had to tell the parents all kinds of things concerning the students,
 whether they try hard or not, whether they work seriously or not.'
 (150901 tshuBdWnskAt, 18-20)

8030 The genitive *yuu* can optionally be used after the object in purposive complements (§24.4.2.1) containing a transitive verb as in (96); in this type of clauses,
 8031 the verb is in subject participial form and transitive verbs take a possessive prefix
 8032 coreferent with the object (§16.1.1.1).

- 8034 (96) *rgytpu nuu yuu uu-kui-rto* *jo-yi.*
 8035 old.man DEM GEN 3SG.POSS-SBJ:PCP-see IFR-come
 8035 'He came to see the old man.' (150908 menglang-zh, 12)

8036 8.2.4 Locative

8037 8.2.4.1 Core locative postpositions

8038 There are three locative postpositions in Japhug, *z̥uu*, *t̥cu* and *ri*, the latter being
 8039 homophonous with the correlative additive focus *ri* (§9.1.6.2). The exact conditions
 8040 of their uses is still an unsolved problem of Japhug grammar. They appear
 8041 to be always optional (goals and locative adjuncts can always be in absolute
 8042 form, see §8.1.8 and 8.1.9) and seem to be interchangeable, as is illustrated in this
 8043 section.

8044 All three postpositions can be used to express static location, motion into, motion
 8045 or from a place. Location or motion (into/from/on) a surface, (into/from/in)
 8046 a container or with/without contact does not seem to be relevant factors for the
 8047 selection of the locative postpositions.

8048 The locative *t̥cu* is most often used in combination with a demonstrative *nu*
 8049 as in (97), a form identical to the locative of the demonstrative pronoun (*nut̥cu*
 8050 'there', see §6.9.3). Without demonstrative, *t̥cu* is also found as in (98) and (99).

- 8051 (97) *japa t̥ce alo <ercha> nut̥cu, n̥kinuu, icq^ha ts^hapa co*
 8052 last.year LNK upstream TOPO DEM:LOC FILLER FILLER TOPO valley
 8052 *nut̥cu tuŋŋt c^hy-yi.*
 8053 DEM:LOC rock.slide IFR:DOWNSTREAM-come
 8053 'Last year, at Ercha, at the valley of Tshapa, there was a rock slide.'
 8054 (160715 nWNa, 1)
- 8055 (98) *jo-nuu-ce t̥ce, t̥su t̥cu jy-mtsur,*
 8056 IFR-AUTO-go LNK road LOC IFR-be.hungry
 8056 'He went away, and on the road he felt hungry.' (2002qajdoskAt, 109)

8 Postpositions and relator nouns

- 8057 (99) *k^hxtyn̥do t̥cu ko-zo*
 side.of.the.top.terrace LOC IFR-land
 8058 '(The raven) landed on the side of the top terrace.' (2002qajdoskAt, 24)

8059 The above examples show *t̥cu* used for location without motion (97), motion
 8060 via a place (98), motion onto a place resulting in contact with the surface (99),
 8061 and (100) illustrates *t̥cu* expressing motion from the inside.

- 8062 (100) *nunur kuiβ̥a ra yui nui-k^ha ui-kum naut̥cu*
 DEM nobleman PL GEN 3PL.POSS-house 3SG.POSS-door DEM:LOC
 8063 *c^hy-nui-łob t̥ce,*
 IFR:DOWNSTREAM-AUTO-come.out LNK
 8064 'He went out from the door of the nobleman's house.' (140513 mutong de
 8065 disheng-zh, 166)

8066 The same diversity of uses is found with the locative *zui*; (101) shows *zui* ex-
 8067 pressing static location ('in their hands') and motion from a place ('from the sky').
 8068 Example (102) illustrates *zui* used with the verb *zo* 'land', which is attested with
 8069 *t̥cu* in (99). Note that in another version of the same story by the same speaker,
 8070 the relator noun *ui-tar* 'on' (§8.3.4.1) is found instead of a locative postposition
 8071 (see 3 in §5.1.1.2).

- 8072 (101) *tumukyryŋi ui-me kuičnuz nui nui-jas zui, nykinui,*
 heaven 3SG.POSS-daughter seven DEM 3PL.POSS-hand LOC FILLER
 8073 *<shanzi> kui-mpcui~mpcyr zo, qale*
 fan SBJ:PCP-EMPH~be.beautiful EMPH wind
 8074 *ui-sy-lyt nui pjy-k-ysui-ndo-nui-ci t̥ce,*
 3SG.POSS-OBL:PCP-release DEM IFR.IPFV-PEG-PROG-hold-PL-PEG LNK
 8075 *tumiunymk^ha zui pjy-nui-łob-nui.*
 sky LOC IFR:DOWN-AUTO-come.out-PL
 8076 'The seven daughters of heaven, holding beautiful fans in their hands,
 8077 came down from the sky.' (150828 niulang-zh, 48)

- 8078 (102) *a-mbro ui-jme zui k^h-zo,*
 1SG.POSS-horse 3SG.POSS-tail LOC IMP-land
 8079 'Land on my horse's tail.' (2014-kWLAG, 562)

8080 The postposition *zui* is related to the suffix -s in Situ, which expresses motion
 8081 from an origin or towards a goal (Lín 1993: 330–331). Situ is certainly most archaic

in this regard (as it also preserves a locative *-j* suffix of which only lexicalized traces remain in Japhug, §8.2.4.4), and the Japhug form has to be explained as debonding from suffix to clitic to independent word (see 33 in §8.2.1 for evidence that *z̥uu* is not a clitic). Japhug-internal evidence for the degrammaticalization is the otherwise unexplainable voicing to *z*, a process that applied to all fricative codas (§3.2.2), and the fact that some frozen forms preserve a *-z* suffix, in particular the approximate locative *cʰiz* (§8.2.4.2), the related indefinite pronoun *ciscʰiz* ‘somewhere’ (§6.6.5) and the relator *w-ŋuz* ‘among’ (see 222 and 223 in §8.3.4.2) and the postposition *baz* ‘while ... still’ (§5.8.3).

The locative *ri* also occurs in all the meanings attested above for *t̥cu* and *z̥uu*, though due to homophony with the additive correlative *ri* (§9.1.6.2), some examples are ambiguous. Examples (103) and (104) show the locative *ri* marking static location and motion towards a place, respectively.

- (103) *kʰyxtu ri puu-ryzi-a tce tx-mtʰum tu-ndze-a*
 terrace LOC PST.IPFV-stay-1SG LNK INDEF.POSS-meat IPFV-eat[III]-1SG
puu-ŋu ri,
 PST.IPFV-be LNK
 ‘I was on the terrace eating meat.’ (150909 qandZGi, 5)
- (104) *tce nuu nuu-kʰa ri uzo ky-ari w-qʰu tce,*
 LNK DEM 3PL.POSS-house LOC 3SG AOR:EAST-go[II] 3SG.POSS-after LNK
 ‘After he went to their (his wife’s family’s) house...’ (14-siblings, 210)

The same interchangeability and optionality of the locative postpositions is observed when these are combined with relator nouns (§8.3.4.5). Although the three postpositions are almost identical in their range of uses, there are nevertheless differences in their compatibilities. With the locative demonstrative pronouns *kure* ‘here’, and *nure* ‘there’ (§6.9.3) as well as *aʂyndundyr* ‘everywhere’, only *ri* can be added, as in (105). The postpositions *t̥cu* and *z̥uu* can be combined as *nut̥cu* *z̥uu* as in (106); no other combination of locative postpositions are possible.

- (105) *tcendyre tsʰuβdum kui-sy-suvcyt ly-ari-a. tce*
 LNK TOPO NMLZ-ANTIPASS-teach AOR:UPSTREAM-go[II]-1SG LNK
nure ri li a-kumpya puu-tu tce
 DEM:LOC LOC again 1SG.POSS-hen PST.IPFV-exist LNK
 ‘I went to Tshobdun to teach. There, I had a hen again.’ (150819 kumpGa,
 78-79)

8 Postpositions and relator nouns

- 8111 (106) *wzo tcekua nuatcu zuu pjy-rvzi q^he*
 3SG EAST DEM:LOC LOC IFR.IPFV-stay LNK
 8112 ‘He was on the east side.’ (28-qAjdoskAt, 152)

8113 All three postpositions are also used with time adjuncts, but do present some
 8114 noticeable differences in usage. They can be interchangeably used with temporal
 8115 relator nouns such as *w-ray* ‘during, the time when’ (§8.3.5), but in other contexts

8116 With counted nouns expressing time (§7.5.1), there is not a single example with
 8117 *zuu* in the corpus. The postposition *ri* is used to express a point in time (as in 107),
 8118 while *tce* mostly means ‘within (the time period)’ as in (108).

- 8119 (107) *tuu-xsoz ri tce jo-yi ri, ui-βri tzyri yyzu,*
 one-morning LOC LNK IFR-come LNK 3SG.POSS-body dew exist:SENS
 8120 *jnu-yci.*
 SENS-be.wet
 8121 ‘One morning, (our hen) came (back from the forest, where it was laying
 8122 eggs) and its body was wet from the dew.’ (150819 kumpGa, 21-22)

- 8123 (108) *tui-xpa nuatcu [...] tuu-tarp^hu, yzo nuara kuu, yzyzga nunu, nunu*
 one-year DEM:LOC one-hive bee DEM:PL ERG honey DEM DEM
 8124 *squu-turpa ui-ro nuu ku-su-γtua-nuu jnu-c^ha-nuu.*
 ten-pound 3SG.POSS-excess DEM IPFV-CAUS-accumulate-PL SENS-can-PL
 8125 ‘In one year, one hive, the bees, the honey, they can gather more than
 8126 ten pounds of it.’ (26-GZo, 34-36)

8127 The form *tce*, which is mainly analyzable as a linker (§25.1.6) and in some cases
 8128 a topic marker (§9.1.5.5) occurs with locative and temporal adjuncts and could be
 8129 analyzed as a postposition in these usages (see also §8.2.4.4). With the temporal
 8130 counted nouns, like *ri* it expresses a specific point in time as in (109) rather than
 8131 a duration.

- 8132 (109) *tce tuu-sŋi tce pŋ-k-xtuy-ci tce,*
 LNK one-day LNK IFR-PEG-meet-PEG LNK
 8133 ‘One day, (the bear finally) met (the rabbit).’ (2011-13-qala, 22)

8.2.4.2 Approximate locative

8135 The suffix *-c^hu* is used to indicate approximate location, referring to a broad area
 8136 rather than a specific place, like the plural *ra* (§9.1.1.2). In (110) it means ‘area/

region', while in (111) it can be translated as 'side' and is opposed to *u-stu* 'straight, side'.

- (110) *tce kupa-c^hu nura, at^hi pcov nura,*
 LNK Chinese-APPROX.LOC DEM:PL downstream side DEM:PL
u-pci nura kuu kure ri
 3SG.POSS-outside DEM:LOC ERG DEM.PROX:LOC LOC
yuu-c^huu-suu-χtui-nuu ηu.
 CISL-IPFV:DOWNSTREAM-CAUS-but-PL be:FACT
 'People from Chinese areas, from downstream, from outside, send
 (people) here to buy (these mushrooms). (20-grWBgrWB, 59)

It also occurs with various relator nouns, in particular *u-q^hu* 'after, behind' and *u-ŋgu* 'inside' as in (111) and (112), respectively. The form *u-q^hu-c^hu* exclusively has a locative meaning, unlike *u-q^hu* which can be used with the temporal meaning 'after'. Note that *u-ŋgu* undergoes vowel assimilation to [uŋguc^hu], showing that it must be analyzed as a suffix rather than as a postposition. Most relator nouns cannot be used with *c^hu*, for instance one cannot say †*u-βyri-c^hu*.

- (111) *u-jwas u-βyri u-stu nuu nuu-yrji,*
 3SG.POSS-leaf 3SG.POSS-front 3SG.POSS-direction DEM SENS-be.green
u-jwas u-q^hu-c^hu nuu nuu-pyi,
 3SG.POSS-leaf 3SG.POSS-behind-APPROX.LOC DEM SENS-be.grey
 'The upper side of its leaves is green, and the lower side is grey.'
 (13-NanWkWmtsWG, 8)

- (112) *tce u-xtypa c^ho u-mi, u-jas,*
 LNK 3SG.POSS-lower.belly COMIT 3SG.POSS-foot 3SG.POSS-hand
u-ŋguu-c^hu nuura nuu-wyrum.
 3SG.POSS-INSIDE-APPROX.LOC DEM:PL SENS-be.white
 'The lower part of its body, its feet, its paws, the inside part are white.'
 (20-xsar, 23)

The approximate locative *-c^hu* is commonly used in particular with the *lo* 'upstream' / *t^hi* 'downstream' and *kuu* 'east' / *ndi* 'west' locative adverbs (§22.2.6), as in (113).⁶

⁶ For the use of *mrętṣa* 'until' to express restrictive focalization in (113), see §8.2.9.

- 8161 (113) *pa juul pcov nyki, tui-ji u-rkuu nura maka*
 down village side FILLER INDEF.POSS-field 3SG.POSS-side DEM:PL at.all
 8162 *me. ruŋgu kuŋy lo-cʰu koŋla zo*
 not.exist:FACT pasture also upstream-APPROX.LOC completely EMPH
 8163 *kua-yvndzo myctṣa tʰi nura me*
 SBJ:PCP-be.cold until downstream DEM:PL not.exist:FACT
 8164 ‘It is not found down in the villages, near the fields. Even on the
 8165 pastures, it only exists at high altitudes where it is very cold, not lower.’
 8166 (15-babW, 116-117)

8167 The suffix *-cʰu* is itself related to the indefinite locative postpositions *cʰiz* and
 8168 *scʰiz* ‘at/in/towards a X, somewhere where X’ as in (114), which come from the
 8169 combination of *-cʰu* with the locative suffix *-z* (degrammaticalized as the locative
 8170 postposition *zuu*, see §8.2.4.1). For the notation *-iz* (instead of the more etymolog-
 8171 ical *-uz*) here, see §3.5.2. In the case of the variant *scʰiz*, the root of *-cʰu* was both
 8172 prefixed and suffixed by the locative *-z*.

- 8173 (114) *tce tcekuu~kuu zo scʰiz sys-toŋ zo scʰiz*
 LNK east~EMPH EMPH INDEF.LOC desert EMPH INDEF.LOC
 8174 *ky-azyut-nuu juŋ-ŋu, nyki, si ri kuu-me, rdystab*
 AOR:EAST-reach-PL SENS-be FILLER tree also SBJ:PCP-not.exist stone
 8175 *ri kuu-me scʰiz zo ky-azyut-nuu juŋ-ŋu.*
 also SBJ:PCP-not.exist INDEF.LOC EMPH AOR:EAST-reach-PL
 8176 ‘Further east, they arrived at a desert, somewhere where there were
 8177 neither trees nor stones.’ (2005 Kunbzang, 169-170)

8178 The postpositions *cʰiz* and *scʰiz* have reduced forms *cʰuu* and *scʰuu* with loss of
 8179 final *-z* (see 115 below), probably originally sandhi variants.

- 8180 (115) *nuu-rjara cʰuu pjy-k-ymdzuu-ci tce,*
 3PL.POSS-yard INDEF.LOC PST.IPFV-PEG-SIT-PEG LNK
 8181 ‘She was sitting in their yard.’(150907 yingning-zh, 61)

8182 There is also a rarer disyllabic variant of the approximate locative *cʰizuu* as in
 8183 (116), with the fully syllabic form *zuu* of the locative postposition.

- 8184 (116) *tua-βzur cʰizuu, nyki, kuu-spoŋ ci*
 INDEF.POSS-corner INDEF.LOC FILLER SBJ:PCP-have.a.hole INDEF

8185 *pjy-tu* *tce*,
 IFR.IPFV-exist LNK

8186 ‘In one of the corners, there was a hole.’ (140510 sanpian sheye-zh, 64)

8187 Some nouns use a suffix *-cʰuu* (homophonous with the reduced form of *cʰiz*
 8188 in 115) to indicate direction, and are not compatible with *cʰiz* and other forms:
 8189 *mṛpcoč-cʰuu* ‘towards the opposite side’ and *tui-mui-cʰuu* ‘towards the sky’, the lat-
 8190 ter mainly used with the verb *ru* ‘look at’ to mean ‘lying on one’s back face up
 8191 (towards the sky)’ as in (117).

8192 (117) *tce tui-mui-cʰuu* *nui ui-kui-ru* *nui*
 LNK INDEF.POSS-sky-towards DEM 3SG.POSS-SBJ:PCP-look.at DEM
 8193 *ui-ymyr* *ui-ŋgu* *zo* *c-pjy-lxt*,
 3SG.POSS-mouth 3SG.POSS-inside EMPH TRAL-IFR-release
 8194 ‘It dropped (the medicine) inside the mouth of (Gesar), who was lying
 8195 on his back) face up towards the sky.’ (Gesar, 265)

8.2.4.3 *tce*: linker or postposition

8197 The word *tce* is one of the most common words in Japhug, and it has several
 8198 different morphosyntactic functions, including that of linker (§25.1.6) and topic
 8199 marker (§9.1.5.5). In addition, it is also used as a postposition, expressing both
 8200 motion and location; it especially commonly occurs with an ablative meaning,
 8201 as in (118) and (119). Its etymology is discussed in the following section (§8.2.4.4).

8202 (118) *kutcu* *zgo* *tce tcekui zgo*
 DEM.PROX:LOC mountain LOC east mountain
 8203 *ku-nui-tsum* *nui-ŋgryl* *ma*
 IPFV:EAST-AUTO-take.away SENS-be.usually.the.case LNK
 8204 ‘(The crossoptilon) would take (the weasel) from the mountain here to
 8205 the mountain over there (on the other side of the river).’
 8206 (23-qapGAmtWmtW, 88)

8207 (119) *tui-ci* *nura pa tce tab bja* *zo*
 INDEF.POSS-water DEM:PL down LOC up completely EMPH
 8208 *yui-tsum* *pjy-ra*.
 INV-take.away:FACT IFR.IPFV-be.needed
 8209 ‘One had to bring water from the lower part (of the valley) upwards.’
 8210 (140522 RdWrJAt, 9)

8 Postpositions and relator nouns

8211 The postposition *tce* is also found with temporal adjuncts, as in (120).

- 8212 (120) *qartsu tce nuu-jpum ftcar tce tu-mbro yu.*
winter LOC IPFV-be.thick summer LOC IPFV-be.high be:FACT

8213 ‘It grows thicker in winter, and taller in summer. (07-tAtho, 22)

8214 It appears in the expression *w-sum tce* ‘in his opinion, in his mind’ as in (121)
8215 and (122); the core locative postpositions are not used in this meaning.

- 8216 (121) *azo a-sum tce, nuu-brui zo yyzu cti tce*
1SG 1SG.POSS-mind LOC 3PL.POSS-horn EMPH exist:SENS be.AFF:FACT LNK
8217 ‘In my opinion, (since) they have horns, (they should be able to fight the
8218 predators off.)’ (20-RmbroN, 64)

- 8219 (122) *tce wzo w-sum tce tce tu-tsum tce tcendyre izora*
LNK 3SG 3SG.POSS-mind LOC LNK IPFV:UP-take LNK LNK 1PL
8220 *ji-sytca^ba ra lonba zo tuu-ci nuu-su-wβze*
1PL.POSS-place PL all EMPH INDEF.POSS-water IPFV-CAUS-become[III]
8221 *to-βmuuy.*
IFR-have.the.intention
‘In his mind, (the snake) wanted to take the water upwards and
8223 transform our whole area into water.’ (150820 qaprANar, 20)

8224 Distinguishing between the uses of *tce* as a postposition and as a topic marker
8225 (§9.1.5.5) is not always trivial; it is analyzed as a topic marker when it can be
8226 replaced by *nuu* §9.1.5.4, or when two *tce* appear in a row as in (122): in this case,
8227 the first one is a postposition and the second one a topic marker.

8.2.4.4 Traces of the locative suffix *-j

8228 Situ has a locative suffix *-j*, also used in the possessive construction (Lín 1993:
8229 325–330), which has disappeared in Japhug, though a few traces remain.

8230 The form *tce*, which is mainly used as a linker (§25.1.6) and also occurs as
8231 postposition (§8.2.4.3) and as a topic marker (§9.1.5.5), probably originates from
8232 the combination of the locative postposition *tcu* and the locative suffix *-j, with
8233 vowel merger at a stage preceding the sound change *o → u (*tco-j → tce; see
8234 §3.3.3 for a discussion of these sound changes).

8235 Another trace of the locative suffix *-j is found in the linker *q^he* ‘then’ and the
8236 time ordinal *q^huj* ‘this afternoon’ (§7.5.2), combining the relator noun *w-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 *q^huj* ‘this afternoon’ shows that the suffix *-j was still productive in Japhug after the sound change *o → u took place.

The interrogative pronoun *ŋoj* ‘where’, variant of *ŋotču* ‘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 *c^ho* ‘and, with’ and its variants *c^hondyre* and *c^hony* (comprising the additive *ny* and the linker *ndyre*) are selected by verbs with non-singular subjects (§14.2.6), including *naxtčuy* ‘be the same’ (§9.1.7), *amumi* ‘be in good terms with’ (123), *r^hkryz* ‘discuss’ and reciprocal verbs (§18.4.1).

- (123) [uzo c^ho] kui-naxtčuy [sujno, xcaj ma
 3SG COMIT SBJ:PCP-be.the.same vegetables grass apart.from
 my-kui-ndza nura c^hony] 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) [k^hu chondyre] mbro ni to-r^hkryz-ndzi.
 tiger COMIT horse DU IFR-discuss-DU
 ‘The tiger and the horse had a discussion.’ (20-tArka, 32)

Postpositional phrases in *c^ho* 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 *c^ho* phrases index not only the intransitive subject proper, but the sum of the subject and the *c^ho* 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 ui-rq^hu nuu yurni labma w-ŋguw
 LNK 3SG.POSS-bark DEM be.red:FACT apart.from.the факт 3SG.POSS-inside
 nuu [syjku c^ho] nuu-naxtčuy-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

8267 the birch.' (06-mbrAj, 13)

8268 The verb *naxtçuy* 'be the same' with a *c^ho* phrase can be used in an equative
 8269 construction (§26.3.1.1).

8270 Apart from the function presented above, *c^ho* 'and, with' is commonly used to
 8271 link together two nouns inside a single noun phrase, as in (126). In this case too,
 8272 the main verb of the clause indexes the whole noun phrase, comprising the sum
 8273 of referents designated by the nouns linked by *c^ho*.

8274 (126) *a-wuu c^ho a-ki ni*
 8275 1SG.POSS-grand.father COMIT 1SG.POSS-younger.sibling DU
c^huu-yi-ndzi ra ma zyni-sti ky-ryzzi
 8276 IPFV:DOWNSTREAM-come-DU be.needed:FACT LNK 3DU-alone INF-stay
myr-c^ha-ndzi tce,
 8277 NEG-can:FACT-DU LNK

8278 'My grandfather and my younger brother have to come, they cannot
 stay by themselves.' (2011-05-nyima, 209)

8279 The marker *c^ho* can also link verb phrases and even entire clauses (see §25.6.2.1
 8280 and Jacques 2014a: 313).

8281 Given the apparently equal status of the two linked nouns in (126), in partic-
 8282 ular with regard to indexation, it is legitimate to wonder whether analyzing it
 8283 as a postposition makes more sense than considering it to be a coordinator; this
 8284 question is explored in §9.2.1.

8285 A *c^ho* phrase can be followed by the associative plural marker *ra* (§9.1.1) as in
 8286 (127) to mean 'et cetera', and the whole phrase can take case marking such as
 8287 ergative.

8288 (127) *tceri uizo ndyre, qajdo c^ho ra kuu ndy tú-wy-ndza cti*
 8289 but 3SG ADVERS CROW COMIT PL ERG ADVERS IPFV-INV-eat be.AFF:FACT
 'But it is eaten by crows and other (animals).' (26-NalitCaRmbWm, 140)

8290 The ergative *kuu* is however optional on comitative phrases, as shown by (128),
 8291 where ergative marking would be expected on the phrase *w-puu ra c^ho*.

8292 (128) *[w-puu ra c^ho] tuturca to-ndza-nuu tce*
 8293 3SG.POSS-young PL COMIT together IFR-eat-PL LNK
to-nuu-zyy-cuu-fka-nuu zo juu-ju.
 8294 IFR-AUTO-REFL-CAUS-be.full-PL EMPH SENS-be
 8295 '(The eagle) ate them together with its fledglings and they ate to their
 full.' (huli yu shanying-zh, 28)

8296 A postpositional comitative phrase can also serve as a dual or plural possessor,
 8297 as if from a complex noun phrase ‘*X c^ho Y*’ with elided Y element, as in (129).⁷
 8298 See §9.2.1 for additional discussion.

- 8299 (129) *tce u-rzaβ c^ho ndzi-me ci tu tce,*
 LNK 3SG.POSS-wife COMIT 3DU.POSS-daughter one exist:FACT LNK
 8300 ‘He and his wife have a daughter.’ (14-siblings, 313)

8301 The comitative is also used in the simultaneous action construction (§16.4.3,
 8302 §24.4.3.2)

8.2.6 Additive

8304 The additive adposition *ny*, possibly from Tibetan མ ‘locative’, appears after
 8305 the protasis of some conditional clauses (§25.2.1), but it also occurs in direct adjac-
 8306 ency between two nouns (generally identical ones), most commonly to express
 8307 repeated action as in (130) and (131).

- 8308 (130) *tx-rpi ny tx-rpi zo jnu-sui-βzu-nu*
 INDEF.POSS-sutra ADD INDEF.POSS-sutra EMPH IPFV-CAUS-make-PL
 8309 *jnu-ŋu tce,*
 SENS-be LNK
 8310 ‘They ask (lamas) to chant sutras after sutras.’ (2003kandZislama, 112)

- 8311 (131) *tce u-χti nu kuu c^ha ntsuu ku-ts^hi*
 LNK 3SG.POSS-companion DEM ERG alcohol always IPFV-drink
 8312 *puu-ŋu tce c^ha ny c^ha ku-ts^hi pjui-cti tce*
 PST.IPFV-be LNK alcohol add alcohol IPFV-drink IPFV-be.AFF LNK
 8313 ‘Her husband used to drink all the time, drank alcohol again and again.’
 8314 (17-lhazgron, 64)

8315 It can also be interpreted as gradual increase (132) and/or the meaning ‘all the
 8316 way’ with locative nouns as in (133).

- 8317 (132) *tui-ci nu taŋ ny taŋ, taŋ ny taŋ tu-ŋi*
 INDEF.POSS-water DEM up ADD up up ADD up IPFV:UP-come
 8318 *pjv-cti*
 IFR.IPFV-be.AFF
 8319 ‘The water was raising up and up.’ (31-deluge, 19)

⁷ Note that (129) does not mean ‘There is his wife and their daughter’ (dual indexation would be expected on the verb).

- 8320 (133) *t̪su ny t̪su pjy-ce qʰe*
 path ADD path IFR:DOWN-go LNK
 8321 ‘He went all the way down.’ (140511 alading-zhn 105)

8322 The additive can also occur between finite verbs with a similar range of mean-
 8323 ings (§19.4), with numerals and counted nouns (§7.3.2.3) to express distributivity,
 8324 and with ideophones to describe a rhythmically occurring action (§10.1.2.3).

8325 8.2.7 Standard marker

8326 Japhug has several postpositions that are mainly used to mark the standard in
 8327 the comparative construction. The most common one is *syz* ‘compared with’,
 8328 but the variants *stas*, *syzny*, *stasny*, *sustas* (117 in §15.1.5.5) *xtanr* (68, §10.4.1) and
 8329 *swxta* are also attested (see §5.8.4 concerning their etymology). Their relative
 8330 frequency appears to be speaker-dependent, and no meaningful difference could
 8331 be detected between them.

8332 In the comparative construction (§26.2.1), the comparee is the intransitive sub-
 8333 ject of the main verb (the parameter, generally an adjectival stative verb) and
 8334 is indexed on the verb. The comparee is either in the absolute or in the erga-
 8335 tive (§8.2.2.7). The standard is necessarily marked by one of the postpositions
 8336 listed above, and cannot be indexed on the main verb. Neither the standard nor
 8337 the comparee are required to be overt. An adjectival stative verb with a stan-
 8338 dard postpositional phrase as in (134) is a well-formed comparative construction.
 8339 Examples like (135) with overt comparee and standard are rarer.

- 8340 (134) *qandzyi syzny puu-wxti, qaliaš syzny puu-xtci*
 falcon COMP SENS-be.big eagle COMP SENS-be.small
 8341 ‘It is bigger than a falcon, and smaller than an eagle.’ (2011-08-kuwu,
 8342 40-41)
- 8343 (135) *uzo nuu azo syz tuu-xpa wxti*
 3SG DEM 1SG COMP one-year be.big:FACT
 8344 ‘She is one year older than me.’ (12-BzaNsa, 94)

8345 The standard marker *syz* (and its variants) also occurs in a construction ex-
 8346 pressing progressive increase throughout the time, where a time counted noun
 8347 like *tu-syi* ‘one day’ or *tu-xpa* ‘one year’ is followed by the standard marker and
 8348 then repeated, as *tu-xpa syz tuu-xpa* ‘more year after year’ in (136). This construc-
 8349 tion, although attested in non-translated texts, is more common in texts from

Chinese, where it calques the construction 一年比一年 <yīnián bǐ yīnián> ‘more 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).

- (136) *nui-jwas nui, [...] tui-xpa syz tui-xpa lu-dyn ηu ma*
 3PL.POSS-leaf DEM one-year COMP one-year IPFV-be.many be:FACT
 LNK

‘There are more needles (leaves) each year.’ (08-saCW, 17)

The standard markers can also be used with subordinate clauses (§25.6.2.3). The standard marker with the distal demonstrative *nui syzny* has the meaning ‘rather than that, could ... as well’ as in (137).

- (137) *ny-mu ky-fsraŋ mx-tui-cʰa tce, nui syzny, a-rca jy-yi tce, a-rca, nyki, laχci pui-βzjox*
 2SG.POSS-mother INF-protect NEG-2-can:FACT LNK DEM COMP 1SG.POSS-following IMP-come LNK 1SG.POSS-following FILLER trade IMP-learn

‘You cannot save your mother, rather than that, come with me to learn 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).

- (138) *ki ky-rtsi kui-tu me ny, azo nui syzny, n̥kinu, kʰa kui-qanu~nui u-ηguw zuu, n̥kinu, tui-epyβ kuβde-rzuy t̥-ky-lx t̥-ky-lx nunuu*
 DEM.PROX INF-count SBJ:PCP-exist not.exist:FACT SFP 1SG DEM COMP FILLER house SBJ:PCP-EMPH~be.dark 3SG.POSS-inside LOC FILLER INDEF.POSS-corpse four-section AOR-OBJ:PCP-release DEM *ku-sylsyi-a cʰa-a cti ny!*
 IPFV-combine-1SG can:FACT-1SG be.AFF:FACT SFP
 ‘(What you ask) is nothing, I am even able to put together a corpse that had been cut into four pieces in a dark house.’ (140512 alibaba-zh, 170)

8374 The phrase *nua syzny* is also used as a marker of adversative topic as in (139),
 8375 where it can be replaced by the marker *zo* (§9.1.5.3).

- 8376 (139) *kuki sylanp^hyn ki nua syzny puu-wxti wo tce k^ha*
 DEM.PROX basin DEM.PROX DEM COMP SENS-be.big SFP LNK house
 8377 *ju-nuu-tsum-a tce,*
 IPFV-VERT-take-1SG LNK
 8378 ‘This basin is really big, I will take it home.’ (150831 jubaopen, 22)

8379 8.2.8 Exceptive

8380 The exceptive postposition *ma* ‘apart from’ and its reduplicated variant *muma*
 8381 are not selected by any verb, and only used in adjunct postpositional phrases as
 8382 in (140).

- 8383 (140) *kuum ci muma nuunu tce znde bja zo cti*
 door one apart.from DEM LNK wall completely EMPH be.AFF:FACT
 8384 ‘Apart from one door, there are walls everywhere.’ (2011-11-kha, 40)

8385 The exceptive *ma* ‘apart from’ is used in particular in restrictive focus construc-
 8386 tions (§9.1.6.5).

8387 When the scope of the restrictive construction is on an entire clause rather
 8388 than a single noun phrase, the clause is followed by the linker *ma* (homophonous
 8389 with the exceptive) and an exceptive phrase limited to the demonstrative pro-
 8390 noun *nua* (here in resumptive use, coreferent with the entire preceding clause)
 8391 and the postposition *ma*, as in (141). The first *ma* in this construction is not to be
 8392 analyzed as the postposition: while it is possible to reduplicate the second one
 8393 as in *ma nua muma* (example 142), reduplication of the first *ma* is not attested.

- 8394 (141) *[azury uu-ca ra] ma nua ma*
 1SG.GEN 3SG.POSS-meat be.needed:FACT LNK DEM apart.from
 8395 *kua-ra me*
 SBJ:PCP-be.needed not.exist:FACT
 8396 ‘I want its meat, and nothing else.’ (02-deluge2012, 14)

- 8397 (142) *ty-pytso kua-yywuu zo ky-nuaepuz*
 INDEF.POSS-child SBJ:PCP-cry EMPH INF-imitate
 8398 *my-spe-a ma nua muma spe-a*
 NEG-be.able[III]:FACT-1SG LNK DEM apart.from be.able[III]:FACT-1SG
 8399 ‘I cannot imitate a baby crying, but apart from that I can imitate (all

8400 animal sounds).' (27-kikakCi, 143)

8401 8.2.9 Terminative

8402 The postposition *mṛctṣa* ‘until’ is used after noun phrases to indicate temporal
 8403 (143) or locative (144) limit. It can be used in opposition with the egressive post-
 8404 positions (see 154 in §8.2.10) or with *kōsmuz* ‘only after’ (example 160 in §8.2.11).

- 8405 (143) *tū-pytso kui-dyn nuara tce, tui-pyrme, bnu-pyrme*
 INDEF.POSS-child SBJ:PCP-be.many DEM:PL LNK one-year.old two-year.old
 8406 *jamar mṛctṣa tui-nuu ku-ts^hi-nuu.*
 about until INDEF.POSS-breast IPFV-drink-PL

8407 ‘In (families where) children are many, (mothers) breastfeed (the)
 8408 children) until (they are) one or two years old.’ (140426 tApAtso
 8409 kAnWBdaR, 13)

- 8410 (144) *akuu mṛctṣa yuu-ku-ta-lyt*
 east until CISL-IPFV:EAST-1→2-release
 8411 ‘I come with you (see you off) until the (land of the) east.’ (28-smAnmi,
 8412 220)

8413 In combination with the demonstrative *nu* ‘that’, *mṛctṣa* ‘until’ means ‘other-
 8414 wise’, as in (145).

- 8415 (145) *kṛ-syṛjo ḫja q^he, nui-mtc^hi kṛ-χpjyt ḫja kuu*
 INF-hear completely LNK 3PL.POSS-mouth INF-observe completely ERG
 8416 *kū-wy-spa cti. nui mṛctṣa mṛ-k^huu.*
 IPFV-INV-be.able be.AFF:FACT DEM until NEG-be.possible:FACT
 8417 ‘(In order to learn the Tshobdun language, since it has no writing
 8418 system), one has no choice but to listen and observe people’s mouth to
 8419 learn it, otherwise it is not possible.’ (150901 tshuBdWnskAt, 41-44)

8420 With a verb in negative form, the terminative can express restrictive focaliza-
 8421 tion of locative and temporal adjuncts (§9.1.6.5), as in (146).

- 8422 (146) *izora pyjk^hu <yiyue> <ershiduohao> mṛctṣa muáj-lyt-nuu k^hi.*
 1PL still January twentieth.plus until NEG:SENS-release-PL hearsay
 8423 ‘(At) our (place), they will only have (vacations) on the twentieth
 8424 something of January, they say.’ = ‘They won’t have (vacations) until the
 8425 twentieth of January.’ (conversation, 14-12-24)

The terminative postposition *mętṣa* can also be used to build temporal subordinate clauses (§25.3.2.3).

8.2.10 Egressive

8430 There are six egressive postpositions in Japhug, which are built by combining
8431 the root *canj*-/*coŋ*- (among the words where *-aj* and *-oŋ* are in free variation; the
8432 variant *canj*- is generalized in the orthography, see §3.5.1) with either the root of
8433 locative relator nouns (§8.3.4) or orientation adverbs (§15.1.1.4) as shown in Ta-
8434 ble 8.1. There is a one-to-one relationship between the orientations of these post-
8435 positions and the six definite orientations found in verb morphology (§15.1.1.4).

The egressive postpositions are mainly used with noun phrases of location expressing length or height (147) or a reference point marking a limit (148). However, *cantaç* ‘up from’ and *canpa* ‘down from’ can also follow noun phrases referring to time reference or durations, as in (149, 150) or more generally any quantity (151). No examples of these postpositions following finite subordinate clauses have been found.

- 8442 (147) *turme tuu-fsu* *cantab tu-mbro* *mx-c^ha.*
 people GENR.POSS-same.size up.from IPFV:UP-be.high NEG-can:FACT
 'It cannot grow higher than a person.'(11-qarGW, 29)

8443

8444 (148) *ma kuutcimke nunaatcu, akta ku-ru* *tce, prawuu candi*
 LNK TOPO DEM:LOC east IPFV:EAST-look.at LNK TOPO west.from
sy-mto, *andi tce tce, cufco cankuu nua sy-mto* *tce,*
 PROP-see:FACT west LNK LNK TOPO east.from DEM PROP-see:FACT LNK
 'In Kuchimke, looking towards the east, (the areas) to the west of
 Praqwu are visible, and in the west, (the areas) to the east of Shyufkyo
 are visible.' (150904 tshAcim, 30)

8445

8446

8447

8448

8449 (149) *kumjysqy-rzaab cantab c^huu-mduu-nua* *mx-ηgryl*
 fifty-day up.from IPFV-live.up.to-PL NEG-be.usually.the.case:FACT
tu-ti-nua jnu-ju.
 IPFV-say-PL SENS-be
 'They cannot live more than fifty days, it is said.' (26-GZo, 41)

8450

8451

8452 (150) *tce stu kur-dyn* *nunaat tur-xpa [tur-yjyn cantab]*
 LNK most SBJ:PCP-be.many DEM one-year one-time up.from

- 8453 *kui-ymuutary puu-me*
 GENR-RECIP:meet PST.IPFV-not.exist
 8454 ‘At most, we would only meet once per year (we had no opportunity to
 8455 meet more than once a year).’ (12-BzaNsa, 42)
- 8456 (151) *wi-puu nuunu χsum cantaꝝ tu*
 3SG.POSS-young DEM three up.from exist:FACT
 8457 *muúj-ŋgryl*
 NEG:SENS-be.usually.the.case
 8458 ‘It does not usually have more than three offsprings.’ (2011-08-kuwu, 14)

8459 The postposition *canṭaꝝ* ‘up from’ is by far more common than all the other
 8460 ones, and is often combined with a negative predicate in a comparative construc-
 8461 tion (meaning ‘at most, no more than ...’, §26.2.4, §26.4.3), as shown by (147), (149),
 8462 (150) and (151) above.

8463 In addition to the locational, temporal and quantitative meanings presented
 8464 above, *canṭaꝝ* ‘up from’ and *caŋpa* ‘down from’ can be used to refer to relative
 8465 age (down from the upper generation, up from the lower generation, as shown
 8466 in 152) or social status (up from the lowliest person, as in 153).

- 8467 (152) *ny-mu ny-wa ni caŋpa, a-ye*
 2SG.POSS-mother 2SG.POSS-father DU down.from 1SG.POSS-grandchild
 8468 *canṭaꝝ tx-rundzaŋspa-nuu je!*
 up.from IMP-be.careful SFP
 8469 ‘Be careful, (all of you) from your parents (in the upper generation) to
 8470 my grandson (in the lower one).’ (conversation, 29-09-2020)

- 8471 (153) *wortc^{hi} zo βyrru ci canṭaꝝ zo tx-sui-ywuuwum-nuu tce,*
 please EMPH miller INDEF up.from EMPH IFR-CAUS-RECIP:gather-PL LNK
 8472 ‘Please gather (everybody), from the miller (the lowliest of servants) up
 8473 (to the highest ranking person).’ (2003 kandZislama, 174)

8474 The egressive postpositions can be used in contrast with the terminative *mṛctṣa*
 8475 ‘until’, as in (154).

- 8476 (154) *tui-mke caŋpa tce tce ki tui-mymke*
 INDEF.POSS-neck down.from LNK LNK DEM.PROX INDEF.POSS-ankle
 8477 *mṛctṣa kui-zyuit kui-rŋji pjui-ŋu ra.*
 until SBJ:PCP-reach SBJ:PCP-be.long IPFV-be be.needed:FACT
 8478 ‘(Tibetan clothes) have to be long (enough) so as to reach the ankle

Table 8.1: Egressive postpositions

Postposition	Relator noun	Orientation adverb
<i>çanṭas</i> ‘up from’	<i>w-taš</i> ‘up, top’	
<i>çarpa</i> ‘down from’	<i>w-pa</i> ‘down, bottom’	
<i>çanjo</i> ‘upstream from’		<i>alo</i> ‘upstream’
<i>çant'i</i> ‘downstream from’		<i>at'i</i> ‘upstream’
<i>çankuu</i> ‘east from’		<i>akuu</i> ‘east’
<i>çanđi</i> ‘west from’		<i>andi</i> ‘west’

8479 down from the neck.’ (30-tWNga, 3)

8480 As other postpositional phrases, egressive phrases followed by demonstratives
 8481 (§9.1.2) mean ‘the person(s)/thing(s) from X’, with a locative (155) or temporal
 8482 (156) interpretation.

8483 (155) *izora kuu, nyki, ts^huβdun canjo naura ‘stypa-pui’*
 8484 1PL ERG FILLER TOPO upstream.from DEM:PL pl.n.-person
 8485 *tu-ti-j nyu.*
 8486 IPFV-say-1PL be:FACT

8485 ‘We call the people (who live) in Tshobdun and further upstream
 8486 ‘Stotpa’. (23-tCAphW, 14)

8487 (156) *sqamnu-pyrme canpa nuunu tu-cya tu-nyisci*
 8488 twelve-years.old down.from DEM GENR.POSS-tooth IPFV-exchange
 8489 *k^huu*
 8490 be.possible:FACT
 8491 ‘Those under twelve years old, their teeth can be replaced.’
 8492 (27-tWCGArgu, 58)

8491 The postposition *canjo* ‘upstream from’ is homophonous with, and historically
 8492 related to, the noun *canjo* ‘seating place’ (for old people and ladies) (§15.1.4.4).

8.2.11 Other temporal postpositions

8493 Apart from the locative, terminative and egressive postpositions, a certain num-
 8494 ber of specifically temporal postpositions are found in Japhug, including *cunŋuu*
 8495 ‘before’, *cimuma* ‘immediately after’, *kósmuz* ‘only after’, *pəintət* ‘since’, *jyz* ‘when’

8497 and *carpei* ‘since’, ‘from ... on’. All can be used with noun phrases and subordi-
 8498 nate clauses; the latter use is studied in the section on temporal clauses (§25.3).

8499 The postposition *cunqgu* ‘before’ is an ancient compound containing as first
 8500 element the *status constructus* of a root cognate to Tangut 繢²¹⁰⁴ *ṣjil*^{1.10} ‘formerly,
 8501 before’ and the relator noun *w-ηgu* ‘inside’ (§8.3.4) as second element. It contrasts
 8502 with *w-q^bu* ‘after’ (§8.3.5), and can follow a noun phrase referring to a point in
 8503 time, as in the common expression *saxsui cunqgu* ‘before lunch’ (with the noun
 8504 *saxsui* ‘lunch’), or a duration, as in (157) and (158). The latter example shows that
 8505 *cunqgu* ‘before’ can be used to refer to events occurring *after* the current temporal
 8506 point of reference (in 158, before three days from the present in the story).

- 8507 (157) *t_{xte} sqamŋu-sŋi cunqgu nuicu tce, nrki, nu-rlas tce*
 that.is fifteen-day before DEM.LOC LNK FILLER AOR-disappear LNK
 8508 *nu-me pur-ŋu juu-ŋu, tc^heme nu,*
 AOR-not.exist PST.IPFV-be SENS-be girl DEM
 8509 ‘That is, fifteen days before, she had disappeared, that girl.’ (tWxtsa, 15)
- 8510 (158) *χsui-sŋi χsy-rzab myctsa a-my-tx-tuu-ryru ra ma*
 three-day three-night until IRR-NEG-PFV-2-get.up be.needed:FACT LNK
 8511 *tce my-p^bn nuara to-ti. matci tcet^ha χsui-sŋi*
 LNK NEG-be.efficient:FACT DEM:PL IFR-say because later three-day
 8512 *χsy-rzab cunqgu wzo nuu-p^byo pjy-ra lo*
 three-night before 3SG IPFV-flee IFR.IPFV-be.needed SFP
 8513 ‘(The rabbit) said ‘Don’t get up until three days and three nights (have
 8514 passed)’, because (the rabbit was buying time) and had to flee before (the
 8515 end of) these three days and nights.’ (140427 qala cho kWrtsag, 30-31)

8516 The postposition *cunqgu* ‘before’ however most commonly occurs with subordi-
 8517 nate clauses, and requires a finite verb in the Imperfective (§21.2.3, §25.3.2.1). It
 8518 is attested following personal pronouns, as in (159), *cunqgu* ‘before’ refers to an
 8519 action concerning the referent of the pronoun, whose nature can be determined
 8520 from the context, as if the main verb of a subordinate clause had been elided.

- 8521 (159) *azo cunqgu a-pi ra atu ryzi-nu tce, nunura*
 1SG before 1SG.POSS-elder.sibling PL up.there stay:FACT-PL LNK DEM:PL
 8522 *yuu nuu-rmi tx-z-myke q^he,*
 GEN 3PL.POSS-name IMP-CAUS-be.first[III] LNK
 8523 ‘Before (you choose a name for) me, my elder brothers up there, (choose)
 8524 their names first.’ (Gesar, 124)

The common adverb *kuçunju* ‘in former times’ comes from the combination of the *status constructus* of the proximal demonstrative *ki* ‘this’ (§6.9) with the postposition *çunju* ‘before’. The phrases *ki çunju* ‘before this’ *nu çunju* ‘before that’ with the demonstratives *ki* ‘this’ and *nu* ‘that’ are also attested.

While the neutral antonym of *çunju* ‘before’ is the relator noun *u-q^hu* ‘after’ (§8.3.5), subsequent temporality can also be expressed by *cimuma* ‘immediately after’ and *kóvmuz* ‘only after’ (one of the rare uninflected words with a non-final stress, §3.7). These postpositions are mainly attested following the demonstrative pronoun *nu*, and often used adverbially as *nuu cimuma* ‘immediately’ and *nuu kóvmuz nr* ‘only then’, but are also attested with temporal and conditional clauses (§25.3.3.2, §25.2.2) and with temporal counted nouns or adverbs as in (160), which also illustrates the opposition between *kóvmuz* ‘only after’ and the terminative postposition *myçtsa* ‘until’ (§8.2.9).

- (160) *uu-xso zNGuIloB nuuu, tce sqamju-xpa myçtsa uu-mat*
 3SG.POSS-normal walnut DEM LNK fifteen-year until 3SG.POSS-fruit
ku-ts^hOB muj-c^ha. pu-wy-ji cimuma, uu-ryi
 IPFV-attach NEG:SENS-can AOR-INV-plant just.after 3SG.POSS-seed
pju-wy-ji uu-q^hu, sqamju-xpa kóvmuz nr uu-mat
 IPFV-INV-plant 3SG.POSS-after fifteen-year only.after LNK 3SG.POSS-fruit
ku-ts^hOB ñu tu-ti-nuu ñgryl tce,
 IPFV-attach be:FACT IPFV-say-PL be.usually.the.case:FACT LNK
 ‘Usually, the walnut tree cannot have walnuts until fifteen years (have passed). Just after one has planted it, after one plants its seeds, it is only fifteen years later that it bears nuts, they say.’ (12-ndZiNgri, 166-167)

There is an adverb *nóvmuz* ‘only then’ (found for instance in 60, §8.2.2.10) whose meaning is identical to *nuu kóvmuz nr* ‘only then’, and apparently results from the fusion of the demonstrative *nuu* with the root *-ovmuz*. The origin of the *k-* element in *kóvmuz* ‘only after’ is unclear; it could be the fused form of the proximal demonstrative *ki* (§6.9.1).

The postposition *pçintçrt* ‘since’ (from Tibetan དྲྭ-ୱ୍ୱ ཚ୍ୱ-ୱ-ୱ ‘thereafter’) can follow a date (161) or a subordinate clause, and is most often used with the relator noun *u-q^hu* ‘after’ to mean ‘from that time on’ as in (162). Another postposition, *çarpei* ‘since’, ‘from ... on’ (combining the *çar-* element found in egressive postpositions §8.2.10 with *-pc̥i* from Tibetan དྲ- ཚ୍ୱ- ‘later’) can be used like *pçintçrt* ‘since’ following *u-q^hu* ‘after’ as in (163), or after temporal clauses (§25.3.3.3). The two postpositions *pçintçrt* ‘since’ and *çarpei* ‘since’, ‘from ... on’ have the same

meaning, but the latter is considered by Tshendzin to be an influence from the Xtokavian dialects (§6.5.1, §15.1.1.3).

- (161) *tce tʰam kuaβdesqi u-ro to-pa ma <liu.jiu.nian>*
 LNK now fourty 3SG.POSS-excess IFR-pass.X.years LNK 1969

peintcxt
 since

‘Now it has been forty years (we have known each other), since 1969.’
 (12-BzaNsa, 13)

- (162) *tcizo pu-ari-tci ηu, mtsʰukʰa pu-ftcxt-tci ηu,*
 1DU AOR:DOWN-go[II]-1DU be:FACT lake AOR-subdue-1DU be:FACT
nui ui-qʰu peintcxt tce, nui-ugra nui nui-me
 DEM 3SG.POSS-after since LNK 2PL.POSS-enemy DEM AOR-not.exist
ηu
 be:FACT

‘We went down (into the lake), subdued the (demons in) the lake, and from that time on, your enemy is no more.’ (Nyima.’Odzer2003.2, 109-110)

- (163) *tce tx-mu nui, nui ui-qʰu caŋpcí zo*
 LNK INDEF.POSS-mother DEM DEM 3SG.POSS-after from.that.time.on EMPH
ky-rundzqʰyjuu ta-znuna
 INF-eat.without.sharing AOR:3→3'-stop
- ‘From that (time) on, the mother stopped to eat on her own without sharing.’ (tWJo 2005, 53)

The postposition *jyz* ‘when’ and its variant *jyzny* ‘when’ follows either subordinate clauses (§25.3.4.1), temporal adverbs (164) or the noun *u-ŋgu* ‘beginning’ (from *ŋg* ‘go’ ‘head, beginning’) as in (164); it is not attested with other noun phrases.

- (164) *juſcur nautcu icqʰa txtcipiū nunura, juſcur*
 yesterday DEM:LOC the.aforementioned boy DEM:PL yesterday
jyzny tu-nuze-a tce pu-apa wo ri
 when IPFV-eat[III]-1SG LNK PST.IPFV-be.correct SFP LNK
 ‘I should have eaten these boys yesterday.’ (160705 poucet5-v2, 36)

- 8580 (165) *tce u-ŋgu jyzny tce, u-mylyjab nura*
 LNK 3SG.POSS-beginning when LNK 3SG.POSS-limb DEM:PL
 8581 *mua-c^hui-p^ha_β-nuu tce, tce nuu yuu u-ndzi ku-fsua~fse*
 NEG-IPFV-cut-PL LNK LNK DEM GEN 3SG.POSS-skin SBJ:PCP-EMPH~be.like
 8582 *nuu pjuu-qaa_β-nuu tce tce*
 DEM IPFV-remove.skin-PL LNK LNK
 8583 ‘In the beginning, they don’t cut off the limbs (from the cattle’s body),
 8584 and take out the skin (in such a way as to preserve its shape) exactly like
 8585 (that of the living animal).’ (06-BGa, 94)

8586 8.3 Relator nouns

8587 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.

8590 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).

8593 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).

- 8597 (166) *jufcu_r <gongxun> a-cki jy-ye.*
 yesterday ANTHR 1SG.POSS-DAT AOR-come[II]
 8598 ‘Yesterday Gong Xun came to (see) me.’ (160320, conversation)

8599 Third, the genitive *yuu* (§8.2.3) can optionally occur between the preceding 8600 noun phrase and the relator (as in 167 below and 65), since relator noun phrases 8601 are a subtype of the possessive construction (§8.2.3.1).

- 8602 (167) *tce smyt tumda rjylpu yuu u-cki nutcu, nykintu,*
 LNK TOPO TOPO king GEN 3SG.POSS-DAT DEM:LOC FILLER
 8603 *u-rza_β u-kui-t^hu c^hy-ce tce,*
 3SG.POSS-wife 3SG.POSS-SBJ:PCP-ask IFR:DOWNSTREAM-go LNK
 8604 ‘He went to ask the king of the lower valley for (one his daughter to take
 8605 as) a wife.’ (2014-kWLAG, 16)

8606 In addition, most relator nouns still preserve non-grammaticalized uses revealing
 8607 their diachronic source, and some of them can be followed by the locative
 8608 postpositions (§8.2.4.1) or by other relator nouns.

8609 8.3.1 Dative

8610 Two dative markers are attested in Japhug, *u-čki* and *u-pʰe*; some speakers like
 8611 Tshendzin prefer the former (as in 166, 168, 169), but most speakers I have recorded
 8612 favor the latter (for instance, Kunbzang Mtsho who tells the story from which
 8613 170 is taken).

8614 The dative can be followed by the locative postpositions *zuu* and *tču*, as in (168),
 8615 (174) and (177).

- 8616 (168) *nur mbro tuu-skyt kui-tso numu u-čki*
 8617 DEM horse INDEF.POSS-speech SBJ:PCP-understand DEM 3SG.POSS-DAT
zuu to-ti
 8618 LOC IFR-say
 8619 ‘She said ... to the horse who could understand speech’
 (2003kAndzWsqhaj, 25)

8620 The dative is used to mark the recipient or addressee. It occurs with indirective
 8621 verbs of speech such as *ti* ‘say’ (168, 169 and 170), *fçrt* ‘tell’ and *tʰu* ‘ask’ (171), and
 8622 also with some intransitive verbs of speech such as *ruçmi* ‘speak’ (172).

- 8623 (169) *icqʰa srwnmnu nur kui, [...] smxnmimitob kucana*
 8624 the.mentioned râkshasî DEM ERG ANTHR ANTHR
u-čki 'nyzo tcʰi uu-ruiy tuu-ŋu' to-ti ri,
 8625 3SG.POSS-DAT 2SG what 3SG.POSS-race 2-be:FACT IFR-say LNK
 8626 ‘The râkshasî asked Smanmi Metog Koshana, ‘What type of being are
 you?’ (28-smAnmi, 378)

- 8627 (170) *tce ty-tcuu nur kui uu-wa u-čki nura*
 8628 LNK INDEF.POSS-SON DEM ERG 3SG.POSS-father 3SG.POSS-DAT DEM.PL
pui-kui-fse nura to-ti puu-ŋu
 8629 AOR-SBJ:PCP-be.like DEM.PL IFR-say SENS-be
 ‘The boy told his father the things that had happened.’ (qachGa2012, 175)

8 Postpositions and relator nouns

- 8630 (171) *nyzo u-my-nur-tuu-stu* *ny, zara nur-cki* *ty-t^he*
 2SG QU-NEG-SENS-2-believe LNK 3PL 3PL.POSS-DAT IMP-ask[III]

8631 *jyY*
 be.possible:FACT
 ‘If you don’t believe it, ask them!’ (140508 shier ge tiaowu de gongzhu-zh, 190)

- 8634 (172) *nui ty-pytso* *nui ui-cki* *to-ruucmi.*
 DEM INDEF.POSS-child DEM 3SG.POSS-DAT IFR-speak
 ‘It spoke to the child.’ (150831 renshen wawa-zh, 36)

8636 It also occurs with verbs of giving to mark the recipient as in (173) with the
 8637 verb *k^ho* ‘give, pass over’, but also the source as in (174) with verbs such as *rpo*
 8638 ‘borrow’, *symbi* ‘ask for’ and *xtu* ‘buy’ (§14.4.1, §17.2.5.7).

- 8639 (173) *ui-nmas* *ui-cki* *py-k^ho* *tce,*
 3SG.POSS-husband 3SG.POSS-DAT IFR-give LNK
 ‘She gave it to her husband.’ (qajdoskAt, 71)

- 8641 (174) *kui-ryrma* *ra nui-cki* *nuitcu, kuxtco ci* *z-py-rjo,*
 SBJ:PCP-WORK PL 3PL.POSS-DAT DEM:LOC basket INDEF TRAL-IFR-borrow
 ‘(The snow leopard) borrowed a basket from the workers.’ (qala2002, 43)

8643 With the verb *k^ho* ‘give, pass over’ the recipient is more often encoded with the
 8644 genitive or a possessive prefix on the theme (§8.2.3.2) or with the semi-grammaticalized
 8645 noun *tui-jas* ‘hand’ (§8.3.6).

8646 The semi-transitive verb *ru* ‘look at’ can mark its goal with the dative, as in
 8647 (175); this is however optional, as this verbs also takes goals in the absolute
 8648 (§8.1.8) or locative (§8.2.4).

- 8649 (175) *tce tyje nui nuy-me* *tce, tce tyje ui-cki*
 LNK sun DEM APPL-be.afraid[III]:FACT-1SG LNK LNK sun 3SG.POSS-DAT
 bja *zo c-tu-ru* *tce, tuzo tur-cki* *maka*
 completely EMPH TRAL-IPFV:UP-look.at LNK GENR GENR.POSS-DAT at.all
 zo my-ru
 EMPH NEG-look.at:FACT
 ‘(If the yeti catches you), it is afraid of the sun, it looks at the sun the
 whole time, and does not look at you.’ (140510 mYWrgAt, 13)

8654 The dative *w-cki* derives from a relator noun meaning ‘side’, ‘near’ or ‘at X’s
 8655 place’ (with or without motion). These locative meanings are still marginally
 8656 present in Japhug in examples like (166) above and (176), (177) and (178) below.

- 8657 (176) *w rte nui w-rna w-cki pui-kui-nqob*
 8658 3SG.POSS-hat DEM 3SG.POSS-ear 3SG-DAT AOR:DOWN-NMLZ:S/A-hang
nunua pjy-mja tce w-ku w-ta^b to-ta.
 8659 DEM IFR:DOWN-take LNK 3SG.POSS-head 3SG-on IFR-put
 8660 ‘He took the hat that was hanging on his ear and put it on his head.’
 (140505 liuhahohan zoubian tianxia-zh, 164)

- 8661 (177) *txye c^ho slyje zngri ra nui-p^he nautcu ky-nycqa*
 8662 sun COMIT moon star PL 3PL.POSS-DAT DEM:LOC INF-bear
a-pui-tui-c^ha ra ma,
 8663 IRR-PFV-2-can.be.needed:FACT LNK
 8664 ‘(When you are) by the sun, the moon and the stars, you will have to
 bear (the heat and the cold), otherwise...’ (2003kandZislama, 53)

- 8665 (178) *li tcetu tx-ye q^he, w-wa w-cki*
 8666 again up.there AOR:UP-go[II] LNK 3SG.POSS-father 3SG.POSS-DAT
ku-nui-ryzi, tceki pui-ari q^he, w-wu^b
 8667 IPFV-AUTO-stay, down.there AOR-go[II] LNK 3SG.POSS-grand.father
w-wi ni ndzi-cki ju-nui-ce q^he,
 8668 3SG.POSS-grand.mother DU 3DU.POSS-DAT IPFV-AUTO-go LNK
 8669 ‘When she comes up there, she stays at her father’s house, and when she
 goes down there, she goes to her grandparent’s place.’ (14-siblings, 305)

8.3.2 Secutive

8671 The secutive relator noun *w-rca* ‘following’ is used with verbs of motion such as
 8672 *gi* ‘come’ to express the meaning ‘follow’, ‘come/go with’ as in (179).

- 8673 (179) *azo kurny ny-rca yi-a eti*
 8674 1SG also 2SG.POSS-following come:FACT-1SG be.AFF:FACT
 ‘I am coming-going with you.’ (2011-05-nyima, 171)

8675 The secutive can have a meaning similar to that of the comitative adverb
 8676 (§5.8.1) ‘together with X’, as in (180).

8 Postpositions and relator nouns

- 8677 (180) *pynmawombyr yuu u-cyruu u-βyi u-rca*
ANTHR GEN 3SG.POSS-bone 3SG.POSS-ash 3SG.POSS-following
8678 *ts^hunt^hun zo ta-wum-nuu juu-ŋu*
IDPH(II):neat EMPH AOR:3→3'-collect-PL SENS-be
8679 ‘They collected all of Padma ’Od-’bar’s bones together with his ashes.’
8680 (2005 Norbzang, 410)

8681 The secutive phrase can follow (180), or precede (181) the noun phrase it ac-
8682 companies.

- 8683 (181) *tuu-jyyt u-rca tʂ-se*
INDEF.POSS-feces 3SG.POSS-following INDEF.POSS-blood
8684 *c^huu-nuu-łob*
IPFV:DOWNSTREAM-AUTO-come.out
8685 ‘(In the case of this disease), blood comes out together with the feces.’
8686 (24-pGArtsAG, 117)

8687 With the indefinite possessor prefix *tʂ-rca* and *tuu-tuu-rca*, the secutive appears
8688 in adverbial function with the meaning ‘together’ (example 23, §7.1.7), though in
8689 examples such as (182) the form *tʂ-rca* retains its nominal status.

- 8690 (182) *coʂ nunuu tʂ-rvku tʂ-rca ŋu,*
buckwheat DEM INDEF.POSS-crops INDEF.POSS-following be:FACT
8691 *suijno mar.*
grass not.be:FACT
8692 ‘Buckwheat (belongs) with the crops, it is not a (type of) grass.’
8693 (13-NanWkWmtsWG, 68)

8694 In addition, the unexpected focus marker *rca* (§26.1.1.4) and the epistemic
8695 sentence final particle *rca* (§10.4.4) are historically related to the secutive.

8.3.3 Deputative

8697 The relator noun *u-ts^hy* has two meanings. First, it can serve as a deputative
8698 relator noun ‘instead of, on behalf of’ as in (183) and (185). No verb selects this
8699 relator noun.

8700 The deputative adjunct can correspond to the intransitive subject (as in 183,
8701 with the verb *tu* ‘exist’), the transitive subject (as in 184, with *yujtsi* ‘support’) or
8702 the object.

- 8703 (183) *nauzora yuu nau-tv-sno* *kau-fse*
 2PL GEN 2PL.POSS-INDEF.POSS-saddle SBJ:PCP-be.like
 8704 *wu-ts^hyt* *nau, tcizo yuu, tci-xc^yndzu* *χsui-ldza*
 3SG.POSS-instead.of DEM 1DU GEN 1DU.POSS-twigs three-long.object
 8705 *pau-tu* *tce, nuanua ly-nau-βlau-tci* *cti* *wo*
 PST.IPFV-exist LNK DEM AOR-AUTO-burn-1DU be.AFF:FACT SFP
 8706 'Instead of a saddle like yours, we had three twigs, this is what we
 8707 burned.' (Kunbzang 2003, 203)

- 8708 (184) *azo nx-ts^hyt, n^xki, si nau tu-yaujtsi-a*
 1SG 2SG.POSS-instead.of FILLER tree DEM IPFV-support-1SG
 8709 *j^yY*
 be.possible:FACT
 8710 'I can support the tree for you/instead of you (while you fetch it).'
 8711 (150830 afanti-zh, 136)

8712 The noun phrase headed by *wu-ts^hyt* can be either an adjunct as in (183) and
 8713 (184), the object of the verb *βzu* 'make', or a nominal predicate with a copula as
 8714 in (185) and (186). In the latter case, to express the meaning 'do to X instead of
 8715 to Y', a biclausal construction 'do to X, (X) is instead of Y' is used as in (186).

- 8716 (185) *si maye tce tce nuanutcu tce, nau-si*
 tree not.exist:SENS LNK LNK DEM:LOC LNK 3PL.POSS-wood
 8717 *wu-ts^hyt jnu-ŋu*
 3SG.POSS-instead.of SENS-be
 8718 '(since) there are no trees, (dung) is used there to replace the firewood.'
 8719 (05-tamar, 10-11)

- 8720 (186) *nau tv-nau-ndym tce azo a-ts^hyt* *ŋu tce*
 DEM IMP-AUTO-take[III] LNK 1SG 1SG.POSS-instead.of be:FACT LNK
 8721 'Take these instead of me (as a compensation).' (2003kAndzwsqhaj2, 141)

8722 The examples (184) and (186) also show that the relator noun *wu-ts^hyt* 'instead
 8723 of' can occur with a first or second person possessive prefix.

8724 Second, *wu-ts^hyt* also means 'with proper measure', mainly occurring in adver-
 8725 bial function as in (187) or in collocation with the verb *βzu* 'make' in the sense
 8726 'do with proper measure' as in (188).

8 Postpositions and relator nouns

- | | | | | |
|------|-------|--|--|--|
| 8727 | (187) | <i>rkangraŋ u-ts^hyt</i> | <i>tsa nuu-kui-nyc̥tsабли-a-nui</i> | |
| | | ANTHR 3SG.POSS-proper.measure | a.little IPFV-2→1-torture-1SG-PL | |
| 8728 | | <i>raabmaš ma</i> | | |
| | | SFP | SFP | |
| 8729 | | 'Rkangrang, don't go over the top in your torturing of me (torture me | | |
| 8730 | | with proper measure), please? (Norbzang 2005, 245) | | |
| 8731 | (188) | <i>u-ts^hyt</i> | <i>tu-su-βzu-nui muáj-k^hu</i> | |
| | | 3SG.POSS-proper.measure | IPFV-CAUS-make-PL NEG:SENS-be.possible LNK | |
| 8732 | | <i>nui-ky-k^ho</i> | <i>nui muu-t^ha-ckut</i> | |
| | | AOR-OBJ:PCP-give | DEM NEG-AOR:3→3'-eat.completely until | |
| 8733 | | <i>tu-ndze</i> | <i>muu-cti.</i> | |
| | | IPFV-eat[III] | SENS-be.AFF | |
| 8734 | | 'They cannot make (the monkey eat) with measure, as it continues | | |
| 8735 | | eating the (food) that is given to it until there is none.' (19-GzW, 60) | | |
| 8736 | | In some contexts as in (189), <i>u-ts^hyt</i> 'proper measure' in adverbial used is better | | |
| 8737 | | translated as 'depending on the circumstances'. ⁸ | | |
| 8738 | (189) | <i>tce numuu u-ts^hyt</i> | <i>numuu u-puu ci ci</i> | |
| | | LNK DEM | 3SG.POSS-proper.measure DEM 3SG.POSS-young once once | |
| 8739 | | <i>vnuz tu,</i> | <i>ci ci tui-rdoš ma me tce</i> | |
| | | two exist:FACT once once one-piece apart.from not.exist:FACT LNK | | |
| 8740 | | <i>núndza</i> | <i>nuu-ŋu.</i> | |
| | | for.this.reason SENS-be | | |
| 8741 | | 'This is why, depending on the circumstances, sometimes (the goat) has | | |
| 8742 | | two kids, sometimes only one.' (05-qaZo, 28) | | |

8743 The inalienably possessed noun *u-ts^hṛt* (at least in the meaning ‘proper mea-
8744 sure’) is borrowed from कृ- *ts^had* ‘measure, limit’. It occurs as second element in
8745 the compound *xtrts^hṛt* ‘restraint of one’s appetite’(with the *status constructus* *xtr-*
8746 *tuu-xtu* ‘belly’).

8.3.4 Locative relator nouns

8748 The dearth of specific locative postpositions (§8.2.4) other than the egressive ones
8749 (§8.2.10) in Japhug is compensated by the existence of many relator nouns ex-

⁸ This example is taken from a text describing goats and sheep; goats are called *tsʰyt* in Japhug, but it is clear from the context that *u-tsʰyt* cannot be the 3SG possessed form of this noun, though the two forms are indeed homophonous.

8750 pressing various types of location, as shown in Table 8.2.

8751 As other relator nouns, they can follow noun phrases (including headless relative clauses), with the possessive prefix agreeing in person and number with the preceding constituent, but can also occur on their own if the referent is definite, as *w-tar* ‘on’ in (190) and (221) below.

8755	(190)	<i>w-tar</i>	<i>zui ky-amdzui ny tṣ-lu</i>	<i>pa-tcyt</i>
		3SG.POSS-ON LOC AOR-sit	LNK INDEF.POSS-milk AOR:3→3'-take.out	
8756		<i>jwə-ŋu</i>		
		SENS-be		

8757 ‘She sat on him and milked.’ (2005 Kunbzang, 81)

8.3.4.1 The tridimensional system

8759 The first six nouns in Table 8.2 are derived from orientation adverbs (§22.2.6). The
 8760 vertical dimension relator nouns *w-tar* ‘on’ and *w-pa* ‘below’ are simply built by
 8761 adding a possessive prefix to the root of the adverb, while the other ones combine
 8762 the *status constructus* of the adverbial root (*lx-*, *tʰy-*, *ky-*, *ndr-* from *lo*, *tʰi*, *kua* and
 8763 *ndi*, respectively) with a suffix *-cu*. This hexameric system comprising three pairs
 8764 of elements along three dimensions (vertical, fluvial, solar) is the same as found
 8765 in verbal morphological (§15.1.1.4) and also egressive postpositions (§8.2.10).

8.3.4.2 Other locative relator nouns

8766 Outside of the tridimensional system, other locative relator nouns also occur in
 8767 antithetic pairs, in particular *w-ṣyri* ‘before, in front of’ vs. *w-qʰu* ‘after, behind’
 8768 (the latter also occurs as a temporal relator noun, cf §8.3.5), *w-ŋgu* ‘inside’ vs. *w-*
 8769 *pči* ‘outside’ and *w-mju* ‘opening, edge, border’ vs. *w-ndo* ‘edge, border’ or *w-qa*
 8770 ‘bottom’.

8771 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-ṣyri* ‘before, in front of’ is one of the very rare cases of a disyllabic word that has a cognate in Tangut sharing both syllables (𢂵𢂸 5416–567 *ywa-rjir*^{2.25–2.74} ‘before’).⁹ The relator noun *w-ku* ‘top of’ (as in 191) is transparently grammaticalized from the body part *tua-ku* ‘head’.

⁹ The syllable *ṣy-* = 𢂷 5416 *ywa*^{2.25} may be a fossilized allomorph of *tua-ku* ‘head’ with a uvular as in the Stau cognate *ṣə* ‘head’.

Table 8.2: Locative relator nouns in Japhug

Lexical origin	
<i>wi-tar</i> ‘on, above’	<i>tar</i> ‘upwards’
<i>wi-pa</i> ‘below, under’	<i>pa</i> ‘downwards’
<i>wi-l̥rcu</i> ‘upstream of’	<i>lo</i> ‘upstream’
<i>wi-t̥yrcu</i> ‘downstream of’	<i>thi</i> ‘downstream’
<i>wi-k̥rcu</i> ‘east of’	<i>kuu</i> ‘eastwards’
<i>wi-nd̥rcu</i> ‘west of’	<i>ndi</i> ‘westwards’
<i>wi-ku</i> ‘top of’	<i>tu-ku</i> ‘head’
<i>wi-qa</i> ‘bottom of’	<i>tr-qa</i> ‘paw, root’
<i>wi-kyri</i> ‘before, in front of’	
<i>wi-qʰu</i> ‘after’, ‘behind’	
<i>wi-ŋgu</i> ‘inside’	
<i>wi-p̥ci</i> ‘outside’	় pʰi ‘outside’
<i>wi-rku</i> ‘side’	
<i>wi-χcyl</i> ‘middle, center’	় d̥kil ‘middle’
<i>wi-p̥yrtʰyβ</i> ‘between’	় bar ‘middle, between’
<i>wi-t̥yβ</i> ‘between’	
<i>wi-mju</i> ‘opening, edge, border’	
<i>wi-ndo</i> ‘edge, border’	

8778 (191) *tce tu si wi-ku zui qaliaw yzsu tce,*
up.there tree 3SG.POSS-top.of LOC eagle SENS:exist LNK

8779
8780 ‘Up there on the top of the tree there is an eagle.’ (140427 laoying mao he
yezhu-zh, 31)

8781 Some relator nouns other than *wi-ku* ‘top of’ have non-grammaticalized uses;
8782 for instance *wi-ŋgu* ‘inside’ still occurs as a noun meaning ‘internal part, inside’
8783 in (192).

8784 (192) *tce nuunia kur-spos yu, wi-ŋgu nu*
LNK DEM SBJ:PCP-have.a.hole be:FACT 3SG.POSS-inside DEM

8785 *so tce*
be.hollow:FACT LNK

8786 ‘Its (inside) has a hole, its inside is hollow.’ (12-Zmbroko, 23)

8787 Some of the relator nouns above can derive verbs of location such as *mrku* ‘be
 8788 first’ and *mrpc̣i* ‘be outside’ with the denominal prefix *mr-* (§20.6).

8789 The meaning of the relator nouns *u-mju* and *u-ndo* requires a specific descrip-
 8790 tion. These nouns are not antithetic to another in all cases. The basic (non-
 8791 grammaticalized) meaning of *u-mju* is the border of the opening or mouth of
 8792 a container / bag (193), or the shoreline (of a lake), as in (194). In this use, it is
 8793 opposed to *u-qa* ‘bottom of’, as in (195).

- 8794 (193) *tcendyre nunu kʰutsa u-mju jamar kui-wxti tu,*
 LNK DEM bowl 3SG.POSS-border about SBJ:PCP-be.big exist:FACT
 8795 ‘Some are about as big as the mouth of a bowl.’ (22-BlamajmAG, 130)

- 8796 (194) *tcendre pyxtcu nuu mtsʰu u-mju nutcu 'saut'*
 LNK bird DEM lake 3SG.POSS-border DEM:LOC IDPH.I:sound
 8797 *to-ti to-nuu-łob.*
 IFR-say IFR:UP-AUTO-come.out
 8798 ‘The bird came out of the shore of the lake with a noise.’ (2014-kWLAG,
 8799 556)

- 8800 (195) *mtsʰu u-qá zuu nyrwuu mr-kui-naχtcuwy ci*
 lake 3SG.POSS-bottom LOC jewel NEG-SBJ:PCP-be.similar INDEF
 8801 *yʂzu tce,*
 exist:SENS LNK
 8802 ‘At the bottom of the sea, there is a jewel unlike any other.’ (2012
 8803 Kunbzang, 12)

8804 The basic meaning of *u-ndo* includes ‘extremity’ (for instance, of a limb as in
 8805 196) and also ‘end’ in both the locative and temporal sense (197).

- 8806 (196) *u-bar u-ndo nuura hanumi juu-ɻav.*
 3SG.POSS-wing 3SG.POSS-border DEM:PL a.little SENS-be.black
 8807 ‘The extremities of its wings are a bit black.’ (23-scuz, 133)

- 8808 (197) *u-ndo tce maka kui-tu juu-me juu-ŋu tce,*
 3SG.POSS-border LNK at.all SBJ:PCP-exist IPFV-not.exist SENS-be LNK
 8809 ‘In the end, nothing is left.’ (04-xiaocunzhuang-zh, 63)

8810 In the case of clothes, *u-ndo* refers to the lower opening (towards the feet), as
 8811 opposed to the collar, as in (198).

8 Postpositions and relator nouns

- 8812 (198) *tce nur u-ndzi numuu pjur-χtsyβ-nuu tce tce tu-ŋga*
 LNK DEM 3SG.POSS-skin DEM IPFV-tan-PL LNK LNK INDEF.POSS-clothes
 8813 *u-ndo ri ku-lyt-nuu, tu-ŋga u-kunja,*
 3SG.POSS-border LOC IPFV-release-PL INDEF.POSS-clothes 3SG.POSS-collar
 8814 *u-pylor u-ku, u-ndo nura ku-lyt-nuu,*
 3SG.POSS-sleeves 3SG.POSS-top 3SG.POSS-border DEM:PL IPFV-release-PL
 8815 *tu-su-fskyr-nuu ŋu.*
 IPFV-CAUS-surround-PL be:FACT
 8816 ‘They tan its hide (of the otter) and put it on the lower opening of the
 8817 clothes, on the collar of clothes, the cuffs of the sleeves and the lower
 8818 opening, and make it around (these openings).’ (28-qapar, 96)

8819 A contrast between *u-myu* and *u-ndo* occurs in their uses as relator nouns,
 8820 indicating opposite extremities or sides. In the case of fields (as in 199), *u-myu*
 8821 designates the higher side of the field (towards the mountain), while *u-ndo* refers
 8822 to the side closer to the river (all arable lands in Gyalrong area lie in narrow
 8823 valleys).

- 8824 (199) *qazmbri nuu, tuu-ji u-ndo, tuu-ji*
 vine DEM INDEF.POSS-field 3SG.POSS-border INDEF.POSS-field
 8825 *u-myu nura abyndundxt zo tu-łor*
 3SG.POSS-border DEM:PL everywhere EMPH IPFV:UP-come.out
 8826 *cti*
 be.AFF:FACT
 8827 ‘The vine, it grows everywhere, on both sides of the fields.’ (06-qaZmbri,
 8828 12)

8829 The relator noun *u-myu* can also designate the top extremity of stairs, as in
 8830 (200); for the lower side, either *u-qa* ‘bottom’ or *u-ndo* can be used (the former
 8831 more commonly).

- 8832 (200) *cunqluy nuu rjyskylt u-myu zuu na-ta nuu-ŋu*
 pestle DEM stairs 3SG.POSS-border LOC AOR:3→3'-put SENS-be
 8833 ‘He put the pestle on the top of the stairs.’ (tWJo 2005, 49)

8834 The superlative derivation (§5.7.9) can be applied to most locative relator nouns,
 8835 as *u-myučumyū* from *u-myu* in (201), where it means that the liquid completely
 8836 fills the bowl to the point of touching the border of its mouth, flowing out at the
 8837 slightest motion.

- 8838 (201) *ts^ha t̪-wy-rku tce k^huitsa u-mjucumju st^huci*
 tea AOR-INV-put.in LNK bowl 3SG.POSS-border:SUPERLATIVE so.much
 8839 *tu-zyut mr-ra ma k^h-ndo tce sy-cke*
 IPFV:UP-reach NEG-be.needed:FACT LNK INF-take LNK PROP-burn:FACT
 8840 ‘When one pours tea, it should not reach the limit of the mouth of the
 8841 bowl, otherwise it will be burning when one holds it.’ (elicited)

8842 In addition to the relator nouns described above, the inalienably possessed
 8843 noun *u-stu* ‘straight ahead’ is mainly used as an adverb, but can also serve as a
 8844 relator noun to indicate the goal of a motion verb as in (202).

- 8845 (202) *tce p^habrgot ri li uzo u-stu zo jny-yi q^he,*
 LNK boar also again 3SG 3SG.POSS-straight EMPH IFR:WEST-come LNK
 8846 *cymuyduu k^h-lyt muu-pjy-nyz q^he p^habrgot jo-nuu-ce.*
 gun INF-release NEG-IFR/IPFV-dare LNK boar IFR-AUTO-go
 8847 ‘The boar came directly at him, but he did not dare to shoot and the boar
 8848 went away.’ (150829 phaRrgot, 8)

8849 8.3.4.3 The relator noun *u-taꝝ* ‘on, above’

8850 The relator noun *u-taꝝ* ‘on, above’ is mainly used to build locative adjuncts or
 8851 goals (see examples in §8.3.4.5), but it is also selected by a certain number of
 8852 verbs to mark an oblique argument.¹⁰

8853 The intransitive verb *atsa* ‘prick’ and its causative form *s^htsa* ‘prick, pierce’
 8854 encode the piercing object as intransitive subject and object, respectively. The
 8855 patient (the person or object being pricked) is encoded as an oblique argument
 8856 in *u-taꝝ*; example (203) illustrates the intransitive verb *atsa* with a generic human
 8857 argument (§5.1.3).

- 8858 (203) *tce u-ku kuu-ymtcosj puu-ηu tce, tuu-taꝝ*
 LNK 3SG.POSS-head SBJ:PCP-be.pointy SENS-be LNK GENR.POSS-on
 8859 *ku-otsa tce puu-cuu-mjym.*
 IPFV-prick LNK SENS-CAUS-hurt
 8860 ‘(The fir needles) are pointy-headed, they prick people, it hurts.’
 8861 (08-tWrgi, 27)

¹⁰ The relator noun *u-taꝝ* is homophonous with the bare infinitive *u-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.

8862 The intransitive verb *nqoꝝ* ‘hang’ has an additional volitional meaning of ‘grab,
 8863 lean on’, taking an object or person with both hands with body contact. It is
 8864 attested for instance to describe a person who has fallen in the water, reaching
 8865 for floating pieces of wood in order not to sink as in (204) or jumping on the
 8866 back of someone and grabbing her to prevent her from leaving (205). The object
 8867 or person being grabbed is marked with *u-taꝝ*.

- 8868 (204) *nunuu zmbruu nui-ky-χtyr* *nui u-taꝝ* *ky-nqoꝝ-uu*
 8869 DEM ship AOR-OBJ:PCP-scatter DEM 3SG.POSS-on IMP-hang-PL
 8870 *ra*
 8871 be.needed:FACT
 8872 ‘Grab the (pieces of the) ship that have been scattered.’ (2012 Norbzang,
 8873 32)
- 8872 (205) *turmuk^ha tce tualyt* *nui u-taꝝ* *ko-nqoꝝ tce*
 8873 evening LOC second.sibling DEM 3SG.POSS-on IFR-hang LNK
 8874 ‘In the evening, he grabbed the second sister.’ (07-deluge, 47)

8874 Some stative verb also optionally select an oblique argument in *u-taꝝ*, in par-
 8875 ticular to express a beneficiary/maleficiary with the verbs *pe* ‘be good’ and *ŋyn*
 8876 ‘be bad’, in the meaning ‘be good to X, be nice with, treat X well’ and ‘treat X
 8877 badly’, as in (206). The genitive can alternatively be used to mark the beneficiary
 8878 with these verbs (§8.2.3.2), but the meaning is rather ‘be advantageous’ or ‘be
 8879 harmful’ depending on polarity.

- 8880 (206) *maka zo u-taꝝ muu-pjy-pe-ndzi* *qhe,*
 8881 at.all EMPH 3SG.POSS-on NEG-IPFV.IFR-be.good-DU LNK
 8882 *pjy-ŋyn-ndzi*
 8883 NEG-IPFV.IFR-be.bad-DU
 8884 ‘They did not treat him well, they treated him badly.’ (2014-kWLAG, 114)
- 8883 (207) *a-pi* *ra a-taꝝ* *nui-tuu-pe*
 8884 1SG.POSS-elder.sibling PL 1SG.POSS-on 3PL.POSS-NMLZ:DEG-be.good
 8885 *pui-syre* *zo tce*
 8886 PST.IPFV-be.ridiculous EMPH LNK
 8887 ‘My elder brothers treated me very well.’ (140501 tshering skyid, 46)

8886 The bipartite verb *stu,mbat* ‘try hard’ (§11.6.3) can also take a beneficiary in
 8887 *u-taꝝ*, with the meaning ‘care about X and treat X well’ as in (208).

- 8888 (208) *ny-taʂ* *stu-a* *mbat-a* *zo* *cti*
 2SG.POSS-on try.hard(1):FACT-1SG try.hard(2):FACT-1SG EMPH be.AFF:FACT
 'I will treat you well.' (2005lobzang, 33)

8890 Other intransitive verbs selecting oblique arguments in *u-taʂ* include *nurçrt*
 8891 'slightly touch in passing' (designating the object touched), *rpu* 'bump on' (§14.5.2)
 8892 and *ndzor* 'be attached' (119, §18.5.5).

8893 The transitive verb *lxt* 'throw, release', when used as a light verb (§22.4) in
 8894 collocation with nouns expressing either objects, weapons or substances that are
 8895 thrown or that the subject hits people with, selects a phrase in *u-taʂ* to indicate
 8896 the recipient, as in (209) and (210). This recipient, although syntactically quite
 8897 different from an object or a semi-object, can however be relativized using the
 8898 object participle (§16.1.2.5).

- 8899 (209) *u-taʂ* *tua-mci* *pjuá-wy-lxt*
 3SG.POSS-on GENR.POSS-spit IPFV-INV-release
 'If one spits on it,' (08-qajAGi, 27)

- 8900 (210) *ɛjɔʂ* *ra nui-taʂ* *kumy kʂ-ari* *tce scoʂ-qʰu* *ci*
 servant PL 3PL.POSS-on also AOR:EAST-go[II] LNK ladle-back once
 8901 *tu-lxt*, *nui-ye* *tce tʂŋkʰut ci* *tu-lxt*
 IPFV-release AOR:WEST-come[II] LNK fist once IPFV-release
 'Every time she went right she would hit the servants with the back of
 8902 the ladle, every time she went left she hit them with the fist.' (2002
 8903 qaCpa, 143)

8904 In addition, the relator noun *u-taʂ* is required with some categories of nouns
 8905 in specific contexts.

8906 First, *u-taʂ* in combination with a noun designating a type of transport (boat,
 8907 car etc) can express the transportation used in a particular trip. With the verb *ce*
 8908 'go' taking the orientation UPWARDS, the meaning is 'to take (a boat, a car etc)'
 8909 as in (211).

- 8910 (211) *zmbriu u-taʂ* *to-ce* *tce jo-nui-ce*
 boat 3SG.POSS-on IFR:UP-go LNK IFR-VERT-go
 'He took a boat and went back home.' (150907 niexiaoqian-zh, 140)

8911 The verb *toʂ* 'come out' with the orientation DOWNWARDS in combination with
 8912 *u-taʂ* expresses the meaning 'take off (a boat, a car etc)' as in (212); the relator

8 Postpositions and relator nouns

8916 noun itself is neutral as to the type of location (static, motion from, motion to-
8917 wards), a topic discussed in more detail in §8.3.4.5.

- 8918 (212) *zmbruu u-taꝝ pjr-łor-nuu*
boat 3SG.POSS-on IFR:DOWN-come.out-PL
8919 ‘They took off the boats.’ (140508 shier ge tiaowu de gongzhu-zh, 149)

8920 To designate the means of transportation used during the whole travel (as
8921 opposed to the begin and end points of the travel as in 211 and 212), the relator
8922 noun *u-ŋguu* ‘inside’ can also be used (§8.3.4.4).

8923 The relator noun *u-taꝝ* also occurs to refer to a written medium, as in (213).

- 8924 (213) *tce juysi u-taꝝ tu-fcxt tce,*
LNK book 3SG.POSS-on IPFV-tell LNK
8925 ‘It is told in a book, that...’ (27-qaCpa, 5)

8.3.4.4 The relator noun *u-ŋguu* ‘inside’

8927 The relator noun *u-ŋguu* ‘inside’ is only partially grammaticalized (§8.3.4.2). How-
8928 ever, it is selected by a few verbs to mark an oblique argument, in particular the
8929 goal of the transitive verbs *rku* ‘put in’ (§14.4.1) and *lxt* in the meaning ‘sow,
8930 spread’ as in (214).

- 8931 (214) *khuartsa u-ŋgur tuu-ci tuu-rku-nuu tce,*
bowl 3SG.POSS-inside INDEF.POSS-water IPFV-put.in-PL LNK
8932 ‘People used to put water in a bowl, and...’ (29-mWBZi, 129)
- 8933 (215) *tur-ji u-ŋgur zuu tsʰyt u-yli nuu*
INDEF.POSS-field 3SG.POSS-inside LOC goat 3SG.POSS-manure DEM
8934 *cʰtú-wy-lxt tce, tx-ryku wuma zo*
IPFV:DOWNSTREAM-INV-release LNK INDEF.POSS-crops really EMPH
8935 *tu-sype cʰa*
IPFV-do.well can:FACT
8936 ‘If one spreads goat manure on the fields, it can make the crops grow
8937 really well.’ (05-qaZo, 33)

8938 It is also found in combination with motion verb to express the means of trans-
8939 portation used during the whole travel, as in (216).

- 8940 (216) <*chuzu*> *w-ŋgu* *t^hu-ye-a* *tce*
 taxi 3SG.POSS-inside AOR:DOWNSTREAM-come[II]-1SG LNK
 8941 'I came on a taxi.' (2010-01-Dpalcan, 28)

8942 8.3.4.5 Locative relator nouns and locative postpositions

8943 All locative relator nouns can be also used with the locative postpositions *zuu*, *ri*,
 8944 *t_cu* and the fused forms of the latter two with the demonstratives *nure* and *nut_cu*
 8945 (§8.2.4). Example (217) illustrates the use of *w-ta_v* 'on, above' and *w-pa* 'below,
 8946 under' with the locative *ri* expressing both static position (with the existential
 8947 verb *tu* 'exist') and motion towards (with the verb *l_{vt}* 'throw', here specifically
 8948 meaning 'direct water').

- 8949 (217) *w-t^hycu* *majt^hi* *q^hajŋgwa* *nui kui, nyki, βya*
 3SG.POSS-downstream downstream water.trough DEM ERG FILLER mill
 8950 *w-pa* *ri tc^hwŋk^hyr tu tce, tc^hwŋk^hyr*
 3SG.POSS-under LOC water.wheel exist:FACT LNK water.wheel
 8951 *w-ta_v* *ri c^huu-l_{vt}* *tce, tc^hwŋk^hyr w-ta_v*
 3SG.POSS-on LOC IPFV:DOWNSTREAM-release LNK LNK water.wheel
 8952 *nure ri βyŋrnŋjwaw ky-ti tu tce*
 DEM:LOC LOC blades OBJ:PCP-say exist:FACT LNK
 8953 'The inferior water trough – under the mill there is a water wheel – (the
 8954 water trough) directs (the water) onto that water wheel – on the water
 8955 wheel there are things called 'blades'. (06-BGa, 27-31)

8956 Example (218) illustrates *w-pa* 'below, under' with the locative *ri* expressing
 8957 motion from a place.

- 8958 (218) *w-t^hor* *w-pa* *ri tu-l_{or}* *nura*
 3SG.POSS-earth 3SG.POSS-below LOC IPFV:UP-come.out DEM:PL
 8959 *miúj-c^ha*
 NEG:SENS-can
 8960 '(Its shoots) cannot come out from under the ground.' (15-babW, 45)

8961 Examples (219) and (190) above show the combination of *w-ta_v* 'on, above' with
 8962 the locative *zuu*, also for static position and motion.

- 8963 (219) *χsyr k^hi u-ta_v* *zui pjy-ryzi* *tce*
 gold bed 3SG.POSS-on LOC IFR.IPFV-stay LNK
 8964 *u-tu-yyχsrui* *pjy-saxas* *zo.*
 3SG.POSS-NMLZ:DEG-be.handsome IFR.IPFV-be.extremely EMPH
 8965 ‘He was sitting on the golden bed, very handsome.’ (2014-kWLAG, 409)

8966 The uses are attested with the locative *teu*, as shown by (220) and (221). No clear
 8967 criterion accounting for the presence or absence of these locative postpositions
 8968 in combination with the relator nouns has been found.

- 8969 (220) *rjymts^hu yuu u-rkuu* *qambuit u-ta_v* *nautcu pjy-ryzi.*
 ocean GEN 3SG.POSS-side sand 3SG.POSS-on DEM:LOC IFR.IPFV-stay
 8970 ‘He stayed on the beach.’ (140511 xinbada-zh, 167)
- 8971 (221) *tce u-ta_v* *nautcu pyymuj tui-spra* *nua* *jy-χtvr.*
 LNK 3SG.POSS-on DEM:LOC feather one-handful IFR-scatter
 8972 ‘He scattered a handful of feathers on it.’ (28-smAnmi, 327)

8973 There is one case of a fossilized *zui* locative (§8.2.4.1) with the relator noun
 8974 *u-ŋgu* ‘inside’, the form *u-ŋguz* ‘inside, among’, which is used in particular to
 8975 single out an element for a group, in particular in a superlative construction (222)
 8976 (§26.4.1) or to describe an intermediate colour (with stative verbs, as in example
 8977 223).

- 8978 (222) *kyn̩dzisi nua-ŋguaz stu kui-xtei nūnū kui ...*
 COLL:siblings 3PL.POSS-among:LOC most SBJ:PCP-be.small DEM ERG
 8979 *nura ntsui tu-ti pjy-ŋu.*
 DEM:PL always IPFV-say IFR.IPFV-be
 8980 ‘The youngest among the sisters was always saying ...’ (150828 donglang,
 8981 26)
- 8982 (223) *nua u-mdob nua aj ky-ti muáj-spe-a ma*
 DEM 3SG.POSS-colour DEM 1SG INF-say NEG:SENS-be.able[III]-1SG LNK
 8983 *arŋi u-ŋguaz kūnū pȳi kui-fse*
 be:green:FACT 3SG.POSS-inside:LOC also be:grey:FACT SBJ:PCP-be.like
 8984 ‘I cannot say its colour, it is somewhere between green and grey.’
 8985 (06-qaZmbri, 56)

8986 8.3.5 Temporal relator nouns

8987 Many temporal postpositions are found in Japhug (§8.2.10, §8.2.9, §8.2.11), and
 8988 temporal relator nouns are relatively fewer. The relator *w-ray* ‘during, the time
 8989 when’ (from Tibetan རྒྱ ‘long, during, when’) is very commonly used with
 8990 subordinate clauses (§25.3.4.1), but can also follow temporal adverbs and nouns,
 8991 as in (§224).

- 8992 (224) *χcitka w-ray tce, tcendyre pya ra, nuu-kx-ndza maka*
 spring 3SG.POSS-during LNK LNK bird PL 3SG.POSS-OBJ:PCP-eat at.all
 8993 *c^hwi-me nuu-ŋu tce, tcendyre w-tuu-mtsur*
 IPFV-not.exist SENS-be LNK LNK 3SG.POSS-NMLZ:DEG-be.hungry
 8994 *pjx-saxa^b zo nuu-ŋu,*
 IFR.IPFV-be.extremely EMPH SENS-be
 8995 ‘In spring, the birds’ food has gone out and (that crow) was extremely
 8996 hungry.’ (kJujmAlu, 6)

8997 The inalienably possessed noun *w-ray*, whose basic meaning is ‘specific (and
 8998 predictable) time’ as (225) (see also §20.2.3), can be used as relator noun as in
 8999 (226) to mean ‘the exact time when’.

- 9000 (225) *w-ray yŋzu ma nykinuu spikuku zo*
 3SG.POSS-specific.time exist:SENS LNK filler every.day EMPH
 9001 *nuu-mab*
 SENS-not.be
 9002 ‘(The rut) occurs at a specific time, not every day.’ (27-qartshAz, 155)
- 9003 (226) *tcendyre w-fsaq^be tce nuu w-ray tce li*
 LNK 3SG.POSS-next.year LNK DEM 3SG.POSS-specific.time LNK again
 9004 *lo-yi*
 IFR:UPSTREAM-come
 9005 ‘It came back at exactly the same time the next year.’ (22-qomndroN, 46)

9006 There are two relator nouns that can be used as antonyms of the preposition
 9007 *čwnggu* ‘before’ (§8.2.11), *w-mp^bru* ‘after, following’ (from ཡྤ ‘p^bro ‘remnant’, in
 9008 particular in expressions such as བେନ୍ଦୁ ‘dehi.’^b ‘next, after that’) and *w-q^bu*
 9009 ‘after’, which is also used for spatial relations (§8.3.4.2). These two nouns are
 9010 not synonymous. The former must be used in the expression *ci w-mp^bru ci* ‘one
 9011 after the other’ (227), and means ‘next’ as in (228), and can follow a subordinate
 9012 clause, expressing temporal subsequence (§25.3.3.1), though most commonly a

8 Postpositions and relator nouns

- 9013 demonstrative pronoun such as *nuu* or *nunuu* referring to the previous clause is
 9014 used instead, as in (229).
- 9015 (227) *ci uu-mp^hru ci zo ko-nuپorə q^he lo-sui-ye.*
 one 3SG.POSS-after one EMPH IFR-kiss LNK IFR:UPSTREAM-CAUS-come
 9016 ‘(The mother) kissed (her children) one after the one and had them come
 9017 (inside the house).’ (160701 poucet2, 38)
- 9018 (228) *tce nuu uu-mp^hru tce tc^hi to-ti?*
 LNK DEM 3SG.POSS-after LNK what IFR-say
 9019 ‘What does it say next?’ (140522 Kamnyu zgo)
- 9020 (229) *tce tui-rdoš pjy-sat tce tceri nunuu uu-mp^hru tui-sla jamar*
 LNK one-piece IFR-kill LNK LNK DEM 3SG.POSS-after one-month about
 9021 *nunuu tui-ci uu-taš nūtču uu-zda nuu*
 DEM INDEF.POSS-water 3SG.POSS-on DEM:LOC 3SG.POSS-mater DEM
 9022 *lo-ce ny c^hy-yi, lo-ce ny*
 IFR:UPSTREAM-go LNK IFR:DOWNSTREAM-come IFR:UPSTREAM-go LNK
 9023 *c^hy-yi ny-car*
 IFR:DOWNSTREAM-come IFR-search
 9024 ‘(Someone) killed one of them, and after that, (the other one) flew along
 9025 the river searching for its mate for about one month.’ (22-qomndroN, 44)

9026 The locative relator *uu-q^hu* ‘after’ also has temporal uses, in particular to build
 9027 temporal subordinate clauses (§25.3.3.1), and it can also be used after noun phrases
 9028 as in the expression *saxsu uu-q^hu* ‘after lunch, afternoon’, or simply following a
 9029 demonstrative as in *nuu uu-q^hu* ‘after that’.

9030 Another originally locative relator noun has temporal functions: *uu-pyrt^hyβ* ‘the
 9031 middle of’, which is used after the demonstrative *nuu* to mean ‘in the meantime’
 9032 (230) and also occurs with temporal clauses with the meaning ‘while’.

- 9033 (230) *azo ku-ce-a tce z-nuu-saŋjar-a nyu tce nuu*
 1SG IPFV:EAST-go-1SG LNK TRAL-SENS-delay-1SG be:FACT LNK DEM
 9034 *uu-pyrt^hyβ tce nuuzo ra kuŋ c-puu-rla-nuu je tce*
 3SG.POSS-in.the.middle LOC 2PL PL ERG TRAL-IMP-untie-PL SFP LNK
 9035 *ly-tsum-nuu je*
 IMP:UPSTREAM-take.away-PL SFP
 9036 ‘I will go there and delay him_i, and in the meantime, you go there and
 9037 untie him_j, and take him_j away.’ (tWJo 2005, 37)

9038 8.3.6 Semi-grammaticalized relator nouns

9039 8.3.6.1 *tu-jas* ‘hand’

9040 The noun *tu-jas* ‘hand’ occurs with several verbs in fixed collocation, the recipi-
 9041 ent of the action being indexed by the possessive prefix on this noun.

9042 It is found with *k^ho* ‘give’ to express the meaning ‘hand over to’ as in (231) and
 9043 (232).

- 9044 (231) *nŋki tɿtʂu nŋu a-jas tɿ-k^hym!*
 DEM:MEDIAL lamp DEM, 1SG.POSS-hand IMP:UP-give[III]
 9045 ‘Hand over to me (up here) that lamp.’ (140511 alading-zh, 122)

- 9046 (232) *kuki mʂbro ki nŋy-jas jŋu-nŋu-k^ho-j ηu*
 DEM.PROX horse DEM.PROX 2SG.POSS-hand IPFV-give-1PL be:FACT
 9047 ‘(If you succeed), we will give you this horse.’ (X1-qachGa, 62)

9048 The collocation of *tu-jas* with the intransitive verb *zyut* ‘reach, arrive’ means
 9049 ‘receive’ or ‘obtain’, as in (233). With the causative form *szyut*, the collocation
 9050 means ‘get’ (with volition and controllability) as in (234) – the recipient marked
 9051 by the possessive prefix on *tu-jas* is the same referent as the transitive subject of
 9052 the main verb.

- 9053 (233) *icq^ha tɿtʂu nŋu a-jas a-nŋu-zyut*
 the.aforementioned lamp DEM 1SG.POSS-hand IRR-PFV-reach
 9054 *ra*
 be.needed:FACT
 9055 ‘I have to obtain this lamp.’ (140511 alading-zh, 212)

- 9056 (234) *tc^hi ra na-suiso zo nŋu, u-jas*
 what PL AOR:3→3'-think EMPH DEM 3SG.POSS-hand
 9057 *ju-nŋu-sui-zyut pɿy-c^ha.*
 IPFV-AUTO-CAUS-reach IFR.IPFV-can
 9058 ‘He was able to get whatever he wanted.’ (140508 benling gaoqiang de si
 9059 xiongdi-zh, 47)

9060 The collocation of the noun *tu-jas* ‘hand’ with the verb *yi* ‘come’ also means
 9061 ‘obtain’ or ‘find’, as in (235).

- 9062 (235) *jinde tce uu-kui-sat koŋla maje tce, nuu*
 nowadays LNK 3SG.POSS-SBJ:PCP-kill completely not.exist:SENS LNK DEM
 9063 *qarma uu-muj kuŋy tuu-jas muŋj-yi wo*
 crossoptilon 3SG.POSS-feather also GENR.POSS-hand NEG:SENS-come SFP
 9064 ‘Nowadays nobody kills crossoptilons, one cannot even get their
 9065 feathers (to use as ornaments).’ (23-qapGAmWmtW, 170)

9066 The noun *tuu-jas* ‘hand’ does not occur in metaphoric use outside of these col-
 9067 locutions; it cannot be used in particular to mark any adjunct. Other noun-verb
 9068 collocations where an experiencer or a recipient is marked as possessor of the
 9069 noun are described in §22.4.

9070 8.3.6.2 Cause and beneficiary

9071 Two semi-grammaticalized inalienably possessed nouns can be used to express
 9072 beneficiaries: *uu-ndža* ‘reason’ as in (236), and *uu-skvt* ‘speech, sound’ as in (237),
 9073 though the latter is very rare. These two nouns also take complement clauses
 9074 (§24.6.3.5, §24.6.3.2) instead of noun phrases.

- 9075 (236) *nyzo ny-ndža puu-ye-a cti*
 2SG 2SG.POSS-reason PST:DOWN-come[II]-1SG
 9076 ‘I came down (here) for you.’ (2003 tWxtsa, 32)

- 9077 (237) *pʰa kymŋuu yuu kui-pe yuu uu-skvt nuatcu*
 all TOPO GEN SBJ:PCP-be.good GEN 3SG.POSS-speech DEM:LOC
 9078 *to-βzu-nuu juu-ŋu.*
 IFR-make-PL SENS-be
 9079 ‘People built it there for the benefit of all of Kamyu.’ (150904 tshAcim,
 9080 32)

9081 The noun *uu-tʰurži* ‘mercy’ (borrowed from Tibetan རྒྱନྤྰ୍ତ୍ତ୍ମକ བୁଗସ୍ ର୍ଦ୍ଜେ ‘compa-
 9082 ssion’, also found in a collocation §22.4.3.3), occurs in a semi-grammaticalized
 9083 construction meaning ‘thanks to’, in combination with the ergative *kui* as an in-
 9084 trumental adjunct (238), or in absolute form as a nominal predicate (239).

- 9085 (238) *puu-cʰa-a nuara nxj ny-tʰurži kui puu-cʰa-a*
 AOR-can-1SG DEM:PL 2SG 2SG.POSS-mercy ERG AOR-can-1SG
 9086 ‘I succeeded all thanks to you.’ (2011 04-smanmi, 112)

- 9087 (239) *ma jinde nura kui-fse ky-mts^hym maje tce,*
 LNK nowadays DEM:PL SBJ:PCP-be.like INF-hear not.exist:SENS LNK
 9088 *smyn u-t^hurzi umx-ŋu ma*
 medicine 3SG.POSS-mercy PROB-be:FACT LNK
 9089 ‘Nowadays we do not hear about (this disease), probably thanks to the
 9090 medicine.’ (27-tWfCAL, 52)

9091 The noun *u-xçyt* ‘strength’ is also often used in instrumental adjuncts with the
 9092 ergative to express cause, as in (240).

- 9093 (240) *tx-zduy u-xçyt kuu pjuu-si cti,*
 INDEF.POSS-toil 3SG.POSS-strength ERG/INSTR IPFV-die be:AFF:FACT
 9094 ‘(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 *ɛnuz* (§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).

- 9112 (1) *pr̥cta cʰo rgunba ni ndzi-pyrtʰyβ ri ɳu*
TOPO COMIT monastery DU 3DU.POSS-between LOC be:FACT
9113 ‘It is between Prashta and the monastery.’ (140522 Kamnyu zgo, 115)

The marker *ni* can appear with a noun phrase comprising two nouns (each with singular referents) linked by the comitative *cʰo* (§8.2.5) as in (1) and (2).

¹ Cognates of these markers in Gyalrong languages and beyond are discussed in §14.8.1.

9 The noun phrase

- 9116 (2) *tce a-wuu c^ho a-bi ni pjua-tu-sat*
 LNK 1SG.POSS-grandfather COMIT 1SG.POSS-younger.sibling DU IPFV-2-kill
 9117 *my-jyy*
 NEG-be.possible:FACT
 9118 ‘You cannot kill my grandfather and my younger brother.’ (2011-05-nyima,
 9119 133)

9120 The dual can follow the numeral *vnuz* ‘two’, as in (3). This combination is
 9121 however very rare (only 13 examples in the corpus out of hundreds of dual *ni*).
 9122 The opposite order (dual followed by numeral) is not grammatical.

- 9123 (3) *mbyyru nuu jla vnuz ni ndzi-t^hyβ ri*
 plough.beam DEM hybrid.yak two DU 3DU.POSS-between LOC
 9124 *nuu-ce tce*
 IPFV:WEST-go LNK
 9125 ‘The beam of the plough goes between the two hybrid yaks.’ (24-mbGo,
 9126 113)

9127 The adverb *vnyna* ‘both’ commonly co-occurs with dual, as in (4); . It is ex-
 9128 terior to the noun phrase, and must thus follow *ni* and all other postnominal
 9129 determiners.

- 9130 (4) *zaŋ c^ho raŋ ni vnyna zo uja ku-te nuu-yu*
 copper COMIT brass DU both EMPH verdigris IPFV-put[III] SENS-be
 9131 ‘Both copper and brass can get verdigris.’ (30-Com, 101)

9132 The dual can also be used with noun dyads (§9.2.2.2), as in (5).

- 9133 (5) *uu-mu uu-wa ni kuu juu-z-nyja-ndzi q^he*
 3SG.POSS-mother 3SG.POSS-father DU ERG IPFV-CAUS-be.a.pity-DU LNK
 9134 ‘Her parents would not be parted from her.’ (14-siblings, 305)

9135 The third person dual pronoun *zyni* is build by combining the pronominal root
 9136 -zo- with the dual *ni* (§6.1), and is not attested in combination with the dual. The
 9137 first and second dual pronouns *tcizo* and *ndzizo*, do occur with the dual marker
 9138 as in (6), though examples are very rare.

- 9139 (6) *tcizo ni wuma zo puu-amumi-tci tce*
 1DU DU really EMPH PST.IPFV-be.in.good.terms-1DU LNK
 9140 ‘We were in harmony together.’ (140512 fushang he yaomo-zh, 85)

9141 Noun phrases with the dual *ni* are always correlated with a dual prefix on the
 9142 following noun in possessive constructions or with relator nouns, as in (1), (3)
 9143 and (7). Not a single example of a noun phrase in *ni* followed by a noun with
 9144 singular or plural possessive prefix is found in the corpus.

- 9145 (7) *wi-pi ni ndzi-srob ko-ri tce*
 3SG.POSS-elder.sibling DU 3DU.POSS-life IFR-save LNK
 9146 ‘He saved the life of his two brothers.’ (qachGa 2012, 139)

9147 The marker *ni* is not obligatory with dual referents, in particular when the
 9148 numeral *ɛnuz* ‘two’ is present. There are in particular intrinsically collective
 9149 nouns referring to a pair of individuals such as *bz̥y̥mi* ‘husband and wife’, which
 9150 can trigger dual indexation as in (8).

- 9151 (8) *kucungua tce tce atu <qinghai> zNGuilob nutcu tce,*
 in.former.times LNK LNK up.there ANTHR ANTHR DEM:LOC LNK
 9152 *ɛjumbruay bz̥y̥mi ci p̥jx-tu-ndzi tce,*
 dragon husband.and.wife one IFR.IPFV-exist-DU LNK
 9153 ‘In former times, in Qinghai, in the Mgolog area, there was a couple of
 9154 dragons.’ (150820 qaprANar, 44)

9155 Such examples are however rare in the corpus; dual indexation is most often
 9156 correlated with a dual marker on the corresponding noun phrase, if overt.

9157 The numeral *ɛnuz* ‘two’ without the dual also triggers dual indexation, as in
 9158 (9).

- 9159 (9) *sun̥gu zu turme wuma zo kui-wxti ɛnuz tu-ndzi tce*
 forest LOC person really EMPH SBJ:PCP-be.big two exist:FACT-DU LNK
 9160 ‘In the forest, there are two giants.’ (140428 yonggan de xiaocaifeng-zh,
 9161 172)

9162 Dual marking on a noun phrase is not necessarily correlated with dual index-
 9163 ation on the verb, especially, but not exclusively, with inanimate referents, as in
 9164 (10) (§14.6.1.1).

- 9165 (10) *wi-mŋas χc^boŋe ni to-mto.*
 3SG.POSS-eye left.and.right DU AOR-have.sight
 9166 ‘His left and right eyes recovered sight.’ (140517 mogui de jing-zh, 105)

9 The noun phrase

However, a noun phrase with *ni* is never correlated with a plural indexation marker on the verb. Apparent exceptions are either speech errors, or cases of ambiguous indexation, as in (11).

- (11) *nr-pi ni kuu nyzo nuyi kr-suso kuu bmas xsui-ttxur kuu pa-z-nrk^har-nuu cti tce,*
2SG.POSS-elder.sibling DU ERG 2SG come.back:FACT INF-think ERG soldier
three-round ERG AOR:3→3'-CAUS-surround-PL be.AFF:FACT LNK

‘Your two elder brothers, thinking that you are coming back, had (the palace) guarded on all sides by three rows of soldiers.’ (qachGa2012, 157)

Example (11) is not completely straightforward, and deserves a detailed comment. The form *paznwk^harnuu* can be parsed as either *puu-az-nrk^har-nuu* PST.IPFV-PROG-surround-PL ‘They were guarding it’ with vowel fusion (§12.3) or *pa-z-nrk^har-nuu* AOR:3→3'-CAUS-surround-PL ‘(He/they) had them guard it’. Context makes it clear here that the second option is the correct one, in particular because in the same passage in another version of the same story, we find the verb *pa-su-lxt* (AOR:3→3'-CAUS-release) ‘he had (them) make’ with the perfective 3→3’ form of a causative verb (Jacques 2016a: 242, §17.2.1). Moreover, while the phrase *nr-pi ni kuu* ‘your two elder brothers’ could in principle belong to the infinitival clause in *kr-suso*², it is clear from the context and the explanations provided by native speakers that *nr-pi ni kuu* is the causer, and *bmas xsui-ttxur kuu* ‘three rows of soldiers’ is the causee (also marked by the ergative, see §8.2.2.6).

We thus observe plural indexation *-nuu* on the main verb *pa-z-nrk^har-nuu*, while the subject *nr-pi ni kuu* has a dual marker. However, this is neither a counterexample to the number indexation rule stated above, nor a speech error: rather, it is a consequence of the fact that causees rather than causers can trigger number indexation on the verb.

9.1.1.2 Plural

The plural marker *ra*, like the dual, follows the noun and most of its modifiers, and fuses with the demonstratives *ki* and *nuu* to build the plural demonstratives *kura* and *nura*, respectively (§6.9, §9.1.2). It should not be confused with the auxiliary verb *ra* ‘be needed’, ‘be necessary’ (§24.5.3.1), though there are cases where some ambiguity may occur.

² Incidentally, note that this infinitival clause contains another complement in Hybrid Reported Speech (§24.2.5.2).

Like the dual *ni*, the plural *ra* is compatible with both animate and inanimate referents, as in (12) and (13). It can be a plain marker of plurality as in (12).

- (12) *kumas si ra c^ho nui-mdos my-naxtacuy*
 other tree PL COMIT 3PL.POSS-colour NEG-be.the.same:FACT
 ‘Its colour is different from that of the other trees.’ ((this tree) and other
 trees, their colours are different) 11-qrontshom, 56)

The marker *ra* is also often a simulative plural (Mauri & Sansò 2018), understandable as ‘and other things’, ‘all kinds of’ as in (13).

- (13) *rdystas ra pjui-tsaβ-nui q^he turme tu-xtsuy nui-ŋu*
 stone PL IPFV-cause.to.fall-PL LNK people IPFV-hit SENS-be
 ‘(Goats and sheep, as they climb high) cause stones (and other things) to
 fall and these hit people.’ (tshAt-qaZo-kAlAG, 4)

The plural can follow numerals (even without head noun) to express an approximative number, as in (14).³

- (14) *ci ci χsum kuiðe ra nui-lst nui-ŋgryl tsuku tce*
 one one three four PL SENS-throw SENS-be.usually.the.case. some LNK
 η nuz jamar ma mūj-lst,
 two about apart.from NEG:SENS-throw
 ‘Sometimes (dogs) have three or four (litters), some only have two.’
 (05-khWna, 22)

The plural marker *ra* can also indicate approximate location, with or without locative markers. In (15), we find approximate location *ra* in *k^ha ra* ‘(everywhere) in the house, around the house’ and *tui-ji ui-ŋgu ra* ‘in the fields’, and in (16) with body parts.

This use of *ra* can convey a meaning of distributed location, and is often combined with the adverb *ayndundyst* ‘everywhere’ (§6.7). It is reminiscent of plural markers in Kirghiz and Old Japanese, which combine collective, hypocoristic and approximate locative meanings (Antonov 2007: 195).

- (15) *βzui nui wuma zo ŋyn tce, teendyre ayndundyst zo*
 mouse DEM really EMPH be.evil:FACT LNK LNK everywhere EMPH
 k^h a ra c^hui-rypu. tur-ji ui-ŋgu ra
 house PL IPFV-bear.young INDEF.POSS-field 3SG.POSS-inside PL

³ Note that in (14) *ci ci* is the expression for ‘sometimes’ (§22.2.1), not used as a numeral.

9 The noun phrase

- 9223 *c^huu-rypuu*,
 IPFV-bear.young
- 9224 ‘The mouse is fierce, it has pups everywhere in the house, and has pups in
 9225 the fields.’ (27-spjaNkW, 166)
- 9226 (16) *nui-βri ra nui-łor, nui-mke nura nui-łor*
 3PL.POSS-body PL IPFV-come.out 3PL.POSS-neck DEM:PL IPFV-come.out
 9227 *nui-rŋa ra bryʃbryβ zo nui-łor*
 3PL.POSS-face PL IDPH(II):covered.by.tiny.bumps EMPH IPFV-come.out
 9228 *nui-ŋu.*
 SENS-be
 9229 ‘(People who suffer from this disease have little blisters) appearing on
 9230 their body, on their neck and all over their face.’ (27-kharwut, 58)

9231 The marker *ra* even occurs with referents which are clearly singular, not only
 9232 in the approximative location function, but also in examples such as (17) where
 9233 the reason for the presence of *ra* is less immediately obvious. In (17), a sentence
 9234 taken from the translation of Rotkäppchen into Japhug (however, the presence
 9235 of *ra* cannot be due to calque since there is no plural marker in the original), the
 9236 function of the plural on the phrase *ty-wi ra* ‘the grandmother’ is more subtle:
 9237 it conveys the idea that the impersonation takes on several aspects of the
 9238 grandmother, not only her physical appearance, but also her voice, as implied by
 9239 the second clause.

- 9240 (17) *qapar nui ku^l li, [...] ty-wi ra to-nuicpuuz*
 dhole DEM ERG again INDEF.POSS-grandmother PL IFR-impersonate
 9241 *tce, tce u^l-skyt ra c^hy-sui-ymtceor zo tce nura to-ti.*
 LNK LNK 3SG.POSS-voice PL IFR-CAUS-be.sharp EMPH LNK DEM:PL IFR-say
 9242 ‘The wolf was pretending to be the grandmother, and said these (words)
 9243 with a sharp voice.’ (140428 xiaohongmao-zh, 95-96)

9244 Just like noun phrases with dual *ni* correlate with dual possessive prefixe (see
 9245 7 in §9.1.1.1), those with plural *ra* can only be coreferent with a plural possessive
 9246 prefix, as *nui-* in (18).

- 9247 (18) *suuku tce t^hye ku^l-fse, kumak^h si ra nui-mat nura*
 tree LNK acorn SBJ:PCP-be.like other tree PL 3PL.POSS-fruit DEM:PL
 9248 *c-pjui-nui-p^huit tce tu-ndze nui-ŋu.*
 TRAL-IPFV:DOWN-AUTO-pluck LNK IPFV-eat[III] SENS-be
 9249 ‘On the trees, (the bear) plucks acorn or fruits from other trees to eat.’

9250 (21-pri, 44)

9251 Apparent counterexamples such as (19), where *ra* is followed by a noun with
 9252 the singular possessive prefix *w-*, occur when the preceding noun phrase is not
 9253 the possessor of the following noun. For instance, in (19) *ra* has the vague locative
 9254 function, and the phrase *tui-ŋga w-taŋ ra* ‘on the clothes’ is not the possessor of
 9255 *w-mat* ‘its fruits’, it is a locative adjunct.

- 9256 (19) *tui-ŋga w-taŋ ra w-mat bvbvβ*
 INDEF.POSS-clothes 3SG.POSS-ON PL 3SG.POSS-fruit IDPH(II):in.clusters
 9257 *zo ku-ndzob.*
 EMPH IPFV-ANTICAUS:attach
 9258 ‘Its seeds attach on clothes in clusters.’ (18-qromJoR, 169)

9259 The plural *ra* very commonly occurs with headless relatives, with or without a
 9260 demonstrative, as in (20), where we find both relatives followed by *nunura* and
 9261 another one followed by *ra*.

- 9262 (20) *[kɣ-ti mɣ-kw̚-pe kwa-fse tu-kw̚-ti]*
 INF-say NEG-NMLZ.S/A-be.good NMLZ.S/A-be.like IPFV-NMLZ.S/A-say
 9263 *nunura tce, [[kɣ-nutsu kur-ra] ra kwny*
 DEM:PL LNK INF-hide NMLZ.S/A-be.needed PL also
 9264 *tu-kw̚-ti] nunura, turme ra kwny, tcayi tu-syrmi-nu*
 IPFV-NMLZ.S/A-say DEM:PL people PL also parrot IPFV-call-PL
 9265 *ŋgrvl.*
 be.usually.the.case:FACT

9266 ‘Those who say things that one should not say, who say even what should
 9267 be concealed, even (if they are) people, they call them ‘parrots’. (24-qro,
 9268 125)

9269 The plural *ra* also occurs between auxiliaries and the preceding complement
 9270 clause with a verb in finite (21) or non-finite (22) form, with a vague implication
 9271 that additional related actions are concerned.

- 9272 (21) *li tui-ji w-ŋgw̚ ra yuu-ku-nuru ra*
 again INDEF.POSS-field 3SG.POSS-inside PL CISL-IPFV-eat.crops PL
 9273 *ŋgrvl.*
 be.usually.the.case:FACT
 9274 ‘It also (usually) comes to eat crops in the fields.’ (24-ZmbrWpGa, 37)

9 The noun phrase

- 9275 (22) *yymdzu tce numuu ky-nyjab ra my-sy-nyz tce*
be.thorny:FACT LNK DEM INF-touch PL NEG-PROP-dare:FACT LNK
9276 ‘It is thorny and one does not dare to touch it with the hand.’
9277 (11-qrontshom, 91)

9278 The marker *ra* following a locative noun or adverb can have the meaning ‘the
9279 people/things from X’, as in (23), without the need to add a demonstrative (cf 39
9280 §9.1.2).

- 9281 (23) *alo ra puu-mbyom-nuu qʰe*
upstream PL SENS-be.in.a.hurry-PL LNK
9282 ‘Those in the village, they (do things) in hurry.’ (conversation140510
9283 tshering, 175)

9284 9.1.1.3 Honorific plural

9285 The plural marker *ra* is also used as a honorific marker on terms of address as
9286 *a-zi ra* ‘my young lady’ in (24), correlating with the plural possessive prefix *nu-*
9287 and sometimes plural indexation (§14.6.1.2).

- 9288 (24) *a-zi ra nuu-<bandeng> puu-car-a ci azo*
1SG.POSS-young.lady PL 3PL.POSS-seat IPFV-look.for-1SG QU 1SG
9289 *tu-ozgruu-a ma*
IPFV-bend-1SG LNK
9290 ‘Young lady, should I look for a seat for you, or bend down (for you to sit
9291 on my back)?’ (2003 Kunbzang, 41)

9292 The honorific function of plural number is also attested with the pronoun *nuuzo*
9293 (§6.1.1).

9294 9.1.2 Demonstratives

9295 Japhug demonstrative determiners are formally identical to the demonstrative
9296 pronouns (§6.9). They distinguish between proximal and distal demonstratives
9297 with different roots, and fuse with the dual and plural markers studied in §9.1.1;
9298 the proximal *ki* undergoes change to *kuu-* in those fused forms.

9299 As with the demonstrative pronouns, there are three sets of demonstratives,
9300 the base form, the reduplicated one (obtained by reduplicating the first syllable),
9301 and the emphatic one, with added *u-* prefix. Note that the latter two sets are
9302 not attested in the dual for determiners in the corpus, but the forms exist and

9303 are easily deducible from the corresponding plural ones. In addition, there is a
 9304 medial demonstrative *nṛki* which occurs in prenominal position.

Table 9.1: Demonstrative determiners

	Base form	Reduplicated	Emphatic
PROX.SG	<i>ki</i>	<i>kuuki</i>	<i>uukuiki</i>
DIST.SG	<i>nuu</i>	<i>nunuu</i>	<i>ununuu</i>
PROX.DU	<i>kuni</i>	(<i>kuukuni</i>)	(<i>uukukuni</i>)
DIST.DU	<i>nuni</i>	<i>nunuuni</i>	(<i>ununununi</i>)
PROX.PL	<i>kura</i>	<i>kuukura</i>	<i>uukukura</i>
DIST.PL	<i>nura</i>	<i>nunuura</i>	<i>unununura</i>
MEDIAL	<i>nṛki</i>		

9305 In Japhug, as in other Gyalrong languages, demonstrative determiners can be
 9306 either/both pre- and postnominal as shown by an example such as (25), with the
 9307 proximal *ki* both before and after the noun *srunloṣpu* ‘little ring’.

- 9308 (25) *az̥o yw̥-caβ-a tx-ŋu tce, ki sruṇloṣ-pu ki*
 1SG INV-catch.up:FACT-1SG AOR-be LNK DEM.PROX ring-DIM DEM.PROX
 9309 *ŋw̥-ctʰwiz-a tce,*
 IPFV:WEST-turn.toward-1SG LNK
 9310 ‘When (the rākshasas) will be about to catch up with me, I will turn this
 9311 little ring towards west (in their direction).’ (28-smAnmi, 222)

9312 All possible combinations of base demonstratives (B) and reduplicated demon-
 9313 stratives (R) are attested as pre- or postnominal determiners:

- 9314 • BNB: *ki N ki, nuu N nuu* (25)
- 9315 • RNB: *kuuki N ki, nunuu N nuu* (26)
- 9316 • BNR: *ki N kuuki, nuu N nunuu* (28)
- 9317 • RNR: *kuuki N kuuki, nunuu N nunuu* (27)

9318 The types BNB and RNB, with the postnominal determiner as a base demon-
 9319 strative, are by far the most common ones in the corpus.

9 The noun phrase

- 9320 (26) *azō kuki typi ki lu-nyk^hauk^hruit-a tce*
 1SG DEM.PROX staff DEM.PROX IPFV:UPSTREAM-drag-1SG LNK
 9321 ‘I will drag along this staff (on the ground).’ (2003 Kunbzang, 225)
- 9322 (27) *icq^ha kuki <qingjiao> kuki tce, nu-qā*
 the.aforementioned DEM.PROX plant.name DEM.PROX LNK 3SG.POSS-root
 9323 *kui-wyrum nu-ŋu.*
 SBJ:PCP-be.white SENS-be
 9324 ‘This (plant that is called) *qingjiao* (in Chinese), its root is white (unlike
 9325 the other *qingjiao* whose root is red).’ (17-ndZWnW, 81)
- 9326 (28) *ki rg̥tpu kuki kuu, icq^ha, qazo nuu to-mts^hi*
 DEM.PROX old.man DEM.PROX ERG the.aforementioned sheep DEM IFR-lead
 9327 *q^he, li tsu kui-wxti nuutcu jo-ce tce,*
 LNK again road SBJ:PCP-be.big DEM:LOC IFR-go LNK
 9328 ‘The old man, leading the sheep, went to the big road.’ (150822 laoye
 9329 zuoshi zongshi duide-zh, 101)
- 9330 The emphatic form is very rare prenominally. In (29), prenominal *ukuki* occurs
 9331 to put contrastive focus on the noun to avoid potential confusion with the subject
 9332 of the sentence (‘this wife of mine, not his wife’).
- 9333 (29) *nuu u-rzaβ nuu kuu, ukuiki a-rzaβ kuki,*
 DEM 3SG.POSS-wife DEM ERG DEM.PROX.EMPH 1SG.POSS-wide DEM.PROX
 9334 *kuiki ekom ki na-suu-ŋβzu tce,*
 DEM.PROX muntjac DEM.PROX AOR:3→3'-CAUS-become LNK
 9335 ‘(My son’s) wife turned this wife of mine into this muntjac.’ (140512
 9336 fushang he yaomo-zh, 187)
- 9337 When the postnominal demonstrative is in plural or dual form, the prenominal
 9338 one is generally unmarked for number, as in (30).
- 9339 (30) *kuiki tc^heme kura nuu-rca azo tu-ce-a*
 DEM girl DEM:PL 3PL.POSS-following 1SG IPFV:UP-go-1SG
 9340 *nuu-nts^hi ma muáj-pe*
 SENS-have.better.apart.from NEG:SENS-be.good
 9341 ‘I have no other choice but to go (to heaven) with these girls.’ (31-deluge,
 9342 61)

9343 However, there are also a few examples with plural marking on both pre-
 9344 and postnominal demonstratives, as in (31), a remarkable phenomenon given
 9345 the fact that the number markers are strictly postnominal.⁴ Plural marking on
 9346 the prenominal demonstrative with a singular postnominal demonstrative is not
 9347 attested.

- 9348 (31) *nunura pya nura lonba zo jy-me-nu tce, bzungui sqaptuy*
 DEM.PL bird DEM.PL all EMPH IFR-not.exist LNK young.man eleven
 9349 *jy-k-ypa-nu-ci.*
 IFR-PEG-become-PL-PEG

9350 ‘All those birds disappeared, and became eleven young men.’ (140520 ye
 9351 tiane-zh, 121)

9352 Proximal prenominal demonstratives can be combined with the postnominal
 9353 *nu*, as in (32), where the latter one is used as a topic marker. The opposite com-
 9354 bination, a distal prenominal demonstrative with proximal postnominal one, is
 9355 not attested in the corpus and presumably ungrammatical.

- 9356 (32) *kuki xpi nu piapwiyu ny,*
 DEM.PROX story DEM TOP LNK
 9357 ‘As far as this story goes,’ (11 examples in the corpus)

9358 The medial demonstrative *nyki*, used to designate referents closer to the ad-
 9359 dressee than to the speaker, is found as a pronoun (§6.9.2.1), but also occurs as
 9360 a prenominal determiner, with or without postnominal demonstrative (either
 9361 proximal or distal), as in (33) and (34). It is frequently used with a noun taking
 9362 a second person possessive prefix – note that the first syllable *ny-* of the demon-
 9363 strative *nyki* itself probably originates from the second singular possessive, as
 9364 proposed in §6.9.2.1.

- 9365 (33) *nyki nuu-typi ui-taꝝ ky-ryt nuu*
 DEM:MEDIAL 2PL.POSS-staff 3SG.POSS-on OBJ:PCP-write DEM
 9366 *uþry-kui-z-nympo-a-nuu*
 RH.Q-2→1-CAUS-watch-1SG-PL
 9367 ‘You wouldn’t show me what is written on that staff of yours, would
 9368 you?’ (2003ras, 61)

⁴ This raises the question whether *nunura* should be analyzed as a prenominal demonstrative, forming a constituent with *pya nura*. There is no pause between *nunura* and *pya* in the sound file, but I cannot exclude the possibility that *nunura* here as a left-dislocated demonstrative (and should be followed by a comma).

9 The noun phrase

- 9369 (34) *n̥ki* *n̥-ty-ri* *n̥u* *ŋotcu* *pua-tu*
DEM:MEDIAL 2SG.POSS-INDEF.POSS-thread DEM where PST.IPFV-exist
9370 ‘That thread of yours, where is it from?’ (2005 Norbzang, 180)

9371 The relative position of prenominal demonstratives and other pronominal ele-
9372 ments is not free. The aforementioned topic marker *ičqʰa* (§9.1.5.2) strictly occurs
9373 before prenominal demonstratives (as in 27), while nominal modifiers such as
9374 *χsyr* ‘gold’ in (35) appear closer to the noun.

- 9375 (35) *kuki* *χsyr* *pyytciu ki* *n̥-jaš* *n̥u-kham-a*
DEM.PROX gold bird DEM.PROX 1SG.POSS-hand IPFV-give[III]-1SG
9376 *ŋu*
be:FACT
9377 ‘(If you succeed) I will give you this golden bird.’ (2012qachGa, 46)

- 9378 (36) *nautcu* *a-tursa* *ŋu*, *tce* *n̥zo kuu* [*n̥u ažo a-cyrui*
DEM:LOC 1SG.POSS-tomb be:FACT LNK 2SG ERG DEM 1SG 1SG.POSS-bone
9379 *nunura*] *a-ty-tur-test* *tce*,
DEM:PL IRR-PFV-2-take.out LNK
9380 ‘My tomb is there, if you take out my bones (from it),’ (150907
9381 niexiaoqian-zh, 109)

9382 Pronouns coreferent with a possessive prefix on the head noun, however, can
9383 be placed either after (36) or before (37) prenominal demonstratives.

- 9384 (37) *kuki*, *ažo* [*ki*] *a-ku* *ki]* *pua-pʰuit*
DEM.PROX 1SG DEM.PROX 1SG.POSS-head DEM.PROX IMP-cut
9385 *ra*
be.needed:FACT
9386 ‘Please behead me!’ (140507 jinniao-zh, 292)

9387 The principles governing the presence and absence of the demonstrative de-
9388 terminers, and the choice of the various patterns described above, is particularly
9389 complex to describe and will be a topic for future research, when a larger corpus
9390 of texts will become available. While the proximal demonstratives always have
9391 some deictic function (although it may not be always appropriate to translate
9392 them with a demonstrative in other languages such as English), the distal demon-
9393 stratives clearly contribute to marking topic (§9.1.5) and definiteness (§9.1.4.3),
9394 and disentangling these various functions is a complex matter.

9395 The distal demonstratives *nu* and *nunu* are particularly common after relative
 9396 clauses (either participial §23.2.1 or finite ones §23.2.2) and complement clauses,
 9397 where arguments against analysing these forms as complementizers are provided
 9398 (§24.3.3).

9399 Following locative adverbs or locative postpositional phrases, the distal and
 9400 proximal demonstratives can be used to express the meaning ‘the one/those (at)
 9401 *X*’ as in (38) and (39). Note that the number determiner *ra* can also be used
 9402 in the same way (example 23 in §9.1.1.2) even without being combined with a
 9403 demonstrative.

- 9404 (38) *aman aman at^{hi} ki kuu*
 INTERJ:SURPRISE INTERJ:SURPRISE downstream DEM.PROX ERG
 9405 ‘*a-βyo my-a<nu>tury-a tce a-scawa*’
 1SG.POSS-uncle NEG-<auto>meet:FACT-1SG LNK 1SG.POSS-poor.of
 9406 *juu-suusym juu-ŋu ye*
 SENS-think[III] SENS-be SFP
 9407 ‘The one down there, he is thinking ‘Poor of me, I will not meet my lama’,
 9408 isn’t he?’ (2003kandZislama, 203)

- 9409 (39) *a-pa, aki nuu staklupa*
 1SG.POSS-father down DEM born.in.the.year.of.the.tiger
 9410 *ky-βde ui-spa nuu my-nuu-xsi ri,*
 OBJ:PCP-throw.away 3SG.POSS-material DEM NEG-AUTO-GENR:know LNK
 9411 ‘Father, the one down there, I don’t know if he is a (boy) born in the year
 9412 of the Tiger, to be thrown (in the lake), but...’ (2011-05-nyima, 154)

9413 Note however that demonstratives or number markers are not absolutely nec-
 9414 essary in such a context. A few (rare) examples of locative postpositional phrases
 9415 meaning ‘the one at/in/from’ without any modifier can be found, as in (40), where
 9416 the postpositional phrase is directly followed by the dative, here used in its loca-
 9417 tive meaning ‘by (the side of), near, at’ (§8.3.1). In this example, the phrase *sukyku*
 9418 *nutcu* does not mean ‘on the treetop’, but ‘the man who is on the treetop’.⁵

- 9419 (40) *[sukyku nutcu] ui-p^he nutcu lo-zyut-ndzi tce*
 treetop DEM:LOC 3SG.POSS-DAT DEM:LOC IFR:UPSTREAM-reach-DU LNK
 9420 ‘(The tiger and the fox) arrived at (the place where the one who was) on
 9421 the treetop (was).’ (2012-x1-khu, 47)

⁵ The 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 བਆ-ດ t^hams.cad ‘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 kx-kuu-nuŋtçrn tce tce si t^hamtçrt kuŋ nuŋu*
forest AOR-SBJ:PCP-be.dangerous LNK LNK tree all ERG DEM

pjui-kuŋ-sat kui-ŋgryl jui-ŋu.
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 *must^hamtçrt* ‘that much’ (§26.1.1.3).

(42) *izora t^hu-dyn-i q^he, k^ha nū t^hamtçrt*
1PL AOR-be.many-1PL LNK house DEM all

mua-nū-ymua-xtc^huit-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 *kuŋ*. It is restricted to human referents.

(43) *kytsa ra kysufse kuŋ wuma zo pjy-nū-rga-nū*
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 ལོན་པ ‘reached, enough, completed’), like *kysufse* ‘all’, also occurs after (never before) demonstratives and number markers as in (44).

- 9450 (44) *azō a-bi* *nura lonba azō kui*
 1SG 1SG.POSS-younger.sibling DEM:PL all 1SG ERG
 9451 *tx-nypwpa-t-a*
 AOR-take.care-PST:TR-1SG
 9452 ‘It was I who took care of all my younger brothers and sisters.’ (140426
 9453 tApAtso kAnWBdaR4, 1)

9454 In (45), *lonba* follows and has scope over the complement clause of the noun
 9455 of speech *kʰycyl* ‘discussion’ (§24.6.3.2).

- 9456 (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
 9457 *a-kʰycyl pui-fcxt ra*
 1SG.POSS-discussion IMP-tell be.needed:FACT
 9458 ‘Tell me all about what happened to my father.’ (Norbzang 2005, 172)

9459 In (46), it has scope over the possessor of the head noun *nuu-rmi* ‘their names’ re-
 9460 dundantly with *tʰamtçxt*. Here *nuu-rmi lonba* could be glossed as *nuu-rmi nuu-txngut*
 9461 ‘their name as a whole’, ‘their collective name’ (example 165, §9.1.8.1).

- 9462 (46) *nuu-zda ruidas uu-kui-ndza tʰamtçxt numura*
 3PL.POSS-companion animal 3SG.POSS-SBJ:PCP-eat all DEM:PL
 9463 *nuu-rmi lonba kurŋi tu-kui-ti ŋu.*
 3PL.POSS-name all beast IPFV-GENR-say be:FACT
 9464 ‘All those that eat the other animals, their name, all of them, is ‘beast’.
 9465 (150822 kWrNi, 8)

9466 An alternative construction with a meaning similar to a universal quantifier
 9467 is totalitative reduplication (§12.4.1.5). In particular, the totalitative participle
 9468 *kui~kui-tu* ‘all who exist’ (§23.7) of the existential verb *tu* ‘exist’ commonly oc-
 9469 curs with a preceding noun phrase (in a head-internal relative, as in 47) or on its
 9470 own (as a headless relative) as a semi-lexicalized quantifier ‘all’.

- 9471 (47) *tce [uu-zda ra kui~kui-tu] kui nuu-rzaβ*
 LNK 3SG.POSS-companion PL TOTAL~SBJ:PCP-exist ERG 3PL.POSS-wife
 9472 *na-nuu-car-nuu nuu-ŋu*
 AOR:3→3'-AUTO-look.for-PL SENS-be
 9473 ‘All of his companions took (other women) as their wives.’ (Norbzang
 9474 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*> *nuu kuu turju ku~kuu-pe, kui-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 uu-rjyldpu*
 3PL ERG the.aforementioned place GEN 3SG.POSS-king
t^ha-nuu-ndo-nuu ndyre p^ha mk^hyrmaj zo
 AOR:3→3'-AUTO-take-PL LNK whole population EMPH
ta-sype-nuu nuu-ηu
 AOR:3→3'-do.good-PL SENS-be
- ‘They became kings of this place, and treated well the whole population.’
 (Norbzang 2005, 447-448)

Its core meaning however is to express the entirety of an object/entity, as in the noun phrase *p^ha uu-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 uu-p^hoŋbu zo uu-mdzu tu ri,*
 LNK whole 3SG.POSS-body EMPH 3SG.POSS-thorn exist:FACT LNK
uu-mat uu-tas zo uu-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)

- 9501 (51) *u^hzo_i p^ha w_i-p^horbu*
 3SG whole 3SG.POSS-body
 9502 'Its whole body' (several attestations)

9503 9.1.3.2 Mid-scalar quantifier

9504 The quantifier *tsuku* 'some' is generally used as a pronoun (§6.7.2), but it does
 9505 occur as a prenominal determiner as in (52), or a postnominal one as in (53) and
 9506 (54). It is most often used in the corpus with human referents, but is compatible
 9507 with inanimate objects, as shown by (53).

- 9508 (52) *tsuku turme ra kú-wy-mtsuy-nuu tce muái-k^hdwy, tsuku turme*
 some people PL IPFV-INV-bite-PL LNK NEG.SENS-be.serious some people
 9509 *ra [...] kú-wy-mtsuy-nuu tce tce, wuma zo c^hú-wy-z-nuaymb^h-nuu*
 PL IPFV-INV-bite-PL LNK LNK really EMPH IPFV-INV-CAUS-swell-PL
 9510 *q^he juá-wy-z-nutufcyl-nuu q^he ku-rngui-nuu*
 LNK IPFV-INV-CAUS-have.diarrhea-PL LNK IPFV-lie.down-PL
 9511 *juu-ra.*
 SENS-be.needed
 9512 'Some people, when they are stung (by bees) are fine, other people, when
 9513 they are stung, it causes them swelling and diarrhea and they have to lie
 9514 down.' (26-ndzWrnaR, 65-67)
- 9515 (53) *pjuu-nuifble-a juu-ra' jy-suiso tce, kumtc^hui tsuku*
 IPFV-cheat[III]-1SG SENS-be.needed IFR-think LNK toy some
 9516 *jy-k^ho tce,*
 IFR-give LNK
 9517 'She thought 'Let's cheat him' and gave him some toys.' (2012 Norbzang,
 9518 134)
- 9519 (54) *ri kui-markui tsuku pjy-tu-nuu tce tce,*
 LNK SBJ:PCP-steal some IFR.IPFV-exist-PL LNK LNK
 9520 'There were some thieves.' (X1-khu, 7)

9521 Note in (55) the combination of the quantifier *tsuku* 'some' with the counted
 9522 noun *tuu-rdo^h* 'one piece', which expresses here a restrictive meaning (thirteen or
 9523 fifteen children for a single person, §7.3.2.4).

9 The noun phrase

- 9524 (55) *tsuku turme tu-rdob yuu w-rjit, sqafsum jamar, sqamju*
some person one-piece GEN 3SG.POSS-offspring thirteen about fifteen
9525 *jamar tu-kur-tu pjy-tu.*
about IPFV-GENR:S/A-exist IFR.IPFV-exist
9526 ‘(In) some (cases), a single (woman) had thirteen or fifteen children.’
9527 (140426 tApAtso kAnWBdaR, 88)

9.1.3.3 Distributive quantifier

9529 Although distributive meaning is generally expressed in Japhug with a counted
9530 noun (§7.3.2.2), the postnominal determiner *rajri* ‘each’ and its variant *ruri* ‘each’
9531 (from Tibetan རྙྩ རྙྩ *ray.re* ‘each’ and རྙྩ རྙྩ *re.re* ‘each’) can also express distributive
9532 meaning, as in (56).

- 9533 (56) *pas rcanu, tu-tupu rayri kuu zo pjui-χsu-nu*
pig UNEXP:DEG one-household each ERG EMPH IPFV-raise-PL
9534 *ra.*
be.needed:FACT
9535 ‘Each single household has to raise pigs.’ (05-paR, 4)

9536 It can also be used with numerals, as in (57), where it refers specifically to days.

- 9537 (57) *sqamju rajri zo zgo tu-ce puu-ηu nui-ηu,*
fifteen EACH EMPH mountain IPFV:UP-go PST.IPFV-be SENS-be
9538 ‘Every fifteen days, she would go up the mountain.’ (2005 Norbzang, 57)

9539 When the quantifier *rajri* ‘each’ occurs in the same sentence with a counted
9540 noun, the scope of the two quantifiers is ambiguous, as in (58).

- 9541 (58) *riryβ rajri χsui-tyxur a-ty-tui-sui-lyt tce,*
mountain each three-lap IRR-PFV-2-CAUS-throw LNK
9542 ‘Drag her three times around each mountain.’ (2005 Kunbzang, 421)

9543 In the predicative possessive construction (§22.5.2.1), when the possessor takes
9544 the determiner *rajri*, its possessum is often followed by the distributive deter-
9545 miner *tuka* ‘each’ (and its reduplicated variant *tukaka*) as in (59).

- 9546 (59) *icq^ha* *wi-mat* *rayri zo* *nur wi-ru* *tuka*
 9547 the.aforementioned 3SG.POSS-fruit each EMPH DEM 3SG.POSS-stalk own
ntsui tu.

9548 always exist:FACT

9549 'Each of its fruits has its own stalk.' (17-thowum, 34)

9550 The determiner *tuka* 'each' can also be used without a possessor in *rayri*, for
 9551 example with the distributive pronouns *zaka* 'each his own' and *zakastaka* 'each
 his own' (§6.7.3) as in (60).

- 9552 (60) *zakastaka* *nui-k^ho* *tuka pjy-tu* *tce*
 each.his.own 3PL.POSS-room each IFR.IPFV-exist LNK

9553 'Each of them had her own room.' (140508 shie ge tiaowu de gongzhu, 85)

9554 In addition to the possessive construction, *tuka* 'each' also occurs in transitive
 9555 constructions, following objects, with broad scope over the whole action (61).

- 9556 (61) *pcaš* *tuka to-βzu-nui* *tce jo-nui-ce-nui.*
 reverence each IFR-make-PL LNK IFR-VERT-go-PL

9557 'Each of them made a reverence and went back.' (28-smAnmi, 176)

9558 The aspectual adverb *ntsui* 'always', which generally has scope over the whole
 9559 sentence (§22.2.1, §22.2.7), can also be used as a distributive quantifier as in (62),
 9560 where its scope is restricted to the temporal phrase *vnui-pyrme ny vnui-pyrme* 'by
 9561 two years' (with the additive *ny*, §8.2.6).⁶

- 9562 (62) *tce izo kyndziki* *ra vnui-pyrme ny* *vnui-pyrme ntsui* *ma*
 9563 LNK 1PL COLL:sibling PL two-year ADD two-year always apart.from
my-ac^hyt-i

9564 NEG-differ.in.age:FACT-1PL

9565 'We brother and sisters were born in intervals of two years each.' (if
 9566 ranked by birth order, each couple of adjacent sibling differ in age from
 each other by two years each) (14-siblings, 243)

9.1.3.4 Intensifiers

9568 The intensifier *k^hro* 'much' and *zimk^hym* 'much' can have both scope over the pred-
 9569 icate (§26.1.1.2) or serve as postnominal modifiers meaning 'many, a lot of'. They
 9570 can undergo emphatic reduplication to *k^hu~k^hro* and *zuu~zimk^hym*, respectively.

⁶ On the morphosyntax of the verb *ac^hyt* 'have X years of difference', see §19.7.7.

9 The noun phrase

When following a noun in absolute form as in (63), these intensifiers are syntactically ambiguous, as they can be analyzed as having scope over the preceding noun phrase, or on the whole predicate.

- (63) *<baisuzhen> nuu kuu, nyki, sŋas pŋy-spa tce (...)*
ANTHR DEM ERG FILLER magic IFR.IPFV-be.able LNK
tua-ŋgo ra zimkʰym zo to-yy-mna
INDEF.POSS-disease PL many EMPH IFR-CAUS-be.better
'Bai Suzhen knew magic, and healed many diseases.' (150825 baishe zhuan-zh, 66-67)

In (64) however, *kʰu~kʰro* unambiguously occurs inside of the ergative postpositional phrase, showing that it cannot be analyzed here as a clausal intensifier.

- (64) *[turme kʰu~kʰro] kuu zo yui-to-rytsʰyt-nuu*
person EMPH~much ERG EMPH CISL-IFR-try-PL
'Many people came and tried it.' (140505 xiaohaitu-zh, 16)

9.1.3.5 Other

In addition to the quantifiers discussed above, there are several markers which combine quantificational function with additional specific meanings.

The marker *cinarura* 'each better than the other' is used as postnominal attribute (§9.1.8.1). In transitive constructions, it occurs between the noun and the ergative *kuu* as in (65). It is probably built by combining the pronoun *cuu* 'who' (§6.5.2), the bound form of the copula *yu* 'be' (§22.5.1.1, **ŋy*- → *ŋa-* due to assimilation with the following *-ra*) and the plural *ra* (§9.1.1.2) in reduplicated form.

- (65) *rjylpu cinarura kuu ta-tʰu-nuu cti ri,*
king each.better.than.the.other ERG AOR:3→3'-ask-PL be.AFF:FACT LNK
muu-tr-nyla-j cti tce,
NEG-AOR-agree-1SG
'(Many) kings, all better than the other, asked for (my daughters in marriage), but we did not agree.' (2003 qachGa, 71)

The adverbs *mutçʰimuruz* 'all kinds' and *mundzamuχtçuy* 'all kinds' (from Tibetan མི་འདྲ་མི་गེ་ཅུ ཡི. "dra.mi.gteig 'diverse, different') are also used as postnominal attributes, located closer to the noun than numerals and demonstratives (66). These forms are only found in traditional narratives.

- 9598 (66) *cɔŋp^bu mundzamuχtcuγ χsui-ri* *kutʂsqi a-pw-tu,*
 tree all.kinds three-hundred sixty IRR-IPFV-exist
 9599 *wi-ku* *zui pya mundzamuχtcuγ χsui-ri* *kutʂsqi nui] ku*
 3SG.POSS-on LOC bird all.kinds three-hundred sixty DEM ERG
 9600 *pyymbri a-ty-lxt-nui* *nui-ra*
 bird.song IRR-PFV-release-PL SENS-be.needed
 9601 ‘May there be three hundred and sixty trees of all kinds, and on them
 9602 three hundred and sixty bird of all kinds of species singing.’
 9603 (2011-04-smanmi, 201-202)

9604 The universal quantifier *rmurmi* ‘all, all kinds of’ (67), a borrowing from Situ
 9605 (meaning ‘everybody’), has a very close meaning, but is very rarely attested.

- 9606 (67) *maka tx-ryku* *rmurmi yui nui-rmi* *nui to-nyrmi*
 at.all INDEF.POSS-crops all GEN 3PL.POSS-name DEM IFR-say.name
 9607 *ri maka kuum mui-pjx-pjui*
 LNK at.all door NEG-IFR-ANTICAUS:open
 9608 ‘He said the names of all kinds of crops, but the door did not open.’
 9609 (140512 alibaba-zh, 107)

9.1.4 Indefinite and definite markers

9.1.4.1 Indefinite determiner

9612 The form *ci* ‘one’ has among its many functions (in addition to pronoun, numeral
 9613 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-
 9614 nite determiner, as in (68) and (69). It is typically used to introduce a new referent
 9615 in a story.

- 9616 (68) *tc^heme kuu-mpciw~mpcyr* *ci* *pjx-nui-łob*
 girl SBJ:PCP-EMPH-beautiful INDEF IFR-AUTO-come.out
 9617 ‘A very beautiful girl appeared (out of it).’ (31-deluge, 50)
 9618 (69) *tcelo tce ty-tcuw* *ci* *c^hy-yi* *q^he,*
 upstream LNK INDEF.POSS-son INDEF IFR:DOWNTSTREAM-come LNK
 9619 ‘A boy came from upstream.’ (2003-kWBra, 41)

9620 Although *ci* can be used as a partitive pronoun ‘one of them’ (§6.7.2), as a post-
 9621 nominal determiner it does not have partitive meaning. To express a meaning

9 The noun phrase

such as ‘one of the boys’, a counted noun such as *tu-rdoꝝ* ‘one piece’ is used instead (§7.3.2.1).

Note that when used as a prenominal modifier, *ci* has a completely different (definite) meaning ‘the other *X*’ (§9.1.7). However, the indefinite *ci* is attested in prenominal position if preceded by the prenominal identity modifier *kumaaꝝ* ‘other’, as in (70), though the exact syntactic analysis of such sentences may require more research (it is possible that *nr-rzaꝝ* here is an essive adjunct §8.1.7, and does not belong to the same constituent as *kumaaꝝ ci*).

- (70) *nyzo kumaaꝝ ci nr-rzaꝝ nuu-nuu-car kuu mna*
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)

There are no dual or plural indefinite determiners in Japhug. The plural marker *ra* can occur after the indefinite *ci*, but with a vague similitative meaning ‘and other things’ as in (71).

- (71) *ndzi-tcuu ci, ndzi-me ci ra to-tu.*
3DU.POSS-son INDEF 3DU.POSS-girl INDEF PL IFR-exist
'They_{du} had a boy and a girl (etc).' (150827 tianluo-zh, 155)

The indefinite *ci* is not obligatory for indefinite referents (whether specific or non-specific), and bare NPs can be used as *fsapaaꝝ* ‘animal’ and *qapar* ‘dhole’ in example (72).

- (72) *fsapaaꝝ nuu-me, a-puu-si qhe, 'nuu qapar kuu ta-ndza*
animal AOR-not.exist IRR-PFV-die LNK DEM dhole ERG AOR:3→3-eat
nyu ma' tu-ti-nuu cti ma,
be:FACT 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

The indefinite pronoun *t^huci* ‘something’ (§6.6.2) has marginal uses as a prenominal indefinite modifier, as in (73), (75) and (80) below.

- 9647 (73) *tʰuci laχci ci c-pur-nuu-βzjoz-nuu tce, jy-ce-nuu*
 something trade INDEF TRAL-IMP-AUTO-learn-PL LNK IMP-go-PL
 9648 *ra*
 be.needed:FACT
 9649 ‘Go and learn some trade!’ (140508 benling gaoqiang de si xiongdi-zh, 29)

9650 This construction arose perhaps from the use of the pronoun *tʰuci* as head of a
 9651 postnominal relative clause with the verb *fse* ‘be like’, as illustrated by examples
 9652 like (74) or (85) in §6.6.2. Turning the verb *fse* ‘be like’ to a finite form as in (75)
 9653 could cause the indefinite *tʰuci*, head of the relative in (74), to be reanalyzed as
 9654 the prenominal modifier of the immediately adjacent noun in (75).

- 9655 (74) *nura [tʰuci [ky-nuisaxcuiβ kur-fse]] pur-ηu wo.*
 9656 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)
- 9657 (75) *[tʰuci u-jmŋo] ci zo pur-fse ri*
 9658 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

9660 Japhug has no dedicated definite determiner, but *nu* and *nunu* as demonstrative
 9661 determiners (§9.1.2) and as topic markers (§9.1.5) and the prenominal aforemen-
 9662 tioned topic marker *içqʰa* (§9.1.5.2) are generally used with definite referents.

9663 Example (76) illustrates a typical example with the determiner *nu*; the indef-
 9664 initive determiner *ci* (§9.1.4.1) occurs in the first introduction of a new referent in
 9665 the story as in the first clause of example (76), but on the following occurrence
 9666 of the same noun *nu* is found.

- 9667 (76) *tce qajdo ci jo-yi tce, tce qajdo nuu kur ‘mo laz tu,*
 9668 LNK CROW INDEF IFR-COME LNK LNK CROW DEM ERG girl karma exist:FACT
pʰo laz me’ to-ti.
 9669 boy karma not.exist:FACT IFR-say
 9670 ‘A crow came. The crow said: ‘The girl will have chance, the boy won’t.’
 (28-qAjdoskAt, 8)

9671 However, although nouns phrases followed by *nu* and *nunu* more often than
 9672 not denote definite referents, these determiners cannot be analyzed as definite

9 The noun phrase

determiners, as noun phrases with *nuu* or *nunu* can in certain cases have indefinite referents.

A very clear case of use of *nuu* with an indefinite referent occurs on nouns serving as heads of head-internal relative clauses. A well-attested typological generalization is that in this type of relative clauses, definiteness marking is grammatical (see [Basilico 1996](#)). In Khroskyabs, [Lai \(2017: 636\)](#) reports that the definiteness marker =*ta* is indeed not accepted on the head noun of head-internal relatives. In Japhug however, *nuu* does occur in such a syntactic context. For instance, in (77), the head *tx-nmar* *nuu kuu* is subject of the participle *nuu-kui-nuu-car* ‘looking for’, and is embedded in the participial relative clause indicated in brackets – the presence of the ergative *kuu* precludes to analyze it as a post-nominal relative (§[23.4.3.1](#)). From the meaning of the sentence the head *tx-nmar* ‘husband’ is clearly indefinite non-specific non-generic (see [Lehmann 1984: 286–291](#)). The fact that it takes the marker *nuu* shows that this marker, unlike Khroskyabs =*ta*, is not primarily marking definiteness.

- (77) *tceri [tx-nmar nuu kuu u-rzaq kui-yntc^huu*
 but INDEF.POSS-husband DEM ERG 3SG.POSS-wife SBJ:PCP-be.many
nui-kui-nuu-car], abyndundxt tndyri
 IPFV-SBJ:PCP-AUTO-search everywhere illegitimate.child
tu-kui-βzu pŷ-tu.
 IPFV-SBJ:PCP-make IFR.IPFV-exist

‘However there were husbands who were looking for several women and had illegitimate children.’ (140427 tAndAGri, 3)

Other cases of indefinite noun phrase with *nuu* are observed with left-dislocated topics. In example (78), we find a type of tail-head linkage (§[25.1.7](#)) where both the noun phrase *spjaŋkui ʂnuuz* ‘two wolves’ and the verb *jx-k-ʂtuy-ci* ‘he met’ are repeated; in the second occurrence, the noun phrase is topicalized and is followed by the topic marker *nunu*, with a slight pause of hesitation. The determiner *nunu* in this clause, unlike *nuu* in (76), does not mark definiteness: that clause cannot be understood as ‘He met the two wolves’.

- (78) *spjaŋkui ʂnuuz jx-k-ʂtuy-ci. spjaŋkui ʂnuuz nunu, tcendyre*
 wolf two IFR-PEG-meet-PEG wolf two DEM LNK
jx-k-ʂtuy-ci tce icq^ha, kui-ry-ntc^ha nuu
 IFR-PEG-meet-PEG LNK the.aforementioned SBJ:PCP-A.PASS:N.HUM-kill DEM

9702 *wuma zo jy-mu.*

really EMPH IFR-be.afraid

9703 'He_i (the butcher) met two wolves. He_i met two wolves, and the butcher_i
9704 was very much afraid.' (150902 liaozhai lang-zh, 7-8)9705 The determiners *nua* or *nunu* are rarely adjacent to the indefinite singular de-
9706 terminer *ci* in the corpus. In all cases with *ci* followed by *nua* (other than the
9707 identity pronoun in §6.8), or with *nua* followed by *ci* in the corpus, they belong
9708 to different constituents. For instance, in (79), *ci* is in adverbial use (§22.2.1) and
9709 does not belong to the preceding noun phrase.

- 9710 (79) [tc^heme nua] ci jy-zyy-syp^hyr q^he
girl DEM one IFR-REFL-shake LNK
9711 'The girl shook herself.' (02-deluge2012, 125)

9712 In (80) although *nunu* follows *ci*, it has scope over the both preceding phrases,
9713 which are left-dislocated and followed by a pause.

- 9714 (80) ky-xtcyr tce numui tce tce icq^ha, [[t^huci tum bri
INF-attach LNK DEM LNK LNK the.aforementioned something rope
9715 ty-ri kui-fse kuij [laχtc^ha ci] nunui], ci
INDEF.POSS-thread SBJ:PCP-be.like ERG thing INDEF DEM one
9716 kú-wy-sui-pa tce, kú-wy-xtcyr,
IPFV-INV-CAUS-do LNK IPFV-INF-attach
9717 "To attach' (means), to put together, attach something with something
9718 like a rope or a thread.' (150902 kAxtCar, 2-3)

9719 However, the indefinite determiner *ci* can be followed by *nua* as in (81).

- 9720 (81) nua, kui-rzi ci nua yyzu mab kui
DEM SBJ:PCP-be.heavy INDEF DEM exist:SENS not.be:FACT SFP
9721 'This is not a difficult thing (to do).' (divination2005, 15)

9722 The aforementioned topic marker *icq^ha* (§9.1.5.2) is almost always used with
9723 definite referents when prenominal, as in (78) above, and is the closest candidate
9724 to be analyzed as a definiteness marker in Japhug. However, it does occur with
9725 non-specific generic referents as in (82), including some that are very clearly
9726 indefinite as in (83); note the absence of postnominal determiner *nua* (83).

9 The noun phrase

- 9727 (82) *icq^ha lulvmu nu^hur-rypu^h tce tce*
 the.aforementioned female.cat DEM IPFV-bear.young LNK LNK
 9728 *u^h-ṣŋi tce k^h-nu^h-rŋgu^h nu^h st^huci*
 3SG.POSS-day LNK INF-AUTO-lie.down DEM so.much
 9729 *máj-ts^hu ma u^h-pu^h ra χse jnu^h-ra*
 NEG:SENS-have.time.to LNK 3SG.POSS-young PL feed:FACT SENS-be.needed
 9730 ‘A/the female cat (unlike male cats), when it had had kitten, does not
 9731 have time to sleep during the day, as it has to feed its kitten.’ (21-IWLU,

- 9732 (83) *icq^ha l^hypu^h u^h-ryi zo fse.*
 the.aforementioned radish 3SG.POSS-seed EMPH be.like:FACT
 9733 ‘It looks like a radish seed.’ (hist-26-qro-fourmi, 61)

9734 In (80), *icq^ha* also precedes two phrases involving indefinite referents, but there
 9735 is a marked pause, and this is a case of *icq^ha* in its function as speech filler (§10.3).

9.1.4.4 Absence of definiteness marking

9737 Like many languages (Creissels 2006b: 130), Japhug uses bare nouns without any
 9738 definiteness marking. Bare nouns are most often non-referential, as *t^he^heme* ‘girl’
 9739 in (84).

- 9740 (84) *vnaxna t^he^heme tur~ty-tu n^h, kyndzisq^haj tu-k^h-sui-βzu*
 both girl COND~AOR-exist LNK COLL:sister IPFV-INF-CAUS-make
 9741 ‘If both of them have girls, let them be sisters.’ (zrAntCW, 4)

9742 Bare nouns are less common with referential nouns (except in answers to ques-
 9743 tions), but examples can be found, as *qac^hya* ‘fox’ in (85).

- 9744 (85) *qac^hya kua m^hxtcu^h ty-tuit-a nu^h mx-tui-ste*
 fox ERG I.told.you.so AOR-say[II]-1SG DEM NEG-2-do.like[III]:FACT
 9745 *ti jnu^h-ŋu*
 say:FACT SENS-be
 9746 ‘The fox says: ‘You do not do as I told you to.’ (2003qachGa, 44)

9747 Personal names generally occur as bare nouns, without any definiteness marker
 9748 as in (86), but there are no constraints against co-occurrence of personal names
 9749 with the determiner *nu* either (see §5.3.4).

- 9750 (86) *urjympamna kui blansajtchin u-cki*
 Padmasambhava ERG Gesar 3SG-DAT
 9751 ‘Padmasambhava (told) Gesar.’ (Gesar, 2)

9.1.5 Topic markers

9.1.5.1 Delimitative topic

9754 The delimitative topic marker *pui~pui-ŋu ny* ‘as for..., concerning...’ is transpar-
 9755 ently derived from the past imperfective of the verb ‘be’ in conditional form ‘if
 9756 it was...’ (with verb-initial reduplication, §12.4.1), as other copulas such as affir-
 9757 mative *cti* ‘be’ and *maš* ‘not be’ in (87).

- 9758 (87) *nunuu kopla zo tycime pui~pui-maš ny*
 DEM really EMPH princess COND~PST.IPFV-not.be LNK
 9759 ‘If she was not really a princess,’ (140519 wandou gongzhu-zh, 71)

9760 The delimitative construction generally has scope over a noun phrase, which
 9761 can have an additional demonstrative *nui* as topicalizer as in (88) (see §9.1.5.4).

- 9762 (88) *a-mu nui pui~pui-ŋu ny qhlui bduxpakyrpu yui*
 1SG.POSS-mother DEM COND~PST.IPFV-be LNK nāga p.n GEN
 9763 *u-me stu kui-xtci nui a-mu*
 3SG.POSS-daughter most SBJ:PCP-be.small DEM 1SG.POSS-mother
 9764 *nui-pe,*
 SENS-be.good
 9765 ‘As for my mother, the youngest daughter of the Nāga Gdugpa dkarpo is
 9766 good to be my mother.’ (Gesar, 5)

9767 In this construction, the verb is in the process of becoming grammaticalized as
 9768 a topic particle. It is possible to find examples where the verb still takes person
 9769 indexation in the delimitative construction when the topicalized element is a first
 9770 or second person pronoun, as in (89).

- 9771 (89) *azo pui~pui-ŋu-a ny, kyndzivi kumŋu tu-j,*
 1SG COND~PST.IPFV-be-1SG LNK siblings five exist:FACT-1SG
 9772 ‘Concerning me, we are five brothers and sisters.’ (hist140501 tshering
 9773 skyid, 1)

9 The noun phrase

However, there are also examples with first or second person pronoun without indexation on the delimitative marker, as in (90), (91) and (92), where a first person singular form *pui-pui-ŋu-a ny* or second person *pui-pui-tu-ŋu ny* would have been expected. Such examples show that *pupuŋuny* has ceased to be analyzed as a verb form at least in these cases. Moreover, third person plural and dual indexation is hardly ever found in the delimitative construction.

- (90) *nyzo pupuŋuny, tṇndzi ra yui nuu-kui-βya,*
 2SG as.for demon PL GEN 3PL.POSS-SBJ:PCP-be.victorious
nuu-rjylpu tuu-ŋu
 3PL.POSS-king 2-be:FACT
 ‘You, you are the king of the demons.’ (hist140512 fushang he yaomo-zh, 61)

- (91) *azō kui-fse pupuŋuny, ciŋgu sŋ-xtcu~xtci nutcu, xpun*
 1SG SBJ:PCP-be.like as.for before GER-be.small DEM:LOC monk
ly-ky-ta,
 AOR:UPSTREAM-OBJ:PCP-put
 ‘For instance me, (I was) sent to become monk early in my childhood.’
 (160721 XpWN, 7)

- (92) *azō pupuŋuny, nuu [...] azō yui a-ndža nuu*
 1SG as.for DEM 1SG GEN 1SG.POSS-reason DEM
tu-o<nuu>lulat-a pui-ŋu tce,
 IPFV-<AUTO>fight-1SG PST.IPFV-be LNK
 As for me, I was fighting for my own sake.’ (140512 abide he mogui-zh, 92)

A short form *ŋuny* instead of *pupuŋu ny* is also attested, as in (93).

- (93) *ma u-ŋga ra ŋuny, maka wuma zo ko-nqhi ma.*
 LNK 3SG.POSS-clothes PL as.for at.all really EMPH IFR-be.dirty LNK
 ‘As for his clothes, they had become very dirty.’ (conversation 140510)

The delimitative topic construction can be used to introduce the main topic of a following discourse (as in 89 and 91), but can be used for contrastive topics, as in example (92) where the speaker expresses a contrast between his and the addresses action ('you, you were fighting for the sake of other people').

9798 9.1.5.2 Aforementioned topic

9799 The marker *icqʰa* ‘the aforementioned’ is used on referents that have been pre-
 9800 viously mentioned in the same story, usually only a few sentences back. It is
 9801 strictly prenominal.

9802 Example (94) illustrates the most typical use of this marker. Sentence (94a)
 9803 introduces a new referent, *kṛtum* ‘ball of thread’ marked with the indefinite de-
 9804 terminer *ci* (§9.1.4.1). Three clauses later in (94d), the same referent occurs again
 9805 as an overt noun with two topic markers, the postnominal *nū* and the prenomi-
 9806 nal *icqʰa*.

- 9807 (94) a. ‘*razri kṛtum ci nū-ra, taqaβ ci nū-ra’ to-ti qʰe*
 thread ball INDEF SENS-need needle INDEF SENS-need IFR-say LNK
 9808 ‘He told (Rgyabza) ‘I need a ball of thread and a needle.’
- 9809 b. ‘*tcendṣre jv-kʰo qʰe,*
 LNK IFR-give LNK
 9810 ‘She gave it to him.’
- 9811 c. ‘*tce u-nḍzvtsʰi ka-tsum-nū nutcu qʰe tce,*
 LNK 3SG.POSS-meal AOR:3→3'-bring-PL DEM:LOC LNK LNK
 9812 ‘When they brought his meal,’
- 9813 d. ‘*icqʰa kṛtum nū uzo kuu ko-ndo,*
 the.aforementioned ball DEM 3SG ERG IFR-take
 9814 ‘he took the ball of thread, and...’ (Gesar 270-272)

9815 A systematic study of the use of the topic marker *icqʰa* in Japhug must over-
 9816 come two inherent difficulties. First, this topic marker is homophonous with (and
 9817 historically related to) the speech filler *icqʰa* (§10.3) and with the adverb *icqʰa* ‘just
 9818 now’, which can also precede noun phrases. Listening to the sound files can help
 9819 distinguishing between the three, as the speech filler is always followed by a
 9820 pause (and optionally by the demonstrative *nū*), but there are still ambiguous
 9821 sentences (see below). Second, *icqʰa* occurs on nouns designating entities that
 9822 the speaker considers to have been previously referred to in the conversation,
 9823 even if they are not present in the same recording.

9824 For instance in (95) the noun *pyrrnɔ́* ‘a species of fungus’ is used with *icqʰa*,
 9825 although this name does not occur before in the same text; it was however men-
 9826 tioned the day before in another recording.

9 The noun phrase

- 9827 (95) *nua zdumqe c^ho icq^ha, pyrrnob numi ndzi-ts^huya*
 DEM fungi.sp. COMIT the.aforementioned fungi.sp. DEM:DU 3DU.POSS-form
 9828 *wuma zo naχtcuy.*
 really EMPH be:identical:FACT
 9829 ‘The *zdumqe* and the *pyrrnob* are very similar.’ (23-mbrAZim, 82)

9830 The topic marker *icq^ha* transparently comes from the adverb *icq^ha* ‘just now’
 9831 (§22.2.1). The pivot constructions that allowed reanalysis from adverb to prenom-
 9832 inal topic marker are very probably headless relatives (§23.4.1) as in (96), or com-
 9833 plement clauses as in (97).

- 9834 (96) *[icq^ha t_y-tuit-a] nua tú-wy-stu q^he,*
 just.now IFR-say[II]-1SG DEM IPFV-INV-do.like LNK
 9835 ‘One does as I just said, and...’ (2002tWsqr, 139)

- 9836 (97) *icq^ha [z-nua-z-munmu-t-a] nua*
 the.aforementioned TRAL-AOR-CAUS-move-PST:TR-1SG DEM
 9837 *mua-pj_y-pe rcama.*
 NEG-IFR.IPFV-be.good FSP
 9838 ‘It was probably not a good thing that I had (gone and) moved them (as I
 9839 said above).’ (150819 kumpGa, 45)

9840 These sentences are still synchronically ambiguous in Japhug; in (97) the con-
 9841 text makes it clear that *icq^ha* is the topic marker (since the fact of having moved
 9842 (the eggs) had been told a few sentences back) and not an adverb ‘just now’ with
 9843 a temporal reference in the past, as the meaning would be ‘it was probably not
 9844 a good thing that I had just moved them’ (an impossible interpretation in this
 9845 context, since this sentence is an explanation why several eggs had not given
 9846 chicks, several days after they had been brought to another place). However, ex-
 9847 tracted from the context, both interpretation would be equally possible for (97),
 9848 and correspond to two different syntactic structures.

9849 With postnominal (§23.4.4) or left-headed head-internal relative clauses (§23.4.3)
 9850 as in (98), *icq^ha* can also be ambiguous. Since the adverb *icq^ha* ‘just now’ can occur
 9851 both before the object (99a) or before the verb (99b) in an independent clause, a
 9852 relative such as (98) can be either interpreted ‘the axe (mentioned above) that he
 9853 had whetted’ (with the topic marker *icq^ha* outside of the relative clause, having
 9854 scope over its head) and ‘the axe that he had just whetted’ with the adverb *icq^ha*
 9855 ‘just now’ inside the relative clause.

- 9856 (98) *tcendyre <luban> kuu icq^ha [turpa t^ha-fse] nu*
 LNK ANTHR ERG the.aforementioned axe AOR:3→3'-whet DEM
 9857 *to-ndo tce,*
 IFR-take LNK
 9858 'Luban took the axe that he had whetted.' (150902 luban-zh, 90)
- 9859 (99) a. *icq^ha turpa t^hur-fse-t-a*
 just.now axe AOR-whet-PST:TR-1SG
 9860 b. *turpa icq^ha t^hur-fse-t-a*
 axe just.now AOR-whet-PST:TR-1SG
 9861 'I just whetted a/the axe.' (elicited)

9862 The use of *icq^ha* as a topic marker with nouns (as in 94d above) probably took
 9863 place by reanalysis of the adverb in headless or postnominal relatives, or in com-
 9864 plement clauses as above, then generalized to all noun phrases even those with-
 9865 out subordinate clause.

9866 9.1.5.3 Adversative topic

9867 There are two adversative topic markers in Japhug, *bo* and *ndyre*. The former is
 9868 similar in meaning to Mandarin 倒 <dào> 'instead, on the other hand', and occurs
 9869 in contexts with a strong adversative meaning 'however, but, on the other hand'
 9870 as in (100).

- 9871 (100) *jinde ku-nu-tu ci kuuma ny-xsi ma*
 nowadays DUBIT-AUTO-exist QU SFP NEG-GENR:know LNK
 9872 *kuicungiu bo puu-tu,*
 in.former.times TOP.ADVERS IPFV.PST-exist
 9873 'It is not clear whether it is still to be found nowadays, but it did exist in
 9874 former times.' (23-scuz, 30)

9875 The marker *bo* also occurs in two constructions meaning 'of course'. First, it is
 9876 found in the 'X *bo* X' construction meaning 'of course (it is) X', as in (101b), the
 9877 answer to the question in (101a) which presents two alternatives.

- 9878 (101) a. *'a-tycime, ny-βju puu-car-a ci, azo tu-ozgrui-a'*
 1SG.POSS-lady 2SG.POSS-mat IPFV-search-1SG QU 1SG IPFV-bow-1SG
 9879 *nuara to-ti, 'ma ny-pi yuu azo tx-azgrui-a*
 DEM:PL IFR-say LNK 1SG.POSS-elder.sibling GEN 1SG AOR-bow-1SG

9 The noun phrase

- 9880 *cti'* *to-ti*
 be.AFF:FACT IFR-say
 'He said 'My lady, should I look for a cushion for you, or should I bow (for you to sit on my back)', and he said 'Because I bow for your elder sister (to sit).'
- 9881 b. 'nyzo *vo* *nyzo ma, a-βju* *pui-tui-car*
 2SG TOP.ADVERS 2SG LNK 1SG.POSS-mat IPFV-2-search
 kui-xtsutsu *me'* *to-ti.*
 INF.STAT-have.time not.exist:FACT IFR-say
 'Of course (I will sit on) you, there is no time to look for a mat for me.' (2014-kWLAG, 195)

9888 Second, *vo* is commonly used with the adverb *luski* 'of course', as in (102), not
 9889 necessarily with any adversative meaning.

- 9890 (102) *pyyŋas* *ky-ti* *ci* *tu* *tce, nupni vo* *luski*
 pheasant OBJ:PCP-say INDEF exist:FACT LNK DEM TOP.ADVERS of.course
 li *nui* *pya* *ŋu*
 again DEM bird be:FACT
 'There is a bird called *pyyŋas* (*Pucrasia macrolopha*), this one, of course (since its name contains *pya* 'bird', §5.5.5.1, Table 5.8) is also a bird (like those previously discussed).' (23-pGAYaR, 2)

9895 The marker *ndyre* presents a milder adversative meaning 'as far as X is concerned, unlike some other (people)' as in (103).

- 9897 (103) *tsuku kui-rga* *tu,* *tsuku my-kui-rga* *tu.* *azo*
 some SBJ:PCP-like exist:FACT some NEG-SBJ:PCP-like exist:FACT 1SG
 ndyre *rga-a.*
 TOP.ADVERS like:FACT-1SG
 'Some like it, some don't; as far as I am concerned, I like it.' (07-tCGom2, 8)

9901 In (104), the use of *ndyre* suggests the meaning 'as opposed to other possible missions'.

- 9903 (104) *a* *a-pa,* *nui ndyre* *wuma zo* *nqa,*
 INTERJ 1SG.POSS-father DEM TOP.ADVERS really EMPH be.difficult:FACT

SYNZUR.

be.dangerous:FACT

'Ah father, this (mission on which you send me) is very difficult and dangerous indeed' (28-smAnmi, 72)

In (105), *ndyrre* has a clear adversative meaning ‘this evening, on the other hand’ (as opposed to the previous evenings).

- (105) *jufceur tuarmu tce ny-pi tualyt nu*
yesterday dusk LNK 2SG.POSS-elder.sibling second.sibling DEM
w-tas ko-nqob-a ri mu-tý-wy-tsum-a tce,
3SG.POSS-ON IFR-hang-1SG LNK NEG-AOR:UP-INV-take.away-1SG LNK
juymar ndyre nyzo tu-kui-tsum-a
this.evening TOP.ADVERS 2SG IPFV:UP-2→1-take.away-1SG
ra ma tce kutcu azo-sti ma maje-a
be.needed:FACT LNK LNK here 1SG-alone apart.from not.exist:SENS-1SG
tce,
LNK
‘Yesterday at dusk I clung onto your second eldest sister but she did not
take me away, this evening take me away, I am all alone here.’
(07-deluge, 56-57)

The phrase *nua srznr* ‘even, rather than that etc’ (§8.2.7) is also used as an adversative topic marker similar to *zo* (see in particular example 139).

9.1.5.4 The demonstrative *nii* as a topic marker

The postnominal determiner *nu* and its reduplicated form *nunu* is one of the 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 *nu*, as in (106).

9 The noun phrase

- 9929 (106) *qawuz nu, (qawuz nu pur-tu-mto-t, ye?) qawuz numu,*
Edelweiss DEM Edelweiss DEM AOR-2-see-PST:TR SFP Edelweiss DEM
9930 *nyki, kućunγu tce,*
FILLER before LNK
9931 ‘The edelweiss, (you saw Edelweiss before, right?)... The edelweiss, in
9932 former times,’ (15-babW, 177)

9933 It also occurs with personal pronouns, as in (107), a sentence where the narra-
9934 tor talks about his personal situation, as opposed to that of his parents who were
9935 mentioned in the previous lines.

- 9936 (107) *azo nu, muŋi zuu kui-ry-βzjoz nu-ce-a*
1SG DEM TOPO LOC SBJ:PCP-ANTIPASS-learn IPFV:WEST-go-1SG
9937 *pui-ŋu.*
PST.IPFV-be
9938 ‘As for me, I was going to school in Mungi.’ (2010-09, 22)

9939 In its function as a topicalizer, the determiner *nu* can follow a noun with post-
9940 nominal demonstratives, as in (108). However, due to the difficulty of systemati-
9941 cally sorting out the topicalization and demonstrative functions of this marker, I
9942 do not attempt to reflect this distinction in the glosses, and use DEM everywhere.

- 9943 (108) *tceri kučki muntoč kučki nu pui-purjuny, wuma zo*
LNK DEM.PROX flower DEM.PROX DEM as.for really EMPH
9944 *kui-zru, kui-pe,*
SBJ:PCP-be.strong SBJ:PCP-be.good
9945 ‘But concerning this flower, so precious and nice’ (150820 meili de
9946 meiguihua-zh, 58)

9.1.5.5 The linker *tce* as a topic marker

9948 The word *tce*, which originates from a locative postposition (§8.2.4.4), is mainly
9949 used in Japhug as a linker (§25.1.6) and as a postposition (§8.2.4.3). It is one of
9950 the most common words in the corpus.

9951 In addition, it can serve as a topic marker, following left-dislocated noun or
9952 postpositional phrases (109).

- 9953 (109) *tsuku kur tce lvpuy ra mbusut c^hur-lxt-nu* *tce nura*
 some ERG LNK radish PL grating IPFV-throw-PL LNK DEM.PL
 9954 *jnu-rku-nu* *jnu-ŋu*
 IPFV-put.in-PL SENS-be
 9955 ‘Some people, they grate radish and use it as filling (for the sausage).’
 9956 (05-paR, 77)

9.1.6 Focus markers

9958 There are several focalization strategies in Japhug, including pseudo-clefts (§23.6.1)
 9959 and sentence-final copulas (§22.5.3.2), but focalized constituents are sometimes
 9960 also unmarked, though they have to be overt (§22.1.2.3).

9961 This section presents the markers used to express different types of focus on
 9962 noun phrase constituents.

9.1.6.1 Additive and scalar focus marker *kuny*

9963 The additive and scalar focus marker *kuny* ‘also, even’ follows the constituent
 9964 over which it has scope, which can be noun phrases, postpositional phrases but
 9965 also subordinate clauses (§25.2.3.1). As with other function words with the syllable
 9966 *ny* as last element (§3.7), the stress is on the first syllable (*kuúny*) and the
 9967 vowel on the second syllable is often elided (a pronunciation *kun* is often heard).

9968 The marker *kuny* expresses both additive focus, as in (110), and scalar focus, as
 9969 in (111) in affirmative sentences. It is also compatible with negative verb forms,
 9970 as in (112), expressing the meaning ‘not even’ (see also *ciny* ‘(not) even one’ in
 9971 §9.1.6.4).

- 9972 (110) *azo kuny staŋlupa* *ŋu-a* *tce*
 1SG also born.in.the.tiger.year be:FACT-1SG LNK
 9973 ‘Me too (like you), I am of the Tiger year.’ (2011-05-nyima, 168)
- 9974 (111) *zara zo u-ŋguuz* *kuny tu-nynduit-nui tce nu*
 3PL EMPH 3SG.POSS-among:LOC also IPFV-fight-PL LNK DEM
 9975 *kua-βua* *γyzu,* *kua-njo* *γyzu* *q^he,*
 SBJ:PCP-win SENS:exist SBJ:PCP-lose SENS:exist LNK
 9976 ‘Even among themselves, they fight, and there are winners and losers.’
 9977 (20-sWNgi, 62-63)

9 The noun phrase

- 9979 (112) *tua-syi muntoꝝ tua-rdoꝝ kuny ci ci tce muáj-st^hut*
 one-day flower one-piece also one one LNK NEG:SENS-finish
 9980 ‘Sometimes one cannot finish even one pattern (on the belt) in one day.’
 9981 (2011-06-thaXtsa, 47)

9982 As an additive focus marker, *kuny* can be repeated on all the nouns designating
 9983 the members of a group sharing a particular property, in the construction *X*
 9984 *kuny*, *Y* *kuny* ‘both *X* and *Y*’, as in (113).

- 9985 (113) *a-puu-ŋu tce, azo kuny taꝝrdo r̥itpa a-puu-ŋu-a, xp̥ltcin kuny*
 IRR-IPFV-be LNK 1SG also TOPO lineage IRR-IPFV-be-1SG ANTHR also
 9986 *taꝝrdo r̥itpa a-puu-ŋu, ... nuu tci-r̥it nuni tce taꝝrdo*
 TOPO lineage IRR-IPFV-be DEM 1DU.POSS-offspring DEM:DU LNK TOPO
 9987 *r̥itpa ma nuu ma kumaꝝ r̥itpa nuu ky-rtsi*
 lineage LNK DEM apart.from other lineage DEM NMLZ:O-count
 9988 *me.*
 not.exist:FACT

9989 ‘For instance suppose that both Dpalcan and I were from Taqrdo lineage,
 9990 then our two children would only count as members of the Taqrdo
 9991 lineage and no other lineage.’ (140426 r̥itpa, 13-15)

9992 The scope of *kuny* is generally exclusively on the constituent that it imme-
 9993 diately follows, but there are cases where the scope is more extensive. In (114),
 9994 *kuny* occurs between the pronoun *azo* and the following participial verb form,
 9995 which bears a 1SG possessive prefix *a-* coreferent with that pronoun (see also 118
 9996 below). The semantic scope of *kuny* here is on the whole relative *azo a-ky-suuso*
 9997 ‘(the things) that I want’ rather than exclusively on the pronoun *azo*.

- 9998 (114) *azo kuny a-ky-suuso nuu ty-stu-nuu ra*
 1SG also 1SG.POSS-NMLZ:O-think DEM IMP-do.like-PL be.needed:FACT
 9999 ‘(I will do as you say, but) do also the things I want.’
 10000 (2003kAndzwsqhaj2, 47)

10001 The focus marker *kuny* is found with nouns or pronouns in core argument
 10002 function, including S (115), O (116), and semi-objects (117). Examples with transi-
 10003 tive subjects are presented below (124 and 125).

- 10004 (115) *azo kuny ny-rca yi-a cti*
 1SG also 2SG.POSS-following come:FACT-1SG be.AFF:FACT
 10005 ‘I am coming with you too.’ (2011-05-nyima, 171)

- 10006 (116) *ma nur-χpum kūnγ kʰro my-kui-fkaβ kui-fse*
 LNK 3PL.POSS-knee also much NEG-SBJ:PCP-cover SBJ:PCP-be.like
 10007 *ku-ryzi-nui*
 IPFV-stay-PL
 10008 ‘(Gents) would (wear trousers that did) not cover much even their knees.’
 10009 (30-rkAsnom, 5)

- 10010 (117) *wi-ru nura laðdum wi-juu kūnγ my-sna, ma*
 3SG.POSS-trunk DEM:PL tool 3SG.POSS-handle also NEG-be.worth LNK
 10011 *my-nguat.*
 NEG-be.strong:FACT
 10012 ‘(The wood from) its trunk is not even good (enough to be used to make)
 10013 tool handles, as it is not strong.’ (17-xCAj, 79)

10014 It also occurs with all types of oblique arguments and adjuncts, including genitive *yuu* (118), dative *wi-cki* (119), locational adjuncts in *tciu* (120) or *ri* (121), temporal
 10015 adjuncts (122) or adjuncts expressing manner or cause (123).

- 10017 (118) *azuy kūnγ a-mpʰrumu a-pui-tui-sui-re*
 1SG:GEN also 1SG.POSS-divination IRR-PFV-2-CAUS-look[III]
 10018 *wi-tú-a-cʰa*
 QU-2-can:FACT
 10019 ‘Can you ask (the monk) to make a divination for me too?’ (The
 10020 divination, 31)

- 10021 (119) *tui-pi yuu wi-nmaɬ ra nui-cki kūnγ*
 GENR.POSS-elder.sibling GEN 3SG.POSS-husband PL 3PL.POSS-DAT also
 10022 ‘*a-pi*’ *tu-kui-ti cti ma nui ma*
 1SG.POSS-elder.sibling IPFV-GENR-say be.AFF:FACT LNK DEM apart.from
 10023 *kupa kui-fse zaka wi-rmi me.*
 Chinese SBJ:PCP-be.like each 3SG.POSS-name not.exist:FACT
 10024 ‘One calls one’s sister’s husband (and others from his family) ‘my elder
 10025 brother’, there are no other special terms as in Chinese.’ (140425
 10026 kWmdza05)

- 10027 (120) *kutcu kūnγ nui jui-fcundži ra kui-xtciu~xtci*
 here also DEM SENS-be.like a.few.days.ago PL SBJ:PCP-EMPH~be.small
 10028 *tx-yndzo kui-fse ri, cixco tce kui-xtciu~xtci*
 AOR-be.cold SBJ:PCP-be.like LNK the.last.days LNK SBJ:PCP-EMPH~be.small

9 The noun phrase

- 10029 *nur-zi* *kuny-fse*
 SENS-subside SBJ:PCP-be.like
- 10030 ‘It is like that here too, a few days ago the weather became a little cold,
 10031 but the last days it has eased a bit.’ (conversation, 141027)
- 10032 (121) *maldzuu* *nui*, *nui* *ui-tʰycu* *tsa* *ri* *kuny yzsu*.
 plant.name DEM DEM 3SG.POSS-downstream a.little LOC also exist:SENS
 10033 *qaryypyt* *ui-rca* *ri* *kuny tu-łob* *nur-ŋu*.
 plant.name 3SG.POSS-among LOC also IPFV-come.out SENS-be
- 10034 ‘The *maldzuu* plant, it is also found in places of slightly lower altitude, but
 10035 grows also in the same places as *qaryypyt* plants.’ (18-qromJoR, 81-82)
- 10036 (122) *kukutcu ftçyçyl* *kuny <baonuanyi>* *tu-tui-nge*
 here mid.summer also warm.clothes IPFV-2-wear[III]
 10037 *pui-cti*.
 PST.IPFV-be.AFF
- 10038 ‘Here you were wearing warm clothes even in mid summer.’
 10039 (conversation, 141017)
- 10040 (123) *tce nutcu* *kuny ui-jas* *ui-ntsi* *typi*
 LNK DEM:LOC also 3SG.POSS-hand 3SG.POSS-one.of.a.pair staff
 10041 *pjui-sytse*, *ui-jas* *ui-ntsi* *kui tsʰitsuku*
 IPFV-plant[III] 3SG.POSS-hand 3SG.POSS-one.of.a.pair ERG whatever
 10042 *nur-z-nyme* *qʰe*,
 IPFV-CAUS-do[III] LNK
- 10043 ‘Even like that (despite the pain in her legs), she props herself with a
 10044 cane using one hand,(and does all kinds of things with her other hand)
 10045 (14-siblings, 52)
- 10046 Although *kuny* ‘also, even’ can be combined with most postpositions and re-
 10047 lator nouns as shown by the examples above, it is however incompatible with
 10048 the ergative *kui*. For instance, in (124), although the demonstrative pronoun *nura*
 10049 ‘they, those’ in the second clause is the subject of the transitive verb *ndza* ‘eat’, it
 10050 does not take the ergative *kui* as would be expected (§8.2.2.1). The same applies
 10051 to *ui-zda ra* ‘his companions’, subject of the transitive verb *na-nuu-çar-nuu* ‘they
 10052 looked for themselves’ in (125),

- 10053 (124) *wi-puu nura li ju-yi-nur q^he, nura kumy*
 3SG.POSS-young DEM:PL again IPFV-come-PL LNK DEM:PL also
 10054 *yuu-tu-ndza-nui.*
 CISL-IPFV-eat-PL
 10055 ‘Its cubs also come and they too eat it.’ (20-sWNgi, 59-60)
- 10056 (125) *wi-zda ra kumy nu-rzaβ turka*
 3SG.POSS-companion PL also 3SG.POSS-wife each
 10057 *na-nuu-car-nuu juu-ηu*
 AOR:3→3'-AUTO-search SENS-be
 10058 ‘His companions also took each a wife for himself (among the women of
 10059 the island).’ (2005 Norbzang, 44)

10060 The combinations †*kua kumy* or †*kumy kua* are unattested, and not accepted by
 10061 native speakers. The contrast between absolute and ergative noun phrases is
 10062 therefore neutralized in additive or scalar focus with *kumy*. Note that other focus
 10063 markers, such as *ri* and *tqi* (see 127 in §9.1.6.2) differ from *kumy* in this regard.

10064 Four pieces of evidence converge to suggest that the first syllable of *kumy* is
 10065 historically related to the ergative postposition *kua*: (i) the incompatibility of co-
 10066 occurrence of *kumy* and *kua*; (ii) the stress on the first syllable in *kumy*; (iii) the
 10067 similar *-ny* element in the other scalar focus marker *cimy* ‘(not) even one’ (§9.1.6.4)
 10068 (iv) the existence of the linker *ny*, possibly of Tibetan origin (§8.2.6). A detailed
 10069 examination of this topic is however impossible on the basis Japhug-internal ev-
 10070 idence, and will require extensive syntactic comparison between Gyalrong lan-
 10071 guages.

10072 The adverb *trmtukumy* ‘specially, on purpose’ appears to be a lexicalized com-
 10073 bination of the noun *tr-mtu* ‘knot’ and the focus marker *kumy*.

10074 9.1.6.2 Correlative additive focus markers *ri* and *tqi*

10075 The additive focus markers *ri* and *tqi* are used in enumerations, repeated after each
 10076 noun referring to members of a group, to focus on the fact that their referents
 10077 share a common property (or properties that are semantically close enough), as
 10078 in (126) (see additional examples in Jacques 2014a: 313–314).⁷

⁷ In addition to their uses in the noun phrase presented in this section, *ri* and *tqi* can also have scope over verbs, as discussed in §25.6.2.2.

9 The noun phrase

- 10079 (126) *nqia^b* *tci tu-^bto_b* *c^ba,*
 dark.side.of.the.mountain also IPFV-come.out can:FACT
 10080 *zruu* *tci tu-^bto_b* *c^ba,*
 sunny.side.of.the.mountain also IPFV-come.out can:FACT
 10081 ‘It can grow in both the dark and the sunny sides of the mountains.’
 10082 (17-thowum, 14)

10083 The correlative focus markers *ri* and *tci* can occur after any noun phrase or
 10084 postpositional phrase, including with the ergative *kuu* as shown by (127), unlike
 10085 the marker *kunr* ‘even, also’ (see examples 124 and 125, §9.1.6.1).

- 10086 (127) *pas kuu tci ndze, nuŋja kuu tci ndze, jla kuu*
 pig ERG also eat[III]:FACT cow ERG also eat[III]:FACT hybrid.yak ERG
 10087 *tci ndze.*
 also eat[III]:FACT
 10088 ‘Pigs eat it, cows eat it, hybrid yaks eat it.’ (18-NGolo, 171)

10089 They can have scope over only part of the noun/propositional phrase, and even
 10090 on the relator nouns as in (128).

- 10091 (128) *syt^ba u-ŋguu tci yyzu, syt^ba ui-tas tci*
 ground 3SG.POSS-inside also exist:SENS ground 3SG.POSS-inside also
 10092 zo *yyzu*
 EMPH exist:SENS
 10093 ‘It is found both inside the ground, and on the ground.’ (25-GdAso, 17)

10094 Alternatively, it is possible to enumerate several properties of the same referent
 10095 using *ri* (this usage is not found with *tci*), but that marker still follows the
 10096 noun phrase. In this case the referent cannot be elided, and must be repeated in
 10097 both clauses, at least as a third person pronoun *uzo* as in (130).

- 10098 (129) *p^baŋrgot nuŋuu uzo ri pjy-rzi, uzo ri pjy-ts^bu tce*
 boar DEM 3SG also IFR.IPFV-be.heavy 3SG also IFR.IPFV-be.fat LNK
 10099 ‘The boar, it was heavy and fat.’ (140428 yonggan de xiaocafeng-zh, 244)

10100 This construction can be relativized with internally-headed relative clauses in
 10101 apposition, keeping the third person *uzo* as a resumptive pronoun (§23.3.1).

10102 The correlative construction can involve the possessor of an inalienably pos-
 10103 sessed noun, as in (130), where in the first clause the referent ‘the girl’ is pos-
 10104 sessor of the intransitive subject (literally ‘her age was small’) and in second it

¹⁰¹⁰⁵ corresponds to the intransitive subject, realized as a third person pronoun *wzo*
¹⁰¹⁰⁶ ‘she’.

- ¹⁰¹⁰⁷ (130) *tc^heme nur u-luaz ri pjy-xtci, wzo ri*
 girl DEM 3SG.POSS-age also IFR.IPFV-be.small 3SG also
¹⁰¹⁰⁸ *pjy-mpcyr,*
 IFR.IPFV-be.beautiful
¹⁰¹⁰⁹ ‘The girl was young and beautiful.’ (150909 hua pi-zh, 10)

¹⁰¹¹⁰ More complex correlations, involving different subjects and predicates related
¹⁰¹¹¹ to another referent, are also possible as shown by example (131), where *ri* occurs
¹⁰¹¹² after the intransitive subject *tui-ci* ‘water’, after the transitive subject *lulu* ‘cat’
¹⁰¹¹³ with the ergative and after the finite verb *tui-ce* ‘it goes up’.

- ¹⁰¹¹⁴ (131) *<yancong> ku-kui-rylob tce ur-tab*
 chimney IPFV-GENR:S/O-make.a.nest LNK 3SG.POSS-on
¹⁰¹¹⁵ *tui-ci ri muý-yi lulu kui ri*
 INDEF.POSS-water also NEG:SENS-come cat ERG also
¹⁰¹¹⁶ *mu-jnú-wy-caβ qapri tu-ce ri muý-c^ha tce*
 NEG-IPFV-INV-catch snake IPFV:UP-go also NEG:SENS-can LNK
¹⁰¹¹⁷ ‘(The sparrows) make their nest in the chimney, (because) water cannot
¹⁰¹¹⁸ come up there, the cats cannot catch them, and the snakes cannot go up
¹⁰¹¹⁹ there.’ (22-kumpGatCW, 69)

¹⁰¹²⁰ The marker *ri* is homophonous with the locative *ri* (§8.2.4), and in cases with
¹⁰¹²¹ an enumeration of locative adjuncts, there can be ambiguity between the two. In
¹⁰¹²² (132), *ri* is analyzed as a locative because of the position of the determiner *ci*, and
¹⁰¹²³ also because it can be replaced with other locative postpositions.

- ¹⁰¹²⁴ (132) *χc^ha ri ci, ui-be ri ci ui-jme*
 right LOC one 3SG.POSS-left LOC one 3SG.POSS-tail
¹⁰¹²⁵ *c^hui-łob jui-ŋu.*
 IPFV:DOWNSTREAM-come.out SENS-be
¹⁰¹²⁶ ‘It has one tail on the right, and one on the left.’ (26-qro, 116)

¹⁰¹²⁷ 9.1.6.3 Incremental additive

¹⁰¹²⁸ Three markers are used to express the meaning ‘not only *X*, but also *Y*’, where
¹⁰¹²⁹ *X* and *Y* stand for noun phrases: *yo alala ri/ma* (133), *myra ma* (134) and *ui-t^hjui*

9 The noun phrase

10130 *tce*.⁸

- 10131 (133) *tce nunuara bo alala ri uizo syz kui-xtci pya*
 LNK DEM:PL ADVERS not.only LNK 3SG COMP SBJ:PCP-be.small bird
 10132 *nura kuny ku-ndym q^he tu-ndze*
 DEM:PL also IPFV-take[III] LNK IPFV-eat[III]
 10133 ‘Apart from those, (the eagle) also catches birds that are smaller than
 10134 itself and eats them.’ (19-qandZGi, 19)

10135 The combination of these markers with the scalar focus marker *ciny* ‘(not) even
 10136 one’ (§9.1.6.4) on the second noun phrase means ‘not even *X*, let alone *Y*’, as
 10137 shown by (134).

- 10138 (134) *u-k^y-p^ha_B myra ma, u-k^y-skra_B ciny*
 3SG.POSS-head-half not.only LNK 3SG.POSS-head-fine.hair not.even.one
 10139 *zo mur-ja-stu-yzyut pui-ŋu*
 EMPH NEG-AOR:3SG→3-CAUS-arrive SENS-be
 10140 ‘(This time, the horse) did not even bring back one fine hair from the
 10141 (evil woman’s) head, let alone half her head.’ (Kunbzang, 428)

10142 These three markers also occur as clausal subordinators (§25.6.2.3).

9.1.6.4 Scalar focus marker *ciny*

10144 The focus marker *ciny* ‘(not) even one’ exclusively occurs with a negative verb.
 10145 Like *kuny* ‘also, even’, this marker has stress on the first syllable *ciny* (§3.7), which
 10146 is obviously related to the numeral *ci* ‘one’ (§7.1.1, §9.1.4.1).

10147 The marker *ciny* has scope over the constituent that immediately precedes it,
 10148 generally a noun phrase including or consisting of a counted noun, as in (135),
 10149 but also headless participial relative clauses as in (136), and (137).

- 10150 (135) *tsuku kui q^he tui-rdo_B ciny my-kui-mto tu.*
 some ERG LNK one-piece even NEG-SBJ:PCP-see exist:FACT
 10151 ‘There are some people who (cannot) even find a single one.’
 10152 (20-grWBgrWB, 36)
- 10153 (136) *ma tce jinde nuu zruwy ky-mto ciny mage.*
 LNK LNK nowadays DEM louse OBJ:PCP-see even not.exist:SENS
 10154 ‘Nowadays there isn’t even a single louse to be seen/one cannot even
 10155 see a single louse.’ (21-mdzadi, 77)

⁸ The etymology of these markers is discussed in §25.6.2.3.

- 10156 (137) *u-rja* *u-kui-ru* *ciny zo pjy-me*
 3SG.POSS-face 3SG.POSS-SBJ:PCP-look even EMPH IPFV.IFR-not.exist
 10157 'Not even one (of the thieves) looked at it/The (thieves) did not even so
 10158 much as looked at it.' (140426 luozi he qiangdao, 30)
- 10159 It is also possible to have both a headless relative clause and the counted noun
 10160 *tui-rdo&* combined with *ciny* as in (138).
- 10161 (138) *tce u-nuu-kui-yy-rkun* *nuu puu-dyn ma*
 LNK 3SG.POSS-IPFV-SBJ:PCP-CAUS-be.few DEM SENS-be.many LNK
 10162 *lu-kui-pya&* *nuu tui-rdo& ciny zo maye*
 IPFV:UPSTREAM-SBJ:PCP-plough DEM one-piece even EMPH not.exist:SENS
 10163 'A lot of people diminish their fields, and not a single of them opens new
 10164 fields.' (150903 friche, 6)
- 10165 In the case of relative clauses before *ciny*, there is some ambiguity as to whether
 10166 the scope of the focus marker is on the head of the relative or on the main verb
 10167 of the relative clause, hence the two proposed translations above for (136) and
 10168 (137).
- 10169 It is not possible to use *ciny* with scope over transitive subjects, followed by
 10170 the ergative.
- 10171 The form *ciny* also occurs in the expression *yu ciny ma& kuu* 'in any case it is
 10172 not', as in (139), literally 'It is not even the case that...'; in this construction, only
 10173 the first verb *yu* 'be' receives person indexation, as shown by (140). In addition to
 10174 *yu* 'be', a few other verbs such as *fse* 'be like' can occur with *ci ny ma& kuu* 'anyway
 10175 X does not'.
- 10176 (139) *qajdo kuu tc^{hi}i mx-nuu-ti* *cti ny, a-ty-nuu-ti*
 crow ERG what NEG-AUTO-say:FACT be.AFF:FACT LNK IRR-PFV-AUTO-say
 10177 *ma yu ciny ma& kuu, nuu szzny kuu-scii-scit*
 LNK be:FACT even not.be:FACT SFP DEM COMP SBJ:PCP-EMPH~happy
 10178 *ryzi-tci*
 stay:FACT-1DU
 10179 'What would not a crow say (a crow tells only lies), let it say as it wants,
 10180 in any case it is not (true), let us rather live (together) happily.'
 10181 (28-qAjdoskAt, 25-26)
- 10182 (140) *kui-murkui yu-a ciny ma& kui*
 SBJ:PCP-steal be:FACT-1SG even not.be SFP
 10183 'Anyway it is not me who is the thief.' (elicited)

9.1.6.5 Restrictive focus

The most common way to express restrictive focus in Japhug is to combine the exceptive *ma* ‘apart from’ (and its reduplicated variant *muma* §8.2.8) with a negative predicate. This can be a verb with a negative prefix as in (141), or a negative existential verb as in (142).

(141) *χsyr-rzaš ma mui-pui-tsu-a jny-suso ri χsui-xpa*
three-day apart.from NEG-AOR-pass-1SG IFR-think LNK three-year

pjy-tsu tce,
IFR-pass LNK

‘He thought that he had spent only three days, but three years had passed.’ (2011-4-smanmi, 178)

(142) *rkonjyl nunuu, u-mi u-ntsi nu*
one.legged.demon DEM 3SG.POSS-leg 3SG.POSS-one.of.a.pair DEM
ma me kʰi.

apart.from not.exist:FACT HEARSAY

‘It is said that one-legged demons only had one leg.’ (140510 rkoNJAl, 4)

In the case of restrictive focalization on locative or temporal phrases, the terminative *myctṣa* ‘until’ (§8.2.9) occurs instead of the exceptive.

(143) *nunuatcu myctṣa mtsʰalu pjy-me qʰe*
DEM:LOC until nettle IFR.IPFV-not.exist LNK

‘It was only there that there was nettle.’ = ‘There was no nettle until there.’ (140520 ye tian'e-zh, 319)

The restrictive focus construction implies the presence of a noun phrase with a numeral or a counted noun when the restriction bears on the quantity as in (141) and (142) above, but restriction can also be qualitative, without quantifier, as in (144).

(144) *u-mat nunuu na-lyt cimuma ny*
3SG.POSS-fruit DEM AOR:3→3'-throw just LNK
kui-ndw~ndtuf zo ma me karyi zo
SBJ:PCP-EMPH~small EMPH apart.from not.exist:FACT turnip.seed EMPH
kui-fse ma me
SBJ:PCP-be.like apart.from not.exist:FACT
‘When the fruit of (*xanthoxylum*) has just come out, there is only something very small, only like a turnip seed.’ (07-tCGom, 7)

10210 The restrictive focus construction can be combined with a scalar focus in *kunyr*
 10211 (see §9.1.6.1), as in (145). In this example, *kunyr* has scope over the subordinate
 10212 clause *stusti ma kui-me*, which is ambiguous between a participial headless rela-
 10213 tive (§23.4.1) ‘consisting of only a female all alone’ and a manner infinitival clause
 10214 (§25.4.2; in this case the gloss of *kui-me* would be INF:STAT-not.exist) ‘even (when)
 10215 there is only a female all alone’.

- 10216 (145) *mu ma, stusti ma kui-me kunyr*
 10217 female apart.from alone apart.from SBJ:PCP-not.exist also
cʰui-rvŋgum juu-cti.
 10218 IPFV-lay.eggs SENS-be.AFF
 ‘Even only a female (hen) alone does lay eggs.’ (150819 kumpGa, 11)

10219 A second possibility to express restrictive focus is the use of the adverb *ŋja*
 10220 ‘completely’, ‘all’ (§22.2.2.3) with scope over a noun phrase rather than the whole
 10221 clause as in (147).⁹

- 10222 (146) *alo mbroχpa ra tce tce nyki qra cʰo qambruu ra*
 10223 upstream nomad PL LNK LNK FILLER female.yak COMIT male.yak PL
yur nur-yli nuuuu tce nuu tu-wum-nuu, tu-sury-rom-nuu
 10224 GEN 3PL.POSS-dung DEM LNK DEM IPFV-gather-PL IPFV-CAUS-be.dry-PL
mbroχpa syt̚a tce stymku ŋja juu-cti ma si
 10225 nomad place LNK grassland completely SENS-be.AFF LNK tree
manje tce tce
 10226 not.exist:SENS LNK LNK
 10227 ‘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)

10228 The adverb *ŋja* (here used rather as a noun modifier) is related to the denominal
 10229 verb *aŋja* ‘be bald, be bare’ (see §20.2.1 on the *a-* derivation), which can be applied
 10230 to nouns such as *stymku* ‘grassland’ and *zgo* ‘mountain’.

- 10231 (147) *qajuu ŋja tu-nuu-ndze, ma nuu ma*
 10232 bug completely IPFV-AUTO-eat[III] LNK DEM apart.from
ts-ryku kui-fse ra ndze
 10233 INDEF.POSS-harvest SBJ:PCP-be.like PL eat[III]:FACT

⁹ The form *ŋja* possibly originates from the first syllable of Tibetan དྲྙྱା ମା *gia.ma* ‘stone slab’, through a meaning ‘bare rock’.

9 The noun phrase

10233 *my-ŋgrvl.*

NEG-be.usually.the.case:FACT

10234 ‘It only eats insects, it does not eat cultivated plants.’ (140511

10235 qamtsWrmdzu, 16)

10236 While in (147) and (146) we lack decisive evidence that *ŋja* forms a syntactic
 10237 constituent with the previous nouns or the following verb, in (148) the presence
 10238 of the ergative makes it clear that *ŋja* is not a clausal adverb, and belongs to the
 10239 postpositional phrase headed by *kua*.

10240 (148) [*ty-lu cʰo tuakrimgo ŋja kua*]

INDEF.POSS-milk COMIT doughnut completely ERG

10241 *cʰui-z-yy-wxti-nuu.*

IPFV-CAUS-CAUS-be.big-PL

10242 ‘They (used to) raise up (the babies) by feeding them milk and

10243 doughnuts only.’ (140426 tApAtso kAnWBdaR, 102)

10244 The same applies to (149), where the presence of the demonstrative *nua* after
 10245 *ŋja* shows that it belongs to the same noun phrase.

10246 (149) *u-rdoŋ nua-me tce, [u-ru ŋja nua],*

3SG.POSS-grain AOR-not.exist LNK 3SG.POSS-stalk completely DEM

10247 *pua-ky-tvβ nuna, taŋndzyr u-ŋgu*

AOR-OBJ:PCP-thresh DEM feeding.emmer 3SG.POSS-inside

10248 *tú-wy-rku tce,*

IPFV-INV-put.in LNK

10249 ‘When all the grains have been removed, the bare stalks, the one that

10250 have been threshed, one puts them in a feeding emmer.’ (140513 tWrtsi,

5)

10252 A reduplicated emphatic form *ŋju~ŋja* is also found as in (150)

10253 (150) *χtceŋnzyn ŋju~ŋja kua zo púa-wy-nxjo cti*

beast EMPH~completely ERG EMPH PST.IPFV-INV-wait be.AFF:FACT

10254 *nua-ŋju.*

SENS-be

10255 ‘It was all wild beasts waiting for him (there).’ (2005 Norbzang, 308)

10256 A third option to express restrictive focus is the inalienable noun *u-jlu*, which

10257 is used in the meaning ‘uncooked’ as a property noun (§5.1.2.7), but has become

10258 grammaticalized as a restrictive marker ‘exclusively, without anything else’ (presumably from an intermediate meaning ‘plain, simple’), as in (151).

- 10260 (151) *sryz nuu kuu tc^hoz uu-jlu zo pjui-nuijvntyn*
 prince DEM ERG religion 3SG.POSS-exclusively EMPH IPFV-be.assiduous.in
 10261 *pui-cti ma juum nuu muu-pjy-car nuu-ŋu,*
 PST.IPFV-be.AFF LNK wife DEM NEG-IFR.IPFV-look.for SENS-be
 10262 ‘The prince was focused exclusively in the study of religion, and was not
 10263 looking for a wife.’ (ras2003, 3)

10264 For the expression of restrictive focus with temporal noun phrases or clauses,
 10265 the postposition *kóbmuz* ‘only after’ can also be used, especially with the demon-
 10266 strative in the expression *nuu kóbmuz ny* ‘only then’ (§8.2.11, §25.3.3.2).

10267 9.1.7 Identity modifiers

10268 There is no specific identity modifier ‘the same’ in Japhug. The only way to
 10269 express this meaning is to use the subject participle of the verb *naχtewy* ‘be the
 10270 same’ (a denumeral verb of Tibetan origin, §7.1.6.1, see also §8.2.5 and §26.3.1.1 on
 10271 the syntax of this stative verb) in a relative clause, as in (152) (a possessor relative,
 10272 §23.5.10). This participle competes with the borrowed identity adverb *anamana*
 10273 ‘identical’ (§22.2.3).

- 10274 (152) *tx-rmi kuu-naχtewy pjy-dyn wo kymjuu,*
 INDEF.POSS-name SBJ:PCP-be.the.same IFR.IPFV-be.many SFP TOPO
 10275 *nyki kuruu ra tce.*
 FILLER Tibetan PL LNK
 ‘There were many people who had identical names, in Kamnyu, among
 10277 the Tibetans.’ (140522 tshupa, 161)

10278 There are two prenominal modifiers expressing non-identity in Japhug: *kuu-*
 10279 *maš* ‘other’ and the numeral *ci* ‘one’, which in prenominal position means ‘the
 10280 other one’ (in postnominal position, it is used as an indefinite determiner, see
 10281 §9.1.4.1). Both of these words can also be used as pronouns, though *ci* requires to
 10282 be combined with the demonstrative *nuu* in this usage (see §6.8).

10283 The modifier *kumaš* is prenominal in its meaning ‘other’, as in (153).

9 The noun phrase

- 10284 (153) *tua-zda nua ma kumaw turme a-pua-me*
 GENR.POSS-companion DEM apart.from other person IRR-IPFV-not.exist
 10285 *tce, k^ha ra a_{syndundyt} pui-_r<nu>yro pui-_{ηu} pui-ti.*
 LNK house PL everywhere IPFV-<AUTO>play SENS-be SENS-say
 10286 ‘(Our neighbour) says that if there are no other persons apart from
 10287 family members, (the monkey) would play everywhere in the house.’
 10288 (19-GzW2, 10)

10289 There are apparent examples of *kumaw* ‘other’ in postnominal position, as in
 10290 (154) and (155), but in such sentences *kumaw* is a preverbal adverb, not a noun
 10291 modifier, with a slightly different meaning ‘anew’. In (154), the usage of *kumaw* is
 10292 very similar to its Chinese equivalent 另外 <lìngwài> ‘other’ in the corresponding
 10293 Chinese sentence 阿兰另外给我买了一部手机, where the preverbal position
 10294 of 另外 <lìngwài> ‘other’ clearly shows that it is not a noun modifier.

- 10295 (154) <*alan*> *kui a-<dianhua> kumaw ta-χtui*
 ANTHR ERG 1SG.POSS-phone other AOR:3→3'-buy
 10296 ‘Alan bought me a new phone.’ (conversation, 17-03-27)
- 10297 (155) *a-βi kui k^ha kumaw ta-nui-sui-βzu*
 1SG.POSS-younger.sibling ERG house other AOR:3→3'-AUTO-CAUS-make
 10298 *q^he,*
 LNK
 10299 ‘My brother made himself a new house.’ (14-siblings, 304)

10300 The identity determiner *kumaw* ‘other’ is grammaticalized from the subject
 10301 participle of the verb *maε* ‘not be’, *kui-maε* ‘who/which is not X’ (see also §16.1.1.7),
 10302 which is still widely used, as in (156) and (157).

- 10303 (156) *myzui [tc^hirtsym kui-maε] nuunu tce, tú-wy-χtci ma nui*
 yet type.of.tsampa SBj:PCP-not.be DEM LNK IPFV-INV-wash LNK DEM
 10304 *ma ky-sqa (my-ra)*
 apart.from INF-boil NEG-be.needed:FACT
 10305 ‘The tsampa that is not ‘chu.rtsam’, one needs to wash it, but not to boil
 10306 it.’ (2002tWsqr, 112)
- 10307 (157) *[u-rkui wuma zo st^huci kui-maε] nuatcu*
 3SG.POSS-side really EMPH so.much SBj:PCP-not.be DEM:LOC

- 10308 *ty-ri* *ci* *kú-wy-lst*
 INDEF.POSS-thread once IPFV-INV-throw
 10309 ‘One sews a thread at a place which is not too much on the border (of
 10310 the patch).’ (12-kAtsxWb, 16)

10311 The modifier *ci* differs from *kumars* in that it is necessarily definite, meaning
 10312 ‘the other one’, as in (158), where it refers to an animal that is chased by lions,
 10313 which was previously mentioned in the text.

- 10314 (158) *zuruuzyri q^he ci ruidas^h nur duuxpa ma*
 progressively LNK other.one animal DEM poor.of LNK
 10315 *nui-ky-ndza uu-spa pui-cti q^he, q^he*
 3PL.POSS-OBJ:PCP-eat 3SG.POSS-material SENS-be.AFF LNK LNK
 10316 *pui-ndza^h q^he muu-nui-c^ha q^he,*
 IPFV-ANTICAUS:make.fall LNK NEG-IPFV-can LNK
 10317 ‘The other animal, poor of him, it is their prey, progressively it falls
 10318 down and cannot stand it anymore.’ (20-sWNgi, 43)

10319 Interestingly, the determiner *ci* does not have scope over other noun modi-
 10320 fiers. For instance, in (159), the noun *tc^heeme* ‘woman’ occurs with an attributive
 10321 adjective in participial form *kui-ηyn* ‘who is evil’ (a relative clause, see §9.1.8),
 10322 but the meaning is not ‘the other evil woman’ as could have been expected (this
 10323 interpretation is excluded since the woman who is the subject of the sentence is,
 10324 by contrast, a kind person), and rather must be ‘the other woman, the evil one’.
 10325 There is no pause in the recording that could lead us to suppose that *kui-ηyn* here
 10326 is an apposition – it is rather a postnominal relative.

- 10327 (159) *n^hki, tc^heeme nuu uu-cki uu-kui-syja jo-ce, ci*
 FILLER women DEM 3SG-DAT 3SG.POSS-SBJ:PCP-give.back IFR-go other.one
 10328 *tc^heeme kui-ηyn nuu uu-cki.*
 woman SBJ:PCP-be.evil DEM 3SG-DAT
 10329 ‘She went to give it back to the woman, the other one, the evil woman.’
 10330 (140515 jiesu de laoren-zh, 90)

10331 9.1.8 Attributes

10332 Japhug has several sub-parts of speech which could be described as ‘adjectives’:
 10333 stative verbs, adverbs and nouns which express properties (rather than actions
 10334 or entities). Property words used as noun modifiers are collectively designated

9 The noun phrase

by the term *attributes*. This heterogenous class excludes the property nouns described in §5.1.2.7, which are the syntactic heads of the noun phrase.

Three types of attributes are distinguished: attributive postnominal (noun or adverb) modifiers, prenominal modifiers and participial *ku-* 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 *tʰylwṛṣṭsat* ‘sparing earth’ or *rnyftcwṛṣa* ‘whose ear has ten holes’, used as attributes of *qandže* ‘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 རྩଗ་ལྷ ཟଙ୍ଗଲୁ ‘year of the tiger’ in 160) also occur postnominally.

- (160) *tcelo prymzi rgṛtpu yu u-ye stag-lu ci*
upstream ANTHR old.man GEN 3SG.POSS-grandchild tiger-year INDEF
yṛzu tce,
exist:SENS LNK

‘Up there, the old Bramze has a grandchild who is born in the year of the tiger.’ (2003nyima2, 48)

Privative nouns in *-lu* ‘...less’ (§5.7.1) and nouns of relative location in *mang* (§5.7.2) are mainly used as postnominal modifiers.

The nouns *χcʰa* ‘right’ and *be* ‘left’ are mainly used with the noun *jaš* ‘hand’, ‘arm’ (or with other paired body parts), and can either be used as pre- (161) or postnominal modifiers (§162).

- (161) *be a-jaš tu-ntcʰoz-a yu*
left 1SG.POSS-hand IPFV-use-1SG be:FACT
‘I use my left hand.’ (elicited)

- 10364 (162) *tui-jas* *χc^ba* *nui kui, taqaβ c^ho* *ty-ri* *nui*
 GENR.POSS-hand right DEM ERG needle COMIT INDEF.POSS-thread DEM
 10365 *tú-wy-ndo*, *tui-jas* *ve* *nui kui ky-cp^hyt* *wi-spa*
 IPFV-INV-take GENR.POSS-hand left DEM ERG INF-patch 3SG.POSS-material
 10366 *nui pjú-wy-sui-st^hob* *ŋu*
 DEM IPFV-INV-CAUS-press be:FACT
 10367 ‘One takes the needle and the thread with one’s right hand, and one
 10368 presses the (cloth) to be patched with the left hand.’ (12-kAtsxWb, 35)

10369 The word *wuma* ‘real, really’ from Tibetan 藏文 *yo.ma* ‘real, true’ (§3.3.1.4) is gen-
 10370 erally used adverbially as an intensifier, in particular with stative verbs (§26.1.1.1),
 10371 but also occurs as a postnominal modifier meaning ‘real’, its original meaning,
 10372 as in (163) and (164).

- 10373 (163) *tyndzi wuma nui nyzo pui-tui-ŋu ma azo tyndzi pui-mav-a*
 demon real DEM SENS-2-be LNK 1SG demon SENS-not.be-1SG
 10374 ‘You are the real demon, not me.’ (2002 lhandzi, 12)
- 10375 (164) *wi-qa* *nui qarŋe,* *tytsob* *wuma nui.*
 3SG.POSS-root DEM be.yellow:FACT silverweed real DEM
 10376 ‘Its root is yellow, the real silverweed.’ (19-khWlu, 74)

10377 The inalienably possessed noun *nui-tyngut* ‘common possession’, which re-
 10378 quires a non-singular possessor, can be used as a postnominal attribute, sharing
 10379 the same possessive prefix as the preceding noun, as in *nui-rmi nui-tyngut* ‘their
 10380 collective name’ in (165).

- 10381 (165) *nunui tṣu nui caŋtas nunui tcetu, (...) riŋgu mur-tu-tuy*
 DEM road DEM up.from up.there DEM pasture NEG-IPFV:UP-touch
 10382 *mṛctṣa, nunui tu-ji t^hamtcxt zo nui-rmi nui*
 until dem indef.poss-field all EMPH 3PL.POSS-name DEM
 10383 *tuturca nui-rmi nui tumju rmi. tceri tumju nunui,*
 together 3PL.POSS-name DEM TOPO be.called:FACT LNK TOPO DEM
 10384 *nui-rmi nui-tyngut kui-fse ŋu.*
 3PL.POSS-name 3PL.POSS-in.common SBJ:PCP-be.like be:FACT
 10385 ‘Up from that path until the pasture, all the fields in there put together,
 10386 their collective name is *tumju*.’ (150903 tWmNu, 8)

9 The noun phrase

In addition, some adverbs, which are more often used with scope over the whole clause, can occur as postnominal modifiers, in particular the comitative adverbs (§5.8.1) and adverbs of quantification (§9.1.3).

9.1.8.2 Attributive prenominal modifiers

Noun phrases serving as prenominal modifiers are not easily distinguishable from possessors, the only difference being the absence of a coreferent possessive prefix on the following noun (§5.1.1.2).

The most common type of prenominal modifiers are placenames and other unpossessible nouns (§5.2.1) and nouns expressing the material from which an object is made, as *χsyr* ‘gold’, *rŋul* ‘silver’ and *si* ‘wood’ in (166).

- (166) *a-tycime, nvzo rŋul rjyskxt u-tas tu-ce ci, χsyr rjyskxt*
1SG.POSS-lady 2SG silver stair 3SG.POSS-on 2-go:FACT QU gold stair
u-tas tu-ce ci, com rjyskxt u-tas tu-nu-ce?
3SG.POSS-on 2-go:FACT QU wood stair 3SG.POSS-on 2-AUTO-go:FACT
'My lady, will you go on the silver stairs, the golden stairs or the
wooden stairs?' (2014-kWLAG, 369)

Prenominal modifiers can be more complex phrases. In (167), the prenominal modifier *čkryz* ‘oak’ takes the restrictive focus marker *ŋja* ‘completely’ (§9.1.6.5).¹⁰

- (167) *nua [čkryz ŋja zo] sunŋgu ŋu tce*
DEM oak completely EMPH forest be:FACT LNK
'It is a forest exclusively of oaks.' (140522 Kamnyu zgo, 91)

In (168), the prenominal modifier of *tſu* ‘path’ has three degrees of embedding.

- (168) *[[[smvt turmda] rjylpu nuara ſu] nu-sakaβ] tſu nūtcu*
TOPO TOPO king DEM.PL GEN 3PL.POSS-well path DEM.LOC
č-ky-ryzi nu-ŋu.
TRAL-AOR-stay SENS-be
'He went (there) and stayed on the way (to) the well of the king of
Smad.mda.' (2005 Kunbzang, 9)

¹⁰ A superficially similar construction is found in 70 (§22.2.2.3); in that example, the constituent [noun+*ŋja zo*] is a preposed nominal predicate. That analysis is not possible in (167), since the subject is the demonstrative *nua*, and the nominal predicate is *čkryz ŋja zo sunŋgu*.

When a prenominal modifier is present, possessive prefixes on inalienably possessed head noun can be neutralized to indefinite possessor (§5.1.4).

At least in the case of some prenominal modifiers limited to single nouns,¹¹ possessive prefixes can either be prefixed on the head noun (169a), or on the modifier (169b) (§5.1.4).

- (169) a. *χsyr a-kumtç^huu*
gold 1SG.POSS-toy

- b. *a-χsyr kumtç^huu*
1SG.POSS-gold toy

‘My golden toy’ (see example 64, §5.1.4)

Since in (169) no stress can be heard on the modifier *χsyr* ‘gold’, it could be possible to argue that *χsyr kumtç^huu* in (169b) should rather be analyzed as a noun compound (§5.5.1) *χsyr-kumtç^huu*: this is one of the domains of Japhug grammar in which the boundary between syntax and morphology is unclear (§3.8.1).

The adverb *konyla* ‘really, completely’ (§22.2.4) can be used as a prenominal modifier in the sense of ‘real’.

- (170) *konyla turme ci, kui-piu-pe tcheme ci, ny-cya*
really person INDEF SBJ:PCP-EMPH~be.good girl INDEF 2SG.POSS-age
kui-xtciu~xtci kui-mpciu~mpcyr a-nui-tu-aβzu
SBJ:PCP-EMPH~be.small SBJ:PCP-EMPH~be.beautiful IRR-PFV-2-become
smalym
prayer

‘May you become a real human, a nice, young and beautiful girl.’ (said to a râkshasî, Norbzang 2005, 287)

9.1.8.3 Participial relatives

Most words expressing properties in Japhug are a subclass of stative verbs, and cannot serve as attributes without being embedded into a relative clause. Since intransitive subjects can only be relativized using *kui-* participial relative clauses (§16.1.1.4), attributive adjectival stative verbs are always in this form, as *kui-pe* ‘good one, which is good’ in (171); the relative *wuma zo tç^heme kui-pe* in this example is head-internal (§23.4.3), as shown by the position of the intensifier *wuma zo* (§26.1.1.1), and literally means ‘(a) woman who is/was really nice’.

¹¹ Attempts to test this possibility with larger prenominal phrases such as that in (167) are inconclusive.

9 The noun phrase

- 10437 (171) *w-rzaβ βdaʒmu nuw [wuma zo tc^heme ku-pe] ci*
 3SG.POSS-wife lady DEM really EMPH woman SBJ:PCP-be.good INDEF
 10438 *pjy-ŋu.*
 IFR.IPFV-be
 10439 ‘His wife, the queen, was a very nice woman.’ (28-smAnmi, 4)

10440 In the case of shorter relative clauses it is not always clear whether we have
 10441 a head-internal, or a postnominal one (§23.4.4). Prenominal relatives with an
 10442 adjectival stative verb such as *stu ku-mna* ‘the best one, the leader’ in (172) are
 10443 less common.

- 10444 (172) *rjylpu nyruaβzaj nuw ku, nyki, [stu ku-mna tc^heme] nuw*
 king ANTHR DEM ERG filler most SBJ:PCP-be.better woman DEM
 10445 *ny-nuw-car jnu-ŋu*
 IFR-AUTO-search SENS-be
 10446 ‘King Norbzang chose for himself the woman leader.’ (2012 Norbzang, 41)

10447 The presence of an adjunct, such as a standard marker, can disambiguate be-
 10448 tween postnominal and head-internal relatives (§23.5.1.2); in (173) for instance,
 10449 the head *pya* ‘bird’ is clearly internal.

- 10450 (173) *βzar ndyre ŋyn ma [wzo syznŋ pya ku-xtci] nuwa*
 buzzard LNK be.evil:FACT LNK 3SG COMP bird SBJ:PCP-be.small DEM:PL
 10451 *ŋja zo tu-ndze jnu-ŋu tce,*
 completely EMPH IPFV-eat[III] SENS-be LNK
 10452 ‘The buzzard is fierce, its eats all the birds that are smaller than itself.’
 10453 (24-ZmbrWpGa, 88)

10454 As shown in §23.3.5.1, in head-internal relative clauses the same determiner
 10455 can appear on the head noun and repeated after the whole relative. The same is
 10456 found with adjectival participial relatives, as in (174) with the indefinite *ci* ‘one’,
 10457 though this usage is rare, in most cases only one of the two determiners is used
 10458 (either the one inside the relative or the external one).

- 10459 (174) *tce [qajua ci ku-yrŋi] ci ŋu.*
 LNK bug INDEF SBJ:PCP-be.green INDEF be:FACT
 10460 ‘It is a green/black bug.’ (26-zrWGndza)

10461 In prenominal position, subject relatives are almost not attested with stative
 10462 verbs, but are found with some intransitive dynamic verbs. In the lexicalized
 10463 expression in (175), prenominal placement of the participle *kuu-rlax* is required.

- 10464 (175) *kui-rlab k^ha*
 SBJ:PCP-disappear house
 10465 ‘An abandonned house.’

10466 9.2 Noun coordination

10467 Japhug lacks a dedicated noun coordinator. Nouns can be either coordinated by
 10468 using the comitative postposition *c^ho* (§9.2.1), or by juxtaposition without any
 10469 linking element (§9.2.2).

10470 9.2.1 Coordination or embedded phrase

10471 The closest thing to a noun coordinator in Japhug is the comitative marker *c^ho*;
 10472 it can be used both to connect finite clauses (§25.6.2.1) or nouns as in (176).

10473 When the constituent comprising two noun phrases connected by *c^ho* is in
 10474 subject or object function, number indexation on the verb reflects the sum of all
 10475 individuals referred to by this coordinated constituent, dual in the case of (176).

- 10476 (176) *[χpxyltcin c^ho alan] kui ko-ndo-ndzi tce,*
 n.p. COMIT n.p. ERG IFR-take-DU LNK
 10477 ‘Dpalcan and Alan caught (one).’ (24-qro, 101)

10478 Number markers like *ra* (§9.1.1.2) have scope over the whole coordinated con-
 10479 stituent, as in (177).

- 10480 (177) *[qandzyi c^ho qalia_B] ra kui c^hui-nuu-tsuum-nuu*
 falcon COMIT eagle PL ERG IPFV:DOWNSTREAM-VERT-take.away-PL
 10481 *tu-ndza-nuu ηgrvl.*
 IPFV-eat-PL be.usually.the.case:FACT
 10482 ‘Falcons and eagles take them (the moles) and eat them.’ (28-qapar, 201)

10483 There is however evidence that *c^ho* is a postposition rather than conjunction.
 10484 First, while *c^ho* cannot be used without a preceding noun phrase or clause, the
 10485 noun following it (for instance, *qalia_B* ‘eagle’ in 177) is optional, as illustrated by
 10486 (178) and several additional examples in §8.2.5.

- 10487 (178) *nuu c^ho to-ruastunmuu-ndzi.*
 [DEM COMIT] IFR-marry-DU
 10488 ‘He married her.’ (140511 alading-zh, 191)

9 The noun phrase

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 *qaliaꝝ* ‘eagle’, as in Figure 9.2.

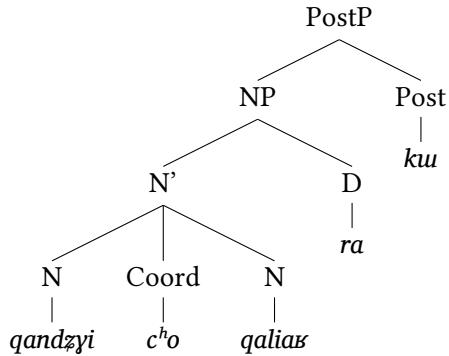


Figure 9.1: *c^ho* as a coordinator

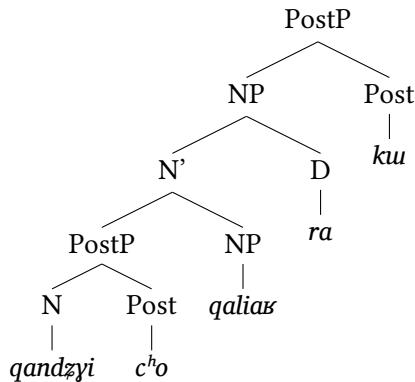


Figure 9.2: *c^ho* as a postposition

9.2.2 Bare coordination

9.2.2.1 Enumeration

Enumerations are the listing of a series of nouns, often with a specific (rising) intonation and a pause between item, and without any coordinating element

10498 (such as the postposition *c^ho* seen above). In Japhug, quite lengthy enumerations
 10499 are attested in the corpus, as shown by (179) with seven nouns.

- 10500 (179) *mbro, jla, nuna, mbala, ts^hyt, qazo, pa_s, nura nutcu*
 horse hybrid.yak cow bull goat sheep pig DEM:PL DEM:LOC
 10501 *u_ja z-nuú-wy-l_y pur-_ju.*
 completely TRAL-IPFV-INV-graze PST.IPFV-be
 10502 ‘People used to graze there horses, hybrid yaks, cows, bulls, goats, sheep
 10503 ans pigs.’ (140522 Kamnyu zgo, 156)

10504 Enumerations are generally understood as non-exhaustive, implying the po-
 10505 tential inclusion of other referents to the list, especially when each noun occurs
 10506 with the participle *kui-fse* ‘like’ as in (180).

- 10507 (180) *nunuu tx-mu nur kui qala kui-fse, ca*
 DEM INDEF.POSS-mother DEM ERG rabbit SBJ:PCP-be.like deer
 10508 *kui-fse, nunuu ruudas kui-xcti nura pjui-sat.*
 SBJ:PCP-be.like DEM animal SBJ:PCP-be.small DEM:PL IPFV-kill
 10509 ‘The mother kills small animals like rabbits or deer.’ (20-sWNgi, 80)

10510 However, enumerations with only two nouns and without specific intonation,
 10511 as in (181), can also express exhaustive enumeration.

- 10512 (181) *q^he ts^hyt qazo ra yuu nura nua-sna.*
 LNK goat sheep PL GEN 3PL.POSS-food DEM:PL SENS-be.good
 10513 ‘It is good as fodder for goats and sheep.’ (16-RIWmsWSi, 65)

10514 When the order of the nouns is rigid (which is not the case in 181, since *qazo*
 10515 *ts^hyt* ‘sheep and goats’ is also attested), the construction belongs to a different
 10516 category: that of noun dyads (§9.2.2.2).

10517 9.2.2.2 Noun dyads

10518 Noun dyads are a pair of nouns occurring in a fixed order, without intervening
 10519 linker or postposition, and sharing their number and case markers. A good exam-
 10520 ple is provided by the expression ‘parents’ comprising the kinship terms *tx-mu*
 10521 ‘mother’ and *tx-wa* ‘father’, as in (182). Note that while number and case markers
 10522 are shared by both nouns, each of them takes its own possessive prefix, and both
 10523 prefixes are coreferent.

9 The noun phrase

- 10524 (182) *nua a-mu a-wa ni yu yu*
 DEM 1SG.POSS-mother 1SG.POSS-father DU GEN be:FACT
 10525 ‘This is for my parents.’ (meimei de gushi)

10526 The dyad for ‘parents’ has a honorific variant, originally used for noblemen in
 10527 the traditional society. It comprises the terms *tx-pa* ‘father’ and *tx-ma* ‘mother’,
 10528 which are borrowed from Tibetan ཡା.པ ཡା.ମା ‘father’ and ཡା.ମା ‘mother’, re-
 10529 spectively. Interesting, the honorific expression follows the ‘father-mother’ or-
 10530 der (as in example 183), while the native one puts ‘mother’ in the first place.

- 10531 (183) *nua kuu-fse a-pa a-ma ni kuu*
 DEM SBJ:PCP-be.like 1SG.POSS-father 1SG.POSS-mother DU ERG
 10532 *nua-ti-ndzi tce*
 SENS-say-DU LNK
 10533 ‘My parents say this.’ (2003nyima2, 94)

10534 Other common dyads referring to humans, but alienably possessed, include
 10535 *rgytpu rgynmuu* ‘old man(men) and woman(women)’, *tx-tcui tc'heme* ‘boy(s) and
 10536 girl(s)’. They are most commonly used as collectives with indefinite referents
 10537 as in (184), but are also attested with definite ones, as in (185), with the aforemen-
 10538 tioned topic marker *icq'ha* (§9.1.5.2).

- 10539 (184) *tx-tcui tc'heme tui-sy-ymdzuu zaka tu*
 INDEF.POSS-son girl GENR.POSS-OBL:PCP-sit each EXIST:FACT
 10540 ‘Gents and ladies each have (different) seating places.’ (31-khAjmu, 10)
- 10541 (185) *tx-rit nua li icq'ha rgytpu*
 INDEF.POSS-offspring DEM again the.aforementioned old.man
 10542 *rgynmuu ni kuu pjx-mto-ndzi*
 old.woman DU ERG IFR-see-DU
 10543 ‘That child, the old man and the old woman saw him.’ (140514
 10544 huishuohua de niao-zh, 4)

10545 Dyads are not restricted to humans, as shown by the dyad *txci qaj* ‘barley and
 10546 wheat’ (18, §10.1.2.10).

10547 Another type of noun dyad comprises two abstract nouns, which can be used
 10548 as manner adjuncts with the ergative (see example 46 §8.2.2.5) or in the degree
 10549 construction as in (186) with the dyad *tx-re tx-jas* ‘chatting and laughing’ (only *tx-*
 10550 *re* ‘laugh’ exists as an independent word). Some of these dyads are nominalized
 10551 forms of bipartite verbs (§11.6.3).

- 10552 (186) *nuitcu rcanuu maka t̪y-re t̪y-fas*
DEM:LOC UNEXP:DEG completely INDEF.POSS-laugh INDEF.POSS-laugh
10553 *pjy-saxas*
IFR.IPFV-be.extremely
10554 ‘There, (the râkshasî) were chatting and laughing a lot.’ (2011-05-nyima,
10555 34)

10556 9.2.3 Disjunction

10557 There is no dedicated linker for expressing inclusive and/or exclusive disjunction
10558 of noun phrases in Japhug. The clausal linker *numaasn̪* ‘otherwise’ can exception-
10559 ally occur between nouns as in (187), but such rare constructions are the result
10560 of the elision of the non-final verb(s) in a string of clauses sharing the same verb
10561 forms such as (188) (§25.6.4).

- 10562 (187) *tce azo a-r̪fit nuu kuu a-wymuu u-riit nuu*
LNK 1SG 1SG.POSS-child DEM ERG 1SG.POSS-brother 3SG.POSS-child DEM
10563 *tce “a-rpuu” numaasn̪ “a-las” tu-ti kuu-ra.*
LOC 1SG.POSS-MB otherwise 1SG.POSS-MZ IPFV-say SBJ:PCP-be.needed
10564 ‘Then my son has to say ‘my uncle’ or ‘my aunt’ to my brother’s son.’
10565 (140425 kWmdza04, 132)

- 10566 (188) *t̪y-ŋgyr lú-wy-lyt, numaasn̪ t̪y-ŋkuu*
INDEF.POSS-fat IPFV-INV-release otherwise INDEF.POSS-pig.skin
10567 *lú-wy-lyt, numaasn̪ cyruu lú-wy-lyt,*
IPFV-INV-release otherwise bone IPFV-INV-release
10568 ‘One puts pig fat, pig skin or bones in it.’ (140428 mtshalu, 19)

10569 The reduced form *mas* (homophonous with the 3SG Factual non-past of *mas*
10570 ‘not be’) of *numaasn̪* ‘otherwise’ is also attested to express disjunction between
10571 nouns as in (189).

- 10572 (189) *nunuu mbos mas turwuar nuu t̪hú-wy-nyqʰŋga tce*
DEM square.cloth otherwise raincoat DEM IPFV-INV-put.on LNK
10573 *χchoqe nuu u-ŋjօs nuu kuu kú-wy-sui-ndo.*
right.and.left DEM 3SG.POSS-hook DEM ERG IPFV-INV-CAUS-take
10574 ‘When one puts on a square cloth or a raincoat (to protect oneself from
10575 the rain), one attaches it with the hooks on the left and on the right.’
10576 (140429 NoR, 15)

9 The noun phrase

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-tup^hu nyu ci bnuu-tup^hu nyu my-xsi.*
one-species be:FACT QU two-species be:FACT NEG-GENR:know
'I dont know if it is one or two species.' (23-RmWrcWftsa, 44)

9.3 Word order in the noun phrase

The order of the elements in the noun phrase in Japhug is relatively rigid. Examples of complex nouns phrases such as (191) and (192) illustrate the orders N(oun)-Adj(ective)-Num(eral) and Dem(onstrative)-N(oun)-Num(eral)-Dem(onstrative), respectively.¹²

- (191) *sun̥gwu zui, [turme wuma zo kui-wxti bnuuz] tu-ndzi tce*
forest LOC people really EMPH SBJ:PCP-be.big two exist:FACT-DU LNK
'In the forest, there are two giants.' (140428 yonggan de xiaocafeng-zh, 171)
- (192) *[uukuki cnat bnuuz kuni] kuu,*
DEM.PROX heddle two DEM.PROX:DU ERG
'(The weaving is done) with these two heddles.' (vid-20140429090403, 47)

From such examples, it can be extrapolated that the most basic word order in the noun phrase in Japhug is Dem-N-Adj-Num-Dem. Although no noun phrase in the corpus presents all five elements, it is easy to elicitate such an example. This order is not unusual crosslinguistically: [Cinque \(2005\)](#) notes that the orders Dem-N-Adj-Num and N-Adj-Num-Dem are both widely attested.

All of the elements in the noun phrases are optional, even the nominal head.

Although the indefinite marker *ci* 'one' and the topic *nua* can appear between the noun and the adjective (being here a head-internal participial relative clause, §9.1.8.3), as shown by examples (174) above and (193) below, numerals are not attested in this position.

¹² The term 'adjective' here refers to attributive adjectival stative verbs in participial form (§9.1.8.3).

9.3 Word order in the noun phrase

- 10602 (193) *yjuu ci kuu-mbuu~mbro zo pjy-tu nuu-ŋu*
 watchtower INDEF SBJ:PCP-EMPH~be.high EMPH IFR.IPFV-exist SENS-be
 10603 *tce*
 LNK
 10604 ‘There was a very big tower.’ (2012 Norbzang, 54)

10605 There are other attributes than adjectival stative verbs in Japhug (§9.1.8.1 and
 10606 §9.1.8.2), in particular prenominal attributes as *rjul* ‘silver’ in (194), but it is prob-
 10607 lematic to use such examples as evidence for a Adj-N-Num-Dem, given the fact
 10608 that prenominal attributes are always essentially nouns used as modifiers.

- 10609 (194) *rjul qʰobqʰoč xsum nuu ny-nuu-čoč*.
 silver ingot three DEM IFR-AUTO-come.out
 10610 ‘The three silver ingots had come out.’ (28-qAjdoskAt, 178)

10611 The prenominal slot can be filled by demonstratives (§9.1.2) and identity mod-
 10612 ifiers *kumaa* ‘other’ or *ci* ‘the other one’ (§9.1.7). These elements can be preceded
 10613 by either a comitative *cʰo* phrase (§9.2.1) or by the aforementioned topic marker
 10614 *icqʰa* (§9.1.5.2, cf. example 195), the leftmost element of a noun phrase.

- 10615 (195) *rjylpu uu-tcuu nuu kuu, icqʰa ci rjylpu*
 king 3SG.POSS-son DEM ERG the.aforementioned other.one king
 10616 *nunuu, <xila> rjylpu nuu u-cki,*
 DEM TOPO king DEM 3SG.POSS-DAT
 10617 ‘The king’s son (told) the other king, the king of Greece’ (140518 huifei
 10618 de muma-zh, 177)

10 Expressive words and sentence final particles

This chapter comprises four sections: §10.1 discusses ideophones, §10.2 presents expressive words lacking specific ideophonic properties (interjections and calling sounds), §10.3 and §10.4 describes sentence final particles and their contribution to the expression of modality and evidentiality.

10.1 Ideophones

Ideophones in Japhug constitute a particularly large part of speech, and can be unambiguously defined on the basis of morphological criteria. The present section builds on previous research (Sun & Shidanluo 2004; Jacques 2013c)), but is based on a larger corpus of ideophones.

10.1.1 Ideophonic stem morphology

Cross-linguistic definitions have been proposed for ideophones; for instance, according to Marc Dingemanse (2017: 2), they are ‘marked words that depict sensory imagery’. While Japhug ideophones do indeed fit this description, in this grammar a language-particular definition is adopted.

Ideophones often have specific morphology, which differs from the rest of the lexicon (Diffloth 1976 and Zwicky & Pullum 1987). This is the case in Gyalrong languages (Sun & Shidanluo 2004: 3–4), and ideophones are thus defined in this grammar (following Jacques 2013c) as words derived from monosyllabic ideophonic roots that can undergo the morphological alternations described in this section.

Table 10.1 presents the ten ideophonic patterns attested in Japhug. Since these patterns involve several types of partial reduplication, a set of symbols are used to represent the elements of the root that are targeted by reduplication: C_i represents 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	<i>R</i>	<i>zjan̥</i>	semelfactive
II	<i>R.R</i>	<i>zjan̥.zjan̥</i>	stative
III	<i>R.nx.R</i>	<i>zjan̥.nx.zjan̥</i>	action with rhythm and/or motion
IV	<i>R.nx.IVC_f</i>	<i>zjan̥.nx.lan̥</i>	action in disorderly fashion
V	<i>pʰuu.R</i>	<i>pʰuu.zjan̥</i>	semelfactive, intensive
VI	<i>mxlv.R</i>	<i>mxlv.zjan̥</i>	stative, intensive
VII	<i>Ruu.C_fi</i>	<i>zjan̥uu.ny̥</i>	progressive change of state
VIII	<i>C_iuuC_fuu.C_iaC_fi</i>	<i>zjuuŋuu.zjan̥i</i>	stative, in quantity, in disorder
	<i>Ruu.C_iaC_fi</i>		
IX	<i>Ri.nx.Ri</i>	<i>zjan̥i.nx.zjan̥i</i>	action with fast motion
X	<i>RRR(*)</i>		onomatopoeia

This system is not specific to Japhug: patterns I, II, III, IV and VII have direct correspondences in Tshobdun (Sun & Shidanluo 2004: 3–4). Patterns V and VI express an intensive meaning in comparison with the corresponding semelfactive (pattern I) and stative (pattern II). No equivalent pattern exists in Tshobdun. The *-nx-* element in patterns III, IV and IX is related to the additive *nx* (§8.2.6).

All patterns (except X) are illustrated with an example using the root |*zjan̥*| ‘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, |*zjan̥*| ‘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 |*zjan̥*| ‘tall’ was glossed by Tshendzin as (1).

¹ This root is not used to illustrate pattern X (§10.1.2.10), which is semantically restricted.

² They are however not translated: I asked my main consultant Tshendzin to produce sentences illustrating each of the possible patterns of the root |*zjan̥*|.

- 10663 (1) *uu-zda* *ra svz kur-mbro kur-fse*
 3SG.POSS-companion PL COMP SBJ:PCP-be.tall SBJ:PCP-be.like
 10664 ‘Taller or higher than the others.’ (elicited)

10665 There are additional ideophonic roots that are related to **|zjay|** by non-morphological
 10666 processes (Table 10.3, §10.1.5.3).

10.1.2.1 Pattern I

10668 Pattern I, which consists of the bare ideophonic root, is combined with predicates
 10669 in the Aorist or Inferential to express an action occurring suddenly, as in (2). The
 10670 form *zjay* means that the action of the sentence resulted in the main referent
 10671 becoming taller than its surrounding.

- 10672 (2) *zjay zo tx-ndzur*
 IDPH(I):tall EMPH AOR-stand
 10673 ‘He stood up suddenly, and (appeared to be) very tall.’ (elicited)

10.1.2.2 Pattern II

10675 Pattern II with plain reduplication indicates a state. It is by far the most com-
 10676 mon ideophonic pattern in texts and it is attested for most ideophonic roots. It
 10677 generally describes a permanent state (as in 4 below).

10678 When an ideophone in pattern II is used with a lexical verb, it can describe a
 10679 state resulting from the action indicated by the main verb (*rmbuu* ‘pile up’ in 3).

- 10680 (3) *tce zjayzjay zo kur-pa to-rmbuu-nur*
 LNK IDPH(II):tall EMPH INF:STAT-AUX IFR-pile.up-PL
 10681 ‘(The villagers) had piled (the hay) up very high.’ (150902 liaozhai lang-zh,
 10682 26)’

10683 A handful of deideophonic verbs in *a-* and *nr-* can be built from pattern II
 10684 ideophones (§20.9.3).

10685 The reduplicated form in pattern II is in most cases a complete reduplication.
 10686 Not only the onset, but also the vowel as well as the final consonant are copied,
 10687 even in the case of initial clusters, as in **|zraj|** → **zrajzraj** ‘bulging, swollen’.

10688 Nevertheless, we do observe some phonetic attrition in the case of the codas
 10689 -*t*, -*y* and -*β*. Final -*t* is generally deleted regardless of the following consonant,
 10690 as in **|xsyt|** → **xsyxsyt** ‘long, thin and flexible’. An exception, which involves an
 10691 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 $|b\gamma\beta| \rightarrow b\gamma b\gamma\beta$ ‘stubborn, bulky’. This rule is however only optional, and $b\gamma\beta b\gamma\beta$ is also attested.

Final *-y* is generally deleted when the onset contains a velar (§4.2.3.1) as in |gry| → *grgry* ‘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 |*kṛti*| → *kṛtukṛti* ‘fat, soft and wet’ and |*qli*| → *quqlī* ‘staring without moving’.

- (4) *uŋ-βri nura kú-wy-rtoŋ qʰe juŋ-xilaj zo qʰe nykinu,*
 3SG.POSS-body DEM:PL IPFV-INV-look LNK SENS-be.wet EMPH LNK FILLER
ŋjuŋβri zo juŋ-pa.
 IDHP:II:fat.soft.wet EMPH SENS-AUX
 ‘The body (of the gecko) looks wet, it is wet and soft.’ (28-tshAwAre, 39)

10.1.2.3 Pattern III

Pattern III comprises the reduplicated ideophonic root with the additive *nr* (§8.2.6) inserted in between. It depicts a rhythmic action or a constant motion as in (5), depending on the semantics of the root.

- (5) *mbro w-ta_s to-ce tce zjagnyrzjaŋ jy-ari-ndzi*
 horse 3SG-on IFR:UP-go LNK IDPH(III):tall AOR-go[II]-DU
 ‘He mounted the horse, and they went there, very tall.’ (elicited)

Deideophonic verbs in *yr-* and *sr-* (§20.9.1) and *nu-* (§20.9.2) are built from pattern III ideophones, without additive *ny*.

Pattern III also allows a variant *RR-nr-RR* with double reduplication of the ideophonic root, with an intensive meaning. For instance *pÿrlnþpÿrl* '(walking) with big strides' has the slightly different meaning '(running) with big strides' with double reduplication (6).

- (6) 'wo a-mu ma-pur-tu-zyy-sat tce azo
INTERJ 1SG.POSS-mother NEG-IMP-2-REFL-kill LNK 1SG
pjuu-nuu-yi-a *ŋu'* *to-ti.* *pyylpyylnypyylpyyl*
IPFV:DOWN-VERT-come-1SG be:FACT IFR-say IDPH(III):with.big.strides

10720 *pjy-nur-yi.*

IFR:DOWN-AUTO-come

10721 ‘She said “Mother, don’t commit suicide, I am coming back” and came
10722 back running in big strides.’ (2003 kAndZWsqhaj2, 26-27)

10723 10.1.2.4 Pattern IV

10724 Pattern IV is formed by combining with the ideophonic root, the additive *nṛ*
10725 (§8.2.6) and a partial copy of the ideophonic root replacing the onset by *l*, a pat-
10726 tern reminiscent of some distributed action verbs (§19.4.2.1). It describes an ac-
10727 tion involving motion occurring in disorderly fashion with intermittent changes
10728 of state. In (7) the form *zjaynṛlay* can be used to depict a drunk person who stum-
10729 bles from time to time while walking, so that he seems taller at one time and
10730 shorter at another time.

10731 (7) *zjaynṛlay nru-ŋke*
IDPH(IV):tall SENS-go

10732 ‘He is walking unsteadily, very tall.’ (elicited)

10733 Deideophonic verbs in *yr-* and *sr-* can be build from pattern IV ideophones
10734 (§20.9.1), without insertion of the additive.

10735 10.1.2.5 Pattern V

10736 Pattern V, made of the ideophonic root prefixed with the element *p^hu-*, is similar
10737 to pattern I (§10.1.2.1) semantically, but it is more rarely used; it indicates a more
10738 sudden action and/or one carried out to a higher degree.

10739 (8) *p^huzjaj zo tx-ndzur*
IDPH(V):tall EMPH AOR-stand

10740 ‘He stood up suddenly, and (appeared to be) very tall.’ (elicited)

10741 This pattern occurs in particular with onomatopoeic ideophones, such as |
10742 *q^hloŋ|* ‘splashing’ (9).

10743 (9) *nur p^huuq^hloŋ zo pjy-yrryt*
DEM IDPH(V):splashing EMPH IFR-throw

10744 ‘He threw (the bag into the water), making a sudden splashing noise.’
10745 (150824 kelaosi-zh, 155)

10746 The most common pattern V ideophone is *pʰučlaš* from |člaš| ‘suddenly’, which
 10747 has the *yṛ-* and *sṛ-* denominal forms (§20.9.1) *yṛpʰučlaš* ‘moving/working quickly,
 10748 hardworking’ and *sṛpʰučlaš* ‘do *X* quickly (not lingering)’.

10749 10.1.2.6 Pattern VI

10750 Pattern VI, with the root prefixed by *mrly-*, describes a state like pattern II, but
 10751 differs from it in that it expresses a higher degree. In addition, it can be used to
 10752 express the result of a change of state with the verb *aβzu* ‘become’ as in (10). It is
 10753 the rarest of all ideophonic patterns, not attested in the Japhug text corpus.

- 10754 (10) *a-ye mrlyzjaŋ zo tʰui-aβzu*
 10755 1SG.POSS-grandson IDPH(VI):tall EMPH AOR-become
 ‘My grandson has become very tall.’ (elicited)

10756 10.1.2.7 Pattern VII

10757 In pattern VII, the coda of the root (C_f ; if no coda is present, a /w/ is inserted,
 10758 §10.1.2.8) is resyllabified as onset of a syllable with the vowel *w*, and then reju-
 10759 plicated with the vowel *i* following the pattern $C_fV.C_fwi.C_{fi}$. It expresses a
 10760 progressive change of state, involving in some case slow motion as in (11).

- 10761 (11) *zjaŋyŋi zo jy-ari*
 10762 IDPH(VII):tall EMPH AOR-go[II]
 ‘He went away slowly (taller than rest).’ (elicited)

10763 10.1.2.8 Pattern VIII

10764 Pattern VIII depicts a state involving a lot of referents having the property de-
 10765 scribed by the ideophone, but spread out spatially in a disorderly fashion.

10766 The formula *Ruu.C_iaC_{fi}* in Table 10.1 applies to ideophonic roots which do
 10767 not have /a/ as their main vowel, for instance |zjyŋ| (whose meaning is almost
 10768 identical to that of |zjaŋ|) has the form *zjyŋ.uu.zjay.i*. When the main vowel is /a/,
 10769 the formula is *C_iuuC_{fi}.C_iaC_{fi}*, thus the pattern VIII of |zjaŋ| is *zju.ŋuu.zja.ŋi*.
 10770 This form means that in a group of unique entities, some are tall and some are
 10771 short, but they are unevenly spread (12).

- 10772 (12) *zjuŋuzjaŋi nui-xcat*
 10773 IDPH(VIII):tall SENS-be.many
 ‘There are many (people), some taller and some shorter.’ (elicited)

10774 Tshendzin glossed the meaning of (12) as follows (13).

- 10775 (13) *tsuku kuu-mbro tsuku kuu-mbyr kuu-fse*
 some SBJ:PCP-be.tall some SBJ:PCP-be.short SBJ:PCP-be.like
 10776 ‘Some tall and some short.’ (elicited)

10777 In cases where the ideophonic root has no coda, the consonant /w/ replaces
 10778 C_f in patterns VII and VIII. For instance, /*sxi*/ ‘with big holes, with big nostrils’
 10779 has the pattern VIII form *sxiwuausxiawi* ‘full of holes everywhere’ (14).

- 10780 (14) *nunuu ur-ŋgu ri c-tu-nuze tce ku-rzzi*
 DEM 3SG.POSS-in LOC TRAL-IPFV-eat[III] LNK IPFV-stay
 10781 *jnu-cti tce, (...) nunutcu abyndundyt sxiwuausxiawi*
 SENS-be.AFF:FACT LNK DEM:LOC everywhere IDPH(VIII):with.holes
 10782 *jnu-suu-spob tce*
 IPFV-CAUS-have.a.hole LNK
 10783 ‘(The species of ants *cymi qro*) goes into wood and eats it, and stays in
 10784 there, (...) and makes holes everywhere in it.’ (26-qro, 94-96)

10785 10.1.2.9 Pattern IX

10786 Pattern IX is formally similar to pattern III except that /i/ is added after each
 10787 reduplicant of the ideophonic root. Semantically, it indicates that the entity pre-
 10788 senting the property described by the ideophonic root undergoes a fast motion.

- 10789 (15) *mbro ta-numbrypuu tce zjaŋinŋjaji zo jy-cq^{blyt}*
 horse AOR:3→3'-ride LNK IDPH(IX):tall EMPH AOR-disappear
 10790 ‘He mounted the horse and disappeared quickly (in the horizon), very
 10791 tall.’ (elicited)

10792 10.1.2.10 Pattern X

10793 Pattern X involves reduplication of the ideophonic root three or more times (it
 10794 was not considered to be an ideophonic pattern in [Jacques 2013c](#)). It is the only
 10795 domain of Japhug grammar where triplication is allowed,³ unlike the Mazur va-
 10796 riety of Stau, where triplication occurs in finite verb forms ([Gates 2017](#)).

³ Another language in which ideophone triplication has been documented is Chintang ([Rai et al. 2006](#)).

10 Expressive words and sentence final particles

10797 Pattern X differs from all preceding patterns in that it is semantically restricted
 10798 to onomatopoeia (16) and endopathic ideophones (ie. ideophones expressing inner sensations such as cold or pain) (17), and nearly always select *ti* ‘say’ as light
 10799 verb (§10.1.7.2). Lexical verbs are also attested with pattern X ideophones (18),
 10800 though more rarely.

- 10802 (16) *tu-mbri nura cutcutcut zo tu-ti nuu-ŋju*
 IPFV-call DEM:PL IDPH(X):cry EMPH IPFV-say SENS-be
 10803 ‘When it calls it makes ‘cut cut cut’.’ (24-ZmbrWpGa, 8)
- 10804 (17) *nui-kui-syŋo tce, nuu nui-łob tce, zurzurzur*
 IPFV-GENR:S/O-listen LNK DEM AOR-come.out LNK IDPH(X):itchy.feeling
 10805 *tu-ti qʰe tcendyre tʂ-ndyr nui-łob cti.*
 IPFV-say LNK LNK pimple IPFV-come.out be:AFF:FACT
 10806 ‘When it appears, one has an itchy feeling, and a pimple appears.’
 10807 (25-khArWm, 4)

10808 The triplication (reduplication at will) of the root expresses either repeated
 10809 action like pattern III, or a continuous and unceasing state. Some pattern X ideophones are reduplicated four (18) or more (19) times.

- 10811 (18) *tʂci qaj nuu tʂtʂy u-ŋguu rcuβrcuβrcuβrcuβ zo*
 barley wheat DEM cupboard 3SG.POSS-in IDPH(X):rustling EMPH
 10812 *pjui-lxt nuu, u-zgra nuu pjy-sy-mtsʰym.*
 IPFV-release DEM 3SG.POSS-noise DEM IFR.IPFV-pro-hear
 10813 ‘(In the night), one could hear the rustling noise of the (one-legged
 10814 demon)_i pouring barley and wheat grains into the cupboard (of the
 10815 woman with whom he_i was having a relationship). (140510 rkoNJAl,
 10816 32-33)

10817 Not all onomatopoeia are realistic descriptions of natural sounds. In (19) we
 10818 find an ideophonic root |ze|* describing the supposed minute sound made by the
 10819 quick motion of the legs of a millipede.

- 10820 (19) *kú-wy-rtob tui-mṇab kui u-mylyjab ra muúj-saxsyl*
 IPFV-INV-look GENR.POSS-eye ERG 3SG.POSS-limb PL NEG:SENS-be.clear
 10821 *zo ri, “zezezezezeze” zo tu-ti ju-ce qʰe,*
 EMPH LNK IDPH(II):sound EMPH IPFV-say IPFV-go LNK

10822	<i>w-tuu-mbjom</i>	<i>syre</i>	<i>zo</i>
	3SG.POSS-NMLZ:DEG-be.quick be.ridiculous:FACT EMPH		
10823	'(Of a type of small millipede) Looking at it, its feet are not clearly visible, but it moves making <i>zezezezezeze</i> , extremely quickly.' (28-kWpAz, 155)		
10824			

10825 Some of the roots used in pattern X are polysyllabic (see for instance *dudut* in
10826 §10.2.3), in which case the ideophone can only be reduplicated two times.

10827 10.1.3 Semantic categories

10828 Japhug ideophones are used for describing various features including sound, colour,
10829 shape, texture, attitude or mood, and some ideophones are multimodal, referring
10830 to combination of several types of sensory information.

10831 Mark Dingemanse (2012: 663) proposed the hierarchy (20) according to which,
10832 if a particular language possesses ideophones belonging to a particular class in
10833 this hierarchy, it will also present ideophones for all the lower classes. All cate-
10834 gories are exemplified in Japhug.

10835 (20) SOUND > MOTION > VISUAL PATTERNS > OTHER SENSORY PERCEPTIONS > IN-
10836 NER FEELINGS AND COGNITIVE STATES

10837 Onomatopoeic ideophones include for instance *|qʰloŋ|* ‘splashing’ (9, §10.1.2.5)
10838 or *|tʰwuy|* ‘metal clinking’.

10839 In addition to sounds, ideophonic roots also describe shapes (for instance *boŋboŋ*
10840 ‘ovoid’), specific hues of colour (*smuiysmuiy* ‘fresh green’), touch (*bruuybruuy* ‘rough,
10841 covered in small pimples’), temperature (*xuβxuβ* ‘warm’), size (*scraꝝscraꝝ* ‘very
10842 small, close to the ground’), quantity (*zuβzuβ* ‘many (people, object) standing/in
10843 upright position’), attitudes (*dyrrdyrr* ‘agape, in a daze, looking stupid’, *cqucqu*
10844 ‘frowning’), pain (*çnuy* ‘intense and sudden pain’), body postion (*çpʰγβçpʰγβ* ‘ly-
10845 ing on the ground, motionless’) and also cognitive states (*ħħħt* ‘free from worry’).

10846 Ideophonic roots often combine several parameters. For instance, *çyaŋçyaŋ*
10847 ‘sharp and shiny (of fangs)’ encodes both shape and hue.

10848 It appears that there are no ideophonic roots specifically dedicated to express-
10849 ing motion; however, dynamic ideophonic patterns (I, III, IV, IX) applied to ideo-
10850 phones describing sound or shapes often add a motional imagery. For instance,
10851 the root *|xur|* means ‘round’ in pattern II, but ‘rotating, turning’ in pattern III
10852 (69, §20.9.2) and IX (21).

- 10853 (21) *w-mvlyjab kura ny kura tu-ste q^he tce,*
 3SG.POSS-limb DEM.PROX:PL ADD DEM.PROX:PL IPFV-do.like[III] LNK LNK
 10854 *icq^ha staxpurjysk^hi yuu tu-jwas nuu*
 the.aforementioned plant.name GEN 3SG.POSS-leave DEM
 10855 *xurinxxuri zo tu-sui-mtcu.*
 IDPH(IX):round EMPH IPFV-CAUS-turn
 10856 ‘(There is a species of insect which) does this with its legs repeatedly, and
 10857 rotates the leaves of the *staxpurjysk^hi* very quickly.’ (18-NGolo, 139)

10858 Some ideophones, however, can have an auditory interpretation competing
 10859 with many other ones. Thus, |*bryβ*| in pattern II form *brybryβ* can designate many
 10860 objects clustered together (like mushrooms) (92, §18.4.2.1 and 19, §9.1.1.2), a stub-
 10861 born person or a heavy and cumbersome object depending on the context.

10862 With a dynamic pattern such as I or III, it can be interpreted as designating
 10863 the noise made by a heavy object falling from a high place as in (22), a meaning
 10864 shared with the deideophonic verbs *srbrybryβ* and *nubryβ* (see the examples in 70,
 10865 §20.9.2).

- 10866 (22) *mbro kuu [...] tc^heme nuu bryβ zo*
 10867 horse ERG girl DEM IDPH(I):heavy.object.falling EMPH
pjy-βde q^he
 IFR:DOWN-throw LNK
 10868 ‘The horse (...) and threw the girl down, making ‘bom’ (on the ground).’
 10869 (2003 kAndZWsqhaj, 48)

10870 10.1.4 Irregularities

10871 In practice, very few ideophonic roots allow the application of all the ten patterns
 10872 exemplified in §10.1.2. In many cases, a particular pattern is not attested because
 10873 there is no imaginable context where the situation could exist.

10874 The meaning of some ideophonic roots can be incompatible with stative pat-
 10875 terns (II, VI and VIII). For instance, the very common |*clar*| ‘suddenly’ is only
 10876 attested in patterns I, III and V.

10877 Even in the case of ideophonic roots which allow several different patterns,
 10878 the semantics of a particular pattern cannot always be predicted from that of the
 10879 other ones. In other words, not all ideophonic roots have a basic meaning from
 10880 which the semantics of all patterns can be regularly derived. In this section, we
 10881 provide two examples with such unpredictable semantics.

10882 First, the root |ru β | has a pattern III ru β n γ ru β meaning ‘dripping (drop by
10883 drop) continuously’ (23).

- 10884 (23) li mbaly-puu nuu yuu uu-qom ra
again bull-DIM DEM GEN 3SG.POSS-tear PL
10885 ru β n γ ru β zo ny-tor cti q^he
IDPH(III):dripping.continuously EMPH IFR-come.out be.AFF:FACT LNK
10886 ‘The tears of the calf flowed, dripping without stop.’ (140512 fushang he
10887 yaomo-zh, 136)

10888 The regular yr- deideophonic verb (§20.9.1) yrru β ru β ‘drip continuously’ de-
10889 riving from ru β n γ ru β is also attested (example 62, §21.3.2.3). In addition, the
10890 compound noun mciru β ru β ‘person whose saliva drips continuously’ (§5.5.3) has
10891 the same form with compatible semantics.

10892 However, the pattern VIII ruwurawi from the same root has an entirely differ-
10893 ent meaning ‘upset and confused’. It occurs in collocation with tu-sum ‘mind’
10894 (24) and cannot be combined with nouns referring to liquids. Although it could
10895 originally have been a metaphorical extension of the concrete meaning of this
10896 root, the exact pathway of semantic change is by no means obvious.

- 10897 (24) uu-ky-nuzduuy nuu-dyn tce, ur-sum
3SG.POSS-OBJ:PCP-be.worried.about SENS-be.many LNK 3SG.POSS-mind
10898 ruwurawi nuu-xtsu
IDPH(VIII):confused IPFV-ferment
10899 ‘He is worried about many things, and he feels upset and confused.’
10900 (elicited)

10901 Second, the root |dzɔŋ| has a pattern II dzɔŋdzɔŋ meaning ‘having bristling
10902 hair’ (25).

- 10903 (25) tceri nuuu uu-rme nuu dzɔŋdzɔŋ nuu-pa
LINK DEM 3SG.POSS-hair DEM IDPH(II):bristling.hair SENS-AUX
10904 ‘The hair (on the squirrel’s tail) is bristling.’ (28-qapar, 135)

10905 However, the pattern III form dzɔŋn γ dzɔŋ has an entirely different meaning: it
10906 refers to the itchy feeling one experiences when blood flows into a limb that has
10907 fallen asleep (due to a sitting position for instance) and blood flows back into the
10908 numb limb, as in (26).

- 10909 (26) *tu-ŋke-a tce a-mi dzognvndzogn zo nu-ti*
 10910 IPFV:UP-walk-1SG LNK 1SG.POSS-foot IDPH(III):feel.itchy EMPH SENS-say
 10910 *ma cʰγ-ndzurput*
 because IFR-be.numb
- 10911 'My foot feels itchy as I walk, because it was numb.' (elicited)

10912 These two examples are in no way exceptional; while ideophonic morphology
 10913 is productive, one should not assume that semantics is predictable.

10.1.5 The phonology of ideophonic roots

10915 The phonological markedness of Japhug ideophones is relatively easy to assess,
 10916 as ideophonic roots (and all the form derived from them present uncommon fea-
 10917 tures from in both onsets and codas.

10.1.5.1 Onsets

10918 Of all 422 known onsets in Japhug, 63 (including 45 two-consonant and 18 three-
 10919 consonant clusters) are exclusively attested in ideophones or ideophonic verbs.
 10920 These onsets present four types of unusual combinations which are completely
 10921 absent from the native vocabulary and/or Tibetan borrowings.

10922 First, palatal stops can be combined with the medials /r/, /l/ in clusters such as
 10923 /cr-/, /cʰr-/, /jr-/, /cl-/, /ɲl-/ ([§4.2.2.3](#), [§4.2.2.4](#)) in ideophones. The only medial
 10924 consonant compatible with palatal stops in the non-ideophonic lexicon is /ɣ/
 10925 ([§4.2.2.5](#)).

10926 Second, dental stops are found with the medials /r/, /j/ and /w/ in clusters
 10927 such as /dr-/, /dj-/, /dw-/ and /tʰj-/ in ideophones. In the non-ideophonic lexicon,
 10928 the only attested medial after dental stops is /ɣ/ ([§4.2.2.5](#)).⁴ There is evidence
 10929 that proto-Gyalrong *tr- became a retroflex affricate /tʂ-/ ([§5.4.3.2](#), [§7.1.3](#)), and
 10930 that clusters of this type have been removed by regular sound change ([§4.2.2.4](#)).

10931 Third, the unvoiced fricatives /ʂ/ and /χ/ occur as preinitial consonants in
 10932 clusters with voiced main consonant such as /ʂy-/, /ʂn-/ and /χn-/ (*χnuuχni* 'soft
 10933 and thin (of food); dizzy, listless'). In the non-ideophonic vocabulary, [ʂ] and [χ]
 10934 as first element of clusters are in complementary distribution with their voiced
 10935 counterparts [r] and [ʐ], respectively ([§4.2.1.4](#), [§4.2.1.8](#)).

10936 Fourth, /l/ is common as first element of clusters in ideophonic roots, as in
 10937 *lbjuulbjuy* 'soft, hanging down'. Comparison with other Rgyalrongic languages

⁴ The noun *qumdroy* 'crane' also has such a cluster, but an onomatopoeic origin of the second syllable is not impossible, compare the Tibetan name of the same bird རྩྚྱྤྱ: *kʰruŋkʰruj* 'crane'.

reveals that **l*- preinitial has changed to /j/ in the non-ideophonic vocabulary (§4.2.1.6).

Another conspicuous phonological feature in ideophones is the very high relative frequency of non-prenasalized voiced stops. In native (non-Tibetan and non-deideophonic) nouns and verbs, the simple stop onsets /b/ and /g/ are extremely rare (§3.2.1). The onsets /d/ and /ʒ/ are more common in the non-ideophonic vocabulary, but almost all originate from clusters containing laterals (see Jacques 2004: 313–314).

While Japhug ideophones, unlike calling/chasing sounds (§10.2.2) do not contain independent phonemes that are not found in the non-ideophonic vocabulary, they enrich the complexity of the phonological system by filling gaps in the phonological system caused by sound changes (see for instance Diffloth 1979) and by favouring rare phonemes and phoneme combinations.

10.1.5.2 Codas

The phonological specificities of ideophonic roots are not limited to onsets: the rhymes presents also some unusual features, especially the codas.

The Kamnyu dialect of Japhug lacks a labial stop coda in the non-ideophonic vocabulary (§3.2.2), due to a sound change **p* → /-β/. However, some ideophones allow a stop final /-p/ instead of /-β/; there is considerable variation across speakers as to which ideophones allow this pronunciation. Tshendzin optionally uses final /-p/ with six ideophones in combination with the main vowel /ɯ/: *tsʰuptsʰup* ‘feeling of humidity in the air’, *tɕʰuptɕʰup* ‘with water drops’, *zupzup* ‘many objects/persons standing upright’, *cʰupcʰup* ‘filthy’, *rsuprsup* ‘very hairy’ and *rkʰuprkʰup* ‘knocking noise’.

Another remarkable property of ideophones is the frequency of the codas /-ŋ/, /-l/ and /-n/ (§3.2.2). These codas have been eliminated by a series of sound changes, merging with the vowels in complex ways (for instance, proto-Rgyalrongic *-aj became Japhug /-o/, §3.3.3). They are also found in loanwords from Tibetan, but some rhymes such as /-ɯŋ/ are only attested in ideophones.

10.1.5.3 Phonological gradation and iconicity

This section focuses on *relative iconicity* (Mark Dingemanse 2011a: 47), namely the correlation between a more or less gradient phonological feature and a semantic dimension, a phenomenon also known as sound symbolism (Boas & De Loria 1941: 16) or synesthesia (Gerner 2004: 186–187).

Japhug lacks regular patterns of consonant gradation such as the well-identified alternations described in Lakhota (Boas & Deloria 1941: 16–18). Gradation in place of articulation is attested, but specific to a particular family of ideophones. For instance, the roots in Table 10.2 have a dental – retroflex – velar – uvular gradation which does correlate with the degree of whiteness, but the same gradation is not generalizable to all ideophones with coronal fricatives.

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
guŋ	clear	the sky, a glance
xuŋ	clear	the sky, a room
χaŋ	slightly orange	the sky during daybreak

In addition to consonant gradation, even more puzzling phenomenon is *ideophonic hybridization*, namely the merger between several ideophonic families by combining rhymes and initial consonant clusters. The ‘clear, bright, white’ family (unvoiced coronal initial fricative, -u/aŋ rhyme) of Table 10.2 has intersections 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 stūpa
tsjan	higher than the rest	man
zjan	higher than the rest	man
zjyŋ	higher than the rest	man

Table 10.3 presents the ideophonic family of |zjan| ‘tall’, the ideophone used as example in §10.1.2. The members of this family mean ‘high, lofty’, and have the shape a dental fricative initial, followed by a j+ medial and a velar coda. The root |sjuŋ| combines these phonological features with the unvoiced fricative /s/ and the rhyme -uŋ of the family ‘white’ in Table 10.2. Its meaning also combines ‘white’ and ‘high’ from both families.

Table 10.4: The [(fricative/r)+l+(u/a/o)+dorsal coda] ideophonic family
'round'

Root	Meaning	Example
<i>sluŋ</i>	bright and round	the sun
<i>slay</i>	white and round	the moon
<i>clay</i>	bright, shiny, spherical	a shaved head
<i>clay</i>	bright, shiny, spherical	a shaved head
<i>rlay</i>	average size, spherical	the moon
<i>rloy</i>	huge, bulky, vaguely spherical	a yak
<i>rlaz</i>	round and hard	tsampa in bowl
<i>rlob</i>	average size, spherical	the head of a small child
<i>rwoŋ</i>	little, in great number spherical	peas
<i>rjɔŋ</i>	cylindrical and with a smooth surface	
<i>xplob</i>	small, spherical	mushroom, hat

The ideophonic family meaning 'round, spherical' (Table 10.4) is particularly rich. Its intersection with the 'white' family comprises four ideophones (|*sluŋ*|, |*slay*|, |*clay*| and |*clay*|), which share the initial consonant, the vowel and the coda with the ideophones in Table 10.2, and integrate both the meanings 'white, bright, shiny' and 'round'.

The two ideophonic families presented in Tables 10.3 and 10.4. have intersections with yet other families; a comprehensive account of ideophones however goes beyond the scope of this grammar, as a considerable amount of elicitation will be necessary to fully reveal the structure of ideophonic vocabulary. Rather 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 *xtʂɔŋ-* has the highest pitch (315 Hz) in the whole sentence, and there is a sharp pitch drop on

10 Expressive words and sentence final particles

- 11008 the second syllable (267 Hz), as shown in Figure 10.1. There is possibly a difference
 11009 in voice quality (Jacques 2013c), though this remains to be demonstrated.
- 11010 (27) *xcelwi rcanuu tuu-se nuu ku-ts^{hi} ny ku-ts^{hi}, (...)*
 tick UNEXP:FOC GENR.POSS-blood DEM IPFV-drink ADD IPFV-drink (...)
 11011 *uu-xtu nuu xtsóŋ.xtsoŋ zo nuu-pa nuu-ŋu.*
 3SG.POSS-belly DEM IDPH(II):bloated EMPH IPFV-AUX SENS-be
 11012 ‘The tick drink one’s blood again and again, (...) so that its belly become
 11013 bloated.’ (25-xCelwi, 44)

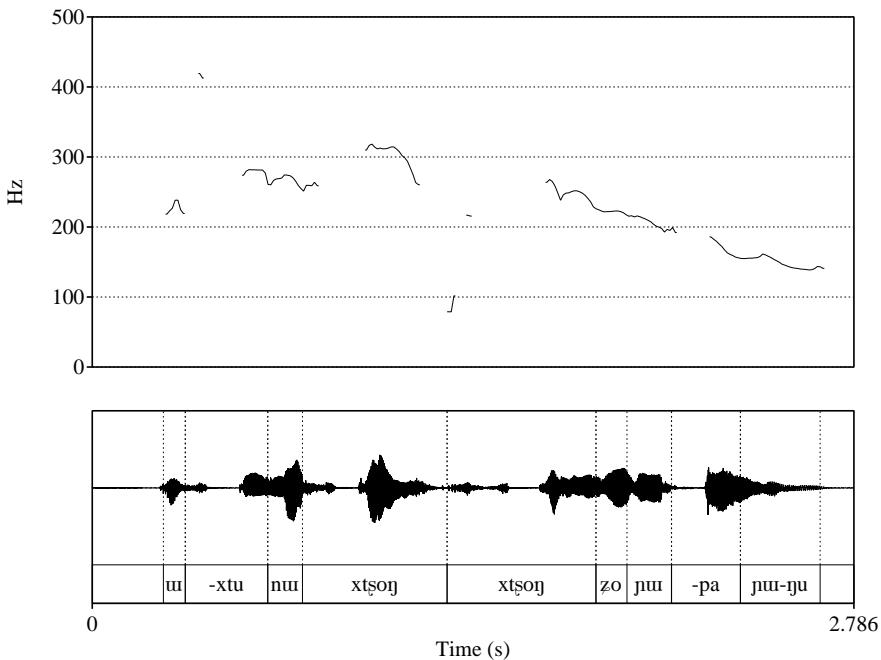


Figure 10.1: Pitch peak in (§27)

- 11014 This emphatic pronunciation is not uncommon, but in most cases the ideo-
 11015 phones do not have any special intonation. Example (§28) illustrates the same
 11016 ideophone *xtsoŋxtsoŋ* a few sentences later in the same text, without any emphasis.
- 11017 (28) *tce ma nuunu tu-fka xtsóŋxtsoŋ zo ŋu.*
 LNK LNK DEM IPFV-be.full IDPH(II):bloated EMPH be:FULL
 11018 ‘(The tick) is full (from having drunk blood) and bloated.’ (25-xCelwi, 59)

10.1.6 The genesis of ideophones

While it cannot be *a priori* excluded that some ideophones could be ancient, their phonological markedness is a sign that they are constantly renewed, using processes different from those found in non-ideophonic words. In this section, I propose a scenario account for one of the origins of ideophonic roots, and ideophonic hybridization (§10.1.5.3).

Some ideophonic roots are obvious built from Tibetan loanwords, but with slight phonetic changes. The most obvious case is |ldzunŋ| ‘skyblue’, which originates from the first syllable of རྩྱ བྱ ཉ ‘green’ (also borrowed as the unpronounceable noun *ldzanyku* ‘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, |zjan̥| and |z̥ray|, both meaning ‘filled up, looking soft’ (of a person’s belly, a bag filled with objects) are reminiscent of the verb *βrjan̥* ‘stretch tight’ (of skin), which is borrowed from the past tense of རྩྱ ལྕ དྲ ཉ ‘stretch, distend’: the ideophones describe a skin or membrane that is overstretched and distended, like the result of the action expressed by the verb *βrjan̥*. The form |zjan̥| could either have been independently borrowed from a Tibetan variety where *r*- and *s*- merge, or directly based on *βrjan̥* with further consonant modification. The root |z̥ray| is derived from |zjan̥| 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/, /ʒ/ and /g/ are common in clusters in the borrowed layer.

However, in many cases the lexical origin of ideophones has been completely blurred by a variety of mechanisms which can only be hypothesized. The four synonymous ideophones *dzoʂ* (29), *zgoʂ*, *goʂ* and *dzur* (30) exclusively occur in collocation with the transitive verb *tsʰoʂ* ‘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.

- 11048 (29) *w-χpum dzoʂ zo pjy-tsʰoʂ*
 3SG.POSS-knee IDPH(I):kneeling EMPH IFR-attach
 ‘(The demon) immediately knelt down.’ (140513 abide he mogui-zh, 47)

- 11050 (30) *w-χpum dzur zo ta-nui-tsʰoʂ ndxre,*
 3SG.POSS-knee IDPH(I):kneeling EMPH AOR:3'→3-AUTO-attach LNK

10 Expressive words and sentence final particles

- 11051 *ty-lu* *pa-nui-tcvt* *nui-ŋu*
 INDEF.POSS-milk AOR:3' → 3-AUTO-take.out SENS-be
 11052 'She immediately knelt down and milked (the cow).' (2003 Kunbzang, 106)

11053 In addition to pattern I, they also occur in pattern III as in (31).

- 11054 (31) *ty-pytso* *ra duxpa-nui matci tcendyre, zgoŋŋyzgoŋ* *zo*
 INDEF.POSS-child PL poor-PL because LNK IDPH(II):kneeling EMPH
 11055 *nui-χpum* *ta-ts^hoŋ-nui* *tce*
 3PL.POSS-knee AOR:3' → 3-attach-PL LNK
 11056 'The poor children, they knelt (before the ogre) one after the other.'
 11057 (160704 poucet4-v2, 42)

11058 I propose that one of the mechanism of ideophone creation is by playful re-
 11059 analysis from lexical verb roots. The four ideophones *dzoŋ*, *zgoŋ*, *goŋ* and *dzur*,
 11060 which have either the onset (z)g- or dz- and the rhymes -oŋ and -ur, originate in
 11061 my opinion from the verbs *ndzoŋ* 'be attached' (the anticausative of *ts^hoŋ* 'attach',
 11062 §18.5.3) and *azgur* 'bow, bend down' (the latter borrowed from ສຸກ 'sgur' 'bend
 11063 down'). The development of these ideophones occurred in three steps, as illus-
 11064 trated in Figure 10.2.

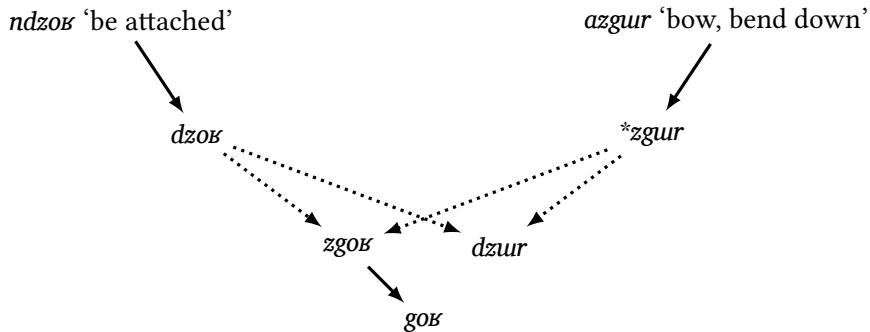


Figure 10.2: Development of the family of ideophones meaning 'kneeling respectfully'

11065 First, the ideophone roots *dzoŋ* 'kneeling' (with alternation to the more marked
 11066 plain voiced *dz-* onset, §3.2.1) and an unattested **zgur* (perhaps 'kneeling and
 11067 bowing') were directly created from the two verbs. The forms *zgoŋ* and *dzur*
 11068 result from blending from the two primary ideophones *dzoŋ* and **zgur* by ex-
 11069 changing rhyme and onset. Third, *goŋ* was derived from *zgoŋ* by simplification of
 11070 the onset.

11071 This process is not a derivation is in the proper sense, since it is neither regular
 11072 nor predictable, and involves processes such as blending which do not normally
 11073 occur in the verbal and nominal morphology of the Japhug language.

11074 In addition to native roots and Tibetan loanwords, an obvious source of ideophones
 11075 are onomatopoeic imitations of natural sounds. However, given the fact
 11076 that ideophonic changes do not follow regular rules unlike the normal vocabulary
 11077 on the one hand, and that northern Gyalrong languages lack historical records
 11078 on the other hand, it is unlikely that the prehistory of this type of ideophones
 11079 can be recovered.

11080 10.1.7 Syntax of ideophones

11081 As pointed out by [Mark Dingemanse](#) (2012: 660), the markedness of ideophones is
 11082 not limited to their phonology, but is also manifested in their syntactic behaviour.

11083 Ideophones nearly always occur as verb adjuncts in Japhug. They are most
 11084 commonly found with the intransitive light verb *pa*, the quotative verb *ti* ‘say’
 11085 and the simulative verb *stu* ‘do like’, following a cross-linguistically well-attested
 11086 pattern ([Güldemann](#) 2008: 280–288). They can also be used as adjunct of any
 11087 lexical verb in either nominalized or finite form, and in a handful of examples,
 11088 as noun modifiers. Ideophones commonly occur with the emphatic *zo* (§26.1.1.5),
 11089 which follows them.

11090 10.1.7.1 The auxiliary *pa*

11091 The intransitive verb *pa* (also attested in collocation with numerals, §22.4.1.4) is
 11092 one of the most common light verb used with ideophones. It is the labile intransitive
 11093 counterpart (§14.5.1.4) of the verb *pa* ‘do’, which also occurs as a light verb
 11094 in noun-verb collocations (§22.4.2.5).

11095 It can either appear as an inflected form as in (32), or as the participle *kua-*
 11096 *pa* as in (33) (see also 3, §10.1.2.2). It is mainly used with pattern II ideophones
 11097 describing colour, shape or spatial disposition.

- 11098 (32) *wu-phonybu nuu rcanuu bŋjliúŋŋli zo nuu-pa.*
 3SG.POSS-body DEM UNEXP:FOC IDPH(II):huge EMPH SENS-AUX

11099 ‘Its body, it is enormous.’ (20-sWNgi, 16)

- 11100 (33) *azo gruufgruuf w-ftsa nuu ty-kua-qawyr ma*
 1SG matsutake 3SG.POSS-nephew DEM AOR-SBJ:PCP-open.cap apart.from
 11101 *nuu ma xplobxplob kua-pa*
 DEM apart.from IDPH(II):small.and.spherical SBJ:PCP-AUX

11102 *mua-puu-mto-t-a*

11103 NEG-AOR-see-PST:TR-1SG

11104 ‘The (mushroom called) the ‘matsutake’s nephew’, I have seen ones with
 11105 opened caps, but never seen one in ball shape (before the cap opens).’
 (23-grWBgrWBftsa, 5)

11106 Like other stative verbs, *pa* has an inchoative meaning in the Imperfective
 11107 (§21.2.6), the Aorist (§21.5.1.3) and the Inferential (§21.5.2.4). It is attested with
 11108 the UPWARDS (*tu-pa*, example 34) and the WESTWARDS (*nua-pa*, example §27 in
 11109 §10.1.5.4) orientation preverbs.

11110 (34) *ui-ru nuara nuu-rom tce rbvβrbvβ tu-pa juu-ŋu*
 3SG.POSS-stalk DEM:PL AOR-dry LNK IDPH(II):rough IPFV-AUX SENS-be
 11111 ‘Once it has dried, its stalk becomes very rough.’ (14-sWNgWJu, 22)

11112 While *pa* is mainly found with pattern II ideophones, it is not restricted to
 11113 these, and attested in a handful of examples with other patterns, such as III (35)
 11114 and IV (36).

11115 (35) *zuruzzyri qʰe li tx-se nuu to-mbat qʰe, li*
 progressively LNK again INDEF.POSS-blood DEM IFR-diminish LNK again
 11116 *txrmyo nuu durnyduur pji-pa*
 drum DEM IDPH(III):drumming.far.away IFR.IPFV-AUX
 11117 ‘Progressively, the blood (in the lake) started to recede, and there was
 11118 again a drumming sound far away.’ (2003-kWBRa, 106)

11119 (36) *ckyrmylr zo kui-pa nuu jo-nuu-yi*
 IDPH(IV):limping EMPH SBJ:PCP-AUX DEM IFR-VERT-come
 11120 ‘He came back home limping.’ (140429 jiedi-zh, 141)

11121 10.1.7.2 Quotative *ti* ‘say’

11122 The verb *ti* ‘say’ occurs as a light verb with ideophones expressing sound (37, 38)
 11123 and endopathic sensations (especially itching or pain as in 39), in patterns I (37,
 11124 39), III (38) and X (§10.1.2.10).

11125 (37) *ui-tʰor t̪eu zjuy zo ti juu-ŋu*
 3SG.POSS-ground LOC IDPH(II):heavy.object.falling EMPH say:FACT SENS-be
 11126 ‘(The stone) made a loud noise (as it fell) on the ground.’ (The 2003
 11127 tWxtsa, 76)

- 11129 (38) *c^hu-tuit cunyguu tce tce tú-wy-ndza tce, tcbwuznvtcbuuz*
 11130 IPFV-be.ripe before LNK LNK IPFV-INV-eat LNK IDPH(III):crunchy.sound
tu-ti juu-ŋu t^hu-tuit uu-q^hu tce tce t^h-wy-ndza
 11131 IPFV-say SENS-be:FACT AOR-be.ripe 3SG.POSS-after LNK LNK AOR-INV-eat
tce, zwaŋnyzwaŋ tu-ti juu-ŋu tce, nuu juu-mum.
 11132 LNK IDPH(III):not.crunchy IPFV-say SENS-be LNK DEM SENS-be.tasty
 11133 'If one eats (an apple)_i before it_i is ripe, it makes a crunchy sound, when
 11134 it is ripe, it makes a soft (not crunchy) sound, it is (more) tasty (in this
 case because it has become sweeter and less sour).' (07-paXCi, 27-28)
- 11135 (39) *tu-kua-ti kuaŋy cŋwuy zo tu-ti tu-mŋym*
 11136 IPFV-GENR:S/O-say also IDPH(I):intense.pain EMPH IPFV-say IPFV-hurt
ŋu
 11137 be:FACT
 11138 '(When suffering from this disease), one feels intense pain even when one
 talks.' (29-RzAr, 35)

10.1.7.3 The simulative verb *stu* 'do like'

11140 The transitive simulative verb *stu* 'do like' (§14.4.2, §25.4.1.2) most commonly ap-
 11141 pears with the non-stative ideophonic patterns III (40) and IV (41). It expresses
 11142 volitional actions, unlike *pa* and *ti*. The syntactic function of the ideophones when
 11143 used with *stu* 'do like' is possibly that of semi-object, as they replace the demon-
 11144 stratives that usually occur with this verb (§14.4.2).

- 11145 (40) *uu-sŋuro lu-lxt tce t^huynv^hluy,*
 11146 3SG.POSS-breath IPFV-release LNK IDPH(III):breathing.movement
t^huynv^hluy tu-ste juu-ŋu.
 11147 IDPH(III):breathing.movement IPFV-do.like[III] SENS-be
 11148 'When (the frog)_i breathes, it_i expands and retracts (its whole body) with
 each breath.' (27-qaCpa, 3)

11149 The ideophone can describe the action as a whole (40), or an aspect of the
 11150 action on the object of *stu* as in (41), where the root *|rlɔʂ|* depicts the shape of the
 11151 fly's head (Table 10.4, §10.1.5.3), and pattern III morphology (§10.1.2.3) the motion
 11152 of the head.

- 11153 (41) *wi-jab tu-tsum tce, wi-ku ra pjui-nui-χtci*
 3SG.POSS-hand IPFV:UP-take.away LNK 3SG.POSS-head PL IPFV-AUTO-wash
 11154 *tce wi-ku ra rloenyrlob tu-ste pui-ηu*
 LNK 3SG.POSS-head PL IDPH(III):round IPFV-do.like[III] SENS-be
 11155 ‘(The fly) stretches up its forelegs to clean its head (and the area around
 11156 it), making (at the same time) a rhythmic rolling motion (with its head,
 11157 round and minute).’ (25-akWzgumba, 51)

11158 The reflexive form *zyy-stu* (§18.3.3) is almost exclusively attested with ideo-
 11159 phones, in particular in the manner serial verb construction (§25.4.1) with other
 11160 intransitive verbs, such as *ku-ryzi* in (42). With pattern II ideophones, it means
 11161 ‘make/have a *X* look’, generally expressing an attitude made on purpose.

- 11162 (42) *spyi pui-nui-te ndxre, nyki rjvlp tu-ce*
 attic 3SG-inside IPFV:EAST-AUTO-put[III] LNK king IPFV:UP-go
 11163 *rcau, tu-ryjorβzuar ku-fse rcau, nyki,*
 UNEXP:FOC IPFV-clean.up INF:STAT-be.like UNEXP:FOC FILLER
 11164 *χts^hχts^hyt zo tu-zyy-stu tce, ku-ryzi pui-ηu,*
 IDPH(II):lively.small EMPH IPFV-REFL-do.like LNK IPFV-stay PST.IPFV-be
 11165 *βdaεmu tu-ce rcau, p^hyt^huχtyr zo pjui-te tce,*
 lady IPFV:UP-go UNEXP:FOC mess EMPH IPFV-put[III] LNK
 11166 *quqlu zo tu-zyy-stu tce ku-ryzi pui-ηu*
 IDPH(II):hangdog.look EMPH IPFV-REFL-do.like LNK IPFV-stay PST.IPFV-be
 11167 *pui-ηu.*
 SENS-be
 11168 ‘(The king)_i put (the bird)_j in the attic. When the king_i would go up there,
 11169 it_j would clean everything up and would be lively; when the queen
 11170 would go up there, it_j would make a mess and have a hangdog look.’
 11171 (2003 Kunbzang, 302-4)

11172 It is also compatible with pattern I (43) or III ideophones, expressing motion
 11173 and/or sound.

- 11174 (43) *tce nuu kuu-xtci zo pui-wy-mbi tce ma*
 LNK DEM SBJ:PCP-EMPH~be.small EMPH IPFV-INV-give LNK LNK
 11175 *cηyβ zo tu-zyy-stu tce ju-nua-mje tce*
 IDPH(I):snapping EMPH IPFV-REFL-do.like LNK IPFV-AUTO-take[III] LNK

- ¹¹¹⁷⁶ *tu-ndze* *nua-ŋu.*
¹¹¹⁷⁷ IPFV-eat[III] SENS-be
¹¹¹⁷⁸ ‘We would give (our turtle)_i a little piece_j (of meat), and it_i would grab it_j with a snapping noise and eat it_j.’ (140510 wugui, 23)

¹¹¹⁷⁹ 10.1.7.4 Other verbs

¹¹¹⁸⁰ Ideophones are not restricted in use to the light verbs cited above, and can appear
¹¹¹⁸¹ with other types of verbs with compatible semantics. There are strict collocation
¹¹¹⁸² restrictions, and most ideophones can only be used with one or a handful of
¹¹¹⁸³ verbs.

¹¹¹⁸⁴ 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
¹¹¹⁸⁵ order is common, in particular in the case of stative adjectival verbs (44).

- ¹¹¹⁸⁷ (44) *wu-mjaŋ* *wuma nua yuu* *wi-rkua* *naura* *nua-yurni*,
¹¹¹⁸⁸ 3SG.POSS-eye really DEM GEN 3SG.POSS-side DEM:PL SENS-be.red
¹¹¹⁸⁹ *nua-yurni* *tsyaŋtsyaŋ* *zo*
¹¹¹⁹⁰ SENS-be.red IDPH(II):brilliant.red EMPH
‘The sides of its eye proper are red, brilliant red.’ (23-qapGAmWmtW,
50-51)

¹¹¹⁹¹ Ideophones can be postverbal even in participial and finite relative clauses
¹¹¹⁹² (§23.3.6), and can be located closer to the verb than determiners such as the in-
¹¹¹⁹³ definite *ci* (§9.1.4.1), as in (45).

- ¹¹¹⁹⁴ (45) *[kuu-yurni zo tsyaŋtsyaŋ]* *ci* *ŋu* *tce*
¹¹¹⁹⁵ SBJ:PCP-be.red EMPH IDPH(II):brilliant.red INDEF be:FACT LNK
‘It (a type of millipede) is brilliant red.’ (28-kWpAz, 152)

¹¹¹⁹⁶ When their semantic scope is more focalized on one of the arguments, the
¹¹¹⁹⁷ ideophone can directly follow a noun as in (46) or (47).

- ¹¹¹⁹⁸ (46) *tua-ŋga* *wi-taŋ* *ra* *wi-mat* *bv̚bv̚β*
¹¹¹⁹⁹ GENR.POSS-clothes 3SG-ON PL 3SG.POSS-fruit IDPH(II):clumping.together
¹¹²⁰⁰ *zo* *ku-ndzob.*
¹¹²⁰¹ EMPH IPFV-ACAUS:attach
‘When one walks among (these plants), their fruits attach to one’s clothes in clumps.’ (18-qromJoR, 170)

- 11202 (47) *rtc^huŋjur yuu u-rme nuu kur nuu-kuu-z-ryza.* nuu
 caterpillar GEN 3SG.POSS-hair DEM ERG IPFV-GENR:S/O-CAUS-itch DEM
 11203 *tuu-ca a-my-nuu-xtuy ra ma tṇndyr*
 GENR.POSS-flesh IRR-NEG-PFV-touch be.needed:FACT LNK pimple
 11204 *bruŋybruy zo tu-tcyst jnu-ŋu*
 IDPH(II):little.pimples EMPH IPFV-take.out SENS-be
 11205 ‘The caterpillar’s hair itches people, it should not touch one’s flesh,
 11206 otherwise it will cause a lot of little pimples to appear.’ (25-rtchWRjW,
 11207 86-88)

11208 10.1.7.5 Noun modifier

11209 In examples such as (46) or (47) (§10.1.7.4), the syntactic status of the ideophone
 11210 is ambiguous between a sentential adverb and a postnominal modifier.

11211 Examples (48) and (49) are incontrovertible evidence that ideophones can serve
 11212 as noun modifier: in (48) is embedded within an exceptive (§8.2.8) postpositional
 11213 phrase which does not contain any verb, and must be analyzed as modifier of the
 11214 counted noun *tuu-rdoꝝ* ‘one piece’.

- 11215 (48) *ma nuunu cawurambum tu-ti-nuu tce nuunu, nykinuu,*
 LNK DEM Shwa.ba.rwa.mbum IPFV-say-PL LNK DEM FILLER
 11216 *[[tuu-rdoꝝ zo zjyjzjy]] ma] ku-me*
 one-piece EMPH IDPH(II):short.and.thick apart.from SBJ:PCP-not.exist
 11217 *jnu-ŋu k^hi*
 SENS-be HEARSAY
 11218 ‘People call it ‘Shwaba rwa’bum’, it is (a kind of deer antler) with only
 11219 one (branch), short and thick.’ (27-qartshaz, 72-3)

11220 In (49), the ideophone *ndzv̥rndzv̥r* is in the emphatic exceptive construction,
 11221 with the linker *ma* (§8.2.8).

- 11222 (49) <*donglang*> *uزو-sti nuunu, [tʂ-tcii tuu-rdoꝝ ndzv̥rndzv̥r]*
 ANTHR 3SG-alone DEM INDEF.POSS-son one-piece IDPH(II):alone
 11223 *ma nuu ma ku-tu pjy-me.*
 LNK DEM apart.from SBJ:PCP-exist IFR.IPFV-not.exist
 11224 ‘There remained only Donglang, the boy, all alone (on earth after his
 11225 family had been taken away).’ (150828 donglang, 134)

11226 However, ideophones as postnominal modifiers are rare, and only occur in
 11227 combination with a singular counted noun such as *tuu-rdoꝝ* in the meaning ‘alone’.

10.1.8 Discourse function

Ideophones are non-essential to communication in the sense that any sentence containing an ideophone can be glossed with another sentence of identical truth value without using any ideophone. The frequency of ideophones and ideophonic verbs presents considerable variation in the corpus: some stories and procedural texts are almost devoid of them, while some episodes of traditional narratives are densely packed with them.

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 *pcyrynyjcyxt* ‘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.

- (50) *nura t̪-stu-t-a tce, sun̪gunayt̪cun ndyrndyr zo*
DEM:PL AOR-do.like-PST:TR-1SG LNK deep.forest IDPH(II):huge EMPH
nur-stu-t-a, u-taꝝ, p̪ya pcyrynyjcyxt zo nur-mbri tce
AOR-do.like-PST:TR-1SG 3SG-on birds IDPH(III):loud EMPH SENS-call LNK
‘I acted this way, I created a huge and deep forest on the top of whose
trees birds are tweeting and chirping and flying around.’
(2011-04-smanmi, 220-221)

10.2 Other expressive words

Two classes of words present common properties with, but are different from, real ideophones: interjections (§10.2.1) and calling sounds (§10.2.2). Although both also present phonological markedness and some degree of iconicity, they are not subject to ideophonic morphology (§10.1.1) and do not share the same syntactic properties.

In addition, we find some nouns which, unlike deideophonic verbs (§20.9.1), ideophonic counted nouns (§7.3.4.4) and nominal ideophonic compounds (§5.5.3), are directly built on an expressive root without derivational morphology (§10.2.3).

10.2.1 Interjections

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

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* ‘say’ (51, 52).

- (51) *t_y-yndzo tce 'utc^hutc^hui' ma-tuu-ti, t_y-sycke tce*
 AOR-be.cold LNK INTERJ:cold NEG:IMP-2-say AOR-PROP-burn LNK
(nykinui) 'atsatsa' ma-tuu-ti, kui-mnjym t_y-tu tce
 FILLER INTERJ:pain NEG:IMP-2-say SBJ:PCP-hurt AOR-exist LNK
'atsatsa' ma-tuu-ti ra
 INTERJ:pain NEG:IMP-2-say be.needed:FACT
 ‘When you feel cold, don’t say “Ah”, when you feel hot, don’t say “ouch”,
 when you feel pain, don’t say “ouch”. (07-deluge, 66-68)

- (52) *sruutp^hu sruunmuu kui-fse kui-sy-ymu~ymu zo*
 râkhasa râkhasâ SBJ:PCP-be.like SBJ:PCP-PROP-EMPH~fear EMPH
jx-k-xtuy-ndzi-ci ri, 'wudzuidzi' muu-to-ti.
 IFR-PEG-meet-DU-PEG LNK INTERJ:fear NEG-IFR-say
 ‘They met fearsome râkhasas and râkhasâs, but he did not say ‘how
 frightful!’. (31-deluge, 116)

Interjections can however be followed by full clauses, but with a pause as in (53) (see also for instance *ja* in example 33, §24.2.5.1).

- (53) *aci! jui-tuu-y_yngi.*
 INTERJ:correction SENS-2-be.right
 ‘Of course (I take back what I have said)! You are right.’ (2003 tWxtsa, 44)

The marker *wo* can precede without pause a noun in vocative function (54) (see also 6, §10.1.2.3).

- (54) *wo a-mu a-kum yuu-ty-ci*
 INTERJ 1SG.POSS-mother 1SG.POSS-door CISL-IMP-open[III]
 ‘Mother, come and open the door for me!’ (2012 tWJo, 23)

Some interjections cannot form a complete utterance on their own: *χawo* ‘if only’ introduces a clause in the Irrealis expressing a wish (see examples 120, §21.4.1.4 and 40, §5.1.2.10). The form *tsatsatsa* is used in a correlative construction meaning ‘one can say that *X*, but one can also say that $\neg X$, with the positive *X* and negative $\neg X$ forms of the same verb followed by the additive *nr*, as in (55).

- 11284 (55) *nur-tur-fse ny tsatsatsa, muúj-tur-fse ny tsatsatsa*
 SENS-2-be.like ADD INTERJ NEG:SENS-2-be.like ADD INTERJ
 11285 ‘One can say that you look like her, but one can also say that you don’t.’
 11286 (2014-kWLAG, 476)

11287 Interjections can be classified into four categories (Table 10.2.1): involuntary
 11288 responses to stimuli (interjections in the proper sense, [Mark Dingemanse 2011b](#)),
 11289 and uninflected words expressing comments on words uttered by oneself or oth-
 11290 others, short orders or polite expressions.

11291 Among these forms, *prjk^hje* ‘wait!’ is the only one with a clear internal ety-
 11292 mology (from *prjk^hu je*, §22.2.1). Some interjections are from Tibetan, including
 11293 the polite expressions and *mts^hyri* ‘how strange’ (§21.3.2.4), which is originally a
 11294 uninflected predicate borrowed from མཚར: *mts^har* ‘feel strange’.

11295 Although interjections lack morphological alternation, the additive *ny* can be
 11296 inserted within *wortc^hi wojyr* (which is borrowed from བྱର୍ତ୍ତ ຝୀଆ ‘thanks’) to
 11297 express repeated action as in (56) (see also 57, §22.2.1), a use reminiscent of the
 11298 Ideophonic patterns III (§10.1.2.3) and IV (§10.1.2.4)

- 11299 (56) *tx-teu* *nua kua* “*wortc^hi ny wojyr zo*” *to-ti* *nua-ŋu*
 11300 INDEF.POSS-boy DEM ERG please ADD please EMPH IFR-say SENS-be
 ‘The boy said ‘please’ (several times).’ (qachGa 2012, 81)

11301 The phatic expressions and *syrma* ‘good night’ and *krynyðdi* ‘take care’, though
 11302 originally non-inflecting, can take number indexation suffixes (§14.7.1) and have
 11303 become quasi-verbs, though they are highly anomalous and defective. The inter-
 11304 jection *wowe* can be used as a response to these expressions.

11305 The expression *k^hyþzay* ‘here I am’ is uttered by the guest when he arrives at
 11306 someone else’s home; the hosts invites the guest inside by saying *ny-tṣu* ‘your
 11307 way’.

11308 The interjection *woja* ‘yes, right’ occurs to confirm the validity of a previous
 11309 statement, sometimes assertive as in (57) but also with interrogative markers
 11310 such as *ye* (see 76, §10.4.2). It can be used whether the addressee had a vocal
 11311 reaction or not.

- 11312 (57) *ununua tcendi <wazi> nur ui-mdos wuma zo nua-ysu-ndo.*
 11313 DEM west socks DEM 3SG.POSS-colour really EMPH SENS-PROG-take
 11314 *woja, nuna kua-fse nua-ŋu.*
 11315 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)

Table 10.5: List of interjections

Category	Form	Function
Involuntary response	<i>uitç^huitç^huu, wutç^hwutç^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^hyri</i>	expresses surprise
Comment	<i>açi</i>	taking back what one has just said
	<i>χawo X</i>	‘If only <i>X</i> ’
	<i>Xtsatsatsa</i> $\neg Xtsatsatsa$	‘One can say that <i>X</i> , but one can also say that $\neg X$ ’
	<i>maχtçuu</i>	‘I told you so!’
	<i>çæŋja</i>	‘It serves you right!’
	<i>woja</i>	confirmation
Orders	<i>c^he, pyk^hiye</i>	‘wait!’
	<i>kuž</i>	‘go!’
	<i>ja</i>	‘come on’
		speech filler (§10.3)
Phatic	<i>k^hyβzay</i>	‘here I am’
	<i>k^hatṣu</i>	‘thanks’
	<i>wortç^hi (wojyr)</i>	‘please’
	<i>ya</i>	‘yes’
	<i>wowe</i>	response to words meaning ‘goodbye’
	<i>woja</i>	confirmation

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).

- (58) a. *lulū pñú-wy-nw-yrk^hyzñga q^he tçítci tçítci tçítci nura*
 cat IPFV-INV-APPL-shout LNK CALL:cat DEM:PL
 tu-kuu-ti q^he ju-yi ñu
 IPFV-GENR-say LNK IPFV-come be:FACT
 ‘When one calls a cat, one says *tçítci tçítci tçítci* and it comes.’
 (06-huchements1, 34-33)
- b. *lulū jú-wy-no tce “tç^ha” tu-kur-ti ñu*
 cat IPFV-INV-chase LNK CHASE:cat IPFV-GENR-say be:FACT
 ‘When one chases a cat, one says *tç^ha*.’ (06-huchements2, 14)

In Japhug, nearly all domestic animals, whether mammals or birds, have special dedicated calling sounds, a list of which is provided in Table 10.6. In addition, a click sound for which no IPA symbol exists is used to call puppies.

Given the rudimentary nature of man-animal interactions, it is not surprising that these sounds cannot be subjected to any morphological operation other than reduplication. They cannot be used with any light verbs or occur as adjuncts. However, if the animal has a name, it can be added after the calling/chasing sound (59).

- (59) *tce uzo kui-ysku a-pu-ñu q^he*
 LNK 3SG SBJ:PCP-having.white.colour.on.the.back IRR-IPFV-be LNK
 “*aþleþle rguskui*” *tu-kui-ti q^he tce uzo tso*
 CALLING:cow COW.name IPFV-GENR-say LNK LNK 3SG understand:FACT
 cti q^he ju-nu-ri cti
 be.AFF:FACT LNK IPFV-AUTO-come be.AFF:FACT
 ‘If (the cow) has white colour on the back (and given the name *rguskui*),
 one says *aþleþle rguskui* and she understands, and comes by herself.’
 (06-huchements1, 3)

Phonologically, these words contain very unusual sounds: they make use of consonants and vowel that are not found at all in the standard lexicon: the dental click /|/, the glottal stop in a cluster /?w/ or as a coda and breathy voice.

⁵ French has the more colorful term *huchement de berger* to designate this class of utterances.

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>wule</i>	<i>nurja</i> ‘cow’	chasing
<i>aþleþle</i>		calling
<i>buwo</i>	<i>mbala</i> ‘bull’	chasing
<i>abobo</i>		calling
<i>tsa?</i> <i>tsa?</i> , <i>tsotsa</i>	<i>kʰwuna</i> ‘dog’	calling
<i>soŋ</i>		chasing
<i>tsutṣutṣutṣutṣutṣu</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>ftsoꝝ</i> ‘female hybrid yak’	calling
<i>acʰocʰo</i>	<i>jla</i> ‘male hybrid yak’	calling
<i>tçʰyt</i>	<i>paꝝ</i> ‘pig’	chasing
<i>anininini, ?wan, ?wan ?wan</i>	pig (adult)	calling
<i>anininini </i>	pig (little)	calling
<i>alolo</i>	<i>qazo</i> ‘sheep’	calling
<i>titititi</i>	<i>tsʰyt</i> ‘goat’	calling
<i>kʰwçuu</i>	goat, sheep	chasing

11344 Only one of these words appears to have an identifiable etymology: *soŋ* ‘chasing sound for dogs’ is possibly related to Tibetan རྩྰ: *soŋ* ‘go’. However, there is a 11345 striking resemblance between some of the chasing/calling sounds in Japhug and 11346 Khroskyabs ([Lai 2017: 227](#)), as illustrated by Table 10.7. It is unlikely that these 11347 resemblances are due to common inheritance.

11349 10.2.3 Deonomatopoeic expressive nouns

11350 A certain number of bird names are based on onomatopoeia imitating their song. 11351 For instance, *qusput* ‘cuckoo’ (example 55, §22.2.1) and *tsuusot* ‘pheasant’ (60) are

Table 10.7: Calling/chasing sounds in Japhug and Khroskyabs

Japhug	Meaning	Khroskyabs	Meaning
<i>aþleþle</i>	calling a cow	<i>vlervlele</i>	calling a hybrid yak
<i>tsa? tsa?</i>	calling a dog	<i>tsâ</i>	calling a dog
<i>sɔŋ</i>	chasing a dog	<i>sɔŋ</i>	chasing a dog
<i>tsutṣutṣutṣutṣutṣu</i>	calling a fowl	<i>tsûtṣutṣu</i>	calling a fowl

11352 described as making a sound identical to their Japhug name.

11353 (60) *tsuþot pʰu nui tu-mbri tce, “tsuþot tsuþot tsuþot” ntsu*
 pheasant male DEM IPFV-make.sound LNK IDPH(X):cry always
 11354 *tu-ti ðu.*
 IPFV-say be:FACT

11355 ‘When the male pheasant sings, it says *tsuþot tsuþot tsuþot*.’ (24-kWmu,
 11356 110)

11357 In the case of *dudut* ‘turtle dove’, its calling sound is described as being slightly
 11358 different from its name, with various interpretations (61).⁶

11359 (61) *tce dudut ky-ti ci tu tce, tce “dudut dudut” ntsu*
 LNK turtle.dove OBJ:PCP-say INDEF exist LNK LNK onomatopoeia always
 11360 *tu-ti. tsuku kui “dudut cunghluy” tu-ti ðu ra*
 IPFV-say some ERG onomatopoeia mortar IPFV-say be:FACT pl
 11361 *tu-ti-nui ri, nui my-xsi ri, “dudu wu” kui-fse*
 IPFV-say-PL LNK DEM NEG-GENR:know LNK onomatopoeia SBJ:PCP-be.like
 11362 *tu-ti ðgryl.*
 IPFV-say be.usually.the.case:FACT

11363 ‘There is (a bird) called turtle-dove, it always makes *dudut dudut*. Some
 11364 people say that it makes *dudut cunghluy*, I don’t know (if it is true), (in any
 11365 case) it makes *dudu wu*.’ (22-CAGpGa, 26-28)

11366 The bird name *tacorcor* is based on the onomatopoeia describing its song (see
 11367 example 134, §21.4.2.2), but with the addition of a *ta-* prefix, which may or may
 11368 not be related to the action nominal *tu-* prefix (§16.4).

⁶ In Tshobdun, ‘pheasant’ and ‘turtle-dove’ are called *tsəþot* and *dudut*, respectively (Sun & Blagros 2019: 137). These words cannot be inherited from the common ancestor of Japhug and Tshobdun however, since Tshobdun -ot should correspond to either -xt or -ut.

10.3 Speech fillers

In Japhug speech fillers, rather than a central vowel, are used to mark pause during speech either due to hesitation, or to give the speaker more time to reflect on what he or she is about to say.

The cataphoric demonstrative *n̥ki*, used both as a pronoun (§6.9.2.2) and as a noun modifier (§9.1.2), is the most frequent speech filler (examples in this grammar include 24 in §12.4.3, 63 in §9.1.3.4 and 121 in §15.1.5.5). It can be combined with the determiner *n̥u* (§9.1.5.4) as *n̥kinuu* (6, §15.1.1.2) or with the indefinite *ci* (§9.1.4.1) as *n̥ki ci n̥u*.

The aforementioned anaphoric topic marker *içqʰa* (§9.1.5.2), which derives from the adverb *içqʰa* ‘just now’, also occurs as speech filler (example 217, §15.2.8.2), likewise frequently followed by the determiner *n̥u* (25, §15.1.2.2 and 205, §15.2.7).

- (62) *nunuu tce, pci ku-r̥zi cti tce, n̥ki n̥u, içqʰa n̥u,*
DEM LNK outside IPFV-stay be.AFF:FACT LNK FILLER DEM FILLER DEM
kʰa u-ŋgwu ju-yi m̥r-ŋgryl
house 3SG.POSS-in IPFV-come NEG-be.usually.the.case:FACT
‘That one (the wild cat), it stays outside, it does not come inside houses
(unlike the domestic cat).’ (21-IWLU, 6-7)

The interjection *ja* (§10.2.1) is used as speech filler by persons listening to traditional stories, as a sign that they are following the narrative of the storyteller. Traditional storytellers require their audience to respond in this way, as shown by (63).

- (63) “*ja*” *tr-ti ma tce mtáj-kʰuu.*
FILLER IMP-say LNK LNK NEG:SENS-be.possible
‘Say ‘ya’, otherwise (I) can’t (tell the story).’ (160720 kandZislama, 003)

10.4 Sentence final particles

Japhug has a rich system of sentence final particles, which combine with verbal morphology to express modality, evidentiality, interrogation and the attitude of the speaker.

Given the fact that the meaning of most sentence final particles is rather difficult to pinpoint with precision, the non-specific gloss SFP is used for all of them.

10.4.1 Particles used in commands

The particle *je* conveys a milder tone to orders expressed with Imperative (§21.4.2), Irrealis (§21.4.1) and Prohibitive (§21.4.3), as shown by (64) (see also 131 in §21.4.2.2 and §21.4.2.3 in §135).

- (64) *pʂk^hiже tce <guan> ma-kʂ-tuʂ-βze je!*
 wait LNK turn.off NEG-IMP-2-make[III] SFP
 'Wait, don't hang up (your phone).' (conversation, 2015-07-05)

It combines with first person Imperfective verb forms to express hortative meaning (§21.2.5) as in (65).

- (65) *azo c^huʂ-yi-a je ma my-p^han-a ny*
 1SG IPFV:DOWNSTREAM-come-1SG SFP LNK NEG:be.efficient:FACT-1SG ADD
my-ʂduy-a t^haŋ ny
 NEG-harm:FACT-1SG SFP SFP
 'Let me come along, even if I am of no use, I will not do any harm.'
 (several occurrences)

It is also used with 2→1 Imperfective forms to express commands with a first person object as in (66), since Imperative lacks 2→1 forms (§21.4.2).

- (66) *a-wi tc^horzi uʂ-ŋguʂ pjui-kuʂ-rku-a je*
 1SG.POSS-grandmother jar 3SG.POSS-in IPFV:DOWN-2→1-put.in-1SG SFP
 'Grandmother, put me in the jar, and...' (2005 Kunbzang, 346)

In addition, the particle *je* is often added to phatic expressions such as *tr-ʂstu* 'goodbye', *sʂrma* 'good night' and *kʂnʂβdi* 'take care' (§14.7.1) as in (67).

- (67) *kʂnʂβdi je a-mu!*
 take.care SFP 1SG.POSS-mother
 'Take care, mother!' (Gesar,54)

Other postverbal elements used with Modal categories include the noun *smulʂm* 'prayer' which occurs with the Irrealis (§21.8.3.2) and the softened command particle *wo* (originally an interjection) as in (68). This particle can be cliticized to the verb stem (§11.6.2).

- 11421 (68) *k^hu nuu bo nuu-βde wo, a-me nuu χtanv*
 tiger DEM ADVERS IMP-throw SFP 1SG.POSS-daughter DEM COMP
 11422 *a-ftsa^h uβry-yi ma*
 1SG.POSS-roof.leak RH.Q-come SFP
 11423 ‘My daughter, don’t worry about the tiger, (I am more worried) that my
 11424 (house) could have a roof leak.’ (khu 2005, 5)

11425 The *je* and *wo* particles are curiously similar to the Imperative and Hortative
 11426 suffixes -(j)e and -(w)o in the Kiranti language Khaling (Jacques et al. 2012: 1114–
 11427 1123), though it is extremely unlikely that this could reflect common inheritance,
 11428 and is rather a pure coincidence.⁷

11429 10.4.2 Particles used in polar questions

11430 In addition to the interrogative prefix *w-* (§21.7.4), and interrogative pronouns
 11431 (§6.5), questions can be marked by a series of several interrogative particles.

11432 The particle *ci* is the most common way of expressing a polar question, in
 11433 combination with a verb in assertive form as in (69) and (70). In this function, it
 11434 is equivalent to the prefix *w-* (§21.7.4).

- 11435 (69) *kuuki li pjuu-mnat-a ci?*
 DEM.PROX again IPFV-repeat-1SG QU
 11436 ‘Do I tell (the story) again?’ (150908 menglang-zh, 1)
- 11437 (70) *nx-zuiβ nuu-yi ci?*
 2SG.POSS-sleep SENS-come QU ?
 11438 ‘Are you feeling sleepy?’ (09-stoR, 65)

11439 It can be used to express an alternative between two possibilities (71), often
 11440 with an assertive verb form followed by the corresponding negative one (72).

- 11441 (71) *nuuzora smi c^hwi-tuu-nuu-βluu-nuu nyu ci, <dian>*
 2PL fire IPFV-2-AUTO-burn-PL be:FACT QU electricity
 11442 *c^huu-tuu-numbjuum-nuu nyu?*
 IPFV-2-get.warm-PL be:FACT
 11443 ‘Do you burn a fire, or do you get warm with (an) electric (radiator)?’
 11444 (conversation, 2013-12-13)

⁷ In any case, Proto-Rgyalrong *-o yields Japhug -u (§3.3.3).

- 11445 (72) *kuuki a-χpi ki nui-mpcyr ci*
 DEM.PROX 1SG.POSS-story DEM.PROX SENS-be.beautiful QU
 11446 *muúj-mpcyr?*
 NEG:SENS-be.beautiful
- 11447 ‘Is this story of mine beautiful or not?’ (140512 fushang he yaomo-zh, 190)

11448 Furthermore, *ci* can indicate a disjunction between more than two options. In
 11449 this function, it is repeated after each clause in the disjunction, except the last
 11450 one, as in (73) (see also 141, §25.6.4).

- 11451 (73) *χsyr k^hri u-ta_β tui-γ<nu>mdzu₁ ci, rŋual k^hri u-ta_β*
 gold seat 3SG.POSS-on 2-<AUTO>sit:FACT QU silver seat 3SG.POSS-on
 11452 *tui-γ<nu>mdzu₁ ci, (...) com k^hri u-ta_β tui-γ<nu>mdzu₁ ci,*
 2-<AUTO>sit:FACT QU iron seat 3SG.POSS-on 2-<AUTO>sit:FACT QU
 11453 *si k^hri u-ta_β tui-γ<nu>mdzu₁?*
 wood seat 3SG.POSS-on 2-<AUTO>sit:FACT
- 11454 ‘Will you sit on the golden seat, the silver seat, the iron seat or the
 11455 wooden seat?’ (2005 Kunbzang, 226-228)

11456 The apprehensive prefix *cu-* is likely to have been grammaticalized from this
 11457 particle (§21.7.1.3).

11458 The particle *kua* occurs in questions to oneself (74), rhetorical questions and
 11459 confirmation-seeking questions (79, §21.3.2.7). Unlike *ci*, it occurs together with
 11460 either an interrogative pronoun or in combination with an interrogative verb
 11461 form.⁸ It is particularly common with the Dubitative (§21.4.4).

- 11462 (74) *a-rcymbe-ŋga nuu ŋoteu nu-a<nui>ri kua?*
 1SG.POSS-old.jacket-wear DEM where AOR:WEST-<AUTO>go[II] QU
 11463 ‘Where did my beggar (wearer of an old jacket) of a husband vanish?’
 11464 (2005 Kunbzang, 231)

11465 It can be combined with the particles *ma* (§10.4.4) and *ye* (see below) as *kuma*
 11466 (75) and *kuye*.

- 11467 (75) *myzui tc^hi muu-puu-fcyr-tci kuma?*
 even.more what NEG-AOR-tell-1DU QU
 11468 ‘Which (trees) are there which we have not yet told (a story) about?’
 11469 (13-tApWpjR, 65)

⁸ Example (74) could be translated into French using the marker *dont* as ‘Mais où est donc passé mon mendiant (de mari)?’

10 Expressive words and sentence final particles

11470 Several particles mark a question inviting the addressee to confirm what the
 11471 speaker has said: *ye*, which even resembles an interjection in that it can be pre-
 11472 ced by a pause as in (76), *nétci* (77, 78) and *loβtci* (79).

- 11473 (76) *kuaʃdesqafsum-pa to-tsu*, *ye? woja, nuu to-tsu*
 43-year IFR-pass SFP INTERJ DEM IFR-pass
 11474 ‘(How many years have passed since 1969?), 43 years have passed, right?
 11475 Yes, that many years have passed.’ (12-BzaNsa, 15)

- 11476 (77) *hehe kua-lxy acyβ, kui-sat-a nuu-ŋu nétc*i*?*
 INTERJ SBJ:PCP-herd ANTHR 2→1-kill:FACT-1SG SENS-be SFP
 11477 ‘Shepherd Askyabs, you are preparing to kill me, right?’ (2003 Kunbzang,
 11478 337)

- 11479 (78) “*tʂʰa mbuz nuu-ŋu” to-ti-a ŋu nétc*i*?*
 tea spill.overt:FACT SENS-be IFR-say-1SG be:FACT SFP
 11480 ‘I said ‘The tea is abouyt to spill over’, didn’t I?’ (26-tAGe, 15)

- 11481 (79) *nyzo ny-tcuu tui-sla to-mtsʰyt loβtci?*
 2SG 2SG.POSS-son one-month IFR-full SFP
 11482 ‘Your son is now more than one month old, right? (conversation
 11483 2013-12-02)

11484 The particle *ramas* also invites the addressee to give a positive answer to
 11485 the speaker’s suggestion like aforementioned markers, but with an additional
 11486 overtone ‘How about ...?’ (80).

- 11487 (80) *tui-rdoβ tsa ryzi-j tce tú-wy-qur-nuu ramas*
 one-piece a.little stay:FACT-1PL LNK IPFV-INV-help-PL SFP
 11488 ‘How about only one of us staying (here) and helping them?’ (180503
 11489 xiyouji 12-zh, 78)

11490 It can be used to express supplication, as in (81) (see also the nearly identical
 11491 example 187, §8.3.3).

- 11492 (81) *a-rfit a-nmas zo nuu ty-tui-stu-nuu*
 1SG.POSS-offspring 1SG.POSS-husband EMPH DEM AOR-2-do.like-PL
 11493 *cti tce, azo u-tsʰyt tsa*
 be.AFF:FACT LNK 1SG 3SG.POSS-proper.measure a.little

11494 *nur-kui-nyc̥tsabli-a-nur r̥abmas ma*

IPFV-2→1-torture-1SG-PL SFP SFP

11495 ‘Rkangrang, you dealt with my son in the same way as you did with my

11496 husband (have him killed), don’t go over the top in your torturing of me
11497 (torture me with proper measure), please?’ (Norbzang 2012, 218-219)

11498 The second syllable *-mas* in *r̥abmas* probably originates from the negative cop-
11499 ula *mas* ‘not be’ (§13.1.2, §22.5.1.1) as postverbal negation (§22.5.3; perhaps from
11500 an interrogative form *ú-mas* ‘is it not ...’). The source of the first syllable *r̥ab-* is
11501 less clear, but may be from the auxiliary *ra* ‘be needed’ (§24.5.3.1), the original
11502 meaning being ‘is it not the case that *X* have/has to ...’

11503 10.4.3 Hearsay particle

11504 The particle *k^hi* expresses hearsay, and often occurs when the original narrator is
11505 left unidentified by the speaker (82).

- 11506 (82) *wi-jasmu ra to-tc̥yt k^hi, wo, tcend̥re kui-yyrbaš nur*
11507 3SG.POSS-thumb PL IFR-take.out SFP INTERJ LNK SBJ:PCP-hunt DEM
kui ky-niuc̥ymuyduu mui-pjy-cha k^hi.
11508 ERG INF-shoot NEG-IFR-can SFP

11509 ‘(They say that the monkey mother) stuck out her thumb (as a sign
11510 meaning ‘now you can shoot’),⁹ but the hunter could not shoot.’ (19-GzW,
75-76)

11511 Sentences marked with this particle (83a) can be reformulated using a reported
11512 speech clause with the complement-taking noun *wi-fc̥yt* ‘story’ (§24.6.3.2), as in
11513 (83b).

- 11514 (83) a. *izo ji-sytc̥ha k^hu pjy-tu k^hi*
11515 1PL 1PL.POSS-place tiger IFR.IPFV-exist SFP
b. *izo ji-sytc̥ha k^hu pjy-tu wi-fc̥yt tu.*
11516 1PL 1PL.POSS-place tiger IFR.IPFV-exist 3SG.POSS-story exist:FACT
‘People say that there used to be tigers in our place.’ (elicited)

11517 The particle *k^hi* can be treated as an afterthought, and undergo right-dislocation
11518 (§22.1.3) together with an auxiliary verb as in (84), or with a full pause and the

⁹ For the context of this example, see (205) (§24.6.3.2).

beginning of a new sentence as in (85), when the speaker realizes as s/he is speaking that s/he only knows this information from second-hand sources, as explicitly stated in (85).

- (84) *kui-dyn tsa tuturca ku-ryzi-nuu pui-ηu, pui-ηu k^{hi}*
 SBJ:PCP-be.many a.little together IPFV-stay-PL SENS-be SENS-be SFP
 ‘They stay together in great number (on remote cliffs), it is said’
 (20-ldWGi, 12)
- (85) *ki kui-fse kui-yrymbumbri zo kui-fse*
 DEM.PROX SBJ:PCP-be.like SBJ:PCP-spread.in.patches EMPH SBJ:PCP-be.like
tu-łor pui-ηu. pui-ηu k^{hi} ma, aj mu-pui-mto-t-a
 IPFV-come.out SENS-be SENS-be SFP LNK 1SG NEG-AOR-see-PST:TR-1SG
 ‘(The mushroom *Hericium erinaceus*) grows in patches (not spread evenly). So they say, I have not seen it.’ (23-mbrAZim, 184)

In the immense majority of examples, *k^{hi}* occurs with verbs in the Inferential (82) or Sensory (84 and 85) (§21.5.2, §21.3.2). However, this is not a morphosyntactic constraint, and *k^{hi}* can in principle be combined with verbs in other TAME categories, such as the Factual (§21.3.1) in (86) (*c^{ha}* rather than the Sensory *pui-c^{ha}*), confirming Tournadre and LaPolla’s (2014) insight of the necessity of distinguishing *source* and *access* to information when describing evidential systems.

- (86) *pyyk^huu nuu kui qapi ky-sat wuma zo c^{ha} k^{hi}.*
 owl DEM ERG mole INF-kill really EMPH can:FACT SFP
 ‘The owl is very good at killing moles, it is said.’ (28-qapar, 205)

The archaic inferential *k^huu-ti* ‘s/he said’ found in a handful of stories may result from the fusion of this particle with the prefixless stem of the verb *ti* ‘say’ (§21.5.4).

In addition, the noun *k^hic^ho* ‘rumour, hearsay’ is a delocutive noun derived from the particle *k^{hi}* and the comitative *c^ho* (§8.2.5). The etymological relationship between *k^hic^ho* and *k^{hi}* is made clear by examples like (87), where *k^hic^ho* is glossed as ‘saying *pjx-ηu k^{hi}*’, i.e. using the hearsay particle and the Inferential to insist on the fact that one has only heard this information from second-hand sources.

- (87) *tceri ui-pui-kui-mto tci pjx-me wo ma, k^hic^ho*
 LNK 3SG.POSS-AOR-SBJ:PCP-see also IFR.IPFV-not.exist SFP SFP rumour
ma nuu ma ui-kui-suiz mane. “pjx-ηu k^{hi},
 LNK DEM apart.from 3SG.POSS-SBJ:PCP-know not.exist:SENS IFR.IPFV-be SFP

11547 ... *pjy-ŋu kʰi” nura tu-ti-nu ma nu ma*
 IFR.IPFV-be SFP DEM:PL IPFV-say-PL LNK DEM apart.from
 11548 *wi-kui-ti puu-me.*
 3SG.POSS-SBJ:PCP-say PST.IPFV-not.exist
 11549 ‘Nobody has ever seen (one-legged demons), there are only rumour, apart
 from that nobody knows about them. People used to say ‘it was
 11550 (allegedly) ...’, but apart from that nobody said anything.’ (140510 rkoNJAl,
 11551 87-89)

11553 The hearsay particle can be followed by other sentence final particles (such as
 11554 *wo*, §11.6.2), but there are no examples of it being preceded by other particles.

10.4.4 Particles expressing epistemic modality

11555 In addition to verbal morphology (§21.4, §21.7), epistemic modality is expressed in
 11556 Japhug by sentence final elements, including the grammaticalized noun *wi-mdor*
 11558 ‘colour’ (§21.8.3.1) and the particles *tʰaj*, *rca* and *ma*.

11559 The particle *tʰaj* is borrowed from Amdo Tibetan, where it appears in the com-
 11560 plex ending *na.tʰaj.gi* expressing possibility (translated asかもしない
 11561 ‘maybe ...’ in Ebihara 2019: 306–307).

11562 Semantically *tʰaj* is close to the possible modality prefix (§21.7.2), as illustrated
 11563 by (88a) and (88b) (see also 15b and 15a in §11.4). It is often followed by the
 11564 exclamative *nŋ* (allomorph of *nu*, §10.4.5).

- 11565 (88) a. *qapri kuu yuŋ-mtsuy-a tʰaj nŋ!*
 snake ERG INV-bite:FACT-1SG SFP SFP
 11566 b. *qapri kuu uumý-wy-mtsuy-a*
 snake ERG PROB-INV-bite:FACT-1SG
 11567 ‘The snake will perhaps bite me.’ (elicited)

11568 In the overwhelming majority of cases, *tʰaj* follows a verb in the Factual Non-
 11569 Past (§21.3.1) to indicate either a probable future event (88a and 90; see also 48,
 11570 §21.3.1.2) or a general statement of uncertain truth value (89).

- 11571 (89) *si wi-mat ra tu-ndze juŋ-cti. xcaj nu*
 tree 3SG.POSS-fruit PL IPFV-eat[III] SENS-be.AFF grass DEM
 11572 *my-ndze tʰaj nŋ. nxj wi-tuú-suŋ?*
 NEG-eat[III]:FACT SFP SFP 2SG QU-2-know:FACT
 11573 ‘(The monkey) eats fruits. It probably does not eat grass. Do you know
 11574 (whether it does or not)?’ (19-GzW,6- 8)

10 Expressive words and sentence final particles

It can also express uncertain result in the apodosis of conditional constructions (with a protasis in the Irrealis (§21.4.1.5, §25.2.1), as in (90)¹⁰ (see also 129, §21.4.1.7).

- (90) *nui a-tr-fse tce tcet^ha, t^hndzi nui kui t^ha “izora
 DEM IRR-PFV-be.like LNK later demon DEM ERG later 1PL
 u-me pui-ŋu” a-nui-susym tce, mý-wy-ndza-j t^haj
 3sg.POSS-daughter SENS-be IRR-PFV-think[III] LNK NEG-INV-eat-1PL SFP
 ‘(If we do it) this way, the ogre_i will think that we are his_i daughters and
 maybe he_i will not eat us. (160705 poucet5-v2, 32-33)*

It can also express a possibly undesirable result as in (91) (§25.5.6).

- (91) *tcet^ha tu-ce-a ma k^hapa ri ku-nŋ̥kuŋke-a tcet^ha, nykinu,
 later IPFV:UP-go-1SG LNK yard LOC PRS-DISTR:walk-1SG later FILLER
 <zayin> tu t^haj
 noise exist:FACT SFP
 ‘I will go up (to my house) because (now) I am walking in the yard, there
 could be noise (so that we won’t hear each other on the phone).’
 (conversation 2016-02-21)*

Other TAME categories are also compatible with *t^haj*, including the Past Imperfective (92) and the Aorist (examples 15b in §11.4 and 13 in §22.1.1.2).

- (92) *tce nuŋja duuxpa ma (...) u-tuu-mu nui
 LNK cow poor.of LNK 3SG.POSS-NMLZ:DEG-fear DEM
 puu-saŋas zo t^haj nuu-susam-a ŋu.
 PAST.IPFV-be.extremely EMPH SFP IPFV-think[III] be:FACT
 ‘I am thinking that the poor cow, she probably was extremely afraid (after
 escaping from a flood and losing a horn in the process).’ (160715 nWNa,
 13-14)*

The particle *rca*, which is probably related to the secutive relator noun *u-rca* ‘following’ (§8.3.2) and the unexpected focus marker *rcanuu* (§26.1.1.4), occurs with verbs in the Sensory or Inferential (93, 94), expressing high probability ‘presumably, probably’.

¹⁰ In addition, (90) is an interesting example of hybrid indirect speech (§24.2.5.2), with the verb form *pui-ŋu* reflecting the point of view of the ogre, while the 1PL pronoun *izora* and the 3SG possessive *u-me* ‘his daughters’ represent that of the children.

- 11599 (93) *jinde kyntc^hu-sŋi ky-mto pui-me tce, pjy-si rca*
 nowadays several-day OBJ:PCP-see PST.IPFV-not.exist LNK IFR-die SFP
 11600 '(We) haven't seen him for several days, he probably died.' (150827
 11601 mengjiangnv-zh,157)

- 11602 (94) *tce kuicuŋgu tce, nyki, tui-tuipu rŋri yuu nuu-kha*
 LNK former.times LNK FILLER one-household each GEN 3PL.POSS-house
 11603 *nuitcu k^hyβya pjy-tu rca.*
 DEM:LOC hand.mill IFR.IPFV-exist SFP
 11604 'In former times, there used to be handmills in every house, presumably
 11605 (now they have disappeared).' (160705 khABGa, 23)

11606 High degree of certainty can be indicated by *ko*, which can be translated as
 11607 'indeed, certainly' (95, 96).

- 11608 (95) *mŋym my-mŋym my-xsi ri, kú-wy-rtoŋ ndyre*
 hurt:FACT NEG:hurt:FACT NEG:GENR:know LNK IPFV-INV-look LNK
 11609 *muáj-pe ko.*
 NEG:SENS-be.good SFP
 11610 'I don't know whether (leprosy) hurts or not, but in any case it does not
 11611 look good indeed.' (25-khArWm, 60-61)

- 11612 (96) *wo, nyki, pui-tui-cqraŋ ko, muáj-tui-naxtcuy,*
 INTERJ filler SENS-2-be.intelligent SFP NEG:SENS-2-be.identical
 11613 *ny-wa nuu muáj-tui-ntc^huy ko.*
 2SG.POSS-father DEM NEG:SENS-2-soil SFP
 11614 'You are really intelligent, you are not a common man, you are your
 11615 father's son indeed.' (Norbzang 2012, 140)

11616 Low degree of certainty on the other hand can be marked by *ma* and *matči*.
 11617 They are particularly common with the defective verb *my-xsi* 'it is not known'
 11618 (§14.3.4). Their scope is on the complement clause(s) of this verb as in (97) (see
 11619 also 157, §21.4.4).

- 11620 (97) *ky-mto a-pui-kui-c^ha tce nuunuu wuma zo pe*
 INF-see IRR-IPFV-GENR:S/O-can LNK DEM really EMPH be.good:FACT
 11621 *tu-ti-nuu pui-ŋgryl tceri yu maŋ*
 IPFV-say-PL SENS-be.usually.the.case LNK be:FACT not.be:FACT

- 11622 *my-xsi* *matci.*
 NEG-GENR:know SFP
- 11623 ‘People say that if you succeed in finding it, it is very good (against
 11624 poison), but I don’t know if it is true or not.’ (22-kuwu, 45-46)
- 11625 Additionally, *ma* is often found with verbs in the Probabilative (§21.7.2, §21.7.2.1)
 11626 or the Rhetorical Interrogative (§21.7.3) prefixes, as in (98) and (99).
- 11627 (98) *pui-mbri* *uamyr-kui-ŋu-ci* *ma.*
 SENS-make.noise PROB-PEG-be-PEG SFP
- 11628 ‘It looks like (my phone) is ringing.’ (160630 abao,-zh, 98)
- 11629 (99) *li* *uifry-pui-jmut-a* *ma.*
 again RH.Q-IPFV-forget-1SG SFP
- 11630 ‘I might forget again (some details of the story that I am about to tell
 11631 again).’ (160704 poucet4-v2, 1)
- 11632 The particle *kuma* results from the fusion of this dubitative *ma* with the inter-
 11633 rogative *kui* (§10.4.2).
- 11634 It is possible that these particles originate from the causal linkers *ma* and *matci*
 11635 ‘because’ (§25.5.2), and that their use as dubitative particles arose from an elided
 11636 causal clause (‘I don’t know whether it is true or not because...’) or justification
 11637 clause (§25.5.5) (‘It looks like ... since’).
- 11638 **10.4.5 Particles expressing speaker attitude**
- 11639 The particles described in this section have meanings that are not easily classifi-
 11640 able into any of the previous categories, but some of which contribute to express
 11641 modality.
- 11642 The particle *nui*, sometimes realized as *ny*, occurs in exclamative sentences, in
 11643 particular with degree nominals (§26.1.2.1) and exclamative nouns (§5.1.2.8).
- 11644 (100) *nui* *u-t^hob* *nura* *nui-k^hi* *nui ye, nui-tui-scit*
 DEM 3SG.POSS-ground DEM:PL 3PL.POSS-luck SFP SFP 3PL.POSS-2-be.happy
 nui!
 SFP
- 11645 ‘The people on earth (on the ground), how lucky they are, right? How
 11646 happy there are! (150828 donglang, 26)

¹¹⁶⁴⁸ The particle *ja* is used to express regret that the action in the clause has taken
¹¹⁶⁴⁹ place (101).

- ¹¹⁶⁵⁰ (101) *p̥jkʰu hanuni ci nu ma-tx-tu-fse p̥uu-ra ja,*
 still a.little INDEF DEM NEG-IMP-2-be.like PST.IPFV-be.needed SFP
¹¹⁶⁵¹ *hanuni ci muu-p̥uu-mda ja ri*
 a.little INDEF NEG-PST.IPFV-be.the.time SFP LNK
¹¹⁶⁵² ‘What a shame, if you could just have (waited) a little bit (before) doing
¹¹⁶⁵³ that, the time was not yet ready.’ (2014-kWLAG, 635-636)

¹¹⁶⁵⁴ The function of *lo* / *loβ* is more difficult to pinpoint. It can serve as a marker of
¹¹⁶⁵⁵ low degree of certainty (102) and as a rhetorical interrogative (in particular the
¹¹⁶⁵⁶ form *loβtci*, §10.4.2)

- ¹¹⁶⁵⁷ (102) *uu-mylyjaε n̥uu kuitṣy-ldza jamar y̥yzu loβ. ma koŋla*
 3SG.POSS-limb DEM six-long.object about exist:SENS SFP LNK really
¹¹⁶⁵⁸ *muu-kr-rtob-a ri, uu-mylyjaε nuura nuu-dyn*
 NEG-AOR-look-1SG LNK 3SG.POSS-limb DEM:PL SENS-be.many
¹¹⁶⁵⁹ ‘It has about six legs, (I think...) I did not have a good look, but in any
¹¹⁶⁶⁰ case it has a lot of legs.’ (21-mdzadi, 7-9)

¹¹⁶⁶¹ It is also found in enumerations (§9.2.2.1) on each of the elements (nouns or
¹¹⁶⁶² clauses) in the list (103) with a continuative intonation, followed a pause.

- ¹¹⁶⁶³ (103) *uu-pi ni yuu fsapar loβ, tuujpu loβ,*
 3SG.POSS-elder.sibling DU GEN cattle SFP flour.based.food SFP
¹¹⁶⁶⁴ *uu-gryl kuu-me zo ta-rku-nuu*
 3SG.POSS-order SBJ:PCP-not.exist EMPH aor:3→3'-put.in-PL
¹¹⁶⁶⁵ (Their parents) gave her two elder sisters cattle and food in great
¹¹⁶⁶⁶ quantity.’ (2005 Kunbzang, 151)

11667 11 The structure of the Japhug verb

11668 11.1 Introduction

11669 Japhug is a verbocentric language: nearly half of this grammar (eleven chapters)
11670 is devoted to verbal morphology.

11671 This chapter first presents an overview of the structure of the verb in Japhug,
11672 including the prefixal ([§11.2](#)) and suffixal ([§11.3](#), [§11.4](#)) chains. The final sections
11673 discusses the templatic structure of Japhug verbal morphology ([§11.5](#)) and word
11674 boundaries ([§11.6](#)).

11675 11.2 The prefixal chain

11676 Like other Gyalrongic languages, Japhug has a strongly prefixing verbal mor-
11677 phology. Inflectional and derivational prefixes constitute two different groups
11678 with almost no overlap, the latter closer to the verb root, and the former further
11679 away from it. For this reason, these two groups are referred to as ‘outer’ and
11680 ‘inner’ prefixes.¹

11681 Not all prefixes are tautosyllabic; some only comprise a consonant (for in-
11682 stance some allomorphs of the translocative such as *c-*), and due to vowel contrac-
11683 tion rules ([§12.3](#), [§14.3.2.7](#)), some combinations of prefixes merge into a single syl-
11684 lable. The transcription used in this grammar however undoes the effect of vowel
11685 merger to bring clarity to the morphological analysis, and avoid a proliferation
11686 of portmanteau affixes.

11687 11.2.1 Outer prefixes

11688 The template of outer prefixes in finite verb forms is summarized in Table [11.1](#). It
11689 contains six slots, as compared to the four slots in the suffixal chain ([§11.3](#)). This
11690 table does not represent inner prefixes, which are contained within the ‘extended
11691 verb stem’, and discussed below in [§11.2.2](#).

¹ Previous accounts of the Japhug verbal template such as [Jacques \(2013b\)](#) do not clearly distin-
guish 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→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 *wþr̥-*, the Polar Interrogative *w-*, the Probabilative *umr̥-* and the Proximative Aspect *jw-* 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 *çu-* and cislocative *yú-* 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 *çu-* (§21.7.1) also appears in slot -3.

Slot -2 includes indexation prefixes, including second person *tú-* (§14.2.1.2), the *ta-* 1→2 and *kú-* 2→1 portmanteau prefixes (§14.3.2.3) and the generic S/O prefix *kú-* (§14.3.2.5). The prefixal element *k(u)-* of the peg circumfix (§11.4) is also located in this slot.

Slot -1 comprises the inverse *-wy* (§14.3.2.7) and the Progressive *asu-* (§21.6.1.1) prefixes. These two prefixes only appear on transitive verbs, since they are incompatible with morphologically intransitive verbs. This slot is the only one that can be filled by more than one prefix simultaneously, as shown by forms such as *pjy-k-yr-wy-z-nxjo-ci* ‘he was waiting for him’ in (2) where the inverse *-wy* (see §14.3.2.2 and §14.3.3.3 on the function of the inverse prefix in this example) is infixated within the *-yz-* allomorph of the Progressive (§12.3, §21.6.1.1).

- (2) *tce pjy-yi tce qala kuu*

LNK IFR:DOWN-come LNK rabbit ERG

pjy⁻³-k⁻²-yr⁻¹<wy>z⁻¹-nxjo-ci tce
IFR.IPFV⁻³-PEG⁻²--<INV>PROG⁻¹-wait-PEGLNK

‘(The snow leopard)_i came down. The rabbit was waiting for him_i (there).’
(140427 qala cho kWrtsAG, 64)

In addition, since the autive *nua-* can also be infixated within the progressive (§19.1.2, §11.2.2), slot -1 actually lies at the border between the inner and outer prefixal domains.

All of these slots can be filled, as in example (3). Although there are co-occurrence restrictions across slots (for instance, some prefixes in -6 such as the Rhetorical Interrogative *uþry-* are incompatible with the negative prefixes in -5; additional examples are presented in §11.5), it is possible to build verb forms with nearly any subset of the six prefixal slots of the outer domain.

- (3) *qapar kuu nyzo a⁻⁶-my⁻⁵-yu⁻⁴-ty⁻³-tu⁻²-wy⁻¹-ndza*

dhole ERG 2SG IRR⁻⁶-NEG⁻⁵-CISL⁻⁴-PFV⁻³-2⁻²-INV⁻¹-eat

‘(Let us hope that) the dhole will not come to eat you.’ (elicited)

The Sensory Evidential existential verbs *yrrzu* ‘exist’ and *maje* ‘not exist’ are only compatible with the affixes of slot -2 (the second person and generic *kuu-*), but in this case these appear as infixes rather than prefixes (§14.2.2). The defective verb *krtupa* ‘tell’ cannot take any prefix (§14.3.4).

Non-finite verb forms follow a similar but slightly different template. As shown in Table 16.1 (§16.1), participles lack the -2 slot, have strong restrictions on the other slots: in -6 only the prospective *ju-* is possible), in -5 only *my-* or *mu-*, in -3 only type A and B preverbs, and in rare cases in -1 only the progressive. Participial prefixes occur between slot -1 and the extended verb stem, and in addition some participle forms take a possessive prefix before slot -6.

11751 **11.2.2 Inner prefixes**

11752 Unlike outer prefixes, inner prefixes do not follow a rigid template. The sigmatic
 11753 causative, in particular, can occur recursively (§17.2.7) and its relative position vis-
 11754 a-vis the facilitative (§18.9.2) and reciprocal (§18.4.1) derivations is determined by
 11755 semantic scope (§17.2.8).

11756 Figure 11.1 represents the possible ways in which most inner prefixes (exclud-
 11757 ing the autive, the denominal prefixes, the human antipassive, the distributed ac-
 11758 tion derivation and the subject-oriented facilitative) can be combined with each
 11759 other, excluding cases of lexicalized derivations.² Examples of attested complex
 11760 forms can be found in the following sections:

- 11761 • Antipassive *rr-* (APASS): §18.6.9
- 11762 • Applicative *nua(y)-* (APPL): §17.4.4
- 11763 • Sigmatic causative *su(y)-* (CAUS): §17.2.8
- 11764 • Velar causative *yrr-* (CAUS2): §17.3.4
- 11765 • Facilitative *nuyuu-* (FACIL): §18.9.2
- 11766 • Passive *a-* (PASS): §18.1.6
- 11767 • Proprietive *sy-* (PROP): §18.8.6
- 11768 • Reflexive *zyrr-* (REFL): §18.3.4, §18.3.6, §18.4.1.2
- 11769 • Tropative *nr(y)-* (TROP): §17.5.5

11770 Combinations of more than two inner prefixes are very rare, and mainly in-
 11771 volve lexicalized derivations. Examples include *asymumuts^humts^hym* ‘inform each
 11772 other’(from *mts^hym* ‘hear’) (4), which combines an *amuu*-reciprocal, a sigmatic
 11773 causative, and a reduplicated reciprocal derivations (see further discussion in
 11774 §18.4.2.5; in 4 and following examples, inner prefixes are colored in red and outer
 11775 prefixes in blue).

- 11776 (4) *yurza kurcat nua z-nuu-a-su-ymuu-mts^hua~mts^hym-nuu jnu-ηu,*
 hundred eight DEM TRAL-AOR-RECIP-CAUS-RECIP-hear-PL SENS-be
 11777 ‘(All) one hundred and eight (boys) went and informed each other.’ (2005
 11778 Norbzang, 90)

² Lexicalized derivations do not necessarily follow these ordering rules, see §17.2.3 and §19.1.6.

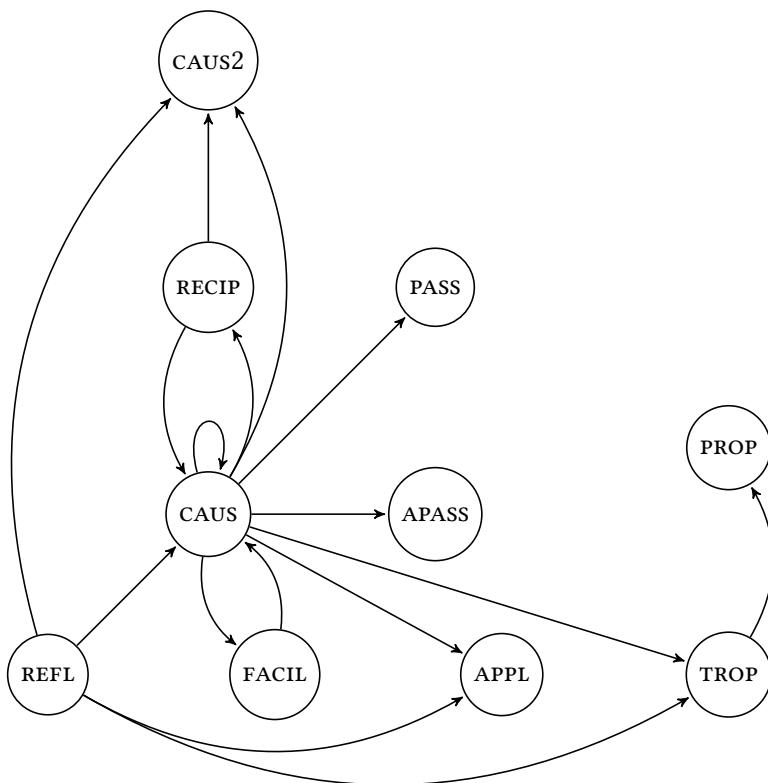


Figure 11.1: The possible linear orders of inner prefixes

11779 A common case of non-lexicalized triple derivation is found when a doubly
11780 derived verb additionally takes the highly productive autive prefix, as in (5).

- 11781 (5) *to-nuu-zyy-cuu-fka-nuu zo jiu-ηu.*
 IFR-AUTO-REFL-CAUS-be.full-PL EMPH SENS-be
11782 ‘They ate to their full.’ (huli yu shanying-zh, 28)

11783 The position of the autive prefix is very unusual (§19.1.2), and not easily rep-
11784 resentable in Figure 11.1. In non-contracting verb forms (§12.3), it occurs on the
11785 border between the outer and inner prefixal domain, following the inverse (as
11786 shown by example 6, with all six outer prefixal positions filled) and preceding
11787 the reflexive *zyy-* (example 5 above, see also §18.3.5).

11 The structure of the Japhug verb

- 11788 (6) *w-nu-ra* *ny, a-my-yu-nu-tú-wy-nu-mbi*
QU-SENS-be.needed add IRR-NEG-CISL-PFV-2-INV-AUTO-give
11789 ‘If he_i needs it_j, then he_i does not have to come and give it_j to you (if he
11790 does not want to).’ (elicited)

11791 In the case of contracting verbs (§12.3), the autative is however inserted after the
11792 *a*-element (§19.1.2), even in verbs such as *atyr* ‘fall’ (7) where it is not analyzable
11793 as a prefix synchronically – the autative is thus infixated within the verb stem.

- 11794 (7) *wzo pjui-γ<nu>tjr mx-cʰa.*
3SG IPFV-<AUTO>fall NEG-can:FACT
11795 ‘It cannot fall (detach) on its own (as its sticks on the clothes).’
11796 (18-qromJoR, 183)

11797 In addition, the autative is infixated within the progressive *asu-* (§19.1.2, §14.3.2.7,
11798 §21.6.1.1), stranded between the outer and inner domain, as shown by (8). The autative
11799 is also infixated when used with the Sensory existential verbs (§14.2.2, §19.1.2).

- 11800 (8) *ca bja zo ku-o<nu>sui-ndza-j*
meat completely EMPH PRS-PROG<AUTO>-eat-1PL
11801 ‘We are eating only meat.’ (2003 kandZislama, 132)

11802 While most of the prefixes in the inner domain follow a layered structure, the
11803 position of the autative, which is determined by phonology and morphology rather
11804 than semantics, is clearly templatic (Bickel & Nichols 2007: 218, §11.5).

11.2.3 Stress

11805 Unlike most Gyalrong languages (J. T.-S. Sun 2005, Y. Lin 2012, Gong 2018: 69–
11806 81), Japhug lacks tonal alternations, and stress retraction is very rare. Stress is
11807 located by default on the last syllable of the verb stem (all suffixes from slots +1
11808 to +4, are unstressed, §11.3), and stress retraction only occurs with three prefixes:
11809 the inverse *-wy* (slot -1, §14.3.2.7), the negative sensory *múj-* (slot -5, §13.1.1) and
11810 the interrogative *wu-* (slot -6, §21.7.4.1).

11.2.4 Phonotactic constraints

11811 There are very strong phonotactic constraints on prefixes in Japhug. Of the fifty
11812 consonant phonemes that are contrastive in onset position (§3.2.1), only ten are
11813 attested in inner prefixes (§11.2.2): the nasal /m/ and /n/ (but not /ŋ/ and /p/),

the glides /j/ and /w/, the dental and alveolo-patalal fricatives (/s/, /z/, /ç/ and /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→3' 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

11 The structure of the Japhug verb

11845 second constraint, in 3↔3 and 2↔3 configurations, it is not possible to index the
11846 number of both arguments. As shown in §14.3.2.6, these constraints are morpho-
11847 logical and cannot be accounted for by purely phonological rules.

11848 Slot +4 is restricted to the suffixal element *-ci* of the peg circumfix, which al-
11849 ways occur in combination with the prefixal element *k(u)-* in slot -2, and can be
11850 elided (§11.4).

11851 When no stress-bearing prefix is present (§11.2.3), the stress invariably falls on
11852 the last syllable of the verb stem. The prefixal slots +2 to +4 are always unstressed,
11853 and their vowel can become unvoiced (§3.7).

11854 Combinations of 1DU/1PL *-t̪i/-j* (slot +2) with third or second dual or plural
11855 *-ndži/-nuu* (slot +3) suffixes are prohibited (§14.3.2.6): for instance, †*puu-mto-t̪i-nuu*
11856 (AOR-see-1DU-PL, intended meaning: ‘The two of us saw them’) is categorically
11857 rejected. The only possible form is *puu-mto-t̪i* (AOR-see-1DU), with neutralization
11858 of the number of the object.

11859 The only verb forms where slots +1, +2 and +3 are filled are the Aorist or
11860 Inferential 1SG→3DU/PL, as in (9). This is the verb form with the highest suffix-
11861 to-prefix ration (3/1).

- 11862 (9) *puu-mto-t⁺¹-a⁺²-ndži⁺³*
AOR-see-PST:TR⁺¹-1SG⁺²-DU⁺³

11863 ‘I saw the two of them.’ (elicited)

11864 The +4 slot is generally empty, except in two cases: the Inferential of contract-
11865 ing (intransitive) verbs, as in (10), and in combination with the *umr-* and *uβrr-*
11866 modal prefixes (§11.4). In the latter case, it is potentially compatible with trans-
11867 sitive verbs in the Aorist, and verb forms such as (11) with all four suffixal slots
11868 filled are acceptable, though no example is found in the corpus.

- 11869 (10) *to-k-yluylt-ndži⁺³-ci⁺⁴*
IFR-PEG-fight-DU⁺³-PEG⁺⁴

11870 ‘The two of them fought.’ (140428 yonggan de xiaocaifeng-zh, 193)

11871 The maximal suffixal chain as in (11) can only be built by integrating the circum-
11872 fix *kuu-...-ci* and the modal *umr-* prefix, so that the prefixal chain has at least three
11873 elements (*umr-puu-kuu-*) constituting four syllables, as compared to the suffixal
11874 chain which contains four elements (*-t-a-ndži-ci*) and three syllables (4/3 suffix-
11875 to-prefix ratio).

- 11876 (11) *umyr-pur-kui-mto-t⁺¹-a⁺²-ndzi⁺³-ci⁺⁴*
 PROB-AOR-PEG-see-PST:TR⁺¹-1SG⁺²-DU⁺³-PEG⁺⁴

11877 ‘It looks like I have seen the two of them.’ (elicited)

11878 Stem alternation (§12.2) involves in some cases suffixal elements such as *-t* 11879 in stem II (§12.2.1; see also §12.2.3) and *-m* in stem III ((§12.2.2) which are not 11880 considered as part of this suffixal template. However, even if one were to analyze 11881 those elements as separate suffixes, they would occupy slot +1: the *-t* Past Tense 11882 transitive suffix and stem III are mutually incompatible, and in any case *-t* can 11883 only surface if the preceding verb stem has an open syllable. Moreover, evidence 11884 from bipartite verbs (§11.6.3), in particular example (35) suggests that stem III is 11885 not suffixal.

11886 Derivational suffixes are very rare in Japhug, and only found in a handful of 11887 lexicalized examples such as the *-t* applicative (§19.7.2, §19.7.3). Since applicative 11888 suffix generates a closed syllable stem (for instance *yut* ‘bring’ from *yi* ‘come’), 11889 this suffix and the transitive Past tense *-t* suffix are mutually incompatible, and 11890 no verb form has more than four suffixes, even counting frozen morphology.

11891 All of the suffixes presented in Table 11.2 occur in finite verb forms. Non-finite 11892 verbs in Japhug cannot take any suffix (§16.1).

11893 Japhug clearly is a strongly prefixing language: it is possible to reach seven to 11894 even potentially nine prefixes in a single verb form by combining the six slots of 11895 the outer prefixal domain (§11.2) with one to three prefixes of the inner domain 11896 (see for instance 6), while four suffixes is the upper limit for the suffixal domain.

11.4 The peg circumfix

11.4.1 Morphology

11897 The peg circumfix *kui-...-ci* comprises a prefixal element *k(u)-* inserted in slot -2 11898 of the outer domain (§11.2.1), and a suffixal element *-ci*, which appears last in the 11899 suffixed chain, after all indexation suffixes, as shown by (12).

- 11900 (12) *ndzi-yi ra, nuni mui-jy⁺-k-xtuy-nu⁺-ci*
 3DU.POSS-relative PL DEM:DU NEG-IFR-PEG-meet-PL-PEG

11901 ‘Their relatives did not meet them (again).’ (2003 zrantCWtWrme, 78)

11.4.2 Optionality of the suffixal element

The -ci element of the circumfix is not always present, and thus in some cases only the peg prefix *k-* occurs.³ Example (13) with tail-head linkage (§25.1.7) for instance shows that the Inferential of *atuy* ‘meet’ can be either *jy-k-ytuy-ci* (the most common form) or *jy-k-ytuy* without the -ci, without change of meaning. In the whole corpus, out of 40 examples of *atuy* ‘meet’ in the Inferential, nine lack the -ci suffix.

- (13) *tcendi tcendi tce mts^hu ci jy-k-ytuy-ci. mts^hu*
 west west LOC lake INDEF IFR-PEG-meet-PEG lake
kui-pui~pab ci jy-k-ytuy-ci. tcendyre mts^hu
 SBJ:PCP-EMPH~be.black INDEF IFR-PEG-meet-PEG LNK lake
kui-pui~pab ci jy-k-ytuy tce tce,
 SBJ:PCP-EMPH~be.black INDEF IFR-PEG-meet LNK LNK
 ‘In the west, he found a lake, he found a lake that was very black. He
 found a lake that was very black, and...’ (28-smAnmi 92-94)

Forms with the simple prefical peg *k-* without -ci are however never found in utterance-final contexts: they are always followed by a linker such as *tce* (§25.1.6), as in (13) above, where the two instances of *jy-k-ytuy-ci* have utterance final intonation and are followed by a pause, while *jy-k-ytuy* starts a new utterance group.

11.4.3 Functions of the peg circumfix

The circumfix has two different functions in the Kamnyu dialect of Japhug.

First, it occurs in contracting verbs (§12.3) to prevent vowel fusion when a D-type preverb is found before a contracting verb stem or prefix (§15.1.1.2). In (12) for instance, without the *k-* prefical element, the inferential *jy-* would merge with the verb stem *atuy* as /jytury/, becoming undistinguishable from the corresponding Imperfective *jui-ytuy* (§21.2.1). This function is not found in Xtokavian dialects of Japhug.

Second, the peg circumfix is found together with Rhetorical Interrogative *uβry-* and Probabilitative *umy-* prefixes. In these configurations, the negative prefixes cannot occur, and only type A orientation preverbs (Aorist, §15.1.1) are possible.

The minimal pair in (14) between *uβry-yu* and *uβry-kui-yu-ci* provides an illustration of the semantic function of the circumfix: without it, the Rhetorical

³ Elision of prefical *kui-* is also found in some rare forms, see (17) below.

11934 Interrogative generally denotes worry/apprehension that the action could take/
 11935 have taken place (14a), while the combination of the Rhetorical Interrogative and
 11936 the circumfix has the negative epistemic modality value ‘it seems like *X* did/does
 11937 not *Y*’ (14b).

- 11938 (14) a. *n̥-ŋga* *ky-tui-nui-tʂuiβ* *uβry-ŋu* *ma*
 2SG.POSS-clothes AOR-2-AUTO-sew RH.Q-PEG-be-PEG LNK
 11939 ‘You didn’t sew your garment, did you? (worried that the subject
 11940 might have sewed his/her garment)’ (elicited)
 11941 b. *n̥-ŋga* *ky-tui-nui-tʂuiβ* *uβry-kua-ŋu-ci* *ma*
 2SG.POSS-clothes AOR-2-AUTO-sew RH.Q-PEG-be:FACT-PEG LNK
 11942 *nui-nui-spoʂ* *cti*
 SENS-AUTO-have.a.hole be.AFF:FACT
 11943 ‘It looks like you haven’t sewed your garment, it still has a hole.’
 11944 (elicited)

11945 With the Probabilitative *umy-*, the use of the circumfix (15c) is associated
 11946 with a lesser degree of confidence than the corresponding form without it (15a).
 11947 Tshendzin explains the meaning of (15c) with the Inferential (15d).⁴

- 11948 (15) a. *umy-jy-azyut*
 PROB-AOR-arrive
 11949 b. *tʂʰuij* *jy-azyut* *tʰan*
 probably AOR-arrive SFP
 11950 ‘He probably has already arrived.’ (elicited)
 11951 c. *umy-jy-kua-zyut-ci*
 PROB-AOR-PEG-arrive-PEG
 11952 d. *jo-zyut* *u-mdob*
 IFR-arrive 3SG.POSS-colour
 11953 ‘It seems that he has probably arrived.’ (elicited)

11954 The minimal pair above shows that the circumfix is not a simple secondary
 11955 morphological exponent of the Inferential, but has a specific modal and eviden-
 11956 tial value. However, it is not obvious at this stage that the combination of the
 11957 circumfix with Rhetorical Interrogative and Possible modality prefixes can be an-
 11958 alyzed compositionally at the synchronic level in the Kamnyu dialect of Japhug,
 11959 and I therefore use the arbitrary gloss ‘peg’ for this formative.

⁴ Note that the Inferential preverbs are not compatible with the Probabilitative prefix (§21.7.2).

11 The structure of the Japhug verb

11960 The *kua-* prefixal element competes with indexation prefixes in slot -2 (§11.2.1).
11961 Since the 2→1 portmanteau *kua-* prefix has the same shape as the peg prefix, trans-
11962 sitive verbs can present ambiguity between 2→1 (§14.3.2.3) and 1→3 (§14.3.2.1)
11963 configurations, as in (16), a verb forms with two possible interpretations.

- 11964 (16) *umy-nuu-kua-nuu-jmut-a-ci*
PROB-AOR-PEG/2→1-AUTO-forget-1SG-PEG
11965 ‘It looks I forgot about it.’ (*kua-* = PEG)
11966 ‘It looks like you have forgotten me.’ (*kua-* = 2→1)

11967 The second person *tu-* and 1→2 portmanteau *ta-* are dominant in slot -2, and
11968 the peg prefixal element *kua-* disappears in 2→3 (17) and 1→2 configurations (18).

- 11969 (17) *umy-nuu-tu-nuu-jmut-ci*
PROB-AOR-2-AUTO-forget-PEG
11970 ‘It looks like you have forgotten about it.’ (elicited)
- 11971 (18) *umy-puu-ta-mto-ci*
PROB-AOR-1→2-see-PEG
11972 ‘It looks like I have seen you.’ (elicited)

11973 The inverse prefix, although located in slot -1, is incompatible with the peg
11974 circumfix: both †*umy-nú-wy-nuu-jmut-a-ci* (PROB-AOR-INV-AUTO-forget-1SG-PEG)
11975 and †*umy-nuu-kú-wy-nuu-jmut-a-ci* (PROB-AOR-PEG-INV-AUTO-forget-1SG-PEG) are
11976 incorrect, and the only way to express this meaning is with the Inferential in
11977 combination with the complement-taking noun *w-mdor* (19) (§21.8.3.1).

- 11978 (19) *wzo kua ny-wy-nuu-jmut-a w-mdor*
3SG.ERG IFR-INV-AUTO-forget-1SG 3SG.POSS-colour
11979 ‘It looks like he has forgotten about me.’ (elicited)

11980 Although complex forms such as (15c), (16), (17) or (18) can be elicited, in the
11981 corpus the combination of circumfix with Rhetorical Interrogative or Probabil-
11982 itative prefixes only occur on stative verbs in 3SG form, and mainly with copulas,
11983 existential or modal auxiliaries.

11984 The Japhug *-ci* suffixal element is probably cognate with the Mediative *-cə* in
11985 Tshobdun (J. T. S. Sun 2017) and the non-egophoric *ki* in Zbu (Gong 2018), which
11986 however have a much larger distribution. The *k(u)-* prefixal element is relatable
11987 to the non-finite *kua-* prefixes (§16.8.1) and some related finite forms (§14.8.3).

11.5 Templatric vs. layered morphology

11988 While the inner prefixal domain follows a layered structure (except for the autive
 11990 prefix, §11.2.2), the outer prefixal chain (§11.2.1) and the suffixal chain (§11.3) are
 11991 rather to be described in terms of templatic morphology. Each of the slots in
 11992 these chains is rigid in the Kamnyu dialect: there is no free affix ordering as in
 11993 Kiranti languages like Chitang (Bickel, Banjade, et al. 2007). We observe four
 11994 specifically templatic features (Bickel & Nichols 2007: 216–218).

11995 First, several non-adjacent dependencies (or mutual incompatibilities) are found
 11996 between prefixes, suffixes and stems, reflecting the fact that some TAME cate-
 11997 gories and person configurations are encoded by formatives in different slots.
 11998 Some conspicuous examples are listed below.

- 11999 • Morphological transitivity is encoded by seven independent morphologi-
 12000 cal and redundant features in various slots (§14.3.1).
- 12001 • The Aorist is marked by combining A-type orientation preverbs (slot -3,
 12002 §15.1.1.1), Stem II (§12.2.1) and the past transitive *-t* (slot +1, §11.3).
- 12003 • The Irrealis (§21.4.1.1) requires *a-* in slot -6, a type A preverb in slot -3
 12004 and stem III (§12.2.2.2) when the person configuration allows it, as in (20)
 12005 below.
- 12006 • The peg circumfix (slots -2 and +4, §11.4) occurs in conjunction with either
 12007 some modal prefixes (slot -6) or type D preverbs (slot -3).
- 12008 • Person configuration (direct vs. inverse, §14.3.2.8) is marked by the inverse
 12009 prefix (slot -1, §14.3.2.7), the contrast between stem I and stem III (§12.2.2.2)
 12010 and the past transitive *-t* (slot +1, §11.3). The former is incompatible with
 12011 the latter two (which occur in complementary distribution).

12012 Example (20) illustrates (coloured in red) the non-adjacent dependency be-
 12013 between *a-* (-6), the type A preverb (-3) and stem III.

- 12014 (20) *a-yuu-ty-tuu-t^he*
 12015 IRR-CISL-AOR-2-ask[III]

12016 ‘Come and ask (for her in marriage).’ (150826 liangshanbo zhuyingtai-zh,
 131)

12017 Second, the position of some prefixes in the chain is independent of the se-
 12018 mantic scope of the outer prefixes between themselves, and of their scope with

11 The structure of the Japhug verb

12019 regards to the inner prefixes. In particular, the causative prefix, located in the
12020 inner domain (§11.2.2), has ambiguous scope with the negative (§17.2.4.4) and
12021 associated motion prefixes (§17.2.4.5).

12022 Third, the allomorphy of more inwards prefixes is in some cases sensitive to
12023 more outward prefixes: for instance, the allomorphy of the inverse (§14.3.2.7) in
12024 slot -1 depends on the preceding prefixes: in particular, modal prefixes in slot -6
12025 do not select the same allomorph as the other prefixes.

12026 Fourth, bipartite verbs (§11.6.3) offer cases of verb forms with more than one
12027 head.

12028 11.6 Wordhood

12029 11.6.1 Criteria for wordhood

12030 Some languages of the Trans-Himalayan family like Bantawa or Galo present
12031 conflicting morphosyntactic and phonological domains (Post 2009; Schiering et
12032 al. 2010; Doornenbal 2009) making an unambiguous definition of ‘words’ prob-
12033 lematic.

12034 In Japhug, the verb presents several phonological and morphological domains,
12035 represented in Table 11.3. Each of the domains is coloured in grey; slots partially
12036 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												

12037 Domain A represents non-adjacent dependencies: as argued in §11.5, the suf-
12038 fixial element *-ci* of the peg circumfix in slot +4 (§11.4) is selected by some modal
12039 prefixes in slot -6, showing that dependencies across formatives cover the whole
12040 verb complex from the beginning of the outer prefical chain (§11.2.1) to the end
12041 of the suffixal chain (§11.3).

12042 Domain B corresponds to the minimal obligatory free form: the suffixal el-
12043 ement *-ci* is not included because it is optional (§11.4) and the dual and plural

12044 suffixes in slot +3 are also optional in specific conditions (§14.6.1.1).

12045 Domain C indicates the slots that can receive stress. It general is found on the
 12046 last syllable of the verb stem by default, but some prefixes attract stress (§11.2.3).
 12047 Slot -6 receives stress when it is filled by interrogative prefix *úu-* followed by
 12048 a monosyllabic verb form (§21.3.1), or when the other prefixes merge with the
 12049 inverse *-wy*. Tautosyllabic suffixes are never stressed (§11.3), but 1SG suffix *-a*
 12050 merges with the last syllabe in some cases (§3.3.1.3).

12051 Domain D correspond to the prefixal slots selecting the allomorph *-wy* of the
 12052 inverse prefix when directly followed by it, and able to interact with the con-
 12053 tracting vowel of the verb stem (§12.3), either by undergoing vowel fusion or by
 12054 insertion of an epenthetic *-j*.

12055 These four domains, to which the extended verb stem (including the inner
 12056 prefixes, §11.2.2) can be added, are concentric: the domain boundaries do not
 12057 overlap. In this grammar, **domain A** is chosen as the verbal word, because in
 12058 addition to non-adjacent dependencies, all formatives contained within it have a
 12059 fixed position, and no external element can be inserted.

12060 There are no proclitic markers which could be candidates to be analyzed as pre-
 12061 fixes in Japhug. Some enclitic linkers and particles are phonologically attached
 12062 on the verb, but there is clear evidence that they cannot be analyzed as suffixes
 12063 (§11.6.2). Bipartite verbs (§11.6.3) offer a more serious challenge to the definition
 12064 of wordhood, but problematic forms are extremely rare and limited.

12065 11.6.2 Enclitics

12066 Some particles and linkers are cliticized on the verb stem, and could seem to
 12067 behave as suffixes.

12068 The sentence final particle *wo* (§10.4.1) is generally a free-standing word, but
 12069 it can optionally be phonologically attached to the verb as in (21). In these cases,
 12070 it bears a stress, possibly analyzable as a effect of intonation.

- 12071 (21) *a-χpi ci puu-fcvt=ó*
 1SG.POSS-story INDEF IMP-tell=SFP

12072 ‘Tell me a story.’ (140511 yiqianlingyiye yinzi-zh, 30)

12073 There are two pieces of evidence showing that =o is not a verbal suffix. First,
 12074 even in cliticized form, its locus is not specifically the verb, but rather the last
 12075 word of the sentence: in (22), =o cliticized on the predicative noun *uu-mdox*
 12076 ‘colour’, ‘it looks like...’ (§21.8.3.1).

11 The structure of the Japhug verb

- 12077 (22) *ma qachya yuu ui-me p̪jy-cti ur-mdor=o.*
 LNK fox GEN 3SG.POSS-daughter IFR.IPFV-be.AFF 3SG.POSS-colour=SFP
 12078 ‘It looks like she (the main character of the story) was the daughter of a
 12079 fox.’ (150909 xiaocui-zh, 177)

12080 Second, *wo* actually occurs last in the chain of sentence final particles. It fol-
 12081 lows for instance the hearsay particle *kʰi* in (23),

- 12082 (23) <*aizheng*> *nua-pʰyn kʰi wo*
 cancer SENS-be.efficient HEARSAY SFP
 12083 ‘It can cure cancer, it is said.’ (20-grWBgrWB, 73)

12084 This hearsay particle is never phonologically cliticized on the verb, and more-
 12085 over can be separated from the verb by the emphatic particle *zo* (§26.1.1), as in
 12086 (24).

- 12087 (24) *ui-tuu-yvndzo saχas zo kʰi.*
 3SG.POSS-NMLZ:DEG-be.cold be.extremely:FACT EMPH HEARSAY
 12088 ‘It is said that (during an eclipse), it is extremely cold.’ (29-mWBZi, 115)

12089 The additive linker *ny* occurs in additive repetition (§19.4) and in conditionals
 12090 (§25.2.1). It is always an enclitic, as indicated by the vowel *y*, which can never
 12091 stress in word-final position in Japhug (§3.3.1). Were *ny* analyzed as a suffix, an
 12092 additional +5 slot would be necessary, since it can follow the *-ci* suffixal element,
 12093 as in (25).

- 12094 (25) *to-kui-ytcʰuz-ci=ny to-kui-ytcʰuz-ci*
 IFR-PEG-sneeze-PEG=ADD IFR-PEG-sneeze-PEG
 12095 ‘He sneezed again and again.’ (140515 jiesu de laoren-zh, 143)

12096 In conditionals, this linker co-occurs with initial reduplication (§12.4.1.2, §25.2.1).
 12097 However, although *ny* is the most common linker on the protasis on condition-
 12098 als, it is not required, and other linkers such as *tce* are also attested, as in (26),
 12099 and there is no strict non-adjacent dependency between *ny* and reduplication
 12100 (§11.6.1).

- 12101 (26) *nua tur~ty-tuu-tut tce qʰe tce rcanu nyo rdystas*
 DEM COND~AOR-2-say[II] LNK LNK LNK UNEXP:DEG 2SG stone
 12102 *nua-tuu-yβzu*
 IPFV-2-become
 12103 ‘If you tell (them) about it, you will be turned into stone and...’ (150902
 12104 hailibu-zh, 84)

₁₂₁₀₅ In additive function, *ny* is not specific to verbs (§8.2.6), and the emphatic *zo*
₁₂₁₀₆ can be inserted between the verb and this linker (27).

- ₁₂₁₀₇ (27) *tcendyre jy-ari ny jy-ari zo ny*
LNK AOR-go[II] ADD AOR-go[II] EMPH ADD
₁₂₁₀₈ 'He went again and again.' (Norbzang 2005, 277)

₁₂₁₀₉ For these reasons, *ny* is not analyzed as a part of the verbal word in Japhug.

₁₂₁₁₀ 11.6.3 Bipartite verbs

₁₂₁₁₁ Bipartite verbs comprise two morphologically active stems, which despite having
₁₂₁₁₂ affixes of their own are combined together in one phonological word, sharing
₁₂₁₁₃ in some cases whole prefixal or suffixal chains (Jacques 2018a). Following the
₁₂₁₁₄ Kirantological tradition (for instance Doornenbal 2009 or Schackow 2015), the
₁₂₁₁₅ first verb stem is referred to as V_1 , and the second one as V_2 .

₁₂₁₁₆ The main features of bipartite conjugation can be explained using *stu=mbat*
₁₂₁₁₇ 'try hard', 'do one's best', the most common bipartite verb. This verb has four
₁₂₁₁₈ possible conjugation patterns, illustrated in Table 11.4 imperative second dual
₁₂₁₁₉ form 'try hard (the two of you)', which contains one prefix (orientation preverb,
₁₂₁₂₀ 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>ty-stu-ndzi ty-mbat-ndzi</i> IMP- V_1 -DU IMP- V_2 -DU	✓	✓
B (right-dominant)	<i>ty-stu = ty-mbat-ndzi</i> IMP- V_1 -IMP- V_2 -DU		✓
C (left-dominant)	<i>ty-stu-ndzi = mbat-ndzi</i> IMP- V_1 -DU- V_2 -DU	✓	
D (quasi-compound)	<i>ty-stu-mbat-ndzi</i> IMP- V_1 - V_2 -DU		

₁₂₁₂₁ Type A bipartite verbs are lexicalized serial verb constructions (§25.1.5): the
₁₂₁₂₂ two verb stems are not phonologically integrated, and each of them takes both
₁₂₁₂₃ prefixes and suffixes. No word can be inserted between *stu* and *mbat* in the corpus,
₁₂₁₂₄ unlike other examples of SVC in Japhug. This is however not the case with all

11 The structure of the Japhug verb

12125 bipartite verbs. For instance, in the case of *fse=ray* ‘happen so many things’, it
12126 is possible to repeat the subject, as in (28).

- 12127 (28) *naura pu=fse naura pu-ray*
DEM:PL PST.IPFV-be.like DEM:PL PST.IPFV-last.a.long.time

12128 ‘All these things happened.’ (many attestations of this sentence, occurs in
12129 traditional stories typically to avoid repeating sentences when a
12130 character tells another character what has happened previously)

12131 In types B and C, the two conjugated verb forms merge phonologically, and
12132 either the suffixal chain of the first verb (in the case of the right-dominant B
12133 type, where the V_1 has a reduced form and the V_2 preserves the full form) or
12134 the prefixal chain of the second one (left-dominant) are removed. For instance,
12135 in (29) the right-dominant bipartite verb has only one dual suffix *-ndzi^{t3}* on the
12136 V_2 , while the prefixal chain *a⁻⁶-ty⁻³-tu⁻²* (IRR-PFV-2) is repeated on both the V_1
12137 and the V_2 . The boundary between the V_1 and the V_2 , transcribed with a clitic
12138 sign =, does not conform to the phonological rules of word-internal morpheme
12139 boundaries: for instance, no vowel contraction occurs between the Irrealis *a*- and
12140 the preceding *-u* in (29), either as *u-a* ⇒ /o/ (§12.3) or *u-a* ⇒ /wa/ (§14.2.1.1). In
12141 addition, this bipartite verb form has two stresses, one on each verb stem.

- 12142 (29) *a-ty-tu-stu=a-ty-tu-mbat-ndzi*
IRR-PFV-2-try.hard(1)=IRR-PFV-2-try.hard(2)-DU
12143 ‘(While I am gone), may the two of you do your best.’ (smanmi 2003.2, 56)

12144 The prefixal chain must be complete: a partial copy such as *†a-ty-tu-stu=tu-*
12145 *mbat-ndzi* with only the second person *tu-* prefix on the V_2 is categorically re-
12146 jected. Likewise, in left-dominant bipartite verbs, the suffixal chain has to be
12147 complete on both the V_1 and the V_2 . This specificity is by no means universal
12148 even in Trans-Himalayan: in Kiranti languages for instance, the V_1 generally
12149 only preserves a sub-set of the suffixal chain, as illustrated by the Bantawa ex-
12150 ample (30) below, where the chain *-in-ka* occurs in reduced form *-in* on the V_1
12151 *k^hat-* ‘go’.

- 12152 (30) *k^har-in lont-in-ka*
go-1/2PL come.out-1/2PL-EXCL
12153 ‘We shall rise again.’ (Doornenbal 2009: 254)

12154 In type D, the two verbs come to share the same prefixal and suffixal chain,
12155 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 (= *raj*, *zduy=sŋyl*, *ntsʰγβ=*, *rga=*, from རྒྱ ‘long’, སྲୁଗྔସྲୁଗྔ *sdug.bṣyal* ‘torment’, འକ୍ଷଣ୍ଟ୍ୟ ‘*tsʰab* ‘anxious’, ད୍ଗା ‘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 X tries hard’. Only the quasi-compound form of the bipartite verb can be derived. The derivational prefix *nṛ-* cannot be repeated on the *V₁* and the *V₂* (a form such 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=rnaš</i> ‘thank a lot’	✓	✓		
<i>ntsʰγβ=rlu</i> ‘be in a hurry’		✓		✓
<i>fse=raj</i> ‘happen so many things’	✓			
<i>kʰru=jγβ</i> ‘be extremely dry’	✓			✓
<i>zduy=sŋyl</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’	✓			✓

There is only one bipartite transitive verb, *NEG + spa = NEG + rka = tu/me* ‘be guilty/innocent’, which is actually even tripartite, since its always occur with an existential verb. It means ‘be guilty’ when used with the affirmative existential verb *tu* ‘exist’ and ‘be innocent’ with the negative one *me* ‘not exist’ (§13.1.2). The *V₁* and *V₂* require a negative prefix (§13.1.3). Both type A (31, 33) and type D (32) conjugations are attested. The existential verb is always an independent word, and never takes person/number indexation in this collocation.

⁵ In Kiranti languages, by contrast, right-dominant bipartite verbs (with partial suffixal chain on the *V₁*, as in 30) are by far the most common option (Jacques 2018a).

11 The structure of the Japhug verb

- 12174 (31) *mx-tur-spe* *mx-tur-rke*
 NEG-2-be.innocent(1)[III]:FACT NEG-2-be.innocent(2)[III]:FACT
 12175 *me*
 not.exist:FACT
 12176 ‘You_{sg} are innocent.’ (elicited)
- 12177 (32) *mx-tu-spa=rka-ndzi* *me*
 NEG-2-be.innocent(1)-be.innocent(2):FACT-DU not.exist:FACT
 12178 ‘You_{du} are innocent.’ (elicited)

12179 The verb stems *spa* and *rka* are always in finite form: only the existential verb
 12180 takes non-finite prefixes. In (33) the subject participle prefix *kui-* occurs on the
 12181 negative existential *me*, while *spa* and *rka* are found in Factual Non-Past. This
 12182 example suggests that *spa* and *rka* are located in a subject complement clause
 12183 selected by the existential verb (§22.5.1.2).

- 12184 (33) *[mkʰyrmaŋ [mx-spa-nuu] mx-rka-nuu]*
 people NEG-be.innocent(1):FACT-PL NEG-be.innocent(2):FACT-PL
 12185 *kui-me] nuu zimkʰym pjy-sui-sat pjy-ra*
 SBJ:PCP-not.exist DEM a.lot IFR-CAUS-kill IFR.IPFV-be.needed
 12186 *rcauu, turme ra kui wuma zo pjy-qʰa-nuu*
 UNEXPECTED man PL ERG really EMPH IFR-hate-PL
 12187 ‘As he had to have many innocent people killed, people hated him.’
 12188 (hist140514 xiee de shewang-zh, 82)

12189 Although morphologically transitive (§14.3.1), as shown by the presence of
 12190 stem III alternation in SG→3 non-past forms (§12.2.2.1), in examples (31) and (34),
 12191 the direct object is dummy and cannot be overt.

- 12192 (34) *mx-spe-a* *mx-rke-a*
 NEG-be.innocent(1)[III]:FACT-1SG NEG-be.innocent(2)[III]:FACT-1SG
 12193 *me*
 not.exist:FACT
 12194 ‘I am innocent.’ (elicited)

12195 Example (35), where both *spa* and *rka* are in stem III form (*spe=* and *=rke*, re-
 12196 spectively) reveals two facts about type D conjugation. First, stem III alternation,
 12197 although historically partially suffixal in origin (§12.2.2.1), is synchronically dis-
 12198 junct from the suffixal chain. Second, although type D forms could appear at first

₁₂₁₉₉ glance to be simple compound verbs (§20.12), the presence of stem alternation on
₁₂₂₀₀ both V_1 and V_2 , instead of having $\dagger m\text{y}-tu\text{-spa-rke}$ with alternation on the V_2 only,
₁₂₂₀₁ shows that the two verb roots are still morphologically active.

- ₁₂₂₀₂ (35) *m̥-tu-spe=rke* *me*
 NEG-2-be.innocent(1)[III]-be.innocent(2)[III]:FACT not.exist:FACT
₁₂₂₀₃ ‘You_{sg} are innocent.’ (elicited)

12 Non-concatenative verbal 12204 morphology

12206 While Japhug lacks tonal alternations like most Gyalrongic languages (J. T.-S.
12207 Sun 2005; Lai 2017; Gong 2018; Shuya Zhang 2018), non-concatenative segmental
12208 alternations are common.

12209 This chapter briefly presents derivation onset alternations (§12.1), and then
12210 provides a detailed account of inflectional stem alternations (§12.2), vowel con-
12211 traction (§12.3) and partial reduplication (§12.4) in verbal morphology.

12212 12.1 Onset alternations

12213 While most of the prefixal derivation morphology in Japhug is fairly concatena-
12214 tive, a handful of prefixal morphological processes involve consonantal alterna-
12215 tions.

12216 Prenasalization is found in the anticausative (§18.5) and a handful of frozen
12217 verb forms (§19.7.9, §17.2.2.4). In all cases, it is probably the result of the fusion of
12218 a nasal prefix with an unvoiced stop/affricative, turning it into the corresponding
12219 voiced prenasalized obstruent (§18.5.1.2).

12220 Another type of consonant alternation is the β - \rightarrow b - fortition in the causative
12221 verb *zbras* ‘attach together’ (§17.2.2.7).

12222 12.2 Stem alternations

12223 Northern Gyalrong languages have three verbal stems, labeled I, II and III fol-
12224 lowing J. T.-S. Sun (2000a) (Situ dialects lack stem III, but some varieties have
12225 additional stems I' and II', see Shuya Zhang 2018). Stem I is the default form,
12226 stem II mainly occurs in Aorist and Past Imperfective, and stem III occurs in the
12227 Non-Past SG \rightarrow 3 direct forms of some transitive verbs (§14.3.2.1).

12228 In Japhug, no verb has more than two different stems. Stem II is different
12229 from stem I in only a handful of irregular verbs (§12.2.1), while stem III has been
12230 regularized (§12.2.2).

12.2.1 Stem II

12.2.1.1 Morphology

12231 Unlike in Tshobdun (J. T.-S. Sun 2000a), Zbu (J. T.-S. Sun 2004; Gong 2018) and
 12232 Situ (Y. Lin 2003; Shuya Zhang 2018), stem II in Japhug is very limited, and only
 12233 found in three irregular 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
ce ‘go’	-ari	
yi ‘come’	-ye	
ti ‘say’	-tut	
suxce ‘send, let go’	-sryri	Causative
suti ‘cause to say’	-sutut	
nuce ‘go back’	-anuri	Vertitive, Autive
nuyi ‘come back’	-nuye	
nr̥cuqe ‘go around’	-anrruri	Distributed action
nrtuti ‘tell around’	-nrtutut	

12236 The yi/ye alternation has an exact correlate in Tshobdun (*wi/wε?*, J. T.-S. Sun
 12237 2000a: 175). The verb *ti* ‘say’ has an irregular correspondence with other Gyal-
 12238 rong languages, where an affricate onset is found (Tshobdun tsə ‘say’, J. T.-S. Sun
 12239 2000a: 174, Situ tsâ, tsîs, Shuya Zhang 2018: 318). In Zbu however, a unique alter-
 12240 nation between affricate and stop is found in this verb (stem I tsʰə, stem II tʰit,
 12241 Gong 2018: 225). The correspondence between the Japhug stem II -tut and its
 12242 Zbu equivalent tʰit is regular (apart from the aspiration). The irregular paradigm
 12243 of this verb in Zbu certainly has to be reconstructed to proto-Gyalrong. Situ and
 12244 Tshobdun have generalized the affricate to stem II, while Japhug has remade the
 12245 stem I by generalizing the dental stop.

12246 Suppletion is observed in the paradigm of ce ‘go’, whose stem II -ari is perhaps
 12247 related to the stem I of the verb ‘go’ found in some dialects of Zbu (r̥i, J. T.-S. Sun
 12248 2004: 274). Xtokavian dialects of Japhug have tʰbl as the stem II of this verb (Lin
 12249 & Luoerwu 2003), a form borrowed from Tibetan བྲལ ‘go beyond, pass’.

12250 The transitive verb *suxce* ‘send, let go’ is the causative of ce ‘go’, and its stem
 12251 II presents an irregular vowel merger *suy* + *ari* → *sryri*, instead of expected †*sryri*

12252 or †*tasuyri* (§17.2.2.6). Other derivations from *ce* ‘go’ also have suppletion, but the
 12253 alternations are regular. The autive and the vertitive *nu-* prefixes (§19.1, §19.2) in
 12254 *nu-ce* ‘go by oneself’/‘go back’ are predictably infixes (§11.2.2) within the stem
 12255 II *ari* as *a<nu>ri* (see examples 42 in §19.1.6 and 13 in §6.2.1). The distributed
 12256 action derivation *nycuuce* ‘go around’ likewise has the expected reduplicated stem
 12257 -*anyruri*.

12258 The verb *nuyi* ‘come back’, vertitive of *yi* ‘come’, shows the expected stem II
 12259 *nuye* with vowel alternation. Its lexicalized causative *suye* ‘invite’ on the other
 12260 hand, has lost stem alternation, but appears to have generalized stem II (§17.2.2.7).

12.2.1.2 Distribution

12261 In Japhug, stem II is mainly found in the Aorist (§21.5.1.1) and in the Apprehensive
 12262 (§21.7.1.1). The verb *ti* ‘say’ also has stem II *tut* in the irregular Progressive Sensory
 12263 form *nui-ysui-tut, nui-ys-tut* ‘he is/was saying’ (§21.3.2.1). In Zbu, stem II is also
 12264 found in the Progressive (J. T.-S. Sun 2000a, Gong 2018: 196).

12265 Unlike Stem III (§12.2.2), Stem II is insensitive to person and number in all
 12266 known Gyalrong languages.

12.2.2 Stem III

12.2.2.1 Morphology

12268 In the Kamnyu dialect of Japhug, stem III is fully regular, and applies to all transitive
 12269 verbs with an open syllable stem ending in a non-front vowel in the expected contexts (§12.2.2.2).

12270 As presented in Table 12.2, two types of alternations are attested: vowel fronting
 12271 in the case of stems in *-a, -u, -uu* and *-m* suffixation with vowel unrounding for
 12272 stems in *-o*. In Xtokavian dialects, the alternations are less predictable, as some
 12273 verbs in *-u* and *-uu* can take the *-m* suffix (Lin & Luoerwu 2003, Jacques 2008a:
 12274 231–234). A cognate suffix *-m* in stem III is also attested in Zbu (Gong 2018: 228–
 12275 229).

12276 Stem III in *-ym* undergoes regular vowel assimilation to *-am-* when followed by
 12277 a 1SG-*a* suffix (§14.2.1.1). For instance, the 1SG→3SG Factual Non-Past of *mto* ‘see’
 12278 is *mtam-a* ‘I (will) see it/him/her’ rather than †*mtym-a*. Stem III with the fronted
 12279 vowel *-e* change to *-i* when followed by *-a*: *ndze-a* ‘I (will) eat it’ is realized as
 12280 [ndzia].

12281 Vowel fronting in stem III originates from the fusion of the verb stem with a **j*
 12282 suffix (§3.3.3, Jacques 2004: 357, Jacques 2008a: 234), cognate to the ‘transitivity

12 Non-concatenative verbal morphology

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	-y̥m	-m suffixation

12286 marker' -jə in Tshobdun (J. T.-S. Sun 2003: 496).

12287 Rather than analyzing the -m suffix as a part of the stem III, it could alterna-
 12288 tively be possible to view it as part of the suffixal chain. Under such an analysis,
 12289 it would be located in slot +1 (§11.3). Bipartite verbs provide evidence against
 12290 such an analysis however (§11.6.3).

12.2.2.2 Distribution

12292 Stem III only occurs in finite verb forms. It is found in Factual Non-Past (§21.3.1.1),
 12293 Egophoric Present (§21.3.3.1), Sensory (§21.3.2.1), Imperative (§21.4.2.1), Irrealis
 12294 (§21.4.1.1) and Imperfective (§21.2.1) of transitive verbs in the 1SG→3, 2SG→3 and
 12295 3SG→3' configurations (§14.3.2.1).

12296 Table 12.3 illustrates all five person configurations of the Factual Non-Past
 12297 where stem III appears and a selection of other configurations where stem I is
 12298 used instead. It has exactly the same distribution in the other TAME categories
 12299 listed above.

12300 Stem III encodes four morphosyntactic features, comprising both TAME and
 12301 person indexation: direct configuration (§14.3.2.8), singular transitive subject,
 12302 third person object and Non-Past tense.

12.2.2.3 Backformation

12304 An indirect consequence of the perfect regularity of stem III formation (§12.2.2.1)
 12305 is that in some rare cases, the stem I has been generated from the stem III by
 12306 applying the alternations backwards.

12307 The stem I of *kʰo* 'give, pass' (§14.4.1) regularly corresponds to Tshobdun *kʰi*
 12308 (as if from proto-Gyalrong **kʰaj*). On the other hand, Zbu *kʰbm*, *kʰäm*, *kʰəm*
 12309 'give' (Gong 2018: 229) and Tangut 爾¹¹⁰⁵ *kʰjow*^{1.56} (Jacques 2014c: 200–201, proto-
 12310 Tangut **khjVm*) match the Japhug stem III *kʰy̥m*. A possible hypothesis to account

Table 12.3: Stem I vs. Stem III in the paradigm of *mto* ‘see’

Person configuration	Stem	Example
1SG→3SG	III	<i>mtam-a</i>
1SG→3DU	III	<i>mtam-a-ndzi</i>
1SG→3PL	III	<i>mtam-a-nuu</i>
2SG→3	III	<i>tui-mtym</i>
3SG→3'	III	<i>mtym</i>
1DU→3	I	<i>mto-tci</i>
2DU→3	I	<i>tui-mto-ndzi</i>
3DU→3'	I	<i>mto-ndzi</i>
3'→3SG	I	<i>yuu-mto</i>

for these diverging correspondences would be that Japhug and Tshobdun have 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 *ㄩㄝ kʰjow*¹¹⁰⁵^{1,56} is highly irregular, and therefore unlikely to have been analogized. Second, Zbu is phylogenetically closer to Tshobdun and Japhug than it is to Tangut, and therefore shared features between Zbu and Tangut are more likely to be due to common retention than to common innovation. Third, there is Japhug-internal evidence that the stem I -o is secondary.

The transitive verb *fkro* ‘put in order’, ‘arrange’, whose stem III is *fkrym* is borrowed from the past tense of the Tibetan verb དྲୟମ-ସ୍ତରମ “grem-bkram” ‘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 *kʰo* ‘give, pass’ and Tshobdun *kʰi* (Jacques 2014c: 201): this verb originally had a stem I **kʰvm* in proto-Gyalrong, preserved in Zbu, but underwent backformation to **kʰaj* in the common ancestor of Japhug and Tshobdun, subsequently evolving to *kʰo* and *kʰi* 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 *cʰu-kuu-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

12 Non-concatenative verbal morphology

12334 *uu-tsa* (in the meaning ‘be suitable’, §22.4.2.1) for instance.

- 12335 (1) *<hulu> nuu si ci juu-ŋu, uu-mat c^huu-kuu-βze*
gourd DEM tree INDEF SENS-be 3SG.POSS-fruit IPFV-SBJ:PCP-make[III]
12336 *ci. tce uu-mat nuunuu, uu-tab ku-kuu-xts^hum,*
INDEF LNK 3SG.POSS-fruit DEM 3SG.POSS-top IPFV:EAST-SBJ:PCP-be.thin
12337 *uu-pa juu-kuu-jpum ci c^huu-βze*
3SG.POSS-bottom IPFV:WEST-SBJ:PCP-be.thick INDEF IPFV-make[III]
12338 *juu-ŋu tce, nuu <hulu> tu-syrm̩i-nuu.*
SENS-be LNK DEM gourd IPFV-call-PL
- 12339 ‘The gourd is a tree, one which grows fruits. It grows fruits that are
12340 thinner on the top part and thicker in the bottom, they are called ‘gourd’.’
12341 (150825 huluwa-zh, 2-3)

12342 Rather than an exception to the rules described in §12.2.2.2, it is simpler to
12343 consider that a synchronic verb root βze ‘grow’ different from βzu ‘make’ has
12344 been created by backformation (§12.2.2.3) from finite imperfective forms such
12345 as $c^h u\text{-}\betaze$ ‘it grows’ in (1). The stem βze however never occurs in past tenses
12346 (Inferential and Aorist), so that this verb is an example of partial and ongoing
12347 backformation.

12348 Another possible example of the same type of backformation is discussed in
12349 §19.7.12.

12.2.3 Frozen -t suffix

12350 Three verbs presented in Table 12.4 have two alternative stem forms in free variation,
12351 with an optional -t suffix. This suffix appears in all person and TAME
12352 forms without any semantic change; compare for instance the Imperfective 1PL
12353 forms *ku-ryzit-i* (IPFV-stay-1PL, example 132, §16.1.3.7) and *ku-ryzi-j* (IPFV-stay-1PL,
12354 example 23, §7.1.7), uttered by the same speaker. The two variants are freely inter-
12355 changeable, but some speakers use the -t suffixed forms more frequently than
12356 others.

12357 The optional -t is not synchronically relatable to the past tense -t, which is
12358 restricted to 1SG→3 and 2SG→3 Aorist and Inferential (§14.3.2.1), and never ap-
12359 pears on intransitive forms, or to any of the frozen derivation -t suffixes (§19.7.2,
12360 §19.7.3).

12361 It could be a trace of the stem II -t suffix, attested in the verb *ti, tut* ‘say’ in
12362 Japhug (§12.2.1), and in a handful of other verbs in Zbu (Gong 2018: 224–225). In

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

12364 this hypothesis, these three verbs used to have a stem II with the -t suffix, but at
 12365 the present stage the two stems have ceased to be morphologically contrastive.

12.3 Vowel contraction

12367 Contracting verbs have polysyllabic stems whose first syllable is *a*. All of these
 12368 verbs are morphologically intransitive (§14.3.1), but some of them can have semi-
 12369 objects or oblique arguments (§14.2.3). The *a*-element can be a valency-decreasing
 12370 prefix (including the passive §18.1, reciprocal (§18.4 or distributed property §18.7
 12371 prefixes), a denominal prefix (the stative denominal *a*- §20.2.1 or a disyllabic de-
 12372 nominal prefix with *a* as its first syllable, §20.2), a deideophonic prefix (§20.9.3)
 12373 or a synchronically non-analyzable element (as in *aro* ‘own’ or *amdzuu* ‘sit’).

12374 To represent vowel contraction in a straightforward way, the notation em-
 12375 ployed in this grammar separates the vowel of the preceding prefix and the con-
 12376 tracting by a hyphen, the prefix is transcribed in its base form, and the result
 12377 of the vowel contraction is indicated after the hyphen. For instance *puu-a-* is to
 12378 be read as ‘prefix *puu-* merging with the contracting vowel as /pa/, while *puu-ꝫ-*
 12379 indicates merger of the preverb with the contracting vowel as /pꝫ/. This ortho-
 12380 graphic rule transcribes contracting vowels in several ways (-ꝫ-, -a- or -o-) depend-
 12381 ing on the prefix with which they merge (see Table 12.5 below). It is important
 12382 to note however that there is no contrast between -*a*-, -*ꝫ*- and -*o*- as contracting
 12383 vowels: there are simply morphologically-conditioned allomorphs.¹

12384 This convention has the advantage of disambiguating verb forms that have
 12385 become identical due to vowel contraction (for instance, *tr-ꝫ-* vs. *tuu-ꝫ-*, both of
 12386 which surface as /trꝫ/), and making the verb forms more easily parseable in the
 12387 corpus.

12388 In Factual Non-Past unprefixed verb forms, the *a*-element surfaces without
 12389 alternation, as in (§2).

¹ The *a*- allomorph is used as citation form of contracting verbs.

12 Non-concatenative verbal morphology

- 12390 (2) *nua ma aro-a me q^be,*
 DEM apart.from possess:FACT-1SG not.exist:FACT LNK
 12391 ‘I don’t have anything else.’ (2003tamukatsa, 112)

12392 The prefixes in slots -6, -5 and -4 can occur in direct contact with the
 12393 contracting vowel *a-* only in Factual Non-Past non-second person forms (§21.3.1.1).
 12394 The vowel of Rhetorical Interrogative *uþry-*, Proximative aspect *ju-* (-6) nega-
 12395 tive *mr-* (-5) and associated motion prefixes *eu-* and *yuu-* (-4) merge as *a-*: *uþry-a-*
 12396 → /uþra-/, *ju-a-* → /ja-/, *mr-a-* → /ma-/, *eu-a-* → /ca-/ and *yuu-a-* → /ya-/, as
 12397 shown in *eu-anbaš-i* ‘we go and hide’ /canbaši/ in (3), *mr-a-ryst* ‘it has not yet
 12398 been written’ /maryst/ (example 7, §18.1.1).

- 12399 (3) *rŋguw u-ŋguw nu:tcu eu-anbaš-i umr-kui-nts^bi-ci*
 boulder 3SG.POSS-in DEM:LOC TRAL-hide:FACT-1PL PROB-PEG-be.better-PEG
 12400 *ma,*
 LNK
 12401 ‘It looks like we should go and hide in the (hollow) boulder.’ (160706
 12402 poucet6, 65)

12403 The interrogative *u-* in slot -6 does not merge with *a-*. Rather, an epenthetic
 12404 -*j-* consonant is inserted between the two, as in (4) with the verb *atsutsu* ‘have
 12405 time’.

- 12406 (4) *a-wa turju χstu-ŋka tu-ti-a uj-átsutsu*
 1SG.POSS-father word three-word IPFV-say-1SG QU-X-have.time:FACT
 12407 ‘Father, do I have time to say three sentences?’ (2003qachga, 173)

12408 In all finite verb forms other than the Factual non-Past, the slot -3 (§11.2.1) is
 12409 filled, and vowel contraction occurs between the vowel of the preverb and the
 12410 *a-* element. The rules of contraction with preverbs are detailed in §15.1.1.2, but
 12411 Table 12.5 presents a summary.

12412 Type C preverbs, which are restricted to transitive verbs, never occur with
 12413 contracting verbs. In the case of type D preverbs, vowel contraction is avoided
 12414 by the insertion of the peg circumfix (see §11.4, §15.1.1.2).

12415 These rules are not purely phonological, since the outcome of the vowel fu-
 12416 sion with type A preverbs depends on the TAME category. For instance, in the
 12417 case of the contracting verb *atyr* ‘fall down’, the type A downwards *pu-* pre-
 12418 verbs merges as /þr-/ in the Irrealis and Imperative (for example *a-mr-pu-xtyr*
 12419 /amþþxtyr/ in 5) and as /pa-/ in the Past Imperfective and Perfective (*pu-atyr*
 12420 /patyr/ in 6).

Table 12.5: Vowel contraction rules with orientation preverbs

TAME	Preverb type	Vowel of the preverb	Vowel contraction
Aorist	A	- <i>ṛ</i>	<i>ṛ-a</i> → /a/
		- <i>u</i>	<i>u-a</i> → /a/
Irrealis, Imperative	A	- <i>ṛ</i>	<i>ṛ-ṛ</i> → /ṛ/
		- <i>u</i>	<i>u-ṛ</i> → /ṛ/
Imperfective, Sensory, Egophoric Present	B	- <i>u</i>	<i>u-o</i> → /o/
		- <i>u</i>	<i>u-ṛ</i> → /ṛ/

- 12421 (5) *a-my-puu-ṛtyr kṛ-suaso kuu*,
IRR-NEG-PFV-fall INF-think ERG
'In order to prevent (the child) from falling down...' (140426 tApAtso
12422 kAnWBdaR, 68)
- 12423
- 12424 (6) *li puu-atyr nuu-ṇu*
again AOR-fall SENS-be
'He fell down again.' (2003 tWxtsa, 104)
- 12425

12426 In slot -2, since contracting verbs are all intransitive, only the second person
12427 *tuu-* and the generic *kuu-* prefixes and the prefocal element *k(u)-* of the peg circum-
12428 fix can occur before the contracting vowel *a*. The outcome of vowel contraction
12429 depends on the TAME category (§14.2.1.2: *tuu-a-* /*ta-*/ in Factual Non-Past (*tuu-ṛtyr*
12430 'you will fall') and Aorist (*puu-tuu-ṛtyr* 'you fell down') and *tuu-ṛ-* /*ṛy-*/ Imperfec-
12431 tive (*pjuu-tuu-ṛtyr* 'you fall down'), Sensory, Egophoric Present, Irrealis, Impera-
12432 tive and Prohibitive (*ma-puu-tuu-ṛtyr* 'don't fall down'). With the peg circumfix,
12433 which appears in the Inferential, the vowel fusion is always *-k-ṛ-* (see example
12434 12, §11.4).

12435 Slot -1 only contains prefixes associated with transitive verbs, which are there-
12436 fore incompatible with contracting verbs.

12437 With non-finite verb form prefixes (§16), vowel fusion is always *u-ṛ* / *ṛ-ṛ*, as
12438 summarized in Table 12.6.

12439 With inner prefixes, vowel contraction is also straightforward and yields *ṛ-*
12440 in all cases: for instance, the sigmatic causative, applicative and tropative of
12441 contracting verbs are *suu-ṛ-* /*sṛ-*/ (§17.2.1.3), *nū-ṛ-* /*nṛ-*/ (§17.4.2) and *nṛ-ṛ-* /*nṛ-*/

12 Non-concatenative verbal morphology

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-/

12442 (§17.5.1), respectively. The autive *nu-* cannot undergo vowel fusion and is rather
 12443 infixes after the contracting vowel *a-* (§11.2.2, §19.1.2).

12444 The Progressive prefix *asu-* (§21.6.1.1), located in slot -1 (§11.2.1), can undergo
 12445 vowel contraction in ways similar to those of contracting verbs, summarized in
 12446 Table 12.7. The non-contracting autive *mu-* and inverse *-wy* prefixes are rather
 12447 infixes between the *a-* and the *-su/z-* elements.

Table 12.7: Vowel contraction of the Progressive prefix

	Slot	Prefix	Transcription	Contracted forms
Past Imperfective	-3	<i>pu-</i>	<i>pu-asu-</i> , <i>pu-az-</i>	/pasu-/, /paz-/
Egophoric Present	-3	<i>ku-</i>	<i>ku-osu-</i> , <i>ku-oz-</i>	/kosu-/, /koz-/
Sensory	-3	<i>jnu-</i>	<i>jnu-ꝝsu-</i> , <i>jnu-ꝝz-</i>	/jꝝsu-/, /jꝝz-/
Second person	-2	<i>tuu-</i>	<i>tuu-ꝝsu-</i> , <i>tuu-ꝝz-</i>	/tꝝsu-/, /tꝝz-/
2→1	-2	<i>kuu-</i>	<i>kuu-ꝝsu-</i> , <i>kuu-ꝝz-</i>	/kꝝsu-/, /kꝝz-/
peg	-2	<i>-(kuu)-</i>	<i>k-ꝝsu-</i> , <i>k-ꝝz-</i>	/kꝝsu-/, /kꝝz-/
Inverse	-1	<i>wy-</i>	<i>-ꝝ<wy>su-</i> , <i>ꝝ<wy>z-</i>	/ó(y)su-/, /ó(y)z-/

12448 Vowel contraction is not restricted to the prefical verbal template. Nouns
 12449 whose stems begin in *a-* are extremely few, but do present some instances of
 12450 vowel contraction (§5.1.1.1). Vowel fusion involving the first person suffixes is
 12451 discussed in §14.2.1.1.

12.4 Partial reduplication in verbal morphology

12.4.1 Initial reduplication

Verb-initial reduplication has a number of morphosyntactic functions, involving clause linking (conditionals §12.4.1.2, temporal clauses (§12.4.1.3), expressing increase of degree (§12.4.1.4), totality (§12.4.1.5) or temporal resilience (§12.4.1.6). 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 *mua-* is *mua~mr-* with vowel alternation (§13.1.1), not distinguishable from that of the prefix *mr-*.

Second, when the initial syllable of the word contains more than one morpheme, as in the case of the *c*- or *z*- allomorphs of the translocative prefix combined with an orientation preverb (§15.2.1.2), reduplication can disregard morpheme boundaries, resulting in a replication of the two morphemes: *c-kr-ts^{hi}i-t-a* (TRAL-AOR-drink-PST:TR-1SG) thus yields *c-kwu~c-kr-ts^{hi}i-t-a* as in (7). Tshendzin however also accepts reduplication of the first morpheme only, reduplicated with addition of *-u* (*cw~c-kr-ts^{hi}i-t-a*).

- (7) *c^ha ckwi~c-kx-ts^hi-t-a zo lu-βzi-a*
alcohol ITER~TRAL-AOR-drink-PST:TR-1SG EMPH IPFV-be.drunk-1SG
nu

be:FACT

'Each time I go and drink alcohol I get drunk.' (elicited)

Example (8) illustrates a third possible pattern, with reduplication of the orientation preverb $\varsigma\text{-}tr\text{-}kuu\text{-}ts^h\gamma t \Rightarrow \varsigma\text{-}\color{red}{tu}\text{-}tr\text{-}kuu\text{-}ts^h\gamma t$ without affecting the associated motion marker.

- 12481 (8) *kuiki turme kura c-tur~ty-kui-ts^hyt zo nuu*
 DEM.PROX person DEM:PL TRAL-TOTAL~AOR-SBJ:PCP-try EMPH DEM
 12482 *pjy-wy-sat-nuu.*
 IFR-INV-kill-PL
 12483 ‘All of these men who had went and tried (to discover the princesses’
 12484 secret) were killed.’ (140508 shier ge tiaowu de gongzhu-zh, 33)

12485 **12.4.1.2 Protasis of conditional**

12486 There are three possibilities in Japhug to mark the verbs in the protasis of con-
 12487 ditionals (§25.2.1): Irrealis (§21.4.1.5), Interrogative *wu-* (§21.7.4.2) and initial re-
 12488 duplication. In the latter two cases, the verb is generally followed by the additive
 12489 linker *ny*, as in (9).

- 12490 (9) *a-tciu tur~tui-ŋu ny, puu-ta-suxcxt nuu ci nuu-ndun*
 1SG.POSS-son COND~2-be:FACT ADD AOR-1→2-teach DEM once IMP-read
 12491 *ra*
 be.needed:FACT
 12492 ‘If you are my son, then recite (the mantra) that I have taught you.’
 12493 (Norbzang 2012, 221)

12494 Conditional reduplication interacts with TAME categories. For instance, redup-
 12495licated Aorist can be used to refer to hypothetical future events as in (10). With-
 12496out the *ny* linker, reduplicated Aorist can be interpreted as Iterative coincidence
 12497 (§12.4.1.3).

- 12498 (10) *tui~ty-tui-tut ny tce pjui-ta-sat ŋu*
 COND~AOR-2-say[II] ADD LNK IPFV-1→2-kill be:FACT
 12499 ‘If you tell (them) about (it), I will kill you.’ (150901 changfamei-zh, 54)

12500 The scope of the protasis can go beyond the clause containing the reduplicated
 12501 verb. In (11), the protasis contains two clauses, the first one headed by the verb
 12502 *mu~mŋ-puu-pe* with reduplicated conditional, and the second one with the verb
 12503 *tu-kui-ŋke* without conditional marking.

- 12504 (11) *tceri tuu-mŋpa kumy, tuu-xtsa muu-mŋ-puu-pe*
 LNK GENR.POSS-sole also GENR.POSS-shoe COND~NEG-PST.IPFV-be.good
 12505 *c^hondyre, ty-rŋab kui-rŋji tu-kui-ŋke q^he,*
 COMIT INDEF.POSS-time SBJ:PCP-be.long IPFV-GENR:S/O-walk LNK

- 12506 *tua-my̥pa ri cimbyrom tu-rke ηgrv̥l.*
 GENR.POSS-sole LOC blister IPFV-put.in[III] be.usually.the.case:FACT
 12507 ‘On the soles too, if one has had bad shoes, and walked for a long time,
 12508 blisters will form on one’s soles.’ (27-tWfCAL, 139)

12509 The reduplicated conditional *pui~pui-ŋu* of the Past Imperfective of the copula
 12510 *ŋu* ‘be’ has been grammaticalized as a topic marker *pupuŋuny* ‘as far as... is
 12511 concerned’ (§9.1.5.1).

12.4.1.3 Iterative coincidence

12513 One of the meaning of initial reduplication with verbs in Aorist form is iterative
 12514 coincidence (Jacques 2014a: 295–296). In this biclausal construction, the first
 12515 clause with the reduplicated verb expresses the repetition of an event ‘every time
 12516 *X*’ (§25.3.1), and the second clause (with a main verb in the Imperfective) the
 12517 resulting situation, as in (12).

- 12518 (12) *[kuaki tcʰemypui ki si u-kui-pʰuit*
 DEM.PROX girl DEM.PROX wood 3SG.POSS-SBJ:PCP-cut
 12519 *tui-tr-ye zo], numu rgynmui nui yui ui-si*
 ITER~AOR:UP-come[II] EMPH DEM old.woman DEM GEN 3SG.POSS-wood
 12520 *pui-pʰuit, ui-tui-ci z-pui-re,*
 IPFV-cut 3SG.POSS-INDEF.POSS-water TRAL-IPFV:WEST-fetch[III]
 12521 ‘Every time the girl came to cut firewood, she would cut firewood for the
 12522 old woman and fetch water for her.’ (150829 taishan zhi zhu-zh, 33)

12523 Although the semantic relationship between the two clauses is more a matter
 12524 of temporal relationship rather than strict causality (for instance in example 12),
 12525 this construction is clearly a subcase of the reduplicated conditional (§12.4.1.2).

12.4.1.4 Incremental

12527 Verb-initial reduplication with adjectival stative verbs can express a gradual in-
 12528 crease of degree ‘become more and more *X*’. This function occurs with TAME
 12529 categories which have an inchoative meaning when used with stative verbs: the
 12530 Imperfective (§21.2.6) as in (13) and (14), the Aorist (§21.5.1.3) and the Inferential
 12531 (§21.5.2.4).

- 12532 (13) *zŋgri my-kui-tṣot ci, nui svz hanuni kui-tṣot*
 star NEG-SBJ:PCP-be.bright INDEF DEM COMP a.little SBJ:PCP-be.bright
 12533 *ci, nui svz hanuni kui-tṣot ci, nui svz hanuni*
 INDEF DEM COMP a.little SBJ:PCP-be.bright INDEF DEM COMP a.little
 12534 *kui-tṣot, tce kuiſde ki tu-fse tce, [...] t^hi*
 SBJ:PCP-be.bright LNK four DEM.PROX IPFV-be.like LNK downstream
 12535 *t^hui-ari ui-juja c^hui~c^hui-tṣot zo*
 AOR:DOWNSTREAM-go[II] 3SG.POSS-following INCR~IPFV-be.bright EMPH
 12536 *nui-ŋu tce,*
 SENS-be LNK
 12537 ‘(The constellation of the earthworm comprises) one non-bright star,
 12538 another one slightly brighter, another one slightly brighter, another one
 12539 slightly brighter, four (stars) like this (...), becoming brighter as they go
 12540 downstream.’ (29-mWBZi, 31-33)

12541 Verb-initial reduplication can be combined with verb repetition and the addi-
 12542 tive linker *ny* to put emphasis on the steadiness of the increase, as in (14).

- 12543 (14) *zuuruzyri tce c^hui~c^hui-myći-ndzi ny c^hui~c^hui-myći-ndzi tce*
 progressively LNK INCR~IPFV-be.rich-DU ADD INCR~IPFV-be.rich-DU LNK
 12544 ‘They progressively became richer and richer.’ (02-deluge2012, 132)

12545 The negation *mu-* of the Imperfective, reduplicated as *mu~my-*, can express
 12546 gradual decrease, as in (15).

- 12547 (15) *t^hndzi nui rca, tu~tu-c^ha zo pjy-cti. tcendxre,*
 demon DEM UNEXP:FOC INCR~IPFV-can EMPH IFR.IPFV-be.AFF LNK
 12548 *wzo nuna tce zuuruzyri tce, mu~my-nui-c^ha zo*
 3SG DEM LNK progressively LNK INCR~NEG-IPFV-can EMPH
 12549 *pjy-cti tce*
 IFR.IPFV-be.AFF LNK
 12550 ‘The demon was becoming stronger and stronger, and he was weaker and
 12551 weaker.’ (140513 abide he mogui-zh, 81)

12.4.1.5 Totalitative

12552 Totalitative reduplication occurs on the main verb of relative clauses (§23.3.2),
 12553 expressing universal quantification (§9.1.3.1) of the relativized referent. It is at-
 12554 tested in participial relatives (§16.1.1.2), finite relatives (§23.2.2) and also some
 12555 partially lexicalized participles (§16.1.1.7).

12557 In the case of participial relatives, the reduplicated syllable is the first syllable
 12558 of the verb other than the possessive prefix, either the subject participle prefix
 12559 *ku-* (16), the object participle *ky-* (17) or an orientation preverb (18).

- 12560 (16) *laχte^ha ηotcu ny-ky-suso zo nunia, ny-mja^b,*
 thing where 2SG.POSS-OBJ:PCP-think EMPH DEM 2SG.POSS-eye
 12561 *ny-rna, ny-cna c^ho ra [ku^a~ku^a-spos]* *nua*
 2SG.POSS-ear 2SG.POSS-nose COMIT PL TOTAL~SBJ:PCP-have.a.hole DEM
 12562 *w-ηgwa tce a-ky-tui-rke q^he*
 3SG.POSS-in LOC IRR-PFV:EAST-2-put.in[III] LNK
 12563 ‘Whatever things you want (from the granary), put it in your eyes, your
 12564 ears, your nose etc, all the holes in your body.’ (31-deluge, 138)

- 12565 (17) *wuma zo nui-pe ndyre, [ku^a~ky-suso] nui nui-fse*
 really EMPH SENS-be.good LNK TOTAL~OBJ:PCP-think DEM SENS-be.like
 12566 ‘It is very nice, it is like everything that (I) want.’ (2011-04-smanmi, 214)

- 12567 (18) *tce ui-t^hycu prysc^hui ra [tui~ty-ku^a-ruuk^hyrl^hyn]*
 LNK 3SG.POSS-downstream TOPO PL TOTAL~AOR-SBJ:PCP-build.house
 12568 *ku^a nui-rdysta^b nui ntsu s-c^hy-nui-ru-nui*
 ERG 3PL.POSS-stone DEM always TRAL-IFR:DOWNSTREAM-AUTO-fetch-PL
 12569 *tce to-nui-ntc^hoz-nui.*
 LNK IFR-AUTO-use-PL
 12570 ‘All people from Praskyu down there who built/repaired their houses
 12571 went there and took stones to use for themselves.’ (140522 Kamnyu zgo,
 12572 196)

12573 In finite relatives, the verb lacks any overt nominalization marker other than
 12574 the reduplication itself. In this construction, the relativized elements are either
 12575 direct objects (as in 19 and 20 below), semi-objects or goals, but never subjects
 12576 (§23.2.2).

- 12577 (19) *ui-ro nura [icq^ha pu~pur-fcat-a] nura ku^a tce tce*
 3SG.POSS-rest DEM:PL just.before TOTAL~AOR-tell-1SG DEM:PL ERG LNK LNK
 12578 *suijno tu-ndza-nui*
 grass IPFV-eat-PL
 12579 ‘The rest, all the (other animals) that I have told about just before eat
 12580 grass.’ (05-khWna, 46)

12 Non-concatenative verbal morphology

- 12581 (20) *nua [spu~spe]* *nua to-nyrmi* *ri tyste <zhima>*
DEM TOTAL~be.able.to:FACT DEM IFR-call.name LNK that.is sesame
12582 *ky-ti nua ny-nua-jmuit*
INF-say DEM IFR-AUTO-forget
12583 ‘He called the names of all (the crops) he knew, but forgot to say ‘sesame’:’
12584 (140512 alibaba-zh, 109)

12585 Finite transitive verbs with totalitative reduplication and a 1SG subject can op-
12586 tionally take plural indexation (§14.3.2.1) corresponding to the relativized direct
12587 object with universal quantification. Object plural indexation in this case is rare
12588 (it is absent for instance in 19 above), and only one example is attested in the
12589 corpus: *pui~pui-mto-t-a-nu* (TOTAL~AOR-see-PST:TR-1SG-PL) ‘all those that I have
12590 seen’ (60, §14.3.2.6).

12591 The totalitative subject participle of the existential verb *tu* ‘exist’ can take a
12592 possessive prefix, which is interpreted as a possessor, as in *a-kui~kui-tu* 1SG.POSS-
12593 TOTAL~SBJ:PCP-exist ‘everything that I have’. No other totalitative verb form al-
12594 lows possessor prefixation. In particular, since the subject participles of transi-
12595 tive verbs require a possessive prefix coreferent with the object (§16.1.1.1), totali-
12596 tative reduplication is incompatible with these forms. For instance, to express
12597 the meaning ‘all those who help me’, forms such as *ta-tu~tu-kui-qur* (1SG.POSS-
12598 TOTAL~IPFV-SBJ:PCP-help) or *ta-kui~kui-qur* (1SG.POSS-TOTAL~SBJ:PCP-help) are com-
12599 pletely unacceptable, and universal quantification has to be expressed with other
12600 means, for instance *a-tu-kui-qur t^hamtçyt* (1SG.POSS-IPFV-SBJ:PCP-help all).

12601 Totalitative reduplication of transitive subject participle is only possible if no
12602 possessive prefix is present (see 56, §23.3.2).

12.4.1.6 Emphatic autive

12603 When occurring in word-initial position, the autive prefix *nua-* can be reduplicated
12604 to express emphatic permansive ‘still X (regardless of whatever may hap-
12605 pen)’, and such verb form can be repeated with the additive linker *ny*, as in (21).

- 12606 (21) *txt^ho nua puwpuny, tce nua my-fse* *tce tcendyre*
pine DEM as.for LNK DEM NEG-be.like:FACT LNK LNK
12607 *wi-jwas nua nua~nua-tu* *ny nua~nua-tu*
3SG.POSS-leaf DEM EMPH~AUTO-exist:FACT ADD EMPH~AUTO-exist:FACT
12608 *q^he*
LNK
12609 ‘As for the pine, it is not like (the other trees), (whatever happens), its

12611 leaves (needles) are still there.' (07-tAtho, 16)

12612 The reduplicated autive should not be mistaken with the combination of a type
 12613 A 'westward' orientation preverb *nui-* with the autive in spontaneous function
 12614 (§19.1.4) as in (22).

- 12615 (22) *wuzo nui-nui-me cti.*
 3SG AOR-AUTO-not.exist be.AFF:FACT
 12616 '(The wart) disappeared by itself.' (24-pGArtsAG, 53)

12.4.2 Verb stem reduplication as secondary exponence

12618 Prefixal partial reduplication of the verb stem is a secondary exponence, used in
 12619 combination with a prefix, in several productive verbal forms listed in Table 12.8.

12620 Stem reduplication occurs in two converbs, the gerund (§16.6.1 and the purpo-
 12621 sive converb (§16.6.2), together with a *sy(z)-* prefix cognate to that of the oblique
 12622 participle (§16.1.3).

12623 It is also found in four regular derivations: reciprocal (§18.4.1, on the *a-* prefix
 12624 see §20.10.3), distributed action (§19.4), auto-evaluative (§19.5) and attenuative
 12625 (§19.6). The attenuative differs from all other cases in that the vowel of the redu-
 12626 plicated syllable is in some cases *-y-* rather than *-u-*.

Table 12.8: Productive verbal forms with stem reduplication and prefixation

Function	Example		Reference
Gerund	<i>mu</i> ‘fear’	<i>sy-mu~mu</i> ‘fearing’	§16.6.1
Purposive converb	<i>jmut</i> ‘forget’	<i>u-mr~nui-sy-jmu~jmut</i> ‘in order not to forget’	§16.6.2
Reciprocal	<i>rquə</i> ‘hug’	<i>a-rqu~rquə</i> ‘hug each other’	§18.4.1
Distributed action	<i>mtsər</i> ‘jump’	<i>ny~mtsui~mtsər</i> ‘jump around’	§19.4
Auto-evaluative	<i>mpçər</i> ‘be beautiful’	<i>zny~mpçuu~mpçər</i> ‘think of oneself as beautiful’	§19.5
Attenuative	<i>wyrum</i> ‘be white’	<i>a-yrr~yrum</i> ‘be whitish’	§19.6

The locus of reduplication is the last syllable of the verb stem, disregarding indexation suffixes. When the verb stem contains more than one syllable, the reduplicated syllable is infixated. For instance, the gerund of *nurre* ‘laugh’ is *səz-n̥r̥u~re* ‘laughing’: the partially replicated material *-ru-* occurs between the two syllables *n̥r̥-* and *-re* of the verb stem. Additional reduplication is blocked on lexically reduplicated verb stems such as *ruru* ‘guard, take care of’ (§19.7.11) or *nuqambumbjom* ‘fly’: triplication is not attested in Japhug, unlike in Stau (Gates 2017).

Non-productive suffixed partial reduplication is found in the antipassive (§18.6.5) and distributed action derivation (§19.4.2.1).

Irregular partial reduplication with *-or* or *-um* in the replicated syllable instead of regular *-u* are also attested (for instance *n̥v̥umt̥aꝝ* ‘play around’ from *n̥v̥aꝝ* ‘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 *qarŋu~rje* ‘be deep yellow’ vs. *aqarŋu~rje* ‘be yellowish’. Reduplicated adjectival verbs are almost always attested in participial form, as in (23).

- 12648 (23) *tcʰeme kui-mpciu~mpcyr kui-pu~pe ci*
 girl SBJ:PCP-EMPH~be.beautiful SBJ:PCP-EMPH~be.good INDEF
 ny-cya kui-xtciu~xtci ci a-nui-tui-γβzu
 2SG.POSS-tooth/age SBJ:PCP-EMPH~be.small INDEF IRR-PFV-2-become
 smulym
 prayer

‘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).

- 12654 (24) *u-ku nuara tce n̥ki, u-kx̥cyl nuara li*
 3SG.POSS-head DEM:PL LNK FILLER 3SG.POSS-top.head DEM:PL again
 ju-qarŋe qʰe ju-wyrui~wyrum kui-fse.
 SENS-be.yellow LNK SENS-EMPH~be.white SBJ:PCP-be.like
 ‘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

- (25) *ny-wa pui-nnu-muu~me cti*
2SG.POSS-father PST.IPFV-AUTO-EMPH~not.exist

‘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.

- (26) *kui-rgui~rga zo tuiume ra maje-nui ma*
SBJ:PCP-EMPH~like EMPH people PL not.exist:SENS-PL LNK

‘There are no people who like it a lot.’ (160706 thotsi, 24)

- (27) *pya ky-ruacmi kui-spu~spa nui kui ...*
bird INF-speak SBJ:PCP-EMPH~be.able DEM ERG

‘The bird who was able to speak very well (said).’ (Norbzang 2012, 26)

Often in combination with the autive *nui-* (§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

- (28) *tui-ji sna tce, [tcʰi l̥y-wy-nui-jur~ji] zo*
INDEF.POSS-field be.good LNK what AOR-INV-AUTO-EMPH~plant EMPH

pe
be.good:FACT

‘(The type of earth called *tr̥tso*) is fit (to be used) as fields, whatever one plants in it, (the planting) will be good (successful).’ (25-cWXCWz, 64)

Although emphatic reduplication is highly productive and regular, a handful of verbs have irregular reduplication patterns. The transitive verb *r̥tcaš* ‘tread on’ has the emphatic form *r̥tcaumtcaš* ‘trample’ (compare example 183, §18.8.2 with 180, §14.6.2) with *-um* reduplicated syllable (§19.4.2.2). The stative verb *mdi*

² In (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.

³ In (28), the subject of the verb *pe* ‘(it) is good’ is not the crop referred to by the interrogative pronoun *tcʰi*, 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)).

12 Non-concatenative verbal morphology

12678 ‘be complete’ has the emphatic form *mdoɔmdi* with -*oɔ* reduplication (§19.4.2.2),
12679 and *tsʰu* ‘be fat’ has the suffixed -*e* reduplicated form *tsʰutsʰe* ‘be very fat’.

12680 The verb *fse* ‘be like’ has the irregular reduplicated form -*fsy~fse* alongside -
12681 *fsu~fse* in universal concessive conditionals (*taʰi pui-nu-fsy~fse* ‘in any case’, ex-
12682 ample 33, §25.2.3.3).

12683 13 Negation

12684 Negation in Japhug is mainly expressed by negative prefixes (§13.1). It is sym-
12685 metrical (Miestamo 2005): the presence of these prefixes is not systematically
12686 correlated with finiteness or TAME alternations.

12687 In addition to negative prefixes, a periphrastic negative construction with
12688 sentence-final negative auxiliary is also attested (§13.2), and it is required in par-
12689 ticular to mark double negation (§13.3).

12690 13.1 Negative prefixes

12691 13.1.1 Allomorphy

12692 Four negative prefixes are found in Japhug: *mx-*, *mu-*, *ma-* and *múj-*. Their distri-
12693 bution is determined by TAME and finiteness.

12694 The *ma-* prefix is restricted to prohibitive verb forms (§21.4.3.1), and always
12695 combined with type A orientation preverbs (§15.1.1.1).

12696 The stress-bearing (§11.2.3) *múj-* prefix (see 1 below) is a portmanteau of nega-
12697 tion and Sensory evidential (§21.3.2). The Sensory prefix *juu-* has the expected
12698 negative form *muu-juu-* only in the case of contracting verbs (§21.3.2.1). Otherwise,
12699 when the prefixal sequence *muu-juu-* occurs, the *juu-* preverb marks the Imperfec-
12700 tive (§21.2.1).

12701 The form *mx-* is found on non-finite verbal forms without any orientation pre-
12702 verb (§16.1.1.2, §16.1.2.2, §16.2.1.2, §16.3.1), in Factual Non-Past and Irrealis form
12703 (see 3 above in §11.2.1), and also when preceded by the interrogative *w-* (§21.7.4.1)
12704 as in (1) and the Proximative *juu-* (§21.6.2) as in (2).

- 12705 (1) *tce tui-ŋke w-mx-ta-za, w-mx-nuu-munmu q^he*
LNK INF:II-walk QU-NEG-AOR:3→3'-start QU-NEG-AOR-MOVE LNK
12706 *múj-sy-mto*
NEG:SENS-PROP-SEE
12707 'If it has not started walking, if it has not moved, it is not visible.'
12708 (26-NalitCaRmbWm)

13 Negation

- 12709 (2) *jufcwr ju-my-c-tx-t^bu-t-a* *zo*
yesterday PROXM-NEG-TRAL-AOR-ask-PST:TR-1SG EMPH
12710 ‘Yesterday I almost did not go and ask about it.’ (elicited)

12711 The allomorph *mu-* is found elsewhere, including non-finite verb forms with
12712 orientation preverbs (§16.1.1.2, §16.1.2.2, §16.2.1.6) and all finite verb forms with
12713 orientation preverbs other than the Prohibitive and the verbal forms where slot
12714 -6 is filled (Irrealis, Interrogative, Proximative etc).

¹²⁷¹⁵ The partial reduplication (§12.4.1) of *mu-* (which occurs in particular in the
¹²⁷¹⁶ protasis of conditionals, §12.4.1.2) does not yield expected †*mu~mu-*, but rather
¹²⁷¹⁷ *mu~my-* with vowel alternation: compare for instance *mu-nu-si* ‘she did not die’
¹²⁷¹⁸ with the *mu-* prefix (as expected in the Aorist) with *mu~my-nu-si-a* ‘if I do not
¹²⁷¹⁹ die’ in (4).

- 12720 (3) *tx-mu nuu yuujpa kaire myctsə mur-nu-si*
 INDEF.POSS-mother DEM this.year DEM.LOC until NEG-AOR-die
 12721 ‘The old woman only died this year (did not die until this year).’
 12722 (14-siblings, 353)

- 12723 (4) *mui~m̥-nu-si-a ny, a-tx-kui-nulaþraðaβ-a*
COND~NEG-AOR-die-1SG ADD IRR-PFV-2→1-hit.with.forelegs-1SG
12724 *ra*
be.needed:FACT
12725 ‘If (after that) I have not died (yet), hit me with your forelegs.’
12726 (2003kAndzwsqhaj2, 83)

The Interrogative *u-* prefix, like conditional reduplication, requires the *mr-* negative prefix (see 1 above), and this commonality in morphophonology is correlated with a similarity in function, since both the prefix *u-* and reduplication are used to mark the verb of the protasis of conditional clauses (§25.2.1).

The -6 slot *umv-* prefix of possible modality (§21.7.2) has a surface form identical to the combination of the interrogative *u-* with the negative prefix *m-*, as in (5). The *umv-* synchronically differs from *u-mv-* (from which it historically derives) in that it can occur with the peg circumfix (§11.4, §21.7.2.1). It is not compatible with a negative prefix.

- 12736 (5) *qajuu kui-fse ra tu-ndze uumyx-ju ma*
 bug SBJ:PCP-be.like PL IPFV-eat[III] PROB-be:FACT LNK
 12737 ‘It presumably/maybe eats bugs.’ (23-pGAYaR, 35)

12738 Negative prefixes are restricted to verb forms, and cannot be prefixed on nouns
 12739 (§13.4.1). They occur however on non-finite verb forms including participles
 12740 (§16.1.1.2, §16.1.2.2, §16.1.3.4), infinitives (§16.2.1.2, §16.2.1.6, §16.2.3.1), degree nomi-
 12741 nials (§16.3.1), conversbs (§16.6.1.2, §16.6.2), but not action nominals (§16.4) and
 12742 fossilized deverbal nouns (§16.5).

12743 13.1.2 Suppletive negative verbs

12744 Negative prefixes can occur on most verbs, with the exception of copulas and
 12745 existential verbs, which have suppletive negative forms (§14.2.2), as illustrated
 12746 in Table 13.1.¹ The contrast between the neutral copula *ŋu* ‘be’ and the Emphatic
 12747 Affirmative *cti* ‘be’ is neutralized in the negative, where only one negative copula
 12748 *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>ŋyŋu</i> ‘exist’	<i>maje</i> ‘not exist’

12749 For instance, the negation of *ŋu* ‘be’ and *tu* ‘exist’ can only be *maꝝ* ‘not be’ (6)
 12750 and *me* ‘not exist’ (7).

- 12751 (6) *azo maꝝ-a*
 1SG not.be:FACT-1SG
 12752 ‘I am not (that girl).’ (2003sras, 66)

- 12753 (7) *kucunŋua tce tuutsʰot puu-me tce,*
 former.times LOC clocks PST.IPFV-not.exist LNK
 12754 ‘In former times, there were no clocks.’ (29-LAntshAm, 65)

12755 Combining *ŋu* and *tu* with negative prefixes (for instance †*my-ŋu-a* instead of
 12756 *maꝝ-a* ‘I am not/It is not me’ and †*muu-puu-tu* instead of *puu-me*) is utterly incorrect
 12757 and categorically rejected by all speakers. Likewise, negative copulas cannot take
 12758 negative prefixes (†*my-maꝝ-a* is ungrammatical).

¹ Another 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 *maꝑ* occur together in the phrase *yu ciny maꝑ kuu* ‘in any case it is not true’ (example 139, §9.1.6.4). The negative existential *me* ‘not.exist’ is very commonly found with the participle of its antonym *kui-tu* to express emphasis on the non-existence, as in (8) in comparison with (7) (§22.5.1.2).

- (8) *kuacum̥gwa mkʰurlu kui-fse ra pui-kui-tu*
 former.times machine SBJ:PCP-be.like PL PST.IPFV-SBJ:PCP-exist
me.
 not.exist:FACT
 ‘In former times, there were no machines or things like that at all.’
 (140430 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>-z̥uu</i>	<i>NEG + z̥uu</i> ‘not just be’	<i>mr-z̥uu</i>
<i>-t̥eʰy̥z</i>	<i>NEG + t̥eʰy̥z</i> ‘be contrary to religion’	<i>mr-t̥eʰy̥z</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 + z̥uu* ‘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 *myzui* ‘even more’ (10).

- (9) *k^hyjmu nutcu my-zui ma, tyrjjo tu tce,*
 kitchen DEM:LOC NEG-be.just LNK shelf exist:FACT LNK

‘In the kitchen, there are not just (the aforementioned objects), there is also a shelf (to store the cooking implements).’ (2011-11-kha2, 22)

- (10) *nunuu pa^hs kuu tu-ndze tce, myzui zo c^hui-ts^hu c^ha*
 DEM pig ERG IPFV-eat[III] LNK even.more EMPH IPFV-be.fat can:FACT
 ‘When the pig eats it (acorns), it can grow even fatter.’ (08-CkrAz, 49)

Second, most *suu-/z-* abilitative verbs (§19.3) are only found in negative forms. For instance the abilitative *z-nxjo* from *nxjo* ‘wait’ only occurs with a negation in the meaning ‘cannot wait to’ (due to hurry/impatience) as in (11).

- (11) *spjan^hkua nuu kuu ju-zyuat muu-pjx-z-nxjo zo tce,*
 wolf DEM ERG IPFV-arrive NEG-IFR.IPFV-ABIL-wait EMPH LNK
 ‘The wolf could not wait (for the fox) to arrive.’ (140516 huli de baofu-zh, 43)

This constraint is also observed with the lexicalized abilitative *sp^hut* ‘can cut’ (from *p^hut* ‘cut, pluck’, §19.3.1) as in (12).

- (12) *tsantu kuu ui-ndzruu muáj-sp^hut ma*
 scissors ERG 3SG.POSS-nail NEG:SENS-can.cut LNK
ui-tur-rko ui-tur-jas
 3SG.POSS-NMLZ:DEG-be.hard 3SG.POSS-NMLZ:DEG-be.thick
juu-syre zo
 SENS-be.ridiculous EMPH
 ‘The scissors cannot cut through her nails, as they are extremely hard and thick.’ (2012, heard in context)

13.1.4 Lexicalized negation

Some verb roots have negative forms with unpredictable lexicalized meanings. Three subtypes can be distinguished.

First, the negative form of the underived form of the root can have an extended meaning. For instance, the verb *rkan* ‘be strong’, ‘be in good physical condition’ can mean ‘be pregnant’ in the negative as in (13).

13 Negation

- 12808 (13) *ki tcʰeme ki muu-py-rkay*
DEM.PROX girl DEM.PROX NEG-IFR-be.in.good.shape
12809 ‘This woman became pregnant.’ (elicited)

12810 Second, the special meaning of the negation appears in derivations: for in-
12811 stance, the stative verb *ftsʰi* ‘feel better’ has a negative causative *NEG + suftsʰi*
12812 ‘force’, ‘coerce’ (§17.2.3) and a lexicalized negative participle *mrkuftsʰi* ‘forcibly’
12813 used as an adverb (§16.2.1.8).

12814 Third, some lexicalized noun-verb collocations require a negative form (§22.4.1.5),
12815 for instance *tuu-skʰruu = NEG-βdi* ‘be pregnant’ from *tuu-skʰruu* ‘body’ and *βdi* ‘be
12816 well’ as in (14).

- 12817 (14) *ndzi-rzaβ bnaβna zo ndzi-skʰruu muu-py-βdi*
3DU.POSS-wife both EMPH 3DU.POSS-body NEG-IFR-be.well
12818 ‘Both of their wives got pregnant.’ (2005 Lobzang, 2)

12819 13.2 Periphrastic negation

12820 Aside from negative prefixes (15a), negation can be expressed by the negative
12821 copula *mav* ‘not be’ (15b) and the negative existential verb *me* ‘not exist’ (15c) in
12822 postverbal position.

- 12823 (15) a. *muu-puu-mto-t-a*
NEG-AOR-see-PST:TR-1SG
12824 ‘I have not seen it.’ (several examples)
b. *pui-mto-t-a mav*
AOR-see-PST:TR-1SG not.be:FACT
12826 ‘I have not seen it, (but rather...).’
c. *pui-mto-t-a me*
AOR-see-PST:TR-1SG not.exist:FACT
12828 ‘I have seen none/I haven’t seen anything.’ (several examples)

12829 The negative copula *mav* ‘not be’ occurs postverbally in Periphrastic TAME cat-
12830 egories requiring a copula (§21.2.2), or to express emphatic negation, contrasting
12831 with an assertive postverbal copula (§22.5.3.1) as in (16b).

- 12832 (16) a. *tcʰindža pui-tuu-γywu γu?*
why SENS-2-cry be:FACT
12833 ‘Why are you crying?’

- 12834 b. *pua-y̥wu-a* *ma* *n̥*, *tua-mua* *pjuw-lst*
 SENS-cry-1SG not.be:FACT SFP INDEF.POSS-sky IPFV-release
 12835 *pua-cti* *ma*
 SENS-be.AFF LNK
 12836 ‘It is not that I am crying, (I look like I am crying because) it has been
 12837 raining.’ (2005-stod-kunbzang, 391)

12838 The postverbal negative existential *me* (§22.5.1.2) has a universal negative mean-
 12839 ing ‘nothing’ or negative indefinite ‘none, not any’ as in (15c) (§22.5.4).

- 12840 (17) *tce u-mdor* *tcʰi zo fse* *my-xsi*,
 LNK 3SG.POSS-colour what EMPH be.like:FACT NEG-GENR:know
 12841 *a-ky-ti* *me* *ma mu-puu-mto-t-a*.
 1SG.POSS-OBJ:PCP-say not.exist:FACT LNK NEG-AOR-see-PST:TR-1SG
 12842 *u-ndzi* *kuny puu-mto-t-a* *me*
 3SG.POSS-skin also AOR-see-PST:TR-1SG not.exist:FACT
 12843 ‘I don’t know which colour it_i has, I can’t say because I have not seen it_i,
 12844 I have not even seen any of its_i hides.’ (27-kikakCi, 22)

12845 It is also found in one of the superlative constructions, illustrated by example
 12846 (18) (§26.4.3).

- 12847 (18) *βzui kui-fse* *tu-qʰe-a* *me*
 mouse SBJ:PCP-be.like IPFV-hate[III]-1SG not.exist:FACT
 12848 ‘Mice is what I hate most (there is nothing that I hate like a mouse).’
 12849 (140427 bianfu yu huangshulang-zh, 13)

13.3 Double negation

12850 Since negative prefixes are not recursive, there are only two ways to express
 12851 double negation in Japhug: either is by combining a negative verb form with a
 12852 negative auxiliary (*me* ‘not exist’ or *maje* ‘not exist’), or a negative verb form in
 12853 a complement clause with a negative complement-taking verb.

12854 Double negation with existential verbs can indicate universal quantification,
 12855 in particular when the verb taking the negative prefix is transitive (or semi-
 12856 transitive) and no overt object (or semi-object) is present as in (19) (see also
 12857 §22.5.4).

13 Negation

- 12859 (19) *pas ayayli* *ma rcanuu* *mr-ndze* *zo*
 pig produce.a.lot.of.manure:FACT LNK UNEXP:FOC NEG-eat[III] EMPH
 12860 *me*
 not.exist:FACT
 12861 ‘Pigs produce a lot of manure, as they eat everything (there is nothing
 12862 they don’t eat).’ (05-paR, 28)

12863 Negative participial forms with a negative auxiliary express mild assertion, as in
 12864 (20) and (21).

- 12865 (20) *azuiy* *mr-kui-pe* *me*
 1SG:GEN NEG-SBJ:PCP-be.good not.exist:FACT
 12866 ‘I am fine (I don’t have any particular problem).’ (140506 shizi he
 12867 huichang de bailingniao-zh, 73)
- 12868 (21) *mr-kui-k^huu* *me*
 NEG-SBJ:PCP-be.possible not.exist:FACT
 12869 ‘There is nothing wrong with it.’ (common in metalinguistic judgments
 12870 about the grammaticality of sentences)

12871 Another type of double negation construction is observed when both the complement-
 12872 taking verb and the verb in the complement clause take a negative prefix. The
 12873 most common verb in this type of configuration is the modal verb *k^huu* ‘be pos-
 12874 sible’ (§24.5.3.1), either with finite complements (§24.2.3) as in (22), or with neg-
 12875 ative infinitival complements (example 146, §16.2.1.2), expressing the meaning
 12876 ‘have no choice but to *X*’.

- 12877 (22) *ny-rca* *mr-yi-a* *mr-k^huu* *q^he*
 2SG.POSS-together.with NEG-come:FACT-1SG NEG-be.possible:FACT LNK
 12878 ‘It have no other choice but to go with you/follow you.’ (Nyima Wodzer
 12879 2003.2, 94-95)

12880 Other verbs attested in this type of construction include *nyz* ‘dare’ (§24.5.3.5)
 12881 as in (23) and *c^ha* ‘can’ (with the meaning ‘cannot help but’ as in 241, §15.2.10.4).

- 12882 (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
 12883 ‘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 kui-maʂ* ‘something/someone who/that is not *X*’ (§22.5.1.1), for instance *tx-rjít kui-maʂ* ‘someone who is not a child’ in (24).

- (24) *uuzora nuu-rjít zo cʰui-βri-nuu qʰe kumaaʂ ra*
 3PL 3PL.POSS-offspring EMPH IPFV-protect-PL LNK other PL
nuu-rjít nuu puapuŋjuny [tx-rjít kui-maʂ]
 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) *nr-kui-caβ me*
 2SG.POSS-SBJ:PCP-catch.up not.exist:FACT
 ‘Nobody will (be able) to catchup with you.’ (2003 qachGa, 109)
- (26) *tumurkʰa tce uu-sr-rŋgwu maye*
 evening LOC 3SG.POSS-OBL:PCP-lie.down not.exist:SENS
 ‘In the evening, it has no place to stay.’ (26-NalitCaRmbWm, 38)

13 Negation

12910 In negative existential constructions, the headless relative can also mean ‘not
12911 any of’ as *kr-mto* ‘any (amadou) to be seen’ in (27).

- 12912 (27) *jinde tce nu [u-kui-ntc^hoz] mane q^he, [kr-mto]*
nowadays LNK DEM 3SG.POSS-SBJ:PCP-use not.exist:SENS LNK OBJ:PCP-see
12913 *kuny mane*
also not.exist:SENS
12914 ‘Nowadays **nobody** uses (amadou), there isn’t even any to be seen.’
12915 (15-babW, 232)

12916 13.4.3 Adverbs

12917 Japhug lacks an all-purpose negative adverb, but there are a few negative intensifiers.

12918 The adverb *maka* is generally used with negative verb forms to express em-
12919 phatic negation ‘not ... at all’ as in (28), in particular with negative existential
12920 verbs (§22.5.4).

- 12921 (28) *tc^heme k^hyck^hyr ku-kui-*ce*
girl man.seating.place IPFV:EAST-GENR:S/O-go at.all
12922 *muu-puu-jyy*
NEG-PST.IPFV-be.allowed
12923 ‘Ladies were not allowed to go to the men’s seating place.’ (31-khAjmu,
12924 39)*

12925 It is however attested in non-negative sentences as in (29), in adversative con-
12926 texts.

- 12927 (29) *jyxts^{hi} ndyre maka nuu-nycqe ra*
this.time ADVERS at.all IMP-endure[III] be.needed:FACT
12928 ‘This time (unlike the previous times), you have absolutely to bear (the
12929 cold of the moon and the heat of the sun without making a word,
12930 otherwise we will not succeed).’ (tWxtsa, 211)

12931 This adverb is built from the root *-ka* found in the distributive determiner *tuka*
12932 ‘each’ (§9.1.3.3) and the distributive pronoun *zaka* ‘each his own’ (§6.7.3). The
12933 first syllable *ma-* resembles the negative prefix *mr-* (§13.1), but given the fact that
12934 negative prefixes (§13.1) are strictly restricted to verb forms, it is not likely that
12935 the first syllable of *maka* is from a negative prefix.

13.4 Negation and parts of speech other than verbs

12936 Rather, it is from the intensifier *mu*,² also attested as intensifier ‘not... at all’ in
12937 negative contexts (30), in *status constructus* form *mr-* (§5.4.1), followed by vowel
12938 assimilation with the following syllable -ka.

- 12939 (30) *nua ma kui-ra mu zo me*
12940 DEM apart.from SBJ:PCP-be.needed at.all EMPH not.exist:FACT
‘I don’t need anything else at all.’ (2003 tWxtsa, 121)

12941 We find in addition the compound form *mucin* ‘not even one at all’ (31) from
12942 *mu* and *cinv* ‘(not) even one’ (§9.1.6.4).

- 12943 (31) *kumdz ra mucin zo mr-arcxt-tci*
12944 relative PL at.all EMPH NEG-have.a.kinship.relationship:FACT-1DU
‘We don’t have any kinship relationship at all.’ (12-BzaNsa, 57)

² This form is related to the denominational verb *mrmu* ‘be the most important’.

12945 14 Person indexation and argument 12946 structure

12947 14.1 Introduction

12948 In Japhug, person indexation is the defining feature of finite verbs, as opposed to
12949 non-finite verbs (§16) and other parts of speech. Japhug finite verb forms index
12950 one or two arguments, depending on the transitivity of the verb, using a com-
12951 bination of prefixes, suffixes and stem alternation. No verb indexes more than
12952 two arguments. The indexation system is very close to a canonical direct-inverse
12953 system (§14.3.2.8).

12954 This chapter first presents intransitive and transitive conjugations, investi-
12955 gates the issue of agreement mismatch, and then discusses the origin of person
12956 indexation affixes. In addition, it documents the analogical extension of person
12957 indexation suffixes to non-finite verb forms in some specific contexts.

12958 14.2 Intransitive verbs

12959 Intransitive verbs comprise dynamic, stative and semi-transitive verbs. All of the
12960 verbs have in common the property of indexing one argument, the intransitive
12961 subject, which when overt is in absolute form (§8.1.1).

12962 14.2.1 The intransitive paradigm

12963 Table 14.1 illustrates the paradigm of intransitive verbs in Kamnyu Japhug, using
12964 the verb *ce* ‘go’ in the Factual non-past¹ as an example. Other Japhug dialects
12965 have slightly different indexation suffixes, a question discussed in §14.8.1 with
12966 comparative evidence from other Gyalrong languages.

12967 There is no stem alternation related to person indexation in the intransitive
12968 paradigm in any Japhug dialect. The invariable stem is represented with the

¹ This 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.

₁₂₉₆₉ symbol Σ in Table 14.1.²

Table 14.1: The intransitive conjugation in Japhug

Person	Form	ce ‘go’ (Factual non-past)
1SG	$\Sigma-a$	$\text{ce}-a$
1DU	$\Sigma-t\zeta i$	$\text{ce}-t\zeta i$
1PL	$\Sigma-ji$	$\text{ce}-j$
2SG	$tuu-\Sigma$	$tuu-\text{ce}$
2DU	$tuu-\Sigma-nd\zeta i$	$tuu-\text{ce}-nd\zeta i$
2PL	$tuu-\Sigma-nuu$	$tuu-\text{ce}-nuu$
3SG	Σ	ce
3DU	$\Sigma-nd\zeta i$	$\text{ce}-nd\zeta i$
3PL	$\Sigma-nuu$	$\text{ce}-nuu$
generic	$kui-\Sigma$	$kui-\text{ce}$

₁₂₉₇₀ With a few well-identified exceptions, the indexation suffixes agree in person and number with the intransitive subject in Japhug. There is no indexation with possessors or oblique arguments, unlike closely related languages like ₁₂₉₇₁ Khroskyabs (Lai 2015) or Tangut (Jacques 2016e).

₁₂₉₇₄ In the intransitive paradigm, five suffixes and two prefixes are found. The ₁₂₉₇₅ stress is always on the last syllable of the verb stem (§11.3, except in a handful ₁₂₉₇₆ of forms, §3.7), and all person indexation suffixes, including $-a$, are unstressed ₁₂₉₇₇ and sometimes are even devoiced (§3.7). Unlike other languages of the Trans- ₁₂₉₇₈ Himalayan, such as Khaling (where the dual inclusive and the third dual are ₁₂₉₇₉ homophonous, see Jacques et al. 2012: 1113), in Japhug all slots in the intransitive ₁₂₉₈₀ paradigm are distinct, without ambiguity.

₁₂₉₈₁ 14.2.1.1 First person

₁₂₉₈₂ First person subjects are indexed by a set of three suffixes marking both person ₁₂₉₈₃ and number: $-a$, $-t\zeta i$ and $-ji$ for first singular, dual and plural, respectively. As ₁₂₉₈₄ in the pronominal paradigms (§6.1), there is no inclusive/exclusive distinction ₁₂₉₈₅ in Japhug; inclusive first+second person is indexed as 1DU or 1PL, as shown by ₁₂₉₈₆ examples such as (1) where the 1DU indexation corresponds to the sum of the

² This notation follows the Kirantological tradition (for instance van Driem 1993a).

12987 2SG and 1SG pronouns in the phrase *nŋzo cʰo azo ni*. Equivalent examples with
 12988 exclusive meaning (1SG+3SG) can be found in the corpus, for instance (23) below
 12989 in §14.2.6.³

- 12990 (1) *nŋzo cʰo azo ni, nŋki, rŋymtsʰu ui-taŋ nuutcu χsui-sŋi*
 12991 2SG COMIT 1SG DU FILLER sea 3SG.POSS-ON DEM:LOC three-day
cui-nŋyak-tci, cui-nŋymole-tci.
 12992 TRAL-have.a.good.time:FACT-1DU TRAL-do.sightseeing:FACT-1DU
 12993 ‘You and I will go on a three day tour on the sea.’ (150827
 mengjiangnv-zh, 216)

12994 The 1SG *-a* suffix is the only suffix in Japhug with a vowel other than *u* (or *i*
 12995 after palatal and alveolo-palatal consonants, §3.5.2), and is the only indexation
 12996 suffix that can be followed by another indexation suffix in the transitive paradigm
 12997 (§14.3.2.6). The *-a* 1SG person index is among the suffixes revealing the underlying
 12998 form of the codas: *-β*, *-γ*, *-κ*, *-z*, which become unvoiced in some contexts (§3.2.2)
 12999 are realized as voiced (see for instance in Table 14.2 below; *-β* is realized [-w-] in
 13000 this context, since it becomes an onset, §3.2.1), but the coda *-t* remains unvoiced
 13001 (for instance *scit-a* be.happy-1SG ‘I am happy’). The codas are resyllabified; for
 13002 instance *scit-a* is syllabified as *sci/ta*.

13003 Some verb stems (independently of transitivity) undergo predictable phono-
 13004 logical alterations when followed by *-a*. With verb stems whose last syllable is
 13005 an open syllable, the *-a* suffix merges its vowel. With closed syllable verb stem
 13006 in *-rC* (C representing a coda), the 1SG suffix causes vowel assimilation. These
 13007 phonological rules are presented in Table 14.2.

13008 When the verb stem ends in *-a*, the 1SG suffix merges with the stem as [a] in
 13009 Kamnyu Japhug, resulting in homophony between the 1SG and the 3SG forms. The
 13010 surface form [rga] corresponds to both 1SG *rga-a* ‘I like it’ and 3SG *rga* ‘he likes
 13011 it’. The fused and invisible suffix is systematically indicated in the orthography
 13012 used in this grammar. In the Sarndzu of Japhug, a long vowel occurs in the 1SG,
 13013 which thus remains different from the 3SG.

13014 When the verb stem ends in vowels other than *-a*, these vowels undergo synize-
 13015 sis with the *-a* suffix (§3.3.1.3), merging into one syllable. In addition, the mid-
 13016 high vowels *-e* and *-o* become the corresponding high vowels *-i* and *-u* in this
 13017 context.

13018 These vowel mergers are obligatory in the Kamnyu dialect. However, there
 13019 are not attested in all Japhug dialects, which may favor hiatus.

³ In 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 $-yt$, $-vn$, $-v\beta$, $-vm$, $-yr$, $-vl$ and $-vz$, the 1SG suffix causes non-optimal vowel assimilation $vC-a \Rightarrow /-aCa/$ (§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 $vC-a$ ($jyat-a$ rather than $jyvt-a$), to indicate the fact that $v \Rightarrow a$ 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’
$-v\beta$	[-awa]	$t^h u-rd\beta-a \Rightarrow [\text{t}^h \text{urdáwa}]$ ‘I lost money’
$-vm$	[-ama]	$mts^h v\beta m-a \Rightarrow [\text{mts}^h \text{áma}]$ ‘I hear it’
$-vt$	[-ata]	$jyvt-a \Rightarrow [\text{jyáta}]$ ‘I will come back’
$-vn$	[-ana]	$tu-nusm\beta n-a \Rightarrow [\text{tunusmána}]$ ‘I will treat it’
$-yr$	[-ara]	$pui-atyr-a \Rightarrow [\text{patára}]$ ‘I fell down’
$-vl$	[-ala]	$nui-nutufçyl-a \Rightarrow [\text{nunutufçála}]$ ‘I had diarrhea’
$-vz$	[-aza]	$mk^h v\beta z-a \Rightarrow [\text{mk}^h \text{áza}]$ ‘I am expert at it’

The first dual $-t\beta i$ suffix ($-tsə$ in some dialects of Japhug, §14.8.1) only causes regular devoicing assimilation on the coda of the verb stem: $-z$, $-r$, $-y$, $-\beta$ are realized as $-s$, $-s$, $-x$, $-χ$ when followed by $-t\beta i$ (for instance $mk^h v\beta z-t\beta i$ 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 $smi t^h u-\beta lu-j$ ‘we made a fire’ and $lipyuy pui-\beta li-j$ ‘we planted radish’ is considered to be

13037 homophonous (the last syllable is realized as [βlij]) by Tshendzin (§3.3.2).

13038 14.2.1.2 Non-first person

13039 Second and third person forms have the same set of suffixes (zero, -*ndzi* and -*nu*
 13040 for singular, dual and plural, respectively) and only differ by the presence of a
 13041 *tuu-* prefix in second person forms. Unlike in Situ (Lin 1993: 197–208), there is no
 13042 second person suffix in the 2SG.

13043 The non-first person dual and plural suffixes -*ndzi* and -*nu* (some Japhug di-
 13044 alects have -*ndza* in the dual instead, see §14.8.1) nasalize the coda -*t* to [n], which
 13045 is not audible before -*ndzi* and results in a geminate in the plural. For instance,
 13046 *scit-ndzi* and *scit-nu* are realized as [scíndzi] and [scínnw], respectively. The vowel
 13047 -*i* and -*u* is often elided, resulting in apparent -*n* codas. The contrast between
 13048 the codas -*n* and -*t* is neutralized in these forms: the last two syllables of both *tuu-*
 13049 *n̩ndut-nu* IPFV-fight-PL ‘they fight (over it)’ and *pjuu-ndun-nu* IPFV-read-PL ‘they
 13050 read/recite it’ are thus realized as [-ndúnnw].

13051 The second person *tuu-* prefix fuses with the initial *a-* of contracting verbs
 13052 (§12.3). The result of vowel fusion is *tuu-a-* ⇒ [ta] in the Factual Non-past (*tuu-atyr*
 13053 ‘you will fall down’) or the Aorist (*jy-tuu-ari* ‘you went there’), but *tuu-r-* ⇒ [t̩r]
 13054 in Irrealis, Imperative, Imperfective or Prohibitive (*ma-tr-tuu-rq̩e* ‘don’t cough’)
 13055 forms. Some irregular verbs have unpredictable second person forms (§14.2.2).
 13056 The generic intransitive subject prefix *kua-* (also used for the object of transitive
 13057 verbs, see §14.3.2.5) follows the same rules of vowel fusion as the second person
 13058 prefix.

13059 14.2.2 Irregular intransitive verbs

13060 In comparison with Zbu (Gong 2018), Japhug only has very few irregular verbs.
 13061 Irregularities related to person marking in Japhug all involve the prefixes.

13062 The second person forms of Sensory Evidential existential verbs *yzyu* ‘exist’
 13063 and *maje* ‘not exist’ (§21.3.2.1) are infixated rather than prefixed. The infixated forms
 13064 are *yzyzu* and *mataje*, as in (2) (from Jacques 2012a: 91) and (3). These two verbs
 13065 lack non-finite morphology (§16.7) and do not occur in other tenses (§15.1.1.5) and
 13066 can be considered to be suppletive forms of the existential verbs *tu* ‘exist’ and *me*
 13067 ‘not exist’ (§13.1.2).

- 13068 (2) *icqʰa* *turme ra nuu-rca* *yzy<t̩y>z*
 13069 the.mentioned person PL 3PL.POSS-following <2sg>exist:SENS
 13069 ‘(I saw) you among these people.’ (elicited)

- 13070 (3) *ky-mts^hym maka ma<ta>ŋe tce, ny-kuu-mŋym*
 INF-hear at.all <2SG>not.exist:SENS LNK 2SG.POSS-SBJ:PCP-hurt
 13071 *tu uŋry-ŋu ma, my-kuu-pe tu*
 exist:FACT RH.Q-be:FACT SFP NEG-SBJ:PCP-be.good:FACT exist:FACT
 13072 *uŋry-ŋu ma nura nuu-suuso-t-a.*
 RH.Q-be:FACT SFP DEM:PL AOR-think-PST:TR-1SG
 13073 ‘(I) have not heard at all about you (for some time), I was wondering
 13074 whether you have some disease, whether something bad happened to
 13075 you.’ (phone conversation, 16-12-28)

13076 These are not the only infix forms in the paradigm of these verbs: the generic
 13077 person *kuu-* is also infixated (*ŋykyzu, makaje*) as is the autive *nuu-* (§11.2.1).

13078 The verb *zyut* ‘reach, arrive’ has in part of its paradigm forms that are identical
 13079 to those of contracting verbs (§12.3). In the Aorist, it has two alternative second
 13080 person forms in free variation, the regular *jy-tuu-zyut* and the form *jy-tuu-azyut*
 13081 with an additional *a*, illustrated by (5) and (4), coming from two versions of the
 13082 same story by the same speaker.

- 13083 (4) *a-rkuu muu-jy-tuu-azyut myctṣa muu-puu-ta-mts^hym tce*
 1SG.POSS-side NEG-AOR-2-arrive until NEG-AOR-1→2-hear LNK
 13084 ‘I did not feel your (presence) until you arrived near me.’ (2012 Norbzang,
 13085 260)
- 13086 (5) *jy-tuu-zyut tce, nyki, azo a-k^ha a-jy-tuu-z-myke*
 AOR-2-arrive LNK FILLER 1SG 1SG.POSS-house IRR-PFV-2-CAUS-be.first[III]
 13087 *ma nyj ny-k^ha a-my-jy-tuu-z-myke ra*
 LNK 2SG 2SG.POSS-house IRR-NEG-PFV-2-CAUS-be.first[III] be.needed:FACT
 13088 *muu-tr-tuu-tut*
 NEG-AOR-2-say[III]
- 13089 ‘You did not say “When you arrive, don’t go first to your house, come to
 13090 my house first.” (2005 Norbzang, 261)

13091 The paradigm of this verb otherwise includes non-optional contracting (*jy-*
 13092 *azyut* ‘he arrived’) and non-contracting forms (the immediate converb *ju-tuu-zyut*
 13093 ‘as soon as X arrived’, §16.6.3).

13094 14.2.3 Semi-transitive verbs

13095 Semi-transitive verbs have the same paradigm as plain intransitive verbs, and
 13096 lack the morphological properties of transitive verbs (§14.3.1). Their intransitive

13097 subject is in absolute form. However, they take a semi-object (§8.1.5), also in ab-
 13098 solutive form, as *paxči* ‘apple’ in (6). These semi-objects do present some objectal
 13099 properties (§8.1.5, §23.5.4.1).

- 13100 (6) *tce azo t^ham kuiki, paxči ci tr-a-ro-a tce tcendyre, [...]*
 LNK 1SG now DEM.PROX apple INDEF AOR-have-1SG LNK LNK
 13101 *nužora kuny ta-su-γbe-nu ra*
 2PL also 1→2-CAUS-be.needed.eat:FACT-PL be.needed:FACT
 13102 ‘Now that I have (was given) this apple, I will give it to you also to eat.’
 13103 (150904 zhongli-zh, 35)

13104 Unlike transitive verbs, which can index the number of the object if the subject
 13105 is 1SG (§14.3.2.6), semi-transitive verbs cannot add a person index after the 1SG -a.
 13106 For instance, in (7), although the object is plural, a form such as †*aroa-a-nu* with
 13107 the -nu plural prefix is strictly prohibited.

- 13108 (7) *azo tr-rjít χsum aro-a*
 I INDEF.POSS-child three have:FACT-1SG
 13109 ‘I have three children.’ (elicited)

13110 The subject of some semi-transitive verbs, in particular *tso* ‘know, understand’
 13111 and *zýspa* ‘pretend’, can optionally be marked with the ergative like a transitive
 13112 subject (§8.2.2.3), as *tr-mu nuu kuu* in (8) and *βdažmu nuu kuu* in (9).

- 13113 (8) *tcendyre [tr-mu nuu kuu] cur ňu nuu maka*
 LNK INDEF.POSS-mother DEM ERG who be:FACT DEM at.all
 13114 *mu-pjy-tso tceri*
 NEG-IFR.IPFV-know LNK
 13115 ‘The old woman did not realize who it was.’ (2002 qaCpa, 242)

- 13116 (9) *icq^ha βdažmu nuu kuu [wuma zo u-suum*
 the.aforementioned lady DEM ERG really EMPH 3SG.POSS-mind
 13117 *kuu-sna] to-zýspa*
 SBJ:PCP-be.good IFR-pretend
 13118 ‘The lady pretended to be a good person.’ (140520 ye tiane-zh, 44)

13119 Some semi-transitive verbs can take both nominal semi-object and comple-
 13120 ment clauses. For instance, *tso* (which can be translated as ‘know’, ‘understand’
 13121 or ‘realize’ depending on the context) occurs with nouns referring to speech or
 13122 meaning as semi-object (as in 10), finite relative clauses (11) and also participial
 13123 clauses (12, §24.5.4.2).

- 13124 (10) *pja muandzamuχtcury nuu-skyst a-puu-tur-tso smaulym*
 bird all.kinds 3PL.POSS-speech IRR-IPFV-2-understand prayer
 13125 ‘May you understand the speech of all species of birds!’
 13126 (2003kandZislama, 85)
- 13127 (11) *ci ky-pa-tci, nuust^huci tx-nyrzab ri, [nuust^huci ny-ku*
 one AOR-do-1DU so.much AOR-pass(time) LNK so.much 2SG.POSS-head
 13128 *zru rcanu] muu-ky-tso-a*
 be.strong:FACT UNEXP:DEG NEG-AOR-know-1SG
 13129 ‘So much time has passed since we have married, I did not realize that
 13130 your hair was so long.’ (2003 Kunbzang, 467)
- 13131 (12) *tce [tc^hi ui-skyst kuu-ŋu ra] ku-tso-a*
 LNK what 3SG.POSS-speech SBJ:PCP-be PL IPFV-understand-1SG
 13132 *nuu-ra ma tu-tuu-ti stuasti, mtaj-cuftaa-a jnuu-ti*
 SENS-be.needed LNK IPFV-2-say alone NEG:SENS-remember-1SG SENS-say
 13133 ‘He says: ‘I need to understand what it is about (what objects these words
 13134 refer to), otherwise if you only speak (if you only explain orally) I won’t
 13135 remember.’ (conversation 14-05-10, 79)

13136 Among semi-transitive verbs, we find the following subclasses:

- 13137 • Verbs of cognition and perception: *tso* ‘understand’, ‘know’ *sŋyo* ‘listen’
- 13138 • Verbs of evaluation: *rga* ‘like’, *stu* ‘believe’, *duy* ‘have enough of’
- 13139 • Modal verbs: *c^ha* ‘can’
- 13140 • Verbs of possession: *aro* ‘own’
- 13141 • Copulas: *ŋu* ‘be’, *maŋ* ‘not be’, *apa* ‘become’ (§22.5.1.1)
- 13142 • Verbs of assignation: *rmi* ‘be called’, *artsi* ‘count as’, *fse* ‘be like’
- 13143 • Verbs requiring an argument expressing time: *ac^hyt* ‘have X years of dif-
 13144 ference’, *tsu* ‘pass X time’
- 13145 • Verbs of pretence: *zŋypa* ‘pretend’
- 13146 • Verbs of obtaining (§15.1.5.6): *axe* ‘have to eat/drink’, *βjyt* ‘get, obtain’
- 13147 • Some adjectival stative verbs: *mk^hyz* ‘be expert’, *p^hyn* ‘be efficient’

13148 The Tshobdun verbs *cʰv* ‘can, be able’ and *rge* ‘like’, cognates of the Japhug
 13149 semi-transitive verbs *cʰa* ‘can’ and *rga* ‘like’, are fully transitive, as shown by the
 13150 forms *mv-koy-cʰv-aŋ* (NEG-2→1-can-1SG) ‘you cannot (kill) me’ (Sun & Blogros
 13151 2019: 634) and *ne-tv-rge* (IPFV-1→2-like) ‘I love you’ (Sun & Blogros 2019: 674),
 13152 which occur with local portmanteau prefixes (§14.3.2.3).

13153 Most semi-transitive verbs are underived bare roots. The only obviously de-
 13154 rived verbs are *zypa* ‘pretend’, which comes from the reflexive of the verb *pa*
 13155 ‘do’ (§18.3.3) and *artsi* ‘count as’, passive of *rtsi* ‘count’. The verb *aro* ‘own’ is
 13156 possibly analyzable as a denominal verb historically derived from *tr-ro* ‘excess’,
 13157 ‘surplus’, ‘leftover’ (§16.4.6, §20.2.1).

13158 Most semi-transitive verbs do not usually take a human semi-object, so that
 13159 sentences with a first or second person semi-object are generally clumsy to build.
 13160 For some of the verbs above, applicative forms are used when a first or second
 13161 person object is needed, for instance *nurga* ‘like’ and *nrstu* ‘believe’ (§17.4.1). The
 13162 verbs *stu* ‘believe’ and *nrstu* ‘believe’ differ in that the semi-object of the former
 13163 refers to words (in general, a complement clause; ‘believe that X’) while the ob-
 13164 ject of the latter is a person (‘believe him’).

13165 However, examples with subjects and semi-objects both either first or second
 13166 person are attested. For instance, (13) shows a very spontaneous use of a 2SG
 13167 semi-object with a 1SG subject with the verb *fse* ‘be like’. Only the subject is
 13168 indexed (with the suffix *-a*) and the use of the transitive *ta-* 1→2 portmanteau
 13169 prefix (§14.3.2.3) here would be nonsensical.

- 13170 (13) *a-bi, nyzo ui-nui-fse-a?*
 1SG.POSS-younger.sibling 2SG QU-SENS-be.like-1SG
 13171 ‘Sister, do I look like you?’ (2014-kWLAG, 475)

13172 The same is observed with the copulas *yu* ‘be’, *mar* ‘not be’ and also *apa* ‘be-
 13173 come’ as in (14) and (15). (see also §22.5.1.1) The copulas always index the subject,
 13174 never the semi-object, independently of any person hierarchy (see 66 in §14.3.2.8
 13175 below), and cannot take the *ta-* 1→2 and *ku-* 2→1 portmanteau prefixes.

- 13176 (14) *nyzo nui-apa-a*
 2SG AOR-become-1SG
 13177 ‘I became you.’ (elicited)
- 13178 (15) *azo nui-tuu-apa*
 1SG AOR-2-become
 13179 ‘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 *sun̥gu* ‘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, [sun̥gu] 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 *zui* in (17).

- (17) *ty-pytso numu li [sun̥gu zui] 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) *tchemypuu nuu kuu u-wa cʰo u-pi nuara*
 girl DEM ERG 3SG.POSS-father COMIT 3SG.POSS-elder.sibling DEM:PL
jny-βde tce, sun̥gu 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.’

13210 (140506 shizi he huichang de bailingniao, 76)

13211 The subject of intransitive verbs with goals is in absolute form, except when
 13212 shared with a transitive verb in another clause, as *tç^hemypu nuu kuu* in (18), which
 13213 owes its ergative marking to the transitive verb *jnr-βde* ‘She left them’. The verb
 13214 *rpu* ‘bump into’ (which takes as goal the surface of physical contact) however can
 13215 take ergative subjects, as it is labile and can be conjugated transitively (§14.5.2).
 13216 Transitive verbs of manipulation can optionally take goals that are formally sim-
 13217 ilar to those of *ce* ‘go’ and *yi* ‘come’ (§14.5.4).

13218 Some intransitive verbs of speech, *ruçmi* ‘speak’ and *ak^hu* ‘call’, can optionally
 13219 take a dative argument, as in (19).

13220 (19) *turme u-cki tu-ruçmi-a cti wo*
 person 3SG.POSS-DAT IPFV-speak-1SG be.AFF:FACT SFP

13221 ‘I am talking to someone (else).’ (phone conversation, 2013-12-02)

13222 Other than locative and dative, some intransitive verbs select oblique argu-
 13223 ments with the genitive (§8.2.3) the relator noun *u-taz* ‘on’ (§8.3.4.3) and verbs
 13224 with intrinsically non-singular subjects often occur with comitative postposi-
 13225 tional phrases in *c^ho* (§14.2.6).

13226 Some intransitive verbs which cannot take semi-objects do occur with counted
 13227 nouns (in particular, *ruçmi* ‘speak’); these counted nouns however have scope
 13228 over the whole sentence, and are not arguments of these verbs, as argued in
 13229 §7.3.2.5.

13230 14.2.5 Semi-transitive verbs with additional oblique arguments

13231 Some semi-transitive verbs can have up to three arguments, and are therefore
 13232 trivalent.⁴ This is the case of rogative verbs (§18.2) such as *symbi* ‘ask for’ (derived
 13233 from the secundative verb *mbi* ‘give’), which have both a dative argument and a
 13234 semi-object, as shown by (20), but are yet conjugated intransitively (the generic
 13235 subject is marked by *ku-*, §14.3.2.5).

13236 (20) <*guojia*> *u-p^he* <*piaozi*> *nuu-kuu-sy-mbi*
 country 3SG.POSS-DAT money IPFV-GENR:S/O-ROG-give
 13237 ‘Ask the government for money.’ (2010, 09)

⁴ This shows that trivalent verbs in Japhug are not necessarily ditransitive (§14.4).

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), 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 *acya* ‘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-βi ra kutcu*
 LNK 1SG.POSS-elder.sibling 1SG.POSS-younger.sibling PL here
a-nuu-tuu-ynuwyro-nuu, ci ci a-ty-tuu-ynumqaj-nuu, ci ci
 IRR-PFV-2-<AUTO>play-PL once once IRR-PFV-2-fight-PL once once
a-ty-tuu-ymumi-nuu qʰe a-ky-tuu-nuu-ryzi-nuu,
 IRR-PFV-2-be.in.good.terms-PL LNK IRR-PFV-2-AUTO-stay-PL
 ‘Brothers, stay here and play, fight from time to time, reconcile with each other from time to time.’ (2003kandzwsqhaj, 43)

The subject of these verbs can be a noun phrase comprising a comitative postpositional phrase in *cʰo* (see §8.2.5 and §9.2.1), in particular with reciprocal verbs (§18.4.1); number indexation on the verb reflects the addition of the added number of all nominals in the noun phrase. For example, in (22) and (23), the verbs have dual indexation, referring to the total number of individuals in the subject noun phrase connected by the comitative *cʰo*.

- (22) <*maerjina*> *nua cʰo <alibaba> ni wuma zo*
 ANTHR DEM COMIT ANTHR DU really EMPH
pjr-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) *nyj ny-mu cʰo azo ni acya-tci*
 2SG 2SG.POSS-mother COMIT 1SG DU be.of.the.same.age:FACT-1DU
 ‘I have the same age as your mother.’ (‘You mother and I have the same age’) (elicited)

The verb *acʰyt* ‘have X years of difference’ has an intrinsically non-singular subject, and is at the same time semi-transitive (§14.2.3), taking as semi-object a temporal noun phrase expressing the age difference between the members of the group referred to by the subject (§19.7.7).

13266 The verb *alulyt* ‘fight’, historically the reciprocal of *lvt* ‘release’ (§18.4.1.3), al-
 13267 most always has non-singular indexation, either with a non-singular intransitive
 13268 subject as in (24), or with a comitative phrase (25) as in examples (22) and (23)
 13269 above.

- 13270 (24) *tceki qro ni pui-ylulyt-ndzi*
 down ant DU SENS-fight-DU
 13271 ‘Down there two ants are fighting.’ (conversation140501-01)

- 13272 (25) *usduxpakyrpu ui-tcui c^hondyre a-teu ni to-k-ylulyt-ndzi*
 ANTHR 3SG.POSS-son COMIT 3SG.POSS-son DU IFR-PEG-fight-DU
 13273 ‘The son of Gdugpa Dkarpo fought with my son.’ (2011-04-smanmi, 49)

13274 However, examples with singular indexation are also attested, for instance
 13275 (26) and (27) with 2SG form. Both are from texts translated from Chinese, but
 13276 were not considered infelicitous by Tshendzin. While direct Chinese influence
 13277 on indexation is unlikely, the use of *alulyt* ‘fight’ with the person one fights
 13278 against left unexpressed (as in 26) or marked in the dative (as in 27), is not attested
 13279 elsewhere.⁵

- 13280 (26) *ki cuŋgu ki puŋpuŋuny, nyzo kui ičq^ha mk^hyrman yu*
 DEM.PROX before DEM.PROX TOP 2SG ERG FILLER people GEN
 13281 *nui-ndza kui t^h-tui-alulyt puŋ-nyu tce,*
 3PL.POSS-reason ERG AOR-2-fight PST.IPFV-be LNK
 13282 ‘The previous time, you fought for the sake of the people.’ (140512 abide
 13283 he mogui-zh, 89)

- 13284 (27) *tce nyzo ny-rpuw ui-cki, nykinu, tu-tui-ylulyt ndyre*
 LNK 2SG 2SG.POSS-MB 3SG.POSS-DAT FILLER IPFV-2-fight LNK
 13285 *mr-pe*
 NEG-be.good:FACT
 13286 ‘It is not good for you to fight with your uncle.’ (150826 baoliandeng-zh,
 13287 185)

13288 The verb *naxtgu* ‘be the same’, although requiring the comparison of at least
 13289 two entities, most often occurs with singular indexation, as shown by examples

⁵ The 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 érzhàn> ‘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’.

like (28) and (29). This may be due to the fact *naxt^cuy* ‘be the same’ is commonly used with inanimate referents (§14.6.1.1), and also because it commonly takes degree nominals (§16.3) as subjects in the equative construction (§26.3.1.1). These degree nominals can take non-singular possessors (dual in 29), but remain themselves singular arguments.

- (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

c^ho naxt^cuy zo tce,
 be.the.same:FACT EMPH LNK

‘Sheep dung is similar to goat dung.’(05-qaZo, 97)

- (29) *ndzi-tuu-wxti nuu-naxt^cuy*
 3DU.POSS-NMLZ:DEG-be.big SENS-be.the.same

‘They have the same size.’ (‘Their size is the same.’) (24-ZmbrWpGa, 24)

14.2.7 Invariable intransitive verbs

A non-negligible amount of intransitive verbs are only attested in 3SG form. Four categories must be distinguished.

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.

- (30) *azō a-me nuu [nyzuy ny-rzaβ] nuu-k^ham-a]*
 1SG 1SG.POSS-daughter DEM 2SG:GEN 2SG.POSS-wife SENS-give-1SG

jyy, [ny-rzaβ a-ky-βze] jyy
 be.allowed:FACT 2SG.POSS-wife IRR-PFV-make[III] be.allowed:FACT

‘(If you succeed), I will agree to give my daughter to you in marriage, she can become your wife (140518 huifei de muma-zh, 71)

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

⁶ There 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).

the orphan noun *tuu-bo*, 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.

- (31) *nuu-mbruu a-my-ty-ηguu, a*
 2SG.POSS-be.angry(1) IRR-NEG-PFV-be.angry(2) INTERJ
nuu-bo a-my-nuu-mbi
 2SG.POSS-be.discouraged(1) IRR-NEG-PFV-be.discouraged(2)
 ‘Don’t be angry, don’t feel frustrated.’ (2003kAndzwsqhaJ2, 128)

This constraint on indexation is also found in collocations (§22.4.1) in cases when the verb is elsewhere attested, for instance *tuu-εjiz + yi* ‘wish’ (§16.5.1, §24.6.3.3). The motion verb *yi* ‘come’ is compatible with all person indexation affixes, but in this collocation it is only found in 3SG, regardless of the person of the possessive prefix on *tuu-εjiz*, as shown by (32).

- (32) *nuu a-εjiz yi eti*
 DEM 1SG.POSS-wish come:FACT be.AFF:FACT
 ‘I want that.’ (140520 xiaoyida de huar-zh, 63)

A third type of verbs with restricted 3SG indexation are verbs which pragmatically require an inanimate subject, such as *rpjuu* ‘turn sour’, which can only apply with *tr-lu* ‘milk’, as in (33) and would be nonsensical in first or second person.

- (33) *tr-lu to-rpjuu*
 INDEF.POSS-milk IFR-turn.sour
 ‘The milk turned sour.’ (elicited)

Fourth, meteorological verbs such as *yutsʰyduy* ‘hot’ or *qanuu* ‘be dark’ occur with a dummy intransitive subject, as in (34) and (35). In these examples, *qʰaqʰu* ‘behind the house’ and *cyr* ‘night’ are locative and temporal absolute adjuncts, respectively (§8.1.9), not the subjects of these sentences.

- (34) *qʰaqʰu myzuu juu-yutshyduy*
 behind.the.house even.more SENS-be.hot
 ‘It feels even hotter behind the house.’ (conversation 14-05-10)

- (35) *tce cyr wuma zo ky-qanuu tce*
 LNK night really EMPH AOR-be.dark aboutLNK
 ‘In the night, when it has become very dark.’ (23-qapGAmtWmtW, 141)

13342 The noun *tui-mu* ‘sky, weather’ occurs in a few cases as subject of intransitive
 13343 meteorological verbs in the corpus, in examples such as (36), but only in
 13344 texts translated from Chinese. These sentences are rejected by Tshendzin, and
 13345 the presence of *tui-mu* ‘sky, weather’ is a calque from Chinese 天气 <tiānqì>
 13346 ‘weather’.⁷

- 13347 (36) *tcendyre tui-mu u-tur-yuuts^hduay*
 LNK INDEF.POSS-sky 3SG.POSS-NMLZ:degree-be.hot
 13348 *pjy-syre zo tce,*
 IFR.IPFV-be.ridiculous EMPH LNK
 13349 (140512 fushang he yaomo-zh, 6)

13350 Some verbs may appear to be invariable only because the non-3SG forms are
 13351 rare. For instance, the auxiliary verb *ra* ‘have to, need’ resembles *jyy* ‘be allowed’
 13352 in taking complement clauses as intransitive subject (§24.5.3.1), and it is almost
 13353 always used in 3SG form. However, in the meaning ‘need, want’, it can take a
 13354 human as subject, and (37) provides an example of 2SG indexation with this verb.

- 13355 (37) *t^hu-nuu-ce ma, my-tui-ra*
 IMP:DOWNTSTREAM-VERT-go LNK NEG-2-need:FACT
 13356 ‘Go back, (I) don’t need you.’ (2002 qaCpa, 31)

13357 14.3 Transitive verbs

13358 14.3.1 The morphological marking of transitivity in Japhug

13359 Transitivity in Japhug can be defined exclusively on the basis of verbal morphology.
 13360 Transitive verbs have the following six common properties.

13361 First, the Aorist 3SG→3’ (§21.5.1.1, §21.1.1.1),⁸ a form that is attested on all transitive
 13362 verbs except for one (§14.3.4) requires a C-type orientation preverb (§15.1.1.1)
 13363 in Kamnyu Japhug. This test can always be applied to distinguish a transitive verb
 13364 from an intransitive one. For instance, the Aorist 3SG→3’ of *ndza* ‘eat’ is *ta-ndza*
 13365 ‘he ate it’ with the C-type prefix *ta-*, while an A-type prefix *tr-* would be expected
 13366 if the verb were intransitive (the incorrect form †*tr-ndza*). A potential problem

⁷ Example (36) corresponds to 由于天气太热 <yóuyú tiānqì tài rè> ‘Because it was too hot’ in the Chinese original.

⁸ The notation 3SG→3’ means ‘third singular subject with another third person object’, see §14.3.2.

with this test is the fact that the result of the merger of A-type orientation preverbs with the initial *a-* of contracting verbs (which are always intransitive, see §12.3) is formally identical to a C-type prefix, for instance the Aorist 3SG *tr-ala* ‘it boiled up’ is realized /tala/, the first syllable /ta-/ being homophonous with 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 *cuu-*, 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 -*uu*, §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 (*†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.

- 13390 (38) *clar* *pjuu-si cuŋgu q^he u-ca*
 IDPH(I):immediately IPFV-die before LNK 3SG.POSS-meat
 13391 *u-ndza tu-za-nu.*
 3SG.POSS-BARE.INF:eat IPFV-start-PL

13392 ‘They start eating its flesh just before it dies.’ (20-sWNgi, 57)

13393 Fourth, the subject participles of transitive verbs require a possessive prefix
 13394 coreferent with the object, unless another inflectional prefix (marking orientation,
 13395 polarity or associated motion) precedes the participle prefix *ku-* (§16.1.1.1).
 13396 The subject participle of *ndza* ‘eat’ is thus *u-kuu-ndza* ‘the one who eats it’, and
 13397 the prefix *u-* cannot be removed.⁹

13398 Fifth, transitive verbs with open-syllable stems require the past tense -*t* suffix
 13399 (§11.3, §14.3.2.1, §21.1.3) in Aorist and Past Imperfective 1SG→3 and 2SG→3 forms.

⁹ In the negative form /m^v-kuu-ndza/ (NEG-PCP:SBJ-eat) ‘the one who does not eat it’, by contrast, the possessive prefix *u-* is optional.

For example, *tr-ndza-t-a* ‘I ate it’ has this past suffix; if this verb were intransitive, a form such as *†tr-ndza-a* would be found instead. This criterion only applies to open-syllable transitive verbs allowing first and second person subjects.

Sixth, the Progressive *asu-* (§21.6.1.1) is only found on transitive verbs. For instance, the transitive verb *ndza* ‘eat’ has a Progressive Sensory 3SG→3’ form *jnu-ysui-ndza* ‘He is eating it’, which would not exist if this verb were intransitive.

Seventh, only transitive verbs¹⁰ can take the inverse *wy-* (§14.3.2.7) and the portmanteau *ku-* 2→1 and *ta-* 1→2 prefixes (§14.3.2.3). The portmanteau prefixes are only found on verbs allowing human subjects and objects.

These seven criteria are almost completely congruent. With the exception of a handful of defective verbs (§14.3.4), the dummy transitive subject construction (§14.3.5), and the antipassive forms of some secundative verbs (§14.4.2, §18.6.4), if a verb satisfies one of these criteria, it will satisfy them all. This excludes cases when particular tests are not applicable, in particular criteria 2 and 5 if the verb has a closed-syllable stem or 3, 5, 6 and 7 due to semantic incompatibility. Only criteria 1 and 4 apply to all verbs.

Intransitive verbs, including semi-transitive verbs (§14.2.3) do not satisfy any of these seven criteria, as can be exemplified with the verb *tso* ‘know, understand’ (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>tuu-tso (kṛ-za-t-a)</i> (39)	<i>†uu-tso (kṛ-za-t-a)</i>
4 Subject participle	<i>kuu-tso</i>	<i>†u-kuu-tso</i>
5 Past tense 1/2SG	<i>kṛ-tso-a</i>	<i>†kṛ-tso-t-a</i>
6 Progressive	–	<i>†asu-tso</i>
7 Inverse or portmanteau prefix	–	<i>†yuu-tso</i>

¹⁰ Antipassive secundative verbs such as *r̥mbi* ‘give to someone’ are the only exception, see §14.4.2.2, examples (114a) and (114b).

- 13419 (39) *az̥o tur-tso* *ky-za-t-a*
 1SG INF:II-understand AOR-start-PST:TR-1SG
 13420 'I began to understand.' (elicited)

13421 The morphosyntactic specificities of transitive verbs are not limited to inflec-
 13422 tional verbal morphology. Some derivational processes, such as antipassiviza-
 13423 tion (§18.6) and anticausativization (§18.5.1.2) can only be applied to transitive
 13424 verbs, and conversely other derivations (such as the applicative, §17.4) are only
 13425 attested on intransitive verbs. Since derivational morphology however, is not as
 13426 productive as inflectional morphology and can be sometimes ambiguous, these
 13427 characteristics cannot be used to define transitivity in Japhug.

13428 Another distinction between transitive and intransitive verbs is the fact that
 13429 transitive subjects require ergative marking (§8.2.2.1), whereas intransitive sub-
 13430 jects are generally in absolute form (§8.1.1). This is not an absolute criterion to
 13431 distinguish between transitive and intransitive verbs, however, since some tran-
 13432 sitive verbs have a dummy subject (§14.3.5), and since intransitive verbs with
 13433 ergative marking are attested in specific contexts (§8.2.2.3, §8.2.2.2).

13434 14.3.2 Polypersonal indexation and direction marking

13435 In Japhug, as in other Gyalrongic languages, transitive verbs index two argu-
 13436 ments, the transitive subject and the object. This section provides a detailed anal-
 13437 ysis of the transitive indexation paradigm in comparison with the intransitive
 13438 conjugation.

13439 The transitive conjugation comprises 31 different forms for each TAME cate-
 13440 gory, as listed in Table 14.6 on p.551. Table 14.7 exemplifies this paradigm using
 13441 the Factual Non-Past of the verb *mto* 'see'. These two-dimensional tables (and
 13442 all other such tables in this chapter) list the subjects as rows and the objects as
 13443 columns. The polypersonal configurations are represented using the notation
 13444 $A \rightarrow P$, where A stands for the person and number of the transitive subject, and
 13445 P for that of the object; for instance 1SG → 3DU means 'first singular subject with
 13446 third DU object'. 3' represents obviative third person, a concept described in more
 13447 detail in §14.3.2.2. The shaded cells 1 → 1, 2 → 2, 3 → 3 and 3' → 3' correspond to re-
 13448 flexive forms, which are not transitive in Japhug, and are expressed by deriving
 13449 an intransitive verb using the prefix *zyr-* (§18.3). Generic person (§14.3.2.5) is not
 13450 included in Table 14.6.

13451 One of the most fundamental features of the Japhug indexation system is the
 13452 fact that the affixes found in the intransitive paradigm also occur in the transitive
 13453 conjugation, and can index either the subject (intransitive S or transitive A) or the

13454 object (O) (depending on the presence or absence of direction marking, §14.3.2.8)
 13455 as illustrated in Table 14.4 with the suffix *-a* and the prefix *tū-*. In other words,
 13456 the indexation affixes reflect neutral alignment.

Table 14.4: Neutral alignment

	S	A	O
1SG <i>-a</i>	<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>tū-</i>	<i>tū-yi</i> ‘You will come’	<i>tū-mtxm</i> ‘You will see it’	<i>tú-wy-mto</i> ‘he will see you’

13457 When studying indexation systems of this type, it is useful to divide the space
 13458 of bipersonal indexation into three domains (Zúñiga 2006; Jacques & Antonov
 13459 2014): the LOCAL domain (when both subject and object are first or second per-
 13460 son), the NON-LOCAL domain (when both subject and object are third person) and
 13461 the MIXED domain (one argument is first or second person and the other one is
 13462 third person). Table 14.5 represents these three domains in blue, red and green,
 13463 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

13464 In the following sections, we first present the forms of the transitive paradigm
 13465 in each of the three domains, then discuss some specific issues (generic and dou-
 13466 ble number indexation) and then analyze the structure of the Japhug indexation
 13467 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										
1PL										
2SG	<i>ku</i> - $\Sigma_1\text{-}a$									
2DU	<i>ku</i> - $\Sigma_1\text{-}a\text{-}ndzi$	<i>ku</i> - $\Sigma_1\text{-}tci$	<i>ku</i> - $\Sigma_1\text{-}ji$							
2PL	<i>ku</i> - $\Sigma_1\text{-}a\text{-}nu$									
3SG	<i>wyú</i> - $\Sigma_1\text{-}a$									
3DU	<i>wyú</i> - $\Sigma_1\text{-}a\text{-}ndzi$	<i>wyú</i> - $\Sigma_1\text{-}tci$	<i>wyú</i> - $\Sigma_1\text{-}ji$	<i>tú</i> - <i>wy</i> - Σ_1	<i>tú</i> - <i>wy</i> - $\Sigma_1\text{-}ndzi$	<i>tú</i> - <i>wy</i> - $\Sigma_1\text{-}nu$				
3PL	<i>wyú</i> - $\Sigma_1\text{-}a\text{-}nu$									
3'										
INTR	$\Sigma_1\text{-}a$									
		$\Sigma_1\text{-}tci$	$\Sigma_1\text{-}ji$	<i>tú</i> - Σ_1	<i>tú</i> - $\Sigma_1\text{-}ndzi$	<i>tú</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>mitam</i> - <i>a</i>	<i>mitam</i> - <i>a</i> - <i>ndzi</i>	<i>mitam</i> - <i>a</i> - <i>nu</i>	
1DU										
1PL										
2SG	<i>ku</i> - <i>mto</i> - <i>a</i>									
2DU	<i>ku</i> - <i>mto</i> - <i>a</i> - <i>ndzi</i>	<i>ku</i> - <i>mto</i> - <i>tci</i>	<i>ku</i> - <i>mto</i> - <i>ji</i>							
2PL	<i>ku</i> - <i>mto</i> - <i>a</i> - <i>nu</i>									
3SG	<i>wyú</i> - <i>mto</i> - <i>a</i>									
3DU	<i>wyú</i> - <i>mto</i> - <i>a</i> - <i>ndzi</i>	<i>wyú</i> - <i>mto</i> - <i>tci</i>	<i>wyú</i> - <i>mto</i> - <i>ji</i>	<i>tú</i> - <i>wy</i> - <i>mto</i>	<i>tú</i> - <i>wy</i> - <i>mto</i> - <i>ndzi</i>	<i>tú</i> - <i>wy</i> - <i>mto</i> - <i>nu</i>				
3PL	<i>wyú</i> - <i>mto</i> - <i>a</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>	

13468 14.3.2.1 Mixed configurations

13469 In the mixed domain, we have to distinguish between *direct* configurations, where
 13470 the subject is first or second person and the object is third person (1→3, 2→3)
 13471 and *inverse* configurations, where the opposite holds true (3→1, 3→2).¹¹

13472 Table 14.8 presents all 1→3 and 2→3 forms (except 1SG→3DU/PL, which are
 13473 discussed in §14.3.2.6) of *mto* ‘see’ in the Factual Non-Past and the Aorist, com-
 13474 pared with the corresponding forms of the intransitive verb *ngo* ‘be ill’. The
 13475 DOWNWARDS *pui-* and UPWARDS *tr-* preverbs are lexically selected by these verbs
 13476 (§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>pui-mto-t-a</i>	<i>ngo-a</i>	<i>tr-ngo-a</i>
1DU(→3)	<i>mto-tci</i>	<i>pui-mto-tci</i>	<i>ngo-tci</i>	<i>tr-ngo-tci</i>
1PL(→3)	<i>mto-j</i>	<i>pui-mto-j</i>	<i>ngo-j</i>	<i>tr-ngo-j</i>
2SG(→3)	<i>tuu-mtym</i>	<i>pui-tuu-mto-t</i>	<i>tuu-ngo</i>	<i>tr-tuu-ngo</i>
2DU(→3)	<i>tuu-mto-ndzi</i>	<i>pui-tuu-mto-ndzi</i>	<i>tuu-ngo-ndzi</i>	<i>tr-tuu-ngo-ndzi</i>
2PL(→3)	<i>tuu-mto-nuu</i>	<i>pui-tuu-mto-nuu</i>	<i>tuu-ngo-nuu</i>	<i>tr-tuu-ngo-nuu</i>

13477 With the exception of 1SG→3 forms (on which see §14.3.2.6), the number of
 13478 the third person argument is never expressed in the mixed domain. Examples
 13479 (40) and (41) illustrate 1PL→3SG and 1PL→3DU forms, respectively. Whether the
 13480 third person object is singular or dual, person indexation is restricted to the 1PL
 13481 -*ji* suffix in both cases. The same is true of the -*tci* suffix, and also in inverse
 13482 configurations.

- 13483 (40) *tce izo ji-k^ha kuan^y ky-fstum-i pui-ra*
 LNK 1PL 1PL.POSS-house also AOR-SERVE-1PL PST.IPFV-be.neededo
 13484 ‘We also had to take care of him in our house.’ (14-siblings, 360)

- 13485 (41) *nx-wuu c^ho nx-bi ni pjui-sat-i*
 2SG.POSS-grandfather COMIT 2SG.POSS-younger.sibling DU IPFV-kill-1PL

¹¹ This terminology will be justified in §14.3.2.8.

13486 *ŋu*
 be:FACT

13487 ‘We will kill your grandfather and your brother.’ (2011-05-nyima, 132)

13488 Although the indexation suffixes *-ndzi* and *-nu* are the same for second and
 13489 third person (§14.2.1.2), in 2→3 and 3→2 configurations, they can only index the
 13490 number of the second person argument, never that of the third person. For in-
 13491 stance, in (42), *to-tuu-yut* is 2SG→3PL, and adding a plural *-nu* here would change
 13492 the meaning to ‘you_{pl} brought people’ and be incompatible with the singular
 13493 pronoun *nyzo*.

- 13494 (42) *nyzo turme ra to-tuu-yut tce,*
 2SG people PL IFR:UP-2-bring LNK
 13495 ‘You(SG) brought people (here).’ (150901 changfamei, 155)

13496 The direct forms of the transitive paradigm are nearly all identical to the cor-
 13497 responding intransitive paradigm. The 1SG→3 and 2SG→3 forms are the only
 13498 ones that show morphological features absent from the corresponding intransi-
 13499 tive paradigm: the Stem III alternation in the Factual Non-Past (and other tenses,
 13500 §12.2.2.2, §21.1.2)¹² and the *-t* suffix in the Past. These features are highlighted
 13501 in red in Table 14.8. Most dialects of Japhug, including those of Gdongbrgyad
 13502 township, have *-z* instead of *-t* as Past suffix (§11.3).

13503 Stem III alternation and the *-t* suffix mark at the same time TAME (§21.1.3,
 13504 §11.3) and person of both subject and object, and must be considered to be an
 13505 integral part of the person indexation system.

13506 Not all transitive verbs present these two features, however; in particular, verb
 13507 with close syllable stems lack both of them. Stem alternation is restricted to a
 13508 few open-syllable stem types (-o, -a, -u and -u, §12.2.2.1), and the *-t* suffix cannot
 13509 surface in close syllable stems. For instance, the Aorist 1SG→3SG of the verbs
 13510 *joꝝ* ‘raise’ and *cluy* ‘drop’ are *tr-joꝝ-a* ‘I raised it’ and *puu-cluy-a* ‘I dropped it’,
 13511 not the completely incorrect †*tr-joꝝ-t-a* or †*puu-cluy-t-a* (with automatic regressive
 13512 devoicing of /h/ and /y/ before /t/, §3.2.2). These incorrect forms would not
 13513 violate Japhug phonotactics, since clusters such as *-xt-* and *-xt-* are well attested
 13514 (§4.2.1.7, §4.2.1.8), showing that the rules governing the use of the *-t* suffix are
 13515 not purely phonological.

13516 The direct forms of transitive verbs with closed syllable stems (such as *joꝝ*

¹² Note in addition the allomorph *mtam-* of stem III when followed by the 1sg suffix /-a/, following regular vowel assimilation (§14.2.1.1).

13517 ‘raise’ and *cluy* ‘drop’) in the mixed domain are thus identical to that of intransitive verbs.

13519 The inverse forms of the mixed domain of the verb *mto* ‘see’ are presented in
 13520 Table 14.9. All forms in this section of the paradigm, regardless of the TAME
 13521 category, take the prefix *yú-/wy-*, whose distribution and allomorphy (*yú-* vs.
 13522 *wy-*) is discussed in more detail in §14.3.2.7.

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-nu</i>	<i>pú-tú-wy-mto-nu</i>

13523 Aside from the prefix *yú-/wy-*, the inverse forms in the mixed domain present
 13524 the same affixes as those of the corresponding intransitive forms (except in the
 13525 case of double number indexation, treated in §14.3.2.6), and lack stem alternation
 13526 (only stem I occurs).

13527 The imperative (§21.4.2.1) is only attested in the direct mixed 2→3 configurations,
 13528 and is the only finite form involving a second person that neither takes the
 13529 second person prefix nor a portmanteau prefix. To express 2→1 imperative, the
 13530 imperfective is used instead (§21.2.5).

14.3.2.2 Non-local configurations

13531 Table 14.10 presents the Non-local domain of the paradigm of *mto* ‘see’ in the
 13532 Factual Non-Past and the Aorist, compared with the intransitive paradigm as
 13533 exemplified by *ngo* ‘be ill’.

13534 There are two types of non-local forms: those taking the *yú-/wy-* prefix, the
 13535 *inverse* configurations (§14.3.2.8), and those without it, the *direct* configurations.

13536 Direct forms present two features distinguishing them from the corresponding
 13537 third person intransitive forms. First, in non-past tenses such as the Factual Non-
 13538 Past, the 3sg subject form has Stem III (like the 1sg→3 and 2sg→3 forms of the
 13539 mixed domain, §14.3.2.1). Second, in the Aorist, a C-type orientation preverb,

Table 14.10: Non-local domain compared with the intransitive paradigm

Person	Transitive		Intransitive	
	Non-Past	Past	Non-Past	Past
3SG(→3')	<i>mto-m</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>		

with -a- vocalism is used instead of the A-type orientation preverbs in -u- and -v- found in the mixed and local domains (*pu-* in the case of the verb *mto* ‘see’). C-type orientation preverbs, only found in this section of the transitive paradigm (§14.3.1, §15.1.1.1), result from the fusion of A-type prefixes with another prefix which is only otherwise attested in the Apprehensive (§21.7.1).

The -t suffix found in some direct forms in the mixed domain (§14.3.2.1) is not attested in the non-local domain.

Inverse forms of the non-local domain only differ from the third person intransitive forms by the presence of the *yú-/wy-* prefix, lacking stem alternation or additional affixes, like the inverse forms of the mixed domain (§14.3.2.1).

Number indexation in the non-local domain encodes only one of the two arguments: the *subject* in the direct configurations and the *object* in the inverse configurations. For instance, in (43), the subject of the verb *pjv-wy-nysma-ndzi* is plural (3PL→3DU), but plural indexation -nu here instead of the dual would be incorrect, as this verb form has the *yú-/wy-* prefix and thus agrees in number with the object.

- (43) *ndzi-julco ra kuu wuma pjv-wy-nysma-ndzi.*
3DU.POSS-neighbour PL ERG really IFR-INV-envy-DU

‘Their neighbours envied the two of them.’ (qajdoskAt, 14)

The third person argument whose number is indexed (the 3DU argument in 43) is called *proximate*, and the one that is not indexed on the verb (corresponding to the noun phrase *ndzi-julco ra* in 43) is called *obviative* (glossed as 3'), using terminology from Algonquian linguistics. While in Algonquian the term *obviative*

(coined by Cuoq 1866) originally refers to a category marked on both nouns and verb indexation (including intransitive verbs), in Gyalrong languages the proximate/obviative contrast is only reflected in transitive verbal morphology (see §14.3.2.8 and §14.3.3)

Direct configurations are by far more common in the corpus than inverse ones. Inverse non-local forms have two functions: marking the relative saliency of the subject and the object (a question detailed in §14.3.3) and indexing a generic subject (§14.3.2.5).

14.3.2.3 Local configurations

Local configurations stand out in Japhug verbal paradigms in being the only forms involving the second person without a *tu-* prefix. Instead, synchronically unanalyzable portmanteau prefixes are found: *ta-* for 1→2, and *ku-* for 2→1. The *ta-* co-occurs with the non-first person dual and plural suffixes (-*ndzi* and -*nu*, §14.2.1.2), and *ku-* with first person suffixes (-*a*, -*tci* and -*ji*, §14.2.1.1), indexing in all cases the person and number of the object. In 2→1 forms, the first person is redundantly indexed both by the suffixes and the portmanteau prefix *ku-*.

The presence of portmanteau prefixes in the local domain is not typologically unusual. Typologists have long noticed that languages with polypersonal indexation tend to have unanalysable affixes in 1→2 and 2→1 forms (Heath 1998) in part due to pragmatic factors (DeLancey 2018). The historical origin of these prefixes is discussed in Jacques (2018c) and §14.8.3.

In 1→2 configurations, since 2SG is exclusively indexed by the *tu-* prefix in the intransitive paradigm, without any suffix (unlike Situ, §14.8.1), the 1→2SG also lacks any indexation suffix. Table 14.11 presents all local configurations of the verb *mto* ‘see’ in the Factual Non-Past and the Aorist, except for those with double suffixation (2DU→1SG and 2PL→1SG) which are treated in §14.3.2.6.

There is no stem alternation, -*t* past tense suffix or *yuu-/wy-* prefix in the local domain in Japhug. Aorist and Factual Non-Past only differ from each other by the presence of the A-type orientation preverb in the former, as can be seen in Table 14.11.

In Japhug, the forms of the local domain are always different from those of the mixed domain, and the person of the subject and the object is never ambiguous. In this regard, Japhug differs from many languages of the Trans-Himalayan family, in particular those of the Kiranti branch. In Khaling, for instance, the same forms are used for 2→1 and 3→1 configurations on the one hand, and for 3→2 and 1NSG→2 on the other hand (Jacques et al. 2012). In that language, the only local configuration to have specific unambiguous forms is 1SG→2.

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-ndži</i>	<i>puu-ta-mto-ndži</i>
1→2PL	<i>ta-mto-nuu</i>	<i>puu-ta-mto-nuu</i>
2SG→1SG	<i>koo-mto-a</i>	<i>puu-koo-mto-a</i>
2→1DU	<i>koo-mto-tči</i>	<i>puu-koo-mto-tči</i>
2→1PL	<i>koo-mto-j</i>	<i>puu-koo-mto-j</i>

13600 In Japhug, while person is unambiguously expressed in the local domain, only
 13601 the number of the *object* is specified, with the exception of 2→1SG configurations
 13602 (§14.3.2.6). Examples (44) and (45) illustrate the same form *tu-ta-fsraj* meaning in
 13603 the first case 1SG→2SG ‘I will save you_{sg}’ and in the second one 1PL→2SG ‘We will
 13604 save you_{sg}’, showing that the form remains identical regardless of the number
 13605 of the subject.

- 13606 (44) *tce azo tu-ta-fsraj ra tce,*
 LNK 1SG IPFV-1→2-protect be.needed:FACT LNK
 13607 ‘I have to save you.’ (150901 changfamei-zh, 219)

- 13608 (45) *izora numuu kojla zo tu-ta-fsraj, tu-ta-βri jnu-suuso-j*
 1PL DEM really EMPH IPFV-1→2-protect IPFV-1→2-save IPFV-think-1PL
 13609 *cti ri,*
 be.AFF:FACT LNK
 13610 ‘We really want to save you.’ (niulan li de lu-zh, 25)

13611 Similarly, (46) and (47) show the form *tu-koo-qur-i* meaning 2SG→1PL ‘You_{sg}
 13612 help us’ in the first example and 2PL→1PL ‘You_{pl} help us’ in the second one.

- 13613 (46) *wortc^{hi} wojyr zo tu-koo-qur-i ra*
 please please EMPH IPFV-2→1-help-1PL be.needed:FACT
 13614 ‘Please, help us.’ (150827 taisui-zh, 22)

- 13615 (47) <*chuhuaiwang*> *c^ho nura, kumaa nura nur-cki,*
 ANTHR COMIT DEM:PL other DEM:PL 3PL.POSS-DAT

- 13616 “*yuu-tu-kuu-qur-i nuu-nnts^{hi}*” *z-jo-suut-i*.
 CISL-IPFV-2→1PL SENS-be.better TRAL-IFR-CAUS-say
 13617 ‘He sent (someone) to the king Huai of Chu and the other ones to tell
 13618 them ‘Come and help us’. (160721 pofuchenzhou-zh, 26)

13619 The 2→1 configuration can occur in the prohibitive with the prefix *ma-* (§13.1.1)
 13620 as in the form *ma-t^huu-kuu-βluu-a* ‘don’t burn me’ in (48), but not in the imperative
 13621 (§21.4.2.1). Instead, the Imperfective is used (§21.2.5), most often with a modal
 13622 verb, as in (46) and (47) and in the form *c^huu-kuu-rku-a* in (48). Attempts to produce
 13623 2→1 Imperative forms such as *†tr-kuu-qur-i* (instead of the correct *tu-kuu-qur-i ra*
 13624 ‘help us’) are rejected by native speakers.

- 13625 (48) *ma-t^huu-kuu-βluu-a, tc^horzi uu-ŋguu*
 PROHIB-IMP-2→1-burn-1SG wine.jar 3SG.POSS-inside
 13626 *c^huu-kuu-rku-a*
 IPFV:DOWNTSTREAM-2→1-put.in-1SG
 13627 ‘Don’t burn me, put me in a wine jar.’ (2003 Kunbzang, 385)

13628 14.3.2.4 Inclusive semi-reflexive configurations

13629 Japhug lacks inclusive / exclusive contrast in both pronouns and indexation sys-
 13630 tem (§14.2.1.1), and inclusive persons are treated the same way as 1DU and 1PL
 13631 exclusive. While inclusive persons could in principle exist in the local domain,
 13632 configuration of this type are problematic: if the subject or object of a transitive
 13633 verb is inclusive, and the other argument strictly first or second person, the re-
 13634 sulting configuration is partially reflexive, since the inclusive contains both first
 13635 and person referents.

13636 In a language like Japhug where reflexivity is marked by an intransitivizing
 13637 derivation (§18.3), there is therefore a conflict between the absence of reflexive
 13638 forms in the transitive paradigm and the need to express inclusive↔first/second
 13639 person configurations in a way that is different from plain reflexives.

13640 The following list provides the four theoretically possible inclusive semi-reflexive
 13641 configurations, displaying the referent shared by subject and object in red. This
 13642 list neglects possible additional third person referents in 1DU exclusive, 1PL, 2DU
 13643 and 3PL arguments, which would artificially increase the number of configura-
 13644 tions.

- 13645 • 1+2→1 ‘You and I verb me’
- 13646 • 1+2→2 ‘You and I verb you’

- 13647 • 1→1+2 ‘I verb you and me’
 13648 • 2→1+2 ‘You verb you and me’

13649 van Driem (1990), in his review of Michailovsky (1988), argues that Kiranti
 13650 languages and Limbu in particular cannot express inclusive semi-reflexive con-
 13651 figurations using transitive verbal morphology, and must resort to periphrases;
 13652 for instance, in order to express the meaning of the 2→1+2 configuration ‘you
 13653 saw both of us in the mirror’, Limbu uses a complement clause containing an in-
 13654 transitive verb meaning ‘you and I appear in the mirror’, object of the transitive
 13655 verb ‘see’, as in (49).

- 13656 (49) *khene?* anchi aina-o a-dha:p-si-ba ke-ni
 13657 2SG 1DI mirror-LOC INCL-be.visible-DU-NMLZ 2-see
 ‘You(sg) saw both of us in the mirror.’ (van Driem 1990: 277)

13658 In Japhug, a similar strategy (though with a finite clause instead of a nominal-
 13659 ized verb form) is employed to express the 1→1+2 configuration in (50), with the
 13660 finite complement clause *χεրլզգոյ ս-յցւ կր-նտչր-տցի* ‘we appear in the mirror’
 13661 as object of the transitive perception verb *mto* ‘see’.

- 13662 (50) [*χεրլզգոյ ս-յցւ կր-նտչր-տցի*] nura puu-mto-t-a
 13663 mirror 3SG.POSS-in AOR-appear-1DU DEM:PL AOR-see-PST:TR-1SG
 ‘I saw both of us in the mirror.’ (elicitation, Jacques 2012a: 85)

13664 Nevertheless, there are cases in Japhug where inclusive semi-reflexive mean-
 13665 ings can be expressed by simple verb forms of the local domain. In example (51),
 13666 the verb *kua-z-maqʰu-tcī* presents a 2→1DU configuration (§14.3.2.3); it is clear in
 13667 this particular case that the object is first dual inclusive ‘you and I’ rather than
 13668 first exclusive, and that we therefore have a semi-reflexive configuration 2→1+2.

- 13669 (51) *muúj-tu-mbyom ri tʰa kua-z-maqʰu-tcī*
 13670 NEG:SENS-2-be.in.a.hurry LNK later 2→1-CAUS-be.after:FACT-1DU
 ‘(If) you don’t hurry (up), you will get us late.’ (elicited)

13671 No example of this type is found in the corpus, and such pragmatically clumsy
 13672 configurations are on the borderline of the Japhug person indexation system.

13673 Semi-reflexive indexation also occurs with third person referents, in particular
 13674 in causative constructions (see 24, §17.2.4).

13675 14.3.2.5 Generic indexation

13676 The prefix *kua-*, which appears in the intransitive paradigm to express generic
 13677 intransitive subject (§14.2.1.2), is also attested in the transitive paradigm to refer
 13678 to generic object. For instance, in example (52),¹³ the transitive verbs *kua-mto* ‘(the
 13679 yeti) will see one’ and *kua-ndo* ‘(the yeti) will catch one’ have the same *kua-* prefix
 13680 as the intransitive verb *a-my-jr-kua-phyo* ‘one should not flee’. This example also
 13681 shows that stem I is selected in the 3→GENR form, as the stem III of *mto* ‘see’ and
 13682 *ndo* ‘catch’ are *mtym* and *ndym*, respectively. Combining the generic *kua-* prefix
 13683 with stem III is impossible, and *kua-mto* cannot be replaced by a form such as
 13684 †*kua-mtym*, which would be unintelligible.

- 13685 (52) *ui-q^hu-c^hu* *ui-stu* *zo*
 13686 3SG.POSS-behind-APPROX.LOC 3SG.POSS-direction EMPH
 13687 *a-my-jr-kua-phyo* *ra* *ma tce kua-mto*
 13688 IRR-NEG-PFV-GENR:S/O-flee be.needed:FACT LNK LNK GENR:S/O-see:FACT
 13689 *tce kua-ndo* *cti* *tu-ti-nui*
 13690 LNK GENR:S/O-take:FACT be.AFF:FACT IPFV-say-PL
 13691 ‘People say that you should not flee in the direction behind it (the yeti), as
 13692 it would see you and catch you.’ (140510 mYWrgAt, 20)

13693 Unlike in Tshobdun (J. T.-S. Sun 2014b), generic transitive subjects in Japhug
 13694 are not indexed by the same prefix as generic intransitive subjects. Apart from
 13695 a handful of irregular verbs (§14.3.4), the inverse prefix *wy-* occurs instead of *kua-*
 13696 to express generic transitive subject, as in the verb *tú-wy-ndza* ‘one eats it’ in (53),
 13697 whose object is definite (anaphorically referring to the noun *k^hurwum* ‘mold’ in
 13698 a previous clause). Note that the generic subject of *tú-wy-ndza* is co-referent with
 13699 the object of the verb *jnu-kua-z-nutufçrl* ‘it causes one to have diarrhea’ (causative
 13700 of the intransitive verb *nutufçrl* ‘have diarrhea’, on which see §16.4.4) in the
 13701 following clause, indexed with the *kua-* as in (52) above, and that conversely the
 13702 (inanimate) object of *tú-wy-ndza* corresponds to the subject of *jnu-kua-z-nutufçrl*.

- 13703 (53) *ma tú-wy-ndza tce, jnu-kua-z-nutufçrl* *cti*
 13704 LNK IPFV-INV-eat LNK IPFV-GENR:S/O-CAUS-have.diarrhea be.AFF:FACT
 13705 ‘If you eat (mold), it causes you diarrhea.’ (20-sWrna, 56)

13706 Generic person indexation is remarkable in Japhug morphosyntax in being
 13707 one of the very few examples of ergative-absolutive alignment outside of the

¹³ The generic person in (52) is translated into English by the second person ‘you’.

case marking system, since the intransitive subject and the object are marked by the same prefix *ku-*, while the transitive subject is not ($S = P \neq A$).

A generic person subject or object is only compatible with a third person argument (GENR→3 or 3→GENR). Combinations with first or second persons are not possible. However, number indexation of the non-generic third person argument is possible when the generic argument is subject. Dual or plural suffixes in GENR→DU or GENR→PL configurations are attested in procedural texts. For instance, (54) has dual indexation (referring to the turnip leaves and the turnip root) with generic human subject.

- 13713 (54) *rasti c^ho rxjndob ni, pjú-wy-zndzyr-ndzi tce*
 turnip COMIT turnip.root DU IPFV-INV-cut-DU LNK
 13714 *pjú-wy-z-nuNGyt-ndzi ηu.*
 IPFV-INV-CAUS-ACaus:separate-DU be:FACT

13715 ‘One separates the turnip from its root by cutting them.’ (150903 kAJar, 7)

13716 Number indexation occurs in particular in the case of generic subject indexation referring to a first person (§14.6.1.4). In (55), the generic subject of the verb
 13717 *tú-wy-qur-nu* corresponds to the first person plural, as indexed on the preceding
 13718 verb *ryzi-j*, and the plural object is overtly indexed.

- 13720 (55) *tui-rdos tsa ryzi-j tce tú-wy-qur-nu ra^mas*
 one-piece a.little stay:FACT-1PL LNK IPFV-INV-help-PL SFP
 13721 ‘Let at least one of us stay here and help them!’ (hist180503 xiyouji 12-zh,
 13722 78)

13723 On the other hand, when the generic argument is in object or intransitive
 13724 subject function, no person indexation suffix can appear on the verb, even if this
 13725 argument is realized as an overt noun phrase with plural marking in addition to
 13726 generic indexation.

13727 For instance, in (56), the verb form with generic object indexation *ku-ku-su-*
 13728 *ndo* lacks any indexation suffix, although both the causer ('the elders') and the
 13729 causee (the generic argument, *tr-pvtso ra* 'us, the children') are plural.

- 13730 (56) *qazo c^hur-kryy-nu tce tr-pvtso ra kui nuu qazo yur*
 sheep IPFV-shear-PL LNK INDEF.POSS-child PL ERG DEM sheep GEN
 13731 *wi-ku nuu ku-kui-su-ndo.*
 3SG.POSS-head DEM IPFV-GENR:S/O-CAUS-take
 13732 ‘(Every time the adults) sheared the sheep’s wool, they would ask the
 13733 children (us) to grab the sheep’s head.’ (160712 smAG, 2)

13734 14.3.2.6 Double number indexation

13735 The transitive paradigm contains six doubly suffixed forms, two in the local do-
 13736 main, and four in the mixed domain, as summarized in Table 14.12. Japhug is
 13737 not the only Gyalrong language with double number indexation. The same set
 13738 of doubly suffixed forms is found in Tshobdun (Sun & Shidanluo 2002) and Zbu
 13739 (Gong 2014).

Table 14.12: Double number indexation in the transitive paradigm

Person	Non-Past	Past
1SG→3DU	<i>mtam-a-ndzi</i>	<i>puu-mto-t-a-ndzi</i>
1SG→3PL	<i>mtam-a-nuu</i>	<i>puu-mto-t-a-nuu</i>
3DU→1SG	<i>yuu-mto-a-ndzi</i>	<i>puú-wy-mto-a-ndzi</i>
3PL→1SG	<i>yuu-mto-a-nuu</i>	<i>puu-wy-mto-a-nuu</i>
2DU→1SG	<i>kuu-mto-a-ndzi</i>	<i>puu-kuu-mto-a-ndzi</i>
2PL→1SG	<i>kuu-mto-a-nuu</i>	<i>puu-kuu-mto-a-nuu</i>

13740 The forms corresponding to those in Table 14.12 without additional *-ndzi* or *-nuu*
 13741 suffix generally have a singular third or second person argument, for instance *puu-*
 13742 *mto-t-a* ‘I saw him’ (§14.3.2.1) or *puu-kuu-mto-a* ‘You_{sg} saw me.’ (§14.3.2.3). There are
 13743 however also cases of optional number indexation, a topic discussed in §14.6.1.1.

13744 The 1SG→3DU and 1SG→3PL forms have stem III alternation in non-past tenses
 13745 (*mto* → *-mtam-* in Table 14.12) and the suffix *-t* in the Aorist, like the corresponding
 13746 1SG→3SG form (§14.3.2.1).

13747 Examples (57), (58), (59) illustrate 1SG→3DU (with stem III, *ndza* → *ndze*), 3DU→1SG
 13748 and 2PL→1SG configurations, respectively. All these forms have double suffixa-
 13749 tion, comparable to *mtam-a-nuu*, *puú-wy-mto-a-ndzi* and *kuu-mto-a-nuu* in Table 14.12
 13750 (with the Imperfective instead of the Factual Non-Past).

- 13751 (57) *tu-ndze-a-ndzi ra*
 IPFV-eat[III]-1SG-DU be.needed:FACT
 13752 ‘I’d like to eat them.’ (IWlu2002, 69)

- 13753 (58) *tu-kui-numgla-a jyy ma ny-pi ni*
 IPFV-2→1-step.over-1SG be.allowed:FACT LNK 2SG.POSS-elder.sibling DU

- 13754 *kui t̪y-wy-numcla-a-ndzi cti*
 ERG AOR-INV-step.over-1SG-DU be.AFF:FACT
 13755 ‘You can step over me, your two elder sister stepped over me.’ (Kunbzang,
 13756 31)
- 13757 (59) *a-pi ra, azuy kukutcu a-my-ky-cha*
 1SG.POSS-elder.sibling PL 1SG:GEN here 1SG.POSS-NEG-OBJ:PCP-can
 13758 *ci yyzu tce [...] tu-kui-qur-a-nui nui-nts^{hi}*
 INDEF exist:SENS LNK IPFV-2→1-help-1SG-PL SENS-be.better
 13759 ‘Sisters, I have a problem (something that I cannot do) here, help me!’
 13760 (150828 donglang, 109)

13761 Double number indexation also occurs on relativized verbs with totalitative
 13762 reduplication (§12.4.1.5), such as *pui~pui-mto-t-a-nui* in (60). In this example, the
 13763 suffix *-nui* indexes the number of the object *tç^heme* ‘girl’, which is also the head
 13764 of this head-internal relative (§23.4.3). It is redundant with the verb-initial redu-
 13765 plication, which expresses universal quantification of the object.

- 13766 (60) *nunui [tç^heme pui-pui-mto-t-a-nui] u-ŋgw u-nui*
 DEM girl TOTAL~AOR-SEE-PST:TR-1SG-PL 3SG.POSS-inside DEM
 13767 *kui-fse kui-mpcyr maye*
 SBJ:PCP-be.like SBJ:PCP-be.beautiful not.exist:SENS
 13768 ‘This is the most beautiful among all the girls I have ever seen.’ (150818
 13769 muzhi guniang-zh, 505)

13770 All forms with double number indexation in Japhug (Table 14.12 and examples
 13771 57 to 59 above) contain the first person *-a* suffix. This includes 1SG→3, 3→1SG
 13772 and 2→1SG configurations, but not 1SG→2: the 1→2 forms, unlike other configu-
 13773 ration involving a first person, do not take person indexation suffixes coreferent
 13774 with their first person subject (§14.3.2.3). Two hypotheses could be proposed to
 13775 account for this relationship between *-a* suffix and double number indexation.

13776 First, this constraint could be seen as a (haplological) prohibition against the
 13777 presence of two identical suffixes in the same verb form. Since second and third
 13778 person number markers are identical, the only way to express a form such as
 13779 2DU→3DU in a fully explicit way would be †Σ₁-*ndzi-ndzi* with two times the same
 13780 suffix, a form which would be excluded by the haplological rule. Such a rule
 13781 however would not account for the absence of second number marker in verb
 13782 forms suffixed with the 1DU *-t̪ci* or the 1PL *-ji*.

Second, it could be argued to be a question of phonology: all person indexation suffixes apart from *-a* have the high vowels /i/ or /ɯ/ (which are not contrastive in this context, §3.5.2), and one could suppose that the ban on double suffixation in this paradigm is due to a constraint against two unstressed suffixes with high vowels (since the stress is on the last syllable of the stem, except in a limited number of cases, §3.7).

However, this hypothesis is contradicted by the fact that other verbal paradigms in Japhug do contain verb forms with two suffixes in high vowels, as in example (61).¹⁴

- (61) *to-k-χlulxt-ndzi-ci*
 IFR-PEG-fight-DU-PEG
 ‘They fought each other.’

Given the fact that the combination of two unstressed suffixes in high vowel are possible in Japhug, phonology cannot explain the absence of a form such as *†kuu-Σ₁-tci-ndzi* (intended for 2DU→1SG).

A third approach to explain the unique properties of the *-a* suffix, involving the notion of person hierarchy, is explored in §14.3.2.8.

14.3.2.7 The allomorphy of the inverse prefix

The inverse prefix¹⁵ has the allomorph *yú-* when occurring in word-initial position, something which is only possible in the Factual Non-Past (as it is the only TAME category without any orientation preverb, §21.3.1.1) when no other inflectional prefix is present. It surfaces as *wy-* in all other cases, merging with the vowel of the preceding prefix, which then bears the accent; the inverse is one of the very few stress-attracting prefixes in Japhug (§11.2.3).

The allomorph *wy-* also occurs in Factual Non-Past forms with the following prefixes:

- Second person *tua-* (§14.3.2.1): *túa-wy-mto* (2-INV-see:FACT) ‘he will see you’
- Negative *m̚a-* (§13.1.1): *m̚a-wy-mto-a* (NEG-INV-see:FACT-1SG) ‘he will not see me’
- Apprehensive *çua-* (§21.7.1): *çúa-wy-mtsuy-a* (APPR-INV-bite:FACT-1SG) ‘(I fear) that it could bite me’

¹⁴ See §15.1.1.2 and §11.4 on the peg circumfix *kuu...-ci*.

¹⁵ The possible origins of the inverse prefix are discussed in §5.1.1.5 and §14.8.2.

- 13813 • Associated motion *ciu-/yu-* (§15.2): *yú-wy-ndza-j* (CISL-INV-eat:FACT-1PL) ‘it
13814 will come to eat us’
- 13815 • Proximative aspect: *ju-* (§21.6.2) *jú-wy-mtsuy-a* PROXM-INV-bite:FACT-1SG
13816 ‘it is about to bite me’
- 13817 • Possible modality: *umyr-* (§21.7.2) *umr̩-wy-mtsuy-a* (PROB-INV-bite:FACT-1SG)
13818 ‘it will perhaps bite me’ (88b, §10.4.4)
- 13819 • Rhetorical Interrogative: *uþrr-* (§21.7.3.1) *uþr̩-wy-mtsuy-a* (RH.Q-INV-bite:FACT-
13820 1SG) ‘it will not bite me, will it?’
- 13821 • Interrogative: *u-* (§21.7.4.1) *ú-wy-ndza-a* (QU-INV-eat:FACT-1SG) ‘Will it eat
13822 me?’

13823 With the progressive prefix *asu-* (§21.6.1.1), the inverse is *infixed* rather than
13824 being prefixed, for instance in a form such as *nu-tuu-ŕ<wy>sui-zgrob* (SENS-2-
13825 PROG<INV>-attach) ‘he is attaching you’. This question is discussed in more detail
13826 in §11.2.1.

13827 The merger of the /w/ of the inverse prefix with the vowels /u/ and /y/ of the
13828 preceding prefixes yields /u/ and /o/, respectively. Although the transcription
13829 -*wy-* is chosen in the present orthography, the fricative /y/ is most often elided,
13830 and the stress and vowel rounding are the main clues of the presence of the
13831 inverse prefix.

13832 Due to the vowel merger, the contrasts between several series of prefixes are
13833 neutralized when preceding the inverse prefix, causing homophony between
13834 morphologically different forms (our orthography however keeps the distinction
13835 between the rounded and unrounded vowels in this context). There are potential
13836 ambiguities in three situations.

13837 First, since the B-type (imperfective) UPWARDS preverb *tu-* (§15.1.1.1) and the
13838 second person *tu-* (§14.2.1.2) both become neutralized as *tú-* before the inverse
13839 prefix, transitive verbs whose intrinsic orientation is UPWARDS (§15.1.5) have the
13840 same surface form in the Imperfective 3→3 (and also 3SG→1SG with verbs whose
13841 stem ends in -*a*, due to vowel merger, see §3.3.1.3 and §14.2.1.1) on the one hand
13842 and the Factual Non-Past 3→2SG on the other hand. The two examples in (62) il-
13843 lustrate this ambiguity with the verb *ndza* ‘eat’ (which selects the orientation UP-
13844 WARDS, §15.1.5.4) with the Factual Non-Past 3→2SG *tú-wy-ndza* ‘it will eat you’ in
13845 (62a) and the Imperfective *tú-wy-ndza-a* 3SG→1SG ‘it eats me’,¹⁶ both pronounced

¹⁶ For the use of the Imperfective in subject complement clause of the verb *jyy* ‘be allowed’, see §21.2.4.

13846 /túyndza/ in two immediately adjacent sentences in the same text.

- 13847 (62) a. *βduut a-my-jy-zyut ra ma tú-wy-ndza*
 demon IRR-NEG-PFV-arrive be.needed:FACT LNK 2-INV-eat:FACT
 (She said) '(Let us hope that) the demon will not arrive, otherwise it
 13849 will eat you.' (tWxtsa2003, 31)
- 13850 b. *tú-wy-ndza-a nuu my-jyy nýma nyzo*
 IPPFV-INV-eat-1SG DEM NEG-be.allowed:FACT SFP 2SG
 13851 *ny-ndža puu-ye-a cti tce*
 2SG.POSS-reason AOR:DOWN-come[II]-1SG be.AFF:FACT LNK
 13852 '(The demon cannot) eat me, I came for you (to save you).'
 13853 (tWxtsa2003, 32)

13854 In addition to the meaning difference, the ambiguity between the two prefixes
 13855 can sometimes be resolved by the syntactic context alone. For instance, the verb
 13856 *stu* 'do like' often occurs with another transitive verb in a serial verb construction
 13857 (§25.4.1.2) sharing the same person and tense. If the other verb in the construc-
 13858 tion does not select the orientation UPWARDS, its Imperfective 3'→3 (or generic
 13859 subject) and Factual 3→2SG will not be homophonous.

13860 For instance, in (63a), since *nucʰymda* 'drink with a straw' selects the orienta-
 13861 tion DOWNSTREAM (§15.1.5.4, example 73), its Imperfective 3'→3 would be *cʰúu*
 13862 *wy-nucʰymda*; the form *tú-wy-nucʰymda* is thus unambiguous, and suffices to
 13863 demonstrate that the surface form /tú(y)stu/ in this context is really a 3→2SG
 13864 form *tú-wy-stu* and not a 3'→3 Imperfective *tú-wy-stu*, even without considering
 13865 the meaning of the sentence.

13866 Conversely, in (63b), the second verb *nú-wy-cuu* is unambiguously a generic
 13867 Imperfective form, since there is no prefix with which the rounded allomorph
 13868 of the B-type WESTWARDS preverb *nú-* could be confused; the form /tú(y)stu/ in
 13869 this sentence must therefore necessarily be analyzed as a generic Imperfective
 13870 *tú-wy-stu*.

- 13871 (63) a. *tʰur-tur-rgyz tce ki tú-wy-stu*
 AOR-2-be.old LNK DEM.PROX 2-INV-do.like:FACT
 13872 *tú-wy-nucʰymda cti tce,*
 2-INV-drink.with.a.straw:FACT be.AFF:FACT LNK
 13873 'When you become old, they will drink you (your blood) like this
 13874 with a straw (planted on your back)' (Norbzang 2012, 67)

- 13875 b. *ki tú-wy-stu tce nū-wy-cu*
DEM.PROX IPFV-INV-do.like LNK IPFV-INV-open
13876 ‘One opens it like this.’ (26-tCAkWG, 19)

13877 Second, the A-type preverbs *tr-* UPWARDS, *ly-* UPSTREAM, *ky-* EASTWARDS and
13878 *jy-* and the corresponding D-type preverbs *to-*, *lo-*, *ko-* and *jo-* (§15.1.1) are neu-
13879 tralized before the inverse prefix. This implies that the Aorist (§21.5.1.1) and In-
13880 ferential (§21.5.2.1) of verbs selecting the orientations listed above will be ho-
13881 mophonous in all forms bearing the inverse prefix.

13882 In (64a), the 3'→3 form /tó(y)sulvt/ could either be Inferential *tó-wy-su-lxt*
13883 with the D-type preverb *to-* or Aorist *tý-wy-su-lxt* with the A-type preverb *tr-*.
13884 Here, the context can help to disambiguate between the two: the former is
13885 preferred because the whole story is told in the Inferential, and using the Aorist
13886 in this particular context would imply taking the event described by the verb as
13887 a reference point (§21.5.1.4), with a different translation ‘when the horse...’. In
13888 (64b) on the other hand, the presence of the postposition *cimuma* ‘immediately
13889 after’ (§25.3.3.2) and the meaning of the sentence imply that the form /tó(y)χtw/
13890 must be analyzed as Aorist rather than Inferential.

- 13891 (64) a. *χsu-trxuar zo tó-wy-su-lxt tce tr-βju*
13892 three-turn EMPH IPFV-INV-CAUS-release LNK INDEF.POSS-mat
13893 *ui-ta* tce *pjy-wy-βde.*
13894 3SG.POSS-on LOC IFR-INV-throw
13895 ‘She made the (horse) run three laps and throw her on the mat.’
13896 (2003kAndzwsqhaj2, 88)
13897 b. *koxtcum-ri nunuu tý-wy-χtu cimuma cyy nura*
13898 silk-thread DEM AOR-INV-buy immediately be.new:FACT DEM:PL
13899 *wuma nui-mpcyr ri,*
13900 really SENS-be.beautiful LNK
13901 ‘Silk threads are very beautiful when one has just bought them, when
13902 they are new.’ (2002thaXtsa, 167)

13899 Third, the contrast between the Proximative *ju-* (§21.6.2) and the B-type *ju-*
13900 preverb is also neutralized when preceding the inverse prefix. For instance, the
13901 Proximative Factual 3→1SG *jú-wy-qaβ-a* PROXM-INV-catch.up-1SG ‘it is about to
13902 catch up with me’ and the Imperfective *jú-wy-qaβ-a* IPFV-INV-catch.up-1SG are ho-
13903 mophonous, since the verb *qaβ* ‘catch up’ is compatible the indefinite orientation
13904 *ju-* (§21.6.2).

13905 14.3.2.8 Direction marking and person hierarchies

13906 The mixed and non-local domains of the Japhug indexation system present a
 13907 remarkable symmetry, illustrated in Table 14.13: direct X→3 and inverse 3→X
 13908 forms have the same person indexation affixes, and only differ by the presence
 13909 of the prefix *wy-* in inverse configurations, and of stem III in (Non-Past) XSG→3
 13910 configurations.

Table 14.13: Symmetrical indexation

Person	Direct (X→3)	Inverse (3→X)
1SG	<i>mtam-a</i>	<i>yúu-mto-a</i>
1DU	<i>mto-tçi</i>	<i>yúu-mto-tçi</i>
1PL	<i>mto-j</i>	<i>yúu-mto-j</i>
2SG	<i>tuu-mtym</i>	<i>tú-wy-mto</i>
2DU	<i>tuu-mto-ndzi</i>	<i>tú-wy-mto-ndzi</i>
2PL	<i>tuu-mto-nuu</i>	<i>tú-wy-mto-nuu</i>
3SG	<i>mtym</i>	<i>yúu-mto</i>
3DU	<i>mto-ndzi</i>	<i>yúu-mto-ndzi</i>
3PL	<i>mto-nuu</i>	<i>yúu-mto-nuu</i>

13911 Although this symmetry is broken in the local domain, where neither the *wy-*
 13912 prefix nor stem III alternation occur (§14.3.2.3), Japhug has an indexation system
 13913 very close to the canonical direct-inverse, as presented in Table 14.14 (Jacques &
 13914 Antonov 2014): all configurations of the lower half of the bipersonal indexation
 13915 space except 2→1 take the *wy-* prefix, while this prefix is not found in the upper
 13916 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	

13917 As mentioned above, person indexation affixes in Japhug have neutral align-

13918 ment, and can be used to index either subjects (of transitive or intransitive verbs)
 13919 or objects. With transitive verbs, the *wy-* prefix (whose allomorphy is described
 13920 in §14.3.2.7) and Stem III (§12.2.2) serve to disambiguate the function of the in-
 13921 dexation affixes closest to the verb stem:¹⁷ if the *wy-* prefix is present, the affix(es)
 13922 index the object, while if Stem III is present, they index the subject. The *wy-* prefix
 13923 and stem III mark *inverse* and *direct* configurations, respectively.

13924 A way to describe the distribution of the inverse and direct markers is the
 13925 notion of person or empathy hierarchy (Silverstein 1976; DeLancey 1981; Sun &
 13926 Shidanluo 2002; Lockwood & Macauley 2012). A typical example of person hier-
 13927 archy is (65), on which first person ranks higher than second person, discourse
 13928 participants (first of second persons) higher than third persons,¹⁸ and among an-
 13929 imate third persons (in particular humans) higher than inanimate third persons.

13930 (65) 1 > 2 > 3 animate > 3 inanimate

13931 This type of hierarchies,¹⁹ originally proposed to account for splits in pronomi-
 13932 nal systems (Silverstein 1976), have been invoked to explain various morphosyntac-
 13933 tic phenomena, including slot accessibility (for instance, the prefixal slot in
 13934 the Independent Order paradigms of Algonquian languages, Zúñiga 2006; Lock-
 13935 wood & Macauley 2012) and direct/inverse marking.

13936 In this framework, when the subject and the object compete for the same mor-
 13937 phological slot, the one that is higher on the hierarchy is indexed. In addition,
 13938 INVERSE markers occur when the *object* is higher on the hierarchy than the sub-
 13939 ject (2 → 1, 3 → 1, 3 → 2), and DIRECT markers when the *subject* is higher (1 → 2, 1 → 3,
 13940 2 → 3).

13941 The explanatory power of hierarchies to analyze indexation systems has been
 13942 challenged (Zúñiga & Cristofaro 2018), in particular due to the fact that in some
 13943 languages one would need to posit contradictory hierarchies (see Zúñiga's 2006
 13944 discussion of Plains Cree).

13945 Independently of the cross-linguistic validity of the notion of person hierar-
 13946 chies, the Japhug indexation system is amenable to an analysis in terms of the
 13947 two non-contradictory hierarchies in (66). The nature of the contrast between 3
 13948 proximate and 3' obviative is discussed in §14.3.3.

¹⁷ If two indexation suffixes are present, the second suffix indexes the number of the other argument (§14.3.2.6).

¹⁸ On the difference between third person on the one hand, and first and second persons on the other hand, see also Benveniste (1966b: 253–256).

¹⁹ Other hierarchies have been suggested; for instance, slot accessibility in most Algonquian languages requires to posit a hierarchy 2 > 1 > 3.

13949 (66) a. 1, 2 > 3PROX > 3', GENR

13950 b. 1SG > 1N.SG, 2, 3

13951 Hierarchy (66a) describes the distribution of the inverse *wy-* prefix and Stem
13952 III in the mixed and non-local domains:

- 13953 • The inverse prefix occurs whenever the subject is lower than the object
13954 (3→1, 3→2, 3'→3), a rule that also accounts for its function to mark the
13955 generic transitive subject GENR→3 (§14.3.2.5).
- 13956 • Stem III is found when the subject is singular and higher than the object
13957 (1SG→3, 2SG→3, 3SG→3').
- 13958 • Neither the inverse prefix nor Stem III are found when the subject and
13959 the object are equal on (66a), in particular in the local domain (2→1, 1→2),
13960 where portmanteau prefixes occur to indicate person configuration (§14.3.2.3),
13961 and the suffix closest to the verb stem indexes the object. Generic object
13962 configurations, which are marked with the *ku-* generic prefix and lack
13963 Stem III (§14.3.2.5), are analyzed as 3'→GENR, as third person obviative
13964 and generic are equal on (66a).

13965 Additional evidence for the existence of (66a) is presented in §14.4.3.

13966 Hierarchy (66b) accounts for the special status of the 1SG: whenever one of the
13967 core arguments is 1SG, the number of the other argument is indexed on the verb.
13968 In 2→1SG, 3→1SG and 1SG→3 configurations, an additional suffix can follow the
13969 -a 1SG to index the number of the third or second person argument (§14.3.2.6). In
13970 the 1SG→2 configurations, the suffix is coreferent with the number of the object
13971 like all forms in the local domain (§14.3.2.3).

13972 The hierarchies in (66) are only valid for Japhug. In other Gyalrong languages,
13973 including Situ (DeLancey 1981; J. T.-S. Sun 2015; Shuya Zhang 2019), Tshobdun
13974 (Sun & Shidanluo 2002) and Zbu (Gong 2014), the inverse prefix is also found in
13975 the 2→1 configuration and does not appear in the generic subject form, suggest-
13976 ing a hierarchy closer to (65).

13977 A different approach to explain the structure of the Japhug direct-inverse in-
13978 dexation system is to analyze it in terms of historical linguistics. Some prelimi-
13979 nary ideas on the topic are presented in §14.8.1 and §14.8.3.

13980 **14.3.3 The function of the direct/inverse contrast in non-local
13981 configurations**

13982 Like most Gyalrong languages, including Tshobdun (Sun & Shidanluo 2002), Zbu
13983 (Gong 2014), but excluding West Gyalrongic (Lai 2015) and some dialects of Situ
13984 (J. T.-S. Sun 2015; Shuya Zhang 2019), Japhug has a contrast between inverse and
13985 direct forms in the non-local configurations.

13986 The clearest function of the inverse prefix in this context in Japhug is marking
13987 generic subject (§14.3.2.5). In non-generic forms, the choice of inverse or direct
13988 configurations is determined by several factors, including animacy, possession
13989 and saliency of the core arguments.

13990 Japhug lacks obviative marking on nouns (§5.1.1.3), but in the present work
13991 I use the terms ‘obviative’ (abbreviated as 3') to refer to the third person *object*
13992 of a verb in direct non-local configuration or to the third person *subject* of a
13993 transitive verb with inverse configuration, and ‘proximate’ (3) for the subject of
13994 a verb in direct form or object of a verb in inverse form (the choice of these terms
13995 is discussed in §14.3.2.2).

13996 **14.3.3.1 Animacy**

13997 The clearest factor determining the proximate or obviative status of a noun phrase
13998 in Japhug is animacy. Whenever one of the core arguments (whether a noun
13999 phrase or a clause) is inanimate and the other animate, the former will almost
14000 always be obviative, and the latter proximate.

14001 When the subject is animate and the object inanimate (with the exception of
14002 generic subjects §14.3.2.5 and pseudo-passive constructions §14.3.3.4), the verb
14003 must be in direct form. Thus, indirective verbs of speech (§14.4.1) such as *ti* ‘say’,
14004 or transitive modal verbs such as *spa* ‘be able’ (§24.5.3.4), whose object is always
14005 a complement clause (or an abstract noun for some of these verbs),²⁰ and whose
14006 subject is necessarily human or higher animal, will always have a proximate
14007 subject and an obviative object (3→3'), and thus never appear in (non-generic)
14008 inverse configurations.

14009 Conversely, in nearly all the cases when the subject is an inanimate entity
14010 (including plants) and the object an animate one (including humans and non-
14011 human animals), the verb appears in inverse form, as illustrated by examples
14012 (67), (69) and (68).

²⁰ Complement clauses, being inanimate arguments, are always obviative when used as objects of complement-taking verbs.

14013 Inanimate agents are usually natural forces, such as *tu-ci* ‘water’ (subject of
 14014 *c^hꝑ-wy-yut* ‘it brings her downstream’ in 67) or *tu-mu* ‘the rain’ (subject of the
 14015 verb *pjú-wy-χt̪i-nu* ‘(they) wash them away’ in 69).

- 14016 (67) *tuŋyt t^hui-ye nui ui-rca nuateu*
 landslide AOR:DOWNSTREAM-come[II] DEM 3SG.POSS-following DEM:LOC
 14017 *tce, nuŋa puŋ-kui-nuŋu nui tyrcā*
 LOC COW PST.IPFV-SBJ:PCP-eat.grass DEM together
 14018 *c^hꝑ-wy-yut, tuŋ-rdoꝑ. tce nuŋu*
 IFR:DOWNSTREAM-INV-bring one-piece, LNK DEM
 14019 *c^hꝑ-wy-yut tcendyrre icq^ha nui, nyki*
 IFR:DOWNSTREAM-INV-bring LNK FILLER DEM FILLER
 14020 *tuŋ-ci kui c^hꝑ-wy-yut q^he*
 INDEF.POSS-water ERG IFR:DOWNSTREAM-INV-bring LNK
 14021 ‘There was a landslide, and together with it, a grazing cow was taken
 14022 away, the water took it away.’ (160715 nWNa, 5-6)

14023 Plants can also be agents of verbs with animate patients, as in (§68). In this
 14024 example, note the inversion between the subject and object of the first verb (*tu-*
 14025 *ndze*, whose subject is the dog and object the plant) and those of the second verb
 14026 (*lú-wy-suŋ-qioꝑ*, whose subject (causer) is the plant and object the dog).

- 14027 (68) *pxŋyxcaj nyki, k^huna kui tu-ndze tce lú-wy-suŋ-qioꝑ*
 plant.sp. FILLER dog ERG IPFV-eat[III] LNK IPFV-INV-CAUS-vomit
 14028 *nui-ŋu.*
 SENS-be
 14029 ‘(The plantcalled) *pxŋyxcaj*_i, when a dog_j eats it_i, it makes it_j vomit.’
 14030 (140505 panaxCAj, 3)

14031 There are also cases when inert substances (such as as soot in 69) can be agents.
 14032 Indeed, in (69), soot is the non-overt subject of the verb *ŋꝑ-wy-suŋ-ŋaŋ-nu* ‘it
 14033 caused them to become black’. In such cases the inanimate argument is always
 14034 obviative, and inverse marking on the verb is required.

- 14035 (69) <*yancong> w-ŋguŋ pui-ŋaŋ rcanu, tce kumpyxtcu ra*
 chimney 3SG-inside IPFV-be.black UNEXP:DEG LNK sparrow PL
 14036 *ŋꝑ-wy-suŋ-ŋaŋ-nu zo, nui-kui-ŋk^hra ra*
 IFR-INV-CAUS-be.black-PL EMPH 3PL.POSS-NMLZ:S/A-be.colourful PL

14037 *mui-nv-χsyl zo tcendyre zauruzyri qale tu-βze,*
 NEG-IFR-be.clear EMPH LNK progressively wind IPFV-make[III]
 14038 *tumua kuu pjū-wy-χtci-nuu tce nui-me nui-ηu*
 INDEF.POSS-weather ERG IPFV-INV-wash-PL LNK IPFV-not.exist SENS-be
 14039 'As it is black inside the chimney, the sparrows were completely
 14040 blackened by it, the patterns and colours (on their feathers) were not
 14041 visible any more, but progressively, the wind and the rain wash them
 14042 away and (the soot on their feathers) disappears.' (22-kumpGatCW, 74-76)

14043 Natural forces appear to be intermediate between inanimates and animates, as
 14044 counterexamples without inverse marking do exist. In (70) for instance, the verb
 14045 *t^ha-nu-tsum* 'it took them downstream' has *tu-ci* 'water' as subject and the ani-
 14046 mate noun *βzu ra* 'the mice' as object, but a direct configuration 3→3' is selected.
 14047 However, only a handful of examples of this type are found in the corpus, and
 14048 inverse marking would normally be expected.

14049 (70) *curmwu w-tas nui nui-z-ryzi nv-me ma*
 stone.heap 3SG.POSS-on DEM 3PL.POSS-NMLZ:OBL-stay IFR-not.exist LNK
 14050 *tui-ci to-yi q^he, tcendyre nyki βzu ra kysufse*
 INDEF.POSS-water IFR:UP-COME LNK LNK FILLER mouse PL all
 14051 *t^ha-nu-tsum. q^he pui-si-nuu.*
 AOR:DOWNTSTREAM:3→3'-AUTO-take.away LNK AOR-die-PL
 14052 'The place where they_j stayed on the stone heap disappeared as the
 14053 water_i came up, and it_i took the mice_j downstream. And they_j died.
 14054 (150831 BZW kAnArRaR, 95)

14055 When both core arguments have third person animate referents, both direct
 14056 (71) and inverse (72) configurations are possible, even when the subject is non-
 14057 human and the object human.

14058 (71) *ndzi-svtc^ha nunu yuu juul nunu rcanu k^hu kuu lonba*
 3DU.POSS-place TOP GEN villager DEM UNEXP:FOC tiger ERG all
 14059 *zo t^ha-ckut nui-ηu*
 EMPH AOR:3→3'-eat SEN-be
 14060 'All the villagers in their land had been eaten by a tiger.' (khu2005, 5)

14061 (72) *"mts^ho_βlan ni a-k^hykum, nyki, a-k^huna zo*
 water.monster DU 1SG.POSS-doorstep FILLER 1SG.POSS-dog EMPH
 14062 *a-pui-fse-ndzi ra" to-ti nui-ηu tce mts^ho_βlan*
 IRR-IPFV-be.like-DU be.needed:FACT IFR-say SENS-be LNK water.monster

- 14063 *ni kuu pjy-wy-nvliivist zo cti*
 DU ERG IFR-INV-greet.like.a.dog EMPH be.AFF:FACT
 14064 ‘He said ‘May the water monsters be like dogs on my doorstep’ and the
 14065 water monsters greeted him like dogs.’ (Norbzang 2012, 205-206)

14066 When both core arguments are inanimate, the verb is generally in direct form,
 14067 including in the case of inanimate objects acting on body parts of animate beings,
 14068 as in (73) or (74).²¹

- 14069 (73) *uu-mp^buz nuunu txjpyom kuu pjy-ndo q^bendyre,*
 3SG.POSS-buttocks DEM ice ERG IFR-take LNK
 14070 ‘His buttocks were stuck on the ice.’ (140427 qala cho kWrtsAG, 37)

- 14071 (74) *rjylpu nuu kuu [uu-mja^b jy-z-nymbju] zo pjy-mto tce,*
 king DEM ERG 3SG.POSS-eye IFR-CAUS-be.bright EMPH IFR-see LNK
 14072 ‘The king_j saw it (the thread)_i as it_i dazzled his_j eyes.’ (2012 Norbzang,
 14073 151-152)

14074 Inverse forms can occur when the object is the most salient of the two inan-
 14075 imate arguments (§14.3.3.3), as in (75), where both the subject and the object of
 14076 the verb *jnú-wy-z-maq^bu* ‘it makes it late’ are plants.

- 14077 (75) *uu-rkuu nutcu, si kuu-wxti a-puu-tu tce*
 3DU.POSS-side DEM:LOC tree SBJ:PCP-be.big IRR-IPFV-exist LNK
 14078 *jnú-wy-z-maq^bu q^be uzo tu-mbro mtáj-c^ba.*
 IPFV-INV-CAUS-be.after LNK 3SG IPFV-be.big NEG:SENS-can
 14079 ‘If there is a big tree_j next to it_i, it_j delays its_i growth and it_i cannot grow
 14080 very big.’ (14-sWNgWJu, 242)

14.3.3.2 Possession and obviation

14082 In Algonquian languages, there are two main constraints governing the use of
 14083 obviation on nouns: on the other hand, third persons possessed by another third
 14084 person are automatically obviative (Wolfart 1973: 25, Valentine 2001: 625), and
 14085 on the other hand, at most one argument can be proximate in any given clause
 14086 (Valentine 2001: 627). A consequence of these constraints is that whenever a

²¹ Example (74) is a particularly convoluted type of unmarked embedded clause (§25.1.4), as the ergative phrase *rjylpu nuu kuu* ‘the king’ is not subject of the immediately following transitive verb *jy-z-nymbju*.

transitive verb takes as subject a possessed noun, and as object a (proximate) noun coreferent with the possessor of the subject,²² the verb will necessarily have an inverse form, as in the Cree example in (76). Conversely, if the subject is a proximate noun and the object a possessed noun whose possessor is coreferent with the subject, the verb will necessarily be direct.

- (76) *cān o-tēm-a kī-mākwam-ik*
 ANTHR 3SG.POSS-dog-OBV PST-bit-INV
 'John_{prox}'s dog_{obv} bit him_{prox}'. (Wolfart 1973: 25)

Though similar phenomena have been reported outside of Algonquian (Aissen 1997), not all languages with direct-inverse indexation display such relationship between possession and obviation (Haude & Zúñiga 2016).

Japhug lacks obviation marking on nouns (§5.1.1.3), but the presence of direct or inverse morphology can nevertheless be used to test whether possession has an effect on the obviation status of nominal arguments.

There is a very clear tendency for inverse marking to occur when the subject is a possessed noun and the object its possessor (henceforth SPO 'subject possessed by third person object'), as shown by examples such as (77), (78) and (79).

- (77) *a-wa u-yi ra nuu-cki kó-wy-ndzui, [...]*
 1SG.POSS-father 3SG.POSS-relative PL 3PL.POSS-DAT IFR-INV-accuse
tcendyre a-wa u-yi ra kuu tó-wy-nymqe
 LNK 1SG.POSS-father 3SG.POSS-relative PL ERG IFR-INV-scold
 '(The old monk) complained about my father_i to his_i parents, and my father_i's parents scolded him_i'. (08-kWqhi, 19)
- (78) *tce u-pi bnuaz numi kurny muu-pjy-wy-suixsyl*
 LNK 3SG.POSS-elder.sibling two DEM:DU also NEG-IFR-recognize
 'Even her_i two elder sisters did not recognize her_i'. (140504
 huiguniang-zh, 120)
- (79) *tcendyre rjylpu yuu u-rzaβ jy-k-γβzu-ci tce, tce*
 LNK king GEN 3SG.POSS-wife IFR-PEG-become-PEG LNK LNK
u-pi ni kuu wuma zo, nykinu, pjy-wy-nyzymjyn
 3SG.POSS-elder.sibling DU ERG really EMPH FILLER IFR.IPFV-INV-envy
 'She_i became the queen, and her_i sisters were envious of her_i'. (140514
 huishuohua de niao-zh, 15)

²² If the object noun is not co-referent with the possessor of the subject, it will be obviative too due to the second constraint.

14114 However, the fact that a correlation between inverse marking and SPO config-
 14115 urations exists does not necessarily imply that the inverse is actually triggered
 14116 by SPO.

14117 First, there are also many examples of SPO with direct marking. For instance,
 14118 in (80), the verbs *juu-z-nxja-ndzi* and *mu-ta-su-ye-ndzi* with SPO lack inverse pre-
 14119 fixes and have direct morphology (subject number indexation §14.3.2.2 and the
 14120 C-type orientation preverb *ta-*, §14.3.1). In addition, the examples (8) and (9) in
 14121 §5.1.1.3 provide a minimal of SPO configuration with direct vs. inverse configu-
 14122 ration in exactly the same context.

- 14123 (80) *tc^heeme wuma zo kuu-pe ci pui-ŋu q^he,*
 14124 girl really EMPH SBJ:PCP-be.good INDEF PST.IPFV-be LNK
uu-mu uu-wa ni kuu juu-z-nxja-ndzi
 14125 3SG.POSS-mother 3SG.POSS-father DU ERG SENS-CAUS-be.regrettable-DU
q^he mu-ta-su-ye-ndzi,
 14126 LNK NEG-AOR:3→3'-CAUS-come[II]-DU
 14127 '(His wife)_i was a very nice girl, her_i parents were unwilling to part with
 her_i and did not let her_i come.' (14-siblings, 304)

14128 Second, the presence of inverse marking in examples (77), (78) and (79) above
 14129 (and in most cases of SPO with inverse) can be accounted for by factors other
 14130 than possession, in particular the relative saliency of the subject and the object
 14131 (§14.3.3.3): in all three examples, the object corresponds to the main character
 14132 of the story; notice in particular in (77) the presence of inverse marking on the
 14133 previous verb *kó-wy-ndzū* 'he complained about him', which does not have SPO.

14134 In stories, non-salient characters tend to be described on the basis of their
 14135 relationship with a salient character (rather than by a different name), and are
 14136 therefore expressed by nouns with third person possessor. Many, if not most SPO
 14137 configurations in the corpus involve non-salient referents acting upon salient ref-
 14138 erents related to them; the apparent correlation between SPO and inverse mark-
 14139 ing in texts may therefore be a side-effect of argument saliency rather than a
 14140 specific morphosyntactic phenomenon.

14.3.3.3 Saliency

14142 When both core arguments are third person animate, both are potentially prox-
 14143 imate or obviative, and the verb can thus be either in direct or inverse form, and
 14144 the choice between one or the other is determined, as we will discuss in this

section, by pragmatics. In this section, I mainly focus on human or anthropomorphized non-human referents; animals are briefly treated at the end of the section.

Transitive verb forms where such a choice between inverse and direct forms exist are however a minority. For instance, in (81), the verbs *to-ti* ‘she said’, *to-nu-ŋga* ‘she wore it’ and *ko-rqoꝝ* ‘he hugged (her neck)’ are in the direct form due to animacy constraints (since the subjects of all three verbs are animate and their object inanimates, see §14.3.3.1). Note that a subject shift takes place between *to-nu-ŋga* ‘she wore it’ and *ko-rqoꝝ* ‘he hugged (her neck)’ without inverse marking.

The only verb in this passage taking two animate referents is *tó-wy-tsum* ‘she took him up’, whose subject is *stu kui-xtci nu* ‘the smallest (of the daughters of heaven)’ and whose object is a human boy.²³

- 14157 (81) *stu kui-xtci nuu kuu ‘...’ to-ti tcendyre qro nuunu*
 most SBJ:PCP-be.small DEM ERG IFR-say LNK pigeon DEM
 14158 *w-ŋga nuu to-nu-ŋga qʰe, tce nuu w-mke ko-rqoꝝ*
 3SG.POSS-clothes TOP IFR-AUTO-wear LNK LNK DEM 3SG.POSS-neck IFR-hug
 14159 *qʰe tcendyre tó-wy-tsum to-nuqambumbjom qʰe*
 LNK LNK IFR-INV-take.away IFR:UP-fly LNK
 14160 ‘The smallest (daughter)_i said ‘...’, she_i wore the pigeon skin, he_j hugged
 14161 her_i neck, and she_i took him_j and flew away (with him).’ (07-deluge,
 14162 61-70)

The presence of inverse marking on *tó-wy-tsum* ‘she took him up’ in (81) is neither due to semantic nor syntactic factors. Rather, animate (in particular, human/sentient) referents in a particular passage (the subsection of a story, or a complete) are classified along a scale of obviativity. The main character(s) is/are ascribed proximate status, while characters which the narrator considers to be more secondary receive obviative status.

Example (81) is taken from a flood story whose main character is a human boy (the only survivor of the flood). This character remains proximate in the whole story, and thus by comparison, the daughter of heaven (the other character found in the passage in 81) is obviative. The proximate/obviative contrast on these animate referents is not visible when they occur as subjects with inanimate objects: the inanimate referents are necessarily always more obviative than any animate referent, and therefore direct forms are found. This contrast is only

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.

revealed when a verb takes two animate referents, namely the verb *tó-wy-tsum*. The apparent shift between direct and inverse forms found in (81) is not an effect of the animate referent changing their obviation status across sentences, but is rather a consequence of the fact that Gyalrong languages lack a special conjugation class used with inanimate objects, such as the VTI (transitive inanimate) verbs in Algonquian.

The scale of obviation (82) accounts for the distribution of direct and inverse marking in (81) (and in the rest of the story): direct marking is found when the subject is higher than the object on the scale, and inverse marking when it is lower.

- (82) human boy > daughter of heaven_i > inanimate referents (*qro u-n̥ga* ‘pigeon clothes’ ; *u-mke* ‘her_i neck’)

The degree of obviativity of each referent, while generally stable within a particular passage, can be fluid in longer narratives. For instance, in the story ‘Norbzang and Padma ’Od’bar’, the analysis of direct vs. inverse forms reveals several scales.

In (83), the subject is the king and the object the character Padma ’Od’bar, and inverse marking indicates that the latter is proximate.

- (83) *kucnui-sŋi kucny-rzaš nút-wy-z-nybaš* *jui-ŋu.*
 seven-day seven-night IPFV-INV-CAUS-have.a.good.time SENS-be
 ‘(The king) let (Padma ’Od’bar) have a good time for seven days and
 seven nights.’ (Norbzang 2005, 202)

Examples (84) and (85) have the secundative verbs *pa-suxçyt* ‘he taught (it) to them’ (§14.4.2) and *nú-wy-çuu-rjo-nu* ‘he lent it to them’ (§14.4.3) in direct and inverse forms, respectively. From these examples, one could further propose the scale (86) showing the relative obviativity of the three groups of characters (Padma ’Od’bar, the three girls, and the king).

- (84) *ty-teu* *nua kuu, [...] nuunu tcʰeme xsum nua lonba*
 INDEF.POSS-boy DEM ERG DEM girl three dem all
pa-suxçyt *jui-ŋu.*
 AOR:3→3'-teach SENS-be
 ‘The boy (Padma ’Od’bar) taught the whole (mantra) to the three girls.’
 (Norbzang 2005, 380; Padma ’Od’bar > girls)

- 14206 (85) *tcendyre "jy"* *ti* *ny χsyrzaj nu-wy-cu-rjo-nu*
 LNK be.possible:FACT say:FACT LNK artefact AOR-INV-CAUS-borrow
 14207 *jnu-ŋu.*
 SENS-be
 14208 '(The king) said ‘yes’ and lent the Gserbzang to (the three
 14209 girls).’(Norbzang 2005, 406; girls > king)

- 14210 (86) Padma ’Od’bar > girls > King

14211 However, while (86) is indeed valid in some sections of the story, we also find
 14212 examples such as (87) and (88) with a verb in direct form, despite the fact that
 14213 the subject (the king) is lower on the scale (86) than the object (Padma ’Od’bar):
 14214 an inverse configuration would be expected.

- 14215 (87) *tcendyre rjylpu kuu na-nusŋom jnu-ŋu.*
 LNK king ERG AOR:3→3'-envy SENS-be
 14216 ‘The king envied (Padma ’Od’bar).’ (Norbzang 2005, 374)

- 14217 (88) *tcendyre tcetu ndyre, pynmawombyr ka-tcyβ-nu jnu-ŋu.*
 LNK up.there LNK ANTHR AOR:3→3'-burn-PL SENS-be
 14218 ‘(The king and his servants) burned Padma ’Od’bar up there.’ (Norbzang
 14219 2005, 389)

14220 In (87) and (88), a different scale (89) has to be posited.

- 14221 (89) King > Padma ’Od’bar

14222 Thus, a particular character of this story (the king), which has obviative
 14223 status in (83) and (85), becomes proximate in (87) and (88), in a passage where he
 14224 temporarily becomes the ‘main character’.

14225 Within each of the scenes of a narrative, the obvativity status of each referent
 14226 generally remains stable. Thus, in chains of verbs sharing coreferent pairs of
 14227 subject and object, all of the verbs are either in direct or in inverse form. In (90)
 14228 for instance, we find four verbs in inverse form in a row; each of them takes
 14229 *tx-wuu* ‘grandfather, old man’ as obviative subject and the main character of the
 14230 story Nyima ’Odzer as proximate object.

- 14231 (90) *tcendyre ty-wuu* *nua kua p̄y-wy-nyjits^hi*
 LNK INDEF.POSS-grandfather DEM ERG IFR-INV-give.to.eat.and.drink
 14232 *tce, nyki, tumgo p̄y-wy-mbi, tur-ci* *ra p̄y-wy-j-ts^hi*
 LNK FILLER food IFR-INV-give INDEF.POSS-water PL IFR-INV-CAUS-drink
 14233 *tó-wy-cui-fka tce tce*
 IFR-INV-CAUS-be.full LNK LNK
 14234 ‘The old man gave him food and drinks, gave him food to eat, water to
 14235 drink, gave him enough for him to eat his fill.’ (2011-05-nyima, 88-89)

14236 However, alternations between direct and inverse can also be found across
 14237 adjacent clauses with constant subjects and objects within a single passage. In
 14238 (91), the noun *lulu* ‘cat’²⁴ is the proximate referent of the verbs *ko-mja* and *no-*
 14239 *mja*, since they are in direct form, but then a shift to inverse occurs and its preys
 14240 (in the dual, the mouse and the sparrow) become proximate instead. The switch
 14241 between direct and inverse marking gives native speakers flexibility to change
 14242 the perspective of the narration.

- 14243 (91) *tce nua jamar tce ci nuni kua “lulu kui yú-ndza-tci” ra*
 LNK DEM about LNK INDEF DEM:DU ERG cat ERG INV-eat:FACT-1DU PL
 14244 *mua-p̄y-suso-ndzi kua, “azo ȳn̄gi-a ny azo ȳn̄gi-a”*
 NEG-IFR-think-DU ERG 1SG be.right:FACT-1SG ADD 1SG be.right:FACT-1SG
 14245 *p̄y-suso-ndzi, tcendyre lulu nua kua ci ko-mja, ci*
 IFR-think-DU LNK cat DEM ERG one IFR:EAST-grab one
 14246 *no-mja tce, ndyre vnašna zo c^hy-wy-ndza-ndzi tce,*
 IFR:WEST-grab LNK LNK both EMPH IFR-INV-eat-DU LNK
 14247 ‘The other two were not thinking ‘The cat will eat us’, but rather ‘I am
 14248 right, I am right’, and the cat grabbed one on his left and one on his right,
 14249 and both ended up eaten by him.’ (IWlu 2002, 76-79)

14250 In other cases, alternations between direct and inverse forms without change
 14251 in subjects and objects appear to be due to hesitations on the part of the speaker.
 14252 For instance, in (92) the speaker first chooses a direct 3PL→3' verb form *ȳrryt-nuu*,
 14253 with *r̄yrlpu yuu u-ŋjor nura* ‘the king’s servants’ being the proximate referent, but
 14254 then switches to the inverse 3'→3SG form *yuu-tsum*, with the character Nyima
 14255 ‘Odzer as proximate referent instead.

²⁴ This story is about humanized animals depicted as able to think and speak, and can be considered to be similar to human referents.

- 14256 (92) *rjylpu yuu u-vjov nura kui jimatwozjr, numuu*
 king GEN 3SG.POSS-servants DEM:PL ERG ANTHR DEM
 14257 *yrrst-nuu pjy-ηu, yuu-tsum pjy-ηu tceri,*
 throw:FACT-PL IFR.IPFV-be INV-take.away:FACT IFR.IPFV-be LNK
 14258 ‘As the king’s servants were about to throw him (into the lake), to take
 14259 him (there).’ (Nyima wodzer2002, 114-115)

14.3.3.4 Pseudo-passive

14261 In some texts translated from Chinese, inverse verb forms are used in configura-
 14262 tions with an inanimate object and an animate subject, an exception to the ani-
 14263 macy constraints described in §14.3.3.1, according to which a direct form would
 14264 be expected. This usage is similar to the generic subject construction (§14.3.2.5)
 14265 where the inverse also occurs with animate subjects and inanimate objects, but
 14266 semantically differs in that the subject is not generic, but rather an unknown
 14267 referent.

14268 Example (93) illustrates this construction with the verbs *jó-wy-kio* and *tó-wy-cuu*,
 14269 whose object is the jar’s cover and subject the girl inside the jar (whose presence
 14270 was unknown to the observer from whose point of view this passage is narrated).

- 14271 (93) *u-tc^hira [...] yuu u-fkaβ nunuu jó-wy-kio. tce nu*
 3SG.POSS-jar GEN 3SG.POSS-cover DEM IFR-INV-slide LNK DEM
 14272 *tó-wy-cuu tce nutcu tce tce li, nucimuma tce li,*
 IFR-INV-open LNK DEM:LOC LNK LNK again immediately LNK again
 14273 *u-ηga ra kui-mpcu~mpcyr ci,*
 3SG.POSS-clothes PL SBJ:PCP-EMPH~be.beautiful INDEF
 14274 *u-βzuwγ ra kui-βdu~βdi ci, tc^hemypuu ci,*
 3SG.POSS-appearance PL SBJ:PCP-EMPH~be.nice INDEF girl INDEF
 14275 *icq^ha tc^hira yuu u-ηgu nutcu*
 the.aforementioned jar GEN 3SG.POSS-in DEM:LOC
 14276 *to-nua-łoz.*
 IFR:UP-AUTO-come.out

14277 ‘The jar’s cover slid over and opened, and a girl with beautiful clothes and
 14278 a very nice appearance came immediately out of it.’ (150827 tianluo-zh,
 14279 102-103)

14280 The first two clauses translate Chinese 发现水缸盖被推开了 <fāxiànn shuǐgāng-
 14281 gài bèi tuīkāi le> ‘He realized that the jar’s cover had been pushed open’. The in-
 14282 verse forms correspond here to a 被 *bèi* ‘passive’ construction, and nearly all of

the examples of inverse expressing unknown (rather than generic) animate subjects have been found in the translation of sentences containing this construction in Chinese. This pseudo-passive construction appears to be an effect of calque from the original, although Tshendzin, when asked about these examples, did not consider them to be ungrammatical.

In addition, there are a few cases in translated texts like (94) with inverse marking and unknown human subject (on the verb *pjy-wy-lwɔŋ* ‘someone spilled it’) where no 被 *bèi* construction is found in the original: this example translates 他发现水罐空了 <tā fāxiàn shuǐguàn kōng le> ‘He realized that his water jar was empty’. The fact that the translation in this example is somewhat removed from the original would support the idea that the pseudo-passive inverse is a native grammatical construction.

- (94) *tcendyrre ri, ku-rtɔŋ tce ui-tuu-ci nura*
 LNK LNK IPFV-look LNK 3SG.POSS-INDEF.POSS-water DEM:PL
pjy-wy-lwɔŋ tce ku-tu pjy-me qhe,
 IFR-INV-spill LNK SBJ:PCP-exist IFR.IPFV-not.exist LNK
 ‘He_i realized that someone had spilled the water (in his_i gourd), and none was left.’ (140505 liuhaohan zoubian tianxia-zh, 194)

Thus, it is unclear at present whether the extension of the generic subject construction to express unknown subjects (the ‘pseudo-passive’), is the result of translatese, or whether it reflects a genuine but rare native construction.

14.3.4 Transitive irregular verbs

Unlike in Zbu (Gong 2014), there are no transitive verbs in Japhug with irregular 1SG forms. The only irregularities related to person indexation are either found in generic forms or defective conjugations.

The verb *ti* ‘say’ takes the prefix *kua-* to express generic human subject as in (95) as if it were an intransitive verb (§14.2.1.2) instead of the inverse *yuu-* found on regular transitive verbs (§14.3.2.5); a form such as †*tū-wy-ti* would be incorrect. It is not the only irregularity of *ti* ‘say’: this is also the only underived transitive verb with a separate stem II in Japhug (§12.2.1.1).

- (95) *tce ckrɔŋ yuu ui-mat nuu tʰye tu-kua-ti nyu*
 LNK oak GEN 3SG.POSS-fruit DEM acorn IPFV-GENR-say be:FACT
 ‘The fruit of the oak is called an acorn.’ (08-CkrAz, 45)

14313 Although the prefix *kuu-* expresses generic object on other transitive verbs
 14314 (§14.3.2.5), in the case of *ti* ‘say’ there is no ambiguity: the object of this verb
 14315 is necessarily a complement clause or a noun, and can never have a first, second
 14316 or generic person referent. The use of *kuu-* to mark the transitive subject is remi-
 14317 niscent of Tshobdun, where both transitive and intransitive verbs mark generic
 14318 subject by the same prefix (J. T.-S. Sun 2014b).

14319 The defective verb *mr-xsi* ‘it is not known’ only occurs in Factual Non-Past
 14320 negative with a generic subject. This transitive verb takes nouns or complement
 14321 clauses as object, usually with either an interrogative pronoun or a polar oppo-
 14322 sition as in (95), sometimes with the dubitative (§21.4.4). It cannot take any ad-
 14323 dditional affix (including nominalization prefixes, §16.7 and orientation preverbs,
 14324 §15.1.1.5), except for the autive *nui-* in the form *mr-nui-xsi*, as in (97).

- 14325 (96) *tu-ndze n̥u maš mr-xsi.*
 14326 IPFV-eat[III] be:FACT not.be:FACT NEG-GENR:know
 ‘I don’t know whether (bears) eat (humans) or not.’ (21-pri, 120)

- 14327 (97) *a-pa, aki nui st̥ašlupa kr-βde*
 14328 1SG.POSS-father down DEM born.the.year.of.the.tiger OBJ:PCP-throw
u-spa nui mr-nui-xsi ri,
 14329 3SG.POSS-material DEM NEG-AUTO-GENR:know LNK
 ‘Father, I don’t know whether the (boy) down there is someone born in
 14330 the year of the tiger, (who must) to be thrown (into the lake as a sacrifice
 14331 to the lake monster), but...’ (2011-05-nyima, 154)

14332 The stem *-xsi* contains the same root as *suz* ‘know’ but without *-z* suffix and
 14333 with a *x-* prefix which represents a fossilized allomorph of the regular generic *kuu-*.
 14334 The verb *suz* ‘know’ is attested in generic form, as in (98). Although such exam-
 14335 ples are very rare, they show that *mr-xsi* cannot be considered to be a suppletive
 14336 form in the paradigm of *suz* ‘know’.

- 14337 (98) *nui ma kuu-pe tci pú-wy-suz me,*
 14338 DEM apart.from SBJ:PCP-be.good also AOR-INV-know not.exist:FACT
mr-kuu-pe tci pú-wy-suz me.
 14339 NEG-SBJ:PCP-be.good also AOR-INV-know not.exist:FACT
 ‘Apart from that, I don’t know about the good or the bad things (that the
 14340 butterfly does).’ (26-qambalWla, 55)

14341 The verb *krtupa* ‘tell’, which presents a unique case of incorporation (§16.1.2.7,
 14342 §20.13.1), only occurs in non-prefixed forms. Its paradigm is thus restricted to the

14343 Factual Non-Past (the only tense without orientation preverb, §21.3.1.1), excluding
 14344 second person forms (which always take a prefix, whether in the mixed or local domain), all inverse forms (which take the *wy-* inverse prefix) and non-finite
 14345 forms (§16.7). Table 14.15 (from Jacques 2012d) presents the defective paradigm
 14346 of *kṛtupa* ‘tell’, with the regular stem III *kṛtupe* in 1SG→3 and 3SG→3’ forms,
 14347 alongside that of *ndza* ‘eat’.

Table 14.15: Paradigm of the verb *kṛtupa* ‘tell’

Person	“to eat”	“to tell”
1SG→3	<i>ndze-a</i>	<i>kṛtupe-a</i>
1DU→3	<i>ndza-t̪i</i>	<i>kṛtupa-t̪i</i>
1PL→3	<i>ndza-j</i>	<i>kṛtupa-j</i>
2SG→3	<i>tu-ndze</i>	XX
2DU→3	<i>tu-ndza-ndži</i>	XX
2PL→3	<i>tu-ndza-nuu</i>	XX
3SG→3’	<i>ndze</i>	<i>kṛtupe</i>
3DU→3’	<i>ndza-ndži</i>	<i>kṛtupa-ndži</i>
3PL→3’	<i>ndza-nuu</i>	<i>kṛtupa-nuu</i>

14349 14.3.5 Transitive verbs with dummy subjects

14350 A handful of transitive light verbs (*βzu* ‘make’ §22.4.2.1, *l̪rt* ‘release’ §22.4.2.2, *t̪çrt*
 14351 ‘take out’ §22.4.2.3, *ndo* ‘take’ §22.4.2.4, *ta* ‘put’ §22.4.2.6 and *tsʰob* ‘attach’) occur
 14352 in the dummy subject construction, expressing natural phenomena, in particular
 14353 meteorological ones.²⁵

14354 In this construction, the verb only has one overt (always singular) absolute
 14355 nominal argument. The only form of the paradigm is the direct 3SG→3’ (§14.3.2.2),
 14356 with Stem III alternation in non-past tenses as in (100), and C-type preverbs in
 14357 Aorist as in (99), showing that the verb, despite its lack of ergatively-marked
 14358 subject, is unambiguously transitive (§14.3.1).

- 14359 (99) *tx̪e na-βzu qʰe jnu-me cti.*
 sun AOR:3→3'-make LNK IPFV-not.exist be.AFF:FACT

14360 ‘It disappears when the sun appears.’ (25-RmArYWG, 36)

²⁵ These dummy subjects, which cannot be realized, correspond to expletive pronouns in languages which require overt subjects.

- 14361 (100) *wi-tab ri kuu-wyrum ku-te, ku-kuu-ta ci*
 3SG.POSS-ON LOC SBJ:PCP-be.white IPFV-put[III] IPFV-SBJ:PCP-put INDEF
 14362 *tu qhe, nuna li k^hurwum yu*
 exist:FACT LNK DEM again mold be:FACT
 14363 ‘A white thing grows on it (meat that has been left to rot), there is
 14364 something that grows on it, this is also mold.’ (20-sWrna, 61)

14365 The unique absolute argument of this construction superficially resembles
 14366 an object. However, in (100), note that the subject participle *ku-kuu-ta* ‘(the thing)
 14367 that grows (on it)’ (§16.1.1.4) is used to relativize this argument instead of an
 14368 object participle (§23.5.3.4) as would have been expected (see also §16.1.1.5).

14369 Moreover, despite the unambiguous morphological transitivity of the verb, the
 14370 ergative is strictly impossible on the noun, even in the case of personified natural
 14371 forces. For instance, in the retellings of Aesop’s story ‘The North Wind and the
 14372 Sun’, although *akuic^hoble* ‘east wind’²⁶ occurs with the ergative with other verbs,
 14373 and although here the North Wind is anthropomorphized and is described as
 14374 blowing on purpose (to compete with the sun), the ergative is not accepted when
 14375 the main verb is *βzu* ‘make’ as in (101).

- 14376 (101) *akuic^hoble nuu to-βzu tee rcanu,*
 east.wind DEM IFR-make LNK UNEXP:DEG
 14377 ‘The East (North) Wind blew.’ (aesop feng he taiyang-zh, 9)

14378 In addition, the light verbs in this construction lack one of the seven mor-
 14379 phological properties of transitive verbs (§14.3.1): they select dental infinitives
 14380 instead of bare infinitives (§16.2.3). Compare for instance (102) where *βzu* ‘make’
 14381 occurs in the bare infinitive *tuu-βzu* with (103), where the bare infinitive *wi-βzu* is
 14382 found instead, as *βzu* ‘make’ is in a plain transitive construction.

- 14383 (102) *tyrtsa kuu-wxti tsa tuu-βzu to-za.*
 wave SBJ:PCP-be.big a.little INF:II-make IFR-start
 14384 ‘There started to be big waves (on the sea).’ (140430 yufu he tade qizi-zh,
 14385 100)
- 14386 (103) *tcendyre c^ha wi-skxt wi-βzu lo-za.*
 LNK alcohol 3SG.POSS-speech 3SG.POSS-BARE.INF:make IFR-start
 14387 ‘He started drunk-talking.’ (150906 qingfeng-zh, 66)

²⁶ This term was chosen to translate ‘Northern Wind’.

The list of the verbs which allow the dummy transitive subject construction is not closed. For instance the causative of *amŋym* ‘be even, be homogeneous’ occurs with the noun *tuu-muu* ‘sky, weather’ in (104).

- (104) *jisŋi tuu-muu nuu kuu-fse t^ha-suu-ŋymŋym*
 today INDEF.POSS-sky DEM SBJ:PCP-be.like AOR:3→3'-be.homogeneous
zo, tŋye tci muu-na-βzu, tuu-muu tci
 EMPH sun also NEG-AOR:3→3'-make INDEF.POSS-weather also
muu-ka-lyt
 NEG-AOR:3→3'-release
 ‘Today the weather was uniform, there was neither sun nor rain.’
 (elicited)

14.4 Ditransitive verbs

Ditransitive verbs are trivalent verbs which follow the transitive conjugation (unlike trivalent semi-transitive verbs, §14.2.5). Both indirective and secundative transitive verbs are attested (Malchukov et al. 2010), and causative verbs deriving from monotransitive verbs also belong to this category.

14.4.1 Indirective

Most non-derived ditransitive verbs in Japhug are indirective. The theme is in the absolute and is indexed as an object. The recipient either takes dative (§8.3.1) or genitive (§8.2.3.2) flagging, as in (105), or is encoded as a possessive prefix on the object.

- (105) *kui-rryrmra ra nuu-cki nuutcu, nyki, kuxtco ci*
 SBJ:PCP-WORK PL 3PL.POSS-DAT DEM:LOC FILLER basket INDEF
z-ŋy-ŋyo,
 TRAL-IFR-borrow
 ‘(The leopard) borrowed a basket from the workers.’ (2002 qalakWcqraq,
 43)

The indirective category can be divided into four semantic subgroups.

First, it comprises verbs of speech, such as *ti* ‘say’, *t^hu* ‘ask’, *ndzuu* ‘complain, accuse’ and *fçyt* ‘tell’, which mark the addressee with the dative.

Second, it includes verbs expressing gift or temporary transfer of objects such as *k^ho* ‘give, pass’ (§12.2.2.3) and *p^hul* ‘offer’ and *ryo* ‘borrow’ and *nŋygu* ‘borrow’.

14415 Th first two encode the source as their subject while their recipients takes the
 14416 dative case, whereas the latter encode the recipient as their subject, and their
 14417 source appear in the dative.

14418 The two verbs translated as ‘borrow’ differ in that the former (*rjo*) expresses
 14419 the lending of an object which can be returned in its original shape to the origi-
 14420 nal owner, while the latter (*nŋŋgu*) is used with grain or money, for which an
 14421 equivalent amount is given back instead of the original object (which has pre-
 14422 sumably already been consumed).²⁷ In addition, verbs of manipulation such as
 14423 *yut* ‘bring’ and *tsum* ‘take away’ can optionally take a dative beneficiary and
 14424 convey a meaning similar to verbs of giving, as in example (106).

- 14425 (106) *tcendyre rjylpu u-p^he la-tsum jui-ŋu*,
 LNK king 3SG.POSS-DAT AOR:3→3:UPSTREAM-take.away SENS-be
 14426 ‘He brought it (the shoe) to the king.’ (tWxtsa 2003, 16)

14427 Third, verbs expressing hitting or throwing can also be indirective, for instance
 14428 *βde* ‘throw’, and also *l^ht* ‘release’, which occurs in many light verb constructions
 14429 (§22.4).

14430 Fourth, some verbs of manipulation have an obligatory indirect argument ex-
 14431 pressing the goal, in particular the verb *rku* ‘put in’ which selects the relator
 14432 noun *u-ŋgu* ‘inside’ (§8.3.4.4). For most verbs of manipulation the goal is op-
 14433 tional (§14.5.4).

14434 The object of indirective verbs is nearly always third person, and local and in-
 14435 verse configurations are almost never attested (except for inverse generic forms,
 14436 §14.3.2.5). For instance in (§107), the recipient is 1SG (‘ask me’), but the verb *t^hu*
 14437 ‘ask’ has the imperative 2SG→3 form (§21.4.2.1) because the non-overt theme cor-
 14438 responds to the questions that the addressee is about to ask, and using a 2→1
 14439 configuration here would be non-sensical.

- 14440 (107) *tr-t^he jy*
 IMP-ask[III] be.allowed:FACT
 14441 ‘Ask [me your questions]!’ (conversation, several attestations)

14442 Local or inverse configurations are attested with indirective verbs of giving in
 14443 the corpus to refer to asking or giving a girl in marriage, as in (108), as this is the
 14444 most common situation when a human can occur as theme of a verb of this type.

²⁷ The meaning ‘lend’ is expressed with the corresponding causatives, see §14.4.3.

- 14445 (108) *a-wa kui, turme yuu u-rzaβ nūi-wy-k^ho-a*
 1SG.POSS-father ERG person GEN 3SG.POSS-wife AOR-INV-give-1SG
 14446 *cti ny*
 be.AFF:FACT SFP
 14447 ‘My father has offered me in marriage to someone.’ (150828 liangshanbo
 14448 zhuyingtai-zh, 166)

14449 The only indirective verb of speech which is commonly used with a human
 14450 theme is *ndzui* ‘complain, accuse’: the object and the dative argument corre-
 14451 spond to the persons about whom and to whom one complains, respectively.
 14452 For instance in (§109), the object is 2SG, and the dative argument a third person
 14453 referent.

- 14454 (109) *azo <laoši> u-cki ta-ndzui*
 1SG professor 3SG.POSS-DAT 1→2-accuse:FACT
 14455 ‘I will issue a complain against you to the professor.’ (150826
 14456 liangshanbo zhuyingtai-zh, 84)

14457 Indirective verbs of manipulation can be used with animate or even human
 14458 objects, and do occur in local configurations, as in (§110).

- 14459 (110) *azo a-xtu u-ŋgu c^hu-ta-rku*
 1SG 1SG.POSS-belly 3SG.POSS-in IPFV:DOWNSTREAM-1→2-put.in
 14460 ‘I will put you in my belly.’ (140505 xiaohaitu-zh, 83)

14.4.2 Secundative

14462 Secundative verbs have two absolute arguments, one of which (the recipient)
 14463 is indexed on the verb, and the other one (the theme) is not. The theme is a
 14464 semi-object, and presents some objectal properties (§16.1.2.4, §23.5.4.2).

14.4.2.1 Inventory of secundative verbs

14466 Most secundative verbs express temporary or permanent giving: *mbi* ‘give’ and
 14467 *ctsui* ‘entrust with’. Since these verbs index the recipient, they commonly occur
 14468 in local configurations (§14.3.2.3), as in (§111).

- 14469 (111) *sumat ky-kui-ctsui-a*
 fruit AOR-2→1-entrust.with-1SG
 14470 ‘You had left me (a jar of) fruit.’ (140516 yiguan ganlan-zh, 77)

¹⁴⁴⁷¹ The verb *mbi* ‘give’ can in addition take an essive adjunct (give as *X*, §8.1.7),
¹⁴⁴⁷² as *nr-rzaβ* ‘your wife’ in (112); in this sentence the object (theme) is *a-me nuu* ‘my
¹⁴⁴⁷³ daughter’.

- ¹⁴⁴⁷⁴ (112) *a-me nuu nr-rzaβ jnu-ta-mbi nyu*
 1SG.POSS-daughter DEM 2SG.POSS-wife IPFV-1→2-give be:FACT
¹⁴⁴⁷⁵ ‘I will give you my daughter in marriage. (=I will give her to you as your
¹⁴⁴⁷⁶ wife)’ (140428 yonggan de xiaocaifeng, 175)

¹⁴⁴⁷⁷ Most verbs of speech are indirective, but *suxçyt* ‘teach’ has secundative alignment
¹⁴⁴⁷⁸ (see example 145, §18.6.4). This verb is perhaps historically a causative
¹⁴⁴⁷⁹ (§17.2.1.4), but it is not analyzable as such synchronically.

¹⁴⁴⁸⁰ The similitative verb *stu* ‘do like’ can also be considered to be secundative. It
¹⁴⁴⁸¹ takes a semi-object designating the manner (generally a demonstrative), and its
¹⁴⁴⁸² object refers to the entity (human, animal or inanimate) subjected to the action
¹⁴⁴⁸³ (with infinitival complement clauses however, there is no raising of the object
¹⁴⁴⁸⁴ from the complement, see §24.5.7). In (113), this verb occurs in a 3DU→1SG configura-
¹⁴⁴⁸⁵ tion (§14.3.2.6), and takes as semi-object the demonstrative *nura* ‘these
¹⁴⁴⁸⁶ (things)’. In serial verb constructions, it occurs with transitive verbs, sharing
¹⁴⁴⁸⁷ the subject and the object of its counterpart, but taking an additional (generally
¹⁴⁴⁸⁸ demonstrative) manner semi-object (§25.4.1.2).

- ¹⁴⁴⁸⁹ (113) *a-pi ni kui nura tý-wy-stu-a-ndzi ndza*
 1SG.POSS-elder.sibling DU ERG DEM:PL AOR-INV-do.like-1SG-DU reason
¹⁴⁴⁹⁰ *cti ma,*
 be.AFF:FACT LNK
¹⁴⁴⁹¹ ‘(This is because) my two brothers treated me like that.’ (qachGa2003,
¹⁴⁴⁹² 175)

¹⁴⁴⁹³ 14.4.2.2 The theme of secundative verbs

¹⁴⁴⁹⁴ The theme of secundative verbs cannot be indexed, unlike that of indirective
¹⁴⁴⁹⁵ verbs, and first or second person themes are not appropriate with the verb *mbi*
¹⁴⁴⁹⁶ ‘give’. To express meanings such as ‘*X* gave me/you to *Y*’, either an indirective
¹⁴⁴⁹⁷ verb has to be used (see 108 above), or alternatively the antipassive form *rymbi*
¹⁴⁴⁹⁸ ‘give to someone’. This antipassive form is the only verb form in Japhug lacking
¹⁴⁴⁹⁹ morphological transitivity (§14.3.1, §18.6.4) that can be used with inverse and
¹⁴⁵⁰⁰ local person indexation, as shown by (114a) and (114b).

- 14501 (114) a. *a-wa kuu azo nuú-wy-ry-mbi-a*
 1SG.POSS-father ERG 1SG AOR-INV-APASS-give-1SG
 'My father gave me away.' (elicited)
- 14502 b. *nyzo kuu azo ny-kui-ry-mbi-a*
 2SG ERG 1SG IFR-2→1-APASS-give-1SG
 'You gave me away (without me knowing).' (elicited)

14505 **14.4.3 Causative of transitive verbs**

14506 The sigmatic causative is the only valency-increasing derivation in Japhug which
 14507 can be applied to transitive (unlike applicative §17.4 and tropative §17.5) verbs.
 14508 When the base verb is transitive, its causative form is ditransitive. I use the no-
 14509 tation $C \rightarrow C' \rightarrow P$ to describe causative configurations with three participants:
 14510 C represents the causer (corresponding to the initiator of the causation, the ar-
 14511 gument that is added by the causative derivation), C' the causee (corresponding
 14512 to the subject of the base verb) and P the patientive (corresponding to the ob-
 14513 ject of the base verb); for instance, if the base verb is 'help', a 1SG→3PL→2SG
 14514 configuration can be interpreted as 'I made them help you.'

14515 Lexicalized causatives are like underived secundative verbs, and index the re-
 14516 cipient as the object. This category includes *jtsʰi* 'give to drink', which derives
 14517 from the monotransitive verb *tsʰi* 'drink', and *çurjo* 'lend', which comes from
 14518 the indirective verb *rjo* 'borrow' (see 120 below for a more detailed discussion
 14519 on this derivation).

14520 Examples (115) and (120) illustrate the 2→1→3 configuration with the verbs
 14521 *jtsʰi* 'drink' and *çurjo* 'lend', expressed in the same way as the local 2→1 config-
 14522 urations of a monotransitive verb (§14.3.2.3).

- 14523 (115) *a-wuu tur-ci juu-kuu-j-tsʰi-tci*
 1SG.POSS-grandfather INDEF.POSS-water IPFV-2→1-CAUS-drink-1DU
 úr-jy?
 QU-be.allowed:FACT
 'Grandfather, could you give us water to drink?' (nyima wodzer 2002,
 76)

14527 In the case of non-lexicalized sigmatic causatives, the status of the causee is
 14528 more complex, since it can optionally receive ergative flagging (§8.2.2.6), and
 14529 cannot be relativized like an object (see §23.5.6). The direct object of such verbs
 14530 can also be relativized using constructions unavailable for the direct object of
 14531 monotransitive verbs (§23.5.3.3).

14532 In addition, unlike secundative verbs, triactantial causatives can either index
 14533 the causee or the argument corresponding to the object of the base verb, depend-
 14534 ing on their person: if the causee or object is first or second person, and the other
 14535 argument is third person, the first or second person will be indexed regardless of
 14536 its syntactic function.

14537 For instance, all three examples (116), (117) and (118) show 2→1 indexation, but
 14538 the first two has a 2→3→1 configuration, and index the patientive argument
 14539 as the object, while the last one is an instance of a 2→1→3 configuration, and it
 14540 indexes the causee as object (see also §17.2.4 and 25, §8.1.7 for additional examples
 14541 of the same type). The prevalence of first and second persons over third persons
 14542 in this context might support the person hierarchy (66a) postulated in (§14.3.2.8).

- 14543 (116) *az̥o tuu-muu kui puu-kui-suu-χtci-a, t̥yndzo nu!*
 14544 1SG INDEF.POSS-weather ERG AOR-2→1-CAUS-wash-1SG cold SFP
 14545 ‘You caused me to be drenched by the rain, it is so cold!’ (2014-kWLAG,
 158)

- 14546 (117) *n̥yzo t̥y-ndze ma alo ma-lx-tuu-tsuum ma*
 14547 2SG IMP-eat[III] LNK upstream NEG-IMP:UPSTREAM-2-take.away LNK
 14548 *tʰa li kui-suu-βnduu-a*
 14549 later again 2→1-CAUS-hit-1SG
 ‘Eat it, don’t take it up there, you would cause me to be beaten again.’
 (2003-kWBRa, 71-72)

- 14550 (118) *az̥o cyruu puu-kui-z-nuuntsʰo-a*
 14551 1SG meat IPFV-2→1-CAUS-eat-1SG
 ‘You make me eat the bones.’ (2014-kWLAG, 211)

14552 While indexation is ambiguous in such cases, ergative flagging helps distin-
 14553 guish between 2→3→1 and 2→1→3 configurations: the ergative is present on the
 14554 causee in (116), and absent on the patientive argument in (118) (see also §8.2.2.6).

14555 Configurations with both causee and patientive argument being first or second
 14556 person (3→2→1 and 3→1→2) are not attested in the corpus,²⁸ and are not easy
 14557 to elicit. The elicited examples (119a) and (119b) show that 3→1→2 and 3→2→1
 14558 configurations are expressed using mixed 3→1 and 3→2 forms, respectively. In
 14559 other words, the causee is indexed as object, and the patientive argument is not
 14560 indexed.

²⁸ See however (121) below, quadrivalent configuration with a second person beneficiary in the dative and 3SG→1SG verb indexation.

- 14561 (119) a. *wzo kui nyzo pú-wy-sui-mto-a*
 3SG ERG 2SG IPFV-INV-CAUS-see-1SG
 ‘He made me see you.’ (3SG→1SG→2SG, elicited)
- 14562 b. *wzo kui azo pu-tú-wy-sui-mto*
 3SG ERG 1SG AOR-2-INV-CAUS-see
 ‘He made you see me.’ (3SG→2SG→1SG elicited)

14565 The causative derivation of indirective verbs has several different effects on
 14566 argument structure. In the case of the lexicalized causative *çurjo* ‘lend’, the re-
 14567 lationship between its three arguments and those of the base verb *rjo* ‘borrow’
 14568 can be summarized as follows (compare 120 with 105 in §14.4.1).

- 14569 • The subject of *rjo* ‘borrow’, the receiving person, corresponds to the object
 of *çurjo* ‘lend’.
- 14571 • The object of *rjo*, the thing that is borrowed, corresponds to the semi-object
 of *çurjo* ‘lend’.
- 14573 • The dative oblique argument of *rjo*, the giving person, corresponds to the
 subject of *çurjo* ‘lend’, which is semantically both causer and source.

- 14575 (120) *wortchi zo, ny-χsyrgyz pui-kui-cu-rjo-j*
 please EMPH 2SG.POSS-magical.object IPFV-2→1-CAUS-borrow-1PL
 ‘Please, lend us you magical object.’ (2005 Kunbzang, 395)

14577 This ‘inversive’ causative derivation reverses the direction of the borrowing
 14578 action and modifies the argument structure and the alignment (indirective to
 14579 secundative) without adding any new referent, by merging the source and causer
 14580 roles, interpreting *çurjo* as ‘ X_i causes Y to borrow Z from himself $_i$ ’. Other cases
 14581 of this type of ‘inversive’ causative are presented in §17.2.5.7.

14582 For most indirective verbs however, recipients and beneficiaries are marked
 14583 with the dative and/or with a coreferent possessive prefix. Thus, the causative
 14584 derivation does turn them into absolutive patientive arguments. For instance,
 14585 the beneficiary of the verb *suyut* ‘send, cause to bring’ is in the dative as that of
 14586 its base verb *yut* ‘bring’, as shown by (121), where dative marking on the 2SG is
 14587 obligatory.

- 14588 (121) *az̥o a-βdax̥pu nua kua pjy-nurmto tce tcendx̥re nx-cki*
 1SG 1SG.POSS-master DEM ERG IFR-find LNK LNK 2SG.POSS-DAT
 14589 *jy-wy-su-tyut-a nyu tce,*
 AOR-INV-CAUS-bring-1SG be:FACT LNK
 14590 ‘My master found it and sent me to bring it to you.’ (140513 qianshang he
 14591 xiaotou-zh, 72)

14.4.4 Causative of semi-transitive verbs

14593 Causative verbs derived from semi-transitive ones (§14.2.3) show secundative
 14594 alignment: the causee is treated as object, and the semi-object of the base verb as
 14595 an absolute oblique, not indexed on the verb. For instance, the causative *syrmi*
 14596 ‘give a name’ (§17.2.2.7) of the verb *rmi* ‘be called’ selects the entity to which a
 14597 name is given as direct object, the 1PL in example (122).

- 14598 (122) *syrndzu cʰo tatsʰi ra kua syŋu-puu tu-nua-ti-nua tce,*
 TOPO COMIT TOPO PL ERG pl.p-person.from IPFV-AUTO-say-PL LNK
 14599 *udurjyt ra syŋu-puu tú-wy-syrmij nyu.*
 TOPO PL TOPO-person.from IPFV-INV-give.name-1PL be:FACT
 14600 ‘Those from Gsar-rdzong and Da-tshang say ‘Sangu people’, they name
 14601 us, (those) of Gdong-brgyad, ‘Sangu people’.’ (23-tCaphW, 12)

14.5 Labile verbs

14603 Most Japhug verbs strictly follow either the intransitive, or the transitive conjugations,
 14604 and voice alternations such as causative (§17.2, §17.3), applicative (§17.4)
 14605 and antipassive (§18.6) are needed to change their valency. A limited number of
 14606 labile verbs are compatible with both conjugations; three groups can be distin-
 14607 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

14610 Plain labile verbs are compatible with both the intransitive and the transitive
 14611 conjugations. When conjugated intransitively, they only have one argument (no
 14612 semi-object or oblique argument). When conjugated transitively (following the
 14613 features in §14.3.1), their subject corresponds to the intransitive subject, and the
 14614 added argument is the object, except for a handful of examples (§14.5.1.4).

14615 Compare for instance the intransitive and transitive use of the verb *βluu* ‘burn’
 14616 in (123). In the (123a), the verb has 1SG indexation, and since it lacks the 12SG→3
 14617 past -t suffix (§14.3.2.1), cannot be a transitive verb form (§14.3.1). This intransitive
 14618 verb form cannot take an object, and means ‘make a fire’. In (123b), the verb has
 14619 the -t suffix and is therefore a 1SG→3 transitive configuration (§14.3.2.1), and can
 14620 take an overt object (here *smi* ‘fire’, but it can also occur with a noun referring to
 14621 the object being burned).

- 14622 (123) a. *tx-βluu-a*
 AOR-burn-1SG
 14623 ‘I made a fire’. (elicited; 1SG:INTR)
 14624 b. *smi tx-βluu-t-a*
 fire AOR-burn-PST:TR-1SG
 14625 ‘I made a fire’. (elicited; 1SG→3)

14626 Table 14.16 gives additional examples of labile verbs with open syllable stems
 14627 in transitive and intransitive conjugations.

Table 14.16: Aorist 1SG(→3) of labile verbs

Verb	Intransitive form	Transitive form
<i>βluu</i> ‘burn’	<i>tx-βluu-a</i>	<i>tx-βluu-t-a</i>
<i>clu</i> ‘plough’	<i>tx-clu-a</i>	<i>tx-clu-t-a</i>
<i>fci</i> ‘forge’	<i>t^hu-fci-a</i>	<i>t^hu-fci-t-a</i>
<i>murkuu</i> ‘steal’	<i>tx-murkuu-a</i>	<i>tx-murkuu-t-a</i>
<i>numbrypuu</i> ‘ride’	<i>tx-numbrypuu-a</i>	<i>tx-numbrypuu-t-a</i>
<i>nymno</i> ‘watch’	<i>kx-nymno-a</i>	<i>kx-nymno-t-a</i>

14628 All criteria listed in §14.3.1 (when applicable) are congruent to distinguish be-
 14629 tween the transitive and intransitive forms of labile verbs; Table 14.17 presents
 14630 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>tui-βluu (to-za)</i>	<i>u-βluu (to-za)</i>
4	Subject participle	<i>kui-βluu</i>	<i>u-kui-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-kui-βluu</i>	<i>tú-wy-βluu</i>

14631 Tests 2 and 5 are not operational with verbs whose stem ends in close syllable,
 14632 but at least test 1 (in the case of *tar* ‘weave’ in 124) is always applicable. Some la-
 14633 bility verbs can even be used with the non-periphrastic Past Imperfective (§21.5.3),
 14634 as in (124a). The presence or absence of the ergative on third person overt sub-
 14635 jects is also a useful confirmation of the valency of the verb; for instance, in
 14636 (124a) the subject *tc^heme* ‘girl’ lacks ergative marking, confirming the fact that
 14637 *tar* ‘weave’ is used here intransitively.

- 14638 (124) a. *tc^heme ci pui-tar* *jnu-ηu*,
 girl INDEF PST.IPFV-weave SENS-be
 14639 ‘A girl was weaving.’ (tWxsta2003, 28)
 14640 b. *nunu munto^h nu^h t^ha-tar* *tce*,
 DEM flower DEM AOR:3→3'-weave LNK
 14641 ‘(When) he wove this pattern, ...’ (150825 huluwa, 98)

14642 For verbs whose objects cannot be human for semantic reasons, test 7 (as in
 14643 125) can also be used to distinguish between intransitive and transitive uses;²⁹
 14644 if the object can be human, then testing for local configurations (§14.3.2.3) is
 14645 possible.

- 14646 (125) a. *cui jnu-wy-p^hut*, *tu-kui-clu*,
 stone IPFV-INV-take.out IPFV-INV-plough
 14647 ‘One has to take out the stones, to plough,’ (2010, 10, 11)

²⁹ Otherwise, a generic *kui-* could be generic object, see §14.3.2.5.

- 14648 b. *tur-ji* *nua lú-wy-clu* *tce*
 INDEF.POSS-field DEM IPFV-INV-plough LNK
 14649 'One ploughs the fields, and ...' (07-tWsqr, 21)

14650 14.5.1.2 Classification of labile verbs

14651 In addition to those in Table 14.16, the following verbs are labile: *yndzur* 'grind',
 14652 *lry* 'herd', *nbras* 'loosen the earth', *ntsu* 'weed with a hoe', *nyre* 'laugh', *nuvysja*
 14653 'talk back, oppose', *nuk^hvja* 'talk back, oppose', *nuprozbmba* 'imitate', *rju* 'parch',
 14654 *sulažrđvβ* 'kick (with its forelimbs)', *suqartsu* 'kick', *suso* 'think', *tar* 'weave', *tyβ*
 14655 'thresh'.

14656 The majority of plain labile verbs denote actions modifying the substance or
 14657 shape of a material (*yndzur* 'grind', *clu* 'plough' etc), in particular activities re-
 14658 lated to agriculture and traditional trades. When used intransitively, these verbs
 14659 do not specify any object, and generally express atelic actions. For instance in
 14660 (124a), *pui-tar* means 'do weaving', without intrinsic endpoint and without refer-
 14661 ence to a particular piece of cloth.

14662 Another category of labile verbs express action negatively affecting people
 14663 (such as *nuvysja* 'talk back, oppose' etc), some with animal subjects (*sulažrđvβ*
 14664 'kick (with its forelimbs)' etc). These verbs take humans as objects in the transi-
 14665 tive conjugation,³⁰ when used intransitively, they express a general propensity
 14666 of the subject to do these negative actions.

14667 The perception verb *mto* 'see' also has an intransitive stative use, meaning
 14668 'have sharp eyesight', taking the noun *tui-mnas* 'eye' as subject, and expressing
 14669 the experiencer as subject possessor). Example (126) shows that the verb *mto* is
 14670 conjugated intransitively (without stem III alternation, otherwise *jui-mtym* 'he
 14671 sees it' would be expected). Some verbs derived from the root *mto*, such as the
 14672 velar causative *yrmto* 'cause to recover eyesight' (§17.3.3.2), come from this stative
 14673 intransitive use rather than the more common transitive one.

- 14674 (126) *ui-mnas* *nui wuma jui-mto* *jui-sa* *jui-ŋu nýma*,
 3SG.POSS-eye DEM really SENS-be.sharp SENS-be.strong SENS-be SFP
 14675 'The (eagle) has a sharp eyesight.' 140522 Kamnyu zgo, 226

³⁰ The 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.

14676 14.5.1.3 Accusative lability

14677 Most labile verbs in intransitive use have a meaning and syntactic function remi-
 14678 niscent of antipassive (§18.6) derivations, and share with them the ability to take
 14679 the non-periphrastic Past Imperfective *pui-* (§18.6.6). Nevertheless, it is unclear
 14680 whether the transitive use of labile verbs is primary; one could also consider
 14681 the intransitive use to be the basic function, and compare their transitive use
 14682 to the Applicative derivation (§17.4) instead. Since the alignment of the subjects
 14683 between the transitive and intransitive uses of these verbs follows nominative-
 14684 accusative, it is referred to as ‘accusative lability’ in this work.³¹

14685 Two plain labile verbs, *nurre* ‘laugh’ and *suso* ‘think’, have an antipassive form.³²
 14686 These two verbs also differ from other labile verbs in having idiosyncratic seman-
 14687 tic differences in their intransitive and transitive uses.

14688 The verb *nurre* ‘laugh’ is a denominal verb deriving from the inalienable noun *tr-
 14689 re* ‘laugh’. In its transitive use ‘laugh at, mock’, it encodes the stimulus as direct
 14690 object. Both the intransitive meaning and the transitive one are well-attested
 14691 functions of the *nu-/nr-* denominal prefix: parallel examples include *nrybař* ‘have
 14692 a good time’ (from *tr-kař* ‘good time’, §20.7.1) for the intransitive use of *nr-* and
 14693 *nrymbru* ‘get angry against’ (from *tr-mbru* ‘anger’, §20.7.2) for its transitive use.
 14694 Therefore, the most likely way to account for the lability of *nurre* is to posit that it
 14695 represents the conflation of two denominal derivations from the same base noun.

14696 The antipassive form *snyurre* ‘laugh at people’ is semantically connected with
 14697 the meaning of the transitive use, and semantically quite different from the in-
 14698 transitive use of *nurre* ‘laugh’.

14699 The intransitive use of *suso* ‘think’ is restricted to the meaning ‘in *X*’s opinion’,
 14700 as in (127),³³ and has no semantic overlap with the antipassive *rususo* ‘think’,
 14701 ‘ponder’ (128).³⁴

- 14702 (127) *tce nuu aj pjui-suso-a tce numuu tua-tuap^hu pui-ŋu-ndzi tce*
 LNK DEM 1SG IPFV-think-1SG LNK DEM one-species SENS-be-DU LNK
 14703 ‘In my opinion, these two (animals belong to) the same species.’
 14704 (20-ldWGi, 45)

³¹ The term ‘agent-preserving lability’ is less felicitous, since the subjects of labile verbs are not always agents.

³² This feature is shared with the semi-transitive labile verb *sypo* ‘listen’ see §14.5.3. On the other hand, no labile verb is compatible with applicative derivation.

³³ The 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).

³⁴ Note that this antipassive form is irregular, §18.6.1.

- 14705 (128) *pjuu-ruu-suso ny pjuu-ruu-suso tce,*
 IPFV-APASS-think ADD IPFV-APASS-think LNK
 14706 ‘He thought about it over and over.’ (02-deluge2012, 63)

14707 In the case of *suso* ‘think’, it appears that the very restricted intransitive use
 14708 is derived from the transitive one.

14709 **14.5.1.4 Ergative lability**

14710 A handful of labile verbs have ergative (or passive-like) lability: the subject of the
 14711 verb when used intransitively corresponds to its object when used transitively.

14712 The clearest example is provided by the denominal verb *nuijjoꝝ* from *ujjoꝝ* ‘ser-
 14713 vant’, which means ‘give orders to’ in transitive use (from ‘treat as a servant’,
 14714 §20.7.2), and ‘work as a servant’ in intransitive use. In (129), the transitive *nuijjoꝝ*
 14715 shares its subject and object with causativized verbs, while in (130) the intransi-
 14716 tive subject of *nuijjoꝝ* has the same referent as the subject of *z-nuu-nymε*, as shown
 14717 by the presence of a translocative echo (§15.2.8.2) on both verbs (which cannot
 14718 target the direct object, §15.2.2).

- 14719 (129) *tc^heme nuu tce tce uu-k^ha nuutcu ko-z-ryzi tce,*
 girl DEM LNK LNK 3SG.POSS-house DEM:LOC IFR-CAUS-stay LNK
 14720 *nua-nuijjoꝝ tu-z-ryme pjy-ηu.*
 IPFV-give.orders IPFV-CAUS-work[III] IFR.IPFV-be
 14721 ‘The witch kept the girl in the house, and gave her orders and put her to
 14722 work.’ (140507 tangguowu-zh, 110-111)

- 14723 (130) *sqi q^he z-nuu-nuijjoꝝ tce kuβka ra nuu-ma*
 day LNK TRAL-IPFV-work.as.servant LNK noble PL 3PL.POSS-work
 14724 *z-nuu-nymε*
 TRAL-IPFV-do.work[III]
 14725 ‘In the day, he would work as a servant, and do work for the nobles.’
 14726 (150828 donglang, 10)

14727 Since the *nuu-/ny-* denominal prefixes occur with similar meanings (‘treat as *X*’
 14728 and ‘become/serve as *X*’) on other base nouns (see §20.7.1 and §20.7.2), the lability
 14729 of *nuijjoꝝ* can be accounted for by assuming a conflation of two homophonous
 14730 denominal derivations from the same base noun, as in the case *nare* ‘laugh’ dis-
 14731 cussed above (§14.5.1.3). The fact that double denominal derivation yields ac-
 14732 cusative lability in one case and ergative lability in the other is a consequence

of the high diversity of meanings associated with the hyper-productive *nu-/nv-* prefix (§20.7).

The other examples of ergative lability are highly lexicalized, and the transitive vs. intransitive functions have to be treated as different lexical entries synchronically.

The intransitive *ri* ‘remain’ ‘be left’ (131) (see also 87, §7.3.3.3) is related to the transitive homophonous verb root *ri*, which is exclusively found in collocation with *tui-srob* ‘life’ (§22.4.3.2) in the meaning ‘save *X*’s life’ (132). The entity whose life is spared is encoded as subject of the intransitive *ri*, and as possessor of the object *tui-srob* of transitive *ri* (see also 7, §9.1.1.1).

- (131) *w-tciw bnuaz nuw pjy-si, tui-rdor nuw jy-ri q^he*
 3SG.POSS-son two DEM IFR-die one-piece DEM IFR-remain LNK
 ‘Two of her sons died, and one remained (alive).’ (Gesar 2003, 315)

- (132) *a-srob ky-tui-ri-t*
 1SG.POSS-life AOR-2-save-PST:TR
 ‘You saved my life.’ (150906 qingfeng-zh, 121)

Given the more specific meaning of transitive *ri*, it is more likely that it derives from intransitive *ri* rather than the other way round. A further piece of evidence in favour of this hypothesis is the irregular causative *bri* ‘protect’, which also appears to derive from the intransitive *ri* ‘remain’ (§17.3.1). The relationship between intransitive *ri*, transitive *ri* and causative *bri* is purely historical. These three verbs are synchronically completely distinct, and select different orientation preverbs (WESTWARDS, EASTWARDS and UPWARDS, respectively).

The verb *pa* ‘do’ is one of the most common verbs in Japhug, with a wide range of meanings including ‘close (door)’, ‘become (friend, spouses)’ and ‘discuss’ (§22.4.2.5). It selects not only nouns, but also infinitive complements as objects (§24.5.2).

Two intransitive verbs with the same root form *pa*, but only attested in 3SG, also exist: the verb *pa* ‘pass X years’, which selects as subject a numeral referring to a number of years (see example 117, §22.4.1.4 and the discussion in §7.3.1.7), and the light verb *pa* used as light verb with ideophones (§10.1.7.1). Both of these functions are derivable from the meaning ‘do’ of the transitive verb (§7.3.4.3, §22.4.2.5). The conversion to the intransitive conjugation may have occurred through third person ambiguous forms in a dummy subject construction (§14.3.5).

The discussion above shows that in the cases of ergative lability, either the intransitive verb (*ri* ‘remain’) or the transitive one (*pa* ‘do’) can potentially be the

¹⁴⁷⁶⁷ primary form, with transitivization or intransitivization by zero-derivation due
¹⁴⁷⁶⁸ to reanalysis in ambiguous contexts (on this topic, see also §12.2.2.3).

14.5.2 Transitive-intransitive labile verbs with oblique arguments

¹⁴⁷⁷⁰ The verb *rpu* ‘bump into’ is also labile, but unlike the previous verbs, it selects an
¹⁴⁷⁷¹ argument with the relator noun *w-tas* ‘on, above’ (§8.3.4.3), corresponding to the
¹⁴⁷⁷² person or object that the subject knocks/bumps into, as in (133).

- ¹⁴⁷⁷³ (133) *w-zmbru w-nuu [...] rjymts^hu yu w-ηguw rŋuw*
¹⁴⁷⁷⁴ 3SG.POSS-boat DEM sea GEN 3SG.POSS-in boulder
¹⁴⁷⁷⁴ *tu-kui-nu-w-łos nuw w-tas ko-rpu.*
¹⁴⁷⁷⁴ IPFV-SBJ:PCP-AUTO-come.out DEM 3SG.POSS-on IFR-bump
¹⁴⁷⁷⁵ ‘His boat ran on a reef (a boulder coming out of the sea).’ (150830 baihe
¹⁴⁷⁷⁶ jieme-zh, 249)

¹⁴⁷⁷⁷ When used transitively, *rpu* ‘bump into’ takes an object corresponding to the
¹⁴⁷⁷⁸ body parts suffering the impact (134, with the 12SG→3 past -t suffix), while in its
¹⁴⁷⁷⁹ intransitive use as in (135) no body part is specified.

- ¹⁴⁷⁸⁰ (134) *a-ku kuum w-tas ky-nu-rpu-t-a*
¹⁴⁷⁸¹ 1SG;POSS-head door 3SG.POSS-on AOR-AUTO-bump.into-PST:TR-1SG
¹⁴⁷⁸¹ ‘I bumped my head against the (top frame of the) door.’ (elicited)
- ¹⁴⁷⁸² (135) *maka zo mui-ky-rpu-a tce mui-ty-nuymaz-a*
¹⁴⁷⁸³ AT.ALL EMPH NEG-AOR-bump.into-1SG LNK NEG-AOR-be.wounded-1SG
¹⁴⁷⁸³ ‘I did not hit (the bottom) and was not injured.’ (150824 kelaosi-zh, 190)

¹⁴⁷⁸⁴ When transitively conjugated, *rpu* ‘bump into’ does not have a causative mean-
¹⁴⁷⁸⁵ ing ‘cause X to bump into Y’ (the causative *su-rpu* is used for this meaning). Al-
¹⁴⁷⁸⁶ though one could be tempted to translate *rpu* ‘bump into’ in this way in examples
¹⁴⁷⁸⁷ like (136) (‘I caused my bracelet to knock on the tripod’), here the bracelet, which
¹⁴⁷⁸⁸ is worn on the body, is construed as an extended part of the body (note the autive,
¹⁴⁷⁸⁹ which conveys both the meaning of non-volitionality and of action affecting the
¹⁴⁷⁹⁰ subject, §19.1.3, §19.1.4).

- ¹⁴⁷⁹¹ (136) *azo a-zgros sq^{hi} w-tas ku-nu-rpe-a*
¹⁴⁷⁹² 1SG 1SG.POSS-bracelet tripod 3SG.POSS-on IPFV-AUTO-bump[III]-1SG
¹⁴⁷⁹² *ndža cti*
¹⁴⁷⁹² reason be.AFF:FACT
¹⁴⁷⁹³ ‘This is because (I accidentally made) my bracelet clang against the

14794 tripod.' (tWxtsa 2003, 52)

14795 **14.5.3 Semi-transitive labile verbs**

14796 The verb *sŋyo* 'listen' can be conjugated transitively or intransitively, but selects
 14797 a semi-object in the second case. In addition, its meaning and the orientation
 14798 preverbs it selects are different depending on its valency.

14799 In the intransitive conjugation, *sŋyo* means 'listen' and selects the orientation
 14800 'towards west', as in (137) (without Stem III alternation). In (138), it occurs with
 14801 the semi-object *w-skṛt*.

- 14802 (137) *nur-sŋyo je*
 IMP-listen SFP
 14803 'Listen!' (140516 guowang halifa-zh, 76)

- 14804 (138) *pγyplas nūnū w-skṛt nūr-kūr-sŋyo tce*
 pheasant DEM 3SG.POSS-voice IPFV-GENR:S/O-listen LNK
 14805 *saxsyl ma kx-mto rkun*
 be.obvious:FACT a.part.from OBJ:PCP-see be.rare:FACT
 14806 'The pheasant, one can recognize its presence by listening to its voice,
 14807 but it is rarely seen.' (23-pGAYaR, 39)

14808 This verb can also take a complement clause as semi-object, and can refer to
 14809 perceptions other than hearing, as in (139) (see also §15.1.5.9).

- 14810 (139) *nγ-ŋga nūr-taš ci mūj-taš kūr nur-sŋyo*
 2SG.POSS-clothes SENS-be.enough QU NEG:SENS-be.enough SFP IMP-listen
 14811
 14812 'Make sure (literally 'feel whether') you have enough clothes.' (elicited)

14813 With transitive valency, *sŋyo* selects the orientation 'towards east', and means
 14814 'obey, listen to', as in (140).³⁵

- 14815 (140) *tce a-mu a-wa ra ka-sŋyo tce*
 LNK 1SG.POSS-mother 1SG.POSS-father PL AOR:3→3'-obey LNK
 14816 *lx-ari tce*,
 AOR:UPSTREAM-go[II] LNK
 14817 'He listened to my parents and went there.' (14-siblings, 219)

³⁵ In example (140), the C-type orientation preverb show that the verb is transitive (§14.3.1).

14818 The transitive *syo* has an antipassive form *syyo* ‘be obedient’ (from ‘listen
 14819 to people’) as in (141), which is not labile, unlike its base verb.

- 14820 (141) <*xiaoqian*> *nur wuma zo tc^heme nur-pe,*
 ANTHR DEM really EMPH girl SENS-be.good
 14821 *nur-sy-sy^ho,*
 SENS-APASS:HUM-listen
 14822 ‘Xiaoqian is a very nice girl, she is obedient.’ (150907 niexiaoqian-zh, 166)

14823 Another type of labile semi-transitive verb is *rga*, which can either be semi-
 14824 transitive or intransitive stative (without semi-object). It means ‘like’ when semi-
 14825 transitive as in (142), with a meaning close to its own applicative derivation
 14826 (§17.4.1), and ‘be happy’ when stative intransitive, as in (143).

- 14827 (142) *icq^ha tumna nur c^ha pjy-rga q^he*
 the.aforementioned arrow DEM alcohol IFR.IPFV-like LNK
 14828 ‘(Gesar’s) arrows like (to drink) alcohol.’ (Gesar, 352)
- 14829 (143) *bzymi ni wuma zo pjy-rga-ndzi.*
 husband.and.wife DU really EMPH IFR.IPFV-be.happy-DU
 14830 ‘The husband and his wife were very happy.’ (140506 woju guniang-zh,
 14831 10)

14.5.4 Ditransitive-monotransitive lability

14832 There are two subtypes of ditransitive-monotransitive lability in Japhug: secundative-
 14833 monotransitive and indirective-monotransitive.

14834 Monotransitive-secundative lability is illustrated by verbs such as *gyrz* ‘give
 14835 back’, *fsuy* ‘repay (gratitude)’ and *syja* ‘give back’: they index as object either the
 14836 recipient or the theme, as shown by examples (144a) and (144b).³⁶

- 14837 (144) a. *ny-tsunlyn nur-ta-fsuy ra*
 2SG.POSS-gratitude IPFV-1→2-repay be.needed:FACT
 14838 ‘I have to return the favour.’ (150827 tianluo-zh, 145)
- 14839 b. *ny-tsunlyn nur-nur-fsuy-a*
 2SG.POSS-gratitude IPFV-AUTO-repay-1SG
 14840 ‘I will return the favour.’ (elicited, adapted from example 144a)

³⁶ The autive is optional in (144b).

14842 Indirective-monotransitive lability is more common: this phenomenon refers
 14843 to verbs which optionally take an oblique goal argument similar to that of intransitive verbs (§14.2.4). Typical examples include allative verbs of manipulation
 14844 (§15.1.2.2) such as *yut* ‘bring’ or *tsum* ‘take away’, which are often found with
 14845 absolute or locative postpositional phrases expressing the goal of the motion
 14846 as in (145), but also commonly occur without any locative argument (146).

- 14848 (145) *rjylpu nuu kuu tuturca k^ha uu-ŋgur jó-wy-tsum-ndzi*
 king DEM ERG together house 3SG.POSS-in IFR-INV-take.away-DU

14849 ‘The king brought them together into a house.’ (140505 liuhohan
 14850 zoubian tianxia-zh, 142)

- 14851 (146) *juymuar ndyre ny-rca tu-kua-tsum-a*
 this.evening LNK 2SG.POSS-following IPFV:UP-2→1-take.away-1SG

14852 *ra*
 be.needed:FACT

14853 ‘This evening, take me with you (to heaven).’ (07-deluge, 48)

14.6 Additional questions on the generic and number indexation

14854 The previous sections focused on person and number indexation in relation to
 14855 verb argument structure. This section discusses some properties of number and
 14856 generic indexation that are observed on both intransitive and transitive verbs.

14.6.1 Agreement mismatch

14857 This section investigates various types of mismatch between person indexation
 14858 on the verb and nominal and pronominal elements in the clause: optional num-
 14859 ber indexation, honorific plural, partitive indexation and the interaction between
 14860 first person and generic person. There are two additional types of indexation mis-
 14861 match not discussed here: hybrid indirect speech (§24.2.5.2), and affixal chains
 14862 in bipartite verbs (§11.6.3).

14.6.1.1 Optional number indexation

14863 The default situation in Japhug is for the third person core arguments to be in-
 14864 dexed in number on the verb in intransitive or non-local configurations (the num-
 14865 ber of the subject in direct configurations, and that of the object in inverse con-

14870 configurations, §14.3.2.2). This is the case in particular in series of verbs sharing the
 14871 same subject, as in example (147) with dual (3DU→3' or 3DU intransitive) index-
 14872 ation on five verbs in a row, referring to the same pair of persons.

- 14873 (147) *tcendyre <yinlia> to-nu-n-do-ndzi, kyn̩da ra to-nu-n-do-ndzi q^he,*
 LNK drink IFR-AUTO-take-DU food PL IFR-AUTO-take-DU LNK
 14874 *qrŋŋyŋ yu-t^hcu tce, to-nuna-ndzi qhe,*
 TOPO 3SG.POSS-downstream LOC IFR-rest-DU LNK
 14875 *pj-nympole-ndzi q^he, tce ko-nu-yi-ndzi*
 IFR-do.sightseeing-DU LNK LNK IFR:EAST-VERT-come-DU
 14876 ‘The two of them took with them drinks and food, and rested and did
 14877 sightseeing further down from Qrangak, and then came back.’
 14878 (conversation 140510)

14879 However, non-singular third person core arguments do not necessarily trigger
 14880 number indexation in all cases. Several syntactic, semantic and discourse factors
 14881 interfere with number indexation.

14882 With existential verbs, number indexation of the subject is nearly always ob-
 14883 served in the case of human referents in the existential construction, even in the
 14884 case of collective nouns without number markers, such as the counted noun *tutu-pu*
 14885 ‘one household’ in (148). Dual or plural indexation is generally observed
 14886 when the subject has a numeral modifier, as in (149).

- 14887 (148) *ununuutcu tur-tupu pjy-tu-nu*
 DEM:LOC ONE-household IFR.IPFV-exist-PL
 14888 ‘there was one household there.’ (140512 yufu yu mogui-zh, 3)
 14889 (149) *kyn̩dzi-xt̩y ysum pjy-tu-nu*
 COLL-brother three IFR.IPFV-exist-PL
 14890 ‘There were three brothers.’ (31-deluge, 7)

14891 On the other hand, with inanimate referents, number indexation is rarely
 14892 found; in (150) for instance, no dual indexation is found on the verb despite the
 14893 numeral *ɛnuz* ‘two’.

- 14894 (150) *nunureri ts^hko ɛnuz tu.*
 DEM:LOC stone.mount two exist:FACT
 14895 ‘There are two stone mounts there.’ (140522 Kamnyu zgo, 138)

14.6 Additional questions on the generic and number indexation

14896 In the possessive construction (§8.2.3.1, §22.5.2), however, the subject of ex-
 14897 istential verbs (the possesum) rarely triggers number indexation, even in the
 14898 case of human referents: compare for instance in (151) the first verb form *pjy-tu-ndzi*
 14899 (existential construction with dual indexation) vs. the second one *pjy-tu*
 14900 (possessive construction with plural possesum, no indexation).

- 14901 (151) *kuicunguu tce, uzymi ci pjy-tu-ndzi tce,*
 long.ago LOC husband.and.wife INDEF IFR.IPFV-exist-DU LNK
 14902 *ndzi-tcui xsum pjy-tu.*
 3DU.POSS-son three IPFV.IPFV-exist
 14903 ‘Long ago, there was a husband and his wife, and they had three sons.’
 14904 (140430 jin e-zh, 2)

14905 With dynamic verbs, as in the existential construction, core arguments gen-
 14906 erally triggers number indexation when they have animate referents. This is in
 14907 particular the case with the adverb *tuturca* ‘together’ (§8.3.2), even to describe
 14908 group actions where all individuals act exactly in the same way as in (152).

- 14909 (152) *tce ly-zo-nuu kurn tuturca lu-zo-nuu,*
 LNK AOR:UPSTREAM-land-PL also together IPFV:UPSTREAM-land-PL
 14910 *t^huu-nuiqambuambjom-nuu kurn tuturca c^huu-nuiqambuambjom-nuu,*
 AOR:DOWNSTREAM-fly-PL also together IPFV:DOWNSTREAM-fly-PL
 14911 ‘When they land they all land together, when they fly they all fly
 14912 together.’ (24-qro, 10)

14913 Number indexation is optional with *tuturca* ‘together’ in the case of inanimate
 14914 referents (including plants). Examples (153a) and (153b) from the same text shows
 14915 verb forms with and without plural indexation in the same context (referring to
 14916 a species of mushroom).

- 14917 (153) a. *tuturca kui-dtu~dyn tu-łob-nuu ηu.*
 together SBJ:PCP-EMPH-be.many IPFV-come.out-PL be:FACT
 14918 ‘They grow together in great numbers.’ (21-jmAGni, 82)
 b. *kui-dtu~dyn zo tuturca tu-łob ηu.*
 SBJ:PCP-EMPH~be.many EMPH together IPFV-come.out be:FACT
 14920 ‘They grow together in great numbers.’ (21-jmAGni, 84)

14921 Optional number indexation is however also attested, though uncommon, with
 14922 dynamic verbs in reference to humans, as in (154), where verb ‘die’ occurs with-
 14923 out plural indexation in its first occurrence (just after a possessive construction,

14924 where indexation on the existential verb *tr-tu* is not found either), and with the
14925 plural suffix *-nuu* in the second occurrence.

- 14926 (154) *wu-rfit kungut ty-tu ri, kutsyy nui-si. kutsyy*
 3SG.POSS-child nine AOR-exist LNK six AOR-die six
 14927 *nui-si-nua q^he*
 AOR-die-PL LNK
 14928 ‘She had nine children, six (of them) died. Six died, and...’ (14-siblings,
 14929 17-18)

The conditions for optional number indexation of human referents with dynamic verbs are not completely clear. Absence of number indexation is rare in intransitive and direct forms, and may be due in part to speech errors (§14.6.1.5).

With generic human subjects, the indexation of the number of the object, though attested (§14.3.2.5), is not common. For instance in (155), despite an overt dual object, the verb lacks number indexation.

- 14936 (155) *kyn̩dz̩i-βi ni s-c^hú-tá-wy-qru* ηu
 COLL-sibling DU TRAL-IPPFV:DOWNSTREAM-INV-welcome be:FACT
 'Let's invite the two brothers down here.' (Nyima wodzer2003-2, 115)

14.6.1.2 Plural as honorific

Plural marking on nouns (§9.1.1.3) and pronouns (§6.1.1) can be used to express singular honorific in Japhug. Similarly, honorific plural indexation is found with second (156) or third (157) person referents, with or without plural *ra* marking on the noun. Honorific plural is mainly attested in traditional stories, but it is still used to address lamas.

- 14944 (156) *a-tycime ra, ci nuu-yuuts^hyduy tce, kx-nuu-rŋguu-nuu*
 1SG.POSS-lady PL a.little SENS-be.hot LNK IMP-AUTO-lie.down-PL
 14945 ‘My lady, it is a bit hot, lie down (to sleep).’ (2014-kWLAG, 232)

14946 (157) *tceri tx-mu nuu kuu rjyłpu ra my-ryzi-nuu tce,*
 LNK INDEF.POSS-mother DEM ERG king PL NEG-stay:FACT-PL LNK
 14947 *pyystcu nuu pjyr-su-sat.*
 bird DEM IFR-CAUS-kill
 14948 ‘The woman had the bird killed while the king was away.’ (2014-kWLAG,
 14949 590)

Honorific plural indexation on the noun does not always correlate with plural indexation on the verb, as in (158), where the verb has a singular form.

- (158) *wo a-zi ra tc^hindza pui-tuu-nyre ηu*
 INTERJ 1SG.POSS-young.lady PL why IPFV-2-laugh be:FACT
 'My lady, why are you laughing?' (2005 Kunbzang, 245)

14.6.1.3 Partitive indexation

Number indexation with a with first person core argument, unlike that of second and third person, is compulsory.

Apparent examples of mismatch however do exist, but are confined to a very specific partitive use of dual or plural number (Bickel 2000). With the interrogative pronoun *cuu* 'who' (§6.5.2), in particular, indexation on the verb can be non-singular with the specific partitive meaning 'who among *X*', in particular in comparative constructions as in (159), with 1DU indexation on the verb although this sentence implies that only one of the two sisters is the most beautiful (see §26.2.1 on this comparative construction, and Jacques (2016b) and §8.2.2.7 on the use of the ergative here).

- (159) *a-βi, nyki tcet^{hi} tce, tuu-ci*
 1SG.POSS-younger.sibling FILLER downstream LOC INDEF.POSS-water
wi-ηguu c-puu-ru tce, cuu kuu
 3SG.POSS-inside TRAL-IMP:DOWN-look LNK who ERG
pui-mpcyrr-tci kuu?
 SENS-be.beautiful-1DU SFP
 'Sister, go and look down there in the water, who is the most beautiful of us?' (2014-kWLAG, 477)

Similarly, non-singular indexation on the verb with a counted noun core argument can have a partitive meaning, for instance *tuu-rdoꝝ* 'one piece' (§7.3.2.1) with plural *-nuu* on the verb in (160) can only be interpreted as meaning 'one of them should take it'.

- (160) *"tui-rdoꝝ kuu a-sci a-t^huu-ndo-nuu nts^{hi}"*
 one-piece ERG 1SG.POSS-instead IRR-PFV-take-PL be.better:FACT
pui-suusym pjx-ηu
 IPFV-think[III] IFR.IPFV-be
 '(The king) was thinking: 'One of (my sons) should inherit the throne.'
 (140510 sanpian yumao-zh, 7)

14978 Another type of partitive indexation is the use of 1PL pronouns with third
 14979 person indexation, as in (161), with two verbs in 3PL→3 form and the 1PL pronoun
 14980 in topicalized position meaning ‘some among us’.

- 14981 (161) *izora tce ckyph̥yr tu-ti-nuu tsuku kuu ckyjwab tu-ti-nuu*
 14982 *1PL LNK wild.chives IPFV-say-PL some ERG wild.chives IPFV-say-PL*
ŋu ma
 14983 be:FACT LNK

‘Among us, some call it *ckyph̥yr*, some *ckyjwab*.’ (07-Cku, 82)

14.6.1.4 First person and generic person

14985 Another type of agreement mismatch observed with first person concerns 1PL
 14986 and generic person. Before examining the examples of mismatch between pro-
 14987 nouns and verb indexation in Japhug, it is important to note that generic person
 14988 often occurs in gnomic statements applying to the speaker himself (§14.6.2), and
 14989 can be used as an indirect way to express a first person, as has been described
 14990 in some Kiranti languages (Bickel & Gaenszle 2015). It is even found in contexts
 14991 where it unambiguously refers to the first person *singular*, as in (162).

- 14992 (162) *my-xsi ko, nura jny-nui-jmuit-a*
 14993 NEG-GENR:know SFP DEM:PL IFR-AUTO-forget-1SG
 14994 ‘I don’t know, I forgot about these things.’ (phone conversation,
 2013-12-24)

14995 Generic inverse Imperfective verb forms with modal verb such as *nts^{hi}* ‘be bet-
 14996 ter’ or *ra* ‘be needed’ (example 163) or even without auxiliary (164) is a common
 14997 way to express 1PL hortative (§21.2.4, §21.2.5), and in such contexts 1PL pronouns
 14998 or possessive prefixes can be found.

14999 In (163), generic inverse marking on the verb corresponds to the 1PL possessive
 15000 on the object *nuya* ‘cow’. The presence of the autive *nua-* (§19.1) is a further clue
 15001 to the equivalence of the generic subject and the 1PL in this example.

- 15002 (163) *skalpa ndzuy nua jnu-ŋu tce, ji-nuya*
 15003 *world be.destroyed:FACT DEM SENS-be LNK 1PL.POSS-cow*
pjuú-wy-nua-ntc^ha jnu-nts^{hi}
 15004 *IPFV-INV-AUTO-butcher SENS-be.better*
 ‘The world is about to be destroyed, let us kill our cow.’ (07-deluge, 7)

14.6 Additional questions on the generic and number indexation

15005 In (164), the 1PL pronoun *izo* directly co-occurs with a verb in transitive subject
 15006 generic form (§14.3.2.5).

- 15007 (164) *izo kuu-mvku pxjk^hu, nu-cya kuu-mtcov nuu ci*
 15008 1PL SBJ:PCP-be.first still 3SG.POSS-tooth SBJ:PCP-be.sharp DEM a.little
 15009 *juú-wy-p^hut*
 IPFV-INV-take.out
 'Let us first take out its sharp teeth.' (150908 menglang-zh, 80)

15010 Co-occurrence of generic indexation with a 1PL pronoun is also found in pro-
 15011 cedural texts; in such contexts the 1PL pronouns occur in apposition with place
 15012 names (§5.2.1), ethnic groups or classes of people, for instance *izo kuruu ra* 'we
 15013 Tibetans' in (165).

- 15014 (165) *izo kuruu ra, n̄ykinuu, qajyi lú-wy-nuu-βzu tce*
 15015 1PL Tibetan PL FILLER bread IPFV-INV-AUTO-make LNK
 'We Tibetans, when we make bread.' (160706 thotsi, 1)

15016 The opposite situation, a generic pronoun in combination with 1PL indexation,
 15017 is much rarer, but also attested. For instance, in (166), the adjectival stative verb
 15018 *xtci* 'be small' bears 1PL -j suffix, but the corresponding overt pronoun in the
 15019 sentence is the generic person *tuzyra* 'one' (§6.2.1). The generic form *pui-kuu-xtci*,
 15020 as in (167) would be possible in the exactly the same context, clearly including
 15021 the first person.

- 15022 (166) *tuzyra pui-xtci-j tce,*
 15023 GENR PST.IPFV-be.small-1PL LNK
 'When we were young.' (17-ndZWnW, 52)

- 15024 (167) *tce jinde aj pui-mto-t-a me ri,*
 15025 LNK now 1SG AOR-see-PST:TR-1SG not.exist:FACT LNK
pui-kuu-xtci tce puú-wy-mto
 15026 PST.IPFV-GENR:S/O-be.small LNK AOR-INV-see
 15027 'I have not seen any (wild crane) recently, but when we were young, we
 did see it.' (22-qomndroN, 35)

15028 Dual or plural indexation can occur with generic transitive subject indexation
 15029 marking a first person, as in example (55) in §14.3.2.5.

15030 In addition to the generic person, the proprietive derivation is another possible
 15031 strategy to indirectly refer to the first person (§18.8.2).

15032 14.6.1.5 Indexation mismatch and speech errors

15033 Speech errors are inevitable in any corpus, and are a factor to take into consider-
 15034 ation to explain inconsistencies in person indexation.

15035 The clearest examples of erroneous indexation are self-corrections. In (168)
 15036 for instance, the speaker first chooses a plural 3PL→3' with *-nu* suffix and then
 15037 corrects herself to the appropriate form 3SG→3' *no-ta*. The error here is due with-
 15038 out doubt to the presence of the overt object *uzunuu tc^hemxli ra* bearing a plural
 15039 marker: plural objects in non-local configuration are only indexed in the case
 15040 of inverse forms (§14.3.2.2), but examples of this type show that speakers may
 15041 nevertheless be tempted to index them in direct configurations too (as if the verb
 15042 were intransitive).

- 15043 (168) *uzunuu tc^hemxli ra, no-ta-nuu tce, no-ta tce,*
 young.man young.woman PL IFR-put-PL LNK IFR-put LNK
 15044 ‘She left (there) the young men and women.’ (2003kandzWsqhaj, 35)

15045 In (169) from a text translated from Chinese, Tshendzin realised that the num-
 15046 ber of daughters was different from what she had remembered, and hesitated
 15047 between the dual and the plural on the indexation of the intransitive verb *nyrura*
 15048 ‘look around’.

- 15049 (169) *oma, kua^hde pjy-suu-ye ny! ku^hde pjy-suu-ye*
 INTERJ four IFR:DOWN-CAUS-come SFP four IFR:DOWN-CAUS-come
 15050 ^q^he, *nunaura pjy-nyrura-ndzi ri, pjy-nyrura-nu* ^{ri,}
 LNK DEM:PL IFR:look.around-DU LNK IFR:look.around-PL LNK
 15051 ‘He sent four (of his daughters, not three), he sent four of them, and they
 15052 looked around.’ (150826 baoliandeng-zh, 223)

15053 Without self correction, indexation errors are less obvious and have to be
 15054 rechecked with a native speaker. In (170), the first verb *l^hwy-ça^hβ-ndzi* has inverse
 15055 marking (§14.3.3.2) and indexes the non-overt object (the youngest daughter and
 15056 her husband). The second (intransitive) verb has dual indexation, but its subject
 15057 is coreferent with that of the previous verb (*u-pi ra* ‘her elder sisters etc’) and
 15058 plural indexation would therefore be expected here, and Tshendzin indeed pro-
 15059 poses to correct the verb form to *k^hak^hu-nu* AOR-call-PL. The confusion between
 15060 dual and plural here is a combination of two factors: the presence of a verb with
 15061 dual indexation just before (indexation attraction), and the ambiguity of the sub-
 15062 ject: the youngest sister has two eldest daughters (the plural here refer to her
 15063 husbands and servants), and one could construe the subject of *k^hak^hu-ndzi* as

14.6 Additional questions on the generic and number indexation

15064 referring only to the two elder sisters, without the additional people, hence the
 15065 dual indexation.

- 15066 (170) *ndyre u-pi* *ra kuu l̥-wy-caβ-ndzi* *nγ*
 LNK 3SG.POSS-elder.sibling PL ERG AOR:UPSTREAM-INV-catch.up-DU LNK
 15067 *kγ-ak^hu-ndzi pnu-γu.*
 AOR-call-DU SENS-be
 15068 ‘Her elder sisters and the others caught up with them and called.’ (2005
 15069 Kunbzang, 155)

15070 Some apparent cases of optional number indexation (§14.6.1.1) should also be
 15071 analyzed as speech errors, as in (§14.6.1.1), where the first verb *jγ-ye-ndzi* bears
 15072 correct dual indexation, but the second one lacks it, presumably due to hesitation
 15073 on the part of the speaker.

- 15074 (171) *nunuu kuu-fse* *ɛnua jγ-ye-ndzi* *tce, ji-k^ha* *zua*
 DEM SBJ:PCP-be.like two AOR-come[II]-DU LNK 1PL.POSS-house LOC
 15075 *jγ-ye* *tce*
 AOR-come[II] LNK
 15076 ‘Two (ghosts) like that came, came to our house.’ (150902 qixian-zh, 139)

15077 14.6.2 Generic person vs. 3PL indexation

15078 In Japhug, both generic marking (§14.3.2.5) and third person plural indexation
 15079 can be used to express generic referents. In particular, both can agree with the
 15080 generic/indefinite noun *turme* ‘person’ (§6.2.2), as illustrated by examples (172)³⁷
 15081 and (173).

- 15082 (172) *nuŋa ra tci kγ-ndza rga-nuu,* *turme kuu tú-wy-ndza*
 COW PL ERG INF-eat like:FACT-PL people ERG IPFV-GENR:A-eat
 15083 *mγ-sna.*
 NEG-be.good:FACT
 15084 ‘Cows like to eat it, but it is not good for people.’ (11-paRzwamWntoR,
 15085 39-40)

³⁷ The generic transitive subject marker is the inverse prefix (§14.3.2.5). In this section, it is however glossed as GENR:A for clarity.

- 15086 (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
 15087 *nuu-rga-nuu tce*
 APPL-like:FACT-PL LNK

15088 ‘The cat is a very nice (animal), people like it.’ (21-IWLU, 41)

15089 The aim of this section is to examine the semantic difference between generic
 15090 person vs. 3PL in contexts like those illustrated by the examples above.

15091 Generic indexation (§14.3.2.5) is most commonly used to express general or
 15092 gnomic statements applying to most humans, including the speaker. No more
 15093 than one argument in a particular sentence can be generic: In particular, it is not
 15094 possible to have both generic subject and object on the same verb form (§5.1.3
 15095 and §6.2.1), except in reflexive constructions (example 15, §6.2.1).

15096 There is obligatory agreement between all generic person markers, whether in-
 15097 dexation on the verb, pronouns or possessive prefixes inside a clause, and across
 15098 contiguous clauses. In (174) for instance, the generic intransitive subject of the
 15099 verb *muu~m̥y-puu-kuu-tso* is coreferent with the transitive subject of *m̥y-wy-mto*.

- 15100 (174) *tce wuma zo muu~m̥y-puu-kuu-tso ny*
 LNK really EMPH COND~NEG-PST.IPFV-GENR:S/O-know LNK
 15101 *m̥y-wy-mto*
 NEG-GENR:A-see:FACT
 15102 ‘If you do not know it well, you won’t see it.’ (07-Cku, 59)

15103 In (175), the generic possessor prefix on *tu-lax̚t̚ha* is also coreferent with the
 15104 object of *nuu-kuu-nusukʰo* ‘they rob people of X’. Note however in this example
 15105 that the generic person on *tu-kuu-nykʰe* is not exactly identical to the referent of
 15106 the previous verb, referring to a subset of it (only women).

- 15107 (175) *turme pjui-sat-nuu, tur-lax̚t̚a nuu-kuu-nusukʰo, tcʰeme tce*
 people IPFV-kill-PL GENR.POSS-thing IPFV-GENR:S/O-rob woman LNK
 15108 *tu-kuu-nykʰe kuu-fse nuu-ŋu*
 IPFV-GENR:S/O-bully SBJ:PCP-be.like SENS-be
 15109 ‘They did things like killing people, robbing people’s things, raping
 15110 women.’ (17-lhazgron, 25-26)

15111 Example (176) show the agreement between the generic pronoun *tuzo* ‘one’
 15112 and generic marking on the verb.

14.6 Additional questions on the generic and number indexation

- 15113 (176) *tu_{zo} tu-kui-ru_cmi nura u-nú-tso?*
 GENR IPFV-GENR:S/O-speak DEM:PL QU-SENS-understand
 15114 ‘Does (you son) understand when people speak?’ (phone conversation
 15115 15-01-13)

15116 Generic human marking can sometimes be used as a substitute for first person,
 15117 both as indexation prefix (§14.6.1.4) or as possessive prefix (§5.1.3.1). Example (177)
 15118 illustrates this function.

- 15119 (177) *tceri t_y-pytso pui-kui-ŋu tce, nur k_y-ndza wuma*
 LNK INDEF.POSS-child PST.IPFV-GENR:S/O-be LNK DEM INF-eat really
 15120 *zo pui-kui-rga.*
 EMPH PST.IPFV-GENR:S/O-like
 15121 ‘When we were children, we used to like eating it a lot.’ (12-ndZiNgri,
 15122 138)

15123 The commonality between all the uses of generic person marking is that it
 15124 always refers to a group including the speaker.³⁸ It is particularly clear in (175),
 15125 where the generic prefix *kui-* on *tu-kui-nyk^he* is coreferent with the overt object
 15126 *t^he^{me}* ‘woman’; this verb form is appropriate in this particular instance because
 15127 the speaker is a woman, and *t^he^{me}* ‘woman’ is used here as a generic noun.

15128 Example (178) further illustrates the same phenomenon. The speaker, also a
 15129 woman, includes herself among the potential Jews’ harp players (though she has
 15130 never played the instrument) and thus employs generic subject marking on the
 15131 first verb (note also the presence of the 1PL pronoun, §14.6.1.4). Conversely, she
 15132 excludes herself from potential flute players (traditionally, only men) and selects
 15133 3PL marking on the second verb.

- 15134 (178) *kuicungua tce, izora t^he^{me} kui zNGro jnú-wy-l_yt,*
 long.ago LNK 1PL girl ERG Jews’.harp IPFV-GENR:A-release
 15135 *t_y-t_{ci}ra kui juli c^hui-l_yt-nui.*
 INDEF.POSS-boy PL ERG flute IPFV-release-PL
 15136 ‘Long ago, among us women used to play the Jews’ harp, while men
 15137 used to play the flute.’ (150907 ZNGro, 10)

³⁸ Example (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.

15138 This example is typical of procedural texts: the generic is consistently used by
 15139 women speakers to refer to activities typically performed by women, and the 3PL
 15140 for men's duties (and vice-versa with men speakers).

15141 This contrast is also found when discussing differences between Tibetan and
 15142 Chinese people, in particular the names given to animals and plants. In (179),
 15143 Chinese are referred to collectively in the 3SG (the plural would also be possi-
 15144 ble in the same context), while Tibetans (the ethnic group to which the speaker
 15145 associates herself) are indexed on the verb by the generic *kuu-* prefix (§14.3.4).

- 15146 (179) *nunuu kupa kuu <gouweicao> tu-ti nyu tce, kuruu ra kuu*
 DEM Chinese ERG setaria.viridis IPFV-say be:FACT LNK Tibetan PL ERG
 15147 *nuu li khunajme tu-kuu-ti nyu tce,*
 DEM again setaria.viridis IPFV-GENR-say be:FACTbe:FACT LNK
 15148 ‘The Chinese call it ‘gouweicao’, Tibetans call it *khunajme*.’
 15149 (16-RIWmsWsi, 54)

15150 The contrast between *kuu-/wy-* generic person and 3PL indexation can thus be
 15151 described as *speaker-inclusive* vs. *speaker-exclusive* generic marking.

15152 Another crucial difference between speaker-inclusive generic and 3PL, is that
 15153 unlike the former, the latter can refer to several different referents in the same
 15154 sentence. In example (180) for instance, the 3PL on the verbs *a-my-tr-ndo-nuu* ‘let
 15155 them not take it’ and *yuu-z-nyndry-nuu* ‘it will poison them’³⁹ agrees with the noun
 15156 phrase *turme ra*, which is to be interpreted as meaning ‘other people’ (§6.8) rather
 15157 than generic person (§6.2.2). Its referent is different from that of the generic 3PL
 15158 in the rest of the passage, such as the matrix verb *nuu-suoso-nuu* ‘they think that ...’
 15159 or the preceding verb *pjuu-rytcumtcaas-nuu* ‘they stamp on it’.

- 15160 (180) *tce syndry tu-ti-nuu nygryl tce*
 LNK be.poisonous:FACT IPFV-say-PL be.usually.the.case:FACT LNK
 15161 *a-pur-suχsyl-nuu bo tce maka my-p^huit-nuu,*
 IRR-PFV-recognize-PL ADVERS LNK at.all NEG-take.out:FACT-PL
 15162 *na-phuit-nuu kumx c^huu-βde-nuu cti. tce*
 AOR:3→3'-take.out-PL even IPFV-throw.away-PL be.AFF:FACT LNK
 15163 *pjuu-rytcumtcaas-nuu ma ‘turme ra kuu a-my-tr-ndo-nuu ma*
 AOR-tread-PL LNK people PL ERG IRR-NEG-PFV-take-PL LNK

³⁹ The 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).

- 15164 *yuu-z-nvndyy-nuu'* *nuu-suuso-nuu.*
 INV-CAUS-be.poisoned:FACT-PL SENS-think-PL
 15165 ‘People say that (this species of mushroom) is poisonous. If they
 15166 recognize it, they don’t pick it up, even if they pick it up they throw it
 15167 away and stamp on it, thinking ‘(This way) other people won’t take it
 15168 and it will not poison them.’ (23-grWBgrWBftsa, 23-27)

15169 14.7 Person indexation on non-finite predicative words

15170 Despite being a highly verb-prominent language, Japhug has some non-verbal
 15171 predicates (§22.3). There is evidence that a few nominals occurring as predicates,
 15172 including nominalized verb forms and nouns, have acquired person indexation
 15173 markers.

15174 Phenomena of this type are uncommon, but clear examples do exist in Indo-
 15175 European (Pott 1859: 414). For instance, in Greek, the adverbs δεῦρο ‘hither’ and
 15176 τῇ ‘here, take it’ have developed the plural forms δεῦτε and τῆτε, with the plural
 15177 present imperative suffix -τε (and unexplainable loss of the syllable -οο in δεῦτε),
 15178 by contamination with imperative verb forms (φέρε, φέρετε), which occur in the
 15179 same contexts (Viti 2015: 113–114). A similar case is found in Gothic, where the
 15180 adverb *hiri* ‘hither’ (which incidentally translates Greek δεῦρο) has dual *hirjats*
 15181 and plural *hirjip*, modelled on imperatives (Braune 1953: 104).

15182 Inflectionalization of nominals is attested in the case of a few phatic (§14.7.1)
 15183 and exclamative (§14.7.2) expressions in Japhug.

15184 14.7.1 Phatic expressions

15185 The expression *syrma* ‘good night’, used to address someone leaving one’s house
 15186 in the evening, transparently derives from the oblique participle *syr-ma* ‘place
 15187 where/time when one stays overnight’ (§16.1.3) from the verb *rma* ‘stay the night,
 15188 live’, as illustrated by example (181).

- 15189 (181) *tce uu-sy-rma* *nunu, prax, praxpa tce*
 LNK 3SG.POSS-OBL:PCP-stay.the.night DEM cliff cavern LNK
 15190 *c-ku-rma* *nuu-ŋu*
 TRAL-IPFV-stay.the.night SENS-be
 15191 ‘The place where its spends the night is the cliffs, it goes to spend the
 15192 night in caverns under the cliffs.’ (20-xsar, 36)

15193 This expression is probably the abbreviation of a phrase such as ‘go back to
 15194 your resting place’ (which would be *nr-syrma jy-nuče*).

15195 Yet, when addressing more than one person, the dual form *syrma-ndzi* and the
 15196 plural *syrma-nu* are used, with the 2/3 dual -*ndzi* and plural -*nu* suffixes found in
 15197 verb paradigms (§14.2.1.2). These suffixes normally only appear on finite verbs.
 15198 The forms *syrma*, *syrma-ndzi* and *syrma-nu* could in principle be analyzed as a Factual
 15199 Non-Past form (§21.3.1.1), but there are three problems with this hypothesis.

15200 First, the meaning of the expression (‘have a good night’) is hardly compatible
 15201 with the Factual Non-Past; an Imperative or Irrealis form would be expected
 15202 instead, and a second person prefix *tut-* would in any case be required. Second,
 15203 while there are several *sy-* verbal derivational prefix, none of them (propriative
 15204 §18.8.1, antipassive §18.6.2 and causative §17.2.1.3) has a function which could
 15205 account for a derivation such as ‘spend the night’ ⇒ (‘have a) good night’. Third,
 15206 no other verb forms (including first or third person), finite or non-finite, are
 15207 attested for *syrma*.

15208 A more promising approach to account for these verb forms is analogy with
 15209 other phatic expressions involving finite verb forms. The most probable one is
 15210 the verb *astu* ‘be straight’, whose Imperative is used to mean ‘goodbye’ (literally
 15211 ‘(walk) straight’) as in (182). These verb forms optionally occur with the sentence
 15212 final particle *je* (§10.4.1), another commonality with *syrma* ‘good night’.

- 15213 (182) a. *ty-ystu* (*je*)
 IMP-be.straight SFP
 ‘Goodbye’ = ‘(walk) straight’ (singular)
 15214 b. *ty-ystu-ndzi* (*je*)
 IMP-be.straight-DU SFP
 ‘Goodbye’ (dual)

15215 The dual and plural forms of *syrma* ‘good night’ can thus be explained as trivial
 15216 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>ystu</i> ‘goodbye.sg’	<i>syrma</i> ‘good night.sg’
<i>ystu-ndzi</i> ‘goodbye.DU’	X ⇒ <i>syrma-ndzi</i> ‘good night’

15217 The expression *krynyðdi* ‘take care’, used when leaving from someone’s place,
 15218 and which also has a dual *krynyðdi-ndzi* and a plural *krynyðdi-nu*, might also be a

inflectionalized form of the *kx-* infinitive (§16.2.1) of the tropative *nx-* (§17.5) of the stative verb *βdi* ‘be well, be good’.

However, this case is less compelling than *syrma* ‘good night’, because *kx-nxβdi-dzzi* and *kx-nxβdi-nu* can alternatively be formally analyzed as imperatives with the EASTWARDS *kx-* preverb (§15.1.1), and because *nxβdi* is also found in regular finite forms (as in 183).

- (183) *wi-ku-tui-nxβdi? wi-ku-tui-pe?*
 QU-PRS-2-feel.well QU-PRS-2-good
 ‘Do you feel well, are you fine?’ (conversation, 16-12-28)

14.7.2 Exclamative expressions

The expression *duxpa* ‘poor ...’ seems at first glance to be a verb, as it not only takes dual and plural suffixes (*duxpa-nuu* ‘poor them’, example 184), but it can also receive first person indexation (such as 1DU in 185). The variant form *zduxpa* is also attested (see 25, §21.2.5).

- (184) *wo a-rfit ra duxpa-nuu ma nuu wi-xtu*
 INTERJ 1SG.POSS-offspring PL poor-PL because DEM 3SG.POSS-belly
wi-ŋgwi nutcu yxzu-nuu rca
 DEM:LOC exist:SENS-PL SFP
 ‘My poor children, there are in his (the wolf’s) belly’ (140430 lang he qizhi xiaoshanyang-zh, 130)

- (185) *tcizo ndy duxpa-tci ye, nx tcendyre, kx-ntcha*
 1DU on.the.other.hand poor-1DU SFP LNK LNK OBJ:PCP-kill
wi-spa zo cti-tei
 3SG.POSS-material EMPH be ASSERT:FACT-1DU
 ‘We, on the other hand, poor of us! We are to be butchered.’
 (kandZislama2003.210)

Yet, *duxpa* has a defective paradigm: it cannot take any prefix, including the second person *tui-*, any TAM marker or any nominalization prefix. In addition, if *duxpa* were to be analyzed as a verb, it would be anomalous, as it is borrowed from Tibetan སྟུག་པ་ ‘suffering’ (also spelled *sdug.ga*),⁴⁰ a nominalized form taking the *-pa/-ba* suffix.

⁴⁰ For an account of the alternation between *p/b* and *g* in the spelling, see Nathan W. Hill (2011a) and the references therein.

While examples of verbs directly borrowed from Tibetan into Japhug are numerous, at least in the earliest layer (for instance *rjuy* ‘run’, *βzjür* ‘change, correct’ etc, see Jacques 2019c), nouns or nominalized verbs borrowed from Tibetan are never converted to verbs without denominal prefixes. Incidentally, we find in Japhug two verbs derived from the same Tibetan etymon (in the variant *°zduxpa*, from an earlier layer of borrowing) by means of denominal prefixes, the intransitive stative verb *syzduxpa* ‘be pitiful’ and the transitive verb *nuzduxpa* ‘have pity for’. The word *duxpa* 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 *duxpa* 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 *syzduxpa* ‘be pitiful’ in (186).

- 15260 (186) *ndzi-yi ra, nuuni muw-pjy-k-xtuy-nur-ci,*
 3DU.POSS-relatives PL DEM:DU NEG-IFR-PEG-meet-PL-PEG
 15261 *pjy-syzduypa-nur ma*
 IFR.IPFV-be.pityful-PL LNK
 15262 ‘Their relatives did not meet them (again), poor them.’
 15263 (2003zrantCWtWrme, 78)

15264 14.8 Historical perspectives

15265 This section explores a range of hypotheses to account for the synchronic resemblance
 15266 between indexation markers (indexation suffixes, the inverse prefix and
 15267 the local scenario portmanteau prefixes) and other morphemes that are possibly
 15268 historically related in Japhug, drawing on comparative data from other Gyalrong
 15269 languages and beyond.

15270 14.8.1 Indexation suffixes, pronouns and possessive prefixes

15271 The indexation suffixes (§14.2.1) are similar to the corresponding possessive pre-
 15272 fixes (§5.1.1) and pronouns (§6.1) in Japhug, as shown by the data in Table 14.19.
 15273 In addition to the Kamnyu dialect, this table includes data on the Tatshi dialect
 15274 (from Lin & Luoerwu 2003, Y. Lin 2011 and personal communication) between
 15275 brackets. The two dialects differ mainly in the presence of alveolo-palatal affri-
 15276 cates in Kamnyu Japhug in the dual, while dental affricates are found in Tatshi.

Table 14.19: Indexation suffixes, pronouns and possessive prefixes in Japhug

		Indexation suffix	Pronoun	Possessive Prefix
1SG	- <i>a</i>		<i>az̥o</i> (<i>ŋa</i>)	<i>a-</i>
2SG			<i>nry̥zo</i>	<i>nry-</i>
3SG			<i>w̥z̥o</i> (<i>mi</i>)	<i>w-</i>
1DU	- <i>t̥ci</i> (- <i>tsə</i>)		<i>t̥cižo</i>	<i>t̥ci-</i> (<i>tsə-</i>)
2DU	- <i>ndzi</i> (- <i>ndzə</i>)		<i>ndz̥izo</i>	<i>ndzi-</i> (<i>ndzə-</i>)
3DU	- <i>ndzi</i> (- <i>ndzə</i>)		<i>z̥y̥ni</i>	<i>ndzi-</i> (<i>ndzə-</i>)
1PL	- <i>ji</i>		<i>ižo</i>	<i>i-</i>
2PL	- <i>n̥u</i> (- <i>nə</i>)		<i>n̥uz̥o</i>	<i>n̥u-</i> (<i>nə-</i>)
3PL	- <i>n̥u</i> (- <i>nə</i>)		<i>z̥ara</i>	<i>n̥u-</i> (<i>nə-</i>)

15277 In the other Gyalrong languages, very similar affixes are found, as shown by
 15278 Table 14.20 (data from J. T.-S. Sun 1998: 139, J. T. S. Sun 2017: 562, Gong 2014; 2018,
 15279 Lín 1993: 168;198).

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>n̥v-</i>		<i>n̥v-</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>t̥cə-</i>	<i>-t̥cə</i>	<i>ndza-/ndzə-</i>	<i>-tʃʰ</i>
2/3DU	<i>"dzə-</i>	<i>-"dzə</i>	<i>"džə-</i>	<i>-"džə</i>	<i>ndza-/ndzə-</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>

15280 The main differences between the indexation systems of the four Gyalrong
 15281 languages include the following observations: (i) only Situ has a 2SG suffix (in-
 15282 transitive and 2SG object)⁴¹ and a third person object suffix, (ii) the 1SG suffix

⁴¹ In 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).

15283 presents unique correspondences, and has many allomorphs in Zbu and Situ,
 15284 (iii) Zbu has a 1PL possessive prefix that is unrelated to the 1PL suffix, (iv) Situ has
 15285 no distinction between 1DU and 2/3DU possessive prefixes, and (v) the 1DU, 2/3DU
 15286 and 2/3PL affixes are either (alveolo)-palatal or dental across the languages.

15287 As shown by Table 14.21, Tshobdun and Tatshi Japhug only have dental per-
 15288 son indices, Zbu and Situ only (alveolo-)palatal ones, and Kamnyu Japhug is in-
 15289 termediate between the two groups, with alveolo-palatal dual affixes *-tci/-ndzi*
 15290 and dental plural affixes *-nu*. It is noteworthy that Kamnyu Japhug, the dialect
 15291 geographically closest to Tshobdun, is less similar to that language in this regard
 15292 than the Tatshi dialect, which is not in direct contact with Tshobdun.

Table 14.21: (Alveolo-)palatal vs. dental person indices in Gyalrong lan-
guages

	Tshobdun	Tatshi Japhug	Kamnyu Japhug	Zbu	Situ
1DU	<i>-tsə</i>	<i>-tsə</i>	<i>-tci</i>	<i>-tçə</i>	<i>-tf^h</i>
2/3DU	<i>-ndzə</i>	<i>-ndzə</i>	<i>-ndzi</i>	<i>-ndzə</i>	<i>-ntf^h</i>
3PL	<i>-nə</i>	<i>-nə</i>	<i>-nu</i>	<i>-nə</i>	<i>-n</i>

15293 A possible explanation to account for the resemblances between the suffixes,
 15294 the possessive prefixes and the pronouns is to argue that the former were gram-
 15295 maticalized from the latter, as has been proposed by [LaPolla \(1992\)](#). In the same
 15296 line of reasoning, the second and third person dual and plural suffixes, which are
 15297 similar to the dual and plural nominal markers in Situ and Tatshi Japhug, could
 15298 be argued to have originated from them. In Tatshi Japhug for instance, the dual
 15299 *-ndzə* and plural *-nə* suffixes could be analyzed as deriving from the dual *ndzə* and
 15300 plural *nəjo* nominal clitics (which differ from those of Kamnyu Japhug, §9.1.1).

15301 The idea of transparent grammaticalization from pronouns or number markers
 15302 in indexation suffixes is however not as straightforward as it might appear at first
 15303 glance. Leaving aside extra-Gyalrong comparative evidence ([Jacques 2012a; De-](#)
 15304 [Lancey 2014](#)), and the fact that most of the pronouns in Gyalrong languages are
 15305 derived from possessive prefixes rather than the opposite ([Jacques 2016e, §6.1](#)), if
 15306 the similarity between the three series of person markers were to be explained as
 15307 resulting exclusively from a recent grammaticalization, the pattern in Table 14.20,
 15308 where the place of articulation (alveolo-palatal vs. dental) of dual and plural in-
 15309 dexation suffixes is aligned on that of the pronouns and possessive prefixes and
 15310 draws an isogloss across the dialects of Japhug (Table 14.21), would imply that
 15311 the grammaticalization postdated not only the breakup of proto-Gyalrong, but

15312 even that of the common ancestor of modern Japhug dialects.

15313 The indexation system of Gyalrong languages cannot however be that recent,
 15314 in particular because the stem alternation system, which contributes to person
 15315 indexation (§12.2.2.2, §14.3.2.1) is clearly reconstructible to the common ancestor
 15316 of Gyalrong languages and Tangut (Gong 2016b) and is too complex and irreg-
 15317 ular (in particular in Zbu, see J. T.-S. Sun 2004 and Gong 2018) to be a recent
 15318 development.

15319 Three alternative types of explanation can be explored to account for the corre-
 15320 spondences between affixes and pronouns: analogical simplification of allomor-
 15321 phy, contamination and degrammaticalization.

15322 First, it is possible that proto-Gyalrong had phonetically conditioned allomorphs
 15323 of the suffixes (the 1SG suffix has maintained some allomorphy in Zbu and Situ,
 15324 see Gong 2014: 46 and Lín 1993: 198), and that the attested languages have gen-
 15325 eralized one of the allomorphs. Analogical levelling has certainly taken place in
 15326 the case of the 1SG. Note that the form *-aŋ* in Tshobdun cannot derive from proto-
 15327 Gyalrong *-aŋ (which yields Tshobdun -i), and the Zbu and Situ -ŋ cannot be a
 15328 phonetic reflex of *-ŋ in most cases, otherwise for instance stems in -a should
 15329 alternate with -o ← *-aŋ in Situ in the 1SG. In Situ and Zbu, the final -ŋ in open
 15330 syllables must have been restored, due to analogical spread from a particular
 15331 context where the *-ŋ was maintained.

15332 Second, the similarity between possessive prefixes, indexation suffixes and
 15333 pronouns could be the result of mutual contamination and convergence. Cases
 15334 of contamination between indexation systems and possessive affixes are attested.
 15335 In Hebrew and Phoenician, for instance, the first person singular perfect suffix
 15336 -t̄f has an unexpected vocalism, as it is commonly agreed that proto-North-West
 15337 Semitic suffix was *-tu, whose outcome should have been †-t. The irregular He-
 15338 brew form is explained as due to contamination from either the 1SG pronoun ?ăní
 15339 or the 1SG possessive suffix -î (Joüon & Muraoka 2006: 122-123; 132-133, Suchard
 15340 2016: 227–229).

15341 Contamination could account for the 1SG affixes in Japhug. The possessive
 15342 prefix *a-* is the regular outcome of earlier *ŋa-, a proto-form which also account
 15343 for the 1SG prefixes in the other languages. The 1SG suffix -a however does not
 15344 regularly correspond to the suffixes -aŋ and -ŋ found in Tshobdun, Zbu and Situ.
 15345 One possibility is that *-ŋp was one of the proto-Gyalrong allomorphs of the 1SG
 15346 suffix,⁴² and was generalized. Another explanation is that only *-ŋ was present in
 15347 proto-Gyalrong, and that the *-ŋp precursor of Japhug -a arose by contamination

⁴² In Bantawa for instance, the 1SG suffix has three allomorphs -ŋ, -ŋ, and -ŋa (Doornenbal 2009: 155).

15348 of *-*ŋ* with the (historically related) possessive prefix *-*ŋp*-.

15349 Third, the possibility of degrammaticalization from person indexation suffixes
 15350 to nominal number markers in Tatshi Japhug and Situ should be taken into con-
 15351 sideration. Kamnyu Japhug, Tshobdun and Zbu have dual and plural markers
 15352 that are completely different from indexation suffixes (Kamnyu *ni* / *ra*, Tshobdun
 15353 *ni?* / *rp?* and Zbu *ni* / *ré?*, see §9.1.1, J. T.-S. Sun 1998 and Gong 2018). The plural
 15354 marker is cognate to Pumi =-*a* (Daudey 2014: 135); Japhug -*a* regularly corre-
 15355 sponds to Pumi -*a* in the native vocabulary (Jacques 2017c), and it is therefore
 15356 unlikely to be a Northern Gyalrong innovation.

15357 If the Zbu, Tshobdun and Kamnyu Japhug number markers above are con-
 15358 servative, the corresponding Tatshi Japhug *ndzə* / *nəjo* and Cogtse Situ *ndʒe* / *ne*
 15359 forms must therefore be innovations, and by consequence, it cannot be argued
 15360 that the 2/3 indexation suffixes derive from these number markers. The opposite
 15361 scenario is possible: Norde (2009: 204–206) discusses the case of the Irish 1PL pro-
 15362 noun *muid* which comes from one of the allomorphs of the 1PL future indexation
 15363 suffix. A similar type of debonding can account at least for the Tatshi Japhug dual
 15364 *ndzə* nominal marker, from the 2/3 dual -*ndzə* indexation suffix.⁴³ The acquisition
 15365 of indexation suffixes by several non-verbal words discussed in §14.7 may have
 15366 contributed to the reanalysis of indexation suffixes as number-marking enclitics.

15367 Much remains unclear about the history of person indexation suffixes and the
 15368 nature of their relationship with pronouns, possessive prefixes and number mark-
 15369 ers in Gyalrong languages. A more satisfying account of these data will only
 15370 become possible when a fully explicit system of proto-Gyalrong reconstruction,
 15371 and complete data on as many varieties as possible becomes available.

15372 14.8.2 The inverse prefix

15373 Two Gyalrong-internal scenarios could be proposed to account for the origin of
 15374 the inverse prefix.

15375 First, it could be proposed that the inverse comes from the 3SG possessive pre-
 15376 fix. In Tshobdun, Zbu and Situ, the inverse prefix (*o-*, *və-* and *wə-*, respectively) is
 15377 homophonous with the 3SG possessive prefix (see Table 5.2 in §5.1.1.5). This is not
 15378 the case in Japhug, where the inverse *yuu-* / *-wy* is clearly different from the 3SG *u-*,
 15379 but it is possible that the 3SG possessive underwent an irregular development, as
 15380 argued in §5.1.1.5. The 3' → 3SG form would originally be a non-finite form taking
 15381 a possessive prefix (for instance a predecessor of the bare infinitive, §16.2.2), and

⁴³ The case of plural *nəjo* is more complicated: the *nə-* element here probably rather derives from the distal demonstrative.

15382 the inverse prefix would have spread from the 3' → 3 to the mixed scenarios 3 → 2
 15383 and 3 → 1, following the pathways described in Jacques & Antonov 2018.

15384 Second, the partial resemblance between the Japhug allomorph *yuu-* and the
 15385 associated motion cislocative *yuu-* prefix (§15.2.1.1) could support the idea that the
 15386 inverse derives from the cislocative, following a well-known grammaticalization
 15387 pathway (Jacques & Antonov 2014). This hypothesis is however less likely, as the
 15388 cislocative itself may be an innovation in Gyalrong languages (§15.2.1).

15389 In any case, cognates of the inverse prefix are found in other Gyalrongic lan-
 15390 guages (Lai 2015) and in Kiranti (Jacques 2012a), so that whatever the ultimate
 15391 origin of this prefix, it was already grammaticalized at the proto-Gyalrongic level.

15392 14.8.3 The origin of portmanteau prefixes

15393 The presence of portmanteau prefixes in the local 1 → 2 and 2 → 1 configurations in
 15394 Japhug is not unusual crosslinguistically (Heath 1998). However, the resemblance
 15395 of the 1 → 2 prefix *ta-* to the second person *tu-* prefix on the one hand, and of the
 15396 2 → 1 prefix *kua-* to various non-finite velar prefixes (§16.8.1) on the other hand,
 15397 raises the question of their potential historical relatedness.

15398 The form of the local configuration prefixes is very similar in other Gyalrong
 15399 languages, as shown by Table 14.22 (data from Lin 1993: 218, Sun & Shidanluo
 15400 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>tp-</i>	<i>kə-o-, tə-o-</i>
Zbu	<i>tp-</i>	<i>kə-w-, tə-w-</i>
Situ	<i>ta-</i>	<i>kə-w-</i>

15401 Only two differences are found in the local domain across the Gyalrong lan-
 15402 guages: Japhug does not have the inverse *wy-* prefix in the 2 → 1 form, and Zbu
 15403 and Tshobdun allow an alternative form with the second person prefix *tə-* and
 15404 the inverse prefix. In all four languages, the verb takes suffixes that are coref-
 15405 erent with the object (second person in 1 → 2 and first person in 2 → 1). Situ is
 15406 the only language with a suffix *-n* in the 1 → 2SG form, the same as that found in
 15407 intransitive 2SG and 3 → 2SG.

Jacques (2018c: 420–421) proposes that the 1→2 prefix originates from the fusion of the second person prefix *tu-* with the agentless passive *a-* (from **ŋa-*, Jacques & Chen 2007), which yields the expected form in all four languages. In this view, a form like Japhug *ta-mbi* 1→2-chase-sg ‘I will give it to you_{SG}’ would have developed through the following stages:

- **ta-ŋa-mbi-na* 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 *ku-*, 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 *kε-* (Michailovsky 2002), correspondance to Japhug *tu-* in intransitive second person and 2→3, and *ku-* 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.

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

Table 14.23: Comparison of second person forms in Japhug and selected Kiranti languages

	Japhug	Bantawa	Limbu
2.INTR	<i>tu-</i> Σ	<i>ti-</i> Σ	<i>ke-</i> Σ
2→3	<i>tu-</i> Σ	<i>ti-</i> Σ- <i>u</i>	<i>ke-</i> Σ- <i>u</i>
2→1	<i>ku-</i> Σ- <i>a</i>	<i>ti-</i> Σ- <i>aj</i>	<i>ke-</i> Σ- <i>aj</i>
1→2	<i>ta-</i> Σ	Σ- <i>na</i>	Σ- <i>ne</i>

second person possessive prefix *ke-* and the indexation prefix in Limbu on the one hand, and the *ku-* 2→1 portmanteau prefix and the non-finite *ku-* 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 *ku-* 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 *ku-* 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 *ku-* prefix in Japhug (§14.3.2.5) but has an additional inverse prefix *kə-o-* in Tshobdun (Table 14.24, J. T.-S. Sun 2014b).

Table 14.24: Comparison of generic person prefix in Japhug and Tshobdun

	Japhug	Tshobdun
GENR.S	<i>ku-</i>	<i>kə-/kp-</i>
GENR.A	<i>wy-</i>	<i>kə-/kp-</i>
GENR.P	<i>ku-</i>	<i>kə-o-</i>
2→1	<i>ku-</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).

- (187) [ŋa kə-ʃi-ŋ] =tə teŋê tsâs-ŋ
 1SG SBJ:PCP-know[I]-1SG=TOP DEM:PL say[I]-1SG
 'I will say what I know about.' (Cogtse dialect, Y. Lin 2016: 72)

- (188) [sanam-scāt kə no-kə-o-mbâ-ŋ] tə,
 Bsod.nams-Skyid ERG AOR.INV-NMLZ-INV-give-1SG DET
 <zengguangxianwen> u-t^{hi}ɛ 'nə-ŋəs
 name 3SG.POSS-book SENS-be[I]
 ‘What Bsod nams Skyid gave me is the book ‘Zengguan
 (Bragbar dialect, Shuya 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 *kuu*. The idea that the Japhug pattern is innovative is supported by the existence of

15493 irregular verbs whose generic transitive subjects are marked by *kuu-* prefix rather
15494 than the inverse (§14.3.4); these verbs would be the remnants of the stage attested
15495 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

15524 Only A and B-type preverbs are found in non-finite verb forms.

15525 Preverbs occur in slot -3 of the verbal template (§11.2), following Associated
 15526 Motion prefixes (§15.2.1), but preceding inverse and indexation prefixes (§14.2.1.2,
 15527 §14.3.2.3, §14.3.2.7).

15528 The four series of preverbs each comprise seven orientations, which can be
 15529 divided into four subsets (including three spatial dimensions, §15.1.3): vertical (up
 15530 / down), riverine (upstream / downstream), solar (east /west) and the unspecified
 15531 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>

15532 Each of the three spatial dimensions are encoded by a pair of preverbs: upper
 15533 (upwards, upstream, east) vs. lower (downwards, downstream, west) orienta-
 15534 tions. In addition to formal differences between upper and lower orientation
 15535 preverbs, this contrast reflects the fact that each of the three dimensions has
 15536 an intrinsic directionality, encoding the direction of gravity, the flow of water
 15537 and the apparent trajectory of the sun in the sky, respectively. The lower ori-
 15538 entations correspond to the direction of natural motion along these dimensions:
 15539 downwards (drawn by gravity), downstream (drawn by water flow) and west-
 15540 wards (towards the point where the sun sets). The upper orientations encode the
 15541 opposite directions, reflecting the source from which natural motion takes place.

15542 The A-type preverbs have either /x/ or /u/ vocalism, corresponding to upper
 15543 and lower orientations, respectively. They occur in the Aorist (§21.5.1.1, except
 15544 for the 3SG→3' configurations (where the C series is used instead, §14.3.2.2), the
 15545 Imperative (§21.4.2.1) and the Irrealis (§21.4.1.1). In addition, the Past Imperfec-

¹ Only orientable verbs (including motion and manipulation verbs, §15.1.2) are compatible with the unspecified orientation preverbs.

15546 tive *pui-* corresponds to the DOWNWARDS A-type preverb (§21.5.3.1, Y. Lin 2011).
 15547 With subject and object participles, A-type preverbs are used to build perfective
 15548 participles (§16.1.1.2, §16.1.2.2); they do not occur on oblique participles (§16.1.3.4)
 15549 or infinitives (§16.2.1.2).

15550 The B-type preverbs have /u/ vocalism in upper orientations, and /w/ in lower
 15551 orientations. In addition, lower orientations preverbs have a palatalized form.
 15552 This palatalization is either reflected by the addition of a -j- medial in the case
 15553 of *pjuu-* DOWNWARDS or by a shift of from dental (in the A-type preverb) to the
 15554 corresponding palatal for *cʰuu-* DOWNSTREAM and *jnu-* EASTWARDS.² The vowel
 15555 transcribed *w* is mostly realized as [i] in this context (§3.5.2). The B series occurs
 15556 in the Imperfective (§21.2.1) and in the Immediate Perfective Converb (§16.6.3).
 15557 In addition, the *jnu-* prefix marking the Sensory evidential (§21.3.2.1) and the *ku-*
 15558 prefix of the Egophoric Present (§21.3.3.1) and the Dubitative (§21.4.4) are special-
 15559 ized uses of the WESTWARDS and EASTWARDS B-type preverbs. B-type preverbs
 15560 are found with subject, object and oblique participles (§16.1.1.2, §16.1.2.2, §16.1.3.4)
 15561 as well as velar infinitives (§16.2.1.2, §16.2.1.6).

15562 The C-type preverbs have the same onset as the corresponding A-type pre-
 15563 verbs, but their vocalism is neutralized to /a/. This series only occurs in the
 15564 Aorist 3SG→3' configuration of the transitive paradigm (§14.3.2.2).

15565 The D-type preverbs are exclusively used to build the Inferential (Perfective
 15566 §21.5.2.1 and Imperfective §21.5.3.1). These preverbs have the same onsets as those
 15567 of the B series, with a division between non-palatalized UPWARDS preverbs and
 15568 palatalized DOWNWARDS preverbs. The preverbs of the UPWARDS series have /o/
 15569 vocalism, but those of the ‘downward’ series have two variants, with either /o/ or
 15570 /yy/ vocalism in free variation, as illustrated by the 3SG Inferential *jny-me* and
 15571 *jno-me* of the verb *me* ‘not exist’ in (1) and (2), respectively.

- 15572 (1) *tce mtsʰu nuu jny-me tce,*
 LNK lake DEM IFR-not.exist LNK
 15573 ‘Then the lake disappeared.’ (2003nyima-2, 106)
- 15574 (2) *wi-ftsoŋ nuu jno-me, po-nuu-yy-me*
 3SG.POSS-female.hybrid.yak DEM IFR-not.exist IFR-AUTO-CAUS-not.exist
 15575 *qʰe*
 LNK
 15576 ‘Her female hybrid yak was gone, she lost it.’ (gesar 2003, 35)

² In 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.

15577 Since the contrast between /v/ and /o/ is neutralized before the inverse -wy-
 15578 prefix (§14.3.2.7), A- and D-type UPWARDS preverbs have the same surface form
 15579 when they directly precede it, as shown in Table 15.2. The contrast is however
 15580 maintained in the transcription system used in this grammar.

15581 With DOWNWARDS preverbs the contrast is not lost in this context, since both
 15582 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)]

15583 In all four series, the unspecified orientation preverbs behave like the upper
 15584 orientation preverbs (/v/, /u/ and /o/ vocalism in series A, B and D, respectively).

15585 The isolated preverb *k^hu-*, which cannot be included in the system described
 15586 above is found in the archaic form *k^hu-ti* ‘s/he said’ of the verb *ti* ‘say’ (§21.5.4).

15.1.1.2 Preverbs and vowel contraction

15588 Vowel contraction occurs when a type A or B preverb (in tenses forms such as the
 15589 *p^u-* Past Imperfective §21.5.3.1, the *j^{nu}-* Sensory §21.3.2.1 and the *ku-* Egophoric
 15590 Present §21.3.3.1 which require the same preverb for all verbs) directly precedes
 15591 either the stem of a contracting verb (§12.3) or the progressive prefix *asu-*. Vowel
 15592 contraction occurs in an idiosyncratic way depending on the type of preverb. The
 15593 *a-* of contracting verb or of the progressive prefix merges with A-type preverbs
 15594 as [-a-] in the Aorist, and as [-v-] in the Irrealis and Imperative. With B-type
 15595 preverbs the result of the contraction depends on the preceding vowel: [-o-] with
 15596 upper *Cu-* preverbs, and [-v-] with lower *C(j)u-* preverbs. Table 15.3 summarizes
 15597 the resulting forms (not including Irrealis or Imperative); the spelling adopted in
 15598 this grammar uses the intermediate ‘contracting form’.

15599 The surface forms resulting from vowel contraction of A- and B-type preverbs
 15600 are identical to C-type and D-type preverbs, respectively. The only immediate
 15601 difference between D-type preverbs and contracting B-type preverbs is that the
 15602 former show free variation between *Cv-* and *Co-* in the DOWNWARDS series, while

the latter only have the C_y- form. For instance, while the Inferential of *me* ‘not exist’ is either *jnr-me* or *no-me* (see 1 and 2 above) with the two variants of the D-type preverbs, the result of the fusion of the B-type preverb *jnu-* (either Sensory or Imperfective) with either a contracting *a-* initial verb or a progressive *asu-* prefix is *jnu-γ-* [jnr-] and cannot be realized as [no-] except in the case of inverse -*wy-* infixation within the progressive γ<*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>tγ-</i>	<i>tγ-a-</i>	[ta-]
Down (A)	<i>pui-</i>	<i>pui-a-</i>	[pa-]
Upstream (A)	<i>lγ-</i>	<i>lγ-a-</i>	[la-]
Downstream (A)	<i>t^hui-</i>	<i>t^hui-a-</i>	[t ^h a-]
Eastwards (A)	<i>kγ-</i>	<i>kγ-a-</i>	[ka-]
Westwards (A)	<i>nui-</i>	<i>nui-a-</i>	[na-]
Unspecified (A)	<i>jγ-</i>	<i>jγ-a-</i>	[ja-]
Up (B)	<i>tu-</i>	<i>tu-o-</i>	[to-]
Down (B)	<i>pju-</i>	<i>pju-γ-</i>	[pjγ-]
Upstream (B)	<i>lu-</i>	<i>lu-o-</i>	[lo-]
Downstream (B)	<i>c^hui-</i>	<i>c^hui-γ-</i>	[c ^h γ-]
Eastwards (B)	<i>ku-</i>	<i>ku-o-</i>	[ko-]
Westwards (B)	<i>jnu-</i>	<i>jnu-γ-</i>	[jnr-]
Unspecified (B)	<i>ju-</i>	<i>ju-o-</i>	[jo-]

C-type preverbs never appear in contracting contexts, because on the one hand contracting verbs are all intransitive and thus do not take C-type preverbs in the Aorist (§14.3.1), and on the other hand the progressive *asu-* removes all marks of morphological transitivity, including the alternation between A- and C-type preverbs (§14.3.1, §21.5.1.1).

Confusion between C-type preverbs and A-type preverbs with vowel fusion can arise in two cases with transitive verbs selecting the DOWNWARDS orientation. First, the 3→3' Aorist form (for instance *pa-rku* ‘he put it into it’) can have the same surface form (in this case [parku]) as the Past Imperfective of the Passive (§21.5.3.1, §18.1.1) of the same verb (*pui-a-rku* ‘it was put in it’). Second, the 3→3' Aorist Causative (*pa-sui-γt* ‘he wrote it with it, he used it to write it’) can be homophonous (here [pasurγt]) with the Past Imperfective Progressive (*pui-asui-*

15621 *rvt* ‘he was writing it’).

15622 Unlike C-type preverbs, D-type preverbs often occur with contracting verbs
 15623 or with the progressive prefix. In such cases, the result of vowel contraction
 15624 is not distinguishable from that with a B-type preverb. For instance, in (3) the
 15625 Inferential Imperfective *pjy-r-y<nu>yro-nuu* of the verb *anuyro* ‘play’ has the same
 15626 surface form [pjvnwyrónuu] as the corresponding Imperfective *pjuu-r-y<nu>yro-*
 15627 *mu*. It is clear from context however that the form here must be interpreted as
 15628 Inferential Imperfective, because the other verbs in the same passage *pjy-nuu-rr-*
 15629 *rvt-nuu* and *pjy-scit-nuu* are in this form, not in the simple Imperfective.

- 15630 (3) *uu-pi* *ra uu-jmjo* *uu-ηguu* *nuitcu*,
 15631 3SG.POSS-elder.sibling PL 3SG.POSS-dream 3SG.POSS-inside DEM:LOC
 pjy-nuu-rr-y-rvt-nuu, *pjy-r-y<nu>yro-nuu* *q^be, wuma zo*
 15632 IFR.IPFV-AUTO-APASS-write-PL IFR.IPFV-<AUTO>play-PL LNK really EMPH
 pjy-scit-nuu *pjuu-ηu*
 IFR.IPFV-be.happy-PL SENS-be
 15633 ‘In her dream, her elder brothers were drawing, were playing, were very
 15634 happy.’ (140520 ye tiane-zh, 84)

15635 In the Kamnyu dialect of Japhug, however, although vowel contractions in-
 15636 volving D-type preverbs are attested, such ambiguous forms are rare and avoided.
 15637 More commonly, a peg circumfix *kua-...-ci* occurs in these forms: the *kua-* element
 15638 prevents fusion between the D-type prefix and the following vowel, which is
 15639 realized *-r-* in this context.

15640 For instance, instead of *pjy-r-y<nu>yro-nuu*, the more common Imperfective
 15641 Inferential form of *anuyro* ‘play’ is *pjy-k-r-y<nu>yro-nuu-ci* as in (4). The *-ci* suffix
 15642 is originally an evidential marker (cognate to the Tshobdun =*cə* Mediative suffix,
 15643 on which see [J. T. S. Sun 2017](#): 564), but in Kamnyu Japhug it only occurs in
 15644 combination with the *kua-* prefix as a peg element (§11.4).

- 15645 (4) *tce nuura pjy-k-r-y<nu>yro-nuu-ci* *tce*
 15646 LNK DEM:PL IFR.IPFV-PEG-<AUTO>play-PL-PEG LNK
 ‘They were playing.’ (140510 fengwang-zh, 33)

15647 Inferential forms with the peg circumfix *kua-...-ci* regularly occur with contract-
 15648 ing verbs or verbs bearing the progressive prefix in the same contexts as the cor-
 15649 responding non-contracting forms without the peg. For instance, in (5), the verb
 15650 *pjy-k-rryi-ci* ‘it was green’ with the peg circumfix clearly belongs to the same
 15651 TAME category as the two preceding verbs *pjy-tu* ‘there was’ and *pjy-rom* ‘it was
 15652 dry’.

- 15653 (5) *t̪su u-rkui zuu si tu-p^huu pjy-tu, si tu-p^huu nuu*
 path 3SG.POSS-side LOC tree one-tree IFR.IPFV-exist tree one-tree DEM
 15654 *u-p^ha_v u-ntsi nuu pjy-rom zo,*
 3SG.POSS-half 3SG.POSS-one.of.a.pair DEM IFR.IPFV-be.dry EMPH
 15655 *u-p^ha_v u-ntsi nuu pjy-k-yrŋi-ci zo,*
 3SG.POSS-half 3SG.POSS-one.of.a.pair DEM IFR.IPFV-PEG-be.green-PEG EMPH
- 15656
 15657 ‘On the side of the road, there was a tree, one half of that tree was dry
 15658 and the other half was green. (The divination2002, 11-12)

15659 In the Inferential, the peg circumfix becomes a morphological exponent of the
 15660 Passive in addition to the Passive prefix *y-* itself: without the peg, the passive
 15661 would not be easily differentiable from the base transitive verb. For instance,
 15662 without the peg element, the Inferential Imperfective Passive *pjy-k-y-ta-ci* ‘It had
 15663 been put there’ in (6) would be identical to the Inferential *pjy-ta* ‘he put it there’
 15664 with the DOWNWARDS orientation.

- 15665 (6) *tcoχtsi u-ta_v nutcu, nykinuu, qajyi kuβde, c^ha kuβde-phoŋ*
 15666 table 3SG.POSS-on DEM:LOC FILLER bread four alcohol four-bottle
pjy-k-y-ta-ci.
 IFR.IPFV-PEG-PASS-put-PEG
- 15667 ‘On the table, there were four pieces of bread and four bottles of alcohol.’
 15668 (140510 sanpian sheye-zh, 51)

15669 The peg circumfix appears in first person forms, following the indexation suffix
 15670 (as in 7), but never in second person forms, as the *tu-* prefix (§14.2.1.2) occurs
 15671 between the preverb and the following contracting vowel (8).

- 15672 (7) *azo, [...] turme yuu u-vjov* *ny-k-yβzu-a-ci*
 15673 1SG person GEN 3SG.POSS-servant IFR-PEG-become-1SG-PEG
 ‘I have become man’s slave!’ 2014 ma he lu-zh, 29)
- 15674 (8) *nŋzo pya ny-tu-ŋβzu cti tce*
 15675 2SG bird IFR-2-become be.AFF:FACT LNK
 ‘You have become a bird!’ (160630 abao-zh, 151)

15676 The *-ci* suffixal element can be elided, though not in utterance-final position
 15677 (§11.4.2).

15.1.1.3 Preverbs in eastern Japhug dialects

15679 The Kamnyu dialect of Japhug stands apart from most varieties in terms of its
 15680 system of preverbs in two regards: the status of C- and D-type preverbs and the
 15681 form of the DOWNWARDS orientation preverbs.

15682 The Xtokavian (§6.5.1) dialects of Japhug spoken in Sarndzu and Tatshi are
 15683 better analyzed with only two series of preverbs: the A- and B-types (Y. Lin 2011:
 15684 70, with a different terminology). Instead of the C- and D-type preverbs, Lin
 15685 & Luoerwu (2003) and Y. Lin (2011) posit two additional vowel-contracting *a*-
 15686 prefixes in these dialects, one occurring in the 3→3' Aorist configuration, and
 15687 the other one in the Inferential.

15688 These prefixes occur with the A- and B-type preverbs, respectively. In third
 15689 and first person forms, the surface forms (resulting from the fusion of these pre-
 15690 verbs with the *a*- 3→3' Aorist or Inferential) are identical (minor pronunciation
 15691 differences excepted) to the corresponding C-type and D-type preverbs in Kam-
 15692 nyu Japhug, following fusion rules similar to those presented in Table 15.3

15693 For instance, in (9a) and (9b), the verb forms transcribed as *nə-a-fe* (in Tatshi)
 15694 and *nə-a-ce* (in Kamnyu) are near-identical in surface pronunciation and function.

- 15695 (9) a. *lamu nə-a-fe*

ANTHR IFR:WEST-IFR-go

15696 ‘Lhamu went westwards.’ (Tatshi dialect, Y. Lin 2011: 70)

- 15697 b. *lamu nə-a-ce*

ANTHR IFR:WEST-go

15698 ‘Lhamu went westwards.’ (Kamnyu dialect)

15699 In second person forms, on the other hand, the second person prefix in Tatshi is
 15700 inserted between the B-type preverb and the *a*- Inferential prefix (A-type preverb
 15701 and *a*- 3→3' prefix, respectively), as can be seen by comparing the Inferential
 15702 second person intransitive in Tatshi (10a) and Kamnyu (10b). The change in the
 15703 relative ordering between the vowel-contracting prefixes and the second person
 15704 prefix has modified the structure of the preverbal system: the Kamnyu dialect has
 15705 gained two additional series of preverbs, but lost one slot in the verbal template
 15706 (§11.2).

- 15707 (10) a. *nə-tə-a-nuŋemk^be*

B.PREVERB-2-IFR-be.lean

15708 ‘You became lean.’ (Tatshi dialect, heard in context)

- 15709 b. *ŋy-tu-nuŋymk^be*
 IFR-2-be.lean
 15710 ‘You became lean.’ (Kamnyu dialect)

15711 Alternatively, it is possible to analyze C- and D-type preverbs in Kamnyu Ja-
 15712 phug as A- and B-type preverbs with vowel fusion following Lin & Luoerwu
 15713 (2003), but there is little Kamnyu-internal data to support such an analysis, since
 15714 D-type preverbs are not segmentable synchronically in this variety.

15715 While in the case of D-type preverbs the vowel fusion approach proposed by
 15716 Lin & Luoerwu (2003) is less attractive in Kamnyu Japhug than in the Tatshi di-
 15717 alect, for the C-type preverbs it is equally applicable to both dialects. First, there
 15718 is no prefix ordering difference between Kamnyu and Tatshi: the 3→3' Aorist
 15719 *a*- prefix posited by Lin Youjing never occurs in verb forms with prefixed per-
 15720 son indexation markers (second person and/or inverse configurations). Second,
 15721 there is arguably one additional trace of the 3→3' Aorist *a*- prefix in the Kamnyu
 15722 dialect: the *ca*- variant of the Apprehensive *cuu*- prefix (§21.7.1) when used with
 15723 transitive verbs in 3→3' form.

15724 There can be little doubt that the fusion hypothesis is correct historically –
 15725 there was a stage where a 3→3' Aorist prefix did exist. However, from a syn-
 15726 chronic point of view, it is not necessary to analyze this prefix as a separate
 15727 morpheme. Furthermore, I decided to favour the non-contracting analysis of
 15728 the preverbs to avoid potential confusion with the *a*- Denominal (§20.2), Passive
 15729 (§18.1) and Reciprocal (§18.4.1) prefixes.

15730 Another substantial difference between Kamnyu Japhug and the Xtokavian di-
 15731 alects concerns the B-type DOWNWARDS preverb. As shown by Table 15.4 (based
 15732 on Y. Lin 2011: 70), the A- and B-type preverbs in Tatshi are nearly completely
 15733 identical to the corresponding Kamnyu preverbs (except for notational differ-
 15734 ences such as *v* and *ə* instead of *r* and *ə*). The only real difference is the DOWN-
 15735 WARDS B-type preverb, which is *pju-* in Kamnyu but has the form *cə-* with a
 15736 palatal stop instead of a cluster in Tatshi. It is possible that the Tatshi palatal re-
 15737 sults from the palatalization of *p*-, but no other examples of **pj-* → *c-* are known to
 15738 me. Alternatively, Kamnyu *pju-* (and D-type *pjr-*) could be analogically based on
 15739 the A-type preverb *pui-*. Another possible origin for the *cə-* of xtokavian dialects
 15740 is the base *-ki* DOWNWARDS found in the adverbs *aki* and *tceki* (§15.1.1.4).

15741 **15.1.1.4 Orientation preverbs and orientation nouns and adverbs**

15742 Excluding the unspecified orientation, there is a one-to-one relation between
 15743 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>

15744 relator nouns (§8.3.4.1) and orientation adverbs (§22.2.6), as the data in Table 15.5
 15745 show.

15746 The initial consonant of the orientation preverbs is identical to that of the
 15747 locative adverbs (Table 15.5), except for (i) the WESTWARDS orientation with a
 15748 nasal *n*- instead of a prenasalized *nd*- (ii) the DOWNWARDS orientation, which
 15749 corresponds to -*ki* in some adverbial forms (*aki* and *tceki*).

15750 The vocalism of the preverbs is only partially predictable from that of the corre-
 15751 sponding adverbs: the prefixes *tʰu-* and *nu-* could be seen as the *status constructus*
 15752 of the adverbs *tʰi* ‘downstream’ and *ndi* ‘westwards’ with -*i* → -*u* alternation, but
 15753 the pattern is less clear in the remaining preverbs. In the case of the UPWARDS
 15754 preverbs, the *t*- prefixes are more likely to be related to the -*tu* root found in the
 15755 adverbs *atu* and *tcetu* rather than the -*taš* root found in the locative noun *u-taš*
 15756 (on which see §8.3.4.3).

15757 The irregular consonantal correspondence between the preverb *nu-* and the
 15758 adverb *ndi* of the DOWNWARDS orientation could be interpreted in three ways.

15759 First, the preverb could have been grammaticalized from the adverb, and a
 15760 sound change **ndi-* → *nu-* could have taken place once it had become a prefix, due
 15761 to a phonotactic constraint against prenasalized stops (and complex segments
 15762 in general) in prefixal position (§11.2.4). This hypothesis is unlikely however,
 15763 because orientation preverbs are precisely the only prefixes that appear to violate
 15764 the phonotactic constraints observed by all other elements of the prefixal chain,
 15765 as shown in particular by the presence of aspirated segments (*tʰu-*), laterals (*lv-*)
 15766 and clusters (*pju-*).

15767 Second, the adverb *ndi* could originate from a compound, whose first element
 15768 *n*- would come from the same etymon as the WESTWARDS preverb *nu-*.

15769 Finally, the possibility that the preverb *nu-* and the adverb *ndi* are historically
 15770 unrelated should also be considered.

15771 The strong resemblance between the preverbs and the locative adverbs could
 15772 be interpreted as due to a relatively recent grammaticalization. However, just as
 15773 in the case of the relation between pronouns and indexation suffixes (§14.8.1), the
 15774 possibility of mutual contamination between partially cognate paradigms has to
 15775 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>tr-</i>	<i>taꝝ</i>	<i>çarṭaꝝ</i>	<i>uu-taꝝ</i>	<i>tçetu</i>
Downwards	<i>puu-</i>	<i>pa</i>	<i>çarpa</i>	<i>uu-pa</i>	<i>tçeki</i>
Upstream	<i>lꝝ-</i>	<i>lo</i>	<i>çarlo</i>	<i>uu-lrcu</i>	<i>tçelo</i>
Downstream	<i>t^huu-</i>	<i>t^hi</i>	<i>çanj^hi</i>	<i>uu-t^hrcu</i>	<i>tçet^hi</i>
Eastwards	<i>kꝝ-</i>	<i>kua</i>	<i>çanjkua</i>	<i>uu-kycu</i>	<i>tçekua</i>
Westwards	<i>nuu-</i>	<i>ndi</i>	<i>çanjndi</i>	<i>uu-ndycu</i>	<i>tçendi</i>

15776 15.1.1.5 Verbs incompatible with orientation preverbs

15777 In the West Gyalrongic languages, including Stau (Jacques et al. 2017: 601) or
 15778 Khroskyabs (Lai 2017: 311), some verbs never take orientation preverbs even in
 15779 the Imperative and Aorist. This appears to be an archaic feature, as it is restricted
 15780 to a very small set of cognate verbs, for instance Stau *vde* ‘see’ and Khroskyabs
 15781 *vdē* ‘see’. No such phenomenon exists in Japhug.³ The Japhug cognates of West
 15782 Gyalrongic preverb-less verbs regularly take orientation preverbs (for instance,
 15783 *mto* ‘see’ selects the DOWNWARDS orientation, see §15.1.5.9).

15784 A handful of verbs never occur with orientation preverbs in Japhug, but this
 15785 phenomenon is completely different from the West Gyalrongic case. In Japhug,
 15786 preverb-less verbs have a defective paradigm, and only occur in one TAME cat-
 15787 egory. Two of them (*mx-xsi* ‘it is not known’ and *krtupa* ‘tell’, §14.3.4) are only
 15788 attested in the Factual Non-Past, and the absence of preverbs is thus regular. The
 15789 existential verbs *yryzu* ‘exist’ and *maje* ‘not exist’ are only found in the Sensory
 15790 Evidential (§14.2.2, §21.3.2), which is normally marked by the preverb *nuu-*, and

³ Still, there are some indirect clues that *ti* ‘say’ could have had irregular preverbless forms at an earlier stage (§21.3.1.4).

15 Orientation and associated motion

15791 can be considered to be the suppletive forms of *tu* ‘exist’ and *me* ‘not exist’, re-
15792 spectively.

15.1.2 Orientable verbs

15794 Most verbs in Japhug have one or several lexicalized orientation(s) (§15.1.5), and
15795 when used with preverbs, these no longer express spatial orientation or direction.
15796 Yet, there is a subclass of verbs, in which the preverbs retain their original spatial
15797 meaning: these are called in this grammar “orientable verbs”.

15798 The defining feature of these verbs is not simply the ability to take any of
15799 the six orientation preverbs, but more importantly their compatibility with the
15800 *unspecified orientation* (§15.1.1.1), which is never used as a lexicalized orientation.

15801 Orientable verbs can be subdivided into three main categories: motion verbs
15802 ('go, 'come' etc), manipulation verbs ('bring', 'take' etc) and orienting verb ('look
15803 towards', 'turn towards' etc). In addition, some stative verbs can be converted
15804 into orientable verbs. This section presents the specificities of a sample of these
15805 categories, and then describes the uses of preverbs to express spatial direction.

15.1.2.1 Motion verbs

15806 Motion verbs in Japhug can be subdivided into four categories, depending on on
15807 their transitivity and on whether they select a local phrase.

15808 First, allative motion verbs select a locative phrase (in the absolute §8.1.8,
15809 with a locative postposition §8.2.4 and/or a relator noun §8.3.4) expressing the
15810 goal / direction of the motion. The most common allative verbs are *ce* ‘go’ and *yi*
15811 ‘come’ (§15.1.2.3), which can also take a purposive complement (§16.1.1.6).

15812 Other allative verbs include *zyut* ‘reach, arrive’ (11), *cit* ‘move’, *p^hyo* ‘flee’, *mtsak*
15813 ‘jump’, *cq^hlyt* ‘disappear’ and *jyrt* ‘turn around and go back’, and derived vertitive
15814 verbs (§19.2) such as *nuce* ‘go back’.

15815 The orientation preverbs of allative verbs express the trajectory towards the
15816 goal, as in (11). Note here the orientation concord between the EASTWARDS pre-
15817 verb *ko*- and the locative relative noun *w-kycu* ‘east of’ (§15.1.2.7).

- 15818 (11) *w-kycu tce icq^ha mts^hu kui-wyrum nui yui*
15819 3SG.POSS-east LOC the.aforementioned lake SBJ:PCP-be.white DEM GEN
15820 *w-ta^h nutcu ko-zyut-ndzi.*
15821 3SG.POSS-on DEM:LOC IFR:EAST-reach-DU

‘In the east from there, they arrived at the white lake.’ (28-smAnmi, 273)

15822 In addition, reflexive-causative derivations from allative verbs, or from verbs
 15823 of relative location, such as *zyrszyut* ‘manage to reach’ and *zyrsyrbat* ‘move
 15824 closer’ from *zyut* ‘arrive’ and *armbat* ‘be near’ (§15.1.2.5, §18.3.4.3), can also be
 15825 allative verbs.

15826 There is always an implicit goal with *ce* ‘go’, *yi* ‘come’ and *zyut* ‘arrive’, even
 15827 when it is not overt, as in (12). In this example, the locative adverb *alo* ‘upstream’
 15828 (here ‘closer to the mountain’, see §15.1.3.2) refers to the path of the motion, not
 15829 its goal. The goal, being encoded by the EASTWARDS preverb, would have to be
 15830 expressed with a eastwards locative noun or adverb (§15.1.2.7).

- 15831 (12) *alo ny alo ky-ye-a ma ui-yyri*
 upstream ADD upstream AOR:EAST-come[II]-1SG LNK 3SG.POSS-front
 15832 *ku-kua-yi tce, nui-yuutsʰydaiy.*
 IPFV:EAST-GENR:S/O-come LNK SENS-be.hot

15833 ‘I came (here, eastwards from the point of origin) by (the road that lies)
 15834 closer to the mountain, when one comes by the (road that is located) in
 15835 the front, it is too hot.’ (conversation, 140510)

15836 Second, the verb *łob* ‘come out’ is an ablative motion verb, selecting a locative
 15837 phrase expressing the point of departure of the motion event, as *ndzom u-pa*
 15838 *nutcu* ‘from under the bridge’ and *tui-ci u-rkui nutcu* ‘from the side of the river’ in
 15839 (13) and *tumunymkʰa zuu* ‘from heaven’ in (14). The preverb refers to the direction
 15840 from this point of origin to the goal (which may be left unspecified), a motion
 15841 upwards in (13), and downwards in (14).

- 15842 (13) *tce ndzom u-pa nutcu tui-ci u-rkui*
 LNK bridge 3SG.POSS-under DEM:LOC INDEF.POSS-water 3SG.POSS-side
 15843 *nutcu pyxtciu nui to-nui-łob tce*
 DEM:LOC bird DEM IFR:UP-AUTO-come.out LNK
 15844 ‘The bird came out from under the bridge, near the river.’ (2002 qaCpa,
 15845 191)

- 15846 (14) *tumunymkʰa zuu pjy-nui-łob-nui*
 heaven LOC IFR:DOWN-AUTO-come.out-PL
 15847 ‘(They) came down from heaven.’ (150828 niulang-zh, 48)

15848 The verb *yi* ‘come’ sometimes selects a locative phrase referring to the source
 15849 of the motion, rather than to the goal, as shown by (15), describing an action
 15850 similar to (14).

15 Orientation and associated motion

- 15851 (15) *spikuku zo tce tumuanymk^ha nutcu, qro χsum*
 every.day EMPH LNK heaven DEM:LOC pigeon three
 15852 *pjuu-yi-nuu*
 IPFV:DOWN-come-PL
 15853 ‘Everyday, three pigeons came down from heaven.’ (31-deluge, 47)

15854 Another ablative verb is the reflexive-causative *zyrsyrrq^{hi}* ‘move further away’
 15855 derivation from the stative verb *arq^{hi}* ‘be far’ (see §15.1.2.5).

15856 Third, atelic motion verbs do not select a locative phrase. This category in-
 15857 cludes verbs expressing the speed of motion (*rjuy* ‘run’, *ŋke* ‘walk’), or non-
 15858 terrestrial motion (*nuqambumbjom* ‘fly’, *ndzab* ‘’). With these verbs, when a loca-
 15859 tive phrase is present, it generally indicates the path of the motion, not the goal,
 15860 as in (16).

- 15861 (16) <*bazi> u-ŋgu* *ri* *ty-ŋke-a* *ma, kuu-yrq^{hi}* *ky-ce*
 yard 3SG.POSS-in LOC AOR-walk-1SG LNK SBJ:PCP-be.far INF-go
 15862 *mua-ku-c^ha-a.*
 NEG-PRS-can-1SG
 15863 ‘I had a walk in the yard, I cannot go very far.’ (conversation, 2017-09-21)

15864 To specify a goal, the atelic motion verb is usually conjoined with an allative
 15865 verb, in particular *ce* ‘go’ or *yi* ‘come’, as in (17).

- 15866 (17) *rjymts^hu u-pco* *tce jo-ndzab* *tce jo-ce.*
 sea 3SG.POSS-side LOC IFR-swim LNK IFR-go
 15867 ‘He swam towards the sea.’ (150830 baihe jiemei-zh, 212)

15868 With the verb *rjuy* ‘run’ there are apparent examples of locative phrases indi-
 15869 cating the goal as in (18), but only in texts translated from Chinese, and this may
 15870 be a calque, though such examples are not considered clumsy by Tshendzin.

- 15871 (18) *rjara u-ŋgu* *c^hy-rjuy* *ri,*
 yard 3SG.POSS-in IFR:DOWNSTREAM-run LNK
 15872 ‘He ran out into the yard.’ (140505 bulaimei-zh, 106)

15873 The verb *ŋke* ‘walk’ is barely attested with the unspecified orientation preverbs;
 15874 it only occurs with these prefixes when in a serial verb construction (§25.4.1)
 15875 with an allative motion verb, as in (19). When used on their own, the UPWARDS
 15876 preverbs occur to express unspecified orientation, as in (16) above.

- 15877 (19) *tce jo-ŋke jo-će tce tce, <changcheng> [...] u-kuw-βzu*
 LNK IFR-walk IFR-go LNK LNK great.wall 3SG.POSS-SBJ:PCP-make
 15878 *ra nuu-cki tce jo-zyuit.*
 PL 3PL.POSS-DAT LOC IFR-arrive
 15879 ‘She went (there) on foot and arrived where people were building the
 15880 Great Wall.’ (150827 mengjiangnv-zh, 147-149)

15881 The distributed action verb *nycuue* ‘go around’ (from *če* ‘go’) does not take defi-
 15882 nite goals (§19.4), and in addition is only compatible with unspecified orientation
 15883 preverbs.

15884 Fourth, transitive motion verbs include *βji* ‘chase, catch up with’, *pjvł* ‘go around,
 15885 cross, avoid’, *pyar* ‘turn over’ and *numgla* ‘step over’, which can also occur with
 15886 the non-specific orientation preverbs, as in (20). The object of these verbs is the
 15887 location or entity around which (or through/towards which) the motion event
 15888 takes place.

- 15889 (20) *zgo tʰystway ja-nnuu-pyav-ndzi, tui-ci*
 mountain how.many AOR:3→3'-AUTO-turn.over-DU INDEF.POSS-water
 15890 *tcʰi jarma ja-n-numgla-ndzi my-xsi ma,*
 what about AOR:3→3'-AUTO-cross-DU NEG-GENR:know LNK
 15891 ‘It is not known how many mountains and rivers they crossed.’
 15892 (qajdoskAt 2002, 50)

15893 The transitive verb *nunqʰu* ‘go along, follow’ (§20.7.2) is also compatible with
 15894 the unspecified orientation preverbs, but can also select the UPWARDS preverbs
 15895 as default, like *ŋke* ‘walk’.

15.1.2.2 Manipulation verbs

15896 Manipulation verbs are transitive verbs expressing a motion involving two enti-
 15897 ties.⁴ The subject, generally (but not exclusively) animate causes the object (proto-
 15898 typically, an inanimate) to move (in some case together with him/her/it). As
 15899 in the case of motion verbs, there are several categories depending on whether
 15900 a locative phrase is selected and the nature of the motion causation.

15901 Allative manipulation verbs select a locative phrase indicating the goal of the
 15902 motion, such as *<xuexiao> yuu u- <caochang> u-χcyl* ‘the center of the school’s

⁴ The term ‘caused accompanied motion’ has been suggested to replace ‘manipulation’ (Margetts et al. 2019).

15 Orientation and associated motion

15904 playground' in (21) or *sxt̪a kui-yrq^{hi} zu* 'to a place far away' in (22). The presence
 15905 of a locative phrase is however always optional (§14.5.4).

- 15906 (21) *ji-k^hutsa* *sy-rku* *ts^haj* *nunuu*,
 1PL.POSS-bowl OBL:PCP-put.in cupboard DEM
 15907 *ta-nyjovjov-nuu* *ta-nuit^haj-nuu* *q^he*
 AOR:3→3'-lift.up.and.go.around-PL AOR:3→3'-lift.up.and.carry-PL LNK
 15908 *rcauu*, <*xuexiao*> *yuu* *wi-<caochang>* *wi-χcyl* *zo*
 UNEXP:DEG school GEN 3SG.POSS-playground 3SG.POSS-center EMPH
 15909 *na-tsum-nuu*.
 AOR:3→3':EAST-take.away-PL
 15910 'They lifted up the cupboard where we put our bowls, and carried it to the
 15911 center of the school's playground.' (150831 BZW kAnArRaR, 22)
- 15912 (22) *wi-pci* *zui jú-wy-sco*, *sxt̪a kui-yrq^{hi}* *zui*
 3SG.POSS-outside LOC IPFV-INV-send place SBJ:PCP-be.far LOC
 15913 *pjú-wy-lst* *ma-pú-wy-sat* *ra*
 IPFV:DOWN-INV-release NEG-IMP-INV-kill be.needed:FACT
 15914 *tu-kui-ti* *pui-ηu*
 IPFV:DOWN-GENR:S/O-say SENS-be
 15915 'One has to send (the snake) outside, to a place far away without killing it,
 15916 people say.' (2010-11, 11)

15917 Allative manipulation verbs can be divided into several subcategories. Verbs of
 15918 transportation, in which the subject carries the object and moves together with
 15919 it/him include *tsum* 'take away' and *γut* 'bring', the transitive counterparts of
 15920 the motion verbs *ce* 'go' and *yi* 'go' (§15.1.2.3), *ru* 'fetch, bring' (discussed in more
 15921 detail in §15.2.9). Verbs of accompanied motion, whose subject and objects move
 15922 together along the same trajectory, include *mts^{hi}i* 'guide', *no* 'drive away', *sco* 'send,
 15923 see off' and *l^{yt}* 'release'.⁵ The latter two verbs can also refer to transportation in a
 15924 vehicle, as in (23). Verbs of accompanied motion can occur with a locative phrase,
 15925 but such uses are very rare.

- 15926 (23) *wi-wa* *kui yui-l^{yt}-wy-l^{yt}-i*
 3SG.POSS-father ERG CISL-IFR:UPSTREAM-INV-release-1PL
 15927 'His father give us a ride here (from Chengdu to Mbarkham).' (elicited)

⁵ This 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*.

15928 Allative verbs of induced motion comprise the causative derivations of motion
 15929 verbs, in particular *suye* ‘invite, cause to come’ and *suxce* ‘send, cause to go’. Only
 15930 the object undergoes the motion, as in (24).⁶

- 15931 (24) *rjwul rjyskyt u-tas t̪y-wy-sux-ce nui-ŋu*
 silver stairs 3SG.POSS-ON IFR:UP-INV-CAUS-go SENS-be
 15932 ‘They made her go up the silver stairs.’ (2003 Kunbzang, 251)

15933 The verbs *mja* ‘take’ (§19.7.3) and *tçyt* ‘take out’ when used as manipulation
 15934 verbs select a locative phrase which can refer to the goal, as in (26), but also in
 15935 some cases to the point of origin of the motion, as in (25). These verbs do not
 15936 necessary imply translational motion of the subject (only motion of the hands).

- 15937 (25) *jy-mtsur qʰe tçendyre ur-pʰunŋgu nuiču icqʰa nui,*
 IFR-be.hungry LNK LNK 3SG.POSS-fold.of.clothes DEM.LOC FILLER DEM
 15938 *qajyi ci jy-tçyt tce to-nui-ndza.*
 bread INDEF IFR-take.out LNK IFR-AUTO-eat
 15939 ‘He became hungry, took a piece of bread from the folds of his clothes
 15940 and ate it.’ (150830 san ge heshang-zh, 139)

- 15941 (26) *rjymtsʰu u-mŋu zuu ju-tçyt-nuu tce*
 ocean 3SG.POSS-border LOC IPFV-take.out-PL LNK
 15942 ‘(The whalers) take (the whale) to the shore of the ocean.’ (160703 jingyu,
 15943 35)

15944 Atelic manipulation verbs cannot select a locative phrase. Some atelic verbs
 15945 are not orientable, and cannot take the unspecified orientation preverbs. For
 15946 instance, *nutʰaj* ‘carry’ (a verb borrowed from Chinese, see §20.11) is only com-
 15947 patible with the UPWARDS orientation, and requires to be used with an allative
 15948 verb such as *tsum* ‘take away’ to specify the goal and the orientation, as in (21)
 15949 above.

15.1.2.3 Motion deixis

15951 Motion and manipulation verbs both have a contrast between translocative (*ce*
 15952 §15.1.2.1, *tsum* §15.1.2.2) and cislocative (*yi* §15.1.2.1, *yut* §15.1.2.2), like the corre-
 15953 sponding associated motion prefixes (*čuu-* §15.2.1.2, *yu-* §15.2.1.1).

⁶ However, 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).

The translocative and cislocative verbs can often be translated as ‘go/take away’ and ‘come/bring’, respectively. However, these translations may be misleading, as the criteria for determining the deictic center in Japhug are not identical to those of Chinese or English.

The cislocative verbs are required not only in case of motion towards the location of the speaker, they have to be used whenever a motion is directed towards a spatial location related either to the speaker *or* the addressee, even in the case of motion from the location of the speaker to that of the addressee. For instance, while in Chinese (and most languages of Europe) both 来你家 *<lái nǐ jiā>* ‘come to your house’ and 去你家 *<qù nǐ jiā>* ‘go to your house’ are grammatical, in Japhug only the cislocative verbs are employed in this case. In (27) for instance, replacing *ju-yi-a* by *ju-çe-a* would result in a very clumsy clause.

- (27) *azō tʰyjtcu jamar ny-kʰa ju-yi-a pe?*
 1SG when about 2SG.POSS-house IPFV-come-1SG be.good:FACT
 ‘At what time should I go to your house?’ (elicited)

Similarly, the cislocative is necessary when both addressee and speaker go together, in sentences with the secutive *wu-rca* (§8.3.2) such as (28), (29) (see also 62 in §15.1.3.3). The translocative *çe* ‘go’ is never attested in such contexts.

- (28) *a-rca jy-yi*
 1SG.POSS-following IMP-come
 ‘Come with me.’ (several attestations)

- (29) *ny-rca tu-yi-a ra ma kutcu*
 2SG.POSS-following IPFV:UP-come-1SG be.needed:FACT LNK here
azō-sti ku-ryz̩i-a mūj-cʰa-a
 1SG-alone IPFV-stay-1SG NEG:SENS-can-1SG
 ‘I am going (to heaven) with you, I cannot stay here alone.’ (02-deluge, 79)

The translocative manipulation verb *tsum* ‘take away’ however can be used with a second person secutive, as in (30).

- (30) *ny-rca tu-ku-tsum-a ra*
 2SG.POSS-following IPFV:UP-2→1-take.away-1SG be.needed:FACT
 ‘Take me with you (to heaven).’ (02-deluge, 70)

15980 15.1.2.4 Orienting verbs

15981 Orienting verbs express change of orientation without translational motion, in-
 15982 volving a pointing/aiming gesture towards a goal. This category includes the
 15983 intransitive *ru* ‘look at’ (§14.2.4), the transitive verbs *ctʰuz* ‘turn towards’ and *tʰu*
 15984 ‘built’ (of roads or bridges; this verb also has additional meanings such as ‘leave
 15985 (a trace)’ as in 33 in specific contexts), as well as the anticausative *ndu* ‘be spread’
 15986 (§18.5).

15987 With the verb *ctʰuz* for instance, the preverb indicates the orientation towards
 15988 which the object is directed, and it can correlate with locative adverbs (31) or
 15989 locative phrases (32).

- 15990 (31) *tce tcekuu zuu rŋul-kʰri ndi ny-ctʰuz tcendi*

LNK east.DISTAL LOC silver-seat west IFR:WEST-turn.towards west.DISTAL

- 15991 *zui kuu ko-ctʰuz tce,*
LOC east IFR:EAST-turn.towards LNK

15992 ‘In the east side, he turned the silver seat towards the west, and in the
 15993 west side he turned (the other seat) towards the east.’ (smAnmi2003, 157)

- 15994 (32) *tce nuu kʰutsa nuu tu-ctʰuz-nuu tui-mpav*

LNK DEM bowl DEM IPFV:UP-turn.towards-PL INDEF.POSS-eye

- 15995 *u-pa ri tu-ctʰuz-nuu kuu-fse tce,*
3SG.POSS-below LOC IPFV:UP-turn.towards-PL INF:STAT-be.like LNK

15996 ‘(The lamas) turn the bowl upwards below the eye (of the patient).’
 15997 (27-tApGi, 20)

15998 Orienting verbs are also compatible with unspecified orientation preverbs, as
 15999 example (33) shows.

- 16000 (33) *kuu-fsor uu-jrob kuu-fse ci*

SBJ:PCP-be.bright 3SG.POSS-trace SBJ:PCP-be.like INDEF

- 16001 *ju-tʰi tce,*
IPFV:UNSPECIFIED-leave.trace[III] LNK

16002 ‘The shooting star leaves something like a bright trail.’ (29-mWBZi, 92)

16003 15.1.2.5 Conversion to orientable verbs

16004 A handful of stative verbs can take the unspecified orientation preverbs and be
 16005 converted to dynamic orientable verbs. The stative verbs of relative location *arm-*
 16006 *bat* ‘be near’ and *arqʰi* ‘be far’ can be used in the meanings ‘move closer’ and

15 Orientation and associated motion

16007 ‘move further away’ identical to the reflexive-causative derived verbs *zÿysÿrmbat*
16008 ‘move closer’ and *zÿysÿrq^{hi}* ‘move further away’ (§15.1.2.1, §18.3.4), as in (34).

16009 (34) *jy-armbat tce ku-rto^b tce, tceri uzo u-pi bnuuz*
AOR-be.close LNK IPFV-look LNK LNK 3SG 3SG.POSS-elder.sibling two
16010 *nunni pjy-ŋu-ndzi.*
DEM:DU IFR(IPFV)-be-DU

16011 ‘As he moved closer, he saw that (the people about to be executed) were
16012 his brothers.’ (140507 jinniao-zh, 334)

16013 Finally, the stative verb *nat* ‘be tired’ occurs with the indefinite orientation
16014 preverbs in the meaning ‘become tired (from walking/running)’, as in (35).

16015 (35) *mui-jy-nat zo mꝫctṣa jo-ce*
NEG-AOR-be.tired EMPH until IFR-go
16016 ‘He went (after them) until he became tired.’ (160706 poucet6, 45)

15.1.2.6 Complement clauses

16018 Some complement-taking verbs, in particular phasal verbs (§24.5.6.2) such as *za*
16019 ‘begin’, select the orientation of the verb in the complement clause, and can be
16020 used with indefinite orientation preverbs (§24.3.5).

15.1.2.7 Orientation concord

16022 Clauses containing a orientable verb generally show agreement between the
16023 orientation of the preverb and that of orientation nouns and adverbs (§8.3.4.1,
16024 §15.1.1.4).

16025 In (36) for instance, the UPSTREAM *lo-* and *c^hy-* DOWNSTREAM preverbs correlate
16026 with the adverbs *alo* ‘upstream’ and *at^{hi}* ‘downstream’, respectively, expressing
16027 here a back and forth motion.

16028 (36) *alo ny lo-rfuy* *at^{hi} ny*
upstream ADD IFR:UPSTREAM-run downstream ADD
16029 *c^hy-rfuy*
IFR:DOWNSTREAM-run
16030 ‘He ran upstream and downstream.’ (160720 kandZislama, 67)

16031 In (37), the WESTWARDS *jy-* preverb corresponds to the orientation relator
16032 noun *u-ndycu* ‘west of’. In the same story, the main character comes back to the

16033 same place on the return trip, from the opposite direction, and the EASTWARDS
 16034 orientation preverb and relator noun are found instead (example 11, §15.1.2.1).

- 16035 (37) *wi-ndycu tce, mts^hu kui-wyrum ci ny-k-xtuy-ci.*
 3SG.POSS-west LOC lake SBJ:PCP-be.white INDEF IFR:WEST-PEG-meet-PEG
 16036 ‘In the west from there, he came upon a white lake.’ (28-smAnmi, 102)

15.1.3 The tridimensional system

16038 Orientation preverbs in Japhug are organized in a three-dimensional system (§15.1.1.1)
 16039 like spatial postpositions, relator nouns and adverbs (§8.2.10, §8.3.4.1, §22.2.6).
 16040 Very similar orientation systems are found in other Gyalrong languages, in par-
 16041 ticular Tshobdun (J. T.-S. Sun 2000a) and the Cogtse dialect of Situ (Lin 1993; Y.
 16042 Lin 2002; Y.-J. Lin 2017).⁷

16043 The present section describes the concrete spatial uses of each of the three
 16044 dimensions (vertical, riverine and solar)⁸ with orientable verbs. The discussion
 16045 here not only applies to orientation preverbs, but also to all nouns, postpositions
 16046 and adverbs encoding orientation.

15.1.3.1 The vertical dimension

16048 The basic meaning of the UPWARDS and DOWNWARDS preverbs, adverbs and lo-
 16049 cator nouns is to encode relative position or motion on the axis that is perpen-
 16050 dicular to the ground. A typical use of these preverbs with orientable verbs for
 16051 instance is to describe motion up and down trees or stairs, as shown by (38) and
 16052 (39).

- 16053 (38) *tc^hi nuu yuu wi-ta_K ty-ari pnuu-ŋu*
 tree.trunk.stairway DEM GEN 3SG.POSS-on AOR:UP-go[II] SENS-be
 16054 ‘He went up the tree trunk stairway.’ (2005 Kunbzang, 65)
- 16055 (39) *rjyskxt to-syglgylgy zo pjy-ce tce,*
 stairs IFR-make.trampling.noise EMPH IFR:DOWN-go
 16056 ‘She hurtled down the stairs.’ (Nyima wodzer2002, 106)

⁷ Not all Core Gyalrong languages, however, have a tridimensional orientation system: Zbu (Gong 2018) and the Bragbar dialect of Situ (Shuya Zhang 2020) are exceptions.

⁸ The 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).

15 Orientation and associated motion

16057 The DOWNWARDS preverb also expresses downwards motion into another medium
 16058 such as water, as in (40).

- 16059 (40) *tcendyre tui-ŋjyt* *kua tui-ci* *u-ŋgwi*
 LNK NMLZ:ACTION-regret ERG INDEF.POSS-water 3SG.POSS-in
 16060 *pjx-mtsas* *q^he pjx-si.*
 IFR:DOWN-jump LNK IFR-die

16061 ‘Out of regret, he jumped into the water and died.’ (28-qAjdoskAt, 187)

16062 The rising and setting of the sun is also expressed with the vertical preverbs
 16063 (*to-łor* IFR:UP-come.out ‘(the sun) rose’ vs. *pjx-čqljxt* IFR:DOWN-disappear ‘(the
 16064 sun) set’); alternatively, the solar dimension is also used (§15.1.3.3).

16065 The vertical dimension preverbs also express relative altitude, in particular
 16066 when the slope between two places is particularly steep. Alternatively, the riverine
 16067 preverbs UPSTREAM / DOWNSTREAM (§15.1.3.2) occur either when the slope is
 16068 less steep, or when following a water stream. This dimension can also be used
 16069 between far away places when the difference in altitude is perceived to be partic-
 16070 ularly conspicuous. For instance, the orientation UPWARDS is selected to describe
 16071 a journey from Gyalrong areas to central Tibet, and DOWNWARDS for a trip to Chi-
 16072 nese areas, as in (41) and (42) (see also 193 in §15.2.4). The riverine dimension is
 16073 alternatively possible however to refer to motion between Gyalrong and Chinese
 16074 areas (§15.1.3.2).

- 16075 (41) *pot st^hwuci kua-yrq^{hi}* *me* *ri, nutcu ty-ari*
 Tibet such.as SBJ:PCP-be.far not.exist:FACT LNK DEM.LOC AOR:UP-go[II]
 16076 *cti* *tce*
 be.AFF:FACT LNK

16077 ‘There is no (place) further away (from here) than Tibet, but he went
 16078 there.’ (meimeidegushi, 32)

- 16079 (42) *rja pjx-ce* *tce*
 Chine IFR:DOWN-go LNK
 16080 ‘He went to China.’ (Gesar, 219)

16081 In some cases, the orientation DOWNWARDS is selected when the path includes
 16082 a section down a mountain, even if the axis is oriented in the upstream/down-
 16083 stream or east/west directions. For instance, the DOWNWARDS orientation pre-
 16084 verb appears to express a motion from *krymju* Kamnyu to *smulju* Smeliu village,
 16085 as explained in example (43), although the path between them follows the east-
 16086 west axis. It is however alternatively possible to use the EASTWARDS preverbs to

16087 describe the trip from Kamnyu to Smeliu (and the WESTWARDS preverbs for the
 16088 opposite journey).

- 16089 (43) “*rqaco pjui-ce-a*” *tu-kui-ti*, “*smulju puu-ari-a*”
 TOPO IPFV:DOWN-go-1SG IPFV:GENR-say TOPO AOR:DOWN-go[II]-1SG
 16090 *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
 16091 *akui tce pa pjui-kui-ce* *pjui-ra* *loβ, tce*
 east LOC down IPFV:DOWN-GENR:S/O-go SENS-be.needed SFP LNK
 16092 *núndza* *pjui-ηu*.
 for.this.reason SENS-be
 16093 ‘People say ‘I will go (down) to Rqakyo’, or ‘I went (down) to Smeliu’, this
 16094 is because one has to go up a mountain and go down on the east side.’
 16095 (150904 akW andi-zh, 16)

15.1.3.2 The riverine dimension

16097 The basic meaning of the UPSTREAM and DOWNSTREAM preverbs, adverbs and
 16098 locator nouns is to express motion or relative position along the axis of a flowing
 16099 river or streamlet.

16100 The downstream preverbs are systematically used to refer to the direction of
 16101 water flow. In particular, the imperfective participles *cʰui-kui-yi* or *cʰui-kui-ce* with
 16102 the DOWNSTREAM preverb are sometimes added to the noun *tu-ci* ‘water’ to spec-
 16103 ify the meaning ‘river, stream’ (*tu-ci cʰui-kui-yi*, literally ‘the water that is coming
 16104 downstream’) as in (44) and (46).

- 16105 (44) *alo ji-tui-ci* *cʰui-kui-yi*,
 upstream 1PL.POSS-INDEF.POSS-water IPFV:DOWNSTREAM-SBJ:PCP-come
 16106 <*jiaomujiao*> *tui-ci* *nuu*
 pl.n INDEF.POSS-water DEM
 16107 ‘Our river upstream (in Kamnyu), the Kyomkyo river...’ (150820
 16108 ZNGWloR, 11)

16109 In (45), the DOWNSTREAM preverb is not only used with motion verbs in the
 16110 collocation with the nouns *tce^hit^hyn* ‘mudslide’ or *tupnṛt* ‘landslide’, it is also found
 16111 on the verb *cʰui-wy-yut* to describe a mudslide taking away an animal with it.

- 16112 (45) *tce tc^hit^hyn cʰui-yi* *tcendyre <dianchang>*
 LNK mudslide IFR:DOWNSTREAM-come LNK power.station

15 Orientation and associated motion

- | | | |
|-------|--|---------------------------------------|
| 16113 | <i>cʰy-pʰut.</i> | < <i>dianchang</i> > <i>cʰy-phut,</i> |
| | IFR:DOWNSTREAM-take.out power.station | IFR:DOWNSTREAM-take.out |
| 16114 | <i>nunuw tuŋyt tʰw-yε</i> | <i>nui ui-rca</i> |
| | DEM landslide AOR:DOWNSTREAM-come[II] | DEM 3SG.POSS-together |
| 16115 | <i>nuit<u>eu</u> tce, nuŋa puu-kuu-nuruu</i> | <i>nui tyrca</i> |
| | DEM.LOC LOC COW PST.IPFV-SBJ:PCP-grazing | DEM together |
| 16116 | <i>cʰy-wy-yut, tui-rdo<u>β</u>.</i> | |
| | IFR:DOWNSTREAM-INV-bring one.piece | |
| 16117 | 'The mudslide swept the power station. It swept the power station, and | |
| 16118 | when the landslide happened, it took away a cow that was grazing | |
| 16119 | (there).' (160715 nWNa, 2-4) | |

The direction opposite to that of the flow of water is normally referred to with the UPSTREAM preverbs, as in (46).⁹ As shown by (47), the UPSTREAM preverbs and adverbs are understood by speakers as specifically referring to the direction towards the source of the river (*tcʰipʰuy*, a noun borrowed from တွေ့ဆုံး *tcʰupʰugs* ‘water source’).

- 16125 (46) *kuki tur-ci c^hwi-kui-yi kuki*
DEM.PROX INDEF.POSS-water IPFV:DOWNSTREAM-SBJ:PCP-come DEM.PROX

16126 *tú-wy-nuunq^hu lu-kui-ce tce,*
IPFV-INV-follow IPFV:UPSTREAM-GENR:S/O-go LNK

16127 ‘(If) you follow this creek upstream...’ (04-cuiniao-zh, 65)

16128 (47) *tc^hip^hwy wi-pcoε lu-kui-ce nuu tce*
source.of.the.river 3SG.POSS-side IPFV:UPSTREAM-gen:S/O-go DEM LNK

16129 “*lo*”, *tc^himt^ha wi-pcoε c^hwi-kui-ce*
upstream lower.reaches 3SG.POSS-side IPFV:DOWNSTREAM-GENR:S/O-go

16130 *nuu tce t^hwi-ari-a”, “t^hi” tú-wy-nuu-syrmí*
DEM LNK AOR:DOWNSTREAM-go[II]-1SG downstream IPFV-INV-AUTO-call

16131 *jnu-jju.*
SENS-be

16132 ‘One calls going towards the source of the river UPSTREAM, and going
16133 towards the lower reaches of the river ‘downstream.’ (150904 akW andi,
16134 24-25)

⁹ In (46), the UPWARDS preverb on *nunq^{hu}* ‘go along, follow’ is the default orientation, see §15.1.2.1.

16135 For motion between localities in the Gyalrong areas located along a river, the
 16136 UPSTREAM and DOWNSTREAM orientation are selected in some cases. For instance,
 16137 the UPSTREAM preverbs occur to describe trips from Kamnyu to Tshobdun (or
 16138 Zbu) as in (48), and the DOWNSTREAM preverbs for the opposite trip.

- 16139 (48) *tsʰuβdun kui-sy-suuxcxt ly-ari-a.*
 16140 TOPO SBJ:PCP-APASS-teach AOR:UPSTREAM-go[II]-1SG
 'I went to Tshobdun to teach.' (150819 kumpGa, 78)

16141 The riverine dimension preverbs can also be used in the case of trips to far
 16142 away places up or down the course of a river. For instance, a journey to Chinese
 16143 areas can be described using the DOWNSTREAM orientation as in (49), though
 16144 due to the considerable altitude difference the orientation DOWNWARDS is often
 16145 preferred (compare with example 42, §15.1.3.1).

- 16146 (49) *rja syz kui-yrqʰi me ri, nutcu*
 16147 China COMIT SBJ:PCP-be.far.away not.exist:FACT LNK DEM:LOC
 16148 *tʰui-ari cti*
 16149 AOR:DOWNSTREAM-go[II] be.AFF:FACT
 'There is no (place) further away (from here) than China, but he went
 there.' (meimeidegushi, 40)

16150 However, in valleys where the main river flows along the east-west axis, the so-
 16151 lar dimension (§15.1.3.3) takes over the riverine dimension. In Mbarkham and the
 16152 towns around it, where the Somang river flows from east to west, the UPSTREAM
 16153 and DOWNSTREAM preverbs cannot be used to refer to the places along the river.
 16154 Rather, the EASTWARDS preverbs occur for the UPSTREAM direction and the WEST-
 16155 WARDS preverb for the downstream orientation. For instance, from Mbarkham
 16156 to Cogtse, located upstream, the EASTWARDS preverb is selected as in (50). For
 16157 Rdzonggag and Bragbar, further downstream (and southwest from Mbarkham),
 16158 the WESTWARDS preverb is used. For shorter trips (on foot or on vehicles) inside
 16159 Mbarkham city, the solar dimension preverbs are also systematically used.

- 16160 (50) *tcuχtsi ky-ari-j, kui-nympo*
 16161 TOPO AOR:EAST-go[II]-1PL SBJ:PCP-watch
 'We went to Cogtse, to visit.' (conversation, 2013-10-15)

16162 In this environment, the riverine preverbs are used to encode the mountain-
 16163 river slope axis, which is perpendicular to the river axis. This phenomenon has
 16164 been observed in other Gyalrong languages. Y. Lin (2002: 34), in an article about

15 Orientation and associated motion

16165 Situ where the same reorganisation of preverb dimensions occurs, argues that
16166 ‘the riverine pair has become generalized for cases where there are no mountain
16167 creeks in sight, and the orientation markings then encode an opposition between
16168 higher and lower parts of a slope via metaphorical extension.’

16169 A further extension of the riverine dimension in such geographical environ-
16170 ments is to encode the orientation perpendicular to that river even in places with
16171 relatively flat ground without any slope. In localities where the river is exactly
16172 aligned on the East-West axis, the riverine preverbs thus started to encode the
16173 North-South axis, with the DOWNSTREAM preverb for the orientation *towards the*
16174 *river* on this axis, and the UPSTREAM preverb from that *away from the river*.

16175 This perpendicular orientation grid is applied not only on streets (where a mild
16176 slope is generally perceptible in Gyalrong-speaking valleys), but even extended
16177 within houses, where the ground is even. For instance, if the toilets are located
16178 on the side of the building that is closer to the river, and if one happens to be on
16179 the opposite side of the apartment, one can say (51), even though one remains at
16180 the same vertical level (all solar and riverine prefixes would also be appropriate,
16181 depending on the absolute orientations).

- 16182 (51) *jyṛyt ci cʰuu-ce-a*
toilet a.little IPFV:DOWNSTREAM-go-1SG

16183 ‘I am going to the toilets.’ (heard several times in context)

16184 Some journeys involve a change of orientation. In such cases, the choice of
16185 the preverb depends on the longest section during the trip. For instance, the road
16186 from Mbarkham to Kamnyu first goes downstream the Somang river (westwards)
16187 and then, for a longer distance, upstream the Kyomkyo river (northwards), and
16188 therefore the UPSTREAM preverbs are required (52).

- 16189 (52) *kympuu muu-ly-tsum-a*
TOPO NEG-AOR:UPSTREAM-take.away-1SG

16190 ‘I did not take (my mobile phone) to Kamnyu.’ (said after having come
16191 back to Mbarkham, conversation, 16-02-21)

16192 For the opposite journey (from Kamnyu to Mbarkham), the orientation DOWN-
16193 STREAM is always selected, as in (53).

- 16194 (53) *tce mbarkʰom kuu-ry-βzjoz tʰuu-ye-a,*
LNK TOPO SBJ:PCP-APASS-study AOR:DOWNSTREAM-come[II]-1SG
16195 ‘I came to Mbarkham to study.’ (140501 tshering skyid, 48)

Given the fact that several contradictory constraints are involved in the choice of the riverine vs. solar orientation preverbs, it is not surprising that the orientations chosen to describe motion from one locality to another in the Japhug speaking area is not completely predictable, and that some orientations must be analyzed as having been completely lexicalized (§15.1.5).

The DOWNSTREAM preverbs can be used also for motion into water as in (54) and (55). They compete in this function with the vertical dimension DOWNWARDS preverbs (see 40 in §15.1.3.1, an example describing the event referred to in 54 in another version of the same story).

- (54) *clas zo tui-ci w-ŋgw*
 IDPH(I):immediately EMPH INDEF.POSS-water 3SG.POSS-in
cʰy-mtsʰaB tce pjy-zyy-sat.
 IFR:DOWNTSTREAM-jump LNK IFR-REFL-kill
 'He immediately jumped into the water and committed suicide.'
 (qajdoskAt 2002, 117)
- (55) *βlama nura kua [...] tsʰytʰyr lu-lxt-nuŋ pnu-ŋyu. tce*
 lama DEM:PL ERG life.release IPFV-release-PL SENS-be LNK
tui-ci w-ŋgw s-cʰu-lxt-nuŋ tce,
 INDEF.POSS-water 3SG.POSS-in TRAL-IPFV:DOWNTSTREAM-release-PL LNK
 'The lamas perform life release and release (aquatic animals) into the water.' (140510 wugui, 14-16)

The UPSTREAM preverbs occur to express motion out of the water, as in (56).

- (56) *<wugui> nuŋ tui-ci w-ŋgw*
 turtle DEM INDEF.POSS-water 3SG.POSS-in
lo-nuŋ-łor
 IFR:UPSTREAM-AUTO-come.out
 'The turtle came out of the water.' (elicited, based on a text example)

Metaphorical extensions of the riverine preverbs include the illative/elative functions (§15.1.4.2, §15.1.5.1), the orientation in the living room (§15.1.4.4), the loom (§15.1.4.5) and various lexicalized uses (§15.1.5.4).

15.1.3.3 The solar dimension

The basic meaning of the EASTWARDS and WESTWARDS preverbs, adverbs and locator nouns is to encode the east-west axis. Example (57) for instance shows

15 Orientation and associated motion

that the orientation encoded by the distal locative adverb *tcendi* is the same as that of the place where the sun sets.

- (57) *turmuak^ha ri tce tcendi ri t^ηe u-sx-cq^hlyt pcos ri*
 dusk LOC LNK west LOC sun 3SG.POSS-OBL:PCP-disappear side LOC
tu.
 exist:FACT
 '(This star) is found at dusk in the west, at the place where the sun sets.'
 (29-mWBZi,76)

The selection of the EASTWARDS and WESTWARDS preverbs is observed not only with the orientational adverbs *tcendi*, *tcekuu* (§22.2.6) and related forms, but also with the borrowed cardinal point *cirpcos* ‘east’ (from ԾԱՌԱՎԱՐ ‘car,p^hogs ‘east’) or descriptive relative clauses meaning ‘place where the sun sets’ or ‘place where the sun rises’ as shown by example (58).

- (58) *tur-rdos numuu, cirpcos ko-ce, tur-rdos numuu bmbyi*
 one-piece DEM east IFR:EAST-go one-piece DEM sun
u-sx-cq^hlyt nutcu jny-cq^hlyt.
 3SG.POSS-OBL:PCP-disappear DEM:LOC IFR:WEST-disappear
 ‘One (of the feathers) went to the east, another one disappeared in the direction where the sun sets.’ (140510 sanpian yumao-zh, 17-18)

The WESTWARDS orientation is found to express the motion of the sun with both the verbs *to* ‘come out’ and *cq^hlyt* ‘disappear’, as in (59). Alternatively, the vertical dimension is also used (§15.1.3.1).

- (59) *t^ηe jny-nui-to*
 sun IFR:WEST-AUTO-come.out
 ‘The sun rose (from the east, towards the west).’ (elicited)

The EASTWARDS orientation is selected to describe trips between localities from west to east, for instance from Kamnyu (32°12'N, 101°57'E) to Sarndzu (32°09'N, 102°07'E) (60), and the WESTWARDS orientation for the return journey.

- (60) *izora tce “syrndzu ky-ari-a” tu-kui-ti jny.*
 1PL LNK TOPO AOR:EAST-go[II]-1SG IPFV-GENR-say be:FACT
 ‘We (in Kamnyu) say “I went (eastwards) to Sarndzu.’ (150904 akW andi, 21)

16249 In locations where the river is oriented on this axis, the solar dimension is dom-
 16250 inant and the riverine dimension recessive (§15.1.3.2). In Mbarkham city, where
 16251 the river flows from east to west, the EASTWARDS and WESTWARDS preverbs are
 16252 used for the upstream and downstream directions, respectively. This overlap has
 16253 caused previous linguists working on Gyalrong languages (in particular Situ) to
 16254 analyze the solar dimension preverbs and adverbs as encoding the ‘upstream/
 16255 downstream’ axis (see the discussion in Y. Lin 2002).

16256 The solar dimension remains dominant even when the path is not parallel to
 16257 the east-west axis, but oriented southwest-northeast or southeast-northwest. For
 16258 instance, a journey from Mbarkham to Jinchuan or Danba along the Somang
 16259 river, which has a clear southwest orientation, the WESTWARDS orientation is
 16260 still preferred over the DOWNSTREAM orientation.

- 16261 (61) <*jinchuan*> *nur-azyut-i* *ri*
 TOPO AOR:WEST-arrive-1PL LNK
 16262 ‘When we arrived in Jinchuan...’ (2010-1, 3)

16263 The east/west dimension can even be used in the case of far away countries, as
 16264 between France and China, as shown by the choice of the WESTWARDS preverb
 16265 in (62).

- 16266 (62) *ny-rca* *azo kurny <faguo> nur-yi-a.*
 2SG.POSS-following 1SG also France IPFV:WEST-come-1SG
 16267 ‘I am going with you to France.’ (conversation, 2013)

16268 This usage is also found with *lyt* ‘release’ in its meaning ‘phone’ (when occur-
 16269 ring in collocation with the Chinese noun 电话 <*diànhuà*> ‘phone’), which takes
 16270 the orientation EASTWARDS to describe a phone call from France to China, and
 16271 WESTWARDS for the opposite direction.

- 16272 (63) *uزو kuu (<dianhua>)* *ku-lyt* *cti* *ma, azo*
 3SG ERG phone IPFV:WEST-release be.AFF:FACT LNK 1SG
 16273 *nur-lat-a* *my-kʰuu* *tce, andi ku-ryzi tce*
 IPFV:WEST-release-1SG NEG-be.possible:FACT LNK west IPFV-stay LNK
 16274 *wr-<dianhuahaoma>* *a-ky-ti* *my-kʰuu*
 3SG.POSS-phone.number 1SG.POSS-INF-say NEG-be.possible:FACT
 16275 ‘It is he who calls (me on the phone), I cannot call him, he lives in the
 16276 west (in France), I cannot say his phone number.’ (conversation, 16-12-28)

15 Orientation and associated motion

16277 The west is the orientation of the mythical countries in traditional stories, as
 16278 in (64). This use probably reflects the geographical location of India as in (65).

- 16279 (64) *andi smynmimitoškucana ciu-nvbdan-a ra tce,*
 16280 west ANTHR TRAL-invite:FACT-1SG be.needed:FACT LNK
jui-ce-a tce, ky-ye-a tce a-pui-ŋu
 16281 IPFV:WEST-go-1SG LNK AOR:EAST-come[II]-1SG LNK IRR-IPFV-be
 16282 ‘I am going to the west to invite Smanmi Metog Koshana (to our realm),
 let us do (the wedding) when I come (back).’ (smAnmi 2003, 36)
- 16283 (65) *nua rjykyr jui-ce kui-ra, cti,*
 16284 DEM India IPFV:WEST-go SBJ:PCP-be.needed
 ‘That (daughter) has to go to India.’ (Gesar, 13)

16285 The EASTWARDS orientation is selected to refer to Hor (Mongolia) in the Japhug
 16286 version of Gesar, as in (66).

- 16287 (66) *nua χwyr ku-ce kui-ra cti,*
 16288 DEM TOPO IPFV:EAST-go SBJ:PCP-be.needed be.AFF:FACT
 ‘That (daughter) has to go to Hor.’ (Gesar, 12)

16289 There is one case in which the solar dimension preverbs are selected to encode
 16290 the axis that is perpendicular to the river: to refer to motion toward the opposite
 16291 bank of the river at the same altitude level (by walking on a bridge, by boat or
 16292 wading), the EASTWARDS and WESTWARDS preverbs are selected, as in (67) and
 16293 (68). In this context, both orientations are appropriate, and there is no strict rule
 16294 to choose EASTWARDS or WESTWARDS to cross a river, unless the river is oriented
 16295 north-south and the axis perpendicular to it corresponds to the east-west axis.

- 16296 (67) *qapri nua kuu kuu-cʰu pʰyri li*
 16297 snake DEM ERG east-APPROX.LOC opposite.bank again
kj-wy-tcyt jui-ŋu
 16298 AOR:EAST-INV-take.out SENS-be
 ‘The snake took him to the opposite bank.’ (divination 2005, 50)

- 16299 (68) *kuu-cʰu pʰyri nuatcu ui-wa*
 16300 east-APPROX.LOC opposite.bank DEM.LOC 3SG.POSS-father
ko-tsum tce,
 IFR:EAST-take.away LNK
 16301 ‘He took his father to the opposite bank of the river.’ (2011-05-nyima, 43)

16302 The EASTWARDS and WESTWARDS preverbs have many other extended uses, in
 16303 particular to express centripetal/centrifugal directions (§15.1.4.3) and meanings
 16304 further derived from them (§15.1.5.7, §15.1.5.10, §15.1.4.1). In addition, the Sensory
 16305 *jnu-* (§21.3.2.1) and Egophoric Present *ku-* (§21.3.3.1) prefixes originate from the
 16306 B-type WESTWARDS and EASTWARDS preverbs, respectively.

15.1.3.4 Deadverbial verbs of relative location

16308 Deadverbial verbs of relative location express the position of the subject (in com-
 16309 parison to that of other referents) on one of the three dimensions. These verbs are
 16310 built by adding the prefix *maj-* to the adverbial stems, as indicated in Table 15.6,
 16311 and their stems are homophonous with the corresponding nouns of relative lo-
 16312 cation (§5.7.2).

16313 The *maj-* prefix has a function that is similar to that of the denominal *mr-*
 16314 prefix, which derives verbs of relative location from relator nouns (§20.6).

Table 15.6: Verbs of relative location and corresponding locative ad-
 verbs

Locative adverb	Verb of location
<i>taꝝ</i>	<i>majtaꝝ</i> ‘be on the upper side’
<i>pa</i>	<i>majpa</i> ‘be on the lower side’
<i>lo</i>	<i>majlo</i> ‘be upstream’
<i>tʰi</i>	<i>majtʰi</i> ‘be downstream’
<i>kuu</i>	<i>majkuu</i> ‘be in the east side’
<i>ndi</i>	<i>majndi</i> ‘be in the west side’

16315 Each of the six verbs in Table 15.6 selects the orientation preverbs correspond-
 16316 ing to their own orientation, for instance *majlo* ‘be upstream’ can only select the
 16317 UPSTREAM orientation, as in shown by (69) and (70). They are not compatible with
 16318 the indefinite orientation preverbs, and should not be confused with orientable
 16319 (§15.1.2) and orienting (§15.1.2.4) verbs.

- 16320 (69) *nur-<beif>* *kuu-mbro* *nuara*
 3PL.POSS-seniority SBJ:PCP-be.high DEM.PL
 16321 *lu-majlo-nuu,*
 IPFV:UPSTREAM-be.upstream-PL
 16322 ‘The elders (sit) higher (upstream).’ (31-khAjmu, 61)

15 Orientation and associated motion

- 16323 (70) *tce numua tv-ftsa* *nua tv-rpuu* *syz*
LNK DEM INDEF.POSS-ZS DEM INDEF.POSS-MB COMP
16324 *lu-kui-maylo* *mu-pjx-ŋgryl*
IPFV-GENR:S/O-be.upstream NEG-IFR.IPFV-be.usually.the.case
16325 ‘Nephews could not be seated higher (upstream) than their maternal
16326 uncles.’ (08-saCW, 12)

16327 These verbs are however compatible with tenses where the orientation pre-
16328 verbs are neutralized, such as the Sensory *nua-* as in (71).

- 16329 (71) *nyzo puu-tuu-maylo* *cti* *ma azo puu-may̚bi-a*
2SG SENS-2-be.upstream be.AFF:FACT LNK 1SG SENS-be.downstream-1SG
16330 *cti* *tce,*
be.AFF:FACT LNK
16331 ‘You are upstream and I am downstream.’ (2014, lang he yang-zh, 20-211)

16332 Deadverbial verbs of relative location are either used in comparative sentences
16333 (70), in superlative constructions with *stu* ‘most’ (§26.4.1), with contrasting ori-
16334 ntations 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

16335 The flow of time can be expressed in Japhug using the vertical dimension, in
16336 particular to refer to a following period, as shown by the verb *puu-ari* in (72),
16337 which is translated as 到了他们的下一代 <dào le tāmen de xiàyídài> ‘in the
16338 following generation’ by Tshendzin in this context (see §27.2.4 concerning this
16339 aspect of the kinship system).

- 16340 (72) *nua uu-pa* *puu-ari* *tce tce, a-wymuu*
DEM 3SG.POSS-down AOR:DOWN-go[II] LNK LNK 1SG.POSS-brother
16341 *uu-ye* *puu-nua-ŋju*, *a-sqʰaqj* *yuu*
3SG.POSS-grandchild PST.IPFV-AUTO-be 1SG.POSS-sister GEN
16342 *uu-ye* *puu-nua-ŋju* *tce azo t̚yrcurca*
3SG.POSS-grandchild PST.IPFV-AUTO-be LNK 1SG together
16343 “*a-ye*” *tu-ti-a* *cti.*
1SG.POSS-grandchild IPFV-say-1SG be.AFF:FACT
16344 ‘In the (generation) below (that of one’s nephews), I say *a-ye* ‘my

16347 grandchild' (to all grandnephews), whether they are my brother's
16348 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).

- 16354 (73) *tce uu-tui-sy-scit* *kua nuu ty-rzaab*
 LNK 3SG.POSS-NMLZ:DEG-PROP-be.happy ERG DEM INDEF.POSS-time
 16355 *nuu-ari* *muu-pjy-tso.*
 AOR:WEST-go[II] NEG-IFR-understand
 16356 ‘It was so nice there that he did not realize that (a lot of) time had passed.’
 16357 (28-smAnmi, 290)

16358 (74) *kyntc^huu-sla* *jny-cq^hlyt* *ri*
 several-months IFR:WEST-disappear LNK
 16359 ‘Several months passed.’ (140513 mutong de disheng-zh, 13)

The semi-transitive verbs *mdu* ‘arrive (of time)’ and *tsu* ‘pass (of time)’ however generally select the orientation UPWARDS (see 115 and 116 in §7.5.1), though the unspecified orientation is also attested for the latter, as in (75). The verb *mdu* ‘live up to’ is used with the DOWNSTREAM orientation preverbs (see 87 and 88, §19.7.2).

- 16364 (75) *χsuu-xpa jy-tsu-j,*
 three-year AOR:UNSPECIFIED-pass-1SG
 16365 ‘We have been (together) for three years (now), and ...’ (Norbzang 2005,
 16366 59)

For these semi-transitive verbs, the noun phrase referring to a time period is the semi-object, not the subject.

15.1.4.2 Illative / elative

16370 A common extended function of the riverine dimension preverbs is to express mo-
16371 tion through an opening. The UPSTREAM preverbs can have an illative meaning,
16372 describing motion into a building or a natural cave (through a door, a window
16373 or any other opening) as in (76), (77) and (78).

15 Orientation and associated motion

- 16374 (76) *pravk^haŋ u-ŋgw* *nautcu lo-ce* *jua-ŋu tceri*
 cave 3SG.POSS-in DEM:LOC IFR:UPSTREAM-go SENS-be LNK
 16375 ‘He went into the cave.’ (140425 shizi huli he lu-zh, 47)

- 16376 (77) *k^ha u-ŋgw* *ly-yi-ndzi* *tce,*
 house 3SG.POSS-in IMP:UPSTREAM-come-DU LNK
 16377 ‘Come inside the house.’ (140507 tangguowu-zh, 90)

16378 The combination of the UPSTREAM orientation with *st^hor* ‘push’ in (78) means
 16379 ‘push (the door) towards the inside of the house’.

- 16380 (78) *spjaŋkui nuu kuu kuum lo-st^hor* *tee, u-ŋgw*
 wolf DEM ERG door IFR:UPSTREAM-push LNK 3SG.POSS-in
 16381 *lo-ce.*
 IFR:UPSTREAM-go
 16382 ‘The wolf pushed the door and went in.’ (140428 xiaohongmao-zh, 80)

16383 The opposite DOWNSTREAM orientation preverbs have an elative meaning, ex-
 16384 pressing motion out of a building, as in (79).

- 16385 (79) *k^ha u-pci* *c^hy-lor.*
 house 3SG.POSS-outside IFR:DOWNSTREAM-come.out
 16386 ‘She came out of the house.’ (140428 xiaohongmao-zh, 28)

16387 However, in the case of tubular or pipe-like objects like the trunk of a musket,
 16388 the orientation is the opposite: the DOWNSTREAM preverbs are used for motion
 16389 toward the inside (80), and the UPSTREAM preverbs occur for motion towards the
 16390 outside (81).

- 16391 (80) *cymuydtu u-lycu* *u-mŋu* *ri qandzi*
 musket 3SG.POSS-upstream 3SG.POSS-opening LOC bullet
 16392 *c^huu-rku-nuu*
 IPFV:DOWNSTREAM-put.in-PL
 16393 ‘The load the bullet into the (trunk) of the musket from the opening (the
 16394 muzzle)’ (28-CAmWGdW, 38)

- 16395 (81) *nunu muizi nuu tu-nuat tce tce qandzi nuu*
DEM gunpowder DEM IPFV-burn LNK LNK bullet DEM
16396 *lu-βde tce ju-ce nuu-ŋu*
IPFV:UPSTREAM-throw LNK IPFV:UNSPECIFIED-go SENS-be
16397 'The gunpowder flares and drives the bullet out (of the trunk of the
16398 muzzle).' (28-CAmWGdW, 85-86)

16399 Likewise, the UPSTREAM preverbs occur to express motion out of a sheath, as
16400 in (82).

- 16401 (82) *scapa lo-χcob*
sword IFR:UPSTREAM-take.out
16402 'He unsheathed his sword.' (140514 huishuohua de niao-zh, 178)

16403 The same applies with containers having a small (and tubular) opening, like
16404 bags or bottles for instance. The DOWNSTREAM orientation preverbs have the
16405 illative meaning 'go/put into' and the UPSTREAM preverbs the elative meaning
16406 'come out of/take out of' as illustrated by (83) and (84). By extension, the verb
16407 *yvmut* 'blow' (for instance, into a pipe) also selects the DOWNSTREAM preverbs
16408 (§15.1.5.8).

- 16409 (83) *tcendyre "tx-fkum uu-ŋguu tce tʰuu-ce*
LNK INDEF.POSS-bag 3SG.POSS-in LOC IMP:DOWNTREAM-go
16410 *nuu-nts^{hi} wo" to-ti. tcendyre <dongguoxiansheng> nuu kuu*
SENS-be.better SFP IFR-say LNK ANTHR DEM ERG
16411 *icq^ha tx-fkum uu-ŋguu juyi nura tsuku*
the.aforementioned INDEF.POSS-bag 3SG.POSS-in book DEM:PL some
16412 *lo-tcxt, [...] spjaŋkuu nuu nuu uu-ŋguu*
IFR:UPSTREAM-take.out wolf DEM DEM 3SG.POSS-in
16413 *cʰy-rku.*
IFR:DOWNTREAM-put.in

16414 'Mr. Dongguo said: 'Why don't you go into the bag (to hide)', took out
16415 some of the books from the bag, and put the wolf into it.' (150901
16416 dongguo xiansheng he lang-zh, 48)

- 16417 (84) <*suoluomen*> *nuu kui azo kuuki pʰon uu-ŋguu tce*
ANTHR DEM ERG 1SG DEM.PROX bottle 3SG.POSS-in LOC
16418 *tʰuu-wy-rku-a* *ŋu,*
AOR:DOWNTREAM-INV-put.in-1SG be:FACT
16419 'Solomon put me in this bottle.' (140512 yufu yu mogui-zh, 78)

15 Orientation and associated motion

In the case of boxes with large openings on the top, the riverine orientation preverbs are not used, and the vertical dimensions preverbs occur instead: the DOWNWARDS preverbs express motion into the box, as in (85), and the UPWARDS preverbs motion out of it, as shown by example (86).

- (85) *mar-rgym ui-ŋgwu zuu ḥwyr ra yuu nuu-rjxβlun thamtçxt yuu*
 butter-box 3SG.POSS-in LOC TOPO PL GEN 3PL.POSS-ministers ALL GEN
nuu-ku nuu pjx-rku
 3PL.POSS-head DEM TRAL-IFR:DOWN-put.in

'He had put the heads of all the ministers of Hor in a butter box.' (gesar, 373)

- (86) *ui-sloxpun nuu kuu rgym ui-ŋgwu zuu, nṣkinuu, ḥçylmdon ci*
 3SG.POSS-teacher DEM ERG box 3SG.POSS-in LOC FILLER spyglass INDEF
to-tçxt tce pjx-mbi
 IFR:UP-take.out LNK IFR-give

'His teacher took a spyglass from a box and gave it to him.' (140508 benling gaoqiang de si xiongdi-zh, 73)

The WESTWARDS preverbs are selected in the case of an object passing through a hole with openings on both sides, for instance a needle's eye, as in (87).

- (87) *taqaβ nuu ui-rna ri spos tce, tce nutcu*
 needle DEM 3SG.POSS-ear LOC have.a.hole:FACT LNK LNK DEM:LOC
tx-ri pñú-wy-røe,
 INDEF.POSS-thread IPFV:WEST-INV-pass.through
 'The needle has a hole at the (needle's) eye_i, and one passes the thread through it_i.' (12-kAtsxWb, 33-34)

The orientation EASTWARDS can be used for motion into a small cavity whose opening is as large as the inside and is located on the side, as shown by examples (88) and (89).

- (88) *nutja ui-ndzi t^bui-ky-rxydut ui-ŋgwu nutcu*
 cow 3SG.POSS-skin IPFV-OBJ:PCP-distend 3SG.POSS-in DEM:LOC
ko-ce.
 IFR:EAST-go
 'He went into the distended hide of the cow.' (31-deluge, 25)

- 16444 (89) *nur yur ur-ma ur-ŋgu xcelwi ko-ce nur-ŋu*
 DEM GEN 3SG.POSS-ear 3SG.POSS-in tick IFR:EAST-go SENS-be
 16445 ‘A tick went into his ear.’ (kAndZislama 2003, 115)

16446 The EASTWARDS orientation also occurs for piercing motion into a surface (like
 16447 skin), as in (90) (see also 125, §17.5.4).

- 16448 (90) *tua-ca ur-ŋgu ky-ari q^he, koŋla ur-ŋgu*
 INDEF.POSS-flesh 3SG.POSS-in AOR:EAST-go[II] LNK completely 3SG.POSS-in
 16449 *zo ku-ce cti.*
 EMPH IPFV:EAST-go be.AFF:FACT
 16450 ‘When (its thorn) goes into the flesh, it penetrates completely.’ (17-xCAj,
 16451 69)

16452 The data above show that no orientation preverb intrinsically encodes illative
 16453 or elative meaning in Japhug. The interpretations ‘towards the inside’ or ‘towards
 16454 the outside’ depend on the shape of the object and the location and the relative
 16455 size of the opening.

15.1.4.3 Centripetal / centrifugal

16456 In Gyalrong languages, the WESTWARDS and EASTWARDS preverbs in some cases
 16457 express centrifugal vs. centripetal directions, respectively. This phenomenon was
 16458 first noticed in Situ by Lín (1993: 228–229).

16459 Example (91)¹⁰ illustrates this extension of the solar dimension with the verb
 16460 *ct^huz* ‘turn towards’ (§15.1.2.4): the orientation towards the subject of the verb
 16461 (centripetal) is expressed by the EASTWARDS preverb (*ko-ct^huz*), and the opposite
 16462 orientation away from the subject (centrifugal) is encoded by the WESTWARDS
 16463 preverb (*ny-ct^huz*).
 16464

- 16465 (91) *tce ur-rme nur ur-pci ny-ct^huz,*
 LNK 3SG.POSS-hair DEM 3SG.POSS-outside IFR:WEST-turn.towards
 16466 *ur-ndzi nur ur-ŋgu ko-ct^huz tce tce to-ŋga.*
 3SG.POSS-skin DEM 3SG.POSS-in IFR:EAST-turn.towards LNK LNK IFR-wear
 16467 ‘He turned the fur (of the jacket)_i towards the outside, and the leather
 16468 towards the inside and wore it_i.’ (140513 mutong de disheng-zh, 55)

¹⁰ This 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.

The centrifugal use of the WESTWARDS preverbs has been further lexicalized and extended to verbs expressing loss or transfer of property (§15.1.5.7, §15.1.5.10) and passing of time (§15.1.4.1).

The centripetal use of the EASTWARDS preverbs also accounts for the presence of the EASTWARDS preverbs with verbs meaning ‘close’, ‘wrap up’ or ‘fold’. Compare for instance the EASTWARDS preverb on *wum* ‘gather’ (in the meaning ‘fold wings’) with the WESTWARDS one on *qxt* ‘separate’ in (92).

- (92) *ty-mbri u-k^huuk^ha u-bar nuu kura ntsuu*
 AOR-make.noise 3SG.POSS-while 3SG.POSS-wing DEM DEM.PROX:PL always
 tu-ste nyu ma jui-kui-nuqambumbjom
 IPFV-do.like[III] be:FACT LNK PROXM-SBJ:PCP-fly
 ty-kui-ryŋgat nuu kui-fse, u-bar nuu
 IPFV-SBJ:PCP-prepare DEM SBJ:PCP-be.like 3SG.POSS-wing DEM
 nuu-qxt nyu ku-wum [...] nyu
 IPFV:WEST-separate ADD IPFV:EAST-gather be:FACT
 ‘When it sings, it does like that with its wings, like it is about to fly, it
 (repeatedly) spreads its wings and then folds them.’ (24-ZmbrWpGa,
 120-123)

A separate use of the solar dimension preverbs is to express alternation between left and right motion, with two verbs either linked by *ny* as in (95) or in paratactic relation as in (93) and (94). In this function, the EASTWARDS preverbs occur on the first verb and the WESTWARDS preverbs on the second one.

- (93) *pjy-yyryst tce u-ryfit ra kui ko-ryci-nuu*
 IFR:DOWN-throw LNK 3SG.POSS-offspring PL ERG IFR:EAST-pull
 ny-ryci-nuu zo nuu-nyu
 IFR:WEST-pull-PL EMPH SENS-be
 ‘She threw them_i down (there), and her children tore them_i apart (pulled
 them_i right and left in a disorderly way.)’ (2012 Norbzang, 401)

- (94) *lalu nuu kui ci ko-mja, ci po-mja tce*
 cat DEM ERG one IFR:EAST-grab one IFR:WEST-grab LNK
 ‘The cat grabbed one on his left and one on his right.’ (IWlu 2002, 78)

With the deictic motion verbs, the EASTWARDS-WESTWARDS alternation also occurs between *ce* ‘go’ and *yi* ‘come’ as shown by (95). Since in this construction the motion verb with translocative deixis always takes the EASTWARDS preverbs,

16496 while the one with cislocative deixis is found with the WESTWARDS preverbs, it
 16497 is not possible to argue that these preverbs here have centripetal vs. centrifugal
 16498 functions as in this case the deixis of the preverbs would contradict that of the
 16499 motion verb.

- 16500 (95) *jiga ki kuu-fse ku-ce ny nuu-yi,*
 zigzag DEM SBJ:PCP-be.like IPFV:EAST-go ADD IPFV:WEST-come
 16501 *ku-ce ny nuu-yi,*
 IPFV:EAST-go ADD IPFV:WEST-come
 16502 ‘The zigzags go left and right.’ (140522 Kamnyu zgo, 39)

15.1.4.4 Orientations in traditional houses

16503 In the traditional living room (*kʰyjmu*), the seating places around the hearth and
 16504 the tripod (*sqʰi*) have specific names and functions: *kʰyckʰyr* for the men, *kʰydi*
 16505 for the lady (in charge of preparing the meal), *caylo* for elderly ladies¹¹ and *sandi*
 16506 for servants and for putting firewood. The use of the riverine and solar dimen-
 16507 sion preverbs, adverbs and locative nouns in the living room is unrelated to the
 16508 cardinal east-west axis or the direction of the mountain slope, and is rather com-
 16509 pletely determined by these conventional seating places, as explained in (96), and
 16510 summarized in Figure 15.1.

- 16511 (96) *kʰydi nunuu tce atʰi tu-ti-nuu.*
 lady.seating.place DEM LNK downstream IPFV-say-PL
 16512 *caylo nuu tce alo tu-ti-nuu, kʰyckʰyr*
 elder.lady.seating.place DEM LNK upstream IPFV-say-PL man.seating.place
 16513 *nuu tce kutcu pcoŋ puu-nuu-ŋu, kutcu pcoŋ puu-nuu-ŋu,*
 DEM LNK here side PST.IPFV-AUTO-be here side PST.IPFV-AUTO-be
 16514 *tcekuu tu-ti-nuu. tce “nyzo tcekuu ky-nuu-ce” nura*
 eastwards IPFV-say-PL LNK 1SG eastwards IMP:EAST-AUTO-go DEM:PL
 16515 *tu-ti-nuu.*
 16516 IPFV-say-PL
 16517 ‘For the seating of the ladies, they say DOWNSTREAM, for that of the elder
 16518 ladies they say UPSTREAM, for that of the men, whether it is here or here,
 16519 they say EASTWARDS, they say ‘go over there EASTWARDS’. (31-khAjmu,
 16520 55-59)

¹¹ This noun is related to the egressive postposition *caylo* ‘upstream from’ (§8.2.10).

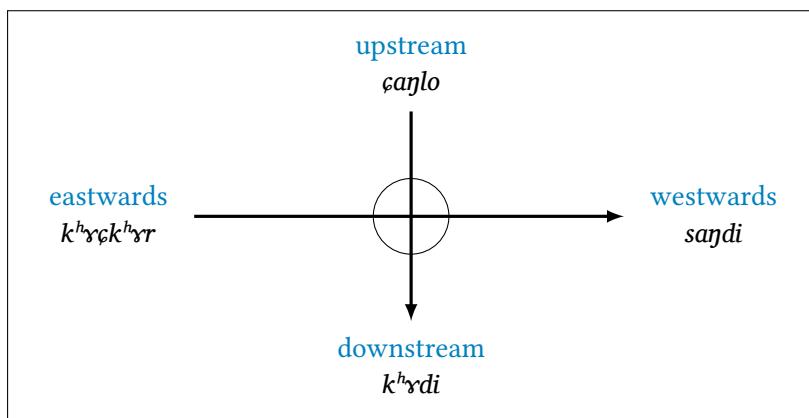


Figure 15.1: Orientations in the living room

16521 The preverbs corresponding to the orientation indicated in Figure 15.1 are al-
 16522 ways selected when the goal of the motion is one of the seating places in the
 16523 living room, for instance EASTWARDS in (97) or WESTWARDS in (98).

- 16524 (97) *ty-tcuu* *nui pui-nui-xtei-nui* *pui-nui-wxti-nui*
 INDEF.POSS-son DEM PST.IPFV-AUTO-be.small-PL PST.IPFV-AUTO-be.big-PL
 16525 *tce kʰyckʰyr* *tcu ku-ce-nui.*
 LNK men.seating.place LOC IPFV:EAST-go-PL
 16526 ‘Men, whether they are young or older, go to the men’s EASTWARDS
 16527 seating place.’ (31-khAjmu, 30)

- 16528 (98) *sanjdi* *nutcu si* *nui-ta-nui*
 seating.place DEM:LOC wood IPFV:WEST-put-PL
 16529 ‘They put the firewood on the WESTWARDS seating place (that is opposite
 16530 the men’s EASTWARDS seating place).’ (31-khAjmu, 36)

16531 15.1.4.5 Orientations with the weaving loom

16532 The riverine dimension is metaphorically extended to refer to the axis of the
 16533 warp threads in the loom. The DOWNSTREAM orientation corresponds to the end
 16534 of the warp closer to the weaver (where Tshendzin’s hands are located in Fig-
 16535 ure 15.2), and the UPSTREAM orientation to the opposite end, where the threads
 16536 are attached.

16537 The downstream preverbs are required on all verbs expressing motion towards
 16538 the lower side, for instance to express the tamping of the intersections between



Figure 15.2: The riverine axis in a body tensioned loom

the threads (using the tool called *t^hazmu*, 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).

- 16542 (99) *wu-sqar* *nui t^hu-ari* *tce*
 3SG.POSS-intersection.of.warp.threads DEM AOR:DOWNSTREAM-go[II] LNK
 16543 *tce, nyki, kuuki* *tú-wy-stu* *tce c^hú-wy-ynda.*
 LNK FILLER DEM.PROX IPFV-INV-do.like LNK IPFV:DOWNSTREAM-INV-tamp
 16544 ‘As the intersection of the (upper and lower) warp threads goes down,
 16545 one does like that to tamp it down.’ (vid-20140429090403, 62)

16546 The axis that is perpendicular to that of the warp threads and parallel to the
16547 ground, through which the weft is inserted (the action depicted in Figure 15.2), is
16548 described using the solar dimension, as shown by the selection of the WESTWARDS
16549 preverb in (100).

- | | | | | | | | |
|-------|-------|---|----------------------------|-----------------|-----------------|----------------------|-------------------|
| 16550 | (100) | <i>w̥-ta&nbsp;b</i> | <i>cʰo</i> | <i>w̥-pa</i> | <i>yur</i> | <i>w̥-vjar</i> | <i>ni</i> |
| | | 3SG.POSS-top | COMIT | 3SG.POSS-bottom | GEN | 3SG.POSS-warp | DU |
| 16551 | | <i>pjui-</i> | <i>rqxts^ba-</i> | <i>ndzi</i> , | <i>nutcu</i> | <i>tui-jlyβ</i> | <i>jui-wy-rue</i> |
| | | IPFV-be.crossed | -DU | DEM.LOC | INDEF.POSS-weft | IPFV:WEST-INV-insert | LNK |
| 16552 | | 'The upper and lower warp threads are crossed, and at (the crossing place) one inserts the weft.' | | | | | |
| 16553 | | (additional explanation provided while transcribing the video from which Figure 15.2 is taken). | | | | | |
| 16554 | | | | | | | |

16555 The vertical dimension preverbs refer to the third axis that is perpendicular
 16556 with the two previous ones, with the DOWNWARDS orientation towards the
 16557 ground. The UPWARDS preverbs occur to describe the lifting of the warp threads
 16558 using the heddles, as in (101).

- 16559 (101) *cnat kuu tx-ri ra tce nuu kuu tú-wy-suu-jos*
 16560 heddle ERG INDEF.POSS-thread PL LNK DEM ERG IPFV:UP-INV-CAUS-raise
 16561 *tce,*
 LNK

16562 ‘One lifts the (warp) threads with the heddles.’ (2011-06-thaXtsa)

15.1.5 Lexicalized orientations

16563 A complete description of the lexicalized orientation preverbs in Japhug would
 16564 require a monograph-length treatment taking into account all verbs, basic and
 16565 derived, and including complex predicates. In order to keep this chapter within
 16566 a reasonable size, I therefore only focus on a few selected semantic categories
 16567 comprising the most common non-orientable verbs of the language.

15.1.5.1 Spatial use of preverbs with non-orientable verbs

16568 While non-orientable verbs generally select only one or two orientations (§15.1.5),
 16569 orientation preverbs that are different from the lexical ones can occur in specific
 16570 contexts to indicate either a motion event linked with the action of the verb
 16571 (normally with an additional associated motion prefix, §15.2.4), the motion of a
 16572 body part or the position of the body.

16573 The intransitive verb *cuu* ‘hibernate’ provides an interesting example of this
 16574 use of the preverbs. The lexically selected orientation of this verb is EASTWARDS
 16575 (like other verbs from the same semantic category), as shown by the preverb *ku-*
 16576 in (102).

- 16578 (102) *qartsuu tce ku-cuu nuu-ŋu.*
 16579 winter LOC IPFV-hibernate SENS-be

16580 ‘In winter, (the bear) hibernates.’ (21-pri, 51)

16581 However, the orientations UPSTREAM and UPWARDS are also attested with this
 16582 verb, with more specific readings. The UPSTREAM orientation is found in (103) and
 16583 also in (170) above, §15.2.1, and expresses hibernation in a cave. These examples

reflect the illative use of the UPSTREAM preverbs (§15.1.4.2). The UPWARDS orientation, also shown by (103), is used when hibernation takes place in a hollow tree, with vertical motion up the tree (§15.1.3.1).

- (103) *tce qartsuu tce nuunu si k^hoŋryl t_r-kui-yri nu*
 LNK winter LOC DEM wood hollow.tree AOR:UP-SBJ:PCP-go[II] DEM
u-ŋguu nuŋmaš tu-cuu, nuŋmašny, pravra u-ŋguu
 3SG.POSS-in otherwise IPFV:UP-hibernate otherwise cave 3SG.POSS-in
lu-ce tce lu-cuu.
 IPFV:UPSTREAM-go LNK IPFV:UPSTREAM-hibernate
 ‘In winter, it either hibernates in a hollow tree, or goes into a cave and hibernates (there).’ (21-pri, 107-108)

The forms with UPSTREAM and UPWARDS preverbs often occur with either motion verbs or associated motion prefixes, as in (104).

- (104) *si u-ŋguu t_r-kui-so, u-ŋguu*
 wood 3SG.POSS-in IPFV:UP-SBJ:PCP-be.hollow 3SG.POSS-in
t_r-kui-rom, nuunu pjui-saxsi tce, nu
 IPFV:UP-SBJ:PCP-be.dried DEM IPFV-do.completely LNK DEM
u-ŋguu c-tu-cuu juu-ŋu.
 3SG.POSS-in TRAL-IPFV:UP-hibernate SENS-be
 ‘Trees whose inside is hollow, whose inside is dried, (the bear) (hollows) it completely, goes up (the hole) and hibernates (there).’ (21-pri, 55)

The use of preverbs to express spatial position or motion as in the case of the UPSTREAM and UPWARDS orientations with *cuu* ‘hibernate’ above are not unusual 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.

16609 15.1.5.2 Preverbs and lability

16610 A handful of labile verbs select different preverbs and have slightly different
 16611 meanings in their transitive and intransitive/semi-transitive uses.

16612 The verb *sryo* ‘listen’ takes the WESTWARDS preverbs when semi-transitive,
 16613 and the EASTWARDS preverbs when transitive with the meaning ‘listen to, obey’
 16614 (§14.5.3).

16615 The verb *suso* ‘think’ is normally transitive and selects the WESTWARDS pre-
 16616 verbs. It can also occur with the DOWNWARDS preverbs, but in this case it is
 16617 intransitive, and means ‘in *X*’s opinion’ (§14.5.1).

16618 15.1.5.3 Irregular orientations with local toponyms

16619 Motion from one locality to another is nearly always expressed using the vertical,
 16620 riverine and solar dimensions in their basic spatial functions (§15.1.3.1, §15.1.3.2
 16621 and §15.1.3.3, respectively). While in some cases there are conflicts between sev-
 16622 eral possible orientations, especially between the riverine and the solar preverbs,
 16623 the choice of the preverbs is nearly always motivated.

16624 However, there are also cases where the choice of the preverbs is unrelated
 16625 to the actual spatial orientation of the trip from one particular place to another.
 16626 For instance, Kamnyu *kymju* (32°12'N, 101°57'E) is located to the west of Mengi
 16627 *muŋji* (32°11'N, 101°57'E, 蒙岩). However, the preverbs corresponding to orienta-
 16628 tions that are exactly opposite to the geographical orientations are used between
 16629 these two villages: the orientation WESTWARDS is used for motion from Kamnyu
 16630 to Mengi (to describe a trip from west to east), and EASTWARDS from Mengi to
 16631 Kamnyu (whereas the actual trip is from east to west), as shown by (105) and
 16632 (106).

- 16633 (105) *kymju* *tce* *tce* *muŋji* *ky-ce* *ty-ra* *tce*, “*muŋji*
 16634 TOPO LOC LNK TOPO INF-go AOR-be.needed LNK TOPO
nua-ce-a” *tu-kur-ti* *ŋu.* *tce* *muŋji* *tce* *kymju*
 16635 IPFV:WEST-go-1SG IPFV-GENR:S/O-say be:FACT LNK TOPO LOC TOPO
nua *tce* *tce*, *ŋki*, “*kymju* *ky-ye-a*, *kymju*
 16636 DEM LNK LNK FILLER TOPO AOR:EAST-come[II]-1SG pl.n
ku-ce-a *ŋu”* *nura* *tu-ti-nua.*
 16637 IPFV:EAST-go-1SG be:FACT DEM:PL IPFV-say-PL
 16638 ‘When one has to go from Kamnyu to Mengi, one says ‘I am going
 (westwards) to Mengi, and from Mengi to Kamnyu, people say ‘I came

- 16639 (eastwards) to Kamnyu, I am going (eastwards) to Kamnyu.' (150904
 16640 akW andi, 6)

16641 (106) *muŋŋi nuu-syx-če* *tʂu nunure ri,*
 TOPO IPFV:WEST-OBL:PCP-go path DEM:LOC LOC
 16642 'On the road (from Kamnyu) towards Mengi...' (140522 Kamnyu zgo, 2)

This contradiction is clear in example (107), where Mengi is explicitly described as being located on the *akuu* (east) side of Kamnyu.

- 16645 (107) *aku psoə̄ n̄iə̄ məŋi ɻu, andi psoə̄ praqwu ɻu.*
 east side DEM TOPO be:FACT west side TOPO be:FACT
 16646 'Mengi is on the east, and Praqwu (a small locality in Kamnyu) is on the
 16647 west.' (140522 Kamnyu zgo, 21)

16648 Ercha village (in Japhug *yju tsʰapa*, most often called using its Chinese name 二
16649 茶村 *ērchácūn*, 32°13'N, 101°55'E), located to the west of Kamnyu, also presents ori-
16650 entation inversion: as shown by (108), the EASTWARDS preverbs are used for trips
16651 from Kamnyu to Ercha, and the WESTWARDS preverbs for the opposite trip. This
16652 fact has been reverified with several speakers (note in particular the anecdote
16653 reported in §27.5.2).

16654 Note that the presence of a hesitation: Tshendzin was about to say *jnu-kuu-če*
16655 with a WESTWARDS preverb (the expected form, based on the geographical loca-
16656 tion of these localities), followed by the the correct *ku-kuu-če* with the irregular
16657 orientation.

- | | | | |
|-------|-------|--|--|
| 16658 | (108) | <i>tce kymnu tce tce <erchacun> nuu-ku... ku-ku-ce</i> | <i>tce</i> |
| | | LNK TOPO LOC LNK TOPO | IPFV:EAST-GENR:S/O-go LNK |
| 16659 | | <i>tce, nuuu “ku-ee-a”</i> | <i>tu-ku-ti</i> <i>ŋu.</i> <i><erchacun> tce</i> |
| | | LNK DEM IPFV:EAST-go-1SG IPFV:GENR:S/O-say be:FACT TOPO | LOC |
| 16660 | | <i>kymnu a-nuu-yi-nuu</i> | <i>tce nuu ‘kymnu nuu-ari-a,</i> |
| | | TOPO IRR-PFV:WEST-COME-PL LNK DEM TOPO | AOR:WEST-go[II]-1SG |
| 16661 | | <i>kymnu nuu-ye-a”</i> | <i>nura tu-ti-nuu</i> <i>ŋu.</i> |
| | | TOPO AOR:WEST-come[II]-1SG DEM:PL IPFV-say-PL be:FACT | |
| 16662 | | (150904 akW andi, 10-11) | |

This puzzling irregularity has not been observed for other toponyms, especially those located further away from Kamnyu. For instance, the UPSTREAM orientation is used for trips to Tshobdun and Zbu, the DOWNSTREAM orientation to Mbarkham (§15.1.3.2) and the EASTWARDS orientation to Sarndzu and Tatshi (§15.1.3.3).

16668 15.1.5.4 Verbs of ingestion

16669 The most common verb of ingestion, *ndza* ‘eat’, generally selects the UPWARDS
 16670 preverbs, as shown for instance by (206) (in §15.2.7) and (200) (in §15.2.6). The
 16671 same is true of verbs derived from it, such as the compound verb *rundzr̩tsʰi*
 16672 ‘have a meal’ (§20.12), as shown by (204) in §15.2.7, and of other more specialized
 16673 verbs of food ingestion such as *mɔs* ‘eat (powdery food)’, *nutçʰaʂ* ‘eat fodder (of
 16674 horses)’, *nutsʰyndz̩yr* ‘eat a tsampa meal’, *zm̩rr̩β* ‘eat (mixing with)’ or *χs̩rl* ‘eat
 16675 (honorific)’.

16676 The DOWNSTREAM preverbs can occur with *ndza* ‘eat’ to refer to eating by wild
 16677 beasts and birds of prey, as in (109), probably due to the fact that this orientation
 16678 is also selected by *çkut* ‘eat/drink completely’, a verb which can also describe the
 16679 actions of ferocious animals as in example (71) in §14.3.3.1.¹²

- 16680 (109) *kurtṣṣy nu kuu, nyki, turme ra yuu nur-fsapas nu*
 16681 leopard DEM ERG FILLER people PL GEN 3PL.POSS-animal DEM
cʰuu-ndze, [...] qazo tsʰyt nu
 16682 IPFV:DOWNSTREAM-eat[III] sheep goat DEM
cʰuu-ndze pjy-ŋu,
 16683 IPFV:DOWNSTREAM-eat[III] IFR.IPFV-be

16684 ‘The snow leopard was eating domestic animals, eating, sheep and
 goats.’ (qala kWQraR 2002, 3)

16685 This orientation is also attested to describe the eating of earth by earthworm
 16686 as in (110), though in this case the preverb is used spatially (§15.1.5.1), reflecting
 16687 the burrowing motion of the earthworm (§15.1.4.2).

- 16688 (110) *tceri qandze kuu tʰylwa yʃa cʰuu-ndze*
 16689 LNK earthworm ERG earth completely IPFV:DOWNSTREAM-eat[III]
nu-cti.
 16690 SENS-be.AFF
 16691 ‘The earthworm only eats earth.’ (25-akWzgumba, 126)

16692 The EASTWARDS orientation is exclusively attested with *ndza* to describe eclipses,
 16693 as in (111), also a spatial use of the preverbs (expressing motion from the left side
 to the right side or vice-versa, §15.1.4.3).

¹² See also the discussion on the use of the DOWNSTREAM orientation with *tsʰi* ‘drink’ below,
 above example 115).

- 16694 (111) *u-rkut kur-fse ku-ze tce,*
 3SG.POSS-side SBJ:PCP-be.like IPFV:EAST-being[III] LNK
 16695 *mu-ky-arco myctṣa ku-ndze yyzu,*
 NEG-AOR:EAST-be.finished until IPFV:EAST-eat[III] exist:SENS
 16696 ‘Sometimes (the eclipse) starts on one side, and ‘eats’ (the moon) until it
 16697 (disappears) completely.’ (29-mWBZi, 155)

16698 The orientation WESTWARDS occurs with verbs referring to animals eating
 16699 grass, such as the intransitive verb *nuruu* ‘eat grass’ as in (112) and its synonym
 16700 *nusṛlyy*.

- 16701 (112) *nuŋa qʰe qazot tsʰyt nura pjy-dyn-nuu tce, nuŋcu*
 cow LNK sheep goat DEM:PL IFR.IPFV-be.many-PL LNK DEM:LOC
 16702 *nua-nurua-nuu tce sujno tu-ndza-nuu pjy-ŋu,*
 IPFV:WEST-eat.grass-PL LNK grass IPFV:UP-eat-PL IFR.IPFV-be
 16703 ‘There were many cows, sheep and goats, and they were eating grass
 16704 there.’ (150819 woniu-zh, 9)

16705 Verbs related to the ingestion of liquids select the EASTWARDS preverbs as de-
 16706 fault, as in (113), including the deideophonic *nukʰuy* ‘gulp’ (§20.9.2).

- 16707 (113) *tui-ci ko-nukʰuy zo ko-tsʰi.*
 INDEF.POSS-water IFR:EAST-gulp EMPH IFR:EAST-drink
 16708 ‘He gulped the water.’ (140429 jiedi-zh, 70)

16709 The verb *tsʰi* ‘drink’ is also found with the DOWNWARDS orientation to refer to
 16710 drinking with the head down on the grounds (like animals, or from a jar with a
 16711 straw), for instance in (167) and (168) in §15.2.1 and (37) in §5.1.2.9. The denominal
 16712 verb *nuci* ‘drink from the ground’ also selects this orientation.

16713 The DOWNSTREAM preverbs occur with this verb in two contexts. First, follow-
 16714 ing the basic spatial meaning of these preverbs (‘direction of the flow of water’,
 16715 §15.1.3.2), they can be used to insist on the flow of liquid through the oesophagus
 16716 during ingestion, as in (114).

- 16717 (114) *tui-ci kuanγ cʰui-ce muu-py-kʰui.*
 INDEF.POSS-water also IPFV:DOWNSTREAM-go NEG-IFR-be.possible
 16718 *tui-ci cʰui-tsʰi muu-py-kʰui*
 INDEF.POSS-water IPFV:DOWNSTREAM-drink NEG-IFR-be.possible
 16719 ‘Even water could not go (down his throat), he could not drink anymore.’
 16720 (of a person suffering from throat cancer, 27-tWfCAL, 81)

Second, the DOWNSTREAM orientation is found to express excessive alcohol drinking, as in (115), possibly by analogy with *çkut* ‘eat/drink completely’ which also takes this orientation (see also the discussion concerning example 109 above).

- (115) *uu-wa nuu kuu c^ha ntsuu c^huu-ts^hi q^he,*
 3SG.POSS-father DEM ERG alcohol always IPFV:DOWNSTREAM-drink LNK
uu-me muáj-nuqβdaꝝ
 3SG.POSS-daughter NEG:SENS-take.care
 ‘Her father was drinking alcohol all the time, and did not take care of his daughter.’ (17-lhazgron, 68)

The DOWNSTREAM preverbs are also selected by the denominal verb *nuc^hymda* ‘drink with a straw’ (example 73, §25.1.5), probably reflecting the illative (through tubular opening) function of the DOWNSTREAM preverb (§15.1.4.2). It is noteworthy that *ts^hi* ‘drink’ takes the DOWNWARDS orientation instead when referring to drinking from a straw.

The UPSTREAM preverbs occur with the verb *χyβ*, which can mean ‘drink until the last drop in one gulp’, or ‘breathe in, suck up, draw up’ as in (116), a special case of the illative (through large opening) function of this orientation (§15.1.4.2; note that the illative is expressed with the opposite orientation as that of *nuc^hymda* ‘drink with a straw’, due to the difference of the shape of the opening).

- (116) *uu-sŋuro lu-χyβ zo tce nuu βyyza nuu*
 3SG.POSS-breath IPFV:UPSTREAM-SUCK EMPH DEM LNK fly DEM
uu-kur uu-ŋguu lu-nu-ce cti
 3SG.POSS-mouth 3SG.POSS-in IPFV:UPSTREAM-AUTO-go be.AFF:FACT
 ‘(The frog)_i draws its_i breath and the fly goes by itself into its_i mouth.’
 (27-qacpa, 7)

15.1.5.5 Stative verbs expressing size

Adjectival verbs describing size, like other stative verbs, become dynamic verbs (‘become X’) in the Imperfective (§21.2), the Irrealis (§21.4.1), the Aorist (§21.5.1.3) and the Inferential (§21.5.2). The most neutral orientation preverbs for these verbs are indicated in Table 15.7. Most positive adjectival verbs select the UPWARDS orientation, except for those describing radial size (*jpum* ‘be thick’, *rjum* ‘be broad’) which are found with the WESTWARDS orientation, and those expressing length (see below).

16751 It is much more difficult to ascertain the lexically selected orientation of neg-
 16752 ative adjectival verbs, since the situations in which their use as dynamic verbs is
 16753 appropriate ('become small(er)', 'become short(er)') are less common. The DOWN-
 16754 WARDS orientation does occur as lexically selected orientation (with *xtci* 'be small'
 16755 and *mbyr* 'be low'), resulting in forms that are homophonous with the Past Im-
 16756 perfective (§21.5.3). Perhaps due to this homophony, the WESTWARDS orientation
 16757 is also used instead with *xtci* 'be small', as in (117).

- 16758 (117) *ki u-Byri sustab zo u-cya*
 DEM.PROX 3SG.POSS-before COMP EMPH 3SG.POSS-age
 16759 *a-nuu-xtci ra*
 IRR-PFV:WEST-small be.needed:FACT
 16760 'May she become younger than before!' (Norbzang 2005, 251)

Table 15.7: Adjectival stative verbs of size and orientation preverbs

Positive size	Orientation	Negative size	Orientation
<i>wxti</i> 'be big'	up	<i>xtci</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>rpyi</i> 'be long'			
<i>jbum</i> 'be thick' (of radius)	west	<i>xtshum</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>ryum</i> 'be broad'	west	<i>tçyr</i> 'be narrow' <i>ngyr</i> 'be narrow'	east east

16761 In addition to the orientations in Table (15.7), the DOWNSTREAM preverbs can
 16762 occur to express a progressive increase (§21.1.3). Compare for instance the use
 16763 of *wxti* 'be big' with the UPWARDS orientation in (118) with that in (119) with the
 16764 DOWNSTREAM orientation, describing a process taking place progressively over
 16765 many years.

15 Orientation and associated motion

- 16766 (118) *m̥zur zo u-kʰa ra to-wxti tce,*
 even.more EMPH 3SG.POSS-house PL IFR:UP-be.big LNK
 ‘His house had become even bigger.’ (140430 yufu he tade qizi-zh, 222)
- 16767 (119) *tceri u-tcui nuu zuruuzyri cʰy-wxti*
 LNK 3SG.POSS-son DEM progressively IFR:DOWNTSTREAM-be.big
 ‘His son progressively grew up.’ (28-smAnmi, 10)

16770 Some of these verbs are compatible with more than one orientation. For in-
 16771 stance, *rŋji* ‘be long’ is attested with the UPWARDS orientation to refer to the
 16772 length of a vertical object, as in (120) (where it is synonymous with *mbro* ‘be
 16773 high’). With the UPSTREAM preverbs, it describes for instance (elongated) fruits
 16774 or leaves growing out of the branch of a plant, as in (121).

- 16775 (120) *tce <yimi> jamar ma tu-rŋji mx-cʰa ma*
 LNK one.meter about apart.from IPFV:UP-be.long NEG-can:FACT LNK
 ‘It cannot grow longer than about one meter.’ (11-qarGW, 114)
- 16777 (121) *turgi yuu u-mat lu-rŋji tsa ηu tce,*
 fir GEN 3SG.POSS-fruit IPFV:UPSTREAM-be.long a.little be:FACT LNK
 16778 *nyki jima popo tsa fse.*
 FILLER maize cob a.little be.like:FACT
 ‘The fir cone is elongated, a bit like the corncob (07-tAtho, 32)

16780 The DOWNTSTREAM preverbs are found to express progressive increase (example
 16781 119, §12.4.1.4, §22.2.1), as in (122), but can also refer to the growth of thread-like
 16782 objects like hair, as in (123). Note in this example that *rŋci* ‘pull’ shares the same
 16783 preverb to refer to the pulling of hairs.

- 16784 (122) *cyr nuu cʰu-rŋji, sŋi nuu*
 night DEM IPFV:DOWNTSTREAM-be.long day DEM
 16785 *cʰu-xtuit nuu-ηu*
 IPFV:DOWNTSTREAM-be.short SENS-be
 ‘The nights are becoming longer, and the days shorter.’ (elicited)
- 16787 (123) *pui-kui-xtci tce, nunu zŋgri nuu nuu-myrzaβ*
 PST.IPFV-GENR:S/O-be.small LNK DEM star DEM AOR-marry
 16788 *u-ray tce, tu-kyrme cʰú-wy-rŋci tce,*
 3SG.POSS-time LNK GENR.POSS-hair IPFV:DOWNTSTREAM-INV-pull LNK

- 16789 *c^huu-rŋji* *ŋu* *to-ti-nuu* *tce*,
 IPFV:DOWNSTREAM-be.long be:FACT IFR-say-PL LNK
 16790 ‘When we were young, people said that when there is a shooting star, if
 16791 you pull your hair, it will grow longer.’ (29-mWBZi, 102)

16792 15.1.5.6 Verbs related to growth, gain or birth

Adjectival verbs of size can be used to express growth (§15.1.5.5), but another construction expressing the same meaning involves the transitive verb *βzu* ‘make’ with a dummy subject (§14.3.5), and an adjectival verb in participial form (§16.1.1), as in (124), with the UPWARDS orientation (compare with 120 above and 75 in §14.3.3.1).

- 16798 (124) *cry nu li kui-mbu~mbo tu-βze cʰa*
 juniper DEM again SBJ:PCP-EMPH-be.high IPFV:UP-make[III] can:FACT
 16799 ‘The juniper grows very high.’ (08-CAG, 1)

16800 The UPSTREAM orientation appears to describe fruits or leaves growing out of
16801 a plant, as in (125) (compare with 121 above).

- 16802 (125) *turgi lanlan̩ nuuw, la-βzu cimuma nu*
fir cone DEM AOR:UPSTREAM:3→3'-make immediately DEM
16803 *nuw-yryŋi,*
SENS-be.green
16804 ‘The fir cone is green when it has just grown out.’ (08-tWrgi, 72)

The DOWNSTREAM orientation is found with long and thin thread-like objects, like the stalks of some plants as in (126) (compare with 123), but also occur to refer to fruits or grains (127), probably as an extension of the progressive incrementation function of this orientation (119 above, §15.1.5.5).

- | | | | | | |
|-------|-------|---|---|----------------------------|------------------------|
| 16809 | (126) | <i>wu-ru</i> | <i>ra kui-xts^hwi~xts^hwm</i> | <i>ŋu</i> | <i>ri,</i> |
| | | 3SG.POSS-stalk | PL SBJ:PCP-EMPH~be.thin | be:FACT | LNK |
| 16810 | | <i>kui-zuu~zri</i> | <i>zo</i> | <i>c^hwi~βze</i> | <i>q^he,</i> |
| | | SBJ:PCP-EMPH~be.long | EMPH | IPFV:DOWNSTREAM-make[III] | LNK |
| 16811 | | 'Although its stalk is very thin, it grows very long.' (19-qachGa mWntoR, | | | |
| 16812 | | 71) | | | |

15 Orientation and associated motion

- 16813 (127) *sun̥guƿpjka nuu uu-mat numuu pjka kuu-fse*
 wild.squash DEM 3SG.POSS-fruit DEM squash SBJ:PCP-be.like
 16814 *cʰuu-βze,*
 IPFV:DOWNSTREAM-make[III]
 16815 ‘Wild squash grows fruits like those of the (cultivated) squash.’
 16816 (16-CWrNgo, 39)

16817 The intransitive verb *ndzxt* ‘grow’ also selects the UPWARDS orientation to de-
 16818 scribe the growth of a plant, and the DOWNSTREAM preverbs for children, as in
 16819 (128).

- 16820 (128) *tʂ-pytsø cʰo-ndzxt*
 INDEF.POSS-child IFR:DOWNSTREAM-grow
 16821 ‘The child grew up.’ (elicited)

16822 For growth in quantity rather than size, the UPWARDS orientation is selected,
 16823 for instance with the verb *dyn* ‘be many’ in (129).

- 16824 (129) *tʰam tce myzur tʂ-dyn-nuu*
 now LNK even.more AOR:UP-be.many-PL
 16825 ‘Now they are even more numerous than before.’ (140522 tshupa, 86)

16826 The UPWARDS orientation is also selected by verbs expressing birth and coming
 16827 into existence such as *tu* ‘exist’ in (130) and (135) (note that its antonym *me* ‘not
 16828 exist’ rather selects the WESTWARDS orientation, §15.1.5.7), and verbs of Tibetan
 16829 origin such as *sci* ‘be born’ (131) and the honorific *mkʰroy* ‘be born, be reincar-
 16830 nated’ (132).

- 16831 (130) *ndzi-tcui ci to-tu*
 3du.POSS-son INDEF IFR:UP-exist
 16832 ‘They had one son.’ (2011-05-nyima, 2)

- 16833 (131) *uu-tcui to-sci ci uu-me to-sci?*
 3SG.POSS-son IFR-be.born QU 3SG.POSS-girl IFR-be.born
 16834 ‘Did she have a boy or a girl.’ (elicited)

- 16835 (132) *nuazora nuu-cki yui-to-mkʰroy pui-ŋu.*
 2PL 2PL.POSS-DAT CISL-IFR:UP-be.born SENS-be
 16836 ‘He had come to be born in their (family).’ (150825 nezha naohai-zh, 38)

16837 The DOWNSTREAM orientation however occurs with verbs expressing humans
 16838 or animals giving birth, such as the intransitive denominal verbs *r̥p̥uu* ‘have
 16839 young’, *r̥yŋgum* ‘lay eggs’ and *r̥yŋit* ‘have a child’ (§20.4.1) and the light verb
 16840 *l̥t̥* ‘release’ in the meaning ‘give birth to’ in (133). This may be an extension of
 16841 the elative function of the DOWNSTREAM preverbs (§15.1.4.2).

- 16842 (133) *tsʰyt̥ nuu tʰui-r̥p̥uu* *tce, bnuuz ntsuu*
 goat DEM AOR:DOWNSTREAM-have.young LNK two always
 16843 *cʰui-lyt̥* *ŋgryl*
 IPFV:DOWNSTREAM-release be.usually.the.case:FACT
 16844 ‘When goats have young, they give birth to two (kids) each time.’
 16845 (05-qazO, 7)

- 16846 (134) *tui-ji* *w-ŋgw* *nura cʰui-r̥yŋgum*
 INDEF.POSS-field 3SG.POSS-in DEM:PL IPFV:DOWNSTREAM-lay.eggs
 16847 *ŋgryl*
 be.usually.the.case:FACT
 16848 ‘It lays eggs in the fields.’ (24-kWmu, 85)

16849 Verbs expressing gain select the DOWNTWARDS orientation, including the ori-
 16850 entable verb *m̥ya* ‘take’ (§15.1.2.2) when used in the meaning ‘obtain, get’ (exam-
 16851 ple 91 in §19.7.3), *β̥yrt̥* ‘obtain’ (§19.7.3), *m̥to* ‘see’ (which can mean ‘find’ espe-
 16852 cially when used with the autive prefix, see §15.1.5.9 and §19.1.4) as well as the
 16853 semi-transitive *aře* ‘have to eat/drink’¹³ as in (135).

- 16854 (135) *a-kur* *w-ŋgw* *tui-ci*
 1SG.POSS-mouth 3SG.POSS-in INDEF.POSS-water
 16855 *p̥uu-aře-a* *tce, a-sroš* *to-tu*
 AOR:DOWN-be.needed.eat-1SG LNK 1SG.POSS-life IFR:UP-exist
 16856 ‘I have water in my mouth to drink, my life is back.’ (2011-05-nyima, 69)

16857 15.1.5.7 Verbs related to loss or death

16858 Verbs expressing loss, with meanings such as ‘disappear’ or ‘lose’ generally se-
 16859 lect the orientation WESTWARDS, probably as an extension of its centrifugal use
 16860 (§15.1.4.3). For instance, the verb *β̥de* ‘throw’, which can also be interpreted as
 16861 meaning ‘lose’ when used non-volitionally (especially with the autive §19.1.6),

¹³ This verb can be translated into Chinese as 吃到 <chídào> ‘have to eat’ or 喝到 <hédào> ‘have to drink’.

15 Orientation and associated motion

16862 selects this orientation, as shown by (136), even though the loss of the hat (in the
 16863 pear story movie) involved a motion downwards.

- 16864 (136) *tce uu-rte ra p̥y-nuŋ-βde tce,*
 LNK 3SG.POSS-hat PL IFR:WEST-AUTO-lose LNK

16865 '(The boy) lost his hat' (Pear story 2010, Tshendzin, 12)

16866 The same is observed with the verb *me* 'not exist' in (137), here also despite a
 16867 clear downward motion of the water level until the lake disappears.

- 16868 (137) *mts^hu nuŋ c^humc^hum zo, tce, tuŋ-skym p̥y-syza tce*
 lake DEM IDPH(II):slowly EMPH LNK INF:II-dry.up IFR:DOWN-start LNK
 16869 *mts^hu nuŋ p̥y-me tce*
 lake DEM IFR:WEST-not.exist LNK

16870 'The level of the lake started to go down slowly and the lake
 16871 disappeared.' (nyima2003, 106)

16872 Verb expressing partial disappearance, such as *rkun* 'be few' in (138), also occur
 16873 with the WESTWARDS orientation.

- 16874 (138) *zgoku nuŋcu si nuŋ z̥aruzyri nuŋ-p̥y-rkun zo*
 mountain DEM:LOC tree DEM progressively INCR~IFR:WEST-be.few EMPH
 16875 'The trees on the mountain became fewer and fewer.'
 16876 (04-xiaocunzhuang-zh, 24)

16877 The verb *cq^hlyt* 'disappear', also semantically related to these verbs, is an ori-
 16878 entable motion verb (§15.1.2.1). It does not usually select the WESTWARDS orienta-
 16879 tion in a non-spatial way, except for the express the passing of time (§15.1.4.1). In
 16880 example (139), there is however some ambiguity as to whether the WESTWARDS
 16881 orientation is purely spatial (the setting of the sun in the west, see §15.1.3.3; note
 16882 that the vertical dimension is more commonly selected, §15.1.3.1), or whether it
 16883 could also be analyzed as centripetal.

- 16884 (139) *txŋe nuŋ nuŋ-cq^hlyt ku-nxjym ra k^hi*
 sun DEM IPFV:WEST-disappear IPFV-wait[III] be.needed:FACT hearsay
 16885 *ma txŋe nuŋ wuma zo nuŋ-me k^hi.*
 LNK sun DEM really EMPH APPL-be.afraid[III]:FACT hearsay
 16886 'The yeti waits for the sun to disappear (before eating the man he has
 16887 caught), because he fears the sun, it is said.' (140510 mYWrgAt, 7)

16888 It is possible that the centripetal function of the WESTWARDS orientation has
 16889 originated from a metaphoric extension of the disappearance of the sun in the
 16890 west at dusk, in which examples like (139) would be the pivot construction allowing
 16891 reanalysis from a purely spatial marker to a more abstract meaning such as
 16892 ‘away from the deictic center’ or ‘loss’.

16893 Verbs expressing a more abstract type of disappearance, such as the cognition
 16894 verb *jmut* ‘forget’ (memory loss), likewise select the WESTWARDS prefixes, as in
 16895 *jyr-nuu-jmut-a* IFR:WEST-AUTO-forget-1SG ‘I forgot (about it)’ (see 162, §14.6.1.4).

16896 The verb *me* ‘not exist’ has another set of forms with the UPWARDS orientation,
 16897 as in (140). With the UPWARDS vertical preverbs, this verb does not entail the
 16898 presupposition that loss occurred; in the perfective, the *tx-me* with UPWARDS ori-
 16899 entation means ‘when there this no X’ (a usage found with other stative verbs,
 16900 §21.1.1.3), while *nuu-me* with WESTWARDS orientation can only be interpreted as
 16901 ‘(when) X disappeared/was lost’.

- 16902 (140) *nuu ma si tx-me tce li nuu nuu-p^huat-nuu*
 DEM apart.from wood AOR:UP-not.exist LNK again DEM IPFV-take.out-PL
 16903 ‘When there is no other wood than this, people cut it.’ (07-Zmbri, 65)

16904 As in many languages (for instance Indo-European **mer*, Rix et al. 2001: 439–
 16905 440), *me* in the meaning ‘disappear’ is commonly used as a euphemism for pass-
 16906 ing away, as in (141).

- 16907 (141) *wizo w-χti jyr-me tce,*
 3SG 3SG.POSS-companion IFR:WEST-not.exist LNK
 16908 ‘Her husband passed away.’ (12-BzaNsa, 127)

16909 Likewise, verbs expressing death and destruction, such as *si* ‘die’ and *χceaz* ‘pass
 16910 away’ (a borrowing from अवैश्य gcegs ‘go away’), *plut* ‘suppress, destroy’, *ndzuy*
 16911 ‘be destroyed’ select the WESTWARDS orientation, as shown by (142), (143) and
 16912 (202) further below (in §15.2.6).

- 16913 (142) *βdaεmu nuu to-ngo tce jyr-si.*
 lady DEM IFR-be.ill LNK IFR:WEST-die
 16914 ‘The lady became ill and died.’ (2011-05-nyima, 5)
- 16915 (143) *jima w-ryi nuu-plut-i*
 maize 3SG.POSS-grain AOR:WEST-destroy-1PL
 16916 ‘We have used up all the maize grains.’ (elicited)

15 Orientation and associated motion

The verb *si* ‘die’ alternatively also occur with the DOWNWARDS preverbs, in particular in the case of animals as in (144). With humans, using the DOWNWARDS preverbs is not rude, but considered to be blunter than with the westwards’ preverbs.

- (144) *tceu zara nuu-NGarmuu nuu pjy-si k^{hi} tce*,
 up.there 3PL 3PL.POSS-hybrid.cow DEM IFR:DOWN-die hearsay LNK
 ‘Those up there, their cow died, it is said.’ (Tagrdo conversation, 2003)

The transitive verb *sat* ‘kill’ also selects the DOWNWARDS orientation preverbs, even when taking an associated motion prefix and an overt goal pointing to an orientation other than DOWNWARDS, as in (145).

- (145) *atu pyxtceu nuu c-pur-sat-nuu ra*
 up.there bird DEM TRAL-IMP:DOWN-kill-PL be.needed:FACT
 ‘Go and kill the bird up there.’ (2005 Kunbzang, 330)

Likewise, *ntc^ha* ‘kill, butcher’ (on whose etymology see Gong 2018: 303–309) occurs with the DOWNWARDS preverbs in the meaning ‘kill (an animal)’, as shown by (146).

- (146) *tce nuu-nuuya pjy-nuu-ntc^ha-nuu*
 LNK 3PL.POSS-COW IFR:DOWN-AUTO-butcher-PL
 ‘They killed their cow (for themselves to eat).’ (02-deluge2012, 17)

The orientation WESTWARDS also occurs with this verb in the meaning ‘butcher’, as illustrated by (147) and (148). On the other hand, *sat* ‘kill’ is not found with the WESTWARDS preverbs.

- (147) *fsapar w-ŋgru puu-nuu-ŋju, ruudaa*
 domestic.animals 3SG.POSS-sinew PST.IPFV-AUTO-be 3SG.POSS-sinew
w-ŋgru puu-nuu-ŋju, nunuu na-ntc^ha-nuu tce
 wild.animals PST.IPFV-AUTO-be DEM AOR:WEST:3→3'-butcher-PL LNK
tu-tcx-tuu tce tce tu-suuy-rom-nuu.
 IPFV:UP-take.out-PL LNK LNK IPFV-CAUS-be.dry-PL
 ‘Whether it is sinew_i from a domestic or a wild animal,_j after they
 butcher them,_j they take it_i out and dry it_i.’ (150906 tWNgru, 6)

- 16941 (148) *nunu pa-sat-nur* *tce tce ju-nu-yut-nur* *tce*
DEM AOR:DOWN:3→3'-kill-PL LNK LNK IPFV-VERT-bring-PL LNK
16942 *nur-ntc^ha-nur*
IPFV:WEST-butcher-PL
16943 'After (the hunters) have killed (the animals)_i, they bring them_i home
16944 and butcher them_i.' (150829 KAGWcAno, 18)

15.1.5.8 Verbs of speech and sound

16945 Verbs of speech mainly select either the orientation UPWARDS (*ti* 'say', *ruqmī*
16946 'speak', *arju* 'speak', see for instance 123 in §15.1.5.5 and 19 in §14.2.4; their etymol-
16947 ogy is discussed in §20.2.1 and §20.6), with the exception of *fçrt* 'tell' (borrowed
16948 from *bçad* 'tell'), which occurs with the DOWNWARDS preverbs (see the Infer-
16949 ential *pjr-fçrt* IFR:DOWN-tell 'she told it' in 127, §16.1.3.7). The intransitive verb
16950 *mbri* 'make a sound', used for animals or objects, is also found with the UPWARDS
16951 preverbs (see *to-mbri* IFR:UP-make.noise in 107, §16.1.1.5)

16952 The intransitive denominal verb *nuryyo* 'sing' (§20.7.1) on the other hand ap-
16953 pears with the orientation DOWNSTREAM, as in (149), and this applies to transitive
16954 verbs taking the base noun *rryo* 'song' as objects (such as *c^hui-tu-za* and *c^hui-ti* in
16955 150).

- 16956 (149) *qarts^hi nur sŋi tce c^hui-nuryyo* *ny*
16957 cicada DEM day LOC IPFV:DOWNSTREAM-sing ADD
16958 *c^hui-nuryyo* *ŋu* *tce*
16959 IPFV:DOWNSTREAM-sing be:FACT LNK
16960 'The cicada (was) singing all the time during the day.
(26-NalitCaRmbWm, 30)

- 16961 (150) *nunu rryo c^hui-tu-za* *q^he, tyrcurca zo*
16962 DEM song IPFV:DOWNSTREAM-CONV:IMM-start LNK together EMPH
16963 *c^hui-ti-nur* *to-c^ha-nur*.
16964 IPFV:DOWNSTREAM-say IFR-can-PL
16965 'They became able to sing along as soon as it started its song.' (140519
16966 yeing-zh, 162)

16967 The choice of the DOWNSTREAM preverbs on verbs related to songs and music
is probably an analogical extension of its use with verbs related to wind instru-
16968 ments, as in (151) and (152) (see also 178, §14.6.2).

15 Orientation and associated motion

- 16968 (151) *juli nuu cʰy-lvt.*
flute DEM IFR:DOWNSTREAM-release
16969 ‘He played the flute’ (140513 mutong de disheng-zh, 85)
- 16970 (152) *nunuura kuu rkdyut cʰu-z-mbri-nuu*
DEM:PL ERG horn IPFV:DOWNSTREAM-CAUS-make.noise-PL
16971 *pjx-mtsʰym.*
IFR-hear
16972 ‘She heard (the hunters) blowing the horn.’ (140520 ye tiane-zh, 249)

16973 The DOWNSTREAM preverbs on verbs of this type itself derives from their use
16974 with *yymut* ‘blow’ as in (153), itself an extension of their illative meaning (‘into
16975 a tubular object’, see §15.1.4.2).

- 16976 (153) *uu-lvcu cʰu-wy-yymut tce tuu-rtsʰyz*
3SG.POSS-upstream IPFV:DOWNSTREAM-INV-blown LNK INDEF.POSS-lung
16977 *nuu nuu-fka yu*
DEM SENS-be.full be:FACT
16978 ‘One blows (into the pig’s trachea) and its lungs fill up.’ (20-kAPjAt, 13)

15.1.5.9 Verbs of perception

16980 With the exception of the orientable verb *ru* ‘look at’ (§15.1.2.4), most verbs of
16981 perception generally select only one orientation. The DOWNWARDS preverbs are
16982 selected by the non-volitional verbs *mto* ‘see’ and *mtsʰym*, which generally means
16983 ‘hear’, but is also used for all non-visual non-volitional perception, including
16984 olfaction (example 122, §17.5.3), touch and the perception of vibrations as in (154).

- 16985 (154) *juu-munmu ny juu-munmu tce tce, nuu uu-ŋguu ncocna*
IPFV-move ADD IPFV-move LNK LNK DEM 3SG.POSS-in spider
16986 *kua-ryzi nuu kua pjuu-mtsʰym tce*
SBJ:PCP-stay DEM ERG IPFV:DOWN-feel LNK
16987 ‘(The fly that has been caught in the spider’s web) moves and moves,
16988 and the spider staying inside feels it.’ (26-mYaRmtsaR, 63-64)

16989 The other verbs each have a different orientation: the semi-transitive *syo* ‘lis-
16990 ten’ selects the WESTWARDS preverbs (§15.1.5.2, §14.5.3), and the tropative verb
16991 *nymnym* ‘smell’ (§17.5.3) the UPWARDS preverbs (examples 122 and 123, §17.5.3).
16992 This orientation simply reflects that of the base intransitive verb *mnym* ‘have a
16993 smell’.

16994 15.1.5.10 Verbs of giving

16995 Ditransitive verbs expressing permanent or temporary transfer of property, in-
 16996 cluding *mbi* ‘give’, *kʰo* ‘give, pass’, *rjo* ‘borrow (from)’ and *nṛŋgu* ‘borrow (from)’
 16997 (and verbs derived from these), have different argument structures (§14.4.1 and
 16998 §14.4.2), but most of them select the WESTWARDS preverbs as default orientation,
 16999 perhaps reflecting the centripetal function of this orientation (§15.1.4.3), as in
 17000 English ‘give away’ or ‘give out’.

17001 For instance, the most common Inferential 3→3' forms of these verbs are *nṛ-*
 17002 *mbi*, *nṛ-mbi*, *nṛ-rjo* and *nṛ-nṛŋgu* (examples are plentiful elsewhere in this gram-
 17003 mar, for instance 14 in §8.1.7, 105 and 108 in §14.4.1 and 173 and 174 in §8.3.1).

17004 However, it is alternatively possible to choose a prefix reflecting the spatial
 17005 direction of the transfer of property. In (155), we find thus a DOWNWARDS ori-
 17006 entation preverb to describe a present (downwards) from heaven, and in (156) an
 17007 UPWARDS preverb expresses the relative vertical position of the recipient and the
 17008 subject: the latter being on the ground, while the former rides a tiger, the transfer
 17009 of property involves a motion upwards.

- 17010 (155) *tumukumpci kui pú-wy-mbi-a n̥u*
 heaven ERG AOR:DOWN-INV-give be:FACT
 17011 ‘Heavens gave it to me.’ (Norbzang 2005, 312)

- 17012 (156) *laŋjuy nuu u-taŋ nuu u-pʰe to-kʰo tce,*
 staff DEM 3SG.POSS-ON DEM 3SG.POSS-DAT IFR:UP-give LNK
 17013 ‘He gave the staff to the (thief) who was on (the tiger).’ (khu2012, 15)

17014 The DOWNWARDS orientation can also be used more metaphorically to express
 17015 gift from someone higher up in the social hierarchy, as in (157).

- 17016 (157) *taŋ kui, <piaoz> pú-wy-mbi-j.*
 up ERG money AOR:DOWN-INV-give-1PL
 17017 ‘The ones above (the government) gave us money.’ (2010-09, 172)

17018 The riverine axis is also metaphorically used to express relative social status
 17019 with the verb *kʰo* ‘give, pass’. The DOWNSTREAM preverbs express transfer of
 17020 property from someone higher in the hierarchy (in particular, nobles or lamas)
 17021 to someone lower than himself. For instance in (158), the subject of *cʰy-tuu-kʰo-*
 17022 *nuu* ‘you gave it to her’ is a prince, and the recipient an unknown girl; note that
 17023 the DOWNSTREAM preverb co-occurs here with the honorific plural (§14.6.1.2), an-
 17024 other linguistic clue to the social status of the subject.

15 Orientation and associated motion

- 17025 (158) *nuitcu zu laftas c^hy-tur-k^ho-nur tce, nuna*
 DEM:LOC LOC token IPFV:DOWNTSTREAM-2-give-PL LNK DEM
 17026 *nua-jum nui cu-car-i ra*
 3PL.POSS-wife.of.lama DEM TRAL-look.for:FACT-1PL be.needed:FACT
 17027 '(Since) you have given her a token, we will go and look for this (woman,
 17028 your wife.' (sras 2003, 42)

17029 The opposite UPSTREAM orientation is found to express gift from someone
 17030 lower in the hierarchy to an important person. In particular, it is the orienta-
 17031 tion selected by the honorific verb *p^hul* 'offer', which is borrowed from 藏语 *p^hul*
 17032 'offer'.

15.1.5.11 Verbs of covering

17033 The verb *fkaβ* 'cover' occurs with both the DOWNWARDS and DOWNTSTREAM pre-
 17034 verbs. The former are selected when the covering action involves a downwards
 17035 motion (as in 159), or when describing the feeling of being completely covered
 17036 by a roof (160b) or by the sky.

- 17037 (159) *tce ma nuna kumpya nuna, nykinu, pui-nuzaβ tce u-mpas*
 LNK LNK DEM hen DEM FILLER AOR-sleep LNK 3SG.POSS-eye
 17038 *ku-sywi pui-ηu. tceri u-mpas u-rq^hu nuna, nykinu,*
 IPFV-close SENS-be LNK 3SG.POSS-eye 3SG.POSS-husk DEM FILLER
 17039 *pju-yi tce u-mpaεrdu nui pju-fkaβ*
 IPFV:DOWN-come LNK 3SG.POSS-eyeball DEM IPFV:DOWN-cover
 17040 *kui-fse pui-ηu ma*
 SBJ:PCP-be.like SENS-be LNK

17041 'When the hen falls asleep, it closes its eyes. Its nictitating membrane
 17042 (literally: 'eye husk') comes down and covers its eyeball.' (150819
 17043 kumpGa, 52)

- 17044 (160) a. *maka k^ha ntsu ku-kui-ryzi ku-kui-lkuy*
 at.all house always IPFV-GENR:S/O-stay IPFV-GENR:S/O-be.stiff
 17045 *muáj-sy-scit.*
 NEG:SENS-PROP-be.happy
 17046 'Staying at home all the time, one feels stiff, is is not nice.'
 b. *pju-kui-fkaβ zo kui-fse*
 IPFV:DOWN-GENR:S/O-cover EMPH SBJ:PCP-be.like
 17047 'One feels like one is covered (oppressed).' (conversation, 14-05-01)

17050 The DOWNSTREAM orientation rather express covering by growing (as in 161)
 17051 or building (162, like Chinese 盖房子 <gài fángzì> ‘build a house’).

- 17052 (161) *staxpuu tx-rŋfi tce stor nui cʰui-fkaβ*
 pea AOR:UP-be.long LNK broad.bean DEM IPFV:DOWNSTREAM-cover
 17053 ‘When the pea has grown, it covers the broad bean.’ (25-sthoRthAB, 4)

- 17054 (162) *kʰa ra cʰy-fkaβ-ndzi*
 house PL IFR-cover-DU
 17055 ‘They built a house.’ (02-deluge2012, 131)

17056 However, example (163) shows that the verb *ta* ‘put’ occurs with the EAST-
 17057WARDS orientation to express a covering action, although a downwards manip-
 17058ulation (putting clothes or hay on top of the pot) clearly takes place, as con-
 17059firmed by the DOWNWARDS preverb on *fkaβ* ‘cover’. The EASTWARDS orientation
 17060 expresses complete covering, including on the top and the sides, a use that may
 17061 be related to the centripetal function of these preverbs (§15.1.4.3).

- 17062 (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
 17063 *pjui-fkaβ-nui tce tce, ui-taŋ tce tui-ŋga*
 IPFV:DOWN-cover-PL LNK LNK 3SG.POSS-on LOC INDEF.POSS-clothes
 17064 *ku-ta-nui, soŋma ra ku-ta-nui tce*
 IPFV:EAST-put-PL hay PL IPFV:EAST-put-PL LNK
 17065 ‘They put (the pot) somewhere and cover it. They cover it, put clothes or
 17066 hay on it.’ (160703 araR, 34-36)

17067 Likewise, the EASTWARDS preverbs are selected by *mpʰur* ‘wrap’ to mean ‘wrap
 17068 inside’ as in (164). The UPWARDS orientation occurs with this verb to mean ‘bind-
 17069 ing up’ a wound as in 165), and the DOWNSTREAM one for wrapping into a roll as
 17070 in (166).

- 17071 (164) *ckybuu u-ŋguu nautcu kú-wy-mpʰur ŋu.*
 onion.bun 3SG.POSS-in DEM:LOC IPFV:EAST-INV-wrap be:FACT
 17072 ‘People wrap it inside onion buns.’ (160706 thotsi, 43)
- 17073 (165) *murmummbju yuu u-tuymaz ra to-mpʰur.*
 swallow GEN 3SG.POSS-wound PL IPFV:UP-wrap
 17074 ‘She bound up the wound of the swallow.’ (150825 huluwa-zh, 40)

15 Orientation and associated motion

- 17075 (166) *tce βzur ri tce c^hú-wy-mp^hur*
LNK angle LOC LNK IPFV:DOWNSTREAM-wrap
17076 *c^hú-wy-za tce mypcos c^hu βzur nu*
IPFV:DOWNSTREAM-INV-start LNK opposite.side APPROX.LOC angle DEM
17077 *u-cki myctṣa c^hú-wy-mp^hur.*
3SG.POSS-DAT until IPFV:DOWNSTREAM-wrap
17078 ‘One start wrapping (the square piece of cloth) on one of the angle up
17079 until the opposite angle (on the diagonal).’ (30-mboR, 20)

17080 15.2 Associated motion

- 17081 An associated motion marker, following Guillaume’s (2016: 13) definition, is ‘a
17082 grammatical morpheme that is associated with the verb and that has among
17083 its possible functions the coding of translational motion.’ This definition ex-
17084 cludes both motion verbs, which are not morphologically tied to the verb stem in
17085 the purposive construction (§16.1.1.6, §24.4.2.1) and orientation preverbs (§15.1),
17086 which do not express translational motion (of the whole body) by themselves
17087 in Japhug, though they can indicate in specific cases the direction of gestures
17088 involving the motion of a body part (§15.1.2.4).

17089 15.2.1 AM prefixes: morphology

- 17090 Unlike Arandic (Koch 1984 and Wilkins 1991) and Tacanan (Guillaume 2009) lan-
17091 guages, Japhug and other Gyalrong languages have simpler AM systems with
17092 only two prefixes, andative/translocative and venitive/cislocative as illustrated
17093 by examples (167) and (168), respectively.

- 17094 (167) *tce tui-ci yui-pjui-nui-ts^hi-nui*
LNK INDEF.POSS-water CISL-IPFV-AUTO-drink-PL
17095 ‘(The wild yaks) come and drink water.’ (20-RmbroN, 46)

- 17096 (168) *tce tui-ci c-pjy-nui-ts^hi.*
LNK INDEF.POSS-water TRAL-IFR-AUTO-drink
17097 ‘She went (there) and drank water.’ (140428 mu e guniang-zh, 72)

- 17098 AM prefixes in Japhug and other Gyalrong languages refer to a motion event
17099 occurring *before* the action of the main verb, resulting in a prior temporal relation
17100 with respect to the main verb, as in (167) and (168). There are no AM markers for
17101 subsequent or concurrent motion.

Table 15.8: Associated motion prefixes in Gyalrong languages

	come	CISL	go	TRAL
Japhug	<i>yi</i>	<i>yuu-</i>	<i>ce</i>	<i>eu-</i> , <i>ɛ-</i> , <i>z-, z-</i>
Kyom-kyo (Situ)	<i>vi</i>	<i>və-</i>	<i>tʃʰi</i>	<i>fɪ-</i>
Cogtse (Situ)	<i>pô</i>	<i>po-</i>	<i>tʃʰe</i>	<i>j-</i>
Brag-bar (Situ)	<i>βz̥ê, və</i>	<i>jp-</i>	<i>tçʰê</i>	<i>çɒ-</i>
Tshobdun	<i>wî</i>	<i>o-</i>	<i>fþ</i>	<i>fɔ-</i>
Zbu	<i>vâ</i>	<i>və-</i>	<i>xwé?</i>	<i>ɛə-</i>

17102 Table 15.8 presents the forms of AM prefixes in all four Gyalrong languages
 17103 (Jacques et al. forthcoming; data from Jacques 2013b, Gong 2018, J. T.-S. Sun 2014a,
 17104 Y. Lin 2016, Shuya Zhang 2016: 200–204, Prins 2016: 497–500).

17105 As shown by the close phonetic resemblance between the motion verbs and
 17106 the corresponding AM prefixes, there is little doubt that the latter have been
 17107 grammaticalized from the former,¹⁴ probably through a paratactic or serial verb
 17108 construction in which motion verbs occurred in direct contact with the lexical
 17109 verb without intervening linker.

17110 Although attested, as in (§169), parataxis is rare in Japhug. It can also found
 17111 when the second verbs takes an AM marker (see 212, §15.2.8).¹⁵

- 17112 (169) *tcendyre tcetu zgo kui-mbuu~mbro myctsə to-ce,*
 LNK up.there mountain SBJ:PCP-EMPH~be.high until IFR:UP-go
 17113 *to-nurtsurva.*
 IFR:UP-climb
 17114 ‘He went up there, climbing, on the very high mountain.’ (150825
 17115 huluwa-zh, 156)

17116 Usually, when a motion verb is followed by or follows another verb, a linker
 17117 such as *tce* almost always occurs between them, as in (170).

- 17118 (170) *pravpa ur-ŋgwi lu-ce tce*
 cave 3SG.POSS-inside IPFV:UPSTREAM-go LNK

¹⁴ Exceptions however include the cislocative *jp-* in Bragbar Situ, whose origin is not straightforward (Shuya Zhang 2020), and the case of Zbu, where the motion verb *xwé?* is unrelated to the AM prefix.

¹⁵ The preferred order is *to-nurtsurva to-ce*, and despite the absence of pause, *to-nurtsurva* here is an afterthought.

17119 *lu-cṳr*.

17120 IPFV:UPSTREAM-hibernate

17121 ‘(Otherwise, the bear) goes into a cave and hibernates (there).’ (21-pri,
108)

17122 The grammaticalization of motion verbs to AM prefixes, from a construction
 17123 similar to that in (§169), occurred in the common ancestor of all Gyalrong lan-
 17124 guages, rather than independently in each language, as is shown by the fact that
 17125 the transitive verb ‘to bring, to fetch’ (Japhug *ru*, Bragbar Situ *ró* / *rô*) shares a
 17126 common irregularity in all languages (Jacques 2013b): it must appear with an
 17127 associated motion prefix. In examples (§171) and (§172) from Japhug and Situ
 17128 removing the AM prefix would result in incorrect forms (§15.2.9).

17129 (171) *c-tx-ru-t-a*
 17130 TRANSL-AOR:UP-bring-PST:TR-1SG

17131 ‘I fetched it.’ (Japhug)

17132 (172) *rɔ-çə-rô-ŋ*
 17133 AOR:UP-TRANSL-bring[II]-1SG

17134 ‘I fetched it.’ (Situ)

17135 In the Japhug verbal template, AM prefixes occupy slot -4, just after modal and
 17136 negative prefixes (§11.2), but before orientation preverbs (§15.1.1.1, see also (167)
 17137 and (168) above) unlike in Situ, where AM occur closer to the verb stem than the
 17138 orientation preverbs (as shown by §172).

17139 The translocative and cislocative prefixes however may not be equally ancient.
 17140 There is no doubt that the translocative prefix can be reconstructed to proto-
 17141 Gyalrong, because in addition to the irregular verb ‘fetch’, it does not superfi-
 17142 cially resemble the verb ‘to go’ in Situ and Zbu (see Table 15.8) and therefore
 17143 cannot have been recently grammaticalized. This idea is supported by the high
 17144 allomorphy of this prefix (§15.2.1.2). The only language with a translocative pre-
 17145 fix that is not cognate with the rest of Gyalrong is the Cogtse dialect of Situ,
 17146 where the prefix *j-* originates from the indefinite orientation preverb (Japhug *jx-*
 17147), replacing the inherited prefix.

17148 The cislocative prefix on the other hand lacks any allomorphy, and its initial
 17149 consonant is identical to that of the verb ‘come’ (with its main vowel either con-
 17150 verted to a schwa or identical to that of the verb stem in the case of Cogtse)
 17151 in almost all languages including Tshobdun (where *o-* comes from **wə-*, the re-
 17152 duced form of *wi* ‘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 ty-ryku yuu-tu-ndze*
 bugs PL IPFV-eat[III] LNK INDEF.POSS-crops CISL-IPFV-eat[III]
my-ŋgryl
 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).

- (174) *tce uzo nuu jy-nuu-p^hyo matei tce, numasny yúu-ndza pjy-ŋu.*
 LNK 3SG DEM IFR-AUTO-flee LNK LNK otherwise INV-eat:FACT IFR-be
 ‘(The rabbit), he fled away, otherwise he would have been eaten.’ (140427
 qala cho kWrtsag, 76)

15 Orientation and associated motion

- 17183 (175) *ty-ryku* *kui-fse* *yuu-ndze*
 INDEF.POSS-crop SBJ:PCP-be.like CISL-eat[III]:FACT
 17184 *mr-ŋgryl*
 NEG-be.usually.the.case:FACT
 17185 ‘It does not come and eat crops.’ (23-pGAYaR, 26)

17186 It is perfectly possible for the inverse (in its non-initial allomorph *-wy-*) to
 17187 directly follow the cislocative, which in this case receives the stress, as *yú-wy-*
 17188 *ndza* in (176).

- 17189 (176) *k^hu a-jy-yzyut* *ndy yú-wy-ndza* *jua-ŋu*
 tiger IRR-PFV-arrive LNK CISL-INV-eat:FACT SENS-be
 17190 ‘If the tiger arrives, it (the tiger) will eat him (the man).’ (kandZislama
 17191 2003, 100)

15.2.1.2 Translocative

17192 Unlike the cislocative, the translocative (or andative) prefix presents an impor-
 17193 tant degree of allomorphy. Besides the main allomorph *guu-*, the consonantal
 17194 allomorphs *ç-*, *z-*, *s-* and *z-* are also found. These allomorphs are only attested in
 17195 direct contact with orientation preverbs, following the rules in Table 15.9.

Table 15.9: Allomorphs of the translocative prefix

Allomorph	Orientation preverb
<i>ç-</i>	<i>tu/ɻ/o/a-, puu/a-, t^hu/a-, ku/ɻ/o/a-, pjuu/ɻ-, (c^hu/ɻ-)</i>
<i>z-</i>	<i>lu/ɻ/o/a-, nuu/a-, (nuu/ɻ-)</i>
<i>s-</i>	<i>c^hu/ɻ-, (pjuu/ɻ-)</i>
<i>z-</i>	<i>ju/ɻ/o/a-, jnuu/ɻ-</i>

17196 The dental allomorphs *s-* and *z-* are only found with orientation preverbs with
 17197 a palatal consonant, and result from dissimilation in place of articulation from
 17198 their alveolo-palatal counterparts. They harmonize in voicing with the following
 17199 orientation preverb, *s-* being found before the orientation preverbs in *c^h-* and *pj-*,
 17200 and *z-* before those in *j-* and *ju-*.

17201 The alveolo-palatal allomorphs are found with non-palatal orientation pre-
 17202 verbs, and also harmonize in voicing with the following consonant, *ç-* occurring
 17203 before unvoiced prefixes (*ç-tu-k^hat-a* in 178 below) and *z-* before voicing ones as
 17204 in (177).

- 17206 (177) *tcendyre u-pur* *ra nuu-ndza* *z-na-car*
 LNK 3SG.POSS-young PL 3PL.POSS-food TRAL-AOR:3→3'-search
 17207 ‘The (cat mother) went to look for food for her (kitten).’ (21-IWLU, 80)

17208 The alveo-palatal allomorphs are also used with the palatal orientation pre-
 17209 verbs, as shown by the form *z-nuu-lat-a* (instead of *z-nuu-lat-a*) in (178) (for an ex-
 17210 ample of *c-c^huu-*, see 2, §4.2.1.5). With *c^h-*, *j-* and *n-* prefixes, the alveolo-palatal
 17211 allomorphs are very rare, but with *pj-* prefixes interestingly, the dissimilatory ef-
 17212 fect is much more limited and *c-* is more common than *s-* (§4.2.2.2), as shown by
 17213 the counts in Table 15.10.

- 17214 (178) *nunu zakastaka kui-tu* *nunu yuu nui-<gongfen>* *ra*
 DEM each SBJ:PCP-exist DEM GEN 3SG.POSS-work.point PL
 17215 *z-nuu-lat-a* *c-tu-k^hat-a* *puu-ra.*
 TRAL-IPFV-throw-1SG TRAL-IPFV-do.everywhere-1SG PST.IPFV-be.needed
 17216
 17217 ‘I had to go everywhere to count work points for every single person.’
 17218 (2010-09, 79)

Table 15.10: Number of attestations of the allomorphs of the translocative prefix with palatal orientation preverb

Prefixes	<i>c-</i>	<i>z-</i>	<i>s-</i>	<i>z-</i>
<i>pjV-</i>	95	3		
<i>c^hV-</i>	1	53		
<i>nV-</i>		4	96	
<i>jV-</i>	0		62	

17219 Some clusters, such as *cpj-*, *zn-*, *cc^h-* and *zn-*, are only attested in translocative +
 17220 orientation preverb combinations (§4.2.1.5).

17221 With prefixes other than orientation preverbs, such as infinitive *k γ -* (179) or
 17222 second person *tu-* (180), only the allomorph *cuu-* is found. The infinitive *k γ -* and
 17223 the east/centripetal orientation preverb *k γ -* can thus be distinguished by their
 17224 compatibilities with the allomorphs of the translocative prefix, the former occur-
 17225 ring with *cuu-*, and the latter with *c-*.

15 Orientation and associated motion

- 17226 (179) *tcendyre nutcu cui-ky-ryŋgum ndyre kumpyytču muáj-nvz*
 LNK DEM:LOC TRAL-INF-lay.eggs LNK sparrow NEG:SENS-dare
 17227 ‘The sparrow does not dare to lay eggs there (on the ground).’
 17228 (22-kumpGatCW, 90-91)
- 17229 (180) *ma-cui-tui-nytuti*
 NEG-TRAL-2-tell.everywhere
 17230 ‘Do go around talking about it.’ (2002 qaCpa, 252)

17231 In Factual Non-Past prefixless forms, the allomorph *cui-* is also the only possi-
 17232 ble one, as in (181) ($\dagger c\text{-}te$ would be an incorrect form).

- 17233 (181) *tce ndži-ŋga cui-te pjy-ra*
 LNK 3DU.POSS-clothes TRAL-put[III]:FACT PST.IFR-be.needed
 17234 ‘She had to make their beds (cover them with a quilt)’. (2003 kWBRa, 76)

15.2.2 Argument of motion

17235 The argument undergoing the motion event is always the subject in the case of
 17236 intransitive, semi-transitive (182), and transitive verbs (183). It is thus impossible
 17237 to interpret *c-pui-syŋo* in (182) as meaning something like ‘listen to *X*, after *X*
 17238 has gone there’ (motion of semi-object) or *c-pui-sat* in (183) as meaning ‘kill the
 17239 boar, after it has gone there’ (motion of object).

- 17240 (182) *aki c-pui-syŋo*
 down TRAL-IMP-listen
 17241 ‘Go down there and listen’ (many attestations).

- 17242 (183) *pʰaŋrgot ci tu tce, nuu c-pui-sat ra*
 boar INDEF exist:FACT LNK DEM TRAL-IMP-kill be.needed:FACT
 17243 ‘There is a boar, go and kill it.’ (140428 yonggan de xiaocafeng-zh,
 17244 227-228)

17245 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 neces-
 17246 sarily *tyndzi tr-mu* ‘the ghost woman’, the subject of the transitive verb *yuu-tú-wy-*
 17247 *nusnupnar*, and also the subject the preceding motion verb *yi* (a case of AM echo,
 17248 §15.2.8). The cislocative *yuu-* cannot be interpreted as expressing the motion of
 17249 the object (2SG) (‘you will come and she will do you harm’).

- 17252 (184) *tcetha nuu ɬyndzi tx-mu nuunu yi tce nyzo*
 later DEM ghost INDEF.POSS-mother DEM come:FACT LNK 2SG
 17253 *yuu-túá-wy-niwsniŋraš cti*
 CISL-2-INV-do.harm be.AFF:FACT
 17254 ‘The ghost woman will come and cause you harm.’ (150907
 17255 niexiaoqian-zh, 96)

17256 The same rule is observed in local configurations. In (185), the verb form *yuu-pjuu-kui-mja-a* 17257 cannot be interpreted as meaning ‘Now that I have come here, take 17258 me’: the cislocative motion event concerns the subject, not the object.

- 17259 (185) *azō kure ryzi-a, tce yuu-pjur-kui-mja-a wo*
 1SG here stay:FACT-1SG LNK CISL-IPFV-2→1-take-1SG SFP
 17260 ‘I am here, come and take me!’ (150825 huluwa-zh, 193)

17261 In causative constructions however, the argument of motion can be either the 17262 causer or the causee (§17.2.4.5; on the syntactic status of the causee, see §14.4.3 17263 and §17.2.4.2). For instance, the form *yuu-c^huu-suu-χtua-nuu* could either mean ‘they 17264 send (cause to come) X here to buy Y’ or ‘they come and make X buy Y’; (186) 17265 illustrates the first interpretation.

- 17266 (186) *tce kupa-c^hu nuara at^{hi}
 LNK Chinese-LOC DEM:PL downstream direction DEM:PL 3SG-outside
 17267 *nuara kui kure ri yuu-c^huu-suu-χtua-nuu ηu.*
 DEM:PL ERG here LOC CISL-IPFV:DOWNSTREAM-CAUS-buy-PL be:FACT
 17268 ‘People from the Chinese areas, people from outside send people here to
 17269 buy (matsutake).’ (20 grWBgrWB 58)*

17270 In the case of manipulation verbs, the motion can involve both the subject and 17271 the object. In (187) for instance, the cislocative does refer to the motion of the 17272 object (the character who has been sent down), but it is implied that he did not 17273 come alone, and was brought to his current place by the unspecified subject of 17274 the verb *yuu-pjy-wy-lxt* ‘s/he/they sent/brought him down’.

- 17275 (187) *u-scun pjy-tu tce, ... kutcu yuu-pjy-wy-lxt*
 3SG.POSS-fault PST:IPFV-exist LNK here CISL-IFR:DOWN-INV-release
 17276 *pjy-ηu.*
 PST:IPFV-exist
 17277 ‘He had broken the law, ... and had been sent (down) here (to earth, as
 17278 punishment).’ (180501 xiyouji 08-zh, 123-124)

17279 A similar use of the cislocative with the verb *lvt* ‘release’ in the sense of ‘bring,
 17280 send’ (someone) is found in example (23) above.

17281 15.2.3 Motion verbs and AM prefixes

17282 In Japhug, there is no constraint on AM prefixes occurring on motion verbs with
 17283 the same deixis. Examples (188) and (189) illustrate the cislocative on the verb
 17284 *yi* ‘come’ and the translocative on the verb *ce* ‘go’, respectively. Such examples
 17285 are not common enough to allow a clear analysis of the semantic value of the
 17286 redundant AM in these examples.

- 17287 (188) <*jiazhang*> *ra ju-yi-nuu* *tce* <*laoshi*> *uu-cki*, *tuu-cki*
 parents PL IPFV-come-PL LNK teacher 3SG.POSS-DAT GENR.POSS-DAT
 17288 *zo* *yui-ju-yi-nuu* *cti* *netci?*
 EMPH CISL-IPFV-come-PL be.AFF:FACT SFP

17289 ‘The parents come, come to the teachers (us), right?’
 17290 (conversation140501 01, 60)

- 17291 (189) *li* *nyki icq^{ha}* *nuu* *txjlu* *ky-rku* *uu-ηguw*
 again DEM the.aforementioned DEM flour OBJ:PCP-put.in 3SG.POSS-inside
 17292 *zii* *c-pjy-ce*
 LOC TRAL-IFR:DOWN-go
 17293 ‘He went into (a bag of) flour.’ (140519 chou xiaoya-zh, 145)

17294 The opposite combinations, namely cislocative with *ce* ‘go’ and translocative
 17295 with *yi* ‘come’, are not grammatical.

17296 In the case of motion verbs without an intrinsic locative goal such as *ηke* ‘walk’,
 17297 the presence of the translocative does not add a locative goal (unlike when used
 17298 with non-motion verbs, see §15.2.7). In (190) for instance, no specific location is
 17299 specified even in the previous clauses, and the translocative on *ηke* indicates that
 17300 the motion took place far away from the deictic center (the king’s palace).

- 17301 (190) *tcendyre numuu c-to-nuu-ηke-nuu* *tce*, *lu* *χsui-xpa*
 LNK DEM TRAL-IFR-APPL-walk-PL LNK year three-year
 17302 *c-pjy-ηke-nuu*,
 TRAL-IFR-walk-PL
 17303 ‘The ministers went to look for (the girl), they walked for three years.’
 17304 (sras 2003, 50)

17305 Participles used in the purposive complements of motions verbs (§16.1.1.6) do
 17306 not take AM prefixes.

17307 **15.2.4 Orientation and AM**

17308 In Japhug, AM markers only specify deixis and the temporal relation between
 17309 motion event and verbal action, but are neutral as far as the orientation of the
 17310 motion event is concerned.

17311 Orientation and AM markers occupy different prefixal slots. Apart from ori-
 17312 entable verbs (§15.1.2), most verbs select one or two lexicalized orientations (see
 17313 §15.1.5). For instance, the transitive *murku* ‘steal’ occurs with the orientation
 17314 UPWARDS (with the orientation preverbs *tr-*, *ta-*, *tu-*, *to-*, see §15.1.1.1).

17315 When non-orientable verbs occur with AM, the verb normally keeps its lex-
 17316 icalized orientation preverb, as in (191), where *murku* ‘steal’ is used with the
 17317 expected *tu-* UPWARDS prefix. In this context, the motion related to the act of
 17318 stealing occurs at the same horizontal level and there is no upward motion; the
 17319 orientation preverb here encodes the default lexicalized orientation for the verb
 17320 *murku* ‘steal’, and is thus irrelevant to the motion event itself.

- 17321 (191) *kui-nŋo nuu q^he ci ci c-tu-murki*
 SBJ:PCP-be.defeated DEM LNK one one TRAL-IPFV-steal[III]
 17322 *kui-fse ma nuu ma mui-pui-yve.*
 SBJ:PCP-be.like apart.from DEM apart.from NEG-SENS-be.needed.eat
 17323 ‘The (lion) which is defeated steals a little out of it, but apart from that
 17324 has nothing to eat.’ (20-sWNgi, 65)

17325 Similarly, in (192), the verb *skuu* ‘bury’ appears with the lexical orientation
 17326 DOWNWARDS, although the associated motion event is oriented towards the op-
 17327 posite direction, as indicated by the adverb *tçetu* ‘up there’.

- 17328 (192) *ki a-tcuu ki tcetu zgoku tce*
 DEM.PROX 1SG.POSS-son DEM.PROX up.there mountain LOC
 17329 *c-pjur-ski-a jnu-nnts^hi*
 TRAL-IPFV:DOWN-bury[III]-1SG SENS-be.better
 17330 ‘Let’s bury my son up there on the mountain.’ (150904 cuzhi-zh, 119)

17331 However, alternatively, the orientation preverbs of verbs with an AM marker
 17332 can also reflect the orientation of the motion event. In (193), the verb *ntsyē* ‘sell’
 17333 occurs with the orientation preverbs UPWARDS (*c-tu-ntsyē-a*) and DOWNWARDS (*c-*
 17334 *pjuu-ntsyē-a*). The lexicalized orientation normally selected by *ntsyē* ‘sell’ is the
 17335 ‘westward; centrifugal’ one (§15.1.4.3). In (193) the UPWARDS and DOWNWARDS
 17336 prefixes clearly correlate with those found on the manipulation verb *yut* ‘bring’
 17337 and express the direction of the motion event.

15 Orientation and associated motion

- 17338 (193) *rja yuu u-laxtc^ha tu-yuit-a tce pot zuu*
 China GEN 3SG.POSS-thing IPFV:UP-bring-1SG LNK Tibet LOC
 17339 *c-tu-ntsye-a, pot yuu u-laxtc^ha pjui-yuit-a*
 TRAL-IPFV:UP-sell-1SG Tibet GEN 3SG.POSS-thing IPFV:DOWN-bring-1SG
 17340 *tce, rja zuu c-pjui-ntsye-a.*
 LNK China LOC TRAL-IPFV:DOWN-sell-1SG
 17341 ‘I bring things (down) from central Tibet, and sell them in China.’
 17342 (28-qAjdoskAt, 15-16)

17343 Overriding of the lexical orientation by the motion event is found in particular
 17344 in the case of AM prefixes expressing round trips (§15.2.5). In (194) for instance,
 17345 the translocative *z-lu-murki-a* with the UPSTREAM preverb expresses the fact that
 17346 the main character of the story steals from a place located downstream (first
 17347 motion event, indicated by the AM prefix) and then brings it upstream (second
 17348 motion event, whose orientation is encoded by the preverb). Interestingly, after
 17349 a few occurrences of the verb *murku* ‘steal’ with AM and UPSTREAM orientation,
 17350 one finds examples of that verb with the same non-lexicalized orientation UP-
 17351 STREAM but without the AM prefix in the same text, as in (195).

- 17352 (194) *tcet^hi t̪ymuj jlyruciyna yuu u-p^he nutcu kuu-murkuu*
 downstream TOPO TOPO GEN 3SG.POSS-DAT DEM:LOC SBJ:PCP-steal
 17353 *c^huu-ce-a yuu tce. ts^hyt uu-bruu yuu*
 IPFV:DOWNSTREAM-go-1SG be:FACT LNK goat 3SG.POSS-horn GEN
 17354 *uu-ci nuuuu z-lu-murki-a ri*
 3SG.POSS-water DEM TRAL-IPFV:UPSTREAM-streal[III]-1SG LNK
 17355 *a-q^hu zuu lx-ye-nuu tce*
 1SG.POSS-after LOC AOR:UPSTREAM-come[II]-PL LNK
 17356 ‘(Tomorrow morning) I will go downstream to steal from Tamuj
 17357 Jlarukyarna, I will steal the water from the goat’s horn, but when (the
 17358 mountain god) comes after me...’ (25-kAmYW-XpAltCin, 31-32)

- 17359 (195) *lo-murkuu pjyr-c^ha tce lo-yuit ri*
 IFR:UPSTREAM-steal IFR-can LNK IFR:UPSTREAM-bring LNK
 17360 ‘He was able to steal it and brought it upstream.’
 17361 (02-montagnes-kamnyu-cz, 31)

17362 In some limited contexts, it is thus possible for verbs without associated mo-
 17363 tion markers to use their orientation preverb to indicate the direction of the ac-
 17364 tion, with or without motion, as in (195).

17365 In (196), similarly, we find the verb *lu-pe-a* with the UPSTREAM orientation without
 17366 an associated motion marker; when this sentence was uttered, we were sitting far from the door, and to close the door it was necessary to get up and walk
 17367 a few meters (we were seated at a place closer to the river, so the door was UP-
 17368 STREAM, §15.1.3.2). The same sentence could have been uttered if the door had
 17369 been at a hand's reach, and could thus have been closed without walking. Re-
 17370 placing *lu-pe-a* in (196) by *z-lu-pe-a* TRAL-IPFV:UPSTREAM-close[III]-1SG, with an
 17371 associated motion marker, would make the second interpretation impossible.

- 17373 (196) *tci-kum lu-pe-a je!*
 1DU.POSS-door IPFV:UPSTREAM-close[III]-1SG SFP
 17374 ‘Let me close the door (for us).’ (conversation, 03-05-2018, Tshendzin)

17375 It is debatable whether the orientation preverbs in examples like (195) and (196)
 17376 could be analyzed as marking associated motion (in Guillaume’s 2016 definition),
 17377 as these prefixes do not actually specify that a motion event takes or does not
 17378 place. What they specify is that if the main action is linked with a translational
 17379 motion event, that motion event follows the direction indicated by the prefix. In
 17380 this grammar, the use of orientation preverbs in examples such as (195) and (196)
 17381 are therefore not considered to be cases of associated motion.

17382 15.2.5 Round trips

17383 The combination of some verbs with AM prefixes implies a round trip when the
 17384 lexical orientation (§15.1.5) is overridden by the orientation of the motion event
 17385 (§15.2.4).

17386 With the verb *χtui* ‘buy’ for instance, the translocative expresses a first trip to
 17387 the goal indicated by the locative *ri* (§15.2.7), but a second trip back to the deictic
 17388 center (here, Kamnyu) is implied by the selection of the DOWNSTREAM orientation
 17389 (§15.2.4).

- 17390 (197) *tce mbroxpa ri jla nuu s-c^hui-χtui-nuu*
 17391 LNK nomad LOC hybrid.yak DEM TRAL-IPFV:DOWNSTREAM-buy-PL
 17392 *ŋja puu-ra.*
 17393 completely PST.IPFV-be.needed
 ‘People had to buy hybrid yaks from the nomads.’ (150820 kAnWCkat,
 26)

17394 In (198), the cislocative indicates a first trip from Chinese areas up to Mbarkham

15 Orientation and associated motion

17395 (the deictic center, *kure ri* ‘here’), and then back to Chinese areas, as indicated
17396 by the choice of the DOWNSTREAM preverb (§15.1.3.2).

17397 (198) *wi-pci nuwa kuu kuare ri yuu-c^hwi-su-χtua-nuu*
3SG-outside DEM:PL ERG here LOC CISL-IPFV:DOWNSTREAM-CAUS-buy-PL

17398 *ŋu.*

be:FACT

17399 ‘People from outside send people to come here and buy (matsutake).’ (20
17400 grWBgrWB, 58)

17401 AM markers expressing round trips are found with a handful of verbs, for
17402 instance *murkuu* ‘steal’ (194), expressing actions which can be considered to have
17403 been fully completed only when the subject comes back to his starting point
17404 with the object. The verb *ru* ‘fetch, bring’, which requires to be used with an AM
17405 prefix, always implies a two way trip (§15.2.9). As in examples (197) and (198),
17406 the AM prefix encodes the deixis of the first trip, and the orientation preverb the
17407 direction of the second trip back – hence the motion of the first trip is always in
17408 a direction opposite to that indicated by the preverb.

15.2.6 The nature of the motion

17410 In Japhug, AM prefixes express physical translation from one place to another,
17411 and unlike other Gyalrong languages do no have grammaticalized uses like prospec-
17412 tive.

17413 The cis- and translocative prefixes only refer to motion events occurring *before*
17414 the action of main verb (§15.2.1). The verbal action does not necessarily take
17415 place immediately after the motion. In (199) for instance, ‘learning computers’
17416 is one of the many activities that the referent did in Chengdu, and took place a
17417 considerable amount of time after the travel from Mbarkham to Chengdu itself.
17418 Here the translocative specifies that the action took place at such a distance from
17419 the deictic center that motion was necessary.

17420 (199) *at^hi wi-pci ri <chengdu> ri <diannao> ci*
downstream 3SG.POSS-outside LOC Chengdu LOC computer INDEF
17421 *c-pa-βzjoz*
TRAL-AOR:3→3'-learn

17422 ‘He went outside of (Tibetan areas, downstream), to Chengdu, and
17423 learnt computers there a little bit.’ (12-BzaNsa, 82)

17424 AM markers are not exclusively used to describe walking or motion on land
 17425 (199). They can also be applied to flying, as in (200), where *nutcu c-tu-ndze* literally
 17426 means ‘it flies there and eats it’. In this example, the translocative is in echo with
 17427 the manipulation verb *tsum* ‘take away’ (§15.2.8.1).

- 17428 (200) *p^hyri pras u-ŋgwi myctṣa ku-tsum q^he, tce*
 the.opposite.side cliff 3SG.POSS-in until IPFV:EAST-take.away LNK LNK
 17429 *nutcu c-tu-ndze juu-ŋu.*
 DEM:LOC TRAL-IPFV-eat[III] SENS-be
 17430 ‘(The eagle) takes (the young animal) to the cliff on the other side (of the
 17431 river) and eats it there.’ (19-qandZGi, 51)

17432 Additionally, they are attested in the case of motion in a liquid (involving for
 17433 instance swimming), as in example (248) in §15.2.10.5, and also plants growing
 17434 from one place to another (201).

- 17435 (201) *tce u-zrym ju-ce q^he nuare ri, kumak u-pcov*
 LNK 3SG.POSS-root IPFV-go LNK DEM:LOC LOC other 3SG.POSS-place
 17436 *c-tu-łor juu-eti ma*
 TRAL-IPFV-come.out SENS-be.AFF LNK
 17437 ‘Its root moves and it grows there, at a different place.’ (15-babW, 46)

17438 In (202), the motion implied by the translocative is more metaphorical, as it
 17439 refers to the reincarnation of a lama in a house different from the one he was
 17440 born in in his previous life. In (132) above (§15.1.5.6), the cislocative occurs in this
 17441 meaning.

- 17442 (202) *a-nuu-χcas, a-nuu-si tce tce, kumak pcov ri li*
 IRR-PFV-pass.away IRR-PFV-die LNK LNK other place LOC again
 17443 *c-tu-sci juu-ŋu.*
 TRAL-IPFV-be.born SENS-be
 17444 ‘When (the reincarnated lama) passes away, he is born in another place.’
 17445 (160722 skWBli, 2)

17446 In the case of (203), the translocative may be interpreted as referring to the
 17447 motion of the seed, but since this example comes from a traditional story where
 17448 the larch is humanized (since its relation to the fir is compared to that of a nephew
 17449 to its uncle), it may also be viewed here as a metaphorical human-like motion.¹⁶

¹⁶ In 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 *k^hyrk^hyr* (§15.1.4.4) in the traditional society.

15 Orientation and associated motion

- 17450 (203) *tce sacuu nur turgi u-locu zuu c-to-tob tce,*
 LNK larch DEM fir 3SG.POSS-upstream LOC TRAL-IFR-come.out LNK
 17451 *tce nunuu tx-ftsa nuu tx-rpuu syz*
 LNK DEM INDEF.POSS-nephew DEM INDEF.POSS-MB COMP
 17452 *lu-kui-maylo muu-pjy-ηgryl*
 IPFV:UPSTREAM-GENR:S/O-be.upstream NEG-IFR.IPFV-be.usually.the.case
 17453
 17454 ‘The larch grew on a place higher than the fir, but nephews could not be
 17455 seated higher (upstream) than their maternal uncles (and this is why the
 17456 larch became deciduous).’ (08-saCW)

15.2.7 Goal

17458 Verbs taking the translocative prefix very often appear with a locative phrase
 17459 (adverb, noun in the absolute or locative case and/or a locative relator noun)
 17460 expressing the goal of the motion, which at the same time corresponds to the
 17461 location where the action takes place, as for instance in (204). The locative *ri*
 17462 is particularly common to express the goal of an AM-prefix verb (see also for
 17463 instance 197 and 198 in §15.2.5 and 199 in §15.2.6 above).

- 17464 (204) <*guanzi> ui-ηguu ri c-tx-rundzyts^hi-j.*
 restaurant 3SG.POSS-in LOC TRAL-AOR-east-1PL
 17465 ‘We went to a restaurant and ate there.’ (2010-1, 13)

17466 Even if it is not present in the same clause as the verb with the translocative,
 17467 the goal generally appears in previous clauses. For instance in (205), the verb
 17468 *c-tu-βzduu-nu* ‘they (went and) collected it there’ is not directly preceded by the
 17469 goal, but it shares the goal *sunguu* ‘in the forest’ of the motion verb *ce* ‘go’.

- 17470 (205) *turme kui-xtci nunuara spikuku zo sunguu ju-ce-nuu tce,*
 people SBJ:PCP-be.small DEM:PL every.day EMPH forest IPFV-go-PL LNK
 17471 *icq^ha nuu, ts^hitsuku z-nuu-car-nuu pjy-ηu tce, χsrr ra*
 FILLER DEM whatever TRAL-IPFV-search-PL IFR.IPFV-be LNK gold PL
 17472 *c-tu-βzduu-nu pjy-ηu.*
 TRAL-IPFV-collect-PL IFR.IPFV-be
 17473 ‘The dwarfs went everyday into the forest, searched around and
 17474 collected gold there.’ (140504 baixuegongzhu-zh, 98-99)

17475 Verbs with the cislocative, on the other hand, are more rarely used with an
 17476 overt goal. As an example, the verb *ndza* ‘eat’ appears 7 times in the corpus with

17477 the translocative, and 16 times with the cislocative. The goal is explicit with the
 17478 translocative (either in the same clause or in the previous clause) in 6 times out
 17479 of 7 (the only exception being 206; note that here the goal can be understood as
 17480 the nest of the eagle), whereas it is overt in only 4 of the 16 examples with the
 17481 translocative.

- 17482 (206) *qalias kui, [...] kui-mvku tce tce ui-t^hob nur tce*
 eagle ERG SBJ:PCP-be.first LNK LNK 3SG.POSS-ground DEM LOC
 17483 *pju-nvbarphvβ tce pju-sat, tce nur kozmuz ny*
 IPFV-hit.with.wings LNK IPFV-kill LNK DEM only.after LNK
 17484 *c^hui-nur-tsum tce c-tu-ndze*
 IPFV:DOWNTREAM-VERT-take.away LNK TRAL-IPFV-eat[III]
 17485 *nur-ra ma,*
 SENS-be.needed LNK
 17486 ‘The eagle, (in the case of animals that are too big), it has to kill them by
 17487 hitting them with its wings, and then take them away and eat them.’
 17488 (50819 RarphAB, 4-5)

17489 The reason for the more common absence of locative phrases with the cislocative,
 17490 as in (207), is because in the case of motion towards the deictic center, the
 17491 goal can generally be inferred on the basis of the context: it is most often either
 17492 the current location, or the house of either the speaker or the addressee.

- 17493 (207) *ja^hm^hzdobzdo^h nur kui qajua ra tu-ndze ma tx-ryku*
 bird.sp DEM ERG bug PL IPFV-eat[III] LNK INDEF.POSS-crops
 17494 *yur-tu-ndze mv-ŋgryl*
 CISL-IPFV-eat NEG-be.usually.the.case
 17495 ‘The bird *ja^hm^hzdobzdo^h* eats bugs, it does not come and eat crops.’
 17496 (24-ZmbrWpGa, 131)

17497 The examples above illustrate the most typical uses of the AM prefixes. How-
 17498 ever, the translocative can also be used in cases where the goal is unspecified
 17499 and not recoverable from the context, simply as a way to indicate that the action
 17500 takes place at a distance from the deictic center. In (208) for instance, the pres-
 17501 ence of the translocative implies that the action did not take place immediately
 17502 near the house, but that the subject had to look for the badgers (see also 190 in
 17503 §15.2.3).

- 17504 (208) *ji-me nur kur βyuz bnuaz zo c-pjy-sat.*
 1PL.POSS-daughter DEM ERG badger two EMPH TRAL-IFR-kill
 17505 ‘Our daughter-in-law went (to look for badgers) and killed two badgers.’
 17506 (27-spjaNkW, 111)

17507 The exact location of the event is left vague, as shown by (209), a comment on
 17508 (208).

- 17509 (209) *nunuu ηotcu ηu, kuu-χsyl kui-me kur-fse*
 DEM where be:FACT SBJ:PCP-be.clear SBJ:PCP-exist SBJ:PCP-be.like
 17510 *ŋuu-cti, “jo-ce tce pjy-sat” tu-kui-ti ŋuu-ηu.*
 SENS-be.AFF IFR-go LNK IFR-kill IPFV-GENR-say SENS-be
 17511 ‘It is like it is unclear where it is, it means ‘she went (somewhere) and
 17512 killed them.’ (explanation of 208).

17513 15.2.8 Echo phenomena

17514 Previous literature on AM has reported the existence of ‘echo phenomena’ in the
 17515 use of AM markers (Wilkins 1991: 251, Vuillermet 2012: 681–683, Rose 2015: 128–
 17516 130, Guillaume 2016: 11), namely that the same motion event can be expressed by
 17517 more than one AM marker. This phenomenon is common in Japhug narratives.
 17518 Two subtypes of AM echo can be distinguished: motion verb with redundant AM,
 17519 and multiple AM marking.

17520 15.2.8.1 Motion verb with redundant AM

17521 In examples such as (210), (211) and (212), a motion verb is followed by clause
 17522 containing a verb with an AM prefix with the same deixis: translocative after *ce*
 17523 ‘go’ (in the Aorist form *tx-ari* in 210) and cislocative after *yi* ‘come’, respectively. It
 17524 is however clear from the context, in all of these examples, that only one motion
 17525 event took place, and that the AM marker could be dispensed with.

- 17526 (210) *zgoku tx-ari n̩, ‘hehe a-zí ra*
 mountaintop AOR:UP-go[II] LNK INTERJ 1SG.POSS-lady PL
 17527 *cʰy-tui-nu-ryrfit-nu múj-tui-nu-suχsyl-nu’*
 IFR-2-AUTO-have.a.child-PL NEG:SENS-2-AUTO-realize-PL
 17528 *c-ta-tuit ŋuu-ηu*
 TRAL-AOR:3→3'-say[II] SENS-be
 17529 ‘He went up the mountain top and said: ‘My lady, you had a child and
 17530 did not notice it.’ (2003 Kunbzang, 118)

17531 The motion verb and the verb with AM are not necessarily adjacent, as in (210)
 17532 where they are separated by a complement clause, but AM echo is common when
 17533 the AM-marked verb directly follows the motion verb, with an intervening linker
 17534 such as *tce* (as in 211) or more rarely with parataxis (as in 212).

- 17535 (211) *tc^hi uu-ta_s to-_ce tce c-ty-ru*
 stairs 3SG.POSS-on IFR:UP-go LNK TRAL-AOR:UP-look
 17536 ‘He went up the stairs and looked up.’ (08-kWqhi, 18)

- 17537 (212) *k^ha muu-puu-ryzi tce tce, ftcar nuu wuma zo βyuz*
 house NEG-PST.IPFV-stay LNK LNK summer DEM really EMPH badger
 17538 *pjy-ruŋwunyŋn tce maka, kumt^hob ra kanyju-yi*
 IFR.IPFV-cause.damage LNK completely threshold PL also IPFV-come
 17539 *yuu-nuu-slo_s pjy-ŋu.*
 CISL-IPFV-dig.up IFR.IPFV-be
 17540 ‘He was not at home, and badgers were causing a lot of damage that
 17541 summer, they came and even dug up the threshold of the house.’
 17542 (27-spjaNkW, 107)

17543 Since, with some exceptions, verbs taking AM prefix do not indicate the direc-
 17544 tion of the motion using their orientation preverbs (§15.2.3), this echo construc-
 17545 tion makes it possible to indicate the orientation on the motion verb (for instance,
 17546 UPWARDS in 210, 211 and 213) while keeping that on the AM-taking verb, some-
 17547 thing which would neither be possible with only AM or with a purposive motion
 17548 verb construction (§15.2.10, §16.1.1.6). Specifying both orientations can be infor-
 17549 mative when the other verb is compatible with more than one orientation, as il-
 17550 lustrated by the contrast between (211) and (213) with the orientations UPWARDS
 17551 and DOWNWARDS on the AM-taking verb *ru* ‘look’, respectively. In principle, all
 17552 7 × 7 theoretical combinations would be possible with this pair of verbs.

- 17553 (213) *ty-tcuu nuu to-_ce tce c-pjy-ru ri,*
 INDEF.POSS-son DEM IFR:UP-go LNK TRAL-AOR:DOWN-look LNK
 17554 ‘The boy went up and looked down.’ (2012 Norbzang, 57)

17555 Echo AM is however completely optional; in (214) for instance, even though
 17556 the verbs *ku-ryzi* and *pjuu-ru*, share the same subject as *to-_ce*, they lack the transloca-
 17557 tive.¹⁷

¹⁷ Note 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.

- 17558 (214) *ci nuu kuu t_g^ba ko-ta, ci numuu, suku naitcu*
 one DEM ERG tea IFR-put one DEM treetop DEM:LOC
 17559 *kuu-nuu-suwa jo-ce. [...] tce numuu suku tce to-ce tce*
 SBJ:PCP-stand.guard IFR:UP-go LNK DEM treetop LOC IFR:UP-go LNK
 17560 *ku-ryzi pjy-ηu ri, tcendyre pjui-ru tce, u-t_g^ba nuu*
 IPFV-stay IFR.IPFV-be LNK LNK IPFV-look LNK 3SG.POSS-tea DEM
 17561 *to-k-yla-ci tce mbuz pjy-ηu tce*
 IFR-PEG-boil-PEG LNK overflow:FACT IFR.IPFV-be LNK
 17562 ‘One (of the two men) prepared tea, the other one went up the tree to
 17563 stand guard. He went up, and as he was staying there, he saw (down
 17564 there) that the tea had boiled and was about to boil over.’ (26-tAGe, 7)

17565 Echo can also occur between a manipulation verb and an AM prefix, as in (215)
 17566 (see also 200, §15.2.6).

- 17567 (215) *numuu tc^hemypuu numuu jy-tsum tce c-pui-sat*
 DEM girl DEM IMP-take.away LNK TRAL-IMP-kill
 17568 *ra*
 be.needed:FACT
 17569 ‘Take this girl (to the forest) and kill her.’ (140504 baixuegongzhu-zh, 39)

15.2.8.2 Multiple AM marking

17571 The second type of AM echo construction is found when two (or more) verbs are
 17572 redundantly prefixed with the same AM marker, for instance the cislocative *yu-*
 17573 in (216), though only a single motion event is supposed to have taken place.

- 17574 (216) *tce a-k^ha ra yui-ta-ryrobruz, a-mgo ra*
 LNK 1SG.POSS-house PL CISL-AOR:3→3'-tidy 1SG.POSS-food PL
 17575 *yui-ta-βzu ηu ci*
 CISL-AOR:3→3'-make be:FACT QU
 17576 ‘Is it (the neighbour’s wife who took pity on me) and came and tidied
 17577 my house and made food for me?’ (150827 tianluo-zh, 76)

17578 AM echo is required in serial verb constructions (Jacques 2016a: 253–255, §25.4.1),
 17579 as shown by (217) and (218), where the pairs of verbs *c-tu-ste / c-ku-nurtce* and *z-*
 17580 *ju-suu-mts^hyt / z-ju-ski* share the same person (3→3'), TAM (imperfective) and AM
 17581 (translocative) markers.

- 17582 (217) *ci ci ur-mi kur icq^ha, lulu yur ur-mi nura*
 one one 3SG.POSS-foot ERG FILLER cat GEN 3SG.POSS-foot DEM:PL
 17583 *z-juu-z-nysts^hyzz. kaura c-tu-ste tce*
 TRAL-IPFV-CAUS-bump DEM:PROX:PL TRAL-IPFV-do.like[III] LNK
 17584 *c-ku-nurtce ra pjy-ju.*
 TRAL-IPFV-tease[III] PL IFR,IPFV-be
 17585 ‘(The mouse) sometimes went and touched the cat’s legs with its leg, it
 17586 (went and) teased (the cat) like that.’ (150902 dashu-zh, 31)
- 17587 (218) *ur-lok ur-ŋgu ri z-ju-su-mts^hyt zo*
 3SG.POSS-nest 3SG.POSS-inside LOC TRAL-IPFV-CAUS-be.full EMPH
 17588 *z-ju-ski*
 TRAL-IPFV-bury[III]
 17589 ‘(The mole)_i goes to its nest_j and buries (so much of the food_k it_i has
 17590 collected that it_i) fills it_j up.’ (28-qapar, 172)

17591 However, not all adjacent verb pairs sharing the same AM markers are neces-
 17592 sarily cases of AM echo. Repetition of an AM prefix can also refer to different
 17593 motion events. In (219) for instance, the first translocative prefix on *c-tu-nurdor*
 17594 refers to the motion of the animal to the place where the walnut tree is found,
 17595 and the second one on *z-ju-ski* to the motion back to its nest. The translocative
 17596 appears in both cases because both places are away from the deictic center (peo-
 17597 ple’s houses), and there is no ambiguity that the two places are distinct.

- 17598 (219) *zNGulor puu-kui-ŋgra nura*
 17599 walnut AOR-SBJ:PCP-ACAUS:cause.to.fall DEM:PL
 17600 *c-tu-nurdor q^he, nura z-ju-ski.*
 TRAL-IPFV-collect.one.by.one LNK DEM:PL TRAL-IPFV-bury[III]
 17601 ‘It goes and collects the walnuts that have fallen (on the ground) one by
 one, and goes (to its nest) and buries them (there).’ (28-qapar, 181)

15.2.9 The verb *ru* ‘fetch, bring’

17602 The manipulation verb *ru* ‘fetch, bring’ (homophonous with the semi-transitive
 17603 *ru* ‘look’) is peculiar, as it generally requires the use of AM prefixes (with very
 17604 few counterexamples, see below), a feature shared with Situ (§15.2.1).

17605 With the translocative, the verb *ru* means ‘go to X and bring Y here’, express-
 17606 ing two motion events (§15.2.5): first, a trip away from the present location (to

15 Orientation and associated motion

17608 look for an object), and second, the way back to the point of departure (bring-
 17609 ing the object). The translocative refers to the *first* motion event. On the other
 17610 hand, the orientation preverb encodes the direction of the way back to the deic-
 17611 tic center, as shown by (220): the first trip (to the bottom of the ocean) has the
 17612 DOWNWARDS orientation, indicated by the prefix on the first verb *pui-ari*, while
 17613 the second one on *ru* has the opposite orientation UPWARDS.

- 17614 (220) *pui-ari* *ndyre juysi nuu c-ta-ru* *pui-ŋu.*
 AOR:DOWN-go[II] LNK book DEM TRAL-AOR:UP:3→3'-bring SENS-be
 17615 ‘He went down (to the bottom of the ocean) and brought up the sutra.’
 17616 (2005 Norbzang, 236)

17617 Locative phrases/adverbs or the locative interrogative pronoun *ŋotcu* ‘where’
 17618 (§6.5.4), when occurring with *ru*, refer to the destination of the first motion event
 17619 (the place where the object was originally/is still found), not the destination of the
 17620 trip back, as illustrated by (221) and (222). In (222), the destination of the first trip
 17621 (UPWARDS) is the opposite orientation as that found on the verb (DOWNWARDS),
 17622 confirming what has been observed in (220) above.

- 17623 (221) *kuki sylanp^hyn ki nxzo ŋotcu z-jx-tuu-ru-t*
 DEM.PROX basin DEM.PROX 2SG where TRAL-AOR-2-bring-PST:TR
 17624 *ŋu?*
 be:FACT
 17625 ‘Where did you get this washbasin from?’ (150831 jubaopen-zh, 138)
- 17626 (222) *atu tx-mt^huum c-pui-re*
 up.there INDEF.POSS-meat TRAL-IMP:DOWN-bring[III]
 17627 ‘Bring (down) the meat from up there.’ (meimeidegushi, 204)

17628 Similarly, the person pronouncing (223) was going towards the east to fetch
 17629 the key; the orientation WESTWARDS on the verb indicates the orientation of the
 17630 way back to the current location.

- 17631 (223) *sycuu z-pui-re-a*
 key TRAL-IPFV:WEST-bring[III]-1SG
 17632 ‘I will fetch the key (over there, towards east).’ (heard in context, 2014)

17633 With the cislocative, the meaning of *ru* can be rather translated as ‘come (to
 17634 the current deictic center) and take X away’, as in (224) and (225); as with the
 17635 translocative, two motion events take place (§15.2.5), but their relationship to the

17636 deictic center is reversed: the first trip is from some place to the present location,
 17637 and the second trip is back to that original place.

- 17638 (224) *tha qalias nuu kuu a-rfit yuu-nui-re*
 later eagle DEM ERG 1SG.POSS-child CISL-AUTO-bring[III]
 17639 ‘The eagle will come and take my child away.’ (140427 laoying mao he
 17640 yezhu-zh, 47)

17641 The orientation preverb, when present, refers to the motion of the second trip
 17642 away from the deictic center. For instance, in (225), the two people who are
 17643 subjects of the verb *yuu-nuu-ru-ndzi* (with westwards orientation *nuu-*) came from
 17644 their houses in a place called *tulu* to another location called *taṣrdo* to take stones
 17645 (both in Kamnyu village).

- 17646 (225) *kutcu zo rdystas yuu-nuu-ru-ndzi izora yuu ra*
 here EMPH stone CISL-IPFV:WEST-bring-DU 1PL GEN be.needed:FACT
 17647 *mx-ŋgryl ui-may ma*
 NEG-be.usually.the.case QU-not.be:FACT LNK
 17648 ‘They come here to take stones away, as if we did not need them.’
 17649 (conversation, 14-05-10)

17650 As shown by (226) (a few sentences before 225), this trip is oriented from west
 17651 to east; having taken the stones in *taṣrdo* (in the east), the two referents go back
 17652 home to *tulu* (westwards).

- 17653 (226) *tcekui taṣrdo ra ky-ye-ndzi*
 east TOPO PL AOR:EAST-come[II]-DU
 17654 ‘They came to Tagrdo (and looked for stones).’ (conversation, 14-05-10)

17655 The examples from (220) to (225) discussed above show that regardless of the
 17656 AM prefix, the transitive verb *ru* expresses a two-way motion event: first from
 17657 point *A* to point *B*, where an object is retrieved, and then back to *A* with the
 17658 object. The AM prefix always indicate the deixis of the first trip (either away or
 17659 towards the deictic center), and the orientation preverb encodes the direction of
 17660 the second trip, whose deixis is the opposite of that of the first trip (§15.2.5).

17661 The manipulation *ru* ‘fetch, bring’ passes all transitivity tests (§14.3.1), for in-
 17662 stance C-type orientation preverbs (220), the past suffix *-t* (221) and Stem III
 17663 alternation. These tests are generally sufficient to distinguish it from the semi-
 17664 transitive *ru* ‘look’, but there are still a few ambiguous cases, in particular in
 17665 the Inferential, where neither stem alternation nor prefix alternation reveals the

transitivity difference. For instance, the surface form *z-lo-ru* can either correspond to the transitive verb ‘she went down(stream) and brought it up(stream)’ as in (227) or to the translocative of the semi-transitive verb ‘he went there and looked upstream’ as in (228).

- (227) *tc^heeme nuu kuu popo to-ndo tce, tuu-ci*
 girl DEM ERG earthenware IFR-take LNK INDEF.POSS-water
 z-lo-ru ri,
 TRAL-IFR:UPSTREAM-bring LNK
 ‘The woman took an earthenware and brought water.’ (Gesar, 328)
- (228) *z-lo-ru ri ci ra mur-lo-cq^hlyt-nuu*
 TRAL-IFR:UPSTREAM-look LNK INDEF PL NEG-IFR:UPSTREAM-disappear-PL
 ‘He went there and had a look up there, but the other ones had not (yet)
 disappeared.’ (tWJo 2005, 74)

The transitive verb *ru* almost always occurs with AM prefixes, even its infinitive form *cuu-ky-ru* as in (229), or its participles as in (230) (for the presence of a subject participle instead of an infinitive in their complement clause, see §16.1.1.6).

- (229) *tcendyre [tuu-ci cuu-ky-ru] nuu-bjiz kuu-yi*
 LNK INDEF.POSS-water TRAL-INF-bring 3PL.POSS-wish SBJ:PCP-come
 maka zo pjy-me
 at.all EMPH IFR.IPFV-not.exist
 ‘None of them wanted to fetch water (anymore).’ (150830 san ge
 heshang-zh, 137)
- (230) *[kuuki χsyr pyxtcuu ki cuu-kuu-ru] cuu*
 DEM.PROX gold bird DEM.PROX TRAL-SBJ:PCP-bring who
 puu-kuu-cha nuu a-sci rjylpu c^hui-ta-suu-ndo-nuu
 AOR-SBJ:PCP-can DEM 1SG.POSS-instead king IPFV-1→2-CAUS-take-PL
 ŋu
 be:FACT
 ‘Whoever among you succeeds in finding and bringing this golden bird
 here, I will give him the throne.’ (qachGa2012, 24)

However, in the purposive motion verb construction with *ce* ‘go’ and *yi* ‘come’ (§16.1.1.6, §15.2.10), the subject participle *uu-kuu-ru* is used without an AM marker,

17691 as in (231), as part of a more general constraint against AM prefixes in this con-
 17692 struction (§15.2.3).

- 17693 (231) *lo-ce-nuu tce, pimawozyr nuu stablu pjy-ju*
 IFR:UPSTREAM-go-PL LNK ANTHR DEM year.of.the.tiger IFR.IPFV-be
 17694 *tce uu-kui-ru lo-ce-nuu,*
 LNK 3SG.POSS-SBJ:PCP-bring IFR:UPSTREAM-go-PL
 17695 ‘They went up there, Nyima ’Odzer was born the year of the tiger and
 17696 they went to take him (downstream).’ (nyima2002, 89)

17697 Example (232) could appear to be a counterexample, but here the phrase *tu-ci*
 17698 *nunuu uu-yuu-kui-nuu-ru* is better analyzed as a prenominal participial subject rela-
 17699 tive clause (§23.4.2) rather than a purposive complement. Note the presence of
 17700 the filler *n̥kinuu* and of a pause of hesitation before the following verb *jy-ye-nuu*
 17701 ‘they came’.

- 17702 (232) *[tu-ci nunuu uu-yuu-kui-nuu-ru] turme ra,*
 INDEF.POSS-water DEM 3SG.POSS-CISL-SBJ:PCP-AUTO-bring people PL
 17703 *n̥kinuu, jy-ye-nuu tce, nunuu si uu-pa nutcu, spos*
 FILLER AOR-come[II] LNK DEM tree 3SG.POSS-under DEM.LOC incense
 17704 *tu-su-zwyr-nuu,*
 IPFV-CAUS-burn-PL
 17705 ‘Whenever people came to take water (from the well), (the demon)
 17706 forced them to burn incense under the tree.’ (140512 abide he mogui-zh,
 17707 12)

15.2.10 Associated motion vs. motion verb construction

17708 To express the meaning of motion prior to an action, associated motion prefixes
 17709 are nearly two times as common as corresponding motion verb constructions
 17710 (henceforth MVC) in the Japhug corpus. There is however a clear semantic dif-
 17711 ference between the two constructions, which was briefly described in Jacques
 17712 (2013b), but is presented here in more detail.

17713 AM and MVC differ from each other in that in the former, the completion
 17714 of both motion event and verbal action is presupposed, whereas in the case of
 17715 the latter, the two can be separated. This difference in degree of event integra-
 17716 tion is most conspicuous in Aorist forms, and can be observed in four types of
 17717 constructions: concessives (with negation of the verbal action), interrogatives,
 17718 conditionals and complement clauses.

17720 Another difference between MVC and AM is the fact that while MVC require
 17721 a volitional verb in the purposive complement, there is no such requirement for
 17722 the AM markers.

17723 **15.2.10.1 Concessive**

17724 A MVC with the motion verb in perfective form can be followed by a clause negat-
 17725 ing the purposive action, as in (233). In this example, only the motion is realized,
 17726 while the action expressed by the verb *rto&* ‘look’ could not be accomplished.

- 17727 (233) *nx-kuu-rto&* *jv-ye-a* *ri, mui-nuu-atuy-tci,*
 17728 1SG.POSS-SBJ:PCP-see AOR-come[II]-1SG LNK NEG-AOR-meet-1DU
mui-puu-ta-mto.
 17729 NEG-AOR-1→2-see
 ‘I came to see you but I did not see you.’

17730 With the corresponding AM verb form *yuu-jv-ta-rto&* ‘I came and saw you’,
 17731 negating the action of the verb is self-contradictory and nonsensical, and a sen-
 17732 tence such as (234) is incorrect.

- 17733 (234) *†yuu-jv-ta-rto& ri mui-puu-ta-mto*
 CISL-AOR-1→2-look LNK NEG-AOR-1→2-see
 17734 Intended meaning: ‘I came to see you but I did not see you.’

17735 Additional minimal pairs of the same type are presented in Jacques (2013b:
 17736 202–203).

17737 Example (235) from a conversation illustrates this property also with a manip-
 17738 ulative verb *yut* ‘bring’: the action of the essive participial complement *kv-ntsye*
 17739 ‘sell’ (§24.4.2.2) is negated in the following clause (with an abilitative *sui-*, see
 17740 §19.3).

- 17741 (235) *syñymmts^hu kuu kv-ntsye c^hv-yuit ri*
 ANTHR ERG OBJ:PCP-sell IFR:DOWNSTREAM-bring LNK
 17742 *muáj-sui-ntsye ndyre,*
 NEG:SENS-ABIL-sell LNK
 17743 ‘Bsod.nams.mtsho brought them (to Mbarkham) to sell, but could not
 17744 sell it.’ (conversation, 14.05.10)

17745 15.2.10.2 Interrogative

17746 The difference between MVC and AM in interrogatives can be illustrated by the
 17747 minimal pair (236) and (237).

17748 In interrogative, MVCs are required to express meanings such as ‘What/who
 17749 have you come/gone to X’, as in example (236), an example which occurs nine
 17750 times in the corpus.

17751 Example (236) presupposes that the addressee has not done anything yet, while
 17752 (237) with associated motion can only be used if the presupposition is that the
 17753 action has already taken place, requiring a different translation.

17754 (236) *tc^{hi} uu-kuu-pa jy-tuu-ye?*
 what 3SG.POSS-do AOR-2-come[II]

17755 ‘What did you come to do?’ (nine examples in the corpus)

17756 (237) *tc^{hi} yuu-ty-tuu-pa-t*
 what CISL-AOR-2-eat-PST:TR

17757 ‘What did you do upon coming here?’ (elicited)

17758 Similarly, in the interrogative clause in (238), the presence of the translocative
 17759 on *c-puu-tuu-ry-tsuiβ* implies that the sewing action has taken place.

17760 (238) *cuu ra nuu-k^{ha} tce c-puu-tuu-ry-tsuiβ ty-ti*
 who PL 3PL.POSS-house LOC TRAL-AOR-2-APASS-sew IMP-say

17761 *ra*
 be.needed:FACT

17762 ‘To whose house have you gone and done some sewing, say it.’ (140512
 17763 alibaba-zh, 164)

17764 This is not a universal property of AM markers. In languages such as Nanai,
 17765 AM markers can be used even when the presupposition is that only the motion
 17766 event has been completed (Stoyanova 2016).

17767 15.2.10.3 Conditional

17768 The presuppositional difference between a MVC and AM is also perceptible in
 17769 the protasis of conditional clauses.

17770 With a MVC in the protasis as in (239), there is no presupposition that the
 17771 verbal action took place, and the motion event alone constitutes a condition to
 17772 the state of affair described in the apodosis.

15 Orientation and associated motion

- 17773 (239) *ny-wa u-kui-rto&* *mui~my-jy-tui-ye ny*
2SG.POSS-father 3SG.POSS-SBJ:PCP-look COND~NEG-AOR-2-come[II] LNK
17774 *azō mui-pui-kui-mto-a.*
1SG NEG-AOR-2→1-1SG
17775 ‘If you had not come to see your father, you would not have seen me.’
17776 (you saw me, but your father was not here)

17777 By contrast, with AM, the verbal action necessarily took place, as in example
17778 (240).

- 17779 (240) *ny-wa mui~my-yui-jy-tui-rto&* *ny pui-syzduxpa*
2SG.POSS-father COND~NEG-CISL-AOR-2-look LNK PST.IPFV-be.pitiful
17780 ‘If you had not come and seen your father, he would have felt sorry.’ (but
17781 you did see him, so he does not feel sorry)

15.2.10.4 Complement clauses

17782 In complement clauses, verbs with AM prefixes are attested, and complement-taking verbs always have scope over both the action of the verb and motion event.

17783 The combination of modal verbs such as *cʰa* ‘can’ with double negation, with the
17784 specific meaning ‘cannot help’, §13.3, have scope over both the motion event and
17785 the verbal action.

17786 This is illustrated in example (241), which is taken from a passage in a story
17787 where the king scolded a small child, who had just returned from a mission he
17788 himself sent him on, because the child did not come to greet him first upon his
17789 return. Example (241) shows the answer the child uses to justify why he went to
17790 see his mother first before greeting the king. From context it is clear that both
17791 the motion event (to his mother’s house, explaining the child’s failure to go to
17792 see the king) and the action ‘drink milk’ (the reason for that motion event) are
17793 equally important to the plot and inseparable.

- 17794 (241) *tui-nuu u-kui-tsʰi pui-cti-a tce,*
INDEF.POSS-breast 3SG.POSS-SBJ:PCP-drink SENS-be.AFF-1SG LNK
17795 *jy-azyut-a tce, tui-nuu ci my-cui-ky-tsʰi nuu*
AOR-arrive-1SG LNK INDEF.POSS-breast INDEF NEG-TRAL-INF-drink DEM
17796 *muáj-cʰa-a*
NEG:SENS-can-1SG
17800 ‘I am (a toddler) who (still) drinks (his mother’s) milk, when I arrived, I
17801 could not help but go and drink milk.’ (Norbzang, 262)

17802 In (242), the negated modal verb has also on the action of both the main verb
 17803 and the motion event – the guards would prevent the main character not only
 17804 from stealing, but also from going to place where the object to be stolen is found.

- 17805 (242) *εmaε χsu-trk^har kuu puu-γz-nyk^har-nuu cti tce,*
 17806 soldier three-rounds ERG SENS-PROG-surround-PL be.AFF:FACT LNK
cuu-ky-muarkuu my-tuu-c^ha
 17807 TRAL-INF-steal NEG-2-can:FACT

17808 ‘Three rounds of soldiers will be surrounding it, you will not be able to
 (go there and) steal it.’ (2003qachga, 55)

17809 Examples (243) and (244) illustrate the scope of aspectual auxiliary verbs (here
 17810 *atsu* ‘have the time to’ and *mda* ‘be time to’) on both motion event and verbal
 17811 action. In (244), note that the infinitive form with AM *cuu-ky-mtc^hot* ‘go and make
 17812 offerings’ translates the Chinese festival 清明节 <qīngmíngjié> ‘Tomb-Sweeping
 17813 Day’ (using a verb borrowed from Tibetan མཚོད་ *mtc^hod* ‘make offerings’). There
 17814 was no motion verb in the original text.

- 17815 (243) *q^he poturzi kuu ny-kum yuu-ky-cuu my-atsu ma*
 17816 LNK ANTHR ERG 2SG.POSS-door CISL-INF-open NEG-have.the.time.to LNK
 17817 ‘Bod.rje does not have time to come and open the door for you.’ (2010
 17818 meimei de gushi, 21)

- 17819 (244) *tursa cuu-ky-mtc^hot to-mdā puu-ŋu*
 17820 grave TRAL-INF-make.offerings IFR-be.the.time SENS-be
 17821 ‘It was the time to (go and) make offerings for the graves.’ (160630
 abao-zh, 70)

17822 The same scopal effect also applies to verbs with AM in complement clauses
 17823 selected by a verb in the protasis, as in (245) and (246): the realization of the
 17824 verbal action (in addition to that of the motion event) belongs to the condition.

- 17825 (245) *cuu-ky-ru muu~my-puu-tuu-c^ha ŋu ny ny-srym*
 17826 TRAL-INF-bring COND~NEG-AOR-2-can be:FACT LNK 1SG.POSS-root
ny-srob lxt-i
 17827 1SG.POSS-life throw:FACT-1PL
 17828 ‘If you do not succeed in going and bringing it here, we will destroy your
 root and your life.’ (Norbzang, 10)

15 Orientation and associated motion

- 17829 (246) *nyzo cuu-ky-murkuu a-puu-tuu-c^ha ny azo c^huu-sur-jyat-a*
 2SG TRAL-INF-steal IRR-IPFV-2-can LNK 1SG IPFV-CAUS-go.back-1SG
 17830 *jyY*
 be.agreed:FACT
 17831 ‘If you succeed in going and stealing it, I can make him to go back there.’
 17832 (02-montagnes-kamnyu, 46)

17833 By contrast, in (247), in the case of the infinitival complement *kui-ryma ky-ce*
 17834 ‘go to work’ with a purposive clause *kui-ryma* (§24.4.2.1), the main verb *mda* ‘be
 17835 time to’ only has scope over the motion event expressed by the verb *ce* ‘go’ – the
 17836 time that is indicated by the stars refers to the beginning of the journey to work,
 17837 not the start of the work itself. Compare this example in particular with (244)
 17838 above, with the same auxiliary verb.

- 17839 (247) *tce kuucunguu tce tuuts^hot puu-me tce nuunuu*
 17840 LNK long.ago LNK clock PST.IPFV-not.exist LNK DEM
c^huu-to₈ lu-cq^hlyt nura
 17841 IPFV:DOWNSTREAM-come.out IPFV:UPSTREAM-disappear DEM:PL
c-tu-kui-ru tce, nuunuu ky-ryru mda
 17842 TRAL-IPFV:up-GENR:S/O-look LNK DEM INF-get.up be.the.time:FACT
my-md₄ c^hondyre kui-ryma ky-ce mda
 17843 NEG-be.time:FACT COMIT SBJ:PCP-work INF-go be.time:FACT
my-md₄ nuutcu c-tu-kui-ru
 17844 NEG-be.time:FACT DEM:LOC TRAL-IPFV:up-GENR:S/O-look
puu-ηgryl.
 17845 PST.IPFV-be.usually.the.case
 17846 ‘In former times, there were no clocks, and people used to go and watch
 17847 when (these stars) came out or disappeared (to find out) whether it was
 time to get up or go to work.’ (29-LAntshAm, 66)

15.2.10.5 Volitionality and controllability

- 17848 An additional difference between AM and MVC has to do with volitionality and/
 17849 or controllability. In the case of an MVC, the verb in the purposive clause, whose
 17850 action follows the motion event, is always necessarily volitional and controllable.
 17851 By contrast, in the case of AM, it is possible to find examples where the verbal
 17852 action expresses a non-controllable event.
 17853 For example in (248) and (249), the verbs *c-pjy-mto* ‘he (went and) saw/found
 17854 it there’ (with verb echo, § 15.2.8) and *c-puu-rndu-tci* ‘we (went and) obtained it’

17856 express the action of finding something or someone, whose outcome is not con-
 17857 trollable. Note that there are no examples of the non-volitional verb *mto* ‘see’
 17858 with the MVC in the corpus (the volitional *rto&* ‘see, look’ or *ru* ‘look’ occur in-
 17859 stead).

- 17860 (248) *nucimuma zo tur-ci w-ŋguw pjy-ce q^he*
 immediately EMPH INDEF.POSS-water 3SG.POSS-inside IFR:DOWN-go LNK
 17861 *icq^ha tycime kuw u-syca*
 the.aforementioned lady ERG 3SG.POSS-key
 17862 *pui-ky-nur-cluy nui c-pjy-mto.*
 AOR:DOWN-OBJ:PCP-AUTO-drop DEM TRAL-IFR-see

17863 ‘He immediately went into the water and saw there the key that the lady
 17864 had dropped by mistake.’ (140510 fengwang-zh, 118)

- 17865 (249) *χsyr pya, χsyr mbro nuunura c^ho ki tycime kura tcizo*
 gold bird gold horse DEM:PL COMIT DEM.PROX girl DEM.PROX:PL 1DU
 17866 *rcanu, wuma zo pui-zduy-tci tce, nui kóbmuz*
 UNEXP:DEG really EMPH PST.IPFV-suffer-1DU LNK DEM only.then
 17867 *c-pui-rndu-tci ηu*
 TRAL-AOR-obtain-1DU be:FACT

17868 ‘We had to endure a lot of hardships before obtaining this golden bird,
 17869 this golden horse and this girl.’ (140507 jinniao-zh, 366)

17870 The verb *si* ‘die’ is also attested with AM as in (250), while a MVC would be
 17871 clumsy in this context.¹⁸

- 17872 (250) *azo muúj-c^ha-a, [...] nui syzny a-c-pui-si-a*
 1SG NEG:SENS-can-1SG DEM COMP IRR-TRAL-PFV-die-1SG
 17873 *nui-mna*
 SENS-be.better

17874 ‘I am good for nothing, I had better just (go and) die.’ (140425 shizi
 17875 puluomixiusi he daxiang-zh, 22)

17876 15.2.10.6 Relativizability

17877 Another difference between MVC and AM is related to the relativizability of core
 17878 arguments. In the MVC, the common subject of the motion verb and the verb of

¹⁸ The verb form *a-c-pui-si-a* ‘let me go and die’ translates Chinese 寻死 <xún sì> ‘look for death’.

15 Orientation and associated motion

17879 the purposive clause (including transitive subject) can be relativized, and if overt,
 17880 the head can be internal, between the purposive clause and the nominalized mo-
 17881 tion verb, as *tx-tku* ‘son, boy’ in (251), or occur after the whole clause.

- 17882 (251) [[*tx-mu* *u-kui-rto*₂] *tx-tku*
 17883 INDEF.POSS-mother 3SG.POSS-SBJ:PCP-see INDEF.POSS-son
 17884 *jx-kui-yri]* *nui a-bi* *ŋu*
 17885 AOR-SBJ:PCP-go[II] DEM 1SG.POSS-younger.sibling be:FACT
 17886 ‘The boy who went to see the old lady is my brother.’ (elicited)

17885 On the other hand, when the verb of the purposive clause is transitive, it is not
 17886 possible to relativize the object. Example (252), with an overt transitive subject
 17887 *a-bi kui* is thus non-grammatical, and the phrase *u-kui-rto*₂ *jx-kui-yri tx-mu* can
 17888 only be interpreted as a subject relative ‘the old lady who went to see him’.

- 17889 (252) *ta-bi* *kui u-kui-rto*₂ *jx-kui-yri*
 17890 1SG.POSS-younger.sibling ERG 3SG.POSS-SBJ:PCP-see AOR-SBJ:PCP-go[II]
 17891 *tx-mu* *nui a-ta* *ŋu*
 17892 INDEF.POSS-mother DEM 1SG.POSS-MZ be:FACT
 Intended meaning: ‘The old lady that my younger brother went to see is
 my aunt.’

17893 The only way to build a relative clause with this meaning is to use AM prefixes.
 17894 In (253) for instance, the prenominal finite relative (a subtype that is restricted
 17895 to object or goal relativization, §23.2.2) *a-bi kui z-ja-rto*₂ does not contain any
 17896 additional embedded clause, and is a simple case of object relativization.

- 17897 (253) [*a-bi* *kui z-ja-rto*₂] *tx-mu*
 17898 1SG.POSS-younger.sibling ERG TRAL-AOR:3→3'-see INDEF.POSS-mother
 17899 *nui a-ta* *ŋu*
 17900 DEM 1SG.POSS-MZ be:FACT
 17901 ‘The old lady that my younger brother went to see is my aunt.’ (elicited)

17900 The fact that by contrast (252) is not grammatical shows that relativization out
 17901 of purposive clauses is prohibited in Japhug grammar, unlike some complement
 17902 clauses (§23.5.11).

17903 16 Non-finite verbal morphology

17904 The distinction between finite and non-finite verb forms is easy to draw in Ja-
17905 phug: the former have person indexation (see chapter §14), while the latter do
17906 not. The only personal markers found on non-finite verb forms are possessive
17907 prefixes, the same set as in underived nouns (§5.1).

17908 In this chapter, I distinguish between several sub-categories of non-finite verb
17909 forms, including participles, infinitives, degree and action nominals as well as
17910 several converbs. In addition to describing the morphology of these verb forms,
17911 I also present their functions to build various types of subordinate clauses, in-
17912 cluding relative, complement and purposive clauses.

17913 16.1 Participles

17914 Japhug speakers, like Ancient Greeks, can be aptly described as φιλομέτοχοι ‘par-
17915 ticiple lovers’: Japhug and other Gyalrong languages have a rich system of partici-
17916 ples, and these non-finite forms play a central role in the syntax of the language.

17917 Participles are nominalized verb forms that keep some verbal characteristics:
17918 they can serve as predicates of subordinate clauses (relative or complement clauses),
17919 take TAM, polarity and associated motion marking, and preserve the verb’s ar-
17920 gument structure.

17921 Participles differ from finite verbs in three ways. First, they cannot serve as the
17922 predicate of a main clause. Second, they are not compatible with the personal in-
17923 dexation of the intransitive and transitive conjugations (including direct/inverse
17924 marking, §14.3.2.7), and with all inflectional suffixes without exception (§11.3).¹
17925 Rather, like nouns, they can take a possessive prefix which can be coreferent with
17926 one of the arguments. Due to the general impossibility of stacking possessive pre-
17927 fixes (§5.1.1), at most only one argument can be indexed this way. Third, there
17928 are restrictions on TAM marking on participles: they have at most three forms
17929 (neutral, perfective and imperfective), and completely lack Inferential (§21.5.2),
17930 Egophoric Present (§21.3.3) or Sensory (§21.3.2) forms .

¹ Japhug is identical in this regard to Tshobdun and Zbu, but crucially differs from Situ, where nominalized forms in *kə-* can bear indexation suffixes (J. T.-S. Sun 2006a; Sun & Lin 2007).

17931 There are three participles in Japhug; the subject S/A participle in *kua-*, the
 17932 object participle in *kr-* and the oblique participle in *sv-*.

17933 Complex participial forms, including negative, associated motion or TAM pre-
 17934 fixes are possible, as shown by example (1). However, never more than four
 17935 inflectional prefixes are found; forms with all five prefical slots filled (such as
 17936 *tu-yuu-jr-kua-qru*) are not accepted by Tshendzin.

- 17937 (1) *uu-yuu-jr-kua-qru* *tr-tcui*
 3SG-CISL-AOR-SBJ:PCP-meet INDEF.POSS-boy

17938 ‘The boy who had come to look for her.’ (The three sisters, 231)

17939 Table 16.1 summarizes the template of participial verb forms; more details are
 17940 provided on possible and attested forms for each participle type in the following
 17941 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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17942 Stem alternation is reduced in participle forms: stem III (§12.2.2.2) never oc-
 17943 curs. The few verbs that have an alternation between stem I and stem II (*ce* ‘go’,
 17944 *yi* ‘come’, *ti* ‘say’ and derived forms, §12.2.1), however, use stem II in subject and
 17945 object participles with perfective orientational prefixes (§15.1.1.1), in forms like *jr-*
 17946 *kua-ye* AOR-SBJ:PCP-come[II] ‘the one who came’ or *tr-kr-tut* AOR-OBJ:PCP-say[II]
 17947 ‘what was said’.

17948 16.1.1 Subject participles

17949 The subject participle, built by adding the prefix *kua-* to the verb stem, designates
 17950 an entity corresponding to the intransitive subject (2, §8.1.1 and §23.5.1), a pos-
 17951 sessor of the subject (§23.5.10.1), or the transitive subject (3, §8.2.2.1, §23.5.2) of
 17952 the base verb.

- 17953 (2) *kua-si*
 SBJ:PCP-die
 17954 ‘The dead one’ (many attestations)

- 17955 (3) *u-kuu-ndza*
 3SG-SBJ:PCP-eat
 17956 ‘The one who eats it.’ (many attestations)

17957 With *a*- initial verbs the *kuu-* prefix regularly merge with *a*- as *kv-*, a form which
 17958 resembles an object participle. There is almost no ambiguity since all *a*- initial
 17959 verbs are intransitive, §12.3). The only exception are the semi-transitive verbs in
 17960 *a*-, such as *aro* ‘have’, whose subject participle *kuu-vro* ‘having, the one who has’
 17961 and object participle *kv-vro* both surface as /kvro/.

17962 The subject participle *kuu-* 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
 17963 has cognates elsewhere in the family (§16.8.1).

17964 In this section, I discuss first morphological issues (possessive prefixes §16.1.1.3,
 17965 other prefixes §16.1.1.2 and ambiguous forms §16.1.1.3), and then present the var-
 17966 ious functions of subject participles, including participial relatives (§16.1.1.4 and
 17967 §16.1.1.5), complementation strategies (§16.1.1.6), as well as the case of lexicalized
 17968 participles (§16.1.1.7).

17969 Examples which could potentially be viewed as subject participles in conver-
 17970 bial use are analyzed as *kuu-* infinitives (§16.2.1.7).

17972 16.1.1.1 Possessive prefixes on subject participles

17973 In the case of transitive verbs, a possessive prefix coreferent with the object is
 17974 obligatory when no overt object is present (3SG *u-* in 3), and when no other prefix
 17975 is added to the participle.

17976 When another prefix (polarity, associated motion or orientation preverb) is
 17977 present, the possessive prefix is optional, as shown by forms like *mr-kuu-ndza*
 17978 ‘the one which does not eat (it)’ in (4), as opposed to *u-mr-kuu-mto* ‘the one who
 17979 does not see it’ in (5) with both possessive *u-* and the negative prefix *mr-*.

- 17980 (4) *tx-mt^bum vja zo ma nu ma, nyki,*
 17981 *INDEF.POSS-meat completely EMPH LNK DEM apart.from FILLER*
tuijpu mr-kuu-ndza ci tu tce,
flour.based.food NEG-SBJ:PCP-eat INDEF exist:FACT LNK
 17982 ‘There is (an animal like the mouse) which only eats meat, not food made
 17983 from flour.’ (27-spjaNkW, 202-2063)

16 Non-finite verbal morphology

- 17984 (5) *li nuunur kumy u-kui-mto γyzu,*
again DEM also 3SG.POSS-SBJ:PCP-see exist:SENS
17985 *u-my-kui-mto γyzu.*
3SG.POSS-NEG-SBJ:PCP-see exist:SENS
17986 ‘There are (people) who see (find) it, and people who don’t.’ (20-sWrna,
17987 20)

17988 In the case of ditransitive verbs, the possessive prefix strictly refers to the
17989 object. With indirective verbs like *t^hu* ‘ask’, the possessive prefix is necessarily
17990 the theme, never the recipient. The form in (6) thus cannot be interpreted as
17991 meaning ‘the one who asks me (about it)’; the correct construction would be (7),
17992 with the recipient in the dative case.

- 17993 (6) *a-kui-t^hu*
1SG.POSS-SBJ:PCP-ask
17994 ‘The one asking for me (in marriage).’ (elicited)
17995 (7) *a-cki u-kui-t^hu*
1SG.POSS-DAT 3SG.POSS-SBJ:PCP-ask
17996 ‘The one who asks me about it.’

17997 With secundative verbs (§14.4.2), the possessive prefix of the subject participle
17998 is obligatorily coreferent with the recipient, not the theme, as in (8).

- 17999 (8) *nua ma ny-kui-mbi me*
DEM apart.from 2SG.POSS-SBJ:PCP-give not.exist:FACT
18000 ‘Nobody will give you another (daughter in marriage).’ (2002 qaCpa, 57)

18001 With intransitive verbs, including adjectival stative verbs, a possessive prefix can
18002 also be added. In the case of semi-transitive verbs (§14.2.3), the possessive can
18003 refer to the semi-object (§8.1.5), as in example (9).

- 18004 (9) *nua cunγui tce, u-kui-rga puu-dyn.*
DEM before LNK 3SG.POSS-SBJ:PCP-like PST.IPFV-be.many
18005 ‘Before, there used to be many people who liked it.’ (12-Zmbroko, 112)

18006 It can also refer to the beneficiary (which is normally marked with genitive or
18007 possessive prefixes, see §5.1.1.4 and §8.2.3.2), as in (10) and (11).

- 18008 (10) *kui-pe tú-wy-nyma tce li tuozo*
 SBJ:PCP-be.good IPFV-INV-make LNK again GENR
 18009 *tui-kui-pe tu*
 GENR.POSS-SBJ:PCP-be.good exist:FACT
 18010 ‘If one does good things, one will also have good things.’ (140518 mao he
 18011 laoshu-zh, 124)
 18012 (11) *azō a-kui-ra nura a-ty-tui-ste qʰendyre azō*
 1SG 1SG.POSS-SBJ:PCP-be.needed DEM:PL IRR-PFV-2-do.like[III] LNK 1SG
 18013 *nunua, nyki, ku-nytsi-a jyy*
 DEM FILLER IPFV-hide[III]-1SG be.possible:FACT
 18014 ‘If you do the things I need, I will keep it secret.’ (2014-kWLAG, 247)

18015 Since participles are also noun-like, the possessive prefixes can be real posses-
 18016 sive, and be preceded with a genitive phrase as in (12) with *nui-kui-mna* ‘the best
 18017 among them’ = ‘their chief’ (on the verb *mna* ‘be better’, see §19.7.10).

- 18018 (12) *tcaχpa ra yui nui-kui-mna nui wuma zo pjy-nuruyom.*
 bandit PL GEN 3PL.POSS-SBJ:PCP-be.better DEM really EMPH IFR-be.upset
 18019 ‘The chief of the bandits was very upset.’ (140512 alibaba-zh, 195)

18020 This construction is used as a type of superlative (§26.4.2).

18021 16.1.1.2 Associated motion, polarity and orientation preverbs on subject 18022 participles

18023 Of all non-finite verb forms, subject participles allow the richest possible com-
 18024 binations of inflectional prefixes: associated motion (§15.2, example 13) below
 18025 with the translocative *çwu-*, polarity (§13.1, see 5 above) and orientation preverbs
 18026 marking TAME (§15.1.1.1) all can be prefixed.

- 18027 (13) *tceri nura w-cui-kui-pʰut ra kui-tu me*
 LNK DEM:PL 3SG.POSS-TRAL-SBJ:PCP-cut PL SBJ:PCP-exist not.exist:FACT
 18028 *ma,*
 LNK
 18029 ‘But nobody goes to collect (its stalks).’ (11-paRzwamWntoR, 90)

18030 Two of the four series of orientation preverbs (§15.1.1.1) are possible with sub-
 18031 ject participles. With A-type prefixes (*ty-* UPWARDS, *pu-* DOWNWARDS etc), the
 18032 participle of dynamic verbs is perfective as *tʰu-kui-ye* ‘the one who came’ in (14),

16 Non-finite verbal morphology

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-kui-yi* ‘the one who (usually) comes’ in (15).² The prefixes *nui-* and *kui-* do appear on subject participles, but only to express imperfective: there are no Egophoric (§21.3.3) or Sensory (§21.3.2) subject partipiles.

- (14) *icq^ha qazo u-kui-ntsye*
 the.aforementioned sheep 3SG.POSS-SBJ:PCP-sell
t^hu-kui-ye nui u-p^he
 AOR:DOWNSTREAM-SBJ:PCP-come[II] DEM 3SG.POSS-DAT
 ‘(He told) the person who had come to sell the sheep.’ (2003kandZislama,
 212)
- (15) *u-kui-ndza ju-kui-yi nui pya ci nui-ŋu*
 3SG.POSS-SBJ:PCP-eat IPFV-SBJ:PCP-come DEM bird INDEF SENS-be
 ‘The one who comes to eat (the fruits) is a bird.’ (2012 qachGa, 22)

The participles of stative verbs with series A and B orientation preverbs have an inchoative meaning, exactly like their finite counterpart (§21.5.1.3 and §21.2.6). In (16) for instance, the imperfective participle *nui-kui-jpum* from *jpum* ‘be thick’ means ‘the one which becomes thicker’, as opposed to the basic participle *kui-jpum* ‘the thick one’.

- (16) *ndzu u-kui jamar nui-kui-jpum yyzu ny,*
 chopsticks 3SG.POSS-head about IPFV-SBJ:PCP-be.thick exist:SENS SFP
kui-wxti.
 SBJ:PCP-be.big
 ‘There are (maggots) that grow as thick as the tip of a chopstick, the big ones.’ (25-akWzgumba, 80)

Imperfective participles of stative adjectival verbs are also can also describe the gradient variation of a property across space rather than time. For instance, in (17), the imperfective subject participles *ku-kui-xts^hum* and *nui-kui-jpum* are used not to indicate a change across time, but to describe the shape of the gourd, which is progressively thinner towards the top and thicker towards the bottom (on the contrast between the EASTWARDS *ku-* vs. WESTWARDS *nui-* preverbs in this context, see §15.1.4.3).

² These two examples also illustrate the use of subject participles as purposive complements with the forms *u-kui-ntsye* and *u-kui-ndza* (see §16.1.1.6, §24.4.2.1).

- 18060 (17) *tce u-mat numuu, u-tas ku-kui-xts^hum,*
 LNK 3SG.POSS-fruit DEM 3SG.POSS-up IPFV-SBJ:PCP-be.thin
 18061 *u-pa juu-kui-jpum ci c^hu-βze juu-ŋu tce,*
 3SG.POSS-down IPFV-SBJ:PCP-be.thick INDEF IPFV-make[III] SENS-be LNK
 18062 *nuu <hulu> tu-syrmii-nuu.*
 DEM gourd IPFV-call-PL
 18063 ‘It grows a fruit that is thinner (in diameter) on the upper part, and
 18064 thicker on the lower part, people call it ‘gourd’.’ (150825 huluwa-zh, 3)

18065 The past imperfective of stative verbs is built using the series A prefix *pui-* as
 18066 in the corresponding finite forms (§21.5.3.1). For instance, the past imperfective
 18067 participle of *ŋu* ‘be’ is *pui-kui-ŋu* ‘the one who used to be’ (§5.7.10), as in (18).

- 18068 (18) *uzyy nuu cuaŋguu u-nmaš pui-kui-ŋu ts^huaraŋ nuu*
 3SG:GEN DEM before 3SG.POSS-husband PST.IPFV-SBJ:PCP-be ANTHR DEM
 18069 *pjx-mto*
 IFR-see
 18070 ‘She saw Tshering, who used to be her husband.’ (qajdoskAt2002, 101)

18071 Most examples in the corpus have one or two prefixes, either combining a
 18072 possessive prefix with another prefix (as in 5 and 13), or combining a negative
 18073 prefix with an orientation preverb, as in (19).

- 18074 (19) *tce k^ha yuu u-ndzys^hi u-ro nuu-kui-ri nuura,*
 LNK house GEN 3SG.POSS-food 3SG.POSS-excess AOR-SBJ:PCP-left DEM:PL
 18075 *muu-nuu-kui-sna nuura, nuura pas kuu bja tu-ndze*
 NEG-AOR-SBJ:PCP-be.good DEM:PL DEM:PL pig ERG completely IPFV-eat[III]
 18076 *juu-ŋu*
 SENS-be
 18077 ‘Food from the house that has been left over, or which is not good any
 18078 more, pigs eat all of it.’ (05-paR, 33)

18079 Subject participles with three prefixes before the participle prefix *kui-* are possi-
 18080 ble, but attestations are rare. Example (1) above shows the combination of a pos-
 18081 sessive, an associated motion and an orientation preverbs (*u-yuu-jx-kui-qru* ‘the
 18082 one who had come to meet/look for her’), and (20) below that of a possessive, a
 18083 polarity and an orientation preverbs.

- 18084 (20) *u-pjuu-kuu-nuu-fkaβ* tu,
 3SG.POSS-IPFV-SBJ:PCP-AUTO-cover exist:FACT
- 18085 *u-mx-pjuu-kuu-nuu-fkaβ* tu ri nuu
 3SG.POSS-NEG-IPFV-SBJ:PCP-AUTO-cover exist:FACT LNK DEM
- 18086 *kuu-fse* *tu-nuu-ndza-nuu* *cti.*
 SBJ:PCP-be.like IPFV-AUTO-eat-PL be.AFF:FACT
- 18087 ‘There are people who cover it (with a lid while cooking), and people who
 18088 don’t, they eat it like that.’ (23-mbrAZim, 22-23)

18089 In addition to imperfective orientation preverbs as in (20), it is possible for
 18090 subject participles to combine possessive prefixes with *perfective* orientation pre-
 18091 verbs, as in (21). Subject participles are the only non-finite forms attested with
 18092 such a combination: the object participles do not allow combination of posses-
 18093 sive and orientation preverbs (§16.1.2.1) and the oblique participles cannot take
 18094 perfective orientation preverbs (§16.1.3.4).

- 18095 (21) *nunuu u-nuu-kuu-car* *u-puu-kuu-mto* *nuu yuu*
 DEM 3SG.POSS-AOR-SBJ:PCP-search 3SG.POSS-AOR-SBJ:PCP-see DEM GEN

18096 *nuu-tṣanj* *ma nunuu, nykintuu, u-cuu-kuu-βji* *nuu yuu*
 SENS-be.fair LNK DEM FILLER 3SG.POSS-TRAL-SBJ:PCP-chase DEM GEN

18097 *muáj-tṣanj*
 NEG:SENS-be.fair

18098 ‘It is fair that she would (be given) to the one who looked for her and
 18099 found her, not to the ones chasing her.’ (140517 buaishuohua-zh, 123)

18100 The negative prefix has the form *mu-* when occurring with a perfective ori-
 18101 entation preverb as *mu-nuu-kuu-sna* ‘the one that is not good anymore’ in (19) and
 18102 *mx-* when no orientation preverb is present (examples 5 and 4 above). With the
 18103 imperfective orientation preverbs, the allomorph *mx-* occurs when preceded by
 18104 a possessive prefix (20) and *mu-* is found when no possessive prefix is present:
 18105 compare the elicited forms (22) and (23). The allomorphs of the negative prefix
 18106 are not in free variation: forms such as †*uu-mu-ku-kuu-ts^{hi}* or †*mx-ku-kuu-ts^{hi}* would
 18107 be incorrect in Kamnyu Japhug.

- 18108 (22) *u-mx-ku-kuu-ts^{hi}*
 3SG.POSS-NEG-IPFV-SBJ:PCP-drink
- 18109 (23) *muu-ku-kuu-ts^{hi}*
 NEG-IPFV-SBJ:PCP-drink
- 18110 ‘The one who drinks it.’ (elicited)

18111 There are no constraints on the number of derivational prefixes in participial
 18112 forms. The derivational prefixes are all closer to the verb root than the participle
 18113 prefix *kui-*, and thus follow it as shown by (20), where the autive *-nu-*, the leftmost
 18114 of all derivational prefixes (§11.2.2), is placed after *kui-*.

18115 Aside from possessive, orientation, associated motion and polarity prefixes,
 18116 subject participles can also receive the Proximative aspect prefix *ju-* (see 252,
 18117 §21.6.2).

18118 Subject participles can undergo totalitative reduplication (§12.4.1.5, §23.3.2),
 18119 which applies to the first syllable of the word, whether it is the participle *kui-* or
 18120 an orientation preverb as in (24), meaning ‘all of those who/that X’.

- 18121 (24) *tce nuunu u-tas juu-jy-kui-ye nuu ku-ndym*
 LNK DEM 3SG.POSS-ON TOTAL~AOR-SBJ:PCP-COME[II] DEM IPFV-take[III]
 18122 *nuu-ŋu.*
 SENS-be
 18123 ‘(The spider) catches all of the (insects) that have come on (the web).’
 18124 (26-mYaRmtsaR, 108)

18125 16.1.1.3 Ambiguities

18126 The subject participle *kui-* prefix is homophonous with the generic person marker
 18127 for intransitive subject and object (§14.3.2.5; note that these two prefixes are prob-
 18128 ably historically related, §14.8.3). In the case of intransitive verbs, some subject
 18129 participles are therefore homophonous with generic person forms.

18130 For instance, the past imperfective generic *pui-kui-ŋu* ‘one used to be’ in (25) is
 18131 identical to the past imperfective participle *pui-kui-ŋu* ‘the one who used to be ...’,
 18132 discussed above (example 18 in §16.1.1.2). In this example, it is obvious that *kui-*
 18133 is the generic person marker because the verb *pui-kui-rga* ‘one used to be’ occurs
 18134 as the main verb; outside of any context, *tx-pvtsø pui-kui-ŋu* could be understood
 18135 as a relative clause ‘the one who used to be a child’, but this is not the meaning
 18136 of this sentence.

- 18137 (25) *tceri tx-pvtsø pui-kui-ŋu tce, nuu ky-ndza wuma*
 LNK INDEF.POSS-child PST.IPFV-GENR:S/O-be LNK DEM INF-eat really
 18138 *zo pui-kui-rga.*
 EMPH PST.IPFV-GENR:S/O-like
 18139 ‘When (we) were children, (we) used to like eating it.’ (12-ndZiNgrī,
 18140 137-138)

More generally, the Factual, Imperfective, Past Imperfective and Aorist forms of intransitive verbs in generic person forms are homophonous with unmarked, Imperfective, Past Imperfective and Aorist participles, respectively. In the case of transitive verbs, the subject participle can be identical to the object generic form. For instance, the participle *nui-tu-kui-ndza* ‘the one who eats them’ in (26) only differs from the generic *tu-kui-ndza* ‘it eats us/people’ in (27) by the possessive prefix *nui-*, and that prefix being optional, there are forms that are really ambiguous between participle and generic.

- (26) *nui tu-rkui jy-azyuit-nui tce, zara nui-tu-kui-ndza*
DEM 3SG.POSS-side AOR-reach-PL LNK 3PL 3PL.POSS-IPFV-SBJ:PCP-eat
sruunmui ci pjy-tu,
râkshasî INDEF IFR.IPFV-be

‘There was a râkshasî who ate those who had arrived near her.’ (2012 Kunbzang, 255)

- (27) *tce ndzypri ky-ti nui tce turme tu-kui-ndza*
LNK brown.bear OBJ:PCP-say DEM LNK people IPFV-GENR:S/O
nui-ŋgryl
SENS-be.usually.the.case

‘The brown bear, it eats people.’ (21-pri, 94)

The irregular generic *tu-kui-ty* ‘one says’ of the verb *ti* ‘say’ is also identical with the participle ‘the one who says’.

The 2SG→1SG form of transitive verbs in *-a*, due to the vowel fusion rule /-a-a/ → *-a*, are also superficially identical to subject participles. For instance *tu-kui-ndza-a* ‘you eat me’ is pronounced [tukwundza] exactly like the generic and the participle *tu-kui-ndza* in the Kamnyu dialect (in the dialects of Japhug where this vowel fusion does not occur, the forms remain distinct).

- (28) *nui kóbmuz ny tu-kur-ndza-a*
DEM only.after LNK IPFV-2→1-eat-1SG
‘Eat me only after (having taken out the thorn on my foot).’ (140426 lang yisheng-zh, 16)

In the case of stative verbs and some auxiliary verbs, the infinitive has in some cases the form *kui-*, and there is thus ambiguity between infinitive and subject participial forms for these verbs (§16.2.1).

18169 **16.1.1.4 Subject relative clauses**

18170 The most common use of subject participles is to build participial relative clauses
 18171 whose head noun is the subject; it is the only way to relativize the subject in
 18172 Japhug (§23.5.1). Headless relatives are most common (§23.4.1), but when the
 18173 head noun is overt, the relative can be either prenominal, postnominal or head-
 18174 internal. With intransitive verbs the difference between postnominal or head-
 18175 internal relatives is often difficult to ascertain, and many examples are ambigu-
 18176 ous; for instance in (29), the relative clause could be argued to be postnominal
 18177 (limited to the participle *kui-ruçmi* ‘speaking’) or head-internal (including *tçʰeme*
 18178 *znuaz* ‘two girls’, and possibly even the previous adjunct).

- 18179 (29) *kʰa w-ŋguw nütçu tçʰeme znuaz kui-ruçmi pjy-tu.*
 house 3SG.POSS-inside DEM:LOC girl two SBJ:PCP-speak IFR.IPFV-exist
 18180 ‘There were two girls speaking in the house.’ (150909 xiaocui-zh, 157)

18181 Other examples such as (30) are unambiguously head-internal, since the loca-
 18182 tive adjunct *kum u-rkuu zuu* cannot belong to the matrix clause. This example
 18183 additionally illustrates the necessity of using a subject relative clause with an
 18184 existential verb to connect a noun with an postpositional phrase (†*kum u-rkuu*
 18185 *zuu pya* would not be a complete sentence).

- 18186 (30) *kumpya nunu tce [kum u-rkuu zuu pya kui-tu] kx-ti*
 hen DEM LNK door 3SG.POSS-side LOC bird SBJ:PCP-exist INF-say
 18187 *jnu-ŋu*
 SENS-be
 18188 ‘The word *kumpya* ‘hen’ means ‘the bird that is next to the door’.
 18189 (22-kumpGa, 3).

18190 With transitive verbs, subject head-internal relatives can be distinguished from
 18191 postnominal ones by the presence of the ergative *kui* on the head noun (§23.4.3),
 18192 as in (31).

- 18193 (31) *[tsuku u-rduu~rdob kui zo tʰotsi u-kui-ta] yyzu.*
 some 3SG.POSS-piece ERG EMPH seal 3SG.POSS-SBJ:PCP-put exist:SENS
 18194 ‘There are people who put a seal (on their bread).’ (160706 thotsi, 20)

18195 Prenominal relatives are relatively rare with intransitive verbs, but commonly
 18196 occur with transitive verbs, as in (32). Note the presence of indefinite person
 18197 possessive marking on the head noun *tr-pvrtso* ‘child’ in this example; unlike in

18198 Situ (Sun & Lin 2007), the head noun of prenominal relatives in Japhug does not
 18199 take a third person singular prefix as in a possessive construction (in which case
 18200 the form *tui-pytso* would have been found).

- 18201 (32) [*tui-nuu* *uu-kui-ts^{hi}*] *tx-pytso* *yuu*
 INDEF.POSS-breast 3SG.POSS-SBJ:PCP-drink INDEF.POSS-child GEN
 18202 *uu-kui-mjym* *nur-juu* *tce*,
 3SG.POSS-SBJ:PCP-hurt SENS-be LNK

18203 ‘It is a disease of infants (who still drink mother milk).’ (25-kACAl, 61)

18204 There are nevertheless prenominal genitival subject relative clauses, containing
 18205 a subject participle, with the genitive *yuu* occurring between the relative
 18206 clause and the head noun. This construction is especially common in texts trans-
 18207 lated from Chinese (due to calquing with 的 <de>-relatives, §23.2.3), but also
 18208 attested in natural speech, as in (33).

- 18209 (33) *numu kur-sy-ndza* *yuu ruda^b* *numu tce* *kurnji tu-kur-ti*
 DEM SBJ:PCP-APASS-eat GEN animal DEM LNK beast IPFV-GENR-say
 18210 *ju.*
 be:FACT

18211 ‘Animals eating (other animals) are called ‘beasts’.’ (150822 kWrNi, 6)

18212 When subject relative clauses contain a complement clause, the main verb
 18213 of the complement clause can be in subject participle form (see example 84 in
 18214 §24.4.2.4).

18215 16.1.1.5 Other relative clauses

18216 In addition to subject relativization, the subject participle is also used in possessor
 18217 relatives, when the relativized element is the possessor of the subject (§23.5.10.1).
 18218 The head-internal clause in (34) is such a possessor relative; its head noun *si* ‘tree’,
 18219 possessor of the subject *uu-mat* ‘its fruits’, is marked with the genitive, showing
 18220 that it belongs to the relative.

- 18221 (34) [*si* *yuu uu-mat* *kui~kui-tu*] *nua* *uu-ku* *ri*
 tree GEN 3SG.POSS-fruit TOTAL~SBJ:PCP-exist DEM 3SG.POSS-top LOC
 18222 *c-ku-zo* *nua-juu* *tce*.
 TRAL-IPFV-land SENS-be LNK

18223 ‘It lands on the top of all trees that have fruits.’ (24-ZmbrWpGa, 43)

18224 Headless possessor relative clauses, such as *nu-mtc^{hi} my-ku-pe* ‘those with a
 18225 foul mouth’ in (35), are even more common.

- 18226 (35) *nui-mtc^{hi} my-ku-pe, ky-nytsuu kuu-ra ra*
 3PL.POSS-mouth NEG-SBJ:PCP-be.good INF-hide SBJ:PCP-be.needed PL
 18227 *kuny tu-kui-nua-ti numura teayi tu-syrm*i*-nu*
 also IPFV-SBJ:PCP-AUTO-say DEM:PL parrot IPFV-call-PL
 18228 *ŋgrvl.*
 be.usually.the.case:FACT

18229 ‘Those with a foul mouth, who say things that should be hidden, are
 18230 called ‘parrots’. (24-qro, 130)

18231 In addition, there are also participial relative clauses in *kuu-* whose relativized
 18232 element is neither the subject or the possessor of the subject, in particular loca-
 18233 tive adjuncts with the relator noun *u-stu* ‘place’ (§23.5.3), the only argument of
 18234 dummy subject verbs (§23.5.3.4) or arguments from complement clauses embed-
 18235 ded within the relative (§23.5.11.4).

18236 16.1.1.6 Purposive clauses and other complementation strategies

18237 Subject participles occur in three types of complement clauses and complemen-
 18238 tation strategies (§24.4.2).

18239 First, the three motion verbs *ce* ‘go’, *yi* ‘come’ and *tox* ‘come out’ (§15.1.2.1)
 18240 use subject participle clauses as purposive clauses (§15.2.10), such as *ndzi-kuu-qur*
 18241 in (36), whose (transitive or intransitive) subject is coreferent with that of the
 18242 matrix verb.

- 18243 (36) *azo [ndzi-kuu-qur] c^huu-yi-a je*
 18244 1SG 2DU-SBJ:PCP-help IPFV:DOWNSTREAM-come-1SG SFP
 ‘Let me come to help you.’ (tWJo 2005, 25)

18245 J. T.-S. Sun (2012) posits the category of *supine* to refer to the cognate construc-
 18246 tion in Tshobdun. However, given the existence of object participle purposive
 18247 clauses (§16.1.2.6, §24.4.2.1) above, I consider the supine to be only a specific use
 18248 of the subject participle, rather than an independent morphology category.

18249 Second, subject participle relative clauses (§23.8.3, §24.4.2.3) are selected as
 18250 objects or semi-objects by some verbs such as *nuçpuuz* ‘pretend’, ‘imitate’, as in
 18251 (37).

- 18252 (37) *zara kuu [c^ha nuu ku-kuu-ts^hi] to-nuicpuaz-nuu,*
 3PL ERG alcohol DEM IPFV-SBJ:PCP-drink IFR-pretend-PL
 18253 ‘They pretended to drink the alcohol (‘imitated an alcohol drinker’).’
 18254 (Norbzang 2012, 91)

18255 Third, participial clauses occur as genuine complements in some constructions
 18256 (§24.4.2.4), in particular in negative existential constructions and when the ma-
 18257 trix verb is itself in subject participle form, as in (38).

- 18258 (38) *[[azo a-kuu-cuu-njo] kuu-c^ha] me*
 1SG 1SG.POSS-SBJ:PCP-CAUS-be.defeated SBJ:PCP-can not.exist:FACT
 18259 ‘Nobody can defeat me.’ (150821 edu de wangzi-zh, 5)

18260 16.1.1.7 Lexicalized subject participles

18261 A certain number of subject participles have developed specialized meanings and
 18262 can be considered to have been lexicalized. Some of these lexicalized participles
 18263 are formally identical to the regular participle (Table 16.2, for instance the noun
 18264 *kuc^hi* ‘candy’ in (39) as compared to the non-lexicalized participle *kuu-c^hi* ‘the one
 18265 that is sweet’ in (40). For such nouns, lexicalization is shown by the meaning spe-
 18266 cialization and the inability to take orientation, associated motion and polarity
 18267 prefixes (but not possessive prefixes, as shown by the prefix *a-* on *kuc^hi* ‘candy’ in
 18268 39).

- 18269 (39) *azo a-ŋgra a-kuc^hi ci tx-χti ra*
 1SG 1SG.POSS-salary 1SG.POSS-candy INDEF IMP-buy[III] be.needed:FACT
 18270 ‘Give me a candy as a reward.’ (140515 congming de wusui xiaohai-zh, 82)
- 18271 (40) *tce nuunuu li tú-wy-ndza tce, kuu-c^hi tu,*
 LNK DEM again IPFV-INV-eat LNK SBJ:PCP-be.sweet exist:FACT
 18272 *mr-kuu-c^hi tu.*
 NEG-SBJ:PCP-be.sweet exist:FACT
 18273 ‘When one eats them, some are sweet, some are not.’ (08-rasti, 55)

18274 Table 16.2 does not include the many names of profession / occupation built
 18275 from the subject participles which are semantically transparent. We can distin-
 18276 guish two cases.

18277 First, labile verbs derive participial forms such as *kuu-lry* ‘shepherd’ or *kuu-*
 18278 *murkui* ‘thief’ (from *lry* ‘graze’ and *murkui* ‘steal’) without an obligatory posses-
 18279 sive prefix; the absence of these prefixes cannot be attributed to lexicalization,
 18280 since these verbs can also be used intransitively (§14.5.1.2).

Second, plain transitive verbs have to undergo antipassive derivation (§18.6) for their subject participles to be usable as names of professions. For instance, *kurṛṛyt* ‘writer’ and *kurṛtṣuβ* ‘tailor’ are from the *rṛ-* non-human antipassive forms of *rṛt* ‘write’ and *tsuβ* ‘sew’, while *kui-sṛ-suixčṛt* ‘teacher’ comes from the *sṛ-* human antipassive of *suixčṛt* ‘teach’(see Table 18.9, §18.6.7.4). Without antipassive prefixes, the subject participles of (non-labile) transitive verbs require either an overt object or a definite and anaphorically recoverable object, and are used as names of professions. For instance, in (41), the participle *u-kui-rṛt* ‘the one writing it’ is used with *tx-rmi* ‘name’ as its object.

- (41) [*tx-rmi* *u-kui-rṛt*] *tx-pṛtso* *nui*
 INDEF.POSS-name 3SG.POSS-SBJ:PCP-write INDEF.POSS-child DEM
 u-rkui *zo*, [...] *pjṛ-zyuit* *tce*,
 3SG.POSS-side EMPH IFR-reach LNK

‘It arrived near the boy who wrote the names (of the contestants).’
 (150826 shier shengxiao, 110)

Moreover, I do not include among lexicalized participles cases like ‘shooting star’ (42): although this expression is not compositional, the participle here is not frozen; the verb *myrzaβ* ‘marry’ can also occur in finite forms with the noun *zŋgri* ‘star’ in the meaning ‘appear, fall (of a shooting star)’ as in (43).

- (42) *zŋgri nui-kui-myrzaβ*
 star IPFV-SBJ:PCP-marry
 ‘Shooting star’ (‘the wedding star’)

- (43) *zŋgri nui-myrzaβ u-raŋ* *tce*, *tui-kyrme*
 star AOR-marry 3SG.POSS-time LNK GENR.POSS-hair
 cʰtú-wy-ryci *tce*, *cʰu-rŋji* *ŋu*
 IPFV:DOWNSTREAM-INV-pull LNK IPFV-be.long be:FACT
 ‘When a shooting star falls, if one pulls one’s hair, it become longer.’
 (29-mWBZi, 101)

Table 16.2: Lexicalized subject participles

Noun	Base verb
<i>kuip̥ra</i> ‘noble’	<i>þra</i> ‘prevail, win’
<i>kuspor</i> ‘hole’	<i>spor</i> ‘have a hole’
<i>kučhi</i> ‘candy’	<i>c̥i</i> ‘be sweet’
<i>kumjym</i> ‘ailment’	<i>m̥ym</i> ‘hurt, feel pain’
<i>kuŋju</i> ‘right thing’	<i>ŋu</i> ‘be’
<i>kumar</i> ‘bad thing’	<i>mar</i> ‘not be’

In the case of *kuŋju* ‘right thing’ and *kumar* ‘bad thing’, lexicalization is very advanced, and the meanings of the nouns are very different from those of the corresponding participles *ku-ŋju* ‘the one that is’ and *ku-mar* ‘the one that is not’. Examples such as (44) and (44) illustrate their use in collocation with verbs like *nyma* ‘work, make’ and *fse* ‘be like’.

- (44) *my-ti-a ma kuŋju my-tu-nyme*
 NEG-say:FACT-1SG LNK right.thing NEG-2-make[III]:FACT
 ‘I won’t say it, because you will not do the right thing.’ (2005 Kunbzang, 397)

- (45) *a-l̥-wy-caβ-a tce tcendyre kuŋju my-fse*
 IRR-PFV-INV-catch.up-1SG LNK LNK right.thing NEG-be.like:FACT
 ‘If he catches up with me, (our enterprise) won’t succeed.’
 (25-kAmYW-XpAltCin, 37)

The participle *ku-mar* ‘the one that is not’ has been independently grammaticalized as an identity pronoun/determined *kumar* ‘other’ (see §6.8 and §9.1.7).

From the nouns *kuŋju* ‘right thing’ and *kumar* ‘bad thing’, the intransitive verbs *rukujy* ‘do the right thing’, ‘take good care of one’s family’ and *rukujy* ‘do bad things’, ‘happen bad things’, ‘be clumsy’ and the transitive verb *nukumar* ‘make a mistake’ have been derived by denominal derivation with *ru-* and *nu-* (§20.4.1, §20.7.3).

The subject participle *ku-mpçyr* ‘the beautiful one’ of the verb *mpçyr* ‘be beautiful’ has a derived denominal transitive verb *nukumpçyr* ‘wear (on important occasions)’ with highly derived semantics, reflecting the lexicalized use of the participle in the meaning ‘decoration’ as in (46).

- 18326 (46) *tce li u-kui-mpcyr kui-fse*
 LNK again 3SG.POSS-SBJ:PCP-be.beautiful SBJ:PCP-be.like
tr-ky-βzu juu-ŋu tce
 AOR-OBJ:PCP-make SENS-be LNK

18328 ‘(The seal on breads) is used for decoration.’ (160706 WzbroN, 6)

18329 Several names of diseases only exist as intransitive verbs, and the disease it-
 18330 self or the person suffering from the disease can only be referred to by using
 18331 a participial or infinitive form. In particular, the word *ky-kui-nyndza* ‘leper’ is
 18332 the perfective subject participle of *nyndza* ‘have leprosy’; this word has some de-
 18333 gree of lexicalization (in particular, it is a common insult), but it behaves like a
 18334 participle grammatically; in particular, it can undergo totalitative reduplication
 18335 (§12.4.1.5, §23.3.2), as in (47).

- 18336 (47) *nunu kui, numuatcu kui~kui-ryzi nuu to-yx-mna.*
 DEM ERG DEM:LOC TOTAL~SBJ:PCP-stay DEM IFR-CAUS-recover
 18337 *to-yx-mna u-q^bu tce tcendyre <quanxian> tce*
 IFR-CAUS-recover 3SG.POSS-after LNK LNK all.the.district LOC
kui~ky-kui-nyndza nuu jy-yx-me
 TOTAL~AOR-SBJ:PCP-have.leprosy DEM IFR-CAUS-not.exist
 18339 ‘He healed all those who were staying there (in the leper house). After he
 18340 healed them, he had eradicated leprosy (removed all lepers) from our
 18341 district.’ (25-khArWm, 82)

18342 Other disease names such as *trkyzbyas* ‘migraine’ (as in 48), although clearly
 18343 the perfective participle or infinitive of a verb root *azbyas, is hardly ever attested
 18344 in finite form.

- 18345 (48) *trkyzbyas nuu ty-mŋym q^be, tce nuu u-q^bu ny,*
 migraine DEM AOR-hurt LNK LNK DEM 3SG.POSS-after LNK
 18346 *jgusqy-rza^b zo mui-tu-mna*
 nine.or.ten-night EMPH NEG-IPFV-recover
 18347 ‘After the migraine starts, it does not recede until nine or ten days.
 18348 (conversation taRrdo 2003, 9)

18349 In addition, we find nouns in *kui-* that can be suspected to be former lexicalized
 18350 participles, such as *kuiju* ‘oath’, which appears to contain the root of the verb *ŋu*
 18351 ‘be’, though the segment *-j-* cannot be accounted for at the present moment,³ and

³ In any case, the Tangut cognate 鹿⁴⁶⁰⁰ *ŋwu*^{1.58} ‘oath’ shows that this derivation is very ancient and reflects a non-productive morphological process.

18352 *kumtə^hu* ‘toy’, whose verbal root cannot be identified. The name *kusvyrū* ‘mirror’
 18353 (an archaic word in the process of being replaced by the Tibetan *χεրլզգօյ* ‘mirror’) could also be a frozen subject participle of the verb *ru* ‘look at’, but the nature of
 18354 the prefix *svy-* is unclear: it could be proprietive prefix (§18.8), or alternatively,
 18355 be analyzed as a frozen oblique participle prefix (§16.1.3.10). In the second view,
 18356 the prefix *ku-* would not be identifiable.

18358 Lexicalized subject participles appearing in compounds are also found. Several
 18359 cases must be distinguished. First, we find subject participles of transitive
 18360 verbs as the second member of a compound, with their object as the first member.
 18361 This type of compounds are lexicalized headless relative clauses, like *qalekuts^hi*
 18362 ‘species of kite’, which combines *qale* ‘wind’ and the participle *u-kuu-ts^hi* of the
 18363 transitive verb *ts^hi* ‘block’, literally ‘blocking the wind’ (§5.5.1.1), a designation
 18364 referring to this bird’s ability to apparently remain unmoving in the sky, as de-
 18365 scribed in (49).

- 18366 (49) *ky-nuqambumbjom muí-ce kuu nunaure ui-stu ri*
 18367 INF-fly NEG:SENS-go ERG there 3SG.POSS-place LOC
 18368 *ku-rzzi tce, [...] ui-kar nuu tu-sylqylqyt ny*
 IPFV-stay LNK 3SG.POSS-wing DEM IPFV-flap.slightly LNK
 18369 *tu-sylqylqyt ñgrvl*
 IPFV-flap.slightly be.usually.the.case:FACT
 18370 ‘It does not move (flying) but remain there (in the sky) at his place,
 slightly flapping its wings.’ (23-RmWrcWftsa, 40)

18371 A second type involves two participles in apposition, as *kuryukuyndzur* ‘har-
 18372 vestman’, built from the subject participles of *rju* ‘parch’ and *yndzur* ‘grind’ (§??). Both verbs being transitive, the absence of a possessive prefix *u-* is an additional
 18373 clue that the form is fully lexicalized.

18375 Third, there are compounds with the subject participle of transitive or intransitive
 18376 verbs as first element (see also §5.5.6), for instance *kuqurzŋgri* ‘evening star’
 18377 from *u-kui-qur* ‘the one helping him’ (*qur* ‘help’) and *zŋgri* ‘star’ literally ‘the star
 18378 of the helper’, for reasons explained in the following excerpt (50).

- 18379 (50) *uunuu kuičuŋgu tce kui-qur ju-kui-ce tce nuna,*
 18380 DEM before LNK SBJ:PCP-help IPFV-GENR:S/O-go LNK DEM
 18381 *mua-nua-łob myctša nuu tu-kui-nuna*
 NEG-AOR:WEST-come.out until DEM IPFV-GENR:S/O-rest
 18382 *mua-pjy-jyγ puu-ŋu tce, tce nündza kuiqurzŋgri*
 NEG-IFR.IPFV-be.possible SENS-be LNK LNK for.this.reason evening.star

18382 *tu-syrmi-nuu*

IPFV-call-PL

18383 ‘Long ago, when one would go helping, one was not supposed to rest
 18384 until it comes out, and for this reason it was called ‘star of the helper’.
 18385 (29-mWBZi, 62)

18386 An example with an intransitive verb is provided by the noun *kundzarmu* ‘type
 18387 of rain’, compound of the participle of *ndzar* ‘drip dry’ (§17.3.1) with the noun *tuu-*
 18388 *muu* ‘sky, weather’ (§5.1.2.11). As shown by the definition provided for *kundzarmu*
 18389 in (51), the original meaning of this compound may have been ‘last drops of rain’
 18400 – the last rain before a relatively long period without rain.

18391 (51) *icq^ha tuu-muu nuu spikuku zo, spikuku zo*
 the.aforementioned INDEF.POSS-sky DEM every.day EMPH every.day EMPH
 18392 *a-ky-lxt tce tce, kuu-maq^hu tce ci ci ku-lxt, ci*
 IRR-PFV-release LNK LNK SBJ:PCP-be.after LNK one one IPFV-release one
 18393 *ci puu-jum kui-fse ηu tce, ununuu*
 one IPFV-be.sunny SBJ:PCP-be.like be:FACT LNK DEM
 18394 *ku-kuu-lxt, <zhenuy> kui-fse ku-kui-lxt*
 IPFV-SBJ:PCP-release showery.rain SBJ:PCP-be.like IPFV-SBJ:PCP-release
 18395 *nuu, ununuu kui-fse a-ky-lxt tce ui-qhu tce*
 DEM DEM SBJ:PCP-be.like IRR-PFV-release LNK 3SG.POSS-after LNK
 18396 *tuu-muu my-lxt tu-kui-ti ηu tce, ununuu*
 INDEF.POSS-sky NEG-release:FACT IPFV-GENR-say be:FACT LNK DEM
 18397 *tuu-muu ku-kuu-lxt nuu kundzarmuu tu-kui-ti*
 INDEF.POSS-sky IPFV-SBJ:PCP-release DEM type.of.rain IPFV-GENR-say
 18398 *ηu*
 be:FACT

18399 ‘When it rains (continuously) everyday, followed by sporadic rain
 18400 (sometimes it rains, sometimes it is sunny), when there is a showery rain
 18401 and after that no more rain, this type of (showery) rain is called
 18402 *kundzarmu*.’ (definition, 2015-04-18)

18403 Nominalizations with the *x-/y-* prefix (§16.5.2) are ancient lexicalized subject
 18404 participles that have undergone a syllable reduction rule (§5.6.2, Jacques 2014b:
 18405 6) and have become completely separated from their base verbs synchronically.

18406 There are also a few adverbs derived from verbs with a *ku-* prefix, but these
 18407 are best analyzed as lexicalized stative infinitives (§16.2.1.8).

18408 **16.1.2 Object participles**

18409 The object participle is a nominalized form which refers to an entity correspond-
 18410 ing to the object (§8.1.3) or semi-object (§8.1.5) of the base verb. Nearly all trans-
 18411 sitive and semi-transitive verbs (except for a handful of exceptions, §16.7) can
 18412 build an object participle by adding the prefix *ky-* (for instance *ky-ndza* from the
 18413 verb *ndza* ‘eat’ in 52). This form is homophonous with, and historically related
 18414 to the velar infinitive (§16.2.1, §16.8.1).

18415 (52) *ky-ndza*

OBJ:PCP-eat

18416 ‘The one that is eaten.’ (many attestations)

18417 In the case of secundative verbs (§14.4.2), the object participle can either refer
 18418 to the recipient or the theme, as in (53); this question is discussed in more detail
 18419 in §16.1.2.4.

18420 (53) *nuu-ky-mbi*

AOR-OBJ:PCP-give

18421 ‘The one that he has given it to.’

18422 ‘The one that has been given to him.’ (many attestations)

18423 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).
 18424 Then, I discuss several cases of ambiguity between object participles and other
 18425 *ky-* prefixed forms in §16.1.2.3 (see also §16.2.1.1). The uses of object participles
 18426 to build relative clauses and complement clauses are described in §16.1.2.4 and
 18427 §16.1.2.6. Finally, I present a few cases of lexicalized object participles in §16.1.2.7.

18429 **16.1.2.1 Possessive prefixes on object participles**

18430 Unlike subject participles, object participles never require a possessive prefix. An
 18431 optional possessive prefix coreferent with the transitive subject, as in (54), can
 18432 however be added.

18433 (54) *a-ky-suuz*

1SG-NMLZ:P-know

18434 ‘The one that I know.’ (many attestations)

18435 In the case of semi-transitive verbs, the possessive prefix is also coreferent
 18436 with the subject, as in the form *u-ky-rga* ‘the one that he likes’ in (55), built in the

18437 same way as the object participle of the transitive (tropative, §17.5) verb *nymum*
 18438 ‘find tasty’.

- 18439 (55) *ri numu stu u-kv-rga, u-kv-ny-mum*
 LNK DEM most 3SG.POSS-OBJ:PCP-like 3SG.POSS-OBJ:PCP-TROP-be.tasty
 18440 *pjv-cti.*
 IFR.IPFV-be.AFF
 18441 ‘But it was what he liked most, what he found most tasty.’ (160703
 18442 poucet3, 74)

18443 In addition to semi-transitive verbs, the complement-taking verb *c^ha* ‘can’ has
 18444 object participles taking possessive prefixes meaning ‘the one that X can Y’, X
 18445 being the subject (marked by the possessive prefix), and Y the verb in the com-
 18446 plement clause, which can be overt or not as in (56), where *nuu-my-kv-c^ha* stands
 18447 for *kv-ndo nuu-my-kv-cha* ‘the one(s) that they are able to catch’ (see additional
 18448 examples in §23.5.11.2).

- 18449 (56) *tce nuu-my-kv-c^ha nuu k^huma χsum pur-tu q^be, nuura*
 LNK 3PL.POSS-NEG-INF-can DEM dog three PST.IPFV-exist LNK DEM:PL
 18450 *kur rcanuu clab zo ku-ndo-nuu nuu-cti.*
 ERG UNEXP:DEG IDEO:I:immediately EMPH IPFV-catch-PL SENS-be.AFF
 18451 ‘The (rats) that they (the people) had been unable to (catch), there were
 18452 three dogs, these (dogs) caught them at once.’ (150831 BZW kAnArRaR,
 18453 48)

18454 16.1.2.2 Associated motion, polarity and orientation preverbs on object 18455 participles

18456 Object participles, like subject participles, are compatible with polarity (57), as-
 18457 sociated motion (58) and orientation preverbs (58).

- 18458 (57) *tce azo a-my-kv-suz txjm^vy nuu kv-ndza*
 LNK 1SG 1SG.POSS-NEG-OBJ:PCP-know mushroom DEM INF-eat
 18459 *my-naz-a*
 NEG-dare:FACT-1SG
 18460 ‘I do not dare to eat the mushrooms that I do not know.’ (23-mbrAZim,
 18461 113)

- 18462 (58) *w-pci tce w-cuu-ky-nyma ci pjy-tu*
 3SG.POSS-outside LNK 3SG.POSS-TRAL-OBJ:PCP-work INDEF IFR.IPFV-exist

18463 *tce,*
 LNK

18464 ‘(The mouse) had something to do outside.’ (140518 mao he laoshu-zh, 88)

18465 Associated motion and polarity prefixes on object participles co-occur with
 18466 possessive prefixes, as shown by (57) and (58) above, but orientation preverbs
 18467 (whether perfective or imperfective) do not. This is an important difference be-
 18468 between subject and object participles (§16.1.1.2). Object participles only have at
 18469 most two prefixes.

- 18470 (59) *tce pjyka wuma nuna tce, pjui-ky-nui-ji ηu tce,*
 LNK gourd really DEM LNK IPFV-OBJ:PCP-AUTO-plant be:FACT LNK
 18471 ‘The gourd proper is cultivated (it does not grow on its own).’
 18472 (16-CWrNgo, 63)

18473 Finite relative clauses, instead of object participles, can be used to specify both
 18474 TAME and the subject (§23.2.2).

18475 Unlike subject participles, object participles are attested with the progressive
 18476 *asu-* prefix, as in (60). It is the only non-finite form compatible with this prefix.

- 18477 (60) *tc^heme nua kua icq^ha, w-jas <meihua>,*
 girl DEM ERG the.aforementioned 3SG.POSS-hand plum.blossom
 18478 *muonto^h pui-ky-ysui-ndo nua pjy-yryt.*
 flower PST.IPFV-OBJ:PCP-PROG-take DEM IFR-throw
 18479 ‘The girl threw down the plum blossom, the flower that she was holding
 18480 in her hand.’ (150907 yingning-zh, 30)

18481 These forms are rare and difficult to identify, as they are always ambiguous
 18482 with object participles or infinitive of causativized verbs. In the case of (60), the
 18483 context makes it clear that interpretation as the participle of a progressive form
 18484 is the only possibility, as the same verb with the progressive appears a few sen-
 18485 tences before in (61).

- 18486 (61) *w-jas nautcu, icq^ha, <meihua> ci*
 3SG.POSS-hand DEM:LOC FILLER plum.blossom INDEF
 18487 *pjy-k-ysui-ndo-ci,*
 IFR.IPFV-PEG-PROG-take-PEG
 18488 ‘She was holding a plum blossom in her hand.’ (150907 yingning-zh, 20)

18489 **16.1.2.3 Ambiguity**

18490 There is rampant ambiguity between object participles, *kṛ-* infinitives and sub-
 18491 ject participles of passive verbs. The question of the ambiguity between object
 18492 participles and *kṛ-* infinitives is discussed in §16.2.1.3.

18493 The passive *a-* merges with the subject participle as /kṛ/, homophonous with
 18494 the infinitive and the object participle. Potentially ambiguous examples are very
 18495 common. For instance, in (62), the form /kṛrku/ could be argued to be an object
 18496 participle *kṛ-rku* or a passive subject participle *kui-r-rku*; the second option is
 18497 chosen here due to the semantics, which fits the passive *arku* ‘be put in, be located
 18498 in’ better (as this passive verb is in the process of becoming a locative existential
 18499 verb, §22.5.1.2). In the absence of any argument in favour of the passive analysis,
 18500 the ambiguous /kṛ-/ forms are analyzed as object participles by default.

- 18501 (62) *sxtc^ha ui-ŋgwi kui-ṛ-rku <yangyu> c^ho lypuy nura*
 18502 *earth 3SG.POSS-inside SBJ:PCP-PASS-put.in potato COMIT radish DEM:PL*
tu-ndze ŋgryl.
 18503 *IPFV-eat[III] be.usually.the.case:FACT*
 18504 ‘It eats the radish and the potatoes that are in the ground.’
 (25-akWzgumba, 22)

18505 Due to the fact that passive verbs in Japhug are barely attested in perfective
 18506 forms (§18.1.1), participles with perfective prefixes can be considered to be object
 18507 participles, especially in cases like (63), where the participle *nui-kṛ-χtṛr* ‘(those)

18508 that have been scattered’ occurs in a sentence following the transitive form *jṛ-*
 18509 *χtṛr* ‘it scattered, it smashed’.

- 18510 (63) *to-yi tce nui-zmbruu jṛ-χtṛr zo nui-ŋu tce,*
 18511 *IFR:UP-COME LNK 3PL.POSS-ship IFR-scatter EMPH SENS-be LNK*
wi-zda ra nui-p^he, n̥ki, “numuu zmbruu
 18512 *3SG.POSS-companion pl 3PL.POSS-DAT FILLER DEM ship*
nui-kṛ-χtṛr nui ui-taꝝ kṛ-nqob-nui ra”
 18513 *AOR-OBJ:PCP-scatter DEM 3SG.POSS-on IMP-hang-PL be.needed:FACT*
to-ti
 18514 *IFR-say*
 18515 ‘The (monster) came up and smashed their ship, and (Norbzang) said to
 his companions: “Grab the (pieces of the) ship that have been scattered”.’
 (2012 Norbzang, 31-32)

18517 The same analysis as object participles, rather than passive subject participles
 18518 is applied to examples of perfective *ky-* forms also when the transitive verb is not
 18519 found in finite form in a neighbouring sentence, such as (64).

- 18520 (64) *fsapar* *w-ŋgo* *rcaŋui*, *pui-ky-pryt* *zo*
 animals 3SG.POSS-disease UNEXP:DEG AOR-OBJ:PCP-break EMPH
 18521 *ty-fse* *pui-ŋu*.
 AOR-be.like SENS-be

18522 ‘It was like the disease of the cattle had been (suddenly) stopped.’ (2003
 18523 kAndZislama, 190)

18524 A more marginal case of homophony occurs between object participles and
 18525 velar infinitives on the one hand, and several finite forms taking the series A
 18526 orientation preverb *ky-* on the other hand (§16.2.1.1).

18527 16.1.2.4 Object relative clauses

18528 Object participles can be used to build object relative clauses, but compete in this
 18529 function with finite relatives (§23.5.3). They differ in this regard from subject
 18530 relatives, which are the only available construction to relativize transitive and
 18531 intransitive subjects.

18532 As was described in §16.1.2.2, object participles, unlike subject and oblique
 18533 participles, cannot combine possessive and orientation preverbs.

18534 Object participles with orientation preverbs are used in relative clauses with
 18535 indefinite subjects, or with definite third person subjects as in (65).

- 18536 (65) *[tamu kuŋ qajyi nu-ky-mbi]* *nuŋ tu-ndze* *pjy-ŋu*
 ANTHR ERG bread AOR-SBJ:PCP-give DEM IPFV-eat[III] IFR.IPFV-be
 18537 ‘(As) he was eating the (pieces of) bread that Lhamo had given him.’
 18538 (2002 qajdoskAt, 111)

18539 The only example of first or second person that could be interpreted as subject
 18540 in a perfective object participle relative in the corpus is (66), but in this example
 18541 (translated from Chinese), the referent of the first person is a pen that has been
 18542 used to write a poem; the ergative postpositional phrase *aŋo kuŋ* here can be either
 18543 analyzed as an instrument (‘the poem that has been written using me’) or as a causee
 18544 (§8.2.2.6, ‘the poem that he has made me write’), as shown by the presence
 18545 of the causative *sui-* prefix, not a subject.

- 18546 (66) [azo kur puu-ky-su-rvt] nuunu pjuu-ndum puu-nyu nétcí
 1SG ERG AOR-OBJ:PCP-CAUS-write DEM IPFV-read SENS-be SFP
 18547 (The pen said: the poet is reading the poem) that has been written using
 18548 me.' (150818 bi he moshuihu-zh, 143)

18549 When the subject is first or second person, an object participle with a posses-
 18550 sive prefix is used instead. In (67) for instance, we find *ji-ky-rku* 'the thing that
 18551 we give' (see §16.5.1 concerning the meaning of this verb) and *ny-ky-suso* 'the
 18552 thing that you think / that you want' with a first plural and a second singular
 18553 possessive prefix, respectively.

- 18554 (67) nuu ma izo ji-ky-rku me, atu
 18555 DEM apart.from 1PL 1PL.POSS-OBJ:PCP-put.in not.exist:FACT up.there
 spyi ty-ce q^he, laxtc^ha yotcu ny-ky-suso zo
 18556 granary IMP:UP-go LNK thing where 2SG.POSS-OBJ:PCP-think EMPH
 nuunuu, ny-mpas, ny-rna, ny-cna c^ho ra
 18557 DEM 2SG.POSS-eye 2SG.POSS-ear 2SG.POSS-nose COMIT PL
 kur~kui-spor nuu u-ηguu tce a-ky-tuu-rke
 18558 TOTAL~SBJ:PCP-have.a.hole DEM 3SG.POSS-inside LOC IRR-PFV-2-put.in[III]
 q^he,
 LNK
 18559 'We don't have anything else to give you as a departing present, go up
 18560 there in the granary, and whatever you want, put it in all the holes (in
 18561 your body), you eyes, you ears, you nose etc.' (31-deluge, 136)

18562 When the subject is a definite third person, it is also possible to have a third
 18563 person possessive prefix on the object participle, as in (68) (or 58 above).

- 18564 (68) ly-fso_h uu-juja nuu pjuu-ru tce [uu-ky-numbrypuu]
 18565 AOR-be.clear 3SG-along DEM IPFV:DOWN-look LNK 3SG.POSS-OBJ:PCP-ride
 nuu k^hu puu-cti nuu-nyu,
 18566 DEM tiger PST.IPFV-be.AFF SENS-be
 18567 'As the day broke, looking down, he (progressively realized that) what he
 was riding was a tiger.' (2005 khu, 20)

18568 Unlike in Tshobdun (Sun & Lin 2007: 10), in Japhug object participial relatives
 18569 with possessive prefixes are not restricted to generic state of affairs, but can refer
 18570 to particular situations as in examples such as (68) and (69).

- 18571 (69) *a-ta^bs, tce ny-kua-mnyym tc^bi nuu-fse ma [alo*
 1SG.POSS-aunt LNK 2SG.POSS-SBJ:PCP-hurt what SENS-be.like LNK upstream
 18572 *q^baq^bu ny-ky-ti] nuura ty-stu-t-a*
 behind.the.house 2SG.POSS-OBJ:PCP-say DEM:PL AOR-do.like-PST:TR-1SG
 18573 ‘Stepmother, how do you feel, I did the things you said (about creating a
 18574 lake) up there behind the house.’ (28-smAnmi, 361)

18575 In object participial relatives, when the relativized element is overt, it is gen-
 18576 erally located before the participle, as in (70).

- 18577 (70) [*nuŋa u-n^bdži t^bu-ky-ryyduut], t^bu-ky-t^buβ nuu*
 cow 3SG.POSS-skin AOR-OBJ:PCP-skin AOR-OBJ:PCP-sew DEM
 18578 *u-ŋguu nuucu ko-ce*
 3SG.POSS-inside DEM:LOC EVD:EAST-go
 18579 ‘He went into the cow hide that had been skinned and sewed.’
 18580 (02-deluge2012, 32)

18581 While the relative clause in (70) can either be interpreted as head-internal or
 18582 post-nominal, clear examples of head-internal object relatives are found (§23.4.3.2),
 18583 as in (71), where the head noun *k^ba* is located between the instrumental adjunct
 18584 *kuu-c^bi kuu* and the participle.

- 18585 (71) [*kui-c^bi kui k^ba ty-ky-siu-βzu] ci pjy-mto-ndzi*
 SBJ:PCP-be.sweet ERG house AOR-OBJ:PCP-CAUS-make INDEF IFR-see-DU
 18586 ‘They saw a house that was made from sweets.’ (140507 tangguowu-zh, 78)

18587 Prenominal object participial relatives are mainly attested with participles with
 18588 a possessive prefix, such as *a-ky-suaz* in (72).

- 18589 (72) *nunu paxci [azo a-ky-suaz] nuu nuura γyzu*
 dem apples 1SG.POSS-OBJ:PCP-know allium DEM DEM:PL exist:SENS
 18590 ‘Of the apples, (the aforementioned) are the ones I know about.’
 18591 (07-paXCi, 73)

18592 Examples of prenominal object participial relatives with orientation preverbs
 18593 are also attested, as in (73) (a near minimal pair with 71) and (74). This type
 18594 of relative clauses are considerably less common than the corresponding head-
 18595 internal ones, especially in texts that have not been translated from Chinese as
 18596 in (74).

- 18597 (73) [lonba com kuu nur-ky-su-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)
- 18600 (74) *tce [k^hru kuu t^hwi-ky-su-lst]* *la^hdun kurn 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)
- 18602 As mentioned above (example 53), the object participles of secundative verbs
 18603 can either refer to their object proper (the recipient, §14.4.2) or to the theme,
 18604 which is not indexed on the verb but occurs in absolute form (§8.1.6). In fact, in
 18605 the corpus examples of theme relativization with the object participle are quite
 18606 common (as 65 above and 75 and 76 below), but recipient relativization is quite
 18607 rare (77). Examples can however be elicited without difficulty.
- 18608 (75) *nui ma u-ky-mbi mane tce,*
 DEM apart.from 3SG.POSS-OBJ:PCP-give not.exist:SENS LNK
 "a-me ta-mbi ra" to-ti tce,
 18609 1SG.POSS-daughter 1→2-give:FACT be.needed:FACT IFR-say LNK
 'He had nothing else to give him, and said 'I give you my daughter''.
 18611 (2011-04-smanmi, 171)
- 18612 (76) *tcendyre [tumukyrni kuu puu-ky-suixcxt] ra pjy-nxxtsun tce tce*
 LNK heaven ERG AOR-OBJ:PCP-teach PL IFR-be.grateful LNK LNK
 18613 *nucimuma zo pjy-nui-ce.*
 immediately EMPH IFR:DOWN-VERT-go
 'Pu'an) was thankful for the things that the god of heaven had taught
 18614 him and went back (to earth) immediately.' (150827 taisui-zh, 135)
- 18616 (77) *icq^ha, [kyntc^hwi-xpa zo, nyki, xciri nui-ky-suixcxt]*
 the.aforementioned several-year EMPH FILLER weasel AOR-OBJ:PCP-teach
 18617 *nui pjy-sat,*
 DEM IFR-kill
 'He killed the weasel that he had trained for several years.' (140518 xuezhe
 18619 he huangshulang-zh, 28)
- 18620 With indirective verbs, the object participle can only refer to the theme, as in
 18621 (78), for these verbs the recipient must be relativized with the oblique participle
 18622 (§16.1.3.7).

16 Non-finite verbal morphology

- 18623 (78) *ny-ky-t^hu* *wi-y^hzu* *ny, t^h-t^he* *jyY*
2SG.POSS-OBJ:PCP-ask QU-exist:SENS LNK IMP-ask[III] be.allowed:FACT
18624 ‘If you have and questions, you can ask them.’ (conversation 14-11-08)

18625 The semi-object of semi-transitive verbs (§8.1.5) can also be relativized with a
18626 object participial relative, as *ji-ky-rga* ‘the one that we like’ in (79).

- 18627 (79) *icq^ha* <*macha*> *ky-ti* *nua [izora stu*
the.aforementioned *macha.tea* OBJ:PCP-say DEM 1PL most
18628 *ji-ky-rga]* *ju*
1PL.POSS-OBJ:PCP-like be:FACT
18629 ‘The (type of tea) called ‘macha’ is what we like most.’ (30-macha, 1)

18630 Secundative verbs undergoing antipassivization become semi-transitive verbs
18631 (§14.4.2, §18.6.4) with the theme remaining the semi-object. Like other semi-
18632 transitive verbs, these antipassive verbs can build an object participle, which
18633 can then be used to relativize the theme, as in (80).

- 18634 (80) *ny-ky-ry-mbi* *nua tc^hi pui-ju?*
2SG.POSS-OBJ:PCP-APASS-give DEM what PST.IPFV-be
18635 ‘What was it that you gave (to people)?’ (elicited)

18636 Object participles also occur in genitival relatives (§23.2.3, postnominal rela-
18637 tive with the genitive postposition *yuu* occurring between the relative clause and
18638 the head noun), as in example (81). This type of examples is frequently found
18639 in texts translated from Chinese, but unattested in the rest of the corpus for ob-
18640 ject relativization, and is a clear case of calque (§23.2.3). Although speakers do
18641 accept these examples, they cannot be considered to be representative of the nor-
18642 mal grammar of the language.

- 18643 (81) *tce [<shuijing> kuu t^h-ky-su-βzu]* *yuu tur-xtsa*
LNK crystal ERG AOR-OBJ:PCP-CAUS-make GEN INDEF.POSS-shoe
18644 *nura jo-yuit.*
DEM:PL IFR-bring
18645 ‘(The bird) brought shoes made of crystal.’ (140504 huiguniang-zh, 162)

18646 16.1.2.5 Other relative clauses

- 18647 Just like subject participles can relativize the possessor of subjects §16.1.1.5), ob-
18648 ject participles can be used to relativize possessors of objects, as in (82), where the

18649 head of the relative *ndzi-mjaε* *mu-tr-ky-ryt* is not the object ‘their eyes’ (which
 18650 would result in a non-sensical sentence ‘their eye which had not been drawn
 18651 were still on the wall’) but rather the possessors (the dragons).

- 18652 (82) [*ndzi-mjaε mu-tr-ky-ryt*] *numi tcetu, znde u-taε*
 3DU.POSS-eye NEG-AOR-OBJ:PCP-draw DEM:DU UP wall 3SG.POSS-on
 18653 *nutcu numu pjy-nui-tu-ndzi.*
 DEM:LOC DEM IFR.IPFV-AUTO-exist-DU

18654 ‘The two (dragons) whose eyes had not been drawn were still present on
 18655 the wall.’ (160718 hualongdianjing-zh, 62)

18656 In light verb constructions with *lxt* ‘release’ (§22.4), the oblique argument en-
 18657 coded with the relator noun *u-taε* ‘on, above’ (§8.3.4.3) can be relativized with
 18658 the object participle. For instance, in (83) and (84), although the noun *tusŋaε*
 18659 ‘enchantment’ is the object of the verb *lxt* ‘release’ in the collocation meaning
 18660 ‘cast a spell’, the participial relative *tusŋaε tr-ky-lxt* means here ‘(prince) who
 18661 has been enchanted’, not ‘the spell that has been cast’.⁴ The head of this relative
 18662 is therefore not the object, but the recipient, although this oblique argument is
 18663 marked with *u-taε* ‘on, above’, as shown by example (84).

- 18664 (83) *qacpa numu, icq^ha nui, rjyłpu ci γuu u-tcεw numu, nykinu,*
 frog DEM FILLER DEM king INDEF GEN 3SG.POSS-son DEM FILLER
 18665 *tui-sŋaε tx-ky-lxt tce qacpa*
 NMLZ:ACTION-enchant AOR-OBJ:PCP-release LNK frog
 18666 *nui-ky-syβzu pjy-γu.*
 AOR-OBJ:PCP-transform IFR.IPFV-be

18667 ‘This frog was the son of a king who had been enchanted and
 18668 transformed into a frog.’ (140429 qingwa wangzi-zh, 180-181)

- 18669 (84) *a-tcεu nui u-taε tui-sŋaε to-lxt tce*
 1SG.POSS-son DEM 3SG.POSS-on NMLZ:ACTION-enchant IFR-release LNK
 18670 *nui mbalx-pu ci jy-syβzu.*
 DEM bull-DIM INDEF IFR-transform

18671 ‘She cast a spell on my son and turned him into a calf.’ (140512 fushang he
 18672 yaomo-zh, 105)

18673 In addition, there are cases where an object participle can relativize a locative
 18674 adjunct (§23.5.5.2). The object participle of the perception verbs *mto* ‘see’ and

⁴ The second interpretation is however possible, and these relatives are ambiguous.

18675 *mts^hym* ‘hear’ can be used to make headless locative relative clauses meaning ‘(a
 18676 place) where *X* can see/hear *Y*, in particular when occurring as the goal of a
 18677 motion verb as in (85). Note the optionality of the ergative on the nouns *tci-rna*
 18678 ‘our ears’ and *tci-mjaš* ‘our eyes’ in (85).

- 18679 (85) [*tci-rna* *mx-ky-mts^hym*], [*tci-mjaš* *mx-ky-mto*]
 1DU.POSS-ear NEG-OBJ:PCP-hear 1DU.POSS-eye NEG-OBJ:PCP-see
 18680 *a-jy-ce-ndzi* *ra*
 IRR-PFV-go-DU be.needed:FACT
 18681 ‘May they go away (to a place) where our ears cannot hear them, where
 18682 our eyes cannot see them.’ (2003-kWBRa, 23)

18683 It is not possible in (85) to replace the object participle by an oblique participle
 18684 *SY-*.

18685 16.1.2.6 Purposive clauses

18686 While *ky-* prefixed non-finite verb forms are very common in complement clauses,
 18687 the near-totality of these forms are infinitives rather than object participles (§16.2.1.5),
 18688 since there are no restrictions on intransitive verbs (§16.2.1).

18689 The only complementation strategy where an object participle, rather than an
 18690 infinitive, has to be posited occurs in the purposive clause of motion verbs when
 18691 the verb of the purposive clause is transitive and coreference occurs between its
 18692 object (rather than subject) and the subject of the matrix motion verb, as *ky-nyk^hu*
 18693 in (86).

- 18694 (86) <*xingqi> raiŋri zo tce numu sŋbzur yuu ui-k^ha nautcu*
 week each EMPH LNK DEM mouse GEN 3SG.POSS-house DEM:LOC
 18695 *ky-nyk^hu ju-yi pjy-ŋu*
 OBJ:PCP-invite IPFV-come IPFV.IFR-be
 18696 ‘He would come to the mouse’s house as a guest.’ (150818 muzhi
 18697 guniang-zh, 299).

18698 A possessive prefix coreferent with the transitive subject of *nyk^hu* can be op-
 18699 tionally added on this object participle, as in (87).

- 18700 (87) *a-ky-nyk^hu jy-ye*
 1SG.POSS-OBJ:PCP-invite AOR-come[II]
 18701 ‘He came to my house as a guest (following my invitation).’ (elicited)

18702 In purposive clauses, the rule is thus that the subject participle is used when
 18703 there is subject-subject coreference (§16.1.1.6), and the object participle in cases
 18704 of object-subject coreference (Jacques 2016a: 248).

18705 16.1.2.7 Lexicalized object participles

18706 While some object participles are commonly used as headless relative clauses,
 18707 few can be considered to be fully lexicalized.

18708 The verbs related to food ingestion such as *ndza* ‘eat’, *ts^hi* ‘drink’, *ndz̥yts^hi* ‘eat
 18709 and drink’, *mɔꝝ* ‘eat powdery food’ have object participles such as *ky-ndza* ‘food’,
 18710 *ky-ts^hi* ‘drink (n), beverage’, *ky-ndz̥yts^hi* ‘food and drink’ and *kymoꝝ* ‘dry tsampa’,
 18711 which commonly occur in enumerations (§9.2.2.1) with nouns not derived from
 18712 verbs, as in (88).

- 18713 (88) *u-ky-ndza* *u-ky-ts^hi* *u-tuukrimgo* *ra*
 18714 3SG.POSS-OBJ:PCP-eat 3SG.POSS-OBJ:PCP-drink 3SG.POSS-butter.bread PL
 18715 *to-yuit* *q^he*, *tcendyre*, *nura* *jn̥-wy-mbi* *q^he*,
 18716 IFR:UP-bring LNK LNK DEM:PL IFR-INV-give LNK
 18717 ‘She brought food, drinks and butter bread for her and gave them to her.’
 18718 (2003-kWBRa, 70)

18719 In these enumerations, sometimes only the first element takes a possessive
 18720 prefix, as in (89), where we find *ndzi-ky-ndza ky-ts^hi* instead of the equally possible
ndzi-ky-ndza ndzi-ky-ts^hi (however, if the first *ky-* participle in the enumeration has
 no possessive prefix, the following participle cannot take one).

- 18721 (89) *ndzi-ky-ndza* *ky-ts^hi* *mr-mbrxt*,
 18722 2DU.POSS-OBJ:PCP-eat OBJ:PCP-drink NEG-ACAUS:cut
 18723 *ndzi-kui-ndz̥yts^hi* *a-pui-me* *smuulym*
 18724 2DU.POSS-SBJ:PCP-eat.and.drink IRR-IPFV-not.exist prayer
 18725 ‘May you never lack food or drink, may there nobody (coming to) eat
 18726 you.’ (2003kAndZWslama, 218)

18727 In these examples, the possessive prefix always refer to the person or animal
 18728 ingesting the food (not the person giving the food), and although these forms
 18729 are very common, since their semantics is completely predictable from the base
 18730 verb, and since the possessive prefix behaves like that of a normal oblique par-
 18731 ticiple, there is no specific reason to consider that they have become nouns and
 constitute lexical entries that must be distinguished from the verb (except in the
 case of *kymoꝝ* ‘dry tsampa’, whose meaning has become more specific).

18732 The forms *ky-pa* and *ky-stu*, derived from the verbs from the verbs *pa* ‘do’ and
 18733 *stu* ‘do like’, both meaning ‘manner, method (to solve a problem)’ (like Chinese
 18734 办法 <bàn fǎ> ‘method’), are other potential candidates to be analyzed as lexical-
 18735 ized object participles (or infinitives). They are particularly commonly used with
 18736 existential verbs to mean ‘*X* has (no/a) way to do it’ (*X* being referred to by the
 18737 possessive prefix on *ky-pa* or *ky-stu*), as in (90).

- 18738 (90) *a-ky-pa* *majə*
 1SG.POSS-method not.exist:SENS
 18739 ‘I have no way to do it.’ (many attestations)

18740 However, collocation in texts of *ky-pa* and *ky-stu* with the finite forms of the
 18741 verbs *pa* ‘do’ and *stu* ‘do like’, as in (91) and, suggest that these forms are still
 18742 synchronically linked with these verbs, and that it may be more economical to
 18743 analyze them as participles rather than derived nouns.

- 18744 (91) *ny-ky-pa* *tua~tu* *ny, ty-pe* *ma mtsʰoʂlan*
 2SG.POSS-OBJ:PCP-do COND~exist:FACT LNK IMP-do[III] LNK water.monster
 18745 *ty-ye*
 AOR:UP-come[II]
 18746 ‘If you have some way (to protect us), use it, because the water monster
 18747 has come.’ (Norbzang 2012, 27-28)
- 18748 (92) *numu u-taʂ* *nuitcu* *ny-ky-stu* *u-γyʂu* *tce*
 DEM 3SG.POSS-on DEM:LOC 2SG.POSS-OBJ:PCP-do.like QU-exist:SENS LNK
 18749 *a-ty-tua-ste* *ma tce*
 IRR-PFV-2-do.like[III] LNK LNK
 18750 ‘If you have a way to deal with him, use it.’ (25-kAmYW-XpAltCin, 37)

18751 The object participle *ky-ti* from the verb *ti* ‘say’, although transparently derived,
 18752 has an unpredictable meaning in the existential construction. With a negative
 18753 existential verb, in addition to the expected meaning ‘have nothing to say’, it can
 18754 be interpreted as ‘be unable to say for sure’, as in (93).

- 18755 (93) *a-ky-ti* *ci* *majə*
 1SG.POSS-OBJ:PCP-say INDEF not.exist:SENS
 18756 ‘I cannot say for sure.’ (many examples)

18757 In addition, there are highly lexicalized object participles occurring as mem-
 18758 bers of compounds; these cases are generally ambiguous, and alternatively ana-
 18759 lyzable as lexicalized velar infinitives (§16.2.1.9). The incorporating verb *kytupa*

18760 ‘tell’ is an interesting case: it combines the form *kṛ-ti* (either the participle ‘what
 18761 one says’ or the infinitive ‘to say’) in *status constructus kṛtu-* (the alternative
 18762 form *kṛtipa* is also attested) with the auxiliary *pa* ‘do’ (§22.4.2.5).

16.1.3 Oblique participles

18764 The *sṛ*-prefix (and its allomorphs *sṛy*-, *sṛz*- and *z*-) is used for non-core argument
 18765 nominalization, in particular recipients of indirective verbs (§8.2.3.2, §8.3.1), in-
 18766 struments (§8.2.2.4), place and time adjuncts, as in (94). It takes a possessive
 18767 prefix which can be coreferent with any core argument (subject or object).

18768 (94) *w-sṛ-yi*

3SG.POSS-OBL:PCP-come

18769 ‘The place/moment from where/when he/it comes.’ (elicited)

18770 Related forms include the gerund (§16.6.1) and the purposive converb (§16.6.2);
 18771 the historical relationship between these categories is discussed in §16.8.2.

16.1.3.1 Allomorphy

18773 The base form of the oblique participle is *sṛ*-, but three additional allomorphs are
 18774 also found: *sṛz*-, *z*- and *sṛy*-.

18775 The allomorph *sṛy*- or *sṛx*- (depending on the voicing of the next consonant)
 18776 is attested with intransitive (or labile) monosyllabic verbs with an onset with-
 18777 out velar/uvular consonant, and without consonant cluster involving a preinitial
 18778 (§17.2.1.4). This allomorph is to some extent lexicalized, and is not found with
 18779 all verbs fulfilling these criteria. Table 16.3 presents some of the most common
 18780 examples of *sṛy*- participles in Kamnyu Japhug.

18781 Some of the verbs taking the *sṛy*- allomorph do also occur with *sṛ*-.
 18782 For instance, *me* ‘not exist’ is attested with both *w-sṛy-me* as in (95) and *w-sṛ-me* in (96).
 18783 However, most verbs in Table 16.3 are only compatible with the *sṛy*- allomorph.

18784 (95) *zmbulam* *w-sṛy-łob* *nura tu-łob*

species.of.mushroom 3SG.POSS-OBL:PCP-come.out DEM:PL IPFV-come.out

18785 *ŋu.* *zmbulam* *wi-sṛy-me* *ra kany*

be:FACT species.of.mushroom 3SG.POSS-OBL:PCP-not.exist PL also

18786 *tu-łob* *cti.*

IPFV-come.out be.AFF:FACT

18787 ‘It grows in the places where the *youlaku* mushroom grows, and also in
 18788 the places where there are no *youlaku*.’ (22-BlamajmAG, 22)

Table 16.3: Examples of oblique participles in *sry-*

Base verb	Oblique participle
<i>pʰy়ন</i> ‘be efficient’	<i>w-sryx-pʰy়ন</i> ‘advantage’
<i>me</i> ‘not exist’	<i>w-sry-me</i> ‘place where there is no X’
<i>ତୋର</i> ‘come out’	<i>w-sry-ତୋର</i> ‘place where X grows,
<i>ଲୟ</i> ‘graze’	<i>w-sry-ଲୟ</i> ‘pasture’
	place from which X comes out’
<i>ନ୍ଦ୍ରୋର</i> ‘be attached’	<i>w-sry-ନ୍ଦ୍ରୋର</i> ‘place where X is attached’
<i>ଜୋ</i> ‘land (of bird)’	<i>w-sry-ଜୋ</i> ‘place where X lands’
<i>ଚେ</i> ‘go’	<i>w-sry-ଚେ</i> ‘direction, place towards which X goes’

- 18789 (96) *txjmry* *w-sry-tu* *wi-sry-me* *yyzu.*
 mushroom 3SG.POSS-OBL:PCP-exist 3SG.POSS-OBL:PCP-not.exist exist:SENS
 18790 ‘There are places where there are mushrooms, and other places where
 18791 there aren’t.’ (20-grWBgrWB, 46)

18792 The allomorphs *syz-* and *z-* occur in the same context, with non-monosyllabic
 18793 verb stems, where the first syllable (either a productive or a frozen prefix) is
 18794 sonorant-initial. These two allomorphs are completely interchangeable, without
 18795 restriction on particular verbs or the function of the the relativized element (in-
 18796 strument, locative or temporal adjunct). For instance, the locative participle of
 18797 *r̥yzi* ‘stay’ is attested as both *w-syz-r̥yzi* and *w-z-r̥yzi* “the place when he/it stays’
 18798 in the corpus, as shown by examples (97) and (98), a few sentences away from
 18799 each other in the same story.

- 18800 (97) *tceri nunuw sytcʰa nur li icqʰa* *qapribuuxsi*
 but DEM place DEM again the.aforementioned python
 18801 *wi-syz-r̥yzi* *pjy-cti.*
 3SG.POSS-OBL:PCP-stay IFR.IPFV-be.AFF
 18802 ‘But that place was the abode of a python.’ (140511 xinbada-zh, 92)
- 18803 (98) *tce <xinbab> rcanui, maka nuatcu ur-z-r̥yzi*
 LNK Sinbad UNEXP:DEG at.all DEM:LOC 3SG.POSS-OBL:PCP-stay
 18804 *wi-tur-syy-mu* *pjy-syre* *zo tce,*
 3SG.POSS-NMLZ:DEG-PROP-be.afraid IFR.IPFV-be.ridiculous EMPH LNK
 18805 ‘Sinbad, the place where he stayed was extremely terrifying.’ (140511
 18806 xinbada-zh, 99)

18807 The *syr-* allomorph, rather than *syz-* or *z-*, is however found when preceding
 18808 the vertitive (§19.2) and autive (§19.1) prefixes, as in (99).

- 18809 (99) *q^he tú-wy-cuu my-kuu-k^huu sy-nuu-łor ri*
 LNK IPFV-INV-open NEG-SBJ:PCP-be.possible OBL:PCP-AUTO-come.out also
 18810 *kuu-me ta-βzu.*
 SBJ:PCP-not.exist AOR:3→3'-make

18811 'He put tape on the drawers so that they could not be opened, and there
 18812 was no way to come out of it (to prevent the rats inside from escaping).'
 18813 (150831 BZW kAnArRaR)

18814 The allomorph *sry-* is also (though more rarely) attested with the autive *nui-*
 18815 of verbs that take *sry-* in their simplex form. For instance, next to *sry-nuu-łor*, the
 18816 oblique participle *sry-nuu-łor* is found in (100) (without autive prefix the oblique
 18817 participle is *u-sry-łor*, see Table 16.3).

- 18818 (100) *u-sry-nuu-łor yuu u-kuu-spor*
 3SG.POSS-OBL:PCP-AUTO-come.out GEN 3SG.POSS-SBJ:PCP-have.a.hole
 18819 *pjy-ŋu.*
 IFR.IPFV-be
 18820 'It was the hole from which it (the animal) came out (of the cave).'
 18821 (140511 xinbada-zh, 83)

18822 The *syz-* allomorph is not completely impossible with the autive *nui-* prefix,
 18823 but only one example, *nui-syz-nuu-NGyt* 'the place where they (had) parted ways'
 18824 (101), is found in the whole corpus (and the form *sry-nuu-NGyt* is also attested, see
 18825 example 122 in §16.1.3.5).

- 18826 (101) *nui-syz-nuu-NGyt yuu icq^ha, tʂysyNGyt nuutcu*
 3PL.POSS-OBL:PCP-AUTO-ACAUS:separate GEN FILLER crossroads DEM:LOC
 18827 *jy-azyut-nuu tce,*
 AOR-reach-PL LNK
 18828 'They arrived at the crossroads where they had parted ways.' (140508
 18829 benling gaoqiang de si xiongdi, 109)

18830 16.1.3.2 Transitivity

18831 Like subject and object participles, oblique participle keep the verb transitivity,
 18832 and transitive verbs can take an overt object as *qaj u-sry-ji* 'place for planting'

18833 wheat⁵ in (102).

- 18834 (102) *qajsta nunu kučunŋw u-sy-ji*
 TOPO DEM in.former.times wheat 3SG.POSS-OBL:PCP-plant
pjy-pe tce tce nündza qajsta tu-ti-nuu juu-ŋu
 IFR.IPFV-be.good LNK LNK for.this.reason TOPO IPFV-say-PL SENS-be
 'Qaysta, in former time it was a wheat field which was good, and for this
 reason, it is called 'Qaysta' 'the place of the wheat.' (140522 kAmYW
 tWji2, 104)

18839 An antipassive form (§18.6) is necessary if there is no definite object. For instance in (103), *syz-ry-ji* 'place for planting, field' is based on the *ry-* antipassive
 18840 of *ji* 'plant'; this form, unlike *u-sy-ji* in (102), is used without (and cannot occur
 18841 with) any noun specifying the crop planted in the field.

- 18843 (103) *tce tumgri syz-ry-ji nuu koŋla jy-y-ye-me-nuu*
 LNK TOPO OBL:PCP-APASS-plant DEM completely IFR-CAUS-not.exist-PL
 18844 *ma kʰa ʂja zo to-βzu-nui.*
 LNK house completely EMPH IFR-make-PL
 'They removed all the fields in Temgri, and built houses there (instead).'
 18845 (140522 kAmYW tWji2, 18)

18847 16.1.3.3 Possessive prefixes

18848 Possessive prefixes on oblique participles are optional, though their presence is
 18849 preferred in careful speech.

18850 With intransitive verbs, the possessive prefix refers to the subject, as *a-syz-nyri*
 18851 'the place where I stay' in (104).

- 18852 (104) *a-kx-ndza ri yyzu, a-syz-ryzi ri*
 1SG.POSS-OBJ:PCP-eat also exist:SENS 1SG.POSS-NMLZ:oblique-stay also
 18853 *yyzu qʰe*
 exist:SENS LNK
 'There), I have food to eat and a place to stay.' (150831 renshen wawa, 24)

18855 With transitive verbs, the possessive prefix can be coreferent with the object.
 18856 For instance, in (105), the plural *nu-* on *nu-sy-tʂuβ* refers to the many types of
 18857 clothes and shoes mentioned just before in the same text.

⁵ Note that participle *u-sy-ji* can have other interpretations, including 'the period when it is planted', as in (129) below.

- 18858 (105) *nua^{st^b}*amt<sup>c^yt yuu nua-sy-tsuaf^b *nua tu-ŋgru*
 so.many GEN 3PL.POSS-NMLZ:oblique-sew DEM INDEF.POSS-sinew
 18859 *tu-su-βzu-nuu.*
 IPFV-CAUS-make-PL
 18860 ‘People use sinew to sew that many (types of clothes and shoes).’
 18861 (150906 tWNgru, 17)</sup>

18862 However, it is also possible for the possessive prefix to be coreferent with the
 18863 subject. This is particularly common when the subject is first or second person,
 18864 and no overt object is present, as *ny-sx-ta* ‘the place where you put it’ in (106).

- 18865 (106) *kuucte nuateu ny-sy-ta* *me* *ú-ŋu*
 other DEM:LOC 2SG.POSS-OBL:PCP-put not.exist:FACT QU-be:FACT
 18866 ‘Isn’t there any other place where you put (the food)?’ (meimei de gushi,
 18867 72)

18868 There is no person hierarchy in slot accessibility to the possessive prefix how-
 18869 ever; in (107), the possessive prefix on *nua-sy-ntc^hoz* marks the subject, although
 18870 the object is first person plural.

- 18871 (107) *tce izora yuu nua-sy-ntc^hoz* *a-puu-tu* *tce nua-tsum*
 LNK 1PL GEN 3PL.POSS-OBL:PCP-use IRR-IPFV-exist LNK SENS-be.grateful
 18872 ‘We are glad that (some) of us have an opportunity to be useful to them.’
 18873 (conversation, 140510)

18875 When the object is overt (§16.1.3.2), it is rare to put a first or second person
 18876 possessive prefix coreferent with the subject on the participle. Rather, a posses-
 18877 sive prefix occurs on the object, as in (108) and (109), as if *k^hutsa sy-rku* ‘place
 18878 where one puts the bowls’ and *mbryz sy-rku* ‘rice container’ were compounds.

- 18879 (108) *tce tce ji-k^hutsa sy-rku* *yuu uu-ŋgwa* *nua,*
 LNK LNK 1PL.POSS-bowl OBL:PCP-put.in GEN 3SG.POSS-inside DEM
 18880 <*chouchou*> *uu-ŋgwa* *pua-nnuu-ŋu,* *nua kumaa nura*
 drawer 3SG.POSS-inside PST.IPFV-AUTO-be DEM other DEM:PL
 18881 *pua-nnuu-ŋu* *kuaŋ maka, laxtc^ha ky-rku* *me,*
 PST.IPFV-AUTO-be also at.all thing OBJ:PCP-put.in whether
 18882 *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]
 18883 ‘Whether it was in the cupboard where we put (our) bowls, in the

16 Non-finite verbal morphology

18884 drawers or elsewhere, whether it was things put in there or food, (the
18885 mice) ate/gnawed it again and again.' (150831 BZW kAnArRaR, 5)

- 18886 (109) *nui syzny a-mbryz sy-rku a-puu-ŋu puu-ra*
DEM COMP 1SG.POSS-rice OBL:PCP-put.in IRR-IPFV-be SENS-be.needed
18887 'Why don't I use (this basin) as a rice container?' (150831 jubaopen-zh,
18888 27)

18889 Using the possessive on the verb is never preferred, but appears to be grammatical
18890 in elicitation in negative existential constructions, thus next to (110a), (110b)
18891 is also possible.

- 18892 (110) a. *izo ji-khuutsa sy-ta me.*
1PL 1PL.POSS-bowl OBL:PCP-put not.exist:FACT
18893 b. *izo k^huutsa ji-sy-ta me*
1PL bowl 1PL.POSS-OBL:PCP-put not.exist:FACT
18894 'We don't have any place to put the bowls.' (elicited)

18895 If the object is an inalienably possessed noun, it can be alienabilized (§5.1.2.9).
18896 For instance, the 1PL possessive form of *tuu-ŋga sy-χtci* 'washing machine' can be
18897 either (111a) with alienabilization or (111b) without it.

- 18898 (111) a. *ji-tuu-ŋga sy-χtci*
1PL.POSS-INDEF.POSS-clothes OBL:PCP-wash
18899 b. *ji-ŋga sy-χtci*
1PL.POSS-clothes OBL:PCP-wash
18900 'Our washing machine' (111a heard in context, 111b elicited)

18901 16.1.3.4 Polarity and orientation preverbs

18902 Unlike subject and object participles, the only prefixes (other than possessive
18903 prefixes) that oblique participles can take are the polarity prefixes and series B
18904 orientation preverbs.

18905 It is thus not possible to have perfective or past imperfective oblique participles,
18906 and alternative strategies are used to express the corresponding meanings.
18907 For instance, from the verb *sqa* 'cook', the form *tu-puu-sy-sqa* (intended meaning:
18908 'the thing that has been used to cook') is incorrect, and the solution to circumvent
18909 this morphological constraint is to combine the plain oblique participle *uu-sy-sqa*
18910 with *puu-kuu-ŋu* (the past imperfective subject participle of *ŋu* 'be') and with the
18911 phrase *nui ցսյցւ* 'before that', as in (112).

- 18912 (112) *nur cuŋgwu u-sy-sqa pui-kui-ŋu u-ŋgwu*
DEM before 3SG.POSS-OBL:PCP-cook PST.IPFV-SBJ:PCP-be 3SG.POSS-inside
(tu-*rku-nuu*)
IPFV-put.in-PL
‘(They put it) in the (pan) that had been used before to cook (the barley grains).’ (31-cha, 64)

18916 Negative forms of the oblique participle are not very common, but examples
18917 are found in the corpus (as in 113) and there is no difficulty to elicit them.

- 18918 (113) *qazmbri nuu, nykinuu, u-sy-pe ra me,*
vine DEM FILLER 3SG.POSS-OBL:PCP-be.good PL not.exist:FACT
18919 *u-my-sy-pe ra me,*
3SG.POSS-NEG-OBL:PCP-be.good PL not.exist:FACT
18920 ‘The vine is neither an advantage nor a harm (to the plants on which it
18921 grows).’ (06-qazmbri, 17)

16.1.3.5 Locative relative clauses

18923 The oblique participle can be used to build many different types of relative clauses,
18924 with various non-core arguments and adjuncts as relativized elements, including
18925 locative, temporal, instrumental adjuncts and dative arguments. The most com-
18926 mon ones are the locative relative clauses.

18927 With motion verbs like *ce* ‘go’ or verbs of manipulation, the relativized element
18928 can be either the goal (place towards which the motion is conducted, as in 114),
18929 or the path through which the motion event takes place: in (115) for instance, the
18930 head *tṣu* is a locative adjunct (‘the road through which one goes to X’) different
18931 from the goal (the placename *prvcta*).

- 18932 (114) *ndzi-syx-ce nuutcu jo-zyuit tce*
3DU.POSS-OBL:PCP-go DEM:LOC IFR-reach LNK
18933 ‘(The ox) arrived at the place towards which the two of them were
18934 going.’ (150826 shier shengxiao-zh, 86)
- 18935 (115) *[prvcta tṣu ku-syx-ce] nuare ri tui-ji ci*
TOPO path IPFV:east-OBL:PCP-go DEM:LOC LOC INDEF.POSS-field INDEF
18936 *tui tce, nuu cŋyŋgy rmi.*
exist:FACT LNK DEM TOPO be.called:FACT
18937 ‘On the road (one has to go through to reach) Prashta there is a field, it
18938 is called Kyangag.’ (140522 kAmYW tWji, 116-117)

16 Non-finite verbal morphology

18939 In (116), the oblique participle designates the areas in which the subject (a
 18940 plant) grows, without a specific goal.

- 18941 (116) *p̥yjka wuma zo a-pu̥-pe, tce u̥-syx-ce*
 pumpkin really EMPH IRR-IPFV-be.good LNK 3SG.POSS-OBL:PCP-go
 18942 *n̥ura a-pu̥-dyn u̥-syz-nyctu̥ce*
 DEM:PL IRR-IPFV-be.many 3SG.POSS-OBL:PCP-go.around
 18943 *a-pu̥-dyn tce, p̥yjka tui-p̥u̥ u̥-tḁ n̥utcu*
 IRR-IPFV-be.many LNK pumpkin ONE-tree 3SG.POSS-ON DEM:LOC
 18944 *kuβdysqi jamar, u̥-mat ku-ts̥ob̥ p̥u̥-c̥a*
 fourty about 3SG.POSS-fruit IPFV-attach SENS-can
 18945 ‘When the pumpkin (grows) well, and when there are a lot of (places on)
 18946 which it can spread, one plant can have about fourty pumpkin.’
 18947 (16-CWrNgo, 96)

18948 The relativized locative adjunct can also be the place of origin rather than the
 18949 goal in the case of the verb *yi* ‘come’ as in (117).

- 18950 (117) *izora nu̥ ji-sy-yi n̥utcu p̥y-ηu tce.*
 1PL DEM 1PL.POSS-OBL:PCP-come DEM:LOC IFR.IPFV-be LNK
 18951 ‘The place from where we come was there.’ (2010-06, 3)

18952 With stative verbs or dynamic verbs implying no motion, the oblique participle
 18953 has a static locative meaning, as in (118).

- 18954 (118) *ty-tcu̥ tc̥eme tui-sy-ymdzu̥ zaka tu.*
 INDEF.POSS-son girl INDEF.POSS-OBL:PCP-sit each exist:FACT
 18955 ‘Gents and ladies each have their (own specific) sitting place.’
 18956 (31-khAjmu, 10)

18957 Participial locative relative clauses are used to describe non-transient proper-
 18958 ties of places: directions, locations or places of origin that are unchanging char-
 18959 acteristics of things or persons (115 and 117), places where some state of affair
 18960 generally occurs due to a natural law (116 and 128) or places used for a specific
 18961 purpose, as in (118), and even more clearly in (119) with the property noun *u̥-rkoz*
 18962 ‘special’ (§16.5.1).

- 18963 (119) *tce saŋdi nuu tce, numuu si*
 LNK lower.side.of.the.hearth DEM LNK DEM firewood
 18964 *w-sy-ta u-rkoz zo pjy-ŋu.*
 3SG.POSS-OBL:PCP-put 3SG.POSS-special EMPH IFR.IPFV-be
 18965 ‘The lower side of the hearth was specifically where (people) put
 18966 firewood.’ (2011-11, 33)

18967 For transient properties of places, finite relatives are used instead (§23.5.5.1). In
 18968 example (120) translated from Chinese,⁶ Tshendzin hesitates between a participial relative (implying that there was a specific place where the sky goddesses put
 18969 their clothes each time they came to earth) and a finite relative (suggesting that
 18970 they put their clothes in some unspecific place, perhaps in a casual way as the
 18971 autive *-nu-* could indicate, §19.1).

- 18973 (120) *tcʰemypui nura, [nuu-ŋga sy-ta] nutcu ko-ce,*
 girl DEM:PL 3PL.POSS-clothes OBL:PCP-put DEM:LOC IFR:EAST-go
 18974 *[nuu-ŋga na-nuu-ta-nuu] nutcu ko-ce matci,*
 3PL.POSS-clothes AOR:3→3'-AUTO-put-PL DEM:LOC IFR:EAST-go LNK
 18975 ‘He went to the place where the girls put their clothes, where they had
 18976 put their clothes.’ (150828 niulang-zh, 59)

18977 Locative participial relative clauses with overt head can be prenominal, in particular with genitival relatives as in (121).

- 18979 (121) *pjy-nukulu-nuu ma sy-nuu-ce yui w-tṣu nuu*
 IFR-be.lost-PL LNK OBL:PCP-VERT-go GEN 3SG.POSS-path DEM
 18980 *mui-pjy-nuu-mto-nuu.*
 NEG-IFR-AUTO-see-PL
 18981 ‘They were lost, and could not find the way back home.’ (160630 poucet1,
 18982 55)

18983 However, head-internal relatives are also attested: in (115) above and (122), the
 18984 head of the participial relatives, the noun *tṣu* ‘road’, occurs between the verb in
 18985 oblique participle form and a place name marking the goal. Note in addition that

⁶ The original text has走到仙女们放衣服的地方 <zǒu dào xiānnǚmen fàng yīfú de difāng> ‘...went to the place where the sky goddesses put/had put their clothes’; both interpretations are possible.

18986 (122) illustrates two locative oblique participial relative clauses embedded within
 18987 another participial relative.⁷

- 18988 (122) [[rpyn̩g̩w̩ tsu lu-sy̩x̩-ce] c^ho [prysc^hw̩ tsu
 TOPO path IPFV:UPSTREAM-OBL:PCP-go COMIT TOPO path
 18989 lu-sy̩-yi] pnu-sy-nui-NGyt]
 IPFV:UPSTREAM-OBL:PCP-come IPFV:WEST-OBL:PCP-AUTO-ACAUS:separate
 18990 nautcu,
 DEM:LOC
 18991 ‘At the place where the road towards Rpangu and the road towards
 18992 Praskhyu separate.’ (140522 kAmYW tWji2, 125)

16.1.3.6 Instrumental relative clauses

18994 Another very productive type of oblique participial relatives are the instrumental
 18995 relative clauses (§23.5.6). Although instruments, like transitive subjects, receive
 18996 ergative case (§8.2.2.4), they are usually relativized with oblique participles.

18997 There is often ambiguity between instrument relativization and locative ad-
 18998 junct relativization; for instance, while the participle u-z-ry-ryt can mean ‘pen
 18999 (the tool used to write)’ as in (123), this form can also designate the paper on
 19000 which one writes or even one’s office.

- 19001 (123) ur-slamaxti nui yuu, [u-z-ry-ryt] ci
 3SG.POSS-classmate DEM GEN 3SG.POSS-OBL:PCP-APASS-write INDEF
 19002 to-nui-ndo tce jo-nui-tsum pnu-ηu tce,
 IFR-AUTO-take LNK IFR-VERT-take.away SENS-be LNK
 19003 ‘He took away the pen of a classmate.’ (2014-tou dongxi de xiaohai-zh, 5)

19004 Instrumental relative clauses built with oblique participles can occur as objects
 19005 of the causativized verb suu-βzu ‘cause to make; use X to make’, as in (124).

- 19006 (124) nuna[u [tuut^hw̩ sy-χtci], [tuu-ηga sy-peiz] nura
 DEM pan OBL:PCP-wash INDEF.POSS-clothes OBL:PCP-wipe DEM:PL
 19007 tu-su-βzu-nui pnu-ηgryl.
 IPFV-CAUS-make-PL PST.IPFV-be.usually.the.case
 19008 ‘People used to employ (Usnea) as tools to wash pans or wipe clothes.’
 19009 (20-sWrna, 151)

⁷ In (122), the orientation preverbs reflect the basic meanings of the tridimensional system (§15.1.3).

19010 In this construction, the material used to make the tool is marked with the
 19011 ergative (§8.2.2.4), as in (125).

- 19012 (125) *ununuu kuu [u-sy-cmi] tu-sui-βzu-nu*
 DEM ERG 3SG.POSS-OBL:PCP-mix IPFV-CAUS-make-PL
 19013 *pui-ηgryl*
 PST.IPFV-be.usually.the.case
 19014 ‘People used to employ it (a boat oar) to mix it (the alcohol).’ (31-cha, 45)

19015 Oblique participles are used to make instrumental relative clauses, used like
 19016 nouns of instruments, from both transitive and intransitive verbs. If the base
 19017 verb is transitive, the participle retains its transitivity: thus in (125), the absence
 19018 of object in the one-word relative clause *u-sy-cmi* ‘the tool used to mix it’ is
 19019 the result of zero-anaphora, and implies a definite object. Instrumental relative
 19020 clauses with a transitive verb more often have an overt object, as in (124). For
 19021 indefinite objects, antipassivization is necessary, as in *u-z-rx-rvt* ‘the tool used to
 19022 write’ in (123) above (see also §16.1.3.2).

19023 The relativized instrument need not be an entity, but can also be an action. For
 19024 instance, in the pseudo-cleft (126), what is referred to by the participial relative
 19025 is the infinitival clause *myrm kx-p^ha_v*.

- 19026 (126) *qajdo [u-rzaβ u-cki u-syz-nurmyzu] nu*
 crow 3SG.POSS-wife 3SG.POSS-DAT 3SG.POSS-OBL:PCP-show.off DEM
 19027 *myrm kx-p^ha_v pjy-ηu*
 type.of.tree INF-chop IFR.IPFV-be
 19028 ‘What he was showing off with in front of his wife was chopping the
 19029 wood of the *myrm* tree (which is easy to cut).’ (11-mYAm, 24)

19030 16.1.3.7 Other oblique relative clauses

19031 In addition to goals, locative adjuncts and instruments, oblique participles are
 19032 used to relativize various other types of arguments and adjuncts, though those
 19033 cases are considerably less common in the corpus.

19034 Dative arguments (in *u-cki* or *u-p^he*, §8.3.1) are relativized with an oblique
 19035 participle (§23.5.8), as is shown by (127), where the verb *fçrt* ‘tell’ also occurs
 19036 as the main verb of the second clause with an overt recipient marked with the
 19037 dative.

- 19038 (127) [u-sy-fcxt] *pjy-me q^he tce tv-pytso*
 3SG.POSS-OBL:PCP-tell IPFV.IFR-not.exist LNK LNK INDEF.POSS-child
 19039 *u-cki nuu tcu nura tc^hi puu-kui-fse nura pjy-fcxt.*
 3SG-DAT DEM LOC DEM:PL what PST-SBJ:PCP-be.like DEM:PL IFR-tell
 19040 ‘She had no one (else) to tell it to, so she told the boy everything that
 19041 had happened.’ (140515 congming de wusui xiaohai-zh, 77)

19042 Likewise, comitative phrases in *c^ho* (§8.2.5) and occurring with verbs with in-
 19043 trinsically non-singular subjects (§14.2.6), are relativized with an oblique partici-
 19044 ple. For instance, the participle *u-sy-ymumi* in (128) is a headless relative meaning
 19045 ‘those with whom it is in good terms with’.

- 19046 (128) *tce uzo [u-sy-ymumi]* *nuu d^hn ma*
 LNK it 3SG.POSS-OBL:PCP-be.in.good.terms DEM be.many:FACT because
 19047 *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
 19048 *uzo c^ho kui-naxtcuy sujno, xcaj ma mx-kui-ndza*
 it with OBL:PCP-be.identical herbs grass apart.from NEG-OBL:PCP-eat
 19049 *nuu ra c^ho nuu amumi-nuu tce,*
 DEM PL with DEM be.in.good.term:FACT-PL LNK
 19050 ‘The (animals) that are in good terms with the rabbit are many, it is in
 19051 good terms with those that only eat grass, like musk deer, sheep or
 19052 goats.’ (04 qala1, 33-4)

19053 Time adjuncts are also possibly relativized using oblique participles, as *u-sy-ji*,
 19054 which means ‘the period when it is planted’ in (129). However, finite relative
 19055 clauses are the preferred way of relativizing time adjuncts (§23.5.9). As in the
 19056 case of locative relative clauses (§16.1.3.5), participial relative clauses are only
 19057 used to refer to specific dates and time periods that are intrinsic properties of the
 19058 event.

- 19059 (129) *tce nunuu zaka [u-sy-ji]* *nuu-ŋu tce*
 LNK DEM each 3SG.POSS-OBL:PCP-plant SENS-be LNK
 19060 ‘These are the (periods) when people plant each of these (crops).’ (15
 19061 tChWma, 19)

19062 Temporal relative clauses are generally headless, but (130) shows an example
 19063 of head-internal (or postnominal) relative clause, with *skyrma* ‘minute, date’ as
 19064 its head noun. In addition, this participial relative has here a superlative inter-
 19065 pretation (§26.4.2).

- 19066 (130) *lysyr* *χsum u-raŋ* *tce, tuxpalvskyr yu, n̥kinu, [skyrm̥a*
new.year three 3SG.POSS-time LOC whole.year GEN FILLER date
 19067 *u-sr-sna]* *ŋu tu-kua-ti* *ŋu.*
3SG.POSS-OBL:PCP-be.good be:FACT IPFV-GENR-say be:FACT
 19068 ‘We say that the third day of the year is the (most) auspicious day in the
 19069 whole year.’ (2010-10, 143)

19070 A further derived meaning of the oblique participle is that of ‘opportunity to
 19071 do X’, as in (131) and (107) above.

- 19072 (131) *tce [syz-nunŋgra]* *yyzu ri, li* *sryzur*
LNK OBL:PCP-earn.wages exist:SENS LNK again be.dangerous:FACT
 19073 ‘Although it (provides) an opportunity to earn wages, it is also
 19074 dangerous.’ (conversation 140510)

19075 Even in context, the exact meaning of a particular oblique relative clause may
 19076 allow some leeway in interpretation. For instance, the participle *ji-syx-ce* in the
 19077 negative existential construction in (132) could be understood as a locative rela-
 19078 tive clause ‘(we had no) place to go’ but also alternatively as ‘(we had no) oppor-
 19079 tunity to go (anywhere)’ in this particular context.

- 19080 (132) *izora tce kʰa u-ŋgw* *ky-ky-ja* *zo*
1PL LNK house 3SG.POSS-inside AOR-OBJ:PCP-close EMPH
 19081 *pur-fse-j* *ku-ryzit-i* *ma [ji-syx-ce]* *maje*
SENS-be.like-1PL IPFV-stay-1PL LNK 1PL.POSS-OBL:PCP-go not.exist:SENS
 19082 ‘We were like locked in the house, with nowhere to go.’ (140501 tshering
 19083 skyid, 116)

19084 16.1.3.8 Causative

19085 The oblique participles can occur as object of the verb *βzu* ‘make’, with a pur-
 19086 posive (133) or causative (134) interpretation. These meanings derive from the
 19087 instrumental nominalizing uses of the oblique participle.

- 19088 (133) *tur-ji* *u-rkua* *ra tʂ-yur* *pju-ta-nu* *tce,*
INDEF.POSS-field 3SG.POSS-side PL INDEF.POSS-fence IPFV-put-PL LNK
 19089 *fsapar* *u-my-syx-ce* *tu-βzu-nu*
animals 3SG.POSS-NEG-OBL:PCP-go IPFV-make-PL

- 19090 *ŋgryl*
be.usually.the.case:FACT

19091 ‘They put a fence around the fields, so as to prevent domestic animals to
19092 go there.’ (140427 qamtsWrmdzu, 14)

19093 In (133), the phrase *fsaparw u-mr-syx-ce* can be interpreted as ‘(something made
19094 so) that animals do not go (there)’, while in (134) *rgargun nunuu u-sy-εjw~εjw*
19095 means ‘(something used to) remind the old man’.

19096 (134) *tcʰeme kuu-ŋyn nuu kuu icqʰa nuu, rgargun nunuu*
woman SBJ:PCP-be.evil DEM ERG FILLER DEM old.man DEM
19097 *u-sy-εjw~εjw* *to-βzu tce,*
3SG.POSS-OBL:PCP-EMPH~remember IFR-make LNK
19098 ‘The evil woman reminded the old man.’ (140515 jiesu de laoren-zh, 128)

19099 tu-ky-su-εjw ftçaka to-βzu

19100 **16.1.3.9 Ambiguity**

19101 The various allomorphs of the oblique participle do resemble other prefixes found
19102 in Japhug. The *sy-* and *sry-* allomorphs are also found with the proprietive derivation
19103 (§18.8), and *sy-* is also similar to the human antipassive, or the sigmatic
19104 causative of *a-* initial verbs (§12.3). Finally, the *z-* allomorph of the oblique participle
19105 can resemble the causative (§17.2.1.1) or one allomorph of the translocative
19106 prefix (§15.2.1.2).

19107 However, unlike subject (§16.1.1.3) and object (§16.1.2.3) participles, these surface
19108 ambiguities are only very superficial, as the forms with which the oblique
19109 participle could potentially be confused are all finite, and hardly ever occur in
19110 the same syntactic context as the oblique participle (and except for their bare in-
19111 finitive form, in the case of transitive verb, never occur with a possessive prefix).

19112 In the case of the *z-* allomorph of translocative prefix, note that it only occurs
19113 before a few orientation preverbs (*nw-*, *nr-*, *ju-*, *jx-*, *jo-*, *ja-*), whereas the oblique
19114 participle *z-* can only follow an orientation preverb, as in *u-cʰu-z-rasruuz* in (135),
19115 so that the two forms can never be confused.

19116 (135) *nunuu yuu u-cʰu-z-rasruuz* *nuu*
DEM GEN 3SG.POSS-IPFV:DOWNSTREAM-OBL:PCP-SWEEP DEM
19117 *u-sy-pciz rmi*
3SG.POSS-OBL:PCP-wipe be.called:FACT
19118 ‘(The tool used to) sweep (the flour) is called a “wiper”.’ (06-BGa, 216)

19119 16.1.3.10 Lexicalized oblique participles

19120 Nouns of instruments and of location, including placenames, are often made from
 19121 oblique participles.

19122 The noun *sycui* ‘key’, although transparently originating from the instrumental
 19123 use of the oblique participle of *cui* ‘open’, is lexicalized as shown by the fact that
 19124 it cannot take orientation preverbs, and that it occurs in collocation with the
 19125 auxiliary *lxt* to mean ‘lock (the door)’ as in (136).

- 19126 (136) *w-ŋguu* *ly-yi* *jyY* *ma sycui*
 19127 3SG.poss-inside IMP:UPSTREAM-come be.allowed:FACT LNK key
 my-a-lxt
 NEG-PASS-throw

19128 ‘Come in, the door is not locked.’ (140428 xiaohongmao-zh, 78)

19129 Place names built from oblique participle include *Znryryma*, from the locative
 19130 participle *z-nryryma* of the verb *nryryma* ‘pray for rain’ (probably a denominal
 19131 verb from a compound **rÿma* based on *tu-ryi* ‘seed’ and *ta-ma* ‘work’, §20.7.1),
 19132 as it was the place where people used to perform this activity in Kamnyu in the
 19133 traditional society, as explained in §18.6.7.3.

19134 Another example is the uninhabited place called *kulrysymdzuu*, a transparent
 19135 combination *kuu-lry* ‘shepherd’ (§16.1.1.7) and *w-sr-ymdzuu* ‘sitting place’ reflecting
 19136 the use of this place (as described in 137).

- 19137 (137) *kui-xtciu~xtci* *ci* *zo* *antym*, *tce nuu kui-lry*
 19138 INF:STAT-EMPH~be.small a.little EMPH be.flat:FACT LNK DEM SBJ:PCP-graze
 ra nuutcu ku-ryzi-nuu pjy-ŋgryl
 PL DEM:LOC IPFV-stay-PL IFR.IPfv-be.usually.the.case
 19139 ‘(The place called *kulrysymdzuu*) is a bit flat, and shepherd used to stay
 19140 there.’ (140522 Kamnyu zgo, 281)

19141 There are also case of nouns of instruments in *sr-* whose base verb is not identifi-
 19142 able. For instance, the noun *srctcuy* ‘strap to carry children on the back’, which
 19143 is glossed using an oblique participle as in (138), is most certainly a frozen oblique
 19144 participle, but there is no verb **ctcuy* in Japhug.

- 19145 (138) *tx-pytso* *wi-srz-burwa*
 19146 INDEF.POSS-child 3SG.POSS-OBL:PCP-carry.on.the.back
 ‘Something used to carry children on the back’ (definition given for the
 19147 noun *srctcuy*)

16 Non-finite verbal morphology

19148 Some nouns originating from lexicalized participles have an irregular *s*- allo-
 19149 morph (Table 16.4). Their antiquity is shown by the existence of exact cognates
 19150 in Tangut (Jacques 2014c: 49;299) and Khroskyabs (Lai 2017: 514; 580). All three
 19151 nouns are used as relators in relative clauses (§23.2.4, §23.5.3), and *wi-spa* ‘ma-
 19152 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>wi-spa</i> ‘material’	<i>pa</i> ‘do’		= <i>spi</i>
<i>wi-stu</i> ‘place’	<i>tu</i> ‘exist’	𢃥 ⁵¹⁶⁵ <i>twu</i> ^{1.58}	
<i>wi-sta</i> ‘place’	<i>ta</i> ‘put’	𢃦 ⁵⁶⁴⁵ <i>tji</i> ^{2.60}	

19153 In addition from the general meaning of ‘place’, the nominal stem *-sta* has three
 19154 highly specific meanings: *tu-sta* ‘bed’, *tr-sta* ‘designated place (for burying a dead
 19155 person)’ and *wi-sta* ‘habit, state’, a complement-taking noun (§24.6.3.1) always
 19156 selecting a third singular possessor, used in particular in a collocation meaning
 19157 ‘return to one’s previous state, recover (from a disease)’ with *fse* ‘be like’, as in
 19158 (139).

(139)	<i>ki</i>	<i>wi-byri</i>	<i>kui-fse</i>	<i>nui wi-sta</i>	<i>zo</i>
		DEM.PROX 3SG.POSS-before	SBJ:PCP-be.like	DEM 3SG.POSS-state	EMPH
		<i>pui-nui-fse</i>	<i>ny</i>		
		PST.IPFV-AUTO-be.like	ADD		

‘She had become again like she was before.’ (2003 Kunbzang, 484)

19162 More speculatively, it is possible that other allomorphs of the oblique nomi-
 19163 nization are preserved in some nouns, even when the base is lost. For example,
 19164 *zmbtru* ‘boat’ might be the lexicalized participle of a verb **mbru* ‘float’ (cognate
 19165 of 浮 *bjuw* ← **m.b(r)u* ‘float’, Zhang et al. 2019) with a fronted *z*- allomorph (like
 19166 that of the sigmatic causative, §17.2.2.4).

19167 An even more pronounced type of lexicalization occurs when an oblique par-
 19168 ticiple becomes member of a compound with *status constructus* vowel alternation.
 19169 In these cases, it is probable that the compound is genitival, rather than a reduced
 19170 relative clause.

19171 As first element of compound, we find the oblique participle *wi-sy-qru* (from
 19172 the verb *qru* ‘greet, welcome, receive’) in *status constructus* combined with the
 19173 noun *cʰa* ‘alcohol’ into *syqr̥cʰa* ‘alcohol to treat the guests’ (§5.5.1.1). There are

also cases of undetectable *status constructus*, as in *syr̥guŋga* ‘bed cover’ from the oblique participle of *r̥ŋgu* ‘lie down’ and the inalienably possessed noun *tu-ŋga* ‘clothes’: since the first element of this compound *syr̥-r̥ŋgu* ends in *-u*, it would not have a different bound form.

Oblique participles are also attested as second element of compounds from both transitive and intransitive verbs.

As an example of lexicalized participle from an intransitive verb, the compound *tʂysyŋçyt* ‘crossroad’ combines the participle *wi-sy-ŋçyt* ‘place where X part ways’ from the anticausative verb *ŋçyt* ‘part ways, part company’) with the *status constructus* of the noun *tʂu* ‘path’, from an earlier locative participial relative **tʂu wi-sy-ŋçyt* ‘the place where roads separate’.

With a transitive verb, we find the noun *βyʂʂypr̥t* ‘watermill valve’, from an earlier instrumental relative **βya wi-sy-pr̥t* ‘the tool used to stop (water) in the mill’ from the *status constructus* *βyʂ-* of *βya* ‘watermill’ combined with the oblique participle *wi-sy-pr̥t* of the verb *pr̥t* ‘break, stop’. With undetectable *status constructus*, we have for instance *pʰusyti* ‘below’ from the onomatopoeia *pʰuu* and the oblique participle of *ti* ‘saying’, literally ‘the tool used to make ‘pff’ sound’.

The noun *tyresytcutçyt* ‘joke’ is an example of compound without *status constructus* on the first element. It comes from the reduplicated oblique participle of the verb *tçyt* ‘take out’, which occurs in collocation with the inalienably possessed noun *tr-re* ‘laugh (n.)’ to mean ‘mock’, as in (140). The original meaning of this compound presumably was ‘something/someone to make fun of’.

- (140) *a-re ma-tui-tçyt*
1SG.POSS-laugh NEG:IMP-2-take.out
'Don't laugh at me!' (elicited)

In the lexicalized compound *tyresytcutçyt*, *tr-re* is alienabilized (§5.1.2.9); this noun occurs in collocation with the verb *βzu* ‘make’ or the causative *suβzu* ‘cause to make’ in the sense of ‘joke’. It can specifically mean ‘mock’, in which case the compound *tyresytcutçyt* takes a possessive prefix coreferent with the *subject* of *βzu* (the person making the joke, not the object of mockery), as shown by the presence of the third dual possessive prefix *ndzi-* in (141) and the second singular *ny-* in (142).

- (141) *wi-pi bniuz ni kumy tsʰurʃun zo, nykinu,*
3SG.POSS-elder.sibling two DU also often EMPH FILLER
pjuú-wy-yṛ-kʰe tce ndzi-tyresytcutçyt ra tu-βzu-ndzi
IPFV-INV-CAUS-be.stupid LNK 3DU.POSS-joke PL IPFV-make-DU

- 19207 *pjy-ŋu.*
19208 IFR.IPFV-be
19209 ‘His two elder brothers often called him a stupid person and mocked
 him.’ (140430 jin e, 11)
- 19210 (142) *ny-t̪yresyt̪cuit̪cxt̪ ma-t̪y-kui-sui-βzu-a*
 2SG.POSS-joke NEG:IMP-IMP-2→1-CAUS-make-1SG
19211 ‘Don’t mock me!’ (elicited)

19212 In these cases, the noun occurring as first element of the compound corre-
19213 sponds to the object of the verb.

19214 The expression *syrma* ‘good night’ derives from the oblique participle of the
19215 verb *rma* ‘stay the night, live’, and presents unusual morphological properties
19216 (§14.7.1).

19217 16.2 Infinitives

19218 16.2.1 Velar infinitives

19219 The most common infinitives in Japhug are the velar infinitives, built from the
19220 stem I of the verb and prefixed either with *kṛ-* or *ku-*; they are homophonous
19221 with participles (and historically related to them, §16.8.1) and not always easily
19222 distinguishable from them (§16.2.1.1). They are in particular the preferred citation
19223 form of the verbs (§16.2.1.4), though not with all speakers.

19224 The *ku-* infinitives are found with stative verbs (including adjectives and exis-
19225 tential verbs), impersonal modal verbs and some anticausative verbs; other verbs
19226 take the *kṛ-* infinitives. In Tshobdun, [J. T.-S. Sun \(2014b:](#) 235) reports that the
19227 *kə-* and *kv-* infinitives (corresponding to *ku-* and *kṛ-* in Japhug) occur with non-
19228 human and human arguments, respectively (in the case of dynamic verbs). It
19229 seems that this criterion is not applicable to Japhug.

19230 Stative verbs in *a-* have regular fusion of *ku-* and *a-* as /kṛ-/; and thus superfi-
19231 cially appear to have *kṛ-* infinitives (for instance, the infinitive of *arji* ‘be green’
19232 is *ku-γṛji* /kṛγṛji/).

19233 16.2.1.1 Infinitives vs. participles

19234 It is not immediately obvious that a category of ‘velar infinitives’ needs to be
19235 distinguished from participles in Japhug, as both are non-finite verbal categories
19236 prefixed in *kṛ-* or *ku-* (§16.1.2.3 and §16.1.1.3).

19237 The necessity to set *ky-* infinitives apart from object participles stems from
 19238 the fact that the latter can only be built from transitive or semi-transitive verbs,
 19239 while the former also occurs with strictly intransitive verbs. Thus, if one were to
 19240 argue that all *ky-*prefixed non-finite forms of transitive verbs are object participles,
 19241 including in the case of complement clauses (for instance *ky-ndza* in 143),
 19242 one would not be able to account for the *ky-*prefixed forms of intransitive verbs
 19243 occurring in the same context such as *ky-ce* in (144) – even though *ce* ‘go’ could
 19244 be considered to be a kind of semi-transitive verb (since it can take a goal, which
 19245 can be relativized with a finite relative clause, §23.5.1), it is not possible to build
 19246 a participial relative clause by prefixing *ky-* on this verb (the oblique participle
 19247 *sy-* must be used instead, §16.1.3).

- 19248 (143) *azo ky-ndza muu-puu-rpo-t-a*
 1SG ???-eat NEG-AOR-experience-PST:TR-1SG
 19249 ‘I never ate that.’ (many attestations)

- 19250 (144) *aj ky-ce muu-puu-rpo-t-a*
 1SG INF-go NEG-AOR-experience-PST:TR-1SG
 19251 ‘I never went there.’ (150820 ZNGWloR, 4)

19252 I therefore adopt the following criteria to distinguish between a *ky-* infinitive
 19253 and an object participle: *ky-* non-finite forms of (non-semi-transitive) intransitive
 19254 verbs are infinitives; *ky-* non-finite forms of transitive and semi-transitive
 19255 verbs occurring in the same contexts as the infinitives of intransitive verbs are
 19256 infinitives.

19257 By systematically applying these criteria, we can identify three contexts where
 19258 infinitives are attested: citation form (§16.2.1.4), complementation (§16.2.1.5; there
 19259 are however a few cases of object participles used in complement clauses, §16.1.2.6),
 19260 and manner converbs (§16.2.1.7).

19261 Distinguishing between subject participles and *kuu-* infinitives in Japhug is less
 19262 straightforward, unlike in other Gyalrong languages such as Tshobdun for instance,
 19263 J. T.-S. Sun 2014a, since even stative verbs take the *ky-* infinitive in complement
 19264 clauses (§16.2.1.5). The only clear contexts where *kuu-* infinitives do occur is
 19265 that of citation forms (§16.2.1.4) and complement clauses containing impersonal
 19266 modal verbs (§16.2.1.5). Converbs in *kuu-* are analyzed as infinitives rather than
 19267 subject participle because they are only attested with stative verbs or other verbs
 19268 taking the *kuu-* infinitives (§16.2.1.7).

19269 16.2.1.2 Associated motion, polarity and orientation preverbs on infinitives

19270 With the exception of the construction in §16.2.1.6 and some converbial uses
 19271 ([§16.2.1.7](#)), *ky-* infinitives do not take possessive prefixes. However, like participles,
 19272 they are compatible with associated motion ([145](#)), negative prefixes ([146](#))
 19273 (with double negation, [§13.3](#)) and B-type orientation preverbs ([147](#)), with combi-
 19274 nations of two prefixes.

- 19275 (145) *a-mgwar pui-mŋym tce cua-ky-χtui muáj-cʰa-a*
 19276 1SG.POSS-back SENS-hurt LNK TRAL-INF-buy NEG:SENS-can-1SG
 19277 ‘My back hurts and I cannot go to buy (apples).’ (conversation,
 30-04-2018)

- 19278 (146) *rjylpu fka cti tce, mꝫ-ky-ce mꝫ-kʰui*
 19279 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)

- 19280 (147) *tꝫ-se mu-pjui-ky-łor ftcaka tu-βze-a*
 19281 INDEF.POSS-blood NEG-IPFV-INF-come.out manner IPFV-make[III]-1SG
 19282 *tu-mdzoz-a pui-ŋu ma,*
 19283 IPFV-avoid-1SG PST.IPFV-be LNK
 ‘I avoided by all means to let the blood come out.’ (24-pGArtsAG, 57)

19284 Negative infinitives take the allomorph *mꝫ-* (as in [146](#)), unless an imperfective
 19285 orientation preverb is present, in which case the negative is *mu-* as in [\(147\)](#).

19286 Impersonal and stative infinitives in *kui-* are only attested with the negative
 prefix *mꝫ-*.

19287 16.2.1.3 Ambiguity

19288 Aside from the homophony between infinitives and participles discussed in §16.2.1.1,
 19289 another type of ambiguity occurs with verbs selecting the orientation preverb
 19290 EASTWARDS, whose A form is *ky-* ([§15.1.1.1](#)). Intransitive verbs in imperative singular
 19291 and perfective third singular forms (for instance *ky-rŋgu* ‘he laid down’) and
 19292 transitive verbs without stem alternation in imperative singular (*ky-tsʰi* ‘drink!’,
 19293 [§21.4.2.1](#)) have forms that are homophonous with the corresponding infinitives
 19294 (*ky-rŋgu* ‘to lie down’, *ky-tsʰi* ‘to drink’), but these cases are never really ambiguous,
 19295 as it is trivial to distinguish between a finite verb form and a non-finite one,
 19296 for instance by changing from singular to dual or plural.

19297 For instance, in a particular context, if a form such as *ky-rygu* can be changed
 19298 to the corresponding plural *ky-rygu-nu* (which can be either perfective AOR-
 19299 lie.down-PL ‘they laid down’ or imperative ‘lie down!’), it is possible to conclude
 19300 that this *ky-rygu* is necessarily finite (since non-finite verb forms in Japhug never
 19301 take indexation affixes, §2.4.2.3) and cannot be an object participle or an infinitive.
 19302

16.2.1.4 Citation form

19304 The infinitive is the preferred form to refer to a verb in metalinguistic discourse
 19305 as a citation form. In this context stative and impersonal verbs consistently take
 19306 the *ku-* prefix as in (148), and the rest of verbs the *ky-* prefix, as in (149) and (150).
 19307 Even in citation form, the infinitive verb can take orientation (150) and polarity
 19308 prefixes (148).

- 19309 (148) *ununuu tce tce [u-tuu-tṣuiβ my-kuu-βdi]*
 DEM LNK LNK 3SG.POSS-NMLZ:ACTION-sew NEG-INF:STAT-be.good
 19310 *tu-kuu-ti ηu*
 IPFV-GENR:A-say be:FACT
 19311 ‘People call this ‘badly sewn’.’ (12-kAtsxWb-zh, 12)
- 19312 (149) *pjuu-su-βndi tce pjuu-su-sat tce nuu kóvmauz ny*
 IPFV-CAUS-hit[III] LNK IPFV-CAUS-kill LNK DEM only.after LNK
 19313 *cʰui-nutsum jnu-ra tce numuu*
 IPFV:DOWNSTREAM-take.away SENS-be.needed LNK DEM
 19314 *[ky-nyvaphyβ] tu-kuu-ti ηu*
 INF-strike.with.wings IPFV-GENR:A-say be:FACT
 19315 ‘It strikes it and kills it (with its wings) and only then takes it away. This
 19316 is called *ky-nyvaphyβ* ‘strike with one’s wings’.’ (150819 RaphAB-zh, 11)

19317 The infinitive is commonly used in metalinguistic discussions about collocations,
 19318 and in those cases can appear together with intransitive subjects (148) or
 19319 objects (150). In the latter, the focus is on the noun *u-kyljyme* ‘head upside down’
 19320 (§5.7.8.3), the verb *ctʰuuz* ‘turn towards’ being present only because it is selected
 19321 by *u-kyljyme*.

- 19322 (150) *u-mηu nuu pa pjuá-wy-ctʰuuz tce nuu*
 3SG.POSS-mouth DEM down IPFV:DOWN-INV-turn.towards LNK DEM
 19323 *[u-kyljyme pjuu-ky-ctʰuuz]*
 3SG.POSS-head.upside.down IPFV:DOWN-INF-turn.toward

- 19324 *tu-kua-ti* *ŋu.*
 IPFV-GENR:A-say be:FACT
- 19325 ‘One turns the mouth (of the container) downwards, it is called ‘to turn upside down’’ (30-macha, 68)
- 19327 The infinitive is not the only possible choice as a citation form; some speakers sometimes cite a generic form (especially with the imperfective, as *pjú-wy-ctʰuz* in 150) or other finite forms (even imperatives).
- 19328 Outside of metalinguistic discourse, the stative/impersonal infinitive is also used as subject of adjectival stative verbs such as *pe* ‘be good’ as in (151), expressing the meaning ‘the fact of ... is good’.
- 19329
 19330 (151) *tce [[kṛ-rṛt] kur-kʰui]* *nū tce tce pjur-pe* *ma, tce*
 LNK INF-write INF:STAT-be.possible DEM LNK LNK SENS-be.good LNK LNK
 19331 *nū tṛ-scoz* *nū pjur-kua-ru* *pjur-kʰui.*
 DEM INDEF.POSS-writing DEM IPFV-GENR:S/O-look SENS-be.possible
- 19332 ‘It is good to have the possibility to write (a language), because then one can look at the writing (to learn that language; otherwise, one has to learn just by listening). (150901 tshuBdWnskAt, 45)
- 19333 In the verb doubling construction, the infinitive of stative verbs can be neutralized to the *kṛ-* form, as in (152) with an adjectival stative verb and (153) with the existential verb *tu* ‘exist’.
- 19334 (152) *kṛ-rṛi* *ri pjṛ-rṛi,*
 INF-be.heavy also IFR.IPFV-be.heavy
 19335 ‘As for being heavy, (the old man) was heavy.’ (140511 xinbada-zh, 138)
- 19336 (153) *uzo rkun,* *ri kṛ-tu* *nū tu*
 3SG be.rare:FACT LNK INF-exist DEM exist:FACT
 19337 ‘It is rare, but as for existing, it does exist.’ (140511 qamtsWrmdzu, 17)
- 19338 **16.2.1.5 Complementation**
- 19339 The most common function of the velar infinitive is to build complement clauses (§24.2.1). Apart from a handful of well-identified cases (§16.1.1.6), all *kṛ-* prefixed verb forms in complement clauses are infinitive rather than object participles (using the criteria in §16.2.1.1).
- 19340 Velar infinitives occur with a great variety of auxiliaries and other complement-taking verbs (§24.2.1) as well as a few complement-taking nouns (§24.6). Few

19352 verbs however require the infinite in complement clauses. Some complement-
 19353 taking verbs like *cʰa* ‘can’ occur with either infinitival complement clauses as
 19354 in (154) or finite complement clauses (§24.2.3), and other verbs like *rpo* ‘experience’
 19355 are compatible with both velar infinitives and bare infinitives (§16.2.3).
 19356 The constraints on co-reference between the subject of the matrix verb and the
 19357 participants of the complement clause is treated in §24.2.1.2.

- 19358 (154) *wi-kyχcyl ur-βruw nuw a-nuw-pʰut tce*
 3SG.POSS-top.of.the.head 3SG.POSS-horn DEM IRR-PFV-take.out LNK
 19359 *ky-nuw-ce cʰa nuw-cti*
 INF-VERT-go can:FACT SENS-be.AFF
 19360 ‘If one takes out the horn on his head, he will be able to go back (to
 19361 heavens).’ (divination 2005, 91)

19362 Complex velar infinitive forms with polarity, orientation and associated motion
 19363 prefixes are attested in complement clauses, as in (155) (see also for instance
 19364 145 and 146 in §16.2.1.2).

- 19365 (155) *azō [cur-ky-car] puw-rpo-t-a.*
 1SG TRAL-INF-search AOR-experience-TR:PST-1SG
 19366 ‘I did go to search (for *Amanita caesarea*).’ (22-BlamajmAG, 32)

19367 Stative verbs, when occurring in a complement clause, generally take the *ky-*
 19368 infinitive, as in example (156) and (157). The main verb of the complement clauses
 19369 in these examples have the *ky-* infinitive, even though both *tu* ‘exist’ and *scit* ‘be
 19370 happy’ are stative verbs and have a citation form with the *kwi-* prefix.

- 19371 (156) *[a-rŋual ky-tu] puw-rpo-t-a*
 1SG.POSS-money INF-exist PST:IPFV-experience-PST:TR-1SG
 19372 ‘I used to have money’. (elicited)
- 19373 (157) *[ky-scit] pjy-ŋgruw nuw-ŋu*
 INF-be.happy IFR-succeed SENS-be
 19374 ‘She succeeded in being happy.’ (150818 muzhi guniang-zh, 6)

19375 The conversion to *ky-* infinitive only applies to stative verbs, not to impersonal
 19376 modal verbs such as *ra* ‘have to, need’. When the latter occur in a complement
 19377 clause, as in example (158), they always have the *kwi-* prefix.

16 Non-finite verbal morphology

- 19378 (158) *[[smyn kyrndza] kur-ra]*
medicine INF-eat INF:IMPERS-be.needed
19379 *pua-rno-t-a*
PST:IPFV-experience-PST:TR-1SG
19380 ‘I used to have to take medicine.’ (elicited)

19381 The velar infinitive is also found in some adnominal complement clauses, for
19382 instance in the collocation comprising the nouns *ftçaka* ‘manner’ or *kowa* ‘man-
19383 ner’ with the transitive verb *βzu* ‘make’ (§24.6.3.1), as (160) below (see also 147
19384 above).

19385 In infinitive complement clauses, the complement verb lacks person/number
19386 indexation. However, in the case of the verbs that require coreference between
19387 the core arguments of the matrix clause and those in the complement clause,
19388 the person and number of the subject (and sometimes also the object) of the
19389 complement clauses are reflected on the indexation of the verb in the matrix
19390 clause (§24.2.1.2). For instance, in (159), both the infinitive *kyr-ti* ‘to say’ and the
19391 matrix verb *múj-spe-a* ‘I am not able’ share the same 1SG subject and 3SG object
19392 (*ui-mdor* ‘its colour’).

- 19393 (159) *nur ui-mdor* *nur aj [kyr-ti] muúj-spe-a*
DEM 3SQ.POSS-colour DEM 1SG INF-say NEG:SENS-be.able[III]-1SG
19394 ‘I don’t know how to say (describe) its colour.’ (06-qaZmbri, 05)

19395 This is also the case with noun+verb collocations taking complement clauses:
19396 in (160), the verb form *tú-wy-βzu* reflects the 3PL→2SG configuration of the infini-
19397 tive *kyrndza* ‘to eat’ in the complement clause.

- 19398 (160) *a-rfit* *ra nur-yi-nur* *cti* *tcet^ha*,
1SG.POSS-children PL VERT-come:FACT-PL be.AFF:FACT in.a.moment
19399 *kyrndza kowa* *ttú-wy-βzu* *cti*
INF-eat manner 2-INV-make:FACT be.AFF:FACT
19400 ‘My children are coming back soon and will try to eat you.’ (2012
19401 Norbzang, 300-301)

19402 With velar infinitive complements, some auxiliary verbs take the orientation
19403 preverb selected by the verb in the complement clause (§24.3.5).

19404 16.2.1.6 Doubly prefixed velar infinitives with negative existential verbs

19405 The infinitive in *kyr-* can take two prefixes in a construction combining the nega-
19406 tive existential verb *me* ‘not exist’ (§22.5.1.2) with a verb in the infinitive prefixed

with a B-type orientation preverb and a possessive prefix coreferent with the subject,⁸ meaning ‘have no way to *X*, be completely unable to *X*’, as in (161) and (162). Note that since in both of these examples, the verbs are intransitive and lack an object participle, the *kṛ-* form can only be analyzed as an infinitive here. This construction is also possible with transitive verbs, in which case the possessive prefix corresponds to the transitive subject.

- (161) *tce ndzi-ju-kṛ-če pjy-me*
 LNK 3DU.POSS-IPFV-INF-go IFR.IPFV-not.exist
 ‘They could not go.’ (150908 menglang-zh, 46)
- (162) *tui-rzak nua u-pjui-kṛ-nuizuipjy-me matci,*
 one-night DEM 3SG.POSS-IPFV-INF-sleep IFR.IPFV-not.exist LNK
 ‘He could not sleep the whole night, because...’ (150831 BZW kAnArRaR, 12)

A derived construction involves the causative *yṛme* ‘cause not to exist, suppress’ with doubly prefixed infinitives to ‘make it impossible for X to Y’ as in (163).

- (163) *a-pjui-kṛ-nuizuipjy-na-yṛ-me*
 1SG.POSS-IPFV-INF-sleep AOR:3→3'-CAUS-not.exist
 ‘He made me unable to sleep.’ (elicited)

There is a variant of this construction with imperfective subject participles in *ku-* instead of infinitives (§16.1.1.6).

16.2.1.7 Converbial function

Velar infinitives in *kṛ-* can also be used as converbs, in subordinate clauses that are neither relatives nor complement clauses, with a variety of meanings.

The most common function of converbial infinitives is similar to the gerund (§16.6.1.3), expressing either the manner in which an action takes place (as in 164, 166 and 167) or describing an additional action occurring at the same time as that referred to by the main verb (as *laχtə̚ha kṛ-fkur*, with an overt object, in 165) (additional examples are presented in §25.4).

⁸ The assertion in Jacques (2016a: 228) that infinitives cannot take possessive prefixes is thus wrong.

16 Non-finite verbal morphology

- 19433 (164) *ky-ŋke ly-ye-a*
 INF-walk AOR:UPSTREAM-come[II]-1SG
 19434 ‘I came on foot.’ (17-lhazgron, 12)
- 19435 (165) *nŋzo [laχtcʰa ky-fkur] tu-tu-ŋke puŋ-ŋu tce*
 2SG thing INF-carry.on.the.back IPFV-2-walk SENS-be LNK
 19436 ‘You are walking carrying things on your back.’ (150909 hua pi-zh, 12)

19437 Converbial infinitives also indicate the degree to which an action is under-
 19438 taken, as in the common expression *tɕʰi ky-cʰa zo* ‘do whatever *X* can to *Y*’ in
 19439 (166).

- 19440 (166) *[tɕʰi ky-cʰa] to-k-ŋndzuit-ci ri, maka zo*
 what INF-can IFR-PEG-bark-PEG LNK completely EMPH
 19441 *kui-pʰyn pŋy-me*
 SBJ:PCP-be.efficient IPFV.IFR-not.exist
 19442 ‘(The dog) barked as much as it could, but it was all for nothing.’ (140426
 19443 gou he qingwa-zh, 21)

19444 The converbs can also be followed by adverbs of quantification like *ŋja* ‘com-
 19445 pletely’ (§22.2.2.1), as illustrated by (167).

- 19446 (167) *<kaihui> kui-fse tʂ̩-ra tce, ky-ŋke ŋja zo*
 meeting SBJ:PCP-be.like AOR-be.needed LNK INF-walk completely EMPH
 19447 *ju-kui-ce puŋ-ra.*
 IPFV-GENR:S/O-go PST.IPFV-be.needed
 19448 ‘When one had to (take part in) a meeting for instance, one had to go on
 19449 foot.’ (12-BzaNsa, 22)

19450 Infinitives in these functions can optionally be followed by the ergative *kui*,
 19451 like the gerunds (§16.6.1.3), as shown by (168).

- 19452 (168) *maka to-numbrypuŋ-nui tce li ky-ŋjuy kui zo jo-ce-nui.*
 completely IFR-ride-PL LNK again INF-run ERG EMPH IFR-go-PL
 19453 ‘They mounted their horses and galloped away.’ (140512 alibaba-zh, 42)

19454 Unlike gerunds (§16.6.1.3), infinitive converbs do not necessarily imply that
 19455 two different actions take place at the same time. In (167) and (168) for instance,
 19456 the converbs *ky-ŋke* and *ky-ŋjuy* do not express a motion event distinct from that
 19457 described by the main verb; rather, the verb *ce* ‘go’ indicates the direction and

19458 deixis of the motion, while the converbs specify the speed and manner of realization
 19459 of the action. Note that in this particular example, using the gerund is not
 19460 possible.

19461 The converbial infinitives are attested with the negative prefix *mr-*, meaning
 19462 ‘without *X*ing’, and generally refer to the way in which the action is performed
 19463 as in (169).

- 19464 (169) *maka my-ky-ruususo kuu zo 'jy'* *to-ti, to-nyla.*
 at.all NEG-INF-think ERG EMPH be.allowed:FACT IFR-say IFR-agree
 19465 ‘She said ‘yes’, she agreed without thinking at all.’ (140429 qingwa
 19466 wangzi-zh, 67)

19467 Negative infinitive converbs can have an adversative interpretation (§25.6.1.1).
 19468 In (170), *my-ky-ystuy* ‘not meeting’ expresses the non-realization of a telic event
 19469 that was the original purpose of the previous actions of the main referent.

- 19470 (170) *[a-mu a-wi ni my-ky-ystuy]*
 3SG.POSS-mother 3SG.POSS-grand.mother DU NEG-INF-meet
 19471 *kú-wy-sui-jyat-a-andzi.*
 IPFV:EAST-INV-CAUS-go.back-1SG-DU
 19472 ‘(My uncles) forced me to go back (to school) without having met my
 19473 mother and my grandmother (even though I had not met...).’
 19474 (2010-Dpalcan-09, 54)

19475 Converbial infinitival clauses can contain an object or a semi-object which
 19476 does not belong to the main clause, as *a-mu a-wi ni* ‘my mother and my grand-
 19477 mother’ in (170). The dual on *kú-wy-sui-jyat-a-andzi* refers to the subject (‘the uncles’,
 19478 mentioned in the previous clause), not the mother and the grandmother.

19479 In nearly all examples, there is subject (S/A) coreference between the matrix
 19480 clause and the converbial clause, but examples like (170), where we rather observe
 19481 coreference between the *object* of the main clause and the subject of the subor-
 19482 dinate clause, shows that there is no syntactic constraint on subject coreference
 19483 in this construction.

19484 Infinitives in *kuu-* (impersonal or stative) also occur as converbs, though these
 19485 forms could in principle also be analyzed as subject participles (§16.1.1). For in-
 19486 stance, in (171) *mx-kuu-mbrxt* ‘without stop’ is considered to be an impersonal
 19487 infinitive serving as a manner converb, but it could be possible to propose an al-
 19488 ternative analysis as a *kuu-* subject participle ‘the one which does not stop’ used
 19489 adverbially. The analysis as infinitives however better accounts for the fact that
 19490 only the verbs whose infinitive is in *kuu-* have converbial forms in *kuu-*.

16 Non-finite verbal morphology

- 19491 (171) *nua maka mv-kua-mbryst zo nuu-ryma*
DEM at.all NEG-INF:IMPERS:S/A-ACAUS:break EMPH IPFV-work
19492 *nua-cti tce,*
SENS-be.AFF LNK
19493 ‘It works without stopping at all.’ (26-GZo, 69)

19494 The existential verbs also occur in converbial use. For instance, *tu* ‘exist’ in
19495 infinitive form *kuu-tu* following a noun or a pronoun can mean ‘in the presence
19496 of...’ as in (172).

- 19497 (172) *[zara kuu-tu] zo to-syruru tce,*
3PL INF:STAT-exist EMPH IFR-compare LNK
19498 ‘He compared (his testimony with theirs) in their presence.’ (150909
19499 xifangping-zh, 155)

19500 Similarly, the negative existential verb *me* ‘not exist’ in infinitive converbial
19501 form means ‘without...’, as in example (173).

- 19502 (173) *tce nxj a-pi [nxzo kuu-me] azo ky-ryzi*
LNK 2SG 1SG.POSS-elder.sibling 2SG INF:STAT-not.exist 1SG INF-stay
19503 *mr-c^ba-a*
NEG-can:FACT-1SG
19504 ‘Brother, without you I cannot stay (here).’ (2011-05-nyima, 53)

19505 16.2.1.8 Velar infinitives as adverbs

19506 The *kuu-* infinitive of stative verbs can be used to create adverbs. The most com-
19507 mon example is the degree adverb *kuuxtçuuxtçi* ‘a little’ from *xtçi* ‘be small’ in
19508 sentences such as (174). In this example, the co-occurrence of an adverb derived
19509 from *xtçi* ‘be small’ with the verb *wxti* ‘be big’ shows that this adverb is already
19510 fully grammaticalized, otherwise such a sentence would be self-contradictory.

- 19511 (174) *βzui sycz kuu-xtçu~xtçi wxti.*
mouse COMP INF:STAT-EMPH~be.small be.big:FACT
19512 ‘It is a little bigger than a mouse.’ (21-GzWLa, 4)

19513 An even more lexicalized example is *mrkufts^{hi}* ‘forcibly’, which occurs in par-
19514 ticular with causative verbs to express coercive causation (§17.2.5.2), as in (175).

- 19515 (175) *tcendyre mvkufts^{hi} zo, nyki u-me yuu u-mi*
 LNK forcibly EMPH FILLER 3SG.POSS-daughter GEN 3SG.POSS-foot
 19516 *nur icq^ha tuu-xtsa u-ŋuu nutcu*
 DEM the.aforementioned INDEF.POSS-shoe 3SG.POSS-in DEM:LOC
 19517 *c^hy-sui-ru*
 IFR:DOWNSTREAM-CAUS-put.in
 19518 ‘She forced her daughter to put her foot into that shoe.’ (140504
 19519 huiguniang-zh, 228)

19520 This adverb is formally the negative stative infinitive of the verb *fts^{hi}* ‘feel bet-
 19521 ter’ (of a disease) (§17.2.3).

19522 These adverbs are probably lexicalized from infinitival conversbs (§16.2.1.7), but
 19523 differ from them in lacking any argument structure.

16.2.1.9 Lexicalized velar infinitives

19525 Lexicalized velar infinitives in *kx-* found in some compounds, though some cases
 19526 could alternatively be analyzed as lexicalized object participles, and are treated
 19527 in §16.1.2.7.

19528 The delocutive expression *ŋxtcukyti,k^hu* ‘obey to everything’ provides an un-
 19529 ambiguous example of lexicalized velar infinitive. The compound *ŋxtcukyti* com-
 19530 bines the pronoun *ŋotcu* ‘where’ in *status constructus* form *ŋxtcui-* with the infini-
 19531 tive *kx-ti* of the verb *ti* ‘say’, and is exclusively used in collocation with *k^hu* ‘be
 19532 possible, agree’, as in (176).⁹ This expression originates presumably from a phrase
 19533 such as ‘agree (*k^hu*) to whatever (*ŋotcu*) *X* says (*kx-ti*)’. However, it should be
 19534 noted that the pronoun *t^hi* ‘what’, not *ŋotcu* ‘where’ is used in Japhug in the free-
 19535 choice indefinite construction meaning ‘whatever’ as in examples (98) to (100) in
 19536 §6.6.6). The form *kx-ti* in any case was originally the complement of the verb *k^hu*
 19537 ‘be possible, agree’, which takes infinitival complements (§24.5.3.1), and thus is
 19538 not analyzable as a former object participle.

- 19539 (176) *uu-tciu kuiβde nura wuma zo ŋxtcukyti*
 3SG.POSS-son four DEM:PL really EMPH obey.to.everything(1)
 19540 *pjx-k^hu-nuu*
 IFR.IPFV-obey.to.everything(2)-PL
 19541 ‘His four sons were very obedient.’ (140508 benling gaoqiang de si
 19542 xiongdi-zh, 15)

⁹ The causative *ŋxtcukyti,suk^hu* ‘cause to obey to everything’ also exists.

19543 **16.2.2 Bare infinitives**

19544 Bare infinitives are formed by combining the stem I of the verb with a possessive
 19545 prefix coreferential with the object of the complement clause, as in example (177).
 19546 Bare infinitives are not attested with orientation, polarity or associated motion
 19547 prefixes. They historically derive from bare action nominal (§16.4.6), which have
 19548 become a very restricted subclass.

- 19549 (177) *nyzo kui-fse a-ŋk^hor nua u-mto*
 you NMLZ:STAT-be.like 1SG.POSS-subject TOP 3SG.POSS-BARE.INF:see
 19550 *mur-pw^h-rno-t-a*
 NEG-AOR-experience-PST:TR-1SG
 19551 'I never saw anyone like you among my subjects.' (28-smAnmi, 393)

19552 With *bzvβ* 'be careful' as matrix verb however, the possessive prefix can also
 19553 index the transitive subject as in (178) (expressing an indefinite object).

- 19554 (178) *kxtsa ni ndzi-pa pnu^h-bzvβ rca*
 parents.and.children DU 3DU.POSS-BARE.INF:do SENS-be.careful SFP
 19555 'The two of them do things very carefully.' (14-05-10)

19556 Intransitive verbs do not have bare infinitives. Complement-taking verbs se-
 19557 lecting bare infinitives for transitive verbs either take dental *tua-* infinitives (§16.2.3)
 19558 or velar infinitives (§16.2.1) when occurring with intransitive verbs.

19559 **16.2.2.1 Complement clauses**

19560 Bare infinitives only occur in complement clauses (§24.2.2). Apart from the aspec-
 19561 tual verb *rno* 'experience, have already' mentioned above in (177), bare infinitives
 19562 are found with two categories of complement-taking verbs.

19563 First, they are compatible with some phasal verbs (§24.5.6.2) such as *za* 'begin',
 19564 *srza* 'begin', *st^hut* 'finish' and *jyy* 'finish' as in (179).

- 19565 (179) *tce nunuu tua-ŋga nua u-tʂuβ t^hua-jyy*
 LNK DEM INDEF.POSS-clothes DEM 3SG.POSS-BARE.INF:sew AOR-finish
 19566 'When one has finished sewing the clothes, ...' (30-tWNga, 29)

19567 Second, they are found with some adjectives such as *βdi* 'be well, be good' and
 19568 derived sigmatic or velar causative verbs such as *yv-βdi* 'repair, cause to be good,
 19569 do *X* well' as in (180) (see §17.3.2.2, §24.5.1.4).

- 19570 (180) *lu-ji-nuu q^he u-nvpuupa tu-yv-βdi-nuu,*
 IPFV-plant-PL LNK 3SG.POSS-BARE.INF:take.care IPFV-CAUS-be.good-PL
 19571 *u-yli ra ku-syape-nuu q^he, c^hu-do nuu-c^ha.*
 3SG.POSS-dung PL IPFV-do.well-PL LNK IPFV-be.fibrous SENS-can
 19572 ‘(Now people) plant (pumpkin also in higher areas), (if) they take good
 19573 care of it and put enough fertilizers, it can become fibrous (so that it can
 19574 be sowed for the next year).’ (140522 kAmYW tWji, 47)

19575 The same set of verbs take complement clauses with dental infinitives when
 19576 the verb of the complement is intransitive (§16.2.3.2).

19577 The bare infinitives also occur in adnominal complement clauses with the noun
 19578 *u-ts^huya* ‘shape, manner’, as in (181).

- 19579 (181) *ndzi-mi u-t^hob u-t^huya nura wuma zo*
 3DU.POSS-foot 3SG-BARE.INF:attach.to 3SG.POSS-form DEM:PL very EMPH
 19580 *naxtcuy-ndzi.*
 be.the.same:FACT-DU
 19581 ‘The way their feet (of fleas and crickets) touch the ground is very
 19582 similar.’ (26-mYaRmtsaR, 17)

19583 No verb requires a bare infinitive: all complement-taking verbs selecting it are
 19584 either alternatively compatible with velar infinitives (§16.2.1.5) or a finite com-
 19585plement (§24.2.3).

16.2.2.2 Bare verb stem in negative existential construction

19587 A non-finite form resembling bare infinitives without possessive prefix is found
 19588 in an unusual construction with the negative existential verbs *me* ‘not exist’ and
 19589 *maje* ‘not exist’ (§13.1.2) with alternative concessive meaning ‘whether or not *X*,
 19590 it amounts to the same’ (§25.2.3.2), in which the bare verb stem occurs in affir-
 19591 mative and in negative form with the negative prefix *mr-*. Unlike bare infinitives
 19592 proper, this form exists with both transitive (182) and intransitive verbs (183).

- 19593 (182) *ndza mr-ndza me-a*
 BARE.INF:eat NEG-BARE.INF:eat not.exist:FACT-1SG
 19594 ‘Whether (you) eat me or not, it amounts to the same.’ (sentence
 19595 obtained as the correction of a sentence I produced to translate a story
 19596 in Japhug)

- 19597 (183) *tce tu-qiuu jnu-mts^ham-a, tu-qiuu muáj-mts^ham-a q^he,*
 LNK 3SG.POSS-half SENS-hear-1SG 3SG.POSS-half NEG:SENS-hear-1SG LNK
 19598 *ce my-ce manje*
 BARE.INF:go NEG-BARE.INF:go not.exist:SENS
 19599 ‘I can hear half of it, can’t hear the other half, whether or not (I) go it
 19600 amounts to the same.’ (conversation 140510)

19601 In this construction, the negative auxiliaries can take person marking, and are
 19602 obligatorily coreferential with the object if the verb in the complement clause is
 19603 transitive, as in (182). With intransitive verbs, no person marking appears on the
 19604 negative verb as in (183).¹⁰ In this construction, the transitive subject (whether
 19605 of transitive or intransitive verbs) cannot be overt.

19606 Although the non-finite form *ce* in (183) superficially resembles a 3SG Factual
 19607 Non-Past (§21.3.1), the absence of stem III alternation (§12.2.2) on *ndza* in (182)
 19608 shows that this cannot be a finite form (otherwise *ndze* ‘s/he/it will eat/eats it’
 19609 would be expected).

19610 16.2.3 Dental infinitives

19611 Dental infinitives (glossed as ‘second infinitives’ INF:II) are built by prefixing *tu-*
 19612 with the verb stem. Dental infinitives occur with intransitive verbs, including
 19613 dynamic (184) and stative verbs (185), including semi-transitive verbs, but are
 19614 not attested with transitive verbs, which take bare infinitives or velar infinitives
 19615 instead.

- 19616 (184) *tua-ŋke ta-za tce*
 19617 INF:II-walk AOR:3→3'-start LNK
 ‘When it starts moving...’ (26-NalitCaRmbWm, 79)

19618 With contracting verbs (§12.3), regular vowel fusion between the *tu-* prefix
 19619 and stem-initial *a-* occurs, resulting in the surface form /tva-/ as in (185).

- 19620 (185) *si nuu daltsutsa nuu tua-yrpi no-za tce*
 19621 tree DEM slowly DEM INF:II-be.green IFR-start LNK
 ‘The tree slowly started to become green.’ (divination 2003, 110)

19622 However, a few morphologically transitive verbs with dummy subjects (§14.3.5),
 19623 in particular *l̥rt* ‘throw’ and *βzu* ‘make, do’ do take *tu-* infinitives as in (186). Note

¹⁰ The fact that only the object is indexed on the auxiliary verb suggests here that this construction displays nominative-accusative alignment.

19624 that in these complex predicates, the light verbs *l̥t* ‘throw’ and *βzu* ‘make, do’,
 19625 although transitively conjugated, cannot take an overt subject marked with the
 19626 ergative, and only have one argument.

- 19627 (186) *tui-mui kui-wxtui~wxti zo tu-l̥t pjy-za*
 INDEF.POSS-sky SBJ:PCP-EMPH~be.big EMPH INF-throw IFR-start
 19628 ‘A big rain started.’ (150819 haidenver-zh, 104)

19629 It is possible that dental infinitives are historically related to degree nominals
 19630 (§16.3) and action nominals (§16.4), which however do not display the same transitivity restrictions. Several hypotheses accounting for the origin of dental infinitives are presented in §16.8.3.

16.2.3.1 Polarity prefixes

19634 Dental infinitives are only compatible with polarity prefixes (as in example 187),
 19635 and cannot take orientation or associated motion. Possessive prefixes on dental
 19636 infinitives only occur in the simultaneous construction with the verb *supa* ‘cause
 19637 to do’ (§24.5.1.3).

- 19638 (187) *qajy u-me nunuu, tcendyre kʰro mx-tu-rga to-za*
 fish 3SG.POSS-daughter DEM LNK a.lot NEG-INF:II-like IFR-start
 19639 ‘He started not liking the mermaid that much (anymore).’ (150819
 19640 haidenver-zh, 154)

19641 Degree nominals present the same constraints on orientation and associated
 19642 motion prefixes (§16.3.1).

16.2.3.2 Complement clauses

19644 Dental *tu-* infinitives are only attested in complement clauses (§24.2.2), and are
 19645 only found with the verbs that select a bare infinitive (§16.2.2.1) when the verb in
 19646 the complement clause is transitive. This complementary distribution suggests
 19647 that bare infinitive and dental infinitives could be treated as two variants of the
 19648 same grammatical category.

19649 Dental infinitives are more often attested with phasal verbs, in particular *za*
 19650 ‘start’ and *sryza* ‘start’ as in (188).

16 Non-finite verbal morphology

- 19651 (188) *mts^hu nur c^humc^hum zo, tce, tur-skym pjv-syza*
lake DEM IDPH(II):slowly.retreating EMPH LNK INF:II-be.dry IFR-start
19652 ‘The (water of the) lake started to retreat slowly.’ (nyima wodzer 2003,
19653 105)

19654 Non-phasal verbs selecting bare infinitive such as *r̥no* ‘experience’ never occur
19655 with the dental infinitive in the corpus, but such forms can be elicited, as in (189).
19656 In the corpus, intransitive complements of the verb *r̥no* ‘experience’ rather velar
19657 infinitives; it is also possible in (189) to replace the dental infinitive *tuu-yi* with a
19658 velar infinitive *kx-yi*.

- 19659 (189) *mbark^hom tuu-yi pui-r̥no-t-a*
TOPO INF:II-come AOR-experience-PST:TR-1SG
19660 ‘I came to Mbarkham before.’ (elicited)

19661 Like other intransitive verbs, antipassivized transitive verbs can take a dental
19662 infinitive (as in 190), unlike the base verb from which they are derived (as in 191,
19663 where a bare infinitive is used instead).

- 19664 (190) *tuu-rx-ryt pa-za*
INF:II-APASS-write AOR:3→3'-start
19665 ‘He started writing.’ (elicited)

- 19666 (191) *tyscoz uu-ryt pa-za*
letter 3SG.POSS-BARE.INF:write AOR:3→3'-start
19667 ‘He started writing the/a letter.’ (elicited)

19668 In addition, dental infinitives also occur in complements of causativized verbs
19669 (§24.5.1.3, §24.5.1.4), and in the construction expressing simultaneous actions
19670 with *supa* ‘cause to do’ described in §16.2.2.1.

19671 16.3 Degree nominals

19672 Degree nominals are built by combining the verb stem with a nominalizing *tuu-*
19673 prefix and a possessive prefix coreferent with the subject, as the dual *ndzi-* in (192).
19674 The form *ndzi-tuu-ymumi* also shows that the nominalization *tuu-* prefix undergoes
19675 regular vowel fusion with stem-initial *a-* to /t̪v/.

- 19676 (192) *tcendyre ndzi-tur-ymumi*
 LNK 3DU.POSS-NMLZ:DEG-be.in.good.terms
 19677 *ndzi-tur-scit* *pui-saxas* *zo* *pui-ŋu*
 3DU.POSS-NMLZ:DEG-be.happy PST.IPFV-be.extremely EMPH SENS-be
 19678 ‘They were very happy together.’ (2005 Lobzang, 13)

19679 All gradable stative verbs can form degree nominals. They most typically occur
 19680 in constructions expressing degree as in (192) (§16.3.4, §26.1.2), but can also
 19681 indicate manner as in (193).

- 19682 (193) *pui-mi* *ui-tui-ŋjbu* *kuny muŋ-naxtcauy.*
 3PL.POSS-leg 3SG.POSS-NMLZ:DEG-be.curved also NEG:SENS-be.the.same
 19683 ‘(People with clubfoot) also differ in the way that their feet are curved
 19684 (some have both legs curved, some only one, some have the legs rotated
 19685 inwards, others rotated outwards, 160719 kAmARu-8)

19686 With dynamic verbs, degree nominals express either the intensity or the fre-
 19687 quency of an action as in (194), or the manner of the action (195). Such examples
 19688 are however uncommon in the corpus.

- 19689 (194) *japa* *tce pʰaŋrgot ui-tui-nyrū* *pui-saxas*
 last.year LOC boar 3SG.POSS-NMLZ:DEG-eat.crops SENS-be.extremely
 19690 *zo* *tce*
 EMPH LNK
 19691 ‘Last year, a boar was causing a lot of damages to the crops.’ (150829
 19692 phaRrgot, 1)

- 19693 (195) *tui-tui-ymdzu* *kui-βdi* *mŋ-kui-βdi* *kuny*
 GENR:POSS-NMLZ:DEG-sit INF:STAT-be.well NEG-INF:STAT-be.well also
 19694 *zo* *cʰui-syfcyra-nui pui-cti.*
 EMPH IPFV-discuss-PL PST.IPFV-be.AFF:FACT
 19695 ‘People would discuss whether one sat well or not.’ (31-khAjmu, 28)

19696 Degree nominals from transitive verbs are extremely rare, but do occur in
 19697 particular for tropative verbs (§17.5) as in (196). It is possible to elicitate degree
 19698 nominals for most transitive verbs, even if such forms are not attested in the
 19699 corpus.

16 Non-finite verbal morphology

- 19700 (196) *maka u-tuu-ny-mpcyr kuu pjy-nyscyr*
completely 3SG.POSS-NMLZ:DEG-TROP-be.beautiful ERG IFR-be.startled
19701 *zo.*
EMPH
19702 ‘He found her so beautiful that he was startled.’ (140429 jiedi-zh, 181)

19703 Although similar in form to dental infinitives (§16.2.3) and action nominals
19704 (§16.4), they differ from both categories in requiring the presence of a possessive
19705 prefix (see §16.8.3 concerning the historical relationship between these forms).
19706 In addition, unlike dental infinitives, degree nominals are compatible with both
19707 intransitive and transitive verbs. Their semantics is also fully predictable, unlike
19708 action nominals which tend to be lexicalized (§16.4.5).

19709 Degree nominal occur in exclamative nominal predicates (§16.3.3), degree con-
19710 structions (§16.3.4) and also several types of complement clauses (§16.3.5).

19711 Another type of degree nominal is built by compounding the stems of two
19712 antonyms, for instance *jaꝝmba* ‘thickness’ (of a sheet) from *jaꝝ* ‘be thick’ and *mba*
19713 ‘be thin’ (§5.5.2.2). The corresponding regular degree nouns also exist (*u-tuu-jaꝝ*
19714 and *u-tuu-mba*).

16.3.1 Polarity prefixes

19715 Like dental infinitives (§16.2.3.1), degree nominals cannot be used with orienta-
19716 tion or associated motion prefixes, but can be found with the negative prefix *mr-*,
19717 as in (197).

- 19718 (197) *maka u-mr-tuu-nuyuw-ηke pjy-saxaꝝ zo*
at.all 3SG.POSS-NEG-NMLZ:DEG-FACIL-walk IFR.IPFV-be.extremely EMPH
19719 ‘It was extremely inconvenient to walk (on the soft earth).’ (014-kWLAG,
19720 148)

16.3.2 Argument structure

19721 Unlike action nominals, degree nominals still keep their argument structure in-
19722 tact. They can take complements exactly in the same way as finite verb forms.
19723 For instance, *βdi* ‘be well, be good’ takes the bare infinitive *u-taꝝ* in (198).¹¹

¹¹ Note that the bare infinitive *u-taꝝ* from the verb *taꝝ* ‘weave’ is homophonous with the relator noun *u-taꝝ* ‘on, above’ (§8.3.4.3) and that this construction is potentially ambiguous.

- 19726 (198) *maka nuu raz rcanuu, ui-tuu-pe*
 at.all DEM cloth UNEXP:DEG 3SG.POSS-NMLZ:DEG-be.good
 19727 *juu-saxab zo, ui-taa*
 SENS-be.extremely EMPH 3SG.POSS-BARE.INF:weave
 19728 *ui-tuu-betai, ui-tuu-mpcyr*
 3SG.POSS-NMLZ:DEG-be.well 3SG.POSS-NMLZ:DEG-be.beautiful
 19729 *juu-saxab*
 SENS-be.extremely
 19730 ‘This piece of cloth is very nice, it is extremely well woven, it is
 19731 extremely beautiful.’ (140521 huangdi de xinzhuang-zh, 84-85)

19732 In (199), the verb *mbat* ‘be easy’ selects a finite complement clause comprising
 19733 the verb *c^hui-wxti* ‘it grows bigger’ in imperfective third singular form.

- 19734 (199) *c^hui-wxti ui-tuu-mbat juu-syre zo*
 IPFV-be.big 3SG.POSS-NMLZ:DEG-be.easy SENS-be.ridiculous EMPH
 19735 ‘It grows big very easily.’ (25-akWzgumba, 77)

19736 Degree nominals can also be used with oblique arguments, such as the first
 19737 person marked by the relator noun *a-taa* (unrelated to the bare infinitive *ui-taa*
 19738 from the previous example) in (200).

- 19739 (200) *a-wi a-taa ui-tuu-yyutsum*
 1SG.POSS-grandmother 1SG-on 3SG.POSS-NMLZ:DEG-be.kind
 19740 *ui-gryl me*
 3SG.POSS-order not.exist:FACT
 19741 ‘My grandmother was extremely kind to me (so that I have to repay
 19742 her).’ (2005 Kunbzang, 407)

16.3.3 Nominal predicates

19744 Degree nominals commonly occur as nominal predicates (§22.3), either with the
 19745 sentence final particle *nuu* as in (201), or as a bare noun phrase as in (202). In
 19746 this predicative use, degree nominals express an exclamation, possibly including
 19747 surprise as in (97) and (202).

- 19748 (201) *ly-yi-nuu wo ty-rundzytshi-nuu ma,*
 IMP:UPSTREAM-come-PL SFP IMP-have.a.meal-PL C
 19749 *nuu-tuu-mtsur-cpaab nuu,*
 2PL.POSS-NMLZ:DEG-be.hungry-be.thirsty SFP

16 Non-finite verbal morphology

- 19750 *nur-tuu-pat* *nur*
 2PL.POSS-NMLZ:DEG-be.tired SFP
19751 ‘Come in and have a meal, you (must be) so hungry, thirsty and tired!’
19752 (160701 poucet2, 40)

19753 Example (198) can be compared with (202) with the verb of degree *saxas* ‘be extremely’ in sensory form. It is possible that the use of degree nominal as nominal predicates historically results from the ellipsis of the degree predicate. The high frequency of the predicative use of degree nominals in the corpus however indicates that this usage has been constructionalized.

- 19758 (202) *uu-tas* *uu-tuu-βdi*,
 3SG.POSS-BARE.INF:weave 3SG.POSS-NMLZ:DEG-be.well
19759 *uu-tuu-mpcyr!*
 3SG.POSS-NMLZ:DEG-be.beautiful
19760 ‘It is woven so well, it is so beautiful!’ (140521 huangdi de xinzhuang-zh,
19761 181)

16.3.4 Degree construction

19762 The most common use of the degree nominals is in the degree construction, where they occur as intransitive subjects of degree verbs like *saxas* ‘be extremely’, which are always in 3SG form as in (203). The possessive prefix on the degree noun is coreferent with the referent having the property described by the nominalized verb, often 3SG as in (203), but not exclusively, for instance with a 3DU in (192) above.

- 19769 (203) *nuunu si nur uu-tuu-jpum* *pjx-saxas*
 DEM tree DEM 3SG.POSS-NMLZ:DEG-be.thick IFR.IPFV-be.extremely
19770 *zo tce*,
 EMPH LNK
19771 ‘That tree was extremely thick.’ (150902 luban-zh, 101)

19772 This construction is described in more details in (§26.1.2).

16.3.5 Complementation

19774 Degree nominals are marginally attested in a complementation strategy, as subject clauses of the modal verb *ra* ‘need, have to’ in negative form, meaning ‘X

19776 should not be so *Y*', where *X* is the subject indexed by the possessive prefix
 19777 preceding the *-tu-* nominalization prefix, and *Y* the verb in degree nominal form.
 19778 For instance, the common expression in (204) with the degree nominal *ny-tu-syre*
 19779 literally means 'You should not be so ridiculous'.

- 19780 (204) *ny-tu-syre* *nui my-ra*
 3SG.POSS-NMLZ:DEG-be.ridiculous DEM NEG-be.needed
 19781 'What you (did/said) is outrageous.' (several examples)

19782 This construction also occurs with the antipassive verb *snyk^he* 'bully people',
 19783 as in (205).¹²

- 19784 (205) *ny-tu-sy-nyk^he* *nui my-ra*
 3SG.POSS-NMLZ:DEG-APASS:HUM-bully DEM NEG-be.needed
 19785 'You cannot treat people so badly.' (2005tWJo, 47)

19786 The degree nominals also seem to occur as adnominal complement of *u-ts^huya*
 19787 'shape, method' as in (206). Note however that since bare infinitives are attested
 19788 in complement clauses of this noun (see example 181, §16.2.2.1), it is also conceivable
 19789 that the forms *u-tu-ts^hu* and *u-tu-r^hom* could be alternatively analyzed as
 19790 dental infinitives (§16.2.3).

- 19791 (206) *pas nui u-βri, nyki, u-rme kui-me zo*
 19792 pig DEM 3SG.POSS-body FILLER 3SG.POSS-hair INF:STAT-not.exist EMPH
u-ts^huya pui-fse ma u-tu-ts^hu c^hondyre
 19793 3SG.POSS-shape SENS-be.like LNK 3SG.POSS-NMLZ:DEG-be.fat COMIT
u-tu-r^hom u-ts^huya nui zo pui-fse
 19794 3SG.POSS-NMLZ:DEG-be.rough 3SG.POSS-shape DEM EMPH SENS-be.like
 19795 '(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 noun

16.4.1 *tu-* action nominals

19798 There are two types of action nominals in Japhug: action nominals in *tu-*, a very
 19799 productive formation which is the main topic of this section, and the bare action
 19800 nominals, treated in §16.4.6.

¹² The meaning of this sentence is close to Chinese 你太欺负人了 <nǐ tài qīfù rén le> 'you are out of line'.

19801 Action nominals in *tu-* can be built from both intransitive and transitive verbs.
 19802 They differ from both participles and infinitives in that the argument structure
 19803 of the verb is lost and the transitivity contrast neutralized, and cannot take ob-
 19804 jects or oblique arguments other than possessors like normal alienably possessed
 19805 nouns.

19806 The action nominal has three potential meanings. First, it can refer to the
 19807 action itself, for instance *tujī* ‘planting and sowing’¹³ from the verb *ji* ‘plant’,
 19808 *tuyyaβ* ‘action of churning’ from *yjaβ* ‘churn’, *turjaβ* ‘dance (n)’ from *rjaβ* ‘dance’
 19809 (intransitive verb), *tusi* ‘death’ from *si* ‘die’ or *tumu* ‘fear’ from *mu* ‘fear’. In this
 19810 function, it can be used in a collocation with *βzu* ‘make’ (§24.4.3.1).

19811 Second, it can mean an object affected by, or resulting from the action. This is
 19812 also the case with some intransitive verbs, for instance *tuqioβ* from the intransi-
 19813 tive *qioβ* ‘vomit’ which can either mean ‘the action of vomiting’ or ‘vomitus’ or
 19814 *tučkʰo* from *čkʰo* ‘dry in the sun’ which can either be ‘action of drying in the sun’
 19815 or ‘grain that are dried in the sun’ (see 86 in §24.4.3.1).

19816 Third, it can also refer to the way an action is performed, for instance *tu-*
 19817 *rvt* which means ‘style of writing, way of writing’ as in (207). This function is
 19818 probably the direct historical origin of the degree nominals (§16.3).

19819 (207) *tce <er> ur-tur-rvt* *tsa n̩ur-fse ri, n̩ur*
 19820 LNK two 3SG.POSS-NMLZ:ACTION-write a.little SENS-be.like LNK DEM
 19821 *stʰuici m̩u-n̩ur-ŋgyy*
 19822 so.much NEG-SENS-ACaus:warp

19823 ‘(The constellation) looks a little bit like the way ‘two’ is written, but not
 19824 as curved.’ (29-LAntshAm, 55)

19825 Stative verbs can also have *tu-* nominals, expressing abstract nouns, for in-
 19826 stance *tutṣaj* ‘justice’ from *tsaj* ‘be fair’.

19827 When the base verb has a stem in *a-*, the action nominal prefix *tu-* undergoes
 19828 regular vowel fusion to *tr-* as in *tryro* ‘game’ from the intransitive verb *ayro* ‘play’
 (however, this verb is also potentially analyzable as a *a-*-denominal verb, see
 19829 §20.2.1 and §16.4.6 below).

19830 The direction of derivation between noun and verb is not always trivial to
 19831 determine. For instance, the noun *tutsye* ‘commerce’ could seem to be the action
 19832 nominal of the transitive verb *ntsye* ‘sell’. However, in this case it is better to
 19833 analyze the noun as the base form, and the verb as denominal (the *n-* element
 being an irregular allomorph of the *nu-* denominal prefix, §20.10.1.1).

¹³ This action noun should not be confused with the related inalienably possessed noun *tujī* ‘field’, which is a different nominalized form.

19834 Action nominals can occur as prenominal modifiers, as in *tutax mt^huxtçyr*
 19835 ‘weaving belt’ (the belt used to attach the back-tension loom), comprising the ac-
 19836 tion nominal *tutax* ‘weaving’ (from *tax* ‘weave’) and the compound noun *mt^hux-*
 19837 *tçyr* ‘belt’.

19838 16.4.2 *tx-* abstract nouns

19839 Abstract nouns in *tx-* can be exclusively derived from adjectival stative verbs.
 19840 The derivation is generally regular but there are exceptions like *txyŋat* ‘tiredness’
 19841 from *nat* ‘be tired’ with an additional *-y-* or *txyŋm* ‘pain’ from *mjym* ‘hurt’ with
 19842 a missing *-m-*.¹⁴

19843 Abstract nouns mainly occur with the ergative *kua*. These postpositional phrases
 19844 express either the manner in which an action takes place (§8.2.2.5) as in (208), or
 19845 the cause of the action describe by the main verb due to a high degree as in (209)
 19846 (see also §26.1.2.1).

19847 (208)	<i>tx-rga</i>	<i>kua zo t^hui-ari</i>	<i>jui-ju.</i>
		NMLZ:ABSTRACT-be.happy	ERG EMPH AOR:DOWNSTREAM-go[II] SENS-be
19848	‘She went there happily.’ (2005 Kunbzang, 258)		

19849 Example (209) also illustrates that one ergative postposition can follow several
 19850 abstract nouns linked with the comitative *c^ho* or in bare coordination (§9.2.2).

19851 (209)	<i>a-βi,</i>	<i>tx-yŋat</i>	<i>c^ho</i>
	1sg.poss-younger.sibling	NMLZ:ABSTRACT-be.tired	COMIT
19852	<i>tx-mtsur</i>	<i>tx-cpas</i>	<i>kua</i>
	NMLZ:ABSTRACT-be.hungry	NMLZ:ABSTRACT-be.thirsty	ERG
19853	<i>muúj-sy-c^ha</i>	<i>tce, num-a-j</i>	<i>je</i>
	NEG:SENS-PROP-can	LNK rest:FACT-1PL	HORT
19854	‘Brother, we are so tired, hungry and thirsty that we can (go any 19855 further), let us rest!’ (qachGa2012, 141)		

19856 The meaning of the abstract nouns in (209) is very similar to that of degree
 19857 nominals (§16.3.4) combined with the ergative in examples such as (210).

¹⁴ In the case of *txyŋm* ‘pain’ it is possible that the verb *mjym* ‘hurt’ derives from the noun with the irregular allomorph of a denominal prefix, which could be either *y-* (§20.5) or *mr-* (§20.6). Note also the existence of the compound noun *tuxtryŋm* ‘dysentery’ from the *status constructus* of *tu-xtu* ‘belly’ with the root *-ŋym*.

- 19858 (210) *maka u-tur-mtsur* *kua ky-ŋke mui-pŋr-c^ha*
 at.all 3SG.POSS-NMLZ:DEG-hungry ERG INF-go NEG-IFR-can
 19859 ‘It was so hungry that it could not walk anymore.’ (140515 huli he
 19860 yelv-zh, 41)

19861 Abstract nouns in *tr-* are also attested without ergative to express the state or
 19862 condition described by the adjective, for instance *tr-mtsur* ‘hunger’ from *mtsur*
 19863 ‘be hungry’, as in (211) and (212). Note in both example the possibility of adding
 19864 a possessive prefix on the noun.

- 19865 (211) *a-tr-mtsur* *nura ci a-nui-suy-zí*
 1SG.POSS-NMLZ:ABSTRACT-be.hungry DEM:PL a.little IRR-PFV-CAUS-ease
 19866 *nua-ra*
 SENS-be.needed
 19867 ‘Let’s (catch the mouse) to ease my hunger.’ (140518 mao he laoshu-zh,
 19868 19)

- 19869 (212) *nuiu ɔɔɔɔɔ u-taŋ* *pua-ky-rxt* *qajyi nua kua*
 DEM paper 3SG.POSS-on AOR-OBJ:PCP-write bread DEM ERG
 19870 *tua-tr-mtsur* *nua-yx-p^hyn*
 GENR.POSS-NMLZ:ABSTRACT-be.hungry IPFV-CAUS-be.efficient
 19871 *my-c^ha*
 NEG-can:FACT
 19872 ‘Bread drawn on a piece of paper cannot ease one’s hunger.’ (160718
 19873 huabingchongji-zh, 35)

19874 In addition, we find abstract alienably possessed nouns in *tr-* expressing an
 19875 abstract state, but which are not synchronically derived from a verb, and whose
 19876 corresponding verbs are denominal. Table 16.5 presents some examples.

19877 The relator noun *u-trjui* ‘addition’, which is essentially attested as an incre-
 19878 mental addition linker (‘in addition to X’, §25.6.2.3) is a trace of the abstract
 19879 noun from which the denominal verb *yxju* ‘add’ was built (§20.5.2).

19880 These nouns possibly derive from base verbs which disappeared and were re-
 19881 placed by the corresponding denominal verbs.

19882 The noun *trk^he* ‘idiot, fool’ deriving from *k^he* ‘be stupid’ formally resembles
 19883 an abstract noun, but semantically differs from the other nouns in this category;
 19884 it is possibly an alienabilized form of the property noun *u-k^he* ‘nasty’ (§5.1.2.7,
 19885 §16.4.6).

Table 16.5: Abstract nouns not derived from verbs

Abstract noun	Denominal Verb	
<i>tyndzo</i> ‘cold’	<i>nyndzo</i> ‘be cold’	vs.
<i>trscyr</i> ‘being startled’	<i>nyscyr</i> ‘be startled’	vi.
<i>tzrzas</i> ‘shame’	<i>nyrzas</i> ‘feel shame, be embarrassed’	vi.
<i>trmqe</i> ‘scolding’	<i>nyrmqe</i> ‘scold’	vt.
<i>trndut</i> ‘quarrel, dispute (n)’	<i>nyndut</i> ‘dispute’	vt.

16.4.3 Simultaneous

The simultaneous action nominal is built by prefixing an additional *tu-* to the base form of the action nominal, resulting in a double *tu-tu-* prefixed form. It is found in collocation with the verb *βzu* ‘make’ (§22.4.2), and optionally with the comitative *c^ho* (§8.2.5), linking two noun phrases referring to the entities undergoing the action together as in (213).

- (213) *tx-wa nuu kuu uu-tcuu c^ho uu-me ni*
 INDEF.POSS-father DEM ERG 3SG.POSS-son COMIT 3SG.POSS-daughter du
внавна zo tuu-tuu-rqob ko-βzu.
 both EMPH SIMULT-NMLZ:ACTION-hug IFR-make
 ‘The father hugged both his son and his daughter at the same time.’
 (140427 xiong he mei-zh, 22)

In this construction, the orientation preverb on *βzu* ‘make’ is the one that is lexically selected by the verb in simultaneous action nominal form (EASTWARDS in 213, reflecting the centripetal function of this orientation, §15.1.4.3). With orientable verbs (§15.1.2), the unspecified orientation *ja-* can be selected (214).

- (214) *zyni tui-tui-ce ja-βzu-ndzi*
 3DU SIMULT-NMLZ:ACTION-go AOR:3→3'-make-DU
 ‘They went at the same time.’ (elicited)

Example (214) also illustrates the fact that, when the verb in simultaneous action nominal form is intransitive, the shared subject (here *zyni*) is in absolute form, even though *βzu* is transitive. This type of construction is described in more detail in §24.4.3.2.

The first *tu-* prefix in the simultaneous construction is probably from the numeral *tu-* ‘one’ prefix (§7.3.1.1), added to a *tu-* action nominal. With intransitive

19908 verbs, the dental infinitives in *tu-* (with a possessive prefix coreferent with the
 19909 subject) also occur to express simultaneous actions in collocation with the light
 19910 verb *supa* ‘cause to do’, as shown by (118) in §16.2.2.1. The action nominal simultaneous
 19911 construction differs however from the dental/bare infinitive simultaneous
 19912 construction in that in the former the action of the same verb applies to different
 19913 subject/objects, while in the latter the same subject performs actions expressed
 19914 by different verbs.

19915 16.4.4 Denominalization of action nominals

19916 Some *tu-* action nominals can serve as base for denominal derivation in *nu-* or
 19917 *ru-* (§20.4.3), resulting in a verb with a double derivation *nu-tu-* or *ru-tu-*. This
 19918 category is highly heterogeneous, and unlike voice derivations originating from
 19919 denominal prefixes, has not developed a consistent meaning and grammatical
 19920 function.

19921 In some cases, the meaning of the (doubly) derived verb is predictable from the
 19922 base verb, but the two verbs differ in their argument structure. For instance, in
 19923 *fçrl* ‘have diarrhea’ → *tufçrl* ‘diarrhea’ → *nutufçrl* ‘have diarrhea’. In this par-
 19924 ticular case, the base verb (from Tibetan *bçal* ‘diarrhea’) and the doubly derived
 19925 verb *nutufçrl* ‘have diarrhea’ are both intransitive verbs, but differ in that the
 19926 former select a body part as subject (the person being indicated by a possessive
 19927 prefix), while the latter selects the person suffering the disease.

- 19928 (215) *a-xtu nuu-fçyl*
 1SG.POSS-belly SENS-have.diarrhea
- 19929 (216) *nuu-nutufçal-a*
 SENS-have.diarrhea-1SG
 19930 ‘I have diarrhea.’ (elicited)

19931 Note that a collocation with *βzu* ‘make’ is also attested with the action nominal
 19932 *tufçrl* ‘diarrhea’ (as in §24.4.3.1), but the experiencer is encoded as a possessive
 19933 prefix on that noun, as *nuu-tu-fçrl* in (217). Given the parallelism between denom-
 19934 inal derivations and noun-light verb collocations (§22.4.2.1), it is possible that the
 19935 denominal verb *nutufçrl* ‘have diarrhea’ came into existence as the verbalized
 19936 form of this collocation.

- 19937 (217) *nvrŋi nuara, nuu-tu-fçyl ci*
 infant DEM:PL 3PL.POSS-NMLZ:ACTION-have.diarrhea INDEF

19938	<i>nur-βze</i>	<i>ŋgrvl</i>	<i>tce</i>
SENS-make[III] be.usually.the.case:FACT LNK			
19939	'Infants, they often suffer from diarrhea.' (17-xCAj, 112)		

19940 In other cases, the doubly derived verb may have a much more restricted mean-
 19941 ing than the base verb, especially when the action nominal on which it is based
 19942 is more lexicalized (§16.4.5).

19943 For instance, the noun *tusqa* ‘wheat gruel’ derived from the transitive verb *sqa*
 19944 ‘cook’ is denominalized as the intransitive *rutusqa* ‘have wheat gruel’ (§20.4.1),
 19945 whose semantic relationship with the base verb is more remote.

19946 This category is difficult to distinguish from denominal verbs from bare action
 19947 nominals (§16.4.6) taking an indefinite possessor prefix *tu-*. For instance, the
 19948 transitive verb *tcʰuu* ‘gore, stab, pierce’ can be used in a light verb construction in
 19949 *lxt* ‘throw, release’ in bare infinitive form, as in (218).

19950	(218) <i>u-tcʰuu</i>	<i>to-lxt</i>
3SG.POSS-BARE.INF:gore IFR-throw		
19951	'He stabbed him.' (elicited)	

19952 The denominal verb *nuututcʰuu* ‘stab’ (attested in 219) is most probably derived
 19953 from the indefinite form *tuu-tcʰuu* of the bare infinitive in the construction in (218),
 19954 though it is also conceivable that this form comes from the action nominal.

19955	(219) <i>to-nuututcʰuu tce pjy-sat</i>	
IFR-stab LNK IFR-kill		
19956	'She stabbed him and killed him.' (140512 alibaba, 300)	

16.4.5 Lexicalized action nominals

19958 Action nominals in *tu-* are prone to lexicalization, developing meanings that are
 19959 unpredictable from the base verb.

19960 Action nominals from verbs related to preparation or ingestion of food can
 19961 become names of specific types of food. For instance, *tusqa* ‘wheat gruel’ and
 19962 *tutsʰi* ‘rice gruel’ originate from the transitive verbs *sqa* ‘cook’ and *tsʰi* ‘drink’,
 19963 though the synchronic link between these nouns and the base verbs has ceased
 19964 to be completely obvious. Other cases of unpredictable meanings are found with
 19965 *tupu* ‘moxibustion’ (with the verb *ta* ‘put’ §22.4.2.6, as in 220), which derives
 19966 from *pu* ‘cook’ (especially of potatoes in hot ashes, but is not used in reference
 19967 to moxibustion).

- 19968 (220) *tupu* *ku-ta-nuu* *tce, tv-pytso* *yuu* *w-laz*
 moxibustion IPFV-put-PL LNK INDEF.POSS-child GEN 3SG.POSS-forehead
 19969 *ci* *ku-ta-nuu,*
 one IPFV-put-PL
 19970 '(To treat this disease), they apply moxibustion, they apply one on the
 19971 forehead of the child.' (25-kACAI, 71)

19972 In some cases, the action noun has a highly restricted meaning in compar-
 19973 ison with the base verb, limited to one particular sub-meaning. For instance,
 19974 the noun *tupyaš* 'land clearing' (221) (used in collocation with *tcxt* 'take out',
 19975 §22.4.2.3) derives from the transitive verb *pyaš* 'turn over', which has the mean-
 19976 ing 'plough' when occurring with the orientation preverb UPSTREAM (see exam-
 19977 ple 135 in §18.6.3). This noun lacks the basic meaning of the base verb and its
 19978 additional extended meanings (such as 'go across (a mountain)', like Chinese 翻
 19979 山 <fānshān> 'cross a mountain'). The antipassive *rɔpyaš* 'clear fields' has the
 19980 same meaning restriction as the action noun, an observation whose significance
 19981 is developed in §20.10.1.2.

- 19982 (221) *tupyaš* *lo-tcxt-ndzi*
 field.clearing IFR:UPSTREAM-take.out-DU
 19983 'They cleared fields.' (07-deluge, 113)

19984 The divergence in meaning between the action nominal and the base verb can
 19985 also be due to semantic innovation in the verb. For instance, the verb *rma* means
 19986 in Japhug 'to stay at someone else's place (for a few nights)', as in (222), but the
 19987 action nominal *turma* 'household' (223), suggesting that the original meaning
 19988 of the verb used to be 'live' and became more restricted semantically, while the
 19989 derived noun preserved its original meaning.

- 19990 (222) *syndzun <laoshi> w-cki* *ri* *k̥-ari-a* *tce, tu-rzaš*
 ANTHR teacher 3SG.POSS-DAT LOC AOR-go[II]-1SG LNK ONE-night
 19991 *c-pur-nuu-rma-a*
 TRAL-AOR-AUTO-stay.at-1SG
 19992 'I went to Sandzin's (house), and stayed there for one night.'
 19993 (conversation 160811)
 19994 (223) *kʰa* *ra cʰy-fkaβ-ndzi qʰe turma* *ko-ndo-ndzi*
 house PL IFR-COVER-DU LNK household IFR-take-DU
 19995 'They built a house and established a family.' (02-deluge 2012, 131)

19996 Note the barely translatable use of the action nominals *turma* and *tuβlu* (the
19997 latter from the transitive verb *βlu* ‘burn’) in the expression used as the conclusion
19998 of most traditional stories in (224).

There are cases where an alienably possessed noun in *tu-* lacks a corresponding base verb; for instance, no verb **qartsu* ‘kick’ is attested besides the noun *tuqartsu* ‘kick (n)’, which is used with *lxt* ‘throw, release’ as in (225) (note that the *tu-* prefix here is neither the indefinite possessor nor the numeral ‘one’ prefixes). The only related verb is the denominal labile verb *suqartsu* ‘kick’ (used only for animals, kicking with the rear limbs), which comes from the action nominal *tuqartsu* ‘kick’ (n) (§20.3.2).

- 20010 (225) *wu-rqo nutcu tuqartsui tʰa-lxt pua-ŋu*
 3SG.POSS-throat DEM:LOC kick AOR:3→3'-throw SENS-be
 20011 ‘He kicked her throat.’ (Norbzang 2012, 292)

In this case, it is most likely that the base verb **qartsuu* ‘kick’ did exist at some stage but was lost, only leaving derived words.

20014 16.4.6 Inalienably possessed bare action nominals

20015 Bare action nominals lack any nominalization affix. They are inalienably pos-
20016 sessed (§5.1.2), and take the indefinite possessor prefixes *tu-* or *tr-*, very similar
20017 in function to the *tu-* action nominals and in form to the bare infinitives (§16.2.2).

They can refer to the action itself, as in *tu-suso* ‘thought’ from the transitive verb *suso* ‘think’ or the way an action is performed, as *u-ti* ‘way of saying’, ‘wording’, ‘expression’ from *ti* ‘say’. They can also be concrete nouns (Table 16.6). In the case of transitive verb, these nouns refer to an instrument used to perform the action, or resulting from the action (*tr-ts^hor* ‘nail’ from *ts^hor* ‘attach’, on which see §18.5.3). In the case of intransitive verbs, bare action nominals can refer to an object having a property described by the verb (for instance *tr-ro* ‘surplus,

16 Non-finite verbal morphology

20025 leftover' from *ro* 'be in surplus, be protruding'). Note the presence of a borrowing
 20026 from Tibetan among these verbs (*fkaβ* 'cover' from ས୍ପାଶ *bkab* 'cover (past)'),
 20027 showing the productivity of this type of derivation.

Table 16.6: Bare action nominals designating concrete objects

Noun	Base verb
<i>tr-ro</i> 'surplus, leftover'	<i>ro</i> 'be in surplus, be protruding'
<i>tr-fkaβ</i> 'lid'	<i>fkaβ</i> 'cover'
<i>tr-çpʰyt</i> 'patch' (n)	<i>çpʰyt</i> 'patch'(vt)
<i>tr-tsʰor</i> 'nail'	<i>tsʰor</i> 'attach' (or 'plant')

20028 For some examples, the semantic relationship between the bare action nominal
 20029 and the base verb is not transparent anymore; for instance, *tuu-ŋyoz* 'helper'
 20030 apparently derives from *ŋyoz* 'glue, paste' (possibly through the sense '(person)
 20031 attached to oneself').

20032 Some property nouns, which are derived from adjectival stative verbs (§5.1.2.7)
 20033 without nominalization *x-/y-* prefix (§16.5.2), are also bare action nominals. Ta-
 20034 ble 16.7 presents a list of these property nouns and their respective base verbs
 20035 (among which *maj* 'be many' is borrowed from 玛尼 *maj* '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>wu-do</i> 'old thing'	<i>do</i> 'be old (of plants)'
<i>wu-kʰe</i> 'nasty'	<i>kʰe</i> 'be stupid'
<i>wu-maj</i> 'in big groups'	<i>maj</i> 'be many'

20036 Intransitive verbs in *a-* are correlated with inalienably possessed action nomi-
 20037 nals with the *tr-* indefinite possessor prefix, for instance *açqʰe* 'cough' (vi) and
 20038 *tr-çqʰe* 'cough' (n). Two hypotheses can be proposed to account for such pairs.

20039 First, one can argue that the base forms are the verbs, and that the inalienably
 20040 possessed noun are derived from them; in this view the *a-* element is absorbed
 20041 the possessive prefixes, and leaves no trace in the possessive paradigm: the
 20042 2SG and 2PL of *tr-çqʰe* 'cough' are *ntr-çqʰe* 'your_{SG} cough' (226) *nu-çqʰe* 'your_{PL}

²⁰⁰⁴³ cough', whereas one would have expected these two forms to have become homophonous due to vowel fusion (2PL *†nu-ṛcq^he* realized as /nṛcq^he/ like the 2SG, §5.1.1.1, §12.3).

Second, it is also possible that *açq^he* ‘cough’ (vi) (and other verbs of the same type) derives from *tr-çq^he* ‘cough’ by the *a-* denominational prefix (§20.2.1).

- 20048 (226) *nɣ-cq^he uβrɣ-yɣzu?*
 2SG.POSS-cough RH.Q-exist:SENS
 20049 ‘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

- | | | |
|-------|-------|--|
| 20053 | (227) | <i>wu-ti tci mu-pjy-naχtcuwy</i> ,
3SG.POSS-expression also NEG-PST.IPFV-be.the.same |
| 20054 | | <i>wu-tur-su-γzirja kurny mu-pjy-naχtcuwy</i>
3SG.POSS-NMLZ:ACTION-CAUS-be.aligned also NEG-PST.IPFV-be.the.same |
| 20055 | | <i>ma,</i>
LNK |
| 20056 | | ‘The words for (father and mother) were different (between common and honorific register), and the respective orders (in which ‘mother’ and ‘father’ appear) were also different.’ (160706 apa ama, 7-8) |
| 20057 | | |
| 20058 | | |

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 *tv-rmi* ‘noun’ and *tv-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).

20066 Formally irregular bare action nominals are rare. The inalienably possessed
20067 noun *tu-nja* ‘debt’ derives from the transitive verb *ŋa* ‘buy on credit, owe’, which
20068 takes as object the amount of money owed (§20.10.1). The stem of the noun has an
20069 additional *n-* prefix, which may reflect a reduced allomorph **t-* of the *tu-* action
20070 nominal prefix, with further automatic nasalization to *n-* before nasal consonant
20071 ([Jacques 2014b](#)).

¹⁵ This sentence is a metalinguistic comment on the phenomenon described in §9.2.2.2, examples (183) and (182).

20072 Bare action nominals are restricted to a few verbs. However, it is likely that
 20073 they were more common at an earlier stage, as suggested by the existence of
 20074 bare infinitives (§16.2.2) and by the development of voice derivations from the
 20075 reanalysis of denominal prefixes (§20.10).

20076 In some cases, the direction of derivation between inalienably possessed noun
 20077 and verb deserves a more detailed discussion. The noun *tu-ŋgo* ‘disease’ could
 20078 be analyzed as deriving from the verb *ŋgo* ‘be ill’, but it is preferable to suppose
 20079 that the noun is primary, and that the verb takes an irregular allomorph of the
 20080 denominal *nu-* prefix (§20.7.1).

20081 We also find inalienably possessed nouns without a corresponding base verb,
 20082 but which may originate from bare action nouns of lost base verbs. For instance
 20083 *tr-re* ‘laugh (n)’ is a noun expressing an action, but whose *tr-* is an indefinite
 20084 possessor prefix and not the action or abstract noun prefix, as shown by (228)
 20085 where it is replaced by the 3SG possessive *w-* prefix.

20086	(228)	<i>wi-re</i>	<i>ci</i>	<i>cmuy</i>	<i>jv-clury</i>
		3SG.POSS-laugh	INDEF	IDPH(I):laugh.suddenly	IFR-drop
20087	‘She suddenly let a laugh escape.’ (2002 qaCpa, 100)				

20088 The verbs related to *tr-re* ‘laugh (n)’, the adjectival stative verb *sre* ‘be ridiculous’
 20089 and the labile verb *nre* ‘laugh’ (§14.5.1), are both denominal and derive
 20090 from it. However, comparative evidence suggests that this noun itself derives at
 20091 an earlier stage from a verb, which was replaced by denominal verbs in Japhug.

20092 16.4.7 Action nominal compounds

20093 Action nominal compounds, like bare action nominals (§16.4.6), lack any nominalization
 20094 affixes. Unlike other noun-verb compounds such as actor nominal compounds, which are rare and sporadic (§5.5.2), action nominal compounds are a
 20095 well-identified grammatical category. As with other compound nouns, the first
 20096 element (the nominal root) is nearly¹⁶ always in *status constructus* form (§5.4).
 20097 For instance, the action nominal *cʰytsʰi* ‘alcohol drinking’ is built from the noun
 20098 *cʰa* ‘alcohol’ (with regular vowel alternation to *cʰy-*) and the transitive verb *tsʰi*
 20099 ‘drink’. When the incorporated noun is originally inalienably possessed, the in-
 20100 definite possessor prefix (§5.1.2.1) is removed, as in *ylutçrt* ‘removing dung out
 20101 of the stable’ (to be used as fertilized) from *tuu-yli* ‘dung’ and *tçrt* ‘take out’.

¹⁶ Vowel 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.

20103 The nominal element generally corresponds to the object of the verb as in
 20104 *cʰytsʰi* or *ylutçṛt* (§5.5.5.2). There are however also cases of goal or adjunct being
 20105 incorporated, as in *qʰaru* ‘look back’ from *w-qʰu* ‘after, back’ (*status constructus*
 20106 *qʰa-*) with the intransitive verb *ru* ‘look at’ (§14.2.4) and *kṛtçʰu* ‘headbutt’ from
 20107 the inalienably possessed noun *tu-ku* ‘head’ (*status constructus kṛ-*) and the verb
 20108 *tçʰu* ‘gore’ (§5.5.5.3).

20109 These nouns mainly occur with light verbs such as *lxt* ‘release’ (§22.4.2.2) or
 20110 *βzu* ‘make’ (§22.4.2.1) as in (229), but are also found in other constructions as in
 20111 (230), where a free object *cʰa* ‘alcohol’ with the bare infinitive *w-tsʰi* can also be
 20112 used (see §17.3.2.2). It is thus likely that the action nominal compounds originate
 20113 (at least in part) from the coalescence of nouns with bare infinitives.

- 20114 (229) *wzo nuu tatpa ta-ta ma qʰaru mucin zo*
 3SG DEM faith AOR:3→3'-put LNK look.back at.all EMPH
 20115 *mui-pa-lxt ny ty-ari jnu-ŋu.*
 NEG-AOR:3→3':DOWN-release LNK AOR:UP-go[II] SENS-be
 20116 ‘He had faith, did not look back (downwards) at all and (succeeded in)
 20117 going up to (the abode of the gods). (Norbzang, 129)
- 20118 (230) *cʰytsʰi ko-yx-tcʰom tce*
 alcohol.drinking IFR-CAUS-be.too.much LNK
 20119 ‘He had drunk too much alcohol.’ (150829 jidian-zh, 16)

20120 Compounds with *rpu* ‘bump into’ or *tçʰu* ‘gore’ as second element can be built
 20121 productively with the meaning ‘hit with *X*’ and ‘stab with *X*’ in collocation
 20122 with *lxt* ‘release’, *X* corresponding to the first element of the compound. For
 20123 instance, in (231) we find the nonce formation *bzyn-rpu* ‘hitting with a monastic
 20124 robe’, whose first element *bzyn* ‘monastic robe’ comes from Tibetan དྱନ གྙାൻ
 20125 ‘monastic robe’, a rather incongruous action which cannot possibly have been
 20126 lexicalized.

- 20127 (231) *w-βyo nuu puu-ari ny, bzyn-rpu bja zo*
 3SG.POSS-FB DEM AOR:DOWN-go[II] ADD robe-bump completely EMPH
 20128 *c-ta-lxt jnu-ŋu.*
 TRAL-AOR:3→3' SENS-be
 20129 ‘(As he_i fell down the throat of the giant snake_j) his lama_k went down
 20130 (to the place where the snake was) and hit it_j repeatedly with his_k
 20131 monastic robe (to force it_j to spit him_i out).’ (2003 kandZislama, 69)

20132 The patient of the hitting action, if overt, is marked with the relator *u-taš*
 20133 ‘on, above’ (§8.3.4.3) as in (232), with the compound *brurpu* ‘hitting with horns’
 20134 (sideways, not goring) from *ta-šru* ‘horn’.

- 20135 (232) *jla kuu a-taš brui-rpu ta-lst*
 hybrid.yak ERG 1SG-on horn-bump AOR:3→3'-throw
 20136 ‘The hybrid yak hit me with his horn.’ (elicited)

20137 In addition, we find action nominal compounds whose incorporated noun ex-
 20138 presses the manner of the action, rather than the object, the goal or the instru-
 20139 ment as in the previous cases.

20140 First, the noun *kʰramba* ‘lie’ can be compounded (without vowel alternation)
 20141 with transitive or intransitive verbs, for instance with the verb *tsʰi* ‘drink’ as *kʰramba-*
 20142 *tsʰi* in (233). These nouns, in collocation with *βzu* (§22.4.2.1, have the meaning
 20143 ‘pretend to *X*’. Note that the compounding with *kʰramba* does not saturate the
 20144 object position, and has no antipassivization effect: the object *cʰa* ‘alcohol’ is
 20145 overt in (233).

- 20146 (233) *zara kuu [cʰa nu] kʰramba-tsʰi] ka-βzu-nu*
 3PL ERG alcohol DEM lie-drink AOR:3→3'-make-PL
 20147 ‘They pretended to drink alcohol.’ (Norbzang 2005, 100)

20148 Second, the lexicalized participle *kuzya* ‘a long time’ can be compounded with
 20149 a verb root as *kuzyr-* (here with vowel alternation). These compounds also occur
 20150 with light verb *βzu*, and the collocation means ‘do *X* for a long time’ as in (234).

- 20151 (234) *kuzyr-car zo jy-βzu-nu*
 long.time-search EMPH IFR-make-PL
 20152 ‘They searched for it for a long time.’ (elicited)

20153 In these constructions, the verb *βzu* ‘make’ takes the person indexation of sub-
 20154 ject and object (§24.3.5), as well as the orientation preverbs selected by the verb
 20155 in the compound, for instance EASTWARDS like *tsʰi* ‘drink’ in (233) and WEST-
 20156 WARDS like *car* ‘search’ in (234). Additional examples of these constructions are
 20157 discussed in §24.4.3.3 (see also Jacques 2016a: 252).

20158 Some action nominal compounds can serve as basis for incorporating denom-
 20159 ininal verbs. The incorporated object sometimes saturates the object function, and
 20160 the resulting incorporating verbs are intransitive, as in the case of *yucʰrtsʰi* ‘drink
 20161 alcohol’ or *yuylhutçyt* ‘remove dung out of stable’ from *cʰrtsʰi* ‘alcohol drinking’
 20162 and *ylhutçyt* ‘removing dung out of the stable’, respectively. In the case of *brurpu*

‘hitting with horns’ however, the resulting verb *nubruurpu* ‘hit with horns’ is transitive, the oblique argument marked with *uu-taš* ‘on, above’ in the construction in (232) being promoted to direct object status. It is not possible to derive a denominal verb from all of the Noun+*rpu* or Noun+*tčʰu* compounds.

A complete list of incorporating denominal verbs and the corresponding action nominal compounds is provided in §20.13. There are also action nominals built by compounding two verb roots (§5.5.2.1), which serve as the basis for compound verbs by way of denominal derivation (§20.12).

16.5 Other deverbal nouns

This section present vestigial nominalization affixes, which despite of their rarity are however important for historical linguistics: the *-z* suffix and the *x/y-* prefix.

16.5.1 Nominalization *-z* suffix

Japhug has five inalienably possessed nouns derived from verbs by means of a nominalizing *-z*¹⁷ (Table 16.8), three of which take the indefinite possessor prefix *tr-* (§5.1.2.1).¹⁸

Table 16.8: Traces of the nominalization *-z* suffix in Japhug

Noun	Base verb
<i>tr-rkuz</i> ‘parting present’	<i>rku</i> ‘put in’
<i>tr-scoz</i> ‘letter, writing’	<i>sco</i> ‘see off, accompany’
<i>uu-mnoz</i> ‘preparation’	<i>mno</i> ‘prepare’
<i>uu-ɛjiz</i> ‘wish’	<i>ɛjɪt</i> ‘think of’
<i>tr-rkoz</i> ‘special’, ‘on purpose’	<i>rko</i> ‘be hard’

The first two nouns *tr-rkuz* ‘parting present’ and *tr-scoz* ‘letter, writing’¹⁹ are object nominalizations. The former *tr-rkuz* ‘parting present’ is biactantial pos-

¹⁷ The *-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).

¹⁸ Nouns in *-z* such as *tr-rtsuz* ‘number’ cannot be counted as a Japhug-internal derivation from *rtsi* ‘count’: both the noun and the verb come from Tibetan, respectively from 計 *rtṣi* ‘calculation’ and 算 *rtṣi* ‘calculate’ (Nathan W. Hill 2014b).

¹⁹ This noun is possibly borrowed from Situ (Jacques 2003).

20180 sessed noun, whose possessor corresponds to the recipient (§5.1.2.13). The ety-
 20181 mological relationship between *tr-rkuz* and *rku* ‘put in’ is obvious when the use
 20182 of this verb in the sense of ‘give as a present to take away’ (put in someone’s
 20183 luggage) is considered, as in (235).

- 20184 (235) *tce tó-wy-z-rrŋat* *tce, tcendyre numuu kuu, icqʰa nuu,*
 LNK IFR-INV-CAUS-prepare.to.leave LNK LNK DEM ERG FILLER DEM
 20185 *tuu-ci* *tur-tr-ste* *to-rku.* *tce 'kuuki*
 INDEF.POSS-water ONE-INDEF.POSS-bladder IFR-put.in LNK DEM.PROX
 20186 *ny-rkuz* *ŋu'* *to-ti.*
 2SG.POSS-present be:FACT IFR-say

20187 ‘He prepared his departure, and gave him a bladder full of water to take
 20188 with him, and said ‘this is your departing present’. (28-smAnmi.txt,
 20189 264–265)

20190 The verb *rku* ‘put in’ can even occur with its derived noun *tr-rkuz* ‘parting
 20191 present’ in the *figura etymologica* construction in (236) (the verb *βzu* ‘make’ can
 20192 alternatively be used instead of *rku* ‘put in’).

- 20193 (236) *a-me* *kuu a-rkuz* *rŋul ta-rku*
 1SG.POSS-daughter ERG 1SG.POSS-present money AOR:3→3'-put.in
 20194 ‘My daughter gave me some money (as present for my departure)
 20195 (elicited)

20196 The other nominalizations in -z are all abstract nouns. The form *w-ŋjiz*, which
 20197 derives from the transitive verb *ŋjit* ‘think of’, ‘miss’, ‘remember’, results from
 20198 the simplification of a complex coda *-ts to -z. This noun only occurs in collo-
 20199 cation with motion verbs, and is preceded by a finite or infinitive complement
 20200 clause (§24.6.3.3). The whole construction has the meaning ‘want to X’, where
 20201 X refers to the content of the complement clause; the experiencer is encoded by
 20202 the possessive prefix on *w-ŋjiz*, as illustrated by (237).

- 20203 (237) *tce azo nwtcu kŋ-ce a-ŋjiz* *múj-yi* *tce*
 LNK 1SG DEM:LOC INF-go 1SG.POSS-want NEG:SENS-come LNK
 20204 ‘I don’t want to go there.’ (150909 hua pi-zh, 22)

20205 The noun *w-mnoz* ‘preparation’ is also only attested in a collocation (with the
 20206 verb *βzu* ‘make’ as in 238). The transitive verb *mno* ‘prepare’ from which it derives
 20207 is itself the irregular causative of *no* ‘be prepared’ (§17.3.1). A -z-less bare action
 20208 nominal *w-mno* ‘preparation’ (§16.4.6) is also attested.

- 20209 (238) *pjuw-njø* *cunŋguw tce* *w-mpoz* *tú-wy-βzu*
 IPFV-be.damaged before LNK 3SG.POSS-preparation IPFV-INV-make
- 20210 *ra*
 be.needed:FACT
- 20211 ‘One has to take preparations before it gets damaged.’ (elicited)

20212 The property noun *w-rkoz* ‘special’ (239), probably derived from *rko* ‘hard’,²⁰
 20213 is used adverbially (with the 3sg or the indefinite possessor prefix) as *tx-rkoz*
 20214 ‘specially’, ‘on purpose’. This meaning is however frequently expressed by the
 20215 borrowing 专门 <zhuānmén> ‘specially, on purpose’).

- 20216 (239) *w-rmi* *w-rkoz* *me.*
 20217 3SG.POSS-name 3SG.POSS-special not.exist:FACT
 20218 ‘There is no specific name (for this type of kinship relationship).’ (140425
 kWmdza06, 149)

20219 16.5.2 Nominalization *y-/x-* prefix

20220 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 initial consonant of the stem since the voicing contrast is neutralized in preinitial position (§4.2.1.7). These nouns are lexicalized ancient subject participles (§16.1.1, §16.8.1) which underwent the same phonological change as that observed with the velar animal class prefix (§5.6.2), that has a syllabic allomorph *kwu-* and reduced allomorphs *y-* or *x-*.

20227 The reduced *y- / x-* prefix only derives nouns from intransitive verbs with monosyllabic stems, without consonant clusters. Some of the nouns in Table 16.9 have cognates in other Rgyalrong languages with reduced prefixes. For instance, *yndzrβ* has an exact cognate in Tshobdun: *y"dzov* ‘fire’ (Sun & Blogros 2019: 214).
 20229 The noun *w-yŋju* has two corresponding forms in Tshobdun: *-β"jú?* ‘window’ (Sun & Blogros 2019: 609) with a reduced uvularized prefix, and *kə"ju?* ‘hole’ (Sun & Blogros 2019: 374) with a non-reduced prefix.

²⁰ This 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.

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’	

20234 The noun *tuu-xpa* ‘one year’, although derived from the verb *pa* ‘pass X years’
 20235 and having an additional *x*-element, does not belong to this category, see §7.3.1.7
 20236 and §7.3.4.3.

20237 The noun *tuu-yṇi* ‘friend, ally’ also belongs to this category, though the base
 20238 verb does not exist in Japhug. It is a near-exact cognate of Tibetan ལྷན གྙେ ‘friend, relative’, a noun derived from the adjective སྱନྼ ‘near’.
 20239

20240 16.6 Converbs

20241 This section discusses several non-finite verb forms which exclusively occur in
 20242 subordinate clauses other than relative and complement clauses. Other verb
 20243 forms which might be labeled as converbs, in particular some uses of the velar
 20244 infinitive, are treated in previous sections (§16.2.1.7).

20245 16.6.1 Gerund

20246 The gerund is built by prefixing *sṛ-* or *sṛz-* to the verb stem with partial reduplica-
 20247 tion of the final syllable. It clearly derives from the oblique participle (§16.1.3,
 20248 §16.8.2), but differs from the latter by the impossibility of adding orientation or
 20249 possessive prefixes, by the obligatory reduplication, and by the absence of the
 20250 allomorphs *z-* and *sṛy-*.

20251 Given the fact that the gerund is marked by both the prefix *sṛ-/sṛz-* and the
 20252 reduplication, I only gloss GER under the prefix, and leave the reduplication un-
 20253 glossed; for instance in (240) *sṛ-rgu~rga* is glossed GER-be.happy instead of the
 20254 more explicit but burdensome GER-GER~be.happy.

- 20255 (240) [sṛ-rgu~rga] *kua jo-nu-ce*
 GER-be.happy ERG IFR-VERT-go
 20256 ‘He went back home happy.’ (140516 yiguan ganlan-zh, 141)

20257 This section reviews the morphology of the gerund (§16.6.1.1), §16.6.1.2), then
 20258 discusses the syntactic properties of gerundive clauses and their meaning (§16.6.1.3),
 20259 and finally presents some cases of lexicalized gerunds (§16.6.1.4).

20260 16.6.1.1 Allomorphy

20261 The distribution of the *syr*- and *syz*- allomorphs is illustrated in Table 16.10. The *syz*-
 20262 allomorph of the gerund prefix is found when the verb stem contains a sonorant
 20263 initial syllabic prefix (like *nu/y-*, *ru/rγ-*, *yuu-/yγ-* etc), while the *syr*- allomorph
 20264 appears in all other contexts, in particular with monosyllabic stems. Verbs with
 20265 a stem in *a*- undergo vowel merger *syr-y-* to /syr-/ as in *symdzudzuu* ‘sitting’ from
 20266 *amdzuu* ‘?’. The *syr*- allomorph can also optionally be used in all contexts.

Table 16.10: Examples of gerunds

Base verb	Gerund
<i>tu</i> ‘exist’	<i>syr-tu~tu</i>
<i>mu</i> ‘fear’	<i>syr-mu~mu</i>
<i>rŋguu</i> ‘lie down’	<i>syr-rŋguu~rŋguu</i>
<i>amdzuu</i> ‘sit’	<i>syr-symdzuu~mdzuu</i>
<i>n̥re</i> ‘laugh’	<i>syz-n̥ruu~re</i>
<i>n̥rte</i> ‘wear (head cover)’	<i>syz-n̥rtuu~ rte</i>
<i>y̥wu</i> ‘cry’	<i>syz-y̥wuu~wu</i>

20267 Verbs whose stem already contains a reduplication are not triplicated. For in-
 20268 stance, the gerund of *nuqambumbjom* is *syr(z)-nuqambumbjom*, not the impossible
 20269 form †*syr(z)-nuqambumbumbjom*.

20270 As in other reduplicated forms (§4.1), partial reduplication in the gerund dis-
 20271 regards morpheme boundaries. In (241), the allomorph *nuy-* of the applicative
 20272 has a coda /-y-/ (§17.2.1.4, §17.4.2) which resyllabifies and becomes the preinitial
 20273 of the next syllable of the verb stem; as such it undergoes partial reduplication,
 20274 resulting in *syznuymuymu* rather than the incorrect form †*syznuymumu*.

- 20275 (241) *tce [syz-nuy-mui~ymu] zo ku-χse jnu-ra.*
 LNK GER-APPL-fear EMPH IPFV-feed[III] SENS-be.needed
 20276 ‘It_i has to feed it_i while being afraid of it._i’ (24-ZmbrWpGa, 110)

20277 Some lexicalized gerunds have slightly irregular forms (§16.6.1.4), but other-
 20278 wise gerund formation is very regular. However, there are traces of the *sry/x-*

20279 allomorph remaining as alternative gerund forms of some verbs. For instance,
 20280 the intransitive motion verb *ce* ‘go’, next to the regular gerund *sry̥wce*, also has
 20281 the form *sry̥wuxce*. Like the oblique participle *w-sry̥-ce* (§16.1.3.1), the gerund
 20282 *sry̥wuxce* was derived with the *sry̥-* allomorph, with resyllabification of the final -
 20283 *x-* and its inclusion in the partial reduplication of the last syllable, like *sry̥nuymuymu*
 20284 above. Since in the case of oblique participles the *sry̥-* allomorph is only found
 20285 with monosyllabic verbs, in the corresponding gerund form the *-y/x-* excrecent
 20286 element necessarily resyllabifies and undergoes partial reduplication.

20287 16.6.1.2 Polarity prefixes

20288 Gerunds cannot bear possessive or orientation preverb, but are attested with
 20289 the negative prefix *m̥-*, as in (242) with the negative gerund *m̥-sry̥-cuu~ce* ‘not
 20290 going’ in collocation with the noun *tu-sum* ‘mind’, here meaning ‘not willing,
 20291 unwillingly, reluctantly’.

- 20292 (242) *tcendyre t̥-pi ni kui li [ndzi-sum*
 20293 LNK INDEF.POSS-elder.sibling DU ERG again 3DU.POSS-mind
m̥-sry̥-cuu~ce] zo jny̥-ta-ndzi
 20294 NEG-GER-go EMPH IFR-put-DU
 20295 ‘The two elder brothers reluctantly left (the ducks) alone.’ (140510
 fengwang-zh, 40)

20296 The form of the negative prefix is *m̥-* with all verbs, except for the lexicalized
 20297 *masyrurju* ‘quietly, in secret’ (§16.6.1.4); the form *ma-* is perhaps due to the fact
 20298 that the base verb *arju* ‘speak’ has an initial *a-* vowel; however, other verbs in *a-*
 20299 have the *m̥-* allomorph, for instance *m̥-sry̥-r̥cq̥hū~cq̥hē* ‘without coughing’ from
 20300 *acq̥hē* ‘cough’.

20301 16.6.1.3 Gerundive clauses

20302 Gerunds are non-finite forms but preserve the verb’s argument structure, and
 20303 gerundive clauses can contain overt intransitive subjects (243 and 242 above) or,
 20304 very rarely, objects (244).

- 20305 (243) *t̥cime nuuu kui [w-qom sry̥-t̥uu~t̥ob] kui ntara*
 20306 young.lady DEM ERG 3SG.POSS-tear GER-come.out ERG DEM:PL
t̥uit̥yci pur-kui-fse ra lonba zo pjy̥-fcyt pui-ηu.
 something AOR-SBJ:PCP-be.like PL all EMPH IFR-tell SENS-be
 20307 ‘The young lady told everything that had happened while shedding

20308 tears.' (140428 mu e guniang-zh, 208)

- 20309 (244) [u-rte syz-nuu-tuu~ta] jx-ari
 3SG.POSS-hat GER-AUTO-put AOR-go[II]
 20310 'He went away wearing his hat.' (elicited)

20311 Gerundive clauses are always subordinate to a main finite clause, and express
 20312 a background action or state occurring at the same time as that referred to by the
 20313 main verb; they can nearly always be translated either by a gerund in English or
 20314 by a 'while' clause (§25.3.4.2, §25.4).

20315 Gerundive clauses, like converbial infinitival clauses (§16.2.1.7), can be fol-
 20316 lowed by the ergative *kui* (example 243 above), the emphatic *zo* (241 and 242,
 20317 §26.1.1.5) or both (as in 245 below). Bare gerundive clauses are also common, as
 20318 in (244 and 246 below). No semantic difference between bare gerundive clauses
 20319 and gerundive clauses followed by *kui* or *zo* can be brought to light.

20320 The focus marker *kunrr* can also follow a gerundive clause with the meaning
 20321 'even *X*ing' as in (248) below.

20322 The (intransitive or transitive) subject of the gerundive clauses is often coref-
 20323 erent with that of the main clause, as in (244) above and (245) below.

- 20324 (245) tycime ra rca sy-mbuu~mbyom zo kui,
 young.lady PL UNEXP:DEG GER-be.in.a.hurry EMPH ERG
 20325 icq^ha nyki, rjytpu u-tcuu nura jn-βde-nuu tce
 the.mentioned FILLER king 3SG.POSS-son DEM:PL IFR-leave-PL LNK
 20326 jo-nuu-ce-nuu
 IFR-VERT-go-PL
 20327 'The princesses left the princes in a hurry and went back home.' (140508
 20328 shier ge tiaowu de gongzhu-zh, 162)

20329 There is however no strict syntactic constraint on coreference between the
 20330 subject of the gerundive clause and that of the main clauses. Other types of
 20331 configurations are attested. In (246), the intransitive subject of the gerundive
 20332 clause *tr-pytso nuu* 'child(ren)' is the object, not the subject, of the main clause
 20333 verb *ku-z-ryzi-nuu*.²¹

²¹ In this example I assume that *tr-pytso nuu* belongs to the gerundive clause, with zero anaphora in the main clause; the opposite analysis could also be considered.

- 20334 (246) [t_r-p_{tso} n_{uu} s_y-s_mdzu_w-m_dzu_w] k_u-z-r_yzi-n_{uu}
 INDEF.POSS-child DEM GER-sit IPFV-CAUS-stay-PL
 20335 ‘They (used to) put the children in sitting position (after having covered
 20336 them in cloth).’ (140426 tApAtso kAnWBdaR 2)

20337 Coreference between the possessor of the subject in the gerundive clause and
 20338 the object of the main clause as in (243) and (242) above is also attested. It is par-
 20339 ticularly common in inalienably possessed noun+intransitive verb collocations
 20340 where the experiencer is marked as the possessor on the inalienably possessed
 20341 noun (§22.4), such as *t_{uu}-sum,ce* ‘want’, *t_{uu}-g_jiz,yi* ‘wish’ (§22.4.1.1) or *t_r-m_bru_w,y_{uu}*

20342 ‘get angry’ as in (247) (§22.4.1.5).

- 20343 (247) u_w-m_bru_w s_y-η_{gu}~η_{gw} k_{uu} z_o jo-n_{uu}-ce.
 3SG.POSS-anger GER-get.angry ERG EMPH IFR-VERT-go
 20344 ‘He went back home angry.’ (150826 baoliandeng-zh, 95)

20345 The opposite configuration, with the possessor in the main clause coreferent
 20346 with the subject of the gerundive clause, is also attested, as in (248).

- 20347 (248) s_y-r_jgu_w~r_jgu_w k_un_y t_{ui}-k_yrn_o_s p_{uu}-mtc_uur t_ce,
 GER-lie.down also GENR.POSS-brain IPFV-turn LNK
 20348 ‘Even lying down, one feels dizzy (one’s head is turning).’
 20349 (29-tAmtshAzkAkWndo, 57)

20350 The only example of gerund without apparent coreference between any par-
 20351 ticipant of the gerundive clause and of the main clause in the corpus is (249).
 20352 However, even here one can interpret the gerundive clause as having a non-overt
 20353 subject whose possessor would be coreferent with the subject or the object of the
 20354 main clause.

- 20355 (249) n_{uu} s_y-r_ku_w~r_ku_w z_o t_r-p_{tso} c^hu_ú-w_y-t_cx_t
 DEM GER-be.few EMPH INDEF.POSS-child IPFV-INV-take.out
 20356 p_jy_ra t_ce,
 IFR.IPFV-be.needed LNK
 20357 ‘People had to raise children with few (resources).’ (140426 tApAtso
 20358 kAnWBdaR, 5)

20359 While gerunds can be built for motion verbs, in the corpus the velar infinitive
 20360 converbs *k_r-* (§16.2.1.7) are more common than gerunds to express meanings such
 20361 as ‘running’ (*k_r-r_juy* (*k_{uu} z_o*)), ‘walking’ (*k_r-η_{ke}* (*k_{uu} z_o*)) when occurring in a

20362 main clause with another motion verb (for instance with *jo-nu-qe-nu* ‘they went
 20363 away’ in 168). Motion verbs are only attested in non-motional collocations (as
 20364 in 242) above). Gerunds of motion verbs are however possible if the motion is
 20365 different from the action of the main verb, as in (250).

- 20366 (250) *sy-ŋkui~ŋke zo jui-ysui-ndza*
 GER-walk EMPH SENS-PROG-eat
 20367 ‘He is eating it while walking.’ (elicited)

20368 16.6.1.4 Lexicalized gerunds

20369 There are a few examples of adverbs from lexicalized gerunds, whose form and
 20370 meaning is not completely predictable from the base verb.

20371 The gerund *sy-xtciu-xtci*, from the stative verb *xtci* ‘be small’ means ‘in child-
 20372 hood, when *X* was young, since childhood’, as in (251). Since the verb *xtci* ‘be
 20373 small’ includes ‘be young’ among its range of meanings, the use of this gerund
 20374 to refer to young age is not unexpected (‘while being young’), but the addi-
 20375 tional meaning ‘since childhood’ does not correspond to the usual function of
 20376 the gerund, which expresses an action or state taking place simultaneously with
 20377 the action of the main verb.

- 20378 (251) *sy-xtciu~xtci zo ui-mu ui-wa jny-me.*
 GER-be.small EMPH 3SG.POSS-mother 3SG.POSS-father IFR-not.exist
 20379 ‘He lost his parents when he was young.’ (150827 tianluo, 4)

20380 The adverb *masyrurju* ‘quietly, in secret’ from *arju* ‘speak’ is formally an an-
 20381 cient negative gerund, with the negative prefix *ma-* rather than *my-*). It originally
 20382 meant ‘without speaking’, but its meaning has become ‘in secret, without some-
 20383 one knowing’ as in (252), and it can even be applied to acts involving speech as
 20384 in (253), showing that it is not semantically linked to its base verb anymore.

- 20385 (252) *tcʰemypui nura, n̩kinui, mu-t̩-rundzaŋspa-nu jamar tce tce, uzo*
 girl DEM:PL FILLER NEG-AOR-pay.attention-PL about LOC LNK 3SG
 20386 *kui masyrurju icqʰa cʰa nu pjy-lwo.*
 ERG quietly the.aforementioned alcohol DEM IFR-spill
 20387 ‘While the girls were not paying attention, he spilled the alcohol in
 20388 secret.’ (140508 shier ge tiaowu de gongzhu-zh, 80)
- 20389 (253) *uzo kur masyrurju kʰyndun nu jny-ndun*
 3SG ERG quietly mantra DEM IFR-recite
 20390 ‘He recited the mantra in secret.’ (2012 Norbzang, 199)

20391 The adverb *mysymdyla* ‘in advance’ (example 254), related to the verb *mda*
 20392 ‘arrive (time)’, might also be an ancient negative gerund, but its morphological
 20393 structure is not completely clear, in particular the element *-la* and the absence of
 20394 reduplication.

- 20395 (254) *nski ty-rfit nuu mysymdyla zo to-ŋke*
 DEM INDEF.POSS-child DEM in.advance EMPH IFR-walk
 20396 ‘This child started walking early.’ (elicited)

20397 16.6.1.5 *stv-* Gerund

20398 The Tibetan loan verb *rjuy* ‘run’ has a regular gerund *sv-rjuy~rjuy* ‘running’; how-
 20399 ever, the adverb *stvrijuy* ‘running’ can also be derived from this verb, with a mean-
 20400 ing identical to that of the gerund, as in (255).²² It is the only verb with the prefix
 20401 *stv-*; an exact cognate *stvrijay?* is found in Tshobdun (Sun & Blogros 2019: 610).

- 20402 (255) *stvrijuy ny stvrijuy zo jo-nur-pʰyo*
 running add running EMPH IFR-VERT-flee
 20403 ‘She fled back home running.’ (140504 huigniang-zh, 131)

20404 16.6.2 Purposive

20405 The purposive converb is used in clauses meaning ‘in order to’, ‘for X to Y’, ‘so
 20406 that X does Y’. This converb originates from the oblique participle (§16.8.2). It
 20407 combines the *sv-/svz-* with a reduplicated verb stem like the gerund, but in addi-
 20408 tion takes a B type orientation preverb preceded by a possessive prefix coreferent
 20409 with a core argument, as for instance *a-nui-sv-stu~stu* ‘in order for me to believe
 20410 in it’ from the semi-transitive *stu* ‘believe’ in (256).

- 20411 (256) *tce nuunu a-nui-sv-stu~stu nura tu-nvme pjv-ŋu*
 LNK DEM 1SG-IPFV-PURP-believe DEM:PL IPFV-make[III] IFR.IPFV-be
 20412 ‘He was doing these things so that I would believe (in his predictions).’
 20413 (150904 yaoshu-zh, 104)

20414 Purposive converbs without reduplication are attested, for instance *u-mv-pju-*
 20415 *sv-sui-spoŋ* from *suspoŋ* ‘pierce’ (the form with reduplication *u-mv-pju-sv-sui-spuŋ~spoŋ*
 20416 ‘so that it would not pierce it’ is also possible) in 257) or without orientation pre-
 20417 verb such as *u-mv-sv-jmu~jmut* ‘so that he would not forget it’ from *jmut* ‘forget’

²² In addition, the velar infinitive converb *kv-ŋuy* can be used in the same contexts (168, §16.2.1.7).

20418 in (258) (the complete form with orientation preverb is found in another version
 20419 of the same story, for instance in 259).

- 20420 (257) *tce nuu uu-pa numuu li k^hxtu numuu, tua-ci,*
 LNK DEM 3SG.POSS-under DEM again platform DEM INDEF.POSS-water
 20421 *tuftsas kuu pjuu-su-spor ηgryl tce,*
 leaking.water ERG IPFV-CAUS-have.a.hole be.usually.the.case:FACT LNK
 20422 *tce uu-my-pjuu-sy-su-spor, numuitcu tyrym*
 LNK 3SG-NEG-IPFV-CONV:PURP-CAUS-have.a.hole DEM:LOC TOPO
 20423 *kuu-fse juú-wy-ta nūtakny cupa kui-fse*
 SBJ:PCP-be.like IPFV-INV-put otherwise flat.stone SBJ:PCP-be.like
 20424 *juú-wy-ta tce,*
 IPFV-INV-put LNK
 20425 ‘Under the top platform, the water, the leaking water can leak through
 20426 (the roof), and in order to prevent it from leaking through, people put
 20427 planks or flat stones there.’ (26-tChWra, 13)

- 20428 (258) [*kui-lγy acyβ nuu kuu uu-my-sy-jmu~jmut*],
 SBJ:PCP-herd Askyabs DEM ERG 3SG-NEG-PURP:CONV-forget
 20429 *uu-p^huŋguu nuu tcu rdystas-puρuu tc^hirdu ci jy-rku,*
 3SG.POSS-inside.clothes DEM LOC stone-little pebble INDEF IFR-put.in
 20430 ‘The shepherd Askyabs put a little pebble inside his clothes so that he
 20431 would not forget (to tell it).’ (2002 qaCpa, 166)

20432 Purposive converbs are most commonly found with the negative prefix *my-*,
 20433 as (257) and (258) above. Non-negative purposive converbs, as in (256), are com-
 20434 paratively much rarer.

20435 With transitive verbs, the possessive prefix can refer either to the subject (with
 20436 1SG possessive *a-* in 259) or the object (3SG possessive *u-* in 260).

- 20437 (259) *jisŋi tce tcendyre a-my-nuu-sy-jmu~jmut nuu*
 today LNK LNK 1SG-NEG-PURP:CONV-forget DEM
 20438 *nuu-rku-t-a ηu*
 AOR-put-in-PST:TR-1SG be:FACT
 20439 ‘Today I put (the pebble in my clothes) so that I would not forget (to tell
 20440 you).’ (2014-kWLAG, 515)

20441 In example (260), the purposive form *a-my-tu-sy-rpu~rpu* with subject indexation
 20442 is also possible, without meaning difference.

- 20443 (260) *kum pu-mbyr tce, a-ku u-my-tu-sy-rpu~rpu*
 door SENS-low LNK 1SG.POSS-head 3SG-NEG-IPFV-CONV:PURP-bump
 20444 *pua-p^haβ-a*
 AOR-lower-1SG
- 20445 ‘As the door is low, I lowered my head so as not to bump on it.’ (elicited)

20446 Although most examples of purposive converbs have the same subject as the
 20447 main clause, this is not a syntactic constraint. In (261), it is the object of the
 20448 main clause *k^huna* ‘dog’ that corresponds to the subject of the purposive clause.
 20449 Furthermore, in (257) above, the subject and object of the purposive clause are
 20450 not even arguments of the main clause.

- 20451 (261) *a-my-ku-sy-mtsur~mtsuy* *uzo kur k^huna ka-βraβ*
 1SG-NEG-IPFV-CONV:PURP-bite 3SG ERG DOG AOR:3→3'-attach
 20452 ‘He attached the dog so that it would not bite me.’ (elicited)

20453 Purposive converbs, although they can be generated for most verbs without
 20454 difficulty, are very rare in the corpus, and several alternative constructions are
 20455 preferred to build purposive clauses (§25.5.4).

20456 16.6.3 Immediate

20457 The immediate perfective converb expresses that the action in the converbial
 20458 clause is immediately followed by that in the main clause ('as soon as'). It is
 20459 built by adding the B type orientation preverb and a *tu-* prefix (which may be
 20460 historically related to the homophonous prefix of action nominals, see §16.8.3)
 20461 and the verb stem I. It is the only verb form with a type B orientation preverb
 20462 (which in all other cases occurs with imperfective TAM categories) that has a
 20463 perfective value.

20464 Since there is a homophonous prefix *tu-* for second person (§14.2.1.2), the im-
 20465 mediate converb is formally identical to the second person singular imperfective
 20466 form²³ for all verbs whose stem I and stem III are identical (including all intransitive
 20467 verbs and some transitive ones, §12.2.2.1); these forms are however easily
 20468 distinguished for transitive verbs with stem III alternation, as illustrated by Ta-
 20469 ble 16.11.

20470 The immediate converb cannot take any additional prefix, even possessive or
 20471 negative prefixes.

²³ More precisely, the 2sg form of intransitive verbs and the 2sg→3 form of transitive ones.

Table 16.11: Examples of the immediate perfective converb /tuu/-

	stem	meaning	2SG(→3) IPFV	IMM
intransitive	<i>sci</i>	to be born	<i>c^huu-tuu-sci</i>	<i>c^huu-tuu-sci</i>
	<i>ce</i>	to go	<i>ju-tuu-ce</i>	<i>ju-tuu-ce</i>
transitive	<i>ts^hi</i>	to drink	<i>ku-tuu-ts^hi</i>	<i>ku-tuu-ts^hi</i>
	<i>ndza</i>	to eat	<i>tu-tuu-ndze</i>	<i>tu-tuu-ndza</i>
	<i>mto</i>	to see	<i>pjuu-tuu-mtym</i>	<i>pjuu-tuu-mto</i>

20472 The converbial clause can contain overt arguments, including absolute arguments as in (262) or transitive subjects marked with the ergative as in (263).

20473 20474 (262) *wi-puu jnuu-tuu-kaa* *n^y kumpyytcuu jamar*
3SG.POSS-child IPFV-CONV:IMM-hatch.out LNK sparrow about

20475 *ma me*
apart.from not.exist:FACT

20476 'Just after its chick has hatched out, it is just (as big as) a sparrow.'
20477 (24-kWmu, 90)

20478 (263) *turme ra kuu pjuu-tuu-mto zo sat-nuu cti.*
people PL ERG IPFV-CONV:IMM-see EMPH kill:FACT-PL be.AFF:FACT

20479 'People kill it as soon as they see it.' (28-qapar, 15)

20480 (264) *nuu pjuu-tuu-βde zo turme nuu pjuu-kuu-si*
DEM IPFV-CONV:IMM-throw EMPH person DEM IPFV-GENR:S/O-die
pjx-ŋgryl.
IFR.IPFV-be.usually.the.case

20482 'As soon as one was thrown in there, one would die.' (28-smAnmi, 131)

20483 There is often coreference between the arguments of the converbial clause
20484 and those of the main clause. In (262) and (264), the subjects of the main clauses
20485 correspond to the intransitive subject and the object of the converbial clause,
20486 respectively. In (263) above and (265) below, both the subject and the object of
20487 the subordinate clauses are coreferent with those of the main clauses. Example
20488 (265) also shows that immediate converbs can have non-third person subjects,
20489 though this is rare in the corpus.

16 Non-finite verbal morphology

- 20490 (265) *tut^bu nuu-sy-cke tce, azo a-jab ku-tur-ndo*
pot SENS-PROP-burn LNK 1SG 1SG.POSS-hand IPFV-CONV:IMM-take
20491 *zo puu-nuu-clay-a*
EMPH AOR-AUTO-drop-1SG
20492 ‘As the pot was burning, I dropped it as soon as I had grabbed it.’
20493 (elicited)

20494 There is however no strict syntactic constraint on subject or object coreference,
20495 as we also find examples where the subject of the converbial clause is not
20496 a participant of the main clause, such as (266).

- 20497 (266) *lu-tuu-fso_B zo q^be tuu-ryma tu-ze nuu-ŋu.*
IPFV-CONV:IMM-be.clear EMPH LNK INF:II-work IPFV-begin[III] SENS-be
20498 ‘It starts working as soon as the day breaks.’ (26-GZo, 71)

20499 The converbial clause nearly always followed either by the emphatic *zo* (§26.1.1.5)
20500 and/or by a linker such as *tce*, *q^be* (266) or *ny* (262).

20501 The immediate converb commonly occurs in the corpus, but it is not the only
20502 way to express immediate succession. Several constructions have a very close
20503 meaning (§25.3.3.2), involving in particular the postposition *cimuma* ‘as soon as’
20504 (§8.2.11).

20505 16.6.4 Adverb from finite verb

20506 The adverb *nufse* ‘just like that’ does not derive from a non-finite verb form, but
20507 rather has been lexicalized from the demonstrative *nu* (§6.9.1) with the 3SG form
20508 of the Factual Non-Past of *fse* ‘be like’ in manner clause from a serial verb con-
20509 struction (§25.4.1.2). The range of meanings of *nufse* is however not predictable
20510 from those of the base verb.

20511 The main meaning of *nufse* is ‘just like that, for no particular reason’ as in
20512 (267).

- 20513 (267) *tuu-rdo_B tc^bi muu-puu-nnuu-pe my-xsi ma nuunu*
one-piece what NEG-PST.IPFV-AUTO-be.good NEG-GENR:know LNK DEM
20514 *nufse pjy-si*
like.that IFR-die
20515 ‘One (of them) died just like that, I don’t know what went wrong.’
20516 (140510 wugui, 53)

20517 It can also mean ‘for nothing, in vain’, in particular in combination with a verb
20518 prefixed with the autive prefix (§19.1.4), as in (268).

- 20519 (268) *nunuu u-mat nufse pjuu-nuu-ŋgra*
DEM 3SG.POSS-fruit like.that IPFV-AUTO-ACAU:cause.to.fall
20520 *pnu-cti ma uu-ryi muáj-nxjts^huu*
SENS-be.AFF LNK 3SG.POSS-seed NEG:SENS-be.useful
20521 ‘Its fruits fall (on the ground) just like that, it is not useful as seed.’
20522 (08-CkrAz, 53)

20523 16.7 Defective verbs

20524 Nearly all Japhug verbs have participles, infinitives and the other non-finite forms
20525 described in this chapter. There is however a handful of defective verbs lacking
20526 non-finite categories.

20527 The sensory existential verbs *yrrzu* ‘exist’ and *maje* ‘not exist’, which present
20528 other types of irregularities (§14.2.2), lack all non-finite forms; the nominalized
20529 forms of the existential verbs *tu* ‘exist’ and *me* ‘not exist’ are used instead.

20530 The transitive verb *krtupa* ‘tell’ cannot be prefixed (§14.3.4), and therefore
20531 lacks all non-finite forms.

20532 The verb *mr-xsi* ‘one does not know’ is only found in the generic negative
20533 Factual Non-Past (§14.3.4), and the corresponding non-finite forms are provided
20534 by the verb *suz* ‘know’.

20535 16.8 Historical perspectives

20536 The great majority of non-finite verb forms studied in this chapter take either
20537 a velar, a sigmatic or a dental prefix. While it is necessary to distinguish many
20538 sub-categories from a synchronic point, it is equally obvious that a diachronic
20539 relationship exists between some of these non-finite forms. While a complete
20540 account of the history of nominalized forms in Japhug will have to wait a proper
20541 reconstruction of proto-Gyalrongic, it is nevertheless possible to offer some pre-
20542 liminary thoughts on the relationship between these morphological categories.

20543 16.8.1 Velar non-finite prefixes

20544 Many Trans-Himalayan languages, including Karbi and Kiranti, have productive
20545 velar nominalization prefixes (Konnerth 2016), and traces of such prefixes can
20546 also be found in other languages such as Tibetan (Jacques 2014d). These forms
20547 are very probably historically related to the velar nominalization prefixes found

16 Non-finite verbal morphology

20548 in Gyalrong languages, but the present chapter focuses on Gyalrong-internal
20549 evidence.

20550 In Japhug, non-finite verb forms with velar prefixes include the following ones:

- 20551 • *kuu-* subject participles (§16.1.1)
- 20552 • *kṛ-* object participles (§16.1.2)
- 20553 • *kuu-* and *kṛ-* velar infinitives (§16.2.1)
- 20554 • Infinitival converbs (§16.2.1.7)
- 20555 • *x-/y-* deverbal nouns (§16.5.2)

20556 In addition, three finite prefixes are likely to be related to these forms: the
20557 2→1 *kuu-* prefix (§14.3.2.3, §14.8.3), the generic S/O *kuu-* prefix (§14.3.2.5), and the
20558 circumfix *kuu...-ci* occurring in several morphological contexts (§11.4).

20559 Given the difficulty of distinguishing infinitives from participles even syn-
20560 chronically (§16.2.1.1), it is quite obvious that these forms are ultimately related,
20561 but accounting for the precise distribution of the forms is not trivial.

20562 In addition to the categories mentioned above, shared by all core Gyalrong
20563 languages, Situ has a type of semi-finite participles in *kə-*, used in various types
20564 of relative clauses (Sun & Lin 2007). In (269) for instance, the form *nə-kə-mase-ntf*
20565 has both a participle *kə-* and a dual suffix *-ntf*; in Japhug, such combination is im-
20566 possible: indexation suffixes (and the second person prefix *tuu-*) are incompatible
20567 with all non-finite forms studied in this chapter.

- 20568 (269) *ndzok kə-nəwetjô=ndʒêst=tə ptṣērə dʒespê*
20569 slightly NMLZ-be.hardworking[II]=DU=TOP then quite
nə-kə-mase-ntf nə-ŋos
20570 AOR-NMLZ-be.rich[II]-DU SENS-be[I]
20571 ‘The two hardworking ones then became rather rich.’ (Y. Lin 2009:
193–194)

20572 In the following, I assume that in proto-Gyalrong both semi-finite participles
20573 of the type exemplified in (269) and subject participles as in Japhug (§16.1.1) did
20574 exist, and were marked by the ancestor of the *kuu-* prefix.

20575 The object participle in *kṛ-*, which is synchronically still homophonous with
20576 the subject participle of a passivized transitive verb (§16.1.2.3), likely originates
20577 from the fusion of the **kə-* participle with the passive **ŋa-* prefix (see also J. T.-S.
20578 Sun 2006a; Sun & Lin 2007 for a suggestion in the same lines).

20579 Since only transitive verbs can have a passive form, the use of the object for
 20580 semi-transitive verbs (for instance example 79 in §16.1.2.4) must have been an
 20581 analogical extension occurring after the merger of the participle prefix and the
 20582 passive was complete.

20583 The *ky-* infinitive possible derives from the object participles. The pivot con-
 20584 struction where such a reanalysis could have taken place is the object of verbs of
 20585 perception such as *mto* ‘see’. When an object participial clause occurs as the ob-
 20586 ject of a verb of perception, while in some case there is no ambiguity (as in 270),
 20587 in examples such as (271) it is possible to analyze the *ky-* prefixed form either as
 20588 an object participle (entailing a translation ‘grains that are sold like that’) or as
 20589 an infinitive (‘selling grains like that’, referring to the whole action rather than
 20590 the object).

- 20591 (270) *ma [pur-ky-sat] nuu ky-mto nuu pur-rpo-t-a.*
 LNK AOR-OBJ:PCP-kill DEM INF-see DEM AOR-experience-TR:PST-1SG
 20592 ‘I have seen killed ones.’ (22-pGakhW, 22)
- 20593 (271) *tce [u-rdo& nuu kuu-fse ky-ntsye] nuu*
 LNK 3SG.POSS-grain DEM SBJ:PCP-be.like OBJ:PCP/INF-sell DEM
 20594 *muu-pur-mto-t-a*
 NEG-AOR-see-TR:PST-1SG
 20595 ‘I have not seen its grains sold like that (unprocessed).’ (09-mi, 61)

20596 After such reanalysis took, the *ky-* infinitive, originally restricted to transitive
 20597 verbs, was extended to dynamic intransitive verbs.

20598 The nominalization *x/y-* prefix is probably the result of the application of
 20599 a sound law of presyllable reduction on monosyllables without initial cluster
 20600 (§5.6.2, §16.5.2) to the subject participle prefix. The regular *kuu-* subject participle
 20601 on monosyllabic clusterless verb stems is due to the analogical generalization of
 20602 the *kuu-* allomorph to all verb forms.

20603 The generic *kuu-* and the 2→1 *kuu-* prefixes, which occur in finite verb forms
 20604 in Japhug, are less likely to come from subject participles. Instead, as argued in
 20605 Jacques (2018c) and §14.8.3, they are traces of the semi-finite participles in Japhug
 20606 and other Northern Gyalrong languages.

20607 Figure 16.1 summarizes the pathways of reanalysis proposed in this section
 20608 and in §14.8.3. The semi-finite participle and subject participle forms are with-
 20609 out doubt historically related, but both have to be reconstructed at the proto-
 20610 Gyalrong level and the function of the original prefix from which they derive is
 20611 unclear – it is conceivable that the original prefix was completely non-finite like

the Japhug subject participle, and that the semi-finite participle is an innovation (on the addition of person indexation markers on non-verbal predicative words, see §14.8.3), but the opposite is equally possible.

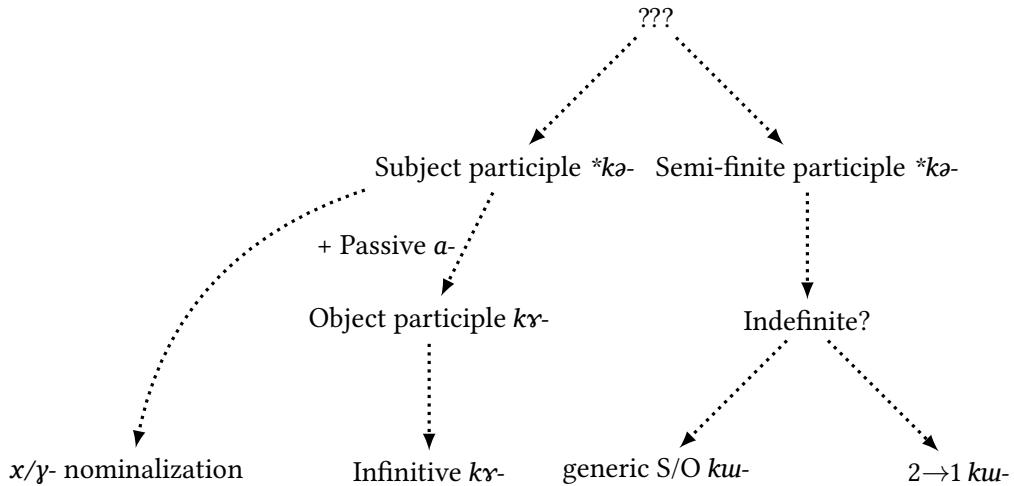


Figure 16.1: Development of velar non-finite forms from proto-Gyalrong to Japhug

20615 16.8.2 Sigmatic non-finite prefixes

²⁰⁶¹⁶ 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 converses 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 this function, in absolutive locative form (§8.1.9). In this view, a gerund like *sṛ-vmdzu~mdzu* ‘sitting’ would come from an original construction meaning ‘at the time when *X* was sitting’. However, this hypothesis is difficult, because of the very restricted nature of participial temporal relatives, which are only found for very specific time periods that belong to common knowledge (for instance *w-sṛ-jí* ‘the period when it is planted’ in example 129 in §16.1.3.7), and are not compatible with most types of temporal clauses.

Other possibilities to explain the origin of the gerund are the locative (§16.1.3.5) and instrumental (§16.1.3.6) uses of the oblique participles. Locative participles could account for the use of gerund with psychological verbs; for instance *sṛ-muu~mu* ‘fearing’ from *mu* ‘fear’ could originate from a metaphorical locative similar to English ‘in fear’. However, the hypothesis that gerunds derive from instrumental oblique participles is more probable due to the optional presence of the ergative *kū* with the gerunds (§16.6.1.3) while locative postpositions are never found in this context. The gerunds thus probably originated from subordinate clauses expressing reason or cause, from which they came to express manner or simultaneous action (‘by sitting’ ⇒ ‘sitting’).

The purposive converbs probably also come from the instrumental use of oblique participles, but through a different pathway. As suggested in Jacques (2014a: 272), examples such as (272) may constitute the pivot construction between instrumental participial relatives and purposive converbs.

- 20649 (272) *yztut^buz nū kucungu tce [tut^bu sṛ-χtei]*
 20650 Selaginella DEM in.the.past LNK pan OBL:PCP-wash
 20651 *nú-wy-nu-p^but pui-ŋgryl*
 20652 IPFV-INV-AUTO-unroot PST.IPFV-be.usually.the.case
 20653 ‘In the past, people would unroot *Selaginella* (to use as) a pan cleaner.’
 20654 (16-RIWmsWsi, 107)

In (272), the participial relative clause *tut^bu sṛ-χtei* ‘pan cleaner’ is an essive adjunct (in absolutive form, §8.1.7) which can be translated as ‘(to use) as a pan cleaner’. This meaning is very close to that of a purposive clause ‘in order to clean pans’. An instrumental participial relative clause in essive function could thus easily be reanalyzed as a purposive clause, and hence the oblique participle as a purposive conversal.

20663 **16.8.3 Dental non-finite prefixes**

20664 Non-finite verbal forms taking a dental stop prefix *tu-* or *tr-* in Japhug include
20665 the following ones:

- 20666 • Dental infinitive (§16.2.3)
- 20667 • Degree nominals (§16.3)
- 20668 • *tu-* action nominals (§16.4)
- 20669 • *tr-* abstract nouns (§16.4.2)
- 20670 • Simultaneous action nominal (§16.4.3)
- 20671 • Immediate perfective converb (§16.6.3)

20672 It is possible that all of these forms are historically related. However, given the
20673 fact that some of the non-finite verb forms in Japhug are inalienably possessed
20674 nouns (§5.1.2) derived by adding a possessive prefix to the bare verb stem (bare
20675 infinitives §16.2.2 and bare action nominals §16.4.6), it is likely that at least some
20676 of the categories listed above originate from the indefinite possessive form of
20677 a bare infinitive or a bare action nominal, as suggested in Jacques (2016a: 236)
20678 concerning the bare infinitives.

20679 Since bare infinitives and dental infinitives are in complementary distribution,
20680 the former being used with transitive verbs and the latter with intransitive ones
20681 (see §16.2.2.1 and §16.2.3.2), it is legitimate to consider the possibility that both
20682 forms go back to a single category. The bare infinitive takes a possessive prefix
20683 that is coreferent with the object of the verb; intransitive verbs lack an object
20684 (semi-transitive verbs have a semi-object §8.1.5, but its morphosyntactic prop-
20685 erties are different from those of canonical objects), and thus if a bare infinitive
20686 were built from an intransitive verb, one would only have three choices: (i) index
20687 the subject, (ii) use the bare stem with any possessive prefix or (iii) use a ‘dummy’
20688 possessive prefix indicating the absence of object. It is possible to argue that den-
20689 tal infinitives correspond to solution (iii), and that the *tu-* prefix in this form is
20690 the indefinite possessor *tu-* (§5.1.3). In this hypothesis, dental infinitives taking
20691 a possessive prefix (see example 195 in §16.2.3.2) are later creations, made after
20692 the etymological origin of the *tu-* had become obscured.

20693 Proposing that *tu-* action nominals and *tr-* abstract nouns come from alienabi-
20694 lized bare action nominals is not to be excluded, but appears to be less compelling,

20695 since there is no complementary distribution between the former and the latter,
 20696 unlike in the case of bare vs. dental infinitives.

20697 It is also conceivable that dental infinitives come from *tuu-* action nominals,
 20698 and bare infinitives from bare action nominals, respectively. In the absence of
 20699 evidence from languages other than Japhug, I leave this issue unresolved.

20700 Regardless of the origin of action nominals, it is clear that degree nominals on
 20701 the one hand, and simultaneous action nominals on the other hand, derive from
 20702 them by prefixing possessive prefixes (in degree nominals) and the numeral *tuu-*
 20703 prefix, respectively (in simultaneous action nominal, §16.4.3).

20704 The origin of the immediate perfective converbs is quite puzzling. While im-
 20705 mediate converb take an obligatory type B orientation preverb, no other *tuu-* non-
 20706 finite form is compatible with orientation preverbs, and moreover type B pre-
 20707 fixes normally occur with imperfective TAME categories (§15.1.1.1, §21.1.1). It is
 20708 conceivable that these converbs ultimately originate from action nominals, but
 20709 the pathway of morphological evolution that has lead to their creation is unclear.

20710 Figure 16.2 summarizes the hypotheses presented in this section; the dotted
 20711 arrows represent uncertain derivations.

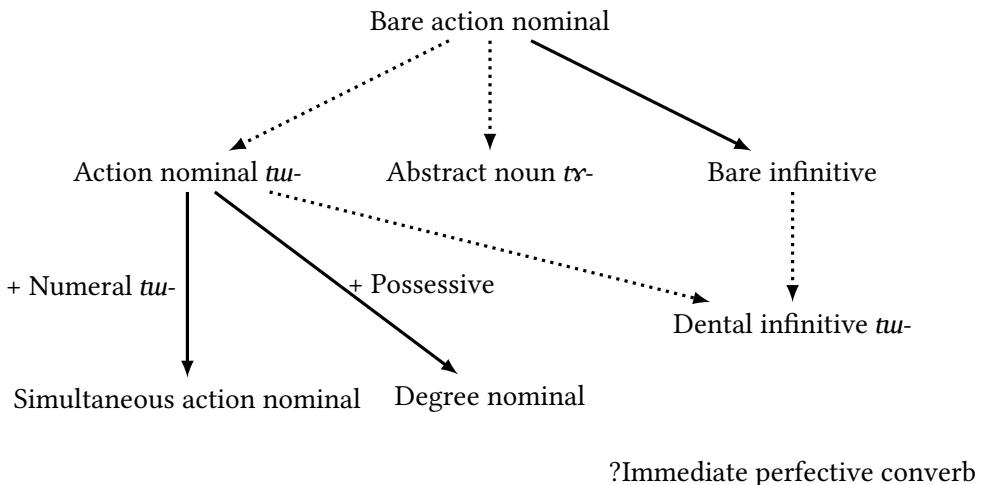


Figure 16.2: Several hypotheses to account for the historical origin of dental non-finite forms in Japhug

20712 17 Valency-increasing derivations

20713 17.1 Introduction

20714 Japhug has much fewer valency-increasing derivations than valency-decreasing
20715 ones: leaving aside fossil derivations (§19.7), only four clearly identified prefixes
20716 are found: sigmatic causative (§17.2), velar causative (§17.3), applicative (§17.4)
20717 and tropative (§17.5). The sigmatic causative however is probably the most pro-
20718 ductive of all derivational processes in Japhug, and can be combined with the
20719 other three (§11.2.2, §17.2.8, §17.4.4, §17.3.4).

20720 17.2 Sigmatic causative

20721 Despite the existence of periphrastic causative constructions (§24.5.1.1), the main
20722 morphosyntactic device to express causation in Japhug is the causative verbal
20723 derivation by dental or alveolo-palatal fricative prefixes, referred to as ‘sigmatic’
20724 causative in this work.

20725 17.2.1 Regular allomorphy

20726 Although not as complex as the causative derivations in Stodsde (J. T.-S. Sun
20727 2007a) or in Khroskyabs (Lai 2016), the sigmatic causative prefix is the derivation
20728 with the greatest number of allomorphs in Japhug.

20729 It has five regular allomorphs *sui-*, *suy-*, *z-*, *s-* and *syr-* depending on the follow-
20730 ing element, and a number of irregular ones (§17.2.2). The allomorph *sui-* occurs
20731 in most environments, and can be considered to be the default form.

20732 17.2.1.1 *z-* allomorph

20733 The *z-* allomorph appears in non-monosyllabic verb bases, when the first syllable
20734 (generally a derivational prefix, or a synchronically non-analysable prefixal
20735 element belonging to the verb root) has a sonorant initial (in practice only *mV-*,
20736 *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>zryrst</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 (e- §17.2.2.3, z- §17.2.2.4, and j- §17.2.2.5).

Intransitive bases with nasal (except *ŋ*-), 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 *y-*, 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 *zqaꝝ*.

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’

20759 17.2.1.3 Vowel fusion

20760 With verbs whose stem begins in *a-* (contracting verbs, §12.3), the sigmatic causative
 20761 prefix merges with this vowel as *sə-*, as shown in Table 17.3. In the glosses, this
 20762 vowel merger is represented as *su-ə-*, following the orthographic rules in (§12.3).
 20763 Only one contracting verb has an irregular causative with intrusive *-y-* (§17.2.2.6).

Table 17.3: The *sə-* allomorph of the causative prefix

Base verb	Derived verb
<i>ačqʰe</i> ‘cough’	<i>səčqʰe</i> ‘cause to cough’
<i>ajtu</i> ‘accumulate’ (vi)	<i>səjtu</i> ‘accumulate’ (vt)
<i>amṛym</i> ‘be homogeneous’	<i>səmṛym</i> ‘do homogeneously’

20764 There are two irregular causative verbs in *sə-*, whose base verb is not a con-
 20765 tracting verb (§17.2.2.7).

20766 17.2.1.4 *suy-* allomorph

20767 For all other types of verb stem, the choice between the *su-* and *suy-/sux-* allo-
 20768 morphs depends on both phonology and morphology. The *suy-/sux-* allomorphs
 20769 occur when the base verb is intransitive, monosyllabic, has no initial cluster and
 20770 no velar or uvular initial consonant, while *su-* appears in all other cases, in par-
 20771 ticular in all bases with consonant clusters.

20772 With the intransitive verb *kaš* ‘hatch’ (the only verb with the single *k-* on-
 20773 set), some speakers (such as Tshendzin) select the *suy-* allomorph and use the
 20774 causative form *suykaš* ‘cause to hatch’ (1) with an internal /-yɪ-/ cluster (§4.2.3.1),
 20775 while other speakers select the *su-* allomorph.

- 20776 (1) *tcendyre numuu ky-yuit-a* *tce tce nuu-nuu-suyv-bab-a*
LNK DEM AOR:EAST-bring-1SG LNK LNK AOR-AUTO-CAUS-hatch-1SG
20777 ‘I brought (the eggs) and made them hatch by myself (without a hen).’
20778 (150819 kumpGa, 47)

20779 Table 17.4 illustrates the correlation between the *suu-* / *suy-*/ *sux-* contrast and
20780 transitivity. The intrusive -y- element undergoes regressive voice assimilation to
20781 -x- when the initial of the verb root is unvoiced.

Table 17.4: The *suu-* and *suy-*/ *sux-* allomorphs of the sigmatic causative prefix

Transitivity	Base verb	Derived verb
intr.	<i>mbuz</i> ‘overflow’	<i>suymbuz</i> ‘let overflow’
tr.	<i>mbi</i> ‘give’	<i>sumbi</i> ‘make/let give’, ‘give with’
intr.	<i>ce</i> ‘go’	<i>suxce</i> ‘send’
tr.	<i>çum</i> ‘brood’	<i>sucum</i> ‘make/let brood’
intr.	<i>tso</i> ‘understand’	<i>suxtso</i> ‘make understand’
tr.	<i>tsum</i> ‘take away’	<i>sutsum</i> ‘send with’
intr.	<i>ndzur</i> ‘stand’	<i>suyndzur</i> ‘make/let stand up’
tr.	<i>ndza</i> ‘eat’	<i>sundza</i> ‘make/let eat’
intr.	<i>nryz</i> ‘dare’	<i>suynryz</i> ‘cause to dare’
tr.	<i>no</i> ‘drive’	<i>suno</i> ‘make/let drive’, ‘drive with’

20782 The intrusive -y- also appears in one of the irregular allomorphs of the sigmatic
20783 causative (§17.2.2).

20784 Other derivational prefixes, including the velar causative *y়-* (§17.4.2), the ap-
20785 plicative *nu-* (§17.4.2), the tropative *nry-* (§17.5.1), the proprietive *sv-* (§18.8.1) and
20786 some denominal derivations (§20.3.2), present an allomorphy involving the inser-
20787 tion of the -y- element, originally in the same context as that of the *suy-* allomorph
20788 of the sigmatic causative. However, in the case of the proprietive and tropative
20789 derivation, this -y- insertion has ceased to be productive.

20790 17.2.2 Irregular allomorphs

20791 In addition to the regular allomorphs described in the previous section, the sig-
20792 matic causative has five irregular allomorphs with alveolo-palatal or palatal con-

20793 sonants instead of alveolar fricatives: *çuu-*, *çuy-*, *ç-*, *z-* and *j-*. All known examples
20794 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>çuumbym</i> ‘cause to be in a hurry’
<i>mnym</i> ‘smell’	<i>çuumnym</i> ‘cause to have a smell’
<i>mjym</i> ‘hurt’ (of a body part)	<i>çuumjym</i> ‘hurt’ (vt)
<i>ntaβ</i> ‘be stable’	<i>çuentaβ</i> ‘leave’ (there)
<i>ngo</i> ‘sick’	<i>çungo</i> ‘make sick’
<i>njo</i> ‘lose’	<i>çunndo</i> ‘win’
<i>nqor</i> ‘hang’ (vi)	<i>çuinqor</i> ‘hang’ (vt)
<i>rjo</i> ‘borrow’	<i>çurjø</i> ‘lend’
<i>tr-mbru + ηgu</i> ‘be angry’	<i>tr-mbru + çuŋgu</i> ‘anger’ (vt)
<i>ηgu</i> ‘lie down’	<i>çuŋgu</i> ‘make/let lie down’
<i>rga</i> ‘be happy’	<i>çurga</i> ‘please’ (vt)
<i>mu</i> ‘be afraid’	<i>çuymu</i> ‘frighten’
<i>pʰyo</i> ‘flee’	<i>çpʰyo</i> ‘flee with’
<i>luy</i> ‘get loose’	<i>çluy</i> ‘drop’
<i>nqor</i> ‘hang’ (vi)	<i>zŋgor</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>tsʰi</i> ‘drink’	<i>jtsʰi</i> ‘give to drink’

20795 17.2.2.1 *çuu-* allomorph

20796 The *çuu-* allomorph is the most common of all alveolo-palatal allomorphs. It occurs
20797 on verb bases with initial clusters with nasal, *f*- or *r*- preinitials, contexts
20798 where the regular *su-* 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
20800 complex predicate *tr-mbru + ηgu* ‘be angry’ (§22.4.3.2).

20801 The *çuu-* allomorph derives causatives mainly from intransitive verbs, except
20802 for *rjo* ‘borrow’ (with the inversive causative *çurjø* ‘lend’, §17.2.5.7) and *fkaβ*

20803 ‘cover’ (which has the instrumental causative *çufkaβ* ‘cover with’, §17.2.5.8).

20804 The base verb *nqoβ* ‘hang’ has three causative forms, *çui-nqoβ* (for the most
20805 common meaning corresponding to transitive ‘hang’), *z-nqoβ* (with a more re-
20806 stricted meaning, §17.2.2.4) and the regular *sui-nqoβ* for instrumental ('hang with')
20807 or indirect causation.

20808 17.2.2.2 *çuy-* allomorph

20809 The verb *mu* ‘be afraid’ has the causative *çuymu* ‘frighten’, the only example of
20810 the *çuy-* allomorph of the sigmatic causative. The intrusive -y- is expected since
20811 the base verb is intransitive and has a labial initial consonant with no cluster
20812 (§17.2.1.4), and appears in other derivations such as applicative (*nuymu* ‘be afraid
20813 of’, §17.4.2) and proprietive (*suumu* ‘be frightening’, §18.8.1).

20814 17.2.2.3 *ç-* allomorph

20815 The *ç-* allomorph is one of the three irregular vowel-less allomorphs of the causative.
20816 It occurs on two monosyllabic verbs, *çpʰyo* ‘flee with’¹ (from *pʰyo* ‘flee’) and *çluy*
20817 ‘drop’ (from *luy* ‘get loose’), unlike the vowel-less regular allomorphs *z-* and *s-*
20818 which are never found on monosyllabic bases (§17.2.1.1, §17.2.1.2). The contrast
20819 between *ç-* and *z-* is not determined by the voicing of the initial consonant of the
20820 base verb (since *luy* ‘get loose’ has a sonorant initial *l-*). Rather, *z-* exclusively
20821 occurs with voiced prenasalized obstruents (§17.2.2.4), and *j-* derives from *ç-* by a
20822 recent sound change (§17.2.2.5).

20823 Like other irregular allomorphs, *ç-* is not restricted to one particular sub-function
20824 of the sigmatic causative. The verb *çpʰyo* ‘flee with’, ‘help X flee with oneself’ re-
20825 reflects the adjuitative function of causative (§17.2.5.3), indexing as direct object the
20826 entity helped by the subject, as shown by the 3SG→2PL configuration in (2).

- 20827 (2) *nunuu ur-pʰe “worte^hi” tx-ti-nuu tce nunuu kuu*
DEM 3SG.POSS-DAT please IMP-say-PL LNK DEM ERG
20828 *a-jv-tú-wy-c-pʰyo-nuu ma,*
IRR-PFV-2-INV-CAUS-flee-PL LNK

20829 ‘Say ‘please’ to him, and he will help you flee (from here).’ (Norbzang
20830 2012, 74-75)

20831 On the other hand, *çluy* ‘drop’ generally expresses non-volitional causation,
20832 especially when used with the autive prefix as in (3) (see also 23 in §17.2.4) but

¹ An alternative form *çupʰyo* with the *çui-* allomorph is also attested.

20833 even without it (4).

- 20834 (3) *w-xçyt tur~tu zo to-yycqali ri tce*
 3SG.POSS-strength TOTAL~exist:FACT EMPH IFR-shout LNK LNK
 20835 *w-kur ur-ŋgu qandze nuu*
 3SG.POSS-mouth 3SG.POSS-in earthworm DEM
 20836 *pjx-nuu-c-luy tce w-zda ra kuu*
 IFR:DOWN-AUTO-CAUS-get.loose LNK 3SG.POSS-companion PL ERG
 20837 *jo-nuu-tsum-nuu*
 IFR-AUTO-take.away-PL
 20838 ‘(The crow) shouted with all his strength, dropped the earthworm that
 20839 was in its mouth, and its companion took it.’ (2011-10-qajdo, 98-100)

- 20840 (4) *kupa-skyt to-ç-luy-a*
 Chinese-language IFR-CAUS-get.loose-1SG
 20841 ‘I spoke Chinese by mistake.’ (‘I should have spoken Japhug’) (heard in
 20842 context)

20843 The regular causative of *luy* ‘get loose’ is *suy-luy* (§17.2.1.4), and is used to
 20844 express a volitional causation ‘untie, detach, take off’, as in (5). The *luy* ‘get
 20845 loose’ itself cannot express a volitional action; this meaning is provided by the
 20846 reflexive-causative *zγy-suy-luy* ‘detach oneself’ (§18.3.4.1).

- 20847 (5) *tvrkaækci nuu kuu nura w-combri ra pjx-suy-luy*
 hunting.dog DEM ERG DEM.PL 3SG.POSS-chain PL IFR-CAUS-get.loose
 20848 ‘The hunting dog took off its chains.’ (140426 liegou he zhonggo-zh, 10)

20849 17.2.2.4 *z*- allomorph

20850 The *z*- allomorph of the causative is only attested with verb bases having pre-
 20851 nasalized onsets. In each of the three verbs, the meaning of the prefix is slightly
 20852 different.

20853 The causative *zmbri* ‘play’ (an instrument), ‘make noise with’ from the intransitive
 20854 *mbri* ‘cry’, ‘make noise’, is a plain instrumental causative (§17.2.5.8), which
 20855 selects as object the musical instrument (see for instance 5a, §8.1.3), while *zŋga*
 20856 ‘help wearing’, ‘make/force to wear’ (from the transitive *ŋga* ‘wear’) reflects the
 20857 adjutative (§17.2.5.3) function rather than the instrumental one, since it selects
 20858 as object the person wearing the clothes (the 3DU object indexation in 6), while
 20859 the clothes are a semi-object (*tua-ŋga nura w-mbe t'w-kui-ngras nura* ‘old and torn
 20860 clothes’, without ergative marking).

- 20861 (6) [tu-ŋga *nura* *u-mbe* *t^hu-ku-Ngras*
 INDEF.POSS-clothes DEM:PL 3SG.POSS-old.one AOR-SBJ:PCP-ACAUS:damage
 20862 *nura]* *tú-wy-z-ŋga-ndzi*,
 DEM:PL IPFV-INV-CAUS-wear-DU
 20863 '(Their_i stepmother was evil), and made the two of them_i wear old and
 20864 torn clothes.' (140429 jiedi-zh, 12)

20865 The causative *zNGOB* from *nqoB* 'hang' (vi) presents an irregular voicing of the
 20866 onset, possibly the effect of a phonotactic constraint against clusters comprising
 20867 a preinitial fricative with a unvoiced prenasalized obstruent such as **çNq-*, since
 20868 only *voiced* prenasalized obstruents are monophonemic (§3.2.1).

20869 The meaning of *zNGOB* is not completely predictable from that of the base verb
 20870 *nqoB* 'hang'. Although it can be translated as transitive 'hang' like the other ir-
 20871 regular causative *çunqoB* 'hang' (§17.2.2.1), its more common meaning is 'pull
 20872 threads (that are coiled around one's fingers) apart (as part of the weaving pro-
 20873 cess)' (in Chinese 牵线 <qiānxiàn> 'pull the threads'), as in (7).

- 20874 (7) *a-tx-ri*kx-zNGOB
 1SG.POSS-INDEF.POSS-thread IMP-hang
 20875 'Pull the threads for me.' (elicited)

20876 With an additional causative prefix (§17.2.7) in instrumental function (§17.2.5.8),
 20877 it specifically means 'hang on a hook' as in (8).

- 20878 (8) *txjŋoB kuu tu-ŋga*ko-siu-zNGOB
 hook ERG INDEF.POSS-clothes IFR-CAUS-hang
 20879 'He hung the clothes on the hook.' (elicited)

20880 17.2.2.5 *j*- allomorph

20881 In the Kamnyu dialect of Japhug, the verb *ts^hi* 'drink' has the irregular causative
 20882 form *jts^hi* 'give to drink' with the *j*- allomorph. In dialects of Japhug which have
 20883 not undergone the *t^hi* → *ts^hi* sound change, the base verb is *t^hi* and its causative
 20884 *çt^hi* with the *ç*- allomorph (§17.2.2.3). This suggests that a sound change **çts^h* →
 20885 *jts^h* took place in this word by dissimilation of mode of articulation (§4.2.1.5).

20886 The causative *jts^hi* 'give to drink' is highly lexicalized, and can occur as input
 20887 for other derivations such as antipassive (§17.2.8, §18.6.4). The regular causative
 20888 *sui-ts^hi* can be used with a neutral factitive meaning 'make drink' (9) or in the
 20889 instrumental function 'drink with/using' (§17.2.5.8).

- 20890 (9) *qajusmynba* [...] *tce numuu tx-fka* *q^he, tce pjur-xtyr.* [...] *tce numuu*
 leech LNK DEM AOR-be.full LNK LNK IPFV-fall LNK DEM
 20891 *u-q^hu* *q^he, nuu kx-suu-ts^hi* *mu^hj-k^huu.*
 3SG.POSS-after LNK DEM INF-CAUS-drink NEG:SENS-be.possible
 20892 'After it_i has had its fill, the leech_i (detaches and) falls down. After that, it
 20893 is not possible to make it_i drink (blood).' (28-kWpAz, 147)

20894 17.2.2.6 Irregular vowel fusion

20895 The causative verb *suxce* 'send' (from *ce* 'go') has a stem II form *s^yri* derived
 20896 from the stem II *ari* of its base verb (§12.2.1). This stem II appears to present the
 20897 merger of the *suy-* allomorph with the *a-* prefixal element as *s^yy-*, with preserva-
 20898 tion of the *-y-* element, instead of expected †*s^yri*.

20899 17.2.2.7 Other irregularities

20900 The denominal verb *symbru* 'get angry' (§20.3.1) has a causative form *s^yzmbru*
 20901 'make angry' (10) with the *z-* allomorph (§17.2.1.1) infixated rather than prefixed
 20902 (occurring between the denominal *s^yr-* prefix and the nominal root *-mbru*).
 20903 (10) *nuu mas* *kui tx-ta-sy<z>mbruu tu* *uá-ŋu*
 DEM not.be:FACT ERG AOR-1→2-<CAUS> exist:FACT QU-be:FACT
 20904 'Otherwise, is it the case that I/we have made you angry?' (2005
 20905 tAwakWcqraR, 88)

20906 The verb *zbraꝝ* 'attach together' (11 provides a definition of this verb) is possibly
 20907 an instrumental causative form of *βraꝝ* 'attach', with irregular placement of the
 20908 vowel-less allomorph *z-* (§17.2.1.1) on a monosyllabic stem and fortition of the *β-*
 20909 to /b/ to avoid the impossible cluster †*zβr-*.
 20910 (11) *u-p^hoŋbu c^hony si, txjtsi nunura tui-tui-xtcyr*
 3SG.POSS-body COMIT tree pillar DEM:PL SIMULT-NMLZ:ACTION-attach
 20911 *ku-kx-βzu* *nunuu tce, kx-zbraꝝ tu-kui-ti* *ŋu.*
 IPFV-INF-make DEM LNK INF-attach IPFV-GENR-say be:FACT
 20912 '(Whether a person or whatever), attaching his body together with a tree
 20913 or a pillar is called *zbraꝝ*.' (150902 kAxtCAr, 14)

20914 The *s^yr-* allomorph (§17.2.1.3) is found on two bases with contracting *a-*: *pe* 'be
 20915 good' and *rmi* 'be called', whose corresponding causative forms are *s^yre* '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 (Shuya 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 *yw/yr-* or *rw/rv-*, 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 *tsyrvts^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’, *arvtch'a* ‘be determined from’ / *zrvtch'a* ‘determine from’ (see examples 31 and 32, §24.2.4) and *ayunqunggu* ‘having a lot of layers’ / *zyunqunggu* ‘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 *ayw-* (§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 ny 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-my-tx-tui-k^huu 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)

- 20947 (13) *wi-pi kua jo-yi tce, tur-ci ky-car*
 3SG.POSS-elder.sibling ERG IFR-come LNK INDEF.POSS-water inf-search
 20948 *to-z-nuna tce*
 IFR-stop LNK
 20949 'His brother came and stopped looking for water.' (2002 nyimawodzer, 66)

20950 The form *suiqas*, which is analyzable as the causative of the transitive verb *qas*
 20951 'peel', has the unexpected meaning 'delimit the boundaries of (a place)' (14). The
 20952 semantic change is unexplained.

- 20953 (14) *k^ha wi-sta ty-nui-suiqas-a*
 house 3SG.POSS-place AOR-AUTO-delimit-1SG
 20954 'I delimited the site (to build) the house.' (elicited)

20955 The secundative verb *nusuk^ho* 'rob, extort', is the lexicalized autive (§19.1.6) of
 20956 the causative *suk^ho* 'cause to give' of the indirective verb *k^ho* 'give' (§14.4.1).²
 20957 The original meaning of *nusuk^ho* was presumably 'X causes Y to give Z to
 20958 himself_i', its grammatical subject being thus originally both agent (causer) and re-
 20959 cipient at the same time, reflecting the inversive function of the causative (§14.4.3,
 20960 §17.2.5.7).

20961 The transitive subject, object and dative arguments of *k^ho* correspond to the
 20962 object, semi-object and subject of *nusuk^ho*, respectively. Example (15) shows this
 20963 verb with 2→1sg indexation, with a meaning that can still be interpreted as 'you
 20964 cause me to give it to you'.

- 20965 (15) *nui mxkufts^hi pur-kui-nusuk^ho-a puu~puu-cti q^he,*
 DEM forcing IPFV-2→1-extort-1SG COND~PST.IPFV-be.AFF LNK
 20966 *kuuki azo sylanphyn ki pjui-qri-a nyu*
 DEM.PROX 1SG basin DEM.PROX IPFV-break[III]-1SG be:FACT
 20967 'If you (try) to take it from me forcibly, I will break this basin.' (150831
 20968 jubaopen-zh, 105-106)

20969 The causative derivation from *k^ho* to *nusuk^ho* differs from other inversive causatives
 20970 in the obligatory presence of the autive *nui-*, and the additional coercive meaning.

20971 The verb *nusuk^ho* can serve as input for other derivations (§18.6.9). The autive
 20972 prefix *nui-* in this verb, although lexicalized, can be optionally reordered with
 20973 regard to the antipassive prefix (§18.6.9, §19.1.6).

² This 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).

20974 The verb *sufits^hi*, formally the causative of the stative verb *fts^hi* ‘feel better’ (or
 20975 ‘be good for nothing’), only occurs in negative form (§13.1.3) and means ‘force,
 20976 coerce’ as in (16).

- 20977 (16) *tceri tycime nua kua tce u-wa nua kua mu-tó-wy-sufits^hi q^he,*
 20978 but girl DEM ERG LNK 3SG.POSS-father DEM ERG NEG-IFR-INV-force LNK
nunua cuŋgu u-sŋi t^hut^hyci pua-kur-fse nunura
 20979 DEM before 3SG.POSS-day something PST.IPFV-SBJ:PCP-be.like DEM:PL
u-wa u-tui-fcxt pjy-βzu
 20980 3SG.POSS-father 3SG.POSS-NMLZ:ACTION-tell IFR-make
 20981 ‘The girl, pressed by her father, told her father everything that had
 happened in the day before that.’ (140429 qingwa wangzi-zh, 110)

20982 This meaning presumably derives from ‘cause to be unable to stand/bear’, as
 20983 the base verb *fts^hi* in negative form can have the meaning ‘cannot stand (the pain,
 20984 discomfort caused by a disease’ as in (17).

- 20985 (17) *wuma zo puu-mŋym tcendyre muu-c^hy-fts^hi tce pjy-yi*
 20986 really EMPH SENS-hurt LNK NEG-IFR-feel.better LNK IFR:DOWN-come
tce
 20987 LNK
 20988 ‘It hurt a lot, she could not stand it and came (down to Mbarkham for
 treatment).’ (12-BzaNsa, 102-103)

20989 The related adverb *mykufts^hi* ‘forcibly’, which originates from the negative sta-
 20990 tive infinitive of *fts^hi* (§16.2.1.8), is also used to express coercion (§17.2.5.2).

20991 17.2.4 Morphosyntax

20992 17.2.4.1 Intransitive bases

20993 The causative derivation increases the valency of the base verb by one argument.
 20994 In the case of intransitive bases, the resulting verb is monotransitive. The intransi-
 20995 tive subject of the base verb corresponds to the object of the causative verb. For
 20996 instance, in (19) the causative verb *svnbaš* ‘hide’ (vt) (from the intransitive *anbaš*
 20997 ‘hide’ (vi), 18) takes the portmanteau prefix 1→2 *ta-* (§14.3.2.3), indexing the per-
 20998 son hiding as object, and the causer (the person helping him/her, §17.2.5.3) as
 20999 transitive subject.

- 21000 (18) *kx-anbaṣ-a*
AOR-hide-1SG
21001 'I hid.' (elicited)
- 21002 (19) *a-rjít ra nuu-yi-nuu cti tcet^ha, kx-ndza kowa*
1SG.POSS-child PL VERT-come:FACT-PL be.AFF:FACT later INF-eat manner
21003 *tú-wy-βzu cti tce ku-ta-sui-ynbaṣ ɳu*
2-INV-make:FACT be.AFF:FACT LNK IPFV-1→2-CAUS-hide be:FACT
21004 'My children are about to come back and will try to eat you, I have to
21005 hide you (help you hide).' (Norbzang 2012, 300-301)

21006 The causer of causative verbs derived from intransitive bases is morphosyn-
21007 tactically identical to the subject of a monotransitive verb both from the point of
21008 view of indexation and case marking, and takes ergative when overt as in (20).

- 21009 (20) *tx-mu nuu kui tx-pytso ra k^hri u-pa zuu*
INDEF.POSS-mother DEM ERG INDEF.POSS-child PL bed 3SG.POSS-under LOC
21010 *ko-sui-ynbaṣ*
IFR-CAUS-hide
21011 'The old woman hid the children under the bed.' (elicited)

21012 17.2.4.2 Transitive bases

21013 The causativization of monotransitive verbs³ is more complicated. While the
21014 causer is always treated like a transitive subject in terms of indexation, ergative
21015 marking and relativization (§14.4.3), the status of the causee (corresponding to
21016 the transitive subject of the base verb) and of the patientive argument (object of
21017 the base verbs) are less straightforward.

21018 From the point of view of indexation (§14.4.3), both causees (21) and patientive
21019 arguments (22) can be indexed as direct objects (in these examples with 2→1SG
21020 configurations, §14.3.2.3).

- 21021 (21) *xpi pjuu-fcat-a, pjuu-kui-sui-fcat-a-ndzi nuu vo*
story IPFV-tell-1SG IPFV-2→1-CAUS-tell-1SG-DU DEM TOP.ADVERS
21022 *jyŋ*
be.acceptable:FACT
21023 'I can tell a story_i, the two of you can have me tell it_i, but ...' (140511 1001
21024 yinzi-zh, 49)

³ The causativization of semi-transitive and ditransitive verbs is discussed in §14.4.4 and §14.4.3, and is not repeated here.

21025 The form *tx-kui-su-bndu-a* is ambiguous, and can either be interpreted as ‘you
 21026 caused me to be beaten (by him/someone)’ as in (22), but also as ‘you made me
 21027 beat him’ with the 2SG as causee rather than patientive argument.

- 21028 (22) *tabndo muáj-tui-tso tce, tce li tx-kui-su-bndu-a*
 speech NEG:SENS-2-understand LNK LNK again AOR-2→1-CAUS-hit-1SG
 21029 ‘You are not listening (to what I say), you caused me to be beaten again.’
 21030 (2003-kWBRa, 109)

21031 The indexation of these verbs is determined by a person hierarchy: when the
 21032 causee (or patientive) is first/second person, and the patientive (or causee) is
 21033 third person, the causative verb takes first/second object indexation (§14.4.3).

21034 From the point of view of case marking, patientive arguments never take the
 21035 ergative, while causees can take it optionally (§8.2.2.6). In example (23), the first
 21036 causee *crypya* ‘bird sp.’ in left-dislocated position has no ergative marking, while
 21037 the second one *qajdo* ‘crow’ takes it (note that the plural indexation on *pjy-su-*
 21038 *yut-nu* shows that *qajdo* is causee and not causer).

- 21039 (23) *crypya nunuu, smvn sajrjyz ra kui ci pjy-su-yut-nu*
 bird.sp. DEM medicine buddha PL ERG once IFR:DOWN-CAUS-bring-PL
 21040 *tce, nuw cry u-ku qʰe pjy-nu-c-luy, tce*
 LNK DEM juniper 3SG.POSS-head LNK IFR:DOWN-AUTO-CAUS-get.loose LNK
 21041 *qajdo kui ci pjy-su-yut-nu ri, nunuu ckryz u-ku*
 crow ERG once IFR:DOWN-CAUS-bring-PL LNK DEM oak 3SG.POSS-head
 21042 *pjy-nu-cluy,*
 IFR:DOWN-AUTO-CAUS-get.loose
 21043 ‘The buddhas_i sent the juniper bird_j to bring the medicine_k (to Gesar),
 21044 but it_j dropped it_k on a juniper tree, they_i sent a crow_l, but it_l dropped
 21045 it_k on an oak.’ (2003 gesar, 260)

21046 17.2.4.3 Semi-reflexive

21047 There are cases of semi-reflexive indexation (§14.3.2.4) with causative verbs, where
 21048 a dual or plural number marker includes both the causer and the causee, as in
 21049 (24) where in the 3'→3DU form *tó-wy-su-ndza-ndzi* the dual suffix indexes the
 21050 addition of the causer (*tx-ržaβ* ‘wife’) and the causee (her husband).

- 21051 (24) *tx-rzaβ nua kua icq^ha, ts^hay u-ŋgwu*
 INDEF.POSS-wife DEM ERG the.aforementioned cupboard 3SG.POSS-in
 21052 *la-nua-rku kua-muum nuara*
 AOR:UPSTREAM:3→3-AUTO-put.in SBJ:PCP-be.tasty DEM:PL
 21053 *c^hy-tc^hyt tce tó-wy-suu-ndza-ndzi pjy-ra.*
 IFR:DOWNTREAM-take.out LNK IFR-INV-CAUS-eat-DU IFR.IPFV-be.needed
 21054 ‘The wife had no choice but to take out the nice (food) that she had put in
 21055 the cupboard and give it to (her husband and herself).’ (150824 kelaosi-zh,
 21056 76)

21057 17.2.4.4 Negation

21058 The relative position of the negative and causative prefixes in the prefixal chain is
 21059 fixed (§11.2) and independent of the semantic scope.⁴ Thus, a negative causative
 21060 verb can be either interpreted as ‘not cause to *X*’ or as ‘cause not to *X*’ (prohibi-
 21061 tion). For instance, *mr-suux-ce-nuu* (NEG-CAUS-go:FACT-PL) can either mean ‘they
 21062 don’t send him/them’ or ‘they prevent/forbid/don’t let him/them go’ as in (25).

- 21063 (25) *nua cymuuyduuy ky-lyt kua-mk^hyz nuara ra*
 DEM gun INF-release SBJ:PCP-be.expert DEM:PL be.needed:FACT
 21064 *ma my-kua-spa nuara my-suux-ce-nuu.*
 LNK NEG-SBJ:PCP-be.able DEM:PL NEG-CAUS-go:FACT-PL
 21065 ‘They need people who are good at shooting with guns, they don’t let
 21066 those who are not able (to shoot) go (to do the shooting).’ (150829
 21067 KAGWcAno, 14)

21068 The negative verb form *mu-pa-su-p^hut* (NEG-pfv:3→3'-CAUS-take.off) can also
 21069 either mean ‘he did not make him/them destroy it’ or ‘he prevented him/them
 21070 from destroying it’, as in (26).

- 21071 (26) *yzo ui-k^ho ta-fsray nuunu, [ui-pi ni*
 bee 3SG.POSS-house AOR:3→3'-protect DEM 3SG.POSS-elder.sibling DU
 21072 *mui-pa-su-p^hut] ra yuu, yzo ra yuu nuu-rjylpu nuu*
 NEG-pfv:3→3'-CAUS-take.off PL GEN bee PL GEN 3PL.POSS-king DEM
 21073 *jo-yi.*
 IFR-come
 21074 ‘The king of the bees whose hive he had protected and had prevented his
 21075 brothers from destroying came.’ (140510 fengwang-zh, 137)

⁴ The same is true of associated motion prefixes (§17.2.4.5).

21076 Another possible interpretation of the combination of causative and negative
 21077 prefixes is ‘make sure *X* does not need to *Y*’, ‘take care of *X* and ensure *Y* does
 21078 not need to happen’ (where *X* represents the causee and *Y* the base verb), as in
 21079 (27).

- 21080 (27) *a-mu rcanuu ndžu tuu-ldža cinx*
 mother UNEXP:FOC chopsticks one-stick even
 21081 *a-my-puu-tuu-suu-qluat-nuu ra*
 IRR-NEG-PFV-2-CAUS-break-PL be.needed:FACT
 21082 ‘Make sure that my mother does not even need to break chopsticks.’ (an
 21083 idiomatic expression meaning “please take care of my mother’s every
 21084 need”, Norbzang 2012, 241)

21085 The same type of ambiguity is also found with the velar causative (§17.3.2.1).

21086 17.2.4.5 Associated motion

21087 As in the case of the negation (§17.2.4.4), the relative ordering of the associated
 21088 motion and causative prefixes in the template is fixed and independent of seman-
 21089 tic scope, and both ‘go/come and cause to *X*’ and ‘cause to go/come and *X*’ are
 21090 possible interpretations.

21091 Thus, either the causer or the causee can be the argument undergoing motion
 21092 (§15.2.2). For instance, the verb *c-ko-z-ruru* in (28) can either mean ‘he sent him
 21093 to guard it’ (causee motion, the correct interpretation in this context) or ‘he went
 21094 and made him guard it’ (causer motion).

- 21095 (28) *rjylpu kuu uu-tcui stu kuu-xtci nuu c-ko-z-ruru.*
 king ERG 3SG.POSS-son most SBJ:PCP-be.small DEM TRAL-IFR-CAUS-guard
 21096 ‘The king sent his youngest son to guard (the apple trees).’ (140507
 21097 jinniao-zh, 39)

21098 17.2.4.6 Serial verb constructions

21099 In the serial verb construction with the similative verb *stu* ‘do like’, the instru-
 21100 mental causative can be repeated on both verbs, as in (29).

- 21101 (29) *tce uu-jab nuu kuu tʰylwa ki*
 LNK 3SG.POSS-hand DEM ERG earth DEM.PROX
 21102 *cʰuu-suu-ste nuu uu-tʰycu*
 IPFV:DOWNSTREAM-CAUS-do.like[III] DEM 3SG.POSS-downstream

21103 *c^hwi-sui-βde*

IPFV:DOWNTSTREAM-CAUS-throw

21104 '(The mole) does like this with its forepaws, and throws the earth below.'
21105 (28-qapar, 155-156)21106 In other serial verb constructions (§25.4.1), intransitive stative verbs generally
21107 have to be causativized to be used with transitive verbs to ensure transitivity
21108 harmony. These causative verbs expressing manner can appear before the lexical
21109 verbs as in (30) (where the causative of *m̥ku* 'be first' expresses the meaning 'do
21110 *X* first', §20.6) or follow it (31, 32).21111 (30) *a-tṣ^ha ci pwi-z-m̥ke pwi-rke*
1SG.POSS-tea once IMP-CAUS-be.first[III] IMP-put.in[III]

21112 'Serve me some tea first.' (elicited)

21113 (31) *wi-mŋu nura koyla zo ko-xtcyr ko-sui-ysuy*
3SG.POSS-opening DEM:PL completely EMPH IFR-tie IFR-CAUS-be.tight
21114 *zo.*
EMPH

21115 'He tied the opening (of the bag) very tightly.' (150824 kelaosi,-zh 297)

21116 The irregular causative of *pe* 'be good', *sx-pe* (§17.2.2.7), is common in the manner
21117 SVC (and in the corresponding complement clause construction, see 33 in
21118 §17.2.4.7) to express the meaning 'do *X* well' (32).21119 (32) *<luban> kuu rcanuu kui-pwi-pe zo, maka*
ANTHR ERG UNEXP:FOC INF:STAT-EMPH~be.good EMPH at.all
21120 *m̥y-kui-xtc^hoŋjyr zo to-ti to-sx-pe.*
NEG-INF:STAT-be.incomplete EMPH IFR-say IFR-CAUS-be.good
21121 'Luban said (the answers) very well, without missing anything.' (150902
21122 luban-zh, 63)

21123 17.2.4.7 Complement clauses with sigmatic causative of manner

21124 Causative forms from adjectival stative verbs occur as complement-taking verbs
21125 to express the manner in which the action takes place (§24.5.1.4). This causative
21126 complement construction competes with the manner serial verb construction
21127 (§17.2.4.6, §25.4.1) and the use of infinitive conversbs (§16.2.1.7, §25.4.2). The same
21128 construction is found with velar causatives (§17.3.2.2).

21129 For instance in (33) the meaning ‘give a good answer’ is expressed with the
 21130 causative *sx-pe* of *pe* ‘be good’ (§17.2.2.7) and an infinitival complement clause
 21131 with the verb *kx-k^ho* ‘to give’.

- 21132 (33) [a-lyn kx-k^ho] u-tx-tu-sx-pe-t n^x tce
 21133 1SG.POSS-answer INF-give QU-AOR-2-CAUS-be.good-PST:TR ADD LNK
 21133 ku-ta-wum nyu
 21133 IPFV-1→2-gather be:FACT

21134 ‘If you give a good answer (to all my questions), I will take you (as my
 21135 disciple).’ (150902 luban-zh, 48)

21136 With the exception of a few verbs like *sype* ‘do well’, most complement-taking
 21137 causative verbs select the lexicalized orientation of the verb in the complement
 21138 clause (§24.3.5). For instance, in (34), the causative verb *c^hy-suu-ymyrm* has the
 21139 DOWNSTREAM orientation preverb *c^hy-* (§15.1.1.1) selected by the verb *yndzur* ‘grind’.

- 21140 (34) kx-yndzur c^hy-suu-ymyrm
 21141 INF-grind IFR:DOWNTSTREAM-CAUS-be.homogeneous
 21141 ‘He ground (the flour) very homogeneously.’ (elicited)

21142 The causative form is also required when the infinitival complement clause
 21143 contains a transitive verb with dummy subject (§14.3.5), as in (35).

- 21144 (35) paxci nuu u-jwa^b kx-lxt juu-z-myke, nuu
 21144 apple DEM 3SG.POSS-leaf INF-release IPFV-CAUS-be.first[III] DEM
 21145 u-q^hu tce juu-ruumuntor,
 21145 3SG.POSS-after LNK IPFV-bloom
 21146 ‘The apple (tree) first grows leaves, and after that blooms.’ (07-paXCi, 14)

21147 17.2.4.8 Auxiliary verbs

21148 A few auxiliary verbs can take the sigmatic causative, and are used with comple-
 21149 ment clauses in a way that is different from those treated in §17.2.4.7.

21150 The causative *suxc^ha* from the modal verb *c^ha* ‘can’ often occurs in inverse
 21151 form with a dummy subject (§14.3.5) with the specific meaning of ‘(cause to)
 21152 be physically able to *X*’, ‘(cause to) be strong enough to *X*’, as in example (36)
 21153 (see also §24.5.3.3). The agent is not expressed, but implicitly refers to the heavy
 21154 object in (36).

- 21155 (36) *nui-rzi tce [ky-fkur] muáj-tur-wy-sux-c^ha.*
 SENS-be.heavy LNK INF-carry.on.the.back NEG:SENS-2-INV-CAUS-can
 21156 'It is heavy, you won't be able to carry it on your back.' (elicitation)

21157 This complement-taking verb is exceptional in being the only one in Japhug
 21158 requiring coreference between object of the matrix clause and subject of the com-
 21159 plement clause (§24.5.3.3).

21160 This verb is attested in direct forms, as in (37), but only in the meaning 'cause
 21161 to be able to bear' without infinitival complement.⁵

- 21162 (37) *kumpya p^hu nui nui-βra tce, mu naura mui-nui-sux-c^he*
 fowl male DEM SENS-win LNK female DEM:PL NEG-SENS-CAUS-can[III]
 21163 '(Otherwise) the roosters are too strong, and and the hens cannot bear it.'
 21164 (150819 kumpGa, 9)

21165 The intransitive phasal *jṛy* 'be finished' (§24.5.6, unrelated to the modal verb
 21166 *jṛy* 'be allowed', §24.5.3.1) has the causative form *suyjṛy* 'finish', used as a syn-
 21167 onym of the transitive verb *st^hut* 'finish' (§24.5.6).

21168 Some modal verbs also appear in the same construction with a velar, instead
 21169 of a sigmatic causative (§17.3.2.3).

21170 17.2.4.9 Collocations

21171 Verbs in noun-verb collocations can undergo sigmatic causative derivation. For
 21172 instance, the combination of *tu-χpum* 'knee' and *ts^hor* 'attach' (§22.4.2.8), which
 21173 means 'kneel' (38), can be causativized to *tu-χpum+sui-ts^hor* 'cause/make/force
 21174 to kneel' (39).

- 21175 (38) *u-χpum pjṛ-ts^hor,*
 3SG.POSS-knee IFR-attach
 21176 'He knelt down.'

- 21177 (39) *u-rkuu nutcu nui-χpum pjui-sui-ts^hor, tce*
 3SG.POSS-side DEM:LOC 3PL.POSS-knee IPFV-CAUS-attach LNK
 21178 *u-ndzyts^hi u-ro nui-kui-ri nunura,*
 3SG.POSS-food 3SG.POSS-excess AOR-SBJ:PCP-remain DEM:PL

⁵ The 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.

21179 *nui-byri* *pjui-χtvr* *tce, tu-sur-ndze* *pjx-ηu*.
 3PL.POSS-front IPFV:DOWN-scatter LNK IPFV-CAUS-eat[III] IFR.IPFV-be
 21180 ‘(The evil prince) forced them to kneel at his side, and would throw at
 21181 them leftovers from his food and force them to eat it.’ (150821 edu de
 21182 wangzi-zh, 63)

21183 The possessive prefix on the inalienable noun *tu-χpum* ‘knee’, which is obliga-
 21184 torily coreferential with the transitive subject in the base construction (38), must
 21185 be coreferential with the causee in the causativized construction (39).
 21186 Causativization of complex predicates is also possible with the velar causative
 21187 prefix (§17.3.2.4).

21188 17.2.5 Semantics of the causative

21189 The basic meaning of the sigmatic causative is a factitive ‘make *X*’ or ‘have some-
 21190 one/something *X*’.

21191 Depending on the volition of the causer and causee and the nature of the ac-
 21192 tion, several specific cases can be distinguished: missive ‘sent to’ (§17.2.5.1), co-
 21193 ercive ‘force to’ (§17.2.5.2), adjutative ‘help *Xing*’ (§17.2.5.3), rogative ‘ask *Xing*’
 21194 (§17.2.5.4), permissive ‘let, allow’ (§17.2.5.5) and indirect causation (§17.2.5.6). This
 21195 classification is intended as a convenient way of exploring the uses of the causative
 21196 in Japhug, and makes no claim to reveal the instantiations of universal categories.

21197 In addition, the sigmatic causative has extended and more grammaticalized
 21198 functions, such as inversive (§17.2.5.7), instrumental (§17.2.5.8) and tropative (§17.2.5.9),
 21199 as well as purely syntactic functions in serial verb constructions (§17.2.4.6 above)
 21200 and complementation (§17.2.4.7).

21201 17.2.5.1 Missive

21202 With motion (§15.1.2.1) and manipulation verbs (§15.1.2.2), the causative has a mis-
 21203 sive meaning. For instance, the causative *sui-yut* from *yut* ‘bring’ means ‘send’
 21204 in the sense of ‘have someone bring *X*’ (either by directly asking a person or by
 21205 mail), as in (40) (see also 23 above in §17.2.4.2).

- 21206 (40) *a-ŋga* *ly-tu-su-yut-ndzi* *nui, a-xtsa* *nui wuma*
 1SG.POSS-clothes AOR-2-CAUS-bring-DU DEM 1SG.POSS-shoe DEM really
 21207 *nui-pe*
 SENS-be.good
 21208 ‘The clothes that you have sent me, the shoes are very nice.’
 21209 (conversation, 15.04.18)

21210 The missive meaning of the causative is also found with non-motional bases
 21211 taking an associated motion prefix, as in (28) above (see also §17.2.4.5).

21212 17.2.5.2 Coercive

21213 The sigmatic causative also occurs to express coercive causation ‘force to’ against
 21214 the will of the causee, as in (41) (see also 39 in §17.2.4.9).

- 21215 (41) *tc^heme nur kuju kui-wxtur~wxti zo na-sui-ta-ndzi*
 girl DEM oath SBJ:PCP-EMPH~be.big EMPH AOR:3→3'-CAUS-put-DU
 21216 *nur-ju*
 SENS-be

21217 ‘They_{DU} forced the girl to swear a big oath.’ (2003 qachga, 139)

21218 This meaning occurs in particular with the adverb *m̥kufts^hi* ‘forcibly’ (42) (see
 21219 also 175, §16.2.1.8), and the related lexicalized causative verb *sufs^hi* ‘force’ (see 16,
 21220 §17.2.3).

- 21221 (42) *tx-pytso smyn m̥kufts^hi tx-sui-ndza-t-a*
 INDEF.POSS-child medicine forcibly AOR-CAUS-eat-PST:TR-1SG
 21222 ‘I forced the child to eat the medicine.’ (elicited)

21223 In this function, the causee generally does not take the ergative, as shown by
 21224 the examples above.

21225 17.2.5.3 Adjutative

21226 The adjutative meaning of the causative ‘help Xing’ occurs with verbs whose
 21227 action is in the interests of the causee, and can only be successfully performed
 21228 by collaboration between causer and causee. A typical example is the causative
 21229 *synbaš* ‘hide’, ‘help to hide’ from *anbaš* ‘hide’ (vi) (see 19 and 20 above, §17.2.4).

21230 Some verbs with irregular allomorphs have the adjutative function, in partic-
 21231 ular *çp^hyo* ‘flee with’ (from the intransitive *p^hyo* ‘flee’, §17.2.2.3) and *zŋga* ‘help
 21232 wearing’ (from *ŋga* ‘wear’, §17.2.2.4).

21233 17.2.5.4 Rogative

21234 Rogative causation occurs when the causer asks a causee for help in performing
 21235 an action, for instance for medical treatment as in (43).

- 21236 (43) *azury kamy t_y-z-nusman-a q^he t_y-mna cti*
 1SG:GEN also AOR-CAUS-treat-1SG LNK AOR-be.better be.AFF:FACT
 21237 ‘I had my own (bellyache) treated (by someone) and it got better.’
 21238 (2011-13-qala, 29)

21239 The rogative *s_y-* prefix derives from this use of the causative (§18.2).

21240 **17.2.5.5 Permissive**

21241 The sigmatic causative occurs with a permissive interpretation ‘let/allow *X*',
 21242 when the causer does not prevent the causee from performing an action. This
 21243 meaning of the causative is common for instance in 2→1 verb forms such as (44)
 21244 and (45).

- 21245 (44) *ku-kuu-z-r_yzi-a-nuu juu-nts^hi*
 IPFV-2→1-CAUS-stay-1SG-PL SENS-be.better
 21246 ‘Please let me stay (here).’ (qajdoskAt 2002, 67)

- 21247 (45) *a-mu ny-ndzyi w^hrc^hβ*
 2SG.POSS-mother 2SG.POSS-fang 3SG.POSS-interstice
 21248 *tu-kui-suu-rto_b-i ra*
 IPFV-2→1-CAUS-look-1SG be.needed:FACT
 21249 ‘Mother, let us look at (show us the thing) that is in the interstice
 21250 between your fangs?’ (Norbzang 2012, 308)

21251 Additional examples of permissive causatives include for instance *z-nuna* ‘al-
 21252 low to rest’ (§12, §17.2.3) and *suu-ndza* ‘let eat, give to eat’ (24, §17.2.4).

21253 **17.2.5.6 Indirect causation**

21254 The sigmatic causative can be used to express the unintended result of an (erro-
 21255 neous) action on the part of the causer, as in (46) (see also 22, §17.2.4).

- 21256 (46) *nyzo t_y-ndze ma alo ma-ly-tuu-tsuum ma*
 2SG IMP-eat[III] LNK upstream NEG-IMP:UPSTREAM-2-take.away LNK
 21257 *t^ha li kui-suu-_bndui-a*
 later again 2→1-CAUS-hit-1SG
 21258 ‘Eat it, don’t take it up there, you would cause me to be beaten again.’
 21259 (2003-kWBRa, 71-72)

21260 It can even be used to express a detrimental result for the causer due to his
 21261 negligence and failure to take proper preventive measures (47).

- 21262 (47) *kum muu-c^hui-pe q^he ... kum kuu-p^hjuu p^hur-βde q^he*
 door NEG-IPFV-close LNK door SBJ:PCP-ACAUS:open IPFV-leave LNK
 21263 *laχtc^ha ra tu-z-murki*
 thing PL IPFV-CAUS-steal[III]
 21264 '(Due to being a heavy drinker), he would (forget) to close the door, leave
 21265 it open, and (as a result) have his things stolen (by other people).'
 21266 (17-lhazgron, 72-73)

21267 It also occurs when the causer only suggests that the causee undertake an
 21268 action of his own volition, with unexpected consequences for the causee. In (48),
 21269 the causative on *nu-tu-su-p^hut* ‘you had it taken off’ refers to the fact that the
 21270 causer (a trickster rabbit from a traditional story) cheated the referent in 1SG (a
 21271 fierce bear) by suggesting that he treat his belly ache in such a way that he would
 21272 wound his own bottom. Note that the absence of 2→1 indexation on the verb *nu-*
 21273 *tu-su-p^hut* means that the bear does not regard himself as causee, and expresses
 21274 it as if the wound resulted from an event independent of him.

- 21275 (48) *pj^h-kuu-nuuβlu-a tce m^hy-jyy ma tce a-xtu*
 IFR-2→1-cheat-1SG LNK NEG-be.allowed:FACT LNK LNK 1SG.POSS-belly
 21276 *kuu-mna syzny a-mp^huz u-ntc^hur*
 INF:STAT-be.better COMP 1SG.POSS-buttock 3SG.POSS-piece
 21277 *nur-tuu-su-p^hut tce*
 AOR-2-CAUS-take.off LNK
 21278 'You cheated me, it is outrageous, not only did my belly not get better, but
 21279 (by misleading me) you caused a piece of my buttocks to be ripped off.'
 21280 (2011-13-qala, 15)

21281 The causative can also express an event resulting not from an action, but from
 21282 the absence of action on the causer’s part, with unintended consequences for
 21283 the patientive argument. For instance, in (49), the 2SG causer (a bird) is about to
 21284 (unwillingly) cause the 1SG (patientive argument) to be killed by not appearing
 21285 to the king.

- 21286 (49) *nur maŋ ny, m^háj-tuu-yi tce kuu-sui-sat-a*
 DEM not.be:FACT ADD NEG:SENS-2-come LNK 2→1-CAUS-kill:FACT-1SG

21287 *nur-ŋu*

SENS-be

21288 ‘Otherwise, by not coming, you are about to get me killed.’ (2005

Kunbzang, 315)

21290 In (50), the causative expresses a non-expected result due to the negligence of
21291 the causer.21292 (50) *tʂ-mt^hum* *ŋy-z-ydi-t-a*

INDEF.POSS-meat IFR-CAUS-have.a.stench-PST:TR-1SG

21293 ‘I let the meat spoil.’ (elicited)

21294 17.2.5.7 Inversive

21295 The inversive function of the causative occurs with verbs expressing a transfer
21296 of property, reversing the recipient/source relation of the base verb. Two possi-
21297 ble cases exist, depending on how source and recipient are encoded by the base
21298 verb’s argument structure.21299 First, most inversive causatives are recipient-source inversive: the argument
21300 with oblique case of the base verb (the source of the transfer) corresponds to the
21301 causer of the causative verb, and the subject of the base verb (the recipient of the
21302 transfer) to the causee of the causative verb (indexed as direct object) (see §14.4.3
21303 for a more detailed discussion). Examples of goal inversives include the irregular
21304 *čurŋo* ‘lend’ (§17.2.2.1) from *rŋo* ‘borrow’ and *zŋŋŋgu* ‘lend’ from *nŋŋgu* ‘borrow’
21305 (see §14.4.1 on the semantic difference between *nŋŋgu* and *rŋo* ‘borrow’),21306 Second, the highly lexicalized *nusuk^ho* ‘rob, extort’ from *k^ho* ‘give’ is a source-
21307 recipient inversive: the dative argument of the base verb (recipient) corresponds
21308 to the transitive subject (causer/recipient) of the causative verb, and the subject
21309 of the base verb to the direct object (source) of the causative verb (§17.2.3). For
21310 other secundative verbs, the rogative *s-* derivation is used instead to express
21311 source-recipient inversion (§18.2).21312 Although inversive causative mostly occurs with ditransitive bases, the causative
21313 of the monotransitive verb *χtu* ‘buy’ can also be interpreted as a recipient-source
21314 inversive. Although *χtu* ‘buy’ lacks a dative argument, the source can be option-
21315 ally specified as a locative adjunct, as in (51), or with the dative in the case of
21316 people as in (52).21317 (51) <*shangdian*> *u-ŋgu* *kʂ-χtu* *yʂzu*
shop 3SG.POSS-inside OBJ:PCP-buy exist:SENS

21318 ‘It (can) be bought in a shop.’ (28-CAmWGdW, 107)

- 21319 (52) <wugui> *wi-kui-ntsye* γγzu *tce, numura nuu-cki* li
 21320 turtle 3SG.POSS-SBJ:PCP-sell exist:SENS LNK DEM.PL 3PL.POSS-DAT again
wi-ndza *ra kx-xtu* γγzu.
 21321 3SG.POSS-food PL OBJ:PCP-buy exist:SENS
 21322 ‘There are people_i who sell turtles_j, and one (can) buy their_j food from
 them_i.’ (140510 wugui, 33)

21323 The causative form *suu-xtu* has several meanings, including the factitive ‘cause
 21324 to buy’ and instrumental ‘buy with’ (see 54 below), but can also mean ‘sell’. This
 21325 meaning is found in (53) with 3→1SG indexation: the transitive subject of *suxtu*
 21326 in this construction is both causer and source, while its direct object is the recip-
 21327 ient.

- 21328 (53) *pynmawombyr kuu* [...] *tγ-wy-suu-xtur-a* ηu
 ANTHR ERG AOR-INV-CAUS-sell-1SG be:FACT
 21329 ‘It is Padma ’Od’bar who sold it to me.’ (2012 Norbzang, 157)

21330 Case marking is completely different when *suu-xtu* has the factitive function
 21331 ‘cause to buy’, as in (54): the source of the transaction (*tx-mthum wi-kui-ntsye* ‘the
 21332 meat seller’) is marked with the dative as with the base verb above in (52).⁶ The
 21333 causative *suxtu* therefore has two different argument structures depending on
 21334 whether it reflects the inversive (‘sell’, 53) or factitive/missive (with associated
 21335 motion ‘send to buy’ as in 54, §17.2.5.1) functions of this derivation.

- 21336 (54) *tx-mt^hum* *wi-kui-ntsye* *wi-cki* *tce tx-mt^hum*
 INDEF.POSS-meat 3SG.POSS-SBJ:PCP-sell 3SG.POSS-DAT LOC INDEF.POSS-meat
 21337 *c-to-suu-xtu* *q^he,*
 TRAL-IFR-CAUS-buy LNK
 21338 ‘She send him to buy meat at the butcher’s.’ (160701 poucet2, 15)

21339 17.2.5.8 Instrumental

21340 The causative prefix occurs on transitive verbs to mark an instrument, syntac-
 21341 tically treated as a causee as in (55), where the Chinese loanword 粉笔 <fěnbì>
 21342 ‘chalk’ occurs with ergative marking (§8.2.2.4).

⁶ One 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.

- 21343 (55) *tcaχpa bnuaz nuu kuu, nyki, <alibaba> yuu ui-kum nuačcu*
 thief two DEM ERG FILLER ANTHR GEN 3SG.POSS-door DEM:LOC
 21344 *<fenbi> kuu, nykinuu, kuu-rytuum ci to-suu-ryt-ndži*
 chalk ERG FILLER SBJ:PCP-be.round INDEF IFR-CAUS-write-DU
 21345 ‘The two thieves drew a circle on Alibaba’s door.’ (140512 alibaba-zh, 181)

21346 However, the causative prefix is not required with overt instruments, as in
 21347 (56).

- 21348 (56) *ui-jav kuu ju-maurbuzz puu-cʰa,*
 3SG.POSS-hand ERG IPFV-scratch SENS-can
 21349 ‘(The mole) can scratch it with its claws.’ (28-qapar, 159)

21350 The co-existence of an overt instrument in the ergative with an overt transitive
 21351 subject in the same clause (without any pause) is clumsy. Example (57a) for in-
 21352 stance is considered infelicitous if borderline ungrammatical, and the alternative
 21353 construction with two clauses (57b) is highly preferred.

- 21354 (57) a. *??uزو kuу spuuyjuu kuу tyscoz pa-sui-ryt*
 3SG ERG pen ERG letter AOR:3→3'-CAUS-write
 21355 (intended meaning:) ‘S/he wrote the letter with the pen.’ (elicited)
 b. *uزو kuу spuuyjuu ta-ndo tce tyscoz pa-sui-ryt*
 3SG ERG pen AOR:3→3':UP-take LNK letter AOR:3→3'-CAUS-write
 21357 ‘S/he took the pen and wrote the letter with it.’ (elicited)

21358 With intransitive bases (such as *βzi* ‘get drunk’ in 58), the causative expresses
 21359 a cause (§8.2.2.5) rather than an instrument.

- 21360 (58) *cʰa kuu ló-wy-suu-βzi*
 alcohol ERG IFR-INV-CAUS-become.drunk
 21361 ‘He became drunk from the alcohol.’ (elicited)

21362 The irregular causative *çuufkaβ* ‘cover with’ (from the transitive *fkaβ* ‘cover’,
 21363 §17.2.2.1) has an instrumental function, and the instrument is marked with the
 21364 ergative as in (59).

- 21365 (59) *kʰylýβ kuu tutʰuu puu-cuu-fkaβ-a*
 cover ERG pan AOR-CAUS-cover-1SG
 21366 ‘I covered the pan with a cover.’ (elicited)

21367 Another irregular causative, *zmbri* ‘play’ (from *mbri* ‘cry’), can also be inter-
 21368 preted as an instrumental causative, but treats the instrument as object (§17.2.2.4)
 21369 without ergative.

21370 17.2.5.9 Tropative

21371 A handful of verbs with a sigmatic causative prefix have a tropative ‘find X, con-
 21372 sider X’ rather than a factitive meaning, the same as what would have been ex-
 21373 pected from a *nṛ-* tropative derivation (§17.5).

21374 The most common tropative causative is *znyja* ‘find *X* a shame’, ‘hate to part
 21375 with’ (60) (in Chinese 舍不得 <shēbùdé> ‘hate to part with’), which derives from
 21376 the intransitive *nṛja* ‘be a shame’ (61).

- 21377 (60) *uu-mu* *uu-wa* *ni kuu juu-z-nṛja-ndzi* *q^he*
 3SG.POSS-mother 3SG.POSS-father DU ERG SENS-CAUS-be.a.shame-DU LNK
 21378 *muu-ta-su-ye-ndzi*,
 NEG-AOR.3→3':UP-CAUS-come-DU

21379 ‘Her parents could not stand to part with her, and did not let her come.’
 21380 (14-siblings, 304)

- 21381 (61) *tce tuu-ji* *juu-nṛja*.
 LNK INDEF.POSS-field SENS-be.a.shame
 21382 ‘These fields, what a shame (nobody is taking care of them).’

21383 Other examples of tropative causative include *zyrt̥ca* ‘consider to be wrong’
 21384 from *yrt̥ca* ‘be wrong’ (46, §18.3.1.4), *zyrŋgi* ‘consider to be right’ from *yŋgi* ‘be
 21385 right’ and *znṛkyyro* ‘find okay’ from *nṛkyyro* ‘be okay’ (itself a denominal verb,
 21386 §20.7.1). The velar causative also has tropative uses (§17.3.3.1).

21387 The expected tropative forms †*nṛnṛja*, †*nṛyrt̥ca*, †*nṛyŋgi* and †*nṛnṛkyyro* are
 21388 not attested.

21389 In addition, the verbs *supa* ‘consider’ and *syrtsi* ‘count as’, causatives of *pa* ‘do’
 21390 (§22.4.2.5, §10.1.7.1) and *artsi* ‘be counted as’ (§17.2.8) are used in the periphrastic
 21391 tropative construction (§24.5.1.2).

21392 The causative of the denominal verb *afsuja* ‘be of the same size’ (§20.2.1) has
 21393 the near-tropative meaning ‘compare the length/size of *X* and *Y*’ (rather than
 21394 ‘make *X* and *Y* have the same length’ or ‘consider that *X* and *Y* have the same
 21395 length’) as in (62).

17 Valency-increasing derivations

- 21396 (62) *mbro w-jme cho ny-kyrme tú-wy-suu-γfsuja*
horse 3SG.POSS-tail COMIT 2SG.POSS-hair IPFV-INV-CAUS-be.of.same.size
21397 *ra*
be.needed:FACT
21398 ‘Let us compare the (length) of the horse’s tail and that of your hair.’ (‘Let
21399 us see which is longest.’) (2014-kWLAG, 675)

21400 17.2.5.10 Applicative

21401 The *suu-* prefix has a value that can be described as applicative comitative when
21402 used with the motion verb *rjuy* ‘run’.

21403 Its causative form *surjuy*, in addition to the regular missive meaning ‘cause
21404 to gallop’, can also serve as an allative transitive verb of manipulation ‘run away
21405 with’ (§15.1.2.2), as in (63).

- 21406 (63) *juulpa w-pci tce cʰγ-suu-rjuy*.
village 3SG.POSS-outside LOC IFR:DOWNSTREAM-CAUS-run
21407 ‘He ran away from the village carrying her (on his back).’ (150829
21408 jidian-zh, 83)

21409 17.2.6 Stative verbs

21410 Although the velar causative *γr-*, rather than the sigmatic prefixes, occurs with
21411 most stative verbs, some stative verbs only appear with allomorphs of the sig-
21412 matic causative.⁷ Table 17.6 presents a list of representative examples.

21413 Stative verbs with a prefixal syllable (*mr-*, *rr-*, *yuu-* etc), always appear with
21414 *z-*, never with *γr-* (except some examples with the prefixal element *a-*). This con-
21415 straint explains for instance why the causative of *mr̥tsaqβ* ‘be spicy’ is in *z-* rather
21416 than *γr-*, while almost all other stative verbs denoting feelings or taste have a
21417 causative in *γr-*, for instance *tçur* ‘be sour’ → *γrtçur* ‘make sour’ and *tsri* ‘be salty’
21418 → *γrtstri* ‘make salty’.

21419 Color stative verbs and stative verbs related to disease and pain (*ngo* ‘get sick’,
21420 *mjjym* ‘hurt’ etc) also form their causative with *suu-* and its variants rather than
21421 with *γr-*, as seen in the table above.

21422 Only a handful of stative verbs are compatible with both velar and sigmatic
21423 causative prefixes. The semantic contrast between them is treated in §17.3.3.2.

⁷ See §17.2.4.6 and §17.2.4.7 concerning some uses of the causativized stative verbs.

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>naꝝ</i> 'be black'	<i>suw-jaꝝ</i>	§17.2.1.4
<i>arji</i> 'be blue'	<i>sui-yrji</i>	§17.2.1.3
<i>yurni</i> 'be red'	<i>z-yurni</i>	§17.2.1.1
<i>mvrtsaqꝝ</i> 'be spicy'	<i>z-mvrtsaqꝝ</i>	
<i>pe</i> 'be good'	<i>sy-pe</i>	§17.2.2.7
<i>mjym</i> 'hurt' (of a body part)	<i>εui-mjym</i>	§17.2.2.1

17.2.7 Recursion

The causative is the only derivation in Japhug that can occur twice in the same form. A second causative prefix can appear on lexicalized causative verbs, in particular those with irregular allomorphs (§17.2.2), such as *εunqoꝝ* 'hang' in (64), where the additional *sui-* prefix has a factitive function.

- (64) *mbro numu w-ku pji-sui-p^hut tce, w-ku numu*
 horse DEM 3SG.POSS-head IFR-CAUS-take.off LNK 3SG.POSS-head DEM
zara yu^h nui-kyntc^haꝝ yu^h w-kum nutcu
 3PL GEN 3PL.POSS-street DEM 3SG.POSS-door DEM:LOC
to-sui-cui-nqoꝝ.
 IFR:UP-CAUS-CAUS-hang

'She had (people) behead the horse, and hang its head on the city gate.'
 (140428 mu e guniang-zh, 107-108)

The rogative verb *syjts^hi* 'ask for something to drink' (§18.2) also contains two instances of the sigmatic causative (at least historically), the irregular *j-* (§17.2.2.5), preceded by the passive *a/yr-* whose vowel merges with another causative. The underlying form of this verb is thus *sui-yr-j-ts^hi* (CAUS-PASS-CAUS-drink).

However, double causativization also occurs with non-lexicalized causatives. For instance, in (65) and (66), the *sui-* prefix closest to the stem is factitive, and the one added to it has the instrumental function (§17.2.5.8), meaning 'cause to *X* with'.

- 21442 (65) *nunur kur pjú-wy-sui-sui-spor* *nui-ηu.*
DEM ERG IPFV-INV-CAUS-CAUS-have.a.hole SENS-be
21443 ‘One makes a hole (into it) with this.’ (24-mbGo, 8)
- 21444 (66) *ci nui tce tce smi pjú-wy-βlui tce nui smumba nui ku*
one DEM LNK LNK fire IPFV-INV-burn LNK DEM flame DEM ERG
21445 *ui-rme nui kú-wy-sui-sui-βyuit* *nui-ra.*
3SG.POSS-hair DEM IPFV-INV-CAUS-CAUS-burn.off SENS-be.needed
21446 ‘The other (method to take out chicken feathers) is to make a fire and
21447 burn off the feathers with the flames.’ (150907 kAnWtChWwWt, 21)

21448 In (65) and (66), the base verbs *spor* ‘have a hole’ and *βyuit* ‘be burned off’ (of
21449 hairs/feathers) are intransitive, but double causativization is also possible with
21450 transitive bases, as in (67).

- 21451 (67) *pui-ta-sui-sui-ryt*
AOR-1→2-CAUS-CAUS-write
21452 ‘I made you write it_i with it_j :

21453 Another type of double causative occurs when sigmatic and velar causative
21454 prefixes are combined (§17.3.4).

21455 17.2.8 Compatibility with other derivations

21456 As the most productive verbal derivation, the sigmatic is also the one that is
21457 compatible with the greatest number of other derivations.

21458 Table 17.7 lists the derivational prefixes that can follow the causative in the
21459 prefocal chain (following the regular allomorphy described in §17.2.1). Since all
21460 cases are exemplified and discussed in the relevant sections, the data is not re-
21461 produced here. Despite the considerable number of prefixes that are compatible
21462 with the sigmatic causative, the reflexive *zγr-* (§18.3.4), *sγ-* antipassive (§18.6.2)
21463 and proprietive (§18.8) derivations are never preceded by the sigmatic causative.
21464 The autive does not normally follow the causative, except in a handful of lexical-
21465 ized examples (§19.1.6).

21466 Fewer derivations can occur before the causative in the prefocal chain. The
21467 other valency-increasing derivations (applicative, tropative, velar causative) never
21468 take a sigmatic causative verb as input. Among valency-decreasing derivations,
21469 the anticausative prenasalization is never attested on causative verbs.

21470 Three valency-decreasing derivations precede the causative only in a hand-
21471 ful of lexicalized verbs. The antipassive and passive derivations are only found

Table 17.7: Derivations following the sigmatic causative in the prefixal chain

Derivation	Form	Reference
Applicative	<i>z-nuu/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>su(y)+prenasalization</i>	§18.5.6
Antipassive	<i>z-rr-</i>	§18.6.9
Antipassive	<i>z-ry-</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

21472 on *rγjts^hi* ‘give to someone to drink’ (§18.6.4) and *ajts^hi* ‘be given to drink’ (§18.1.4),
 21473 from the irregular causative *jts^hi* ‘give to drink’ (§17.2.2.5) of *ts^hi* ‘drink’ and *sγnusuk^ho*
 21474 ‘rob people’ from the autive-causative *nusuk^ho* ‘rob, extort’ (§18.6.9).

21475 In addition, the progressive prefix *asu-* probably derives from the combination
 21476 of the passive with the sigmatic causative (§21.6.1.3), but cannot be analyzed this
 21477 way synchronically.

21478 The derivations that can productively take a sigmatic causative verb as input
 21479 are presented in Table 17.8.

Table 17.8: Derivations preceding the sigmatic causative in the prefixal chain

Derivation	Form	Reference
Reflexive	<i>zγγ-su(y)-</i>	§18.3.4
Reciprocal	<i>a-sui(y)-</i> + reduplication	§18.4.1.2
Facilitative	<i>nuyuu-su(y)-</i>	§18.9.2
Autive	<i>nu-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 prefixal 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 *yr*- (in the Kamnyu dialect, corresponding to *wr*- 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, polysyllabic bases, including those whose non-final syllable is a derivation prefix or an unanalyzable element (such as *a*-, *nV*-, *rV*-, *sV*- etc) can only be causativized with sigmatic prefixes (§17.2.6). A handful of verbs are compatible with both velar and sigmatic causative prefixes (§17.3.3.2).

Table 17.9 presents a representative sample of velar causative verbs, including adjectival stative verbs, existential verbs and modal verbs. The presence of Tibetan loanwords such as *dṛṇ* ‘be many’, *βdi* ‘be well’ and *tsʰoz* ‘be complete’ (from རྒྱନྰ ‘possessing’, རྒྱେ ‘well’ and བྲ୍ଲୋ ‘complete’) in the list shows that this prefix is productive.

The velar causative *yr*- prefix is homophonous with a few other derivational prefixes, including denominal (§20.5), deideophonic (§20.9.1) and subject-oriented facilitative (§18.9.1). The latter derives intransitive verbs whose stems are identical (with different conjugations however) to those of velar causatives, for instance *yrwxti* ‘become big easily’ vs. *yrwxti* ‘make bigger’ from *wxti* ‘be big’.

The causative verbs from complement-taking modal verbs such as *kʰw* ‘be possible’ can occur with nominal objects, especially abstract nouns as in (68), but are more commonly found with complement clauses as objects (§17.3.2.3).

- | | | | | |
|------------|--|----------------------------------|---------------|--------------|
| 21509 (68) | <i>ndzi-tutsye</i> | <i>ra muu-puu-ky-yr-kʰw</i> | <i>ftcaka</i> | <i>ntsui</i> |
| | 2DU.POSS-commerce | PL NEG-IPFV-INF-CAUS-be.possible | manner | always |
| 21510 | <i>tu-βze</i> | <i>pjyr-ŋu</i> . | | |
| | IPFV-make[III] | IFR.IPFV-be | | |
| 21511 | 'He was always trying (by all means) to make it impossible for them to manage their business.' (150825 baishe zhuan-zh, 102) | | | |
| 21512 | | | | |

Table 17.9: Examples of velar *yv-* causative derivations

Base verb	Derived verb
<i>dvn</i> ‘be many’	<i>yvdvn</i> ‘increase’
<i>βdi</i> ‘be well’	<i>yvβdi</i> ‘repair’, ‘make better’
<i>ts^hoz</i> ‘be complete’	<i>yvts^hoz</i> ‘make complete’
<i>wxti</i> ‘be big’	<i>yvwxti</i> ‘make bigger’
<i>jom</i> ‘be broad’	<i>yvjom</i> ‘broaden’
<i>mna</i> ‘be better’	<i>yvmna</i> ‘heal’, ‘make better’
<i>smi</i> ‘be cooked’	<i>yvsmi</i> ‘cook’
<i>me</i> ‘not exist’	<i>yvme</i> ‘destroy’
<i>maꝝ</i> ‘not be’	<i>yvmaꝝ</i> ‘cause not to be’
<i>ra</i> ‘be needed’	<i>yvra</i> ‘cause to have to’
<i>k^huu</i> ‘be possible’	<i>yvk^huu</i> ‘make it possible to’

21513 17.3.1 Irregular allomorphs

21514 Irregular allomorphs of the velar causative are very rare and highly lexicalized.
 21515 The *yv-* prefix clearly originates from earlier **wv-*, as shown by the form *wv-*
 21516 in eastern Japhug dialects and the cognate prefixes *wv-* in Tshobdun and Zbu
 21517 (J. T.-S. Sun 2014a). The vowel-less irregular allomorphs originate from earlier
 21518 **w-*, nasalized to /m/ before nasal and prenasalized stops.

21519 A /w-/ allomorph, realized as *β-*, is found in the verb *βri* ‘protect’, ‘save’ (69),⁸
 21520 which derives from the intransitive *ri* ‘remain’, ‘be left’ (see examples 87, §7.3.3.3
 21521 and 131, §14.5.1.4). The bare root *ri* is also attested in the transitive verb *ri* ‘save’
 21522 (always in collocation with *tu-sroꝝ* ‘life’, §22.4.3.2), a zero derivation from *ri* ‘re-
 21523 main’ (§14.5.1.4).

- 21524 (69) *nꝝ-pi ni tx-tui-βri-t ηu*
 21525 2SG.POSS-elder.sibling DU AOR-2-save-PST:TR be:FACT
 ‘You saved your two elder brothers.’ (qachGa 2003, 130)

21526 The lexicalized causative *βri* can be subjected to reflexivization (§18.3.4) in
 21527 *zvβri* ‘protect oneself’ (example 15, §6.2.1).

⁸ This verb can take as object the entity being protected as in (69) (see also 45, §14.3.2.3), but also in some cases the entity one protects something from; for instance the participial clause *qale uu-kuu-βri* (wind 3SG.POSS-SBJ:PCP-protect) means ‘(hedge) that protects from the wind’.

21528 The regular sigmatic causative *suy-ri* from the base verb *ri* ‘remain’ also exists,
 21529 and predictably means ‘leave, not use up completely’ as in (70). It is probable
 21530 that *βri* originally also had a meaning close to that of *suy-ri*, and then changed to
 21531 ‘save, protect’.

- 21532 (70) *ki a-tx-tuu-ndze q^he q^he uu-qa nutcu*
 DEM.PROX IRR-PFV-2-eat[III] LNK LNK 3SG.POSS-bottom DEM:LOC
 21533 *tuu-ndzruu jamar ci zo a-nui-tui-suy-ri ma*
 INDEF.POSS-nail about INDEF EMPH IRR-PFV-2-CAUS-remain LNK
 21534 ‘When you eat this, leave a (quantity of) about a nail (from it in the
 21535 bowl).’ (2003kandZislama, 80)

21536 The *m*- allomorph of the velar causative occurs in the verb *mno* ‘prepare’ (see
 21537 36 in §8.2.2.1, and the discussion in §16.5.1), a causative of the intransitive stative
 21538 verb *no* ‘be ready’ (with nasalization **w-no* → *mno*). This intransitive verb is
 21539 particularly common in the participle form *kui-no* ‘already prepared, ready to
 21540 (eat)’ (corresponding to Chinese 現成 <xiānchéng> ‘ready-made’), as in (71).

- 21541 (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
 21542 *tu-ndza-j cti ma*
 IPFV-eat-1PL be.AFF:FACT LNK
 21543 ‘Nowadays we do not raise (chicken) anymore, we eat ‘ready-made’
 21544 (eggs).’ (22-kumpGa, 85)

21545 Like *βri* above, the causative *mno* can be reflexivized to *zyymno* ‘prepare oneself’
 21546 (§18.3.4). A regular causative form *suy-no* ‘prepare’ is also attested, but it is much
 21547 rarer than *mno*, and the semantic difference between these two causative forms
 21548 has not been elucidated.

21549 Another example of the nasalized *m*- allomorph is the rare transitive verb
 21550 *mdzar* ‘drip dry’ (73) which derives from the intransitive verb *ndzar* ‘drip dry’
 21551 (72).⁹ The onset *mdz-* is phonologically /mndz-/, with the causative **w-* prefix
 21552 nasalized by the prenasalized voiced affricate /ndz/, a unitary phoneme (§4.2.1.9).

- 21553 (72) *tuu-ŋga nua-χtci-t-a tce a-puu-ndzar tce*
 INDEF.POSS-clothes AOR-wash-PST:TR-1SG LNK IRR-PFV-drip.dry LNK

⁹ This verb also appears in participial form in the compound *kundzarmu* ‘type of rain’ (see 51, §16.1.1.7).

17.3.2 Morphosyntax

17.3.2.1 Negation

The combination of the velar causative with negation prefixes is ambiguous. As in the case of the sigmatic causative (§17.2.4.4), the scope of the negation can either include the causation ('not cause to *X*') or not ('cause not to *X*'). For instance, the causative *y̥rwxti* 'make bigger' in negative form can either be 'not make bigger', or 'make smaller' as in (74).

- 21570 (74) *w-p^huu puu-wxti tce, nura t^hamt_cyt ma-ty-tui-yx-wxti*
 1SG.POSS-price SENS-be.big LNK DEM:PL all NEG-IMP-2-CAUS-be.big
 21571 '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 *yrkʰw* ‘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).

21580 The examples in (75) illustrate the possible constructions with the causative
 21581 *yṛtē^hom* ‘make too much’ from *tē^hom* ‘be too much’ and the verb *ts^hi* ‘drink’ ex-
 21582 pressing the main action in the complement clauses. The velar infinitive (75a)
 21583 and bare infinitive (75b) constructions have the same meaning ‘drink too much’,
 21584 and the causative verb takes the orientation prefix normally selected by the verb
 21585 in the complement clause, in this case either EASTWARDS (75a) or UPSTREAM (75b).

- 21586 (75) a. [c^ha k_y-ts^hi] ko-y_y-tc^hom
 alcohol INF-drink IFR-CAUS-be.too.much
- 21587 b. [c^ha u_y-ts^hi] lo-y_y-tc^hom
 alcohol 3SG.POSS-BARE.INF:drink IFR-CAUS-be.too.much
 ‘He drank too much alcohol.’ (elicited)
- 21588 c. c^hyt^hi ko-y_y-tc^hom
 alcohol.drinking IFR-CAUS-be.too.much
 ‘He had drunk too much alcohol.’ (150829 jidian-zh, 16)

21591 In addition, example (75c) shows that object-verb action nominal compounds
 21592 (§5.5.5.2, §16.4.7) can occur with causative verbs instead of complement clauses.

21593 While action nominal compounds are rare, the causative complement con-
 21594 struction with velar and bare infinitive is very common and compatible with all
 21595 verb categories. Even noun-verb collocations such as *tu-x_yrt+l_yt* ‘exert strength,
 21596 do *X* forcibly’ can occur in these complement clauses as in (76) (with an UPWARDS
 21597 orientation preverb).

- 21598 (76) rg_ytpu nu_y k_y u_y-tcu_y ja-st^hob tce, u_y-x_yrt
 old.man DEM ERG 3SG.POSS-son AOR:3→3'-push LNK 3SG.POSS-strength
- 21599 u_y-l_yt to-y_y-tc^hom tce
 3SG.POSS-release IFR-CAUS-be.too.much LNK
 ‘The old man pushed his son, but exerted too much strength and...’
 21600 (150831 jubaopen-zh, 161-162)

21602 All velar causative verbs, even those that are generally used with a concrete
 21603 factitive meaning, can be used in these complement-taking constructions. For in-
 21604 stance, *yṛ-βdi* (from *βdi* ‘be well’), which can mean ‘repair’ with a nominal object
 21605 (see 23, §6.3), occurs in the sense of ‘do *X* well, do *X* nicely’ with a complement
 21606 clause as in (77).

- 21607 (77) *k^ha u-B^Yri nuutcu u-fkrym*
 house 3SG.POSS-front DEM:LOC 3SG.POSS-BARE.INF:place
 21608 *a-k^Y-tuu-yy-βdi*
 IRR-PFV-2-CAUS-be.well
 21609 'Place these nicely (in order) in front of the house.' (smanmi 2003.1, 253)

21610 17.3.2.3 Modal and existential verbs

21611 Velar causative forms of modal verbs, in particular *yrra* 'cause to have to' and
 21612 *yyk^huu* 'make it possible to', are found with velar infinitive or finite complement
 21613 clauses (§24.5.1.1) like the corresponding base verbs *ra* 'be needed' and *k^huu* 'be
 21614 possible' (§24.5.3.1) as in (78), but not with bare or dental infinitives.

- 21615 (78) *[ky-nuu-tօn]* *muu-tr-yy-k^hu-t-a.*
 INF-AUTO-come.out NEG-AOR-CAUS-be.possible-PST:TR-1SG
 21616 'I preventing it/him from coming out.' (elicited)

21617 The object of the causative verb is most often the (transitive or intransitive)
 21618 subject of the complement clause as in (78), but not necessarily; in (79), the object
 21619 of *tr-yy-k^huu-t-a* is the possessor of the subject (in the possessive construction,
 21620 §22.5.2.1).

- 21621 (79) *[u-rŋual ky-tu] tr-yy-k^huu-t-a.*
 3SG.POSS-money INF-exist AOR-CAUS-be.possible-PST:TR-1SG
 21622 'I made it possible for him.her to have money.' (elicited)

21623 In (80), the causative *yrra* occurs with a clause containing the form *ku-ra* that
 21624 can either be interpreted as a relative (with a subject participle) or as a com-
 21625 plement clause (in which case the *ku-* prefix is preferably analyzed as a stative
 21626 infinitive).

- 21627 (80) *<xianling> nuu nuu-rga q^hendyre, [...] [nuu-βjօn]*
 magistrate DEM AOR-be.happy LNK 3PL.POSS-servant
 21628 *ku-ra]* *nuu muu-jy-yy-ra q^he,*
 SBJ:PCP-be.needed DEM NEG-IFR-CAUS-be.needed LNK
 21629 'The magistrate was happy, and cancelled the duties that they had to do.'
 21630 (150904 cuzhi-zh, 187)

21631 The existential verb *tu* (§22.5.1.2) can also be subjected to the *yy-* derivation,
 21632 which yields the verb *yytu* 'cause to have'. This form is used to causativize pos-
 21633 sessive constructions (§22.5.2) or noun-verb collocations (§22.4.1) as in (81).

- 21634 (81) *a-xcyst zo tu-yyste tce*
 1SG.POSS-strength EMPH IPFV-CAUS-exist[III] LNK
 ‘(The rain, flowing on my body), gives me (makes me have) strength.’
 21635 (150819 woniu-zh, 55)

21637 17.3.2.4 Collocations

21638 Complex predicates comprising a noun-verb collocation can undergo causativiza-
 21639 tion with the *yṛ-* prefix.¹⁰

21640 For instance, the combination of the lexicalized object participle *kṛ-ti* (OBJ:PCP-
 21641 say) with the existential verb *me* ‘not exist’, which means ‘have nothing to say’
 21642 or ‘be unable to say for sure’ (see example 93, §16.1.2.7), can be causativized to
 21643 *kṛ-ti + yṛ-me* ‘cause *X* to have nothing to say’ as (82).

- 21644 (82) *rjylpu nuu u-kṛ-ti na-yṛ-me*
 king DEM 3SG.POSS-OBJ:PCP-say AOR:3→3'-CAUS-not.exist
 ‘He made the king unable to say anything.’ (2005 tAwakWcqraR, 110)

21646 17.3.3 Semantics

21647 17.3.3.1 Tropative

21648 The velar causative does have a tropative interpretation in specific contexts, like
 21649 the sigmatic causative (§17.2.5.9). The verb *yṛwxti* ‘make bigger’ from *wxti* ‘be big’
 21650 for instance can mean ‘find/consider to be bigger’ as in (83).

- 21651 (83) *kumab uu-yi nura nuu-rtsawa*
 other 3SG.POSS-relative DEM:PL 3PL.POSS-importance
 21652 *muu-pjy-nuu-yṛ-wxti*
 NEG-IFR.IPFV-AUTO-CAUS-be.big
 ‘He did not consider his other relatives to be as important (as his wife).’
 21653 (kWjujmAlu 2003, 64)

21655 A tropative velar causative with a slightly lexicalized meaning is *yṛkʰe* ‘depre-
 21656 ciate, demean’ (84) (see also 141, §16.1.3.10), from *kʰe* ‘be stupid’.

¹⁰ The causativization of complex predicates with the sigmatic prefixes is treated in §17.2.4.9.

- 21657 (84) *w-kw-n-nymqe, w-kw-nv̥re, w-kw-yr-kʰe nura*
 3SG.POSS-AUTO-scold 3SG.POSS-laugh.at 3SG.POSS-CAUS-be.stupid DEM:PL
 21658 *p̥w-xcat zo.*
 SENS-be.many EMPH
 21659 ‘There were many people scolding him, making fun of him, calling him
 21660 stupid.’ (150829 phaRrgot, 13)

21661 17.3.3.2 Velar vs. sigmatic causatives

21662 Some stative verbs are compatible with both sigmatic (§17.2.6) and velar causative
 21663 prefixes, an observation which raises the question of the semantic distinction
 21664 between these two derivations when contrastive.¹¹

21665 J. T.-S. Sun (2006b; 2014a), with regard to the causative prefixes *sə* and *wp-* in
 21666 Tshobdun, proposes that in the case of some stative verbs, the former indicates
 21667 an increase of degree (85a), while the latter expresses a change of state (85b).

- 21668 (85) a. *cʰéji ne-ke-səy-cʰi?=nə?* *mim?=cə*
 beer IPFV-GENR-CAUS-be.sweet=DEM be.tasty=MED
 21669 ‘Beer is tasty when one allows it to sweeten (naturally and gradually).’
 b. *cʰéji ne-ke-we-cʰi?=nə?* *mim?=cə*
 beer IPFV-genr-CAUS-be.sweet=DEM be.tasty=MED
 21671 ‘Beer is tasty when one sweetens it (e.g. by adding sugar).’

21672 In Japhug, it is not completely clear whether a semantic contrast of the same
 21673 type is attested. Minimal pairs such as *sux-cʰi* and *yr-cʰi* from *cʰi* ‘be sweet’ or *sux-*
 21674 *tçur* and *yr-tçur* from *tçur* ‘be sour’ do exist, but no consistent semantic difference
 21675 appears to exist between them.

21676 Examples (86) and (87) suggest that the causative *sux-tçur* means ‘make sour’
 21677 rather than ‘make more sour’ as would be expected following Sun’s analysis of
 21678 Tshobdun.¹²

- 21679 (86) *tce t̥yko muu-tr-tçur tce, NGolo w-mat nui*
 LNK pickle NEG-AOR-be.sour LNK Ribes.stenocarpum 3SG.POSS-fruit DEM

¹¹ The contrast between the two causative derivations in the case of the irregular allomorphs *β-* and *m-* is discussed in §17.3.1.

¹² In the case of (86), it is possible that *t̥yko muu-tr-tçur* can be contextually translated as ‘when the pickle is not sour *enough*’, and that therefore the verb *p̥juu-sux-tçur* does indeed mean ‘make more sour’. Tshendzin proposed conflicting interpretations of this example. The occurrence of *sux-tçur* in (87) however is incompatible with an analysis in terms of heightened degree.

21680 *pú-wy-p^huit* *tce, tce tyrca* *pjuú-wy-yr-la* *tce, tce txjko*
 IPFV-INV-take.off LNK LNK together IPFV-INV-CAUS-soak LNK LNK pickle
 21681 *pjuu-suix-tcur* *c^ha.*
 IPFV-CAUS-be.sour can:FACT
 21682 ‘When the pickle_i is not sour, one picks fruits from the *Ribes*
 21683 *stenocarpum_j*, soaks it together (with it_i), and it_j can make the pickle
 21684 sour.’ (18-NGolo, 27)

21685 (87) *wi-tuu-tcur* *kui tur-kur* *wi-ŋgu*
 3SG.POSS-NMLZ:DEG-be.sour ERG GENR.POSS-mouth 3SG.POSS-inside
 21686 *lú-wy-rku* *q^he maka pui-sur-ymu-zyuit* *q^he,*
 IPFV:UPSTREAM-INV-put.in LNK at.all IPFV-CAUS-DISTR-reach LNK
 21687 *tuu-p^horju* *ra kuniy pui-suix-tcur* *kui-fse* *cti*
 GENR.POSS-body PL also SENS-CAUS-be.sour SBJ:PCP-be.like be.AFF:FACT
 21688 ‘It is so sour that when one puts it into one’s mouth, it makes everything
 21689 (sour in an even way), as if one’s whole body becomes sour.’ (09-mi, 68)

21690 In addition, example (88) shows that the velar causative *yr-tcur* is not incom-
 21691 patible with the meaning ‘make more sour’. It is possible that other semantic
 21692 parameters (such as direct/indirect causation and volitionality) are at play in the
 21693 choice of the two prefixes.

21694 (88) <cai> *wi-tuu-tcur* *muáj-rtas* *tce, <cu>*
 dish 3SG.POSS-NMLZ:DEG-be.sour NEG:SENS-be.enough LNK, vinegar
 21695 *pui-lat-a* *tce pui-yr-tcur-a*
 AOR-release-1SG LNK AOR-CAUS-be.sour-1SG
 21696 ‘As the dish was not sour enough, I added vinegar to make it sourer.’
 21697 (elicited)

21698 The only verb root that has sigmatic and velar causative forms with clearly dif-
 21699 ferent meanings is *mto*, a labile verb meaning ‘see’ when conjugated transitively,
 21700 and ‘have sharp eyesight’ when intransitive (§14.5.1.2). The sigmatic causative
 21701 *sui-mto*, based on the transitive use of *mto*, means ‘let see, show’ as in (89).

21702 (89) *kuki* *ty-ndym* *tce, [...] zimk^hym wi-ku,* *tc^hi*
 DEM.PROX IMP-take[III] LNK world 3SG.POSS-head what
 21703 *kui-tu* *zo nu pjuu-tuú-wy-sui-mto cha*
 SBJ:PCP-exist EMPH DEM IPFV-2-INV-CAUS-see can:FACT
 21704 ‘Take this (spyglass), it will make you able to see everything that exists in
 21705 the world.’ (140508 benling gaoqiang de si xiongdi-zh, 74-75)

21706 The velar causative *yymto* ‘cause to recover eyesight’ is based on the stative
 21707 use ‘have sharp eyesight’. Just as the base verb requires the noun *tui-mnaꝝ* ‘eye’
 21708 as intransitive subject (example 126, §14.5.1.2), *yymto* requires it as object as in
 21709 (90).

- 21710 (90) *nunuu kuu maka nui-mnaꝝ tu-yy-mtym*
 21711 DEM ERG completely 3PL.POSS-eye IPFV-CAUS-have.sharp.eyesight[III]
c^ha ri,
 21712 can:FACT LNK
 21713 ‘That (plant) can cure their blindness (cause their eyes to recover
 eyesight).’ (140517 mogui de jing-zh, 85)

21714 17.3.4 Compatibilities with other derivations

21715 Due to the constraint on monosyllabic bases (§17.2.6), the velar causative can only
 21716 take bare verb roots (or at least verb roots containing frozen prefixes) as input,
 21717 unlike the sigmatic causative which can precede a dozen derivational prefixes
 21718 (§17.2.8).

21719 The velar causative prefix can be preceded by the reflexive *zyy-* as in (91) (see
 21720 also 59, §18.3.4.1 and §18.3.4.2).

- 21721 (91) *icq^ha tui-xtsa numi tx-ky-sŋaab*
 21722 the.mentioned INDEF.POSS-shoe DEM:DU AOR-OBJ:PCP-enchant
pjx-cti tce tcendyre, pjx-zyy-yy-xtci-ndzi
 21723 IFR,IPFV-be.AFF LNK LNK IFR-REFL-CAUS-be.small-DU
 21724 ‘The shoes had been enchanted, and became small by themselves.’ (160706
 poucet6, 98)

21725 It can also undergo reduplicated reciprocal derivation (80, §18.4.1.2), and oc-
 21726 curs with the autive *nui-* (83 in §17.3.3.1 above) and the *z-* allomorph of the sig-
 21727 matic causative (§17.2.1.1) as in (92).

- 21728 (92) *tce t̪su ri pjx-tui-z-yy-βdi-t cti tce, tce*
 21729 LNK road also IFR-2-CAUS-CAUS-be.well-PST:TR be.AFF:FACT LNK LNK
nuitcu a-ky-tui-ce
 21730 DEM:LOC IRR-PFV:EAST-2-go
 21731 ‘(Since) you have already had the road repaired (by someone else), (take
 that road) to go (east).’ (2011-04-smanmi, 149)

21732 The tropative causative *yṛk^he* ‘demean’ (from *k^he* ‘be stupid’, §17.3.3.1) also has
 21733 the *sṛ-* antipassive form (§18.6.2) *sṛz-yṛ-k^he* (APASS-CAUS-be.stupid) ‘demean peo-
 21734 ple’.

21735 17.4 Applicative

21736 The applicative *nū-* is a valency-increasing derivation by means of which an
 21737 oblique argument, an adjunct or even a non-participant (including comitative
 21738 or dative adjuncts and semi-objects, §17.4.1) is promoted to object function. In
 21739 Japhug, the base verb is always morphologically intransitive, and the applicative
 21740 verb transitive (§14.3.1). The subject of the applicative verb corresponds to the
 21741 same referent as that of the base verb, though it receives ergative case marking
 21742 instead of absolute (see examples 106 and 105 in §17.4.1 below).

21743 The *nū-* applicative is only attested by a limited number of examples (exhaus-
 21744 tively listed in Table 17.10; the allomorphy is discussed in §17.4.2), but the fact
 21745 that it includes the Tibetan loanword *rga* ‘like, be glad’ (from རྒ གྠ dga ‘be happy’)
 21746 shows that it has some degree of productivity.

21747 Cognates of the applicative prefix are found in other Gyalrong languages (in
 21748 Tshobdun, see J. T.-S. Sun 2006b), and one potential example is found in Khroskyabs
 21749 (Lai 2017: 361). This prefix probably originates from the denominal *nū-* (§20.7.2),
 21750 and replaced the older suffixal applicative, which only remains in a handful of
 21751 examples (§17.4)

21752 In addition to these examples, the *nr-* deideophonic verbs can be analyzed as
 21753 applicative derivations from their *a-* deideophonic counterpart (§20.9.3).

21754 17.4.1 The syntactic and semantic functions of the promoted argument

21755 Despite the limited number of applicative verbs, there is a considerable diversity
 21756 in the syntactic functions of the non-core arguments (of the base verbs) that are
 21757 promoted to object status by the applicative derivation.

21758 17.4.1.1 Promotion of comitative argument

21759 The verb *azuzu* ‘wrestle’, historically a reciprocal verb (§18.4.1.3), requires a non-
 21760 singular subject and can select a comitative argument in *c^ho* (§8.2.5). The object
 21761 of the applicative form *nrzuzu* ‘wrestle with’ corresponds to this comitative ar-
 21762 gument, as shown by the minimal pair (93) vs. (94).

Table 17.10: Examples of the *nu-* applicative prefix

Base verb	Derived verb
<i>azuuzu</i> ‘wrestle’	<i>nryzuuzu</i> ‘wrestle with’
<i>akʰu</i> ‘call’	<i>nrykʰu</i> ‘invite’
<i>akʰrzŋga</i> ‘shout, call’	<i>nrykʰrzŋga</i> ‘shout at’
<i>andzut</i> ‘bark’	<i>nryndzut</i> ‘bark at’
<i>amdzuu</i> ‘sit’	<i>nrymdzuu</i> ‘look after’
<i>ayro</i> ‘play’	<i>nryyo</i> ‘play with’
<i>stu</i> ‘believe’ (vi)	<i>nrstu</i> ‘believe’ (vt)
<i>mbyom</i> ‘be in a hurry’	<i>numbyom</i> ‘look forward to’
<i>ŋke</i> ‘walk’	<i>nurŋke</i> ‘look for’
<i>rga</i> ‘like’ (vi)	<i>nurga</i> ‘like’ (vt)
<i>snjom</i> ‘envy’ (vi)	<i>nusnjom</i> ‘envy’ (vt)
<i>zduy</i> ‘suffer’	<i>nuzduy</i> ‘worry about’
<i>buuy</i> ‘miss’ (vi)	<i>nuybuuy</i> ‘miss’ (vt)
<i>mu</i> ‘be afraid’	<i>nuyymu</i> ‘be afraid of’

- 21763 (93) *wu-zda* *c^ho* *jwu-yzuuzu-ndzi*
 3SG.POSS-companion COMIT SENS-WRESTLE-DU
 21764 ‘He is wrestling with his friend.’ (elicited)

21765 (94) *wu-zda* *jwu-yz-nwu-yzuuzu*
 3SG.POSS-companion SENS-PROG-APPL-WRESTL
 21766 ‘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).

- 21775 (95) *tce izo kuruu ra tce tsʰylu nuu stu ji-ky-rga*
 LNK 1PL Tibetan PL LNK milk.tea DEM MOST 1SG.POSS-OBJ:PCP-like
 21776 *cti*
 be.AFF:FACT
 21777 ‘Milk tea is the one (the type of tea) that we Tibetans like most.’ (05-qaZo,
 21778 169)
- 21779 (96) *tʰaxtsa nuu izo kuruu tcʰeme ra yuu, numuu mylyn zo*
 coloured.belt DEM 1PL Tibetan woman PL GEN DEM absolutely EMPH
 21780 *pjuu-tu kui-ra tce, stu ji-ky-nuu-rga*
 IPFV-exist SBJ:PCP-be.needed LNK most 1PL.POSS-OBJ:PCP-APPL-like
 21781 *cti,*
 be.AFF:FACT
 21782 ‘Coloured belts are something that we Tibetan woman must absolutely
 21783 have, and it is what we like most.’ (thaXtsa 2002, 92)

21784 In addition to morphological (§14.3.1) differences, as well as absolutive vs. ergative
 21785 marking of the subject (§8.2.2.1), the base verb *rga* and its applicative *nurga*
 21786 differ from each other in three regards.

21787 First of all, *rga* displays lability between a semi-transitive use ‘like’ and a stative
 21788 intransitive use meaning ‘be happy’ (compare 142 and 143 in §14.5.3), while the
 21789 applicative *nurga* does not mean ‘be happy because/for’.

21790 Second, only the base verb *rga* can take infinitival complement clauses (§16.2.1.5,
 21791 §24.2.1.2), as in (97) (see also 177, §14.6.2), while the derived verb *nur-rga* cannot:
 21792 the applicative derivation thus removes complement-taking ability (at least in
 21793 this case).

- 21794 (97) *ma azo [qajuu nura ky-nyrtoχpjyt] puu-rga-a tce*
 LNK 1SG bug DEM:PL INF-observe PST.IPFV-like-1SG LNK
 21795 ‘I used to like to observe bugs.’ (26-quspunmbro, 15)

21796 Third, with first or second person objects, only the applicative *nurga* is possible.
 21797 The local scenario 1→2 (98) and 2→1 configurations (example 43, §5.1.2.12), as
 21798 well as the mixed scenario inverse configurations (99) cannot be expressed with
 21799 the base verb *rga*.

- 21800 (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
 21801 ‘I like you, I love you.’ (160630 abao-zh, 113)

- 21802 (99) *nunu r̥y̥lpu u-tcua nuu kuu a-puú-wy-nuu-rga-a*
DEM king 3SG.POSS-son DEM ERG IRR-IPFV-INV-APPL-like-1SG
21803 *ra*
be.needed:FACT
21804 ‘May the prince love me!’ (150819 haidenver-zh, 531)

21805 17.4.1.3 Promotion of dative argument

21806 The verbs *andzuit* ‘bark’ and *akʰyʂn̥ga* ‘call’ optionally select a dative argument
21807 (*turme my-ky-nufse nuu* ‘the person that it does not know’ in 100), which is pro-
21808 moted to object status by the applicative (101).

- 21809 (100) *turme my-ky-nufse nuu u-cki puu-yndzuit*
person NEG-OBJ:PCP-know DEM 3SG.POSS-DAT SENS-bark
21810 ‘(The dog) is barking at the unknown person.’ (elicited)
- 21811 (101) *turme my-ky-nufse nuu puu-yz-nuu-yndzuit*
person NEG-OBJ:PCP-know DEM SENS-PROG-APPL-bark
21812 ‘(The dog) is barking at the unknown person.’ (elicited)

21813 17.4.1.4 Introduction of new referent

21814 For most applicative verbs, the object corresponds to an entirely new referent,
21815 without equivalent in the argument structure of the base verb. Based on the
21816 semantic role of the added argument, four sub-cases can be distinguished.

21817 The semi-transitive verb *stu* ‘believe’, like *rga* ‘like’, is semi-transitive (§14.2.3).
21818 Its semi-object is either a complement clause or a noun such as *u-rju* ‘his words’,
21819 expressing the content of the utterance that is believed by the subject. Its (mor-
21820 phologically irregular, §17.4.2) applicative *nystu* takes as object the person utter-
21821 ing the words that are believed by the subject, as in (102), which is not expressed
21822 as an argument of the base verb (with *stu* ‘believe’ the only way to express the
21823 person saying the words that are believed is as possessor of the semi-object).

- 21824 (102) *nunu azo u-puu-kuu-ny-stu-a ny, tcendyre, nuacimuma*
DEM 1SG QU-SENS-2→1-APPL-believe-1SG ADD LNK immediately
21825 *zo ce-tci tce,*
EMPH go:FACT-1DU LNK
21826 ‘If you believe me, let us go (there) immediately.’ (140425 shizi huli he
21827 lu-zh, 23)

Examples like (103) with the relative clause *uزو kuu ta-tut* ‘(the words) that he said’ appearing before the verb could seem to imply that *nrstu* can also select as object the words uttered. If this analysis were correct, the applicative *nrstu* would be similar to *murga* ‘like’ above in promoting the semi-object of its base verb as object. However, if the relative clause takes a second person subject as in (104), it is possible either to use the base verb *stu* ‘believe’ or the applicative *nrstu* with a second person object (*mx-ta-nrstu* ‘I don’t believe you’), but not with a third person object, showing that in (103) the relative clause is not the object, but an adjunct (the object of *nrstu* in this example is the referent corresponding to the subject of the relative clause).

- (103) [uزو kuu ta-tut] nuu ma-nuu-tuu-ny-ste
 1SG ERG AOR:3→3'-say[II] DEM NEG-IMP-2-APPL-believe[III]
 ‘Don’t believe what he said.’ (elicited)
- (104) [nyزو ty-tuu-tut] nuu mx-stu-a
 2SG AOR-2-say[II] DEM NEG-believe:FACT-1SG
 ‘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 *ty-tcuu ... tu-yrcqali-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-nua*, 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) ty-tcuu t^hamtct kui-duu-dyn nuu
 INDEF.POSS-boy all SBJ:PCP-be.many DEM
 yurnyyur zo tu-yrcqali-nuu tce, tcendyre
 IDPH(III):noisy.and.crowded EMPH IPFV-shout-PL LNK LNK
 ruidas naura nua-mu-nua tce c^huu-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)

21857 The corresponding applicative verb *nuyumu* ‘be afraid of’ marks the experiencer
 21858 in the ergative, and takes the stimulus (in 106, *turme* ‘people’) as object (note
 21859 the generic object indexation, §14.3.2.5). The referent promoted as object by the
 21860 applicative derivation in this verb is the same as that promoted to subject status
 21861 by the proprietive *s(y)-* (see 180, §18.8).

- 21862 (106) *nunu kuu turme wuma zo nui-kua-nuy-mu.*
 21863 DEM ERG people really EMPH IPFV-GENR:S/O-APPL-be.afraid
 ‘It is very afraid of people.’ (24-ZmbrWpGa, 26)

21864 The verb *ayro* ‘play’ (almost always attested as *a<nu>yro* with infixation of
 21865 the autive, §19.1.2), rarely occurs in the singular, and can select comitative arguments
 21866 (§8.2.5), as in (107).

- 21867 (107) <*xiaocui*> *nui ty-rustunmuu u-q^hu q^he tce*
 21868 ANTHR DEM AOR-marry 3SG.POSS-after LNK LNK
icq^ha [<yuanfeng> nui, ta^hndo my-kui-tso
 21869 the.aforementioned ANTHR DEM speech NEG-SBJ:PCP-understand
nui c^ho] spikuku zo tuturca nui-y<nu>yro-ndzi q^he
 21870 DEM COMIT every.day EMPH together IPFV-<AUTO>play-DU LNK
 21871 ‘After she married, Xiaocui played every day with Yuanfeng, who did
 not understand speech.’ (150909 xiaocui-zh, 66)

21872 However, unlike *azuzu* ‘wrestle’ above, its applicative *nyro* ‘play with’ does
 21873 not promote the comitative argument (the person one plays with) to object status.
 21874 Rather, it selects the instrument (the toy one plays with) as object. In (108), the
 21875 object of *nyro* is not overt in the same clause, but anaphorically refers to *kumtc^hu*
 21876 ‘toy’ in the previous clause.

- 21877 (108) *myzuu kumtc^hu kur-fse ty-tu ny, tuyryz*
 21878 again toy SBJ:PCP-be.like AOR-exist ADD together
nui-nui-nyro-ndzi nura p^hy-ŋgryl,
 21879 IPFV-APPL-play-DU DEM:PL IPFV.IFR-be.usually.the.case
 ‘Whenever there was a toy_i, they(DU) played with it_i together.’ (IWlu, 17)

21880 17.4.1.5 A problematic case

21881 The relationship between the transitive verb *nuzduy* ‘worry about’ and the base
 21882 verb *zduy* ‘suffer’ (from *sdug* ‘suffering’) is slightly different from the preceding
 21883 cases, and it is disputable whether this verb is to be classified as applicative.

21884 The intransitive verb *zduy* has two different meanings: ‘be sad’ when used with
 21885 the nouns *tu-sum* ‘mind’ or *tu-sni* ‘heart’ as subjects, and the experiencer as pos-
 21886 sessor as in (109), and ‘endure hardship’ when taking a human (or non-human
 21887 animal) subject (110). The meaning ‘worry’ of the verb *nuzduy* is not directly
 21888 derivable from either. It is close to ‘to be sad about’, but the transitive subject of
 21889 *nuzduy* corresponds to the possessor of the subject of *zduy*, making it a unique
 21900 type of derivation.

- 21891 (109) *tchemypuu nuu ui-sni ny-zduy*
 little.girl DEM 3SG.POSS-heart IFR-suffer
 21892 ‘The little girl was very sad.’ (140504 huiguniang-zh, 101)

- 21893 (110) *laεnui-sŋi pjy-zduy-ndzi tce,*
 one.or.two-day IFR.IPFV-suffer LNK
 21894 ‘They had (worked) hard for several days.’ (qajdoskAt 2002, 35)

21895 17.4.2 Allomorphy

21896 The applicative prefix has three regular allomorphs: *nu-*, *nuy-* and *ny-*.¹³ The
 21897 allomorph *nuy-* has the same distribution as the *suy-* allomorph of the causative
 21898 (§17.2.1.4), occurring with monosyllabic intransitive verb roots whose onset does
 21899 not contain a cluster and/or a velar consonant. The allomorph *ny-* (homophonous
 21900 with the tropative, §17.5.1) is due to vowel fusion with the contracting *a*- in some
 21901 verb stems (§12.3; the de-contracted form *nu-ŋ-* is used in some of the discussion
 21902 in this section), with the exception of the verb *stu* ‘believe’ whose applicative is
 21903 irregular.

21904 The allomorph *nu-* occurs in all other contexts. It is homophonous with the
 21905 autive (§19.1), the vertitive (§19.2) and various other prefixes, including the WEST-
 21906 WARDS orientation preverbs (§15.1.1.1) and the denominal *nu-* (§20.7), but ambi-
 21907 guity is rare as these prefixes belong to different slots (§11.2).¹⁴

21908 17.4.3 Lexicalized applicatives

21909 Three of the applicative verbs in Table 17.10 are highly lexicalized and cannot be
 21910 considered to be synchronically analyzable as related to their base verbs.

¹³ A similar allomorphy is found in other Gyalrong languages, see J. T.-S. Sun (2006b) on Tshobdun.

¹⁴ For an example of partial ambiguity between autive and applicative, see examples (113) and (114) in §17.4.3.

21911 First, the transitive verb *nuk^hu* ‘invite’ (to one’s home as a guest, see examples
 21912 in §24.2.2.2 and §16.1.2.6) originates from the applicative *nui-yrk^hu* of *ak^hu* ‘call’,
 21913 meaning ‘call (someone), shout at’. The verb *ak^hu* can select a locative goal (re-
 21914 ferring to the direction towards which one calls), as in (111), and its applicative
 21915 *nui-yrk^hu* presumably originally promoted this oblique argument to object status.

- 21916 (111) *k^ha nuitcu c-to-k-yrk^hu-ci*
 house DEM:LOC TRAL-IFR-PEG-call-PEG
 21917 ‘He went and called towards the house.’ (2011-05-nyima, 78)

21918 At that earlier stage, *nui-yrk^hu* probably used to have a meaning similar to that
 21919 of *nui-yrk^hyzŋga* ‘shout at’, the applicative of *ak^hyzŋga* ‘shout, call’ (a verb related to
 21920 and synonymous with *ak^hu* ‘call’). As shown by (112), the applicative *nuk^hyzŋga*
 21921 ‘shout at’ selects the goal/addressee as object (the plural marking on the verb
 21922 form which here indexes the object being due to the presence of the inverse
 21923 prefix, see 3’→3PL in §14.3.2.2).

- 21924 (112) *tc^heme u-sk^ht kui-snur~sna ci kui zo*
 girl 3SG.POSS-voice SBJ:PCP-EMPH~nice INDEF ERG EMPH
 21925 *tú-wy-nui-yrk^hyzŋga-nui ntsu.*
 IPFV-INV-APPL-call-PL always
 21926 ‘A girl who had a beautiful voice was calling them.’ (2003kandZislama, 9)

21927 The applicative *nui-yrk^hu* however underwent the semantic change ‘call *X*’ ⇒
 21928 ‘call *X_i* to invite him/her; to come as guest’ ⇒ ‘invite *X* to come as guest’, so that
 21929 its etymological relationship with its base verb *ak^hu* ‘call’ is not synchronically
 21930 obvious anymore.

21931 Second, *nunŋke* ‘look for’ is formally an applicative of the atelic motion verb
 21932 *ŋke* ‘walk’ (§15.1.2.1). The promoted object corresponds to the aim of the motion
 21933 (the entity that the subject is searching), as in (113).

- 21934 (113) *ji-<baogao> ty-lvt, <piaozi> c-ty-nunŋke, <dianzhan>*
 1PL.POSS-report IMP-release money TRAL-IMP-look.for electric.station
 21935 *βzu-j nyu*
 make:FACT-1PL be:FACT
 21936 ‘Make a report for us, go and look for money, and we will build an
 21937 electric station.’ (2010-09, 169)

21938 This verb should not be confused with the regular autive *nui-ŋke* of the verb
 21939 *ŋke* ‘walk’, which is intransitive, as shown by the generic *kui-* in (114) (§14.2.1.2).

- 21940 (114) *tua-ji* *ui-ŋgu* *aŋyndundyst tu-kui-nuu-ŋke*
 INDEF.POSS-field 3SG.POSS-in everywhere IPFV-GENR:S/O-AUTO-walk
 21941 *k^huu* *tce*
 be.possible:FACT LNK
 21942 ‘One can walk (on this path) everywhere in the fields (as one wishes).’
 21943 (15-06-05)

21944 Third, the transitive verb *nymdzuu* ‘look after’ historically derives from the in-
 21945 transitive *amdzuu* ‘sit’ by the applicative derivation. Its original meaning probably
 21946 was ‘sit by’, with a locative adjunct promoted to object status, but in Japhug it
 21947 rather means ‘stay near X and look after X’ without necessary implication of
 21948 remaining seated, as in (115).

- 21949 (115) *ty-lu* *koŋla* *zo* *kú-wy-nymdzuu* *nui-ra*
 INDEF.POSS-milk completely EMPH IPFV-INV-look.after SENS-be.needed
 21950 *ma blywur* *zo* *tu-m buz* *nui-ŋju*
 LNK immediately EMPH IPFV-spill.out SENS-be
 21951 ‘One has to look after the milk (in the pan), otherwise it will spill out as
 21952 soon as (it boils).’ (elicited)

21953 17.4.4 Applicatives and other derivations

21954 The applicative derivation cannot take any other derived verb form as input. The
 21955 only partial exception is the applicative *nyzuzu* ‘wrestle with’, whose base form
 21956 *azuuzu* ‘wrestle’ historically was a reciprocal verb (§18.4.1.3), but since it is an al-
 21957 ready fossilized reciprocal, it does not demonstrate the ability of the applicative
 21958 to apply to reciprocal forms in general.

21959 On the other hand, applicative verb forms can be subjected to further deriva-
 21960 tions, including the reflexive *zyr-* (*zyr-nyzstu* REFL-APPL-believe ‘believe in one-
 21961 self’, see example 72, §18.3.6) and the sigmatic causative (116).¹⁵

- 21962 (116) *turme ra, zimk^hym zo, nui-z-nuu-snom-a-nui* *c^ha-a*
 people PL many EMPH IPFV-CAUS-APPL-envy-1SG-PL can:FACT-1SG
 21963 ‘I will be able to make a lot of people envy (me for my dress).’ (jinai de
 21964 guniang-zh, 22)

21965 The problematic verb *nuzduy* ‘worry about’ (§17.4.1.5) can in addition serve as
 21966 input to the proprietive derivation (§18.8.6).

¹⁵ In this example, the 1SG is both causer (indexed as transitive subject) and patient, while the causee (‘the people’) is indexed as object.

21967 17.5 Tropative

21968 The tropative¹⁶ *ny-* prefix is a valency-increasing derivation creating a transitive
 21969 verb meaning ‘find/consider to be *X*’ out of an intransitive stative verb.¹⁷

21970 The tropative resembles the causative derivations in that the subject of the
 21971 base verb becomes the object of the derived verb, and the added argument is
 21972 the transitive subject (unlike the applicative). However, the semantic role of the
 21973 transitive subject is not an agent (causer), but an experiencer.

21974 For instance, the tropative of the stative verb *mpçyr* ‘be beautiful’ is the transitive
 21975 *nympçyr* ‘find beautiful’, whose object is the entity considered to be beautiful
 21976 (*icqʰa tçʰeme* ‘the girl’ in 117), and whose transitive subject in the ergative is the
 21977 person feeling the beauty of the object (*t̪ru u-t̪eu* ‘the prince’ in 117).

- 21978 (117) *tce nuu t̪ru u-t̪eu nuu kuu nuicimuma zo*
 LNK DEM chieftain 3SG.POSS-son DEM ERG immediately EMPH
 21979 *icqʰa tçʰeme nuu ny-ny-mpçyr, tce*
 the.mentioned girl DEM IFR-TROP-be.beautiful LNK
 21980 *ny-ny-pe.*
 IFR-TROP-be.good

21981 ‘The prince immediately found the girl very beautiful and fell in love
 21982 with her.’ (140518 huifei de muma-zh, 53-54)

21983 The tropative derivation is extremely productive, and Table 17.11 illustrates a
 21984 few representative examples.

21985 The semantics of the derived verb is not always simply ‘consider/find *X*’. In
 21986 the case of stative verbs whose meaning is neutral (not explicitly positive like
 21987 ‘beautiful’), the tropative often has the additional meaning ‘find too *X*’, as in
 21988 (118) for instance.

- 21989 (118) *ny-sytcʰa u-nuu-tuu-ny-xtci ny, azo a-βlu ci*
 2SG.POSS-place QU-SENS-2-TROP-be.small ADD 1SG 1SG.POSS-trick INDEF
 21990 *tu tce,*
 exist:FACT LNK
 21991 ‘If you find your place too small for you, I have an idea.’ (150829 taishan
 21992 zhi zhu-zh, 203)

¹⁶ This term is taken from Arabic linguistics, see for instance Larcher (1996). Another possible term for this derivation would be ‘estimative’.

¹⁷ Cognate prefixes are found in other Gyalrong languages, (J. T.-S. Sun 2006b: 5–6, Jacques 2013a).

Table 17.11: Examples of the *nṛ-* tropative derivation

basic verb	derived verb
<i>rtaš</i> ‘be enough’	<i>nṛrtaš</i> ‘find sufficient’
<i>wxti</i> ‘be big’	<i>nṛwxti</i> ‘find big’
<i>zri</i> ‘be long’	<i>nṛzri</i> ‘find long’
<i>pe</i> ‘be good’	<i>nṛpe</i> ‘consider to be good, love’
<i>mṇym</i> ‘smell’ (vi)	<i>nṛmṇym</i> ‘smell’ (vt)
<i>cʰi</i> ‘be sweet’	<i>nṛxcʰi</i> ‘find sweet’
<i>maš</i> ‘not be’	<i>nṛymaš</i> ‘consider wrong’
<i>mbat</i> ‘be easy’	<i>nṛymbat</i> ‘finish easily’

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 as ‘consider *X* to be *Y*’, where both *X* and *Y* are nouns, cannot be expressed in Japhug using a tropative derivation (forms such as $\dagger nṛ\text{-}ŋu$ or $\dagger nṛ\text{-}tu$ are utterly incorrect), and a synthetic construction must be used instead (§24.5.1.2).

An apparent exception could seem to be *nṛymaš* ‘consider wrong’ from the negative copula *maš* ‘not be’. However, this verb never means ‘consider *X* not to be *Y*’, and it seems that one of the original meanings of /maš/ was ‘not to be right’, as shown by a lexicalized form such as the fossilized participle *kumara* ‘bad thing’ (from ‘(something) which is not right’, §16.1.1.7). In this example the tropative preserved the original meaning of the verb, while the base verb underwent an independent semantic change (already at the common Gyalrong stage).

The ability to undergo tropativization is thus a criterion for identifying a subclass of adjectives among stative verbs (with the exception of some derived adjectives, which are not compatible with the tropative possibly for morphological reasons, §17.5.4).

17.5.1 Allomorphy

As shown by Table 17.11, aside from the regular *nṛ-* allomorph, a few verbs select a *nṛy-* / *nṛx-* allomorph. A similar allomorphy is observed on the sigmatic causative (§17.2.1.4) and the applicative (§17.4.2) prefixes. The *sui-* / *suy-* alternation of the sigmatic causative is still productive: the latter allomorph occurs when the original verb is intransitive, without an initial consonant cluster and without initial velar or uvular. It is possible that a similar distribution used to

²²⁰¹⁶ exist at a former stage for the *nry*- / *nry-* allomorphs, but the data at hand do not permit a firm conclusion.

The *ny*- allomorph of the tropative is homophonous with that of the applicative before *a*- contracting verbs (§12.3, §17.4.2), but there are no cases of forms that are ambiguous between these two derivations.

When two base verbs have stems that only differ in the presence vs. absence of an *a*-prefixal element, their tropative form is identical. For instance, the stative verbs *amtçor* ‘be pointy’ and *mtçor* ‘be sharp’ (§19.7.7) have the same tropative *nymtçor*, which can be interpreted as either ‘find pointy’ or ‘find sharp’.

22025 17.5.2 Past imperfective

22026 Tropative verbs stand out among transitive verbs in that they are compatible with
22027 Past Imperfective *pui-* and Inferential imperfective *pjy-* forms as in (§119) (see also
22028 124c in §17.5.4 below), unlike most transitive verbs which require the progressive
22029 *asui-* to occur with these TAME prefixes (§21.5.3).

- 22030 (119) *ui-tur-tcur* *mx-tc^hom* *tce*,
 3SG.POSS-NMLZ:DEG-sour NEG-be.exceedingly:FACT LNK
 22031 *pú-wy-nx-mum* *cti.*
 PST.IPFV-INV-TROP-be.tasty be.AFF:FACT
 22032 ‘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-nx-mum* IFR-TROP-be.tasty) means '(he used not to find it tasty, but now) he finds it tasty'.

22036 17.5.3 Lexicalized tropatives

Some tropative verbs have specialized meanings that are not completely predictable from the base verb. Thus, *nṛ-pe* (tropative of *pe* ‘be good’), in addition to its regular meaning ‘consider to be good’, can also be used in the sense of ‘love’, as in (117) above. The tropative of the modal auxiliary *nts^{hi}* ‘be better’ (§24.5.3.1), *nṛnts^{hi}*, also has this meaning (120).¹⁸

- 22042 (120) *azo a-nú-wy-nnts^{hi}-a ra*
 1SG IRR-PFV-INV-love-1SG be.needed:FACT
 22043 ‘(Aladin thought) ‘May the princess love me.’ (140511 alading-zh, 196)

¹⁸ Since the etymological relationship between the base verb *nts^hi* ‘be better’ and *nyns^hi* ‘love’ is not synchronically transparent, the *ny-* is not analyzed as a prefix in the glosses.

22044 The transitive verb *mrk^he* ‘bully’ from *k^he* ‘be stupid’, probably also used to
 22045 be a tropative verb ‘consider to be stupid’, with a quite unpredictable semantic
 22046 evolution.

22047 The perception verb *nrmnrym* ‘smell’ (vt) is formally a tropative derived from
 22048 the intransitive *mnym* ‘smell’ (vi), a verb that can only take nouns meaning ‘smell’
 22049 (such as the inalienably possessed noun *tr-di* ‘smell’) as subject, as shown by (121).

- 22050 (121) *nunuu cry nuu wuma zo pe, tce pjú-wy-βlur tce*
 22051 DEM juniper DEM really EMPH be.good:FACT LNK IPFV-INV-burn LNK
uu-di wuma mnym
 22052 3SG.POSS-smell really have.a.smell:FACT
 22053 ‘The juniper is very nice, when one burns it it has a strong smell.’
 (08-CAG, 24-25)

22054 The tropative *nrmnrym* can take as object a noun meaning ‘smell’, with the
 22055 referent whose smell is perceived encoded as a possessive prefix on the object
 22056 (for instance the 3PL prefix on the noun *nu-di* ‘their smell’ in 122). However,
 22057 unlike its base verb, *nrmnrym* can also directly select as object the referent whose
 22058 smell is perceived, including even a first or second person as in (123).

- 22059 (122) *srutp^hu nuu kuu, yotcu ryzi-nuu pjy-suχsyl matci, nuu-di*
 22060 râkshasa DEM ERG where stay:FACT-PL IFR-realize LNK 3PL.POSS-smell
tu-ny-mnym pjy-cti tce pjy-mts^hym.
 22061 IPFV-TROP-have.a.smell IFR.IPFV-be.AFF LNK IFR-feel
 22062 ‘The ogre realized where they where, as it was sniffing them out and
 perceived (their smell).’ (160706 poucet6, 53-54)
- 22063 (123) *jy-yi tce, pjyk^hu tu-ta-ny-mnym*
 22064 IMP-come LNK still IPFV:UP-1→2-TROP-have.a.smell
 22065 ‘Come (here), I will smell you (to see if you have had alcohol).’ (140506
 loBzi, 11)

22066 Example (122) also shows that *nrmnrym* expresses volitional olfactory percep-
 22067 tion (looking for something by paying attention to smell). Its non-volitional
 22068 counterpart is *mts^hym* in the sense of ‘perceive (a smell) inadvertently; find (by
 22069 smell)’.¹⁹

¹⁹ The 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).

22070 **17.5.4 Compatibility with other derivations**

22071 In addition to underived stative verbs as in Table 17.11 above, the tropative derivation
 22072 can also take verbs with the proprietive *syr-* derivation (§18.8)

22073 One of the most common of such verbs is *nysyrsclit* ‘find pleasant’ (of a place, a
 22074 situation, an event) from the proprietive *syclit* ‘be pleasant’ (‘be such that people
 22075 feel happy with/in it’) of the stative verb *scit* ‘be happy’. In the excerpt from a
 22076 conversation in (124), we see that the tropative *mu-pui-ny-sy-scit-a* (124c) occurs
 22077 in answer to a question with the proprietive verb *u-piu-sy-scit* (124a).

- 22078 (124) a. (T) *atu tybab u-puú-sy-scit?* [...]
 up.there party QU-PST.IPFV-PROP-be.happy
 22079 ‘Was the party up there nice?’
- 22080 b. (L) *pui-sy-scit a-taB,*
 PST.IPFV-PROP-be.happy 1SG.POSS-MZ
 22081 *ny-kui-sy-scit puu-me*
 NEG-SBJ:PCP-PROP-be.happy PST.IPFV-not.exist
 22082 ‘It was nice, mother-in-law, there was nothing that was not nice.’
- 22083 c. (A) *azo ndyre muu-pui-ny-sy-scit-a,*
 1SG LNK NEG-PST.IPFV-TROP-PROP-be.happy-1SG
 22084 *lo-nutc^homba-a*
 IFR-have.a.cold-1SG
 22085 ‘As far as I am concerned, I did not find (that party) nice, I caught a
 22086 cold.’ (TaRrdo2003)

22087 The antonym of *nysyrsclit*, *nysyrduy* ‘find unpleasant’, is also the tropative of a
 22088 proprietive verb *sryduy* ‘be unpleasant’ from the base verb *duy* ‘be upset’. Both
 22089 *scit* and *duy* are Tibetan loanwords (from སྃଦ୍ଧ ཟିକ ‘be happy’ and སྡྷୁଗ ཟିଗ ‘suffer’,
 22090 respectively), showing the productivity of this double derivation. While no other
 22091 examples of this double derivation are found in the corpus, it is possible to elicit
 22092 additional examples (§18.8.6).

- 22093 (125) *nunuu u-rme u-ŋgwu ri ku-ce tce tcendyre*
 DEM 3SG.POSS-hair 2SG.POSS-in LOC IPFV:EAST-go LNK LNK
 22094 *ku-ce ny ku-ce tce tce u-ndzi u-ŋgwu ri*
 IPFV:EAST-go ADD IPFV:EAST-go LNK LNK 3SG.POSS-skin 3SG.POSS-in LOC
 22095 *ku-otsa puu-ŋu tce fsapab ra kuu nuu ny-syy-duy-nuu*
 IPFV-prick SENS-be LNK animal PL ERG DEM TROP-PROP-be.upset:FACT-PL

- 22096 *ŋgrvl* *ma*
 be.usually.the.case:FACT LNK
- 22097 ‘(Its seeds) go into the hair (of the sheep), deeper and deeper and stick
 into their skin, and the animals find this unpleasant.’ (19-khWlu, 107-109)

22099 The tropative-proprietive verbs *nysyiscit* and *nysyduy* take as transitive subject
 (with the ergative in 125) the experiencer (like the base verbs *scit* ‘be happy’ and
 duy ‘be upset’) and as object the stimulus (the situation or place causing the
 feeling, like the proprietive verbs *sryscit* ‘be pleasant’ and *sryduy* ‘be unpleasant’).

22103 The tropative is also attested with the subject-oriented facilitative *yr-* (§18.9.1).
 For instance, from *yvβzi* ‘become drunk easily’ (facilitative of *βzi* ‘be drunk’) one
 can derive the tropative *nyyvβzi* ‘consider that *X* becomes drunk easily’ (126).

- 22106 (126) *nyzo ndyre pui-ta-ny-yvβzi*
 2SG LNK SENS-1→2-TROP-FACIL-be.drunk
 ‘You, I think that you are easily drunk.’ (elicited)

22108 Distributed property verbs such *amuzyut* ‘be evenly distributed’ (§18.7) can un-
 dergo the tropative derivation (*nymuzyut* ‘consider that *X* is evenly distributed’,
 for instance about colours), though such uses are uncommon.

22111 The tropative cannot take as input any other type of derived stative verbs, such
 as the passive (§18.1), and more surprisingly the *nuyu-* facilitative (§18.9.2).

22113 Tropative verbs can in their turn serve as input for other derivations, including
 causative (§17.2.8), reflexive (§18.3.6) and reciprocal (§18.4.1.2). A related deriva-
 tion whose meaning is close to that of a reflexivized tropative is the auto-evaluative
 zmr- (§19.5).

22117 17.5.5 Other tropative constructions

22118 Apart from the tropative *ny-*, tropative meaning can be expressed in Japhug by
 the sigmatic causative in a few cases (§17.2.5.9), the velar causative (§17.3.3.1) and
 by periphrastic constructions (§24.5.1.2).

22121 Other derivations with a tropative meaning include the *rv(y)-* prefix in *rvyruuy*
 ‘cherish’ (from *ruy* ‘be precious’, §19.7.5), and the reflexive *zv̥-* of some intransi-
 tive verbs (§18.3.1.4).

18 Valency-decreasing derivations

18.1 Passive

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 (*tyscoz* ‘letter’ in 1a and 1b).¹ The transitive subject cannot be expressed: passive verbs do not take overt agents.

- (1) a. *uizo kuu tyscoz ryt*
3SG ERG letter write:FACT
'S/he will write a/the letter.' (elicited)
- b. *tyscoz a-ryt*
letter PASS-write:FACT
'The letter is written/has been written.' (elicited)

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 -*r-*, 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.

- (2) *kum p̥y-st^hob ri, kum p̥y-k-r-yrtury-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)

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.

¹ The 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>aqjyɔꝝ</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’

22147 The passive derivation only removes transitive subjects, and passivized verbs
 22148 preserve oblique arguments or adjuncts. For instance, like the verb *βraꝝ* ‘attach’,
 22149 which includes a locative argument in its argument structure, the passive form
 22150 *aβraꝝ* ‘be attached’ also selects a locative phrase, with a locative case as in (3) or
 22151 in absolute form as in (4).

- 22152 (3) *stuxsi yuu u-χcxl ri xturkui a-βraꝝ,*
 double.yoke GEN 3SG.POSS-middle LOC hide.ripe PASS-attach:FACT
 22153 ‘The hide rope (connecting the yoke to the plough) is attached in the
 22154 middle of the double yoke.’ (24-mbGo, 107)

- 22155 (4) *ty-mu nuu yuu u-tcuu nuu kum-qʰu*
 INDEF.POSS-mother DEM GEN 3SG.POSS-son DEM door-back
 22156 *pjx-k-γ-βraꝝ-ci tce,*
 IPFV-PEG-PASS-attach-PEG LNK
 22157 ‘The old woman’s son was attached on the back of the door.’ (tWJo 2012,
 22158 63)

22159 The passive derivation also applies to some noun-verb collocations. For in-
 22160 stance, in (5), passivized verb *a-lvt*, meaning ‘be locked’ in collocation with the
 22161 noun *syciu* ‘key’, has a meaning directly derived from that of the collocation of
 22162 *syciu* with the base verb *lvt* ‘release’, which means ‘lock (the door)’ (§16.13.10).

22163 The noun *sycu* ‘key’ is a semi-object (§8.1.5) in this collocation. The intransitive
 22164 subject of (*sycu*) *a-lrt* ‘be locked’ in (5) is *kum* ‘door’.

- 22165 (5) *kum sycu my-a-lrt*
 door key NEG-PASS-release:FACT
 22166 ‘The door is not locked/has not been locked.’ (140428 xiaohongmao-zh, 77)

22167 Passive verb forms are almost never attested in first or second person forms,
 22168 except for the highly lexicalized passives *apa* ‘become’ and *qβzu* ‘become, grow’
 22169 (§18.1.2). Example (6) with *arku* ‘be in’² shows that there is not absolute con-
 22170 straints against first or second person indexation on passive verbs.

- 22171 (6) *nunua p^hoŋ u-ŋgwi nutcu pur-a-rku-a*
 DEM bottle 3SG.POSS-in DEM:LOC PST.IPFV-PASS-put.in-1SG
 22172 ‘(You don’t believe that) I had been put inside this bottle.’ (140512 yufu yu
 22173 mogui-zh, 119)

22174 The historical hypothesis in (§14.8.3) proposes that the 1→2 portmanteau pre-
 22175 fix *ta-* originates from the fusion of the passive *a-* with the second person *tu-*
 22176 prefix indexing the object. If correct, this scenario implies that first or second per-
 22177 son indexation on passive verbs may have been more common in proto-Gyalrong
 22178 than in Japhug.

22179 18.1.1 The interaction of the Passive derivation with Dynamicity and 22180 TAME

22181 With the exception of *apa* ‘become’ and *qβzu* ‘become, grow’ (§18.1.2), passive
 22182 verbs express resultative states. They are mainly attested in the Past Imperfective
 22183 (6) and in the Inferential Imperfective (4, see also 16 in §18.1.3). In combination
 22184 with the Factual Non-Past the passive means ‘X has already been Yed’ or ‘X is
 22185 Yed’ (where *X* represents the object of the base verb *Y*) as in (7) (see also 1b and
 22186 5 above).

- 22187 (7) *jaŋmyzdoŋdɔŋ nua kuanŋ pya ŋu, my-a-rvt*
 bird.sp. DEM also bird be:FACT NEG-PASS-write:FACT
 22188 ‘The *jaŋmyzdoŋdɔŋ* is also a bird, it is not written (in the list of bird’s
 22189 names that had been prepared beforehand to ask about all known bird
 22190 species).’ (23-RmWrcWftsa, 86)

² Although 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.

Examples of passive verbs in Perfective or Inferential forms are very rare. In (8), the form *ko-k-γ-ŋjɔ̚r-ci* can only be interpreted as the Inferential of the passive of *ŋjɔ̚r* ‘paste’, with a meaning ‘(the spit) got glued (on her)’ that does not seem interpretable as resultative.

- (8) *tcelo kutcu a-mci ci*
 upstream DEM.PROX:LOC 1SG.POSS-saliva once
s-c^htu-βde-a, nui cui yui ndzi-taꝝ
 TRAL-IPFV:DOWNSTREAM-throw-1SG, DEM who GEN 2DU.POSS-on
ky-kui-γ-ŋjɔ̚r nui a-rzaβ a-pui-tu-ŋu-ndzi to-ti ri
 AOR-SBJ:PCP-PASS-glue DEM 1SG.POSS-wife IRR-IPFV-2-be-DU IFR-say LNK
[...] tce ci s-c^ho-βde ri, rŋułysmyn u-taꝝ
 LNK once TRAL-IFR:DOWNSTREAM-throw LNK ANTHR 3SG.POSS-on
ko-k-γ-ŋjɔ̚r-ci cti ri, jaŋmyc^huqqa kui ny-nui-peiz
 IFR-PEG-PASS-glue-PEG be.AFF:FACT LNK ANTHR ERG IFR-AUTO-wipe
q^he uzo u-taꝝ ko-nui-ŋjɔ̚r.
 LNK 3SG 3SG.POSS-on IFR-AUTO-glue
 ‘He said ‘I will spit from here, and whoever of you two gets glued by my spit will be my wife.’ He spat, and although (his spit) got glued on Rngulasman, Yagmakhyiqa wiped it off and pasted it onto herself.’
 (2003-kWBRa, 48-50)

The participle /kγkŋjɔ̚r/ in this example could in principle either be parsed as a an perfective object participle *kγ-kγ-ŋjɔ̚r* (AOR-OBJ:PCP-glue) or perfective subject passive participle *ky-kui-γ-ŋjɔ̚r* (AOR-SBJ:PCP-PASS-glue), but only the second option is likely, due to the fact that the gluing action is spontaneous and lacks an agent.³ The fact that *ŋjɔ̚r* ‘paste’ lacks an anticausative (§18.5) and that the passive form *aŋjɔ̚r* is used with an anticausative-like meaning (§18.1.3) may explain why the perfective forms are possible with this verb.

18.1.2 Lexicalized passives

The verbs *pa* ‘do’ (§22.4.2.5) and *βzu* ‘make’ (§22.4.2.1) have lexicalized passive forms that are used as quasi-copulas *apa* ‘become’ and *aβzu* ‘become, grow’ taking a semi-object serving as nominal predicate (§22.5.1.1), for instance *tč'i* ‘what’ in (9) or *turme (ci)* ‘a human’ in (10) (for additional examples, see 31 in §9.1.2, 7 and

³ Note in addition that the relativized element is the referent marked with the oblique relator noun *u-taꝝ* ‘on, above’ (§8.3.4.3).

22217 8 in §15.1.1.2). In addition, *aβzu* is also used as a plain intransitive verb meaning
 22218 ‘grow’.

- 22219 (9) *nvzo tc^{hi} a-nuu-tua-γβzu ra?*
 2SG what IRR-PFV-2-become be.needed:FACT

22220 ‘What do you (want to) become?’ (2003kandZislama, 36)

- 22221 (10) *turme ci a-nuu-γpa-a kui, turme juu-γβzu-a ci*
 22222 human INDEF IRR-PFV-become-1SG SFP human IPFV-become-1SG a.little
a-pui-k^hu kui
 22223 IRR-IPFV-be.possible SFP
 ‘If only I could become a human!’ (150819 haidenver-zh, 242)

22224 In the perfective, the third person forms of *aβzu* ‘become, grow’ have an identi-
 22225 cal surface form with those of the transitive *βzu* ‘make’: for instance /naβzu/ can
 22226 be either parsed as *nu-aβzu* (AOR-become) or as *na-βzu* (AOR:3→3'-make). Since
 22227 the transitive *βzu* has dummy subject functions (§14.3.5), in examples such as (11),
 22228 it is possible to analyze the form /t^haβzu/ as t^ha-βzu (AOR:3→3'-make) instead.

- 22229 (11) *uu-mat t^huu-aβzu tce tce*
 3SG.POSS-fruit AOR-grow LNK LNK

22230 ‘When its fruits grow...’ (06-zrantcu; 25)

22231 The verbs *ta* ‘put’ and *rku* ‘put in’ have passive forms whose meaning is still
 22232 predictable from the base verb, *ata* ‘be on’ and *arku* ‘be in’. However, these passive
 22233 forms generally serve as existential verbs (§22.5.1.2) as in (12) and (13), without
 22234 the implication that the state results from a manipulative action. While in (12)
 22235 one could argue that an alternative translation such as ‘a saddle has been put
 22236 there’ would be possible,⁴ in the case of (13) it is obvious the presence of a sweet
 22237 substance inside of a plant leaf is not attributable to an external agent.

- 22238 (12) *uu-rkuu nuatcu si uu-sno ci a-ta tce,*
 3SG.POSS-side DEM:LOC wood 3SG.POSS-saddle INDEF PASS-put:FACT LNK
 22239 ‘Next to (the horse), there is a wooden saddle.’ (2012 qachGa, 51)

⁴ In 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.

- 22240 (13) *nua u-ŋguu nua kur-c^{hi} yzzgga kur-fse*
DEM 3SG.POSS-in DEM SBJ:PCP-be.sweet honey SBJ:PCP-be.like
22241 *a-rku tce*
PASS-put.in:FACT LNK
22242 ‘(When one presses on the flower of the *Habenaria glaucifolia*), inside of
22243 it there is something sweet like honey.’ (16-CWrNgo, 204)

22244 A piece of evidence suggesting that the verbs *ata* ‘be on’ and *arku* ‘be in’ are
22245 in the process of becoming specialized existential verbs (§22.5.1.2) is the fact that
22246 they alternate with the suppletive Sensory forms of the existential verbs (*yzzu*
22247 ‘exist’ and *maje* ‘not exist’, §14.2.2), as in (14).

- 22248 (14) *nutcu puu-a-ta ri maje*
DEM:LOC PST.IPFV-PASS-put LNK not.exist:SENS
22249 ‘(The meat) used to be there, but now it is not there (any more).’
22250 (meimeidegushi, 74)

22251 However, unlike the existential verbs *tu* ‘exist’ and *me* ‘not exist’, both *ata* ‘be
22252 on’ and *arku* ‘be in’ have regular sensory forms, as in (15).

- 22253 (15) *sxtc^ha u-ŋguu nutcu rŋual tuu-tANGOB puu-r-ruk tce,*
ground 3SG.POSS-in DEM:LOC silver one-basket SENS-PASS-put.in LNK
22254 ‘Inside the ground, there is a basketful of silver.’ (2003 tamukatsa, 67)

22255 18.1.3 Agent demotion

22256 The *a*- derivation demotes the transitive subject, and the agent is not expressible
22257 in the same clause. However, the agent is not necessarily semantically deleted by
22258 the passive derivation. In (16) for instance, the agent of the wrapping action is
22259 clear from the context both to the narrator of the story and to the person dis-
22260 covering the silver ingots inside the pieces of bread – it is therefore semantically
22261 recoverable.

- 22262 (16) *u-ŋguu nutcu rŋual q^hoŋq^hoŋ tuu-rdoŋ*
3SG.POSS-in DEM:LOC silver ingot one-piece
22263 *pjɪr-k-ŋ-mp^hur-ci,*
IFR.IPFV-PEG-PASS-wrap-PEG
22264 ‘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) *wi-pa, tc^hunjk^hyr yuu wi-spjuŋ tu-kuu-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) *nui wi-t^hycu ri com kui-ndzor ci*
 DEM 3SG.POSS-downstream LOC iron SBJ:PCP-ACAUS:attach INDEF
tu tce, nui t^hašmu 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^hašmu*.’ (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) *wi-muntoš nui kuny c^hui-γzirja tce tu-k^hyl*
 3SG.POSS-flower DEM also IPFV:DOWNSTREAM-be-aligned LNK one-place
nutcu bniuz, χsum kuβde jamar ku-ndzor.
 DEM:LOC two three four about IPFV-ACAUS:attach
 ‘Its flowers are also aligned, in each place they are attached in (groups) of
 about two, three or four.’ (16-RlWmsWsi, 8-9)

Another difference between *ndzor* ‘be attached’ and *ats^hor* ‘be attached’ is that the former only occurs as a resultative (like most passive verbs in Japhug, see

22293 §18.1.1), while *ndzor* ‘be attached’ can also mean ‘cling onto, lean on, grab’ as in
 22294 (119) (§18.5.5).

22295 In the case of verbs lacking an anticausative form however, such as *pjor* ‘paste’,
 22296 the passive forms can be used with an anticausative function, with a semantically
 22297 deleted agent, as shown by examples such as (8) in §18.1.1.

22298 Passive verbs are as a rule incompatible with an overt agent, even when se-
 22299 mantically recoverable. Other morphosyntactic devices such as a direct-inverse
 22300 marking are used to express the relative saliency of the agent and the patient in
 22301 Japhug (see the discussion in §14.3.3).

22302 In example (20) with a passive verb, the ergative postpositional phrase *tx-se*
 22303 *kui* could appear to be an example of overt agent.⁵ However, note that the base
 22304 verb *mar* ‘smear’ can encode the material used to smear a surface as a semi-object
 22305 (*taqfaz* ‘soot’ in 21) rather than as an instrument. Likewise, the ergative is optional
 22306 on *tx-se* ‘blood’ (compare with 22).

- 22307 (20) *xçiri yuu uu-mtc^{hi}* *ra [tx-se]* *kui]*
 weasel GEN 3SG.POSS-mouth PL INDEF.POSS-blood ERG
 22308 *pjx-k-γ-mar-ci* *zo*
 IFR.IPFV-PEG-PASS-smear-PEG EMPH
 22309 ‘The weasel’s mouth was smeared with blood.’ (140518 xuezhe he
 22310 huangshulang-zh, 24)

- 22311 (21) *tc^heme nuu kui [...] uu-rja* *taqfaz to-mar*
 girl DEM ERG 3SG.POSS-face soot IFR-smear
 22312 ‘The lady smeared her face with soot.’ (2002 qaCpa, 267)

- 22313 (22) *uu-mtc^{hi}* *uu-taꝝ* *tce tx-se* *ra*
 3SG.POSS-mouth 3SG.POSS-on LOC INDEF.POSS-blood PL
 22314 *pjx-k-γ-mar-ci* *zo.*
 IFR.IPFV-PEG-PASS-smear-PEG EMPH
 22315 ‘Its mouth was smeared with blood.’ (140518 xuezhe he huangshulang-zh,
 22316 19)

22317 The apparently puzzling optional use of the ergative in (20) is in fact the same
 22318 as that observed with the partitive argument of the verb *mts^hyt* ‘be full’ (§8.2.2.9),
 22319 and has to be distinguished from either agent or instrument.

⁵ In 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.

22320 The agent can at best be expressed as a possessive prefix on the intransitive
 22321 subject of the passive verb, as in (23), though in this example the implication that
 22322 the agent is 2SG is only contextual.

- 22323 (23) *n̥-sm̥n uu-j-á-ndza?*
 2SG.POSS-medicine QU-PEG-PASS-eat:FACT
 22324 ‘Has your medicine been eaten?’ (elicited)

22325 The only case of a passive verb taking as argument an overt noun phrase corre-
 22326 sponding to the transitive subject of the base verb is *afskyr* ‘be surrounded’ from
 22327 *fskyyr* ‘go around’. As shown in (24) and (25), an absolute locative noun phrase
 22328 referring to the surrounding entity (in square brackets) can appear with this verb
 22329 after the intransitive subject (the surrounded entity/location).

- 22330 (24) *iżyra ji-kʰa nuu [jyjyt tuu-tykʰryz nuu]*
 1PL 1PL.POSS-house DEM balcony one-row DEM
 22331 *ku-o-fskyr.*
 IPFV:EAST-PASS-surround
 22332 ‘Our house is surrounded by one row of balcony.’ (2011-11-kha2, 4)

- 22333 (25) *a-kʰa uu-rkuu nuunu [tuu-ji] a-fskyr.*
 1SG.POSS-house 3SG.POSS-side DEM INDEF.POSS-field PASS-surround:FACT
 22334 ‘(The sides of) my house are surrounded by fields.’ (elicited)

22335 However, the base verb *fskyyr* ‘go around’ in the meaning ‘surround’ can be con-
 22336 structed with the surrounding entity as its transitive subject (in 26, *prax* ‘cliff’).
 22337 This ergatively-marked subject however is not a volitional agent and rather se-
 22338 mantically corresponds to a locative argument, which may explain why it is not
 22339 removed by passivization (though ergative marking is lost).

- 22340 (26) *kuki sytcʰa ki, uu-rkuu tʰamtçyt [prax] kuu*
 DEM.PROX place DEM.PROX 3SG.POSS-side all cliff ERG
 22341 *ku-fskyr nuu-cti*
 IPFV:EAST-surround SENS-be.AFF
 22342 ‘(The sides of) this place are all surrounded by cliffs.’ (elicited)

22343 18.1.4 Passive from ditransitive verbs

22344 Secundative verbs such as *mbi* ‘give’ and *jtsʰi* ‘give to drink’ (a lexicalized causative
 22345 of *tsʰi* ‘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) *tr-pytso* *w-smyn* *a-mbi*
 INDEF.POSS-child 3SG.POSS-medicine PASS-give:FACT
 ‘The child has been given his medicine.’ (elicited)

- (28) *tr-pytso* *ra tr-lu* *a-jts^hi*
 INDEF.POSS-child PL INDEF.POSS-milk PASS-give.to.drink:FACT
 ‘The children have been given milk to drink.’ (elicited)

The causativization of these passive verbs yields the rogative derivation (§18.2).

18.1.5 Reduplicated passive

The intransitive verb *aβzdoββzdu* ‘be in good order’ derives from the transitive verb *βzdu* ‘collect’ (itself borrowed from *bsdu* ‘collect’), and can be interpreted as a lexicalized passive derivation (‘have been collected and put in order’ → ‘be in good order’). However, unlike other passive verbs, it presents reduplication with the rare *-o-* replicant (on this type of reduplication, see also §19.4.2.2).

The verb *aβdoββdi* ‘be in good health’ (29) apparently has the same morphological structure as *aβzdoββzdu* ‘be in good order’, but since its base verb *βdi* ‘be well’ (from *bde* ‘be well’) is stative intransitive, this example cannot be analyzed as a passive.

- (29) *izora cyxco* *ku-oβdoββdi-j*
 1PL these.days PRS-be.in.good.health-1PL
 ‘These days we are in good health.’ (elicited)

Another interesting difference between *aβzdoββzdu* ‘be in good order’ and *aβdoββdi* ‘be in good health’ is that the former has a sigmatic causative *sβzdoββzdu* ‘put in order’, while the latter has a velar causative *yvβdoββdi* ‘tidy up, put in order’ whose meaning is not derivable from that of *aβdoββdi* ‘be in good health’.

18.1.6 Compatibility with other derivations

There are no examples in the corpus of passive derivations taking as input causative or applicative verbs, except for some lexicalized causatives such as *jts^hi* ‘give to

drink' (§18.1.4). However, it is likely that the progressive prefix *asu-* originates from the combination of the passive and the sigmatic causative (§17.2.8, §21.6.1.3).

Passive verbs however can be subjected to sigmatic causative derivation. The fusion of the sigmatic causative *sui-* with the passive *a-* yield /sv/, a surface form identical to the antipassive (§18.6.2) and the proprietive (§18.8) prefixes.

First, the causative-passive double derivations from secundative verbs (§18.1.4) has become the rogative derivation (§18.2). Second, the lexicalized passives *apa* 'become' and *aβzu* 'become, grow' (§18.1.2) have the causative forms *sypa* and *svβzu*, both of which predictably mean 'cause to become, turn into, transform into'. These causative verbs are ditransitive, as in (30), taking as semi-object the entity in which the object is transformed.

- (30) *tui-ci t^hamt_{cxt} tx-se sui-sypa-j*
 INDEF.POSS-water all INDEF.POSS-blood CAUS-become:FACT-1SG
 'Let us turn all the water into blood.' (2003smanmi, 91)

The object indexed on the verb is the entity that undergoes transformation, such as the 1PL in (31), not the one that it is transformed into. Only the object is targeted by reflexivization (§18.3.4).

- (31) *kuki ji-βda_{smu} kuu ki kui-fse, nyki, sun_{gur}
 DEM.PROX 1PL.POSS-queen ERG DEM.PROX SBJ:PCP-be.like FILLER forest
 pya nuú-wy-sui-svβzu-j*
 bird AOR-INV-CAUS-become-1PL
 'Our queen has transformed us into bird from the forest.' (140520 ye
 tiane-zh, 127)

The verbs *sypa* and *svβzu* 'cause to become, turn into, transform' occur with a variety of semi-objects. In (32), the semi-object *tui-mpcar* *tui-mpcar* is a repeated counted noun (§7.3.2.3) expressing literally the meaning 'turn (the rock) into sheets one by one'.

- (32) *tce nuu tui-mpcar tui-mpcar nuú-wy-sui-svβzu nuu-ra*
 LNK DEM one-sheet one-sheet IPFV-INV-CAUS-become SENS-be.needed
 '(To extract stone slabs), one has to chop (the rocks) sheet by sheet (layer
 by layer).' (14-siblings, 173-175)

The semi-object of *sypa* and *svβzu* 'cause to become' can also be an infinitival or participial clause. This combination is a common type of periphrastic causative construction (§24.5.1.1), illustrated in example (33) with the two relative clauses

22405 *uu-cya kui-xt̪eu~xt̪ci* ‘who is young, whose age is small’ and *ku-mp̄eu~mp̄eyr* ‘who
 22406 is beautiful’ as semi objects. A more literal translation could be ‘he turned his
 22407 mother into (someone) whose age was small and who was beautiful’.

- 22408 (33) *uu-mu* [*uu-cya* *kui-xt̪eu~xt̪ci*]
 22409 3SG.POSS-mother 3SG.POSS-age SBJ:PCP-EMPH~be.small
 22410 [*kui-mp̄eu~mp̄eyr*] *zo* *na-su~yβzu* *nua~yu*.
 SBJ:PCP-EMPH~be.beautiful EMPH AOR:3→3'-CAUS-become SENS-be
 22411 ‘He made his mother become young and beautiful.’ (Norbzang 2005, 253)

22411 This periphrastic construction is also possible with the reflexivized forms of
 22412 *sypa* ‘transform’ and *sypz̪u* ‘transform’ (example 68, §18.3.4)

22413 The verb *syrtsi* ‘consider as’ (see 23, §8.1.7) is the sigmatic causative of *artsi*
 22414 ‘count as’ (34), itself passive of the transitive *rtsi* ‘count’ (from *rt̪si* ‘count’).

- 22415 (34) *x̪iri* *kui-fse* *nura* *kurŋi* *mai-nui~y~rtsi* *lo*.
 22416 weasel SBJ:PCP-be.like DEM:PL beast.of.prey NEG-SENS-PASS-count SFP
 ‘Weasel and the like do not count as beasts of prey (I think.)’

22417 Passive verbs can occur as second element of Noun-Verb nominal compounds,
 22418 but in this case the *a-* prefix is absorbed by the previous nominal root, resulting
 22419 in a surface form undistinguishable from that of the base verb. For instance,
 22420 the compound *cn̪rsti* ‘person with a stuffy nose’ can be parsed as *cn̪r-* (*status*
 22421 *constructus* of *tu-çna* ‘nose’) and *-sti*, a syllable ambiguous between the passive
 22422 *asti* ‘be blocked’ and the base verb *sti* ‘block’ (108, §5.5.5.2). . The former is more
 22423 probable, as this noun should be analyzed as meaning ‘(person) whose nose is
 22424 blocked rather than as ‘blocking noses’.

22425 18.2 Rogative

22426 The rogative⁶ *sy-* prefix is attested on the secundative verbs *mbi* ‘give’ and *jts̪i*
 22427 ‘give to drink’, and produces intransitive verbs meaning ‘ask (someone) to *X*
 22428 (something) to oneself’ (where *X* stands for the meaning of the base verb), *symbi*
 22429 ‘ask for’ and *syjts̪i* ‘ask for something to drink’, respectively.

22430 The *sy-* prefix is homophonous to that of the antipassive (§18.6.2)⁷ and of the

⁶ This term is from Latin *rogo* ‘I ask, I require’.

⁷ The rogative prefix on *symbi* ‘ask for’ was mistakenly glossed as ‘antipassive’ in Jacques (2012c: 215), example (32). The antipassive forms of *mbi* ‘give’ and *jts̪i* ‘give to drink’ are *rymbi* ‘give to someone’ and *ryjts̪i* ‘give to someone to drink’, respectively. These forms have the *ry-* antipassive prefix instead of *sy-* (§18.6.4).

22431 proprietary (§18.8) derivations.

22432 Rogative verbs are morphologically intransitive, as shown by (35) (the past
 22433 transitive suffix *-t* would be expected here if this verb were transitive, see §14.3.1)
 22434 and (36) (here a type-C orientation prefix would have been expected §14.3.2.2, §15.1.1).
 22435

22436 However, while the rogative derivation affects transitivity, it does not decrease
 22437 valency: *symbi* and *svjtsʰi* are trivalent like their base verb: they have two arguments
 22438 in addition to the intransitive subject, a semi-object (the entity that is
 asked for) and a dative argument (§14.2.5).

- 22439 (35) *azō a-pi* *wi-cki* *kumtcʰuu ci*
 22440 1SG 1SG.POSS-elder.sibling 3SG.POSS-DAT toy INDEF
nw-sy-mbi-a
 22441 AOR-ROG-give-1SG

‘I asked my elder brother/sister to give me a toy.’ (elicited)

22442 The semi-object of *symbi* ‘ask for’ can be a human (including a first or second
 22443 person), in contexts like asking for someone in the context of arranged marriage
 22444 (36) or asking for a child to become recognized as a reincarnated lama.

- 22445 (36) *tce a-bi* *nure ri, nw-sy-mbi-nur*
 22446 LNK 1SG.POSS-younger.sibling DEM:LOC LOC AOR-ROG-give-PL
 22447 ‘They asked for my younger brother (to come to marry their daughter)
 there.’ (14-siblings, 210)

22448 The dative argument is optional, and rarely expressed. Rogative verbs with
 22449 non-overt dative can be used as a polite way to ask for something, as in (37),
 2250 where neither the person asking (the child) nor the addressee (the grandfather,
 2251 that would take the dative) are expressed within the same clause.

- 22452 (37) *a-wuu, tui-mgo ky-sy-mbi,*
 22453 1SG.POSS-grandfather INDEF.POSS-food OBJ:PCP-ROG-give
tui-ci ky-sy-jtshi wiβry-tu
 22454 INDEF.POSS-water OBJ:PCP-ROG-give.to.drink opt-exist:FACT
 22455 ‘Grandfather, would there be food or water that (we could) ask for (you to
 give us)?’ (2011-05-nyima, 81)

22456 The rogative *sy-* is likely to have originated from the combination of the sig-
 22457 matic causative *su-* and passive *a-* prefixes (§18.1.6). The verbs *mbi* ‘give’ and *jtsʰi*
 22458 ‘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 *raj* ‘oneself’ (§6.4), it lacks any reflexive pronoun, and the only way to express reflexive meaning is by means of a dedicated prefix *zyr-*, 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 *zyr-*, 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-pjw-zyr-yx-la-nu* ‘they bathe in it=they cause themselves to soak in it’ and *kui-zyr-nusmxn* to heal themselves’ are semantically both agents and patients. When the subject is non-singular, each member of the group corresponding to the subject is acting on himself, as opposed to the reciprocal derivation, where every member performs the same action to other members of the groups, and is agent and patient either simultaneously or in turn (§18.4).

- (38) *tce nuu u-ŋgwri ri c-pjw-zyr-yx-la-nu* *tce li*
 LNK DEM 3SG.POSS-in LOC TRAL-IPFV-REFL-CAUS-soak-PL LNK again
kui-zyr-nusmxn ju-ce-nuu tce,
 SBJ:PCP-REFL-heal IPFV-go-PL LNK
 ‘People go and bathe in (warm springs), they go (there) to heal
 themselves.’ (20-ldWGi, 52;56)

The prefix *zyr-* is highly productive, but only targets objects.⁸ Other syntactic

⁸ The only exceptions to this rule are a handful of intransitive verbs which take the *zyr-* prefix (§18.3.1.4).

Table 18.2: Examples of reflexive verbs in Japhug

Base verb	Reflexive verb
<i>χt̪ci</i> ‘wash’	<i>zγγχt̪ci</i> ‘wash oneself’
<i>tsʰi</i> ‘strangle’	<i>zγntsʰi</i> ‘hang oneself’
<i>sat</i> ‘kill’	<i>zγrsat</i> ‘commit suicide’
<i>rku</i> ‘put in’	<i>zγrrku</i> ‘put oneself in’
<i>nrstu</i> ‘believe in’	<i>zγrnrstu</i> ‘believe in oneself’
<i>fstun</i> ‘take care of’	<i>zγrfstun</i> ‘take care of oneself’

functions such as possessors of objects for instance cannot be reflexivized using *zγγ-*. The form *†zγγ-sycyt* (intended meaning ‘comb oneself’) found in one example in the corpus (39a) is a mistake, as pointed out by the consultant who told the story (Tshendzin) herself, since *sycyt* ‘comb’ can only take the noun *tuk-ku* ‘head’ as object, not the person whose hair is combed. The only way to express the meaning ‘comb oneself’ is by the autive prefix (§19.1.3) as in (39b).

- (39) a. *†pjy-zγγ-sycyt-ndzi to-rympco~mpcyr-ndzi*,
IFR-REFL-comb-DU IFR-EMPH~make.up-DU
Intended meaning: ‘They combed themselves and made themselves beautiful.’ (150830 baihe jiemei-zh, 85)
- b. *ndzi-ku pjy-nu-sycyt-ndzi to-rympco~mpcyr-ndzi*,
3DU.POSS-head IFR-AUTO-comb-DU IFR-EMPH~make.up-DU
‘They combed their hair and made themselves beautiful.’ (correction of the previous example)

Similarly, in the reflexive causative derivation *zγrsuntcʰyr* ‘cause oneself to appear’ from *ntcʰyr* ‘appear’ (§18.3.4), reflexivization by *zγγ-* only targets the intransitive subject of the base verb (the entity which appears in the dream, *sun̪gi* ‘lion’ in 40a), not the experiencer, which is encoded as possessor of the noun *tuk-jm̪o* ‘dream’. Thus, example (40b) cannot be interpreted as ‘he caused her to appear to himself’.

- (40) a. *wi-jm̪o w-ŋgwu sun̪gi ko-ntcʰyr*
3SG.POSS-dream 3SG.POSS-in lion IFR-appear
‘He dreamt of a tiger / A tiger appeared to him in a dream.’ (elicited)

- 22508 b. *w-jm̥ŋo w-ŋgur ko-zyy-sui-n̥t̥e^hyr*
 3SG.POSS-dream 3SG.POSS-in IFR-REFL-CAUS-appear
 22509 ‘He made himself appear to her in a dream.’ (2012 Norbzang, 116)

22510 18.3.1.1 Transitivity

22511 All reflexive verbs are morphologically intransitive (§14.3.1). In terms of case
 22512 marking however, they are not prototypical intransitive verbs. When their sub-
 22513 ject is overt, it is in absolute form in most cases as in (41), but subjects of reflex-
 22514 ive verbs in the ergative (§8.2.2.3) are also attested (15, §6.2.1).

- 22515 (41) *wz̥o ku-n̥u-zyy-fst̥um c^ha*
 3SG IPFV-AUTO-REFL-serve can:FACT
 22516 ‘It (will) be able to take care of itself on its own.’ (150822 laoye zuoshi
 22517 zongshi duide-zh, 149)

22518 In particular, the semi-transitive lexicalized reflexive *zypa* ‘pretend’ (derived
 22519 from *pa* ‘do’, §18.3.3) often occurs with subjects marked with the ergative, such
 22520 as the right-dislocated constituent <*tangseng*> *n̥u kuu* in (42) (see also example
 22521 9, §14.2.3).

- 22522 (42) *mr-kuu-tso to-zypa, <tangseng> n̥u kuu.*
 NEG-SBJ:PCP-understand IFR-pretend ANTHR DEM ERG
 22523 ‘He pretended not to have understood, Tangseng.’ (180503 xiyouji 12-zh,
 22524 46)

22525 18.3.1.2 Reflexivization from ditransitive verbs

22526 The reflexive is possible with indirective verbs of giving or speech, whose objects
 22527 corresponds to the theme (§14.4.1): *k^ho* ‘give’ and *fçrt* ‘tell’ yield the reflexive
 22528 verbs *zyrk^ho* ‘give oneself up’ and *zyrfçrt* ‘tell about oneself’, as in (43).

- 22529 (43) *nyzo bgra w-jas nutcu n̥u-tu-n̥u-zyy-k^ho zo*
 2SG enemy 3SG.POSS-hand DEM:LOC IPFV-2-AUTO-REFL-give EMPH
 22530 *wmy-kuu-cti-ci?*
 PROB-PEG-be.AFF-PEG
 22531 ‘(By doing that), aren’t you handing yourself over to your own enemy?’
 22532 (2014niulan li de lu-zh, 11)

22533 The *zyr-* prefix can only express reflexivization of the theme of indirective
 22534 verbs, never the dative-marked recipient; for instance, it cannot be prefixed to
 22535 an indirective verb such as *t'u* ‘ask’ (§14.4.1) to convey the meaning ‘ask oneself’.
 22536 With the secundative verb *mbi* ‘give’, the reflexive prefix is not possible either,
 22537 though for pragmatic rather than syntactic reasons.

22538 18.3.1.3 Permissive function

22539 The reflexive prefix can in some cases have the permissive function ‘let oneself
 22540 be *X*’, the most common case with the verb *zyrnuβlu* ‘be fooled’ from the transi-
 22541 tive denominal verb *nuβlu* ‘cheat’ (‘let oneself be cheated’). With most transitive
 22542 verbs, this meaning is expressed by means of the reflexive+causative double
 22543 derivation (§18.3.4).

22544 In (44), an overt agent (corresponding to the causee of the causative construc-
 22545 tion) marked with the ergative *kui* appears with the verb *zyrnumbrypu* ‘let one-
 22546 self be mounted’. Although taken from a text translated from Chinese, it is not
 22547 considered incorrect after rechecking with Tshendzin.

- 22548 (44) *tcendyre mbro kui “nu-pe” to-ti nu-ŋu. tcendyre turme nu*
 LNK horse ERG SENS-be.good IFR-say SENS-be LNK man DEM
 22549 *kui to-zyr-numbrypu nu-ŋu tce tce turme nu mbro u-tas*
 ERG IFR-REFL-ride SENS-be LNK LNK man DEM horse 3SG.POSS-on
 22550 *nutcu to-œ nu-ŋu tce,*
 DEM:LOC IFR:UP-go SENS-be LNK

22551 ‘The horse said ‘good’ and let himself be mounted by the man, and the
 22552 man rode on him.’ (ma he lu-zh, 221-23)

22553 18.3.1.4 Reflexivization of intransitive verbs

22554 A handful of intransitive verbs can undergo reflexivization with the *zyr-* prefix.

22555 With intransitive deadverbial (§15.1.3.4) and denominal verbs of relative loca-
 22556 tions in *mr-*, such as *maylo* ‘be upstream’ and *mypyrtʰyβ* ‘be in the middle’, the
 22557 reflexive prefix derives volitional motion verbs such as *zyrmaylo* ‘put oneself up-
 22558 stream’ (45) and *zyrmypyrtʰyβ* ‘put oneself in between’. It is possible that these
 22559 forms come from the simplification of former reflexive+causative (§18.3.4) by loss
 22560 of the causative prefix.

- 22561 (45) *wi-l̥cu n̥uitcu jo-ce tce lo-zyy-manlo.*
 3SG.POSS-upstream DEM:LOC IFR-go LNK IFR:UPSTREAM-REFL-be.upstream
 ‘(The wolf) went to a place upstream (from the lamb), he placed himself upstream.’ (2014 lang he yang, 8-9)

The pair of intransitive verbs *yṛt̪ca* ‘be wrong’ and *yṛṇgi* ‘be right’ have the reflexive forms *zyṛyṛt̪ca* ‘recognize one’s mistake’ and *zyṛyṛṇgi* ‘consider oneself to be right’, as shown by (46). Note that the causative of these verbs has a tropative meaning, for instance the causative *zyṛt̪ca* ‘consider to be wrong’ in the second clause of (46); the reflexive forms thus have the expected meaning of reflexive+causative double derivations (‘consider oneself to be right/wrong’).

- | | | | | | | |
|-------|------|--|--------------------------------|-----------------------------|-------------------|----------------|
| 22570 | (46) | <i>tuzo pjui-kui-zyy-yytca</i> | <i>ra</i> | <i>ma,</i> | | |
| | | GENR IPFV-GENR:S/O-REFL-be.wrong | be.needed:FACT | LNK | | |
| 22571 | | <i>tui-zda</i> | <i>pjui-wy-z-yytca,</i> | <i>tuizo (...)</i> | | |
| | | GENR.POSS-companion | IPFV-INV-CAUS-be.wrong | GENR | | |
| 22572 | | <i>pui-kui-nui-yytca</i> | <i>kuny pjui-kui-zyy-yytgi</i> | <i>tce,</i> | | |
| | | IPFV-GENR:S/O-REFL-be.wrong | also | IPFV-GENR:S/O-AUTO-be.right | | |
| 22573 | | <i>wi-mbryzwi</i> | <i>kui-tu</i> | <i>me</i> | <i>tu-kui-ti</i> | <i>nui-ŋu.</i> |
| | | 3SG.POSS-result | SBJ:PCP-exist | not.exist:FACT | IPFV-GENR:S/O-say | SENS-be |
| 22574 | | 'One has to recognize one's mistakes; if one considers one's companions to be wrong, and if one consider oneself to be always right even if one is wrong, there will be no (good) result.' | | | | (IWlu, 80-82) |
| 22575 | | | | | | |
| 22576 | | | | | | |

The reflexive verb *zyszcze* ‘burn oneself’ appears to derive from the propriative verb *sycze* ‘be burning’ (from *cke* ‘burn’, §18.8), though from its meaning it is tempting to wonder whether this prefix *s-* here is not rather analyzable as an irregular causative (§17.2.2).

- 22581 (47) *ma-pur-tuu-zyy-sy-cke*
 NEG-IMP-2-REFL-PROP?-burn
 ‘Don’t burn yourself!’ (elicited)

One reflexive verb seems to derived from an ideophone rather than from a verb root: *zγyçp^hyβ* 'lay flat' (48)⁹ shares the same root |*çp^hyβ*| as *çp^hyβçp^hyβ* 'laying flat' (49). It is possible that this verb originates from a deideophonic derivation (§20.9), with subsequent deletion of the denominational prefix.

⁹ The vowel alternation in (48) is regular, see §14.2.11.

- 22587 (48) *ui-t^ho_B* *zui pui-zyycp^haβ-a*
 3SG.POSS-ground LOC AOR-lay.flat-1SG
 22588 'I laid flat on the ground.' (elicited)
- 22589 (49) *ui-t^ho_B* *cp^hyβcp^hyβ* *zo juu-rzzi, ky-nuuqambumbjom*
 3SG.POSS-ground INPH(II):laying.flat EMPH SENS-stay INF-fly
 22590 *muáj-c^ha*
 NEG:SENS-can
 22591 'The bird is staying on the ground without moving, it cannot fly.' (elicited)

22592 18.3.1.5 Other reflexive constructions

22593 The reflexive *zÿr-* is almost the only way to express reflexivity in Japhug. How-
 22594 ever, the antipassive verb *ra-χtci* (from the transitive verb *χtci* 'wash'), has the
 22595 meaning 'wash one's face' or 'have a shower' (§18.6.7.5), almost like that of the
 22596 regular reflexive *zÿrχtci* 'wash oneself'. Similarly, the prefix *rÿ-* in *rÿmpçyr* 'make
 22597 up' from *mpçyr* 'be beautiful' is reflexive-like ('make oneself beautiful', see §19.7.5).

22598 18.3.2 Reflexive vs. anticausative

22599 Transitive verbs such as *tṣaβ* 'cause to fall/roll', *kry* 'bend' or *xt^hom* 'put hori-
 22600 zontally' which have a corresponding prenasalized anticausatives (§18.5) use the
 22601 reflexive derivation to express the corresponding intransitive volitional action.

22602 The action of the transitive verb itself can be either volitional (50) or non-
 22603 volitional (including involuntary actions of animate beings and actions of inani-
 22604 mate referents, as in 51) depending on the context.

- 22605 (50) *tx-pytso* *nui ki* *kuu-fse*
 INDEF.POSS-child DEM DEM.PROX SBJ:PCP-be.like
 22606 *lu-xt^hom-nui* *ku-cui-rŋgu-nui*
 IPFV:UPSTREAM-put.horizontally-PL IPFV-CAUS-lie.down-PL
 22607 *pui-ma_B,*
 PST.IPFV-not.be
 22608 'People would not lie the babies down horizontally like this.' (140426
 22609 tApAtso kAnWBdaR1, 57)
- 22610 (51) *rdystas nui ui-tui-rzi* *kuu ui-t^ho_B*
 stone DEM 3SG.POSS-NMLZ:DEG-be.heavy ERG 3SG.POSS-ground

- 22611 *pjy-wy-tsab* *tce pjy-wy-sat.*
 IFR:DOWN-INV-cause.to.fall LNK IFR:DOWN-INV-kill
 22612 ‘The stones (in the wolf’s belly) were so heavy that they caused him to
 22613 fall down and die.’ (140428 xiaohongmao-zh, 171)

22614 The anticausative verbs are nearly always non-volitionally (see §18.5.5), as il-
 22615 lustrated by (52) and (53).

- 22616 (52) *tce rŋgur nuni* (...) *to-k-ymui-rpu-ndzi tce*
 LNK boulder DEM:DU IFR-PEG-RECIP-bump-DU LNK
 22617 *pjy-ngrui-ndzi* *tce tsyndo*
 IFR:DOWN-ACAU:shatter-DU LNK side.of.the.road
 22618 *pjy-ndzaβ-ndzi.*
 IFR:DOWN-ACAU:cause.to.roll-DU
 22619 ‘The two boulders bumped into each other, shattered, and rolled down the
 22620 side of the road.’ (28-smAnmi, 143)

22621 In (53), the verb *lo-ndom* means ‘lie down horizontally after falling down (out
 22622 of exhaustion)’, as shown by (54), the gloss provided in Japhug for this verb form,
 22623 which also involves the anticausative verb *ndzaβ* ‘fall/roll’.

- 22624 (53) *tcendyre u-βi* *nui ky-ŋke mui-ŋy-cʰa tce*
 LNK 3SG.POSS-younger.sibling DEM INF-walk NEG-IFR-can LNK
 22625 *tcendyre lo-ndom* *cti tce*
 LNK IFR:UPSTREAM-ACAU:put.horizontally be.AFF:FACT LNK
 22626 ‘His younger brother was not able to walk anymore, and lay down.’
 22627 (2011-05-nyima, 58-59)
- 22628 (54) *u-ku* *lo* *lo-ru* *tce*
 3SG.POSS-head upstream IFR:UPSTREAM-look LNK
 22629 *pjy-ndzaβ,* *tce ky-nui-ryru* *my-kuu-cʰa* *nui,*
 IFR:DOWN-ACAU:cause.to.fall LNK INF-AUTO-get.up NEG-SBJ:PCP-can DEM
 22630 *tce lo-ndom* *tu-kuu-ti* *nui-ŋu*
 LNK IFR:UPSTREAM-ACAU:put.horizontally IPFV-GENR:S/O-say SENS-be
 22631 ‘He fell down, head looking upstream, not able to get up by himself, so
 22632 one says *lo-ndom*’ (elicited, explanation of example 53)

22633 On other hand, the combination of the transitive verb with the reflexive ex-
 22634 presses a volitional meaning implying that the action was done on purposive by

22635 an animate agent. In (55), the subject of *ny-zyy-xt^hom* ‘he put himself horizontally=he laid down horizontally’ did not fall down (unlike that of example 53),
 22636 but on the contrary lays down on the ground by himself voluntarily to pretend
 22637 to have fallen down and have died.

- 22639 (55) *t_su nu_tcu ny-zyy-xt^hom tce pu_u-ku_u-si*
 road DEM:LOC IFR:WEST-REFL-put.horizontally LNK AOR-SBJ:PCP-die
 22640 *to-zyy_pa.*
 IFR-pretend
 22641 ‘He laid down on the road horizontally and pretended to be dead.’ (140517
 22642 huli he lang-zh, 12)

22643 In (56), the verb *zyytsa_b* ‘cause oneself to fall/roll’ expresses the same action
 22644 as *mtsab* ‘jump’, a clearly volitional motion verb.

- 22645 (56) *t_u-ci k_uu-wxtur~wxti nu_u u-ηg_uu nu_tcu*
 INDEF.POSS-water SBJ:PCP-EMPH~be.big DEM 3SG.POSS-in DEM:LOC
 22646 *ko-mtsab. tce nu_tcu ko-zyy-tsa_b q^he*
 IFR:EAST-jump LNK DEM:LOC IFR:EAST-REFL-cause.to.roll LNK
 22647 ‘He jumped into the river, he let himself roll into it.’ (150830 baihe
 22648 jiemei-zh, 209-2012)

22649 When no prenasalized anticausative verb exists, the reflexive can still be used
 22650 to insist on the volitional character of a usually non-volitional action in combi-
 22651 nation with a causative prefix (§18.3.4.1).

22652 18.3.3 Lexicalized reflexives

22653 A few reflexive verbs have meanings that are unpredictable from their base verbs
 22654 and have become highly lexicalized.

22655 The semi-transitive verb *zyypa* ‘pretend’ (§18.3.1.1, §14.2.3, §16.1.1.6) transpar-
 22656 ently comes from the reflexive of the light verb *pa* ‘do’ (§22.4.2.5), probably
 22657 through a meaning such as ‘make oneself into X’. This verb is also attested as a
 22658 stative verb meaning ‘be arrogant’.

22659 The intransitive auxiliary *zyystu*, which occurs as a light verb with ideophones
 22660 (§10.1.7.3) to express voluntary actions, is the reflexive of the simulative verb *stu*
 22661 ‘do like’ (§14.4.2, §25.4.1.2).

22662 The verb *zyyctuz* ‘reveal one’s true nature’ (57) derives from the orienting verb
 22663 *ctuz* ‘turn towards’ (§15.1.2.4).

- 22664 (57) *wzo nu^{st^h}*uci pjur-suzduy-a muáj-pe jv^r-sus^o tce
- 22665 3SG so.much IPFV-cause.to.worry-1SG NEG:SENS-be.good IFR-think LNK
ko-zyyct^huz.
 IFR-reveal.oneself
- 22666 ‘She thought: “It is not good of me to cause him so much worries”, and
 22667 she revealed her true identity to him.’ (2003kAndzwsqhaj2, 125)

22668 18.3.4 Reflexive causative

22669 Reflexive derivations from causativized verbs are extremely common in Japhug,
 22670 and have a considerable diversity of uses.

22671 18.3.4.1 Reflexive causative and volitionality

22672 When applied to non-volitional intransitive verbs, the double (causative+reflexive)
 22673 derivation is a strategy to express volitional action. For instance, a non-volitional
 22674 verb like *fka* ‘be full’ is not attested in the Imperative (§21.4.2.2). The doubly de-
 22675 rived *zyy-cuu-fka*, which conveys the meaning ‘cause oneself to become full=eat
 22676 to one’s full’, can on the other hand occur in the Imperative, as in (58).

- 22677 (58) *tx-zyy-cuu-fka*
 IMP-REFL-CAUS-be.full
 22678 ‘Eat to your full!’ (a common polite expression)

22679 Examples (58) and (59), illustrate that the reflexive prefix is compatible with
 22680 both the velar (§17.3.4) and the sigmatic (§17.2) causative prefixes.

22681 Note that the meaning of *zyyzyzo* ‘make oneself light’ can also be expressed
 22682 with a periphrastic construction as in (68) below.

- 22683 (59) *nyzo nuⁱ, tx-muj st^huci a-tx-tuⁱ-zyy-y^r-zo,*
 2SG DEM INDEF.POSS-feather so.much IRR-PFV-2-REFL-CAUS-be.light

22684 *ny-mbro numuⁱ qale st^huci a-tx-zyy-y^r-mbjom tce,*
 2SG.POSS-horse DEM wind so.much IRR-PFV-REFL-CAUS-be.quick LNK
 22685 ‘(If) you make yourself as light as a feather, and your horse makes itself
 22686 as quick as the wind, (you will succeed.)’ (2011-04-smanmi, 65-66)

22687 This use of the double causative+reflexive derivation is similar to the reflex-
 22688 ivization of transitive verbs that have prenasalized anticausative counterparts to
 22689 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, *z̥y̥-y̥-la* ‘bathe into, immerse oneself into’ (example 38 above), derives from the intransitive verb *la* ‘soak’ through the causative *y̥-la* ‘immerse, dip in’. However, even in this case the doubly derived verb *z̥y̥-y̥-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 *tv-mbyom* ‘hurry up!’ exists) has the double derivation *z̥y̥-cui-mbyom* ‘hasten, hurry, strive to do *X* as fast as possible’, as in (60).

- (60) *to-z̥y̥-cui-mbyom zo jo-nui-ce tce u-jilco ra*
 IFR-REFL-CAUS-be.in.a.hurry EMPH IFR-VERT-go LNK 3SG.POSS-villager PL
nui-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 *z̥y̥-cui-nqor* ‘let oneself hang’ (as in 61) only reflects the first meaning of the base verb (the non-volitional ‘be hanging’).

- (61) *porst nua kumy tcetu kʰyrka nuteu tce*
 small.spider DEM also up.there ceiling DEM:LOC LOC
pjw-z̥y̥-cui-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 *y̥kʰe* ‘depreciate, demean’ from *kʰe* ‘be stupid’ (§17.5.5). Reflexive verbs deriving from this type of

22720 causative mean ‘(cause people to) consider oneself to be *Y*’; for example, *zyryykk^he*
 22721 ‘depreciate, demean’ is not used in meaning ‘cause oneself to become stupid’.

22722 18.3.4.3 Motion verbs

22723 With the stative verbs of relative location *armbat* ‘be near’ and *arq^hi* ‘be far’, the re-
 22724 flexive+causative double derivations produce the motion verbs *zyrsyrmbat* ‘move
 22725 closer’ and *zyrsyrq^hi* ‘move further away’, whose goal is marked in the dative, as
 22726 in (62) (see also 59 in §5.1.3). Although zero conversion of these stative verbs into
 22727 motion verbs is also attested (§15.1.2.5), the double derivation is by far the most
 22728 common way of expressing these meanings.

- 22729 (62) *uizo daltsutsa zo li, masyrurju zo, sruutp^hu nuu ui-cki*
 3SG slowly EMPH again in.secret EMPH ogre DEM 3SG.POSS-DAT
 22730 *ko-zyr-suu-yrbat.*
 IFR:EAST-REFL-CAUS-be.near

22731 ‘He moved closer to the ogre slowly in secret.’ (160706 poucet6, 91)

22732 When the base verb is a motion verb, the reflexive+causative double derivation
 22733 also yields a motion verb, as in the case of *zyr-suu-zyuit* ‘manage to reach’ from
 22734 *zyuit* ‘reach’ (on the *zy-* prefixal element, see §14.2.2). The verb *zyr-suu-zyuit* differs
 22735 from its base verb in that it expresses that the subject had to strive hard to reach
 22736 the goal, as example (63) illustrates.

- 22737 (63) *ui-tuu-yrq^hi pjy-saxab zo ri, nuu kumy*
 3SG.POSS-NMLZ:degree-be.far IFR.IPFV-be.extremely EMPH LNK DEM also
 22738 *jo-zyr-suu-zyuit.*
 IFR-REFL-CAUS-reach

22739 ‘(China)_i was very far, but even so he managed to reach it_i.’ (140511
 22740 alading-zh, 22)

22741 18.3.4.4 Reflexive causatives from transitive verbs

22742 When the base verb is transitive, the result of the reflexive+causative double
 22743 derivation is still an intransitive verb.

22744 The double derivation can have a plain compositional meaning, as in *zyr-suu-*
 22745 *rto^he* ‘have oneself examined’ in (64). The reflexivized argument corresponds to
 22746 the causer and object of the base verb. The causee *smynba* ‘doctor’ does not re-
 22747 ceived ergative marking, and is not indexed on the verb, as an inverse 3→2 configura-
 22748 tion (§14.3.2.1) would be nonsensical in (64).

- 22749 (64) *smynba a-ty-tui-zyy-su-rto*
 doctor IRR-PFV-2-REFL-CAUS-see
 22750 ‘You should have yourself examined by a doctor.’ (elicited)

22751 Doubly derived verbs can also express involuntary actions ‘get oneself Xed’.
 22752 For instance, the reflexive+causative *zyy-su-sat* from *sat* ‘kill’ can have the mean-
 22753 ing ‘get oneself killed’, as in (65).

- 22754 (65) *ma βyuz nyu tce, kʰyrku ra wuma zo yi. tce*
 LNK badger be:FACT LNK side.of.the.house PL really EMPH come:FACT LNK
 22755 *nunuu pjw-zyy-su-sat ngrvl.*
 DEM IPFV-REFL-CAUS-kill be.usually.the.case:FACT
 22756 ‘The badger often comes near houses, and gets itself killed. (The dogs
 22757 chase it and kill it, and people also kill it.)’ (27-spjaNkW, 127-129)

22758 With some transitive verbs, the double derivation has the same meaning ‘take
 22759 pains to *X*, strive to *X*’ as with intransitive verbs above (examples 60 and 63).
 22760 For instance, the reflexive causative *zyy-su-pjyl* of the transitive motion verb *pjyl*
 22761 ‘go around, cross, avoid’ (§15.1.2.1) means ‘strive to avoid *X*, take the necessary
 22762 measures to avoid *X*’ rather than ‘get oneself avoided’: with this verb, the re-
 22763 flexivization targets the causee rather than the object (‘cause oneself to avoid *X*’
 22764 rather than ‘cause *X* to avoid oneself’).

- 22765 (66) *tcendyre nu tu-ky-zyy-su-pjyl kowa ntsuu*
 LNK DEM IPFV-INF-REFL-CAUS-go.around manner always
 22766 *tu-βzu-ndzi pjy-nyu.*
 IPFV-make-DU IFR.IPFV-be
 22767 ‘(The mouse and the sparrow) took every measure to avoid (the cat).’
 22768 (IWlu, 20)

22769 The causative verbs *sypa* ‘transform’ and *sβzu* ‘transform’ (§18.1.6) derived
 22770 from the lexicalized passive verbs *apa* ‘become’ and *aβzu* ‘become, grow’ (§18.1.2)
 22771 are ditransitive, selecting as object the entity that undergoes transformation, and
 22772 as semi-object the entity into which the change occurs. Reflexivization targets
 22773 the object, and the corresponding reflexive forms *zyrsypa* and *zyrsyβzu* mean
 22774 ‘transform oneself into *X*’ (rather than ‘transform *X* into oneself’). They select as
 22775 semi-object the entity into which the subject is transformed, for instance *pjyrgyt*
 22776 ‘vulture’ in (67).

- 22777 (67) *sloχpum nuu ci nuu-zyy-syphyr ny pjyrgyt ci*
 teacher DEM a.little AOR-REFL-shake ADD vulture INDEF
 22778 *nuu-nuu-zyy-suу-yβzu jnu-ηu.*
 AOR-AUTO-REFL-CAUS-become SENS-be
 22779 ‘The teacher shook himself, and transformed himself into a vulture.’
 22780 (2003kandZislama, 61-62)

22781 Just like the causative verbs *sypa* and *syβzu* from which they are derived (example 33, §18.1.6, §17.2.8), *zyrsypa* and *zyrsyβzu* 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 *zyryzø* ‘make oneself light’ (example 59 above), the participle *kui-zo* ‘the one who is light’ occurs as semi-object of *zyrsypa* ‘transform oneself into’.

- 22787 (68) *turme užo numuu rcanuu [t̪y-muj] zo kui-fse*
 man 3SG DEM UNEXP:DEG INDEF.POSS-feather EMPH SBJ:PCP-be.like
 22788 *kui-zo] jny-zyy-suу-ypa,*
 SBJ:PCP-be.light IFR-REFL-CAUS-become
 22789 ‘The man, him, made himself as light as a feather.’ (04-smanmi, 84)

22790 18.3.5 Reflexive and autive

22791 Reflexive and autive (§19.1) derivations have completely different semantics, and
 22792 distinct morphosyntactic properties, since the latter does not change the verb
 22793 transitivity. With a handful of verbs such as *bmuy* ‘intend to, decide’, the reflexive
 22794 form has an autobenefactive meaning (*zybzmuу* ‘decide for oneself’), but the
 22795 transitivity is changed.

22796 The autive *nu-* (§19.1) is compatible with the reflexive *zyr-*. It is the only derivational
 22797 prefix that precedes the reflexive prefix in the prefical chain (§11.2.2). The
 22798 autive+reflexive combination has four different meanings.

22799 First, it can express and involuntary action that the subject both causes and
 22800 suffers from (as in 43 above).

22801 Second, the *nu-* prefix can also be used to put emphasis on the fact that the
 22802 subject perform the reflexive action by him/her/itself without external help, as
 22803 in (69).

- 22804 (69) *tcet^ha tur-ji ui-ηgwa numura, icq^ha tu-rdoေ*
 later INDEF.POSS-field 3SG.POSS-in DEM:PL FILLER one-piece
 22805 *kui-fse nura cwi-ndze, tcendxre, užo*
 SBJ:PCP-be.like DEM:PL TRAL-eat[III]:FACT LNK 3SG

- 22806 *ku-nuu-zyy-fstum* *c^ha*
 IPFV-AUTO-REFL-take.care can:FACT
 22807 ‘(This hen) will go and eat the grains in the fields, it will be able to take
 22808 care of itself on its own.’ (150822 laoye zuoshi zongshi duide-zh, 149)

22809 Third, the *nuu-* 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
 22810 fact that the parents (dual subject) ate to their full in the absence of their children.

- 22812 (70) *ndzi-pyri* *kua-puu~pe* *to-βzu-ndzi* *q^he, zyni*
 3DU.POSS-diner SBJ:PCP-EMPH~be.good IFR-make-DU LNK 3DU
 22813 *to-nuu-zyy-cuu-fka-ndzi.*
 IFR-AUTO-REFL-CAUS-be.full-DU
 22814 ‘They made a nice dinner for themselves, and ate to their fill.’ (160701
 22815 poucet2, 16-17)

22816 Fourth, it can occur to express an action taking place spontaneously without
 22817 external agent, as in (71).

- 22818 (71) *kum c^hy-nuu-zyy-sui-ytsa*
 door IFR-AUTO-REFL-CAUS-be.locked
 22819 ‘The dock locked itself’ (elicited; describes house doors with an automatic
 22820 locking system)

22821 The autive is common on verbs with reflexive and causative prefixes (§18.3.4),
 22822 resulting in a triple derivation, as in (70) and (71) above.

22823 18.3.6 Reflexive, tropative and applicative

22824 Apart from the causative, the reflexive derivation can be added after other valency-
 22825 increasing derivations such as the tropative and the applicative.

22826 As an example of reflexivized tropative, *nÿmpçrr* ‘consider to be beautiful’
 22827 (from *mpçrr* ‘be beautiful’) can be reflexivized as *zÿrnÿmpçrr* ‘consider oneself
 22828 to be beautiful’ (§17.5.4).

22829 The applicative verbs *nuymu* ‘be afraid of’ and *nurga* ‘like, love’ (from *mu* ‘be
 22830 afraid’ and *rga* ‘like’) have reflexive form *zÿr-nuu-rga* and *zÿr-nuy-mu* which can
 22831 either mean ‘like/be afraid of oneself’ or have a reflexive+causative meaning
 22832 ‘have people like/be afraid of oneself’. The latter meaning can also be expressed
 22833 with a triple derivation such as *zÿr-z-nuy-mu* with the causative *z-* between the
 22834 reflexive and the applicative prefixes.

22835 The applicative *nystu* ‘believe in’, which selects as object the person one be-
 22836 lies in (example 102, §17.4.1), can also be reflexivized as *zyrnystu* ‘believe in
 22837 oneself’, as in (72).¹⁰

- 22838 (72) *nua pa-mto nura mui-jy-zyr-ny-stu.*
 DEM AOR:3→3'-see DEM:PL NEG-IFR-REFL-APPL-believe
 22839 ‘He did not believe the things that he himself had (just) seen.’ (150830
 22840 baihe jiemei-zh, 106)

22841 18.3.7 Historical origin

22842 The reflexive *zyr-* is cognate to forms found in other Gyalrong languages, includ-
 22843 ing Tshobdun *ojp-* (J. T.-S. Sun 2014a), Zbu *vjp-* (Gong 2018: 9) and Situ *wjp-*.¹¹
 22844 These prefixes go back to a proto-Gyalrong form **wjp-* (with a variant **wajp-* for
 22845 Tshobdun) with metathesis in Japhug. However, the cluster *zy-* is otherwise only
 22846 attested in Japhug in ideophones such as *zyrzyr* ‘having some (pieces) coming
 22847 out (out of a bundle)’ (§10.1.5.1).

22848 This prefix itself is possibly the incorporated *status constructus* form of the
 22849 third singular pronoun **wajay* (corresponding to Japhug *uzo* ‘he’, §6.1, whose
 22850 irregular phonology is discussed in §5.1.1.5); typological parallels of the PERSONAL
 22851 PRONOUN ⇒ REFLEXIVE change proposed here also exist in Yukaghir (Jacques
 22852 2010b, Maslova 2007: §5.2).¹²

22853 The reflexive prefix is a core Gyalrong innovation, not shared even by Khroskyabs.
 22854 The reflexive prefix *bjæ-* in Khroskyabs is not directly related to its core Gyalrong
 22855 equivalent, as it is based on the denominal *bj-* (Lai 2017: 300), cognate of the Ja-
 22856 phug stative denominal *a-* (§20.2). Both Khroskyabs *bjæ-* and proto-Gyalrong
 22857 **wjp-* reflexive prefixes share the *status constructus* of the pronominal base **jan-*
 22858 (Japhug *-zo*, §6.1), but result from independent grammaticalizations.

¹⁰ This example is from a translated story, but the presence of a second object (the relative *nua 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.

¹¹ Some dialects of Zbu however have a divergent reflexive prefix *jw-*, which cannot be cognate to the forms discussed here (Gong 2018: 9).

¹² For an alternative etymology, see J. T.-S. Sun (2014a).

18.4 Reciprocal

18.4.1 Reduplicated reciprocal

The reduplicated reciprocal derivation is the productive way of expressing mutual action in Japhug. It combines the *a-* prefixal element found in the passive (§18.1) and several denominal derivations (§20.2) with the partially reduplicated stem of the base verb. If the verb has a polysyllabic stem (whether or the the non-final syllable are derivational prefixes), only the last syllable is reduplicated. For instance *rqoꝝ* ‘hug’, *nuporꝝ* ‘kiss’ and *nurutꝝa* ‘envy’¹³ yield *a-rqu~rqoꝝ* ‘hug each other’ (73), *a-nupru~porꝝ* ‘kiss each other’ and *a-nurutꝝu~tꝝa* ‘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 *nyu-* 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 *nyuybuy* ‘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 un-glossed to avoid unnecessary redundancy: thus *a-rqu~rqoꝝ* is glossed as RECIP-hug rather than as RECIP-RECIP~hug.

The *v/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-v-rqu~rqoꝝ-nuu-ci* ‘they hug each other’ corresponds to the sum of referent of the subject of the first verb *jo-nuu-če* ‘he went back’ with the group of people referred to by the postpositional

¹³ The verb *nurutꝝa* ‘envy’ is denominal from *nutꝝa* ‘envy’ (n).

22894 phrase *wu-yi ra c^ho* ‘with his relatives’ (see §14.2.5 for examples of the same phe-
 22895 nomenon with non-reciprocal verbs).

- 22896 (73) *k^ha jo-nuu-ce tcendyre [wu-yi ra c^ho]*
 22897 home IFR-VERT-go LNK 3SG.POSS-relative PL COMIT
ko-k-γ-rqu~rqu~nui-ci zo jw-yywnui.
 22898 IFR-PEG-RECIP-hug-PL-PEG EMPH IFR-cry-PL
 22899 ‘He went home and he and his relatives hug each other and cried.’ (140512
 fushang he yaomo1, 35)

22900 Expectedly, the reciprocal of secundative verbs (§14.4.2) targets the recipient
 22901 object; for instance, *mbi* ‘give’ yields *ambumbi* ‘give to each other’ (74).

- 22902 (74) *tce nuu w-ŋgu sruismyⁿ ra pjui-lst-nuu, tce nura*
 22903 LNK DEM 3SG.POSS-in medicine PL IPFV:DOWN-release-PL LNK DEM:PL
pjui-nuu-lst-nuu tce nura jua-ŋmbui~mbi-nuu ra jw
 22904 IPFV:DOWN-AUTO-release-PL LNK DEM:PL IPFV-RECIP-give-PL PL be:FACT
 22905 ‘They put medicine (against sinus inflammation) into the (snuff tobacco)_i,
 and they give it_i to each other.’ (30-CnAto, 17-18)

22906 The reduplicated reciprocal derivation can also express naturally collective
 22907 events without clearly distinct agents and patients, such as *awuwum* ‘gather to-
 22908 gether’ (75) from *wum* ‘gather’.

- 22909 (75) *qartsua tγ-mda q^he tce c^huu-γ-wuu~wum-nuu q^he*
 22910 winter AOR-be.the.time LNK LNK IPFV:DOWNSTREAM-RECIP-gather-PL LNK
kuu-dur~dyn zo tuaturca ku-ryzi-nuu jua-ŋu
 22911 SBJ:PCP-EMPH~be.many EMPH together IPFV-stay-PL SENS-be
 22912 ‘When winter arrives, they gather and stay together in great numbers.’
 (23-qapGAmtWmtW, 107-108)

22913 The meaning of this reciprocal form is also slightly different from that of the
 22914 base verb, since *wum* ‘gather’ has a wide range of extended meanings, such as
 22915 ‘take as a X’ (as in example 24, §8.1.7) or ‘fold wings’ (as in 92, §15.1.4.3) which are
 22916 completely absent from the reciprocal form. In addition, the verb *wum* typically
 22917 takes non-human entities as objects when meaning ‘gather’ as in (76).

- 22918 (76) *tursa* *w-rkui* *χpun-ŋga* *t^hamtçxt a-c-tv-tur-wum*
 cemetery 3SG.POSS-side monk-clothes all IRR-TRAL-PFV-2-gather
 22919 *tce*
 LNK
 22920 ‘Go and collect all the monk robes near the cemetery.’ (2003qachGa, 155)

22921 The intransitive verb *andundo* derived from *ndo* ‘catch’ can have a prototypical
 22922 reciprocal meaning ‘grab each other’ (especially relative to fighting, see example
 22923 85 below, §18.4.1.2). It also occurs with the naturally collective event meaning
 22924 ‘be clustered together’ as in (77) with a singular verb form, due to the fact that
 22925 mushrooms are poorly differentiable inanimate referents (§14.6.1.1).

- 22926 (77) *tce* *tce* *wi-qa* *nui* *nui-γ-nduw~ndo*, *wi-taš* *nui* *ki*
 LNK LNK 3SG.POSS-foot DEM SENS-RECIP-take 3SG.POSS-top DEM DEM.PROX
 22927 *kui-fse* *kui-duw~dyn* *nui-ŋu* *tce*,
 SBJ:PCP-be.like SBJ:PCP-EMPH~be.many SENS-be LNK
 22928 ‘The base (of the mushroom 刷把菌 <shuābājūn> ‘Ramaria formosa’) is
 22929 all clustered together, but it has many top parts.’ (23-tshAYCAnW, 12)

22930 A handful of intransitive verbs can derive reciprocal forms. The verb of speech
 22931 *ruçmi* ‘talk’ has the derived form *a-ruçmuu~çmi* ‘exchange words, talk to each
 22932 other’ (see example 101, §18.4.4), with reciprocalization of the dative-marked re-
 22933 cipient (compare with 172, §8.3.1).

22934 18.4.1.1 Reciprocal and noun-verb collocations

22935 In some noun-verb collocations (§22.4.2), the verb can undergo the reduplicated
 22936 reciprocal derivation, expressing mutual action between the subject and the pos-
 22937 sessor of the object of the base construction.

22938 For instance, the collocation meaning ‘braid hair’ (78) including the verb *βzu*
 22939 ‘make’ and the body part *tu-ku* ‘head’ (§5.1.2.3) yields in (79) a reciprocalized
 22940 construction with the reduplicated verb *aβzuuβzu* and the noun *tu-ku* demoted as
 22941 semi-object.

- 22942 (78) *a-pi* *wi-ku* *nur-βzu-t-a*
 1SG.POSS-elder.sibling 3SG.POSS-head AOR-make-PST:TR-1SG
 22943 ‘I braided my sister’s hair.’ (elicited)

- 22944 (79) *wi-pi c^ho ndzi-ku pwi-γ-βzu~βzu-ndzi ndyre*,
 3SG.POSS-elder.sibling COMIT 3DU.POSS-head IPFV-RECIP-make-DU LNK
 22945 ‘She and her sister braided each other’s hair.’ (2005 Kunbzang, 260)

22946 18.4.1.2 Reciprocal and other derivations

22947 The reciprocal derivation is highly productive, can be applied to verbs that have
 22948 undergone a valency-increasing derivation such as causative (§17.2, §17.3), applicative (§17.4) or tropative (§17.5).

22950 Reciprocalized causatives are found with both sigmatic and velar causative
 22951 verbs. For instance, the velar causative *yrrlaꝝ* ‘destroy’ (from the intransitive verb
 22952 *rlaꝝ* ‘disappear’, borrowed from वळ्या ‘*brlag* ‘lose’) has a reciprocal form *ayyrlurlaꝝ*
 22953 ‘destroy each other’ (80).

- 22954 (80) *kuicunγgu tce, tyru ra tu-o-nusnuiρu~ŋraꝝ-nu tce*
 former.times LNK chieftain PL IPFV-RECIP-do.harm-PL LNK
 22955 *c^hui-γ-y-rlu~rlaꝝ-nu pjγ-ŋgryl*
 IPFV-RECIP-CAUS-disappear-PL IPFV.IFR-be.usually.the.case
 22956 ‘In former times, chieftains used to harm (murder) each other and destroy
 22957 each other’s families.’ (elicited)

22958 Reciprocalization of sigmatic causatives is productive. Example (81) illustrates
 22959 two verbs with this double derivation: *asunq^hunq^hi* ‘make each other dirty’ (from
 22960 the causative *sunq^hi* ‘make dirty’ derived from *nq^hi* ‘be dirty’) and *asuŋŋuiŋraꝝ*
 22961 ‘blacken each other’ (from the causative *suŋŋaꝝ* ‘blacken’ from *ŋraꝝ* ‘be black’). In
 22962 the latter, note that partial reduplication targets the syllable /ŋraꝝ/, disregarding
 22963 morpheme boundaries (the /ŋ/ is part of the causative prefix, §17.2.1.4).

- 22964 (81) *ŋy-k-γ-suu-nq^hwi~nq^hi-ndzi tce,*
 IFR-PEG-RECIP-CAUS-be.dirty-DU LNK
 22965 *ŋy-k-γ-suŋŋ-ŋw~ŋŋraꝝ-ndzi-ci zo*
 IFR-PEG-RECIP-CAUS-be.black-DU-PEG EMPH
 22966 ‘They_{DU} made each other dirty, they blackened each other.’ (elicited, can
 22967 be said of children playing in a dirty place)

22968 The lexicalized verb *nusuk^ho* ‘rob, extort’ which etymologically derives from
 22969 *k^ho* ‘give’ with the causative and autive prefixes (§17.2.3) can also undergo recip-
 22970 reciprocalization to *anusuk^huk^ho* ‘extort each other’ as in (82).

- 22971 (82) *nunuu jy-ky-yrrat* *nur pŷ-k-ŷ-nusuk^hur-k^ho-nur-ci.*
DEM AOR-OBJ:PCP-throw DEM IFR.IPFV-PEG-RECIP-rob-PL-PEG
22972 ‘The beasts fought with each other to get the (piece of cloth) that he had
22973 thrown (at them).’ (150825 huluwa-zh, 150)

22974 Reciprocalized tropatives are not commonly found in the corpus, but poten-
22975 tially any tropative verb can undergo reciprocal derivation. For instance, the
22976 slightly lexicalized tropative verb *nype* ‘consider to be good, like’ (from *pe* ‘be
22977 good’) yields *anypupe* ‘like each other’, as in (83).¹⁴

- 22978 (83) *jy-k-ŷ-nnts^hur~nts^hi-ndzi-ci, jy-k-ŷ-nŷ-pur~pe-ndzi* *tce*
IFR-PEG-RECIP-love-DU-PEG IFR-PEG-RECIP-TROP-be.good-DU LNK
22979 ‘They fell in love with each other.’ (150827 mengjiangnv-zh, 104-105)

22980 The reciprocal derivation is also completely productive with applicative verbs.
22981 For instance *nuybuiy* ‘miss, long for’ (from *buy* ‘miss home’), *nŷk^hyzŋga* ‘shout at’
22982 (from *ak^hu* ‘call’) and *nurga* ‘like’ (from *rga* ‘like, be happy’) yield the reciprocal
22983 verbs *anuybuiybuy* ‘miss each other’, *anŷk^hyzŋgu~zŋga* ‘shout at each other’ and
22984 *anurgu~rga* ‘like each other’, respectively. In the case of *a-nuy-bu~ybuiy*, par-
22985 tial reduplication disregards morpheme boundaries (the /ŷ/ that belongs to the
22986 applicative prefixes is reduplicated together with the verb root), as in the case
22987 of the reciprocal of causative *asuynuynar* ‘blacken each other’ discussed above
22988 (§18.4.1.2).

22989 A sigmatic causative derivation can be applied to a reciprocal verb. For in-
22990 stance, *awuwum* ‘gather together’ (see 75 in §18.4.1 above) yields the verb *s̄ywuwum*
22991 ‘gather’, whose meaning is close to that of the base verb *wum* ‘gather’ (see exam-
22992 ple 76 above and the related discussion), but lacking the extended meanings of
22993 this verb and more commonly used to express the meaning ‘gather’ with human
22994 objects.

- 22995 (84) *srūnmuu ra c^hy-sūr-ŷ-wuu~wum* *tce,*
râkhasâ PL IFR-CAUS-RECIP-gather LNK
22996 ‘She gathered the râkhasîs together.’ (2011-05-nyima, 33)

22997 Such double derivations are by no means rare. The causative+reciprocal *s̄ytuta*
22998 ‘separate’ (of two persons that are fighting with each other, as in 85) is consider-
22999 ably more commonly used than the simple reciprocal *atuta* ‘release each other’
23000 (from *ta* ‘put’).

¹⁴ The other verb *anysts^hunts^hi* ‘love each other’ in (83) derives from *nysts^hi* ‘love’, which is a lexicalized and synchronically non-analyzable tropative (§17.5.3).

- 23001 (85) *nur-sur-γ-tuu-te-a* *ri tce myzua ku-o-ndur~ndo-ndzi*
 IPFV-CAUS-RECIP-put-1SG LNK LNK again IPFV:EAST-RECIP-take-DU
 23002 *cti*
 be.AFF:FACT
 23003 ‘I am (repeatedly) separating them (two fighting ants), but they grab each
 23004 other again (each time).’ (conversation 14-05-01)

23005 The verb *asymumts^humts^hym* ‘inform each other’, which presents two instances
 23006 of the reciprocal derivation, is treated in (§18.4.2).

23007 **18.4.1.3 Lexicalized reciprocal**

23008 The meaning of reciprocal verbs is not always fully predictable from that of the
 23009 base verb; some reciprocal verbs express naturally collective action (§18.4.1) and
 2310 may have a meaning that is more restricted than that of the base verb.

23011 In some cases, the meanings of the reciprocal form has changed to such an
 23012 extent that the two verbs have become synchronically unrelated. The clearest
 23013 example is the intransitive verb *alulyt* ‘fight’, which requires a non-singular sub-
 23014 ject and can select a comitative phrase (§8.2.5) as in (86), like regular reciprocal
 23015 verbs (§18.4.1).

- 23016 (86) *nduxpa kyrpu yuu ui-tcuu* *c^ho azo a-tcuu* *nua*
 ANTHR ANTHR GEN 3SG.POSS-SON COMIT 1SG 1SG.POSS-SON DEM
 23017 *tx-alulyt-ndzi tce, tce a-tcuu* *yuu-sat* *pjx-ŋu* *ri,*
 AOR-fight-DU LNK LNK 1SG.POSS-SON INV-kill:FACT IFR.IPFV-be LNK
 23018 ‘Gdugpa dkarpo’s son and my son fought with each other, and my son
 23019 was about to be killed.’ (28-smAnmi, 253)

23020 This verb originates from the transitive verb *lxt* ‘release’, which is used as
 23021 a light verb in several collocations related to fight. In these constructions, the
 23022 syntactic object of *lxt* is the instrument used to hit or shoot, such as weapons
 23023 (*scapa* ‘sword’, *tudi* ‘arrow’, *cymuydu* ‘gun’ etc) or body parts (*txjk^hut* ‘fist’ etc)
 23024 as objects (87, 88 and also 210 in §8.3.4.3), while the semantic patient (the entity
 23025 that is hit or shot at) is marked by the relator noun *ui-taꝝ* ‘on’ (§8.3.4.3).

- 23026 (87) *nunuu cymuydu tu-lxt-nua* *tce pjuu-sat-nua cti.*
 DEM gun IPFV-release-PL LNK IPFV-kill-PL be.AFF:KILL
 23027 ‘They shoot at it with guns and kill it.’ (28-qapar, 20)

- 23028 (88) *qac^bya ur-taʂ zo li tudi nuŋ ci to-lxt.*
 fox 3SG.POSS-ON EMPH again arrow DEM INDEF IFR-release
 23029 'He too shot an arrow at the fox.' (140507 jinniao-zh, 82)

23030 The reciprocal derivation here originally expressed mutual action between the
 23031 subject and the oblique argument (marked by *u-taʂ* 'on') of the base verb; the
 23032 original meaning may have been 'shoot at/hit each other (with *X*)', and it can be
 23033 surmised that the verb *alulxt* 'fight' used to require a semi-object corresponding
 23034 to the instrument used for hitting/shooting at an earlier stage. The verb *alulxt*
 23035 became fully lexicalized when it ceased to co-occur with a semi-object, and when
 23036 its meaning became narrowed to the meaning 'fight', as opposed to all the other
 23037 possible meanings of the light verb *lxt* (§22.4.2.2).

23038 In some cases, the base verb does not exist anymore but its possible form can
 23039 be easily recovered. For instance, the reciprocal *anurjyruru* 'look at each other's
 23040 face' (example 89) is derived from a lost base verb *tnurjyruru*, an incorporating
 23041 verb made from the intransitive *ru* 'look at' (§15.1.2.4) and the nominal root of
 23042 *tu-rŋa* 'face', with the denominal prefix *nu-* (§20.13.2).

- 23043 (89) *nunu c^ho ci ky-anurjyruru-ndzi tce*
 23044 DEM COMIT a.little AOR-look.at.each.other-DU LNK
 'They exchanged a look with each other.' (2010-07, pear story)

23045 Finally, we find a few intransitive verbs that resemble reciprocal verbs for-
 23046 mally (presence of *a-* prefix and verb stem reduplication) and syntactically (non-
 23047 singular subject, select comitative phrases), but whose verb root is not otherwise
 23048 attested in Japhug: *amumi* 'be in good terms with' (§8.2.5), *azuzu* 'wrestle' and
 23049 *asusu* 'copulate' (the latter perhaps related to *susu* 'live').

23050 18.4.2 Reciprocal *amu-* prefix

23051 In addition to the reduplicated reciprocal (§18.4.1), a second reciprocal pattern
 23052 is attested in Japhug: the prefix *amu-*. As shown by the examples in Table 18.3,
 23053 the *amu-* prefix can derive reciprocal verbs from ditransitive, transitive, semi-
 23054 transitive and intransitive verbs. When prefixed to *a-* initial verbs such as *atuy*
 23055 'meet', no vowel contraction takes place (the reciprocal is *amutuy* 'meet each
 23056 other' rather than *amytuy* as could have been expected).

23057 The verbs that are compatible with *amu-* derivation can be divided into four
 23058 groups: indirective, perception, semi-transitive and stative.

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^haq^b</i> ‘put against’	<i>amust^ha^b</i> ‘be one against the other’
	<i>rupu</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’

23059 18.4.2.1 *amu-* reciprocalization of indirective verbs

23060 Indirective verbs (§14.4.1) such as *ti* ‘say’ become semi-transitive (§14.2.3) when
 23061 subjected to the *amu-* reciprocal derivation.

23062 The reciprocal verb *amuti* ‘say to each other’ is compatible with a semi-object
 23063 (noun phrase or reported speech complement clause as in 90 and 91) correspond-
 23064 ing to the object of the base verb. The reciprocal derivation here expresses mutual
 23065 action between the subject and the dative recipient of *ti* ‘say’.

- 23066 (90) ‘*nautcu tui-ci z-jnur-kuu-su-γ-j-ts^hi*
 23067 DEM:LOC INDEF.POSS-water TRAL-IPFV-GENR:S/O-CAUS-PASS-CAUS-drink
jnu-nts^hi’ to-k-γmu-ti-ndzi
 23068 SENS-be.better IFR-PEG-RECIP-say-DU
 23069 ‘They said to each other ‘we should go there and ask for water to drink.’
 (Nyima wodzer 2002, 59)

23070 Example (91) illustrates the use of this reciprocal verb with a generic person
 23071 form, with neutralization of number marking (the verb otherwise always has
 23072 non-singular number indexation in finite forms).¹⁵

¹⁵ Concerning the kinship rule described in (91), see §27.2.3.

- 23073 (91) *nunua kyndzi-sq^haj u-r̥it* *nur tce “a-my̥tsa”*
DEM COLL-sister 3SG.POSS-offspring DEM LNK 1SG.POSS-MZCh
23074 *tu-kui-ymu-ti* *jui-ŋu.*
IPFV-GENR:S/O-RECIP-say SENS-be
23075 ‘Children of sisters call each other ‘my maternal parallel cousin’.’ (140425
23076 kWmdza4, 5)

23077 The reciprocal *amu-* prefix expresses reciprocity between the subject and other
23078 oblique arguments, for instance those marked by the relator noun *u-taꝝ* ‘on,
23079 above’ (§8.3.4.3). For instance, the verb *amust^haꝝ* ‘be one against the other’ (92)
23080 is derived from *st^haꝝ* ‘put against’, a ditransitive verb which selects a phrase in
23081 *u-taꝝ* (93).

- 23082 (92) *tce nunua li b̥yβb̥yβ* *zo kui-pa tce,*
LNK DEM again IDPH(II):growing.in.clumps EMPH SBJ:PCP-AUX LNK
23083 *kui-ymu-st^hur~st^haꝝ* *zo kui-dyn tu-łoꝝ*
SBJ:PCP-RECIP-EMPH~put.against EMPH SBJ:PCP-be.many IPFV-come.out
23084 *ŋu.*
be:FACT
23085 ‘(These mushrooms) grow in clumps, one against the other in great
23086 numbers.’ (23-mbrAZim, 9)

- 23087 (93) *ma numia uzo r̥ja* *[tui-mdzu u-taꝝ]*
LNK DEM 3SG completely GENR.POSS-tongue 3SG.POSS-on
23088 *kú-wy-st^haꝝ* *tce my̥r̥tsaꝝ,*
IPFV-INV-put.against LNK be.spicy:FACT
23089 ‘If one puts it (this plant) on one’s tongue (without anything else), it is
23090 spicy.’ (13-tCamu, 13)

23091 The verb *amurpu* ‘bump one against the other’ is a similar case (see example
23092 3, §6.1), but its base verb *rpu* ‘bump against’ is labile (§14.5.2).

23093 18.4.2.2 *amu-* reciprocation of perception verbs

23094 The perception verbs *mto* ‘see’, *mts^hym* ‘hear’ are also compatible with the *amu-*
23095 prefix. Unlike the indirective verbs discussed in §18.4.2.1 their reciprocal forms
23096 *amumto* ‘see each other’ and *amumts^hym* ‘hear from each other’ (or ‘hear each
23097 other’) express reciprocal action between the subject (experiencer) and the ob-
23098 ject (stimulus) of the base verb. As shown by (94), these verbs also select the
23099 comitative like other reciprocal forms.

- 23100 (94) <liangshanbo> *c^hondyre pjur-ymui-mto-ndzi mui-pjy-jy* *tce*
 ANTHR COMIT IPFV-RECIP-SEE-DU NEG-IFR.IPFV-be.allowed LNK
 23101 ‘She and Liang Shanbo were not allowed to see each other.’ (150826
 23102 liangshanbo zhuyingtai-zh, 164)

23103 18.4.2.3 *amu-* reciprocalization of semi-transitive verbs

23104 In the case of the semi-transitive verbs *tso* ‘know, understand’ and *atuy* ‘meet’,
 23105 the *amu-* derivation targets the semi-object.

23106 The verb *amutso* can be used with the reciprocal meaning of ‘understand each
 23107 other’ (95), but also has an additional meaning ‘be clear, be understandable (of
 23108 speech)’, reflecting the homophonous *amu-* distributed property derivation (§18.7).
 23109 As discussed in §18.7, the reciprocal and distributed property *amu-* prefixes are
 23110 historically related, and the verb *amutso* is one of the pivot forms between them.

- 23111 (95) *kupa-sk^yt* *tú-wy-βzu* *tce nūnū a-puⁱ-ŋu*, *izo yuⁱ*
 Chinese-language IPFV-INV-make LNK DEM IRR-IPFV-be 1SG GEN
 23112 <*guoyu*> *ŋuⁱ-ŋu tce, nūnū kysufse yuⁱ ji-rju*
 national.language SENS-be LNK DEM all GEN 1SG.POSS-speech
 23113 *ŋuⁱ-ŋu tce, pju-kui-ymui-tso* *ŋuⁱ-ra* *ri, li*
 SENS-be LNK IPFV-GENR:S/O-RECIP-understand SENS-be.needed LNK again
 23114 *nūnū konjla* *múj-tso-nūnū*.
 DEM completely NEG.SENS-understand-PL
 23115 ‘When we speak Chinese, since it is our national language, everybody’s
 23116 language, we should be able to understand each other, but (the people
 23117 from Tshobdun) do not understand it completely either.’ (150901
 23118 tshuBdWnskAt, 15-17)

23119 18.4.2.4 *amu-* reciprocalization of stative verbs

23120 The *amu-* prefix occurs with a few stative verbs. The stative verbs of relative
 23121 location *armbat* ‘be near’ and *arq^hi* ‘be far’ have the reciprocal forms *amurmbat*
 23122 ‘be close to each other’ and *amurq^hi* ‘be far from each other’. In (96), *amurmbat*
 23123 appears in singular form due to the inanimate character of the stars and their
 23124 poor differentiability from each other with a naked eye.

- 23125 (96) *zŋgri wuma kui-tṣot* *ŋuⁱ-ma^h* *ri,*
 star really SBJ:PCP-be.bright SENS-not.be LNK
 23126 *kui-ymui-rmbui-rmbat* *zo* *ŋuⁱ-ŋu tce, nūnū wuma ŋuⁱ-saχsyl.*
 SBJ:PCP-RECIP-EMPH~be.near EMPH be:FACT LNK DEM really SENS-be.clear

23127	[...] <i>u-tuu-γzirja</i>	<i>u-ts^burya</i>	<i>nū</i> , [...] <i>vnymchi</i>
	3SG.POSS-NMLZ:DEG-be.aligned	3SG.POSS-shape DEM	gnam.khyi
23128	<i>tsa</i>	<i>pnu-fse</i> , [...] <i>ri pnu-γmu-rmbat.</i>	
	a.little	be.like:FACT LNK SENS-RECIP-be.near	
23129	'(There six stars in the Pleiades.) They are not very bright stars, but they are close to each other, and for this reason they are quite visible. The way they are aligned is a bit similar to that of the constellation Gnam.khyi, but closer to each other' (29-mWBZi, 15-20)		
23130			
23131			
23132			

The verb *amufse* ‘know each other’ (example 97) historically originates from the *amu-* reciprocal form of a base *-fse*, which is not related to the intransitive stative verb *fse* ‘be like’, but rather to a lost verb corresponding to the Tshobdun verb *fse?* ‘hear’ (Sun & Blogros 2019: 213). The isolated derivation *nufse* ‘know’ (a person) (possibly a lexicalized autive §19.1.6) is derived from the same base with the same meaning; it also has a Tshobdun cognate: *náfse* ‘know well’ (Sun & Blogros 2019: 121).

23140 (97) *nuure ri tce ky-amufse-tci tce, tcendyre wuma zo*
DEM:LOC LOC LOC AOR-know.each.other-1DU LNK LNK really EMPH
23141 *pui-amumi-tci*
PST.IPFV-be.in.good.terms-1DU
23142 ‘We got to know each other there, and we were in very good terms.’
23143 (12-BzaNsa, 6)

Some reciprocal verbs derived either from dynamic transitive verbs (*amustʰaqβ* ‘be one against the other’ in 92) or from stative verbs (*amurmbat* ‘be close to each other’ in 96) are stative, and often appear with emphatic reduplication. This reduplication is different from that of reduplicated reciprocal verbs (§18.4.1), which is one of the morphological exponents of that reciprocal formation.

23149 18.4.2.5 Causativization of *amu-*- reciprocal verbs

²³¹⁵⁰ The sigmatic causative can be added to *amu-* reciprocal verbs. For instance, *amumto* ‘see each other’ discussed above yields the causative form *symumto* ‘cause to see each other’, which also selects the comitative like its base verb.¹⁶

¹⁶ The 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 liàngge shàonánnǚ chūlái yǔ Gěng Qùbìng jièmian> ‘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.

23153 as shown by (98).¹⁷

- 23154 (98) *jo-suu-ye tce icq^ha <gengqubing> nuu c^ho*
 IFR-CAUS-come LNK the.aforementioned ANTHR DEM COMIT
 23155 *pjy-su-ymu-mto.*
 IFR-CAUS-RECIP-see
 23156 ‘The (old man) brought them in and had them meet Geng Qubing.’
 23157 (150906 qingfeng-zh, 58)

23158 The verb *asymumts^humts^hym* ‘inform each other’ underwent three derivations
 23159 from the base verb *mts^hym* ‘hear’: *amuu-* reciprocal derivation (*amumts^hym* ‘hear
 23160 from each other’), sigmatic causative (*symumts^hym* ‘cause to hear from each other’)
 23161 and then finally the reduplicated reciprocal derivation (*a-symumts^hu~mts^hym*,
 23162 §18.4.1.2). Unlike the non-volitional reciprocal verb *amumts^hym* ‘hear from each
 23163 other’ from which it is derived, *asymumts^humts^hym* is a verb of speech, and ex-
 23164 presses a volitional action (see 99 below and 7 in §5.1.1.3).

- 23165 (99) *wzo kuu ui-zda tuu-rdoe uu-p^he ta-tut,*
 3SG.ERG 3SG.POSS-companion one-piece 3SG.POSS-DAT AOR:3→3'-say
 23166 *tuu-zda kuu li ci uu-zda nuu*
 INDEF.POSS-companion ERG again INDEF 3SG.POSS-companion DEM
 23167 *uu-p^he kuu-fse c-ta-tut ny, [...] yurza*
 3SG.POSS-DAT SBJ:PCP-be.like TRAL-AOR:3→3'-say ADD hundred
 23168 *kuurcat nuu z-nuu-a-su-ymu-mts^hu~mts^hym-nuu juu-ŋu,*
 eight DEM TRAL-AOR-RECIP-CAUS-RECIP-hear-PL SENS-be
 23169 ‘The boy told one of his companions, and that one went and told another
 23170 one, and all one hundred and eight (boys) went and informed each other.’
 23171 (2005 Norbzang, 89-90)

23172 The first two clauses in (99) provide a native gloss on the meaning of this
 23173 reciprocal verb.

23174 18.4.3 Reciprocal *andzui-* prefix

23175 The transitive verb *βri* ‘protect’ (an irregular causative of *ri* ‘remain’, see §17.3.1),
 23176 has the reciprocal *andzuiβri* ‘protect each other’ with the unique *andzui-* prefix,
 23177 historically related to the denominal *andzi-* (§20.2.5; on the difficult question of
 23178 the /i/ vs. /u/ contrast in this context, see §3.5.2).

¹⁷ The absence of plural indexation in (98) is expected since in direct 3→3' forms only the number of the subject is indexed on the verb (§14.3.2.2).

- 23179 (100) *tcizo andzui-þri-tci ra*
 1DU RECIP-protect:FACT-1DU be.needed:FACT
 23180 ‘The two of us have to look out for each other.’ (elicited)

23181 **18.4.4 Verbs of co-participation**

23182 The compound verb *amyrk^ho* ‘give and take’, which derives from the transitive
 23183 verbs *mja* ‘take’ and *k^ho* ‘give’ (§19.7.3, §14.4.1) is not formally reciprocal but im-
 23184 plies an action performed by more than one person. Contrary to a reciprocal or a
 23185 reflexive, this collective action is not mutual or directed towards oneself: rather,
 23186 it expresses that two distinct actions performed by different referents take place
 23187 (near-)simultaneously and are linked with one another. Example (101) illustrates
 23188 that one of the two people referred to by the third dual subject hands over the
 23189 child (a semi-object, §8.1.5) and that the other person takes the child from her
 23190 hands. Note the non-iconic order in the compound, where the root *mja* occurs
 23191 before *k^ho*, also the action of giving necessarily temporally precedes that of tak-
 23192 ing.

- 23193 (101) *tceri t_r-rjiti nuu juu-ymy^hk^ho-ndzi q^he kojla*
 LNK INDEF.POSS-child DEM IPFV-give.and.take-DU LNK really
 23194 *tu-o-nuu-ruci_muu~cmi-ndzi kumy muúj-tsu ma tce li*
 IPFV-RECIP-talk-DU also NEG:SENS-have.time.to LNK LNK again
 23195 *tú-wy-nuu-tsuum juu-cti.*
 IPFV:UP-INV-VERT-take.away SENS-be:AFF
 23196 ‘She_i hands the child_j to him_k and he_k takes him_j, but they_{i+k} don’t get
 23197 the time to exchange any words and she_i is taken back to heaven.’
 23198 (150828 donglang, 174-175)

23199 Despite the presence of a reciprocal verb *a-ru_cmuu~cmi* ‘talk to each other’
 23200 (§18.4.1) in this passage, since there is no exchange of roles in the compound
 23201 action described by the verb *amyrk^ho* ‘give and take’, it is preferable to refer to
 23202 this type of construction as ‘co-participation’ (more precisely, ‘unspecified co-
 23203 participation’ in Creissels and Voisin’s 2008 terminology). This verb is isolated,
 23204 as none of the other compound verbs recorded up to now have a meaning of this
 23205 type.

18.5 Anticausative

18.5.1 Morphology

18.5.1.1 Prenasalized-unvoiced alternation

Voice derivations in Japhug are mainly concatenative and prefixal. An important exception is the alternation between unvoiced stops/affricates and their voiced prenasalized counterparts (which are to be analyzed as single phonemes, §3.2.1), reflected in verb pairs whose unvoiced member is transitive, and whose voiced prenasalized member is intransitive.

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>pyar</i> ‘turn over’ (vt)	<i>mbyar</i> ‘turn over’ (vi)
<i>χtyr</i> ‘scatter’	<i>ndytr</i> ‘be scattered’
<i>tçyβ</i> ‘burn’ (vt)	<i>ndzçyβ</i> ‘be burned’
<i>tçyar</i> ‘squeeze out’	<i>ndzçyar</i> ‘be squeezed out’
<i>tçaqβ</i> ‘cause to fall/roll’	<i>ndzqβ</i> ‘fall/roll’ (vi)
<i>ftçi</i> ‘melt’ (vt)	<i>ndzi</i> ‘melt’ (vi)
<i>cuu</i> ‘open’ (vt)	<i>nju</i> ‘open’ (vi)
<i>kry</i> ‘bend’	<i>ngry</i> ‘be bent’
<i>kio</i> ‘cause to glide’	<i>ngio</i> ‘slip’, ‘glide’
<i>kra</i> ‘cause to fall’	<i>ngra</i> ‘fall’
<i>qaꝝ</i> ‘peel off’ (vt)	<i>ngar</i> ‘peel off’ (vi)
<i>qyt</i> ‘separate’ (vt)	<i>nungrt</i> ‘part ways’
<i>qia</i> ‘tear down’	<i>ngia</i> ‘come loose’
<i>qlut</i> ‘break’ (vt, of long objects)	<i>nghut</i> ‘break’ (vi)
<i>qrax</i> ‘tear’	<i>ngrax</i> ‘be torn’
<i>qrzz</i> ‘shave’	<i>ngryz</i> ‘break’ (vi, of hair, dry leaves etc)
<i>qrui</i> ‘break’ (vt, of hard objects)	<i>ngrui</i> ‘break’ (vi)

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>mbrr</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>tsʰok</i> ‘attach’	<i>ndzoʂ</i> ‘be attached’
<i>cʰyʂβ</i> ‘flatten, crush’	<i>nyʂβ</i> ‘be crushed, flattened’
<i>qʰrut</i> ‘completely scratch’	<i>ngrut</i> ‘be completely scratched’

23214 There are 28 known examples of this alternation, involving both unvoiced
 23215 unaspirated stops/affricates (Table 18.4) and aspirated stops/affricates (Table 18.5).
 23216 In Table 18.4, the verb *nuŋgṛt* ‘part ways’ has a lexicalized autive *nu-* integrated
 23217 in the verb stem (§19.1.6), but the bare stem *ngṛt* is found in nominalized forms
 23218 such as *w-sʂ-ŋgṛt* ‘place where X part ways’ (§5.5.1.1).¹⁸

23219 In the absence of a clearly identifiable derivational affix, the direction of the
 23220 derivation is not completely obvious. It is conceivable in principle that the intransitive
 23221 verbs in Tables 18.4 and 18.5 are derived from their transitive counterparts,
 23222 but the opposite direction is equally possible.

23223 The latter direction could even seem more likely when looking at the meaning
 23224 of some of the transitive verbs in these tables from a West European-cum-
 23225 Chinese perspective: for instance, the meaning of *kra* ‘cause to fall’ has to be
 23226 glossed in a way that makes it seem like it is derived from the intransitive verb
 23227 *ŋgra* ‘fall’.

23228 A cognate phenomenon is well-known in other branches of the Trans-Himalayan
 23229 family such as Old Chinese, Tibetan and Lolo-Burmese, and several traditions of
 23230 research analyse these cases as devoicing of the voiced initial by the sigmatic
 23231 causative prefix (for instance Shefts-Chang 1971; Dài 1994; Gerner 2007) while
 23232 other scholars argue for the opposite direction (Sagart & Baxter 2012; Jacques
 23233 2012b; see a summary of several opinions on this matter in Handel 2012).

¹⁸ The verb pairs *xtʰom* ‘put horizontally’ / *ndom* ‘lie horizontally’ and *fʂi* ‘melt’ (vt) / *ndʐi* ‘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.

23234 **18.5.1.2 Evidence for the directionality of the anticausative derivation**

23235 In Japhug (and other Gyalrong languages), three independent pieces of evidence
 23236 clearly indicate that the direction of derivation must be from the transitive verb
 23237 to the intransitive one.

23238 First, the transitive verbs in these pairs can have either unaspirated onset (see
 23239 the examples in Table 18.4) or an aspirated onset (Table 18.5). In the hypothesis
 23240 that the intransitive verbs derive from their transitive counterpart, this obser-
 23241 vation can be trivially explained: the aspiration contrast is neutralized by the
 23242 prenasalization, as illustrated in Table 18.6 (some of the aspirated affricates are
 23243 indicated in brackets in this table, as no examples are attested).

Table 18.6: Prenasalization and aspiration neutralization

p -	p^h -	$\rightarrow mb$ -
t -	t^h -	$\rightarrow nd$ -
ts -	ts^h -	$\rightarrow ndz$ -
$tç$ -	$(tç^h)$ -	$\rightarrow ndz$ -
$tʂ$ -	$(tʂ^h)$ -	$\rightarrow ndʐ$ -
c -	c^h -	$\rightarrow ny$ -
k -	k^h -	$\rightarrow ng$ -
g -	g^h -	$\rightarrow NG$ -

23244 On the other hand, in the hypothesis that the intransitive verbs are primary,
 23245 the origin of aspiration contrast on the transitive counterparts requires an addi-
 23246 tion set of explanations.

23247 Second, the verb *χtyr* ‘scatter’ (Table 18.4) is borrowed from Tibetan གྲୟରྙྰ ག୍ତୋର
 23248 ‘scatter’. The prenasalized form *ɛndyṛ* ‘be scattered’ has no Tibetan equivalent,
 23249 and its onset *ɛnd-* is incompatible with the phonotactics of Tibetan consonant
 23250 clusters. Thus, this intransitive verb must be a Gyalrong-internal creation from
 23251 a Tibetan base,¹⁹ and it follows that the direction of derivation should be from
 23252 the transitive verb to the intransitive one.

23253 Third, all scholars favouring the hypothesis that the intransitive verb is pri-
 23254 mary suppose that the onset of transitive verbs has been devoiced by the addition
 23255 of a sigmatic causative. In Japhug, this hypothesis makes no sense, because the

¹⁹ Cognate pairs also exist in Zbu (*χtór* / *bⁿdór*, Gong 2018: 271) and in Tshobdun (*χtor* / *bⁿdor*, Sun & Blogros 2019: 345; 241), showing that this derivation goes back at least to the common ancestor of these three languages.

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 (J. T.-S. 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 autive *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

18.5.1.3 Absence of clusters in the anticausative form

Among the pairs in §18.5.1.1, two verbs stand out in having a preinitial consonant in the transitive form without equivalent in the intransitive one: *ftsi* ‘melt’ (vt), with a *f*- (phonologically /w/) prefixal element (the expected form of the intransitive *ndzi* ‘melt’ would be †*mdzi*) and *xt^hom* ‘put horizontally’ with a *x*- element (the expected form of *ndom* ‘lie horizontally’ would be †*yndom*).

No decisive explanation can be provided to account for this idiosyncrasy, found in other Gyalrongic languages including Tangut. Two mutually incompatible hypotheses can be considered. First, it is possible that in these two pairs both the intransitive and the transitive verbs are derived from a common root with different fossil derivational prefixes. Second, the reconstructed nasal prefix responsible for the anticausative prenasalization might have caused cluster simplification (**N-ptri* → **N-tri* → *ndzi*).

In the second hypothesis, the anticausative form *ndyr* ‘be scattered’ from the Tibetan loanword *χtyr* ‘scatter’ would be phonetically irregular, possibly a clue of it being analogically created on the basis of other anticausative derivations.

²⁰ The same is incidentally true of various other languages of the Trans-Himalayan family, including Tibetan (Jacques 2012b; Nathan W. Hill 2014a) and Jinghpao (Dài & Xú 1992: 78), where anticausative derivation also exists.

²¹ Independent 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).

23287 **18.5.2 Function**

23288 The discussion in the previous section has shown that the transitivity alterna-
 23289 tion exhibited by the verb pairs in Tables 18.4 and 18.5 was a valency-decreasing
 23290 derivation, turning a transitive verb with unvoiced obstruent onset into an in-
 23291 transitive verb with voiced prenasalized onset (following the rules in Table 18.6).

23292 Like the passive (§18.1), the only argument of the prenasalized intransitive verb
 23293 corresponds to the object of the base verb. Unlike the passive derivation however,
 23294 prenasalized intransitive verbs have a dynamic meaning (rather than expressing
 23295 a resultative state) and also imply that the action took place spontaneously, se-
 23296 mantically removing the agent. For instance, while the passive *a-pryt* of the verb
 23297 *pryt* ‘break’ (of a thread) implies the existence of an agent (102), the prenasalized
 23298 intransitive *mbryt* expresses a spontaneous action without external agent (103).²²
 23299 For this reason, this derivation is henceforth referred to as ‘anticausative’.

23300 (102) *pjy-k-y-pryt-ci*
 IFR-PEG-PASS-break-PEG

23301 ‘It has been broken (by someone).’

23302 (103) *wo a-zi ra nuu-mkyuur puu-mbryt*
 INTERJ 1SG.POSS-lady PL 3PL.POSS-necklace AOR-ACaus:break
 23303 ‘My lady, your necklace broke!’ (2003 Kunbzang, 255)

23304 While anticausativized verbs are not compatible with external volitional agents,
 23305 they are however attested with an explicit expression of the cause and/or of an
 23306 involuntary and indirect agent. For instance in (104) the capsizing of the ship
 23307 (expressed by the anticausative *mbyas* ‘turn over’ (vi) from *pyas* ‘turn over’ (vt))
 23308 is due to a storm mentioned in the previous clause, however without explicit
 23309 marking of the causal relationship.

23310 (104) *ndzi-zmbruu cʰy-mbyas.*
 3DU.POSS-boat IFR:DOWNSTREAM-ACaus:turn.over

23311 ‘(One day, there was a terrible storm on the ocean, and) their boat
 23312 capsized.’ (140511 xinbada-zh, 18)

²² The 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.

23313 In (105), the anticausative *ngrui* ‘break’ (vi) occurs even though the human
 23314 subject of the preceding clause is the identified agent of the verb *pjx-nuu-cluy*
 23315 ‘she dropped it’ and the involuntary indirect cause of the breaking action.

- 23316 (105) *popo pjx-nuu-cluy tce, pjx-NGRUI.*
 earthenware IFR-AUTO-DROP LNK IFR-ACaus:break
 23317 ‘She dropped the earthenware and it broke.’ (2003gesar, 329)

23318 Anticausatives verbs can also follow their corresponding base transitive verbs,
 23319 as illustrated by the pair *qlut* ‘break’ (of long objects, vt) and *nghlut* ‘break’ (vi)
 23320 in (106). Instead of non-volitional action, what the anticausative *nghlut* expresses
 23321 in this case is the successful realization of the action: the subject of *qlut* controls
 23322 his decision to *attempt* at breaking an object, but cannot control his success in
 23323 performing this action.

- 23324 (106) *pjur-tur-qlut q^be pjur-nghlut nuu-cti.*
 IPFV-CONV:IMM-break LNK IPFV-ACaus:break SENS-be.AFF
 23325 ‘(Twigs of willow that grow in lower altitude) break as soon as one
 23326 breaks it.’ (07-Zmbri, 6)

23327 18.5.3 Anticausative and dummy subject constructions

23328 The verb *ts^hob* can be used as a prototypical transitive verb with the meaning
 23329 ‘attach, plant’, as in (107) (see also 63, §19.4) or ‘fix’ (something on something
 23330 else).

- 23331 (107) *fsaŋ c-pjur-ta-nuu nyu. tce loŋrta ra*
 fumigation TRAL-IPFV-put-PL be:FACT LNK prayer.flag PL
 23332 *c-tu-ts^hob-nuu*
 TRAL-IPFV-attach-PL
 23333 ‘(In the morning of the first day of the year) People go (there) and make
 23334 fumigation, plant prayer flags...’ (140522 Kamnyu zgo, 308-309)

23335 It is also one of the few transitive verbs to occur in the dummy subject con-
 23336 struction (§14.3.5) in the meaning ‘grow’ (of fruits, leaves and flowers), as in (108).

- 23337 (108) *tce tuu-k^hyl nuutcu, χsuŋ-cvβ, kuŋβde-cvβ jamar ku-ts^hob*
 LNK one-place DEM:LOC three-pod four-pod about IPFV-attach
 23338 ‘In each place (in each section on the stalk of the plant), three or four
 23339 pods grow.’ (09-stoR, 42)

23340 The anticausative *ndzor* ‘be attached’ occurs with exactly the same meaning as
 23341 *ts^hor* ‘attach’ in the dummy subject construction. In (109), the intransitive subject
 23342 *vnui-cyβ*, *χsui-cyβ* ‘two or three pods’ of *ndzor* corresponds to the object *χsui-cyβ*,
 23343 *kuipde-cyβ* of *ts^hor* in (108).

- 23344 (109) *tui-k^hyl ri, vnui-cyβ, χsui-cyβ jamar ku-ndzor c^ha*
 23345 one-place LNK two-pod three-pod about IPFV-ACAUS:attach can:FACT
 23346 ‘In each place (section on its stalk), two or three pods can grow.’
 (09-stoR, 35)

23347 This is not the only use of *ndzor*, which is one of the few anticausatives that
 23348 are compatible with a volitional meaning (compare with 119, §18.5.5).

23349 18.5.4 Collocation

23350 Among the pairs in Table 18.4, the verbs *u-ko+p^hi* ‘be disappointed by’ and *u-*
 23351 *bo+mbi* ‘be discouraged’ are remarkable in that both are noun-verb collocations,
 23352 taking the same inalienably possessed noun *u-ko* (otherwise unattested) as object
 23353 or intransitive subject,²³ Showing that the anticausative prenasalization, like sev-
 23354 eral other derivations (§22.4), affects collocations as a whole despite being only
 23355 morphologically expressed on the verb stem.

23356 The intransitive *mbi* ‘be discouraged, feel frustrated, lose heart’ is always in
 23357 3SG form (§14.2.7), and the possessor on *u-ko* indicates the experiencer, as in
 23358 (110) where the form *ndzi-ko* takes a 2DU possessive prefix coreferent with the
 23359 subject of the previous verb (see also 31 in §14.2.7).²⁴

- 23360 (110) *stvβts^hyt muu-puu-tuu-nuu-c^ha-ndzi cti tce,*
 23361 contest NEG-AOR-2-AUTO-can-DU be.AFF:FACT LNK
 23362 *ndzi-ko a-my-nuu-mbi*
 23363 2DU.POSS-disappoint(1) IRR-NEG-PFV-ACAUS:disappoint(2)
 ‘(It is not that I don’t want to give her to you), it is that you failed in the
 contest, don’t feel frustrated.’ (2003sras, 118)

23364 The transitive verb *p^hi* occurs with the meaning ‘disappoint’, encoding the stim-
 23365 ulus as transitive subject and the experiencer as possessor of the object as in (111).

²³ The noun and the verb are glossed with the same expression, but using the indices (1) and (2) (§22.4.3.2).

²⁴ This collocation has an exact Tshobdun cognate *o-ye?*+*“bi* ‘lose morale’ (Sun & Blogros 2019: 708).

23366 The argument structure of the two verbs thus only differs by the loss of the subject (stimulus) in the intransitive form *mbi* meaning ‘be disappointed’.
 23367

- 23368 (111) *a-^ho* *pua-tuu-p^hi*
 1SG.POSS-disappoint(1) SENS-2-disappoint(2)
 23369 ‘I am disappointed by you.’ (elicited)

23370 A reflexive meaning ‘be disappointed in oneself’ can be expressed by combining
 23371 the same person as subject of *p^hi* and possessor of *u-^ho* (1SG in 112) with the
 23372 autive prefix *pua-* in its ‘self-affectedness’ function (§19.1.3).

- 23373 (112) *kuki si ki u-q^ha c^hua-tuu-tc^hyt,*
 DEM.PROX tree DEM.PROX 3SG.POSS-root IPFV-2-take.out
 23374 *ju-tuu-ts^hum u-tur-c^ha nv, [...] tce azo*
 IPFV-2-take.away QU-2-can:FACT ADD LNK 1SG
 23375 *a-^ho pua-nua-p^hi-a nu*
 1SG.POSS-disappoint(1) IPFV-AUTO-disappoint(2)-1SG be:FACT
 23376 ‘If you succeed in uprooting this tree and carrying it away, I will admit
 23377 defeat.’ (140428 yonggan de xiaocaifeng-zh, 82-84)

23378 The anticausativized collocation *u-^ho + mbi* can undergo additional derivations,
 23379 such as the facilitative (see 206 in §18.9.1), and the incorporating verbs *s^hzombi* ‘be
 23380 discouraging’, ‘be hopeless’ and *n^hzombi* ‘lose hope’ also derived from it (§20.13.1).

23381 18.5.5 Volitionality

23382 An important proportion of anticausative verbs are only compatible with inan-
 23383 imate subjects, for instance *ngru* ‘break’ (example 105 in §18.5.2), *ndzi* ‘melt’ as
 23384 in (113) or *ndzyar* ‘be squeezed out’ (example 17, §5.1.2.3), and therefore express
 23385 non-volitional actions.

- 23386 (113) *txjpa kuu-xtci~xtci ka-l^ht ri, muáj-^hduw,*
 snow SBJ:PCP-EMPH~be.small AOR:3→3'-release LNK NEG:SENS-be.serious
 23387 *p^hjk^hu tu-ndzi pua-c^ha.*
 still IPFV-ACAU:melts SENS-can
 23388 ‘There was a bit of snow, but it is not serious, it can still melt.’
 23389 (conversation 15-12-17)

23390 Even anticausative verbs that are compatible with human or animal subjects
 23391 are poorly compatible with volitional meaning. For instance, *ndzaβ* ‘fall/roll’

23392 (from *tṣaqβ* ‘cause to fall/roll’) expresses involuntary fall as in (114), but cannot be
 23393 used for voluntary rolling motion. The reflexive form of the base transitive verb
 23394 *zγṛtṣaqβ* ‘cause oneself to fall/roll’ is required instead for this meaning (§18.3.2).

- 23395 (114) *pui-n̥džaβ* *qʰe, paχci ra pa-nui-lwoβ* *tce,*
 AOR:DOWN-ACAU:cause.to.fall LNK apple PL AOR:3→3'-AUTO-spill LNK
 23396 ‘He fell down and spilled the apples.’ (2010 Tshendzin pear story, 9)

23397 However, a few anticausative verbs are compatible with various degrees of
 23398 volitionality. The verb *mbyaβ* ‘turn over’ (vi) (from *pyaβ* ‘turn over’) can be used
 23399 for controllable actions such as tossing over one’s bed (115), and its distributed
 23400 action derivation (§19.4) *nymbyaβlaβ* ‘turn over here and there’ occurs to express
 23401 voluntary actions as in (116).

- 23402 (115) *kʰri ui-taβ* *nuitcu ko-mbyaβ* *ny*
 bed 3SG.POSS-ON DEM:LOC IFR:EAST-ACAU:turn.over ADD
 23403 *jy-mbyaβ* *tce*
 IFR:WEST-ACAU:turn.over LNK
 23404 ‘She tossed over her bed.’ (140430 yufu he tade qizi-zh, 237)
- 23405 (116) *nui χsui-yjyn* *nui-nymbyaβlaβ* *jui-ηu.*
 DEM three-times AOR-DISTR:turn.over SENS-be
 23406 ‘(The horse Rtamchog Rinpoche) rolled over on its back three times (on
 23407 the beach).’ (2012 Norbzang, 105)

23408 The anticausative *nunγyt* ‘part ways’ (from *qyt* ‘separate’, with a lexicalized
 23409 autive *nui-*, §18.5.1.2, §18.5.6) stands out in having no restriction on volitionality,
 23410 as in (117) and (118) where it occurs in the meaning ‘divorce’.

- 23411 (117) *ui-χti* *ci na-nui-car* *ri, tcendyre*
 3SG.POSS-companion INDEF AOR:3→3'-AUTO-search LNK LNK
 23412 *kui-maqʰu* *qʰe pui-nunγyt-ndzi*
 SBJ:PCP-be.after LNK AOR-ACAU:separate-DU
 23413 ‘She found a husband, but they eventually divorced.’ (14-siblings, 99-100)
- 23414 (118) *nyzo jy-ce, tcizo nūnγyt-tci* *ma*
 2SG IMP-go 1DU ACAU:separate:FACT-1DU apart.from
 23415 *my-jy*
 NEG-be.allowed:FACT
 23416 ‘Go away, we absolutely have to part ways.’ (2002qajdoskAt, 75)

23417 The anticausative *ndzor* ‘be attached’ (§18.5.3) is also attested as a synonym
 23418 of the intransitive *nqor* in its special meaning ‘cling onto, lean on, grab’ (see
 23419 example 204, §8.3.4.3) and with a clear volitional meaning, as shown by (119).²⁵

- 23420 (119) *wi-fsomur* *q^hendyre, tulxt* *nui wi-tas*
 3SG.POSS-tomorrow.evening LNK second.sibling DEM 3SG.POSS-on
 23421 *ko-ndzor* *q^he [...] turmuak^ha tce tulxt* *nui*
 IFR-ACAUS:attach LNK dusk LNK second.sibling DEM
 23422 *wi-tas* *ko-nqor tce,*
 3SG.POSS-on IFR-hang LNK
 23423 ‘The next day in the evening, he grabbed (clung onto) the second sister;
 23424 (...) at dusk, he grabbed the second sister.’ (07-deluge, 41;45)

23425 18.5.6 Compatibility with other derivations

23426 Even though the anticausative probably originates from the autive prefix (§18.5.1.2),
 23427 both derivations are compatible, as shown by examples such as *pui-nuu-ŋgra* (120)
 23428 (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).

- 23430 (120) *yuijpa wi-muunto* *nui-ky-lxt* *nui*
 this.year 3SG.POSS-flower AOR-SBJ:PCP-release DEM
 23431 *pui-nnu-ŋgra* *kuuny fsaq^he q^he nui*
 AOR:DOWN-AUTO-ACAUS:cause.to.fall also next.year LNK DEM
 23432 *wi-sta nui li nui jamar tc^hi kuu-tu nui*
 3SG.POSS-place DEM again DEM about what SBJ:PCP-exist DEM
 23433 *wi-mat pui-βze cti*
 3SG.POSS-fruit IPFV-make[III] be.AFF:FACT
 23434 ‘Even if the flowers that have blossomed this year and fall down, the
 23435 next year it makes at that place as many fruits (as there were flowers the
 23436 previous year).’ (11-qarGW, 62)

23437 Like most intransitive verbs, anticausative verbs can undergo the subject-oriented
 23438 facilitative (§18.9.1) *yr-* derivation. For instance, *nglut* ‘break’ (vi), *ngru* ‘break’
 23439 (vi) and *mbyar* ‘turn over’ (vi) have the derived forms *yrnglut* ‘breaking easily’
 23440 (121), *yrngru* ‘break easily’ and *yrmbyar* ‘turning over easily’ (of cars on a slippery road).

²⁵ In this excerpt, the same action is described twice, the first time with *ndzor* ‘be attached’, the second time with *nqor* ‘hang’.

- 23442 (121) *nur-rom kany my-yy-nglut*
 AOR-be.dry also NEG-FACIL-ACAUS:break:FACT
 23443 ‘Even after it has dried up, (the wood of high mountain willow twig)
 23444 does not break easily.’ (07-Zmbri, 59)

23445 The subject-oriented facilitative of the anticausative and the object oriented fa-
 23446 cilitative *nuyu-* (§18.9.2) of the base transitive verb has very close meanings: for
 23447 instance from *pryt* ‘break’ (vt) and *mbryt* ‘break’ (vi) have the facilitative forms
 23448 *nuyu-pryt* and *yy-mbryt*, both of which can be translated as ‘break easily’; the for-
 23449 mer implies however the presence of an external agent, while the latter expresses
 23450 a spontaneous action.

23451 The proprietive *sv-* derivation (§18.8) is also attested with some anticausative
 23452 verbs, in particular *svngio* ‘be slippery’ from *ngio* ‘slip’.

23453 The distributed action derivation (§19.4) occurs with anticausative verbs ex-
 23454 pressing a motion event, such as *nryndzaβlaβ* ‘roll again and again/in all direc-
 23455 tions’ and *nrymbyaβlaβ* ‘turn over again and again’ from *ndzaβ* ‘fall/roll’ *mbyaβ*
 23456 ‘turn over’ (vi), with a repeated motion; *nrymbyaβlaβ* can describe a (possibly vo-
 23457 litional) rolling motion in both lateral directions (remaining at the same place,
 23458 as in 122 below and 116 in §18.5.5), as opposed to *nryndzaβlaβ*, used for a rolling
 23459 motion either in one direction (123), or rolling motion in disorderly fashion.

- 23460 (122) *zruay nur-nrymbyaβlaβ rdtul my-txet*
 louse AOR-DISTR:ACAUS:turn.over dust NEG-take.out:FACT
 23461 ‘When a louse rolls around, it does not raise dust.’ (proverb)

- 23462 (123) *nunu rgorjlu nur nuicumuma zo tui-nryndzaβlaβ jo-za*
 DEM ball DEM immediately EMPH INF:II-DISTR:ACAUS:roll IFR-start
 23463 *tce jo-ndzaβ ny jo-ndzaβ.*
 LNK IFR-ACAUS:roll add IFR-ACAUS:roll
 23464 ‘The ball immediately started rolling over and over.’ (140514 huishuohua
 23465 de niao-zh, 136)

23466 The anticausative verb *ngio* ‘slip’ has two distributed action forms, the regular
 23467 one *nryngiolo* which can be translated as ‘slip/glide/move around over and over’
 23468 (124) and *nuungiolulo*, which rather has a volitional meaning ‘glide, slide (in no
 23469 particular direction)’ (125).

- 23470 (124) *tce numuu pjúá-wy-ta tce, tce snama tx-ŋke tce*
 LNK DEM IPFV:DOWN-INV-put LNK LNK beast.of.burden AOR-walk LNK
 23471 *tce, my-nŋŋgiolo.*
 LNK NEG-DISTR:ACAUSTR:cause.to.glide:FACT
 23472 ‘One puts (belly and neck bands on the burdens), so that when the beast
 23473 of burden walks, (the burden) does not move around (on its back).’
 23474 (30-tAsno, 98)
- 23475 (125) *tx-pytso tyjpyom ui-taꝝ pnu-nunŋgiolulo*
 INDEF.POSS-child ice 3SG.POSS-on SENS-DISTR:ACAUSTR:cause.to.glide
 23476 ‘The child slides on the ice.’ (elicited)

23477 A few anticausative verbs can take the sigmatic causative prefix. For instance,
 23478 the causative *suyndzí* ‘melt’ (vt) of *ndzí* ‘melt’ (vi) can be elicited. This form can
 23479 express indirect causation, as in (126),²⁶ as opposed to the base transitive verb *ft̪si*
 23480 ‘melt’ which is used for volitional activities (127).

- 23481 (126) *ta-mar cʰy-suy-ndzí-t-a*
 INDEF.POSS-butter IFR-CAUS-ACAUSTR:melt-PST:TR-1SG
 23482 ‘I let the butter melt (by forgetting it next to a source of heat).’ (elicited)
- 23483 (127) *kʰru nua cʰui-ft̪si-nua tce, tce numuu pjui-lyt-nua*
 pig.iron DEM IPFV-melt-PL LNK LNK DEM IPFV:DOWN-release-PL
 23484 *pnu-cti tce,*
 SENS-be.AFF LNK
 23485 ‘They melt the pig iron and pour it into (the mold).’ (25-qraR, 33)

23486 The anticausative *nungṛt* ‘part ways’ has the causative form *znuungṛt* ‘sepa-
 23487 rate’. This verb is not specifically used for indirection causation, but it is re-
 23488 stricted to express separation of two entities from each other, as in (128), unlike
 23489 the base verb *qṛt* ‘separate’ which has a broader range of meanings, including
 23490 ‘spread’ (of limbs, hair, feathers) as in (129).

- 23491 (128) *rasti cʰo rxjndob ni, pjúá-wy-ndzyr-ndzí tce*
 turnip COMIT turnip.root DU IPFV-INV-cut-DU LNK
 23492 *pjúá-wy-z-nungṛt-ndzí* ηu.
 IPFV-INV-CAUS-ACAUSTR:separate-DU be:FACT
 23493 ‘One separates the turnip from its root by cutting them.’ (150903 kAJar,

²⁶ The same semantic contrast appears to be found in Zbu (Gong Xun, p.c.) and Tshobdun (J. T.-S. Sun 2014a).

23494 7-8)

- 23495 (129) *uu-jme nuu [...] ki tu-fse tu-z-nundzi*
 3SG.POSS-tail DEM DEM.PROX IPFV-be.like IPFV-CAUS-be.vertical[III]
 23496 *tce tce nuu-qxt nuu-ŋu.*
 LNK LNK IPFV-separate SENS-be
 23497 ‘It puts its tail vertically like this and spreads (the tail feathers).’
 23498 (24-ZmbrWpGa, 73-79)

23499 18.5.7 Other cases of voicing alternation

23500 The anticausative derivation is not the only type of voicing alternation in Japhug.
 23501 Among verbs, two cases of non-anticausative voicing alternations are found,
 23502 the isolated pair treated in §19.7.9 and the irregular sigmatic causative *zNGoʂ*
 23503 ‘hang’ (vt) from *nqoʂ* ‘hang’ (vi). The onset *zNG-* in *zNGoʂ* ‘hang’ (containing the ir-
 23504 regular *z-* allomorph of the sigmatic causative prefix, §17.2.2.4) apparently results
 23505 from the voicing of an earlier cluster like **c-nq-* due to phonotactic constraints
 23506 (§4.2.1.5).

23507 In ideophones, voicing alternations with or without prenasalization are also
 23508 attested, as shown by the pair *quqli* and *NGUNGLI*, both meaning ‘eyes wide open’
 23509 (§10.1.5.3). In addition, at least one ideophone, *dzoʂ* ‘kneeling suddenly and re-
 23510 spectfully’, which appears in collocation with the transitive verb *tsʰoʂ*, originates
 23511 from the anticausative verb *ndzoʂ* ‘be attached’ (§10.1.6).

23512 18.6 Antipassive

23513 The antipassive derivation converts a morphologically transitive verb into an
 23514 intransitive one, removing the object and preserving the subject. As in the closely
 23515 related Tshobdun language (J. T.-S. Sun 2006b: 8), two antipassive prefixes are
 23516 found in Japhug: *rr-* and *sv-*.

23517 18.6.1 *rr-* antipassive

23518 The *rr-* antipassive prefix is productive, and it is thus impossible to provide a
 23519 complete list of all examples. Table 18.7 provides a representative sample of this
 23520 derivation, which includes a number of verbs of Tibetan origin (for instance *fsoʂ*
 23521 ‘earn’ and *βzjɔʂ* ‘learn’ from བ୍ୟାଜ୍ୟୁସ୍ ບ୍ୟୋଗ୍ସ ‘accumulate’ and བ୍ୟାଜ୍ୟୁସ୍ ສ୍ୟୋଗ୍ସ ‘learn’, respec-
 23522 tively). As in Tshobdun (J. T.-S. Sun 2006b: 8), this prefix is typically used when

²³⁵²³ the suppressed argument is non-human (§18.6.7.2), though a few exceptions exist
²³⁵²⁴ (§18.6.4).

²³⁵²⁵ This derivation takes as input mono- or ditransitive verbs (§18.6.4), and one
²³⁵²⁶ labile verb (*suso* ‘think’, see §14.5.1.3).

Table 18.7: Examples of the antipassive prefix *rr-*

Base verb	Derived verb
<i>roꝝ</i> ‘carve’	<i>rryros</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>rrfse</i> ‘whet things’
<i>ftczz</i> ‘castrate’	<i>rrftczz</i> ‘castrate animals’
<i>ntcʰa</i> ‘butcher’	<i>rrntcʰa</i> ‘butcher animals’
<i>myo</i> ‘prepare’	<i>rrymyo</i> ‘prepare things’
<i>ndun</i> ‘read aloud’	<i>rryndun</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>bzjoz</i> ‘learn’	<i>rrbzjoz</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>scrt</i> ‘move’	<i>rrscrt</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>rrxtu</i> ‘do shopping, buy things’
<i>χtci</i> ‘wash’	<i>rrxtci</i> ‘wash, have a bath’
<i>fçrt</i> ‘tell’	<i>rrfçrt</i> ‘report’
<i>ŋa</i> ‘owe’ (money)	<i>rrnŋa</i> ‘have a debt’
<i>tçrβ</i> ‘burn’	<i>rrtçrβ</i> ‘burn land’
<i>pyaz</i> ‘turn over’	<i>rrypyaz</i> ‘reclaim land’
<i>ntsye</i> ‘sell’	<i>rrntsye</i> ‘do business’
<i>raðruuz</i> ‘sweep’	<i>rrroðruuz</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’

23527 The main morphosyntactic differences between transitive verbs and their cor-
 23528 responding antipassive forms are illustrated the following examples. In (130), the
 23529 base verb *βzjoz* ‘learn’ is fully transitive, selecting the type-C preverbs in the non-
 23530 local direct Aorist (§14.3.1, §15.1.1.1). The object is the topic studied (in 130, the
 23531 nominalized verb *tu-sŋas* ‘sorcery’) and the transitive subject, the person learn-
 23532 ing, is taking the ergative case.

- 23533 (130) *azuy a-me ci tu tce, numu kui*
 1SG.GEN 1SG.POSS-daughter INDEF exist:FACT LNK DEM ERG
 23534 *tu-sŋas pa-βzjoz tce,*
 NMLZ:ACTION-cast.spells AOR:3→3'-learn LNK
 23535 ‘I have a daughter, and she has learned sorcery.’ (140512 fushang he
 23536 yaomo-zh, 143)

23537 The antipassive verb *rɣβzjoz* ‘learn things’ in (131) is morphologically intransi-
 23538 tive, selecting the type-A preverbs (§14.3.1) in the Aorist (*pui-* instead of *pa-*,
 23539 §15.1.1.1). It is used to avoid mentioning a specific topic of study, and it is often
 23540 better to translate this verb as ‘go to school/university’. Like the transitive subject
 23541 of *βzjoz* ‘learn’, the subject of *rɣβzjoz* ‘learn things’ corresponds to the person(s)
 23542 acquiring knowledge. However, when overt, its subject occurs in absolute form
 23543 as *u-me nu* ‘her daughter’ in (131).

- 23544 (131) *u-me nu pui-ry-βzjoz ri tʰam u-<gongzuo>*
 3SG.POSS-daughter DEM AOR-APASS-learn LNK now 3SG.POSS-job
 23545 *u-ma me*
 3SG.POSS-work not.exist:FACT
 23546 ‘Her daughter went to school (studied things) but has no job now.’
 23547 (17-lhazgron, 60)

23548 Although example (131) only illustrates one of the seven morphological cri-
 23549 teria for transitivity (§14.3.1), all have been successfully tested with antipassive
 23550 prefixes.

23551 The non-orientable antipassive verbs select as lexicalized orientation the same
 23552 one as that of their base verb. For instance, *rɣmbi* ‘give to someone’ selects the
 23553 EASTWARDS preverbs like its base verb *mbi* ‘give’ (§15.1.5.10).

23554 The object affected by the *rɣ-* derivation is not only demoted morphologically
 23555 but also removed syntactically, and verbs with the antipassive prefix cannot take
 23556 an overt patient corresponding to the object of the base verb, even as semi-object
 23557 or with an oblique case (the antipassive *rɣfɛrt* ‘report’ is however an exception,
 23558 see §18.6.3).

The antipassive verbs are generally understood as having a generic/indefinite patient. In Table 18.7, their meaning is translated using the most usual patient associated with a particular activity, for instance ‘clothes’ in the case of *rr-tṣuβ* ‘sew’ and *rr-qp'yt* ‘patch’. The patient that has been demoted from object status by the *rr-* prefix is nearly always an inanimate entity, but there are some examples of verbs (such as *ryntch'a* ‘butcher’) with animal patient, and even demoted human recipient in the case of some secundative verbs (§18.6.4). The semantic contrast between the *rr-* and *sr-* antipassive derivations is described in (§18.6.7), and morphosyntactic constructions competing with antipassive derivations to express indefinite objects are discussed in §18.6.8.

Although the meaning of the derived verbs is not fully predictable in each case (§18.6.3), the formation of the *rr-* antipassive is almost perfectly regular. There are only three *rr-* antipassive verbs with irregular morphology. First, *rynya* ‘have a debt’ from *ŋa* ‘owe’ (a verb selecting as object the amount of money owed, 132) has an additional *-n* element.

- (132) *squ-mpcar* *kx-ŋa-t-a*
 TEN-money.unit AOR-owe-PST:TR-1SG
 ‘I bought (it) on credit and owe (him) ten renminbi.’ (elicited)

Second, *rṛtsye* ‘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 *rr-*. These cases are accounted for in §20.10.1.

Apart from these irregularities, the allomorphy of the *rr-* 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 *rr-* prefix is formally similar to the denominative *rr-* (§20.4.1),²⁷ to the extent that synchronic ambiguity exists between these two prefixes. In particular, the verb *rrznde* ‘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 *rr-* is attested with other denominal expressing the building of the base noun, for instance *tr-loꝝ* ‘nest’ → *rrloꝝ* ‘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 *rr-* antipassive form, as the intransitive *ručmi* ‘speak’ (which can have

²⁷ In addition, there is a residue of *rr-* prefixed verb that can neither be analyzed as antipassive nor as denominal derivations (§19.7.5).

23593 an overt dative recipient, 19, §14.2.4, but no reported speech complement clause)
 23594 already serves as its ‘lexical antipassive’. The verbs of ingestion *ndza* ‘eat’ and
 23595 *tsʰi* ‘drink’ share the compound verb *rundz̥r̥tsʰi* ‘have a meal’ (§20.4.1, §20.12) as
 23596 their intransitive counterpart.

23597 18.6.2 *sy-* antipassive

23598 Like the *ry-* antipassive, the *sy-* antipassive is productive. Table 18.8 presents a
 23599 list of representative examples, including Tibetan loanwords such as *fst̥rt* ‘praise’
 23600 from བསྟོད་ *bstod* ‘praise’. Unlike the *ry-* antipassive, the *sy-* prefix is used when the
 23601 demoted patient is human or equivalent (§18.6.7.2, see J. T.-S. Sun 2006b: 8 on
 23602 Tshobdun), except in the case of some secundative verbs (§18.6.4). The *sy-* antipas-
 23603 sive derivation can also denote animal patients in specific contexts (§18.6.7.2).

23604 The only cases of allomorphy with the antipassive *sy-* are the allomorph *sa-*
 23605 occurring when the prefix is followed by a complex onset whose first element is
 23606 a uvular fricative (§3.5.4), and the allomorph *syz-* which appears with some poly-
 23607 syllabic stems whose first syllable has a sonorant initial *syzyymu* ‘praise people’.

23608 The *sy-* prefix is homophonous with the rogative (§18.2), the proprietive (§18.8)
 23609 and denominational derivations (§20.3), as well as with the oblique participle *sy(z)-*
 23610 (§16.1.3). Potential ambiguity exists with the proprietive derivation. For instance,
 23611 the transitive *nuzduy* ‘worry about’ has two homophonous intransitive derived
 23612 verbs *sy-nuzduy*, an antipassive meaning ‘worry about people’, and a proprietive
 23613 ‘causing worry to people’.

23614 Most *sy-* antipassives derive from monotransitive verbs, but a handful of them
 23615 are based on ditransitive verbs (§18.6.4). In addition, the labile verbs *n̥re* ‘laugh’
 23616 and *syŋo* ‘listen’ are also compatible with the *sy-* prefix. The antipassive forms
 23617 *syŋyo* ‘be obedient’ and *syŋn̥re* ‘laugh at people’ derive from the meanings ‘listen
 23618 to’ and ‘laugh at, mock’ that these two verbs have when conjugates transitively
 23619 (§14.5.1.3).

23620 Some of *sy-* antipassive verbs can either be dynamic verbs or stative verbs, in
 23621 the latter case expressing a general tendency/propensity of the subject to do the
 23622 action. For instance, *sy-ndza* from *ndza* ‘eat’ can mean ‘eat people, eat someone’
 23623 (as in 156, §18.6.7.1), but also ‘be a man-eater’, ‘prick’ (133) or ‘be carnivorous’
 23624 (animal eating other animals, 158a, §18.6.7.2).

23625 (133)	<i>tce nunuu uː-rme</i>	<i>tu</i>	<i>ma my-sy-ndza</i>	<i>ma</i>
	LNK DEM	3SG.POSS-hair exist:FACT	LNK NEG-APASS-eat:FACT	LNK

Table 18.8: Examples of the antipassive prefix *syr-*

Base verb	Derived verb
<i>tçʰu</i> ‘gore’	<i>srytçʰu</i> ‘gore people’
<i>mtswy</i> ‘bite’	<i>srymtswy</i> ‘bite people’
<i>nymtsioꝝ</i> ‘peck’	<i>srynymtsioꝝ</i> ‘peck people’
<i>yrmu</i> ‘praise’	<i>sryyrmu</i> , <i>sryzyrmu</i> ‘praise people’
<i>fstxt</i> ‘praise’	<i>sryfstxt</i> ‘praise people’
<i>nurtça</i> ‘tease’	<i>srynurtça</i> ‘tease people’
<i>ñndu</i> ‘hit’	<i>sazndu</i> ‘hit people’
<i>nykʰe</i> ‘bully’	<i>srynykʰe</i> ‘bully people’
<i>nrysry</i> ‘be jealous of’	<i>srynrysry</i> ‘be jealous of people’
<i>nuruutṣa</i> ‘envy’	<i>srynuruutṣa</i> ‘envy people’
<i>çar</i> ‘search’	<i>sryçar</i> ‘search someone’
<i>suuxçxt</i> ‘teach’	<i>srysuxçxt</i> ‘teach people’
<i>tʰu</i> ‘ask’	<i>srytʰu</i> ‘ask in marriage’
<i>nrre</i> ‘laugh’	<i>srynrre</i> ‘laugh at people’
<i>sryjo</i> ‘listen’	<i>srysryjo</i> ‘listen to advice’

23626

wi-mdzu *me.*

3SG.POSS-thorn not.exist:FACT

23627

'It has hair, but does not prick, because it has no thorns.' (15-babW, 97)

23628

The propensity antipassives have a meaning very close to that of generic human objects, as demonstrated by example (134), where the same meaning is expressed by the antipassive *sry-ndza* and the generic object *kuu-ndza* (see additional examples in §18.6.8.2).

23632

(134) *mdzadi nuu wuma zo sry-ndza. wuma zo*
 flea DEM really EMPH APASS-eat:FACT really EMPH
kuu-ndza tce ryza.
 GENR:S/O-eat:FACT LNK itch:FACT

23633

'Fleas bite a lot. They bite people a lot, and it itches.' (21-mdzadi, 16-17)

23634

23635 **18.6.3 Lexicalized antipassive**

23636 Most antipassive verbs have meanings that are predictable from that of their base
 23637 verbs. However, in some cases antipassivization not only demotes the patient
 23638 from object status, but restricts the range of meanings of the verb root.

23639 The meaning of the transitive verb *pyaꝝ* ‘turn over’ differs depending on the
 23640 objects it occurs with; its possible meanings include ‘turning (clothes) inside out’,
 23641 ‘open (the cover of a box)’, ‘cross (mountains, rivers)’ (20, §15.1.2.1) or ‘plough
 23642 (fields)’ (see 135 below and 138 in §9.1.6.4).

- 23643 (135) *nua-jí* *ra kui-dur-dyn* *kui-jur~jom*
 3PL.POSS-field PL SBJ:PCP-EMPH~be.many SBJ:PCP-EMPH~be.wide
 23644 *lo-pyaꝝ-nuu*
 IFR:UPSTREAM-turn.over-PL

23645 ‘They had ploughed many wide fields for them.’ (2002 qajdoskAt, 90)

23646 By contrast, its antipassive *rypyāꝝ* ‘reclaim land’²⁸ only preserves the last meaning
 23647 of the base verb, with ‘land’ or ‘field’ as implicit patient as in (136). Note in
 23648 addition that the antipassive selects the UPSTREAM preverbs (*lu-* in 136) like the
 23649 verb *pyaꝝ* in the meaning ‘plough’ (*lo-* in 135).

- 23650 (136) *zgoku* *tu-ce* *qʰe lu-rv-pyaꝝ* *nv,*
 mountain IPFV:UP-go LNK IPFV:UPSTREAM-APASS-turn.over ADD
 23651 *rv-rvku* *cʰo* *ra pjui-ji* *qʰe, tce nua kui-fse*
 INDEF.POSS-crops COMIT PL IPFV-plant LNK LNK DEM SBJ:PCP-be.like
 23652 *ku-rvzi* *pjx-ŋu.*
 IPFV-stay IFR.IPFV-be

23653 ‘(The old man) lived by going to the mountain, clearing fields and
 23654 planting crops.’ (150831 jubaopen-zh, 3-5)

23655 Similarly, while the transitive verb *tçvβ* ‘burn’ can take various types of ref-
 23656 erents as objects (including humans, as in 88, §14.3.3.3), the antipassive *rvtçvβ*
 23657 ‘burn land’²⁹ is also restricted to its use in agriculture, with ‘land’ as demoted
 23658 patient.

23659 The expected meaning of *rypyāꝝ* ‘reclaim land’ and *rvtçvβ* ‘burn land’ if they
 23660 had been regular antipassives would have been ‘turn things over’ and ‘burn

²⁸ The meaning of this verb corresponds to Chinese 开垦 <kāikěn> ‘reclaim land’, ‘clear a wild area for cultivation’.

²⁹ The meaning of this verb is translated as 烧荒 <shāohuāng> ‘clear land by fire’ in Chinese.

things', respectively. Despite the absence of an incorporated noun, these two verbs include information about the demoted patient. This semantic irregularity has implications for the study of the origin of the antipassive prefixes in Japhug, as discussed in §20.10.1.2.

The verb *ryst* 'report' from *fçrt* 'tell' stands out among antipassive verbs from the point of view syntax. While *ryst* is morphologically intransitive, as is shown by the form *kui-ryst* in (137) with the intransitive subject generic prefix *kui-* (§14.2.1.2), the patient of this verb can nevertheless be overt as a semi-object (in 137, the demonstrative *nunura*, anaphorically referring to the previous complement clauses). The object of the base verb *fçrt* 'tell' is thus only demoted to semi-object status (§8.1.5), and not syntactically removed. The dative recipient is also preserved by the antipassive derivation.

- (137) *slama ra yuu t^hut^hyci kui-fse, nuu ky-ry-βzjoz ra*
 student PL GEN something SBJ:PCP-be.like DEM INF-APASS-study PL
nur-stu m^haj-stu nuu, [...] nunura nur-p^hama
 SENS-be.serious NEG:SENS-be.serious DEM DEM:PL 3PL.POSS-parents
ra nuu-cki kui-ryfçyt nuu-ra.
 PL 3PL.POSS-DAT GENR:S/O-report:FACT SENS-be.needed
 '(As a teacher), one has to report to the parents all sorts of things about
 the student, whether they study seriously or not etc.' (150901
 tshuBdWnskAt, 20)

18.6.4 Antipassive forms of ditransitive verbs

Among ditransitive verbs, indirect 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 *ryst^hu* 'ask questions' and *syt^hu* 'ask in marriage' depending on whether the demoted patient is inanimate or human (see examples 155b and 159, §18.6.7).

Three secundative verbs, *mbi* 'give', *ctsuu* 'entrust with' and *jts^hi* 'give to drink', behave differently in this regard. Their object (semantically the recipient) is generally human, but the *sr-* antipassive prefix does not occur with these verbs: the corresponding forms (for instance *sybmi* 'ask for') exist, but do not have antipassive meaning (they exemplify the rogative derivation, §18.2). Instead, their antipassive forms *rymbi* 'give to someone', *ryctsuu* 'entrust someone with' and *ryjts^hi*

³⁰ Note however the morphosyntactic peculiarities of the lexicalized antipassive *ryst* 'report' from the indirective verb *fçrt* 'tell' (§18.6.3).

23691 ‘give to someone to drink’ take the *ry-* prefix. These verbs are henceforth referred
 23692 to as ‘*ry-* antipassivized secundative verbs’.

23693 The demoted recipient of *ry-* antipassivized secundative verbs can be indefinite
 23694 and non-specific as in the case of most antipassive verbs (§18.6.7), as in (138).

- 23695 (138) *wuzry wu-βra kui-rkui~rkun ntsu ma*
 3SG:GEN 3SG.POSS-share SBJ:PCP-EMPH~be.few always apart.from
 23696 *mui-pjy-nu-ta. wu-ro ra lonba nu-ry-mbi pjy-ηu.*
 NEG-IFR-AUTO-put 3SG.POSS-rest PL all IPFV-APASS-give IFR.IPFV-be
 23697 ‘He would only keep a little for himself, and give away the rest.’ (150902
 23698 *hailibu-zh*, 8)

23699 However, often, as in (139) and (140), the identify of the recipient is known to
 23700 the speaker, but the antipassive is chosen to leave it unspecified, either because
 23701 the information is irrelevant (because the addressee does not know the people in
 23702 question) or to hide information.

- 23703 (139) *kumyu ma mui-nui-βab wu-q^hu tce, tce χsum nu*
 five apart.from NEG-AOR-hatch 3SG.POSS-after LNK LNK three DEM
 23704 *nui-ry-mbi-tci tce*
 AOR-APASS-give-DU LNK
 23705 ‘Only five (of the twelve eggs) hatches, and we gave three (of the chicks)
 23706 (to other people).’ (22-kumpGa, 81-82)

- 23707 (140) *a-kumpya wu-pui kui-sxjndu~jndxt zo pu-ηu*
 1SG.POSS-hen 3SG.POSS-young SBJ:PCP-EMPH~be.cute EMPH PST.IPFV-be
 23708 *ri, tceri <xinqitian> <fangjia> tce tu-nur-ce-a*
 LNK LNK sunday holidays LOC IPFV:UP-VERT-go-1SG
 23709 *pui-ra tce c-kx-ry-ctṣui-a.*
 PST.IPFV-be.needed LNK TRAL-AOR-APASS-entrust.with-1SG
 23710 ‘My chicks were very cute, but on sunday, I had to go back on holiday,
 23711 and I went (to someone_i) and entrusted him/her/them_i with them.
 23712 (150819 kumpGa, 48-49)

23713 In addition, antipassivization of secundative verbs does not removes the recip-
 23714 ient: it can be demoted to oblique argument status, with dative marking, as in
 23715 (141) and (143).

- 23716 (141) *azo tv-tcur* *ra nuu-cki* *c^ha* *jnu-ry-jts^hi-a*
 1SG INDEF.POSS-SON PL 3PL.POSS-DAT alcohol IPFV-APASS-give.to.drink
 23717 *ŋgrvl*
 be.usually.the.case:FACT
 23718 ‘I (usually) give a drink to the guys.’ (elicited)

23719 Although the three *ry-* antipassivized secundative verbs *rymbi* ‘give to some-
 23720 one’, *rrętšuu* ‘entrust someone with’ and *ryjts^hi* ‘give to someone to drink’ are
 23721 morphologically intransitive like all other antipassives, as shown by the absence
 23722 of past transitive *-t-* suffix in (140), and of C-type orientation preverb in (143),
 23723 they do preserve more transitivity features than most antipassive verbs.

23724 First, the three *ry-* antipassivized secundative verbs differ from other antipas-
 23725 sive verbs in terms of case marking; their subject can receive ergative marking
 23726 in some contexts.

23727 With third person arguments and no overt recipient as in (142), the subject
 23728 *a-mu a-wa ni* is in absolute form.

- 23729 (142) *a-mu* *a-wa* *ni* *a-k^huna* *jry-ry-mbi-ndzi*
 1SG.POSS-mother 1SG.POSS-father DU 1SG.POSS-dog IFR-APASS-give-DU
 23730 ‘My parents gave my dog away.’ (elicitation, 2019-11-30)

23731 However, ergative marking on the subject occurs in (143) with a 1SG recipient,
 23732 and in (144) below with a 1SG semi-object (theme).

- 23733 (143) *a-wa* *kua a-bi* *a-cki*
 1SG.POSS-father ERG 1SG.POSS-younger.brother 1SG.POSS-DAT
 23734 *ky-ry-ctʂuu.*
 AOR-APASS-entrust.with
 23735 ‘My father entrusted me with my younger brother.’ (elicited)

23736 Second, an even more unusual feature of the the three *ry-* antipassivized se-
 23737 cundative verbs is that the morphosyntactic status of the theme of the giving
 23738 action. In all the examples above from (138) to (141), the theme is a third person
 23739 semi-object (§8.1.5), and its number cannot be indexed even with a 1SG subject
 23740 (§14.3.2.6).

23741 However, in the very rare cases when the theme is first or second person,
 23742 the verb *rymbi* ‘give to someone’ exceptionally occurs with inverse *wy-* or local
 23743 scenario indexation affixes (*ta-* 1→2 and *kua-* 2→1, see §14.3.2.3) prefixes, as if
 23744 the verb were morphologically transitive, and the theme were a direct object.

23745 No such example is found in the corpus, but forms such as (144) can be elicited
 23746 (§14.4.2.2).

- 23747 (144) *a-wa kuu azo nút-wy-rr-mbi-a*
 1SG.POSS-father ERG 1SG AOR-INV-APASS-give-1SG
 23748 ‘My father gave me away.’ (elicited)

23749 This puzzling construction is not only possible, but it is actually the only way
 23750 to express a non-third person theme with the verb *mbi* ‘give’.

23751 Not all secundative verbs however select the *rr-* antipassive like *mbi* ‘give’ and
 23752 *jts'hi* ‘give to drink’. For instance, *suxçrt* ‘teach’, which encodes the recipient/
 23753 addressee as object (the 2SG in 145, as indicated by the *ta-* portmanteau prefix), is
 23754 not compatible with *rr-* prefix: the only antipassive form of this verb is *srsuxçrt*
 23755 ‘teach people’, ‘work as a teacher’, as in (146).

- 23756 (145) *txfsyri kx-βzu ci pjui-ta-suxçrt.*
 thread INF-make a.little IPFV-1→2-teach
 23757 ‘Let me teach you how to make threads.’ (vid-20140506043657, 43)

- 23758 (146) *li sloxpun ta-ndo-t-a tce, nuare*
 again teacher AOR:3→3'-take-PST:TR-1SG LNK DEM:LOC
 23759 *pjui-sy-suxcat-a pui-ŋu.*
 IPFV-APASS-teach-1SG PST.IPFV-be
 23760 ‘I too became a teacher, and I was teaching there.’ (12-BzA Nsa, 19)

23761 Similarly, the secundative verb *nusuk^ho* ‘rob, extort’ has the antipassive form
 23762 *srynusuk^ho* ‘rob people’, also with the *sy-* prefix (example 168, §18.6.9).

23763 18.6.5 Reduplicated antipassive

23764 The intransitive verb *rxt^hut^he* ‘inquire’, ‘ask for information’ derives from *t^hu* ‘ask’
 23765 like *rxt^hu* ‘ask questions’ (155b, §18.6.7, §18.6.4), with the rare reduplication in *-e*
 23766 in addition to the *rr-* prefix. This reduplicated antipassive form is isolated, but
 23767 this type of reduplication is attested in a few other forms (§19.4.2.1).

23768 As shown by (147), *rxt^hut^he* ‘inquire’ is an intransitive verb: the type A orien-
 23769 tation preverb *nua-* is selected instead of type C if the verb were morphologically
 23770 transitive (§15.1.1.1). This verb also selects an oblique argument in the dative, like
 23771 its base verb (§14.4.1).

- 23772 (147) *a-cki γw-nuu-rxt^hut^he*
 1SG.POSS-DAT CISL-AOR-ask.permission
 23773 ‘He came and asked me (for information).’ (elicited)

23774 This verb is mainly attested as a negative infinitive converb *mx-ky-rxt^hut^he*
 23775 ‘without asking (for permission)’ (as in Chinese 问都没有问就 ……) as in (148).³¹

- 23776 (148) *mbro nuu kuu ckrruu numuu [maka mx-ky-rxt^hut^he] kuu*
 horse DEM ERG serow DEM at.all NEG-INF-ask.permission ERG
 23777 *nuufse ju-ky-yi nuu wuma zo pjy-q^ha jnu-ηu.*
 like.that IPFV-INF-come DEM really EMPH IFR.IPFV-hate SENS-be
 23778 ‘The horse hated that the serow came like that without asking
 23779 (permission) at all.’ (ma he lu-zh, 9)

23780 18.6.6 Antipassive and past imperfective

23781 Antipassive verbs, unlike most dynamic verbs (§21.5.3.1), are compatible with
 23782 Past Imperfective *pui-* and Inferential Imperfective *pjy-*. This question is however
 23783 difficult to study for three reasons.

23784 First, many of the transitive base verbs in Tables 18.7 and 18.8, for instance
 23785 *βzjoz* ‘learn’ and *cp^hyt* ‘patch’, select the DOWNWARDS preverbs as one of their
 23786 lexicalized orientation (see for instance the perfective form *pa-βzjoz* ‘she learned
 23787 it’ in 130 above). As a consequence, there is syncretism for these verbs between
 23788 Aorist and Inferential on the one hand, and Past Imperfective and Inferential
 23789 Imperfective on the other hand (§21.5.3.1). For instance, the form *pui-ry-βzjoz* ‘she
 23790 went to school’ in (131) above is Aorist, but in a different context the same form
 23791 can be analyzed as a Past Imperfective ‘she was studying’.

23792 Second, while simple Past and Inferential Imperfective are attested with an-
 23793 tipassive verbs, they are also compatible with the Periphrastic Aorist and Infer-
 23794 tential Imperfective (§21.5.3), combining the Imperfective verb form (§21.2.2) with
 23795 a copula in Inferential Imperfective (*pjy-ηu*) or in Past Imperfective (*pui-ηu*) as il-
 23796 lustrated by example (149). It is unclear whether any function difference exists
 23797 between non-periphrastic and periphrastic tenses for these verbs, apart from the
 23798 fact that the latter are unambiguously imperfective.

³¹ The ergative on the subject *mbro nuu kuu* ‘the horse’ is due to the main verb *pjy-q^ha* ‘he hated that...’.

- 23799 (149) *tce uu-me numuu <xianzhong> nautcu pjw-r̥-βzjox*
 LNK 3SG.POSS-daughter DEM district.school DEM:LOC IPFV-APASS-learn
 23800 *pua-ŋu ri,*
 IPFV-be LNK
 23801 ‘(At the time when) her daughter was going to school, (her father was
 23802 drinking alcohol and neglected his parental duties).’ (17-lhazgron, 67)

23803 Third, since some of the *sv-* antipassives can be used as stative verbs (propen-
 23804 sity antipassives, §18.6.2), they are thus compatible with Aorist and Inferential
 23805 Imperfective anyway.

23806 Despite these difficulties, unambiguous examples of non-periphrastic Aorist
 23807 and Inferential Imperfective are not common in the corpus even with verbs se-
 23808 lecting the DOWNWARDS orientation. In (150), it is clear from the context that *pjy-rr̥-βzjox*
 23809 is Inferential Imperfective rather than Inferential Perfective both due to
 23810 the context, the presence of the adverb *ntsuu* and the unambiguous Inferential Im-
 23811 perfective with Progressive *pjy-k-ysuu-ndun-ci* ‘he was reading it’ in the following
 23812 clause.

- 23813 (150) *<caichen> nuunu pjy-rr̥-βzjox ntsuu. juyi ntsuu*
 ANTHR DEM IFR.IPFV-APASS-learn always book always
 23814 *pjy-k-ysuu-ndun-ci.*
 IFR.IPFV-PEG-PROG-read-PEG
 23815 ‘Caichen was always studying, always reading books.’ (150907
 23816 niexiaoqian-zh, 21)

23817 In other contexts, there is genuine ambiguity: example (151) can either mean
 23818 ‘the wife was patching clothes’ (the interpretation provided by Tshendzin) or ‘the
 23819 wife (had) patched clothes’.

- 23820 (151) *tx-rzaβ nuu pjy-rr̥-cpʰyt,*
 INDEF.POSS-wife DEM IFR.IPFV-APASS-patch
 23821 ‘The wife was patching clothes.’ (qajdoskAt 2002, 20)

23822 18.6.7 The uses of the antipassive derivations

23823 18.6.7.1 Antipassive derivations and indefinite patients

23824 In Japhug, non-overt objects of (non-labile) transitive verb are always interpreted
 23825 as transitive, even when a particular verb form happens to lack unambiguous
 23826 markers of transitivity (§14.3.1). The minimal example (152) with the 1SG→3

23827 Aorist of *βzjoz* ‘learn’ could in principle be an intransitive form (due to the fact
 23828 that the past transitive -*t* suffix cannot surface with a close syllable stem, §14.3.2.1).
 23829 Yet, this example cannot mean ‘I studied something’ or ‘I went to school’, but nec-
 23830 cessarily implies that the object has been previously mentioned in the discourse.

- 23831 (152) *χsui-sla pui-βzjoz-a*
 three-months AOR-learn-1SG
 23832 ‘I have learned it (how to make ploughshares) for three months.’
 23833 (2010-09, 14)

23834 The antipassive derivations, which not only demote the object, but suppress
 23835 it syntactically (except for ditransitive verbs, see §18.6.4), are a way to express a
 23836 non-referential indefinite patient, either a non-specific patient (translatable as
 23837 ‘something’), or a whole range of possible patients. For instance in the case
 23838 of *rγβzjoz* ‘learn things’, the implicit patient can be a school curriculum ('go to
 23839 school, study') as in (153) below and (131) above, or a non-specific topic ‘study
 23840 something’ as in (150) in §18.6.6.

- 23841 (153) *nura nu-p^he nutcu, χsui-xpa nu pui-rr-βzjoz-a.*
 DEM:PL 3PL.POSS-DAT DEM:LOC three-years DEM PST-APASS-learn-1SG
 23842 ‘I have studied with them for three years.’ (160721 XpWN, 30)

23843 Example (154) also illustrates the contrast between the transitive verb *t^hu* ‘ask’³²
 23844 with an overt object *wzry nu* ‘his own (question)’ and the corresponding anti-
 23845 passivized verb *rxt^hu* ‘ask questions’ with a non-specific patient (the prohibition
 23846 against asking additional questions anymore is not limited to the one he forgot
 23847 to ask).

- 23848 (154) *wzry nu ky-nu-t^hu na-nu-jmat pui-ŋu, tceri nu*
 3SG:GEN DEM INF-AUTO-ask AOR:3→3'-AUTO-forget SENS-be LNK DEM
 23849 *ma tu-rr-t^hu mu-nu-jry pui-ŋu,*
 apart.from IPFV-APASS-ask NEG-AOR-be.allowed SENS-be
 23850 ‘He had forgotten to ask his own (question), but he was not allowed to
 23851 ask questions anymore.’ (divination, 2005, 48-9)

23852 In rarer cases, the demoted patient is referential and semantically recoverable
 23853 from the context. In (155b) for instance, by contrast with (154), the demoted pa-
 23854 tient of *rxt^hu* ‘ask questions’ corresponds to the previous sentence (155a): taking

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).

23855 the context into consideration the verb form *ko-rx-t^hu-nu* means ‘They consulted
 23856 the lama (about the reason why the man was about to die and what to do about
 23857 it)’.

- 23858 (155) a. *tx-tcuu nuu kuu-si to-rxŋgat.*
 INDEF.POSS-son DEM SBJ:PCP-die IFR-be.about
 ‘The man (had fallen ill) and was about to die.’ (rkongrgyal2.2002, 24)
 23860 b. *βlama px-car-nuu tce, ko-rx-t^hu-nuu ri*
 lama IFR-search-PL LNK IFR-APASS-ask-PL LNK
 ‘They looked a lama and consulted him/ask for his advice.’
 23862 (rkongrgyal2.2002, 25)

23863 Similarly, in (156), the implicit patient of the verb *sx-ndza* ‘eat (someone)’ is not
 23864 ‘people’ in general, but rather the group of characters present at the moment of
 23865 the action with the demoness, and it is thus in fact partially referential.

- 23866 (156) *tce kuu-sx-ndza tu-oxyuyu ri,*
 LNK SBJ:PCP-APASS-eat IPFV-prepare LNK
 23867 ‘(The râkshasî demoness revealed her true nature) and was about to eat
 23868 someone (one of them), but ...’ (28-smAnmi, 397)

23869 18.6.7.2 The contrast between *rx-* and *sx-* prefixes

23870 The semantic difference between the *rx-* and *sx-* antipassive prefixes involves a
 23871 contrast in humanity (following J. T.-S. Sun 2006b on Tshobdun) and animacy.

23872 The *rx-* prefix is required for inanimate/abstract indefinite patients. In the case
 23873 of verbs of speech, the removed object corresponds to a reported speech com-
 23874 plement clause (as in 155b above, §24.2.5). Some *rx-* antipassives however have
 23875 animate non-human patients, in particular *rxftc̚rz* ‘castrate’ and *rxntc̚h'a* ‘butcher’
 23876 (from *ftc̚rz* ‘castrate’ and *ntc̚h'a* ‘butcher’), which can only refer to animals.

23877 The *sx-* prefix by contrast is mainly used to express generic human objects
 23878 (with a meaning often close to that of the generic object indexation marker *kuu-*
 23879 §18.6.8) or indefinite humans (sometimes even semantically recoverable from the
 23880 context, as in 156). However, the *sx-* prefix when used as a propensity antipassive
 23881 can demote animal patients, as in (157) where *sx-sat* is a stative verb meaning
 23882 ‘have killing power, be lethal’ (rather than ‘kill people’).

- 23883 (157) *tce numuu ju-lxt-nuu tce tce numuu wuma zo juu-sy-sat*
 LNK DEM IPFV-release-PL LNK LNK DEM really EMPH SENS-APASS-kill
 23884 [...] *qro ri juu-xtci cti, tce numuu kuu rcanuu*
 pigeon also SENS-be.small be.AFF:FACT LNK DEM ERG UNEXP:DEG
 23885 *tui-k^hyl tce bnuuz χsum jamar pjui-sat juu-ŋu*
 one-place LOC two three about IPFV-KILL SENS-be
 23886 ‘They shoot with (scattering bullets), and it is very lethal, (...) the
 23887 pigeons are small, (with scattering bullets) they kill two or three
 23888 (pigeons) in one place.’ (28-CAmWGdW, 116)

23889 In addition, when both agents and patients are (non-human) animals, the pre-
 23890 fix *sy-* can also be used to demote the object, as in the case of the verb *symts^{hi}*
 23891 ‘lead the way’ (from *mts^{hi}* ‘lead’) which can be applied to packs of animals. Note
 23892 also that the antipassive *syndza* from *ndza* ‘eat’, can both mean ‘eat someone’ (as
 23893 in 156 above) or ‘eat other animals’ as in (158a) (a sentence which can be glossed
 23894 by 158b).

- 23895 (158) a. *ruidas nui u-ŋgur kui-sy-ndza nui, kurŋi*
 wild.animals DEM 3SG.POSS-in SBJ:PCP-APASS-eat DEM beast
 23896 *tu-kui-ti ŋu*
 IPFV-GENR-say be:FACT
 23897 ‘Among the animals, the carnivorous ones are called ‘beasts’:
 23898 (elicited, explanation of example 33, §16.1.1.4)
 23899 b. *nui-zda ruidas u-kui-ndza t^hamtcyt nunura*
 3PL.POSS-companion animal 3SG.POSS-SBJ:PCP-eat all DEM:PL
 23900 *nui-rmi lonba kurŋi tu-kui-ti ŋu.*
 3PL.POSS-name all beast IPFV-GENR-say be:FACT
 23901 ‘All ones that eat the other animals, their name is ‘beasts’.’ (150822
 23902 kWNI, 8)

23903 The human vs. non-human contrast between the two prefixes can be observed
 23904 on a handful of verbs that are compatible with both *ry-* and *sy-* antipassives. The
 23905 indirect verb *t^hu* ‘ask’ takes the *ry-* prefix when the demoted patient is an
 23906 action/state of affair (as in *ryt^hu* ‘ask questions’ in 155b above), but takes the *sy-*
 23907 prefix when asking for someone in marriage (§18.6.4), as in (159).

- 23908 (159) *azo kui-sy-t^hu ce-a*
 1SG SBJ:PCP-APASS-ask go:FACT-1SG
 23909 ‘I am going to ask for (the girls) in marriage.’ (2003 Kunbzang, 5)

A less lexicalized minimal pair is provided by *car* ‘search’, which has the antipassive forms *rycar* ‘search for things’ and *sycar* ‘search for someone’.

23912 18.6.7.3 Avoidance

23913 The *s-* antipassive can be used as a strategy to avoid overtly referring to a particular entity. In (160) for instance, despite the use of the antipassive *s-nurṭṣa* ‘tease people’ (from *nurṭṣa* ‘tease’), the implicit patient of this verb is not indefinite: it
23914 is a type of local deity called *zui'bdaš* (from գվի՛բդաշ *gzi.bdag* ‘local deity’).
23915
23916

- | | | | | | |
|-------|-------|--|---------------------------|----------------------------------|---------------------------|
| 23917 | (160) | <i>tuu-muu</i> | <i>wuma zo</i> | <i>tx-me</i> | <i>tce, tcendyre</i> |
| | | INDEF.POSS-weather | really | EMPH AOR-not.exist | LNK LNK |
| 23918 | | <i>ts^hitsuku</i> | <i>c-ku-sy-nurtca-nuu</i> | <i>tce, fsaŋ</i> | <i>ra</i> |
| | | some.things | TRAL-IPFV-APASS-tease-PL | LNK fumigation | PL |
| 23919 | | <i>c-pjw-ta-nuu</i> | <i>c-pjw-rjaŋ-nuu</i> | <i>nura tce, tce</i> | |
| | | TRAL-IPFV-put-PL | TRAL-IPFV-dance-PL | DEM:PL | LNK LNK |
| 23920 | | <i>tuu-muu</i> | <i>ku-suŋ-lyt-nuu</i> | <i>pjw-ŋgrvl.</i> | |
| | | INDEF.POSS-weather | IPFV-CAUS-release-PL | IFR.IPFV-be.usually.the.case | |
| 23921 | | <i>tce nuu</i> | <i>wi-syŋ-nyma</i> | <i>yuu sytč^ha nuu</i> | <i>znyryyma tu-ti-nuu</i> |
| | | LNK DEM | 3SG.POSS-OBL:PCP-make | GEN place | DEM placename IPFV-say-PL |
| 23922 | | <i>juu-ŋu</i> | | | |
| | | SENS-be | | | |
| 23923 | | ‘When there was no rain at all, people would go there and do teasing, | | | |
| 23924 | | make fumigations and dance, and cause rain to come. They call the place | | | |
| 23925 | | where these activities were performed <i>znyryyma</i> .’ (140522 Kamnyu zgo, | | | |
| 23926 | | 246-252) | | | |

23927 Tshendzin explicitly provided the sentence (161) as a gloss to the verb form
23928 *č-ku-sx-nurtça-nu* in this context.

- 23929 (161) *zuβdaš c-kú-wy-nurtca*
 mountain.god TRAL-IPFV-INV-tease
 23930 ‘One teases the mountain gods.’ (gloss of example 160).

The ‘teasing’ in question refers to the belief that rain resulted from the wrath of mountain deities. The aim of this ceremony, rather than appeasing the gods, was to anger them. It has not been practiced for decades, and memory of this practice only survives in this toponym *zn̄ryyma*, whose etymology is discussed in more detail in §16.1.3.10.

23936 **18.6.7.4 Participial forms of antipassive verbs**

23937 The subject participle of antipassive verb is the preferred strategy to build nom-
 23938 inals referring to persons with a particular activity or profession, as illustrated
 23939 by the forms in Table 18.9 (see also §16.1.1.7), or having a particular habit (see 107,
 23940 §5.5.2). These nominalized forms are frequently used but not lexicalized, and
 23941 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>βzjoz</i> ‘learn’	<i>ku-rr-βzjoz</i> ‘learner, student, scholar’
<i>tʂuβ</i> ‘sew’	<i>ku-rr-tʂuβ</i> ‘tailor’
<i>rṛt</i> ‘write, draw’	<i>ku-rr-rṛt</i> ‘writer, painter’
<i>ntçʰa</i> ‘butcher’	<i>ku-rr-ntçʰa</i> ‘butcher’ (person who slaughters animals)
<i>suxçṛt</i> ‘teach’	<i>ku-sṛ-suxçṛt</i> ‘teacher’
<i>mtsʰi</i> ‘lead’	<i>ku-sṛ-mtsʰi</i> ‘leader’ (in a dance, of a pack of animals)

23942 Oblique participles (§16.1.3.10) also need to undergo antipassivization to be
 23943 used to derive nouns of instruments or of location without overt object. For
 23944 instance, the antipassive participle *w-z-rr-rṛt* (3SG.POSS-OBL:PCP-ANTIP-write) is
 23945 used to express the meaning ‘writing implement, pen’ (§16.1.3.6).

23946 **18.6.7.5 Reflexive use of the antipassive**

23947 The indefinite patient interpretation is not the only meaning of the *rr-* antipassive
 23948 derivation. For instance, the verb *raχtçi* ‘wash’ (vi) from *χtçi* ‘wash’ (vt) does not
 23949 mean ‘wash things’ as could have been expected, but has a reflexive meaning
 23950 ‘wash one’s face’ or ‘have a shower/bath’ (see example 101, §19.7.5).³³ The regular
 23951 reflexive form *zrrχtçi* ‘wash oneself’ is also attested with this verb (§18.3.1.5).

23952 **18.6.8 Other strategies used to express indefinite patients**

23953 As a means of expressing indefinite patients, the antipassive derivations compete
 23954 with five alternative constructions: indefinite object pronouns (§18.6.8.1), generic

³³ A typologically similar irregularity is found with the antipassive-durative verb *niza-lā* ‘wash oneself’ in Bezhta (Khalilova et al. 2016: 554).

23955 object nouns (§18.6.8.2), light verb constructions with action nominal (§18.6.8.3),
 23956 incorporation (§18.6.8.4) and pairs of denominal verbs (§18.6.8.5).

23957 18.6.8.1 Indefinite pronouns

23958 Indefinite pronouns (§6.6), in particular *tʰuci* ‘something’ (§6.6.2) or *tsʰitsuku* ‘what-
 23959 ever’ (§6.6.3) as object functionally overlap to some extent with the *sɣ-* antipas-
 23960 sive derivations. However, indefinite pronouns are preferred if the indefinite
 23961 patient is referential, as in (162).³⁴

- 23962 (162) *užo kur tsʰitsuku pɣ-ndun tce kʰyndun ra pɣ-βzu*
 3SG ERG whatever IFR-read LNK recitation PL IFR-read
 23963 ‘He recited something, he recited a formula.’ (140510 sanpian yumao-zh,
 23964 100)

23965 18.6.8.2 Generic marking

23966 The generic noun *turme* ‘person’ (§6.2.2) and generic person indexation of the
 23967 object (§14.3.2.5) compete with the *sɣ-* antipassive. As shown by examples (163)
 23968 and (164)³⁵ the meaning of the antipassive *sɣmtsuy* ‘bite’ (‘be a biting/stinging
 23969 entity’) and that of the generic object *kuu-mtsuy* ‘X bites people’ in the Factual
 23970 are very close semantically. The antipassive of propensity, being a stative verb,
 23971 is however more often used in a comparative construction such as that in (163)
 23972 (§26.3.1.4). Example 134 above (§18.6.2) presents a minimal pair of the same type.

- 23973 (163) *mtsʰalvyrum nuu yuu u-rame tu ri, [...] mtsʰalypas nuu*
 nettle.sp DEM GEN 3SG.POSS-hair exist:FACT LNK nettle.sp DEM
 23974 *stʰuci my-sɣ-mtsuy.*
 much NEG-APASS:PROP-bite:FACT
 23975 ‘Although the white nettle has hairs, it does not sting as much as the
 23976 black nettle.’ (19-mtshalu2, 6)
- 23977 (164) *mtsʰalvypas cʰo mtsʰalvyrum nuu bnačna kur kuu-mtsuy*
 nettle.sp COMIT nettle.sp DEM both ERG GENR:S/O-bite:FACT
 23978 ‘Both black and white nettle sting.’ (11-mtshalu, 26)

³⁴ Examples of antipassive verbs with referential implicit patient are however attested, as in (156) and (155b) above.

³⁵ On the absence of dual indexation on *kuu-mtsuy* ‘they bite people’, see §14.3.2.5 and §14.6.1.

23979 18.6.8.3 Nominal+light verbs collocation

23980 Collocations involving transitive light verbs and their objects have a functional
 23981 overlap with antipassive verbs, when their objects, either action nominals or
 23982 nouns describing the product of the action, are generic and not referential. For
 23983 instance, the collocation *tr-çpʰyt+ta* ‘patch, make patches’ (from the inalienable
 23984 noun *tr-çpʰyt* ‘patch’ and the transitive verb *ta* ‘put’) has a meaning close to that
 23985 of the antipassive *rrçpʰyt* ‘patch clothes’ (from *çpʰyt* ‘patch’, the verb from which
 23986 the noun *tr-çpʰyt* itself is derived, §16.4.6) when the possessive prefix on *tr-çpʰyt*
 23987 is indefinite. As illustrated by example (165), where the participial form of this
 23988 collocation *tr-çpʰyt u-kuu-ta* ‘(person) who makes patches’ occurs in opposition
 23989 to the participle of an antipassive verb *kua-rr-tsuiβ* ‘(person) who sews clothes,
 23990 taylor’.

- 23991 (165) *tcʰeme [tr-çpʰyt u-kuu-ta] kuu-xtcui~xtci*
 woman INDEF.POSS-patch 3SG.POSS-SBJ:PCP-put SBJ:PCP-EMPH~be.small
 23992 *pjx-tu ma nuu ma kuu-rr-tsuiβ pjx-me.*
 IFR.IPFV-exist LNK DEM apart.from SBJ:PCP-APASS-sew IFR.IPFV-not.exist
 23993 ‘There were a few women who made patches, but no (women) tailors.’
 23994 (12-kAtsxWb, 12)

23995 The collocation *tr-çpʰyt+ta* can however occur with a 3SG possessive prefix on
 23996 the object *u-çpʰyt+ta* and refer to a definite patient, encoded as possessor of the
 23997 object.

23998 Other light verbs occurring in this type of collocation include *βzu* ‘make’, *lxt*
 23999 ‘release’ and *tçyt* ‘take out’ (see 75, §20.10.1).

24000 18.6.8.4 Incorporating verbs

24001 Object-saturating incorporating verbs (§20.13.3.2) are intransitive verbs derived
 24002 from transitive bases whose intransitive subject corresponds to the subject of the
 24003 base verb. The incorporated noun corresponds to the object of the base verb, and
 24004 is indefinite and non-referential, and thus functionally close to an antipassive,
 24005 in particular to lexicalized ones (§18.6.3).³⁶ For instance, the incorporating verb
 24006 *yuu<piāozi>fsor* ‘earn money’ from 票子 <piàozi> ‘ticket, paper money’ and *fsor*
 24007 ‘earn’ has a meaning and usage identical to the antipassive *rrfsor* ‘earn money’.

³⁶ This 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).

24008 18.6.8.5 Denominal pairs

Transitive denominal verbs with the *nu-/nr-* prefix can in some cases have *sy-* antipassives (§18.6.2), but never *rr-* antipassives. Instead, intransitive *ru-/rr-* 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 *nr-* (§20.7.2) from the inalienably possessed noun *ta-ma* ‘work’ (§5.1.2.1), does not have an antipassive form such as *†rr-nyma*. Rather, the intransitive *rryma* ‘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, *rryma* ‘do work’ is compatible with non-periphrastic Past Imperfective and Inferential Imperfective (§21.5.3) like antipassive verbs (§18.6.6).

24020 18.6.9 Compatibility with other derivations

The *sv-* antipassive derivation can be taken 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 *svnṛk^hu* ‘invite people’ (166) and *svnṛk^he* ‘bully people’ (167) from *nṛk^hu* ‘invite’ (lexicalized applicative of *ak^hu* ‘call’, §17.4.3) and *nṛk^he* ‘bully’ (lexicalized tropative of *k^he* ‘be stupid’, §17.5.3), respectively.

- 24027 (166) *nui-ŋjɔŋ* *ra kui tui-ndza* *tu-βzu-nuu* *nura*,
 3PL.POSS-servant PL ERG NMLZ:ACTION-eat IPFV-make-PL DEM:PL
 24028 *nui-sy-nyk^hu-nuu* *ra pjy-cti* *q^he*,
 IPFV-APASS-invite-PL PL IFR.IPFV-be.AFF:FACT LNK
 24029 ‘Their servants were making food, they were inviting people.’
 24030 (28-qAjdoskAt, 136-137)

24031 (167) *ny-tui-sy-nyk^he* *nui m^hy-ra*
 2SG-NMLZ:DEG-APASS-bully DEM NEG-be.needed:FACT
 24032 ‘You should not bully people like that (your bullying of other people
 24033 should not cross the line).’ (28-qAjdoskAt, 14)

24034 Antipassive forms from non-lexicalized applicative and tropative verbs are not
24035 attested in the corpus, but can be elicited, for instance *sx-nu-rga* APASS-APPL-
24036 like 'like people' from *nurga* 'like' (vt) (§17.4.1.2) and *sx-ny-mpçyr* APASS-TROP-
24037 be.beautiful 'find people beautiful' from *nympçyr* 'find beautiful' (§17.5).

Only one causative verb takes the *r-* antipassive: *jts^{hi}* ‘give to drink’ (§18.6.4), an irregular causative from *ts^{hi}* ‘drink’ (§17.2.2.5), which competes with the regular one *sui-ts^{hi}* ‘make/let drink, drink with’.

Other causative verbs are only attested with the *sy-* antipassive, for instance *sy-siu-rto&* APASS-CAUS-look) ‘show to people’. The lexicalized causative *nusuk^ho* ‘rob, extort’, which historically derives from *k^ho* ‘give’ by the combination of the sigmatic causative *su-* and the autive *nu-* prefixes (see 15, §17.2.3), has two *sy-* antipassive forms (§18.6.4): the *sy-* can be directly prefixed to the complex verb stem as in *srymusuk^ho* ‘rob people’ (168) (historically *sy-nu-siu-k^ho* APASS-AUTO-CAUS-give), but the alternative form *nu-sy-siu-k^ho* (AUTO-APASS-CAUS-give) with the autive prefix *nu-* switching position with the antipassive is also possible (§19.1.6).

- 24049 (168) *icq^ha tcaχpa nura kuu li, laxte^ha*
 the.aforementioned robber DEM:PL ERG again thing
 24050 *z-ŋy-sy-nusuk^ho-nu*
 TRAL-IFR-APASS-rob-PL
 24051 ‘The robbers had gone and robbed some people from
 24052 (140512 alibaba-zh, 113)

24053 Applicative verbs can serve as input for the sigmatic causative derivation.
24054 With the *rr*- antipassive, the *z*- allomorph of the causative is selected (§17.2.1.1) as
24055 in *z-rr-rvt* (169) and *z-rr-tsuβ* (170) from *rvt* 'write/draw things' and *rvt suβ* 'sew
24056 things' (antipassives of *rvt* 'write, draw' and *tsuβ* 'sew', respectively, §18.6.1).

In combination with the antipassive, both the permissive/precative 'make *X*, let *X*, ask to *X*' (as in 169) and the instrumental '*X* with' (170) uses of the sigmatic causative are attested.

- 24060 (169) *Dai.Song yu, nykinu, ui-caχpu nuu kuu pjy-wy-sqyr tce,*
 ANTHR GEN FILLER 3SG.POSS-friend DEM ERG IFR-INV-ask.to.do LNK
 24061 *nykinu, pjy-wy-z-ry-ryt nuu-ŋu*
 FILLER IFR-INV-CAUS-APPL-draw SENS-be
 24062 ‘One of Dai Song’s friend’s asked him to draw something.’
 24063 (2010-kewen-07, 10)

24064 (170) *tce nuu tx-ri pjú-wy-nuu-βzu tce*
 LNK DEM INDEF.POSS-thread IPFV-INV-AUTO-make LNK
 24065 *cʰtú-wy-z-ry-tʂuβ nuu*
 IPFV-INV-CAUS-APASS-sew BE:FACT
 24066 ‘One (can) then make the thread and use it to sew things.’ (13-tAsAsqAri,
 24067 40)

24068 18.7 Distributed property

24069 The *amu-* prefix expressing a distributed property can be applied to a handful of
 24070 transitive and semi-transitive verbs.

24071 With the cognition verbs *suz* ‘know’ and *tso* ‘know, understand’ (semi-transitive,
 24072 see §14.2.3), the meaning of this derivation is ‘be *X*ed by everybody, be *X*able’,
 24073 as shown by *amutso* ‘be clear (of speech)’ (171) and *amusuz* ‘be well-known’.

24074 (171) *nua tu-kui-ti tce myzua amui-tso.*

DEM IPFV-GENR-say LNK even.more DISTR-understand:FACT

24075 ‘If one says this, it is clearer (easier to understand).’ (heard several times
 24076 during elicitation sessions)

24077 The verb *amutso* also has a reciprocal reading ‘understand each other’, corre-
 24078 sponding to the *amu-* reciprocal derivation (example 95, §18.4.2). It is possible
 24079 that *amutso* was the pivot form between the two derivations. A reanalysis from
 24080 reciprocal to ‘distributed property’ may have taken place through the causative
 24081 of the reciprocal *su-ymuu-tso* ‘cause people to understand each other’, which orig-
 24082 inally took as objects causee (see 172) and as optional semi-object the speech/
 24083 words.

24084 (172) *a-pi cʰo a-ki ni*

1SG.POSS-elder.sibling COMIT 1SG.POSS-younger.sibling DU

24085 *ky-su-ymuu-tso-t-a-ndzi*

AOR-CAUS-RECIP-understand-PST:TR-1SG-DU

24086 ‘I helped my elder and younger brothers/sisters understanding each
 24087 other.’ (elicited)

24088 The semi-object was then reinterpreted as the object, and forms such as *ta-*
 24089 *sui-ymuu-tso* in (173) were then reinterpreted as meaning ‘cause (words) to be
 24090 understandable’ rather than ‘cause people to understand (words)’.³⁷ The dis-
 24091 tributed property meaning of *amu-* was then created by back-formation from
 24092 this causative form.

24093 (173) *tua-rju ta-sui-ymuu-tso*

INDEF.POSS-word AOR:3→3'-CAUS-???-understand

24094 ‘He spoke clearly’. (Literally: ‘He made the words understandable’;
 24095 elicited)

³⁷ Note 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’.

When occurring on other verbs, however, the *amu-* prefix expresses that the action spreads everywhere (within a particular location), without external agent. The verb *amu-rmbuu* (derived from *rmbuu* ‘pile up’) is specifically used to describe food piled up high in a container (bowl or pot) to the point of filling it up completely, as in (174), in particular as the result of cooking.

- (174) *fsosoz ndyre, tx-amuu-rmbuu zo.*
 next.morning LNK AOR-DISTR-pile.up EMPH
 ‘The next morning, (the bowl) was completely filled (with food).’
 (2003kandZislama, 145)

The verb *amu-zwyr* (from *zwyr* ‘burn’) occurs to refer to the (non-controlled) spread of fire, as in (175).

- (175) *tarji ty-ye tce yndzvβ a-my-ty-luy*
 drought AOR-come[II] LNK fire.hazard IRR-NEG-PFV-come.off
ra ma jw-ymur-zwyr mbat
 be.needed:FACT LNK IPFV-DISTR-burn be.easy:FACT
 ‘When there is a drought, there should not be a fire as it can spread easily (it this case).’ (elicited)

It is also used metaphorically to describe the spread of information as in (176). This example illustrates two verbs with distinct sub-functions of the distributed property *amu-* prefix occurring with a common subject, suggesting a path of reanalysis from the first sub-function (‘be known by everybody’ → ‘be known to everybody’) to the second one (‘be Xed everywhere’).

- (176) *kuki yuu wi-tcha nuna, nuacimuma zo rjylkʰvβ*
 DEM.PROX GEN 3SG.POSS-news DEM immediately EMPH kingdom
nutcu jv-k-ymui-zwyr-ci tce jv-k-ymui-suz-ci.
 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)

The verb *amuzyut* ‘be evenly distributed’, derived from the motion verb *zyut* ‘reach, arrive’, also illustrates the spatially distributed meaning of the prefix *amu-* (originally ‘reach everywhere’). Note that despite the fact that the root *zyut* generally causes a /u/ → /v/ vowel change on derivational and inflectional prefixes directly attached to it (§14.2.2), it is not the case with *amu-*.

24124 This verb *amuzyut* mainly occurs in a serial verb construction (§25.4.1). In
 24125 (177), it shares the same subject and TAME category as the following verb *nui-łor*
 24126 ‘(it) comes out’. It expresses the manner in which the action takes place, and has
 24127 to be translated as the adverb ‘evenly’.

- 24128 (177) *tx-ndyr* *nunui*, [...] *nui-βri* *rcaui*,
 INDEF.POSS-pustule DEM 3PL.POSS-body UNEXP:DEG
 24129 *kui-so* *nui-me* *zo*, *nui-ymui-zyuit* *zo*
 SBJ:PCP-be.empty IPFV-not.exist EMPH IPFV-DISTR-reach EMPH
 24130 *nui-łor* *nui-ju*.
 IPFV-come.out SENS-be

24131 ‘The pustules (...) come out evenly everywhere on their body, without
 24132 any empty spot.’ (27-kharwut, 63-64)

24133 When occurring with a transitive verb in this serial verb construction, the sig-
 24134 matic causative form *symuzyut* ‘do evenly’ is used instead, as in (178) (§25.4.1.3).

- 24135 (178) *tce tamar kuni, nyki tc^horzi nui ui-mju me,*
 LNK butter also FILLER alcohol.jar DEM 3SG.POSS-opening whether
 24136 *ui-qä* *me* *nura* *nui-sui-ymui-zyuit* *zo*
 3SG.POSS-bottom whether DEM:PL IPFV-CAUS-DISTR-reach EMPH
 24137 *nui-mar* *nui-ra*
 IPFV-smear SENS-be.needed
 24138 ‘(The jar maker) also to apply butter evenly to the opening and the
 24139 bottom of the alcohol jar.’ (30-kWrAfcAr, 65-66)

24140 The distributed property *amu-* prefix is restricted to a handful of very lexical-
 24141 ized verbs. Hence, if the hypothesis of reanalysis from reciprocal presented above
 24142 is valid, this process must have taken place in the remote past. The opposite hy-
 24143 pothesis of reanalysis from the distributed property function to the reciprocal
 24144 function also deserves to be taken into consideration.

24145 18.8 Proprietive

24146 The proprietive *sy-* prefix³⁸ derives stative verbs from verbs of perception, feeling
 24147 or some verbs of involuntary action. Table 18.10 presents representative examples

³⁸ This category was previously referred to as ‘deexperiencer’ in previous publications, such as Jacques (2012c).

²⁴¹⁴⁸ of this derivation, which include some loanwords from Tibetan (*scit* ‘be happy’, *rga* ‘like’ and *βzi* ‘be drunk’ from ལྷ གྲି ‘be happy’, བྱା གླା ‘like’ and བྱା གླା ‘be drunk’, respectively), showing that the proprietive prefix is productive.

Table 18.10: Examples of proprietive verbs in Japhug

Base verb	Derived verb
<i>mtsur</i> ‘be hungry’	<i>srm̥tsur</i> ‘be a famine’
<i>ŋgio</i> ‘slip’	<i>sŋŋgio</i> ‘be slippery’
<i>asdryt</i> ‘slip’	<i>sasdryt</i> ‘be slippery’
<i>čke</i> ‘get burned’	<i>sřčke</i> ‘be burning’
<i>scit</i> ‘be happy’	<i>sřscit</i> ‘be pleasant’
<i>βzi</i> ‘be drunk’	<i>sřβzi</i> ‘be very intoxicating’
<i>nat</i> ‘be tired’	<i>sřynat</i> ‘be exhausting’
<i>mu</i> ‘be afraid’	<i>sřymu</i> ‘be frightening’
<i>duy</i> ‘have enough of’	<i>sřyduy</i> ‘be unpleasant’
<i>rga</i> ‘like’	<i>sřrga</i> ‘be adorable’
<i>tso</i> ‘know, understand’	<i>sřtso</i> ‘be understandable’
<i>nryz</i> ‘dare’	<i>sřnryz</i> ‘be such that people dare to’
<i>cʰa</i> ‘can’	<i>sřcʰa</i> ‘be such that people can’
<i>mto</i> ‘see’	<i>sřmto</i> ‘be visible’
<i>suz</i> ‘know’	<i>sřsuz</i> ‘be known’
<i>spa</i> ‘be able to’	<i>sřspa</i> ‘be known’
<i>mtsʰym</i> ‘hear’	<i>sřmtsʰym</i> ‘be audible’
<i>rndu</i> ‘obtain’	<i>sřrndu</i> ‘be easy to find’
<i>nuzduy</i> ‘worry about’	<i>sřnuuzduy</i> ‘causing people to worry’

²⁴¹⁵¹ The base verbs are mainly intransitive (proprietive verbs derived from semi-transitive and transitive verbs are treated in §18.8.3 and §18.8.4), and encode as subject the experiencer (*mu* ‘be afraid’, *scit* ‘be happy’) or a patientive argument suffering from the action (*čke* ‘get burned’, *ŋgio* ‘slip’).

²⁴¹⁵⁵ The proprietive derivation removes this experiencer or patientive argument from the argument structure and promotes instead the stimulus to subject status. Compare for instance the base verb *mu* ‘be afraid’ whose subject is the experiencer feeling fear (179) with the proprietive *sřymu* ‘be frightening’ (180) whose subject is the entity causing fear to people.

- 24160 (179) *nua rg̥tpu nua pjy-mu tce,*
 DEM old.man DEM IFR.IPFV-be.afraid LNK
 24161 ‘The old man was afraid.’ (140426 xiaohaizi he hua de shizi-zh, 10)

24162 Example (180) also shows that the subject of the proprietive verb *syy-mu* is the
 24163 same referent as the object of the applicative verb *nuy-mu* ‘be afraid of’ derived
 24164 from the same verb root (§17.4.1).

- 24165 (180) *sun̥gi nunui pjy-syy-mu tce pjy-nuy-mu*
 lion DEM IFR.IPFV-PROP-be.afraid LNK IFR.IPFV-APPL-be.afraid
 24166 *nua-ŋu.*
 SENS-be
 24167 ‘The lion_i was terrifying and (the old man) was afraid of it_i.’ (shizi yu
 24168 nongfu-zh, 7)

24169 A minority of proprietive verbs allow the demoted experiencer to be encoded
 24170 with the genitive, for instance *srs̥cit* ‘be pleasant’ (from *scit* ‘be happy’) in (181),
 24171 which takes as oblique experiencer *azuy* 1SG:GEN.

- 24172 (181) *nunui u-tciu nua fso t^bui-wxti tce tha azuy*
 DEM 3SG.POSS-son DEM in.the.future AOR-be.big LNK later 1SG:GEN
 24173 *my-sy-scit*
 NEG-PROP-be.happy:FACT
 24174 ‘When his son has grown up, it will not be a pleasant situation for me.’
 24175 (28-smAnmi, 18)

24176 In the case of the intransitive verbs *mts̥ur* ‘be hungry’ and *çpas* ‘be thirsty’, the
 24177 proprietive derivation removes the experiencer from the argument structure of
 24178 the verb without adding a stimulus and the resulting proprietive verbs *symts̥ur*
 24179 ‘be a famine’ and *sryçpas* ‘be a lack of drink’ have dummy subjects, as in (182).

- 24180 (182) *tui-xpa tce, wuma pjy-sy-mts̥ur*
 one-year LNK really IPFV.IFR-PROP-be.hungry
 24181 ‘One year, there was a famine.’ (elicited)

24182 18.8.1 Allomorphy

24183 The main allomorph of the proprietive prefix is *sy-*. The variant *sa-* occurs when
 24184 prefixed on a verb stem containing a cluster with a uvular preinitial (§3.5.4).

24185 The proprietive prefix, like other derivations (§17.2.1.4)), had at an earlier stage
 24186 the allomorph *sxy-* with intrusive *-y*, but it ceased to be productive and remains
 24187 on only three verbs: *sxynat* ‘be exhausting’, *sxymu* ‘be frightening’ and *sxyduy* ‘be
 24188 unpleasant’.

24189 18.8.2 Proprietive derivation and generic marking

24190 With verbs that can undergo proprietive derivation (see above), the generic in-
 24191 transitive subject *kui-* form and proprietive have overlapping uses.

24192 In (183), the generic form *kui-ŋgio* ‘one will slip’ expresses a potential conse-
 24193 quence of the state described by the proprietive verb *nui-sy-aðx̥t* ‘it is slippery’.
 24194 A semantic commonality between generic and proprietive verb forms in this ex-
 24195 ample is that both refer to an action to which all humans (including speaker and
 24196 addressee) are potentially subjected.

- 24197 (183) *nunutacu pjút-wy-rytcaꝝ a-pui-ŋu tce, [...] zgruy zo*
 DEM:LOC IPFV-INV-tread IRR-IPFV-be LNK certainly EMPH
 24198 *kui-ŋgio cti ma, nunu nui-sy-aðx̥t*
 GENR:S/O-ACAUS:glide be.AFF:FACT LNK DEM SENS-PROP-slip
 24199 *kur-fse.*
 SBJ:PCP-be.like

24200 ‘If one walks on it (the moss), one will certainly slip, as it is slippery.’
 24201 (03-zhenzhuquan-zh, 23)

24202 With experiencer and modal verbs, the semantic closeness of generic and pro-
 24203 prietive is even more obvious, if one compares for instance the generic of *nyz*
 24204 ‘dare’ (184) with the proprietive *snyz* ‘be such that people dare to’ in (185): the
 24205 experiencer argument of the base verb that has been demoted by the proprietive
 24206 derivation is by default interpreted as generic, unless it can be recovered from
 24207 the context, or expressed by an oblique case as in (181) above.

- 24208 (184) *[kx-ndza] mu-puu-kui-nyz ma snyz*
 INF-eat NEG-PST.IPFV-GENR:S/A-dare LNK be.poisonous:FACT
 24209 *tu-ti-nuu nui-ŋu.*
 IPFV-say-PL SENS-be
 24210 ‘We/people would not dare to eat it, because they say that it is
 24211 poisonous.’ (19-khWlu, 87)

24212 In (185), note that generic reference is expressed by the proprietive derivation

18 Valency-decreasing derivations

24213 on *my-sy-nyz* ‘one does not dare to...’ and by the generic possessor on *tui-jas* ‘one’s
24214 hand’ in the immediately following clause.

- 24215 (185) *tce [ky-nyjas] my-sy-nyz zo ma tui-jas*
LNK INF-touch NEG-PROP-dare:FACT EMPH LNK GENR.POSS-hand
24216 *ku-otsa cti tce myym.*
IPFV-prick.into be.AFF:FACT LNK hurt:FACT
24217 ‘It is such that people do not dare to touch it, as it pricks in one’s hand
24218 and it hurts.’ (15-babW, 58)

24219 In addition, both the generic and the proprietive can serve as a indirect way to
24220 express first person (§14.6.1.4), as shown by examples (186) and (187), where the
24221 generic *nui-kui-duy* and proprietive *nui-sy-duy* have exactly the same meaning
24222 ‘be fed up with *X*, don’t feel like *X*’. In both cases, the implicit experiencer is
24223 the 1SG referent mentioned in the previous clause.

- 24224 (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
24225 *ntsur nui-kur-duy*
always SENS-GENR:S/O-have.enough.of
24226 ‘I go to walk (without a special reason), because I don’t feel well staying
24227 at home all the time.’ (conversation, 2013-12-24)
- 24228 (187) *kutcu azo-sti nui-cti-a tce*
DEM:PROX:LOC 1SG-alone SENS-be.AFF-1SG LNK
24229 *nui-sy-duy*
SENS-PROP-have.enough.of
24230 ‘I am here alone, and I am fed up of that (the fact of being alone make
24231 one feel fed up).’ (07-deluge, 42)

24232 18.8.3 Proprietive derivations from semi-transitive verbs

24233 The proprietive derivation takes some semi-transitive verbs such as *duy* ‘have
24234 enough of’, *tso* ‘know, understand’ or *rga* ‘like’ (§14.2.3) as input. In such cases,
24235 the intransitive subject of the proprietive verb corresponds to the semi-object of
24236 the base verb. For instance, in (188), the infinitival complement clause *nui kui-fse*
24237 *ky-ryzi* ‘staying like that’ is semi-object of *duy* ‘have enough of’, while in (189) the
24238 complement clause is the intransitive subject of *syy-duy* (the experiencer being
24239 unexpressed in this clause).

- 24240 (188) [nuu kur-fse kyr-ryzi] nuu-dury-a.
DEM SBJ:PCP-be.like INF-stay SENS-have.enough.of-1SG
24241 'I am fed up of living like that.' (140426 jiagou he lang-zh, 36)
- 24242 (189) [ky-ryzi] wuma zo pjy-syy-dury.
INF-stay really EMPH IFR.IPFV-PROP-have.enough.of
24243 'Living (there) was very difficult to endure.' (150827 taisui-zh, 13)

24244 The semi-transitive modal verbs *cʰa* 'can' and *nryz* 'dare' also have proprietive
24245 forms *sycʰa* 'be such that people can' and *syrnyz* 'be such that people dare to'
24246 which select the same types of complement clauses as those selected by their
24247 base verbs, as illustrated by (190) (see also 184) and (185) in §18.8.2 above). These
24248 complement clauses are the intransitive subject of the proprietive verbs.

- 24249 (190) *tui-sŋi* [muuntoŋ ʂnuaz ʐsum jamar lú-wy-taŋ]
one-day flower two three about IPFV:UPSTREAM-INV-weave
24250 *nuu-sy-cʰa*
SENS-PROP-can
24251 'In one day, it is possible to weave two or three patterns (on the belt).'
24252 (2011-06-thaXtsa, 52)

24253 However, the complement clauses can be elided, and the subject participle
24254 forms of the proprietive verbs can refer to an argument (generally object) of
24255 the (elided or overt) verb in the complement clause. For instance in (191), the
24256 participle *kui-sy-cʰa* can be translated as '(the mice) that can be (caught)' (an elided
24257 infinitive form such as *ky-ndo* INF-grab is implicit in this example).

- 24258 (191) βzui [...] kui-sy-cʰa nura azo pjui-sat-a ny,
mouse SBJ:PCP-PROP-can DEM:PL 1SG IPFV-kill-1SG be:FACT
24259 *my-kui-sy-cʰa* jy-kui-y<nu>ri nura nuazora kui
NEG-SBJ:PCP-PROP-can AOR-<AUTO>go[II] DEM:PL 2PL ERG
24260 *pui-sat-nuu ra* ny
IMP-kill-PL be.needed:FACT SFP
24261 'The mice, I will kill the ones that (I) can (get), but the one that (I) cannot
24262 (get) and have gone away, you will have to kill them.' (150831 BZW
24263 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_vmto* ‘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_vmto* 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’, *saxpas* ‘respect’). All of these verbs have experiencer or experiencer-like transitive subjects.

The proprietive of verbs of perception and obtaining such as *sy_vmts^hym* ‘be audible’ (192) and *sy_vrndu* ‘be easy to find’ (193) express a potential state, semantically close to the object-oriented facilitative (§18.9.2).

- (192) *tce sun̥gu ku-ryzi cti t̥ya ky-mto*
 LNK forest IPFV-stay be.AFF:FACT in.the.open OBJ:PCP-see
me. ri [tu-mbri] nuu sy-mts^hym.
 not.exist:FACT LNK IPFV-make.noise DEM PROP-hear:FACT
 ‘It stays in the forest and is never seen in the open, but it can be heard singing.’ (23-scuz, 119-120)

- (193) *tua-muu muáj-lxt tce t̥jmryy muáj-sy-rndu*
 INDEF.POSS-sky NEG:SENS-release LNK mushroom NEG:SENS-PROP-obtain
 ‘It is not raining, and so it is not easy to find mushrooms.’ (elicited)

The proprietive of *suz* ‘know’ and *spa* ‘be able to’ both mean ‘be (widely) known’, and mainly occur with the noun *tv-rmi* ‘name’, as in (194) and (195).

- (194) *uu-rmi jnu-sy-suz*
 3SG.POSS-name SENS-PROP-know
 ‘His name is well-known.’ (elicited)

- 24296 (195) *myzui u-rmi* *my-kui-sy-spa* *xcat*
 again 3SG.POSS-name NEG-SBJ:PCP-PROP-be.able be.many:FACT
 24297 *cti*
 be.AFF:FACT
 24298 ‘There are many other (plants) whose name is not known.’ (08-tWrgi, 54)

24299 The case of the verb *synuzduy* ‘causing people to worry’, which is derived from
 24300 applicative verb *nuzduy* ‘worry about’ (§17.4) is treated in §18.8.6.

24301 18.8.5 Lexicalized proprietive

24302 The meaning of some proprietive verbs is not entirely predictable from their base
 24303 verbs.

24304 The verb *cke* ‘get burned’ encodes as subject the entity that suffers from burn-
 24305 ing, as in (196). The expected meaning of its proprietive *sycke* would be ‘be burn-
 24306 ing’. While this meaning is indeed attested as in (197), *sycke* can also simply mean
 24307 ‘be hot’, concerning for instance the weather as in (198), without the implication
 24308 that people subjected to this weather suffer from burns.

- 24309 (196) *a-jas* *pui-cke*
 1SG.POSS-hand AOR-burn
 24310 ‘My hand was burnt.’ (elicited)

- 24311 (197) *smi t^ha-βlui-nui* *ri, pjy-sy-cke* *q^he, zakastaka*
 fire AOR:3→3'-burn-PL LNK IFR.IPFV-PROP-burn LNK each.their.own
 24312 *jo-nui-ryci-nui* *q^he,*
 IFR-AUTO-pull-PL LNK
 24313 ‘They made a fire (and used their legs as tripods to make tea), but since it
 24314 was burning, and each of them pulled (their legs and were not able to
 24315 prepare food).’ (2014-kWLAG, 333)

- 24316 (198) <*diandian*> *zo* *kui-ryzi* *pui-muactab, tu-kui-ηke* *tce*
 shop EMPH GENR:S/O-stay SENS-be.cold IPFV-GENR:S/O-walk LNK
 24317 *pui-sy-cke*
 SENS-PROP-burn
 24318 ‘Staying in the shop it is cold, but walking (on the street) it is hot.’
 24319 (conversation, 14-05-10)

18.8.6 Compatibility with other derivations

The proprietive derivation can take as input anticausative verbs (§18.5.6). For instance, *srygio* ‘be slippery’ comes from *ŋgio* ‘slip’, itself from *kio* ‘cause to slip’. The proprietive verb *srygio* expresses that the action of the base verb *kio* is possible due to the nature of the ground, as shown by (199).

- (199) *uu-t^hob* *juu-sy-ŋgio* *tce tcoɔxtsi juú-wy-kio*
 3SG.POSS-ground SENS-PROP-ACAU\$.glide LNK table IPFV-INV-glide

*μυρ-κ^hυι
SENS-be.possible*

'The ground is sl

'The ground is slippery, and one can move the table by making it glide on it.' (elicited)

The verb *nuzduy* ‘worry about’ (which could be analyzed as a lexicalized applicative of *zduy* ‘suffer’, §17.4.1.5) has the *sx-* proprietary *synuzduy* ‘causing people to worry’, as shown by example (200), homophonous with an antipassive verb meaning ‘worrying about people’.

- (200) *ny-wa* *nuit^hamtcyt zo* *t^hwi-wxti tce, nuu kw-fse*
 2SG.POSS-father so.much EMPH AOR-be.big LNK DEM SBJ:PCP-be.like
 [...] *cui-ky-yluulyt* [...] *c^ha* *ci kuma, pui-sy-nuu-zduy*
 TRAI-INE-fight can:FACT OUI.SEP SENS-PROP-worry about

‘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)

Propriative verbs cannot be subjected to (sigmatic *su-* or velar *yr-*) causative derivations. On the other hand, they can take the tropative *nr-* prefix, as shown by the common verbs *nysrscit* ‘find pleasant’ and *nysryduy* ‘find unpleasant’ derived from *srsclt* ‘be pleasant’ and *sryduy* ‘be unpleasant’, respectively (§[17.5.4](#)).

18.8.7 Relationship with other derivations

The proprietary *syr-*, like several other voice prefixes (§20.10), is related to the denominal *syr-* derivation (§20.10.2). It has a common origin with the antipassive *syr-* (§18.6.2; see in particular the propensitive function of the antipassive).

The proprietive and the *sv*-antipassive are however synchronically quite distinct. While only the former can have intransitive or semi-transitive verbs as input, both can occur on transitive verbs, in which case the former is object-oriented (§18.8.4), while the latter is subject-oriented (§18.6.2).

24349 18.9 Facilitative

24350 Japhug has two productive facilitative derivations, the *yr-* and *nuyu-* prefixes,
 24351 deriving stative verbs whose subjects correspond to the subject and the object
 24352 (or goal) of the base verbs, respectively. Cognates of both prefixes are found
 24353 in Tshobdun (*w-* and *nwa-*), with an identical functional constraint (J. T.-S. Sun
 24354 2014a)

24355 These prefixes are only valency-decreasing when prefixed to transitive verbs,
 24356 and do not change transitivity when the base verb is intransitive.

24357 The meaning of these prefixes is very similar to that of complement clauses
 24358 headed by the stative verb *mbat* ‘be easy’ (§24.5.8). For instance, (201b) was pro-
 24359 vided as a gloss for (201a) during an elicitation session.

- 24360 (201) a. *nui-nuyu-βzjox*

SENS-FACIL-learn

- b. *ky-βzjox nui-mbat*

INF-learn SENS-be.easy

‘It is easy to learn.’ (elicited)

24363 A third way of expressing facilitative meaning is by verb compounding; the
 24364 only example of this type is *apymbat* ‘be easy to do’ from the transitive verb *pa*
 24365 ‘do’ and the stative verb *mbat* ‘be easy’ (§20.12).

24366 18.9.1 Subject-oriented facilitative

24367 The prefix *yr-*, homophonous with the velar causative *yr-* (§17.3), generally de-
 24368 rives stative verbs meaning ‘become/get X easily’, ‘tend to become/get X’. For
 24369 instance, from *wxti* ‘be big’ one can derive the stative verb *yvwxti* ‘become big
 24370 easily’, as illustrated by (202).

- 24371 (202) *si kur-wxtur-wxti nui-βze cʰa ma wuma zo*

tree SBJ:PCP-EMPH~be.big IPFV-grow[III] can:FACT LNK really EMPH

24372 *nui-yr-wxti.*

SENS-FACIL-be.big

‘It can grow into a hug tree, as it easily becomes huge.’ (07-Zmbri, 10)

24373 The facilitative prefix *yr-* is very productive on stative verbs, including on loan-
 24374 words from Tibetan. For instance, *rgyz* ‘be old’ (from 老 *rgas* ‘get old’) has a facil-
 24375 itative form *yryrgyz* ‘age quickly’, attested in (203).

- 24377 (203) *turme my-kuu-njfur, numuu my-kuu-yy-rgyz tce tce*
 people NEG-SBJ:PCP-change DEM NEG-SBJ:PCP-FACIL-be.old LNK LNK
 24378 *numuu tvt^bo tu-syrm̩i-nuu nyu.*
 DEM ANTHR IPFV-call-PL be:FACT
 24379 ‘Persons who don’t change, who don’t age quickly, people call them
 24380 ‘pines’’ (07-tAtho, 26)

24381 Some dynamic intransitive verbs are also attested with the *yy-* derivation, with
 24382 meanings such as ‘X quickly/early/easily’ or ‘X often’. For instance, *mda* ‘be the
 24383 time’ derives the form *yy-mda*, which can mean ‘be the time (ripen) earlier’, as in
 24384 (204), and *r̩ru* ‘get up’ has the facilitative *yyr̩ru* ‘getting up early’, ‘getting up
 24385 easily’ (as soon as one wakes him/her up).

- 24386 (204) *naura izo ji-ji puu-ky-z-myku nuu izo*
 DEM:PL 1PL 1PL.POSS-field AOR-OBJ:PCP-CAUS-be.first DEM 1PL
 24387 *wu-p^but ku-z-myku-j ma*
 3SG.POSS-BARE.INF:cut IPFV-CAUS-be.first-1PL LNK
 24388 *nuu-yy-mda*
 SENS-FACIL-be.the.time
 24389 ‘Our fields, that have been (sowed) first, we harvest they first, because
 24390 the (crops) ripen earlier (than in other places, higher up in altitude).’
 24391 (2010-09)

24392 It also occurs on some anticausative verbs (§18.5); for instance, the intransitive
 24393 *ngru* ‘break’ has the facilitative form *yy-ngru* ‘easily break’, which has the same
 24394 meaning as the object-oriented facilitative *nuuyu-qru* of the transitive base verb
 24395 *qru* ‘break’ (§18.5.6). It is also attested with denominal verbs such as *s̩ymburu* ‘get
 24396 angry’ (§20.3.1), whose facilitative is *yyss̩ymburu* ‘get angry easily’.

24397 The *yy-* prefix is also found on intransitive verbs that only occur in collocation
 24398 with a particular noun, for instance *nmu* ‘shake (of earthquakes)’ (on which
 24399 see §19.7.1) or the collocation *wu-bo + mbi* ‘be discouraged’ (§18.5, §22.4.3.2), from
 24400 which *yy-nmu* or *wu-bo + yymbi* ‘be easily discouraged’ can be derived (examples
 24401 205 and 206).

- 24402 (205) *icq^ba s̩ytc^ba nuu waʃu nuu-yy-nmu.*
 the.aforementioned place DEM earthquake SENS-FACIL-shake
 24403 ‘Earthquakes are frequent in this place.’ (elicited)

- 24404 (206) *wu-tuu-yyy-mbi* *nwu!*
2SG.POSS-discourage(1) 3SG-NMLZ:DEG-FACIL-ACAUS:discourage(2) SFP
24405 ‘You are so easily discouraged!’ (elicited)

With the dynamic motion verb *ce* ‘go’, the facilitative *yr-ce* only occurs in collocation with *tr-rzax* ‘time’ in the meaning ‘pass quickly (of time)’, as in (207). In this example, the facilitative applied to the whole collocation *tr-rzax+ce* ‘spend (one’s time)’ (§22.4.1)

- 24410 (207) *n̥-t̥-r̥zaš* *ur-pnú-yx-ce*
 2SG.POSS-INDEF.POSS-time QU-SENS-FACIL-go
 24411 ‘Is the time passing quickly for you?’ (elicited)

The facilitative *yr-* 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 *yrcuftas* ‘to have a good memory’ and *yrsjmut* ‘be forgetful’, respectively (208).

- 24416 (208) *jnu-cqraš tce jnu-yy-cuiftaš*
 SENS-be.intelligent LNK SENS-FACIL-memorize
 24417 ‘He is intelligent, he has a good memory.’ (elicited)

This derivation demotes the object, and the intransitive subject of the facilitative verbs *yṛcūftaš* 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 ‘to be easy to remember/forget’, the other facilitative prefix *nuyu-* is used instead (§18.9.2). Hence, the prefix *yṛ-* can be described as a subject-oriented facilitative, following Sun’s (2014a) description of the cognate prefix *wp-* in Tshobdun.

18.9.2 Object-oriented facilitative

The facilitative *nuyu-* prefix is one of the rare disyllabic derivational prefix in Japhug. Like *yr-* (§18.9.1), it is used to build stative verbs meaning ‘be easy to X’. It is most commonly prefixed to transitive action verbs: a typical example is for instance *nuyu-kry* ‘be easy to shear’ from *kry* ‘mow, shear’, as in (209). Additional examples are found in Table 18.11.

- 24430 (209) *tce qazo kui-wxti nuara yuu q^he, nuu-rme juu-rŋji*
 LNK sheep SBJ:PCP-be.big DEM:PL GEN LNK 3PL.POSS-hair SENS-be.long
 24431 *q^he juu-nuyuu-kryy, kui-xtci nuara yuu, nuu-rme*
 LNK SENS-FACIL-shear SBJ:PCP-be.small DEM:PL GEN 3PL.POSS-hair
 24432 *juu-xtut q^he, mūj-nuyuu-kryy.*
 SENS-be.short LNK NEG:SENS-FACIL-shear
 24433 ‘The big sheep, their wool is long and thus easy to shear, the small ones,
 24434 their wool is short and difficult to shear.’ (160712 smAG, 28-29)

24435 When the base verb is transitive, the *nuyuu-* prefix is a valency-decreasing
 24436 derivation, removing the transitive subject, and turning the object into an in-
 24437 transitive subject. In (210) for instance, *nuyumto* ‘be easy to see’ appears in the
 24438 Factual third singular without stem III alternation, showing that it is an intransitive
 24439 verb (§14.3.1).

- 24440 (210) *ci nuu xcaj ui-mdob tsa ui-kui-ndo nuu*
 INDEF DEM grass 3SG.POSS-colour a.little 3SG.POSS-SBJ:PCP-take DEM
 24441 *my-nuyuu-mto. tce wuma zo*
 NEG-FACIL-see:FACT LNK really EMPH
 24442 *mū~my-puu-kui-tso ny my-wy-mto*
 COND~NEG-PST.IPFV-GENR:S/O-understand LNK NEG-INV-see
 24443 ‘The other one, which has the colour of grass, is not easy to see; unless
 24444 you know it very well, you won’t see it.’ (07-Cku, 58)

24445 Among the verbs in Table 18.11, the facilitative *nuyujpa* ‘be convenient’ is par-
 24446 ticularly lexicalized, with both an irregular *-j*-element occurring between the pre-
 24447 fix *nuyuu-* and the root *|pa|*, and a non-predictable meaning derivation.

24448 In the case of the verb *ti* ‘say’, the facilitative *nuyuti* can either mean ‘be easy
 24449 to pronounce’ or ‘be easy to express’, as in example (211), uttered by Tshendzin
 24450 during an elicitation session.

- 24451 (211) *nuu mūj-nuyuu-ti*
 DEM NEG:SENS-FACIL-say
 24452 ‘This (meaning) is difficult to express (in Japhug).’ (heard in context)

Table 18.11: Examples of the facilitative *nuuyu-* prefix in Japhug

basic verb	derived verb
<i>ŋke</i> ‘walk’	<i>nuuyunjke</i> ‘be easy to walk (on)’
<i>ŋga</i> ‘wear’	<i>nuuyunŋga</i> ‘be nice to wear’
<i>ndza</i> ‘eat’	<i>nuuyundza</i> ‘be easy/nice to eat’
<i>ntɛʰoz</i> ‘use’	<i>nuuyuntɛʰoz</i> ‘be easy to use’
<i>mto</i> ‘see’	<i>nuuyumto</i> ‘be easy to see’
<i>ti</i> ‘say’	<i>nuuyuti</i> ‘be easy to say’
<i>çuuftaꝝ</i> ‘remember’	<i>nuuyuçuuftaꝝ</i> ‘be easy to remember’
<i>jmut</i> ‘forget’	<i>nuuyujmut</i> ‘be easy to forget’
<i>pa</i> ‘do’	<i>nuuyujpa</i> ‘be convenient’

24453 Some intransitive verbs are attested with the *nuuyu-* prefix. The only common
 24454 one is *nuuyunjke* ‘be easy to walk (on)’ (from *ŋke* ‘walk’); the *nuuyu-* derivation
 24455 appears to be possible on a few other motion verbs and verbs of location (such
 24456 as *rjuy* ‘run’ or *rzzi* ‘stay’), though their acceptability has to be rechecked. The
 24457 subject of the facilitative verbs derived from such intransitive verbs corresponds
 24458 to the locative adjunct (212) or goal (213) of the base verb.

- 24459 (212) *tcʰeme nuna tʰlwa juuyunyuzur to-ce qʰe, maka*
 girl DEM earth IDPH(II):soft LOC IFR:UP-go LNK at.all
 24460 *w-mx-tuu-nuuyu-ŋke* *pjy-saxas zo,*
 3SG.POSS-NEG-NMLZ:DEG-FACIL-walk PST.IPFV-be.extremely EMPH
 24461 ‘The girl went up the (path made of) soft earth, and it was extremely
 24462 difficult to walk on it.’ (2014-kWLAG, 148)

- 24463 (213) *tʂu ur-rkuu juu-yrbat tce, juu-nuuyuu-ce*
 path 3SG.POSS-side SENS-be.close LNK SENS-FACIL-go
 24464 ‘(This place) is close to the road, it is easy to go to.’ (elicited)

24465 The semi-transitive *tso* ‘know, understand’ (§14.2.3) can also undergo the fa-
 24466 cilitative derivation to *nuuyutso* ‘easy to understand’. Semi-transitive verbs in *a-*,
 24467 such as *ase* ‘have to eat/drink’ or *atuy* ‘meet’, are not compatible with *nuuyu-*,
 24468 which appears to lack an allomorph with vowel fusion; a form †*nuuyyße* for in-
 24469 stance (intended meaning: ‘easy to get to eat’) is utterly unacceptable.

24470 Since semi-objects, goals and some locative adjuncts do have partial objectal
 24471 properties (§8.1.5, §8.1.8, §8.1.6, §23.5.4, §23.5.5), it is nevertheless appropriate to

24472 describe *nuyuu-* as an object-oriented derivation, following J. T.-S. Sun (2014a).
 24473 The contrast between *nuyuu-* and subject-oriented *yr-* is clearest with the transitive verbs *jmut* ‘forget’ and *cuftaz* ‘remember’, which can be subjected to both
 24474 derivations: compare object-oriented *nuyujmuit* ‘be easy to forget’ and subject-
 24475 oriented *yyjmut* ‘be forgetful’ (§18.9.1).

24476 It is possible to apply the facilitative derivation to an intransitive verb al-
 24477 ready derived by the sigmatic causative, for instance *nuyuu-suy-naz* (FACIL-CAUS-
 24478 be.black) ‘be easily blackened’. It is also possible to causativize a facilitative
 24479 verb (with the z- allomorph of the sigmatic causative, §17.2.1.1). For example, the
 24480 causative of *nuyuntç'oz* ‘be easy to use’ is *z-nuyuu-ntç'oz* (CAUS-FACIL-use) ‘make
 24481 easy to use’. The relative order of the facilitative and of the causative prefixes
 24482 thus reflects their semantic scope (§17.2.8).

24484 19 Other verbal derivations

24485 19.1 Autive

24486 The autobenefactive-spontaneous or autive¹ prefix *nu-* is one of the most productive voice prefixes in Japhug.

24488 In this section, I first present the morphological properties of this prefix (allo-morphy and position in the template), and then describe its three main functions:
24489 autobenefactive/self-affectedness, spontaneous and permansive (previously iden-
24490 tified in Jacques 2015e). Finally, I discuss cases of lexicalized autives and propose
24491 historical pathways between the autive and other derivations such as the verti-
24492 tive and the anticausative.

24494 The anticausative derivation in Japhug does not cause any stem alternation,
24495 unlike in other languages such as Bragbar (Shuya Zhang 2020).

24496 19.1.1 The autive prefix and verb transitivity

24497 Unlike most voice markers, the autive prefix *nu-* neither increases nor decreases
24498 verb valency: whether the base verb is morphologically intransitive, transitive
24499 or labile, *nu-* prefixation has no effect on any of the seven transitivity criteria
24500 (§14.3.1).

24501 For instance, transitive verbs with *nu-* still have stem III alternation (§12.2.2.1,
24502 for instance *-ndo* → *-ndym* in 1) or the past tense *-t* suffix (§11.3, see *tx-nu-ndo-t-a*
24503 in 2).

- 24504 (1) *laŋjuŋ nyzo tx-nui-ndym je*
24505 staff 2SG IMP-AUTO-take[III] SFP
‘Take the staff.’ (2005 khu, 13)

- 24506 (2) *nyzo nykinu, tx-tui-nurdor, aj tx-nui-ndo-t-a me*
24507 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)

24508¹ I 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 *at̪r* ‘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-ŋruu* *nunuu t^hu-rgyz* *tce tce nuu uzo*
DEM 3SG.POSS-horn DEM AOR-be.old LNK LNK DEM 3SG
pjuu-ŋ<nuu>t̪r *pjuu-ŋu.*
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-nu* *tce nutcu li yṛ<nu>z̪u*
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 *asuu-* (§11.2.2, §21.6.1.1), as in example (5).

- 24536 (5) <gaoyucheng> *kui* *wi-laxtc^ha* [...] *pwi-a<nua>sui-fkur* *yui*
 ANTHR ERG 3SG.POSS-thing PST.IPFV-<AUTO>PROG-carry DEM
 24537 *wi-ŋwui* *nutcu* *wi-jas* *c^hγ-tsum* *ri,*
 3SG.POSS-inside DEM:LOC 3SG.POSS-hand IFR:DOWNTSTREAM-take.away LNK
 24538 ‘Gao Yucheng put his hand in the things (bag) that he was carrying on his
 24539 back.’ (150902 qixian-zh, 132)

24540 In all other cases (and excluding lexicalized autives, §19.1.6), the autive *nui*
 24541 occurs on the leftmost side of the verb stem, just before the reflexive (§18.3),
 24542 but after inflectional prefixes (including orientational, participial, inverse and
 24543 person indexation prefixes), as shown by the forms *tu-nui-zyr-raxtcrz-i* ‘we treat
 24544 ourselves’ in (6) and *a-tv-tú-wy-nui-ndza* in (7).

- 24545 (6) *tce ji-ky-nui-raxtcyz* *ra jy-ye-nui*, *izora*
 LNK 1PL-OBJ:PCP-AUTO-cherish PL AOR-come[II]-PL 1PL
 24546 *tu-nui-zyr-raxtcrz-i*,
 IPFV-AUTO-REFL-cherish-1PL
 24547 ‘When people we cherish come, or when we (wish) to treat ourselves,’ (30
 24548 macha, 74)
- 24549 (7) *tu-ttú-wy-ndza wi-nui-susym* *q^he a-tv-tú-wy-nui-ndza*
 IPFV-2-INV-eat QU-IPFV-think[III] LNK IRR-PFV-2-INV-AUTO-eat
 24550 *nui-nts^hi*
 SENS-be.better
 24551 ‘If it wants to eat you, let it eat you!’ (150901 dongguo xiansheng he
 24552 lang-zh, 100)

24553 When occurring in this leftmost slot, forms bearing the autive prefix can be
 24554 ambiguous: for instance the surface form *nui-ce* (from the verb *ce* ‘go’) can either
 24555 be parsed as 3SG Factual autive (AUTO-go:FACT), 3SG Factual vertitive (§19.2, (VERT-
 24556 go:FACT) or 2SG WESTWARDS imperative (§21.4.2.1, IMP:WEST-go).

24557 In addition to its infixability, the autive prefix has the particularity of being
 24558 (optionally) realized as geminated *-n-* when it occurs before a verb stem or verb
 24559 prefix in *nui*-, as in (8).

- 24560 (8) *tv-tciu* *nunui*, *kui*, *nunutcu kumy pjy-n-nui-rga*
 INDEF.POSS-son DEM ERG DEM:LOC also IFR:IPFV-AUTO-APPL-like
 24561 *cti.*
 be.AFF:FACT
 24562 ‘Even like that, the boy still loved her.’ (140510 sanpian sheye-zh, 121)

24563 19.1.3 Autobenefactive/self-affectedness function

24564 The autobenefactive function of the *nu-* prefix can be subdivided into four sub-
 24565 cases: subject affectedness, beneficial, exclusive beneficial, and mild imperative.

24566 First, the autative prefix frequently appears with transitive verbs when the ob-
 24567 ject takes a possessive prefix coreferent with the transitive subject, especially in
 24568 the case of body parts and other inalienably possessed nouns, to emphasize the
 24569 fact that the agent is affected by his/her own action. For example, in (9), the
 24570 2SG possessive prefix on the body part *nr-ku* is coreferent with the subject of the
 24571 2SG→3 imperative form *pui-nuu-χtci*.

- 24572 (9) *nr-ku pui-nuu-χtci*
 2SG.POSS-head IMP-AUTO-wash

24573 ‘Wash your head.’ (elicited)

24574 The autative is not restricted to body part objects, but also appears with more
 24575 abstract possessed objects such as *ui-sro&* and *ui-brum* in (10) and (11).

- 24576 (10) *uizo kuu ui-sro& ko-nuu-ri nuu-ŋu*
 3SG.ERG 3SG.POSS-life IFR-AUTO-save SENS-be

24577 ‘He saved his own life.’ (140512 yufu yu mogui-zh, 127)

- 24578 (11) *tua-ci ui-ŋgwa ui-brum pjui-kua-ntc^hyr nuu*
 INDEF.POSS-water 3SG.POSS-in 3SG.POSS-shade IPFV-SBJ:PCP-shine DEM

24579 *pjui-nuu-mto tce,*
 IFR-AUTO-see LNK

24580 ‘She saw her (own) reflection in the water.’ (140428 mu e guniang-zh, 59)

24581 Example (12) presents a clear contrast between *mu-to-xtsuy* (no *nu-* prefix) and
 24582 *to-nuu-xtsuy* (presence of *nu-* prefix, coreference between possessor and transitive
 24583 subject). It also illustrates that the subject affectedness expressed by the autative
 24584 prefix is not necessarily beneficial, but can also be detrimental.

- 24585 (12) *turpa ci to-lyt ri si nuu ui-tas mu-to-xtsuy kuu uizo*
 axe once IFR-release LNK tree DEM 3SG.POSS-on NEG-IFR-hit ERG 3SG
 24586 *yuu ui-jas zo to-nuu-xtsuy.*
 GEN 3SG.POSS-hand EMPH IFR-AUTO-hit

24587 ‘He swung the axe but did not hit the tree, and instead hit his own arm.’
 24588 (140430 jin e-zh, 41)

24589 However, the *nu-* prefix is optional in all four sentences: its presence
 24590 is not required to express subject-object possessor coreference. In addition, non-
 24591 coreference between subject and object possessor is possible on verbs taking the
 24592 autive prefix.

24593 Second, the autive prefix can also be found on both intransitive and transitive
 24594 verbs to focus on the pleasant character of an action for the subject, as in (13).

- 24595 (13) *k̥r̥tsa ra χsum nuu kuu-scu~scit zo*
 24596 COLL:family PL three DEM SBJ:PCP-EMPH~be.happy EMPH
ku-nuu-ryzi-nuu pjy-ηu,
 24596 IPFV-AUTO-stay-PL IFR.IPFV-be

24597 ‘The three of them lived happily.’ (Gesar 2003, 211)

24598 Third, the autive *nu-* can be used to express that the action only benefits the
 24599 subject, to the exclusion of other referents. In (14) for instance, the *nu-* prefix on
 24600 the verbs *tu-nuu-ndza-ndzi* ‘they eat it’ and *ku-nuu-ts^{hi}-ndzi* ‘they drink it’ express
 24601 that the 3DU subject (the two elder sisters) performed these actions without shar-
 24602 ing anything with the 1SG referent.

- 24603 (14) *nr-pi ni kuu [...] qajyi nura kuu-muum zyni*
 24604 2SG.POSS-elder.sibling DU ERG bread DEM:PL SBJ:PCP-tasty 3DU
tu-nuu-ndza-ndzi, uu-rkuu ky-kuu-cke ra azo
 24605 IPFV-AUTO-eat-DU 3SG.POSS-side AOR-SBJ:PCP-burn PL 1SG
jnú-wy-mbi-a-ndzi, cʰa ra zyni ku-nuu-ts^{hi}-ndzi, azo
 24606 AOR-INV-give-1SG-DU alcohol PL 3DU IPFV-AUTO-drink-DU 1SG
uu-bjø jnú-wy-jts^{hi}-a-ndzi puu-cti
 24607 3SG.POSS-diluted AOR-INV-give.to.drink-1SG-DU PST.IPFV-be.AFF
 24608 ‘Your two sisters (...) ate the tasty food and gave me the burned part of
 24609 the bread, drank the alcohol and gave me diluted alcohol to drink.’ (The
 three sisters, 68)

24610 In these cases an emphatic pronoun referring to the beneficiary can be placed
 24611 just before the verb (§6.4). It does not bear the genitive (§8.2.3.2) or the ergative
 24612 even when it refers to the transitive subject, as *zyni* ‘3DU’ in example (14). The
 24613 distributive pronoun *zaka* ‘each his own’ (§6.7.3) can also be used in this function,
 24614 as in (15).

19 Other verbal derivations

- 24615 (15) *tcizo bnuaz ma maje-tci tce, zaka ky-nui-βzu*
 1DU two apart.from not.exist:SENS-1DU LNK each INF-AUTO-do
 24616 *my-rtaš-tci*
 NEG-be.enough:FACT-1DU
 24617 ‘We are only two, we are not enough people to act separately.’ (The three
 24618 sisters, 74)

24619 The autive can also appear when the beneficiary is an oblique referent, for
 24620 instance the genitively-marked *azuy* ‘1SG:GEN’ (§8.2.3.2) in (16), where the relative
 24621 (between square brackets) containing the complement clause *azuy a-pui-nui-pe*
 24622 ‘May it be beneficial to me! (at the expense of others)’ is used to translate 很自
 24623 私 <hěn zìsī> ‘very selfish’ in the original text.

- 24624 (16) [“*azuy a-pui-nui-pe*” *pui-kui-suso*] *ci pjy-ŋu*
 3SG:GEN IRR-IPFV-AUTO-be.good IPFV-SBJ:PCP-think INDEF IFR.IPFV-be
 24625 ‘He was someone who was (always) thinking ‘May it be beneficial to me!’”
 24626 (140430 jin e-zh, 31)

24627 Fourth, with Imperative and Irrealis forms (§21.4), the autive prefix can convey
 24628 a softened tone, expressing a friendly suggestion rather than an order, as in (18)
 24629 and (17) or even the wish that the addressee performs an action pleasant and
 24630 beneficial to him/herself (19).

- 24631 (17) *nyzo nuumutcu kyndza kui-mum c-ty-nui-ndze*
 2SG DEM:LOC food SBJ:PCP-be.tasty TRAL-IMP-AUTO-eat[III]
 24632 ‘Go and eat nice food there!’ (140426 jiagou he lang-zh, 64)

- 24633 (18) *laχtcʰa mutcʰumuruz tu, myzua koxtcinri tu tce,*
 things all.kind exist:FACT also silk.thread exist:FACT LNK
 24634 *yui-ty-nui-χtui-nui*
 CISL-IMP-AUTO-buy-PL
 24635 ‘There are all kinds of things, there are silk threads, come and buy them!’
 24636 (140504 baixue gongzhu-zh, 121-122)

- 24637 (19) *a-wui a-wi ra kutcu*
 1SG.POSS-grandfather 1SG.POSS-grandmother PL DEM.PROX:LOC
 24638 *nui-n-nybaš-nui, a-nui-tu-nui-rumani-nui, tce*
 IMP-AUTO-have.a.good.time-PL IRR-PFV-2-AUTO-recite.mantra-PL LNK

- 24639 *kutcu a-ky-tui-nuu-ryzi-nuu*
DEM.PROX:LOC IRR-PFV-2-AUTO-stay-PL
24640 ‘Grandfathers and grandmothers, have a good time here, recite mantras
24641 and stay here (pleasantly).’ (2003kandzwsqhaj, 61)

24642 However, it should be pointed out that the autive has an almost opposite
24643 (mocking/defiance) function in imperatives in examples such as (31) below in
24644 §19.1.4.

24645 19.1.4 Spontaneous function

24646 The spontaneous function of the autive prefix includes six subcases: actions with-
24647 out external cause, self-volitional actions, non-volitional actions, casual action,
24648 concessive clauses, and mocking imperatives.

24649 First, the autive prefix expresses actions that are perceived by the speaker as
24650 occurring spontaneously by themselves, such as the growth of plants or animals
24651 (20) or action taking place due to an unseen force (example 21, with an emphatic
24652 pronoun *wzo*, §6.4).

- 24653 (20) *tce zruuy nuu tce, tsuku kuu tui-pyc^{bak} w-ηgwi*
LNK louse DEM LNK some ERG INDEF.POSS-navel 3SG-inside
24654 *tu-nui-łob ηu tu-ti-nuu ηu tce my-xsi*
IPFV-AUTO-come.out be:FACT IPFV-say-PL be:FACT LNK NEG-GENR:A:know
24655 *ma wzo nuu-kui-nuu-βze ci nuu-cti tce,*
LNK 3SG IPFV-SBJ:PCP-AUTO-grow INDEF SENS-be.AFF LNK
24656 ‘The louse, some say that it comes from the navel, I don’t know, it grows
24657 by itself.’ (21 mdzadi, 61)

- 24658 (21) *si w-rgym nuu yuu w-fkaβ nuu, wzo*
wood 3SG.POSS-box DEM GEN 3SG.POSS-cover DEM 3SG
24659 *to-nuu-ŋjui.*
IFR-AUTO-ACAUS:open
24660 ‘The cover of the box opened by itself.’ (150906 toutao-zh, 180)

24661 Second, with a volitional subject (in particular human), the autive can indicate
24662 an action performed of one’s own will, without being forced by anything or any-
24663 one, as in (22), or without help from anybody else (‘by oneself’), as in (23) and
24664 (24).

19 Other verbal derivations

- 24665 (22) *azō pjui-kui-nui-βde-a-nui my-ra, azo*
 1SG IPFV:DOWN-2→1-throw-1SG-PL NEG-be.needed:FACT 1SG
- 24666 *pjui-nui-mtsaʂ-a jy*
 NEG-IPFV:DOWN-AUTO-jump-1SG be.allowed:FACT
- 24667 ‘You don’t need to throw me in there, I will jump by myself (of my own
 24668 free will).’ (2011-05-nyima, 152)
- 24669 (23) *azō zo z-nui-nui-ru-a nui-nts^{hi}*
 1SG EMPH TRAL-IPFV-AUTO-look-1SG SENS-be.needed
 24670 ‘I need to go and have a look by myself.’ (140507 tangguowu-zh, 141)
- 24671 (24) *tce nui uzo tu-nui-yyrbaʂ q^he nui u-ky-ndza*
 LNK DEM 3SG IPFV-AUTO-hunt LNK DEM 3SG.POSS-OBJ:PCP-eat
 24672 *nui-nui-car nyu.*
 IPFV-AUTO-look.for be:FACT
 24673 ‘(The cat) hunts on its own and looks for its own food by itself.’ (21-lWLU,
 24674 50)
- 24675 Third, the autive can also express an action occurring by mistake or against
 24676 the volition of the subject: compare examples (25a) with autive and (25b) without
 24677 it.
- 24678 (25) a. *k^hutsa pui-qru-t-a*
 bowl AOR-break-PST:TR-1SG
 24679 ‘I broke the bowl (possibly on purpose).’ (elicited)
- 24680 b. *k^hutsa pui-nui-qru-t-a*
 bowl AOR-AUTO-break-PST:TR-1SG
 24681 ‘I broke the bowl (by mistake).’ (elicited)
- 24682 The combination of inferential with autive (see also §21.5.2.3) can express that
 24683 the action occurred against the volition of the subject and unbeknownst to him/
 24684 her at the time when it happened (26).
- 24685 (26) *hehe a-zi ra c^hy-tuu-nui-ryrfit-nui*
 INTERJ 1SG.POSS-lady PL IFR-2-AUTO-have.a.child-PL
 24686 *mtúj-tuu-nui-suiχsrl-nui*
 NEG:SENS-2-AUTO-realize-PL
 24687 ‘My lady, you had a child and did not notice it.’ (2003 Kunbzang, 118)

24688 Some verbs such as *jmut* ‘forget’ or *cluy* ‘drop’, generally appears with the
 24689 autive prefix in the corpus (in the case of *jmut* ‘forget’ in 23 examples out of 28),
 24690 as in (27)

- 24691 (27) *my-xsi ko, nura jy-nui-jmut-a*
 NEG-GENR:know SFP DEM:PL IFR-AUTO-forget-1SG
 24692 ‘I don’t know, I forgot those things.’ (Conversation, 2013-12-24)

24693 Fourth, an extension of the spontaneous value of the prefix *nui-* is the meaning
 24694 ‘casually’, ‘at one’s will’, ‘whatever’ (corresponding to Chinese 隨便 <suíbiàn>
 24695 ‘casually’), as in (28).

- 24696 (28) “*huaguniang*” *ra tu-nui-ti-nui jui-ŋu.* *nunuara zara ku*
 name PL IPFV-AUTO-say-PL SENS-be DEM:PL 3PL ERG
 24697 *ui-rmi tu-nui-tcxt-nui jui-ŋu.*
 3SG.POSS-name IPFV-AUTO-take-PL SENS-be
 24698 ‘They say ‘huaguniang’, they call (this type of cows) like that.’ (*implied*
 24699 meaning: they invented their name, it is not a real name; 28 qapar, 239)

24700 Fifth, as a further extension of the meaning ‘casually’ seen above, the autive
 24701 appears in the protasis of alternative (29), scalar (30) and universal (§12.4.3) con-
 24702 cessive conditionals (§25.2.3, Jacques 2014a: 298–300). In these constructions, the
 24703 result described in the apodosis takes place regardless of whether the condition
 24704 in the protasis is fulfilled or not. The autive prefix expresses the fact that the re-
 24705 sulting action is independent of the condition. In this function, it is often realized
 24706 with a gemination as *-nnui-*.

- 24707 (29) *tce tui-sum puu-a<nnui>ri ny ju-kui-ce,*
 LNK GENR.POSS-mind AOR-<AUTO>go[II] LNK IPFV-GENR:S/O-go
 24708 *muu-puu-a<nnui>ri ny ju-kui-ce puu-ra*
 NEG-AOR-<AUTO>go[II] LNK IPFV-GENR:S/O-go PST.IPFV-be.needed
 24709 ‘Whether one liked it or not, one had to go.’ (14 tApi taRi, 212)

- 24710 (30) *nui li ui-qa jui-βze jui-cti ma ui-muuntoꝝ*
 DEM again 3SG.POSS-foot IPFV-make[III] SENS-be:AFF LNK 3SG.POSS-flower
 24711 *puu-nnui-tu kumy, ui-ryi ra ky-mto mage.*
 PST.IPFV-AUTO-exist also 3SG.POSS-seed PL INF-see not.exist:SENS
 24712 ‘This one also grows by its root, as even if it has flowers, (I) have never
 24713 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-yywu 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-yywu* 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).

² The 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.

- 24739 (33) *tc^heme nur jy-nauk^hada ri, mu-pjy-p^hyn, tc^heme nur*
 girl DEM IFR-convince LNK NEG-IFR-be.efficient girl DEM
 24740 *pjy-nuu-yywu cti,*
 IFR.IPFV-AUTO-cry be.AFF:FACT
 24741 ‘She (tried to) comfort the girl, but it was for nothing, the girl kept on
 24742 crying.’ (zrAntCW 2003 48)
- 24743 (34) *nunu pjuu-ŋgra cunjgu tce tce jui-rom*
 DEM IPFV:DOWN-ACAUS:make.fall before LNK LNK IPFV-be.dry
 24744 *cti tce, u-ryi nunu tcu a-nuu-mp^hur*
 be:AFF:FACT LNK 3SG.POSS-seed DEM LOC PASS-AUTO-wrap:FACT
 24745 *cti*
 be:AFF:FACT
 24746 ‘Before (the flower) falls down, it dries up, and its seed is still wrapped in
 24747 it.’ (13 tCamu, 59)

24748 The autive is found in particular in sentences with the phrase *nu kunn̥* ‘even
 24749 like that, despite these circumstances’, as in (35) below and (8) in §19.1.2 above.

- 24750 (35) *nur kunn̥ pjy-nuu-ryma.*
 DEM also IFR.IPFV-AUTO-work
 24751 ‘Even so, she kept on working.’ (140520 ye tiane-zh, 397)

24752 Second, the autive *nu-* prefix can express that a state continues despite the fact
 24753 that a long time has passed, as in (36), or that it is maintained without change,
 24754 as in (37).

- 24755 (36) *t^ho nuunu qartsumyftcar zo a<nuu>rŋi cti*
 pine DEM winter.and.summer EMPH <AUTO>be.blue:FACT be.AFF:FACT
 24756 ‘The pine (remains) green the whole year.’ (07 tAtho, 51)
- 24757 (37) *zmbulum chond^hre gruβgruβ kui-fse ty-lob tce*
 type.of.mushroom COMIT Matsutake SBJ:PCP-be.like AOR-come.out LNK
 24758 *xplorxplor kui-pa tce zuruzyri*
 IDPH(II):spherical SBJ:PCP-auxiliary LNK progressively
 24759 *nuu-kui-nuwyt nuu nuu-mab. ty-lob*
 IPFV-SBJ:PCP-open.towards.the.exterior DEM SENS-not.be AOR-come.out
 24760 *jyzny nuu-xtci labma nuu kui-fse nuu-nuu-ŋuu~ŋu q^he*
 when SENS-be.small only DEM SBJ:PCP-be.like SENS-AUTO-EMPH~be LNK
 24761 ‘It is not like the (mushroom called) *zmbulum* and the Matsutake, which

24762 are spherical when they come out and progressively open towards the
 24763 exterior. It is just that it is small when it comes out, (otherwise) it is
 24764 already like that.' (24-zwArqhAjmAG, 19)

24765 The permansive reading of the autive prefix is only possible in non-perfective
 24766 verb forms, in particular Factual, Imperfective, Past Imperfective and Sensory.

24767 The permansive use of the autive *nu-* is not without typological parallels. One
 24768 of the clearest cases is the Russian pronominal element *себе*, originally the dative
 24769 form of *себя* 'oneself', and which alongside its autobenefactive value, is used in
 24770 certain contexts with a permansive value ('continue to ...').³

24771 This construction is not fully grammaticalized in Russian, but it is nevertheless
 24772 a good parallel to the permansive value of the autive in Japhug. Since it is clear in
 24773 Russian that the original meaning of this marker can only have been autobene-
 24774 factive, not permansive or spontaneous, this fact suggests that the directionality
 24775 of grammaticalization is more likely to be from autobenefactive to permansive in
 24776 Japhug too. The following pathway in four stages can be proposed to account for
 24777 this evolution; note that all four stages represent attested uses of Japhug autive.

- 24778 1. 'Do *X* for/to oneself' (AUTOBENEFACTIVE, examples 9, 10, 14 in §19.1.3).
- 24779 2. 'Do *X* on one's own' (23, §19.1.4).
- 24800 3. 'Do *X* on one's own, disregarding external conditions' (22, §19.1.4).
- 24801 4. 'Continue to do *X*, despite (adverse) external factors.' (PERMANSIVE)

24782 19.1.6 Lexicalized autives

24783 The autive *nu-* is lexicalized in a handful of verbs listed in Table 19.1, whose
 24784 meaning is not fully predictable from that of the base verb, and which present
 24785 several morphological properties.

24786 The clearest example of lexicalized autive is the verb *nvtuy* 'happen to be' (38),
 24787 which derives from *atuy* 'meet'. The autive *nu-* prefix, which undergoes here
 24788 vowel contraction (§12.3), occurs here in spontaneous action function (§19.1.4),
 24789 but both the meaning of the verb and the position of the prefix are anomalous: the
 2490 autive is normally infixated rather than prefixed in the case if verbs in *a-* (§19.1.2).

³ I 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>nuβde</i> ‘lose’
<i>ta</i> ‘put’	<i>nuta</i> ‘wear, take’
<i>st^hor</i> ‘push, press’	<i>nust^hor</i> ‘have sex’
<i>kro</i> ‘share’	<i>nukro</i> ‘share among themselves’
<i>sndu</i> ‘exchange’	<i>antsndu</i> ‘get exchanged (by mistake)’

- 24791 (38) *ndi na-za-nuu* *q^he, tcendi zua my-kui-βjst*
 west AOR:WEST:3→3-start-PL LNK west LOC NEG-SBJ:PCP-obtain
 24792 *u-rca* *ntsua nuu-nytuy* *pjy-ηu.*
 3SG.POSS-following always IPFV-happen.to.be.at IFR.IPFV-be
 24793 ‘When they started (distributing food) from the west, he was each time
 24794 among those who did not get anything.’ (28-qAjdoskAt, 157)

24795 The regular infixated autive, with predictable meaning, is also attested as in (39),
 24796 in the spontaneous function (§19.1.4).

- 24797 (39) *nuni zyni nuu-a<nuu>tuy-ndzi*
 DEM:DU 3DU AOR-<AUTO>meet-DU
 24798 ‘They met each other by themselves (it was not an arranged marriage).’
 24799 (14-siblings, 348)

24800 The lexicalized autive *nytuy* can be prefixed by the sigmatic causative as *znytuy*
 24801 ‘cause *X* to be at’ as in (40) or with the volitional meaning ‘make sure to happen
 24802 to be at’ (41). This is an additional difference from the regular autive, which is
 24803 placed further away from the stem than the causative prefix (§19.1.2).

- 24804 (40) *kuiki kui-ymt_{COUS}* *nunua u-mci*
 DEM.PROX SBJ:PCP-be.pointy DEM 3SG.POSS-saliva
 24805 *pjuu-kui-yi* *uu-stu* *nuu*
 IPFV:DOWN-SBJ:PCP-come 3SG.POSS-direction DEM
 24806 *pjuú-wy-z-nytuy.*
 IPFV-CAUS-happen.to.be.at
 24807 ‘One (turns/puts) the corner (of the bib) towards the direction of the
 24808 drooling saliva (of the baby).’ (vid-20140506043657, 19)

19 Other verbal derivations

- 24809 (41) *cyr tutsh^{ot} sqamnu^z zo tce a-jy-tur-z-nxtay tce,*
 night hour twelve EMPH LNK IRR-PFV-2-CAUS-happen.to.be.at LNK
 24810 ‘You will have to make sure to be there at midnight.’ (2003qachga, 26)

24811 The verbs *nubde* ‘lose’ (42), *nuta* ‘wear, take’ (in particular, ‘take as a wife
 24812 in marriage’ as in 43), *nust^hor* ‘have sex’⁴ and *nukro* ‘share among themselves’,
 24813 are additional cases of lexicalized autative derivations. The former *nubde* ‘lose’
 24814 reflects the spontaneous function of the *nu-* prefix, and the three other verbs the
 24815 autobenefactive (‘do for/on oneself’) function.

- 24816 (42) *jy-a<nu>ri ri, u-rte ny-nubde*
 AOR-<VERT>go[II] LNK 3SG.POSS-hat IFR-lose
 24817 ‘He went away, but lost his hat.’ (2010-07-pear story, 21)

- 24818 (43) *nur ku^z u-rza^β a-ky-nute nur-nts^{hi}*
 DEM ERG 3SG.POSS-wife IRR-PFV-take[III] SENS-be.better
 24819 ‘Let him take her as his wife.’ (140513 shenqi de feitan-zh, 183)

24820 The causative forms of these verbs, such as *znuta* ‘let X wear’ (44) and *znukro*
 24821 ‘share X with’ (45) also have the sigmatic causative prefix placed before the lexi-
 24822 calized autative *nu-*, unlike the expected order. Note also that although the mean-
 24823 ing of the autobenefactive *nukro* ‘share among themselves’ from *kro* ‘share’ ap-
 24824 pears to be compositional and predictable, the causative is both positionally and
 24825 semantically irregular, as it works as a beneficiary applicative rather than as a
 24826 true causative with this verb (a prototypical causative would be expected to mean
 24827 ‘made/let X share among themselves’, though it is easy to understand how such
 24828 a meaning could have evolved to ‘share with X’).

- 24829 (44) *ny-rjyntc^{ha} nura azo ci pjui-kur-z-nuta-a tce*
 2SG.POSS-ornament DEM:PL 1SG INDEF IPFV-2→1-CAUS-take-1SG LNK
 24830 ‘Can you let me wear your ornaments?’ (2014-kWLAG, 472)

- 24831 (45) *u-tyr^βa^{rc}a nura u-zda ra*
 3SG.POSS-wild.meat DEM:PL 3SG.POSS-companion PL
 24832 *nur-z-nu-krym, pjui-mbi ntsu^z pjy-ju.*
 IPFV-CAUS-AUTO-share[III]:FACT IPFV-give always IFR.IPFV-be
 24833 ‘He would share the meat from his hunt with the others, give it to them.’
 24834 (150902 hailibu-zh, 6)

⁴ This transitive verb requires a male as subject. For a typological parallel, see the obscene sense of Latin *comprimo* ‘press’ (Adams 1990: 182).

24835 The intransitive verb *antsyndu* ‘get exchanged (by mistake)’ is derived from the
 24836 transitive verb *syndu* ‘exchange’ (itself the causative of *andu* ‘be exchanged for’)
 24837 by the combination of the passive *a-* prefix (§18.1) with the prefixal element *-nt-*
 24838 . Given the intrinsic non-volitional meaning of *antsyndu* (see examples 46 and
 24839 47), it is likely that it originates from the autive in spontaneous action function
 24840 (§19.1.4) as the reduced allomorph *-n-*. The *-t-* element between *-n-* and the verb
 24841 stem *syndu* is an effect of internal sandhi *-ns-* → *-nts-* (a sound change reminiscent
 24842 of Tibetan, Li 1933), as prenasalized fricatives do not exist in Japhug (§4.2.1.9).

- 24843 (46) *kʰydi* *gnuz-muaz nuu-antsyndu*
 lady.seating.place two-kind AOR-be.exchanged.by.mistake
 24844 *my-nuu-suχsyl*
 NEG-AUTO-realize:FACT
 24845 ‘(Your king) does not realize that two (different sisters) have been
 24846 exchanged at the lady seating place.’ (2003 Kunbzang, 329; see §15.1.4.4
 24847 on the meaning of *kʰydi*)

- 24848 (47) *nuzora puu-tuu-ntsyndu-nuu*
 2PL SENS-2-be.exchanged.by.mistake-PL
 24849 ‘You are the opposite way!’ (conversation 16-04-12; context: I told
 24850 Tshendzin that my father and I cannot drive cars, while my mother and
 24851 my wife can)

24852 The verb *antsyndu* can thus be analyzed as a double autive+passive derivation,
 24853 with the expected placement of the autive after the passive (§19.1.2). This verb
 24854 can be further causativized as *syntsyndu* ‘exchange by mistake’ and even receive
 24855 a second autive prefix as in (48).

- 24856 (48) *tci-ŋga* *to-nuu-su-ntsyndu-tci*
 1DU.POSS-clothes IFR-AUTO-CAUS-exchanged.by.mistake-1DU
 24857 ‘We exchanged our clothes by mistake.’ (elicited)

24858 There are also examples of lexicalized autive *nuu-* prefixes that are located
 24859 in their expected locus in the template, further away from the stem than the
 24860 causative. This is the case for instance with the verb *nusukʰo* ‘rob, extort’ (see
 24861 example 15, §17.2.3), from the causative *sukʰo* ‘cause to give’ of *kʰo* ‘give’. This
 24862 verb has two *sy-* antipassive forms (§18.6.2), the regular one *sy-nuu-su-kʰo* (APASS-
 24863 AUTO-CAUS-give) ‘rob people’, but also the variant *nuu-sy-su-kʰo* (AUTO-APASS-
 24864 CAUS-give) with the autive prefix *nuu-* moved further away from the stem than
 24865 the antipassive *sy-* (§18.6.2).

19 Other verbal derivations

24866 Additional possible examples of fossilized autive prefixes include *mungyt* ‘part
24867 ways’ (§18.5.1.2) and *mja* ‘take’ (§19.7.3).

24868 19.1.7 Historical relationship with other derivations

24869 Further semantic evolution of the autive prefix with some verbs has led to the de-
24870 velopment of distinct grammatical categories, the vertitive *nu-* (§19.2) which re-
24871 mained formally similar to the autive, and the anticausative (§18.5), which under-
24872 went phonological reduction to a non-concatenative alternation: the shift from
24873 unvoiced stops and affricatives to their corresponding prenasalized voiced coun-
24874 terparts.

24875 19.2 Vertitive

24876 The vertitive *nu-* is exclusively attested with a restricted set of motion (§15.1.2.1)
24877 and manipulation verbs (§15.1.2.2), indicated in Table 19.2, expressing that the
24878 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)

24879 The vertitive meaning developed out of the autobenefactive function of the
24880 autive ‘take for oneself’ → ‘take to one’s home’ → ‘take back home’. However,
24881 the two prefixes are synchronically distinct, and can be combined together, as in
24882 example (49); note that in this case the autive is generally realized as *-n-* (§19.1.2).

- 24883 (49) *tce nuu-tuu-nym* *qʰe, tce zara ku-n-nua-yi-nu*
LNK IPFV:EAST-2-chase[III] LNK LNK 3PL IPFV:EAST-auto-come.back-PL

24884 *ŋu ci c-ku-tuu-nym ra?*
 24885 be:FACT QU IPFV:EAST-2-chase[III]

24886 '(And your cows, are they (still) like that), you let them out of the pen (in
 24887 the morning), and they come back home on their own, or do you have to
 chase them home?' (taRrdo conversation, 28-29)

24888 All vertitive verbs in Table 19.2 have corresponding homophonous autive forms.
 24889 Example (50) shows the use of the vertitive form of *tsum* 'take away', while (51)
 24890 illustrates its autive form. It is clear in the case of (51) that *nui-tsum* cannot be
 24891 interpreted as 'take back' (since a river flows in one direction and does not take
 24892 back floating objects to its source).

24893 (50) *icq^ha rjylpu u-tcuu nui kuu tycime nui, uzo*
 the.aforementioned king 3SG.POSS-son DEM ERG girl DEM 3SG
 24894 *u-rjylk^hβ nütcu jo-nui-tsum q^he*
 3SG.POSS-kingdom DEM:LOC IFR-VERT-take.away LNK
 24895 'The prince took the girl back (*vertitive*) to his kingdom.' (140504 baixue
 24896 gongzhu-zh, 232)

24897 (51) *azuy nui-nuipde-t-a nui ú-ŋu tu-ci kuu*
 1SG:GEN AOR-lose-PST:TR-1SG DEM QU-be:FACT INDEF.POSS-water ERG
 24898 *t^hu-a-nui-tsum nui ú-ŋu*
 AOR-3→3'-AUTO-take.away DEM QU-be:FACT
 24899 'Is it the one that I lost? Is it the one that the water took away
 24900 (*spontaneous*)?' (140427 bianfu jingji he shuiniao-zh, 29)

24901 Unlike the regular autive, but similarly to lexicalized autive verbs (§19.1.6), the
 24902 vertitive prefix is located closer to the verb stem than the causative, as shown by
 24903 the form *znuce* 'let go back' in (52).

24904 (52) *tui-yjyn pjui-ta-z-nui-ce jyY ri,*
 one-time IPFV:DOWN-1→2-CAUS-VERT-go be.allowed:FACT LNK
 24905 'I can let you go back home one time.' (150901 changfamei-zh, 171)

24906 19.3 Abilitative

24907 The abilitative *su-/z-* prefix occurs on transitive verb bases. It is formally identical
 24908 to the sigmatic causative, and possibly historically derived from it (§19.3.2). As
 24909 in the case of the causative, the allomorph *z-* is found on polysyllabic verb bases

19 Other verbal derivations

whose first syllable has a sonorant initial (§17.2.1.1). Since the abilitative only occurs on transitive verbs, there is no equivalent of the *suy-* allomorph (§17.2.1.4).

This prefix derives verbs expressing the ability of the transitive subject to perform the action of the base verb, as in *sundza* ‘be able to eat’ from *ndza* ‘eat’ (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 *nyqqa* ‘bear, endure, resist’.

- (53) *azō kūn̥y 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 numui nui-k^ho u-ŋgw*
3PL.POSS-NEG-OBJ:PCP-ABIL-eat DEM 3PL.POSS-room 3SG.POSS-in
nuutcu u-pui tu-nui-pa-nui pui-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) *synymmts^hu ku^l ky-ntsye c^hy-yuit ri*
ANTHR ERG OBJ:PCP-sell IFR:DOWNSTREAM-bring LNK
mu^lj-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

- 24936 *ty-rfit* *ra my-sur-χsu-ndzi pŷ-cti* *q^he*
 INDEF.POSS-child PL NEG-ABIL-feed-DU IFR.IPFV-be.AFF:FACT LNK
 24937 ‘They ran out of food, and were about to be unable to feed the children.’
 24938 (160701 poucet2, 55-56)
- 24939 (57) *tcendyre w-βlu* *zaza zo mu-to-sui-tcxt* *tce z̥umkhym*
 LNK 3SG.POSS-trick early EMPH NEG-IFR-ABIL-take.out LNK a.long.time
 24940 *zo c^hy-rui-suiso pŷ-ra*.
 EMPH IFR-APASS-think IFR.IPFV-be.needed
 24941 ‘He could not find a solution at first, and had to think for a long time.’
 24942 (140425 ajimide1, 19)

24943 This derivation can also be used to indicate the acceptance or reluctance of the
 24944 subject to do the action, as in (58).

- 24945 (58) *qafy w-me* *nui kui, tce li w-pi* *nura*
 fish 3SG.POSS-daughter DEM ERG LNK again 3SG.POSS-elder.sibling DEM.PL
 24946 *wuma zo mu-pŷ-sui-βde jui-ŋu*
 really EMPH NEG-IFR-ABIL-throw SENS-be
 24947 ‘The mermaid was reluctant to abandon her elder sisters.’ (150819
 24948 haidenver-zh, 303)

24949 As shown by examples (53) to (58), abilitative verbs are only attested in nega-
 24950 tive form in the corpus. For some if not most abilitative verbs, the presence of a
 24951 negative prefix is a requirement (§19.3). Non-negative forms can be elicited for
 24952 some of them (59).

- 24953 (59) *a-βlu* *ty-sui-tca-t-a*
 1SG.POSS-trick AOR-ABIL-take.out-PST:TR-1SG
 24954 ‘I succeeded in finding a solution.’ (elicited)

24955 19.3.1 Lexicalized abilitatives

24956 There are two lexicalized abilitative verbs with the reduced allomorph *s*: *sp^hut*
 24957 ‘can cut’⁵ from *p^hut* ‘cut, pluck’, ‘take out’ as in (60) (see also 12, §13.1.3) and the
 24958 complement-taking verb *spa* ‘be able to’ (§24.5.3.4) from *pa* ‘do’. In addition, the
 24959 isolated verb *jqu* ‘be able to lift’ might also be a lexicalized abilitative with an
 24960 irregular allomorph of the prefix (§19.7.8).

⁵ In Chinese, this verb in negative form is translated as 切不动 <qiēbùdòng> ‘cannot cut’ or 咬
 不动 <yǎobùdòng> ‘cannot tear by chewing’.

19 Other verbal derivations

- 24961 (60) *mbruatcuu ki* *muáj-mtcob* *tce* *muáj-sp^hut*
knife DEM.PROX NEG:SENS-be.sharp LNK NEG:SENS-can.cut
24962 ‘This knife is not sharp, it cannot cut.’ (elicited)

24963 Both *spa* ‘be able to’ and its base verb *pa* ‘do’ have cognates in all Gyalrongic
24964 languages, including Tangut (𢂔385 .*wji*^{2,60} ‘be able to’ and 𢂔513 .*wji*^{1,10} ‘do’, see
24965 Jacques 2014c: 86;255-256), Khroskyabs (Wobzi *fsó* ‘savoir faire’, Lai 2017: 475)
24966 and Stau (*vzə* with metathesis). Although West Gyalrongic languages lack an abilitative
24967 derivation, the existence of this cognate set demonstrates that this derivation
24968 goes back to at least proto-Gyalrongic, and has been lost in West Gyalrongic
24969 except in this lexicalized form.

24970 19.3.2 Historical origin

24971 Although the abilitative derivation goes back at least to the common ancestor
24972 of Japhug and Tangut, it is nevertheless likely that it derives from the sigmatic
24973 causative (Jacques 2015d: 190).

24974 Although abilitative and causative derivations share little semantic commonalities,
24975 there are nevertheless potentially ambiguous sentences, where a *su-* prefix
24976 can be interpreted either as causative or as abilitative with very similar meaning,
24977 differing only in perspective. These ambiguous clauses may have been the pivot
24978 constructions allowing a reanalysis from causative to abilitative.

24979 The main ambiguous construction between causative and abilitative occurs
24980 with the presentive meaning of the sigmatic causative in negative form (§17.2.4.4).
24981 For instance, in example (61), the verb *suu-rqoꝝ* (from *rqoꝝ* ‘hug’) can be analyzed
24982 as an abilitative ‘be able to hug’.

- 24983 (61) *turme lañnulaꝝsum kuniꝝ my-ky-suu-rqoꝝ kui-fse*
people two.or.three also NEG-INF-ABIL-hug SBJ:PCP-be.like
24984 *kui-jpum jnu-βze c^ha*
SBJ:PCP-be.thick IPFV-grow can:FACT
24985 ‘(The Fir) can grow so thick that two or three people cannot hug (its
24986 trunk).’ (08-tWrgi, 6)

24987 However, it is also possible to construe the meaning in a different way: ‘The
24988 fir can grow so thick that it prevents even two or three people from hugging
24989 (its trunk)’, with a causative interpretation. This interpretation is possible due to
24990 the ambiguity of the scope of the negation of the causative, which generates the
24991 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 *su-* 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 *kunr* ‘also, even’ the ergative cannot surface anyway (§9.1.6.1), so that the surface ambiguity between causee and causer can only be resolved by person indexation.

This hypothesis is made more plausible by the fact that, as discussed above, abilitative verbs almost always occur in negative form.

Another potential pivot construction between causative and abilitative is found with the instrumental use of the sigmatic causative (§17.2.5.8). In (62) for instance, the *su-* prefix is an instrumental causative (‘sew with’) but the context also invites an abilitative interpretation (‘be able to sew’).

- (62) *kuuki taqaβ ki, u-xso taqaβ nuu mas, nykinu, nufse taqaβ nuu mas tce, nuu rcanu, tc^hi*
 FILLER like.that needle DEM not.be:FACT LNK DEM UNEXP:FOC what
nur-tui-suuso-t c^huu-tui-nuu-sui-tʂuiβ k^huu
 AOR-2-think-PST:TR IPFV-2-AUTO-CAUS/ABIL-sew be.possible:FACT
 ‘This needle is no ordinary needle, it is not a simple needle like that, (with it) you will be able to sew whatever you like.’ (140508 benling gaoqiang de si xiongdi-zh, 103)

19.4 Distributed action

The distributed action derivation has a double morphological exponence, combining a prefix *ny-* with the partially reduplicated stem of the base verb. Partial reduplication applies to the last syllable of the stem if polysyllabic (§4.1), and the replicant takes the vowel *-u* by default, except in a few cases studied in §19.4.2.1 and §19.4.2.2. The distributed action derivation is not compatible with verbs that already have reduplicated forms or a *ny-* or *nu-* prefix. For instance, *nuqambum-bjom* ‘fly’ lacks a distributed action form; to express this meaning, a serial verb construction (§25.4.1.3) with the distributed action derivation *nyčuče* ‘go around’ (from the motion verb *če* ‘go’) is used instead, as in (63).

- (63) *uu-bar ra ko-ts^hob-nuu tce tcendyre, rjylpu nuu chony*
 3SG.POSS-wing PL IFR-attach-PL LNK LNK king DEM COMIT
ayndundyt ju-nuqambum-bjom-ndzi tce ju-nyčuče-ndzi ra
 everywhere IPFV-fly-DU LNK IPFV-DISTR:GO-DU PL

19 Other verbal derivations

- 25022 *to-khur* *nui-ŋu.*
 IFR-be.possible SENS-be
 25023 ‘They attached wings on her back, and she became able to fly around
 25024 everywhere with the king.’ (150818 muzhi guniang-zh, 515)

25025 This derivation is found with both intransitive and transitive verbs, as shown
 25026 by the examples in Table 19.3, and does not affect valency. It expresses a repeated
 25027 action, often (with the base verb has a motional meaning) with aimless motion,
 25028 distributed spatially and/or temporally. It is semantically very close to the Chi-
 25029 nese construction X来X去 *X lái X qù*, and distributed action derivation can often
 25030 be translated by this construction: for instance *nyrjurjuy* ‘run around’ closely
 25031 corresponds to Chinese 跑来跑去 *pǎo lái pǎo qù*.

25032 The distributed action derivation preserves stem alternation (§12.2.1). The verb
 25033 *nṛtuti* ‘tell around’ has the stem II *-nṛtutut* as expected from the base verb *ti* ‘say’
 25034 (stem II *-tut*), and *nṛcūce* ‘go around’ has the stem II *anṛruri* with a prefixed *a-*
 25035 like the stem II *-ari* of the base verb *ce* ‘go’.

Table 19.3: Examples of distributed action derivations

Base verb	Derived verb
<i>ŋke</i> ‘walk’	<i>nṛŋkuŋke</i> ‘walk around’
<i>rjuy</i> ‘run’	<i>nṛrjurjuy</i> ‘run around’
<i>mtsax</i> ‘jump’	<i>nṛmtsumtsax</i> ‘jump around’
<i>ce</i> ‘go’	<i>nṛcūce</i> ‘go around’
<i>çar</i> ‘search’	<i>nṛcūcar</i> ‘search around’
<i>ndo</i> ‘take’	<i>nṛndundo</i> ‘carry around’
<i>ti</i> ‘say’	<i>nṛtuti</i> ‘tell around’ (or ‘say many times’)
<i>çtʰuz</i> ‘turn towards’	<i>nṛçtʰuzçtʰuz</i> ‘turn in all directions’
<i>βndu</i> ‘hit’	<i>nṛβndubβndu</i> ‘hit repeatedly’
<i>tʰu</i> ‘ask’	<i>nṛtʰutʰu</i> ‘ask around’
<i>βji</i> ‘chase’	<i>nṛβjuβji</i> ‘chase around’

25036 The distributed action derivation can be semantically very close to the repe-
 25037 tition of the verb with the additive linker *nṛ*, and both often occur in the same
 25038 contexts. In the case of motion verbs, repetition with alternation between the
 25039 EASTWARDS and WESTWARDS orientations (§15.1.4.3) has the same ‘goal-less ac-
 25040 tion’ function as the distribution action derivation. For instance, the meaning of
 25041 example (64) could be expressed with the verb *nyrjurjuy* ‘run around’.

- 25042 (64) *ko-rfuy ny ny-rfuy zo q^he,*
 IFR:EAST-run LNK IFR:WEST-run EMPH LNK
 25043 ‘She ran around.’ (150901 changfamei-zh, 112)

25044 However, in the case of allative motion verbs (§15.1.2.1), distributed action
 25045 derivation and verb repetition can have a different meaning. The former gener-
 25046 ally expresses the absence of a specific goal as in (65), and often co-occurs with
 25047 the adverb *avvndundyt* ‘everywhere’ (see 63 above). The distributed action verb
 25048 *nycwce* is only compatible with the unspecified orientation prefixes, and cannot
 25049 occur with any of the other six orientations (§15.1.3).

- 25050 (65) *wzo-suwo ju-nycwce mu-pjy-jyy*
 3SG-as.wish IPFV-DISTR:go NEG-IFR.IPFV-be.allowed
 25051 ‘(The nightingale) was not allowed to (fly) around freely.’ (140519
 25052 yeying-zh, 109)

25053 On the contrary, verb repetition with the same orientation prefix (66) (unlike
 25054 64) conveys an idea of continuous and lengthy motion in one specific direction, a
 25055 meaning that would be incompatible with that of the corresponding distributed
 25056 action verb *nycwce* ‘go around’.

- 25057 (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
 25058 *tcendi tcendi tce tcendyre mts^hu ci ny-k-xtuy-ci.*
 west west LNK LNK lake INDEF IFR-PEG-meet-PEG
 25059 ‘He went towards the west (for a long time), very far in the west, and
 25060 found a lake.’ (28-smAnmi, 91-92)

25061 With non-motional oriented verbs such as *ct^huz* ‘turn towards’ (§15.1.2.4), the
 25062 distributed action derivation does not imply translational motion, but expresses
 25063 the idea of turning one’s aim/look/body part towards all directions, as with the
 25064 verb *nyct^huhuz* in (67).

- 25065 (67) *w-enra ra ny-nyct^huhuz tceri, nyki, ty-pytso ra*
 3SG.POSS-nose PL IFR-DISTR:turn.towards LNK FILLER INDEF.POSS-child PL
 25066 *khri w-pa ky-ky-sut-ynba^h nui pjy-sutxyl matci*
 bed 3SG.POSS-under AOR-OBJ:PCP-CAUS-hide DEM IFR-discover LNK
 25067 *w-di pjy-mnym tce,*
 3SG.POSS-smell IFR.IPFV-have.a.smell LNK
 25068 ‘(The ogre) pointed his nose in all directions, and discovered the children

19 Other verbal derivations

25069 that had been hidden under the bed because of the smell.' (160704
 25070 poucet4-v2, 4-5)

25071 With verbs of speech such as *ti* 'say' and *t^hu* 'ask', the distributed action derivation
 25072 (respectively *nxtuti* 'tell around' and *nxt^hut^hu* 'ask around') generally implies
 25073 a repeated activity (generally at different places) directed towards many people
 25074 as in (68) and (69). These verbs can select dative recipients as their base verbs
 25075 (§14.4.1), but those are rarely overt and if overt only generic nouns such as *turme*
 25076 'people' are possible.

- 25077 (68) *nx-smulym nuu azo a-rpyo yuu-thuu-lxt*
 25078 2SG.POSS-prayer DEM 1SG 1SG.POSS-lap CISL-AOR:DOWNSTREAM-release
 25079 *tce, tce mucin my-nxtuti-a ma, nuu mas q^he,*
 LNK LNK at.all NEG-DISTR:say:FACT-1SG LNK DEM not.be:FACT LNK
 25080 *tu-nxtuti-a nyu*
 25081 TRAL-DISTR:say-1SG be:FACT
 25082 '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)

- 25083 (69) *tcendyre zuu~zimk^hym zo abyndundxt zo jy-nxt^hut^hu tce*
 25084 LNK EMPH-long.time EMPH eveywhere EMPH IFR-DISTR:ask LNK
 25085 *"qala noj nuu-ari" ntsuu to-ti pjy-nxt^hut^hu tce,*
 25086 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)

25087 However, *nxtuti* can also have a temporally protracted action meaning 'speak
 25088 for an (overly) long time' without the implication of more than one recipient, as
 25089 in (70), a sentence describing the plight of an informant assailed with questions
 25090 by a linguist.

- 25091 (70) *ky-nxtuti kuu a-rqo zo*
 25092 IFR-DISTR:say ERG 1SG.POSS-throat EMPH
 25093 *ky-nuu-suuy-ndzi-t-a*
 25094 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 *tsʰyt* ‘try’, the distributed action derivation *nxtsʰwutsʰyt* ‘test/try again and again’ expresses repetition, as in (71) with first syllable reduplication indicating iterative coincidence (§12.4.1.3).

- (71) *tcendyre tcʰeme nu c-to-nytsʰwutsʰyt ri, tu-ta-nytsʰwutsʰyt zo nu tcʰeme nu kua labnylab zo tu-ste*
 LNK girl DEM TRAL-IFR-DISTR:try LNK ITER~AOR:3→3'-DISTR:try
zo nu tcʰeme nu kua labnylab zo tu-ste
 EMPH DEM girl DEM ERG IDPH(III):with.ease EMPH IPFV-do.like[III]
pui-cti pui-ŋu.
 PST.IPFV-be.AFF:FACT SENS-be
 ‘He has gone and tested the girl again and again, and each time he tested her, she answered correctly with ease.’ (2005tAwakWcqraR, 54)

Stative verbs, including adjectives, are usually incompatible with the distributed action derivation. The resulting form would be formally identical to the tropative (§17.5) with emphatic reduplication (§12.4.3). The only adjective with such a derivation is *snu* ‘be mad’ (from *smio* ‘be crazy’), which yields *nxsnuusnu* ‘be a little crazy, do crazy things (intermittently)’, attested in (72).⁶

- (72) *pui-nxsnuusnu ntsui pjy-cti tce*
 IPFV-DISTR:be.mad always IFR.IPFV-be.AFF:FACT LNK
 ‘He always did (all sorts of) crazy things.’ (150829 jidian-zh, 12)

The distributed action derivation also has the sense of ‘do *X* in disorderly fashion’: the form *nxfufse* (from the similative verb *fse* ‘be like’) can be interpreted as ‘act foolishly’, as in (73). From this use, *nxfufse* has developed the extended meaning ‘be pretentious’, like that of the auto-evaluative derivation (§19.5).

- (73) *tcʰi pur-tui-nyme ŋu, tcʰi pur-tui-nxfufse pui-ŋu ma,*
 what SENS-2-make[II] be:FACT what SENS-2-DISTR:be.like SENS-be LNK
n̩ki jx-pʰyo ma
 FILLER IMP-flee LNK
 ‘What are you doing, what kind of foolish act are you doing, flee?’
 (Norbzang 2012, 65)

In addition to regular distributed action verbs, there is one example with the prefix *rɣ-*: *rɣβzuβzar* ‘cut into many pieces’ from *βzar* ‘cut’.

⁶ In this translated example, the form *pui-nxsnuusnu* 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.

25120 19.4.1 Lexicalized distributed action verbs

25121 A certain number of verbs have forms that are similar to a distributed action
 25122 derivation, combining a *nṛ-* prefix with partial reduplication of the stem, but
 25123 have no corresponding base verb with exactly the same stem. The intransitive
 25124 *nṛrura* ‘look around’ is a particularly good candidate to be analyzed as a fos-
 25125 silized derivation of this type, as its meaning exactly fits that of a distributed
 25126 action form of a verb meaning ‘look’. It might be an irregular derivation from *ru*
 25127 ‘look at’ (§15.1.2.4), with unexplained vowel alternation (note that the expected
 25128 *†nṛruru* does not exist).⁷

25129 The transitive verbs *nṛkʰuukʰrut* ‘drag along’, *nṛeući* ‘drag along’ and *nṛmuma*
 25130 ‘stroke’⁸ are possible candidates for being analyzed as lexicalized distributed ac-
 25131 tion verbs. The verb *nṛeući* might be related to *rṛci* ‘pull’, but for the other two
 25132 no known root exist in the language, and if verbs such as **kʰrut* and **ma* did exist
 25133 at an earlier stage, they have been lost at least in the Kamnyu dialect. Note how-
 25134 ever that *nṛeući* and *nṛkʰuukʰrut* ‘drag along’ are orientable manipulation verbs
 25135 (§15.1.2.2), and express an action occurring in one specific direction, as in (74); if
 25136 these verbs are indeed ancient distributed action derivations, this derivation pos-
 25137 sibly has the sense of ‘protracted action’ (as in 70 above) rather than distributed
 25138 action in the proper sense.

- 25139 (74) *tce ki a-txpi ki lu-nṛkʰuukʰrui-a tce azo*
 LNK DEM.PROX 1SG.POSS-staff DEM.PROX IPFV:UPSTREAM-drag-1SG LNK 1SG
 25140 *lu-mṛku-a ḷu tce, a-qʰu*
 IPFV:UPSTREAM-be.first-1SG be:FACT LNK 1SG.POSS-after
 25141 *lx-yi je tce, a-txpi ur-jru~jrob*
 IMP:UPSTREAM-come SFP LNK 1SG.POSS-staff 3SG.POSS-trace~PERLATIVE
 25142 *zo lx-yi je tce,*
 EMPH IMP:UPSTREAM-come SFP LNK
 25143 ‘I am going up there first, dragging this staff_i (of mine) along, come after
 25144 me and follow its_i trace.’ (2005 Kunbzang, 200-201)

25145 On the other hand *nṛmuma* ‘stroke’ is used to express touching or groping (eg.
 25146 in the dark) without specific direction, as in (75).

⁷ Khroskyabs 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.

⁸ The verb *nṛmuma* ‘stroke’ is homophonous with the emphatic reduplicated form of the transitive verb *nṛma* ‘do, work’.

- 25147 (75) *uu-mat nuu puu-rko tce puú-wy-nymuma tce rbom.*
 25148 3SG.POSS-fruit DEM SENS-be.hard LNK IPFV-INV-stroke LNK be.rough:FACT
 25149 'Its fruit is hard and rough to the touch.' (12-ndZiNgri, 44)

25150 The intransitive verb *nyp^hup^hu* 'beg' could superficially seem to be a lexicalized
 25151 distributed action verb, but it is better to analyze it as a denominal verb (§20.7)
 25152 from the inalienable noun *u-p^hup^hu* 'alms', which selects the person receiving
 25153 the alms (rather than the one giving them) as possessor, as shown by (76) (see
 25154 also §5.1.2.13).

- 25155 (76) *nyzo ny-p^hup^hu ky-yut aj a-va ku-me*
 25156 2SG 2SG.POSS-alms INF-bring 1SG 1SG.POSS-free.time PRS-not.exist
 'I don't have time to give you alms.'(2003kandZislama, 154)

25157 The verb *nystuustu* 'cause trouble to' (77) is formally the distributed action derivation
 25158 from the verb of simulative *stu* 'do like' (§14.4.2), with a synchronically un-
 25159 predictable meaning.

- 25160 (77) *zara-stuusti tce nuu-kuu-nystuustu maye,*
 25161 3PL-alone LNK 3PL.POSS-SBJ:PCP-cause.trouble not.exist:SENS
 25162 'When alone (without their young ones), (the wild yaks) have no enemies
 (predators).' (20-RmbroN, 50)

25163 19.4.2 Irregular partial reduplication

25164 Partial reduplication with *Cuu-* replicant (§4.1) is not the only way of forming
 25165 distributed action verbs. Suffixal reduplication in *-lV* (§19.4.2.1) and prefixal redu-
 25166 plication in *Co_k-* and *Cum-* (§19.4.2.2) are also attested.

25167 19.4.2.1 Replicant in *-lV*

25168 The verbs in Table 19.4 take a suffixed syllable *-le* or *-lu* (*nyymyo* 'watch' → *ny-*
 25169 *mnyo-le*), or a syllable in *-lV* whose rhyme replicates that of the verb stem (*mbyak*
 25170 'turn over' → *ny-mbyak-lax*). This exceptional example of rhyme reduplication in
 25171 Japhug has important consequences for phonological analysis (§3.5.2.1). A similar
 25172 type of reduplication is observed in pattern IV ideophones (§10.1.2.4).

25173 Apart from *çar* 'search', which has two alternative distributed action deriva-
 25174 tions *nyçuucar* and *nyçarlar* (both 'search around, search in all directions'), the
 25175 other verbs only occur with *-lV* replicant variant. The verb *mtçur* 'turn' has two
 25176 variants *nymtçurlur* and *nymtçurlu*.

19 Other verbal derivations

Table 19.4: Examples of distributed action derivations with -IV replicant

Base verb	Derived verb
<i>mbyaꝝ</i> ‘turn over’ (vi)	<i>nymbyaꝝlaꝝ</i> ‘turn over here and there’ (vi)
<i>ndzaꝝ</i> ‘fall/roll’	<i>nynndzaꝝlaꝝ</i> ‘roll again and again’ (or in all directions)
<i>ndzaꝝ</i> ‘swim’	<i>nynndzaꝝlaꝝ</i> ‘swim around’
<i>mtçur</i> ‘turn’ (vi)	<i>nymtçurlur</i> ‘turn in all directions’ (vi)
	<i>nymtçurlu</i> ‘turn in all directions’ (vi)
<i>nymno</i> ‘watch’ (vl)	<i>nymnole</i> ‘watch the scenery’ (vi)
<i>tſaꝝ</i> ‘cause to fall/roll’	<i>nynntſaꝝlaꝝ</i> ‘cause to roll in all directions’
<i>pyaꝝ</i> ‘turn over’ (vt)	<i>nypyaslaꝝ</i> ‘turn over here and there’ (vt)
<i>çar</i> ‘search’	<i>nycarlar</i> ‘search around’

With the labile verb *nymno* ‘watch’, this derivation has an antipassivizing effect, since the derived verb *nymnole* ‘watch the scenery’ is strictly intransitive.

This derivation can be applied to both the base verbs *tſaꝝ* ‘cause to fall/roll’ and *pyaꝝ* ‘turn over’ and their anticausatives *ndzaꝝ* ‘fall/roll’ and *mbyaꝝ* ‘turn over’, respectively.

19.4.2.2 Replicant in *Cox-* or *Cum-*

A handful distributed action verbs take a replicant other than the regular -*u*. The transitive verb *mpʰur* ‘wrap’ yields *nymphoʒmpʰur* ‘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).

The intransitive verb *nýkaꝝ* ‘have a good time’ has the derived form *nýkumtaꝝ* ‘play around’ with -*Cum-* replicant, the only example of this type of reduplication in Japhug.

19.4.3 Compatibilities with other derivations

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).

Further derivations on distributed action verbs are verb rare. The verb *nymnole* ‘watch the scenery’ for instance can be causativized with the sigmatic prefix *z-*, as in (78).

- 25197 (78) *kvntc^hab ra c^hy-z-nympole*
 street PL IFR-CAUS-DISTR:watch
 25198 'He (took) him to do sightseeing in the city.' (140511 alading-zh, 53)

25199 19.5 Auto-evaluative

25200 Like the distributed action derivation (§19.4), the auto-evaluative derivation has
 25201 a double exponence: the prefix *zny-* and verb stem partial reduplication. It takes
 25202 a stative intransitive verb as input, and derives an intransitive verb meaning
 25203 'think of oneself as *X*, pretend to be *X*' (where *X* stands for the meaning of the
 25204 base verb, always expressing a positive characteristic), as in Table 19.5. Although
 25205 similar to reflexivized tropatives (§17.5), auto-evaluative verbs have a derogatory
 25206 meaning and imply pretentiousness and vanity or bragging.

25207 When the base verb already has an auto-evaluative meaning (*xpa* 'be proud'),
 25208 the auto-evaluative derivation only adds the derogatory nuance (*znyxpuχpa* 'be
 25209 arrogant').

Table 19.5: Examples of auto-evaluative derivations

Base verb	Derived verb
<i>mpçyr</i> 'be beautiful'	<i>znympçumpçyr</i> 'think of oneself as beautiful'
<i>χeu</i> 'be strong'	<i>znyχeuχeu</i> 'think of oneself as strong'
<i>xpa</i> 'be proud'	<i>znyχpuχpa</i> 'be arrogant'
<i>pe</i> 'be good'	<i>znyjpujpe</i> 'be full of oneself'

25210 The verb *znyjpujpe* 'be full of oneself' (from *pe* 'be good') has an irregular form
 25211 with an inserted *-j-* element (the expected form would be *†znypupe*), and its mean-
 25212 ing is slightly lexicalized 'be full of oneself' (from 'think of oneself as good').

- 25213 (79) *nui-rjylpu nui kui nura, maka, uzo ty-ky-fstyt yui*
 3PL.POSS-king DEM.ERG DEM:PL at.all 3SG AOR-OBJ:PCP-flatter GEN
 25214 *u-rju nura pjy-mts^hym tce, myzui zo*
 3SG.POSS-word DEM:PL IFR-hear LNK even.more EMPH
 25215 *to-znyjpujpe.*
 IFR-be.full.of.oneself
 25216 'Hearing these words of praise, the king became even more full of himself
 25217 than before.' (150830 afanti-zh, 98-99)

19 Other verbal derivations

Other examples of lexicalized auto-evaluative verbs include *znyhluli* ‘play the coquette’ (from *li* ‘be spoiled’) and *zn̥yŋyuŋu* ‘be arrogant’, a verb built from the root of the copula *ŋu* ‘be’, whose original meaning was ‘be right’ (§16.1.1.7).

19.6 Attenuative reduplication

In verbal derivation, reduplication occurs to express reciprocal (§18.4.1), distributed action (§19.4) and emphasis (§12.4.3). Combination of *a-* prefix with partial reduplication of the last syllable of the stem is also found with an attenuative meaning in a few stative verbs of colour (Table 19.6). Note that the replicated syllables takes the vowel /y/ instead of /u/ in *a-y̥y~yrum* ‘be whitish’ and *a-py~pyi* ‘be greyish’, and the absence of *w* in *a-y̥y~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>ayryyrum</i> ‘be whitish’
<i>pyi</i> ‘be grey’	<i>apypyi, apypyi</i> ‘be greyish’
<i>qarŋe</i> ‘be yellow’	<i>aqarŋurŋe</i> ‘be yellowish’

Since the base verbs in Table 19.6 can also be subjected to emphatic reduplication, we find minimal pairs like and *a-y̥y~yrum* ‘be whitish’ and *a-qarŋu~rŋe* ‘be yellowish’ (80) vs. *wyrui~wyrum* ‘be very white’ (81) and *qarŋu~rŋe* ‘be very yellow’ (82), respectively (§12.4.3).

- (80) *u-muntoŋ nura ayryyrum u-ŋguuz kuanŋ*
 3SG.POSS-flower DEM:PL be.whitish:FACT 3SG.POSS-inside:LOC also
aqarŋurŋe kuu-fse
 be.yellowish:FACT SBJ:PCP-be.like
 ‘Its flower is whitish, with a taint of yellowish.’ (‘it is like yellowish inside the whitish colour’) (16-CWrNgo, 207)
- (81) *tceri qro numu wuma zo wyrum, kuu-wyrui~wyrum*
 LNK pigeon DEM really EMPH be.white:FACT SBJ:PCP-EMPH~be.white
zo ŋu.
 EMPH be:FACT
 ‘The pigeon is very white.’ (24-qro, 2)

- 25239 (82) *wi-mumtob rca wuma zo mpcyr tce*
 3SG.POSS-flower UNEXP:FOC really EMPH be.beautiful:FACT LNK
 25240 *kui-qarŋw~rŋe zo ŋu.*
 SBJ:PCP-EMPH~be.yellow EMPH be:FACT
 25241 'Its flower is very beautiful, it is very yellow.'

25242 19.7 Fossil affixes and marginal derivations

25243 19.7.1 Volitional *mu-* prefix

25244 The intransitive dynamic verb *munmu* ‘move’ contains a prefix *mu-*, as shown
 25245 by the existence of the bare root *nmu* in the verb *nmu* ‘shake (of earthquakes)’
 25246 ([Jacques 2017a](#)), which is only found in collocation with the noun *waju* ‘earth-
 25247 quake’ (83).

- 25248 (83) *waju jx-nmu*
 25249 earthquake IFR-shake
 'There was an earthquake.' (elicited)

25250 The Limbu labile verb |*munt*| ‘move’ ([Michailovsky 2002](#)) is probably cognate
 25251 to the Japhug root ([Jacques 2017b](#): 212, see also §3.3.3 on the absence of coda
 25252 in Japhug), and since *munmu* means ‘move’ in general (for both animate and
 25253 inanimate beings), the restriction of the base verb *nmu* to earthquakes specifically
 25254 cannot be an archaism. Rather, the ancestor of the base verb *nmu* must have
 25255 had a more general meaning ‘move’ when the proto-form from which *munmu*
 25256 originates was derived from it. The exact meaning of the ancestor of *nmu*, and the
 25257 function of the *mu-* prefix in this verb are uncertain, but the following scenario
 25258 can be proposed: the *n-* element in *nmu* could be a frozen allomorph of the autive
 25259 ([§19.1](#)), and the original meaning of *nmu* could have been ‘move (spontaneously,
 25260 without external agency)’, and the derived form *munmu* would thus have had the
 25261 meaning ‘move (voluntarily)’: in Japhug, this verb can refer to volitional actions,
 25262 and it is used for instance with the imperative and prohibitive (for instance in
 25263 84).

- 25264 (84) *ma-nui-tui-munmu ma my-pʰyn*
 25265 NEG-IMP-2-move LNK NEG-be.efficient:FACT
 'Don't move, otherwise it won't work!' (2002 qala, 69)

In this interpretation, the original function of the *mu-* in this example would be deriving a volitional verb out of a non-volitional one (itself rendered non-volitional by the autobenefactive prefix).

In other Gyalrong languages, only cognates of the derived verb *munmu* are attested. The Bragbar Situ form *vərmô* ‘bouger’ (Shuya Zhang 2020) suggests that *mu-* originates from **wə-* with regressive nasalization from the last syllable. This invalidates a possible comparison with the volitional **m-* prefix reconstructed by Baxter & Sagart (2014: 55) in Old Chinese.

19.7.2 Applicative -*t* suffix

Beside the productive prefixal *nu-* applicative (§17.4), Japhug has vestigial traces of a -*t* applicative suffix, better attested in Kiranti and West Himalayish languages (see Michailovsky 1985, Jacques (2015a) and Jacques 2016c for comparative studies of this suffix). Only two examples of this derivation exist in Japhug: *yut* ‘bring’ and *mdut* ‘strongly wish for’.⁹

The verb of manipulation *yut* ‘bring’ derives from the motion verb *yi* ‘come’; the vowel alternation is regular as pre-Japhug **i* changes to /ui/ in closed syllables. With a motion verb such as ‘come’, the effect of the applicative (85) is similar to a causative (86).

(85) ‘come with X’ → ‘bring’

(86) ‘cause X to come’ → ‘bring’

The transitive verb *mdut* ‘be resolved to, be determined to’ is historically related to the verb *mdu* ‘live up to’, and constitutes another example of the -*t* applicative, though it is less immediately obvious than in the case of *yut* ‘bring’ because each of the verbs has undergone semantic specialization after the derivation took place.

The verb *mdu* is semi-transitive (§14.2.3), and takes as its semi-object the lifespan; it can be applied to plants, animals and humans, as shown by examples (87) and (88). It selects the DOWNSTREAM series of directional prefixes (§15.1.4.1).

(87) *tce nuŋa užo nuŋui, sqamŋu-xpa jamar cʰui-mdut*
LNK COW 3SG DEM fifteen-year about IPFV-live.up.to

⁹ More examples of -*t* applicative are found in Situ (Y.-J. Lin 2017; Shuya Zhang 2020), though all involving verbs of motion.

- 25295 *nur-ŋgryl*
 SENS-be.usually.the.case
 25296 ‘A cow itself can live up to fifteen years.’ (05-qaZo, 142)
- 25297 (88) “*nɔzo nur kʰruatsu-xpa a-tʰui-tu-mduu ra nɣ*”
 2SG DEM ten.thousand.year IRR-PFV-2-live.up.to be.needed:FACT SFP
 25298 *to-ti nur-ŋju. tce “azo kuan kʰruatsu cʰondyre tuu-rzaŋ*
 IFR-say SENS-be LNK 1SG also ten.thousand.year COMIT one-day
 25299 *nunu cʰui-mduu-a ra*” *to-ti*
 DEM IPFV-live.up.to-1SG be.needed:FACT IFR-say
 25300 ‘He said: ‘May you live ten thousand years! I want to live one thousand
 25301 years and one more day.’ (150830 afanti-zh, 64)

25302 The meaning ‘live until/up to’ is however a semantic innovation in Japhug:
 25303 its Situ cognate *mdš* means ‘reach’ as a motion verb. Japhug has restricted the
 25304 meaning of this verb to a very specific context.

25305 The verb *mdut* ‘be resolved to, be determined to’ is morphologically transitive,
 25306 and can take as its object an infinitive complement as in (89). It shares with *mduu*
 25307 ‘live up to’ the DOWNSTREAM directional prefixes (*cʰui-*).

- 25308 (89) *azo kurui-skyt ky-βzjoz nur cʰui-mduit-a zo*
 1SG Tibetan-language INF-learn DEM IPFV-be.determined EMPH
 25309 *cti*
 be.AFF:FACT
 25310 ‘I am determined to learn Tibetan/Gyalrong.’ (elicited)

25311 The precise meaning of *mdut* is to be determined to do something that one has
 25312 confidence they can realize. If one accepts the idea that the original meaning of
 25313 Japhug *mduu* ‘live up to’ was ‘reach’ as in Situ, the meaning ‘be determined to’
 25314 of the verb *mdut* has the same relationship to that of the base verb as English
 25315 ‘reach for’ (‘reach for the stars’) to the verb ‘reach’, with a conative interpreta-
 25316 tion ‘try/strive to reach’. The addition of the suffix *-t* turns the semi-transitive
 25317 (morphologically intransitive) *mduu* into a transitive verb whose A corresponds
 25318 to the S of the base verb. This applicative derivation from a semi-transitive verb
 25319 is not unique in Japhug; the transitive verb *nurga* ‘like’ from the verb *rga* ‘like,
 25320 be happy’ with the *nur-* applicative is another similar example (§17.4).

25321 19.7.3 Antipassive *-t* suffix

25322 The semi-transitive verb *βjrt* ‘obtain’, as proposed by Gong (2018: 310), is related
 25323 to the orientable manipulation verb *mja* ‘take (from)’, a meaning illustrated by ex-
 25324 ample (90). The two verbs differ by vowel alternation, -*t* suffixation and preninal
 25325 nasalization.

25326 (90)	<i>numura yuu nuu-rte</i>	<i>nua ci ui-q^hu</i>	<i>ci zo</i>
	DEM.PL GEN 3PL.POSS-hat	DEM one 3SG.POSS-after one	EMPH
25327	<i>to-nua-mja.</i>	<i>to-nua-mja</i>	<i>q^he jo-tsum</i>
	IFR:UP-AUTO-take	IFR:UP-AUTO-take	LNK IFR-take.away LNK
25328	<i>ui-pi</i>	<i>ra tuukaka nuu-ku</i>	<i>ui-tax</i>
	3SG.POSS-elder.sibling PL	each	3PL.POSS-head 3SG.POSS-on
25329	<i>pjx-ta.</i>		
	IFR:DOWN-put		

25330 ‘He took their crowns one after the other and put them on the heads of
 25331 each of his brothers.’ (160705 poucet5-v2, 19-20)

25332 The transitive verb *mja* can also mean ‘get, obtain’ when used with the DOWN-
 25333 WARDS orientation, as in (91) (§15.1.5.6). Apart from Tshobdun *mjé*, cognates in
 25334 other Gyalrongic languages (such as Zbu *vjé?*) lack a nasal preinitial, suggesting
 25335 that the Japhug and Tshobdun forms result from fusion with the autive prefix
 25336 (§19.1, Gong 2018: 310). This constitutes an interesting exclusive common innova-
 25337 tion shared by Japhug and Tshobdun.

25338 (91)	<i>tua-sji ky-mdi</i>	<i>tu-kua-ryma,</i>	<i><gongfen></i>	<i>vnua-skyrma</i>
	one-day INF-complete	IPFV-GENR:S/O-work	labour.point	two-cent
25339	<i>pju-wy-mja ma</i>	<i>muu-puu-kuu-c^ha,</i>		
	IPFV-INV-take apart.from	NEG-PST.IPFV-GENR:S/O-can		
25340	<i>puu-kuu-xtci.</i>			
	PST.IPFV-GENR:S/O-be.small			
25341	‘Working a complete day, I could only get two cents of labour points, as I			
25342	was young.’ (2010-09, 86)			

25343 The verb *βjrt*, meaning ‘obtain’ (something that everyone is looking for) is
 25344 semi-transitive (§14.2.3), optionally taking a semi-object or a complement clause
 25345 as in (92) and (93), but conjugated intransitively, as shown by the Aorist *pua-βjrt*
 25346 (AOR-obtain) ‘he got (it)’ (with a A-type preverb, §14.3.1).

- 25347 (92) *ky-ndza maka mur-pjy-βjyt.*
 INF-eat at.all NEG-IFR:DOWN-obtain
 25348 ‘He did not obtain anything to eat.’ (qajdoskAt 2002, 104)
- 25349 (93) *tx-tciu stu kui-wxti numuu kui [numuu tc^heeme nuu*
 INDEF.POSS-son most SBJ:PCP-be.big DEM ERG DEM girl DEM
 25350 *muu-puu-ky-βjyt] nuu wuma zo pjy-ny-sryduuy*
 NEG-AOR-INF-obtain DEM really EMPH IFR-TROP-be.unpleasant
 25351 ‘The elder boy was upset that he did not get the girl.’ (140513 shenqi de
 25352 feitan-zh, 219)

25353 The verb *βjyt* ‘obtain’ is not synchronically derived from *mja* ‘take’: both verbs
 25354 come from an etymon reflected by Zbu *vjé?* ‘prendre, obtenir, enlever’ (Gong
 25355 2018: 310) whose expected Japhug form would be **βja*. Based on the comparative
 25356 evidence in Gong (2018: 310–311), this lost verb was transitive and had the same
 25357 argument structure as Japhug *mja*.

25358 Hence, the *-t* suffix in *βjyt* ‘obtain’ used to remove morphological transitivity,
 25359 turning the transitive subject into a intransitive subject, and the and the object
 25360 into an (optional) semi-object. Given the fact that some *-t* codas in Japhug origi-
 25361 nate from earlier **-s* (§11.3), it is possible that this *-t* suffix is related to the reflex-
 25362 ive/middle suffix attested in Kiranti, Nungish and West-Himalayish (reflected for
 25363 instance by Khaling *-si*, Jacques et al. 2016), which has antipassive functions in
 25364 many languages, including possibly Old Chinese (Jacques forthcoming).

25365 19.7.4 Other detransitive prefixes

25366 The transitive verb *t^hu* ‘ask’ (with indirective alignment, §14.4.1), in addition to
 25367 the regular antipassives *rvt^hu* ‘ask questions’ and *svt^hu* ‘ask for a girl in marriage’
 25368 (§18.6.7), has two isolated intransitive derived forms: *rvtmut^hu* ‘ask around’ and
 25369 *cumt^hu* ‘ask a lot of questions’ (94), from which the compound *cumt^huspo₂* ‘child
 25370 who likes to ask a lot of question’ is derived (with *spo₂* ‘have a hole’ as second
 25371 element).

- 25372 (94) *nyzo ndyre ny-tui-cumt^hu* *nu!*
 2SG LNK 2PL.POSS-NMLZ:DEG-ask.a.lot.of.questions SFP
 25373 ‘You really (like to) ask a lot of questions!’ (elicited)

25374 It is possible that the *-m(u)-* element in these complex prefixes is historically
 25375 related to the *amu-* reciprocal and distributed property prefixes (§18.4.2, §18.7).

25376 **19.7.5 *ry-* prefix**

25377 Some verbs have *ry-* prefixes that can neither be analyzed as antipassive (§18.6.1)
 25378 nor as denominal (§20.4) derivations, at least synchronically, and whose function
 25379 is not clearly identifiable.

25380 The verbs *rywum* ‘tidy up’ and *rytsʰyt* ‘try’ are clearly derived from *wum* ‘gather’
 25381 and *tsʰyt* ‘try’, respectively. However, they cannot be analyzed as antipassives,
 25382 since they are morphologically transitive like their base verbs.

25383 The verb *rywum* can mean ‘tidy up’ as in (95), taking as object a place (house
 25384 or room) or ‘collect (and put in order)’ as in (96).

- 25385 (95) *t̥cime nuu kuu kʰa ku-ryzi tce, nuu-ndz̥ytsʰi ra tu-βze,*
 girl DEM ERG house IPFV-stay LNK 3PL.POSS-food PL IPFV-make[III]
 25386 *nuu-kʰa ra tu-rywum p̥j̥-ŋu*
 3PL.POSS-house PL IPFV-tidy.up IFR.IPFV-be
 25387 (140504 baixuegongzhu-zh, 102)

- 25388 (96) *rg̥tpu nuu kuu nuura rŋwul nuu-ky-mbi cʰo laχtcʰa*
 old.man DEM ERG DEM:PL silver AOR-OBJ:PCP-give COMIT thing
 25389 *nuu-ky-mbi nuura to-rywum qʰe,*
 AOR-OBJ:PCP-give DEM:PL IFR-collect LNK

25390 The old man collected the money and the things that (the people) had
 25391 given (them).’ (150906 toutao-zh, 174)

25392 These meanings can also be conveyed by the base verb *wum* ‘gather’, as in (97).
 25393 However, *wum* has a much wider range of meaning, including ‘fold, close’ (of
 25394 umbrellas, wings, see 92, §15.1.4.3) and ‘take as (disciple)’ (24, §8.1.7). The derived
 25395 verb *rywum* thus has a more specific and restricted use than its base verb.

- 25396 (97) *nuura kuu u-pxci ra ky-wum ta-qur-nuu tce,*
 DEM ERG 3SG.POSS-apple PL INF-gather AOR:3→3'-help-PL LNK
 25397 ‘They helped him to pick up his apples.’ (pear story-Tshendzin, 11)

25398 The meaning difference between *rytsʰyt* ‘try’ and *tsʰyt* ‘try’ is more difficult
 25399 to ascertain, as both verbs can occur with a nominal object as in (98). In the
 25400 corpus, when the derived verb *rytsʰyt* has an overt object, it is always however a
 25401 complement clause, and it can have the sense of ‘compare’ as in (99).

- 25402 (98) *uzo kuu tui-ŋga ta-rytsʰyt/ta-tsʰyt*
 3SG ERG INDEF.POSS-clothes AOR:3→3'-try
 25403 ‘He tried the clothes.’ (elicited)

- 25404 (99) [a-mbro u-jme nuu-zri ci, nvki, nyzo ny-kvrm̩e
 1PL.POSS-horse 3SG.POSS-tail SENS-be.long QU FILLER 2SG 2SG.POSS-hair
 25405 nuu] cuu-ryts^hyt-tci ra
 SENS-be.long DEM TRAL-try:FACT-1DU be.needed:FACT
 25406 'Let us try whether my horse's tail is longer, or your hair (let us see which,
 25407 of my horse's tail and your hair, is the longest).' (2003 Kunbzang, 470)

25408 However, the base verb is also possible with exactly the same type of comple-
 25409 ment clauses, as in (100).

- 25410 (100) <chengming> kui, numuu qarts^hi numuu to-ts^hyt. tce pur-c^ha ci
 ANTHR ERG DEM cricket DEM IFR-try LNK SENS-can QU
 25411 muúj-c^ha nura to-ts^hyt tce
 NEG:SENS-can DEM:PL IFR-try LNK
 25412 'Chengming tried the cricket, tried whether it would be victorious (in
 25413 cricket fights) or not.' (150904 cuzhi-zh, 142)

25414 The intransitive verb *rɔmpɔyr* 'make up' (101) is derived from the stative verb
 25415 *mpɔyr* 'be beautiful'.

- 25416 (101) pya t^hamtcyt nuu, [...] pjy-ra-χtci-nuu, nuu-ku ra pjy-sycyt-nuu
 bird all DEM IFR-APASS-wash-PL 3PL.POSS-head PL IFR-comb-PL
 25417 tce to-rɔmpɔyr-nuu puu-ju.
 LNK IFR-make.up-PL SENS-be
 25418 'All birds ... washed, combed their hair and dressed up.' (tulao de
 25419 wuya-zh, 15)

25420 It has the emphatic reduplicated form *rɔmpɔɔr~mpɔyr* with a rare -oɔ replicated
 25421 syllable, and often occurs in the causative form *zrɔmpɔyr* 'help X making
 25422 up' or 'make up/dress up using', as in (102).

- 25423 (102) tu-kui-z-rɔmpɔyr-tci ra
 IPFV-2→1-CAUS-make.up-1DU be.needed:FACT
 25424 'Help us dressing up and making up.' (140504 huiguniang-zh, 71)

25425 This use of the *rr*- prefix could be analyzed as a quasi-reflexive 'make oneself
 25426 beautiful', reminiscent of the case of the antipassive *raχtci* 'wash' (vi) (see 101 and
 25427 §18.6.7.5), though it cannot be analyzed as an antipassive or a reflexive since the
 25428 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 *yrtçyt* ‘select from’, more specifically ‘choose/select (someone) from a group of people’ (in particular, as a leader),¹⁰ is derived from *tçyt* ‘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 *yrtçyt* occurs in a finite relative clause (§23.2.2) whose relativized element is the object. The noun *nuu-ŋgumndzuy* ‘their leader’ inside the relative is the essive adjunct.

- (103) *tce nuu <faliedong> nuunu, [nuunu nuu-ŋgumndzuy*
 LNK DEM ANTHR DEM DEM 3PL.POSS-leader
ta-yrtçyt-nuu] *kua <shake> nuu ko-su-βraš.*
 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 *zyryrtçyt* ‘volunteer’ (to go and go something) has a meaning that is not completely predictable from that of the base verb.

Second, *yrlyt* ‘lock’ is related to *l̥st* ‘release’, which can mean ‘lock’ when occurring in collocation with the noun *s̥rcuu* ‘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 དྲୟୁଁ ‘*gsal* 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.

¹⁰ This verb has a Tshobdun cognate *wptset_{II}* ‘select’ (Sun & Blogros 2019: 209), and this derivation thus goes back at least to their common ancestor.

25458 **19.7.7 *a*- prefix**

25459 In addition to the passive (§18.1), reciprocal (§18.4.1) and denominal stative (§20.2.1)
 25460 derivations, a prefix *a*- has non-classifiable functions in the following examples.

25461 The stative verb *amtçor* ‘be pointy’ appears to be derived from *mtçor* ‘be sharp’.
 25462 Both are stative verbs, and are obviously close semantically (both can take for
 25463 instance *mbrutçuu* ‘knife’ as intransitive subject, as in 60, §19.3.1).

25464 The verb *acʰyt* ‘have X years of difference’ is either plain intransitive, taking
 25465 the number of years as subject (104), or semi-transitive, selecting the years as
 25466 semi-object (104b) (see also 62, §9.1.3.3).

- 25467 (104) a. *tcizo tci-pyr^tʰyβ* *kumju-pyrme acʰyt*
 1DU 1DU.POSS-between five-years differ.in.age:FACT
 25468 b. *tcizo kumju-pyrme acʰyt-tci*
 1DU five-years differ.in.age:FACT-1DU
 25469 ‘We have a five year difference.’ (elicited)

25470 It could potentially be analyzed as a denominal verb in *a*- (§20.2.1) from a lost
 25471 noun **cʰyt* borrowed from Tibetan ཀྱ ཕ ‘difference’. While the Tibetan origin
 25472 of the root is beyond doubt, it is also possible that this verb is derived by the *a*-
 25473 prefix from the semi-transitive *cʰyt* ‘differ by’ (itself from Tibetan), which selects
 25474 as semi-object not a characteristic other than age, for example the quantity of
 25475 fern eaten in (105).

- 25476 (105) *kui-dyn* *kui-mpi* *ci* *cʰyt-nuu* *ma nuu*
 SBJ:PCP-be.many SBJ:PCP-be.few INDEF differ:FACT-PL LNK DEM
 25477 *kui-fse* *rcantu* *pakuku* *zo* *kui-dyn* *zo*
 SBJ:PCP-be.like UNEXP:FOC every.year EMPH SBJ:PCP-be.many EMPH
 25478 *nuu-car-nuu*.
 IPFV-search-PL
 25479 ‘They differ in that some (eat fern) a lot or fewer, but they search a lot
 25480 (of fern) every year.’ (conversation 140510)

25481 The verb *cʰa* ‘can’, ‘be able’, ‘be fine’ has two derived forms in *a*-: *acʰucʰa*
 25482 ‘be capable’ (see 1, §7.1.4) with reduplication *acʰyla* ‘be capable’ with suffixed -
 25483 *IV* replicated syllable (§19.4.2.1). The meaning of this derivation is both emphatic
 25484 and antipassive-like: unlike the base verb *cʰa* ‘can’, which can take a complement
 25485 clause as semi-object (§16.2.1.5, §24.2.3.1), *acʰucʰa* and *acʰyla* are strictly intransi-
 25486 tive stative verbs.

25487 19.7.8 Abilitative *j*- prefix

25488 The transitive verb *jqu* ‘be able to lift’ (106) has an intrinsically abilitative mean-
 25489 ing. This unusual property suggests that it may be the remnant of a lexicalized
 25490 abilitative verb whose base **qu* ‘lift’ was lost, and that the *j*- preinitial was an
 25491 abilitative prefix, possibly an irregular allomorph of the *su-* abilitative (§19.3),
 25492 reminiscent of the *j*- allomorph of the sigmatic causative (§17.2.2.5).

25493 (106) *p̥yjkʰu u-*_{ku} *mr-jqe*

yet 3SG.POSS-head NEG-be.able.to.lift[III]:FACT

25494 ‘(The baby) is not yet able to lift up his head.’ (elicited)

25495 19.7.9 Prenasalization

25496 In addition to the anticausative derivation (§18.5), prenasalization alternation is
 25497 found in an isolated pair of intransitive verbs: *sqlum* ‘collapse’ (of the ground)¹¹
 25498 and *arnglum* ‘be caved in’ (107).

25499 (107) *u-*_{t^bob} *jua-yrnglum*

3SG.POSS-ground SENS-be.caved.in

25500 ‘The ground is caved in.’ (elicited)

25501 The form *arnglum* derives from *sqlum* by addition of a prefix *a-* and prenasal-
 25502 ization of the uvular stop /q/ to /NG/. In addition, the /s/ was rhotacized to /r/ as
 25503 result of voicing: the combination *zNG* is only attested across syllable boundaries
 25504 in Japhug, as in the plant name *razngu*,¹² never in an onset, and this example
 25505 suggest that a sound change **SNG* → *RNG* took place.

25506 The combination of prenasalization with *a-* in *arnglum* appears to have a re-
 25507 sultative stative meaning, as opposed to the dynamic verb *sqlum*. It is possible
 25508 that the prenasalization reflects a trace of the autive prefix (§19.1.4).

25509 19.7.10 Comparative derivation?

25510 The pair of stative verbs *sna* ‘be good, be worthy’ and *mna* ‘be better’ are possibly
 25511 historically related, sharing a common root *-na* with different prefixes *s-* and *m-*

¹¹ The 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.

¹² In this word, note also that a form such as †*arngu* would violate another phonotactic constraint (§3.4.1).

(or **w*-, with nasalization, §17.3.1, §4.2.1.9) prefixes. If genuine, this etymological relationship is not synchronically obvious, and a detailed description of the synchronic meanings of these verbs is necessary.

The verb *sna* can either mean ‘be kind, be generous’ as in (108) (see also 9, §14.2.3), ‘be pleasant’ (example 112, §17.4.3) or ‘be worthy, be fit to’, as in (109) and (110) (also 117, §9.1.6.1). In the third case, it selects a semi-object, which can either be a noun or participle (109), or an infinitival complement clause (110).

- (108) *rjylpu ri a-tas wuma ku-sna*,
 king also 1SG.POSS-on really PRS-be.kind
 ‘The king is very kind with me.’ (2002 qaCpa, 123)
- (109) *ly-tcyt ma nyzo a-mtc^hot u-kui-ndza*
 IMP:UPSTREAM-take.out LNK 2SG 1SG.POSS-offering 3SG.POSS-SBJ:PCP-eat
 my-tui-sna
 NEG-2-be.worthy:FACT
 ‘Spit it out, you are not worthy of being the one eating my offering.’
 (2014, kWLAG, 177)
- (110) *turme ky-ndza my-sna*
 person INF-eat NEG-be.fit:FACT
 ‘It is unfit for people to eat.’ (12-Zmbroko, 96)

The range of meanings of *mna* only partially overlaps with that of *sna*. First, it can ‘feel better, heal’, taking either the disease/wound (111) (see also example 48, §16.1.1.7), or the person (or body part) afflicted by it (112) as subject. Note that in (111), the verb is in the 3SG form, indexation as intransitive subject the noun *ny-cq^he* ‘your cough’ rather than the 2SG, showing that this noun cannot be analyzed as an essive adjunct (§8.1.7).

- (111) *ny-cq^he u-pná-mna?*
 2SG.POSS-cough QU-SENS-be.better
 ‘Is your cough getting better?’ (many attestations)
- (112) *u-pná-tui-mna*
 QU-SENS-2-be.better
 ‘Are you feeling better?’ (smAnmi 2003.2, 119)

Second, *mna* occurs in comparative constructions (§26.2) with the standard marker *syz(ny)* (§8.2.7) or the comparee marker *kui* (§8.2.2.7), as in (113) (see also

19 Other verbal derivations

25539 56, §5.1.3). By contrast, *sna* is not attested in comparative constructions in the
25540 whole corpus.

- 25541 (113) *nauſſe pjui-kv-fcvt svz uu-puú-mna?*
like.that IPFV-INF-tell COMP QU-SENS-be.better
25542 ‘Is it better (to explain how to weave with video) than simply by telling
25543 it like that (without video)?’ (vid-20140429090403, 188)

25544 The participle *kua-mna* is lexicalized in the sense of ‘leader, chief’ (example 12,
25545 §16.1.1.1).

25546 The data above suggest that *mna* originally was a lexicalized comparative (‘be
25547 better’) of *sna* (‘be good’), and that these two verbs have undergone distinct se-
25548 mantic specialization (‘be better’ ⇒ ‘feel better, heal’ vs. ‘be good’ ⇒ ‘be worthy,
25549 be fit’). The morphological structure of these verbs is however elusive: the *s-* el-
25550 ement in *sna* is possibly related to the proprietive *sv-* (§18.8), but the *m-* prefix in
25551 *mna* is isolated in Japhug. It could originate from **w-* with regressive nasalization
25552 from the *n-* of the root.

25553 19.7.11 Reduplication

25554 Reduplication occurs as a secondary exponent of several verbal derivations, in-
25555 cluding Distributed action (§19.4), Reciprocal (§18.4.1), and is also found sporadi-
25556 cally with other derivations (for instance with the antipassive, §18.6.5).

25557 In addition, reduplication is also attested by itself as the only marking of a
25558 valency-changing derivation in the case of *ruru* ‘guard, take care of’, which de-
25559 rives from the intransitive verb *ru* ‘look at’. The base verb *ru* selects a goal in
25560 the dative or with locative marking (§14.2.4, §15.1.2.4), while *ruru* is transitive (as
25561 shown by stem alternation in 114) and the entity taken care of by the subject is
25562 encoded as object.

- 25563 (114) *tce pahts^{hi} puu-ruare pju-ŋu ri,*
LNK hogwash IPFV-take.care[III]:FACT IFR.IPFV-be LNK
25564 ‘While he was taking care of the hogwash....’ (2014-kWLAG, 94)

25565 The compound noun *þyyru* ‘miller’ includes as second element the non-reduplicated
25566 variant of the same root *-ru* with the same meaning as that of *ruru* ‘guard, take
25567 care of’ (the first element is from the noun *þya* ‘mill’, see §5.5.2).

25568 **19.7.12 Vowel alternation**

25569 The rare verb *rnde* ‘get into trouble’ is only attested in the expression in (115). The
 25570 -*t*- suffix shows that this verb is morphologically transitive (§14.3.1), despite being
 25571 unable to take an overt object.

- 25572 (115) *k̥-rndu syzny puu-rnde-t-a*
 INF-obtain COMIT AOR-get.into.trouble-PST:TR-1SG
 25573 ‘I not only did not obtain anything, but in addition I got into trouble.’
 25574 (elicited)

25575 The co-occurrence of *rnde* with *rndu* ‘obtain’ in the expression exemplified by
 25576 (115) is probably not only a matter of euphony, but also of morphological relation-
 25577 ship (*a figura etymologica*). The verb *rnde* is invariable, but its stem is identical to
 25578 the stem III (§12.2.2.1) of *rndu* as in (116).

- 25579 (116) *uzo stuasti zo tu-ce qhe, tce k̥ro zo puu-rnde*
 3SG alone EMPH IPFV:UP-go LNK LNK a.lot EMPH SENS-obtain[III]
 25580 *k̥i.*
 HEARSAY
 25581 ‘She goes (up there in the mountain), and found a lot of mushrooms
 25582 (they say).’ (conversation 14-05-10)

25583 It is possible to suppose that the verb *rnde* is a backformation from the stem
 25584 III of *rndu* ‘obtain’. A hypothesis of this type is likely in the case of the defective
 25585 intransitive verb *βze* ‘grow’ which originates from *βzu* ‘make’ (§12.2.2.3), due to
 25586 the fact that the stem *βze* never occurs in tenses such as the Aorist and that the
 25587 verb *βzu* ‘make’ is also used with the meaning ‘grow’ with a dummy subject
 25588 (§14.3.5).

25589 In the case of *rnde* however, the fact that this rare verb is mainly attested in
 25590 Aorist forms, where a Stem III is not possible makes the backformation hypoth-
 25591 esis less likely. In addition, although the meaning of *rnde* ‘get into trouble’ is
 25592 relatable to that of *rndu* ‘obtain’ (‘obtain/get problems/trouble’), it is not a sim-
 25593 ple narrowing of the meaning of *rndu*, a verb all of whose attestations refer to
 25594 positive events (see 116 above, as well as 249 in §15.2.10.5).¹³

25595 Alternatively, one could consider that *rnde* ‘get into trouble’ originates from
 25596 *rndu* ‘obtain’ by a valency-neutral derivation. The vowel alternation could be

¹³ For 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’.

19 Other verbal derivations

25597 accounted for by hypothesizing the existence of a *-j suffix (as in the case of the
25598 Stem III, §12.2.2.1), whose exact function is difficult to describe in the absence of
25599 other examples.

25600 20 Denominal derivations

25601 20.1 Introduction

25602 Denominal verbalizing derivations turn nouns into verbs. Their source can either
25603 be an inalienably or an alienably possessed noun (§5.1.2), an isolated nominal root
25604 or a compound.

25605 These derivations are referred to simply as ‘denominal’ (without specifying
25606 ‘verbalizing’) in this chapter and everywhere else in the grammar, since the only
25607 non-verbalizing denominal derivations, the denominal adverbs (§5.8), are rela-
25608 tively marginal.

25609 Japhug boasts a considerable number of denominal prefixes, most of which
25610 are highly productive (in particular, they can be applied to Tibetan and even
25611 Chinese loanwords). A consequence of the existence of these derivations is that
25612 conjugated verbs in Japhug are not a closed class, unlike in otherwise morpho-
25613 logically rich languages of the Trans-Himalayan family such as Kiranti (Jacques
25614 2017b),¹ where light verb constructions are the only productive way of forming
25615 predicates from nouns.

25616 In the rest of the grammar, the denominal prefixes are not distinguished from
25617 the nominal root in the glosses (the prefixes and the nominal roots are treated as
25618 a single stem). By contrast, in this chapter, the denominal prefixes are segmented
25619 and glossed as DENOM.

25620 This chapter provides a detailed account of all attested denominal prefixes (sec-
25621 tions §20.2 to §20.7). It also describes non-prefixal denominal derivations (§20.8)
25622 and deideophonic verbalizing prefixes (§20.9).

25623 Some denominal prefixes are historically related to various valency-changing
25624 derivations, in particular the antipassive (§20.10). In addition to their basic func-
25625 tion of deriving verbs from nouns, denominal prefixes also occur in compound
25626 verbs (§20.12), incorporating verbs (§20.13), and in verbs recently loaned from
25627 Chinese (§20.11).

¹ In 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 *yr-* denominal verb (§20.5) from the inalienably possessed noun *tr-kʰu* ‘smoke’ is *yṛkʰu* ‘have smoke’ (rather than *tyṛtṛkʰu*), and the same applies even to the noun *trrba* ‘game’ whose *tr-* prefixal element is not an indefinite possessor prefix, but whose denominal form is *yṛrba* ‘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 *trusqa*.

Some denominal prefixes, including *suu-/sv-* (§20.3.2), *ruu-/rv-* (§20.4), *yuu-/yr-* (§20.5.2), *muu-/mr-* (§20.6) and *nuu-/nr-* (§20.7) have either *u* or *v* vocalism (with the variant *a* when the following syllables has a uvular preinitial, §3.5.4). This vowel contrast is partially based on that of the indefinite possessor prefix (*tu-* vs. *tr-*, §5.1.2.1) when the base noun is inalienably possessed, but many exceptions exist.

A handful of denominal verbs have in addition an intrusive *-y-/x-* velar fricative element (like the sigmatic causative, §17.2.1.4), for instance *yṛxpra* ‘send’ from *trpra* ‘messenger’ (§20.5.2).

Denominal prefixes are nearly always located closest to the root than any non-denominal derivational prefix. Only one exception is known: the causative *svzmbriu* ‘anger’ from the denominal verb *svymbru* ‘get angry’, whose causative prefix is irregularly inserted between the denominal prefix *sv-* and the nominal root *-mbru*: *sv-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’,

25663 *lxt* ‘release’ or existential verbs like *tu* ‘exist’. Both types of construction serve to
 25664 integrate a nominal root into a predicate.

25665 For instance, the verb *ruqajiu* ‘get worms’ and *r̥spiu* ‘fester’, with the *ru-*/*r̥-*
 25666 denominational prefix (§20.4.1) have the same meaning as the collocation of their base
 25667 noun *qajiu* ‘worm’ and *tr-spui* ‘pus’ with the light verb *βzu* ‘make’, as illustrated
 25668 by (1) where both constructions appear. This example also shows that synonymous
 25669 denominational and light verb constructions from the same nouns lexically se-
 25670 lect the same orientation preverbs: UPWARDS in the case of *r̥spiu/tr-spui+βzu* ‘fes-
 25671 ter, have pus’, and WESTWARDS in that of *ruqajiu/qajiu+βzu* ‘have worms, grow
 25672 worms’.

- 25673 (1) *tce [tr-spui tce to-βzu] tce [qajiu no-βzu] ma*
 LNK INDEF.POSS-pus LNK IFR:UP-make LNK WORM IFR:WEST-make LNK
 25674 *ky-nuqambumbjom u-xcxt kui nunuu u-bar*
 INF-fly 3SG.POSS-strength ERG DEM 3SG.POSS-wing
 25675 *u-ndzom yuu u-qaa nura to-r̥-spui q^he*
 3SG.POSS-bridge GEN 3SG.POSS-bottom DEM:PL IFR:UP-DENOM-pus LNK
 25676 *jy-rui-qajiu*
 IFR:WEST-DENOM-worm
 25677 ‘(Its wing) has pus and worms grew in it, it flew so much that the base of
 25678 its wing festered and had worms.’ (22-qomndroN, 56-59)

25679 In each of the sections of this chapter on denominational prefixes, the correspond-
 25680 ing light verb constructions are systematically indicated.

25681 Although the two constructions are semantically very close, an important dif-
 25682 ference is that in the denominational construction, the noun cannot take external
 25683 determiners like numeral and demonstratives (unlike denominational derivation in
 25684 some Uto-Aztecan languages like Hopi for instance, see K. C. Hill 2003). For in-
 25685 stance, in (2), the verb *c^hry-r̥y-r̥jɪt* (from *tr-r̥jɪt* ‘child’, §20.4.1) means ‘gave birth to
 25686 (a) child/children’, without any indication on the number of children (the unicity
 25687 of the offspring in this example is deduced from the context of the story).

- 25688 (2) *[u-rzaβ nuu u-sk^hrui muu-nuu-kui-βdi] nuu,*
 25689 3SG.POSS-wide DEM 3SG.POSS-body NEG-AOR-SBJ:PCP-be.well DEM
c^hy-r̥y-r̥jɪt
 IFR-DENOM-child
 25690 ‘His wife, who was pregnant, gave birth to (a) child.’ (Norbzang 2012, 112)

25691 In order to specify the number of children that are born, a collocation with the

verb *sci* ‘be born’, its causative *susci* ‘give birth to’ or the corresponding possessive construction with the verb *tu* ‘exist’ are needed instead, as in (3). The same meaning cannot be expressed by combining the verb *cʰy-ry-ry-jit* with a numeral.

- (3) *tu-ry-jit* *kungut t̪y-tu*.
 3SG.POSS-child nine AOR-exist
 ‘She had nine children.’ (14-siblings, 16)

The only cases when a denominal derivation can preserve the modifier of a noun is when the modifier is fused with the noun root and both undergo the derivation together. For instance, the nominal phrase *t̪cʰitčun paxči* ‘pear’, which comprises the noun *paxči* ‘apple’ with the placename *t̪cʰitčun* ‘Chuchen’ as prenominal modifier (§9.1.8.2, §5.5.1.1) can be verbalized as *nutcʰitčunpaxči* ‘collect pears’ with the intransitive *nu-* derivation (§20.7.2).

20.2 Contracting prefixes

Contracting denominal prefixes are mono- or disyllabic prefixes which first syllable is *a-*, and undergoes vowel contraction in the contexts discussed in §12.3 like the passive *a-* (§18.1) and the reciprocal derivations (§18.4).

20.2.1 Stative *a-*

The denominal prefix *a-* derives intransitive verbs. Most *a-* denominal verbs are stative, and either mean ‘be *X*’ or ‘have the property of *X*’. The stative denominal function of *a-* is highly productive, and can be applied to Tibetan loanwords.

Denominal verbs in *a-* can express shape, as in *artaš* ‘be forked’ from *t̪y-rtas* ‘branch’. They can also refer to a more abstract property of the base noun, as in the case of *aci* ‘be wet’, which derives from *tu-ci* ‘water’ (on which see §5.1.2.11).

Denominal verbs expressing physical defects are most often built with the *a-* prefix, for instance *aqala* ‘be lame’, *azṛwu* ‘be lame’ and *aqquwa* ‘be blind’ from *čkala* ‘lame person’, *zṛwu* ‘lame person’ (from *za.ba* ‘cripple’) and *cqquwa* ‘blind person’, respectively (an exception is *yṛmbyo* ‘de deaf’ with the *yṛ-* prefix, §20.5).

Some denominal verbs in *a-* express a property shared by several entities, for instance *aqya* ‘be the same age’ (§14.2.6) from *tu-qya* ‘tooth’). ² Such verbs can

² The semantic extension ‘age’ from ‘tooth’ is also found in other Gyalrongic languages, see for instance Lai (2017: 524).

25720 have a reduplicated stem, or suffixal syllables, like the verbs *a-fsuu~fsu* and *a-fsu-ja* both meaning ‘be of the same size’³ from the inalienably possessed noun *w-fsu* ‘of the same size’ (§20.8.2, §26.3.1.3).

25723 Not all *a-* denominal verbs are stative. Dynamic intransitive verbs in *a-* include for instance *arju* ‘speak’ (§15.1.5.8) from *tuu-rju* ‘word’, ‘utterance’, and the
25724 verbs *amqaj* ‘fight’ (scold each other) and *ayro* ‘play’ (with non-singular subjects),
25725 from *tuu-mqaj* ‘scolding’ and *tzyro* ‘game’⁴, which are almost always attested with
25726 infixation of the autive *nu-* as *a<nu>mqaj* and *a<nu>yro*.

25728 Compound nouns of dimension (§5.5.2.2) can derive compound verbs (§20.12)
25729 meaning ‘of uneven/unequal *X*’ or ‘spread along the dimension *X*’ with the *a-*
25730 prefix, as shown in Table 20.1. Among them, *ajpomxts^hum* ‘have uneven thick-
25731 ness’ presents an unexplained alternation between /u/ and /o/ alternation: the
25732 denominal verb has *o* in the first syllable, while the compound noun *jpumxts^hum*
25733 ‘thickness’ and the base verb *jbum* ‘be thick’ have *u*.

Table 20.1: Denominal verbs from nouns of dimension

Base compound noun	Denominal verb
<i>jpumxts^hum</i> ‘thickness’ (diameter)	<i>ajpomxts^hum</i> ‘be of uneven thickness’
<i>ja^um̥ba</i> ‘thickness’ (of a sheet)	<i>aja^um̥ba</i> ‘be of uneven thickness’
<i>xt^uwuxte</i> ‘size’	<i>axt^uwuxte</i> ‘be of uneven size’
<i>ta^uki</i> ‘up and down’	<i>ata^uki</i> ‘be aligned on the vertical axis’
<i>lot^ui</i> ‘upstream and downstream’	<i>alot^ui</i> ‘be aligned on the riverine axis’
<i>kundi</i> ‘east and west’	<i>akundi</i> ‘be aligned on the east-west axis’

25734 The causative form of these verbs, regularly built with vowel fusion *suu-γ-*
25735 (§17.2.1.3), means ‘align/put along the *X* dimension’ as in (4) (where the upstream-
25736 downstream dimension refers to the head-tail dimension of the body of the but-
25737 terfly).

- 25738 (4) *tce nunuu w-bar kui^hde y^hzu ma, w-p^hab*
LNK DEM 3SG.POSS-wing four exist:SENS LNK 3SG.POSS-half

³ On the causative form of *afsuja* ‘be of the same size’, see §17.2.5.9 (in particular example 62).

⁴ The noun *tzyro* ‘game’ is however also possibly interpretable as a deverbal noun, see §16.4.

25739	<i>w-n̥tsi</i>	<i>ri</i>	<i>kui-wxti</i>	<i>ci</i> ,	<i>kui-xtci</i>	<i>ci</i>
	3SG.POSS-one.of.a.pair	LOC	SBJ:PCP-be.big	INDEF	SBJ:PCP-be.small	INDEF
25740	<i>tce [...] nui-nuqambuumbjom ri</i>	<i>tce</i>	<i>nunua</i>			
	LNK	AOR-fly		LNK	LNK	DEM
25741	<i>lu-sut-y-lo-tʰi</i>				<i>nui-ŋu.</i>	
	IPFV:UPSTREAM-CAUS-DENOM-up-downstream	SENS-be				
25742	'(The butterfly) has four wings, on each side a big one and a small one. (...)					
25743	When it flies, it aligns (its wings) along the 'upstream-downstream' axis.'					
25744	(26-qambalWla, 52)					

25745 The verbs *ataški*, *alotʰi* and *akundi* and their causative forms select the UPWARDS,
 25746 UPSTREAM (as in 4) and EASTWARDS preverbs, respectively.

25747 Noun-verb pairs where the verb has *a-* and the noun is an inalienably pos-
 25748 sessed noun selecting the *tr-* indefinite possessor prefix (for instance the verb
 25749 *ačqʰe* 'cough' and the inalienably possessed noun *tr-čqʰe* 'cough') can be inter-
 25750 preted as *a-* denominal derivation, but the opposite directionality (the inalienably
 25751 possessed noun as a nominalized form of the *a-* prefixed verb) is also possible
 25752 (see §16.4.6 for a more detailed discussion). Another problematic example of *a-*
 25753 denominal derivation is *acʰyt* 'be *X* years apart' (§19.7.7).

25754 In some cases, semantic changes either in the verb or the noun have obscured
 25755 the etymological relationship between them. For instance, it is possible that *aro*
 25756 'have' is historically related to *tr-ro* 'excess', 'surplus' (§14.2.3), though there is
 25757 no synchronic link between these two words.

25758 A certain number of intransitive verbs in *a-* can be suspected of being denom-
 25759 inal verbs whose base noun has been lost. This is particularly clear in the case
 25760 of some verbs expressing shape such as *aβzurχsum* 'have a triangular shape'
 25761 from a noun **βzurχsum* unattested in Japhug, but attested in Tibetan as བୃତ୍ସନ୍
 25762 *bzur.gsum* 'triangle'. Even when the nominal source is not recoverable, as in the
 25763 case of *artum* 'be round', the hypothesis that the *a-* verb comes from a lost noun
 25764 (in this case, something like **rtum* 'round object, circle') can never be ruled out.

25765 The deideophonic *a-* derivation (§20.9.3) is also likely to have a historical rela-
 25766 tionship with the stative *a-* denominal prefix.

20.2.2 Similative *aru-*

25768 The prefix *aru-* derives stative verbs meaning 'be *X*-like, be similar to *X*' from
 25769 a nominal base. Table 20.2 presents a few representative examples of this prefix.
 25770 Although these verbs (with the exception of *aruldzajkui* 'be green') are relatively
 25771 rare in the corpus, this derivation is extremely productive and can be applied

25772 to Tibetan loanwords, for instance *cog.cog* ‘paper’, *ldzajku* ‘green’ and *munto&*
25773 ‘flower’ (from རྒྱତྰ རྒྱତྰ *cog.cog* ‘paper’, རྩྲଙྔ ལྡୁ *ldzaj.gu* ‘green’ and ମେତୋଗ୍ *me.tog* ‘flower’,
25774 respectively. It is even found on Chinese loanwords such as 喇叭 <lāba> ‘horn’.

Inalienably possessed nouns such as *tr-tçuu* '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) ‘purple, colour of the pigeon’s neck’ can be denominalized as *aruqromkem dor* ‘purple’.

Table 20.2: Examples of the *aru-* similitative denominal prefix

Base noun	Denominal verb
<i>сөңгөр</i> ‘paper’	<i>аруңғорғор</i> ‘be like paper’
<i>fsapar</i> ‘animal’	<i>аруңсарап</i> ‘be like an animal’
<i>kʰutsa</i> ‘bowl’	<i>аруқұтса</i> ‘be like a bowl’
<i>taqaβ</i> ‘needle’	<i>арутақаβ</i> ‘be like a needle’
<i>ldzajku</i> ‘green’	<i>арулдзайку</i> ‘be green’
<laba> ‘horn’	<i>арулаба</i> ‘be shaped like a horn’
<i>sujno</i> ‘grass’	<i>арусујно</i> ‘be like grass’
<i>tyr-tęw</i> ‘son’, ‘boy’	<i>арутыртәу</i> ‘be boyish’
<i>txjpa</i> ‘snow’	<i>арутхјпа</i> ‘be like snow’
<i>muntor</i> ‘flower’	<i>арумунтор</i> ‘be like a flower’

With colour nouns, including those borrowed from Tibetan like *ldzajku* ‘green’ and *smvrsmu* ‘dark red’ (§5.2.2) and others like *qro-mke uu-mdor* ‘purple’, the denominal verbs in *arw-* simply mean ‘be *X*, have the colour *X*’, as in (5).

- 25784 (5) *tce kumaš xcaj nura arui-ldžanjkuw kur-fse ma*
LNK other grass DEM:PL DENOM-green:FACT SBJ:PCP-be.like LNK
25785 ‘The other plants (around it) are (very) green.’ (22-BlamajmAG, 22)

Denominal verbs in *aru-* are often used in similitive constructions with degree nominals, either as nominal predicates as in (6) (§16.3.3) or in the degree construction (7) (§16.3.4). Note that the connotation of these similitive verbs can be culture-specific: although *arumuntox* ‘be like a flower’ can be understood as ‘be as beautiful as a flower’, its most natural interpretation is surprisingly ‘worthless’ (because flowers are viewed as not lasting long, and prone to withering).

- 25792 (6) *u-tuu-yruu-muntob* *nua!*
 3SG.POSS-NMLZ:DEG-DENOM-flower SFP
 25793 ‘It is as (worthless) as a flower.’ (elicited)
- 25794 (7) *u-tuu-wyrum* *kua pui-yruu-tijpa zo*
 3SG.POSS-NMLZ:DEG-be.white ERG SENS-DENOM-snow EMPH
 25795 ‘It is white as snow.’ (elicited)

25796 They also occur in participial form as *kua-yruu-taqab* ‘that is like a needle’ in (8),
 25797 often with the similitative stative verb *fse* ‘be like’.

- 25798 (8) *u-jwas* *u-ts^hwya* *nunu kua-yruu-taqab*
 3SG.POSS-leaf 3SG.POSS-shape DEM SBJ:PCP-DENOM-needle
 25799 *kua-fse* *naxtcuy* *ri,*
 SBJ:PCP-be.like be.identical:FACT LNK
 25800 ‘The shape of its leaves is similar (to those of the fir) in that they are like
 25801 needles.’ (11-mYAm, 74)

25802 Additional examples of similitative constructions involving these verbs can be
 25803 found in [Jacques \(2018d\)](#) and §26.3.3.2.

25804 20.2.3 Proprietive *ary-*

25805 The *ary-* denominal prefix has a proprietive meaning, and is generally correlated
 25806 with partial reduplication of the nominal stem as in *aryrq^hurq^hio* ‘be grooved’
 25807 (9) from *tr-rq^hio* ‘groove’.

- 25808 (9) *u-ru* *nura* *tr-kua-yry-rq^hu~rq^hio* *kua-fse* *ci*
 3SG.POSS-stalk DEM:PL AOR-SBJ:PCP-DENOM-groove SBJ:PCP-be.like INDEF
 25809 *ju* *q^he,*
 be:FACT LNK
 25810 ‘Its stalk is like it has had many groovings on it.’ (14-sWNgWJu, 45)

25811 The *ary-* prefix can also be used to derive verbs from counted nouns as for
 25812 instance *arycuceryz* ‘be striped’ from *tuu-crzyz* ‘one stripe’. The verb *aryk^humk^hyl*
 25813 ‘be clustered in patches’, ‘not homogeneously distributed’ from *tuu-k^hyl* ‘one place’
 25814 has the very rare partial reduplication pattern in *-um* (*ary-k^hum~k^hyl*, §19.4.2.2).

25815 Non-reduplicated *ary-* denominal verbs are also found, for instance *aryts^hi* ‘be
 25816 cooked like rice gruel’ (from *tuts^hi* ‘rice gruel’, a lexicalized nominalization from
 25817 *ts^hi* ‘drink’) and *aryryy* ‘happen at the predicted time’ from *u-rry* ‘predicted time’
 25818 (on which see §8.3.5).

- 25819 (10) *azə a-zuŋβ pŋy-k-rry-rry-ci*
 1SG 1SG.POSS-sleep IFR-PEG-DENOM-predicted.time-PEG
 25820 'I feel sleepy at the expected time.' (elicited, can be said when one feels
 25821 sleepy at the same hour in the afternoon when one went to sleep the
 25822 previous days)

25823 Like other compound denominal prefixes (§20.2.4.2), the *ary-* prefix loses its *a-*
 25824 element when subjected to causative derivation. For instance, *arytsʰi* 'be cooked
 25825 like rice gruel' has the causative form *zr̥tsʰi* 'cook like rice gruel' (§17.2.2.8).

25826 The *ary-* prefix should not be confused with the reciprocal from transitive verbs
 25827 in *ry-*. For instance *aryzduzda* 'call each other' (before departure) does not di-
 25828 rectly come from the noun *tuu-zda* 'companion', but is rather the reduplicated
 25829 reciprocal (§18.4.1) of the denominal verb *ryzda* 'call before departure' derived
 25830 from this noun.

25831 20.2.4 Proprietive *ayu-*

25832 The prefix *ayu-* derives proprietive stative verbs meaning 'have a lot of *X*' or
 25833 'produce a lot of *X*'. For instance, Tshendzin provided the definition in (11) for
 25834 the proprietive denominal *ayu-mdzu* from *tr-mdzu* 'thorn'.

- 25835 (11) *pnu-ryyu-mdzu, uu-taŋ ty-mdzu pnu-dyn*
 25836 SENS-DENOM:PROP-thorn 3SG.POSS-ON INDEF.POSS-thorn SENS-be.many
kŋ-ti pnu-ŋu.
 25837 OBJ:PCP-say SENS-be
 '(The word) *pnu-ryyu-mdzu* means 'there are a lot of thorns on it.' (elicited)

25838 When the base noun is inalienably possessed (§5.1.2) or when it is a counted
 25839 noun (§7.3), the denominal prefix is directly attached to the root, and the indefi-
 25840 nite possessor prefixes *tuu-*, *tr-*, *ta-* or the numeral prefixes are removed, as shown
 25841 in the examples in Table 20.3. The *ayu-* prefix is invariable, without an allomorph
 25842 such as †*ayr-* as could have been expected (§5.1.3) when the base noun selects the
 25843 indefinite possessor prefix *tr-*.

25844 This prefix is very productive, and occurs on nominal bases borrowed from
 25845 Tibetan (such as *rjul* 'silver', *u-mdor* 'colour', *tuy* 'poison' and *smn* 'medicine'
 25846 (respectively from དྲྲྲ བྱଳୁ 'silver', མྲྲྲ ཡମ୍ଦୋ 'colour', ཉྲྲྲ གୁྱୁ 'poison' and མྲྲྲ ཟମ୍ବନ୍ 'medicine') and even Chinese (*tu-awan* 'a pair' from 双 <*shuāng*> 'pair').

25847 Another possible meaning of the *ayu-* prefix is 'be the same *X*', as in the case
 25848 of *ayumdo* 'be the same colour' from *uu-mdor* 'colour'. These types of verbs have

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’

25850 non-singular intransitive subjects, as in (12) with a comitative phrase (§8.2.5).⁵

- 25851 (12) *wu-rū cʰo wu-fkaβ ra ayumdoʂ zo*
 3SG.POSS-stalk COMIT 3SG.POSS-cover PL DENOM-colour:FACT EMPH
 25852 *arŋi.*
 be.green:FACT
 25853 ‘Its stalk and its cap are the same green colour.’ (of a species of
 25854 mushroom) (22-BlamajmAG, 121)

25855 A few *ayu-* denominal verbs, such as *ayutuy* ‘be poisonous’ from *tuy* ‘poison’,
 25856 have a more abstract proprietive function (‘have the property of X’) like that
 25857 of the *sŋ-* prefix (note the synonym *sŋndŋy* ‘poisonous’, §20.3.1). Other semantic
 25858 values of the *ayu-* prefix are discussed in §20.2.4.3.

25859 The *ayu-* denominal prefix has cognates in other Gyalrong languages, for ex-
 25860 ample *nwa-* in Tshobdun (J. T.-S. Sun 2014a).

25861 20.2.4.1 Reduplication

25862 Emphatic reduplication (§12.4.3) is possible as an option on denominal verbs, but
 25863 some verbs in *ayu-* occur with obligatory reduplication of the nominal root, for
 25864 instance *ayujuaʂ* ‘have a lot of arms’ and *ayumumi* ‘have a lot of legs’ (13). Note
 25865 that the alternative form *ayujaʂ* without reduplication is also attested, but with
 25866 a completely different meaning (§20.2.4.3).

- 25867 (13) *ngocna juʂ-ʂyʂ-juʂ-jaʂ juʂ-ʂyʂ-juʂ-mi, wu-mylyjaʂ*
 spider SENS-DENOM-EMPH~arm SENS-DENOM-EMPH~leg 3SG.POSS-limbs
 25868 *juʂ-dyn*
 SENS-be.many
 25869 ‘The spider has many arms and legs, its limbs are many.’ (elicited)

25870 20.2.4.2 Causative

25871 Only a few causative verbs derived from *ayu-* denominal verbs are attested. In-
 25872 stead of expected vowel fusion (*†suʂ-ʂyʂ- → sŋyʂ-*, see §17.2.1.3), the *a-* element
 25873 is dropped and replaced by the *z-* allomorph of the sigmatic causative (§17.2.2.8).
 25874 For instance, the stative verb *ayungunŋgu* ‘have a lot of layers’ (from *wu-ŋgu* ‘in-
 25875 side’, with reduplication, §20.2.4.1) has the causative form *z̥yungunŋgu* ‘put on a
 25876 lot of layers’ as in (14).

⁵ Concerning the absence of dual indexation on the verbs in (12), see §14.6.1.1.

- 25877 (14) *w-rzaβ nuu kuu, [...] <huangdi> yuu w-rte nuu χsum zo*
 3SG.POSS-wife DEM ERG emperor GEN 3SG.POSS-hat DEM three EMPH
 25878 *pjy-z-yuu-ŋuu~ŋuu pjy-nyrte*
 IFR-CAUS-DENOM-EMPH~inside IFR-wear
 25879 ‘His wife wore three imperial crowns one on the top of the other.’ (140430
 25880 yufu he tade qizi-zh, 227)

20.2.4.3 Lexicalized denominal verbs

25881 The semantics of the *ayu-* derivation is not always trivially predictable.
 25882 Some of the lexicalized meanings are relatable to one of the basic functions
 25883 of this prefix. For instance, *ayuʂwaj* ‘match’ (to each other) (15) from *tuu-ʂwaj* ‘a
 25884 pair’ presumably derives from an earlier ‘have the property of being a pair’.

- 25885 (15) *tce [u-拜ri ta-tuit] cʰo [u-qʰu*
 LNK 3SG.POSS-before AOR:3→3-say[II] COMIT 3SG.POSS-after
 25886 *ta-tuit] nurā maka mu-pjy-k-xyuu-ʂwaj-ci*
 AOR:3→3-say[II] DEM:PL at.all NEG-IPFV.IFR-PEG-DENOM-pair-PEG
 25887 ‘The things he said in the beginning and those that he said later did not
 25888 correspond to each other.’ (contradicted each other) (2011-10-qajdo, 78)

25889 Other denominal verbs have meanings that are completely unpredictable. For
 25890 example, the denominal verb *ayujaz* from *tuu-jaz* ‘hand, arm’, rather than meaning
 25891 ‘have arms’ as expected (see however §20.2.4.1), either occurs in the sense of
 25892 ‘fidget, touch other peoples’ things (like a thief)’ or ‘do things (with one’s hands)
 25893 quickly’. The metaphorical extensions on which the unpredictable meanings of
 25894 *ayu-* are sometimes shared with other denominal derivations. For instance, *ayur-
 25895 par* ‘go along well’ (with non-singular subject) from *tuu-rpar* ‘shoulder’ presents
 25896 the same semantic derivation as the transitive denominal verb *nypar* ‘go along
 25897 well with’ (from ‘carry on the shoulder’, §20.7).

25898 Some lexicalized *ayu-* denominal verbs additionally present unusual argument
 25899 structure. Unlike other *ayu-* verbs which are plain intransitives, *ayuruz* ‘inherit
 25900 from’ (either from *w-ruz* ‘species’, borrowed from ရိုက် rigs ‘race’, or from ရှုံ rus
 25901 ‘bone, lineage’) is a semi-transitive verb (§14.2.3), taking as semi-object the per-
 25902 son or group of people one inherits a trait from as in (16).
 25903

- 25904 (16) *tuu-mu ra a-nuu-kuu-ʂyuruz qʰe, nuu*
 GENR.POSS-mother PL IRR-PFV-GENR:S/O-inherit LNK DEM
 25905 *nii-ʂyrgu a-puu-sna, tuzo tuu-ʂyrgu*
 3PL.POSS-tooth.quality IRR-IPFV-be.good GENR GENR.POSS-tooth.quality

25906 *nuu-sna*

SENS-be.good

25907 'If one inherits from one's mother's (lineage), and (people from) one's
 25908 mother's (lineage) have good tooth quality, then one will (also) have good
 25909 tooth quality.' (27-tWCGArgu, 11-12)

25910 20.2.4.4 Comitative adverbs

25911 The *ayu-* denominal derivation has served as the basis for the development of a
 25912 separatee morphological category: denominational comitative adverbs (Jacques 2017d,
 25913 §5.8.1).

25914 Comitative adverbs are built by combining the prefix *kryuu-* (or *kry-*, a borrow-
 25915 ing from Tshobdun, §5.8.1) to the partially reduplicated stem of the base noun,
 25916 as in *kryuu-rtuu~rtaꝝ* 'together with its branches' from *tr-rtaꝝ* 'branch' or *kryuu-*
 25917 *rjuu~rjit* 'together with his/her/its children' from *tr-rjit* 'child'. These adverbs
 25918 are formally homophonous with the *kuu-* subject participles (§16.1.1) or stative
 25919 infinitives (§16.2.1.1) of the *ayu-* denominal verbs with emphatic reduplication
 25920 (§20.2.4.1).

25921 For example, the surface form /kryuurturtaꝝ/ can be parsed either as a comi-
 25922 tative adverb *kryuu-rtuu~rtaꝝ* 'together with its branches' or as the participle *kuu-*
 25923 *rjuu-rtuu~rtaꝝ* 'the one which has many branches' as in (17).

- 25924 (17) *si kuu-yyuu-rtuu-rtaꝝ ki kui-fse nuw-car-nuu*
 25925 tree SBJ:PCP-DENOM-EMPH~branch this SBJ:PCP-be.this.way IPFV-search-PL

25926 'They search for a tree having a lot of branches like this.' (elicited)

25927 Examples (18a) and (18b) present a minimal pair contrasting the participle
 25928 'have many children' on the one hand and the comitative adverb 'with his/her
 25929 children' on the other hand (both pronounced /kryuurplejwrit/).

- 25930 (18) a. *icqʰa tcʰeme nuu kuu-yyuu-rjuu~rjit ci*
 25931 the.aforementioned woman DEM SBJ:PCP-DENOM-EMPH~child INDEF
pua-ŋu
 25932 PST.IPFV-be
 'This woman had a lot of children.' (elicited)
 b. *kryuu-rjuu~rjit zo jo-nuw-ce-nuu*
 25933 COMIT-children EMPH IFR-VERT-go-PL
 'She/They went back with their children.' (elicited)

The comitative adverbs result from the reanalysis of a non-finite form of proprietive *ayu-* denominal verb, possibly a subject participle or an infinitive in verbal function (§16.2.1.7), with a trivial semantic change from proprietive ‘have many *X*’ to comitative ‘together with *X*’ (on the semantic proximity of the two categories, see for instance Sutton 1976; Patz 1991; Stassen 2000; Stolz et al. 2006; Arkhipov 2009).

20.2.5 Collective *andzi-*

The *andzi-* collective denominal prefix is attested in only one example: *andzirya* ‘be neighbours’ from *tr-rya* ‘neighbour’, as in (19).

- (19) *juu-yndzi-rya-ndzi*
SENS-DENOM-neighbour-DU

‘They are one next to the other.’ (elicitation)

This prefix is historically related to the *andzu-* reciprocal (§18.4.3), and the social collective *kvndzi-* prefix (§5.7.8.1) derives from the combination of the denominal *andzi-* with the *ku-* subject participle prefix (§16.1.1). The surface form /kvndzirya/ is ambiguous between the collective ‘neighbours’ and the participle ‘who are neighbours to each others, placed one next to each other’ as in (20).

- (20) *tceri tuu-tuu-rdoꝝ tuu-tui-rdoꝝ juu-ŋu ma*
LNK one-one-piece one-one-piece SENS-be LNK
kuu-yndzi-rya kuu-fse kuu-rry-k^hum~k^hy
SBJ:PCP-DENOM-neighbour SBJ:PCP-be.like SBJ:PCP-DENOM-EMPH~place
kuu-fse maye.
SBJ:PCP-be.like not.exist:SENS

‘(This type of mushroom grows) one by one (in isolated), not one next to the other (clustered together), not in patches.’ (24-zwArqhAjmAG, 81-82)

Although none of the other social collective nouns has a corresponding *andzi-* stative verb synchronically, this derivation must have been more widespread at an earlier stage. It is possible that the *ndzi-* element of this prefix is related to the dual *ndzi-* found in the possessive paradigm and pronouns (§6.1), though how exactly this prefix was built remains unclear.

20.3 Sigmatic denominal prefixes

20.3.1 Proprietary *sy-*

Proprietary 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 *nwu-*, §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 proprietary denominal 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-* proprietary denominal verbs (§20.2.4), in particular *ayutuy* ‘be poisonous’ from *tuy* ‘poison’, which has the same meaning as *syndry* ‘be poisonous’.

The corresponding *nwu-/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 denominal *sy-*-proprietary denominal prefix and corresponding *ny-*-denominal verbs

Base Noun	<i>sy-</i> -denominal (stimulus)	<i>ny-</i> -denominal (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 ଅଙ୍ଗାର *mts^har* ‘wondrous, strange’ among the verbs in Table 20.4 shows that both denominal derivations are productive.

The historical relationship between denominational *sy-* and *ny-* prefixes on the one hand, and proprietive and tropative prefixes on the other hand, is explored in §20.10.2.

Proprietive denominational verbs in *sy-* do not have tropative forms, and instead form the corresponding *ny-* denominational verb instead. For instance *syŋaqβ* ‘be unpleasant’, ‘be embarrassing’ (21) lacks a tropative *ny-syŋaqβ*, and instead requires the corresponding transitive denominational tropative *nyŋaqβ* ‘consider to be unpleasant’, ‘be embarrassed by/to’ (22).

- (21) *ayumdzu tce, [ky-nyjaβ]*
have.thorns:FACT LNK INF-touch.with.hand

sy-ŋaqβ.

DENOM:PROP-unpleasant:FACT

‘It is thorny, and unpleasant to touch with the hand.’

- (22) *srunmuu nuu kuu za [ky-ti u-rqo ny-kuu-toŋ]*
demoness DEM ERG early INF-say 3SG.POSS-throat NEG-SBJ:PCP-come.out
tce [ky-ti kuŋ-ny-ŋaqβ] to-zyyra 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 denominational verbs in *sy-* can select complement clauses as intransitive subjects. In those cases, the corresponding *ny-* denominational verbs are found with complement clauses as objects (22).

The verb *syŋaqβ* ‘be unpleasant’ is also remarkable in that it appears as first element of a the nominal compound *syŋaqβdi* ‘unpleasant smell’ (§5.5.6).

Some of the denominational verbs in *sy-* and *ny-* have semantic extensions that are not immediately predictable from the base verb. For instance, the denominational verbs from *tya* ‘visible’, ‘in the open’ are lexicalized: *syta* is used in the sense of ‘be accessible and safe’ (of roads, places), and *nyta* is a stative verb meaning either ‘be completely visible’ or ‘not feel vertigo (while being in a steep place)’ (24).

- (23) *tsʰywyrre nuunu, abynduundxt zo tce, u-jak-pa nuu wuma*
gecko DEM everywhere EMPH LNK 3SG.POSS-hand-under DEM really
zo nuu-njor tce, tsʰi kuŋ-fse zo
EMPH SENS-PASS-glue LNK what SBJ:PCP-be.like EMPH

- 26010 *mr-kur-srya* *tr-a<nu>ri* *kunv pju->tvr*
 NEG-SBJ:PCP-be.accessible AOR:UP-<AUTO>go[II] also IPFV-fall
- 26011 *mu&j-c^ha.*
 NEG:SENS-can
- 26012 'The gecko, the palms of its paws are very adhesive, and no matter how
 steep and inaccessible the places it goes up to, it cannot fall down.'
- 26013 (28-tshAwAre, 19-20)
- 26014
- 26015 (24) *pras u-tas* *nu-nrya*
 cliff 3SG.POSS-on SENS-not.feel.vertigo
- 26016 'He does not feel vertigo on the cliff.' (elicited)

26017 The denomininal verb *symbruu* 'get angry', which derives from the noun *tr-mbruu*
 'anger' with the prefix *sy-*, differs from all proprietive denomininal verbs in Ta-
 ble 20.4 in that it selects as subject the experiencer rather than the stimulus, as
 shown by (25) with 2SG indexation. The verb used to express the corresponding
 proprietive meaning is *symbruuŋgu* 'be detestable' ('cause people to get angry', a
 denomininal incorporating verb, §20.13.1, §22.4.3.2). The corresponding transitive
 verb *nymbruu* 'get angry with' is the functional applicative of *symbruu* 'get angry',
 as both verbs encode the same type of referent as subject.

- 26025 (25) *ma-tr-tu-sy-mbruu*
 NEG-IMP-2-DENOM:PROP-anger
 'Don't get angry!' (140425 shizi lang huli-zh, 22)

26027 Another unexplained irregularity of *symbruu* 'get angry' is the causative form
 syzmbruu 'anger', with the causative *z-* infix between the denomininal prefix and
 the nominal root (§17.2.2.7).

26030 20.3.2 Causative/instrumental sV-

26031 The sigmatic prefix *su(y)-/sy-* has a causative 'cause to be/have *X*' or instru-
 mental 'use *X*' denomininal function. As illustrated in Table 20.5, most of the de-
 nomininal verbs derived with this prefix are morphologically transitive, the only
 exceptions being *suŋeļu* 'be left-handed' ('use the left hand') and *sundzupe* 'sit
 without crossing legs'.

26036 The *su(y)-/sy-* allomorphy of this denomininal prefix has similarities with that
 of the sigmatic causative (§17.2.1). The allomorph *sy-* is selected when the base
 noun is an inalienably possessed noun selecting the *tr-* indefinite possessor pre-
 fix (such as *tr-k^hu* 'smoke') or with frozen *tr-* prefix (such as *trčyt* 'comb'), *su(y)-/sy-*

20 Denominal derivations

26040 *sux-* occurs with monosyllabic nominal roots without cluster and uvular or velar
 26041 onsets such as *tsʰaʂ* ‘sieve’ (a context similar to that of the *suy-* allomorph of the
 26042 sigmatic causative, §17.2.1.4), and *su-* is found in all other contexts, including in-
 26043 alienably possessed nouns selecting the *tui-* indefinite prefix (*tui-jaʂndz̥u* ‘finger’)
 26044 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>tuqartsuu</i> ‘kicking’	<i>suiqartsuu</i> ‘kick’ (vl)
<i>laʂrdyʂβ</i> ‘kicking with forelegs’	<i>suiqartsuu</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>trtʂu</i> ‘lamp’	<i>srytʂu</i> ‘illuminate with a lamp’ (vt)
<i>tui-jaʂndz̥u</i> ‘finger’	<i>suijaʂndz̥u</i> ‘point’ (with the finger) (vt)
<i>tui-çtʂi</i> ‘sweat’	<i>suciçtʂi</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)

26045 Denominal verbs in *sui(y)-/sry-* do not correspond to a single light verb construc-
 26046 tion. In the case of *sundzuupe* ‘sit without crossing legs’, the denominal deriva-
 26047 tion has a meaning similar to that of the base noun *ndzuupe* ‘sitting position of
 26048 women on the ground, without crossing legs’ in collocations with the light verb
 26049 *βzu* ‘make’ (§22.4.2.1) as in (26).

- 26050 (26) *tcʰeme nuu ky-kui-ʂ<nuu>mdzui* *tce ndzuupe* *ntsui*
 girl DEM AOR-GENR:S/O-<AUTO>sit LNK sitting.position always

26051 *juú-wy-βzu puu-ra.*

IPFV-INV-make PST.IPFV-be.needed

26052 'Women, when they sat, had to sit with both legs folded on one side,
26053 without crossing legs.' (31-khAjmu, 24)

26054 With nouns expressing striking actions such as *tuqartsuu* 'kicking',⁶ *sui-* derives
26055 labile verbs like *suiqartsuu* 'kick' (§14.5.1.2) corresponding to collocations with *lxt*
26056 'release' (§22.4.2.2).

26057 Other verbs such as *suciṣsi* 'cause to sweat' and *syrmi* 'name someone' ('cause
26058 to be named'), have the same meanings as collocations of the base nouns with
26059 the verb *tçyt* 'take out', as shown by the pair (27a) and (27b) from the same story,
26060 and example (28).

- 26061 (27) a. *ɬyndzitylytsʰaʂ tu-sy-rmi-nu* *juu-ɳu ma,*
26062 delphinium IPFV-DENOM:CAUS-name-PL SENS-be LNK
26063 'People call it (a species of *Delphinium*) ɬyndzitylytsʰaʂ.'
(13-NanWkWmtsWG, 135)
- 26064 b. *tce nuu u-rmi nuu ɬyndzitylytsʰaʂ to-tcxt-nu* *tce nuu*
26065 LNK DEM 3SG.POSS-name DEM delphinium IFR-take.out-PL LNK DEM
26066 *juu-ɳu.*
26067 SENS-be
26068 'This is why people call it ɬyndzitylytsʰaʂ 'demon milk-filter''.
(13-NanWkWmtsWG, 140)
- 26069 (28) *li tur-ctsisi zo pjuu-tcxt tu-mŋym ɳu.*
again GENR.POSS-sweat EMPH IPFV-take.out IPFV-hurt be:FACT
'It hurts again so much that it causes one to sweat.' (25-kACAl, 98)

26070 The verb *sykʰuu* can either mean 'burn to make smoke' (taking a noun such
26071 as *cry* 'juniper' as object) or 'smoke out by directing smoke towards X'. In the
26072 second case, this verb is equivalent to the combination of the base noun *ty-kʰu*
26073 'smoke' with the causative form *sux-çe* 'send, cause to go' as shown by example
(29), where both the denomininal *sykʰuu* and the noun-verb collocation appear.

- 26074 (29) *icqʰa si kʰoŋryl ty-k-yri nuu u-ɳguu kumy*
the.aforementioned tree hollow AOR-SBJ:PCP-go[II] DEM 3SG.POSS-in also
26075 *li [...] tu-çe qʰe, tce u-pa*
again IPFV:UP-go LNK LNK 3SG.POSS-down

⁶ The *tu-* prefix on *tuqartsuu* 'kicking' may either be a frozen possessor prefix, action nominal prefix or numeral 'one' prefix.

- | | | | | |
|-------|---|-----------------------|-------------------------|-----------------------|
| 26077 | <i>tu-sy-k^hui-nuu.</i> | <i>wi-pa</i> | <i>smi pjút-wy-βluu</i> | <i>q^he</i> |
| | IPFV:UP-DENOM:CAUS-smoke-PL | 3SG.POSS-down fire | IPFV-INV-burn | LNK |
| 26078 | <i>ty-k^huu</i> | <i>tu-suix-ce-nuu</i> | <i>q^he,</i> | |
| | INDEF.POSS-smoke | IPFV:UP-CAUS-go-PL | LNK | |
| 26079 | '(When the bear _i) goes up in a hollow tree, (the hunters) smoke it _i from | | | |
| 26080 | the bottom (of the tree), they make a fire and send the smoke upwards | | | |
| 26081 | (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 *fsay* ‘fumigation’ and the verb *ta* ‘put’ exists (§22.4.2.6), it means ‘make fumigations’ and cannot take a patient like the object *kʰydaꝝ* ‘khataꝝ’ in (30).

- 26086 (30) *k^hγdαs to-su-fsaŋ q^he, c^hγ-mqlaʂ q^he,*
 Khatag IFR-DENOM:CAUS-fumigation LNK IFR-swallow LNK
 26087 ‘She fumigated the khatag and swallowed it.’ (Gesar 2003, 63)

The verb *syftçaka* ‘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 *syftçaka* 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.

- 26095 (31) *wi-ndzyts^{hi} nui kui-mui~mum zo tu-syftcake q^he*
 3SG.POSS-meal DEM SBJ:PCP-EMPH~be.tasty EMPH IPFV-prepare[III] LNK
 ‘She would (each time) prepare a meal (for the old woman).’
 (2014-kWLAG, 616)

26098 (32) *ji-ndzyts^{hi} ftcaka t^r-βze*
 1PL.POSS-meal manner IMP-make[III]
 ‘Prepare a meal for us!’ (meimeidegushi, 67)

The *sr-* denominal derivation is productive, as shown by the presence of several words of Tibetan origin in Table 20.5, including *trṣṛt* ‘comb’, *fsaj* ‘fumigation’, *ts^has* ‘sieve’, *ts^hwi* ‘dye’ and *ftṣaka* ‘manner’ from 藏文 *cad* ‘comb’, 藏文 *bsaj* ‘fumigation’, 藏文 *ts^hags* ‘sieve’, 藏文 *ts^hos* ‘dye’ and 藏文 *bca ka* ‘tool’, respectively.

Unlike other denominal prefixes such as *nu-/nr-*, which can be paired with other prefixes (§20.7.3), verbs derived by the *sui(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 *sy-*/*yr-*/*nr-* contrast between *sykʰu* ‘smoke’ (by directing smoke towards), ‘burn into smoke’ (see 29 above) and the intransitive verbs *yṛkʰu* ‘have smoke’ with the *yr-* prefix (example 44, §20.5) and *nrkʰu* ‘be smoked’ (§20.7.1). Another group of denomininal verbs comprising *syftçaka* ‘prepare’ with a contrast between *sy-*, *ru-* and *nu-* is discussed in §20.4.3.

The verb *syrmī* ‘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 *tx-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 *sy-* 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 *ryjwaʂ* ‘grow leaves’ from *tx-jwaʂ* ‘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 *ryrjɪt* ‘have a child’ from *tx-rjɪt* ‘offspring’).

These denomininal verbs have meanings similar to collocations involving several light verbs. For instance, *ryjwaʂ* ‘grow leaves’ and *rymat* ‘grow fruits’ are synonymous with complex predicates comprising their base nouns *tx-jwaʂ* ‘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

Table 20.6: Intransitive denominal verbs in *ruu-/rꝝ-*

Base noun	Denominal verb
<i>muntoꝝ</i> ‘flower’	<i>r̥umuntoꝝ</i> ‘bloom’
<i>kučnom</i> ‘ears’ (of corn)	<i>rukučnom</i> ‘shoot out into ears’
<i>qajuu</i> ‘worm’	<i>ruqajuu</i> ‘get worms’
<i>com</i> ‘milk skin’	<i>rꝝcom</i> ‘form (of milk skin)’
<i>tꝝ-jwaꝝ</i> ‘leaf’	<i>rꝝjwaꝝ</i> ‘grow leaves’
<i>u-mat</i> ‘fruit’	<i>rꝝmat</i> ‘grow fruits’
<i>tꝝ-spui</i> ‘pus’	<i>rꝝspui</i> ‘fester’, ‘have pus’
<i>u-cvβ</i> ‘pod’ (of beans)	<i>rꝝcvβ</i> ‘grow pods’
<i>tꝝrka</i> ‘twins’	<i>rꝝrka</i> ‘have twins’
<i>tꝝ-puu</i> ‘young’ (of animal)	<i>rꝝpuu</i> ‘bear young’
<i>tꝝ-rjit</i> ‘offspring’	<i>rꝝrjit</i> ‘have a child’
<i>kʰa</i> ‘house’	<i>rꝝkʰa</i> ‘build a house’
(<i>yꝝr-</i>) <i>zga</i> ‘honey’	<i>rꝝzga</i> ‘make honey’, ‘gather pollen’
<i>juli</i> ‘flute’	<i>rujuli</i> ‘play the flute’
<i>u-stu</i> ‘truth, truly’	<i>rꝝstu</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>ndzvtsʰi</i> ‘meal’	<i>ruндzvtsʰi</i> ‘have a meal’
<i>jvγyt</i> ‘terrace’, ‘toilets’	<i>rujvγyt</i> ‘go to the toilets’
<i>conjβzu</i> ‘woodwork’	<i>ruconjβzu</i> ‘do woodwork’
<i>qartsvβ</i> ‘harvest’	<i>ruqartsvβ</i> ‘do harvesting’
<i>skv̥rwa</i> ‘circumambulation’	<i>ruskv̥rwa</i> ‘do a circumambulation’
<i>χpuun</i> ‘monk’	<i>rꝝχpuun</i> ‘become a monk’
<i>ftčaka</i> ‘manner’	<i>ruftčaka</i> ‘do preparation’
<i>tuu-čmi</i> ‘word’	<i>ruučmi</i> ‘speak’
<i>tuu-jroꝝ</i> ‘trace’	<i>rꝝjroꝝ</i> ‘leaving traces’
<i>tusqa</i> ‘wheat gruel’	<i>ruutusqa</i> ‘eat wheat gruel’
<i>tufcv̥r</i> ‘pottery’	<i>rꝝfcv̥r</i> ‘do pottery’
<i>tukrv̥z</i> ‘discussion’	<i>rꝝkrv̥z</i> ‘discuss’
<i>tꝝ-loꝝ</i> ‘nest’	<i>rꝝloꝝ</i> ‘make a nest’
<i>ta-ma</i> ‘work’ (n)	<i>rꝝma</i> ‘work’

26140 in §20.1.2.

- 26141 (33) *nui* [u-jwa₂] *nui-lxt* *tcendyre* [u-mat] *nui-βze]*
- DEM 3SG.POSS-leaf IPFV-release LNK 3SG.POSS-fruit IPFV-make[III]
- 26142 ‘(The Zanthoxylum) makes leaves and grows fruits.’ (07-tCGom, 22)

26143 Second, a related meaning of the *ru-/rr-* nominal prefix is ‘build *X*’, when
 26144 the product of the action results from a volitional action and is separate from the
 26145 body of the agent, encoded as intransitive subject. Nominal verbs of this type,
 26146 such as *rrylos* ‘make a nest’ and *rrkʰa* ‘build a house’, systematically correspond to
 26147 complex predicates with the verb *βzu* ‘make’, such as *kʰa+βzu* ‘build a house’ and
 26148 *tr-lor+βzu* ‘make a nest’. These constructions select human or animal subjects.

26149 Third, when the base noun refers to an activity rather than an object, the mean-
 26150 ing of the *ru-/rr-* nominal verb is ‘do *X*, perform a *X*’. There are two types of
 26151 complex predicates corresponding to this subtype of nominal verbs.

26152 On the one hand, as in the previous subtypes, verbs such as *rukʰramba* ‘tell
 26153 lies’ (from *kʰramba* ‘lie’) or *rrkʰrɔz* ‘discuss’ (from *tukrɔz* ‘discussion’), *rustunmu*
 26154 ‘marry’ (from *stunmu* ‘marriage’)⁷ are synonymous with constructions in *βzu*
 26155 ‘make’, *kʰramba+βzu* and *tukrɔz+βzu*, respectively.

26156 On the other hand, verbs such as *ruskʰrwa* ‘do circumambulations’ (from *skṛrwa*
 26157 ‘circumambulation’) and *rujyṛyt* ‘go to the toilets’ (from *jyṛyt* ‘terrace’, ‘toilet’)
 26158 instead correspond to collocations with the motion verb *ce* ‘go’ (§22.4.1.1).

26159 Third, in a few cases such as *rujuli* ‘play the flute’ (from *juli* ‘flute’), the meaning
 26160 of the nominal derivation is ‘use *X*’, and the corresponding complex predicate
 26161 selects the light verb *lxt* ‘release’ (*juli+lxt* ‘play the flute’, see 151, §15.1.5.8).

26162 Fourth, *ru-/rr-* nominal verbs from nouns of profession can have the mean-
 26163 ing ‘become *X*’, for instance in the case of *rrxpun* ‘become monk’ from *xpun*
 26164 ‘monk’. The corresponding complex predicate involves the verb *ndo* ‘take’ (§22.4.2.4).
 26165 Most nouns of this type however take the intransitive nominal *nui-* to derive a
 26166 verb with this meaning (§20.7.1).

26167 In addition to nouns, the *ru-/rr-* nominal derivations also takes as input
 26168 lexicalized nominalized verb forms. For example, the lexicalized participles *kunju*
 26169 ‘right thing’ and *kumaz* ‘bad thing’ (from the subject participles *kui-yu* ‘the one
 26170 that is’ and *kui-maz* ‘the one that is not’, §16.1.1.7) take the *ru-* nominal prefix to
 26171 form the verbs *rukunju* ‘do the right thing’, ‘take good care of one’s family’ and
 26172 *rukumaz* ‘do bad things’, respectively.⁸ Another example is *rutusqa* ‘eat wheat

⁷ Tibetan loanwords are common in this category; the three base nouns in the examples given here come from ཁྲମ རྩୟ ཁྲମ କ୍ରମବ୍ରା ‘liar’, ཁྲଗ ཁྲଗ ཁྲଗ ଗ୍ରୋସ୍ ‘discussion’ and ཁྲଗ ཁྲଗ ཁྲଗ ସ୍ତୋନମୋ ‘banquet’, respectively.

⁸ The corresponding complex predicate selects the verb *nyma* ‘do’, see 44 in §16.1.1.7.

26173 gigel', discussed in more details in §16.4.4 and §20.1.1.

26174 The *ruu-/rr-* prefix also has a deadverbial function, as in the case of *ruuslywur*
 26175 'happen suddenly' which comes from the adverb *klywur* 'suddenly' (itself bor-
 26176 rowed from शुभ्रः *glo.bur* 'sudden'). This verb expresses an action taking place
 26177 spontaneously as in (34), as opposed to that expressed by the corresponding *nuu-*
 26178 verb *nuuslywur* 'do suddenly' (§20.7.1).

- 26179 (34) *k^hyrum nunu, tuu-mtc^hi tu-tas zmbyr*
 mouth.ulcer DEM INDEF.POSS-mouth 3SG.POSS-on ulcer
 26180 *nuu-kui-łos ŋu. tce wuma zo ruuslywur*
 IPFV-SBJ:PCP-come.out be:FACT LNK really EMPH DENOM-suddenly
 26181 'The disease called) *k^hyrum* is an ulcer which appears on the mouth. It
 26182 happens very suddenly.' (25-khArWm,1-2)

26183 20.4.2 Transitive denominal verbs

26184 Transitive denominal verbs in *rr-* are also attested, but are considerably rarer.
 26185 Table 20.7 presents most attested examples.

Table 20.7: Transitive denominal verbs in *ruu-/rr-*

Base noun	Denominal verb
<i>tuu-tya</i> 'one span'	<i>rrtya</i> 'measure by handspan'
<i>tuu-jom</i> 'one fathom'	<i>rrjom</i> 'measure by fathom'
<i>tuu-ydxt</i> 'one section'	<i>rrydxt</i> 'cut into sections'
<i>tuu-rzuuy</i> 'one section',	<i>rrrzuuy</i> 'cut into sections'
<i>tuu-tyrzuy</i> 'one section'	
<i>tuu-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'

26186 Most transitive denominal verbs in *rr-* take counted nouns (§7.3) as input.
 26187 Three different meanings can be distinguished. First, *rr-* denominal verbs from
 26188 counted noun expressing units of lengths (see Table 7.11, §7.4) mean 'measure by
 26189 X', as in the case of *rrtya* 'measure by handspan' (35).

- 26190 (35) *t^hystuy kuu-ra nur c^hú-wy-ry-tya*
 how.much SBJ:PCP-be.needed DEM IPFV:DOWNSTREAM-DENOM-handspan
 26191 ‘One measures how long (the clothes have to be weaved) by handspan.’
 26192 (vid-20140429092115, 25)

26193 Second, when the base noun has the meaning ‘(one) section’, the *ry-* denomininal
 26194 verb derived from it means ‘cut/turn into *X*’, like corresponding complex predi-
 26195 cates with either *lvt* ‘release’, *βzu* ‘make’ or the causative *suxče* ‘send’, ‘cause to
 26196 go’. Example (36) illustrates the parallel uses of the denomininal verb *r_Yrzuy* ‘cut
 26197 into sections’ and the complex predicate *X-rzuy + lvt*. Emphatic reduplication on
 26198 the verb *pj^h-wy-ry-rzuy~rzuy* contributes to express the fact that the patient is cut
 26199 into more than two sections.

- 26200 (36) *pj^h-wy-ry-rzui~rzuy tce kuβde-rzuy zo tó-wy-lvt,*
 26201 IPFV-INV-DENOM-EMPH~section LNK four-section EMPH IFR-INV-release
pj^h-wy-sat.
 26202 IFR-INV-kill
 26203 ‘(The thieves) cut him into many sections, they cut him into four sections
 and killed him.’ (140512 alibaba-zh, 115)

26204 Third, in the case of the counted noun *tui-spra* ‘one handful’ which refers to
 26205 the volume contained in a handful, the denomininal verb means ‘take a handful of’,
 26206 ‘hold in one hand’ as in (37).

- 26207 (37) *uu-juu, uu-sy-ndo [tui-jas] kuu*
 26208 3SG.POSS-handle 3SG.POSS-OBL:PCP-take GENR.POSS-hand ERG
kú-wy-ry-spra kuu-k^huu] jamar myetsa
 26209 IPFV-INV-DENOM-handful SBJ:PCP-be.possible about until
c^hú-wy-βzoB
 26210 IPFV-INV-peel/sharpen
 26211 ‘One sharpens its handle until it can be held in one’s hand.’
 (13-tAsAsqAri, 27)

26212 There are two transitive denomininal verbs in *ry-* that are not derived from
 26213 counted nouns: *ryp^huu* ‘give a price for’ from the inalienably possessed noun *uu-*
 26214 *p^huu* ‘price’ and *ryNqra* ‘do in an incomplete way’ from the property noun *uu-nqra*
 26215 ‘broken one’ (§5.1.2.7). The former has the lexicalized reflexive *zyrryp^huu* ‘act ac-
 26216 cording to one’s ability’⁹ (probably through an intermediate meaning such as

⁹ The meaning of this verb is close to that of the Chinese expression 量力而行 <liànglìérxíng> ‘act according to one’s ability’.

²⁶²¹⁷ ‘(correctly) evaluate one’s price’, §18.3.3).

²⁶²¹⁸ 20.4.3 Pairing with other denominal prefixes

²⁶²¹⁹ Intransitive denominal verbs with the *ruu-/ry-* denominal prefix (§20.4.1) are often paired with denominal verbs in *nuu-/ny-*. Several categories of *rV-/nV-* pairs have to be distinguished.

Table 20.8: Pairs of denominal verbs in *ruu-/ry-* and *nuu-/ny-*

<i>ruu-/ry-</i> denominal verbs	<i>nuu-/ny-</i> denominal verbs
<i>rukuiçnom</i> ‘shoot out into ears’(vi)	<i>nukuiçnom</i> ‘collect ears’ (vi)
<i>ruqajiu</i> ‘have worms’ (vi)	<i>nuqajiu</i> ‘look for worms’ (vi)
<i>ruftçaka</i> ‘do preparation’ (vi)	<i>nuftçaka</i> ‘prepare’ (vt)
<i>rykryz</i> ‘have a discussion’ (vi)	<i>nuikryz</i> ‘discuss’ (vt)
<i>ryma</i> ‘work’ (vi)	<i>nyma</i> ‘do’ (a job) (vt)
<i>ruk^hyxwi</i> ‘have a meeting’ (vi)	<i>nuk^hyjxwi</i> ‘meet about’ (vt)

²⁶²²² There are pairs of intransitive verbs, such as *ruqajiu* ‘have worms’ and *nuqajiu* ‘look for worms’ from *qajiu* ‘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).

²⁶²²⁶ However, in most cases the *rV-* verb is intransitive and the *nV-* one is transitive. ²⁶²²⁷ For instance, *ryma* ‘work’ (38) has intransitive morphology (no stem II alternation), no overt object and its subject is in absolute form, while its counterpart ²⁶²²⁸ *nyma* ‘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 ²⁶²²⁹ transitive subject of the *nV-* encode the same referent.

- ²⁶²³² (38) *nutcu a-wi c^ho a-mu ni*
DEM:LOC 1SG.POSS-grandmother COMIT 1SG.POSS-mother DU
tu-ry-ma-ndzi,
IPFV-DENOM:TR-WORK-DU
²⁶²³³ ‘My grandmother and my mother were working there.’ (2010-09, 21)

²⁶²³⁵ The additional object argument of the *nV-* verb which can be a noun phrase as ²⁶²³⁶ in (39), with a *figura etymologica* *wi-ma+nyma* ‘do *X*’s work’ in (40).

- 26237 (39) *k^ha nura nu-nx-me.*
 house DEM:PL SENS-DENOM:TR-work[III]
 '(Her daughter) does the housework.' (14-siblings, 67)

- 26239 (40) *uzo kuu rjylpu u-ma tu-nx-me*
 3SG.ERG king 3SG.POSS-work IPFV-DENOM:TR-work[III]
 'He did the work of a king.' (2003 qachGA, 194)

26241 In the case of other verbs pairs such as *r^hkr^hyz* 'have a discussion' and *nukr^hyz*
 26242 'discuss' (something), the object of the *nV*-verb is an infinitive complement clause,
 26243 as in (41). In some cases the transitive verb *nukr^hyz* has the additional meaning
 26244 'discuss and decide that *X*'.

- 26245 (41) *khu c^hondyre mbro ni to-ry-kryz-ndzi.* [...]
 tiger COMIT horse DU IFR-DENOM:INTR-discussion-DU
 26246 *[tua-rjit k^h-wy-nuisk^hru tce, u-puu nuu*
 GENR.POSS-offspring AOR-INV-be.pregnant.from LNK 3SG.POSS-child DEM
 26247 *tc^hi jamar tee tu-ky-sci nuu], to-nui-kryz-ndzi.*
 what about LNK IPFV-INF-be.born DEM IFR-DENOM:TR-discussion-DU
 26248 'The tigress and the mare had a discussion, they discussed how long it
 26249 would take for the child to be born after one gets pregnant.' (20-tArka, 34)

26250 The relationship between the *rV*- and the *nV*- verbs is functionally similar to
 26251 a base verb and its applicative counterpart, or to an antipassive verb and its cor-
 26252 responding base verb (§18.6.8.5, §20.7.3). The high degree of productivity of this
 26253 type of denominational pair is shown by the presence not only of Tibetan loanwords
 26254 among the examples, but also of loanwords from Chinese such as *ruk^hyjxwi* 'have
 26255 a meeting' and *nuk^hyjxwi* 'meet about' (from 开会 <kāihuì> 'have a meeting',
 26256 §20.11).

26257 The semantics of the verbs *ruftçaka* 'do preparation' and *nuftçaka* 'prepare',
 26258 like that of *syftçaka* 'prepare' (§20.3.2), derives from the collocation *ftçaka+βzu*
 26259 'prepare *X*, prepare to *X*' (the other meanings of this collocation are discussed
 26260 in Jacques 2016a: 240, §16.2.1.5 and §16.2.1.2) rather than from the noun *ftçaka*
 26261 'manner' itself. Both *nuftçaka* and *ftçaka+βzu* can occur with infinitival comple-
 26262 ment clauses (42) or nouns (32 in §20.3.2) as objects. The intransitive *ruftçaka*
 26263 occurs as the functional antipassive counterpart of both *nuftçaka* and *syftçaka*.

- 26264 (42) *li ky-tvβ kú-wy-nur-ftcaka ra [...]*
 again INF-thresh IPFV-INV-DENOM-manner be.needed:FACT
 26265 *tv-tcui ra kui tcendyre ky-tvβ ftcaka tú-wy-βzu tce,*
 INDEF.POSS-boy PL ERG LNK INF-thresh manner IPFV-INV-make LNK
 26266 ‘(After...), one has to prepare the threshing, the men prepare to thresh
 26267 (the crops).’ (2010-10, 101-102)

20.5 Velar denominal prefixes

26268 The *yv-* denominal prefix (and its rarer variant *yv-*) 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

26275 The *yv-* prefix can derive several types of intransitive verbs, of which Table 20.9 lists a representative sample.

26277 Some *yv-* denominal verbs are stative proprietive, like those in *ayu-* (§20.2.4),
 26278 such as *yvrcor* ‘be muddy’ from *tvrcor* ‘mud’. The base nouns can be inalienably
 26279 possessed nouns, nouns with a frozen *tv-* prefix, alienably possessed nouns (such
 26280 as *rdul* ‘dust’) and also property nouns (such as *w-jlu* ‘uncooked’, §5.3). The only
 26281 example of a Tibetan loanword among these nouns is *rdul* ‘dust’ (from རྩླ རଦୁଲ
 26282 ‘dust’). Unlike *ayu-*, the *yv-* prefix can derive verbs from abstract nouns, such as
 26283 *yvndzo* ‘be cold’ from *tvndzo* ‘cold weather’.

26284 Different nouns belonging to the same semantic categories do not necessarily
 26285 select the same denominal prefix. For instance, the inalienably possessed noun
 26286 *w-duxun* ‘fragrance’ is the base for the denominal verb *ayuduxun* ‘be fragrant’
 26287 with the *ayu-* prefix, while the noun *tv-di* ‘smell’ (from which *w-duxun* ‘fragrance’ is derived) takes the *yv-* denominal prefix (*yvdi* ‘have a smell’, ‘stink’).
 26288 Similarly, while most denominal verbs expressing physical defects are built with
 26289 the *a-* prefix (§20.2.1), the verb *yvmbyo* ‘be deaf’ (from *tvmbyo* ‘deaf person’) has
 26290 the *yv-* prefix.

26292 The meaning of the *yv-* prefix is slightly different from that of *ayu-*. Some
 26293 nouns can take both prefixes, such as *tv-mdzu* ‘thorn’, which is the base for two
 26294 denominal verbs: *ayumdzu* ‘have a lot of thorns’ (see the Japhug definition of this
 26295 verb in 11, §20.2.4) and *yvmdzu* ‘have thorns’.

Table 20.9: Intransitive denomininal verbs in *yuu-*/*yr-*

Base noun	Denomininal verb
<i>rdul</i> ‘dust’	<i>yrrdul</i> ‘be dusty’
<i>tyrcor</i> ‘mud’	<i>yrrcor</i> ‘be muddy’
<i>tymbyo</i> ‘deaf person’	<i>yrrmbyo</i> ‘be deaf’
<i>tyndzo</i> ‘cold’ (weather)	<i>yrrndzo</i> ‘be cold’ (of weather)
<i>tycu</i> ‘coolness’	<i>yrrcu</i> ‘be cool’ (of a place)
<i>w-kre</i> ‘authority’	<i>yrrkre</i> ‘be respected’ (of a person)
<i>w-jlu</i> ‘uncooked’	<i>yrrjlu</i> ‘be uncooked’
<i>ty-di</i> ‘smell’ (n)	<i>yrrdi</i> ‘have a smell’, ‘stink’
<i>ty-mdzu</i> ‘thorn’	<i>yrrmdzu</i> ‘have thorns’
<i>ty-tcuy</i> ‘tree shoot’	<i>yrrtcuy</i> ‘grow shoots’ (of trees)
<i>tu-tca</i> ‘mistake’	<i>yrrtca</i> ‘be wrong’
<i>ty-k'h'u</i> ‘smoke’	<i>yrrk'h'u</i> ‘be smoky’
<i>ty-tsuar</i> ‘crack’	<i>yrrtsuar</i> ‘have cracks’, ‘develop cracks’
<i>tywu</i> ‘cry’ (n)	<i>yrrwu</i> ‘cry’ (vi)
<i>tyrbaq</i> ‘game’ (n)	<i>yrrtbaq</i> ‘hunt’ (vi)
<i>conjtca</i> ‘timber’	<i>yrrconjtca</i> ‘chop timber’

26296 The *ayuu-* denomininal prefix indicates the presence of an important quantity of
 26297 the substance or entity referred to by the base noun (‘have a lot of *X*’ or ‘produce
 26298 a lot of *X*’), while *yr-* prefix rather can be simply glossed as ‘have *X*’, without
 26299 specification of quantity, as shown by the definition in (43).

- 26300 (43) *jnu-yrr-mdzu* *tce ty-mdzu* *yrrzu* *kry-ti*
 SENS-DENOM:PROP-thorn LNK INDEF.POSS-thorn exist:SENS OBJ:PCP-say
 26301 *jnu* *ma kui-dyn* *my-kui-dyn* *nura mas*
 be:FACT LNK SBJ:PCP-be.a.lot NEG-SBJ:PCP-be.a.lot DEM:PL not.be:FACT
 26302 ‘(The word) *jnu-yr-mdzu* means ‘it has thorns’, it does not (specify
 26303 whether) there are many or not.’ (elicited)

26304 Another meaning of the *yr-* prefix is ‘from which *X* comes out, emitting *X*’.
 26305 For instance *yrrdul* ‘be dusty’ has the specific meaning ‘emitting dust’ (of a dusty
 26306 road) rather than ‘be covered in dust’ (see §20.5.3). The verb *yrrk'h'u* (from *ty-*
 26307 *k'h'u* ‘smoke’) has two different meanings: ‘be smoky’ (of a place) or ‘have smoke
 26308 coming out’ (44).

- 26309 (44) *k^ha nuu-yy-k^huu-nuu*
 house SENS-DENOM-smoke-PL
 26310 ‘There is smoke coming out from their house.’ (Norbzang 2012, 227)

26311 Among these verbs, *yrtca* ‘be wrong’ is one of the few intransitive verbs that
 26312 can be reflexivized with the *zyy-* prefix (§18.3.1.4), with a reflexive tropative meaning
 26313 *zyyyrtca* ‘recognize one’s mistake’.

26314 Some *yy-* denominal verbs are clearly dynamic verbs. For instance, the denomina-
 26315 *yytsur* ‘have cracks’ (45a) has the same meaning as the collocation combining
 26316 the base noun *tx-tsuri* ‘crack’ with the verb *ce* ‘go’ (45b).

- 26317 (45) a. *uu-rnom-cyruu lo-yy-tsuri*
 3SG.POSS-rib-bone IFR:UPSTREAM-DENOM-crack
 26318 b. *uu-rnom-cyruu yuu uu-tsuri lo-ce*
 3SG.POSS-rib-bone GEN 3SG.POSS-crack IFR:UPSTREAM-go
 26319 ‘His ribs got fractured.’ (elicited)

26320 Some of the dynamic intransitive denominal verbs in *yy-* such as *yytsur* ‘have
 26321 cracks’ and *yywu* ‘cry’ have patientive intransitive subjects, but a few other verbs
 26322 such as *yyrba* ‘hunt’ and *yuqonjca* ‘chop timber’ have agentive subjects like the
 26323 transitive denominal *yu-/yy-* verbs treated in the following section.

26324 The intransitive deideophonic *yy-* prefix (§20.9.1) is probably historically re-
 26325 lated to the *yy-* intransitive denominal prefix.

26326 20.5.2 Transitive denominal verbs

26327 The *yu-/yy-* prefix can also derive transitive verbs, either from inalienably pos-
 26328 sessed nouns or counted nouns (see Table 20.9). The correlation between the
 26329 vocalism of the indefinite possessor prefix *tuu-/tx-* and that of the denominal pre-
 26330 fix *yu-/yy-* is less consistent than for other derivations.

26331 The verb *yyxpra* ‘send’ has the unique allomorph *yyx-* with an intrusive velar
 26332 fricative *-x-* like some voice derivations (§17.2.1.4), even though this is not found
 26333 in the base noun *txpra* ‘messenger’ and the other denominal verb *nypra* ‘be sent’
 26334 (§20.5.3).

26335 When the base noun refers to a concrete object, the corresponding *yu-/yy-*
 26336 denominal verb expresses the action prototypically associated with the use of
 26337 that object, for instance *yuri* ‘thread’ (pass a thread through beads/a needle’s
 26338 eye) from *tx-ri* ‘thread’.

Table 20.10: Intransitive denominal verbs in *yuu-/yr-*

Base noun	Denominal verb
<i>tr-ri</i> ‘thread’ (n)	<i>yuri</i> ‘thread’ (vt) (beads, needle)
<i>tr-fkum</i> ‘bag’	<i>yufkum</i> ‘put in a bag’
<i>trjtsi</i> ‘pillar’, ‘post’	<i>yujtsi</i> ‘support’ (as a pillar supporting the roof)
<i>tui-lyn</i> ‘answer’ (n)	<i>yulyn</i> ‘answer’ (vt)
<i>tui-tçʰa</i> ‘news’	<i>yutçʰa</i> ‘answer’ (vt) (to someone)
<i>tui-scur</i> ‘a double handful’	<i>yuscur</i> ‘hold with both hands’
<i>tui-çkat</i> ‘one load’	<i>yuçkat</i> ‘load’ (a burden on an animal)
<i>tui-jmjo</i> ‘dream’ (n)	<i>yxjmjo</i> ‘dream of’
<i>trpra</i> ‘messenger’, ‘envoy’	<i>yxprə</i> ‘send’ (someone)
<i>w-trjuw</i> ‘addition’ (§25.6.2.3)	<i>yxju</i> ‘add’
<i>tr-ro</i> ‘excess’, ‘surplus’	<i>yxro</i> ‘add’, ‘do/give more’

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 *yutçʰa* ‘answer’ is semantically close to the complex predicate involving the base noun *tui-tçʰa* ‘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 *tui-tçʰa* in 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 jnr-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 deriva-

tion (§18.1). The resulting verbs, for instance *ayučkat* ‘be loaded with’ (47), superficially resemble *ayu-* proprieative denominal verbs (§20.2.4), and it is possible that the *ayu-* derivation originates from a combination of the passive with the transitive denominal *yuu-*.

- (47) *ki* *tyrka ki* *ty-ruku* *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)

The *yr-/yuu-* denominal prefix is cognate with Tshobdun *wp-*, for instance *wp-ri?* ‘thread a needle’ from *ri?* ‘thread’, (J. T.-S. Sun 2014a), which exactly corresponds to Japhug *yuri* ‘thread’.

20.5.3 Pairing with other denominal prefixes

A considerable number of nouns can take both *yuu-/yr-* and *nuu-/nr-* denominal prefixes. Table 20.11 presents a list of pairs of denominal verbs derived with these prefixes; the base nouns are not included in this table for lack of space, but are indicated in Tables 20.9 and 20.10 above.

These pairs can be classified into three groups, depending on the transitivity of the verbs and the semantic correspondences between them.

Table 20.11: Pairs of denominal verbs in *yuu-/yr-* and *nuu-/nr-*

<i>yuu-/yr-</i> denominal verbs	<i>nuu-/nr-</i> denominal verbs
<i>yrndzo</i> ‘be cold’ (of weather) (vi)	<i>nrendzo</i> ‘feel cold’ (vi)
<i>yrceu</i> ‘be cool’, ‘be shady’ (vi)	<i>nryceu</i> ‘cool off’ (vi) (in the shades)
<i>yrk'uu</i> ‘have smoke’ (vi)	<i>nryk'uu</i> ‘be smoked’ (vi)
<i>yrndlul</i> ‘be dusty’ (vi) ‘emit dust’	<i>nurdul</i> ‘be dusty’ (vi) ‘becovered in dust’
<i>yrwu</i> ‘cry’ (vi)	<i>nrywu</i> ‘cry for’ (vt)
<i>yrnbaš</i> ‘hunt’ (vi)	<i>nrynbaš</i> ‘hunt for’ (vt)
<i>yrxpра</i> ‘send’ (vt)	<i>nrypra</i> ‘be sent’ (vi)
<i>yrjmjo</i> ‘dream of’(vt)	<i>nuijmjo</i> ‘appear in dream’ (vi)
<i>yuučkat</i> ‘load’ (vt) (a burden on an animal)	<i>nuučkat</i> ‘carry loads’ (vi) (on animals)

First, we find pairs of intransitive verbs, where the *yuu-/yx-* verb expresses either a property associated with a place ('have *X*', 'emitting *X*'), or with a dummy intransitive subject (*yndzo* 'be cold'), while the *nua-/nx-* denominal verbs takes as subject an experiencer (*nyndzo* 'feel cold').

In the case of the pair of intransitive verbs *yýrdul* and *nurdul* (from *rdul* 'dust') however, the subject of *nurdul* is not an experiencer, the semantic difference between the two verbs being explained in (48).

- 26380 (48) *kui-yy-rduul* *nui, uzo ui-taꝝ* *rdul*
 INF:STAT-DENOM-dust DEM 3SG 3SG.POSS-on dust

26381 *tu-kui-łos* *nui ḡu,* *kui-nui-rduul* *nui, uzo*
 IPFV:UP-SBJ:PCP-come.out DEM be:FACT INF:STAT-DENOM-dust DEM 3SG

26382 *ui-taꝝ* *rdul ky-kui-ndzob* *nui ḡu*
 3SG.POSS-on dust AOR-SBJ:PCP-ACAU:attach DEM be:FACT

26383 'kuu-yx-rdul means that dust is coming up from it, and kuu-nu-rdul means
26384 that dust is attached on it.' (elicited definition)

Second, there are cases in which the *yu-/yr-* denominal verb is intransitive, and the corresponding *nu-/nr-* verb is transitive, such as *yrwu* ‘cry’ and *nrwu* ‘cry for’. The transitive subject of the *nu-/nr-* verb corresponds to the same entity as the intransitive subject of its counterpart in *yu-/yr-*, and has the same functional relationship to it as an applicative derivation (§17.4) to its base verb, as the object of the transitive verb in *nu-/nr-* expresses a patientive argument.

26391 Third, the opposite situation, with transitive denominal verbs in *yu-*/*yr-* and
26392 intransitive verbs in *nu-*/*nr-*, is also attested. These are passive-like configura-
26393 tions, where the subject of the intransitive verb corresponds to the object of its
26394 transitive counterpart (as in *yrxpra* ‘send’ / *nrpra* ‘be sent’), and antipassive-like
26395 configurations, where the subjects of both verbs are the same (*yuçkat* ‘load’ /
26396 *nuçkat* ‘carry loads’).

20.6 Labial nasal denominal prefixes

The most common function of the *mr-* denominal prefix to derive intransitive verbs of relative location from locative relator nouns (§8.3.4.2), as illustrated in Table 20.12. Note the presence of Tibetan loanwords in this list, including *u-pci* ‘outside’ and *u-χcyl* ‘center’ from 西 pʰi ‘outside’ and 中 d̥kʰil ‘center’, a fact that demonstrates the productivity of this derivation.¹⁰

¹⁰ The first syllable of *ui-pyrtʰyβ* ‘between’ is also borrowed from *բար* *bar* ‘space between’.

Table 20.12: Denominal verbs of location in *mr-*

Base noun	Denominal verb
<i>tu-ku</i> ‘head’, <i>u-ku</i> ‘top of’	<i>mrku</i> ‘be first’
<i>u-qʰu</i> ‘after’, ‘behind’	<i>maqʰu</i> ‘be after’
<i>u-pci</i> ‘outside’	<i>mrpc̥i</i> ‘be outside’
<i>u-ŋgu</i> ‘inside’	<i>mrŋgu</i> ‘be inside’
<i>u-χcrl</i> ‘center’	<i>mrχcrl</i> ‘be in the center’
<i>u-pyrtʰyβ</i> ‘between’	<i>mrpyrtʰyβ</i> ‘be between’

26403 The *mr-* denominal prefix is possibly related to the *maj-* prefix which derives
 26404 verbs of relative locations from locational adverbs, for instance *majlo* ‘be up-
 26405 stream’ from *lo* ‘upstream’ (§15.1.3.4).

26406 In addition to their semantic similarity, verbs of location in *mr-* and *maj-* have
 26407 in common the fact that they are among the very few intransitive verbs that can
 26408 be reflexivized (§18.3.1.4): *zyr-* prefixation yields volitional motion verbs such as
 26409 *zyrmrpyrtʰyβ* ‘put oneself in between’ or *zyrmajlo* ‘put oneself upstream’, from
 26410 *mrpyrtʰyβ* ‘be between’ and *majlo* ‘be upstream’.

26411 The causativization of *mr-* denominal verbs has several outcomes. With *mrku*
 26412 ‘be first’ and *maqʰu* ‘be after’, which can have temporal meanings (§7.1.5), the
 26413 sigmatic causative forms *z-mrku* and *z-maqʰu* generally mean ‘do first’ or ‘do after/
 26414 later’ with complement clauses as in (49) (see also examples 30, §17.2.4.6 and 204
 26415 §18.9.1).

- 26416 (49) *sulymgruβdyn kuu [u-tʰu]* *ty-tu-z-mrku-t*
 ANTHR ERG 3SG.POSS-BARE.INF:ask AOR-2-CAUS-be.first-PST:TR
 26417 *ŋu tce*
 be:FACT LNK
 26418 ‘Bsod.nam sgrub.ldan, you were the first to ask (her in marriage).’ (sras
 26419 2003, 103)

26420 The causative *z-maqʰu* also has the straightforward causative meaning ‘cause
 26421 to be late, delay’ (examples 51, §14.3.2.4 and 75, §14.3.3.1).

26422 With other verbs, for which a temporal interpretation is not possible, the
 26423 causative derivation means ‘put in *X*’, where *X* corresponds to the relator noun.
 26424 For instance, *z-mrŋgu* and *z-mrpc̥i* occur in the sense of ‘wear (some clothes) in-
 26425 side’ and ‘wear outside’. In addition, *z-mrpc̥i* can be used in the metaphorical

26426 sense of ‘treat as a stranger’.

26427 In addition to generating verbs of relative location, the denomininal *mu-* and
26428 *mr-* prefixes are also attested with other functions, illustrated by the examples in
26429 Table 20.13.

Table 20.13: Other denominational verbs in *muu-/mr-*

Base noun	Denomininal verb
– <i>sti</i> ‘alone’	<i>musti</i> ‘be alone’
<i>tu-lum</i> ‘size’, ‘dimensions’	<i>mr̥lum</i> ‘be big in size’
<i>tx-mu</i> ‘mother’	<i>mr̥mu</i> ‘be the most important’
<i>tx-rzaβ</i> ‘wife’	<i>mr̥rzaβ</i> ‘marry’ (of a girl)
<i>tx-tçuu</i> ‘son’	<i>mr̥tçuu</i> ‘be adopted as a son’
<i>tu-rpaꝝ</i> ‘shoulder’	<i>mr̥rpaꝝ</i> ‘carry on the shoulder’

26430 First, they derive stative intransitive verbs of quantity or size such as *mr̥lum* ‘be
26431 highly lexicalized: *musti* ‘be alone’ derives from the stem –*sti* ‘alone’ which is only used
26432 in the Kamnyu dialect in compounds with pronouns as first element (§22.2.2.4)
26433 or as the reduplicated adverb *stusti* ‘alone’, and *mr̥mu* ‘be the most important’, is
26434 presumably derived from *tx-mu* ‘mother’, though not by a direct semantic change.
26435

26436 To these examples, it is possible to add *mr̥mbur* ‘protruding’, which probably
26437 comes from a lost noun **mbur* borrowed from Tibetan མྔ རྒྱྲ བྸ ‘bulge, protuberance’, and *muxte* ‘be the majority’, which may originate from the obsolete
26438 property noun **w-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
26439 the compound noun *xtçuxte* ‘size’, §5.5.2.2 and §20.2.1 above).

26440 Second, the *mr-* prefix is used to build intransitive verbs meaning ‘become
26441 someone’s *X*’ from kinship terms, as in *mr̥rzaβ* ‘marry’ (of a girl) and *mr̥tçuu* ‘be
26442 adopted as a son’¹¹ from *tx-rzaβ* ‘wife’ and *tx-tçuu* ‘son’, respectively.

26443 Third, there is one transitive verb derived with the *mr-* prefix: *mr̥rpaꝝ* ‘carry
26444 on the shoulder’ from the inalienably possessed body part *tu-rpaꝝ* ‘shoulder’

¹¹ This verb has the additional meaning of Chinese 入赘 <rùzhùi> ‘marry into one’s wife’s household’.

, anomalous both because of the vocalism of the denominal prefix (*mu-* is expected) and because of its isolated meaning, similar to the *nr-* denominal verb *nrwpas* ‘carry on the shoulder’ (§20.7.2).

20.7 Dental nasal denominal prefixes

The denominal prefixes *nu-/nr-* have a high degree of productivity, and present a wide range of functions. They can derive both intransitive and transitive verbs from nouns.

20.7.1 Intransitive

Intransitive denominal derivations in *nu-/nr-* have at least six different meanings, illustrated in Table 20.14. All six categories contain examples of borrowings from Tibetan and even Chinese in some cases, such as *u-mdor* ‘colour’, *rdul* ‘dust’ and *xpunbu* ‘master’ from མດོག ‘mdog’ ‘colour’, རླྟ ‘rdul’ ‘dust’ and བୋନ་པୋ ‘lord’, respectively.

First, some denominal verbs in *nV-* are stative, including proprietive verbs like *nrmar* ‘be oily’ from *ta-mar* ‘butter’, with a meaning quite different from *ayumar* ‘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, *numdoṣ* ‘look like’ from *u-mdor* ‘colour’ is semi-transitive, as shown by (50), where its semi-object is the headless relative *u-sni mr-kui-naṣ* ‘who is not evil (whose heart is not black)’.

(50)	<i><maji> nuunu [u-sni</i>	<i>mr-kui-naṣ]</i>	<i>pjy-nu-mdoṣ</i>
	ANTHR DEM	3SG.POSS-heart	NEG-SBJ:PCP-be.black PST.IFR-DENOM-colour

26468

‘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-mdor* ‘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-/nr-* denominal derivation can mean ‘get (covered by) *X*, suffer from *X*’, as in *nuyur* ‘be affected by frost’ (from *tuyur* ‘frost’). This verb selects

Table 20.14: Intransitive denomininal verbs in *nuu-/nꝝ-*

Base noun	Denominal verb
<i>w-ezzuу</i> ‘appearance’	<i>nuuеzzuу</i> ‘be pleasing to the eye’
<i>ta-mar</i> ‘butter’	<i>nꝝmar</i> ‘be oily’
<i>w-mdor</i> ‘colour’	<i>numdor</i> ‘look like’
<i>sya</i> ‘rust’	<i>nusya</i> ‘become rusty’
<i>rdul</i> ‘dust’	<i>nurdul</i> ‘be dusty’ (be covered in dust)
<i>tuyur</i> ‘frost’	<i>nuuyur</i> ‘suffer from frost’
<i>tr-kʰuу</i> ‘smoke’	<i>nꝝkʰuу</i> ‘be smoked’
<i>trzri</i> ‘dew’	<i>nꝝzri</i> ‘get wet from the dew’
<i>w-χcyl</i> ‘middle’	<i>nꝝχcyl</i> ‘go to the middle’
<i>tumtci</i> ‘morning’	<i>numtci</i> ‘rise early’
<i>turmuu</i> ‘evening’	<i>nurmuu</i> ‘sleep late’
<i>rryo</i> ‘song’	<i>nurryo</i> ‘sing’
<i>tr-pyri</i> ‘dinner’	<i>nꝝpyri</i> ‘have dinner’
<i>saxsuу</i> ‘lunch’	<i>nusaxsuу</i> ‘have lunch’
<i>tr-kaк</i> ‘good time’	<i>nꝝkaк</i> ‘have a good time’
<i>χpunbu</i> ‘master’	<i>nuuχpunbu</i> ‘become the master’
<i>ьmaзmi</i> ‘soldier’	<i>nuuьmaзmi</i> ‘become a soldier’, ‘serve in the army’
<i>qarma</i> ‘crossoptilon’	<i>nuqarma</i> ‘search for crossoptilon’
<i>mtsʰalu</i> ‘nettle’	<i>numtsʰalu</i> ‘search for nettle’
<i>qro</i> ‘ant’	<i>nuqro</i> ‘search for ants’
<i>trjmry</i> ‘mushrooms’	<i>nꝝjmry</i> ‘search for mushrooms’

26477 as subject plants (51), and differs from the corresponding light verb construction
 26478 *tuyur+ta* (52) (§22.4.2.6) whose transitive subject is dummy (§14.3.5).

- 26479 (51) *stonka tce li, nyki, puu-nuu-yur q^he, li pjuu-tsyi q^he*
 autumn LNK again FILLER AOR-DENOM-frost LNK again IPFV-rot LNK
 26480 *muu-nuu-sna cti.*
 NEG-IPFV-be.good be.AFF:FACT

26481 ‘In autumn, when (the *Arisaema consanguineum*) get frosted, it rots and
 26482 dies.’ (14-sWNgWJu, 179)

- 26483 (52) *tuyur pa-ta, kuu-dyn zo muu-pa-ta.*
 frost AOR:3→3-put SBJ:PCP-be.many EMPH NEG-AOR:3→3-put
 26484 ‘There was a bit of frost, but not much.’ (conversation, 15-12-17)

26485 Third, the *nu-/ny-* denominal prefixes can also derive verbs of motion towards
 26486 a location, such as *nyχcrl* ‘go to the middle’ (from *u-χcrl* ‘middle’). These verbs
 26487 differ from the verbs of location derived with the *mr-* prefix such as *mrχcrl* ‘be in
 26488 the middle’, which express a static position without motion (Table 20.12, §20.6).

26489 Fourth, these prefixes can be used to build verbs describing an activity related
 26490 to the base noun. The denominal verbs can have the same meaning as a light verb
 26491 construction in *βzu* ‘make’, as in the case of *nuryyo* ‘sing’ (§15.1.5.8) and *ryyo+βzu*
 26492 ‘sing’. Alternatively, the corresponding complex predicate can be an existential
 26493 construction (§22.4.1.3): compare the use of the denominal verb *nusaxsu* ‘have
 26494 lunch’ in (53a) with that of the base noun *saxsu* ‘lunch’ combined with the exis-
 26495 tential verb *tu* ‘exist’ in (53b).

- 26496 (53) a. *ui-tv-tui-nur-saxsu?*
 QU-AOR-2-DENOM-lunch
 26497 b. *ny-saxsu ui-puá-tu?*
 3SG.POSS-lunch QU-PST.IPFV-exist
 26498 ‘Did you have lunch?’ (both heard in context several times)

26499 The *ruu-/ry-* denominal prefix is more commonly used for these meanings (in
 26500 examples such as *rundz̥ts^{hi}i* ‘have a meal’ from *ndz̥ts^{hi}i* ‘meal’, §20.4.1), and the
 26501 choice between the nasal and the rhotic denominal prefixes is lexically deter-
 26502 mined.

26503 Fifth, when the base noun expresses a profession or social status, the denom-
 26504 inal verb in *nu-* means ‘become X’ (54a), synonymous with the light verb con-
 26505 struction with *ndo* ‘take’ (§22.4.2.4) as in (54b).

- 26506 (54) a. *ja^mχy^mχu^qa l^r-nu^z-χp^mbu*
 ANTHR AOR:UPSTREAM-DENOM-master
 26507 ‘Yagmakhyiqa became the master.’ (2003-kWBRA, 60)
- 26508 b. *χp^mbu la-ndo*
 master AOR:3→3:UPSTREAM-take
 26509 ‘He became the master.’ (elicited)

26510 The rhotic prefixes also appear in this function, though only on two nouns:
 26511 *χp^mun* ‘monk’ and *t^rχ^muu* ‘nun’ (*r^rχp^mun* ‘become a monk’ and *rut^rχ^muu* ‘become a
 26512 nun’, §20.4.1). Using the *nu-* denominal prefix instead of the rhotic prefixes with
 26513 these two nouns is not ungrammatical, but less unfelicitous.

26514 The verb *nui^zjo^z* from *zjo^z* ‘servant’ is labile, and means ‘work as a servant’ in
 26515 intransitive use (see §14.5.1.4 and §20.7.2 for further discussion).

26516 Sixth, when the base noun designates an animal or a plant, the *nu-/nz-* prefix
 26517 most often means ‘search/look for/collect *X*’. This highly productive function
 26518 corresponds semantically to the combination with the verb *p^hut* ‘cut, pluck’ in
 26519 the case of plants: in (55) for instance, the same action is redundantly referred to
 26520 by the verb *numts^halu* ‘search for nettle’ and by *mts^halu* ‘nettle’ followed by *p^hut*.

- 26521 (55) *kui-nu^z-mts^halu*, *mts^halu u-kui-p^huit* *jo-yi*
 SBJ:PCP-DENOM-nettle nettle 3SG.POSS-SBJ:PCP-take.out IFR-come
 26522 ‘She came to collect nettle.’ (140520 ye tiane, 365)

26523 When the base noun refers to animal, this denominal derivation has the same
 26524 meaning as the verb *tc^ryt* ‘take out’, ‘extract’ as shown by (56) where both con-
 26525 structions redundantly occur.

- 26526 (56) *lu-fso^z* *cun^zgu tce tcend^zre kui-nu^z-qafy* *nts^huu* *ju-ce*
 IPFV-be.day before LNK LNK SBJ:PCP-DENOM-fish always IPFV-go
 26527 *pj^r-ηu.* *tcend^zre qafy nts^huu* *z-lu-tc^ryt*
 IFR.IPFV-be LNK fish always TRAL-IPFV:UPSTREAM-take.out
 26528 *pj^r-ηu* *tce,*
 IFR.IPFV-be LNK
 26529 ‘(The fisherman) always went fishing before daybreak.’ (140512 yufu yu
 26530 mogui, 9-10)

26531 Like the rhotic prefix, the *nu-* denominal prefix also has a deadverbal function,
 26532 and occurs in *nus^rlywur* ‘do suddenly’ from *zlywur* ‘suddenly’ (compare with
 26533 *ruus^rlywur* ‘happen suddenly’, §20.4.1).

26534 A possible irregular reduced allomorph *n-* of the intransitive denominal *nu-*
 26535 prefix is possibly found in the verb *ngo* ‘be ill’, which is derived from the inalienably
 26536 possessed noun *tu-ŋgo* ‘disease’: the group *ng-* represents /nŋg-/ phonologically
 26537 (§4.2.1.9). This irregular allomorph appears to also be attested with some
 26538 transitive verbs (§20.7.2).

26539 20.7.2 Transitive

26540 The *nu-/ny-* denominal prefix is also used to derive transitive verbs, with a con-
 26541 siderable variety of meanings, all with high productivity. In the following, in
 26542 order to clarify the glosses, *X* represents the base noun, and *Y* the object of the
 26543 corresponding transitive *nu-/ny-* denominal verb.

26544 First, transitive denominal verbs in *nu-/ny-* can have a tropative function
 26545 ‘treat/consider *Y* as *X*’, as in the case of *nuŋgra* ‘treat as an enemy’ from *ŋgra*
 26546 ‘enemy’. The verb *nuŋjɔv* ‘give orders to’ (from ‘treat as a servant’) from *ŋjɔv*
 26547 ‘servant’ is labile, and means ‘work as a servant’ when conjugated intransitively.
 26548 It is one of the very few verbs with ergative lability in Japhug (see §14.5.1.4).

26549 The opposite (anti-tropative) meaning ‘be treated as *X* by *Y*’ is found in *nyme*
 26550 ‘be adopted as a daughter’ (from *tu-me* ‘daughter’: ‘become *Y*’s daughter’), the
 26551 transitive equivalent of the *mr-* derivation found in the intransitive verb *mr̥tçu*
 26552 ‘be adopted as a son’ (from *tr-tçu* ‘son’, §20.6).

26553 Second, the transitive *nu-/ny-* denominal has an instrumental function like
 26554 the sigmatic denominal (§20.3.2). This function can be subdivided into two cases:
 26555 ‘use *X* to do to *Y*’ as in *nytar* ‘hit with a stick’ (selecting the entity being hit as
 26556 object) from *t̥tar* ‘stick’ and ‘use *Y* as an *X*’ as in *nyti* ‘use as a walking stick’
 26557 from *t̥yi* ‘walking stick’ (selecting as object the implement used to replace a
 26558 walking stick, as shown by 57).

- 26559 (57) *w-rkonyŋ nunu ci to-ndo tce to-ny-ni tce*
 26560 3SG.POSS-femur DEM INDEF IFR-take LNK IFR-DENOM-walking.stick LNK
 26561 ‘He picked one of its femurs up and used it as a walking stick.’ (140511
 xinbada-zh, 71)

26562 Third, when the base noun refers to the body part (or a substance coming
 26563 from) of a plant or an animal, the denominal verb can mean ‘take the *Y* from
 26564 the *X*’, the object *X* being the possessor of that body part. The meaning of this
 26565 derivation is similar to that of the verbs *pʰut* ‘cut, pluck’ and *tçyt* ‘take out’ with

Table 20.15: Transitive denomininal verbs in *nu-*/*ny-*

Base noun	Denominal verb
<i>tx-pytso</i> ‘child’	<i>nutypytsø</i> ‘treat as a child’
<i>ugra</i> ‘enemy’	<i>nuugra</i> ‘treat as an enemy’, ‘be hostile to’
<i>tui-me</i> ‘daughter’	<i>nyme</i> ‘be adopted as daughter’
<i>smyn</i> ‘medicine’	<i>nusmyñ</i> ‘treat’, ‘heal’
<i>tui-rpaꝝ</i> ‘shoulder’	<i>nyrpaꝝ</i> ‘carry on the shoulder’
<i>txtar</i> ‘stick’, ‘staff’, ‘rod’	<i>nytar</i> ‘hit with a stick’
<i>txpi</i> ‘walking stick’	<i>nypi</i> ‘use as a walking stick’
<i>cymuydu</i> ‘gun’	<i>nuçymuydu</i> ‘shoot at’ (with a gun)
<i>tx-þju</i> ‘cushion’	<i>nyþju</i> ‘sit on’, ‘use as a cushion’
<i>tx-rme</i> ‘hair’	<i>nyrme</i> ‘remove the hair’
<i>tx-qa</i> ‘paw, root’	<i>nyqa</i> ‘uproot’
<i>tx-rq^hu</i> ‘hull, skin’	<i>nyrq^hu</i> ‘peel’
<i>tx-lu</i> ‘milk’	<i>nylu</i> ‘milk’ (a cow)
<i>tui-rdoꝝ</i> ‘one piece’	<i>nurdoꝝ</i> ‘collect piece by piece’
<i>tx-mbruu</i> ‘anger’	<i>nymbruu</i> ‘get angry against’
<i>tx-re</i> ‘laugh’	<i>nyre</i> ‘laugh at’
<i>tx-sjut</i> ‘bite’	<i>nysjut</i> ‘gnaw’, ‘bite’
<i>txjkuuz</i> ‘secret’	<i>nyjkuuz</i> ‘conceal from’
<i>tui-mcla</i> ‘one step’	<i>numcla</i> ‘step over’, ‘cross’
<i>wi-q^hu</i> ‘after’	<i>nuunq^hu</i> ‘go along, follow’
<i>tui-sk^hruu</i> ‘body’	<i>nusk^hruu</i> ‘be pregnant with’

the corresponding base nouns:¹² for instance, *nxrme* ‘remove the hair’ (shear) expresses the same meaning as *tx-rme* ‘hair’ with *p^hut* in example (58).

(58)	<i>nunja kuu-fse</i>	<i>qazo kuu-fse</i>	<i>ntura</i>	
	cow SBJ:PCP-be.like	sheep SBJ:PCP-be.like	DEM:PL	
	<i>c^hui-nx-rme</i>		<i>ŋgryl</i>	<i>numu</i>
	IPFV:DOWNSTREAM-DENOM:TR-hair		be.usually.the.case:FACT DEM	
	<i>uu-rme</i>	<i>c^hui-p^hut</i>	<i>ŋgryl</i>	<i>ma</i> ,
	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-rdoꝝ* ‘one piece’ (§7.3.2.2) the transitive denominal derivation yields the distributed action meaning *nurdoꝝ* ‘pick up one by one’.

Fourth, when the base noun is an abstract noun, the transitive denominal in *nu-/nx-* expresses an action directed toward a patient or stimulus, as in *nxbmru* ‘get angry with’ (from *tx-mbru* ‘anger’, see also §20.3.1). Among these verbs, *nxre* ‘laugh, laugh at, mock’ from the inalienably possessed noun *tx-re* ‘laugh’ is labile (§14.5.1.3).

Fifth, denominal verbs in *nu-* can have idiosyncratic meanings associated with a noun+verb collocation. For instance *nusk^hru* ‘be pregnant with’ (41, §20.4.3) from *tu-sk^hru* ‘body’ derives from the collocation *tu-sk^hru + 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 *nunq^hu* ‘go along, follow’ (§15.1.2.1) which derives from *uu-q^hu* ‘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. *rxkryz* ‘have a discussion’, the intransitive verb serves as the functional antipassive of the transitive one, and the *nV-* verb cannot take the antipassive *rx-* prefix (§18.6.8.5).

¹² The same is true of the intransitive denominal verbs in *nu-/nx-* meaning ‘search/look for/collect X’ discussed above.

26595 The *ny-* denomininal prefix also derives dynamic verbs (both transitive and intransitive) paired with proprietive denomininal verbs in *sy-* (§20.3.1).

26597 These verbs are not compatible with the proprietive *sy-* derivation (§18.8): the
26598 corresponding stative *sy-* denomininal is used instead. For instance, the transitive
26599 denomininal verb *nyŋaβ* ‘consider to be unpleasant’, ‘be embarrassed by’ (from
26600 *tyŋaβ* ‘unpleasant thing, wrong’) lacks a proprietive form such as *tsy-nyŋaβ*, and
26601 the denomininal *syŋaβ* ‘be unpleasant’, ‘be embarrassing’ (21 in §20.3.1) is used
26602 instead.

26603 Denominal verbs in *ny-* can however take the *sy-* antipassive prefix (§18.6.2),
26604 for example *syŋyre* ‘laugh at people’ from *nyre* ‘laugh’ (§14.5.1.3).

26605 Some *sy-/ny-* denomininal pairs have lost their base noun. For instance, there is
26606 no abstract noun *tyŋcqa* in Kamnyu Japhug corresponding to the pair *syŋcqa* ‘be
26607 bearable’/*nyŋcqa* ‘endure’. Nevertheless, like synchronic denomininal verbs such
26608 as *nyŋaβ* ‘consider to be unpleasant’, the transitive form in these pairs cannot
26609 undergo the proprietive derivation: the denomininal *syŋcqa* (59) is used instead of a
26610 putative form such as *tsy-nyŋcqa*.

- 26611 (59) *a-χpum puu-mŋym ri, ny-kuu-syŋcqa maje*
1SG.POSS-knee SENS-hurt LNK NEG-SBJ:PCP-be.bearable not.exist:SENS
26612 ‘My knee hurts, but nothing unbearable.’ (elicited)

26613 Pairing with other denomininal prefixes such as *yuu-/yy-* (§20.5.2) is also attested,
26614 but with less straightforward semantic correspondences between the two verbs.

20.8 Other denomininal verbs

20.8.1 Zero-derivation or backformation?

26615 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
26616 is little evidence in Japhug for denomininal zero-derivation.

26617 Table 20.16 includes cases of noun-verb pairs in which the semantics of the
26618 verb is innovative: the nouns have the same meanings as those of their cognates
26619 in other Trans-Himalayan languages such as Chinese and Tibetan (for evidence
26620 that these nouns are not borrowed from Tibetan, see Jacques 2004: 162 and
26621 Nathan W. Hill 2014c), but there is no trace of the corresponding verbs outside
26622 of core Gyalrong languages.

26623 The inalienably possessed nouns *ta-mar* ‘butter’, *tr-mkum* ‘pillow’ and *trjpyom*
26624 ‘ice’ formally look like bare nominalizations (§16.4.2, §16.4.6) from the corre-

Table 20.16: Verbs backformed from nouns in Japhug

Noun	Verb	Cognates
<i>ta-mar</i> ‘butter’	<i>mar</i> ‘smear’	汉语 <i>mar</i> ‘butter’
<i>tr-mkum</i> ‘pillow’	<i>mkum</i> ‘have one’s head turned towards’	枕 * <i>t.kəm?</i> → <i>tɕimX</i> ‘pillow’
<i>trjpyom</i> ‘ice’	<i>jpyom</i> ‘freeze’	冰 * <i>rpaṁ</i> → <i>pīj</i> ‘ice’
<i>ndzom</i> ‘bridge’	<i>ndzom</i> ‘form a layer of ice’	汉字 <i>zam.pa</i> ‘bridge’

26628 sponding verbs. The etymological relationship between *ta-mar* ‘butter’ and *mar* 26629 ‘smear’, while not completely obvious, is supported by the existence of the *figura* 26630 *etymologica* in (60) and the typological parallel provided by the French denom- 26631 inal verb *beurrer* ‘smear’ (not necessarily butter) from *beurre* ‘butter’.

- 26632 (60) *ta-mar* *ŋja* *zo* *ku-mar-nu*
 INDEF.POSS-butter completely EMPH IPFV-smear-PL
 ‘They smeared it completely with butter.’ (30-komar, 11)

26634 The inalienably possessed noun *tr-mkum* ‘pillow’ is related to the rare orient- 26635 ing verb (§15.1.2.4) *mkum* ‘have one’s head turned towards *X* while lying in bed’, 26636 as in (61).

- 26637 (61) *tr-tciu* *nui*, *soz* *tce*, *rru* *trkʰa* *tce*, *tcʰeme nu*
 INDEF.POSS-son DEM morning LOC get.up:FACT moment LOC girl DEM
 yuu [...] *ui-jme* *pcoz* *nutcu* *ntsui*
 GEN 3SG.POSS-tail side DEM:LOC always
 cʰui-mkum *pjy-ŋu*
 IPFV:DOWNSTREAM-head.towards IFR.IPFV-be
 ‘The man, in the morning, when he was about to get up, had his head
 towards the tail of the woman.’ (rkoNrJAl2002, 15)

26642 In both cases, the cognates in Chinese and Tibetan suggest that the verbs in 26643 Japhug are secondary. I propose that rather than being cases of denominal zero- 26644 derivation, these verbs were back-formed from the nouns on the model of bare 26645 nominalizations.

26646 The case of the verb *ndzom* ‘form a bridge of ice (over a body of water)’ (62)
 26647 is more puzzling, since the noun *ndzom* ‘bridge’ from which this verb originates

26648 is alienably possessed and does not have a frozen *tr-* prefix. There is no model
 26649 from which this verb could have been backformed.

- 26650 (62) *tua-ci ko-ndzom*
 INDEF.POSS-water IFR-form.a.bridge.of.ice
 26651 ‘A bridge of ice formed over the river.’ (elicited)

26652 A possible scenario for the backformation hypothesis is that a *nu-* denominational
 26653 verb (§20.7) was first derived from the base noun, and its *nu-* prefix was then
 26654 reinterpreted as an autative prefix (§19.1).¹³ As a consequence of this backformation,
 26655 a prefixless verb, whose stem is identical to that of the base noun, was created,
 26656 following the pathway in (63).

- 26657 (63) *ndzom* ⇒ **nui-ndzom* ⇒ **nui-ndzom* ⇒ *ndzom*
 bridge ⇒ *DENOM-bridge ⇒ *AUTO-form.a.bridge ⇒ form.a.bridge

26658 A synchronic example of ongoing reanalysis of the *nu-* denominational prefix as an
 26659 autative prefix is provided by the transitive verb *numcla* ‘step over’, ‘cross’, which
 26660 derives from the counted noun *tu-mgla* ‘one step’. An anomalous form *ja-mcla*
 26661 (64) without the *nu-* prefix is found in the corpus, and can be explained as having
 26662 been backformed from *ja-nui-mcla* (see 20, §15.1.2.1, with a similar context) by this
 26663 mechanism.

- 26664 (64) *riryβ tʰystuy ja-pyak, tua-ci tʰystuy*
 mountain how.many AOR:3→3'-cross INDEF.POSS-water how.many
 26665 *ja-mcla my-xsi ma,*
 AOR:3→3'-step.over NEG-GENR:know LNK
 26666 ‘It is not now how many mountains and rivers he crossed.’ (160706
 26667 poucet6, 48)

20.8.2 Vowel alternation

26668 The inalienably possessed noun *w-fsu* ‘of the same size’, used in one of the equative
 26669 constructions (§26.3.1.3, §5.1.1.5, Jacques 2018d), is etymologically related to
 26670 the stative verb *fse* ‘be like’. This *u / e* alternation, which is similar to that of Stem
 26671 III (§12.2.2.1) and a few other isolated examples (§19.7.12), is possibly due to a **j*
 26672 suffix.

¹³ Both 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’.

20.9 Deideophonic verbs

In addition to nouns (and some adverbs such as *ɛlywur* ‘suddenly’, §20.4.1), some verbalizing prefixes can take ideophones as input.

20.9.1 *yy-* and *sy-* deideophonic verbs

The most productive deideophonic prefixes are *yy-* and *sy-*. Verbs derived with these prefixes can be built from most (though not all) ideophonic roots, either from the reduplicated root (type I) or from a root with partial reduplication in *l-* (type II).

Type I deideophonic verbs can be illustrated by the intransitive verb *yyplasplas* ‘flick, extend and retract’ (of a snake’s tongue) (65a) and its transitive counterpart *syplasplas* (65b).

- (65) a. *qapri yu u-mdzu juu-yy-plasplas zo*
 snake GEN 3SG.POSS-tongue SENS-DEIPH:INTR-flicking EMPH
 ‘The snake’s tongue is flicking.’ (elicited)
- b. *qapri ku u-mdzu juu-sy-plasplas zo*
 snake ERG 3SG.POSS-tongue SENS-DEIPH:TR-flicking EMPH
 ‘The snake is flicking its tongue.’ (elicited)

Despite the fact that the reduplicated root *-plasplas* in these verbs resembles the type II ideophonic pattern (which has a stative meaning, §10.1.2.2), its meaning corresponds to that of the type III pattern ‘dynamic action’ ideophone, namely *plasnyplas* ‘flickering’ (§10.1.2.3).¹⁴ Compare (65b) with the corresponding light verb construction (66), which uses the simulative verb *stu* ‘do like’ (§10.1.7.3). In this particular case, the deideophonic verb in (65b) expresses a faster motion than the construction in (66), but this semantic difference is not generalizable to all deideophonic verbs.

- (66) *qapri ku u-mdzu plasnyplas zo juu-ysuu-stu*
 snake ERG 3SG.POSS-tongue IDPH(III):flickering EMPH SENS-PROG-do.like
 ‘The snake is flicking its tongue.’ (elicited)

As a general rule, type I verbs in *yy-* and *sy-* have a meaning that corresponds to that of the type III ideophone based on the same root. They differ from each other

¹⁴ The type II pattern *plasplas* of the ideophonic root *-plas* has a entirely unrelated meaning: ‘completely white’.

in that the prefix *yr-* builds intransitive verbs, whose synthetic counterpart is a light verb construction with an intransitive verb such as *zyrstu* ‘act like’ (§10.1.7.3), whereas *sv-* derives transitive verbs with a causative meaning ‘make *X* do/be’ like the construction with *stu* ‘do like’ (66).

Type II deideophonic verbs have partial reduplication of the ideophonic root in *l-*, and semantically correspond to pattern IV (§10.1.2.4), expressing spatially distributed action (note that the distributed action derivation also presents the *l-* reduplication, §19.4). Most ideophonic roots either derive type I or type II deideophonic verbs. For instance, there is no verb *țyr-plas-las* from the root *-plas* discussed above (the verb in 65a is *yr-plas-plas*), and the type II deideophonic verb *yrçışanlay* ‘balance’ from *-çışan* has no correspond type I verb *țyrçışanjeçışan* despite the fact that a type III pattern ideophone *çışanjyrçışan* ‘balancing’ does exist.

An example of an ideophonic root allowing four deideophonic patterns is *-juuy-*. The type I verbs *γγjuuyjuuy* (vi) and *sγjuuyjuuy* (vt), like the corresponding ideophone *juuyŋŋjuuy*, mean ‘shake’, while the type II verb *γγjuuyluuy* (vi) and *sγjuuyluuy* (vt) instead mean ‘wiggle, squirm, creep’, expressing a great number of individuals and/or motion in all directions; these verbs are particularly appropriate to refer to insects, snakes or fishes (see for instance 67), but can also be applied to describe a crowd of people.

- 26721 (67) *tce qapri qaçpa [...] pjy-yx-juyluy zo cti*
 LNK snake frog IPFV.IFR-DEIDPH:INTR-wiggling EMPH be.AFF:FACT
 26722 ‘There were (many) snakes and frogs wiggling (everywhere).’ (2003
 26723 kWBRa, 119)

This meaning can also be conveyed by the type IV ideophone *juynrluy* 'wig-gling'.

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 *twu* ‘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).

26731 Tshobdun has cognate prefixes *wp-* and *sp-* with similar functions (Sun & Shi-
26732 danluo 2004; J. T.-S. 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 *ru-skyrwa* ‘make circambulations’ (§20.4.1).

- (68) *skyrwa* *ky-nur-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-ruu-skyrwa-a*
 IDPH(III):turn EMPH AOR-DENOM-circumambulation-1SG

‘I made circumambulations (again and again).’ (elicited)

By contrast, the corresponding transitive verb *srxurxur* ‘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-bvβbvβ* (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-bvβbvβ* putting more focus on the speed and the quantity of objects.

- (70) a. *rdystas pa-nui-bvβ* *zo* *pa-βde*
 stone AOR:3→3-DEIDPH-heavy.object EMPH AOR:3→3:DOWN-throw

- b. *pa-sr-bvβbvβ* *zo* *pa-βde*
 AOR:3→3-DEIDPH-heavy.object EMPH AOR:3→3:DOWN-throw

- c. *bvβnybvβ* *zo* *pa-βde*
 IDPH(III):heavy.object EMPH AOR:3→3:DOWN-throw

‘He threw (stones) down, going ‘boom’ (on the ground) again and again.’ (elicited)

26759 **20.9.3 *a-* and *nr-* deideophonic verbs**

26760 A few verbs in *a-* can be built from reduplicated ideophonic roots, with a mean-
 26761 ing equivalent to the type II ideophonic pattern (§10.1.2.2). For instance, the ideo-
 26762 phone *boxbor* ‘in a group, in a cluster’ (71) is the source of the intransitive verb
 26763 *abobox* ‘cluster around’, ‘huddle’.

- 26764 (71) *tce NGOcna me, poryt me, u-puu t̪y-tu*
 LNK big.spider whether small.spider whether 3SG.POSS-young AOR-exist
 26765 *tce, kuaki icq^ha, [...] u-taꝝ nunaure*
 LNK DEM.PROX the.aforementioned 3SG.POSS-on DEM:LOC
 26766 *boxbor zo ku-ndzobr-nuu tce*
 IDPH(II):in.group EMPH IPFV-ACAUS:attach-PL LNK
 26767 ‘When spiders_i, whether big ones or small ones, have offspring_j, those_j
 26768 attach in clusters on them_j.’ (26-mYaRmtsaR, 118)

- 26769 (72) *k^huzypuu ra nuu-mu u-cki*
 puppy PL 3PL.POSS-mother 3SG.POSS-DAT
 26770 *ko-k-γz-boxbor-nuu-ci ma nuu-nx-ndzo-nuu*
 IFR-PEG-DEIDPH-in.group-PL-PEG LNK SENS-DENOM-cold-PL
 26771 ‘The puppies huddled against their mother, as they feel cold.’ (elicited)

26772 Intransitive deideophonic verbs in *a-* pair with transitive verbs in *nr-* such as
 26773 *nrboxbor* ‘cluster around’. The subject of transitive *nrboxbor* encodes the same
 26774 semantic role as that of the intransitive subject of *abobox*, while its direct ob-
 26775 ject corresponds to the referent marked with the relator noun *u-taꝝ* ‘on’ in the
 26776 intransitive equivalent.

- 26777 (73) *kui-myci ra yuu, nuu-tciu nura kui tcheme ci*
 SBJ:PCP-be.rich PL GEN 3PL.POSS-son DEM:PL ERG girl INDEF
 26778 *pjy-k-γz-nx-boxbor-nuu-ci*
 PST.IPFV-PEG-PROG-DEIDPH-in.group-PL-PEG
 26779 ‘Children from rich (families) were grouped around a girl.’ (160630
 26780 abao-zh, 87)

26781 It is possible to analyze *nr-* deideophonic verbs as applicative derivations (§17.4)
 26782 from *a-* deideophonic verbs with regular vowel fusion *nuu-γ-* → *nr-* (§17.4.2), pro-
 26783 moting oblique arguments in *u-taꝝ* ‘on’ to object status.

26784 In addition to ideophones expressing ‘grouping, clustering’ like *boxbor*, the *a-*
 26785 derivation is also compatible with ideophones of shape like *alulju* ‘be cylindrical’
 26786 from *ljalju* ‘cylindrical’. Such verbs do not have a *nr-* counterpart.

20.10 The denominational origin of voice prefixes

26788 There is a remarkable similarity in Japhug between some valency-changing pre-
 26789 fixes on the one hand, and denominational prefixes on the other hand, as illustrated by
 26790 Table 20.17. These correspondences suggest that a historical relationship exists
 26791 between these pairs of prefixes.

Table 20.17: Voice derivations and denominational prefixes

Voice		Denominal derivation	
Sigmatic causative	§17.2	Instrumental/ causative denominational <i>su(y)-/sx-</i>	§20.3.2
<i>su(y)-/z-</i>			
Applicative <i>nuy(y)-</i>	§17.4	Transitive denominational <i>nuy-</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	Propriative denominational <i>sy-</i>	§20.3.1
Propriative <i>sr-</i>	§18.1	Propriative denominational <i>sr-</i>	§20.3.1

26792 The resemblance between these two series of prefixes is not specific to Japhug,
 26793 and found in all Gyalrongic languages, in particular Khroskyabs (Lai 2017: 527).
 26794 The following sections (in particular §20.10.1) provide evidence that these resem-
 26795 blances are due to the fact that the derivations in Table 20.17 actually historically
 26796 originate from the corresponding denominational derivations (see also Jacques 2014b;
 26797 2015d, Lai 2017: 527–529, Lai to appear).

26798 Not all valency-changing prefixes in Japhug are related to denominational deriva-
 26799 tions: the reflexive *zyr-* in particular derives instead from the incorporation of the
 26800 3SG pronoun (§18.3.7 and Jacques 2010b), and some derivations such as the autive
 26801 and anticausative are probably inherited from proto-Trans-Himalayan (§19.1.7,
 26802 §18.5, Sagart & Baxter 2012, Jacques 2015e).

20.10.1 The origin of the *ry-* antipassive prefix

26803 The resemblance between the *ry-* applicative (§18.6.1) and the intransitive denom-
 26804 inational *ry-* prefix (§20.4.1) suggests that a historical relationship between these pre-
 26805 fixes is possible. In addition, the fact that the antipassive only has cognates in

26807 Tshobdun and Zbu (J. T.-S. Sun 2006b; 2014a, Jacques forthcoming) makes it un-
 26808 likely that this derivation is very ancient.

26809 A few antipassive verbs have formal and semantic irregularities (§18.6.1). In
 26810 this section, I show that these irregularities are shared with corresponding action
 26811 nominals (§20.10.1.1, §20.10.1.2), and that this observation is a crucial piece of
 26812 evidence to propose that the antipassive prefix originates from the denominational
 26813 derivation of action nominals from transitive verbs (§20.10.1.4).

26814 20.10.1.1 Formal commonalities between antipassive verbs and action 26815 nominals

26816 Two antipassive verbs have irregularities in stem formation: *rñnya* ‘have a debt’,
 26817 ‘owe money’ from *ŋa* ‘owe’ (money) has an intrusive *-n-* element between the
 26818 antipassive *rñ-* prefix and the stem *-ŋa*, and *rñtsye* ‘do business’ presents the op-
 26819 pose situation: the corresponding transitive verb *ntsye* ‘sell’ has an extra prefamilial
 26820 *n-* element (§18.6.1).

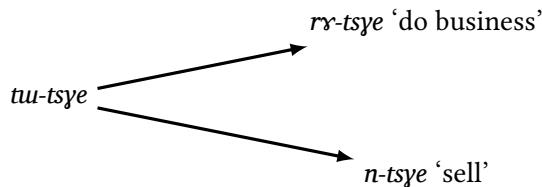
26821 These morphological specificities are not isolated: the action nominals *tu-nña*
 26822 ‘debt’ (§16.4.6) and *tutsye* ‘commerce’ (§16.4) have the same stem as the corre-
 26823 sponding antipassive verbs.

26824 This commonality between action nominals and the corresponding antipassive
 26825 verbs is explainable if one assumes that the latter derive from the former by a
 26826 denomininal *rñ-*, on the model of *rñkryz* ‘discuss’ and *rñma* ‘work’ from *tukryz* ‘dis-
 26827 cussion’ or *ta-ma* ‘work’ (n) (§20.4.1), rather than directly from the corresponding
 26828 transitive verbs.

26829 The *n-* element in *tu-nña* ‘debt’ may be analyzable as a nasalized dental nomi-
 26830 nization prefix (**t-ŋa* → *-nña*, §16.4.6), and the relationship between *rñnya* and
 26831 the base verb *ŋa* is thus indirect, as shown in (74).

26832 (74) *ŋa* ‘owe’ → *-nña* ‘debt’ → *rñnya* ‘have a debt’

26833 The verb *rñtsye* ‘do business’ is also directly derived from *tutsye* ‘commerce’
 26834 rather than from the transitive *ntsye* ‘sell’. The *n-* element on *ntsye* is explainable
 26835 as a reduced allomorph of the transitive denomininal *nu-* prefix (§20.7.2). Thus,
 26836 while *rñtsye* ‘do business’ is synchronically perceived as deriving from *ntsye*, both
 26837 verbs historically actually derive from the action nominal *tutsye*, as shown in
 26838 Figure 20.1.

Figure 20.1: The derivational history of *ntsye* and *r̥tsye*

20.10.1.2 Semantic commonalities between antipassive verbs and action nominals

Commonalities between antipassive verbs and action nominals are not restricted to stem formation as in §20.10.1.1 above.

The formally regular antipassive verb *r̥ypyas* ‘reclaim land’, ‘clear land for farming’ has a restricted meaning in comparison with the corresponding transitive verb *pyas* ‘turn over’: while the latter can occur with a wide range of objects, the former is exclusively used to refer to turning uncultivated land into fields (from the meaning ‘plough’ of the base verb, §18.6.3). The same semantic restriction is also observed with the action nominal *tupyaš* ‘land clearing’, used in collocation with *t̥çyt* ‘take out’ with a meaning close to that of the antipassive *r̥ypyas*.

- (75) *mu-^{lo}-ny-^{tsob}-ndzi* *kur tupyaš*
 NEG-IFR-DENOM-silverweed-DU ERG field.clearing
 lo-t̥çyt-ndzi
 IFR:UPSTREAM-take.out-DU
 ‘They did not collect silverweed, and cleared fields for farming (instead).’
 (31-deluge, 145)

This common semantic restriction suggests that the action nominal *tupyaš* and *r̥ypyas* are related, and can be accounted for by assuming that the latter is a denominal derivation from the former, rather than directly deriving from *pyas* ‘turn over’, as shown in (76).

- (76) *pyas* ‘turn over’, ‘plough fields’ → *tupyaš* ‘land clearing’ → *r̥ypyas* ‘clear land for farming’

26861 **20.10.1.3 Irregular prefix**

26862 Another irregular antipassive involves the prefix rather than the stem: the verb
 26863 *rususo* ‘think’, ‘ponder’ (§14.5.1.3) from *suso* ‘think’ has *ru-* rather than the regu-
 26864 lar *rv-* prefix. This irregular form is easily accounted for by the hypothesis that an-
 26865 tipassive verbs are denominal derivations from action nominals: *rususo* is the ex-
 26866 pected regular rhetic denominal from the bare action nominal *tui-suso* ‘thought’
 26867 (§16.4.6).

26868 **20.10.1.4 Pathway of reanalysis**

26869 Evidence from irregular antipassive verbs presented above in §20.10.1.1, §20.10.1.2
 26870 and §20.10.1.3 suggest that the formal resemblance between the *rv-* antipassive
 26871 prefix and the intransitive rhetic denominal *ru-/rv-* prefix is not simply a coinci-
 26872 dence, but that the antipassive derivation came into being from the verbalization
 26873 of an action nominal, following the pathway presented in Figure 20.2.

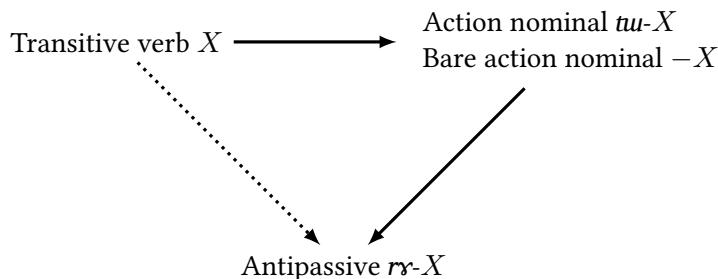


Figure 20.2: The origin of the antipassive *rv-*

26874 The transitive verb first undergoes nominalization into either an action nom-
 26875 inal in *tu-* (§16.4) or into a bare action nominal (taking either a definite or an
 26876 indefinite possessive *tu-* or *tx-*, §16.4.6). This action nominal then takes the rhetic
 26877 intransitive denominal prefix. The rhetic prefix removes the *tu-/tx-* prefix irre-
 26878 spective of whether it is an indefinite possessor prefix or a dental nominalization
 26879 prefix, following a general property of denominal derivations in Japhug (§20.1.1,
 26880 §16.4.4).

26881 With the exception of the few verbs studied in the section above, where a
 26882 morphological or semantic irregularity in the action noun left a trace on the
 26883 antipassive verb, the intermediate step leaves no traces. It is possible that once
 26884 a sufficient number of verbalized denominal action nouns had been created by

this process, the antipassive derivation became productive and that antipassive verbs were directly derived from the transitive base verbs.

Even if the antipassive prefix has become functionally separate from the intransitive denominal *rɣ-* in Japhug, many antipassive verbs remain synchronically ambiguous: for instance, the verb *rɣcpʰyt* ‘patch clothes’ can either be analyzed as the antipassive equivalent of *cpʰyt* ‘patch’ or as a denominal from *tr-ɣcpʰyt* ‘patch’ (§18.6.8.3).

The pathway in Figure 20.2 is not specific to Gyalrong languages; antipassive affixes from ancient light verb constructions with action nominals have been documented in Mande and elsewhere (Creissels 2012, Sansò 2017), providing a parallel example of the functional overlap between denominal verbalization and light verb constructions in Japhug (§20.1.2).

The same two-step mechanism can be used to account for the other resemblances between denominal prefixes and valency-changing derivations in Table 20.17. More generally, action nominalization neutralizes the transitivity of the verb stem, and the new argument structure of the derived verb is determined by the denominal prefix.

20.10.2 The proprietive and antipassive *sɣ-* prefixes and their tropative counterpart

The form and meaning of the proprietive *sɣ-* derivation (§18.8) are close to that of the denominal proprietive *sɣ-* (§20.3.1). The *sɣ-* denominal verbs often occur in pairs with transitive or intransitive *nɣ-* denominal verbs from the same noun (§20.7.3), as in *sɣre* ‘be ridiculous’ and *nɣre* ‘laugh’, ‘laugh at’ (from *tr-re* ‘laugh’, Table 20.4, §20.3.1).

Both the proprietive *sɣ-* (§18.8) and the tropative *nɣ-* (§17.5) can be accounted for by assuming a pathway similar to that of the antipassive (Figure 20.2), by supposing *sɣ-* and *nɣ-* denominal derivations from abstract nouns (§16.4.2) or degree nominals (§16.3). The intermediate abstract nouns are actually attested in many cases, as in (77) and (78).

(77) *mu* ‘be afraid’ → *tumu* ‘fear’ → *sɣymu* ‘be frightening’

(78) *mpçyr* ‘be beautiful’ → *trmpçyr* ‘beauty’ → *nɣmpçyr* ‘find beautiful’

In addition, the proprietive verb *sɣynat* ‘be exhausting’ (from *nat* ‘be tired’) with the allomorph *sɣ-* presents the same intrusive *-y-* element as the abstract noun *trynat* ‘tiredness’, supporting the idea that this noun was indeed the intermediate step between the base verb and its proprietive form.

When the base verb undergoing action nominalization and proprietive verbalization is transitive, there is a potential ambiguity, since the proprietive derivation selects as intransitive subject a referent either possessing a particular property or having the tendency or propensity to perform a particular action. With action verbs such as *mtsuy* ‘bite’, the most natural interpretation will be ‘have the propensity to bite’ rather than ‘tend to be bitten’ (79), yielding an antipassive derivation (§18.6.2).

(79) *mtsuy* ‘bite’ → **tumtsuy* ‘action of biting’ → *srmntsuy* ‘bite people’

With verbs of cognition, an ambiguity is possible; for instance the *sr-* derivation from the transitive verb *nuzduy* ‘worry about’ is interpretable either as proprietive *synuzduy* ‘causing people to worry’ (§18.8.4) or as the antipassive ‘worry about people’ (§18.8.6). Both of these meanings can be explained as proprietive denominational derivations from an abstract noun **tV-nuzduy* ‘worry’.

20.10.3 Applicative, sigmatic causative and passive

Following the same type of pathways as for antipassive, proprietive and tropative derivations, the applicative *nu(y)-* (§17.4), the causative *su(y)-* (§17.2) and the passive *a-* can be analyzed as having historically originated from the transitive *nu-* (§20.7.2), the causative/instrumental *su(y)-* (§20.3.2) and the stative *a-* (§20.2.1) denominationalizations from an action nominal, as illustrated in (80).

- (80) a. *mu* ‘be afraid’ → *tumu* ‘fear’ → *nuymu* ‘be afraid of’
 b. *nat* ‘be tired’ → *trynat* ‘tiredness’ → *suynat* ‘exhaust’, ‘cause to be tired’
 c. *ts^hor* ‘attach’ → **tu-ts^hor* ‘attachment’¹⁵ → *ats^hor* ‘be attached’

The reduplicated reciprocal (§18.4.1) originates from a stative denominational verb with reduplication expressing plural subject (as in Stau, where not only reduplication but even triplication is attested with this meaning, Gates 2017), from which the reciprocal function was a pragmatic inference.

While the applicative, like the antipassive, is restricted to the Core Gyalrong languages and is certainly a recent innovation, the situation is more complex in the case of the passive and the causative.

The *a-* passive, which originates from **ŋa-*, is probably related to the valency-decreasing *ŋV-* prefix found in Kuki-Chin (Jacques & Chen 2007), which also

¹⁵ This hypothesized action nominal is indirectly attested as the bare infinitive in (181) (§16.2.2.1).

expresses reciprocal, reflexive and even antipassive in some cases (So-Hartmann 2009: 203–209, Mang 2006: 57). The sigmatic causative, which has highly complex morphology across Gyalrongic languages (J. T.-S. Sun 2007a; Lai 2016), is also widespread in the Trans-Himalayan, and has been discussed in a considerable number of works, including Conrady (1896), Sagart & Baxter (2012), Mei (2012), Handel (2012) and Jacques (2015d).

The existence of the cognates of the valency-changing prefixes *a-* and *sui(y)-* in other branches of Trans-Himalayan could be seen as contradicting the hypothesis that they originate from denominalization prefixes. However, two pieces of evidence suggest that the pathway of reanalysis developed to account for the origin of the antipassive is also applicable to these two prefixes.

First, the sigmatic prefix also has a denominal function in various Trans-Himalayan languages from Jinghpao (Dài & Xú 1992: 72, Kurabe 2016: 88) to Old Chinese (Conrady 1896). There is consensus among scholars that this function is at least equally as old as the causative one.

Second, the irregular *sv-* allomorph of the causative in *svrmi* ‘name someone’ (§17.2.2.7) can be accounted for by analyzing this transitive verb as a causative denominal (§20.3.2) from the noun *tx-rmi* ‘name’ rather than a direct causative derivation from the verb *rmi* ‘be called’.

It is therefore possible either that the postulated pathways in (80b) and (80c) above have taken place independently in several branches, or that the reanalysis had already been completed in the ancestral language ancestral. These hypotheses do not imply that the reanalysis took place only once in each language. In all languages that have preserved the sigmatic denominal and that have some form of bare nominalization, pathways similar to (80b) can have occurred repeatedly even after the sigmatic causative had been fully grammaticalized.

20.11 Loan verbs

While Tibetan verbs are generally borrowed directly (Jacques 2019c), Chinese verbs and adjectives need to undergo denominal derivation to be compatible with verbal morphology.

Speakers born after 1990 profusely use verbs of Chinese origin.¹⁶ Chinese adjectives can be borrowed almost freely with either the *nu-* (§20.7.1) or the *ru-* (§20.4.1) denominal prefixes, as illustrated by *nu<yan>* ‘be strict’ (from *𠀤<yán>*

¹⁶ Due 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.

26984 ‘severe, strict’) in (81) and *ruu*-*fuza* ‘be complicated’ (from 复杂 <fùzá> ‘com-
 26985 plicated’) in (82). The *nuu*- and *ruu*- prefixes are apparently freely interchangeable
 26986 in this type of words.

- 26987 (81) *uزو uu-tuu-nuu-<yan>* *uu-gryl* *mu*
 3SG 3SG.POSS-NMLZ:DEG-DENOM-strict 3SG.POSS-order at.all
 26988 *pui-me*
 PST.IPFV-not.exist
 26989 ‘He was extremely strict.’ (phurpa 2010, 35)

- 26990 (82) *nui-ruu-<fuza>* *wo*
 SENS-DENOM-complicated SFP
 26991 ‘It looks complicated!’ (heard in context)

26992 For action verbs, the choice of the *ruu*- and *nuu*- prefixes is conditioned by transi-
 26993 tivity (§20.4.3): *ruu*- denominal verbs are intransitive, for example *rulkʰγjxwi* ‘have
 26994 a meeting’ (from 开会 <kāihui> ‘have a meeting’), while their *nuu*- counterparts
 26995 are transitive (*nukʰγjxwi* ‘meet about’). In some cases a light verb construction
 26996 with the Chinese verb borrowed as a noun also exists; for instance, in addition
 26997 to *rulkʰγjxwi* ‘have a meeting’, it is possible to use *kʰγjxwi* ‘meeting’ in collocation
 26998 with *βzu* ‘make’ as in (83).

- 26999 (83) *kʰγjxwi nui-ysui-βzu-nuu*
 meeting SENS-PROG-make-PL
 27000 ‘They were having a meeting.’ (17-lhazgron, 50)

27001 Borrowed verbs, although they have undergone denominational derivation, some-
 27002 times preserve morphosyntactic peculiarities of the corresponding verb in Chi-
 27003 nese. For instance, although the manipulation verb *nutʰaj* ‘carry’, like 抬 <tái>
 27004 ‘lift, carry’, specifically means ‘lift up and carry (something heavy, of more than
 27005 one person)’ with a constraint on the number of the subject (see example 21,
 27006 §15.1.2.2).

20.12 Compound verbs

27007 Compounds verbs combine two verb roots (henceforth referred to as ‘*V*₁’ and ‘*V*₂’
 27008 following the Kirantological tradition) within the same stem. Unlike bipartite
 27009 verbs (§11.6.3, Jacques 2018a), the two verb roots are not separable and cannot
 27010 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 *ap̥ybat* ‘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 *axt̥quuxte* ‘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>rv̥joeβzur</i> ‘tidy up’ (vt)	<i>joθ</i> ‘raise’ (vt)	<i>βzur</i> ‘move’ (vt)
<i>axt̥quuxte</i> ‘be of uneven size’	<i>xt̥ei</i> ‘be small’ (vi)	<i>wxti</i> ‘be big’ (vi)
<i>argyle</i> ‘be extremely happy’ (vi)	<i>rga</i> ‘be happy’ (vi)	= <i>le</i>
<i>andz̥ymstu</i> ‘well-ironed’ (vi)	<i>ndz̥ym</i> ‘be warm’ (vi)	<i>astu</i> ‘be straight’ (vi)
<i>ap̥ybat</i> ‘be easy to do’ (vi)	<i>pa</i> ‘do’ (vt)	<i>mbat</i> ‘be easy’ (vi)
<i>n̥rtoχpjyt</i> ‘observe’ (vt)	<i>rtoθ</i> ‘look, watch’ (vt)	<i>χpjyt</i> ‘observe’ (vt)
<i>n̥rscyl̥t</i> ‘take somewhere and back home’ (vt)	<i>sco</i> ‘see off’ (vt)	<i>l̥t</i> ‘release’, ‘get so back home’ (vt)
<i>n̥rtsumyut</i> ‘take away and bring back’ (vt)	<i>tsum</i> ‘take away’ (vt)	<i>yut</i> ‘bring’ (vt)
<i>nundz̥ymbiom</i> ‘be in a hurry to eat’ (vi)	<i>ndza</i> ‘eat’ (vt)	<i>mbyom</i> ‘be in a hurry’ (vi)
<i>nundz̥yqyr</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>nurŋgumbri</i> ‘make noise in the bed’ (vi)	<i>rŋgu</i> ‘lie down’ (vi)	<i>mbri</i> ‘cry, sing’ (vi)
<i>raχtutsye</i> ‘do business’ (vi)	<i>χtuu</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 *axt̥quuxte* ‘be of uneven size’ (Table 20.1, §20.2.1, §5.5.2.2), and also *rv̥joeβzur* ‘tidy up’, whose corresponding compound action noun *joθzur* ‘tidying up’ is used in collocation with the light verb *βzu* ‘make’ (§5.5.2.1).

The verb *argyle* ‘be extremely happy’ does not derive from a compound noun **rgyle*, but rather from the bipartite verb *rga=le*, which only occurs in non-finite

27025 forms (§11.6.3).

27026 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*
 27027 ‘easiness to do’ rather than directly from *pa* ‘do’ and *mbat* ‘be easy’, there is no
 27028 such noun in Kamnyu Japhug. It is probable that such a noun used to exist, and
 27029 that only its derived denominal verb was preserved.

27031 A clue that denominal compounds do not directly derive from their base verbs
 27032 is offered by *raxtutsye* ‘do business’. The *V₂* -*tseye* has the same form as that found
 27033 in the action noun *tutsye* ‘commerce’ and the antipassive *rxtysye* ‘do business’,
 27034 ‘sell things’ (§18.6.1), while the corresponding transitive verb *ntsye* ‘sell’ has an
 27035 additional *n-* prefix. The explanation for the absence of *n-* in *raxtutsye* is that this
 27036 verb comes from a compound **χtutsye* ‘commerce’ directly built from the action
 27037 noun *tutsye* rather than from the transitive verb *ntsye* ‘sell’. Although **χtutsye* is
 27038 not in common usage, it is considered to be marginally acceptable by Tshendzin.

27039 Some compound verbs lack denominal prefixes, as shown in Table 20.19. However,
 27040 the fact that the *V₁* occurs in *status constructus* in the case of *ngyjts^hi* ‘feed’
 27041 (*ŋgṛ-* from *ngu* ‘feed’) and that all the *V₁* of all of these verbs have a prenasalized
 27042 onset may suggest a denominal origin: since the denominal *nu-* prefix has an
 27043 irregular *n-* or homorganic *N-* allomorph (§20.7.1, §20.7.2), it is possible that the
 27044 denominal prefix here was absorbed by the preexisting prenasalization of the *V₁*:
 27045 **n-ŋgṛ-ct^hi* → **ŋgṛ-ct^hi* → *ŋgṛjts^hi*.

Table 20.19: Compound verbs without denominal prefix

Compound verb	<i>V₁</i>	<i>V₂</i>
<i>mpumnu</i> ‘be soft and smooth’ (vi)	<i>mpuu</i> ‘be soft’ (vi)	<i>mnu</i> ‘be smooth’ (vi)
<i>mtsurčpas</i> ‘be hungry and thirsty’ (vi)	<i>mtsur</i> ‘be hungry’ (vi)	<i>čpas</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)

27046 The semantic relationship between the *V₁* and the *V₂* differs across compound
 27047 verbs. In most cases, the compound has an additive meaning ‘do *V₁* and *V₂*’, as
 27048 in *nrtsumyut* ‘take away and bring back’ (in particular, all verbs in Table 20.19
 27049 are of this type). Another possibility is a head-complement relationship, as that

27050 illustrated by *apxmbat* ‘be easy to do’, whose meaning is equivalent to a construction
 27051 with *mbat* ‘be easy’ taking a complement clause containing the verb *pa* ‘do’
 27052 (§18.9).

27053 20.13 Incorporation

27054 Japhug has few dozen complex verb stems comprising a nominal and a verbal
 27055 root. Nearly all of these verbs contain a denominal prefix, and incorporation is
 27056 thus analyzed in Japhug as a subtype of denominal derivation (Jacques 2012d).

27057 Although noun incorporation is not a frequent phenomenon in Japhug, its
 27058 productivity is undeniable, as it applies to loanwords, as shown by the verb
 27059 *yui* <*piaozi*> *fsor* ‘earn money’ (84), whose base noun 票子 <*piàozi*> ‘ticket’, ‘pa-
 27060 per money’ is from Chinese and whose base verb *fsor* ‘accumulate’ comes from
 27061 Tibetan དྲୁସ୍ བྱଁ བྱଁ བྱଁ ‘accumulate’.

27062	(84)	<i>nx-mbro</i>	<i>c^ho</i>	<i>nx-rŋwɪl</i>	<i>tu-rke-a</i>	<i>tce</i>
		2SG.POSS-horse	COMIT	2SG.POSS-silver	IPFV-put.in[III]-1SG	LNK
27063		<i>kui-yui-<piaozi>-fsor</i>		<i>jy-ce</i>	<i>tce</i>	
		SBJ:PCP-DENOM-money-earn		IMP-go	LNK	
27064		'I will give you a horse and some silver, go and earn some money.'				
27065		(Lobzang 2005, 17)				

27066 20.13.1 Incorporation and denominal derivation

27067 A considerable proportion of incorporating verbs in Japhug are denominal deriva-
 27068 tions from Noun-Verb action nominal compounds (§5.5.5.2, §5.5.5.3) which are
 27069 still synchronically attested. Table 20.20 presents a sample of incorporating verbs
 27070 with the corresponding action nouns, as well as the base nouns and base verbs.
 27071 These action nominals also occur in collocation with light verbs, with meanings
 27072 similar to those of the incorporating verbs (§20.1.2, §20.13.4).¹⁷

27073 When the incorporating verb is transitive, its direct object corresponds in
 27074 some cases to an oblique argument in the light verb construction. For instance,
 27075 the verb *nuzgruitc^huu* ‘give a nudge’ encodes the patient (the person receiving the
 27076 nudge) as object (85), while in the light verb construction with the compound
 27077 *zgruitc^huu* ‘nudge’, the patient is marked by the relator noun *u-tar* ‘on, above’ (86)
 27078 (§8.3.4.3).

¹⁷ Japhug (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>yūc^hṛts^{hi}</i> ‘drink alcohol’ (vi)	<i>c^ha</i> ‘alcohol’ ⇐ <i>c^hṛts^{hi}</i> ‘alcohol drinking’	<i>ts^{hi}</i> ‘drink’ (vt)
<i>yūyhlutçṛt</i> ‘take out dung’ (vi)	<i>tū-yli</i> ‘dung’ ⇐ <i>c^hṛts^{hi}</i> ‘dung collecting’ (out of the stables)	<i>tçṛt</i> ‘take out’ (vt)
<i>yūcup^hut</i> ‘take out stones’ (vi)	<i>cuu</i> ‘stone’ ⇐ <i>cup^hut</i> ‘stone clearing’ (out of the fields)	<i>p^hut</i> ‘take off’ (vt)
<i>yuk^huts^hoꝝ</i> ‘hunt with dogs’ (vi)	<i>k^huna</i> ‘dog’ ⇐ <i>k^huts^hoꝝ</i> ‘hunting with dogs’	<i>ts^hoꝝ</i> ‘attach’ (vt)
<i>yurṛufsoꝝ</i> ‘earn riches’ (vi)	<i>tū-rṛuu</i> ‘riches’ ⇐ <i>rṛufsoꝝ</i> ‘earning money’	<i>fsoꝝ</i> ‘accumulate’ (vt)
<i>yusup^hut</i> ‘cut firewood’ (vi)	<i>si</i> ‘wood’ ⇐ <i>sup^hut</i> ‘firewood cutting’	<i>p^hut</i> ‘take off’ (vt)
<i>yutṣymts^{hi}</i> ‘lead the way’ (vi)	<i>tsu</i> ‘path’ ⇐ <i>tsymts^{hi}</i> ‘leading the way’	<i>mts^{hi}</i> ‘lead’ (vt)
<i>nuzgrutç^hu</i> ‘give a nudge’ (vt)	<i>tū-zgruu</i> ‘elbow’ ⇐ <i>zgrutç^hu</i> ‘nudge’	<i>tç^hu</i> ‘stab’ (vt)
<i>nykṛtç^hu</i> ‘give a headbutt’ (vt)	<i>tū-ku</i> ‘head’ ⇐ <i>kṛtç^hu</i> ‘headbutt’	<i>tç^hu</i> ‘stab’ (vt)
<i>nusnuŋas</i> ‘harm’ (vt)	<i>tū-sni</i> ‘heart’ ⇐ <i>snuŋas</i> ‘harming people’	<i>ŋas</i> ‘be black’ (vi)
<i>ny^huxtsu</i> ‘break clods of earth’ (vi)	<i>tr-p^hu</i> ‘clod (of earth)’ ⇐ <i>trp^huxtsu</i> ‘breaking clods of earth’	<i>xtsu</i> ‘pound’ (vt)
<i>nyq^haru</i> ‘look back’ (vi)	<i>w-q^hu</i> ‘after’ ⇐ <i>q^haru</i> ‘look back’	<i>ru</i> ‘look’ (vi)

- 27079 (85) *t̪-wy-nu-a-zgruu-tc^huu-a*
AOR-INV-DENOM-elbow-stab-1SG
27080 ‘He gave me a nudge.’ (elicited)
- 27081 (86) *a-ta₂ ny-zgruu-tc^huu ma-ty-tui-lxt ma nu-mŋym*
1SG.POSS-on 2SG.POSS-elbow-stab NEG-IMP-2-release LNK SENS-hurt
27082 ‘Don’t give me a nudge, it hurts.’ (elicited)

27083 Alternatively, the patientive argument can be encoded as a possessive prefix
27084 on the base nominal compound. For instance, the object of the *nusnuŋas* ‘harm’
27085 (2sg in 87) refers to the person who is harmed, and corresponds to the prefix on
27086 the compound noun *snupas* ‘harming people’ in the light verb construction (3PL
27087 in 88).

- 27088 (87) *ma-nui-tui-mu tce azo mx-ta-nu-a-snua-jas*
NEG-IMP-2-be.afraid LNK 1SG NEG-1→2-DENOM-heart-black:FACT
27089 ‘Don’t be afraid, I will not do any harm to you.’ (140429 jiedi-zh, 187)
- 27090 (88) *tuarne ra nu-a-snua-jas nu-ysui-βzu tce*
people PL 3PL.POSS-heart-black SENS-PROG-make LNK
27091 ‘It was harming people.’ (150827 taisui, 31)

27092 Table 20.20 only includes examples with the denominal prefixes *yuu-* (§20.5)
27093 and *nuu-/ny-* (§20.7), but other denominal prefixes are attested in this construc-
27094 tion. In particular, the alternative forms *rurjufsox* ‘earn riches’ (with the rhotic
27095 denominal, §20.4) and *suzgrutc^huu* ‘give a nudge’ (with the instrumental sigmatic
27096 denominal, §20.3.2) are attested alongside *yurjufsox* ‘earn riches’ and *muzgrutc^huu*
27097 ‘give a nudge’.

27098 This use of the term ‘incorporation’ to refer to this construction is debatable,
27099 since unlike prototypical incorporation, which originates from noun+verb coales-
27100 cence (Mithun 1984), in the case of Japhug a two-step process has to be posited:
27101 (i) action nominal compounding followed by (ii) denominal derivation. However,
27102 this derivation process is not isolated cross-linguistically: similar constructions
27103 are found in Ancient Greek (Benveniste 1966a) and may be posited for proto-
27104 Algonquian (Garrett 2004; Jacques 2012d).

27105 Not all incorporating verbs derive transparently from Noun+Verb compounds.
27106 In spite of the presence of a denominal prefix on the verb, the expected action
27107 nominal is not always attested. For instance, the intransitive verb *nuijlry* ‘herd
27108 hybrid yaks’ (from *jla* ‘hybrid yak’ and *lry* ‘herd’) might have been derived from
27109 a noun such as **jly-lry*, but no such noun exists anymore.

27100 In some cases, denominational derivations are derived directly from a Noun+Verb
 27111 collocation. Table 20.21 presents examples of denominational verbs in *nui-*/*ny-* and *syr-*
 27112 coming from lexicalized complex collocations. In these constructions, the base
 27113 verb is intransitive, and the base noun its subject (§20.13.3.1). Some of the nouns
 27114 and/or verbs are orphan lexemes (§22.4.3.1, §22.4.3.2), and are not attested as free
 27115 elements.

Table 20.21: Incorporating verbs from noun-verb collocations

Incorporating verb	base noun	Noun+verb collocation
<i>nuyñymk^he</i> ‘be skinny’ (vi)	<i>u-nyym</i> ‘flesh’	<i>u-nyym + k^he</i> ‘be skinny’
<i>nuyñymsuu</i> ‘be plump’ (vi)	<i>u-nyym</i> ‘flesh’	<i>u-nyym + suu</i> ‘be plump’
<i>syrzilos</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>syrbrunjuu</i> ‘be detestable’ (vi)	<i>tx-mbruu</i> ‘anger’	<i>tx-mbruu + nyuu</i> ‘be angry’
<i>nyrçymyym</i> ‘cherish’ (vt)		<i>u-rça + myym</i> ‘cherish’
<i>syrzombi</i> ‘be discouraging’, ‘be hopeless’ (vi)		<i>u-ko + mbi</i> ‘be discouraged’, §18.5.4
<i>nyzombi</i> ‘lose hope’ (vt)		
<i>nusroñmbryst</i> ‘be in agony’	<i>tuu-sroo</i> ‘life’	<i>mbryst</i> ‘break’, ‘be cut’ §18.5)

27116 Three types of denominational derivations are found in Table 20.21, all indepen-
 27117 dently attested with simple nouns. First, we find stative intransitive verbs in
 27118 *nui-* (§20.7.1), whose intransitive subject corresponds to the possessor of the base
 27119 noun as in the case of *nuyñymk^he* ‘be skinny’ (compare 89a and 89b).

- 27120 (89) a. *nui-tuu-nui-nyym-k^he*
 SENS-2-DENOM-flesh-be.skinny
 27121 ‘You are skinny.’ (heard in context)
 27122 b. *ny-nyym* *nui-k^he*
 2SG.POSS-flesh SENS-be.skinny
 27123 ‘You are skinny.’ (140517 mogui de jing zh, 22)

27124 Second, some verbs make use of the *syr-* proprietive denominational prefix (§20.3.1).
 27125 The verb *syrzilos* ‘be disgusting’ is paired with the *ny-* denominational *nyzilos* ‘have
 27126 nausea’ (other verb pairs of the same type are found in Table 20.4), while *syr-
 27127 brunjuu* ‘be detestable’ instead corresponds to the simple denominational *syrbruu* ‘get
 27128 angry’ (§20.3.1).

Third, the transitive verbs *nycymyym* ‘cherish’ and *nyombi* ‘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).

- (90) a. *a-tcui* *jui-nx-rçx-mjäm-a*
 1SG.POSS-son SENS-DENOM-cherish(1)-cherish(2)-1SG
 ‘I cherish my son.’ (elicited)
- b. *a-tcui* *a-rça* *mjym*
 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, *amnaxts^hum* ‘be petty’ (91) derives from *tui-mjaæ* ‘eye’ and *xts^hum* ‘be thin’ with the denominational prefix *a-*, but no collocation **tui-mjaæ + xts^hum* exists, though the etymological relationship with the base noun and verb is still synchronically transparent.

- (91) *jui-tu-γ-mjaæ-ts^hum*
 SENS-2-DENOM-eye-be.thin
 ‘You are petty-minded.’ (elicited)

There are also a handful of incorporating verbs without a dedicated denominational prefix, as illustrated by Table 20.22.

Table 20.22: Incorporating verbs without dedicated denominational prefix

Incorporating verb	base noun	base verb
<i>amvbu</i> ‘have rickets’ (vi)	<i>tui-mi</i> ‘foot’	<i>ajvu</i> ‘be bowed’ (vi)
<i>akvmtçor</i> ‘be pointy-headed’ (vi)	<i>tui-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 *amvbu* ‘have rickets’ and *akvmtçor* ‘be pointy-headed’, the nominal stems *mr-*, *kṛ-* and *sui-* in *status constructus* appear to be infixated within the stem of the base verbs *ajvu* ‘be bowed’ and *amtçor* ‘be pointy’. The stem *a<mr>vu* in addition lacks the *-j-* preinitial found in *ajvu*.

Infixation is not the only possibility to account for these two verbs however, since the initial *a-* syllables themselves are probably frozen denominational prefixes

(see also §19.7.7). An alternative hypothesis is that both the apparent base verbs and the incorporating verbs are derived. The intransitive verb *nusuzze* ‘transport wood’ provides a possible model. This compound verb, which comes from the compounding of *si* ‘wood’ (with vowel alternation *su-*, §5.4.1) and the root of *nuzze* ‘transport’, at first glance seems to be a case of noun infixation within the stem *nuzze*. However, the existence of the action nominal *suzze* ‘firewood transportation’ shows that *nusuzze* ‘transport wood’ is a trivial example of denominal incorporation like the verbs in Table 20.20 above. The anomaly here is the verb *nuzze* ‘transport’, whose *nu-* prefix must be secondary – a likely explanation for this prefix is that *nuzze* is a denominal derivation from a lost action nominal **tuu-zze* ‘transportation’.

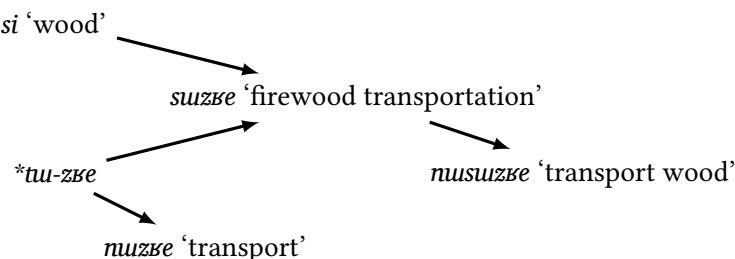


Figure 20.3: The derivational history of *nusuzze* ‘transport wood’

Hence, as illustrated in Figure 20.3, *nusuzze* ‘transport wood’ is only indirectly related to *nuzze* ‘transport’, and the infixation hypothesis is certainly wrong in this case. A scenario in the same lines is possible for *amvzu* ‘have rickets’ and *akvmitcor* ‘be pointy-headed’.

The only example of nominal incorporation without a denominal prefix is the defective verb *krytupa* ‘tell’ (its conjugation is presented in Table 14.15, §14.3.4), which comes from the compounding of the object participle *kry-ti* ‘the thing that is said’ (§16.1.2) with *pa* ‘do’. Non-denominal incorporating verbs are much more common in Khroskyabs (Lai 2017: 388–411) than in core Gyalrong languages.

20.13.2 Incorporation and other derivations

Like other denominal verbs, incorporating verbs undergo productive voice derivations. In some cases, only the derived verb exists: for instance, the intransitive *anuryrruru* ‘look at each other’s faces’ has the form of a reduplicated reciprocal (§18.4.1) from a transitive verb **nui-rjy-ru* ‘look at *X*’s face’ (from *tu-rja* ‘face’ and *ru* ‘look’, §20.13.3.3), but no such base verb exists at least in the Kamnyu

²⁷¹⁷⁷ dialect of Japhug (§18.4.1.3).

²⁷¹⁷⁸ 20.13.3 Syntactic function of the incorporated word

²⁷¹⁷⁹ The incorporated nouns have four syntactic functions: intransitive subject, ob-
²⁷¹⁸⁰ ject/semi-object, goal/location adjunct and instrument. There are no examples of
²⁷¹⁸¹ incorporated transitive subjects in Japhug.

²⁷¹⁸² 20.13.3.1 Incorporation of intransitive subject

²⁷¹⁸³ Intransitive subject incorporation is found in verbs deriving from noun+intransitive
²⁷¹⁸⁴ verb collocations such as those listed in Table 20.21 above such as *nusro&nbryt*
²⁷¹⁸⁵ ‘be in agony’ from *tu-sro&* ‘life’ and *mbryt* ‘break’, ‘be cut’. None of these verbs
²⁷¹⁸⁶ has a dummy intransitive subject: the incorporated subject does not saturate the
²⁷¹⁸⁷ subject function. Rather, either the possessor of the base noun (see examples 89a
²⁷¹⁸⁸ and 89b above in §20.13.1) or an external referent is promoted to intransitive sub-
²⁷¹⁸⁹ ject status (or to object status in the case of transitive verbs such as *mr&ymjym*
²⁷¹⁹⁰ ‘cherish’).

²⁷¹⁹¹ There are no clear examples of subject incorporation among verbs deriving
²⁷¹⁹² from noun+verb action nominals.

²⁷¹⁹³ 20.13.3.2 Incorporation of object

²⁷¹⁹⁴ Object incorporation is found in some incorporating verbs that derive from noun+verb
²⁷¹⁹⁵ action nominal compounds such as those presented in Table 20.20 (§20.13.1) and
²⁷¹⁹⁶ others which probably originate from lost compounds. It is a saturating incor-
²⁷¹⁹⁷ poration, which removes the object from the argument structure of the verb:
²⁷¹⁹⁸ incorporating verbs of this type are all intransitive, while their base verbs are all
²⁷¹⁹⁹ transitive. Typical examples include *yuc&yts&i* ‘drink alcohol’ (from *c&a* ‘alcohol’
²⁷²⁰⁰ and *ts&i* ‘drink’) or *nyp&uxtsui* ‘break clods of earth’ (from the stem of *tr-p&u* ‘clod’
²⁷²⁰¹ (of earth) with *xtsui* ‘pound’) (§20.13.4).

²⁷²⁰² Some lexicalized noun+verb collocations have an incorporating form. For in-
²⁷²⁰³ stance, the transitive verb *ru*, which only¹⁸ occurs with the noun *zruy* ‘louse’ with
²⁷²⁰⁴ the meaning ‘pick lice off’, can also incorporate the same noun to yield *nuzruyru*
²⁷²⁰⁵ ‘pick lice off’.

¹⁸ This verb must (at least synchronically) be distinguished from two homophonous verbs: the intransitive *ru* ‘look at’ (§15.1.2.4) and the transitive *ru* ‘fetch, bring’ (which requires an associated motion prefix, §15.2.9).

27206 The semi-transitive verb *rga* ‘like’ (§14.2.3) can incorporate a semi-object, as
 27207 in *nucmurga* ‘be talkative’, ‘like to talk a lot’ (with the *status constructus c̥mu-* of
 27208 the inalienably possessed noun *tu-čmi* ‘word’) and *nuc^hṛrga* ‘like to drink alcohol’
 27209 (with *c^hṛ-* from *c^ha* ‘alcohol’).

20.13.3.3 Incorporation of goal/locational adjunct

27210 Goals or locational adjuncts can also be incorporated. Unlike objects (§20.13.3.2),
 27211 they do not saturate the object function of the verb and the incorporating verb
 27212 has the same transitivity as that of the base verb. For instance, the verb *nṛq^hṛṇga*
 27213 ‘put on’ (of clothes worn on the shoulders on the top of other clothes) is transitive
 27214 as is the base verb *ṛṇga* ‘wear’ and selects as object the garment that is worn,
 27215 typically a raincoat (see 189, §9.2.3). The incorporated noun *wu-q^hu* ‘after’, ‘behind’
 27216 (in *status constructus q^hṛ-*) here indicates the location where the piece of garment
 27217 is worn (‘wear on the back’).

27218 However, goal argument saturation occurs when the base verb requires a goal
 27219 argument. For instance, *ru* ‘look’ selects a goal or dative arguments (§14.2.4), but
 27220 the incorporated verb *nṛq^haru* ‘look back’, which contains the locational noun
 27221 *wu-q^hu* ‘after’ (with the bound form *q^ha-* rather than *q^hṛ-*), is strictly intransitive.

27222 The intransitive verb *nuk^hṛṛŋgu* ‘lie down to rest’ provides an example of locational
 27223 adjunct incorporation. It derives from the noun *k^ha* ‘house’ (*k^hṛ-*) and the
 27224 intransitive verb *rŋgu* ‘lie down’, ‘sleep’. The original sense of this verb was
 27225 probably ‘lie down (somewhere) in the house’ or perhaps even more specifically
 27226 ‘lie down in the dining room’ (the term *k^hṛjmu* ‘dining room’ contains the *status*
 27227 *constructus k^hṛ-* as first element), but it has now lexicalized further, meaning ‘lie
 27228 down to rest in a casual way’ in a place unfit for this purpose and not necessarily
 27229 within the house (as illustrated by 92).

- 27230 (92) *smyt tuimda rjyłpu nura yu nui-sakaβ tṣu nuacu*
 27231 pl.n pl.n king DEM:PL GEN 3PL.POSS-well path DEM:LOC
 27232 *c-kṛ-ṛyzi nui-ŋu. lo-nui-k^hṛ-rŋgu kui-fse ndyre*
 27233 TRAL-AOR-stay SENS-be AOR-DENOM-house-lie.down SBJ:PCP-be.like LNK

27234 ‘He went to the water well of the king of Smad, and stayed there. He lay
 27235 down on the ground in a casual way.’ (2005-stod-kunbzang, 9-10)

20.13.3.4 Incorporation of instrument

27236 Instrument incorporation, like object incorporation (§20.13.3.2), is found in de-
 27237 nominal verbs deriving from action nominal compounds (Table 20.20). Like goal

and locational adjunct incorporation (§20.13.3.3), it does not saturate the object function: the verb *nuzgrutč^huu* ‘give a nudge’ from *tu-zgruu* ‘elbow’ and *č^huu* ‘stab’ is transitive like its base verb, as shown by example (85) (§20.13.1 above).

Some instrument incorporating verbs are lexicalized, for instance *nū-rmbu-χtci* from *tu-rmbi* ‘urine’ (regular *status constructus rmbuu-*) and *χtci* ‘wash’ does not mean ‘wash with urine’; *χtci* is to be understood here as ‘drench’ (as in ‘drenched in the rain’ in 13, §26.1.1.4), and although *nū-rmbu-χtci* probably originally meant ‘piss on’, its present meaning is instead ‘spray a liquid on’, in particular of a species of ants (93).

- (93) *tce nuutcu tce qro nū u-mpas w-ŋgash ra ku-ce,*
 LNK DEM:LOC LNK ant DEM 3SG.POSS-eye 3SG.POSS-in PL IPFV:EAST-go
u-mpas nū ku-mtsuy ny tu-nū-rmbuu-χtci nūra tce,
 3SG.POSS-eye DEM IPFV-bite ADD IPFV-DENOM-urine-wash DEM:PL LNK
 ‘(When the bear comes to eat them), the ants go into its eyes, bite its eyes
 and spray acid on them.’ (26-qro, 45-46)

Instruments other than body parts can be incorporated, for instance *tx-jlyβ* ‘steam’ in the verb *nxjlyβsqa* ‘stew’ from *sqa* ‘cook’. However, this is also a lexicalized incorporating verb, which does not mean ‘cook with steam’ as could have been expected, but rather ‘stew for a long time’.

Instrument incorporation is more common with transitive verbs, but examples also exist with intransitive verbs, for instance *numbrumtsaš* ‘skip rope’ from *tumbri* ‘rope’ (*mbruu-*) and *mtsaaš* ‘jump’.

20.13.4 Incorporation and other constructions

Incorporating verbs occur in the same contexts as the corresponding non-compounded syntactic constructions when these exist, both in the case of incorporating verbs from noun+verb collocations such as *nupnymk^he* ‘be skinny’ (94) (see also 89a and 89b above) and of those from action nominal compounds such as *nyp^huuxtsuu* ‘break clods of earth’ (95).

- (94) *icq^ha qazo nū-pym kur-su nūra q^he*
 the.aforementioned sheep 3PL.POSS-flesh SBJ:PCP-be.plump DEM:PL LNK
nū-nuuya-kryy, qazo kui-nū-pym-k^he nūra [...]
 SENS-FACIL-shear sheep SBJ:PCP-DENOM-flesh-be.skinny DEM:PL
muáj-nuuya-kryy.
 NEG:SENS-FACIL-shear
 ‘Sheep that are plump are easy to shear, but sheep that are skinny are

27269 difficult to shear.' (160712 smAG, 28-29)

- 27270 (95) *maka lu-kui-nyp^huxtsui* *tce tce rcanui*,
 at.all IPFV-GENR:S/O-DENOM-clod-pound LNK LNK UNEXP:DEG
 27271 *tx-p^hui* *lú-wy-xtsui* *tce*,
 INDEF.POSS-clod IPFV-INV-pound LNK

27272 'When people break clods of earths, ...' (26-mYaRmtsaR, 89)

27273 Nevertheless, these constructions are not completely equivalent. The minimal
 27274 triplet in (96) can be used to illustrate some of the differences between them.

- 27275 (96) (i) *cui-p^hut* *nui-βzu-t-a*
 stone-take.off AOR-do-PST:TR-1SG
 27276 (ii) *nui-yu-cui-p^hut-a*
 AOR-DENOM-stone-take.off-1SG
 27277 (iii) *cui nui-p^hut-t-a*
 stone AOR-take.out-PST:TR-1SG

27278 'I cleared the stones (from the field).' (elicitation)

27279 The non-compounded construction (iii) is the only one that can occur if the
 27280 argument is referential or takes a determiner (unlike languages like Hopi which
 27281 allow determiners to have scope over an incorporated noun, see K. C. Hill 2003;
 27282 Haugen 2008). In the light verb construction with the action nominal compound
 27283 *cup^hut* 'taking stones' (out of the fields, before ploughing) (i) and the incorporat-
 27284 ing verb *yucup^hut* 'take out stones' (ii), the bound nominal element *cui-* cannot
 27285 be used to refer to specific stones that have been previously mentioned. A sim-
 27286 ilar constraint is observed with other denominal verbs (§20.1.2). The light verb
 27287 construction (i) is used to highlight that an action takes a long time or effort, or
 27288 occurs many times in this particular example.

27289 The usage differences between (i)–(iii) in (96) however are not generalizable to
 27290 all incorporating verbs, in particular because the existence of an incorporating
 27291 verb does not imply that the constructions in (i) and (iii) also exist, and because
 27292 compounding is not always compositional. The triplet of constructions in (97)
 27293 with *nrq^haru* 'look back' (§20.13.3.3), the compound *q^haru* 'look back' (§20.13.1)
 27294 and the non-compounded construction with *u-q^hu* 'after', 'behind' and *ru* 'look',
 27295 illustrate a different situation.

- 27296 (97) (i) *uzo nu, tatpa ta-ta ma q^haru mucin zo*
 3SG DEM faith AOR:3→3'-put LNK look.back at.all EMPH
 27297 *mu-pa-lst ny tx-ari juu-ηu.*
 NEG-AOR:3→3'-release ADD AOR:UP-go[II] SENS-be
 27298 'He kept faith and did not look back at all and went up (did not fall
 27299 down and reached the heavens).' (2005 Norbzang, 129)
- 27300 (ii) *ts^hoŋχpuŋ nyruŋβzaŋ uzo muuma zo*
 ANTHR ANTHR 3SG apart.from EMPH
 27301 *puŋ-ny-q^ha-ru-nu juu-ηu, kuŋ-kuŋ-tu zo*
 AOR-DENOM-BACK-look-PL SENS-be TOTAL~SBJ:PCP-exist EMPH
 27302 *puŋ-atyr-nu juu-ηu,*
 AOR-fall-PL SENS-be
 27303 'Apart from Tshong dpon Norbzang, they looked back, and all of
 27304 them fell down.' (2005 Norbzang, 129)
- 27305 (iii.a) *wi-bruu nu ki tu-fse q^he wi-q^hu*
 3SG.POSS-horn DEM DEM.PROX IPFV-be.like LNK 3SG.POSS-behind
 27306 *ri lu-ru,*
 LOC IPFV:UPSTREAM-look
 27307 'Its horn is turned towards its back like that.' (20-RmbroN, 108)
- 27308 (iii.b) *tc^heme nu lo-ce tce si wi-q^hu nuŋcu*
 girl DEM IFR:UPSTREAM-go LNK tree 3SG.POSS-behind DEM:LOC
 27309 *lo-ru ri,*
 IFR:UPSTREAM-look LNK
 27310 '(150901 changfamei-zh, 221)
 27311 'The girl went there and looked behind the tree.'(150901
 27312 changfamei-zh, 221)
- 27313 (iii.c) *jo-cq^hlyt-ndzi tce, ndzi-qhu jo-ru ma nuŋ*
 IFR-disappear-DU LNK 3DU.POSS-behind IFR-look LNK DEM
 27314 *ma wi-kypa pjy-me.*
 apart.from 3SG.POSS-manner IFR.IPFV-not.exist
 27315 'The two them disappeared, and the only thing shed could do was
 27316 looking at them from behind (at their back as they were going away).'
 27317 '(140506 shizi he huichang de bailingniao-zh, 215)

27318 The examples above show that the collocation of *wi-q^hu* 'after', 'behind' and *nuŋ*
 27319 'look' is semantically quite different from the compound *q^haru* 'look back' and its

27320 corresponding denominal incorporating verb: its range of meanings includes 'be
27321 turned behind, towards the back' (iii.a), 'look behind *X*' (iii.b) or 'look at *X* from
27322 behind' (iii.c). The light verb construction (i) and the incorporating verb (ii) by
27323 contrast can only be used in the sense of 'look back'. Unlike in (96), the light verb
27324 construction (i) is not used to express either protracted or repeated action since
27325 *q^haru* 'look back' is semelfactive, but rather occurs in (97) to put more emphasis
27326 on the negation of the action (he did not look back in the slightest).

27327 The contrast between the three constructions in (96) and (97) also has to do
27328 with the relative frequency of the verbal forms in which they appear. In partic-
27329 ular, an important proportion of incorporating verbs in the corpus are subject
27330 participles (as in 94 above) or generic forms (as in 95).

27331 21 Tense, aspect, modality and 27332 evidentiality

27333 21.1 Introduction

27334 All finite verb forms in Japhug have one primary TAME (tense, aspect, modal-
27335 ity, evidentiality) category, encoded by orientation preverbs (§21.1.1), stem alter-
27336 nations (§21.1.2) and additional affixes in some cases (§21.1.3). Primary TAME
27337 categories can be combined with secondary aspectual and modal prefixes (§21.6,
27338 §21.7).

27339 Table 21.1 summarizes the primary TAME categories in Japhug. Labels such as
27340 ‘Imperfective’ or ‘Egophoric Present’ are conventional names for Japhug-specific
27341 morphological verbal categories, and therefore capitalized in this chapter and in
27342 the whole grammar following the convention proposed by Haspelmath (2010:
27343 674) and others. The use of these terms makes no implication that they have
27344 any crosslinguistic validity or that the Japhug categories are amenable to direct
27345 comparison with TAME categories in other languages.

27346 Apart from the Factual Non-Past, all primary TAME categories take one ori-
27347 entation preverb. Some categories, such as the Sensory, are marked by the same
27348 preverb on all verbs. Other categories select a preverb belonging to one of the
27349 four series (A, B, C or D, see Table 21.2 below and Table 21.1.1, §15.1.1.1), whose
27350 orientation is lexically specified by the verb (§15.1.5).

27351 Primary TAME categories in Japhug are divided into four groups: Non-Past
27352 (Factual, Egophoric Present, Sensory, §21.3), Imperfective (which is mainly used
27353 in subordinate clauses or in periphrastic constructions, §21.2), Past (Aorist, Infer-
27354 tential, §21.5) and Modal (Imperative, Irrealis, Dubitative, §21.4). This classifica-
27355 tion is based on both semantic and formal features, and is justified in each of the
27356 sections of this chapter.

27357 In addition to the primary categories, periphrastic TAME categories are built
27358 by combining finite verbs with the copula *yu* ‘be’. The main verb can be in the
27359 Imperfective (§21.2.2, §21.5.3.5), in the Factual Non-Past to express periphrastic
27360 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

27361 postverbal TAME auxiliary should not be confused with its focalizing function

27362 (§22.5.3.2).

21.1.1 Preverbs

27364 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), while 27365 the orientation of the preverb is either lexically determined, or expresses spatial 27366 orientation (in the case of orientable verbs §15.1.2).

21.1.1.1 Morphology

27370 Orientation preverbs in Kamnyu Japhug come in four series, which contribute (in 27371 combination with other formatives and morphological devices) to mark TAME, 27372 transitivity and person. Each series comprises seven orientations, divided into 27373 Upper orientations (up, upstream, eastwards), Lower orientation (down, down-27374 stream, westwards) and unspecified orientation (§15.1.1). Table 21.2 lists the 27375 rules of preverb formation. The C- is the initial consonant of the preverb, which 27376 encodes the orientation: *t*- UPWARDS, *p*- DOWNWARDS, *l*- UPSTREAM, *t^h/c^h*- DOWN-27377 STREAM, *k*- EASTWARDS, *n-/j-* WESTWARDS and *j*- ‘unspecified’.

27378 Upper vs. Lower orientation preverbs have a different vocalism (except for

27379 type C preverbs, whose vowel is neutralized to *Ca-*), and type B and D lower
 27380 orientation preverb have a palatalized onset, realized as *c^h-* for DOWNSTREAM pre-
 27381 verbs (rather than *†^hj-*) and as *n-* for WESTWARDS preverbs. A complete list of all
 27382 preverbs is presented in Table 15.1 (§15.1.1). Only types A and B are attested on
 27383 non-finite forms (§16.1.1.2).

Table 21.2: Orientation preverbs and TAME categories

	Upper	Lower	TAME categories
A	<i>Cy-</i>	<i>Cu-</i>	AOR, PST.IPFV, IMP, IRR
B	<i>Cu-</i>	<i>Cju-</i>	IPFV, SENS, PRS, DUB
C	<i>Ca-</i>	<i>Ca-</i>	AOR (3→3')
D	<i>Co-</i>	<i>Cjṛ-</i>	IFR, IFR.IPFV

27384 21.1.1.2 Ambiguity with type A preverbs

27385 Type A preverbs occur with a wide range of TAME categories. In particular,
 27386 Aorist and Imperative both select the type A preverb, without any additional
 27387 prefix. A few ambiguous forms do exist in the case of intransitive verbs in partic-
 27388 ular: for instance, *ky-rrzi* with the type A EASTWARDS preverb *ky-* and the verb
 27389 *rrzi* ‘stay’ can either be analyzed as an 2SG imperative ‘stay!’ or as a 3SG Aorist ‘he
 27390 stayed’. However, four additional morphological marks can help disambiguating
 27391 between the two categories in some contexts.

27392 First, Aorist selects stem II (§12.2.1), and Imperative stem III (§12.2.2, §21.1.2).
 27393 Second, transitive verbs in Aorist take type C preverbs instead of type A. Third,
 27394 the -t past tense suffix is found in the Aorist, but not in the Imperative (§21.1.3).
 27395 Fourth, the rules of vowel contraction (§12.3) are different across TAME cate-
 27396 gories: the contracting vowel of the stem merges with the preverb as *Ca-* in the
 27397 Aorist and Past Imperfective, and as *Cy-* in the Imperative and the Irrealis. For in-
 27398 stance, a contrast can be observed between the 3SG Aorist /kamdzu/ (*ky-amdzu*,
 27399 AOR-sit) ‘s/he sat down’ and the 2SG Imperative /kymdzu/ (*ky-ymdzu*, IMP-sit)
 27400 ‘sit!’.

27401 Syncretism occurs in the cases of verbs whose lexical orientation is WEST-
 27402 WARDS and EASTWARDS, the Imperfective of such verbs is identical to the Egophoric
 27403 Present or Dubitative on the one hand, and the Sensory on the other hand (ex-
 27404 cept in specific contexts, see §13.1.1, §22.5.1.2). For instance, the form *ku-omdzua-*
 27405 *a* of the verb *amdzua* ‘sit’, which takes the EASTWARDS preverbs, can either be ana-

lyzed as Imperfective (IPFV-sit-1SG) or Egophoric Present (PRS-sit-1SG) depending on the context.

Likewise, verbs selecting the DOWNWARDS orientation have Aorist and Inferential forms that are identical to their Past Imperfective and Inferential Imperfective forms, respectively. Given the constraints on the occurrence of the non-periphrastic Past Imperfective (§21.5.3), however, such cases are much rarer.

21.1.1.3 Orientation preverbs and aspect

The Past Imperfective and Inferential Imperfective preverbs *p̥uu-* and *p̥jy-* correspond to the DOWNWARDS preverbs of series A and D, respectively. The grammaticalization process from ‘downward’ orientation to imperfective has occurred (probably independently) in all core Gyalrong languages, and is discussed in detail in Y. Lin (2011).

There are two additional less grammaticalized cases of orientations used with a specific aspectual meaning, and overriding the intrinsic orientation of the verb.

First, the DOWNSTREAM orientation occurs with stative verb to express progressive change of state occurring naturally, in particular to describe the growth of plants and animals (§15.1.5.5). This usage is common with the adverb *zuruuzyri* ‘progressively’, and is observed across various TAME categories, including for instance the Inferential (1), the Imperfective (2, 3) and the Aorist (3). The verbs *mtsʰyt* ‘be full’, and *wxti* ‘be big’ normally select the UPWARDS orientation (see example 118, §15.1.5.5), and *yurni* ‘be red’ the WESTWARDS orientation.

- 27427 (1) *nua-muj nura zuruuzyri cʰy-mtsʰyt*
3PL.POSS-feather DEM:PL progressively IFR:DOWNSTREAM-be.full
‘Progressively, the (little birds) became full of feathers.’ (bailingniao he xiaoniao, 9)
- 27430 (2) *qandze nua xtc i qʰe kui-xtcu~xtci ma*
earthworm DEM be.small:FACT LNK SBJ:PCP-EMPH~be.small apart.from
maje, taqaβ jamar ma maje tce zuruuzyri
not.exist:SENS needle about apart.from not.exist:SENS LNK progressively
cʰui-wxti nua-cti.
IPFV:DOWNSTREAM-be.big SENS-be.AFF
‘The earthworm is small, only about as small as a needle, and then it grows progressively.’ (25-akWzgumba, 123)

- 27435 (3) *zuruažyri tce c^hu-yurni tce*
 progressively LNK IPFV:DOWNTREAM-be.red LNK
 27436 *t^hu-yurni tce tce c^hu-tut ηu tce,*
 AOR:DOWNTREAM-be.red LNK LNK IPFV-be.ripe be:FACT LNK
 27437 ‘It progressively becomes red, and after it has become red it ripens.’
 27438 (16-RIWmsWsi, 18)

27439 Second, the UPWARDS orientation in the Aorist overrides the lexical orientation
 27440 of stative verbs to indicate a point of temporal reference in temporal clauses. For
 27441 instance, the negative existential verb *me* ‘not exist’ (§15.1.5.7), whose intrinsic
 27442 orientation is WESTWARDS, occurs with the UPWARDS orientation as in (4) in the
 27443 meaning ‘when there is no...’ without inchoative aspect ‘when ... disappears’ as
 27444 is usually found in the Aorist (see also §21.5.1.4, Jacques 2014a: 283, fn 10).

- 27445 (4) *nuu ma tx-me tce juu-p^hut-nuu*
 DEM apart.from AOR:UP-not.exist LNK IPFV-take.out-PL
 27446 ‘When there is nothing else than than this, people cut it.’ (140427
 27447 qamtsWrmdzu, 12)

21.1.1.4 Orientation preverbs and evidentiality

27449 The Sensory *juu-* and Egophoric Present *ku-* markers correspond to the WEST-
 27450 WARDS and EASTWARDS preverbs of series B, respectively. It is unlikely that a
 27451 pair of preverbs encoding the solar dimension (§15.1.3.3) was directly grammaticalized
 27452 to express an evidential contrast.

27453 However, an extended function of the EASTWARDS/WESTWARDS contrast is the
 27454 expression of centripetal vs. centrifugal orientation (§15.1.4.3). The centripetal
 27455 meaning of the EASTWARDS orientation goes back at least to proto-Gyalrong,
 27456 since it is attested in Situ, and the metaphorical use of centripetal/cislocative
 27457 marker to express speaker affectedness could have been further grammaticalized
 27458 as an egophoric marker.

21.1.2 Stem alternation

27460 Stem alternation (§12.2) has a lower functional load than preverbs to encode
 27461 TAME, since stem II is only attested on a handful of irregular verbs (§12.2.1) and
 27462 stem III, although found on an important number of transitive verbs (§12.2.2.1),
 27463 is restricted to only a small subset of the paradigms, as it marks both TAME and
 27464 person/number (§12.2.2.2).

Three cases of systematic redundancy between stem alternation and orientation preverbs are observed. First, stem III alternation is redundant as a TAME marker (but not as a transitivity marker, §14.3.1) with B type preverbs in the Imperfective, the Sensory and the Egophoric. Second, in 3→3' configurations, stem II and C type preverbs redundantly mark Aorist (§12.2.1). Third, stem III is redundant with the contrast between A and C type preverbs to distinguish between Imperfective and Aorist forms in the case of transitive verbs; taking *ndza* ‘eat’ as an example of an alternating transitive verb, its 2SG→3 Imperative *tr-ndze* ‘eat it!’ (stem III, A preverb) differs from its 3SG→3’ Aorist *ta-ndza* ‘s/he ate it’ (base stem, C preverb) by both the preverbs and the stems.

Since intransitive verbs lack the contrast between A and C type preverbs (and also stem III), stem II is the only clue to disambiguate between the third person Aorist and Imperative, which are both marked by A type preverbs: for instance, while non-alternating verbs such as *rɔzi* ‘stay’ have ambiguity between these two forms (§21.1.1.2), irregular alternating verbs such as *ce* ‘go’ make a clear distinction between Aorist 3SG (*jy-ari* AOR-go[II] ‘s/he went’) and Imperative 2SG (*jy-ce* IMP-go ‘go!’) and the corresponding dual and plural forms. It is the only case when stem alternation is critical to distinguish between two TAME categories.

21.1.3 Other affixes

Aside from preverbs and stem alternation, formatives used to mark primary TAME categories are few.

The negative prefixes (slot -5, §11.2.1) have different forms depending on TAME categories, and one of them, the Sensory Negative *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).

27498 **21.1.4 Evidentiality and person**

27499 As in many languages with evidential systems (J. T.-S. Sun 2018), person and
 27500 evidentiality present some degree of interaction in Japhug.

27501 The Sensory (§21.3.2) and Inferential (§21.5.2) have restrictions on the use of
 27502 first person in declarative clauses. First person subjects are not impossible, but
 27503 have very specific meanings (see §21.3.2.6 and §21.5.2.3).

27504 The Egophoric Present, on the other hand, is not compatible with second per-
 27505 son in declarative clauses, and with first person in interrogative ones.

27506 Like most languages of the Tibetosphere, interrogatives sentences generally
 27507 adopt the perspective of the addressee rather than that of the speaker, causing
 27508 a phenomenon referred to as ‘anticipation rule’ (Tournadre & LaPolla 2014: 244)
 27509 or ‘flipping’ (San Roque et al. 2017): the speaker anticipates the answer of the
 27510 addressee and uses the form that he expect the addressee will choose to respond
 27511 to the question. For instance, in example (5), the speaker uses the Factual because
 27512 she expects and answer with the Factual such as *suz-a* (know:FACT-1SG) ‘I know’.

- 27513 (5) *nɛj u-tú-suz?*
 27514 2SG QU-2-know:FACT
 27515 ‘Do you know it?’ (19 GzW, 8)

27516 As a result of this change of perspective, compatibilities between evidential
 27517 markers and first vs. second person are always reversed between declarative and
 27518 interrogative sentences (§21.3.3.2).

27519 The addressee perspective however is not a syntactic rule. The addressee is free
 27520 to adopt the evidential form suggested by the speaker who asked the question, or
 27521 to choose another form if he sees fit: see Garrett & Bateman (2007) for an account
 27522 of this phenomenon in Tibetan. It is also possible to have in the same question
 27523 two verbs referring to the addressee with the Egophoric Present in one case and
 the Sensory in the other, as in (6).

- 27524 (6) *wo, u-kú-tu-pe, u-tú-ju-cʰa?*
 27525 INTERJ QU-EGOPH-2-be.good QU-SENS-2-be.fine
 27526 ‘Are you feeling well, are you fine?’ (140425 shizi huli he lu-zh, 16)

27526 **21.2 Imperfective**

27527 The Imperfective is one of the most common finite verb form in Japhug, but rarely
 27528 appears on its own without an auxiliary verb. It mainly occurs in periphrastic

27529 TAME constructions (§21.2.2) and subordinate clauses (§21.2.3, §21.2.4). A specific
 27530 hortative function (§21.2.5) has developed from its use in complement clauses
 27531 with a modal auxiliary. In addition, verbs of perceptions are used in the Imper-
 27532 fective in specific contexts (§21.2.7).

27533 21.2.1 Morphology

27534 The Imperfective selects type B preverbs (§21.1.1, §15.1.1), and stem III (§12.2.2.1,
 27535 §21.1.2) when appropriate. The preverb orientation is not neutralized. Table 21.3
 27536 shows the Imperfective 3SG→3' and 3PL→3' forms of some transitive verbs, illus-
 27537 trating all six orientation preverbs and alternation between stem III (in 3SG→3')
 27538 and stem I (in 3PL→3').

Table 21.3: Examples of Imperfective verb forms (3→3' transitive configura-
 tions)

Verb	Orientation	Imperfective
<i>ndza</i> 'eat'	UPWARDS	<i>tu-ndze, tu-ndza-nu</i>
<i>ko</i> 'prevail over'	DOWNWARDS	<i>pju-kym, pju-ko-nu</i>
<i>ly</i> 'dig'	UPSTREAM	<i>lu-lye, lu-lya-nu</i>
<i>βlu</i> 'burn'	DOWNSTREAM	<i>cʰu-βli, cʰu-βlu-nu</i>
<i>ndo</i> 'take'	EASTWARDS	<i>ku-ndym, ku-ndo-nu</i>
<i>suso</i> 'think'	WESTWARDS	<i>jnu-susym, jnu-suoso-nu</i>

27539 Table 21.4 presents the Imperfective paradigms of the transitive verb *ndza* 'eat'
 27540 (UPWARDS) and of the intransitive contracting verb *amdzu* 'sit' (EASTWARDS), with
 27541 vowel contracting of the preverb and the vowel of the stem in the first and third
 27542 person subject forms.

27543 Verbs selecting the EASTWARDS or WESTWARDS orientation (§15.1.3.3, §15.1.4.3,
 27544 §15.1.5) present syncretism between Imperfective on the one hand, and Egophoric
 27545 Present or Sensory on the other hand. For instance, the 3SG→3' form *jnu-susym*
 27546 of the verb *suso* 'think' (which requires the WESTWARDS preverbs), can either be
 27547 Imperfective or Sensory (§21.3.2.1, §21.2.6). Similarly, the 1SG forms *ku-ryzi-a* and
 27548 *ku-omdzui-a* of the verbs *ryzi* 'stay' and *amdzu* 'sit' (whose lexical orientation is
 27549 EASTWARDS, see Table 21.4), can be Imperfective or Egophoric Present (§21.3.3.1).

27550 Verbs selecting other orientations do not have such ambiguity; for instance,
 27551 the verb *ryma* 'work' (selecting UPWARDS orientation) has different Imperfective,

Table 21.4: Examples of Imperfective paradigms

1SG($\rightarrow 3'$)	<i>tu-ndze-a</i>	<i>ku-omdzuu-a</i>
1DU($\rightarrow 3'$)	<i>tu-ndza-tci</i>	<i>ku-omdzui-tci</i>
1PL($\rightarrow 3'$)	<i>tu-ndza-j</i>	<i>ku-omdzuu-j</i>
2SG($\rightarrow 3'$)	<i>tu-tuu-ndze</i>	<i>ku-tuu-ymdzuu</i>
2DU($\rightarrow 3'$)	<i>tu-tuu-ndza-ndzi</i>	<i>ku-tuu-ymdzuu-ndzi</i>
2PL($\rightarrow 3'$)	<i>tu-tuu-ndza-nuu</i>	<i>ku-tuu-ymdzuu-nuu</i>
3SG($\rightarrow 3'$)	<i>tu-ndze</i>	<i>ku-omdzuu</i>
3DU($\rightarrow 3'$)	<i>tu-ndza-ndzi</i>	<i>ku-omdzui-ndzi</i>
3PL($\rightarrow 3'$)	<i>tu-ndza-nuu</i>	<i>ku-omdzuu-nuu</i>
1 \rightarrow 2SG	<i>tu-ta-ndza</i>	
2SG \rightarrow 1SG	<i>tu-kuu-ndza-a</i>	
3' \rightarrow 3SG	<i>tú-wy-ndza</i>	

²⁷⁵⁵² Egophoric Present and Sensory forms: *tu-ryma*, *ku-ryma* and *jnu-ryma*, respectively.

21.2.2 Use in periphrastic TAME categories

²⁷⁵⁵⁵ Periphrastic TAME categories with a main verb in the Imperfective are used to express habitual or ongoing actions. In these constructions, the main verb expresses person/number and aspect, while the copula encodes tense, modality and evidentiality.

²⁷⁵⁵⁹ The examples in (7) (with the verb *ndza* ‘eat’ in the 3SG \rightarrow 3’ configuration) illustrate attested possibilities. With a copula in the Factual Non-Past *yu* (7a) or in the Sensory *jnu-yu* (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-yu* or in the Inferential Imperfective *pjy-yu*, 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).

- ²⁷⁵⁶⁷ (7) a. *tu-ndze yu*
 IPFV-eat[III] be:FACT
²⁷⁵⁶⁸ ‘S/he/it eats it/is eating it.’ (Periphrastic Imperfective)

- 27569 b. *tu-ndze pui-ŋu*
IPFV-eat[III] SENS-be
27570 ‘S/he/it eats it/is eating it.’ (Periphrastic Sensory)
- 27571 c. *tu-ndze pui-ŋu*
IPFV-eat[III] PST.IPFV-be
27572 ‘S/he/it used to eat it/was eating it.’ (Periphrastic Past Imperfective)
- 27573 d. *tu-ndze pjyr-ŋu*
IPFV-eat[III] IFR.IPFV-be
27574 ‘S/he/it used to eat it/was eating it.’ (Periphrastic Inferential
27575 Imperfective)
- 27576 e. *tu-ndze a-pui-ŋu*
IPFV-eat[III] IRR-IPFV-be
27577 ‘If s/he eats it...’ (Periphrastic Irrealis)

27578 In these constructions, the copula never takes any person/number indexation
27579 markers or associated motion, which can only be found on the main verb. For in-
27580 stance, in (8), the 1SG indexation suffix *-a* can only occur on *tu-ndze-a*, and putting
27581 it on the copula *ŋu* here is categorically rejected (although the copula *ŋu* ‘be’ is
27582 compatible with indexation affixes, §14.2.3)

- 27583 (8) *ty-mt^hum tu-ndze-a pui-ŋu ri,*
INDEF.POSS-meat IPFV-eat[III]-1SG PST.IPFV-be LNK
27584 ‘I was eating the meat.’ (150909 qandZGi, 5)

27585 Negation can be expressed in these constructions by using the suppletive neg-
27586 ative copula *maš* ‘not be’ (§13.1.2, §13.2, §22.5.3.1), as in (9).

- 27587 (9) *ma lonba tuturca tu-myrm pui-maš.*
LNK all together IPFV-hurt PST.IPFV-not.be
27588 ‘(My whole head) was not hurting all at the same time.’ (24-pGArtsAG, 77)

27589 Chains of verbs in the Imperfective can share the same copula, which appears
27590 at the end, following the last verb. In (10), the Inferential Imperfective copula
27591 *pjyr-ŋu* has scope over no less than ten verbs in the Imperfective (marked in red),
27592 sharing the same subjects and expressing a list of actions repeatedly occurring in
27593 a particular order every day (the first verb *ku-rtoz* ‘he saw that..’ does not belong
27594 to this chain, see §21.2.7). One verb in the Aorist (marked in blue) appears in the
27595 middle of the Imperfective chain to set a point of temporal reference ‘when they
27596 reach (the ground)’.

- 27597 (10) *ku-rtob tcendire spikuku zo qro χsum pjua-yi-nuu*
 IPFV-look LNK everyday EMPH pigeon three IPFV:DOWN-come-PL
 27598 *tce tumunymk^{ha} zuu pjua-nuu-tob-nuu tce tce*
 LNK heaven LOC IPFV:DOWN-AUTO-come.out-PL LNK LNK
 27599 *wi-t^hob pui-azyut-nuu tce, ci pjua-zyy-syphyr-nuu tce,*
 3SG.POSS-ground AOR:DOWN-reach-PL LNK a.little IPFV-REFL-shake-PL LNK
 27600 *tce qro wi-ndzi nuu pjua-qab-nuu tce, uzoz pjua-ta-nuu tce,*
 LNK pigeon 3SG.POSS-skin DEM IPFV-peel-PL LNK apart IPFV:WEST-put LNK
 27601 *wi-ηgu tce^heme kui-mpciw-mpcyr zo χsum ntsui*
 3SG.POSS-inside girl SBJ:PCP-EMPH~be.beautiful EMPH three always
 27602 *pjua-nuu-tob tce lu-nxtsov-nuu tce, tce*
 IPFV:WEST-AUTO-come.out LNK IPFV-collect.Potentilla.anserina LNK LNK
 27603 *turmuk^{ha} tce li nykinuu tvtsov nuu*
 evening LOC again FILLER Potentilla.anserina DEM
 27604 *tu-nuu-nado-nuu zara qro wi-ndzi wi-ηgu nuu*
 IPFV:UP-AUTO-take-PL 3PL pigeon 3SG.POSS-skin 3SG.POSS-in DEM
 27605 *tu-nuu-ηga-nuu tce tce pjua-zyy-syp^hyr-nuu q^he tce ci*
 IPFV-AUTO-wear-PL LNK LNK IPFV-REFL-shake-PL LNK LNK one
 27606 *wi-q^hu ci zo tumunymk^{ha} nutcu tu-cq^hlyt-nuu*
 3SG.POSS-after one EMPH heaven DEM:LOC IPFV:UP-disappear-PL
 27607 *ntsui pjy-ηu.*
 always IFR.IPFV-be
 27608 'He saw that everyday, three pigeons would come down from heavens,
 27609 and as they reached the ground, they would shake themselves, shed the
 27610 pigeon skins and put it a aside, and three beautiful girls would come out
 27611 from (the skins), they would collect *Potentilla anserina*, and in the
 27612 evening, they would take the *Potentilla*, wrap themselves in their pigeon
 27613 skin, shake themselves and disappear in heavens one after the other.'
 27614 (07-deluge, 31-38)

27615 Aside from the habitual and progressive meaning in (7a), the combination of a
 27616 main verb in Imperfective with a copula in the Factual Non-Past can also express
 27617 imminent future, as in (11) and (12). In (11), it also appears in the apodosis of a
 27618 conditional construction to express the result if the condition in the protasis is
 27619 verified.

- 27620 (11) *c-tu-ru-a ηu tce, turme pjua-pjua-ηu ny,*
 TRAL-IPFV:UP-look-1SG be:FACT LNK human COND~SENS-be ADD

- 27621 *a-ku, nyki, tu-syŋobŋob-a ñu tce ts-yi,*
 1SG.POSS-head FILLER IPFV-nod-1SG be:FACT LNK IMP:UP-come
 27622 ‘I am going to have a look, and if it is a human, I will nod and you can
 27623 come (to eat him).’ (2012 khu, 48-49)
- 27624 (12) *wo a-mu ma-pui-tur-zyy-sat tce azo*
 INTERJ 1SG.POSS-mother NEG-IMP-2-REFL-kill LNK 1SG
 27625 *pjui-nuu-yi-a ñu*
 IPFV:DOWN-VERT-come-1SG be:FACT
 27626 ‘Mother, don’t commit suicide, I am coming back.’ (2003 kAndzwsqhaj2,
 27627 26)

27628 In (13), the Imperfective verb *yu-ju-re-a* refers to an event expected to occur
 27629 several years in the future. However, this is still analyzable as an imminent fu-
 27630 ture, as this action is to take place immediately after the point of future temporal
 27631 reference expressed by the verb *jy-nuyye-a* in the Aorist (§21.5.1.4).

- 27632 (13) *kuki tui-tc^hyyduu ki nyzo w-pui ts-pe*
 DEM.PROX one-jar DEM.PROX 2SG 3SG.POSS-safekeeping IMP-do[II]
 27633 *tce, azo jy-nuu-ye-a tce tce yu-ju-re-a ñu*
 LNK 1SG AOR-VERT-come[II]-1SG LNK LNK CISL-IPFV-fetch[III]-1SG be:FACT
 27634 ‘Keep this jarful (of olives for me while I am gone), when I come back I
 27635 will come and take it back.’ (140516 yiguan ganlan-zh, 24-25)

27636 The existence of Periphrastic TAME categories, in addition to the primary and
 27637 secondary categories, makes the Japhug TAME system extremely complex. At
 27638 the present stage of my knowledge of the language, the semantic differences
 27639 between some categories still eludes me.

27640 For instance, the (Primary) Sensory and the Periphrastic Sensory can both ex-
 27641 press habitual or generic actions, as in (14) where both forms appear redundantly
 27642 (with tail-head linkage, §25.1.7).

- 27643 (14) *tce ma nuuu dudut nuu kuu tcyom kunuñ pui-ndze.*
 LNK LNK DEM dove DEM ERG xanthoxylum also SENS-eat[III]
 27644 *tcyom kunuñ pui-ndze tce tu-ndze pui-ñu,*
 xanthoxylum also SENS-eat[III] LNK IPFV-eat SENS-be
 27645 *pjui-kre pui-ñu.*
 IPFV-cause.to.fall[III] SENS-be
 27646 ‘The dove also eats xanthoxylum. It also eats xanthoxylum, and makes it
 27647 fall (from the tree).’ (22-CAGpGa, 32-33)

27648 There is overlap between the use of postverbal copulas in the periphrastic
 27649 TAME constructions and their function as focus marker (§13.2, §22.5.3.2). In (15),
 27650 the negative copula *maʂ* and the emphatic affirmative *cti* are used both to build
 27651 the Periphrastic Imperfective, and to express contrastive focus on the dative re-
 27652 cipient.

- 27653 (15) *nŋzo nŋ-pʰe tu-ti-a maʂ, pŋnmawombyr u-pʰe*
 2SG 2SG.POSS-DAT IPFV-say-1SG not.be:FACT ANTHR 3SG.POSS-DAT
 27654 *tu-ti-a cti*
 IPFV-say-1SG be.AFF:FACT
 27655 ‘I am not saying it to you, I am saying it to Padma ’Od’bar.’ (Norbzang
 27656 2005, 190)

27657 21.2.3 Use in temporal clauses

27658 Chains of verbs in the Imperfective without subordinating relation, but possibly
 27659 sharing a tense-marking copula, can indicate a succession of events, as in (10)
 27660 above. The Imperfective also occurs in subordinate temporal clauses expressing
 27661 precedence or simultaneous action.

27662 Temporal clauses of temporal precedence headed by the postposition *cwŋgu*
 27663 ‘before’ (§8.2.11, §25.3.2.1, Jacques 2014a: 286–287) require the Imperfective, to the
 27664 exclusion of all other finite and non-finite verb forms. In (16) and (17) for instance,
 27665 only *lu-fsoʂ* and *ku-lxt* can occur with *cwŋgu*, and neither infinitive (§16.2) or
 27666 Aorist forms (§21.5.1) are possible, regardless of the TAME form of the verb of
 27667 the main clause (Inferential in 16, Past Imperfective in 17).

- 27668 (16) *tce nŋ u-fso lu-fsoʂ cwŋgu qʰe li nura*
 LNK DEM 3SG.POSS-tomorrow IPFV-be.bright before LNK again DEM:PL
 27669 *c-to-stu.*
 TRAL-IFR-do.like
 27670 ‘The next day, before the day broke, he went (there) and did like (she had
 27671 said).’ (28-smAnmi, 356)
- 27672 (17) *tua-mua ku-lxt cwŋgu nŋ u-tar-sy-cke*
 INDEF.POSS-sky IPFV-release before DEM 3SG.POSS-NMLZ:DEG-PROP-burn
 27673 *pua-saχaʂ zo*
 PST.IPFV-be.extremely EMPH
 27674 ‘Before it rained, it was very hot.’ (conversation, 17-09-2018)

27675 In temporal clauses with *u-k^huk^ha* ‘while’, Imperfective express an action oc-
 27676 curring simultaneously with that of the main clause, as in (18) and (19). However,
 27677 unlike *ciungu*, *u-k^huk^ha* does not select the Imperfective and other finite TAME
 27678 forms are possible (§25.3.4.2).

- 27679 (18) *azō pjui-ta-suixcxt u-k^huk^ha lu-taʂ-a ḷu*
 1SG IPFV-1→-teach 3SG.POSS-while IPFV-weave be:FACT
 27680 ‘I am teach you (how to weave) and weaving at the same time.’ (elicited)

- 27681 (19) *q^he ur-pui tui-nui pui-jts^hi u-k^huk^ha,*
 LNK 3SG.POSS-young INDEF.POSS-breast IPFV-give.to.drink 3SG.POSS-while
 27682 *u-ku kura tu-ste tce zruy ra*
 3SG.POSS-head DEM.PROX:PL IPFV-do.like[III] LNK louse PL
 27683 *pjui-re pui-ṣu. tce zruy nura tu-ndze pui-ṣu.*
 IPFV-pick.off[III] SENS-be LNK louse DEM:PL IPFV-eat[III] SENS-be
 27684 ‘While (the monkey mother) breastfeeds her young, she does like this on
 27685 its head at the same time and picks lice off. Then she eats the lice.’
 27686 (19-GzW, 36-38)

27687 21.2.4 Use in complement clauses

27688 The Imperfective is common in complement clauses, in particular with modal
 27689 verbs. In such clauses, no auxiliary copula is required.

27690 Imperfective occurs in S-complement clauses with modal verbs such as *ra* ‘be
 27691 needed’, ‘be necessary’ (20, 21), *jyy* ‘be allowed’ (22), *nts^hi* ‘be better’ and *k^hu* ‘be
 27692 possible’.

- 27693 (20) *atu pyxtcu nui pjúr-wy-sat pui-ra*
 up.there bird DEM IPFV-INV-kill SENS-be.needed
 27694 ‘One has to kill the bird upstairs.’ (2003kongzong, 364)

- 27695 (21) *pjui-tui-yi my-ra*
 IPFV:DOWN-2-come NEG-be.needed:FACT
 27696 ‘You don’t have to come down (with us).’ (heard in context)

- 27697 (22) *tu-kui-qur-a ú-jyy*
 IPFV-2→1-help-1SG QU-be.possible:FACT
 27698 ‘Could you help me?’ (150901 dongguo xiansheng he lang-zh, 34)

27699 The aspectual auxiliary *ŋgryl* ‘be usually the case’ (§24.5.6.4) most often selects
 27700 a complement in the Imperfective, expressing recurring actions or situations, as
 27701 in (23).

- 27702 (23) *qala kuu nura kuu-fse βlaβlu tu-βze*
 hare ERG DEM:PL SBJ:PCP-be.like trick IPFV-do[ILI]
 27703 *pjx-ŋgryl.*
 IFR.IPfv-be.usually.the.case
 27704 ‘The hare used to do tricks like that.’ (31-qala, 82)

27705 The Imperfective is also found in object or semi-object complement clauses
 27706 with modal verbs such as *spa* ‘be able to’ (24) or *cʰa* ‘can’ (example 213, §21.5.2.4).

- 27707 (24) *pua-krym muúj-spe qhe, tcendyre numua u-pua*
 IPFV-share[III] NEG:SENS-be.able[III] LNK LNK DEM 3SG.POSS-young
 27708 *tua-rdoꝝ tua kua [...] tu-nua-ndym qhe, uzo stuasti zo*
 one-piece DEM ERG IPFV-AUTO-take[III] LNK 3SG alone EMPH
 27709 *tu-nua-ndze pua-ŋu*
 IPFV-AUTO-eat[III] SENS-be
 27710 ‘(The mother cat) does not know how to share (the food she has brought
 27711 for her kitten equally), one of the kitten takes (the whole) and eats it alone
 27712 (without giving anything to its mother or the other kitten).’ (21-IWLU, 81)

27713 Imperfective complement clauses are found with main verbs in all primary
 27714 TAME categories, including perfective ones like Inferential (example 213, §21.5.2.4)
 27715 or the Aorist.

27716 21.2.5 Hortative

27717 The Imperfective used without any copula or auxiliary can have a hortative mean-
 27718 ing similar to the one it has when combined with a modal auxiliary such as *ra*
 27719 ‘be needed’ or *ntsʰi* ‘be better’ (§21.2.4).

27720 The hortative function occurs in first person subject forms, with either transi-
 27721 tive or intransitive verbs (25).

- 27722 (25) *ku-zγyctʰuz-a ma zduxpa*
 IPFV-reveal.one's.true.nature-1SG LNK poor.of
 27723 ‘Let me show him who I am, poor of him.’ (2003kandzwsqhaj, 146)

27724 It is also found instead of the Imperative in the 2→1 configurations (26, 27, 28,
 27725 29), since the Imperative only allows 2→3 forms (§21.4.2.1).

- 27726 (26) *ku-kui-nyjo-a je*
 IPFV-2→1-wait-1SG SFP

27727 ‘Wait for me!’ (heard in context)

- 27728 (27) *ju-kui-tsum-a wo, a-wi*
 IPFV-2→1-take.away-1SG SFP 1SG.POSS-grandmother

27729 ‘Take me away with you, grandmother!’ (140519 mai huochai de xiao
 27730 nvhai-zh, 160)

- 27731 (28) *nui-me jui-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
 27732 *mr-c^ha-a*
 NEG-can:FACT-1SG

27733 ‘Give me you daughter, I cannot go back there alone.’ (02-deluge2012, 108)

- 27734 (29) *u-jui-nuakumab-a ny jui-kui-sur-βzjaur-a*
 QU-IPFV-make.a.mistake-1SG ADD IPFV-2→1-CAUS-correct-1SG
 27735 ‘If I make a mistake (when speaking), correct me.’ (elicited)

27736 The hortative meaning of the Imperfective occurs in three main contexts: (i)
 27737 when the clause containing the verb in the Imperfective followed by a causal
 27738 clause, with the linker *ma* in between, as in (25) and (28); (ii) when the verb is
 27739 followed by the sentence final particle *wo* (§10.4.1), as in (27); (iii) in the apodosis
 27740 of conditional constructions (29).

27741 21.2.6 Inchoative

27742 With stative verbs, like the Aorist (§21.5.1) and the Inferential (§21.5.2) the Imperfective
 27743 always expresses ongoing change, whether it appears in main clauses in
 27744 a Periphrastic tense (30), or in a complement clause (31).

- 27745 (30) *t^hui-tut ri tce c^hui-wyrum jui-ηu.*
 AOR-be.ripe LNK LNK IPFV-be.white SENS-be
 27746 ‘When it ripens, it becomes white.’ (16-CWrNgo, 165)

- 27747 (31) *nur kumy c^hw-myci-ndzi mu-pjy-c^ha-ndzi*
DEM also IPFV-be.rich-DU NEG-IFR.IPFV-can-DU
'Despite (their hard work), they could not become rich. (divination 2003,
27749 7)

27750 This inchoative meaning often appears with initial reduplication of gradual
27751 increase (§12.4.1.4), as in (32).

- 27752 (32) *zurwizyri tce tcendyre w-skxt nur tu~tu-mpcyr*
progressively LNK LNK 3SG.POSS-voice DEM INCR~IPFV-be.beautiful
27753 *zo nyu*
EMPH be:FACT
'As it grows bigger, the rooster's) voice progressively becomes more and
27755 more beautiful.' (22-kumpGa, 74)

27756 Verbs selecting the WESTWARDS or EASTWARDS preverbs as intrinsic orientations
27757 have syncretism between Imperfective on the one hand, and Sensory or
27758 Egophoric Present on the other hand (§21.2.1). For instance, the form *nui-nas* is
27759 (inchoative) Imperfective in (33), and (stative) Sensory in (34) (illustrating the
27760 comparative use of the Sensory, §21.3.2.5). The only formal difference between
27761 them is the presence of the auxiliary *nyu* in (33).

- 27762 (33) *pui-rom tce tce nui-nas zo nyu*
AOR-be.dry LNK LNK IPFV-be.black EMPH be:FACT
27763 'When (the puffball mushroom) dries, it becomes black.' (22-BlamajmAG,
27764 75)
- 27765 (34) *tce ui-jme nunuu kui nui-nas*
LNK 3SG.POSS-tail DEM ERG SENS-be.black
27766 'It tail is more black.' (23-qapGAmtWmtW, 60)

21.2.7 Perception verbs

27768 The verbs *rtoz* 'look' and *sypo* 'listen', which normally express volitional perception,
27769 occur in the Imperfective in an unusual construction which has three main
27770 characteristics.

27771 First, the object or semi-object (§14.5.3) of the verb is non-overt, and cataphorically
27772 refers to the immediately following clause(s), which describe(s) the perceived event, as in (35). These clauses are in coordinating relationship with
27773

21 Tense, aspect, modality and evidentiality

27774 the clause of the perception verb, and are not subordinate complement clauses
 27775 (§24.4.4).

- 27776 (35) *wi-zda* *ra kui ku-rto&-nui tce, [numu rdystas*
 27777 3SG.POSS-companion PL ERG IPFV-look-PL LNK DEM stone
 27778 *jy-k-xfzu rcanui], wuma zo pjy-jyxt-nui.*
 27779 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)

27780 Second, despite having an Imperfective form, the verbs can express a semelfac-
 27781 tive perception (note in particular the presence of the adverb *bl̥ywur* ‘suddenly’
 27782 in 36 below), rather than an ongoing or recurrent perception when the following
 27783 clause is in the Aorist or in the Inferential (as in 35, 36, 37 and 38 below)

- 27784 (36) *spjaŋkui kui bl̥ywur zo ku-rto& tce, k^huna yu wi-mke*
 27785 wolf ERG suddenly EMPH IPFV-look LNK DOG GEN 3SG.POSS-neck
 27786 *nuitcu smazgruβ ci pjy-mto pu-ηu.*
 27787 DEM:LOC scar INDEF IFR-see SENS-be
 ‘The wolf suddenly saw (that there was) a scar on the dog’s neck.’ (140426
 jiagou he lang-zh, 41-42)

27788 Third, the perception is non-volitional: the verbs in this construction can be
 27789 translated as ‘notice’ (of something unexpected), as shown by the fact that the
 27790 verb of non-volitional perception *mto* ‘see’ occurs in the following clause in (36)
 27791 to redundantly express the same perception event as *ku-rto&*.

27792 The clauses referring to the perceived event (shown in square brackets below)
 27793 in the Inferential either express actions that had taken place before the percep-
 27794 tion event, and whose results only are perceptible (§35, §38), or actions that are
 27795 immediately perceived as they occur (§37).

- 27796 (37) *a-wa* *kui-ruijyxt jy-ce ri, nu-syŋo tce,*
 27797 1SG.POSS-father SBJ:PCP-go.to.toilets IFR:WEST-go LNK IPFV-listen LNK
 27798 *[wi-tar nuitcu turme ci jy-yi]*
 27799 3SG.POSS-up DEM:LOC man INDEF IFR:WEST-come
 ‘My father had gone to toilets, and heard (there) that someone came
 upstairs.’ (08-kWqhi, 11-12)

27800 The cataphoric object of the perception verb can comprise more than one
 27801 clause, as shown by (38).

- | | | | | |
|-------|------|--|--|-----------------------|
| 27802 | (38) | <i>icq^ha</i> | <i>kui-nuucylymbumbjom nuu c^hy-sta,</i> | <i>[...] tcendyre</i> |
| | | the.aforementioned SBJ:PCP-racing | DEM IFR-wake.up | LNK |
| 27803 | | <i>ku-rtob tce, [u-tui-ci</i> | <i>ri pjy-lwo^htce, tcendyre</i> | |
| | | IPFV-look LNK 3SG.POSS-INDEF.POSS-water also | IFR-spill LNK | LNK |
| 27804 | | <i>icq^ha nuu, tycime nuu ri kui-yrq^hu~rq^hi zo jo-nuu-ce</i> | | |
| | | FILLER DEM lady | DEM also SBJ:PCP-EMPH~be.far EMPH IFR-AUTO-go | |
| 27805 | | <i>cti] tce,</i> | | |
| | | be.AFF:FACT LNK | | |
| 27806 | | 'The racer woke up, and saw that his water had been spilled, and that the | | |
| 27807 | | princess had already gone far away.' (140505 liuhaohan zoubian | | |
| 27808 | | tianxia-zh, 130) | | |

In this construction, the Imperfective forms *ku-rtoς* and *ju-syjo* can also refer to generic or recurrent events if the following clause is in the Imperfective too, as in example (10) above (§21.2.2).

The Imperfective of perception should be distinguished from the regular uses of the perception verbs *rtoz* 'look' and *sxyo* 'listen' in the Imperfective. In (39) and (40) for instance, the direct objects of the verb *rtoz* do not cataphorically refer to the following clause, but rather to concrete entities (the leopard's head in 39, two birds in 40), and there is no non-volitional perception interpretation.

- 27817 (39) *tce kurtsyy nunuu w-ku* *nunuu kú-wy-rtoꝝ* *tce, lulu tsa*
LNK leopard DEM 3SG.POSS-head DEM IPFV-INV-look LNK cat a.little
27818 *w-ts^huya* *fse,*
3SG.POSS-shape be.like:FACT
27819 ‘Looking at the leopard’s head, it seems a bit like that of the cat.’
27820 (27-qartshAz, 167)

- 27821 (40) *azo ndyre ku-rto&-a juu-na&tcuuy-ndzi cti.*
 1SG LNK IPFV-look-1SG SENS-be.the.same-DU be.AFF:FACT
 ‘(When) I look at them (of two species of birds), they look the same.’

27822 (24-ZmbrWpGa, 5)

The verb *ru* ‘look at’ occurs in construction similar to that described above for *rtoš* ‘look’ and *sryo* ‘listen’ (§24.4.4) as in (41), but it keeps its volitional meaning and is not exclusively found in the Imperfective.

- 27827 (41) *ŋxqa* *ky-ti* *ci* *tu* *tce*, *kui-xrq^{hi}*
 mushroom.sp OBJ:PCP-say INDEF exist:FACT LNK SBJ:PCP-be.far
 27828 *ju-kui-ru* *tce*, [salabɔŋboŋ tsa fse].
 IPFV-GENR:S/O-look.at LNK puffball a.little be.like:FACT
 27829 ‘There is (a mushroom) caller *ŋxqa* (cow’s foot), when one looks at it from
 27830 far away, it is a bit like a puffball.’ (22-BlamajmAG, 84)

27831 21.3 Non-past categories

27832 This section discusses Factual Non-Past (§21.3.1), Sensory (§21.3.2) and Egophoric
 27833 Present (§21.3.3), three TAME categories which have two commonalities. First,
 27834 they almost always occur in sentences referring to Non-Past events (one excep-
 27835 tion is discussed in §21.3.2.7). Second, they do not have an inchoative meaning
 27836 when used with stative verbs, unlike the Imperfective (§21.2.6). Like the Imper-
 27837 fective and the Modal categories, they select stem III in transitive direct configu-
 27838 rations with singular subject and third person object (§12.2.2).

27839 Minimal pairs between these three categories can be found in specific contexts
 27840 ([Jacques 2019a](#)), and the tripartite evidential contrast between them is discussed
 27841 in §21.3.4.

27842 21.3.1 Factual Non-Past

27843 21.3.1.1 Morphology and glossing

27844 The Factual is the only finite TAM category in Japhug without an orientation
 27845 preverb and any other prefix in slot -3.¹ In the case of verbs without stem III
 27846 alternation (i.e. transitive verbs with a non-alternating rhyme and intransitive
 27847 verbs), it is realized as the bare stem. It selects the negative prefix *mr-* (§13.1.1).

27848 Complete paradigms of transitive and intransitive verbs in the Factual Non-
 27849 Past are presented in §14.3.2, and need not be repeated here.

27850 In spite of the absence of overt marking for most verbs, the gloss FACT is never-
 27851 theless always specified on verbs in the Factual in this grammar, whether or not
 27852 stem alternation occurs. This gloss is marked as a suffix (verb:FACT), rather than
 27853 as a prefix, to avoid confusion with derivational prefixes, since suffixes (§11.3 are

¹ The 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*).

27854 fewer than prefixes (§11.2), and also because stem III, which occurs in Factual
 27855 singular subject forms, is suffixal in origin (§12.2.2.1).

27856 The formation of the Factual is regular. However, the copula *yu* ‘be’ lacks an
 27857 Egophoric Present form (*†ku-yu-a* is not accepted, see §21.3.3), and it thus appears
 27858 that the preverbless forms of this verb are syncretic, analyzable either as Factual
 27859 or Egophoric Present (however, no attempt will be made at distinguishing those
 27860 two categories in the glosses).

27861 A few verbs, such as *kvtupa* ‘tell’ and *mr-xsi* ‘it is not known’, cannot take
 27862 orientation preverbs and are only attested in the Factual (§14.3.4).

27863 Due to the absence of orientation preverbs, vowel contraction with prefixes
 27864 located before slot -3 (§11.2.1) only occur in first or third person forms of the
 27865 Factual (§12.3). Otherwise, contracting verbs surface with initial *a-* in Factual
 27866 Non-Past non-negative form.

27867 21.3.1.2 Main clauses

27868 The Factual has two main functions when used in an independent clause without
 27869 an auxiliary verb.

27870 First, in the case of stative verbs, whether adjectival stative verbs or existen-
 27871 tial verbs/copulas, the Factual is used to describe facts considered to belong to
 27872 everybody’s common knowledge. Example (42) illustrates five examples of the
 27873 use of the Factual in this way, including copulas and adjectives. The Imperfec-
 27874 tive cannot occur in this function with stative verbs, since it has an inchoative
 27875 meaning (§21.2.6).

- 27876 (42) *tce kumpyytciu nuunu pyxtciu nuu-rca, kui-xtci ci*
 LNK sparrow DEM bird 3PL-among SBJ:PCP-be.small INDEF
 27877 *zdobzdo& yu tce, uizo xtci ri wuma*
 IDEO:STAT:small.and.cute be:FACT LNK 3SG be.small:FACT but really
 27878 *zo eqrax tce ui-mpas ui-rkwi nuunu ra*
 EMPH be.smart:FACT LNK 3SG:POSS-eye 3SG:POSS-border DEM PL
 27879 *kuu-pas kuu tu-wy-fskyr, nuu ui-tas ri, hanuni,*
 SBJ:PCP-be.black ERG IPFV-INV-surround DEM 3SG-on LOC a.little
 27880 *kuu-xtciu~xtci kui-yurni kui-fse tu,*
 SBJ:PCP-EMPH-be.small SBJ:PCP-be.red SBJ:PCP-be.like exist:FACT
 27881 *ui-xtypa nuu ra, ui-rqopa pjui-ze tce, nuu ra,*
 3SG:POSS-belly DEM PL 3SG:POSS-throat IPFV-begin[III] LNK DEM PL

- 27882 *wi-jme mur-t^hwi-nuu-lox myct̪a nuu wyrum*
 3SG:POSS-tail NEG-AOR-AUTO-come.out until DEM be.white:FACT
 27883 ‘Among the birds, the sparrow is tiny and cute. Although it is small it is
 27884 very intelligent. Its eyes are surrounded by black (feathers), and above
 27885 that there are some red (dots). Its belly is white from the throat until the
 27886 tail.’ (22 kumpGatCW, 2-7)

27887 With dynamic verbs however, the Imperfective does occur to express general
 27888 knowledge, especially in generic forms (as in *tú-wy-fskyr* IPFV-INV-surround ‘it
 27889 surrounds it’ above) or with a dummy subject (S/A) (*pjuu-ze* IPFV-begin[III] ‘it
 27890 begins’ above).

27891 The Factual also is also found in this function with dynamic verbs, in particular
 27892 when the subjects are overt and/or definite, as in (43).²

- 27893 (43) *uu-ku kui-mpuu nuu puú-wy-p^hut tce, nuŋa ra kuu*
 3SG.POSS-head SBJ:PCP-be.soft DEM IPFV-INV-pluck LNK COW PL ERG
 27894 *ndza-nuu, pas kuu mx-ndze*
 eat:FACT-PL pig ERG NEG-eat:FACT
 27895 ‘One plucks the (leaves) on the extremities, the soft ones, the cows eat it,
 27896 the pigs don’t.’ (06 qaZmbri, 20)

27897 Second, with dynamic verbs, the Factual can express immediate future. In
 27898 assertive sentences with first person subject (44), or in interrogative sentences
 27899 with second person subjects (45), the Factual can be interpreted as indicating the
 27900 intention to perform an action.

- 27901 (44) *ŋotcu tuu-ce ny-q^hwi~q^hu yi-a, ny-ŋga*
 where 2-go:FACT 2SG.POSS-EMPH~after come:FACT-1SG 2SG.POSS-clothes
 27902 *ny-xtsa fkur-a*
 2SG.POSS-shoes carry:FACT-1SG
 27903 ‘Wherever you go, I will go after you, I will carry your clothes and your
 27904 shoes.’ (26-kWIApopo, 37)

- 27905 (45) *mbark^hom t^hyjtcu tuu-yi?*
 Mbarkham when 2-come::FACT
 27906 ‘When are you coming to Mbarkham?’ (Conversation, 2014)

² The Imperfective would also be possible here, however.

27907 The Factual can also be used to express non-intentional future events when
 27908 the speaker has reasonable reasons for assuming that they will take place as in
 27909 (46).

- 27910 (46) *si-a jny-suoso, t^ha yua-sat-a jny-suoso*
 die:FACT-1SG IFR-think in.a.moment INV-kill:FACT-1SG IFR-think
 27911 'He thought "I will die", he thought "It will kill me".' (Buxiejiang gaizuo
 27912 yisheng-zh, 30)

27913 Verbs in the Factual in this function can be combined with the affirmative
 27914 copula *cti* 'be' (47) to emphasize the certainty that the action will take place.

- 27915 (47) *tce t^ha yi cti ma, snikuku zo ju-yi*
 in.a.moment come:FACT be:AFF:FACT LNK every.day EMPH IPFV-come
 27916 *jnu-cti tce nui ntsuu tu-ti jnu-cti*
 SENS-be:AFF LNK DEM always IPFV-say SENS-be:AFF
 27917 'It will come soon: it comes everyday and each times says this.' (qaCpa
 27918 2003, 185-186)

27919 They are also compatible with sentence final particles of epistemic modality
 27920 such as *t^haj* 'maybe, probably' (48), which can be used to temper the degree of
 27921 assertion.

- 27922 (48) *a-mu juymur tce tci-scawa ye ma k^hu*
 1SG.POSS-mother today.evening LNK 1DU.POSS-poor.of SFP LNK tiger
 27923 *yi t^haj ny*
 come:FACT SFP SFP
 27924 'Mother, poor of us, today evening the tiger is probably coming (for us).'
 27925 (The tiger, 4)

27926 21.3.1.3 Use in complement clauses

27927 The Factual is found in the complement clause of modal auxiliaries such as *ra* 'be
 27928 needed' and *jny* 'be allowed', but occurrences are considerably fewer than those
 27929 of the Imperfective (§21.2.4). It is used to refer to actions just about happen at
 27930 the time of utterance (as in 49 and 50), rather than generic statements.

- 27931 (49) *nuna-j uá-jny*
 rest:FACT-1SG QU-be.allowed:FACT
 27932 'Could we rest?' (2003 qachGa, 270)

21 Tense, aspect, modality and evidentiality

- 27933 (50) *azō kur-kap ce-a ra*
1SG SBJ:PCP-scoop go:FACT-1SG be.needed:FACT
27934 ‘I have to go to scoop water.’ (2014-kWLAG, 69)

21.3.1.4 Use in Periphrastic TAME categories

27936 The Factual occurs in fewer Periphrastic TAME constructions than the Imperfective (§21.2.2).

27938 With the Past Imperfective *pui-ŋu* and Inferential Imperfective *pjy-ŋu* forms of
27939 the copula *ŋu* ‘be’, it is used to build the Periphrastic Proximative (§21.6.2.1).

27940 Some speakers (in particular Kunbzang Mtsho) combine the Factual with the
27941 Sensory *nui-ŋu* of the copula to express the same meaning as the Inferential in
27942 narratives, notably with the verb *ti* ‘say’, where the constructions in (51) occurs
27943 instead of *to-ti* (IFR-say) ‘s/he said’ (§21.5.1.8).

- 27944 (51) ‘...’ *ti pui-ŋu*
say:FACT SENS-be
27945 ‘S/he said: ...’ (many examples)

27946 This form may however not be Factual in the proper sense, but rather the trace
27947 that *ti* ‘say’ (a highly irregular verb, §12.2.1.1) used to have irregular preverbless
27948 forms (§15.1.1.5). The archaic form *kʰu-ti* ‘s/he said’ provides additional support
27949 for this idea (§21.5.4).

21.3.2 Sensory

21.3.2.1 Morphology

27952 The assertive Sensory form of regular verbs is build by combining the B type
27953 WESTWARDS *nui-* preverb with stem I or stem III depending on person and transi-
27954 tivity (§12.2.2.2; stem II also occurs in one case, see 55 below). It is thus potentially
27955 ambiguous with the Imperfective of verbs selecting WESTWARDS as their intrinsic
27956 orientation. Examples (33) and (34) in §21.2.6 illustrate this syncretism between
27957 Sensory and Imperfective.

27958 The negative Sensory is marked by the portmanteau prefix *múj-* (§13.1.1), dif-
27959 fering from the negative Imperfective form *mu-nui-* of verbs selecting the WEST-
27960 WARDS preverbs. The *múj-* prefix is not compatible with contracting verbs (§12.3)
27961 however: their negative Sensory form is *mu-nui-*, as in (52).

- 27962 (52) *yzuit^huz nd̥re, sujno tci muu-nuu-γ-rtsi, si tci*
 Selaginella LNK grass also NEG-SENS-PASS-count tree also
 27963 *muu-nuu-γ-rtsi.*
 NEG-SENS-PASS-count
 27964 ‘The selaginella can neither be counted as a species of grass, nor as a tree.’
 27965 (16-RIWmsWsi, 98)

27966 The Sensory commonly appears in combination with the Progressive *nuu-γsui-*
 27967 */nuu-γz-* with transitive verbs. The negative form of the Sensory progressive is
 27968 *muu-nuu-* (53), like that of a contracting verbs.

- 27969 (53) *tui-muu p̥yjk^hu muu-nuu-γsui-lxt ri, qale nuu-γsui-βzu.*
 INDEF.POSS-sky yet NEG-SENS-PROG-release LNK wind SENS-PROG-make
 27970
 27971 ‘It is not yet raining, but there is wind.’ (conversation, 15-06-05)

27972 The Sensory form of the verb *ti* ‘say’ has stem I *nuu-ti* when occurring without
 27973 the Progressive (54), but unexpectedly selects stem II *nuu-γsui-tut, nuu-γs-tut* with
 27974 Progressive (55), which also presents the irregular allomorph *-γs-* (§21.6.1.1).

- 27975 (54) *nua kua-fse a-pa a-ma ni kua nuu-ti-ndzi*
 DEM SBJ:PCP-be.like 1SG.POSS-father 1SG.POSS-mother DU ERG SENS-say-DU
 27976 *tce*
 LNK
 27977 ‘My parents are saying these things.’ (2003nyima2, 94)

- 27978 (55) *a-τaβ kua nuu nuu-γs-tut*
 1SG.POSS-FZ ERG DEM SENS-PROG-say[II]
 27979 ‘My aunt is saying (those things).’ (2003 smanmi2, 147)

27980 The irregular existential verbs *yγzu* ‘exist’ and *mage* ‘not exist’ are the supple-
 27981 tive Sensory forms of *tu* ‘exist’ and *me* ‘not exist’ (§13.1.2, §14.2.2). They are the
 27982 only verbs whose Sensory forms is not marked by a prefix.

27983 21.3.2.2 Direct perception

27984 The Sensory is used to express access to information (Tournadre & LaPolla 2014)
 27985 through any of the senses, most commonly vision, but also hearing (56), touch
 27986 (57), smell (58) and taste (59). It implies the discovery of a previously unknown
 27987 fact or confirmation of an uncertain fact.

- 27988 (56) *tu-mbri tce u-skṛt wuma zo juu-mpcyr*
 IPFV-cry LNK 3SG.POSS-voice really EMPH SENS-be.beautiful
 27989 ‘When it cries, its voice is very beautiful.’ (04-cuiniao-zh, 26)
- 27990 (57) *juū-wy-nymyle tce juu-mpui.*
 IPFV-INV-touch LNK SENS-be.soft
 27991 ‘It is soft to the touch.’ (19 khWlu, 25)
- 27992 (58) *tce nuu tu-nymnym-nuu tce, cymtsho ui-di, puu-puu-ŋyu*
 LNK DEM IPFV-smell-PL LNK musk 3SG.POSS-smell COND~PST.IPFV-be
 27993 *ny, ui-di juu-mnym, tce numuu tcu ui-fsa*
 LNK 3SG.POSS-smell SENS-be.smell LNK DEM LOC 3SG.POSS-snare
 27994 *tu-ta-nuu juu-ŋgryl.*
 IPFV-put-PL SENS-be.usually.the.case
 27995 ‘(The hunters) smell (the places where they find deer hair); if it is smell of
 27996 musk, it is very strong. And they put the snare there.’ (27-kikakCi, 68)
- 27997 (59) *tú-wy-ndza tce wuma zo juu-mum juu-ti*
 IPFV-INV-eat LNK really EMPH SENS-be.tasty SENS-say
 27998 ‘She said: ‘(These ferns, prepared this way) are very nice to eat’ (said just
 27999 after eating them; conversation 14.05.10)

28000 Although in the above examples there is no implication that the person pro-
 28001 ducing the sound or the objects mentioned in the sentences are not visible to
 28002 the speaker, in these contexts vision is largely irrelevant to determine the prop-
 28003 erty in question, and there is not ambiguity as to which sensory channel was
 28004 responsible for obtaining the information.

28005 21.3.2.3 Endopathic and extra-sensorial perception

28006 As in other languages of the area, but unlike Lhasa Tibetan ([Tournadre & LaPolla](#)
 28007 [2014](#)), the Sensory form is used for endopathic sensations (pain, itch, cold etc)
 28008 relating to the speaker, as in example (60).

- 28009 (60) *t^ham tce muáj-c^ha-a, a-mi juu-mŋym.*
 now LNK NEG:SENS-can-1SG 1SG.POSS-foot SENS-hurt
 28010 ‘Now I can’t, my foot hurts.’ (21-kuGrummAG, 24)

28011 In (61), the Sensory is used in a generic sentence, when the speaker has ex-
 28012 perienced himself the feeling and recounts his experience while presenting it as

28013 a generic fact (§14.6.1.4), and thus do not count as a real example of endopathic
 28014 Sensory with an experiencer other than the speaker.

- 28015 (61) *kuu-maq^hu q^he tui-cya pui-mjym*
 SBJ:PCP-be.after LNK GENR.POSS-tooth SENS-hurt
 28016 ‘Afterwards teeths hurt.’ (27 tApGi, 66)

28017 In (62), which describes the effects of foot and mouth disease on cattle, the
 28018 speaker uses the Sensory to describe an inference about the endopathic feelings
 28019 of the cattle suffering from the disease (they are in pain), based on information
 28020 from vision and hearing (their whining and behaviour).

- 28021 (62) *nui-mci kx-rywum maka muij-c^ha-nui tce nui-mci*
 3PL.POSS-saliva INF-collect at.all NEG:SENS-can-PL LNK 3PL.POSS-saliva
 28022 *tu-yvruufrauβ zo pui-ŋu. tce nui-rqo pui-mjym rca,*
 28023 IPFV-flow.continuously EMPH SENS-be LNK 3PL.POSS-throat SENS-hurt SFP
 28024 ‘They cannot keep the saliva in their mouths, and it flows continuously.
 28025 Their throats hurt.’ (27-kharwut, 6)

28026 In (63) likewise we have the Sensory used with *mjym* ‘hurt’ to describe an
 28027 event visually witnessed by the speaker.

- 28028 (63) *kuicnysqi t^hui-azyuat ri, tce pyjk^hu ui-mi pui-mjym tce ri,*
 28029 seventy AOR-reach but LNK already 3SG.POSS-foot SENS-hurt LNK but
nui kuyk^ha ts^hitsuku pui-nyme cti.
 28030 DEM also house some.things SENS-work[III] be.AFF:FACT
 28031 ‘He is seventy, his foot hurts already, but even like that he does all sorts
 of work at home.’ (14-siblings, 49-50)

28032 The Sensory is also possible in the case of extra-sensory perception obtained
 28033 by divination. In (64), it occurs on the verb *pui-γ-rku* which refers to a present
 28034 situation (unknown to other people) and on *pui-p^hyn* about a future event.

- 28035 (64) “*ui-qa nuiču χsyr tui-tangoč pui-γ-rku tce, nui*
 28036 3SG.POSS-root DEM:LOC gold one-basket SENS-PASS-be.put.in LNK DEM
a-ty-sui-tcxt tce pui-p^hyn” pui-ti
 28037 IRR-PFV-CAUS-take.out LNK SENS-be.efficient SENS-say
 28038 ‘(After performing the divination, the lama) said ‘There is one basketful of
 28039 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)

28040 21.3.2.4 The expression of surprise

28041 Japhug has several interjections specifically used to express surprise (§10.2.1),
 28042 *amaj* and *mtsʰyri* ‘how strange’.

28043 The Sensory often occurs in such contexts, as in (65), as expected for a direct
 28044 visual perception (§21.3.2.2). This use of the Sensory evidential is what moti-
 28045 vated its analysis as a mirative marker in some languages (Nathan W. Hill 2012,
 28046 DeLancey 2012, Aikhenvald 2012).

- 28047 (65) *amaj, nuistʰuci nui-mbro*
 INTERJECTION:SURPRISE so.much SENS-be.high
 28048 ‘It is so high!’ (150826 liyu tiao longmen-zh, 75)

28049 When the predicate is a stative verb, the degree nominal construction (§16.3.4,
 28050 §22.3), can alternatively be used to express the unexpected high degree of the
 28051 observed property.

- 28052 (66) *amaj, nuu uu-tuu-syre, mtsʰyri,*
 INTERJECTION:SURPRISE DEM 3SG-NMLZ:DEG-be.funny how.strange
 28053 *uu-tuu-sy mtsʰyri nuu*
 3SG-NMLZ:DEG-be.surprising SFP
 28054 ‘It is so funny, so surprising!’ (150830 baihe jiemei-zh, 112)

28055 21.3.2.5 Other functions

28056 The Sensory is commonly used instead of the Factual for describing facts about
 28057 animals that do not live in Tibetan areas. Compare for instance the forms of the
 28058 stative verbs *sryymu* ‘be terrifying’ and *mpçyr* ‘be beautiful’: they appear in the
 28059 Factual when referring to spiders or flowers found in the area (67 and 68) and in
 28060 the Sensory when referring to lions and gnus, which the speaker has only seen
 28061 in zoos or in the television (69 and 70). The choice of the Sensory instead of the
 28062 Factual in such context might be a way for the speaker to highlight the fact that
 28063 this information comes from his/her own personal experience, because s/he may
 28064 not take for granted that everybody shares this knowledge.

- 28065 (67) *ŋgonypu NGOCNA kṣ-ti ci tu tce, numu wxti nuu*
 disaster spider OBJ:PCP-say INDEF exist:FACT LNK DEM be.big:FACT DEM
 28066 *stɔr jamar tu. kú-wy-rtɔr tce sry-mu.*
 bean about exist:FACT IPFV-INV-look.at LNK PROP-be.afraid:FACT
 28067 ‘There is one that is called ‘disaster spider’, it is big, like the size of a bean.
 28068 It is terrifying to look at it.’ (26 mYaRmtsaR, 151)

- 28069 (68) *nunaa u-muantob nuu mpcyr.*
DEM 3SG.POSS-flower DEM be.beautiful:FACT
28070 ‘Its flower is beautiful.’ (15-babW, 105)
- 28071 (69) *sun̥gi nuu puu-sry-mu.*
lion DEM SENS-PROP-be.afraid
28072 ‘The lion is terrifying.’ (20 sWNgi, 64)
- 28073 (70) <*jiaoma> nuu puu-mpcyr*
gnu DEM SENS-be.beautiful
28074 ‘The Gnu is beautiful.’ (20-RmbroN, 128)

28075 The Sensory is also common in all finite comparative constructions (§26.2),
28076 whether the comparee is marked with the ergative (71) (§8.2.2.7) or the standard
28077 takes the comparative postposition (72) (§8.2.7). The presence of the Sensory in
28078 such constructions might be due to the fact that comparisons require an evalua-
28079 tion of the respective positions of the standard and the comparee on a scale, and
28080 that the result of this comparison is thus ‘freshly’ obtained information.

- 28081 (71) *slyzum kuu puu-dyn, tce tui-xpa tce vnu-yjyn jamar*
lunar.eclipse ERG SENS-be.many LNK one-year LOC two-times about
28082 *yvzu, vmbiyuzun puu-rkun cti.*
exist:SENS solar.eclipse SENS-be.few be.AFF:FACT
28083 ‘Lunar eclipse are more numerous, they occur about twice a year, while
28084 solar eclipse are rarer.’ (29-mWBZi, 169-170)
- 28085 (72) *u-rna nuu mbro yuu syz puu-wxti.*
3SG.POSS-ear DEM horse GEN COMP SENS-be.big
28086 ‘Its ears are bigger than those of the horse.’ (20-tArka, 5)

28087 The use of the Sensory is not obligatory in such constructions: the Factual is
28088 also possible.

28089 21.3.2.6 Sensory evidential and person

28090 With second person subjects, the Sensory is very commonly used to state a fact
28091 about the addressee that the speaker noticed (not something he knew previously).
28092 For instance, in contrast to (74) in the Factual in which the addressee’s (recent)
28093 actions are irrelevant, a sentence such as (73) can be used if the speaker witnessed
28094 something revealing the proficiency of the addressee.

21 Tense, aspect, modality and evidentiality

- 28095 (73) *nur-tur-mk^hyz*
SENS-2-be.expert
28096 ‘You are good at it.’ (heard in several conversations)
- 28097 (74) *nyzo stu zo tuu-mk^hyz tce, tce nyzo c-ty-nyme*
2SG most EMPH 2-be.expert:FACT LNK LNK 2SG TRAL-IMP-do[III]
28098 ‘You are the best at it, do it!’ (150822 laoye zuoshi zongshi duide-zh, 37)

28099 With first person subjects, the Sensory is not rare. It is common with verbs
28100 such as *rga* ‘be happy’ whose intransitive subject is the experiencer, as in (75)
28101 (see §21.3.4 on the contrast between Sensory, Egophoric Present and Factual in
28102 such contexts).

- 28103 (75) *ny-tciu ty-sci tce nui-pe tce papa, azo*
2SG.POSS-child AOR-born LNK SENS-good LNK good 1SG
28104 *nui-rga-a*
SENS-be.happy-1SG
28105 ‘It is nice that your son is born, I am happy.’ (conversation, 2013)

28106 With non-experiencer adjectival stative verbs, it can occur if the speaker dis-
28107 covers something about oneself, for instance from the behaviour of others as in
28108 (76).³

- 28109 (76) *azo ndyre nui-syjlob-a tce, tyrbabkci kumy zo*
1SG on.the.other.hand SENS-be.ugly-1SG LNK hunting.dog also EMPH
28110 *kú-wy-mtsuy-a muýj-susym*
IPFV-INV-bite-1SG NEG:SENS-think[III]
28111 ‘I am (so) ugly that even a hunting dog does not want to bite me.’ (140519
28112 chou xiaoya-zh, 86)

28113 21.3.2.7 Tense and aspect

28114 The Sensory never has an inchoative meaning with stative verbs, unlike the Im-
28115 perfective (§21.2.6). It can be used to describe both ongoing events or habitual/
28116 generic situations (§21.3.2.5). With transitive verbs, it often occurs with the pro-
28117 gressive (§21.3.2.1).

³ This 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.

28118 The Sensory is mainly found in non-past contexts. However, unlike the Factual
 28119 and the Egophoric, the Sensory can refer to past events. In (77), the verb *n̄uu-ti-n̄uu*
 28120 ‘they say/said’ concerns an event that had occurred decades before.

- 28121 (77) *az̄o a-p^he “n̄yzo ju-tuu-ce ra” n̄uu-ti-n̄uu.*
 1SG 1SG.POSS-DAT 2SG IPFV-2-go be.needed:FACT SENS-say-PL
 28122 ‘They said to me: ‘You have to go.’ (2010-09, 104)

28123 The Sensory *n̄uu-ti* of the verb *ti* ‘say’ is the normal way to report the words
 28124 uttered by a third person, when the speaker has heard them directly (as is ob-
 28125 viously the case in 77). The Aorist *ta-tut*, which is used to describe past events
 28126 directly witnessed by the speaker (§21.5.1.2), is never found in conversations to
 28127 quote someone else’s words (it occurs in temporal §21.5.1.4 and relative §21.5.1.6
 28128 clauses).

28129 The Sensory also occurs in future contexts in the apodosis of conditional clause
 28130 to express the prediction of a likely outcome, as in (78) (see also 64, §21.3.2.3).

- 28131 (78) *n̄uu t̄x-ŋ̄uu tce tce, si lú-wy-yŋ̄jui, smi a-t̄x-wxti tce*
 28132 DEM AOR-be LNK LNK wood IPFV-INV-add fire IRR-PFV-be.big LNK
n̄uu-p^hvn
 28133 SENS-be.efficient
 28134 ‘(He thought:) ‘In this case, if (I) add more firewood, and if the fire is
 bigger, it should work.’ (150827 taisui-zh, 63)

28135 The Sensory is also found to express events that one has not yet perceived, but
 28136 which one expects to be perceptible, as illustrated by the use of the verbs *yŋ̄zu*
 28137 ‘exist’ and *wi-n̄u-ŋ̄u* ‘isn’t it’ in (79).

- 28138 (79) *aki c-pu-sŋ̄yo ma [...] “ndzaŋ̄laŋ̄ turme jo-yi*
 28139 down.there TRAL-IMP:DOWN-listen LNK Jambudvîpa man IFR-come
tce, tui-ci ky-kui-nauχtcyn wi-ŋ̄gwa
 28140 LNK INDEF.POSS-water AOR-SBJ:PCP-be.fierce 3SG.POSS-inside
c-pjút-wy-βde n̄uu-ra” ur-kui-ti ci
 28141 TRAL-IPFV:DOWN-INV-throw SENS-be.needed 3SG.POSS-SBJ:PCP-say INDEF
yŋ̄zu tce, wi-n̄u-ŋ̄u kua?
 28142 exist:SENS LNK QU-SENS-be QU
 28143 ‘Go and listen down there to (see whether) there is someone saying ‘A
 28144 man from Jambudvîpa has come, let us throw him into the fierce water.’
 (28-smAnmi, 159)

28145 21.3.3 Egophoric Present

28146 21.3.3.1 Morphology

28147 The Egophoric Present is build combining the B type EASTWARDS *ku-* preverb with
 28148 stem I or stem III depending on person and transitivity (§12.2.2.2). Verbs select-
 28149 ing EASTWARDS as their intrinsic orientation therefore have syncretism between
 28150 Imperfective and Egophoric. For instance, the form *ku-ryzi-a* is in the Egophoric
 28151 Present in (80) and in the Imperfective in (81) (see §21.2.4 on this use of the Im-
 28152 perfective).

- 28153 (80) *kuare* *ku-ryzi-a*
 DEM.PROX:LOC PRS-stay-1SG

28154 ‘I am here.’ (heard in context)

- 28155 (81) *kuteu* *ku-ryzi-a* *juu-tob*
 DEM.PROX:LOC IPFV-stay-1SG SENS-be.needed
 28156 ‘I have to stay here.’ (28-qAjdoskAt, 78)

28157 Unlike the Sensory (§21.3.2.1), the Egophoric Present does not have a special
 28158 negative form, and selects the *mu-* negative prefix, as in (82).

- 28159 (82) *kuu-vrq^{hi}* *ky-ce* *mur-ku-c^ha-a*
 SBJ:PCP-be.far INF-go NEG-PRS-can-1SG
 28160 ‘I cannot go very far.’ (for now, due to an accident; conversation 17-09-21)

28161 The Egophoric Present form of the existential verbs *tu* ‘exist’ and *me* ‘not exist’
 28162 is regular: *ku-tu* and *ku-me* (83), respectively. The copulas *yu* ‘be’ and *ma^h* ‘not be’
 28163 lack an Egophoric Present form.

- 28164 (83) *azo kuare a-va* *ku-me* *tuu-mgo*
 1SG here 1SG.POSS-free.time PRS-not.exist INDEF.POSS-food
 28165 *ku-osui-βzu-a* *cti*
 PRS-PROG-make-1SG be.AFF:FACT
 28166 ‘I don’t have time, I am making food.’ (Rkangrgyal, 47)

28167 Transitive verbs often combine the Egophoric Present with the Progressive
 28168 *asu-* (§21.6.1.1). The vowel of the preverb merges with that of the Progressive
 28169 prefix as *ku-osuu-* / *ku-oz-*, as in (84).

- 28170 (84) *ca bja zo ku-o-<nua>sur-ndza-j ma fsapab*
 meat completely EMPH PRS-PROG<AUTO>-eat-1PL LNK animal
 28171 *wi-tui-si wi-gryl maye.*
 3SG.POSS-NMLZ:DEG-die 3SG.POSS-order not.exist:SENS
 28172 ‘(These days) we are eating only meat, as (domestic) animals have been
 28173 dying in great numbers (due to a disease).’ (2003 kandZislama, 132)

28174 **21.3.3.2 Egophoric Present and first/second person indexation**

28175 The Egophoric Present, while common in conversations, is nearly non-existent
 28176 in narrative and procedural texts (outside of quotations) unlike the Factual and
 28177 the Sensory.

28178 In declarative sentences, Egophoric Present can occur with first person subject,
 28179 whether intransitive subject as in *ku-nuna-j* ‘we are resting’ (85) or transitive
 28180 subjects as in *ku-ta&-a* ‘I am weaving it’ (86).

- 28181 (85) *kure ku-nuna-j*
 here EGOP-rest-1PL
 28182 ‘(Today, on the National Holiday), we are resting here.’ (conversation,
 28183 16-10-01)

- 28184 (86) *<kuabao> wi-spa ci ku-ta&-a*
 satchel 3SG.POSS-material INDEF PRS-weave-1SG
 28185 ‘I am weaving a satchel.’ (conversation, 14-11-25)

28186 No example of Egophoric Present with second person subject in declarative
 28187 sentences has been found in the corpus, nor could such example be elicited. How-
 28188 ever, second person objects are possible, as in (87).

- 28189 (87) *kure ku-ta-nyjo*
 DEM.PROX:LOC PRS-1→2-wait
 28190 ‘I am right here waiting for you.’ (heard in context)

28191 As a result of the anticipation rule (§21.1.4), the person constraint on the Egophoric
 28192 Present is reversed in interrogative sentences. As shown by (88) and (89), the
 28193 Egophoric Present appears with second person subjects, and is not attested with
 28194 first person. These two questions expect answers such as (93) and (80) (in §21.3.3.1)
 28195 with first person and Egophoric.

- 28196 (88) *u-kú-tur-scit-nu?*
 QU-PRS-2-be.happy-PL
 28197 ‘Are you (and your family) happy?’ (2002 qaCpa, 121)
- 28198 (89) *ŋotcu ku-tui-ryzi?*
 where PRS-2-stay
 28199 ‘Where are you?’ (heard in context)

28200 The person constraints described above are the reason for calling the TAME
 28201 category discussed in this section “egophoric”, designating a type of evidentiality
 28202 specifically marking ‘information as known through conscious personal involve-
 28203 ment’ (Nathan W. Hill 2020).⁴

28204 21.3.3.3 Egophoric Present and third person

28205 The Egophoric Present can occur with third person subjects. This use is partic-
 28206 ularly common in declarative sentences when the subject is a noun with a first
 28207 person possessive prefix, whether an abstract inalienable noun as in the case of
 28208 *a-ŋa* ‘my free time’ in (83), or kinship terms as in (90).

- 28209 (90) *a-wi cʰo a-wa ni nyzo ny-ndža*
 1SG.POSS-grandmother COMIT 1SG.POSS-father DU 2SG 2SG.POSS-reason
 28210 *kui wuma zo ku-nusumuzduy-ndži tce*
 ERG really EMPH PRS-worry-DU LNK
 28211 ‘Grandmother and Father are very worried because of you.’ (150819
 28212 haidenver-zh, 494)

28213 Conversely, Egophoric is also frequent with second person possessors in inter-
 28214 rogative sentences, such as *ny-ma* ‘your work’ as in (91a).

- 28215 (91) a. *ny-ma u-kú-dyn?*
 2SG.POSS-work QU-PRS-be.many
 28216 ‘Do you have a lot of work?’ (heard in context)
- b. *a-ma ku-dyn*
 1SG.POSS-work PRS-be.many
 28218 ‘I have a lot of work.’

⁴ Hill argues in favour of replacing ‘egophoric’ with the term ‘personal evidential’.

28219 With non-possessed subjects nouns, it also occurs when the first person is a
 28220 beneficiary, marked either as a possessor (92) or with oblique flagging as in the
 28221 clause *a-taʁ wuma ku-sna* ‘he is nice to me’ in (93) above.

- 28222 (92) *χpṛltçin kuu a-ma ra ku-oz-nyma*
 ANTHR ERG 1SG.POSS-work PL PRS-PROG-do
 28223 ‘Dpalcan is doing my housework (in my stead).’ (conversation, 16-04-12)

- 28224 (93) *tcʰeme nuu kuu ‘wuma zo ku-scit-i, rjyłpu ri a-taʁ wuma*
 girl DEM ERG really EMPH PRS-be.happy-1PL king also 1SG-on really
 28225 *ku-sna, ejor̥ ra ri wuma zo ku-pe-nui’ to-ti*
 PRS-be.kind servant PL also really EMPH PRS-be.good IFR-say
 28226 ‘The girl said: ‘We are very happy, the king is very kind to me, the
 28227 servants are very nice.’ (2002 qaCpa, 122-4)

28228 The use of Egophoric with third person subjects is an instance of what has been
 28229 termed ‘broad egophoric’ by (Gawne 2017: 89). Japhug appears to allow a wider
 2830 range of third person referents to occur with egophoric than most languages.
 2831 There are examples of Egophoric Present with third person subjects in which the
 2832 personal involvement of the speaker is not immediately obvious.

28233 In (94), we find Egophoric Present on the main verb, even though the transitive
 28234 subject and the speaker were not together at time of utterance.⁵

- 28235 (94) *alan nyki, bdurjyt ri <shangban> ku-osui-βzu*
 ANTHR FILLER TOPO LOC office.work PRS-PROG-do
 28236 ‘Alan, she is doing office work in Gdongbrgyad (these days).’
 28237 (conversation, 2014-12-24)

28238 In (95), the use of the Egophoric Present is not straightforward.⁶

- 28239 (95) *kuu-ngo wuma zo rkun, <abazhou> [...]*
 SBJ:PCP-be.sick really EMPH be.few:FACT Rngaba
 28240 *pui-nua-mua~me cti qʰe, pxjkʰu*
 PST.IPFV-AUTO-EMPH~not.exist be.AFF:FACT LNK still
 28241 *ku-nua-me.*
 PRS-AUTO-not.exist

⁵ There is however a relationship between them, since the subject of (94) is the daughter of the speaker.

⁶ It 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.

21 Tense, aspect, modality and evidentiality

28242 ‘There are few people sick (of the Covid), (here) in Rngaba district there
28243 never was anyone, and even now there is not (a single) one.’
28244 (conversation 2020-07-31)

28245 Tshendzin explains the form *ku-nuu-me* ‘there is not’ here as (96) with the Fac-
28246 tual Non-Past.

28247 (96) *tʰam kūnγ me* *kγ-ti juu-ŋu.*
now also not.exist:FACT INF-say SENS-be
28248 ‘It means ‘not even now’.’

28249 21.3.3.4 Tense and aspect

28250 The Egophoric Present expresses ongoing events or repeated actions occurring
28251 during a short time range around the present time. Thus, the sentence (97) can
28252 either mean ‘What are you doing *right now*?’ or ‘What are you doing *these days*?’.

28253 (97) *tcʰi ku-tuu-nym?*
what PRS-2-do[III]
28254 ‘What are you doing (now, these days)?’ (heard in context)

28255 These two meanings are also possible when the Egophoric Present is combined
28256 with the Progressive, as shown by (98) and (94).

28257 (98) *alan ku ji-pyri ku-osuu-βzu.*
ANTHR ERG 1PL.POSS-dinner PRS-PROG-make
28258 ‘Alan is preparing the dinner for us (right now).’ (conversation, 15-01-02)

28259 The Egophoric Present marks actions or states that are temporary. For instance,
28260 *mu-ku-cʰa-a* ‘I cannot do it’ in (99) (and 82 in §21.3.3.1 above) means that the
28261 speaker describes a non-permanent situation: she previously was able to do it,
28262 and will presumably be soon able to do it again when she has fully recovered.

28263 (99) *pxjkʰu kūnγ uužo kuu ku-oz-nyma cti ma pxjkʰu*
still also 3SG ERG PRS-PROG-do be.AFF:FACT LNK still
28264 *mu-ku-cʰa-a wo.*
NEG-PRS-can-1SG SFP
28265 ‘Even now, he is still doing (the housework), as I am still unable (to do it,
28266 due to an accident).’ (conversation, 17-09-01)

28267 The Factual (100) or the Sensory are used instead when describing situations
 28268 that have become permanent.

- 28269 (100) *tham a-puu-ŋu, tu-ndze-a maka my-cha-a*
 now IRR-IPFV-be IPFV-eat[III]-1SG at.all NEG-can:FACT-1SG
 28270 ‘Now, I cannot eat (the fruit of the *Ribes stenocarpum*) at all (anymore,
 28271 because it is too sour, unlike when the speaker was a child and did not
 28272 mind about the sourness.’ (18-NGolo, 22)

28273 The Egophoric Present is restricted to present tense. In (101), the form *ku-ta-*
 28274 *nyjo* ‘I (will) be waiting for you’ referring to a future event is rather analyzable
 28275 as an Imperfective, given the syncretism between these two in the case of this
 28276 verb.

- 28277 (101) *a-jy-tui-yuit tce, azo c^ho [...] tycime nuu kuu numuu kyntc^hab*
 IRR-PFV-2-bring LNK 1SG COMIT princess DEM ERG DEM town
 28278 *yuu ui-pei nutcu ku-ta-nyjo.*
 GEN 3SG.POSS-outside DEM:LOC IPFV-1→2-wait
 28279 ‘When you bring (the bird), the princess and I will be waiting for you
 28280 outside of the town.’ (140507 jinniao-zh, 294)

28281 The Egophoric Present can also occur in the case of periods of time including
 28282 the present and the past. For instance, when asked whether she had seen a par-
 28283 ticular person, who was present at the time in Mbarkham, Tshendzin said the
 28284 sentence (102) with the Egophoric Present.

- 28285 (102) *muu-ku-otay-a*
 NEG-PRS-meet-1SG
 28286 ‘I have not meeting him (these days).’ (conversation 16-03-10)

28287 21.3.4 Tripartite contrast

28288 The tripartite contrast between Egophoric Present (103), Sensory (104, 105) and
 28289 Factual (106) with the experiencer stative verbs such as *scit* ‘be happy’ in declar-
 28290 ative sentences with a first person subject can help understanding the semantics
 28291 of these TAME categories in this context.

- 28292 (103) *ku-scit-i*
 PRS-be.happy-1PL
 28293 ‘We are happy.’ (conversation, in a response to a new years’ greeting)

- 28294 (104) *nuitcu nu-scit-a cti li tce tce a-zda*
 DEM:LOC SENS-be.happy-1SG be.AFF:FACT again LNK LNK 1SG-companion
 28295 *ri nu-pe-nuu,*
 also SENS-be.good-PL
 28296 ‘I am very happy there, the people with me are very nice.’ (140501 jingli,
 28297 149)
- 28298 (105) *nuu tx-ŋu tce, azo ndyre, ㅂሎյbutchi szz*
 DEM AOR-be LNK 1SG on.the.other.hand elephant COMP
 28299 *ndyre nu-scit-a tce a-kʰi nu-ŋgwa*
 on.the.other.hand SENS-be.happy-1SG LNK 1SG.POSS-luck SENS-be.lucky
 28300 ‘Since it is like that, I am happier than the elephant, I am luckier than
 28301 him.’ (140425 shizi puluomixiusi he daxiang, 41)
- 28302 (106) *χsui-xpa jy-tsü-j, nuasthuaci zo scit-i,*
 three-year AOR-pass-1SG so.much EMPH be.happy:FACT-1PL
 28303 *amumi-j*
 be.in.good.terms:FACT-1PL
 28304 ‘We have been together for three years now, we are so happy together.’
 28305 (Norbzang 2005, 95)

28306 In (106), the speakers (humans stranded on an island) include the addressees
 28307 (rākshasīs in human shape) in the first plural, and state their happiness together
 28308 as an commonly agreed fact (the first step in a plan to cheat the rākshasīs), hence
 28309 the use of the Factual.

28310 In (105), the selection of the Sensory here may be due to the presence of a
 28311 comparative construction (§21.3.2.5). In (104) the choice of the Sensory rather
 28312 than the Egophoric Present expresses that when thinking about it, the speaker
 28313 feels that she is happy. The Egophoric Present in (103) entails the continuous
 28314 conscience of being in a state of happiness, and that this state is temporary.

28315 21.4 Modal categories

28316 21.4.1 Irrealis

28317 21.4.1.1 Morphology

28318 The Irrealis has three exponents: a dedicated prefix *a-* in slot -6 (§11.2.1), a type
 28319 A preverb in slot -3, and stem III in appropriate forms (§12.2.2.1, §21.1.2), as illus-

28320 trated by (107a). A cognate verb form with identical triple exponence is found in
 28321 Tshobdun (J. T.-S. Sun 2007b).

28322 With dynamic verbs, the preverb follows the lexically selected orientation of
 28323 the verb (for instance *tr-* UPWARDS in 107a). Stative verbs take the DOWNWARDS
 28324 *pui-* preverb like the Past Imperfective (§21.5.3.1) when used with a stative mean-
 28325 ing, as in (107b), and the intrinsic orientation (WESTWARDS in 107c) when occur-
 28326 ring with an inchoative meaning.

- 28327 (107) a. *a⁻⁶-tr⁻³-ndze*
 IRR-PFV-eat[III]
 28328 ‘Let it/him/her eat/ if s/he/it eats’
 28329 b. *a⁻⁶-pui⁻³-me*
 IRR-IPFV-not.exist
 28330 ‘If it does not exist’
 28331 c. *a⁻⁶-nui⁻³-me*
 IRR-PFV-not.exist
 28332 ‘If it disappears’

28333 Unlike the Imperative (§21.4.2.1), the Irrealis is compatible with all person con-
 28334 figurations.

28335 21.4.1.2 Main clauses

28336 In main clauses, the Irrealis has four main functions. The first three (wish, jussive
 28337 and uncertainty) are treated in this section, and the fourth one (delayed impera-
 28338 tive) in §21.4.1.3.

28339 First, it can express a wish, often in combination with the predicative noun
 28340 *smulym* ‘prayer’ (§21.8.3.2; see also in Tshobdun J. T.-S. Sun 2007b: 804), as in
 28341 (108), or with the sentence final particle *kua* (§10.4.2) as in (109).

- 28342 (108) *pja mundzamuχtcuuy nur-skyt a-pui-tuu-tso smulym*
 bird all.kinds 3PL.POSS-speech IRR-IPFV-2-understand prayer
 28343 ‘May you understand the speech of all species of birds!’
 28344 (2003kandZislama, 85)
- 28345 (109) *turme ci a-nui-ypa-a kua*
 human INDEF IRR-PFV-become-1SG SFP
 28346 ‘If only I could become a human!’ (150819 haidenver-zh, 242)

28347 While in (109) the wish is virtual, example (10) is a magical formula pronounced
 28348 by a lama, and the Irrealis has a performative function, conveying to the ad-
 28349 dressee the ability it describes.

28350 Second, the Irrealis can occur with third person referents with a jussive mean-
 28351 ing (see also J. T.-S. Sun 2007b: 811 on Tshobdun), expressing either that the
 28352 speaker allows the subject to perform the action (110), a request or an order.
 28353 Jussive Irrealis clauses can be used in a purposive complementation strategy
 28354 (§21.4.1.6).

- 28355 (110) *a-t^huu-yi*, *a-t^huu-yi*
 IRR-PFV:DOWNSTREAM-COME IRR-PFV:DOWNSTREAM-COME
 28356 ‘Let him come, let him come (as he wishes.)’ (2003 Kunbzang, 41)

28357 In combination with the Autive (§19.1), the jussive Irrealis expresses that the
 28358 speaker does not care about the actions of the third person subject, as in (111)
 28359 (compare with the Autive Imperative, §21.4.2.3).

- 28360 (111) *uu-púú-wy-sat-a ny a-púú-wy-nui-sat-a ma my-p^hyo-tci*
 QU-SENS-INV-kill-1SG add IRR-PFV-INV-AUTO-kill-1SG LNK NEG-flee-1DU
 28361 ‘If she is to kill me let her kill me, we will not flee.’ (2002nyimavodzer,
 28362 36)

28363 With second persons, the Irrealis is found instead of the Imperative to express
 28364 non-controllable actions. In (112), compare for instance the non-controllable verb
 28365 *mna* ‘be better’ in the Irrealis with the controllable one *ryzi* ‘stay’ in the Impera-
 28366 tive.

- 28367 (112) *pxjk^hu a-ty-tui-mna, myzui ky-ryzi*
 still IRR-PFV-2-be.better yet IMP-stay
 28368 ‘(Wait till) you get better, stay a little more.’ (said to a convalescent
 28369 person who wants to leave the place where she is taken care of.)
 28370 (12-BzaNsa, 110)

28371 The negative Irrealis is also more felicitous than the Prohibitive (§21.4.3) with
 28372 non-controllable verbs, such as *nutç^homba* ‘have a cold’ in (113).

- 28373 (113) *a-my-ty-tui-nutç^homba ra ma tce ny-eq^he*
 IRR-NEG-PFV-2-have.a.cold be.needed:FACT LNK LNK 2SG.POSS-cough
 28374 *nui-t^huu nui-ηu wo*
 SENS-be.serious SENS-be SFP
 28375 ‘Don’t catch a cold, otherwise you cough will be become even more

28376 serious.' (conversation 17-09-01)

28377 Third, in interrogative clauses, the Irrealis can express the uncertainty of the
 28378 speaker on his/her ability to realize the action, as in (114).

- 28379 (114) *andi ki st^huci smar kui-wxti izo ky-su^h-bzur t^he^hi*
 28380 west DEM.PROX so.much river SBJ:PCP-be.big 1PL INF-CAUS-move what
a-ty-stu-j?
 28381 IRR-PFV-do.like-1PL

28382 'How can we move such a huge river? (2005 tAwakWcqraR, 210)

21.4.1.3 Delayed imperative

28383 The Irrealis can be used as a delayed or postponed imperative. This function indicates,
 28384 according to Sun's (2007b: 809) apt description of the same phenomenon
 28385 in Tshobdun, 'the speaker's physical inaccessibility as an eyewitness, rather than
 28386 simply delayed compliance.'

28387 In (115), the verb in the Irrealis *a-ty-tu-ti* refers to an action to be realized at a
 28388 future moment expressed by the temporal clause in the Aorist *jy-tu-azyut* 'when
 28389 you arrive...' (§21.5.1.4), when the speaker will not be present to remind the ad-
 28390 dressee to perform the action.

- 28391 (115) *[k^ha ky-mto jy-tu-azyut] tce q^hihiji χsu^h-ηka a-ty-tu-ti*
 28392 house INF-see AOR-2-arrive LNK INTERJ three-word IRR-PFV-2-say
ra
 28393 be.needed:FACT
 28394 'When you arrive at visible distance of the house, say *q^hihiji* three times.'
 (qachGa 2012, 164-165)

28395 The contrast between the Irrealis and the Imperative to express delayed com-
 28396 mand can be illustrated by the following pair of examples from two version of
 28397 the same story, referring to the same action (the method to pass a dangerous
 28398 place where a pair of magical boulders crush all people coming between them)
 28399 but from a different perspective.

28400 In (116), a nāga explains the method to the main character (Nyima 'Odzer). The
 28401 nāga is not coming with him; only Nyima 'Odzer and his horse intend to cross
 28402 the boulders. Therefore, the Irrealis verb forms *a-ky-tu-βra^h* and *a-ty-tu-zyy-yy-*
 28403 *zo* are selected, as the nāga will not be present when Nyima 'Odzer will have to
 28404 realize these actions.

- 28405 (116) *nur-tur-armbat-ndzi tce, ny-mbro u-jme zuu*
 AOR:WEST-2-be.near-DU LNK 2SG.POSS-horse 3SG.POSS-tail EMPH
 28406 *p^hupi a-ky-tuu-βraβ, nyzo tx-muj st^huci*
 potentilla.fruticosa IRR-PFV-2-attach 2SG INDEF.POSS-feather so.much
 28407 *a-ty-tuu-zyy-yy-zo, ny-mbro qale st^huci*
 IRR-PFV-2-REFL-CAUS-be.light 2SG.POSS-horse wind so.much
 28408 *a-nur-zyy-yy-mbjom*
 IRR-PFV-REFL-CAUS-be.quick
 28409 ‘When you approach (the boulders), attach a branch of *Potentilla*
 28410 *fruticosa* on the tail of your horse, make yourself as light as a feather,
 28411 and may your horse be as quick as the wind.’ (Smanmi2003.2, 60-61)

28412 By contrast, in (117), it is the horse Rtamchog Rinpoche who explains to Nyima
 28413 ’Odzer how to cross the boulders. Since these two characters will do the cross-
 28414 ing together, the horse uses the Imperative *tx-zyy-yy-zo* instead of the Irrealis
 28415 (§21.4.2.2).

- 28416 (117) *azō nu, qale jamar zo tu-zyy-yy-mbjom-a nyzo nu*
 1SG DEM wind about EMPH IPFV-REFL-CAUS-be.quick-1SG 2SG DEM
 28417 *tx-muj jamar tx-zyy-yy-zo*
 INDEF.POSS-feather about IMP-REFL-CAUS-be.light
 28418 ‘I will make myself as quick as the wind, make yourself as light as a
 28419 feather.’ (28-smAnmi, 117-119)

28420 In negative forms likewise, the Irrealis is better than the Prohibitive (§21.4.3.2)
 28421 if the addressee is to refrain from doing an action in the absence of the speaker
 28422 who issued the order/request/suggestion not to do it, as in (118), where both
 28423 assertive and negative Irrealis verbs in delayed imperative function are found.

- 28424 (118) [...] *ntsuu kxtupe ri, maka u-jas a-ky-tuu-ndym,*
 always tell:FACT LNK completely 3SG.POSS-hand IRR-PFV-2-take[III]
 28425 *a-ky-tuu-sxtcitsi zo a-lx-tuu-yut ma*
 IRR-PFV-2-continue EMPH IRR-PFV:UPSTREAM-2-bring LNK
 28426 *u-skyt a-my-ky-tuu-syñym*
 3SG.POSS-word IRR-NEG-2-listen[III]
 28427 ‘She will not stop saying ‘...’, but don’t release your grasp on her hand,
 28428 and directly bring her (here), and don’t listen to her words.’ (qachGa
 28429 2003, 66)

28430 **21.4.1.4 Complement clauses**

28431 According to Sun's (2007b: 807) description of Tshobdun, the Irrealis is required
 28432 when occurring with matrix verbs expressing desire or intention. In particular,
 28433 he points out that the verb *səsi?* means 'think' when the complement clause is in
 28434 realis mode, and 'desire, want' with a complement clause in the Irrealis.

28435 In Japhug, the cognate verb *suso* 'think' has the meaning 'want' rather with
 28436 Infinitive or Imperfective complement clauses (§24.5.4.1), such as (119).

- 28437 (119) [nui wuma zo tu-ndze-a] nui-susam-a
 DEM really EMPH IPFV-eat[III]-1SG SENS-think[III]-1SG
 'I want to eat it a lot.' (140506 woju guniang-zh, 35)

28439 Complement clauses in the Irrealis with *suso* 'think' as matrix verb are in all
 28440 cases reported speech, reflecting functions such hypothetical protasis and apo-
 28441 dosis (§21.4.1.5) in (120) or jussive (§21.4.1.2) as in (121) and (122).

- 28442 (120) χawo zo kui-dur-dyn kui a-kx-nuutsʰyβ-nui tce
 INTERJ EMPH SBJ:PCP-EMPH~ERG IRR-PFV-attack.in.pack-PL LNK
 28443 a-tx-tcʰu-nui tce, a-pui-sat-nui kui nui-susam-a ri
 IRR-PFV-gore-PL LNK IRR-PFV-kill-PL SFP SENS-think[III]-1SG LNK
 'I am thinking that if only they attacked in pack and gored (the lion),
 28444 they would probably kill it.' (20-RmbroN, 65-67)

- 28446 (121) "nuunu tce kui-xtcui~xtci ci tu-tcat-a tce nui
 DEM LNK SBJ:PCP-EMPH~be.small INDEF IPFV-take.out-1SG LNK DEM
 28447 a-tx-ndze" ny-suso
 IRR-PFV-eat[III] IFR-think
 'He thought: 'I will take a few (olives from the jar) so that she (can) eat
 28449 some.' (140516 yiguan ganlan-zh, 42)

28450 The used of reported speech with *suso* 'think' in (122) is a semi-grammaticalized
 28451 purposive construction (§21.4.1.6), where the Irrealis is not obligatory: similar
 28452 purposive clause with other TAME categories are also attested.

- 28453 (122) "a-mi nuunu a-tx-mna" nui-susam-a tce, nura
 1SG.POSS-leg DEM IRR-PFV-be.better SENS-think[III]-1SG LNK DEM
 28454 ku-z-nusman-a ny.
 PRS-CAUS-treat-1SG be:FACT
 'In order for my leg to get better, I am treating it (with footbaths).'
 28456 (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 *jy* 'be possible', with a jussive meaning as in (123) and (124), or a delayed imperative, as in (115) above (§21.4.1.3).

- (123) *a-wuu c^ho a-ri ni*
 1SG.POSS-grandfather COMIT 1SG.POSS-younger.sibling DU
c^hui-yi-ndzi ra ma zyni-sti ky-ryzi
 IPFV:DOWNSTREAM-come-DU be.needed:FACT LNK 3DU-alone INF-stay
my-c^ha-ndzi tce, [a-t^hui-yi-ndzi] ra
 NEG-can:FACT-DU LNK IRR-PFV:DOWNSTREAM-come-DU be.needed:FACT
 'My grandfather and younger brother have to come (with me), as they
 cannot stay on their own, let them come.' (2011-05-nyima 208-209)
- (124) *ki pui-sy-ce tce, [a-nui-yfcu] pui-nts^{hi}*
 DEM.PROX SENS-PROP-burn LNK IRR-PFV-cool.down SENS-be.better
 'This (tea) is too hot, let it cool down.' (elicited)

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).

- (125) *nui 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
cti tce
 be.AFF:FACT LNK
 'Would he go there, he would not be able to reach (his goal), and would
 die.' (28-smAnmi, 60)

The combination of a protasis in the Irrealis and an apodosis in the Past Imperfective is used to express counterfactual meaning (§21.5.3.4, §25.2.4), as in (126).

- 28485 (126) *tcizv̥y nuu kuu-fse ci a-puu-tu ndyre, kura*
 1DU:GEN DEM SBJ:PCP-be.like INDEF IRR-IPFV-exist LNK DEM.PROX:PL
 28486 *kuu-fse muu-puu-nv̥ykuŋke-tci wo*
 SBJ:PCP-be.like NEG-PST.IPFV-DISTR:walk-1DU SFP
 28487 ‘If we had (so many cattle and fields) like that, we would not be
 28488 wandering around like that.’ (2005 Kunbzang, 188)

21.4.1.6 Purposive

28490 The Irrealis occurs in purposive complementation strategies. Two constructions
 28491 are attested. First, as in (127), the Irrealis clauses expresses the purpose of a action
 28492 referred to in another clause.

- 28493 (127) *kʰyxtu cui-nv̥baŋ-tci tce, [nv̥-k̥yrme a-tr-zbaŋ]*
 rooftop TRAL-have.fun:FACT-1DU LNK 2SG.POSS-hair IRR-PFV-be.dry
 28494 ‘Let us go to the rooftop platform to rest, so that your hair can dry (after
 28495 bathing).’ (2002 qaCpa, 287)

28496 Second, with a similitative verb such as *fse* ‘be like’ or *stu* ‘do like’ and inter-
 28497 rogative pronoun as in (128), the Irrealis clause rather corresponds to the action
 28498 needed to realize the purpose, which is indicated by a coordinated clause *nuu-pʰvn*
 28499 ‘(so that) it is efficient/it works/it solves it’.

- 28500 (128) *[nuu tcʰi a-tr-fse] tce nuu-pʰvn*
 DEM what IRR-PFV-be.like LNK SENS-be.efficient
 28501 ‘How (should he do) to solve (this problem)?’ (Divination 2005, 45)

21.4.1.7 Periphrastic Irrealis

28502 The Periphrastic Irrealis combines the Irrealis copula *a-puu-ŋu* with one or a chain
 28503 of several verbs in the Imperfective, as in (129) (see also §21.2.2).

- 28504 (129) *[u-ŋgu pjuu-kuu-ce tce tuu-ku ci*
 3SG.POSS-inside IPFV:DOWN-GENR:S/O-go LNK GENR.POSS-head a.little
 28505 *pjuú-wy-nuu-sv̥cvt, pjuú-wy-nuu-χtci] a-puu-ŋu ndyre, wuma*
 IPFV-INV-AUTO-comb IPFV-INV-AUTO-wash IRR-IPFV-be LNK really
 28506 *zo sy-scit tʰaj nv!*
 EMPH PROP-be.happy:FACT SFP SFP
 28507 ‘If one were to dive (in the water), comb and wash one’s hair, it would be
 28508 very nice!’ (140515 congming de wusui xiaohai-zh, 25-27)

28510 It replaces the Imperfective Irrealis (§21.4.1.1) in the case of telic verbs (see
 28511 §21.5.3.5).

28512 21.4.2 Imperative

28513 21.4.2.1 Morphology

28514 The Imperative is built by combining type A preverbs with stem I or stem III
 28515 depending on transitivity and number (§21.1.2). It only has second person subject
 28516 forms, which are however never marked with the second person *tu-* prefix, unlike
 28517 in other TAME categories (§14.2.1.2). In addition, transitive verbs can only take a
 28518 third person object; 2→1 configurations cannot be expressed with the Imperative,
 28519 and the Imperfective in hortative function is used instead (§21.2.5).

28520 The Imperative can occur with an overt second person pronoun referring to
 28521 the subject (see examples 135, §21.4.2.3 and 138, §21.4.2.4).

28522 Table 21.5 illustrates the Imperative paradigms of *ndza* ‘eat’, a transitive verb
 28523 with stem III alternation (§12.2.2), *amdzuu* ‘sit’, an intransitive contracting verb
 28524 (§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>amdzuu</i> ‘sit’	<i>ce</i> ‘go’
2SG(→3)	<i>tr-ndze</i>	<i>kx-ymdzuu</i>	<i>jx-ce</i>
2DU(→3)	<i>tr-ndza-ndzi</i>	<i>kx-ymdzuu-ndzi</i>	<i>jx-ce-ndzi</i>
2PL(→3)	<i>tr-ndza-nuu</i>	<i>kx-ymdzuu-nuu</i>	<i>jx-ce-nuu</i>

28525 For intransitive verbs which are neither contracting nor have stem II alterna-
 28526 tion, the Imperative forms are identical to the third person Aorist forms (§21.1.1.2).

28527 The Imperative lacks negative forms: the Prohibitive (§21.4.3) or negative Irre-
 28528 alis (§21.4.1.2) are used instead.

28529 21.4.2.2 Main clauses

28530 The Imperative expresses actions that the speaker wishes the addressee to realize.
 28531 It is appropriate for blunt orders (§130), requests (131), and also polite invitations
 28532 (§132).

- 28533 (130) *jy-ce!*
IMP-go
‘Go away!’ (many examples)
- 28535 (131) *to_bde tce jy-l_yt je ma a-<dianhua>*
a.moment LNK IMP-release SFP LNK 1SG.POSS-phone
28536 *wi-kua-l_yt yyzu*
3SG.POSS-SBJ:PCP-release exist:SENS
‘Call me in a moment, there is someone calling me on the phone!’
(conversation, 22-08-2018)
- 28539 (132) *<guazi> ty-ndza-ndzi*
melon.seed IMP-eat-DU
28540 ‘Eat some melon seeds!’ (conversation 14-05-10)

28541 The Imperative is not restricted to immediate commands/requests. In (133),
28542 the actions referred to by the Imperative verbs *ly-ryci* ‘pull it’ and *t^hu-syt_cy_t* ‘add
28543 firewood’ are to be realized (in the presence of the speaker) at two points of
28544 reference in the future indicated by temporal clauses in the Aorist (§21.5.1.4).

- 28545 (133) “*a-wi smi t^hu-syt_cy_t*” *ty-tuat-a tce*
1SG.POSS-grandmother fire IMP-add.firewood AOR-say[II]-1SG LNK
28546 *ly-ryci, “a-wi smi ly-ryci”*
IMP:UPSTREAM-pull 1SG.POSS-grandmother fire IMP:UPSTREAM-pull
28547 *ty-tuat-a tce t^hu-syt_cy_t ra*
AOR-say[II]-1SG LNK IMP-add.firewood be.needed:FACT
‘When I say ‘grandmother, add firewood’, remove the firewood, and
28548 when I say ‘grandmother, remove the firewood’, add firewood.’ (2005
28549 Kunbzang, 370-371)

28551 As in Tshobdun (J. T.-S. Sun 2007b: 809), the Irrealis is found instead of the
28552 Imperative to express actions to be performed at a point in the future in the
28553 absence of the speaker (§21.4.1.3).

28554 The Imperative does not commonly occurs for non-controllable verbs, espe-
28555 cially stative verbs. However, this constraint is more pragmatic than morphosyn-
28556 tactic, and in some contexts, even a verb like *m_bro* ‘be high’ can be used in the
28557 Imperative, as in (134). In this type of example, the Imperative *ty-m_bro* is identical
28558 to the 3SG Aorist.⁷

⁷ In 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.

- 28559 (134) *tce numuu cyr tce tu-mbri tce* “*сөвсөвсөвсөвсөв сөвсөвсөвсөвсөв*”
 LNK DEM night LOC IPFV-sing LNK IDPH(X):cry IDPH(X):cry
 28560 *tu-ti nyu tce, “tu-sji tu-rtsyy ty-mbro, tu-sji tu-rtsyy*
 IPFV-say be:FACT LNK one-day ONE-node IMP-be.high one-day ONE-node
 28561 *ty-mbro” tu-ti nyu tu-ti-nuu nygryl.*
 IMP-be.high IPFV-say be:FACT IPFV-say-PL be.usually.the.case:FACT
 28562 ‘(In june, when crops are about to grow), (the *tacовсор* bird)_i sings in the
 28563 night, making the sound *сөвсөвсөвсөвсөв*, people say that it_i tells (the
 28564 crops) ‘Grow by one node everyday!’’ (23-scuz, 113-114)

28565 21.4.2.3 Imperative and autive

28566 With the Autive prefix (§19.1), the Imperative has two distinct and nearly opposite
 28567 meanings.

28568 First, it can indicate a mild suggestion or a request for a favour (§19.1.3), as in
 28569 (135).

- 28570 (135) *laъjuy nyzo ty-nuu-ndym je tce, azo jyyrt ci*
 staff 2SG IMP-AUTO-take[III] SFP LNK 1SG toilet INDEF
 28571 *lu-ce-a ny*
 IPFV:UPSTREAM-go-1SG SFP
 28572 ‘Take the staff, I am going to the toilets.’ (2005 khu, 13)

28573 Second, it is also used in a mocking way to express defiance (§19.1.4), as in (136)
 28574 and (137).

- 28575 (136) *nui-nuu-nyre ma nyzo qacpa ny-rzaβ ny-kui-mbi*
 IMP-AUTO-laugh LNK 2SG frog 2SG.POSS-wife 2SG.POSS-SBJ:PCP-give
 28576 *kui-tu me*
 SBJ:PCP-exist not.exist:FACT
 28577 ‘Laugh as you wish, nobody will give you a wife, you frog.’ (2002 qaCpa,
 28578 176)
- 28579 (137) *kynvβdi je a-wuu tuijo, a-qe*
 farewell SFP 1SG.POSS-grandfather demon 1SG.POSS-shit
 28580 *kui-sx-ckur~cke ci ty-nui-ndze*
 SBJ:PCP-PROP-EMPH~burn INDEF IMP-AUTO-eat[III]
 28581 ‘Farewell, old demon, eat my hot shit!’ (2005 tWJo, 45)

28582 21.4.2.4 Complement clauses

28583 The Imperative is commonly used in complement clauses of modal verbs. The
 28584 combination the modal auxiliary *jyy* ‘be possible’ with an Imperative complement
 28585 clause expresses that the speaker politely allows the addressee to undertake an
 28586 action that the addressee himself intends to do, as in (138) and (139).

- 28587 (138) [nyzo tx-nui-ndym] jyy
 2SG IMP-AUTO-take[III] be.possible:FACT
 28588 ‘Please take it.’ (divination, 84)

- 28589 (139) ny-ky-t^hu u-yyzu ny, [tx-t^he] jyy
 2SG.POSS-OBJ:PCP-ask QU-exist:SENS ADD IMP-ask[III] be.possible:FACT
 28590 ‘If you have a question, please ask it.’ (conversation, 14-11-08)

28591 The modal verb *ra* ‘be needed’ with Imperative is used in requests (140) and
 28592 also blunt orders with death treats(141).

- 28593 (140) c-tx-t^he ra
 TRAL-IMP-ask[III] be.needed:FACT
 28594 ‘Go and ask him about it.’ (divination, 8)

- 28595 (141) c-tx-re ra ma cui-ky-ru
 TRAL-IMP-bring[III] be.needed:FACT LNK TRAL-INF-bring
 28596 mui~my-pui-tuu-c^ha ny ny ny-srym ny-srob
 COND~NEG-AOR-2-can be:FACT LNK 1SG.POSS-root 1SG.POSS-life
 28597 lxt-i
 throw:FACT-1PL
 28598 ‘Go and bring it here; if you do not succeed in going and bringing it
 28599 here, we will destroy your root and your life.’ (Norbzang, 10)

28600 21.4.2.5 Serial verb constructions

28601 Two verbs in the Imperative can be used in a Serial Verb Construction (§25.4.1),
 28602 the first verb conveying the manner in which the action is performed, as in (142).

- 28603 (142) tx-mbyom zo tx-ce ra
 IMP-be.in.a.hurry EMPH IMP:UP-go be.needed:FACT
 28604 ‘Hurry up and go upstairs!’ (160706 poucet6, 6)

28605 The first verb can be in the prohibitive (§21.4.3), a construction meaning ‘do
 28606 V_2 without doing V_1 ’ (143).

- 28607 (143) *kuki tsu ki ma-nuu-tuu-βde zo jv-ce*
 DEM.PROX path DEM.PROX NEG-IMP-2-throw EMPH IMP-go
 28608 ‘Go along this way without leaving it!’ (140507 jinniao-zh, 212)

28609 21.4.3 Prohibitive

28610 21.4.3.1 Morphology

28611 The Prohibitive is built by combining the dedicated negative prefix *ma-* (§13.1.1), a
 28612 type A preverb and the stem III of the verb when appropriate (§12.2.2.1, §21.1.2). In
 28613 second person subject forms, unlike the Imperative (§21.4.2.1), the second person
 28614 prefix obligatorily occurs, as in *ma-nuu-tuu-te* ‘don’t put him/her/it’ (144).

- 28615 (144) *nuatcu ma-nuu-tuu-te ma tx-pytso ra nuu-sta*
 DEM:LOC NEG-IMP-2-put[III] LNK INDEF.POSS-child PL 3PL.POSS-place
 28616 *cti*
 be.AFF:FACT
 28617 ‘Don’t put her there, it is the place of the children.’

28618 Unlike the Imperative (§21.4.2.1), the prohibitive has no constraints on person.
 28619 It can occur in 2→1 configurations (145), but also with a first person intransitive
 28620 (146) or transitive subject (147) and also in very rare cases in the third person (148).

- 28621 (145) *ma-tx-kui-ndza-a tcet^ha ny-χpi pju-feat-a*
 NEG-IMP-2→1-eat-1SG later 2SG.POSS-story IPFV-tell-1SG
 28622 ‘Don’t eat me, and I will tell you a story.’ (tWJo 2012, 62)
- 28623 (146) *za ma-tx-nuna-tci q^he*
 soon NEG-IMP-rest-1DU LNK
 28624 ‘(In order to catch up with the wasted time), we will not stop (working)
 28625 early (today).’ (conversation 14-05-10)
- 28626 (147) *nuu k^hramba ma-tx-βze-a ra ma*
 DEM lie NEG-IMP-make[III]-1SG be.needed:FACT SFP
 28627 ‘I should not tell lies.’ (27-kikakCi, 222)

- 28628 (148) *tce tu-mdzu u-tab ma-nw-xtcas ra ma*
LNK GENR.POSS-tongue 3SG.POSS-on NEG-IMP-stain be.needed:FACT LNK
28629 *tu-mdzu tu-syzoŋzoy zo q^he c^hu-nuŋymbvβ*
GENR.POSS-tongue IPFV-make.numb EMPH LNK IPFV-swell
28630 *cti.*
be.AFF:FACT
28631 ‘(The *Arisaema consanguineum*) should not get on one’s tongue_i, as it
28632 makes the tongue_i numb, and it_i swells.’ (14-sWNgWJu, 145)

28633 The preverb is optional in second person prohibitive forms. For instance with *ti*
28634 ‘say’, *ma-tuu-ti* (NEG:IMP-2-say) and *ma-tr-tuu-ti* (NEG-IMP-2-say) both occur in free
28635 variation.

28636 Despite the clear morphological differences between the Prohibitive and the
28637 Imperative, the type A preverb is glossed as IMP and the negation as NEG (to
28638 avoid a redundant gloss PROHIB on both prefixes). When the preverb is elided,
28639 the negative *ma-* is glossed as NEG:IMP.

21.4.3.2 Functions

28641 The Prohibitive with a second person subject is essentially the negative counter-
28642 part of the Imperative, with exactly the same range of functions (§21.4.2.2), in-
28643 cluding orders, requests and polite suggestions, such as the polite expression *ma-*
28644 *tr-tuu-rasle* (149), which corresponds to Chinese 不用客气 <búyòngkèqì> ‘you’re
28645 welcome’.

- 28646 (149) *ma-tr-tuu-rasle, tr-zyy-cua-fka je*
NEG-IMP-2-be.polite IMP-REFL-CAUS-be.full SFP
28647 ‘Please eat to your full!’ (heard in context)

28648 The prohibition can refer to an action to happen in the future, as in (150), where
28649 the moment when the action is to be avoided is indicated by the temporal clause
28650 in the Aorist (§21.5.1.4).

- 28651 (150) *tceu tr-ari-tci tce, uu-tuu-yvndzo*
up.there AOR:UP-go[II]-1DU LNK 3SG.POSS-NMLZ:DEG-be.cold
28652 *saxas zo ri, “utc^hutc^hu” ma-tuu-ti*
be.extremely:FACT EMPH LNK INTERJ NEG:IMP-2-say
28653 ‘When we go up there (in the sky, near the moon), it will be extremely
28654 cold, but then don’t say ‘brbr’.’ (07-deluge-64)

The negative Irrealis can also be used as a delayed prohibitive as in (151) (§21.4.1.3), contrasting with the Prohibitive in the same way as the Irrealis in delayed imperative function contrasts with the Imperative (§21.4.2.2): the Prohibitive and Imperative imply that the speaker will be present when the action is to be realized or avoided (as in 150), while the Irrealis occurs when the speaker will not be present.

- (151) *icq^ha ruudab̥ ra kuu ta-tuit nura, turme*
 the.mentioned animal PL ERG AOR:3→3'-say[II] DEM:PL people
 wu-cki a-mx-tx-tui-ti ma
 3SG.POSS-DAT IRR-NEG-PFV-2-say LNK

‘You will have to avoid telling human what the animal say.’ (150902
 hailibu-zh, 83)

Like the Imperative (§21.4.2.4), the prohibitive also occurs in subject complement clauses with auxiliaries such as *ra* ‘be needed’ (147, §21.4.3.1).

A construction with the same verb occurring in the Imperfective followed by its Prohibitive form in the first person, with the alternative interrogative particle *ci* (§10.4.2) in between, is used to express hesitation between two possibilities (152).

- (152) *ku-ce-a ci ma-kx-ce-a kuu*
 IPFV:EAST-go-1SG SFP NEG-IMP-go-1SG SFP
 ‘(I wonder) whether to go or not.’ (elicited)

The Prohibitive is also used in manner clauses meaning ‘without doing *X*’, sharing their subject (and also possibly object) with another verb in the Imperative or the Imperfective, as in (153) (see also 143, §21.4.2.5).

- (153) *sxtc^ha kuu-yrq^hi zui pjú-wy-lvt ma-piú-wy-sat*
 place SBJ:PCP-be.far LOC IPFV:DOWN-INV-release NEG-IMP-INV-kill
 ra
 be.needed:FACT
 ‘One has to take it far away (from the house) without killing it.’ (2010-11,
 11)

The Prohibitive is also found in the protasis of conditionals (§25.2), as in (154). This type of ‘warning’ conditional construction expresses a possible undesirable result occurring if the subject fails to perform the action designated by the verb in the Prohibitive.

- 28684 (154) *ty-mt^hum kumy ky-ky-sqa nura zatsa*
 INDEF.POSS-meat also AOR-OBJ:PCP-cook DEM:PL soon
 28685 *ma-t̪y-wy-nuβdaš q^he, u-taš ri kuu-wyrum*
 NEG-IMP-INV-take.care LNK 3SG.POSS-top LOC SBJ:PCP-be.white
 28686 *ku-te*
 IPFV-put[III]
 28687 ‘In the case of meat also, if one fails to take care of cooked (meat) in
 28688 time, white stuff will appear on it.’ (20-sWrna,60)

28689 Finally, it can also be used in a counterfactual construction as in (155).

- 28690 (155) *nua syzny, nyzo kuu ma-ty-kuu-sui-cqraš-a kuu*
 DEM COMP 2SG ERG NEG-IMP-2→1-CAUS-be.intelligent-1SG ERG
 28691 *pjx-mna!*
 PST.IFR-be.better
 28692 ‘It would have been better if you had not made me smart!’ (160711
 28693 riquet8-v2, 18)

21.4.4 Dubitative

28694 The Dubitative *ku-* is formally identical to the B type EASTWARDS preverbs, which
 28695 also marks the Imperfective and the Egophoric Present (§21.3.3). It always oc-
 28696 curs with the Autive *-nu-* prefix (§19.1 and with the polar question *ci* particule
 28697 (§10.4.2, see example 156), the interrogative *kuu* (§10.4.2, 158) or the alternative
 28698 polar question construction (combining a positive followed by the equivalent
 28699 negative verb form as in 157).

- 28701 (156) *tce lu-ky-nuu-ji nua kuu zru tu-ti-nua*
 LNK IPFV-OBJ:PCP-AUTO-plant DEM ERG be.strong:FACT IPFV-say-PL
 28702 *nuu-ŋu tce my-xsi. ku-nnuu-zru ci kuma.*
 SENS-be LNK NEG-GENR:know:FACT DUB-AUTO-be.strong QU SFP
 28703 ‘The cultivated (variety of Angelica) is better (than the wild one), they
 28704 say, I don’t know, maybe it is better.’ (17-ndZWnW, 34)
- 28705 (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
 28706 *ma*
 SFP
 28707 ‘I don’t know whether it efficient or not (as medicine).’ (19-GzW, 108)

21 Tense, aspect, modality and evidentiality

28708 In addition, dubitative verb forms are followed either by the sentence final
28709 particles *kuma* or *kuye* (§10.4.2) as in (156) or a verb form such as *mr-xsi* ‘one
28710 does not know’ (§ 157).

28711 The dubitative is mainly used to express doubts while reporting opinions from
28712 other people (as in 156 and 157), but with the interrogative *kua* as in (158), its
28713 meaning is rather that of emphasis on the fact that the speaker has no clue about
28714 the answer to the question (as in French *donc...bien* in ‘*Qui donc cela peut-il bien*
28715 *être*?’).

28716 (158) *wo nua cua ci ku-nua-ŋu kua?*

INTERJ DEM who INDEF DUB-AUTO-be QU

28717 ‘Who on earth is it (who does all) that?’ (2014-kWLAG, 619)

28718 21.5 Past categories

28719 The Aorist, Past Imperfective, Inferential Perfective and Inferential Imperfective
28720 all strictly express past tense events or states when occurring in main clauses. In
28721 addition, they all take the past transitive -t suffix (§21.1.3) in 1SG→3 and 2SG→3
28722 forms of open stem verbs (see §21.5.1.1, §21.5.2.1 and §21.5.3.1).⁸

28723 This section describes the morphology of these TAME categories, their uses
28724 in main clauses and subordinate clauses, and also the semantic contrast between
28725 them in various contexts.

28726 21.5.1 Aorist

28727 21.5.1.1 Morphology

28728 The Aorist is built by combining stem II (§12.2.1, or stem I for non-alternating
28729 verbs) with either A-type (159) or C-type preverbs (160) depending on person
28730 configuration and transitivity (§15.1.1.1, §21.1.1.1): the latter are restricted to transitive
28731 direct 3→3' configurations (§14.3.2.2).

28732 (159) *tŋ-yε-j*

AOR:UP-come[II]-1PL

28733 ‘We came (up).’ (many attestations)

⁸ The only non-past TAME category that is compatible with the -t suffix is the Apprehensive (§21.7.1).

- 28734 (160) *ta-tut*
 AOR:3→3'-say[II]
 28735 ‘S/he said it.’ (many attestations)

28736 In addition, like the Inferential, the Aorist takes the 1/2SG→3 Past transitive
 28737 suffix *-t* (§11.3, §21.1.3). Complete paradigms of transitive and intransitive verbs
 28738 in the Aorist are presented in §14.3.2, and need not be repeated here.

28739 Some Aorist verb forms are ambiguous and could be interpreted as belonging
 28740 to other TAME categories. The ambiguity with the Imperative (§21.4.2.1) is
 28741 discussed in detail in §21.1.2. A more difficult case is that between Past Imper-
 28742 fective *pui-* (§21.5.3) and the Aorist of stative verbs selecting DOWNWARDS as their
 28743 intrinsic orientation (§15.1.5). The only way of differentiating between the two
 28744 is the clear inchoative meaning of stative verbs in the Aorist (§21.5.1.3), showing
 28745 that *pui-rom* in (161) can only be analyzed as an Aorist ‘(when) it has dried’ rather
 28746 than as a Past Imperfective ‘it was dry’ (see also example §21.2.6, §33).

- 28747 (161) *wi-jwas rcanui pui-rom kuni wi-mdzu nw*
 3SG.POSS-leaf UNEXP:FOC AOR-be.dry also 3SG.POSS-thorn DEM
 28748 *myzui zo mtcob*
 even.more EMPH be.sharp:FACT
 28749 ‘When its leaves have dried, the thorns (on the leaves) are even sharper.’
 28750 (18-NGolo, 70)

28751 21.5.1.2 Main clauses

28752 The Aorist occurs in main clauses to express past perfective events that the
 28753 speaker has witnessed him/herself. It is used to report actions that the speaker
 28754 has performed himself, as in (162) and (163), unlike the Inferential, which is only
 28755 compatible with first person in very specific contexts (§21.5.2).

- 28756 (162) *nur ku-fse rcanui <qibajin> zo*
 DEM SBJ:PCP-be.like UNEXP:FOC seven.or.eight.pounds EMPH
 28757 *tr-xtui-t-a. tce <dong> pui-βzu-t-a*
 AOR-buy-PST:TR-1SG LNK freeze AOR-make-PST:TR-1SG
 28758 ‘(Nettles) like that, I bought seven or eight pounds. Then I put them in
 28759 the refrigerator.’ (conversation, 14-05-10)

28760 In the absence of any adverb with a function comparable to English ‘already’
 28761 in Japhug, the Aorist is used to express this meaning, in combination with a tense

28762 adverb as in (163).⁹

- 28763 (163) *jufcuundzi n̩r-cki tx-tut-a ma, wuma zo*
 a.few.days.ago 2SG.POSS-DAT AOR-say[II]-1SG LNK really EMPH
 28764 *a-tsa zo pnu-βze*
 1SG.POSS-adapted EMPH SENS-make[III]

28765 ‘I already told you a few days ago, (the shoes you have sent me) fit me
 28766 really well.’ (conversation, 2019-05-26)

28767 Actions that the speaker has witnessed as a passive participant are also ex-
 28768 pressed with the Aorist rather than the Inferential.

- 28769 (164) *a-kur-rtob jy-ye tce yui-nú-wy-mbi-a*
 1SG.POSS-SBJ:PCP-look AOR-come[II] LNK CISL-AOR-INV-give-1SG
 28770 ‘He came to see me and gave it to me.’ (conversation, 17-09-21)

28771 In (165), the choice of the Aorist *ka-lyt* and the Past Imperfective *pui-wxti* re-
 28772 reflects the fact that the speaker has directly seen the snowfall (rather than deduc-
 28773 ing its occurrence from the presence of snow on the ground). By contrast, the
 28774 Inferential *to-ndzi* ‘it melted’ (rather than the Aorist *tx-ndzi*) indicates that the
 28775 speaker has not witnessed the melting, and only deduced that it has occurred
 28776 due to the absence of snow, despite the snowfall in the previous night (§21.5.2.2).

- 28777 (165) *kutcu hanuni pui-yndzo. jufcuacyr txjpa*
 DEM.PROX:LOC a.little SENS-be.cold yesterday.night snow
 28778 *ka-lyt. ka-lyt ri mui-pui-wxti. jisŋi tce*
 AOR:3→3'-release AOR:3→3'-release LNK NEG-PST.IPFV-be.big today LNK
 28779 *lonba to-ndzi.*
 all IFR-ACAU: melt
 28780 ‘Here it is a bit cold. Yesterday evening there was a snowfall. There was
 28781 snow but not much, and now it has melted completely.’ (conversation,
 28782 17-11-23)

28783 The Aorist is also used to describe the events that the speaker has seen on a
 28784 film, for instance the pear stories, as in (166).

⁹ Tshendzin said (163) answering a question I had already asked a few days before.

- 28785 (166) *tx-pvtso kuu-y<nuu>yro tsuku yyzu-nuu*
 INDEF.POSS-child SBJ:PCP-<AUTO>play several exist:SENS-PL
 28786 *jy-ye-nuu tce, nuura kuu u-paxci ra ky-wum*
 AOR-come[II]-PL LNK DEM:PL ERG INF-collect AOR:3→3'-help-PL LNK
 28787 *ta-qur-nuu tce, ta-stuy-ndzur-nuu*
 AOR:3→3'-CAUS-stand-PL
 28788 ‘There were some children playing (there), they came, helped him to
 28789 collect the apples (that had been spilled) and helped (him) up.’
 28790 (chen-pears, 10-11)

28791 For events that have occurred in a more remote past, the requirement on di-
 28792 rect (visual) perception may be less strict. For instance, in (167), the verbs in
 28793 the Aorist express a series of events that have happened to a member of the
 28794 speaker’s extended family. They did not live in the same household, and did not
 28795 meet very frequently, and the speaker did not witness all of the events, but is
 28796 familiar enough with the situation to feel entitled to use the Aorist rather than
 28797 the Inferential.

- 28798 (167) *nuu-mu nuu tx/ngo q^he ci ci nuu-si kui-fse ci*
 3PL.POSS-mother DEM AOR-be.ill LNK one one AOR-die SBJ:PCP-be.like one
 28799 *ci tx-mna kui-fse q^he kuicnuu-xpa zo t^huu-mduu.*
 one AOR-be.better SBJ:PCP-be.like LNK seven-year EMPH AOR-live.up.to
 28800 ‘Their mother got ill, and survived seven years, sometimes looking like
 28801 she had died, sometimes looking like she was getting better’ (14-siblings,
 28802 32-33)

28803 21.5.1.3 Change of state

28804 In main clauses, stative verbs (other than copulas, §22.5.1.1) in the Aorist always
 28805 express a change of state, whether adjectival verbs such as *dyn* ‘be many’ (168)
 28806 or existential verbs (169).

- 28807 (168) *nure kuma^к pcos <banqian> jy-kui-ye nuura*
 DEM:LOC other side move AOR-SBJ:PCP-come[II] DEM:PL
 28808 *tu-nuu tce, tx-dyn-nuu.*
 exist:FACT-PL LNK AOR-be.many-PL
 28809 ‘(Now) there are people who have come from other places (to settle in
 28810 that village), (and the number of inhabitants) has increased.’ (140522
 28811 tshupa, 87)

- 28812 (169) *ny-<dian> nur-me*
 2SG.POSS-electricity AOR-not.exist
 28813 ‘Your (cellphone) is out of battery.’ (you don’t have any electricity
 28814 anymore) (heard in context)

28815 The Aorist is however found on stative verbs in some temporal subordinate
 28816 clauses (§21.5.1.4) without change of state meaning.

28817 In addition to stative verbs, some modal verbs such as *c^ha* ‘can’ select the UP-
 28818WARDS orientation with an inchoative meaning, as illustrated by example (17)
 28819 (§24.2.3.1) (see also §21.5.2.4).

28820 **21.5.1.4 Temporal subordinate clauses**

28821 The Aorist is used in subordinate clauses to mark a point of temporal reference.
 28822 It occurs in generic statements to indicate the period when an event takes place.
 28823 For instance in (170), the temporal clause *ftçar ky-ndzor* ‘when summer arrives’
 28824 must select the Aorist; no other TAME category would be possible here.

- 28825 (170) *wu-fsaq^he, [ftçar ky-ndzor] q^he li tu-łob.*
 28826 3SG.POSS-next.year summer AOR-ACaus:attach LNK again IPFV-come.out
 28827 ‘The next year, when summer arrives, it comes out again.’ (of a perennial
 28828 plant, 19-qachGa mWntoR, 29)

28829 Direct visual perception is irrelevant in temporal clauses. In (171), the Aorist
 28830 *jx-ye* occurs even though the speaker is only reporting a story about a parrot
 28831 that she has not witnessed personally, and only heard from someone else. Here
 28832 the meaning of the Aorist is simply to state the temporal condition when the
 28833 following actions (utterance of human speech) take place.

- 28834 (171) *tuarne jx-ye tce <laikerenle> tu-ti, tce <nihao>*
 28835 person AOR-come[II] LNK a.guest.has.arrived IPFV-say LNK hello
 28836 *tu-ti.*
 28837 IPFV-say
 28838 ‘(Of a parrot which is able to say a few words) When someone comes
 28839 (the parrot) says ‘A guest has arrived’, and says ‘hello’’ (24-qro, 112-113)

28840 With stative verbs, the Aorist can exceptionally be used without inchoative meaning (§21.5.1.3) in temporal clauses, but always with the UPWARDS *tx-* preverb. For instance in (172), *tx-jpum* and *tx-xts^hum* mean ‘when it is thick’ and ‘when it is

thin', not 'when it becomes thick/thin', which would be expressed with the intrinsic WESTWARDS preverbs (see also 140, §15.1.5.7 and 4, §21.1.1.3).

- (172) *tx-jpum tce tcendyre tuu-sŋi kʰro lú-wy-taʂ*
 AOR-be.thick LNK LNK one-day much IPFV-INV-weave
pnu-kui-cʰa ma tx-xtsʰuum tce tce, koŋla
 SENS-GENR:S/O-can LNK AOR-be.thin LNK LNK completely
lú-wy-taʂ muŋj-sx-cʰa
 IPFV-INV-weave NEG:SENS-PROP-can
 'When (the threads) are thick, one can weave a lot in one day, when they are thin, it is not possible to weave.' (2011-06-thaXtsa, 54-55)

Apart from stative verbs, a similar use of the UPWARDS orientation is found with the transitive verb *suso* 'think', 'want' in some contexts (§24.5.4.1).

While the Aorist is restricted to past events in main clauses, it is found in temporal clauses to express points of time reference in the future. In (173) and (174), the Aorist forms *pui-tuu-nui-ye-nui* 'when you come back' and *pui-tuu-ari* 'when you go down' refer to events that have not yet taken place at the time of utterance. The use of the Aorist in future contexts is also observed in conditional clauses (§21.5.1.5).

- (173) *nuzo pui-tuu-nui-ye-nui nautcu cuparkʰyrkʰyt*
 2PL AOR:DOWN-2-VERT-come[II] DEM:LOC stone.step
a-pui-tuu-łɔʂ-nui tce azo tʰylwa puiyŋnuy
 IRR-PFV:DOWN-2-come.out-PL LNK 1SG earth IDPH(II):soft
pjui-łɔʂ-a yu
 IPFV:DOWN-come.out-1SG be:FACT
 'When you come back, take the stone steps, I will come down on the soft earth.' (2014-kWLAG, 438)

- (174) *tcetʰa pui-tuu-ari tce, ki a-ky-tuu-ctʰuz*
 soon AOR:DOWN-2-go[II] LNK DEM.PROX IRR-PFV:EAST-2-turn.towards
tce, tcetʰa ju-nui-ce-nui cti
 LNK SOON IPFV-VERT-go-1SG be.AFF:FACT
 'When you go down there, turn (this magical object) in the direction (of the rākshasas), and they will go back (from where they are from).' (2011-04-smanmi, 121)

In (175), both the temporal clause and the main clause contain a verb in the Aorist, but in the latter, that verb *nui-me* 'it disappeared' is embedded in a com-

28868 plement clause headed by the noun *u-ndza* ‘cause’ (§25.5.2, §24.6.3.5, with elided
 28869 possessive prefix), while the main verb *ŋu* ‘be’ is in the Factual.

- 28870 (175) *a-va tu ri, tcet^ha nui-mbryst tce tce*
 1SG.POSS-free.time exist:FACT LNK soon AOR-ACAU:break LNK LNK
 28871 *[a-<dian> nui-me] ndza ŋu*
 1SG.POSS-electricity AOR-not.exist reason be:FACT
 28872 ‘I have time (to talk with you), but in a moment when (the phone line)
 28873 disconnects, it will be because my (cellphone) is out of battery.’
 28874 (conversation)

28875 The Aorist in subordinate clauses is not always used to fix a point of temporal
 28876 reference, however. It can also refer to an event preceding those of the following
 28877 clauses, and which the speaker has witnessed (as in main clauses, §21.5.1.2). In
 28878 (176), the clause *tr-mt^hum nū-wy-mbi-a* is not to be translated as ‘when (s/he/
 28879 someone) gave/gives meat’ (a translation that is possible in other contexts), but
 28880 rather as ‘(someone) had given me’ with as pluperfect, as a background event
 28881 that took place before the whole story begins.

- 28882 (176) *tr-mt^hum nū-wy-mbi-a tce, tu-ndze-a pui-ŋu*
 INDEF.POSS-meat AOR-INV-give-1SG LNK IPFV-eat[III]-1SG PST.IPFV-be
 28883 *tce, k^hxtu ri pui-ryzi-a.*
 LNK roof LOC PST.IPFV-stay-1SG
 28884 ‘(Someone) had given me (a piece of) meat, and I was eating it, I was
 28885 staying on the roof platform (and then a kite flew down and robbed it).
 28886 (150909 qandZGi, 2)

28887 21.5.1.5 Conditional clauses

28888 In the protasis of reduplicated conditional (§12.4.1.2), the Aorist has a purely as-
 28889 pectual function, and does not express absolute past tense, but past tense relative
 28890 to the apodosis.

28891 The Aorist occurs in the protasis in generic contexts, as in (177).

- 28892 (177) *trci, qaj, sto^h staŋra nura mu~my-t^hú-wy-yndzur ny*
 barley wheat broad.bean peas DEM:PL COND~NEG-AOR-INV-grind ADD
 28893 *ky-ndza my-k^hu*
 INF-eat NEG-be.possible:FACT
 28894 ‘If we don’t grind barley, wheat, broad beans and peas, they cannot be
 28895 eaten.’ 06-BGa, 5)

28896 It is also found in conditional constructions referring to future events, as in
 28897 (178) and (179). This usage reminds of the use of the Aorist in future temporal
 28898 clauses (such as 173, §21.5.1.4).

- 28899 (178) *tui~t^y-tui-tut* *ny tce pui-ta-sat* *ŋu*
 COND~AOR-2-say[II] add LNK IPFV-1→2-kill be:FACT
 28900 ‘If you tell (anyone) about it, I will kill you.’ (150901 changfamei-zh, 54)

- 28901 (179) *pui~pui-nyo* *ny, ndzizo bnuuz yuu ndzi-ku*
 COND~AOR-be.defeated ADD 2DU two GEN 2DU.POSS-head
 28902 *c^htú-wy-p^hut* *ra*
 IPFV-INV-take.off be.needed:FACT
 28903 ‘If he fails, we will decapitate both of you.’ (140505 liuhaohan zoubian
 28904 tianxia-zh, 104-5)

28905 The Aorist is less felicitous in the protasis of counterfactuals (§25.2.4), where
 28906 the Irrealis is used instead (§21.4.1.5).

28907 21.5.1.6 Relative clauses

28908 The Aorist commonly occurs in finite relative clauses (§23.2.2), as in the object
 28909 head-internal relative in (180).

- 28910 (180) *icq^ha* *[srunlob-pui kur-fse* *na-k^ho]* *nunu*
 the.aforementioned ring-DIM SBJ:PCP-be.like AOR:3→3-give DEM
 28911 *ko-ct^huz*
 IFR:EAST-turn.towards
 28912 ‘He_i turned the little ring that (Smanmi Metog Koshana) had given him_i
 28913 in the direction (of the râkshasas). (28-smAnmi, 173)

28914 The verb in the relative can also undergo totalitative reduplication of the first
 28915 syllable (§12.4.1.5), as *tui~ta-stu* ‘all (the ways) in which she had done it’.¹⁰

- 28916 (181) *[ui-pi* *kur tui~ta-stu]* *nui to-stu* *q^he*
 28917 3SG.POSS-elder.sibling ERG TOTAL~AOR:3→3'-do.like DEM IFR-do.like LNK
 28918 ‘She did everything like her elder sister.’ (2014-kWLAG, 167)

¹⁰ The object of the verb *stu* ‘do like’ refers to the manner in which the action is performed, not its patient (§14.4.2).

In relative clauses, the contrast between Aorist and Inferential is neutralized, as only the Aorist can appear. Thus, in both (180) and (181) above, the verb of the relative clause in the Aorist, while that of the main clause is in the Inferential. The events referred to in the Aorist in these relative clauses occur in the Inferential earlier in the stories: compare for instance the Inferential *jny-k^ho* in the main clause in (182) with the Aorist *na-k^ho* in the relative in (180).

- (182) *srunlo&-puu kui-fse ci jny-k^ho.*
 ring-DIM SBJ:PCP-be.like INDEF IFR-give
 '(Smanmi Metog Koshana) gave him something like a little ring.'
 (28-smAnmi, 160)

21.5.1.7 Complement clauses

Some finite complement clauses take the Aorist when the main verb is also in the Aorist, as in (183).

- (183) *azō [nuu-z-nyre-t-a] puu-c^ha-a*
 1SG AOR-CAUS-laugh-PST:TR-1SG AOR-can-1SG
 'I succeeded in making her laugh.' (140430 jin e-zh, 179)

21.5.1.8 Periphrastic Narrative

Some speakers (in particular Kunbzang mtshu) use the Periphrastic Narrative instead of the Inferential as the main TAME category of narration when telling traditional stories.

The Periphrastic Narrative combines a verb in the Aorist with the copula in the Sensory *jnu-ŋu*. In (184), the periphrastic construction *t^hu-sta-nuu jnu-ŋu* 'they woke up' corresponds to an Inferential *c^hy-sta-nuu* in a similar story told by another speaker (185).

- (184) *nua ㅂ마& kui-kui-tu zo t^hu-sta-nuu jnu-ŋu.*
 DEM soldier TOTAL~SBJ:PCP-exist EMPH AOR-wake-PL SENS-be
 'All the soldiers woke up.' (2003qachGa, 77)
- (185) *icq^ha kui-ruuru ㅂ마&mi nura c^hy-sta-nuu.*
 the.aforementioned SBJ:PCP-guard soldiers DEM:PL IFR-wake-PL
 'The guards woke up.' (140507 jinniao-zh, 148)

28945 As in the case of other periphrastic TAME constructions (see in particular 10,
 28946 §21.2.2 concerning the Periphrastic Imperfective), a chain of several verbs in the
 28947 Aorist can share one copula. In (186) for instance, the copula *jnu-ŋu* has scope
 28948 over two clauses, each containing a verb in the Aorist (*ta-tut* and *mu-ta-tut-ndzi*,
 28949 respectively).

- 28950 (186) *tce [kui-wxti ni ndzi-p^he ta-tut] ri, [kui-wxti ni*
 LNK SBJ:PCP-big DU 3DU.POSS-DAT AOR:3→3'-say[II] LNK SBJ:PCP-big DU
 28951 *kui mu-ta-tut-ndzi] jnu-ŋu.*
 ERG NEG-AOR:3→3'-say[II]-DU SENS-be
 28952 ‘He told it_i to the two elder (sisters)_j, but they_j did not tell it_i (to their_j
 28953 parents).’ (2005-stod-kunbzang, 35)

28954 In the case of the verb *ti* ‘say’, while the regular Periphrastic Narrative is at-
 28955 tested (186), we also find a periphrastic form *ti jnu-ŋu* (187) with the Factual *ti*
 28956 instead of the Aorist *ta-tut*.

- 28957 (187) “*a-pi jnu-čpač-a*” *ti jnu-ŋu*
 1SG.POSS-elder.sibling SENS-be.thirsty-1SG say:FACT SENS-be
 28958 ‘She said: ‘Sister, I am thirsty.’ (2003 Kunbzang, 306)

28959 The verb *ti* ‘say’ in the Factual can share a copula with verbs in the Aorist in
 28960 Periphrastic Narrative chains. In (188), the Factual form *ti* belongs to the same
 28961 chain as the following Aorist form *ta-tut*, and *jnu-ŋu* has scope over both of them.
 28962 This periphrastic construction is similar to that of (186) above, but with a verb in
 28963 the Factual instead of the Aorist in the first clause.

- 28964 (188) *[stu kui-xtci nua u-p^he ti] ny, [nua kui li*
 most SBJ:PCP-be.small DEM 3SG.POSS-DAT say:FACT ADD DEM ERG again
 28965 *ta-tut] jnu-ŋu*
 AOR:3→3'-say[II] SENS-be
 28966 ‘He told it_i to the youngest (sister)_j, and she_j told it_i (to her parents).’
 28967 (2003 Kunbzang, 56)

21.5.2 Inferential

28968 In this section, the term ‘Inferential’ is used as abbreviation for ‘Inferential Per-
 28969 fective’, as opposed to the Inferential Imperfective discussed in §21.5.3.

28971 21.5.2.1 Morphology

28972 In the Kamnyu dialect of Japhug, the Inferential is built from the stem I of the
 28973 verb with type D preverbs (§15.1.1.1, §21.1.1.1). For instance, the verb *ce* ‘go’ (whose
 28974 stem II is *-ari*, §12.2.1), has the Inferential 3SG form *jo-ce* (IFR-say) ‘he said’ with
 28975 the indefinite orientation type D preverb *jo-* and the stem I *-ce*.

28976 In the Xtokavian dialects of Japhug, there are only two series of preverbs (A
 28977 and B), and the Inferential is marked by combining the B type preverbs with the
 28978 Inferential prefix *a-*. The second person prefix *tu-* is inserted between the preverb
 28979 and the Inferential *a-* (compare 10a and 10b, §15.1.1.3).

28980 Transitive verbs with open syllable stem with first and second person singular
 28981 subjects and third person object in addition select the *-t* past tense suffix (§11.3,
 28982 §21.1.3, -z in some dialects of Japhug), as illustrated by (189), (192) and (190) (see
 28983 also 203, §21.5.2.3).

- 28984 (189) *azō cʰa kʰro ko-tsʰi-t-a*
 1SG alcohol much IFR-drink-PST:TR-1SG
 ‘I drank a lot of alcohol.’ (aesop zuoke de gou-zh, 36)

- 28986 (190) *maka nɣ-βzanjlyn βze-a ra ma*
 completely 2SG.POSS-payback make[III]:FACT-1SG be.needed:FACT LNK
 a-tciu u-srob ko-tui-ri-t tce
 1SG.POSS-son 3SG.POSS-life IFR-2-save-PST:TR LNK
 ‘I have to return the favour, as you have saved my son’s life.’
 (2011-04-smanmi, 49)

28990 The verb *ti* ‘say’ is irregular in lacking this suffix in the Inferential; the 1SG and
 28991 2SG Inferential of this verb are thus *to-ti-a* and *to-tu-ti* as in (191), not †*to-ti-t-a* and
 28992 †*to-tu-ti-t*.

- 28993 (191) *tce nuu u-qʰu tce tcʰi to-ti-a?*
 LNK DEM 3SG.POSS-after LNK what IFR-say-1SG
 ‘What did I say after that?’ (140522 Kamnyu zgo, 221)

28995 The Inferential occurs with the negative prefix *muu-* (§13.1.1), as in (192).

- 28996 (192) *muu-to-ta-t-a*
 NEG-IFR-put-PST:TR-1SG
 ‘I did not put (the tea on the oven).’ (Conversation, 28-04-2018, Dpalcan)

28998 In the Kamnyu dialect, the preverbs are prevented from merging with the initial *a-* of contracting verbs (§12.3) by insertion of the peg circumfix (§11.4), to
 28999 avoid confusion with the Imperfective (since the result of the vowel merger of B
 29000 type and D type preverbs with *a-* is identical). This insertion occurs in third (193)
 29001 and first person (see 205, §21.5.2.3) forms.

- 29003 (193) *konyla turme jny-k-γβzu-nui-ci*
 really person IFR-PEG-become-PL-PEG
 29004 ‘(The puppets) became real people.’ (150822 yan muouxi de ren-zh, 46)

29005 In the second person, the prefix *tū-* occurs in slot -2 (§11.2.1, like the prefical
 29006 element *k(u)-* of the peg circumfix.) between the preverbs and the verb stem,

- 29007 (194) *nyzo pya jny-tuu-γβzu cti tce*
 2SG bird IFR-2-become be.AFF:FACT LNK
 29008 ‘You have become (transformed into) a bird.’ (160630 abao-zh, 151)

29009 Table 21.6 presents the paradigms of a regular transitive verb (*ts^{hi}* ‘drink’), the
 29010 irregular *ti* ‘say’ (both with a 3SG object) and an intransitive contracting verb
 29011 (*aβzu* ‘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(→3’)	<i>ko-ts^{hi}-t-a</i>	<i>to-ti-a</i>	<i>jny-k-γβzu-a-ci</i>
1DU(→3’)	<i>ko-ts^{hi}-tci</i>	<i>to-ti-tci</i>	<i>jny-k-γβzu-tci-ci</i>
1PL(→3’)	<i>ko-ts^{hi}-j</i>	<i>to-ti-j</i>	<i>jny-k-γβzu-j-ci</i>
2SG(→3’)	<i>ko-tuu-ts^{hi}-t</i>	<i>to-tuu-ti</i>	<i>jny-tuu-γβzu</i>
2DU(→3’)	<i>ko-tuu-ts^{hi}-ndzi</i>	<i>to-tuu-ti-ndzi</i>	<i>jny-tuu-γβzu-ndzi</i>
2PL(→3’)	<i>ko-tuu-ts^{hi}-nuu</i>	<i>to-tuu-ti-nuu</i>	<i>jny-tuu-γβzu-nuu</i>
3SG(→3’)	<i>ko-ts^{hi}</i>	<i>to-ti</i>	<i>jny-k-γβzu-ci</i>
3DU(→3’)	<i>ko-ts^{hi}-ndzi</i>	<i>to-ti-ndzi</i>	<i>jny-k-γβzu-ndzi-ci</i>
3PL(→3’)	<i>ko-ts^{hi}-nuu</i>	<i>to-ti-nuu</i>	<i>jny-k-γβzu-nuu-ci</i>

29012 The contrast between upper A-type (*tr-*, *lry-*, *kry-*, *jny-*) and D-type preverbs (*to-*,
 29013 *lo-*, *ko-*, *jo-*) is neutralized when followed by the inverse prefix (see Table 15.2,
 29014 §15.1.1.1), so that transitive verbs without stem II alternation selecting the upper
 29015 orientations have syncretism between Aorist and Inferential. For instance, the

29016 phonetic form [kóyndo] is ambiguous between the Aorist 3'→3 *ký-wy-ndo* (AOR-
29017 INV-take) and the Inferential 3'→3 *kó-wy-ndo* (AOR-INV-take), both translatable
29018 as ‘someone/it/s/he grabbed him/her’.

29019 **21.5.2.2 Evidentiality**

29020 In main clauses, the Inferential is used to express past perfective event, like the
29021 Aorist (§21.5.1.2). The contrast between these two categories is of an evidential
29022 nature: the Aorist is selected if the speaker had directly witnessed the event,
29023 while the Inferential occurs when only indirect clues allow him/her to deduce
29024 that the action has taken place.

29025 For instance, (195a) in the Aorist can be uttered if the speaker has seen the
29026 snowfall, while (195b) in the Inferential is chosen if the speaker infers that a
29027 snowfall has taken place from the presence of snow on the ground.

- 29028 (195) a. *txjpa ka-lxt*
 snow AOR:3→3-release
29029 b. *txjpa ko-lxt*
 snow IFR-release
29030 ‘It snowed.’ (elicited, see 165 above)

29031 In the case of predicates involving a change of state, selecting the Aorist is
29032 only possible if the speaker has witnessed the whole process. For instance, to
29033 express the meaning ‘the water boiled’, the Aorist in (196a) is possible only if
29034 the speaker has observed the change of phase of water to ebullition, while the
29035 Inferential form (196b) is used when the s/he notices that the water has already
29036 started boiling.

- 29037 (196) a. *tuu-ci ty-ala*
 INDEF.POSS-water AOR-boil
29038 b. *tuu-ci to-k-ṣla-ci*
 INDEF.POSS-water IFR-PEG-boil-PEG
29039 ‘The water boiled.’ (elicited)

29040 In narratives concerning the speaker, the Aorist is used in the case of actions
29041 that s/he has directly seen, while the Inferential is chosen for events that s/he has
29042 not directly perceived. For instance, in (197), the speaker selects the Inferential
29043 *pjṛ-yi* to describe the coming of the falcon, as she had not noticed the presence
29044 of that bird until the piece of meat in her hand was snatched away. Selecting the

29045 Aorist *pui-ye* (AOR:DOWN-come[II]) ‘it came down’ instead would mean that the
 29046 speaker had seen the falcon approaching. The Aorist *ta-nuu-mja* ‘it took it away’
 29047 expresses that the speaker felt and saw the meat being taken away; choosing
 29048 Inferential *to-nuu-mja* instead would have implied that the speaker had not even
 29049 noticed the snatching event, and had only realized the disappearance of the meat
 29050 after it had been taken away.

- 29051 (197) *kʰyxxtu ri pui-ryzi-a tce ty-mtʰum tu-ndze-a*
 terrace LOC PST.IPFV-stay-1SG LNK INDEF.POSS-meat IPFV-eat[III]-1SG
 29052 *pui-ŋu ri, toðde tcendyre qandzyi pjy-yi tce, nura*
 PST.IPFV-be LNK suddenly LNK falcon IFR:DOWN-come LNK DEM:PL
 29053 *mui-pur-tso-a tce, ndyre a-jab ty-mtʰum nuunu*
 NEG-AOR-understand-1SG LNK LNK 1SG.POSS-hand INDEF-meat DEM
 29054 *ta-nuu-mja tce*
 AOR:3→3':UP-AUTO-take LNK
 29055 ‘I was on the terrace eating meat, and suddenly a falcon came down
 29056 without me noticing, and took away the (piece of) meat in my hand.’
 29057 (150909 qandZGi, 5-7)

29058 In retellings of narratives observed on film, such as the *Pear stories*, the Aorist is
 29059 used for most events that have appeared in the video (§21.5.1.2). The Inferential is
 29060 used when only the result of action is visible. For instance in (198), the Inferential
 29061 *to-sui-mtsʰyt* instead of the Aorist *ta-sui-mtsʰyt* occurs because the filling process
 29062 is already completed in the beginning of the *pear story* video.

- 29063 (198) *tcendyre bnuu-kuxtco to-sui-mtsʰyt tce*
 LNK two-basket IFR-CAUS-be.full LNK
 29064 ‘(The man) had filled two baskets (with the pears).’ (chen-pear, 2)

29065 The Inferential can also be used in a more subtle way: to express that one of
 29066 the characters in the film has not witnessed an event, even though the narrative
 29067 may have seen it. For instance, the stealing of the pears is described using the
 29068 Aorist *ja-nuu-tsum* ‘he took them away’ in (199) since it is visible on the video,
 29069 but when describing the point of view of the old man discovering that the pears
 29070 have disappeared when climbing down his ladder, the Inferential *jo-nuu-tsum* ‘he
 29071 took them away’ occurs instead.

- 29072 (199) *nunuu kuu wi-paxci tur-kuxtco nuu ja-nuu-tsum*
 DEM ERG 3SG.POSS-apples one-basket DEM AOR:3→3'-AUTO-take.away
 29073 ‘(The boy) took away one basketful of pears.’ (chen-pear, 5)

21 Tense, aspect, modality and evidentiality

- 29074 (200) *rgvtpu nuu puu-lor ri, tce pjv-suχsyl ri*
 old.man DEM AOR:DOWN-come.out LNK LNK IFR-realize LNK
 29075 *jo-nu-tsum cti tce u-kypa maje,*
 IFR-AUTO-take.away be.AFF:FACT LNK 3SG.POSS-method not.exist:SENS
 29076 ‘When the old man came down from the tree, he realized that (the pears)
 29077 had been taken away, but could not do anything about it.’ (chen-pear, 14)

29078 The Inferential can occur to express events seen in dreams, as in (201).

- 29079 (201) *[azo [...] qarts^{hi} jny-k-ypa-a-ci] puu-yxjmjo-t-a*
 1SG cricket IFR-PEG-become-1SG-PEG AOR-dream-PST:TR-1SG
 29080 ‘I dreamed that I had become a cricket.’ (150904 cuzhi-zh, 193)

29081 The Inferential is the main TAME category to describe actions occurring in tra-
 29082 ditional stories, though some speakers rather prefer the Periphrastic Narrative
 29083 construction (§21.5.1.8). Example (202) illustrates this narrative function, where
 29084 the succession of the verbs in the Inferential reflects the relative temporal order
 29085 of the actions. The choice of the Inferential rather than the Aorist here is moti-
 29086 vated by the fact that the fictional events described in these stories have not been
 29087 witnessed by the speaker.

- 29088 (202) *ta-zi nuu kuu nuuŋa uu-ndži nuunu*
 INDEF.POSS-younger.sibling DEM ERG COW 3SG.POSS-skin DEM
 29089 *c^hy-ryydurt q^hendxre c^hy-tṣwβ. tcendyre nyki, ta-mar*
 IFR-peel.skin LNK IFR-sew LNK FILLER INDEF.POSS-butter
 29090 *tuu-tuyyja^β nuu to-ndo qhe, u-ŋguu nutcu*
 one-NMLZ:ACTION-churn DEM IFR-take LNK 3SG.POSS-inside DEM.LOC
 29091 *ko-zyy-mp^hur.*
 IFR-REFL-wrap
 29092 ‘The younger brother skinned the hide of the cow and sewed it. He took
 29093 one churnfull of butter, and wrapped himself inside (the hide).’
 29094 (07-deluge, 14-15)

29095 The Inferential Imperfective occurs for imperfective events and states in nar-
 29096 ratives (§21.5.3.2).

29097 In narratives told in the Inferential, the Aorist is restricted to temporal (§21.5.1.4)
 29098 and relative (§21.5.1.6) subordinate clauses.

29099 21.5.2.3 Inferential with first person

29100 The Inferential is not rare with first person subjects in assertive clauses, but has
 29101 specific meanings. With volitional verbs, this combination can be uttered when
 29102 a speaker notices that s/he forgot to do or did not properly do an action. For
 29103 instance, in (203), the speaker (Tshendzin) selects the Inferential when realizing
 29104 that she forgot to put the water to boil (see 192, §21.5.2.1 for a similar example).

- 29105 (203) *tuu-ci muu-to-suu-yla-t-a*
 INDEF.POSS-water NEG-IFR-CAUS-be.boiling-PST:TR-1SG
 29106 ‘I did not put the water to boil.’ (Conversation, 01-05-2018, Tshendzin)

29107 The Inferential with first person is also found when the speaker realizes a fact
 29108 that s/he had failed to notice or not fully understood before.

29109 For instance, in (204), Inferential 1SG *jnx-k-ytuy-a-ci* ‘I have met’ occurs in a
 29110 sentence uttered when the speaker has ascertained that the person he has met is
 29111 a Daoist master, after a long conversation.

- 29112 (204) *a-k^{hi} ma kuaki koŋla nuu jnx-k-ytuy-a-ci*
 1SG.POSS-luck LNK DEM.PROX real DEM IFR-PEG-meet-1SG-PEG
 29113 ‘I am lucky, I (finally) met a real (Daoist master).’ (150907
 29114 laoshandaoshi-zh, 37)

29115 Similarly, in (205), the speaker (a horse) uses the Inferential *jnx-k-yβzu-a-ci* ‘I
 29116 have become’ (as opposed to the Aorist *nuu-aβzu-a*) to express his sudden realiza-
 29117 tion that it has been tricked into becoming a domestic animal.

- 29118 (205) *turme yuu uu-ŋjɔB jnx-k-yβzu-a-ci*
 man GEN 3SG.POSS-servant IFR-PEG-become-1SG-PEG
 29119 ‘I have become a slave of the man.’ (aesop ma he lu-zh, 29)

29120 Example (206) illustrates the contrast between Aorist and Inferential with first
 29121 person subjects: the speaker did put the water on the oven, but forgot to open
 29122 the oven, hence the use of the Inferential for the second verb.

- 29123 (206) *tuu-ci kx-ta-t-a ri, <dian> muu-to-zwar-a*
 INDEF.POSS-water AOR-put-PST:TR-1SG LNK electricity NEG-IFR-burn-1SG
 29124 ‘I put the water (on the oven), but did not open the electricity.’
 29125 (Conversation, 04-05-2018, Tshendzin)

29126 The Inferential with first person can also be used when the speaker did the
 29127 action he intended but on the wrong object, as in (207), a sentence said after
 29128 Tshendzin realized (by looking into the pot) that she mistakenly warmed the
 29129 wrong pot (not the one containing nettles). Here *mts^halu* ‘nettle’ is focalized using
 29130 the copula *nui-maꝝ* (§22.5.3.2).

- 29131 (207) *mts^halu ko-yy-ndzam-a nui-maꝝ*
 nettle IFR-CAUS-be.warm-1SG SENS-not.be

29132 ‘It is not the nettles that I warmed.’ (Conversation, 07-05-2018,
 29133 Tshendzin)

29134 The Inferential with first person is particularly common with verbs expressing
 29135 uncontrollable and non-volitional actions, such as (208).

- 29136 (208) *kx-nuuzw^h ko-rdal-a*
 INF-sleep IFR-overshoot-1SG
 29137 ‘I overslept.’ (elicitation)

29138 The inferential does not however express by itself non-volitionality; the autive
 29139 prefix *-nu-* (§19.1.4) is used in conjunction with the inferential to insist on the
 29140 non-volitional character of a particular action, as in (209).

- 29141 (209) *jy-nur-jmaut-a*
 IFR-AUTO-forget-1SG
 29142 ‘I forgot.’ (many attestations)

29143 With non-volitional perception verbs such as *mto* ‘see’ and *mts^hym* ‘hear’, Infer-
 29144 ential first person negative can be employed to express failure to perceive (210)
 29145 (see also example 220, §21.5.3.2), or alternatively to state that the speaker has not
 29146 witnessed a fact of doubtful truthfulness (211).

- 29147 (210) *juufcuar a-<dianhua> jy-tu-lyt ri muu-pjy-mts^ham-a,*
 yesterday 1SG.POSS-telephone IFR-2-release LNK NEG-IFR-hear-1SG
 29148 *k^ha puu-a-ta tce*
 house PST.IPFV-PASS-put LNK
 29149 ‘Yesterday when you called (me) on the phone, I did not hear it, as (I was
 29150 away and) had left the phone at home.’ (conversation, 2015-06-18)
- 29151 (211) *nyzo kuu-fse a-ŋk^hor nuu muu-pjy-mto-t-a*
 2SG SBJ:PCP-be.like 1SG.POSS-subject DEM NEG-IFR-see-PST:TR-1SG
 29152 ‘I have never seen anyone like you among my subjects.’ (Smanmi 2003-2,
 29153 347)

29154 21.5.2.4 Change of state

29155 When used with stative verbs, the Inferential Perfective expresses change of state,
 29156 like the Aorist (§21.5.1.3) and the Imperfective (§21.2.6). In (212), *mpçyr* ‘be beau-
 29157 tiful’ thus means ‘become beautiful’ in the Inferential.

- 29158 (212) *myzui zo to-mpçyr*
 even.more EMPH IFR-be.beautiful

29159 ‘(The Phoenix) became even more beautiful than before.’ (150901
 29160 bainiaochaofeng-zh, 76)

29161 The verb *cʰa* ‘can’, which normally selects the DOWNWARDS orientation (§21.5.3.1)
 29162 to express both Imperfective Inferential/Past Imperfective (‘was able to do *X*’)
 29163 and Inferential/Aorist (‘succeeded in doing *X*’), has an inchoative meaning ‘be-
 29164 came able to do *X*’ when occurring with the UPWARDS orientation, as shown by
 29165 (213) (see also 17, §24.2.3.1).

- 29166 (213) *murmumbju u-pui numui [...] u-tuymaz ra*
 swallow 3SG.POSS-little.one DEM 3SG.POSS-wound PL
 29167 *to-mna tce, nu-nuqambumbjom to-cʰa.*
 IFR-be.better LNK IPFV-fly IFR-can
 ‘The swallow’s wounds got better, and it became able to fly.’ (150825
 29169 huluwa-zh, 44-45)

29170 21.5.2.5 Subordinate clauses

29171 The Inferential rarely appears in subordinate clauses, as in most contexts the con-
 29172 trast between Aorist and Inferential is neutralized, and only the former is attested.
 29173 In particular, in finite relative clauses, the Inferential is not found (§21.5.1.6).

29174 In complement clauses, the Inferential is only found when the verb of the main
 29175 clause is also in the Inferential, as in (214).

- 29176 (214) *nimawozyr nuu kui, [srummuu nuu pjy-ftul], [...] [rŋguu*
 ANTHR DEM ERG râkshasî DEM IFR-subdue boulder
 29177 *ky-kui-nyxtcyn ra pjy-ftul], tce icqʰa sruanmuu nuu yuu*
 AOR-SBJ:PCP-be.fierce PL IFR-subdue LNK FILLER râkshasî DEM GEN
 29178 *uu-kui-ra nuura [smynmimitobkucana ri*
 3SG.POSS-SBJ:PCP-be.needed DEM:PL ANTHR also

- 29179 *c-ko-nybdyn]* *pjy-cʰa*
 TRAL-IFR:EAST-invite IFR-can
 29180 ‘Nyima ’Odzer had subdued the râkshasî, subdued the magical boulders,
 29181 and also succeeded in inviting Smanmi Meto Koshana to the east, what
 29182 the râkshasî had requested. (2011-04-smanmi, 261-263)

29183 In this sentence, the scope of the verb *pjy-cʰa* is ambiguous: it could be re-
 29184 stricted to the last verb *c-ko-nybdyn*, but could also be understood as encompass-
 29185 ing the first two clauses (whose main verb is *pjy-ftul*).

29186 Examples of Inferential in the protasis of conditional constructions are pre-
 29187 sented in §25.2.1 (example 16).

29188 21.5.3 Past Imperfective and Inferential Imperfective

29189 21.5.3.1 Morphology

29190 The Past Imperfective and Inferential Imperfective are built exactly in the same
 29191 way as Aorist (§21.5.1.1) and Inferential Perfective (§21.5.2.1), but with the DOWN-
 29192 WARDS preverbs *pui-* and *pjy-* instead of the preverb corresponding to the intrinsic
 29193 lexicalized orientation, a peculiarity observed in most Gyalrong varieties (Y. Lin
 29194 2011). Thus, verbs selecting downwards as their intrinsic orientation present
 29195 syncretism between Aorist and Past Imperfective, and between Inferential and
 29196 Imperfective Inferential.

29197 For instance, the form *pui-rom* of the verb *rom* ‘be dry’, which selects the DOWN-
 29198 WARDS orientation, can either be interpreted as an Aorist ‘it became dry/when it
 29199 becomes dry’ (§21.5.1.1) or as a Past Imperfective ‘it was dry’.

29200 Another case of syncretism is provided by the modal verb *cʰa* ‘can’ which takes
 29201 the downwards orientation to express the meaning ‘succeed in doing X’ (where
 29202 X refer to the content of the complement clause), as the Inferential Perfective
 29203 *pjy-cʰa* in (215).

- 29204 (215) [zdum kui-ŋav *nui cʰy-sui-jyxt]* *pjy-cʰa*
 cloud SBJ:PCP-be.black DEM IFR:DOWNSTREAM-CAUSE-turn.back IFR-can
 29205 *nui-ŋu.*
 SENS-be
 29206 ‘He succeeded in making the black cloud turn back.’ (25-kAmYW, 70)

29207 When the verb of the complement clause is in the Imperfective, the same form
 29208 *pjy-cʰa* is rather an Inferential Imperfective, and means ‘s/he was able to do X’
 29209 instead, as in (216).

- 29210 (216) *c^huu-mxci-ndzi mu-pjy-c^ha-ndzi*
 IPFV-be.rich-DU NEG-IFR.IPFV-can-DU
 29211 ‘They were unable to become rich.’ (Divination, 7)

29212 In Japhug, not all verbs have Past and Inferential Imperfective forms. Only
 29213 stative verbs (including adjectives, existential verbs, copulas and passive verbs,
 29214 §18.1.1), some stative transitive verbs with (such as tropative verbs, §17.5.2) and
 29215 some atelic intransitive dynamic verbs (such as *rÿzi* ‘stay’) are compatible with
 29216 these two TAME categories in main clauses. Table 21.7 provides examples of
 29217 these three categories of verbs, with minimal pairs taken from the text corpus.

Table 21.7: Examples of contrast between Inferential Perfective and Im-
 perfective

Type	Inferential Perfective	Inferential Imperfective
Stative	<i>to-mpçrr</i> ‘s/he became beautiful’	<i>pjy-mpçrr</i> ‘s/he was beautiful’
Tropative	<i>jny-nx-mpçrr</i> ‘s/he found him/her/it beautiful’	<i>pjy-nx-mpçrr</i> ‘s/he was finding him/her/it beautiful’
Atelic dynamic	<i>ko-rÿzi</i> ‘s/he stayed (there)’	<i>pjy-rÿzi</i> ‘s/he was staying (there)’

29218 Atelic dynamic intransitive verbs include the following: some verbs of location
 29219 such as *rÿzi* ‘stay’, some modal verbs such *rga* ‘like’ and *c^ha* ‘can’, antipassive verbs
 29220 (§18.6.6) and also some verbs expressing activities requiring a certain amount of
 29221 time such as *tax* ‘weave’ or *rÿma* ‘work’.

29222 Like the Aorist and the Perfective Inferential, the Past and Inferential Imperfec-
 29223 tive require the past suffix *-t* in the 1/2→3 forms of open syllable stem transitive
 29224 verbs (§11.3, §21.1.3). However, since only very few transitive verbs are compati-
 29225 ble with these two categories, relevant examples such as (217) are very rare (see
 29226 also 226, §21.5.3.4).

- 29227 (217) *pui-nx-pe-t-a*
 PST.IPFV-TROP-be.good-PST:TR-1SG
 29228 ‘I used to like it.’ (elicited)

29229 Most transitive verbs need to take the progressive *asu-* prefix (§21.6.1) build
 29230 Past and Inferential Imperfective forms. The peg circumfix *k...-ci* is inserted be-

29231 tween the *pjy-* preverb and the progressive prefix (§11.4) in first and third person
 29232 forms (§21.5.2.1), as shown by (218). The past transitive suffix *-t* does not occur
 29233 with the progressive (§21.6.1).

- 29234 (218) *rgynmui nui kui li icq^ha <yuwang> nui*
 29235 old.woman DEM ERG again the.aforementioned net DEM
pjy-k-ysui-tsuiβ-ci
 29236 IFR.IPFV-PEG-PROG-SEW-PEG
 29237 ‘The old woman was sewing nets (like before).’ (140430 yufu he tade
 qizi-zh, 297)

29238 One context however where all verbs appear to be found without restriction in
 29239 the Past Imperfective is in the apodosis of counterfactual conditionals (§21.5.3.4).

29240 In other cases, the Periphrastic Past and Inferential Imperfective (§21.5.3.5) are
 29241 used instead.

29242 21.5.3.2 Main clauses

29243 In main clauses, the Past and Inferential Imperfective indicate a previous state or
 29244 habitual situation. For instance, in (219), the use of the Past Imperfective to refer
 29245 to the presence of warts (*pui-tu* ‘there used to be’ and *pui-dyn* ‘there were many’)
 29246 is necessary because of their subsequent disappearance, explicitly mentioned in
 29247 the following clauses.

- 29248 (219) *a-jas ri li kuukura ntsui pui-tu tce*
 29249 1SG.POSS-hand LOC again DEM.PROX:PL always PST.IPFV-exist LNK
pui-dyn. tceri nui ui-q^hu li icq^ha stu
 29250 PST.IPFV-be.many LNK DEM 3SG.POSS-after again FILLER MOST
kui-myku nui-kui-tos nui-nui-me q^he tce
 29251 SBJ:PCP-be.first AOR-SBJ:PCP-come.out AOR-AUTO-not.exist LNK LNK
jny-nui-me
 29252 IFR-AUTO-not.exist
 29253 ‘I had (warts) on my hand there, and there were a lot. But later, the
 29254 (wart) that had first come out disappeared by itself, and (the rest)
 disappeared.’ (24-pGArtsAG, 49-50)

29255 The Past and Inferential Imperfective also express an ongoing process in the
 29256 past, during which additional events have occurred, as in (220).

- 29257 (220) *juafcar k^hur-k^hro zo jo-tu^l-lyt ri mu^l-pj^l-mts^ham-a ma*
 yesterday EMPH~much EMPH IFR-2-release LNK NEG-IFR-hear-1SG LNK
 29258 *k^hamu pu^l-asur-βzu-a*
 cooking PST.IPFV-PROG-make-1SG
 29259 ‘Yesterday you called (me) many times (on the phone), but I did not hear
 29260 it, as I was cooking.’ (conversation, 14-12-2018)

29261 In combination with the Autive, the Past Imperfective can convey permansive
 29262 meaning (§19.1.5), as in (221).

- 29263 (221) *tc^heme nu^l-nu^lk^hya^l-t-a ri, mu^lj-p^hyn, tce*
 girl AOR-convince-PST:TR-1SG LNK NEG:SENS-be.efficient LNK
 29264 *pu^l-nu^l-y^lwu cti*
 PST.IPFV-AUTO-cry be.AFF:FACT
 29265 ‘I comforted the girl, but to no avail, she was still crying.’ (2003
 29266 rzantCWtWrme, 61)

29267 The Inferential Imperfective is the standard TAME category used in traditional
 29268 stories to describe states and ongoing actions, as illustrated by the chain of verbs
 29269 marked in red in (222). It is the counterpart of the Inferential Perfective in narra-
 29270 tive function (§21.5.2.2).

- 29271 (222) *prask^hay ci pj^l-tu q^he, prask^han u^l-ŋgwu nuatcu*
 cave INDEF IFR.IPFV-exist LNK cave 3SG.POSS-inside DEM:LOC
 29272 *pj^l-fsob. nu^l u^l-rkua nu^lra rcanu, li nykinu,*
 IFR.IPFV-be.bright DEM 3SG.POSS-side DEM:LOC UNEXP:FOC again FILLER
 29273 *si ra pj^l-k-yrŋi-ci zo. nykinu, munto^l kumny wuma*
 tree PL IFR.IPFV-PEG-be.green-PEG EMPH FILLER flower also really
 29274 *zo pj^l-d^hn, tce pj^l-sy-scit. [...] u^l-ŋgwu*
 EMPH IFR.IPFV-be.many LNK IFR.IPFV-PROP-be.happy 3SG.POSS-inside
 29275 *lo-ce ri, tce nuatcu rg^ltpu xsum kui, nyki, kumbryl*
 IFR:UPSTREAM-go LNK LNK DEM:LOC old.man three ERG FILLER chess
 29276 *pj^l-k-yrŋi-ci zo. nykinu, munto^l kumny wuma*
 IFR.IPFV-PEG-PROG-release-PL
 29277 ‘There was a cave. Inside the cave, there was light. Around it, the trees
 29278 were green, and there were many flowers, it was a very nice (place). (...)
 29279 He entered (the cave), and in there there were three old men playing
 29280 chess.’ (150902 qixian-zh, 111-118)

29281 21.5.3.3 Temporal clauses

29282 The Past Imperfective, like the Aorist (§21.5.1.4), is used in temporal subordinate
 29283 clauses. The clause in the Past Imperfective expresses an ongoing process in the
 29284 middle of which the event referred to in the main clause (in the Aorist or in the
 29285 Inferential Perfective) takes place, as illustrated by (223).

- 29286 (223) *wuma zo pur-asur-ndza-ndzi, pur-pe jamar zo tce*
 29287 really EMPH PST.IPFV-PROG-eat-DU PST.IPFV-be.good about EMPH LNK
tcendyre, nuunu, nyki, k^ha nuu yuu ui-kum to-njw
 29288 LNK DEM FILLER house DEM GEN 3SG.POSS-door IFR-ACaus:open
 29289 ‘While/Right at the moment when they were eating (the sweets) in big
 29290 quantity and were (enjoying it), the door of the house opened.’ (140507
 tangguowu-zh, 85-87)

29291 21.5.3.4 Apodosis

29292 The Past Imperfective is also used in the apodosis of counterfactual conditionals
 29293 (with an Irrealis in the protasis, §21.4.1.5), as shown by the form *pui-pe* in (224).

- 29294 (224) *nuunu muyzusapa nuu tceki nuu tce a-pui-y-ryt tce*
 29295 DEM TOPO DEM down DEM LOC IRR-IPFV-PASS-write LNK
pui-pe ma
 29296 PST.IPFV-be.good LNK
 29297 ‘It would have been better if (the name) *muyzusapa* had been written
 29298 down there (on a sheet of paper where many names of locations in the
 mountains had been written).’ (140522 Kamnyu zgo, 82)

29299 In this very restricted context, all verbs can have a Past Imperfective form.
 29300 For instance, *rpu* ‘bump into’ (§14.5.2), which normally selects the EASTWARDS
 29301 orientation (the preverb *k_y-* in 225), takes the *pui-* Past Imperfective preverb in
 29302 (226).

- 29303 (225) *ny-k^ha jy-ye-a ri, a-ku*
 29304 2SG.POSS-house AOR-come[II]-1SG LNK 1SG.POSS-head
k_y-nuu-rpu-t-a
 29305 AOR-AUTO-bump-PST:TR-1SG
 29306 ‘When I came to your house, I bumped my head (on the door frame).’
 (elicited)

- 29307 (226) *ny-k^ha* *jv-ye-a* *ri, a-ku* *pju-p^haβ-a*
 2SG.POSS-house AOR-come[II]-1SG LNK 1SG.POSS-head IPFV-lower-1SG
 29308 *a-pu-ŋu tce mu-pu-nu-rpu-t-a.*
 IRR-IPFV-be LNK NEG-PST.IPFV-AUTO-bump-PST:TR-1SG
 29309 ‘When I came to your house, if I had lowered my head, I wouldn’t have
 29310 bumped it (into the door frame).’ (elicited)

29311 The Inferential Imperfective is not attested in this construction.

29312 21.5.3.5 Periphrastic Past and Inferential Imperfective

29313 Only atelic verbs, in particular stative verbs, are compatible with Past Imperfective
 29314 and Inferential Imperfective (§21.5.3.1) in contexts other than the apodosis
 29315 of counterfactuals (§21.5.3.4).

29316 To express the meanings otherwise conveyed by the Past Imperfective with
 29317 telic verbs, two strategies are possible. First, the Progressive *asu-* makes all transitive
 29318 verbs compatible with these two tenses (§21.5.3.1, §21.6.1). Second, the Pe-
 29319 riphastic Past Imperfective and Inferential Imperfective, which combine the Im-
 29320 perfective form of the verb with the copula in the Past Imperfective *pu-ŋu* and
 29321 the Inferential Imperfective *pjy-ŋu*, respectively (§21.2.2). For instance, instead of
 29322 the incorrect form *†pjy-ndza* (Inferential Imperfective of the telic transitive verb
 29323 *ndza* ‘eat’), the periphrastic construction in (227) is used.

- 29324 (227) *tu-ndze pjy-ŋu*
 29325 IPFV-eat[III] IFR.IPFV-be
 ‘S/he/it used to eat it/was eating it.’ (many examples)

29326 Just in the same way as the Aorist can be combined with the Sensory copula
 29327 *jnu-ŋu* to build the Periphrastic Narrative (§21.5.1.8), the Past Imperfective with
 29328 *jnu-ŋu* expresses an Periphrastic Imperfective Narrative, with the same meaning
 29329 as the Inferential Imperfective. For instance, the construction in (228) is equiva-
 29330 lent to the Inferential Imperfective *pjy-taš* (IFR.IPFV-weave) ‘s/he was weaving’.

- 29331 (228) *tc^heme ci pu-taš jnu-ŋu*
 29332 girl INDEF PST.IPFV-weave SENS-be
 ‘A girl was weaving.’ (2003 tWxtsa, 29)

29333 21.5.4 Archaic form

29334 The archaic 3SG *k^hu-ti* ‘s/he said’ and 3PL *k^hu-ti-nu* ‘they said’ forms with the iso-
 29335 lated preverb *k^hu-*, are attested in a few occurrences in stories told by Tshendzin’s

29336 mother. They are glossed by Tshendzin with the Inferential forms 3SG→3 *to-ti* and
 29337 3PL→3 *to-ti-nu*, respectively.

29338 (229) “*cuu kuu nuu-tú-wy-mbi tx-ti ma my-jyy*”
 who ERG AOR-2-INV-give IMP-say apart.from NEG-be.possible:FACT
 29339 *k^huu-ti-nu*.
 ???-say-PL

29340 ‘Who gave this to you, you must tell us.’ (2003-kWBRA, 79)

29341 These forms are not found in texts by younger speakers. No other trace of this
 29342 preverb is found in Japhug. A possible origin for it would be the hearsay sentence
 29343 final particle *k^hi* (§10.4.3), which sometimes occur in the reported speech comple-
 29344 ments (§24.2.5.1) of the verb *ti* ‘say’, sometimes even in direct contact with the
 29345 stem of this verb as in (230), in its irregular preverbless inferential form (§21.3.1.4).

29346 (230) “*ny-kyχcyl ny-bruu nuu pjuu-tur-p^hut tce*
 2SG.POSS-top.of.head 2SG.POSS-horn DEM IPFV-2-take.off LNK
 29347 *ky-nuu-cee jnuu-k^huu k^hi” ti jnuu-ŋu*
 INF-AUTO-go SENS-be.possible SFP say:FACT SENS-be
 29348 ‘He said: “If you remove the horn on the top of your head, it will be
 29349 possible for you to go wherever you want.”’ (divination 2005,101)

29350 The preverb *k^huu-* would thus result from the procliticization and eventual ab-
 29351 sorption of a sentence final particle from a preceding clause into the verbal word,
 29352 a scenario similar to that proposed for the Apprehensive *cuu-* (§21.7.1.3). If this hy-
 29353 pothesis is correct, the form *k^huu-ti* may not be the residual form from an ancient
 29354 paradigm, but rather an unsuccessful Japhug innovation that has eventually died
 29355 out.

29356 21.6 Secondary Aspectual categories

29357 There are two secondary aspectual prefixes in Japhug, the Progressive (§21.6.1)
 29358 and the Proximate (§21.6.2). They can be combined with several primary TAME
 29359 categories, but cannot occur together in the same verb form.

29360 21.6.1 Progressive

29361 21.6.1.1 Morphology

29362 The Progressive prefix *asu-* is located in slot -1 of the outer prefical template
 29363 (§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-*, *-yz-* 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 *nyjo* ‘wait’ in Table 21.8. The disyllabic allomorphs *asu-*, *-ysuu-* and *-osuu-* are found in all other contexts (illustrated with the monosyllabic *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>ysuu-</i>	Sensory	<i>jnu-ysuu-ndza</i> SENS-PROG-eat
	Inferential	<i>pjy-k-ysuu-ndza-ci</i> IFR.IPFV-PEG-PROG-eat-PEG
<i>yz-</i>	Sensory	<i>jnu-yz-nyjo</i> SENS-PROG-wait
	Inferential	<i>pjy-k-yz-nyjo-ci</i> IFR.IPFV-PEG-PROG-wait-PEG
<i>osuu-</i>	Egophoric Present	<i>ku-osuu-ndza-a</i> PRS-PROG-eat-1SG
<i>oz-</i>	Egophoric Present	<i>ku-oz-nyjo-a</i> PRS-PROG-wait-1SG

The vocalism of this prefix follows the same alternations as the initial *a-* of

29375 contracting verbs (§12.3).

29376 The *asuu-/az-* allomorphs are found in word-initial position, in first or third
 29377 person Factual Non-Past (see for instance 240), following the Past Imperfective
 29378 *pui-*, with the negative *mr-* and the Rhetorical Interrogative *wþrr-* (§21.7.3, *wþrr-*
 29379 *asuu-ndo* RH.Q-PROG-take:FACT ‘it does not have (this colour), does it?’).

29380 The *-osuu-/oz-* allomorphs are restricted to Egophoric Present forms with the
 29381 prefix *ku-* (§21.3.3.1).

29382 The *-ysuu-/yz-* allomorphs are the most common, attested with the Sensory
 29383 *jnu-*, with the peg circumfix (§11.4, in Inferential Imperfective form) and also in
 29384 the Irrealis Imperfective with the preverb *pui-* (for instance *a-pui-ysuu-ndo* IRR-
 29385 IPFV-PROG-take ‘may it have (this colour?’).

29386 Like contracting verbs, the Progressive prefix selects the peg circumfix *ku-...-ci*
 29387 (§11.4) in the Inferential Imperfective (§21.5.3.1), as shown by the form *pjy-k-ysuu-*
 29388 *car-ci* ‘it was searching/looking for it’ in (231).

- 29389 (231) *suŋgw nautcu, nykinu, wuma zo spjaŋku kui-mtsur ci*
 forest DEM:LOC FILLER really EMPH wolf SBJ:PCP-be.hungry INDEF
 29390 *pjy-tu. teendyre numutcu u-kx-ndza aŋyndundyt*
 IFR.IPFV-exist LNK DEM:LOC 3SG.POSS-OBJ:PCP-eat everywhere
 29391 *pjy-k-ysuu-car-ci.*
 IFR.IPFV-PEG-PROG-search-PEG

29392 ‘In the forest, there was a wolf, and he was looking for food there
 29393 everywhere?’ (140428 xiaohongmao-zh, 29-30)

29394 The inverse (slot -1, §11.2.1) and the autive (inner prefix, §11.2.2) are *infixed*
 29395 within the progressive, as shown by (232) and (233) (see also 2 in §11.2.1, 8 in
 29396 §11.2.2 and 5 in §19.1.2).

- 29397 (232) *nua-tui-ý<wy>z-nuk^hramba*
 SENS-2-PROG<INV>-cheat
 29398 ‘S/he is cheating you.’ (elicited)

- 29399 (233) *u-ŋga c^hY-NGRA_B ldzYβldzYβ zo ri,*
 3SG.POSS-clothes IFR-ACAU_S:tear IDPH(II):in.shreds EMPH LNK
 29400 *nua-y<nui>sui-ŋga*
 SENS-PROG<AUTO>-wear
 29401 ‘His clothes are torn to shreds, but he is still wearing them.’ (elicited)

When both inverse and autive are combined with the Progressive, the *-su/z-*-element is removed, and only the first vowel of the Progressive remains, as in (234).

29407 An irregular allomorph -*ys*- is found in the Sensory Progressive *nuu-ys-tut* (SENS-
29408 PROG-say[II]) ‘s/he is saying/said’ of the verb *ti* ‘say’ (§21.3.2.1), a form also un-
29409 usual by the presence of Stem II.

Transitive verbs with the Progressive prefix lack some of the morphological exponents of transitivity (§14.3.1).

First, in Sensory, Egophoric, Irrealis and Factual, Stem III alternation does not occur in sg→3 configurations of alternating verbs (§12.2.2.2); for instance, the Progressive Sensory 3SG→3' of *ndza* ‘eat’ is *n̩nu-ṛsui-ndza* (SENS-PROG-eat) ‘s/he/it is eating it’ with Stem I, unlike the plain Sensory *n̩nu-ndze* which selects Stem III (see example 14, §21.2.2). Combining Stem III with the Progressive (something like †*n̩nu-ṛsui-ndze*) is categorically rejected by native speakers.

Second, the past *-t* suffix (§21.1.3) does not occur in 1/2SG→3 forms of Past Imperfective and Inferential Imperfective of verbs with the Progressive prefix. For instance, the 1SG→3SG form *pui-asu-βzu-a* (PST.IPFV-PROG-make-1SG) ‘I was making it’ (see for instance example 220, §21.5.3.2) lacks the *-t* suffix, and inserting it (*†pui-asu-βzu-t-a*) is not accepted by speakers.

Other exponents of transitivity, such as C-type preverbs (§14.3.2.2), subject participles (§16.1.1.1) and bare infinitives (§16.2.2) cannot be tested, due to the incompatibility of the Progressive with most non-Finite forms on the one hand, and the undetectability of the *pui-/pa-* contrast when followed by the vowel contracting *asu-*: the surface form /paswβzu/ ‘s/he/it is making it’ is equally analyzable as *pui-asu-βzu* (PST.IPFV-PROG-make) or as *pa-asu-βzu* (PST.IPFV:3→3'-PROG-make). The former analysis is adopted in this grammar.

The 1→2 *ta-* seems to be incompatible with the progressive. For instance, to express the meaning 'I am waiting for you', only the simple Egophoric Present *ku-ta-nyjo* (PRS-1→2-wait) is possible, the surface form /kutaznyjo/ can only be analyzed as a causative Imperfective *ku-ta-z-nyjo* (IPFV-1→2-CAUS-wait) 'I will have you wait for him', not as an Egophoric Progressive †*ku-ta-rz-nyjo*.

Other person configurations, including inverse mixed scenarios 3→1/2 (§14.3.2.1) and local scenario 2→1 (§14.3.2.3) can be elicited with the Progressive, as in (232) and (235), though no such examples have yet been found in the corpus.

- 29438 (235) *pua-kui-ysui-zgrob-a*
 SENS-2→1-PROG-attach-1SG
 29439 ‘You are attaching me.’ (elicited)

29440 21.6.1.2 Functions

29441 The Progressive indicates the non-telicity of the verbal action. It occurs in the
 29442 case of ongoing actions (including events be protracted for a long time period, as
 29443 in 236), and also habitual actions (237) (see also 98 and 94 in §21.3.3.4).

- 29444 (236) *sryz yuu juim ku-osui-car-i, lu χsui-xpa pua-ηke-j*
 prince GEN wife PRS-PROG-search-1PL year three-year PST.IPFV-walk-1PL
 29445 *pua-ra ri*
 PST.IPFV-be.needed LNK
 29446 ‘We are looking for the prince’s wife, we had to walk for three years.’
 29447 (2003sras, 58)
- 29448 (237) *akui <xianzhong> ri <chuzhong> ku-osui-βzjoz.*
 east district.school LOC junior.high.school PRS-PROG-learn
 29449 ‘She is reading junior high school at the district school.’ (14-siblings, 370)

29450 With the Factual and the Sensory, the Progressive precludes an imminent fu-
 29451 ture interpretation (§21.3.1.2). For instance *tui-mu asui-lst* in (238) means ‘(when)
 29452 it is raining’ (as part of general knowledge), while the corresponding plain Fac-
 29453 tual *tui-mu lrt* (239) is to be understood as ‘it will rain’.

- 29454 (238) *ma tṣye me nautcu tce, zdum lu-yi*
 LNK sun not.exist:FACT DEM:LOC LNK cloud IPFV:UPSTREAM-come
 29455 *ŋu tce, nu u-ŋgu nura, tui-mu*
 be:FACT LNK DEM 3SG.POSS-in DEM:PL INDEF.POSS-sky
 29456 *kui-xtci~xtci zo asui-lst tce tce numu*
 SBJ:PCP-EMPH~be.small EMPH PROG-release:FACT LNK LNK DEM
 29457 *βyŋrt̚hi wuma zo dyn.*
 mosquito really EMPH be.many:FACT
 29458 ‘When the sun has not appeared (yet, in the morning), when clouds
 29459 come, and there is a little rain, the mosquitoes are particularly many.’
 29460 (25-RmArYWG, 38-39)

- 29461 (239) *nunu qapryŋar kuu zdum tu-tcxt* *ŋu* *tce tu-muu*
DEM TOPO ERG cloud IPFV-take.out be:FACT LNK INDEF.POSS-sky
29462 *lxt* *tu-ti-nuu* *ŋgryl*
release:FACT IPFV-say-PL be.usually.the.case:FACT
29463 ‘(The snake from) Qaprangar is releasing clouds, and it will rain.’ (140522
29464 Kamnyu zgo-zh, 335)

29465 The verb *ndo* ‘take’ requires the Progressive in all its finite forms in the stative
29466 collocation *wi-mdor*+*ndo* ‘have the colour of’, as in (240) (†*wi-mdor ndym* is not
29467 attested).

- 29468 (240) *kuki wi-mdor zo asui-ndo.*
DEM.PROX 3SG.POSS-colour EMPH PROG-take:FACT
29469 ‘It has this colour.’ (23-mbrAZim, 6)

29470 The Progressive makes transitive dynamic verbs compatible with the Past Im-
29471 perfective and Inferential Imperfective (§21.5.3.1). These forms can express previ-
29472 ous habitual actions (‘use to *X*’) that have ceased to occur, as in (241) and (243),
29473 or past ongoing actions (242).

- 29474 (241) *tce aŋyndundyt zo <dagong> ntsuu puu-asui-βzu tce*
LNK everywhere EMPH work.for.salary always PST.IPFV-PROG-make LNK
29475 *nrki, puu-nungra ntsuu ri, japa ri tce, [...]*
FILLER PST.IPFV-work.for.salary always LNK last.year LOC LNK
29476 *<kaoshi> puu-cʰa*
examination AOR-can
29477 ‘She used to do migrant work everywhere, but last year (...) she
29478 succeeded in the exam (to become a civil servant).’ (12-BzaNsa, 77)

- 29479 (242) *azo kuukure ri juryi puu-asui-rtor-a cti tce, maka*
1SG DEM:LOC LOC book PST.IPFV-PROG-look-1SG be.AFF:FACT LNK at.all
29480 *puu-mto-t-a maka me*
AOR-see-PST:TR-1SG at.all not.exist:FACT
29481 ‘I was here reading books, I did not see anything.’ (150901 dongguo
29482 xiansheng he lang-zh, 60-61)

29483 Example (243) illustrates the tense contrast between the Progressive Past Im-
29484 perfective *puu-asui-ndza-a* ‘I was eating/used to eat it’ (previous habitual) and the
29485 Progressive Egophoric Present *ku-osuu-ndza-a* ‘I am eating it’ (present habitual).

- 29486 (243) *woja nuu cuŋgu kumab smvn, numuu kur-fse*
 INTERJ DEM before other medicine DEM SBJ:PCP-be.like
 29487 <*gaipian*> *pui-tu numuu pui-asuu-ndza-a. tce nuu*
 calcium.tablet PST.IPFV-exist DEM PST.IPFV-PROG-eat-1SG LNK DEM
 29488 *t^hui-arco kɔv̥muuz ny, nyzo ky-tui-sui-yut nuu*
 AOR-be.finished.up only.then ADD 2SG aor:east-2-CAUS-bring DEM
 29489 *tu-ndze-a. nyzo ky-tui-suryut numuu, <*gaipian*>*
 IPFV-eat[III]-1SG 2SG aor:east-2-CAUS-bring DEM calcium.tablet
 29490 *pui-ŋu ye, tce nuu ku-osuu-ndza-a.*
 SENS-be SFP LNK DEM PRS-PROG-eat-1SG
 29491 ‘Before that I had another medicine, (another) calcium tablet like that,
 29492 and it was the one I was taking. I (started) taking the (medicine) you
 29493 have sent me when (the previous one) was finished up. The (medicine)
 29494 you have sent me, calcium tablet, I am taking it (now).’ (conversation
 29495 17-08-21)

29496 Temporal clauses with the Progressive and the relator noun *wu-ray* ‘the time
 29497 when, while’ can express simultaneity with the action of the main clause (§25.3.4.1).
 29498 In this construction, the verb can be in the Factual even when the main clause is
 29499 in the Aorist or the Inferential, as in (244).

- 29500 (244) *tce [tx-pytso ra kur az-nuurdor-nuu wu-ray] zo*
 LNK INDEF.POSS-child PL ERG PROG-collect:FACT-PL 3SG.POSS-time EMPH
 29501 *tce tcendyre, z̥ni daltsutsa jny-zyy-sui-yrq^hi-ndzi tce*
 LOC LNK 3DU slowly IFR-REFL-CAUS-be.far-DU LNK
 29502 ‘While the children were collecting (firewood, piece by piece), (their
 29503 parents) slowly moved away (from them).’ (160630 poucet1, 48)

29504 When the subordinate and the main clauses share the same subjects, the verb
 29505 with the Progressive prefix in the subordinate clause can express the manner of
 29506 the action of the main clauses, as in (245).

- 29507 (245) *a-tx-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
 29508 <*gongxun*> *kui izo ji-skvt nuu-ysuu-βzu tce,*
 ANTHR ERG 1PL 1PL.POSS-language SENS-PROG-make LNK
 29509 *‘ny-tx-lu c^ho ny-paxci tx-χtui-tci’ nuura*
 2SG.POSS-INDEF.POSS-milk COMIT 2SG.POSS-apple AOR-buy-1DU DEM:PL

29510 *nui-ti.*

SENS-say

29511 ‘They bought milk and apples for me, and Gong Xun (龚勋) said,
 29512 speaking in our language: ‘We bought milk and apples for you’
 29513 (conversation, 17-08-21)

21.6.1.3 History

29515 The Japhug Progressive prefix *asu-* is obviously related to the Tshobdun *psv-* ([Sun & Shidanluo 2002](#): 89) and the Zbu *psv-/psə-* ([Gong 2018](#): 199–201) progressive
 29516 prefixes, but no cognates are found in the rest of Gyalrongic, even in Situ. It is a
 29517 possible northern Gyalrong common innovation.

29519 As in Japhug, the Progressive *psv-* in Zbu and Tshobdun is incompatible with
 29520 Stem III and the past transitive -z suffix (cognate to Japhug -t, §[21.1.3](#)), but its
 29521 distribution is considerably more restricted. Zbu *psv-* is not compatible with ori-
 29522 entation preverbs and the inverse prefix; the allomorph *psə-* optionally occurs
 29523 with verbs taking the sigmatic causative prefix ([Gong 2018](#): 199–200).

29524 The infixability of the inverse and the autive prefixes within the Progressive in
 29525 Japhug (§[21.6.1.1](#)) is a clue that *asu-* and its cognates are etymologically composite,
 29526 comprising two elements *a-* and *-su-*. Possible candidates for the former include
 29527 the Passive (§[18.1](#)) and the Denominal *a-* (§[20.2.1](#)), and for the latter the oblique
 29528 participle *sv-* (§[16.1.3](#)) or the sigmatic causative *su-* (§[17.2](#)).

21.6.2 Proximative

29530 The Proximative *jui-*, located in slot -6 of the outer prefixal chain (§[11.2.1](#)), corre-
 29531 sponds to the Tshobdun *jə-* prefix (Prospective 前瞻体, [J. T.-S. Sun 2008](#): 142–143)
 29532 and the Zbu *jə-* or *wo-* prefixes (depending on the dialect, [Gong 2018](#): 9;201–202).

29533 It mainly appears in the corpus in combination with the Aorist ([246](#), [247](#)) or
 29534 the Inferential ([248](#), [249](#)) expressing that the action was almost realized, but not
 29535 completed. The adverb *zumi* ‘almost’ is commonly used together with the prox-
 29536 imitative, as in ([246](#)) and ([247](#)).

- 29537 (246) *wu-nmaš nui japandzi ri, wuma zo tʂ-ngo tce*
 3SG.POSS-husband DEM the.year.before LOC really EMPH AOR-be.ill LNK
 29538 *zumi zo jui-nui-si*
 almost EMPH PROXM-AOR-die
 29539 ‘Her husband became sick a few years ago, and almost died.’ (14-siblings,
 29540 356)

- 29541 (247) *zumi juu-pú-wy-sat-a.*
almost PROXM-AOR-INV-kill-1SG
29542 ‘He almost killed me.’ (150901 dongguo xiansheng he lang-zh, 139-141)
- 29543 (248) *uu-lu zo juu-pjy-cuu, tuu-mu kuu*
3SG.POSS-faint(1) EMPH PROXM-IFR-faint(2) NMLZ:ACTION-fear ERG
29544 ‘He almost fainted out of fear.’ (150909 hua pi-zh, 73)

29545 The non-realized action can be deemed undesirable (as in 246 to 248 above),
29546 but may also be an aim that the subject tried but failed to realize as in (249).

- 29547 (249) *χsui-txxur juu-ko-ce zo tce, tce tce, nuu ma*
three-turn PROXM-IFR:EAST-go EMPH LNK LNK LNK DEM apart.from
29548 *muu-jny-cʰa tce*
NEG-IFR-can LNK
29549 ‘He almost completed (was about to complete) the third lap, but could
29550 not (run) any more.’ (2003ras 110-111)

29551 The Proximative combined with the Factual Non-Past has the meaning ‘be
29552 about to do’. It is generally attested with a copula as in (250), like the Periphrastic
29553 Proximative (§21.6.2.1).

- 29554 (250) *juu-nuzaŋβ zo nuu-ŋu*
PROXM-sleep:FACT EMPH SENS-be
29555 ‘He is about to fall asleep.’ (elicited)

29556 With contracting verbs (§12.3) in the Factual Non-Past, the Proximative merges
29557 with the contracting vowel as /ja-/, as in (251).

- 29558 (251) *juu-atar-a zo nuu-ŋu*
PROXM-fall:FACT-1SG EMPH SENS-be
29559 ‘I am about to fall down.’ (elicited)

29560 This meaning is also found with participial forms, such as *juu-tu-kuu-wyrum* ‘(the
29561 one) which is about to become white’ in (252) (see also 92, §15.1.4.3).

- 29562 (252) *kuu-pyi ci konla zo zumi*
SBJ:PCP-be.grey INDEF completely EMPH almost
29563 *juu-tu-kuu-wyrum kuu-fse ci nuu-ŋu.*
PROXM-IPFV-SBJ:PCP-be.white SBJ:PCP-be.like INDEF SENS-be
29564 ‘It is grey, almost like it is about to become white.’ (24-ZmbrWpGa, 34)

29565 A more marginal meaning of the Proximate in subordinate clauses is ‘as soon
 29566 as’ (with completion of the verbal action), as in (253).

- 29567 (253) *ununuu ui-ndzuyu nunu a-puu-tu tce tcendyre, pya ra*
 DEM 3SG.POSS-resin DEM IRR-IPFV-exist LNK LNK bird PL
 29568 *jui-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
 29569 *pjui-ηgryl jui-ηju.*
 IPFV-be.usually.the.case SENS-be

29570 ‘If its resin appeared, birds would get stuck by it as soon as they land (on
 29571 the tree) and would die.’ (140427 yanzi yu niaolei-zh, 9)

21.6.2.1 Periphrastic proximative

29572 The Proximate is in competition with the Periphrastic Proximate constructions, which combines the Factual Non-Past with the 3SG copula in various TAME categories.

29573 With the Past Imperfective copula *pui-ηu* (254) or the Inferential Imperfective
 29574 *pjv-ηu* (255), the periphrastic construction means ‘was about to do *X*, almost/
 29575 nearly did *X*’.

- 29576 (254) *βduuxpa naχpu yuu ui-tcuu kuu a-tcuu sat pui-ηu*
 ANTHR ANTHR GEN 3SG.POSS-SON ERG 1SG.POSS-son kill:FACT PST.IPFV-be
 29577 *ri, jv-tur-sytuta-t tce*
 LNK IFR-2-separate-PST:TR LNK

29578 ‘The son of Klu gdugpa nagpo was about to kill (almost killed) my son,
 29579 but you separated them.’ (28-smAnmi, 280)

- 29580 (255) *cymuuyduu lxt pjv-ηu ri [...] jv-suiso tce*
 gun release:FACT IFR.IPFV-be LNK IFR-think LNK
 29581 ‘(The hunter) was about to shoot, but he thought ‘...’ (140428
 29582 xiaohongmao-zh, 145)

29583 The Aorist form *tr-ηu* occurs in the Periphrastic Proximate construction in
 29584 temporal clause to fix a point in time (§21.5.1.4), either in the past or in the future
 29585 as (256) ‘when *X* will be about to *Y*’.

21 Tense, aspect, modality and evidentiality

- 29589 (256) *nyzo ttú-wy-caβ* *tʂ-ɳu tce, azo kuu be nur*
2SG 2-INV-catch.up:FACT AOR-be LNK 1SG ERG left DEM
29590 *nur-ct^huz-a*
IPFV:WEST-turn.towards-1SG
29591 ‘When they will be about to catch up with you, I will turn my left (hand)
29592 in their direction. (2011-04-smanmi, 145)

29593 In the non-past, the Periphrastic Proximative selects the Sensory copula *nur-ɳu*
29594 and expresses imminent future ‘is about to X’ as in (257) and (258). With
29595 the copula in the Factual Non-Past, clear examples of proximative meaning are
29596 difficult to ascertain, as postverbal copulas have additional functions (§22.5.3).

- 29597 (257) *wo a-wymuu ra my-tur-yi-nur* *ut-ɳu ma,*
INTERJ 1SG.POSS-brother PL NEG-2-come:FACT-PL QU-be:FACT LNK
29598 *kuu-ndza nur-ɳu*
GENR:S/O-eat:FACT SENS-be
29599 ‘My brothers, aren’t you coming, (the râkshasî) is about to eat us!’
29600 (28-smAnmi, 399)

- 29601 (258) *sʂ-rŋgwa~rŋgwa kumy tui-kyrnoʂ* *nur-mtcur tce, “atar-a*
GER-lie.down also GENR.POSS-brain IPFV-turn LNK fall:FACT-1SG
29602 *nur-ɳu” ky-suiso zo ntc^hyr*
SENS-be INF-think EMPH appear:FACT
29603 ‘Even lying down, your head is dizzy, and it feels like you are about to
29604 fall down.’ (29-tAmtshAzkAkWndo, 57-58)

29605 21.7 Secondary Modal categories

29606 Secondary Modal categories include the Probabilitative (§21.7.2), Rhetorical Inter-
29607 rogative (§21.7.3) and Interrogative (§21.7.4) which can be combined with primary
29608 TAME categories, and the Apprehensive (§21.7.1), which presents morphological
29609 commonalities with the Aorist (§21.5.1.1).

29610 21.7.1 Apprehensive

29611 21.7.1.1 Morphology

29612 The Apprehensive prefix *ɳu-* presents a series of unique morphological properties
29613 in Japhug. It occupies the slot -3 of the outer prefixal chain (§11.2.1), the same as

29614 orientational preverbs (§15.1.1.1). It is the only finite TAME category apart from
 29615 the Factual Non-Past (§21.3.1) to lack orientation preverbs.

29616 On transitive verbs, the 3→3' direct form of the Apprehensive is *ca-*, with
 29617 a vowel alternation identical to that found with type C preverbs in the Aorist
 29618 (§14.3.2.2, §15.1.1.1, §21.1.1) as illustrated by the contrast between the intransitive
 29619 (Anticausative, §18.5.1) *cuu-ngruu* '(I am afraid that) it will break' and its coun-
 29620 terpart transitive *ca-nuu-qruu* '(I am afraid that) he will break it', with the same
 29621 vocalism as that on the preverb *ta-* prefix on the Aorist *ta-ndo* 's/he took it'.

- 29622 (259) a. *kuuki χcyl nuu-cti tce, nuu fse laxtcʰa*
 DEM.PROX glass SENS-be LNK DEM be.like:FACT thing
 29623 *u-ηguu cʰu-tu-rke tce*
 3SG.POSS-inside IPFV:DOWNSTREAM-2-put.in[III] LNK
 29624 *cuu-Ngruu kuu!*
 APPR-ACAU:break SFP
 29625 'This is (made of) glass, if you put it like that in something else, I am
 29626 afraid it will break.' (elicited)
 29627 b. *a-tcuu nuu kuu kʰutsa ta-ndo tce,*
 1SG.POSS-son DEM ERG bowl AOR:3→3'-take LNK
 29628 *ca-nuu-qruu kuu!*
 APPR:3→3'-AUTO-break SFP
 29629 'My son took the bowl, I am afraid that he will break it.' (elicited)

29630 This alternation is also found on transitive verbs with dummy transitive sub-
 29631 ject (§14.3.5), as in (260), showing that morphological transitivity, rather than
 29632 semantic factors, determine the vocalism of this prefix.

- 29633 (260) *tuu-muu ca-lxt kuu*
 INDEF.POSS-weather APPR:3→3'-release SFP
 29634 'I am afraid that it will rain.' (elicited)

29635 In addition, like the Aorist, it occurs with the 1/2SG→3 -t (§21.1.3) as in (261a),
 29636 and selects Stem II (§12.2.1) in the verbs that have an alternation between stem I
 29637 and II, such as the verb *ti* 'say' in (261b) and *ce* 'go' in (261c).

- 29638 (261) a. *nuu cuu-tuu-nyma-t kuu*
 DEM APPR-2-do-PST:TR SFP
 29639 'I am afraid that you will do that.' (elicited)

21 Tense, aspect, modality and evidentiality

Table 21.9 summarizes the morphological commonalities between Apprehensive and Aorist (as opposed to Imperfective, §21.2.1).

Table 21.9: Comparison of Apprehensive, Aorist and Imperfective forms

	Apprehensive	Aorist	Imperfective	Common feature
3SG→3'	<i>qa-lxt</i>	<i>pa-lxt</i>	<i>pjuu-lxt</i>	<i>a</i> vocalism
3SG→3'	<i>qa-nuu-qruu</i>	<i>pa-nuu-qruu</i>	<i>pjuu-nuu-qri</i>	<i>a</i> vocalism
2SG→3	<i>quu-tuu-tut</i>	<i>tx-tuu-tut</i>	<i>tu-tuu-ti</i>	Stem II
2SG→3	<i>quu-tuu-nyma-t</i>	<i>tx-tuu-nyma-t</i>	<i>tu-tuu-nyme</i>	-t

The Apprehensive is not only incompatible with all TAME markers, but also with associated motion prefixes (§15.2.1) and non-finite verb forms. On the other hand it appears with all person indexation markers (1sg in 263, 2sg in 262, 2sg→1sg in 265) and the negative prefix *mu-* (262 and 264).

- 29650 (262) [nyzo stxβts^hyt ci mu-çui-tui-c^ha] jui-susam-a tce,
 2SG contest INDEF NEG-APPREHENSIVE-2-can SENS-think[III]-1SG LNK
 29651 nuu jui-nuazduy-a wo
 DEM SENS-be.worried-1SG SFP
 29652 'I fear that you will not succeed in the contest, this is what I am worried
 29653 about.' (2003ras, 95)

29654 21.7.1.2 Functions

29655 The Apprehensive is used to indicate worry or even fear that the event referred
29656 to by the verb might happen. Several verbs with the meaning ‘fear’ exist in the
29657 language (in particular the Applicative verb *nuymu* ‘be afraid of’, §17.4), but none

29658 is a complement taking verb meaning ‘be afraid that *X*’.¹¹ The Rhetorical Inter-
 29659 rogative (§21.7.3) can have a meaning similar to that of the Apprehensive, but
 29660 conveying a milder degree of concern.

- 29661 (263) [cui-maq^hu-a kui zo] jy-suso-nuu tce rcanu, pcobzzi
 APPR-be.after-1SG SFP EMPH IFR-think LNK unexpectedly corner
 29662 kui^hde zo jo-yi-nuu.
 four EMPH IFR-come-PL

29663 ‘Fearing of being late (thinking ‘I am afraid that I will be late’), they
 29664 came from the four corners of the world.’ (150906 toutao, 19)

29665 The Apprehensive exclusively expresses the fear of the speaker, not that of the
 29666 agent, though in the case of reported speech this may be a person different from
 29667 the present speaker (as in 263).

29668 Despite its Aorist-like morphological features (§21.7.1.1), the Apprehensive is
 29669 exclusively refers to fear for a future event at the time of utterance; for instance,
 29670 (261c) above in cannot be interpreted as meaning ‘I am afraid that he may already
 29671 be gone.’ In complement clause with a matrix verb in the Aorist, it can however
 29672 refer to an event which has already happened ‘(I) was afraid that it might *X*’, as
 29673 in (264).

- 29674 (264) muu-cur-k^huu kui nuu-suso-t-a
 NEG-APPR-be.possible SFP AOR-think-PST:TR-1SG
 29675 ‘I thought it would not work.’ (conversation, 02-05-2018; after opening a
 29676 washing machine, expecting it would not open)

29677 The apprehensive prefix only occurs either in independent clauses with the
 29678 exclamative sentence final particle *kui* (265), and in reported speech with the
 29679 verb *suso* ‘think’ (264, 262, 263). It is strictly impossible in any other type of
 29680 complement clause.

- 29681 (265) cui-kui-mpca-a kui!
 APPREHENSIVE-2→1-scold-1SG SFP
 29682 ‘I am afraid that you will scold me.’ (elicited)

29683 It is possible to use the Apprehensive in clauses with precautioning or preven-
 29684 tive meanings (as in 259 and 263), but it is not the usual way of expressing these
 29685 meanings in the language (§25.5.6).

¹¹ The clause *cui-maq^hu-a kui zo jy-suso-nuu* in (263) creatively translates the Chinese expression 争先恐后 <zhēngxiānkǒnghòu> ‘vie with each other in order to’.

29686 21.7.1.3 Historical origin

29687 The Apprehensive *çuu-* is superficially similar to the translocative associated motion prefix *çuu-*, which is grammaticalized from the verb *çe* ‘go’ (§15.2.1.2), but the
 29688 two prefixes do not occupy the same prefical slot (-3 vs. -4, §11.2.1) and do not
 29689 share the same morphological alternations, and are not semantically close. It is
 29690 unlikely that they are historical related.

29692 A possible origin for the apprehensive *çuu-* might be the alternative interrogative particle *çi* ‘whether ... or’ (§10.4.2), which can coordinate two clauses (the
 29693 second clause being the negative counterpart of the first one) to express hesitation
 29694 or worry that an action might not take place, as in (266) (see also 152,
 29695 §21.4.3.2).

- 29697 (266) *c^ha-a ci my-c^ha-a my-xsi, p_{yjk}^hu*
 29698 can:FACT-1SG QU NEG-can:FACT-1SG NEG-GENR:know:FACT still
 29699 *xtci-a cti*
 29700 be.small:FACT-1SG be.AFF:FACT
 29699 ‘I don’t know whether I will be able to do it, I am still young.’ (2010-09,
 29700 105-106)

29701 Although generally clause-final, the particle *çi* can be prosodically attached to
 29702 the second clause, and could have been absorbed into the verbal template (Lai
 29703 accepted describes similar processes in Khroskyabs). In this hypothesis, the Apprehensive was first grammaticalized in negative forms, with reordering of the
 29704 Apprehensive and of the Negative prefix (267), and the non-negative Apprehensive
 29705 forms were created by backformation.

- 29707 (267) *çi my-c^ha ⇒ *çuu-my-c^ha ⇒ muu-çuu-c^ha*
 29708 ‘(I don’t know) whether he (will be able to do it) or not be able to do it’
 29709 ⇒ ‘I worry that he might not be able to do it.’

29710 This idea should still be viewed as speculative, since it does not account for
 29711 the Aorist-like morphological features of the Apprehensive.

29712 The *a* vocalism of the Apprehensive prefix with 3→3' transitive forms is a clue
 29713 that the C-type preverbs in Japhug originate from the fusion of A-type preverbs
 29714 with an Aorist 3→3' **a* prefix (§15.1.1.3). Given the ability of the Aorist to refer
 29715 to future events in temporal clauses (§21.5.1.4), it is possible that in pre-Japhug
 29716 or proto-Gyalrong, there was a TAME category without preverb but taking stem
 29717 II and the 3→3' **a* prefix expressing perfective future tense, and that the grammaticalization
 29718 of *çi* as a prefix occurred on a form of this lost category.

29719 21.7.2 Probabilitative

29720 The Probabilitative prefix *umy-*, located in slot -6 of the outer prefixal template
 29721 (§11.2.1), is transparently grammaticalized from the combination of the Interrogative *w-* (§21.7.4) with the negative *my-* (§13.1.1). It is compatible with the Aorist
 29722 (268), the Imperfective (§21.7.2.2) and the Factual Non-Past (269), and has the
 29723 epistemic modality meaning ‘probably, presumably’.

29725 (268) *umy-jy-azyuat*

PROB-AOR-arrive

29726 ‘He probably has already arrived.’ (elicited)

29727 (269) *tci-tas nuna, tci-tas umy-pe*

1DU.POSS-MZ DEM 1DU.POSS-ON PROB-be.good:FACT

29728 ‘(Now that we have money), maybe our stepmother will treat us better.’
 29729 (140507 tangguowu-zh, 155)

29730 Although Probabilitative with Aorist (268) can be elicited, no such example
 29731 is attested in the corpus. Instead, a periphrastic construction with the Factual
 29732 Probabilitative form of the copula *umy-ju* ‘maybe it is’ combined with the Aorist
 29733 is found, as in (270).

29734 (270) *ny-ja ndzi-cki ty-tut-a ri,*

2SG.POSS-sister 3DU.POSS-DAT AOR:3→3'-say[II]-1SG LNK

29735 *mui-ta-tut-ndzi umy-ju ma*

NEG-AOR:3→3'-say[II]-DU PROB-be:FACT SFP

29736 ‘I have told it to your two elder sisters, but they presumably have not
 29737 told (your parents) about it (since they have not given any answer).’
 29738 (2014-kWLAG, 106)

29739 When the speaker hesitates in his degree of confidence regarding a particular
 29740 statement, s/he can alternate between the Factual copula *ju* and the Probabilita-
 29741 tive form *umy-ju* ‘maybe it is’, as in (271).

29742 (271) *cyr tce tu-mbri tce, “qaqaqaqa” tu-ti ju tce nuna*

night LOC IPFV-cry LNK INTERJ IPFV-say be:FACT LNK DEM

29743 *pγyplas ju. “pγyplas ju” tu-ti-nui, ju tce*

pheasant be:FACT pheasant be:FACT IPFV-say-PL be:FACT LNK

- 29744 *umy-ŋu* *ma* *my-xsi* *matci cyr* *ndyre*
 PROB-be:FACT LNK NEG-GENR:know:FACT LNK night LOC
 29745 *mitj-sy-mto* *tce.*
 NEG:SENS-PROP-see LNK
 29746 ‘It sings at night, it makes the sound *qaqaqaqa*, that is the pheasant
 29747 *Pucrasia macrolopha*. They say it is the *Pucrasia macrolopha*, maybe it is,
 29748 we don’t know, in the night it is not visible.’ (23-pGAYaR, 8-11)

29749 The Probabilitative prefix is not compatible with negative prefixes or negative
 29750 copulas: forms such as *†umy-maz* (intended meaning ‘maybe it is not’) are incor-
 29751 rect. To express the meaning ‘maybe not *X*’, the Rhetorical Interrogative *uβrr-*
 29752 with peg circumfix occurs instead (§21.7.3.3).

29753 **21.7.2.1 Possible modality with peg circumfix**

29754 The Probabilitative prefix can be combined with the peg circumfix (§11.4), with
 29755 an epistemic modality of substantial doubt ‘maybe’, as in (272).

- 29756 (272) *pya ra kuu tu-ndza-nuu umy-kui-ŋu-ci* *ma*
 bird PL ERG IPFV-eat-PL PROB-PEG-be-PEG LNK
 29757 ‘Maybe birds eat it.’ (17-thowum, 39)

29758 This form is compatible with verbs in the Sensory, as in (273); with the meaning
 29759 ‘it seems, it looks like’.

- 29760 (273) *alo* *tcu rgunba ci* *yŋzu* *umy-kui-ŋu-ci* *tce*
 upstream LOC temple INDEF exist:SENS PROB-PEG-be-PEG LNK
 29761 ‘It looks like there is a temple up there.’ (2003 Kunbzang, 229)

29762 **21.7.2.2 Probabilitative with Imperfective**

29763 The combination of the Probabilitative prefix with the Imperfective form (§21.2)
 29764 expresses optative modality ‘if only...’, as in (274) and (275).

- 29765 (274) *umy-c^hui-myči-a*
 PROB-IPFV-be.rich-1SG
 29766 ‘If only I could become rich!’ (elicited)

- 29767 (275) “*icqʰa rfxlpu u-tcw nūr umv-pjuu-mtam-a*”
 the.mentioned king 3SG.POSS-son DEM PROB-IPFV-see[III]-1SG
 29768 *ntsui pnu-susym pjy-ŋu.*
 always IPFV-think[III] IFR.IPFV-be
 29769 ‘She was thinking all the time: ‘If only I could see the prince!’ (150819
 29770 haidenver-zh, 154)

29771 This type of compound form is also attested however with the expected com-
 29772 positional meaning ‘it will probably be’, as in (276b).

- 29773 (276) a. “*nūr-kʰi ye” ti qʰe,*
 3PL.POSS-luck SFP say:FACT LNK
 29774 ‘She said: ‘They are so lucky.’ (to have so many cattle).’
 b. “*tciŋy uumv-pjuu-ŋu nx ly-yi wo!” ntsui*
 1DU:GEN PROB-IPFV-be ADD IMP:UPSTREAM-come always SFP
 29775 *tu-ti pnu-ŋu nūr-ŋu.*
 IPFV-say PST.IPFV-be SENS-be
 29776 ‘He said each time: ‘Maybe (these cattle) will be ours, come.’ (2005
 29777 Kunbzang, 193-195)

29779 21.7.3 Rhetorical interrogative

29780 21.7.3.1 Morphology

29781 The Rhetorical Interrogative prefix *uβry-*, located in slot -6 of the outer prefixal
 29782 template (§11.2.1), mainly occurs with verbs in the Factual Non-Past (277) in the
 29783 corpus, but forms with the Aorist (278) or the Imperfective are also attested. It is
 29784 not compatible with negative prefixes.

- 29785 (277) *rcañu mti pjuruu vja zo t̪yrmekʰo pnu-ŋu*
 UNEXP:DEG turquoise coral completely EMPH floor PST.IPFV-be
 29786 *pnu-ŋu. ‘nūr a-mi pjua-te-a ri*
 SENS-be DEM 1SG.POSS-foot IPFV:DOWN-put[III]-1SG LNK
 29787 *uβry-sqlum ma’ na-suso pnu-ŋu*
 RH.Q-collapse:FACT SFP AOR:3→3'-think SENS-be
 29788 ‘The floor was all tiled with and turquoise and coral. She thought ‘If I
 29789 tread on it, it will not yield under my weight, will it?’ (2005 Kunbzang,
 29790 221)

- 29791 (278) *turmukʰa ny nua-βyo jɣ-azyut ny “joβ*
 evening ADD 3PL.POSS-FB AOR-arrive ADD INTERJ
 29792 *uβry-č-tu-tuit-nu?” ti nua-ŋu.*
 RH.Q-TRAL-AOR-2-say[II]-PL say:FACT SENS-be
 29793 ‘In the evening, their lama arrived and said: ‘You did not go and say *joβ*
 29794 (to the girl), did you?’ (2003kandZislama, 22)

29795 21.7.3.2 Functions

29796 The Rhetorical Interrogative has two main functions, both in the form of negative
 29797 rhetorical questions.

29798 First, it expresses concern on part of the speaker that the action described
 29799 by the verb might happen (279) or might have already happened (278 above),
 29800 depending on the TAME category of the verb. In this function, it is frequently
 29801 combined with the sentence final particle *ma* (§10.4.4) as in (277) and (279).

- 29802 (279) “*a-tab nutcu, loŋbutcʰi nua uβry-yuŋgur ma*”
 1SG.POSS-ON DEM:LOC elephant DEM RH.Q-CISL-lie.down:FACT SFP
 29803 *nua-suŋsym tce, nua ntswi u-ky-nuzduy nua-ŋu*
 IPFV-think[III] LNK DEM always 3SG.POSS-OBJ:PCP-worry/about SENS-be
 29804 *kʰi*
 HEARSAY
 29805 ‘(The marmot)_i thinks: ‘The elephant_j won’t come and sleep on my
 29806 (hole), will it_j?’, this is what it_i worried about.’ (28-qapar, 48)

29807 In this use, *uβry-* normally carries a negative presupposition ‘it will not *X*, will
 29808 it?’. This negative meaning appears to be absent only in a handful of examples
 29809 such as (280), where *uβry-* is found with the final particle *ye*: in another version
 29810 of the story from which this example is taken, the corresponding quotation has
 29811 the verb *yi* ‘come’ in affirmative form without the Rhetorical Interrogative, and
 29812 instead the sentence final particle *tʰaj* (see 48, §21.3.1.2).

- 29813 (280) *a-mu, juŋymaur tce kʰu uβry-yi ye!*
 1SG.POSS-mother this.evening LNK tiger RH.Q-come:FACT SFP
 29814 ‘Mother, the tiger will come this evening (to eat us), isn’t?’ (X1-khu, 3)

29815 In this function, the prefix *uβry-* has some overlap with the Apprehensive
 29816 prefix *ču-* (§21.7.1.2), though the latter conveys a higher degree of worry.

29817 Second, the Rhetorical Interrogative occurs in interrogative clauses expressing
 29818 polite requests, as in (281).

- 29819 (281) *nvki nuu-tyni u-tab ky-ryt nuu*
DEM:MEDIAL 2PL.POSS-staff 3SG.POSS-on OBJ:PCP-write DEM
29820 *uþry-kuu-z-nymo-a-nuu?*
RH.Q-2→1-CAUS-watch-1SG-PL
29821 ‘You wouldn’t show me what is written on that staff of yours, would
29822 you?’ (2003sras, 61)

29823 This function is common in particular with the Rhetorical Interrogative form
29824 *uþry-jy* of the modal verb *jy* ‘be possible’ selecting a complement clause in the
29825 Imperfective, as in (282).¹²

- 29826 (282) *nuzo ra þsum nuu, [a-rzaþ c^huu-tuu-yi-nuu]*
2PL PL three DEM 1SG.POSS-wife IPFV:DOWNTSTREAM-2-come-PL
29827 *uþry-jy?*
RH.Q-be.possible:FACT
29828 ‘The three of you, would you come (to my palace and become) my
29829 wives?’ (Norzang 2005, 399)

29830 The prefix *uþry-* also occurs in polite inquiries about a person’s health, ex-
29831 pressing sincere concern about a possible illness as in (283).

- 29832 (283) *ny-kui-mjym uþry-ku-tu, ny-cq^he*
2SG.POSS-SBJ:PCP-hurt RH.Q-PRS-exist 2SG.POSS-cough
29833 *uþry-ku-t^huu?*
RH.Q-PRS-be.serious
29834 ‘You don’t have any disease (these days), have you? Your cough is not
29835 serious, is it?’ (conversation, 2016-03-20)

29836 A more marginal use of *uþry-* is found in (284), where it appears on two
29837 antonymic verbs linked by the adversative *ri* to express the meaning ‘if I don’t *X*,
29838 at least I will not *Y*.’ In another version of the story from which (284) is taken,
29839 the same meaning (285) is expressed by verbs in the negative Factual Non-Past
29840 with the sentence final particle *t^hay* (§10.4.4).

- 29841 (284) *p^hyn uþry-pjur-tu-a ri bduuy nuu*
be.efficient:FACT QU.R-IPFV-exist-1SG LNK harm:FACT DEM
29842 *uþry-pjui-tu-a tce ty-rca*
QU.R-IPFV-exist-1SG LNK INDEF.POSS-together

¹² The noun *a-rzaþ* ‘my wives’ in (282) is an essive adjunct (§8.1.7).

21 Tense, aspect, modality and evidentiality

- 29843 *c^huu-yi-a* *je*
 IPFV:DOWNSTREAM-come-1SG SFP
- 29844 ‘Even if I am of no use at least I will not do any harm, let me come
 29845 along!’ (X1-tWJo, 43)
- 29846 (285) *azo c^huu-yi-a* *je ma mx-p^han-a* *ny*
 1SG IPFV:DOWNSTREAM-come-1SG SFP LNK NEG:be.efficient:FACT-1SG ADD
 29847 *mx-^hdury-a* *t^haŋ ny*
 NEG-harm:FACT-1SG SFP SFP
- 29848 ‘Let me come along, (even) if I am of no use, I will not do any harm.’
 29849 (several occurrences)

21.7.3.3 Rhetorical Interrogative with peg circumfix

29851 The combination of the Rhetorical Interrogative with the peg circumfix (§11.4) is
 29852 not compositional. Despite the absence of any negative prefix (§13.1), it is the
 29853 negative counterpart (in functional terms) of the Probabilitative prefix (§21.7.2),
 29854 expressing the meaning ‘it looks like/seems that *X* is/does not’, as in (286)¹³ and
 29855 (287).

- 29856 (286) *k^hro uβry-kui-pe-ci*
 much RH.Q-PEG-be.good:FACT-PEG
 29857 ‘(What you are proposing) does not look nice (fair).’ (140506 nongfu he
 29858 mogui-zh, 69)
- 29859 (287) *ułonbutc^hi nui, uı-rme ra uβry-kui-tu-ci*
 elephant DEM 3SG.POSS-hair PL RH.Q-PEG-exist:FACT-PEG
 29860 ‘The elephant, it seems that it does not have hair (on its body).’
 29861 (19-RloNbutChi, 9)

21.7.3.4 Historical origin

29862 The prefix *uβry-* is probably related to the Tshobdun interrogative prefix *vré-* (Sun
 29863 & Blogros 2019: 397), though the two prefixes are not entirely similar: Tshobdun
 29864 *vré-* is monosyllabic, and the vowel *-e* (from earlier **a*) has not undergone reduc-
 29865 tion to *v* as could have been expected in the view of its Japhug cognate. The fact
 29866 that Japhug *uβry-* contains two syllables, and that it occurs in the left-most (-6)

¹³ In (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’.

slot of the verbal template suggests that it may have been grammaticalized relatively recently in comparison with other elements of the prefixal chain. In view of the formal differences between the two languages, one cannot exclude at this stage the possibility of independent grammaticalization, though the source is unclear.

Possible sources (from a formal point of view) could include the noun *w-βra* ‘his share’ (cognate to Tshobdun ó-vre) or the adverbial noun *w-βra* ‘it is X’s turn to...’ (§5.1.2.12). However, the semantic link between these meanings and that of the Rhetorical Interrogative is unclear.

29876 21.7.4 Interrogative

29877 21.7.4.1 Morphology

29878 The Interrogative *w-*, found in slot -6 of the outer prefixal template (§11.2.1), is a
 29879 stress-attracting prefix (§11.2.3). When attached to a monosyllabic base, like the
 29880 Factual Non-Past 3SG of monosyllabic stem verbs, the stress is on the Interroga-
 29881 tive prefix itself, as in *ú-jyy* ‘it is possible to’ (288) (see also 49, §21.3.1.3 above).

- 29882 (288) *kuki nwi-tar-kʰym ú-jyy*
 DEM.PROX IPFV-2-give[III] QU-be.possible:FACT
 29883 ‘Could you pass (me) this thing?’ (2003, conversation taRrdo)

29884 If the base is polysyllabic, the stress is on the second syllable just following
 29885 the Interrogative, whether this syllable is a prefix (289) or part of the verb stem
 29886 (290).

- 29887 (289) *nij w-tú-siuz?*
 2SG QU-2-know:FACT
 29888 ‘Do you know it?’ (19-GzW, 8)

- 29889 (290) *ki sakab w-rkui nutcu si w-yuzu?*
 DEM.PROX well 3SG.POSS-side DEM:LOC tree QU-exist:SENS
 29890 ‘Are there trees near this well?’ (140517 mogui de jing-zh, 100)

29891 When occurring in direct contact with the stem of a contracting verb (§12.3),
 29892 the Interrogative *w-* does not merge with the initial *a-*. Instead, an epenthetic *-j-*
 29893 is inserted between the prefix and the verb stem (see examples 4, §12.3 and 23,
 29894 §18.1.3).

29895 21.7.4.2 Functions

29896 The Interrogative prefix *wu-* has two main functions. First, it expresses a polar
 29897 question (as in 291a for instance), expecting an answer with the same verb in
 29898 affirmative or negative form (291b), a question studied in more detail in §21.1.4
 29899 and §21.3.3.2. An alternative way of marking polar questions is the sentence final
 29900 particle *ci* (§10.4.2).

- 29901 (291) a. *wortc^{hi} zo a-t^y-tui-t^he wú-jy^y?*
 please EMPH IRR-PFV-2-ask[III] QU-be.possible:FACT
 29902 ‘Can you ask it (for me)?’ (divination 2002, 45)
 29903 b. *jy^y, jy^y!*
 be.possible:FACT be.possible:FACT
 29904 ‘Yes, yes!’ (divination 2002, 46)

29905 Second, it occurs in the protasis of conditionals (§25.2.1) in free variation with
 29906 initial reduplication (§12.4.1.2). In this construction, the verb is generally followed
 29907 by the additive marker *ny*, as in (292).¹⁴

- 29908 (292) “*ny-nmas nui a-t^y-suisu*” *wi-nuú-tui-suisym ny, ku^ki*
 2SG.POSS-husband DEM IRR-PFV-live QU-SENS-2-think[III] ADD DEM.PROX
 29909 *t^y-ndze*
 IMP-eat[III]
 29910 ‘If you want your husband to live, eat this!’ (150909 hua pi-zh, 182)

29911 21.7.4.3 Historical perspectives

29912 Many languages of the Trans-Himalayan family, including Chinese, Tibetan and
 29913 Gyalrongic varieties, have vocalic prefixes marking polar interrogatives similar
 29914 to Japhug *wu-* (H. Sun 1995). However, it remains unclear whether these prefixes
 29915 reflect genuine common inheritance: in particular, although some Tibetan lan-
 29916 guages do have an interrogative prefix *e-*, it is not attested in Old Tibetan texts
 29917 (Hoshi 2012), and may therefore be an innovative feature. If this prefix is not
 29918 an archaic feature in Tibetan, the Japhug Interrogative *wu-* and its equivalent in
 29919 other Gyalrongic languages such as Khroskyabs *â-* (Lai 2017: 340) may be better
 29920 analyzed as borrowings from Amdo Tibetan.

¹⁴ The second person prefix *ny-* in (292) is a case of hybrid indirect speech (§24.2.5.2).

29921 21.8 Non-verbal TAME markers

29922 Verbal morphology and periphrastic constructions are not the only ways to en-
 29923 code TAME in Japhug. Three other grammatical categories contribute to mark
 29924 TAME.

29925 21.8.1 TAME adverbs

29926 Tense, aspect and modality can be expressed by primary aspectual adverbs such
 29927 as *pʂjkʰu* ‘still’, *zuruzyrri* ‘progressively’ or *ntsuu* ‘always’ (§22.2.1), time ordinals
 29928 (§7.5.2), temporal counted nouns (§7.5.1), time adverbs derived from nouns (§7.5.3)
 29929 and adverb of epistemic modality (§22.2.5).

29930 21.8.2 Sentence-final particles

29931 Many sentence final particles contribute to the expression of modality and evi-
 29932 dentiality. Some particles are dedicated markers: the hearsay particle *kʰi* (§10.4.3)
 29933 is specifically encodes evidentiality, *tʰap* indicates epistemic modality (§10.4.4)
 29934 and *je* has a hortative/imperative meaning (§10.4.1). Other particles such as *wo*
 29935 (§10.4.1) have meanings that are more difficult to describe exclusively in terms of
 29936 modality or evidentiality. No sentence final particle expresses tense or aspect.

29937 21.8.3 Nouns and the expression of modality

29938 Two nouns of Tibetan origin, *w-mdor* ‘colour’ and *smulym* ‘prayer’ occur sentence-
 29939 finally as modal markers. These sentence-final uses probably originate from
 29940 complement-taking nouns (§5.1.2.6) used predicatively (§22.3).

29941 21.8.3.1 The noun *w-mdor* ‘colour’

29942 The noun *w-mdor* ‘colour’, borrowed from Tibetan མດོ ཡོ མດོ ‘colour’, occurs with
 29943 the highly grammaticalized modal meaning ‘it looks like’, as in (293) and (294).

- 29944 (293) [w-myljajə n̩u, [...] kurcʂ-ldza jamar yyzu] w-mdor
 3SG.POSS-limb DEM eight-piece about exist:SENS 3SG.POSS-colour
 29945 ‘It looks like (the spider) has eight limbs.’ (26-mYaRmtsaR-48)

- 29946 (294) [icq^ha nua [kyntc^hwi-sŋi zo tu-ndza-nui]
the.aforementioned DEM several-day EMPH IPFV-eat-PL
29947 jui-rtaŋ] u-mdoi
SENS-be.enough 3SG.POSS-colour
29948 'It looks like (the meat in one of those) is enough (for the lions) to eat for
29949 several days.' (20-sWNgi, 58)

This construction occurs with the Sensory in the complement clause (§21.3.2) as in the examples above, or with the Inferential to express a past event/situation (see 22, §11.6.2). The combination of Inferential with *u-mdor* is semantically close to the Probabilitative with peg circumfix (§21.7.2.1, see also 15d, §11.4).

The denominal verb *numdor* ‘look like’ derived from this construction (§20.7.1) has the same meaning, but rather selects a subject participle in the complement clause as in (295), with subject coreference between the main clause and the complement (compare 295 and 296).

- 29958 (295) *χpuun kui-ts^hu nuu maka mui-nuu-mummu tce ku-nuu-ryzi*
 monk SBJ:PCP-be.fat DEM at.all NEG-IPFV-move LNK IPFV-AUTO-stay
 29959 *pjy-cti ma [kui-ce] mui-pjy-numdor.*
 IFR.IPFV-be.AFF LNK SBJ:PCP-go NEG-IFR.IPFV-look.like
 29960 ‘The fat monk was not moving and was staying, and did not look like he
 29961 was going (anywhere).’ (150830 san ge heshang-zh, 127)

29962 (296) *[kui-ce] nuu-tuu-numdor*
 SBJ:PCP-go SENS-2-look.like
 29963 ‘You look like you are going.’ (elicited)

The verb *numdoš* can alternatively take a noun phrase as semi-object, as in (297).

- 29966 (297) [turme ku-pe ci] *nua-nuimdor*
 person SBJ:PCP-be.good INDEF SENS-look.like
 29967 'He looks like someone nice.' (elicited)

29968 21.8.3.2 The noun *smulym* ‘prayer’

29969 The noun *smulym* ‘prayer’ (སୁଲ୍ୟମ) *smon.lam* ‘prayer’, ‘wish’) is grammaticalized as
29970 a quasi-sentence final particle, used in combination with the Irrealis (§21.4.1.2)
29971 to express a wish, as in (298). A similar construction has been documented in
29972 Tshobdun (J. T.-S. Sun 2007b).

- 29973 (298) *tc^heme kui-mpcw~mpcyr ny-cya*
 girl SBJ:PCP-EMPH~be.beautiful 2SG.POSS-tooth/age
 29974 *kui-xtcw~xtci zo, turme ntsw tui-ndze*
 SBJ:PCP-EMPH~be.small EMPH people always 2-eat[III]:FACT
 29975 *my-kui-ra ci a-nuw-tui- γ βzu smulym*
 NEG-SBJ:PCP-be.needed INDEF IRR-PFV-2-become prayer
 29976 ‘May you become a very beautiful, nice and young girl who does not
 29977 have to eat humans.’ (Norbzang 2012, 328-329)

29978 It also occurs with the Factual Non-Past (299), and can have scope over several
 29979 clauses, comprising both verbs in the Factual Non-Past and the Irrealis, as in
 29980 (300).

- 29981 (299) *nw t γ -nw-ndym tce tui-mxci smulym*
 DEM IMP-AUTO-take[III] LNK 2-be.rich:FACT prayer
 29982 ‘Take (these cattle and, and may you be rich!)’ (2003kAndzwsqhaj2, 142)
- 29983 (300) *nwzora kuny tui-scit-nw tce nw, nw-kui-m γ ym ra*
 2PL also 2-be.happy:FACT LNK DEM 2PL.POSS-SBJ:PCP-hurt PL
 29984 *a-pw-me smulym ny!*
 IRR-IPFV-not.exist prayer SFP
 29985 ‘May you be happy and be spared of any disease.’ (conversation,
 29986 15-01-02)

29987 The basic meaning of *smulym* is still attested in Japhug, as in (301), and its
 29988 sentence-final function is performative, and particularly common in formal prayers
 29989 and wishes.

- 29990 (301) *smulym nw na-ndum-nw ndxre, “ki u- γ yri nw*
 prayer DEM AOR:3→3'-read-PL LNK DEM.PROX 3SG.POSS-before DEM
 29991 *suistw zo kui- γ c^huic^ha, ki u- γ yri nw suistw*
 COMP EMPH SBJ:PCP-be.capable DEM.PROX 3SG.POSS-before DEM COMP
 29992 *zo kui-pe [...] a-nuw- β ze smulym”*
 EMPH SBJ:PCP-be.good IRR-PFV-make[III] prayer
 29993 *ta-tuit-nw*
 AOR:3→3'-say[II]-PL
 29994 ‘They recited the prayer, and said ‘May you become even stronger and
 29995 better than before.’ (Norbzang 2005, 410-412)

21 Tense, aspect, modality and evidentiality

29996 The noun *smulym* can be denominalized with the prefix *nu-* (§20.7.2) as the
29997 transitive complement-taking verb *nusmulym* ‘wish’, which is compatible with
29998 either infinitival complements or complement clauses in the Irrealis as in (302).

- 29999 (302) *nyzo a-t^hui-tui-myci juu-nuu-smulam-a*
 2SG IRR-PFV-2-be.rich SENS-DENOM-prayer-1SG
30000 ‘I wish that you become rich.’ (elicited)

22 Simple clauses

This chapter focuses on the syntax of simple clauses, that is clauses which do not involve multiclausal constructions.

Five topics are discussed: word order within the clause (§22.1), sentential adverbs (§22.2), verbless sentences (§22.3), noun-verb collocations (§22.4) and copulas (§22.5).

22.1 Word order

With a few exceptions (§22.3), Japhug sentences require a finite verb to be complete, while all other constituents are optional. The main verb is generally sentence-final: only a handful of words (§22.2.7) and dislocated constituents (§22.1.3), can occur after it.

22.1.1 Basic word order

This section describes the word order patterns involving verb and core arguments attested in the corpus (with the exception of right dislocation, §22.1.3) when all arguments are overt. The question of non-overt arguments is treated in §22.1.2, and the position of adverbials in §22.2.

22.1.1.1 Intransitive verbs

When overt, core arguments and adjuncts are located before the verb. In (1) for instance, the intransitive subject *wi-mu wi-wa ni* ‘his mother and his father’ (§9.2.2.2) in the dual is placed before the adverb *բայնա* ‘both’ and the main verb *յր-սի-նձի* ‘they_{du} died’. The dual suffix on the verb here indexes the number of the intransitive subject (§14.2.1.2).

- (1) [wi-mu wi-wa ni] բայնա յր-սի-նձի
3SG.POSS-mother 3SG.POSS-father du both IFR-die-DU
'His parents had both died.' (150828 donglang, 8)

30025 In the case of semi-transitive verbs (§14.2.3), which have two absolute arguments,
 30026 it is very rare to have both an overt intransitive subject and an overt
 30027 semi-object (except if the semi-object is a complement clause, see §24.3.2). The
 30028 semi-object can be follow (2) or precede (3) the subject, but in the second case
 30029 there is a pause, indicative of left dislocation.

- 30030 (2) *kukura <xuexiao> nui-rga-nu.*
 DEM.PROX:PL school SENS-like-PL
 30031 ‘Those (the children) like school.’ (conversation, 14-05-10)
- 30032 (3) *txci nui, pya ra nuist^{hi} my-rga-nu.*
 barley DEM bird PL that.much NEG-like:FACT-PL
 30033 ‘The barley, the birds don’t like it so much.’ (23-pGAYaR, 29)

30034 With intransitive verbs selecting a locative phrase (§14.2.4), the locative phrase
 30035 is generally located between the intransitive subject and the verb (4).

- 30036 (4) *[u-pi ni] tṣu kui-wxti nutcu jo-ce-ndzi*
 3SG.POSS-elder.sibling DU road SBJ:PCP-be.big DEM:LOC IFR-go-DU
 30037 ‘His two elder brothers went (along) the big road.’ (2003qachga, 45)

30038 However, it is possible to put the locative phrase before the subject, especially
 30039 when it refers to the source of the motion (§15.1.2.1), as in (5) and (6).

- 30040 (5) *tumunymk^ha nutcu [qro χsum] pjui-yi-nu*
 heaven DEM:LOC pigeon three IPFV:DOWN-come-PL
 30041 ‘(Every day), three pigeon came down from heaven.’ (02-deluge, 49)
- 30042 (6) *mts^hu yui u-ŋgur nutcu [mts^hoŋlaŋ] to-nui-ɬob*
 lake GEN 3SG.POSS-in DEM:LOC water.monster IFR-AUTO-come.out
 30043 ‘A water monster came out of the lake.’ (2011-04-smanmi, 257)

30044 Likewise, the standard of comparison (marked by the postposition *syz*, §8.2.7)
 30045 can either precede or follow the intransitive subject (§26.2.1).

30046 Oblique phrases with the relator noun *u-taꝝ* ‘on, above’ selected by the main
 30047 verb (§8.3.4.3) are located between the intransitive subject and the verb, as in (7)
 30048 and (8).¹

¹ With the motion verb *ce* ‘go’, in (8) in stem II *ari*, *u-taꝝ* specifically indicates the means of transportation (§8.3.4.3).

- 30049 (7) *[u-yli nu] li ty-rvku u-tab wuma zo*
 3SG.POSS-dung DEM again INDEF.POSS-crop 3SG.POSS-on really EMPH
 30050 *pe*
 be.good:FACT
 30051 ‘Its dung is good (as fertilizer) for the crops.’ (05-qaZo, 95)
- 30052 (8) *tcendyre [zyni pya ni] zmbruu u-tab kx-ari-ndzi nu-ŋu.*
 lnk 3DU bird DU boat 3SG.POSS-on AOR:EAST-go[II] SENS-be
 30053 ‘The two of them (including the bird) departed on the boat.’ (Norbzang
 30054 2005, 231)

30055 Unlike intransitive subjects, essive adjuncts (§8.1.7) are closer to the verb than
 30056 oblique arguments, as shown by *turme* ‘person’ in (9), which is not an intransitive
 30057 subject (‘the people are nice to me’) but an essive phrase ‘as people’ (see also 18,
 30058 §8.1.7).

- 30059 (9) *tce <zhoujikong> tce myzuu li a-tab turme*
 LNK center.for.disease.control LNK even.more again 1SG.POSS-on person
 30060 *pe-nuu ma*
 be.good:FACT-PL LNK
 30061 ‘At the district center for disease control, they are also very nice to me (as
 30062 people).’ (140501 tshering skyid, 141)

30063 22.1.1.2 Monotransitive verbs

30064 When the main verb is transitive, the transitive subject (with the ergative post-
 30065 position, §8.2.2.1) is found before the direct object (in absolute form, §8.1.3), as
 30066 in (10).

- 30067 (10) *kui-yyrbaa nura kui qarts^baz ui-puu nuu pjy-mto-nuu*
 SBJ:PCP-hunt DEM:PL ERG deer 3SG.POSS-little DEM IFR-see-PL
 30068 ‘The hunters saw the little deer.’ (140429 jiedi-zh, 133)

30069 The object of a transitive verb only rarely precedes the subject, except for ob-
 30070 ject complement clauses (§24.3.1), and examples exhibiting this order are all an-
 30071 alyzable as left-dislocated topicalized constituents, as in (11).

22 Simple clauses

- 30072 (11) *a-tcui ji-rya ra nuu-mbala kuu*
 1SG.POSS-son 1PL.POSS-neighbour PL 3PL.POSS-OX ERG
 30073 *t^ha-nutsum tce nunuu u-kur-car*
 AOR:3→3-AUTO-take.away LNK DEM 3SG.POSS-SBJ:PCP-search
 30074 *ce-tci*
 go:FACT-1DU
 30075 ‘My son_i, the neighbour’s ox has taken him_i away, and we are looking for
 30076 him_i.’ (tWJo 2012, 42)

30077 In (12), the object *u-mp^huz nunuu* is topicalized, and in addition the ergative
 30078 phrase *txypyom kuu* is not a real agent.

- 30079 (12) *u-mp^huz nunuu txypyom kuu pjy-ndo*
 3SG.POSS-bottom DEM ice ERG IFR-take
 30080 ‘His (the leopard’s) bottom, it had been caught in the ice.’ (140427 qala, 37)

30081 The object-subject-verb order is however found to focalize the subject, to-
 30082 gether with a postverbal copula (§22.5.3.2) as in (13), where the transitive subject
 30083 *nunuu kuu* follows the object (Chunjie).

- 30084 (13) <chunjie> *nunuu kuu ja-nuu-tsuum ηu t^haŋ*
 ANTHR DEM ERG AOR:3→3'-VERT-take.away be:FACT SFP
 30085 ‘It is probably him who took away Chunjie.’ (150825 huluwa-zh, 118)

30086 Note that without intonation, (13) is ambiguous, as [<chunjie> *nunuu kuu*] could
 30087 also be analyzed as a single constituent (since personal names can optionally
 30088 take demonstrative determiners, §5.3.4), and in this case the translation of the
 30089 sentence would be ‘Chunjie probably took him.’ The above translation however
 30090 is the correct one in the context of the story.

30091 22.1.1.3 Secundative verbs

30092 The recipient (direct object) generally precedes the theme (semi-object) of se-
 30093 cundative verbs (§14.4.2) as in (14).

- 30094 (14) *u-zi tuumgo ny-mbi*
 3SG.POSS-younger.sibling food IFR-give
 30095 ‘He gave food to his younger brother.’ (nyima 2003-2, 31)

30096 In noun-verbs collocations where the verb is secundative such as *tuu-nuu+jts^{hi}*
 30097 ‘breastfeed’ as in (15), placing the recipient (*w-puu*) after the them (*tuu-nuu*) is never
 30098 attested.

- 30099 (15) *w-puu tuu-nuu jnu-jts^{hi} kuanz zo*
 30100 3SG.POSS-young INDEF.POSS-breast IPFV-give.to.drink also EMPH
 30101 ‘Even when (the monkey mother) breastfeeds her young one...’ (19-GzW,
 25)

30102 However, with the verb *mbi* ‘give’ there are examples of the opposite order as
 30103 in (16), where the theme (*qajyi ky-kuu-cke nuura* ‘pieces of bread that had burnt’)
 30104 precedes the recipient (*kua-lxy nuu* ‘the shepherd’).

- 30105 (16) *tc^heme nuu kuu qajyi ky-kuu-cke nuura kua-lxy nuu*
 30106 girl DEM ERG bread AOR-SBJ:PCP-burn DEM:pl SBJ:PCP-herd DEM
 30107 *na-mbi*
 30108 AOR:3→3'-give
 ‘The girl gave the shepherd pieces of bread that had burnt (to eat).’ (2003
 Kunbzang, 76)

30109 22.1.1.4 Causative verbs

30110 Causative verbs (§17.2) derived from plain intransitive verbs behave like mono-
 30111 transitive verbs (§22.1.1.2), but those derived from transitive (§14.4.3) or semi-
 30112 transitive (§14.4.4) verbs are ditransitive.

30113 Causative derivations from transitive verbs have a causee (§8.2.2.6), whose
 30114 syntactic status is intermediate between subject and object: it can be marked with
 30115 the ergative, but is indexed as if it were an object if it is first or second person
 30116 while the object is third person (§14.4.3). The causee in the ergative is normally
 30117 placed before the object (17), even when it serves as instrument (§17.2.5.8) as in
 30118 (18).

- 30119 (17) *wu-mbro kuu qapri tuu-rdo^s nuu pjy-z-ryteas*
 30120 3SG.POSS-horse ERG snake one-piece DEM IFR-CAUS-trample
 ‘He made his horse trample one of the (two) snakes.’ (smanmi 2003, 30)
- 30121 (18) *“zmbru-βfaj nunuu kuu c^ha nuu tú-wy-sui-cmi tce c^ha*
 30122 boat-oar DEM ERG alcohol DEM IPFV-INV-CAUS-mix LNK alcohol

22 Simple clauses

- 30122 *muum*" *tu-ti-nuu* *pui-ŋu* *ma*
be.tasty:FACT IPFV-say-PL PST.IPFV-be LNK
30123 'People used to say that if one mixes the alcohol (using) a boat oar, it is
30124 tasty.' (31-cha, 43-44)

30125 The object can be located before the causee, but it is always a left dislocated
30126 constituent, followed by a pause as *u-čnycz numu* 'its head/extremity' in (19).

- 30127 (19) *qandže yu*, (...) *u-cnyz* *numu*, *u-mtc^{hi}* *kua*
earthworm GEN 3SG.POSS-extremity DEM 3SG.POSS-mouth ERG
30128 *ku-su-nđym tce*
IPFV-CAUS-take[III] LNK
30129 '(The earthworm's head) extremity, (the crow) takes it with its beak.'
30130 (140511 qajdo, 3)

30131 In the case of causative verbs from semi-transitive verbs (§14.4.4), such as *syrmi*
30132 'give a name' (from *rmi* 'be called', §17.2.2.7), the direct object (the person to whom
30133 a name is given) is always located before the semi-object (the name given), as in
30134 (20).

- 30135 (20) *tce ndži-tcua nuu pimawozyr to-syrmi-nuu*
LNK 3DU.POSS-SON DEM ANTHR IFR-give.a.name-PL
30136 'They called their son Nyima 'Odzer.' (2011-05-nyima, 3)

30137 22.1.1.5 Indirective verbs

30138 Dative arguments (§8.3.1) of indirective verbs (§14.4.1) follow the transitive sub-
30139 ject as in (21):² there is not a single example of dative phrase preceding a transi-
30140 tive subject in the whole corpus.

- 30141 (21) *icq^{ha}* *numu* *ty-tcua* *nuu kua [u-mu*
the.mentioned DEM INDEF.POSS-SON DEM ERG 3SG.POSS-mother
30142 *nuu u-čki]* (...) *to-ti.*
DEM 3SG.POSS-DAT IFR-say
30143 'The boy said to his mother (...).' (2014-kWLAG, 437)

² For 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).

30144 Dative phrases can be located either after the theme or before it, as shown
 30145 by examples (22a) and (22b) redundantly describing the same action in the same
 30146 story.

- 30147 (22) a. <alading> *nua kuu, nykinuu, icq^ha* *t_xtsu nua*
 ANTHR DEM ERG FILLER the.aforementioned lamp DEM
 30148 [*uu-mu* *uu-cki]* *ny-k^ho tce,*
 3SG.POSS-mother 3SG.POSS-DAT IFR-give LNK
 30149 ‘Aladin gave the lamp to his mother.’ (140511 alading-zh, 165)
 30150 b. [*uu-mu* *uu-cki]* *t_xtsu nua ny-k^ho.*
 3SG.POSS-mother 3SG.POSS-DAT lamp DEM IFR-give
 30151 ‘He gave his mother the lamp.’ (140511 alading-zh, 167)

30152 The first pattern (object-dative) is rarer than the second one, but attested for
 30153 all indirective verbs, including verbs of speech, as in (23), where the reported
 30154 speech clause occurs before the dative phrase (compare with 21 above, the more
 30155 common pattern).

- 30156 (23) [*nua-kuu-lly* *lu-ce-a* *uu-nuá-pe*
 2DU.POSS-SBJ:PCP-herd IPFV:UPSTREAM-go-1SG QU-SENS-be.good
 30157 [*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
 30158 [*nua-ŋu*
 SENS-be
 30159 ‘He told the two elder (sisters) ‘Ask (your parents) whether it would be
 30160 appropriate for me to go herding (cattle) for you.’ (2003 Kunbzang, 68)

30161 Most oblique arguments also follow the subject and precede the object. It is
 30162 the case of the goal argument marked by the relator *uu-taꝝ* (§8.3.4.3) in (24).

- 30163 (24) *kuu-yyrbaꝝ kuu [pri uu-taꝝ]* *tudi to-lxt*
 SBJ:PCP-hunt ERG bear 3SG.POSS-on arrow IFR-release
 30164 ‘The hunter shot an arrow at the bear.’ (elicited)

30165 22.1.2 Overt and non-overt arguments

30166 Sentences with two or three overt arguments such as those discussed in §22.1.1
 30167 are a minority in Japhug. Most clauses comprise a verb with only one, or even
 30168 without any overt arguments.

30169 22.1.2.1 Core arguments

30170 Non-overt core arguments, including subjects and objects, are always definite,
 30171 and anaphorically refer to a previously mentioned entity. For instance, example
 30172 (25) with a bare verb necessarily means ‘S/he/it ate it’, and cannot be interpreted
 30173 as ‘S/he/it ate/had a meal’ with indefinite object or as ‘someone ate it’ with
 30174 indefinite subject.

- 30175 (25) *ta-ndza*
 AOR:3→3'-eat
 30176 ‘S/he/it ate it.’ (elicited)

30177 To express indefinite core arguments, non-overtness is an option only in the
 30178 case of labile verbs (§14.5.1), but requires the conversion of the verb to the intransitive
 30179 conjugation. Only a handful of verbs are labile (§14.5.1.1, §14.5.1.2), and for
 30180 the rest of the verbs either an indefinite pronoun (§6.6) or a valency-decreasing
 30181 derivation such as antipassive (§18.6), passive (§18.1) or proprietive (§18.8) must
 30182 be used instead.

30183 Semi-objects (§8.1.5), like objects, are interpreted as definite where non-overt,
 30184 as shown by (26) with the semi-transitive verb *βjyt* ‘get, obtain’ (§14.2.3, §19.7.3).

- 30185 (26) *tc^hemypui nuu kuu pjy-wy-nuisuuk^ho tce mur-pjy-βjyt.*
 girl DEM ERG IFR-INV-rob LNK NEG-IFR-obtain
 30186 ‘The girl had robbed him_i of it_j, he_i had not obtained it_j.’ (150829 taishan
 30187 zhi zhu-zh, 134)

30188 22.1.2.2 Oblique arguments

30189 Unlike core arguments, oblique arguments can be interpreted as indefinite when
 30190 non-overt. For instance, when motion verbs like *ce* ‘go’ and *yi* ‘come’ (§15.1.2.1),
 30191 lack both an overt goal and a purposive clause (§24.4.2.1), two different meanings
 30192 are possible. First, a previously mentioned goal can be understood as implicit as
 30193 in (27).

- 30194 (27) *qapri tu-ce ri muáj-c^ha tce*
 snake IPFV:UP-go also NEG:SENS-can LNK
 30195 ‘Snakes cannot go (up there in the chimney) either.’ (22-kumpGatCW, 70)

30196 Second, there is a minority³ of cases when no definite goal can be semantically

³ However, 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.

30197 recoverable, as in (28) where the two verbs *ku-ce* and *nui-yi* indicate back and forth
 30198 distributed motion, without any clear direction.

- 30199 (28) *wi-zda nui-car nui-suusym tce tcendyre, ki*
 30200 3SG.POSS-companion IPFV-search SENS-think LNK LNK DEM
kui-fse ku-ce ny nui-yi
 30201 INF:STAT-be.like IPFV:EAST-go ADD IPFV:west-come
 30202 (That ant) want to search for its companion, and goes here and fro like
 that.' (conversation 140501-01)

30203 Likewise, when the oblique argument of indirective verbs (§14.4.1, §22.1.1.5) is
 30204 non-overt, it can be interpreted as either definite or indefinite.

30205 For instance, the indirective collocation *tudi + lyt* 'shoot an arrow', which se-
 30206 lects an oblique argument (goal) in *wi-tar* (§8.3.4.3, see 24 above in §22.1.1.5), lacks
 30207 an overt oblique in (29). In this example, it is clear that the subject must have
 30208 aimed before shooting, and therefore that a covert definite oblique is implied, as
 30209 confirmed by the choice of a specific orientation 'towards east' rather than the
 30210 indefinite orientation preverb.

- 30211 (29) *nunuu xpun nuu kui tudi ci ko-lyt tcendyre icq'a,*
 30212 DEM monk DEM ERG arrow INDEF IFR:EAST-release LNK FILLER
qapri nuu yuu wi-rpas zo to-xtsuy
 30213 snake DEM GEN 3SG.POSS-shoulder EMPH IFR-hit
 30214 'The monk shot an arrow, and it hit the snake in the shoulder.' (150820
 qaprANar, 23)

30215 By contrast, in (30), also without overt goal, the command is to shoot arrows
 30216 without aiming, simply to see whose arrows will reach the farthest, as confirmed
 30217 by the choice of the indefinite orientation preverb. The absence of relator nominal
 30218 clause in *wi-tar* in this example is to be interpreted here as absence of goal.

- 30219 (30) *tudi jy-lyt-nuu*
 30220 arrow IMP-release-PL
 'Shoot arrows!' (elicited, based on a story)

30221 In (31), the verb of speech *ti* 'say' lacks an overt dative argument (§8.3.1), and
 30222 it is obvious in this context not only that there is no definite addressee, but that
 30223 there is no addressee at all, since *ti* here means 'utter (a sound)'.

- 30224 (31) *wi-tur-muictas zo pjy-ηu ri, jy-nycqa q^be,*
 3SG.POSS-NMLZ:DEG-be.cold EMPH IFR.IPFV-be LNK IFR-endure LNK
 30225 “*witc^hwitc^hwi*” *mu-to-ti*
 INTERJ NEG-IFR-say
 30226 ‘Although it was very cold, he (successfully) endured it, and did not say
 30227 ‘How cold!’’ (07-deluge, 73-74)

30228 To force a definite goal/addressee interpretation, the presence of an overt re-
 30229 lator noun with a 3SG prefix is necessary, as in (32).

- 30230 (32) a. *wi-tax tudi to-lyt*
 3SG.POSS-on arrow IFR-release
 30231 ‘S/he shot at it.’ (elicited)
 b. *wi-cki (...) to-ti*
 3SG.POSS-DAT reported.speech IFR-say
 30233 ‘S/he told (...) to him/her.’ (many examples)

30234 The difference between core vs. oblique arguments is therefore distinct from
 30235 the parameter of indexability (§14.2, §14.3): core arguments are those with oblig-
 30236 atory definite interpretation when non-overt, including (transitive and intransi-
 30237 tive) subjects, objects and semi-objects, while oblique arguments lack this prop-
 30238 erty.

30239 22.1.2.3 Focalization

30240 Focalized noun phrases are always overt, if limited to a demonstrative pronoun.
 30241 They can be formally indistinguishable from non-focalized ones even by intona-
 30242 tion, as the demonstrative *nu* in the last clause of example (33).

- 30243 (33) *mt^bumyr yui wi-zbron nunaui, tu-nu-iob jiu-ηu.*
 seal GEN 3SG.POSS-pattern DEM IPFV:UP-AUTO-come.out SENS-be
 30244 *tu-myrbur kui-fse jiu-ηu tce nu*
 IPFV-be.protuberant SBJ:PCP-be.like SENS-be LNK DEM
 30245 *my-naχtcuuy.*
 NEG-be.the.same:FACT
 30246 ‘The patterns on the seals (called *mt^bumyr*) are coming out, protuberant,
 30247 that is how they differ (from the other types of seals).’ (160706 thotsi, 67)

30248 Focalized first or second person referents require an overt pronoun to surface,
 30249 as in (34).

- 30250 (34) *nyzo ny-sni* *nu-nas* *ma azo a-sni*
 2SG 2SG.POSS-heart SENS-be.black LNK 1SG 1SG.POSS-heart
 30251 *muŋj-nas* *tce, tṇndzi wuma nuu nyzo nuu-tuu-ŋu ma azo*
 NEG:SENS-be.black LNK demon real DEM 2SG SENS-2-be LNK 1SG
 30252 *tṇndzi nuu-mas-a*
 demon SENS-not.be-1SG
 30253 ‘You are evil, not me, you are the real demon, not me.’ (2002 lhandzi, 12)

30254 There is no dearth of strategies to explicitly mark focus, including focus parti-
 30255 cles (§9.1.6), pseudo-cleft constructions (§23.6.1) and sentence-final copulas (§22.5.3.2).

30256 22.1.3 Right dislocation

30257 While word order is rigid in Japhug, and the verb is normally located after all
 30258 arguments and adjuncts (§22.1.1), left and right dislocation is attested, though
 30259 accompanied with a specific intonation.

30260 22.1.3.1 Dislocated constituents

30261 All arguments and adjuncts can be right dislocated, including transitive subjects
 30262 with ergative marking (35), possessor with genitive (§36), locative and time ad-
 30263 juncts (§37).

- 30264 (35) *sla tu-ngo* *ŋu tu-ti-nuu* *ŋu, kuruu ra kuu.*
 moon IPFV-be.sick be:FACT IPFV-say-PL be:FACT Tibetan PL ERG
 30265 ‘They say that moon is getting sick, the Tibetans.’ (29-mWBZi, 151)

- 30266 (36) *nuu ma* *wi-muŋtob* *ky-mto mage,* *turgi yuu.*
 DEM apart.from 3SG.POSS-flower INF-see not.exist:SENS fir GEN
 30267 ‘Apart from that it has no flowers, the fir.’ (08-tWrgi, 73)

30268 Sentential adverbs (§22.2) also undergo dislocation, as shown by (37) and (38).

- 30269 (37) *paχci ndyre pj-tu,* *kuičuiŋgwa*
 apples ADVERS IFR.IPFV-exist former.times
 30270 ‘(Unlike other fruits,) apples did exist (in our area), in former times.’
 30271 (07-paXCi, 4)

- 30272 (38) *clas zo ny-me,* *li.*
 IDPH(I):immediately EMPH IFR-not.exist again
 30273 ‘She suddenly disappeared, again.’ (150907 niexiaoqian-zh, 116)

Subordinate clauses can also be right-dislocated, for instance infinite complement clauses (example 42, §24.3), supine participial clauses (39) (§24.4.2.1) or concessive conditionals (40) (§25.2.3.1).

- (39) *tewχtsi kχ-ari-j, kua-nymjo*
 Cogtse AOR:EAST-go[II]-1SG SBJ:PCP-watch
 ‘We went to Cogtse, to do some sightseeing.’ (conversation, 2013)
- (40) *tu-mbri u-k^bwuk^ba u-bar nuu ki ntsuu*
 IPFV-make.noise 3SG.POSS-while 3SG.POSS-wing DEM DEM.PROX always
tu-ste nuu-ŋu, lχ-zo kuanx.
 IPFV-do.like[III] SENS-be AOR-land also
 ‘It does like this with its wings when it sings, even when it lands.’
 (23-RmWrcWftsa, 114)

In (41), the consequence clause *ŋmurtsuu nu syre* ‘The *Berchemia yunnanensis* is funny’ is right-dislocated together with the linker *ma* (here meaning ‘because’), while the causal clause (§25.5.2) serves as the main clause. This example provides evidence that the linker *ma* can form a syntactic constituent with the preceding clause, even though it is most often prosodically linked to the causal clause following it.

- (41) *yuijpa kui-fse nuare ri tce u-munton uu-lxt,*
 this.year SBJ:PCP-be.like DEM:LOC LOC LNK 3SG.POSS-flower IPFV-release
fsaq^be tce tce u-mat nuu-βze ŋu,
 next.year LOC LNK 3SG.POSS-fruit IPFV-grow[III] be:FACT
ŋmurtsuu nu syre ma.
 Berchemia.yunnanensis DEM be.funny:FACT LNK
 ‘The *Berchemia yunnanensis* is funny because it makes a flowers (there)
 this year, but its fruits grow the next year.’ (11-qarGW, 59)

The presence of a right dislocated constituent does not preclude an overt constituent with the same syntactic function in the main clause: for instance, in (42) the ergative phrase *tr-wa nu ku* ‘the father’ and the right-dislocated constituent *u-nmaa* *nu ku* ‘her husband’ refer to the same person, transitive subject of the sentence.

- 30299 (42) *wzo sr̥umma kur-ju nu tr-wa nu kuu mu-pjy-suχsyl,*
 3SG râkshasî SBJ:PCP-be DEM INF-father DEM ERG NEG-IFR-realize
 30300 **u-nmas** **nu kuu.**
 3SG.POSS-husband DEM ERG
 30301 ‘The father_i did not realize that she_j was a râkshasî, her_j husband_i.’
 30302 (28-smAnmi, 62)

30303 22.1.3.2 The functions of right dislocation

30304 Right dislocation in Japhug has three main functions, similar to those identified
 30305 by Honkasalo (2019: §13.7.2) in the Geshiza language.

30306 The main function of right dislocation is that of afterthought, used to identify a
 30307 referent that has not been mentioned previously (35), provide additional side com-
 30308 ments (38, 41), complementary information (37) or even redundant information
 30309 that can contribute to identify a referent (42).

30310 Right dislocation is also used to reactivate a constituent in discourse (Honkasalo
 30311 2019: §13.7.2), to avoid ambiguity with other referents. In (43) for instance, the ref-
 30312 erent *u-kʰa* ‘its house/shell’ is found more than twenty clauses after its previous
 30313 occurrence.

- 30314 (43) *tce numu nu-rko, u-kʰa nu.*
 LNK DEM SENS-be.hard 3SG.POSS-house DEM
 30315 ‘It is hard, its house (the shell of the snail).’ (26-tWcipaR, 76)

30316 Finally, right dislocation can serve to mark emphasis on a topical referent. In
 30317 (44) for instance, the noun *u-mylyjas* is both left- and right-dislocated, showing
 30318 that this instance is neither an afterthought nor a constituent reactivation.

- 30319 (44) *u-mylyjas nu, nu nu, kurc-y-ldzi jamar yyzu rca,*
 3SG.POSS-limb DEM DEM six-piece about exist:SENS UNEXP:FOC
 30320 **u-mylyjas nu.**
 3SG.POSS-limb DEM
 30321 ‘Its limbs, it has six ones, its limbs.’ (26-mYaRmtsaR, 47)

30322 In some cases, the exact function of right dislocation is ambiguous. In (39) for
 30323 instance, the purposive phrase could be emphasized by dislocation, but alterna-
 30324 tively it is also possible to interpret it as an afterthought.

22.2 Sentential adverbs

This section describes non-derived sentential adverbs, excluding those derived from nouns (§5.8), lexicalized conversbs (§16.6) ideophones (§10.1), but including adverbs with non-synchronously transparent etymology and loanwords from Tibetan.

22.2.1 Tense and aspect

Absolute tense is mainly expressed by time ordinals (§7.5.2) and other time adverbials derived from nouns (§7.5.3). There are in addition a few aspectual adverbs that are not transparently derived from nouns.

The adverb *pʂjk^hu* has a permansive meaning ‘still’ when used with a positive verb form (45).

- (45) *izo a-mu nua t^hamt^ham kurcysqaptuy t^hur-azyut ηu.*
 1PL 1SG.POSS-mother DEM now eighty.one AOR-arrive be:FACT
pʂjk^hu ji-paꝝ pjuw-nge c^ha.
 still 1PL.POSS-pig IPFV-feed[III] can:FACT
 ‘Our mother is now eighty-one years old, she can still feed our pigs.’
 (2010, 9.2, 16-17)

Contrary to what could have been expected, *pʂjk^hu* ‘still’ is only rarely used with a verb prefixed with the Autive in permansive function (§19.1.5). Examples like (46) with redundant marking of permansive aspect are attested but uncommon.

- (46) *mts^hoblaŋ nuna ꝑ pʂjk^hu maka zo pjy-n-nauzuβ*
 water.monster DEM still completely EMPH IPFV.IFR-AUTO-sleep
cti ma
 be.AFF:FACT LNK
 ‘The aquatic monster was still asleep.’ (140508 benling gaoqiang de si
 xiongdi-zh, 189)

With a negative predicate, *pʂjk^hu* means ‘not...yet’, as shown by (47) and (48).

- (47) *azo pʂjk^hu tua-sla mui-puu-tsua-a*
 1SG still one-month NEG-PST.IPFV-pass-1SG
 ‘It has not yet been a month since I have (come here).’ (2003 tWxtsa, 44)

- 30351 (48) *ma u-me kurny ynvsqamnuaz-pyrme t^hur-azyut, tce*
 LNK 3SG.POSS-daughter also twenty.eight.years.old AOR-arrive LNK
 30352 *nunu p^hjk^hu u-χti ra muu-na-car ma*
 DEM yet 3SG.POSS-companion PL NEG-AOR:3→3'-search LNK
 30353 'His daughter is twenty.years years old, but she does not yet have a
 30354 companion (husband).' (14-siblings, 317-218)

30355 This adverb is generally located before the object (examples 45, 48) but after
 30356 the intransitive subject (46, 47). It can also occur without a main verb, in combi-
 30357 nation with with the sentence final particle *je* (§10.4.1) as *p^hjk^hu je* 'wait', hence
 30358 the interjection *p^hk^hije* 'wait!' (§10.2.1) with irregular fusion.

30359 The reduplicated forms *zuruzzri* 'progressively' and the rarer *zvrzur*,⁴ are fre-
 30360 quent with gradable stative verbs to express a progressive change of state as in
 30361 (49), sometimes with incremental initial reduplication of the verb (§12.4.1.4).

- 30362 (49) *zuruzzri tce tce c^hu-yurni ηu.*
 progressively LNK LNK IPFV-be.red be:FACT
 30363 'It progressively becomes red.' (11-qarGW, 66)

30364 They are also found with dynamic verbs, in particular with temporal clauses
 30365 in *u-juja* 'along with' (§25.3.4.2) as in (50).

- 30366 (50) *tce t^hu-wxti u-juja ny, (...) kuu-wxti ra kuu*
 Lnk AOR-be.big 3SG.POSS-along ADD SBJ:PCP-be.big PL ERG
 30367 *nuu-ky-ndza, tc^hi tu-ndza-nuu kuu-ηu nuu zuruzzri tce*
 3PL.POSS-OBJ:PCP-eat what IPFV-eat-PL SBJ:PCP-be DEM progressively LNK
 30368 *nuu-mbi-nuu.*
 IPFV-give-PL
 30369 'As the child_j grows older, the adults_i progressively give (him/her)_j their_i
 30370 food, whatever it is they_i eat.' (140426 tApAtso kAnWBdaR, 38)

30371 The highly polyfunctional *ci*, whose functions range from the numeral 'one'
 30372 (§7.1.1) to various indefinite, partitive or non-identity markers (§6.6.1, §6.8, §6.7.2,
 30373 §9.1.4.1, §9.1.7), is used as an aspectual adverb 'once' as in (51) (see also for instance
 30374 141, §22.4.2.5).⁵ The attenuative adverb *ci* presumably derives from this meaning

⁴ It is possible that these forms are borrowed from *zor* 'incidentally', though the semantics is unclear.

⁵ Semelfactive meaning is however more often expressed with a sentential counted noun (§7.3.2.5) with the 'one' prefix (for instance *tu-y^hvn* 'one time').

30375 (§22.2.4).⁶

- 30376 (51) “*q^hihifi*” *ci ta-tuat nui-ŋu*
 INTERJ once AOR:3→3'-say[II] SENS-be
 30377 ‘He said *q^hihifi*.’ (2003 qachGa, 160)

30378 Its reduplicated form *ci ci* has the meaning ‘sometimes, in some cases’, often
 30379 repeated in two or more clauses in parataxis ‘sometimes *X*, sometimes *Y*’ as
 30380 in (52).⁷ In (52), *ci ci* combines with the Autive prefix in spontaneous function
 30381 (§19.1.4) to indicate the unpredictability of the alternative events.

- 30382 (52) *u-me mūtj-nuβdaš q^he tcendyre u-me*
 3SG.POSS-daughter NEG:SENS-take.care LNK LNK 3SG.POSS-daughter
 30383 *nui, nykinui, ci ci pjui-nui-mtsur, ci ci pjui-nui-fka*
 DEM FILLER one one IPFV-AUTO-be.hungry one one IPFV-AUTO-be.full
 30384 ‘He did not take care of his daughter, and his daughter would sometimes
 30385 be hungry, sometimes have enough to eat.’ (17-lhazgron, 69-70)

30386 The adverb *li* means ‘again, like the previous time’ as in (53). It can be option-
 30387 ally followed by the additive *ny*.

- 30388 (53) *tcendyre li to-jyṛt tce, smynmimitoš kuçana c^ho li*
 LNK again IFR:UP-turn.around LNK ANTHR ANTHR COMIT again
 30389 *pjy-ruk^hycyl-ndzi.*
 IFR-discuss-DU
 30390 ‘He returned again (up there), and had again a discussion with Smanmi
 30391 Metog Koshana (as he had done previously).’ (28-smAnmi, 197)

30392 In combination with the adverbial *ci*, it can mean ‘one more, another one’ as
 30393 in (54) (like Chinese 再 <zài> ‘again’). Alternatively however, *ci* in context can
 30394 also be interpreted as an attenuative adverb (§22.2.4).

- 30395 (54) *ama u-tui-mpcyr nuu! li ci pur-fcxt!*
 INTERJ 3SG.POSS-NMLZ:DEG-be.beautiful SFP again once IMP-tell
 30396 ‘Wow, what a beautiful (story)! Tell (me) another one.’ (2005 tWJo, 40)

30397 The adverb *ntsui* ‘always’ is used as a temporal universal quantifier ‘all the time’
 30398 (55) or ‘every time’ as in (56), a function from which it has become a distributive

⁶ Chinese 一下 <yíxià> ‘one time, a little’ has a similar range of meanings.

⁷ See also 167 (§21.5.1.2) and 9 (§25.1.6) for representative examples of this adverbial locution.

30399 quantifier (§9.1.3.3). It is one of the few adverbs that can be used postverbally
 30400 (§22.2.7).

30401 (55) *wi-skxt mpcyr ma “qusput qusput” ntsuu tu-ti*
 3SG.POSS-voice be.beautiful:FACT LNK onomatopoeia always IPFV-say

30402 *ŋu.*

SENS-be

30403 ‘(The cuckoo) has a beautiful song, it says *qusput qusput* all the time.’

30404 (24-qro, 68)

30405 (56) *spikuku zo nuu ntsuu tu-ti juu-ŋu tce,*
 every.day EMPH DEM always IPFV-say SENS-be LNK

30406 ‘(The bird comes) everyday and says this every time.’ (2014-kWLAG, 510)

30407 In addition, *ntsuu* can indicate a repeated action ‘again and again’ as in (57),
 30408 where the repetition is also marked by the additive *nŋ* (§8.2.6).

30409 (57) “*wortcʰi nŋ wojyr, ma-tx-kui-ndza-a*” *ntsuu to-ti juu-ŋu.*
 please ADD please NEG-IMP-2→1-eat-1SG always IFR-say SENS-be

30410 ‘He said again and again ‘Please, don’t eat me.’ (140427 bianfu yu
 30411 huangshulang-zh, 11)

30412 Other temporal adverbs include *ɛlywur* ‘suddenly’ from Tibetan རྒྱଲྨྤྰ ཁ୍ଲୋ.ବୁର
 30413 ‘sudden’, used with Aorist or Inferential verb forms to express an abrupt change
 30414 of state (58), *toðde* ‘a moment’, which can also mean ‘suddenly’ (example 197,
 30415 §21.5.2.2), and also ‘in a moment’ referring to a future event (131, §21.4.2.2) or
 30416 ‘for a moment’ (59), and *içqʰa* ‘just now’⁸ (on which see also §9.1.5.2).

30417 (58) *maka pui-nŋbaŋ-i, ɛlywur zo wi-xtu*
 completely PST.IPFV-have.a.good.time-1PL suddenly EMPH 3SG.POSS-belly

30418 *tx-myrm tce puu-si cti*

AOR-hurt LNK AOR-die be.AFF:FACT

30419 ‘As we were having a party (in the mountain), his belly suddenly started
 30420 to ache, and he died.’ (Norbzang 2012, 368)

30421 (59) *kuure ri toðde ku-nuna-a.*
 DEM.PROX:LOC LOC a.moment PRS-rest-1SG

30422 ‘I am resting for a moment.’ (conversation 2019-09-16)

⁸ Its meaning is close to Chinese 刚才 <gāngcái> ‘just now, a moment ago’.

30423 **22.2.2 Quantification**

30424 This section presents adverbial quantifiers that are not temporal or aspectual
 30425 markers, as those are treated in the previous section (§22.2.1).

30426 **22.2.2.1 Universal quantifiers**

30427 The universal quantifiers *kysufse* ‘all’ and *lonba* ‘all’ can have scope over a single
 30428 noun phrase (§9.1.3.1). When following an intransitive subject or object in pre-
 30429 verbal position as in (60), it is not clear whether the scope of the quantifier is on
 30430 the preceding noun phrase or on the whole sentence.

- 30431 (60) *rgytpu rgynmuu ni kuu [kuuki tx-pxtso χsum ki]*
 old.man old.woman DU ERG DEM.PROX INDEF.POSS-child three DEM.PROX
 30432 *kysufse zo cʰy-yx-wxti-ndzi.*
 all EMPH IFR-CAUS-be.big-DU
 30433 ‘The old man and the old woman raised all these three children.’ (140514
 30434 huishuohua de niao-zh, 60)

30435 The postnominal *mutcʰimuruuz* ‘all kinds’ (§9.1.3.5) appears in (61) stranded
 30436 from the noun *tu-ŋga* ‘clothes’ by the unexpected/high degree marker *rca* (§26.1.1.4),
 30437 suggesting that it could be analyzed here as a sentential adverb.

- 30438 (61) *tu-ŋga rca mutcʰimuruuz cʰú-wy-βzu*
 INDEF.POSS-clothes UNEXP:FOC all.kinds IPFV-INV-make
 30439 *kʰuu*
 be.possible:FACT
 30440 ‘One can make all kinds of clothes (using it).’ (05-qaZo, 72)

30441 **22.2.2.2 Everywhere**

30442 The adverb *aʂyndundxt* ‘everywhere’ can be used on its own, but also together
 30443 with overt locative adjuncts (or goals); it can both precede (63) or follow it (62,
 30444 64).

- 30445 (62) *tu-ji uu-ŋgwu aʂyndundxt zo tu-łor*
 INDEF.POSS-field 3SG.POSS-in everywhere EMPH IPFV-come.out
 30446 *cti.*
 be.AFF:FACT
 30447 ‘It grows everywhere in the fields.’ (12-ndZiNgri., 159)

30448 Locative adjuncts used with *abvndundyt* often take the plural *ra* (§9.1.1.2) to
 30449 mark approximate location as in (63) and (64).

- 30450 (63) *abvndundyt sungu ra kumy tu-tob cti.*
 everywhere forest PL also IPFV-come.out be.AFF:FACT
 30451 ‘It also grows everywhere in the forest.’ (14-sWNgWJu, 147)
- 30452 (64) *abvndundyt zo k^ha ra c^hwi-rypui tur-ji ui-ngr ra*
 everywhere EMPH house PL IPFV-litter INDEF.POSS-field 3SG-inside PL
 30453 *c^hwi-rypui*
 IPFV-litter
 30454 ‘Mice have litter everywhere in the house, in the fields.’ (27-spjaNkW, 166)

30455 There are a few examples where *abvndundyt* is followed by the locative post-
 30456 position *ri* (§8.2.4.1) as (65) like a locative noun phrase. However, no sentences
 30457 with *abvndundyt* ‘everywhere’ as core argument (like ‘everywhere is quiet’) are
 30458 found in the corpus, indicating that it would be clumsy to analyze it as a pronoun
 30459 (§6.7.1).

- 30460 (65) *nufse zo abvndundyt ri tu-nnau-tob q^he, ui-zrym*
 like.that EMPH everywhere LOC IPFV-AUTO-come.out LNK 3SG.POSS-root
 30461 *nura kui-tu maje.*
 DEM:PL SBJ:PCP-exist not.exist:SENS
 30462 ‘It grows simply like that everywhere, it has no roots.’ (20-sWrna, 76)

30463 When *abvndundyt* ‘everywhere’ occurs under the scope of negation, it never
 30464 expresses the meaning ‘nowhere’, as shown by (66) and (67).

- 30465 (66) *stymku nura, tui-ci ui-rkuu nura tu ma*
 plain DEM:PL INDEF.POSS-water 3SG.POSS-side DEM:PL exist:FACT LNK
 30466 *abvndundyt st^hwci me*
 everywhere so.much not.exist:FACT
 30467 ‘It is found in plains, or next to rivers, but it is not found everywhere.’
 30468 (14-sWNgWJu, 53)
- 30469 (67) *tce cyr tce c^hwi-nui-tob-nui tce, abvndundyt*
 LNK night LNK IPFV:DOWNSTREAM-AUTO-come.out-PL LNK everywhere
 30470 *ju-ce-nui my-kui-k^huu*
 IPFV-go-PL NEG-SBJ:PCP-be.POSSIBLE
 30471 ‘(They make it) to prevent (animals) from coming out at night and going
 30472 everywhere.’ (150902 mkhoN, 21)

30473 The word *ŋotcujondyst* ‘everywhere’ is semantically very close to *abvndundyst*
 30474 ‘everywhere’ but rarer; it may also be translated as ‘in all kinds of places’. It
 30475 contains a partially reduplicated form of the interrogative pronoun *ŋotcu* ‘where’
 30476 (§6.5.4).

30477 (68) *ekryz u-ŋgwi tci juu-łob, turgi u-ŋgwi tci*
 oak 3SG.POSS-inside also SENS-come.out fir 3SG.POSS-inside also
 30478 *juu-łob, zmbri u-ŋgwi tci juu-łob, mbraj*
 SENS-come.out willow 3SG.POSS-inside also SENS-come.out red.birch
 30479 *u-ŋgwi tci juu-łob, tce s̥yku suŋgwi nura tci*
 3SG.POSS-inside also SENS-come.out LNK birch forest DEM:PL also
 30480 *juu-łob, tce ŋotcujondyst zo γyzu cti ri, stymku*
 SENS-come.out LNK everywhere EMPH exist:SENS be:AFF LNK plain
 30481 *me, suŋgwi ㅂja zo tu-łob juu-ŋu.*
 whether forest completely EMPH IPFV-come.out SENS-be
 30482 ‘(This mushroom) grows among oaks, among firs, among willows, among
 30483 red or white birch forests, you find it everywhere, whether on plains or
 30484 in forest.’ (23-mbrAZim, 233-238)

30485 22.2.2.3 Restrictive ‘only, always’

30486 The adverb *ㅂja* ‘completely’, which can be used to mark restrictive focus on a
 30487 noun phrase (§9.1.6.5), also occurs with scope over the whole sentence in the
 30488 meaning ‘all, only, always’ as in (69), where it follows the ergative *kui* (compare
 30489 with 148 in §9.1.6.5, where the ergative is located before *ㅂja*).

30490 (69) *tui-ŋga me, tui-xtsa me nuu*
 INDEF.POSS-clothes whether INDEF.POSS-shoe whether DEM
 30491 *tr-tcui ra kui ㅂja zo cʰui-tʂuβ-nuu pjy-ŋu.*
 INDEF.POSS-son PL ERG completely EMPH IPFV-sew-PL IFR.IPFV-be
 30492 ‘Whether clothes or shoes, it was always the boys (not the ladies) who
 30493 sewed them.’ (12-kAtsxWb, 120)

30494 In copular sentences (§22.5.1.1), when *ㅂja* has scope over the nominal predicate,
 30495 that nominal predicate can be preposed, as in (69) (see also example 277 in
 30496 §21.7.3.2).⁹

⁹ Example 167 in §9.1.8.2 is superficially similar, but the constituent [noun+*ㅂja zo*] in that example is a prenominal modifier of the following noun, while in (70) *tr-tcui ㅂja zo* cannot be a prenominal modifier of *kui-rv-tʂuβ* ‘tailor’, otherwise the existential verb *pjy-tu* rather than the copula *pjy-cti* would be expected.

- 30497 (70) *kucungtu tce [ty-tcuu bja zo] kui-ry-tṣuβ*
 in.former.times LNK INDEF.POSS-son completely EMPH SBJ:PCP-APASS-sew
 30498 *pjy-cti ma tc^heeme kui-ry-tṣuβ pjy-me.*
 IFR.IPFV-be.AFF LNK girl SBJ:PCP-APASS-sew IFR.IPFV-not.exist
 30499 'In former times, only boys were tailors (all tailors were boys), there were
 30500 no women tailors.' (12-kAtsxWb, 115)

30501 22.2.2.4 Restrictive 'alone'

30502 To express the meaning 'alone', two constructions based on the root *-sti* 'alone'
 30503 are used.

30504 The root *-sti* can be directly combined with personal pronouns in forms such
 30505 as *azo-sti* with the 1SG *azo* 'I' or *uzo-sti* with the 3SG *uzo* 'he' (§6.1.2) as in (71).

- 30506 (71) *n̥r-rca tu-yi-a ra ma kutcu azo-sti*
 1SG.POSS-together IPFV:UP-come-1SG be.needed:FACT LNK here 1SG-alone
 30507 *ku-ryzi-a muíj-c^ha-a*
 IPFV-stay-1SG NEG:SENS-can-1SG
 30508 'I am coming with you, I cannot stay here all alone.' (2-deluge2012, 80)

30509 Alternatively, the reduplicated form of the root *stusti* 'alone' occurs either on
 30510 its own as in (72), or as a postnominal modifier as in (73).

- 30511 (72) *azo stusti n̥u-a*
 1SG alone be:FACT-1SG
 30512 'I am alone.' (conversation, 2014)

- 30513 (73) *fsapaʂ kx-χsu muíj-mbat ma maka aki pr̥ku rgali*
 cattle INF-raise NEG:SENS-easy LNK completely down ANTHR milk.cow
 30514 *stusti kui zo, ji-tuβyi lonba zo, nu kui-kui-jndz̥y*
 alone ERG EMPH 1PL.POSS-chaff all EMPH DEM TOTAL~SBJ:PCP-be.coarse
 30515 *zo t^ha-ckut q^he*
 EMPH AOR:3→3'-eat.completely LNK

30516 'Raising cattle is difficult, down there in Praku, the milk cow alone ate all
 30517 our chaff, all the big ones.' (taRrdo2003, 35)

30518 In a text translated from Chinese, we do find a calque of the Chinese construc-
 30519 tion (我一个人 <wǒ yīgèrén> 'I alone') with the pronoun *azo* '1SG' followed by
 30520 the counted noun *tu-rdɔ́s* 'one piece' (§7.3.2.4); this sentence is not idiomatic.

- 30521 (74) *azō tur-rdo& kuu ntsu& tur-ci c-tu-re-a*
 1SG one-piece ERG always INDEF.POSS-water TRAL-IPFV:UP-fetch[III]-1SG
 30522 ‘It is always I alone who goes to fetch water.’ (150830 san ge heshang, 44)

30523 22.2.3 Identity

30524 The adverb *anamana* ‘identical’ is borrowed from the Amdo Tibetan form རྒྱ ཡା.ନା.ମା.ନା ‘identical’. It occurs with the copula *ŋu* (§22.5.1.1) as in (75). It is
 30525 similar in meaning to the reduplicated participle *kuu-naχt̪eu~χt̪eu* ‘completely
 30526 identical’ of *naχt̪eu* ‘be the same’ (§9.1.7) but does not occur as noun modifier.
 30527

- 30528 (75) *u-βri rcanu, qacpa u-βri nu anamana zo*
 3SG.POSS-body UNEXP:FOC frog 3SG.POSS-body DEM identical EMPH
 30529 *nu-ŋu*
 SENS-be
 30530 ‘The body of the (turtle) is identical to the body of a frog.’(140510 wugui, 8)

30531 22.2.4 Adverbial Intensifiers

30532 Intensifiers used to express high degree (‘much’) and quantity (‘much, for a long
 30533 time’) are discussed in §26.1.1. Negative intensifiers are discussed in §13.4.3.

30534 The attenuative *ci*, derived from the adverbial function ‘once’ (§22.2.1) of the
 30535 numeral ‘one’ (§7.1.1), conveys a milder and more polite tone to Imperative (§21.4.2)
 30536 and Irrealis (§21.4.1) verb forms, in particular with modal verbs in interrogative
 30537 form (§24.5.3.1) as in (76).

- 30538 (76) *wortε^{hi} zo, azo a-βi ci a-pu-mtam-a*
 please EMPH 1SG 1SG.POSS-younger.sibling a.little IRR-PFV-see[III]-1SG
 30539 *ú-jγy*
 QU-be.allowed:FACT
 30540 ‘Could I see my younger sister, please?’ (140511 1001 yinzi-zh, 23)

30541 Due to the high polyfunctionality of *ci*, in examples such as (77), the attenua-
 30542 tive function is not always clearly distinguishable from its semelfactive one.

- 30543 (77) *li ci ty-ti*
 again a.little.once IMP-say
 30544 ‘Say it again!’ (many attestations)

30545 The intensifier *koyla*, whose first syllable originates from the reduction of the
 30546 lexicalized participle *kui-yu* ‘the one that/who is (really)’ (Table 16.2, §16.1.1.7),¹⁰
 30547 originally means ‘really’, a meaning still attested in (78). In this meaning it can
 30548 also serve as prenominal modifier (§9.1.8.2).

- 30549 (78) *wo a-mu, azo koyla jx-azyut-a*
 INTERJ 1SG.POSS-mother 1SG really AOR-arrive-1SG
 30550 ‘Mother, it is really me who arrived (not someone else pretending to be
 30551 me).’ (Norbzang 2012, 220)

30552 The secondary meanings ‘(doing) well, correctly’ (79) and ‘completely’ (80)
 30553 developed out the etymological sense of ‘really’.

- 30554 (79) *ma koyla mu-kx-rto&-a ri, u-mxlyja& nura nuu-dyn,*
 LNK really NEG-AOR-look-1SG LNK 3SG.POSS-limb DEM:PL SENS-be.many
 30555 ‘I did not have a good look at (how many limbs it has), but it has many
 30556 limbs.’ (21-mdzadi)

- 30557 (80) *kupa uu-skyt ri uu-qiuu jamar ma*
 Chinese 3SG.POSS-language also 3SG.POSS-half about apart.from
 30558 *muúj-tso-nui. (...) li nuu koyla*
 NEG:SENS-understand-PL again DEM completely
 30559 *muúj-tso-nui.*
 NEG:SENS-understand-PL
 ‘Chinese_i also, they only understand half, (...), they don’t understand it_i
 30560 completely/well (so one has to learn to speak their language to be able to
 30561 communicate).’ (150901 tshuBdWnskAt, 14-17)

30563 Finally, in some negative contexts, *koyla* acquired a meaning close to *maka*
 30564 ‘(not) ... at all’, as in (81).

- 30565 (81) *tce kx-ymuu-tuy ri puu-me ma <jiatong>*
 LNK INF-RECIP-meet also PST.IPFV-not.exist LNK completely
 30566 *koyla puu-me tce (...) kx-ηke uja zo*
 transportation PST.IPFV-not.exist LNK INF-walk completely EMPH
 30567 *ju-kui-ce puu-ra.*
 IPFV-GENR:S/O-go PST.IPFV-be.needed
 30568 ‘We had no opportunity to meet, as there were no transportation means

¹⁰ The non-reduced form of *koyla*, *kuiyula*, corresponds to Tshobdun *kəŋólv* ‘well’ (Sun & Blogros 2019: 55).

22 Simple clauses

30569 at all, (...) and we had no choice but to go on foot (whenever there was a
30570 meeting).' (12-BzANsa, 21)

30571 22.2.5 Epistemic modality

30572 The adverbs *cʰylvnn̥* ‘maybe’ and *zgruy* ‘certainly’ can contribute to the expres-
30573 sion of epistemic modality, together with verbal morphology (§21.4, §21.7) and
30574 sentence final particles (§10.4).

30575 The former *cʰylvnn̥* ‘maybe’, ‘perhaps’ originates from an Inferential form of
30576 the verb *lvt* ‘release’, followed by the additive *n̥*, perhaps originally the protasis
30577 of a conditional construction (§25.2.1). It is often combined with the sentence fi-
30578 nal particle *tʰaj* (§10.4.4) as in (82), or with a verb in Probabilative form (§21.7.2).

- 30579 (82) *izora n̥ki, cʰylvnn̥ yui-znuuzduuxpa- tce yui-lvt-i*
1PL FILLER maybe INV-have.mercy:FACT-1PL LNK INV-release:FACT-1PL
30580 *tʰaj wo*
SFP SFP
30581 ‘Maybe (the ogre) will have mercy upon us and will let us go.’ (160703
30582 poucet3, 39)

30583 The latter *zgruy* ‘certainly’ generally occurs with a main verb in the Factual
30584 Non-Past (§21.3.1). It tends to be replaced by the Chinese adverb 肯定 <kědìng>
30585 ‘certainly’, even by the best speakers.

- 30586 (83) *n̥-wi nu zgruy zo rga*
2SG.POSS-grand.mother DEM certainly EMPH like:FACT
30587 ‘Your grandmother will certainly like it.’ (140428 xiaohongmao-zh, 52)

30588 22.2.6 Orientation adverbs

30589 The tridimensional system found in orientation preverbs (§15.1.1.1), egressive post-
30590 positions (§8.2.10, Table 8.1) and locative relator nouns (§8.3.4.1) is also reflect
30591 by locative adverbs (Table 22.1). There is a one-to-one correspondence between
30592 these adverbs and the corresponds nouns and preverbs (§15.1.1.4).

30593 There are four series of adverbs shown in Table 22.1. With the exception of
30594 the adverbs of the vertical dimension (UPWARDS and DOWNWARDS), the other
30595 series are trivially derived from the bare adverbs by prefixation of *a-*, *tce-* (perhaps
30596 related to the postposition *tce* §8.2.4.3) and *-cʰu* (§8.2.4.2).

30597 The bare adverbs are most often directly placed before an orientable verb
30598 (§15.1.2) bearing a preverb encoding the same orientation, as in (84) and (87). The

Table 22.1: Orientation adverbs

Orientation	Bare	Basic	Distal	Approximate
Upwards	<i>ta<small>b</small></i>	<i>atu</i>	<i>tçetu</i>	
Downwards	<i>pa</i>	<i>aki</i>	<i>tçeki</i>	
Upstream	<i>lo</i>	<i>alo</i>	<i>tçelo</i>	<i>loc^hu</i>
Downstream	<i>t^hi</i>	<i>at^hi</i>	<i>tçet^hi</i>	<i>t^huuc^hu</i>
Eastwards	<i>kuu</i>	<i>akuu</i>	<i>tçekuu</i>	<i>kuuc^hu</i>
Westwards	<i>ndi</i>	<i>adi</i>	<i>tçendi</i>	<i>nduuc^hu</i>

30599 adverb *kuu*, though homophonous with the ergative in isolation (§8.2.2), is often
 30600 pronounced [ku] as in the recording of (87), due to regressive assimilation from
 30601 the preverb *ko-*.

30602 (84) *tx-mpja tce t^hi c^huu-yi, tx-yvndzo*
 AOR-be.warm LNK downstream IPFV:DOWNSTREAM-come AOR-be.cold

30603 *tce lo lu-ce*
 LNK upstream IPFV:UPSTREAM-come

30604 ‘(Contrary to expectations), when (the weather) becomes warm it comes
 30605 downstream, and when it becomes cold it goes upstream.’ (24-kWmu,
 30606 27-28)

30607 This is not the exclusive function of bare orientation adverbs however: they
 30608 can also refer to a static location unrelated to the orientation of the verb, and
 30609 non-adjacent to it (85). However, the basic and distal adverb are more often used
 30610 in this function.

30611 (85) *kuu ri ci (...) pjuu-su-xtsa-nuu, ndi ri li ci*
 east LOC one IPFV:DOWN-CAUS-be.planted-PL west LOC again one
 30612 *pjuu-su-xtsa-nuu*
 IPFV:DOWN-CAUS-be.planted-PL

30613 ‘(In former times, when people installed the loom, they would) plant one
 30614 (sharpened peg) in the east (left), another one in the west (right) (to attach
 30615 the upward extremity of the warp threads).’ (vid-20140429090403, 139)

30616 All four series of orientation adverbs can be followed by the core locative post-
 30617 positions (§8.2.4.1) as in (85), (86) and (87).

- 30618 (86) *qalias nutcu lu-zo tce akur ri ku-ru, andi ri*
 eagle DEM:LOC IPFV-land LNK east LOC IPFV:EAST-look west LOC
 30619 *nut-ru*
 IPFV:WEST-look
 30620 ‘Eagles land there and look around (to the east and the west, looking for
 30621 food.)’ (140522 Kamnyu zgo, 224)

30622 Example (87) shows that distal orientation adverbs can occur in the same con-
 30623 text as locative relator nouns in -cu (§8.3.4.1).

- 30624 (87) *wi-ndycu nutcu, duxpakyrpu yuu wi-me nuu kui k^hri*
 3SG.POSS-west DEM:LOC ANTHR GEN 3SG.POSS-daughter DEM ERG seat
 30625 *pjy-ta tce kui ko-ru. tce teelo nutcu pimawozyr*
 IFR:DOWN-put LNK east IFR:EAST-look LNK upstream DEM:LOC ANTHR
 30626 *yuu wi-k^hri nuu pjy-ta-nuu tce, t^hi*
 GEN 3SG.POSS-seat DEM IFR:DOWN-put-PL LNK downstream
 30627 *c^ho-ru-nuu tce*
 IFR:DOWNSTREAM-look-PL LNK
 30628 ‘On the west side, the daughter of Gdugpa Dkarpo placed her seat and
 30629 turned it towards the east. On the downstream side, (the servants) placed
 30630 Nyima ’Odzer’s seat, and turned it towards the upstream direction.’
 30631 (2011-04-smanmi, 239-240)

30632 The bare adverbial stems can be compounded to build nouns of dimension
 30633 (§5.5.2.2)

30634 In addition to the adverbs in Table 22.1, we also find *tyton* ‘uphill’, UPWARDS
 30635 and *tyzun* ‘downhill’, DOWNWARDS specifically indicating orientation upwards
 30636 and downwards a slope. They can be associated with both the vertical (UPWARDS,
 30637 DOWNWARDS) and the fluvial (UPSTREAM, DOWNSTREAM) orientations, as shown
 30638 by (88), where the motion verb *ce* ‘go’ and the manipulation verb *tsum* ‘take
 30639 away’ take the fluvial orientation UPSTREAM with *tyton*, but the vertical orienta-
 30640 tion DOWNWARDS with *tyzun*.

- 30641 (88) *tce tyton lu-ce puipuquny, snama tyton tsa*
 LNK uphill IPFV:UPSTREAM-go TOP beast.of.burden uphill a.little
 30642 *lu-wy-tsum pw~puu-ra ny*
 IPFV:UPSTREAM-INV-take.away COND~PST.IPFV-be.needed ADD
 30643 *wi-kontas tu-sui-yswy-nuu tce nuu kui*
 3SG.POSS-front.strap IPFV-CAUS-be.tight-PL LNK DEM ERG

30644	<i>lu-rvci</i>	<i>nui-ra.</i>	<i>tyzum</i>	<i>pjuw-ce</i>	<i>pupuŋunv,</i>
	IPFV:UPSTREAM-pull	SENS-be.needed	downhill	IPFV:DOWN-go	TOP
30645	<i>wi-sŋyt</i>	<i>cʰui-sui-ysuy-nui</i>			<i>nui-ra.</i>
	3SG.POSS-crupper	IPFV:DOWNSTREAM-CAUS-be.tight-PL	SENS-be.needed		
30646	'When it _i goes uphill, (that is) if they need to lead the beast _i of burden on an upward slope, they need to tighten the front strap of the saddle for it _i to pull (the burden). When it _i goes downhill, they need to tighten the crupper.'				
30647					(30-tAsno, 101)
30648					
30649					

Despite their *-n* coda (§3.3.3), these adverbs are native words, as shown by their Tshobdun cognates *tótm* 'uphill' and *tójət* 'downhill' (Sun & Blogros 2019: 123–4). The expected Japhug forms would be †*txtom* and †*txzut*, respectively. The coda *-n* probably results from the coalescence of the inherited adverb with the demonstrative *nui*.

22.2.7 Postverbal elements

The only part of speech that is always located after the main verb is the sentence final particles (§10.4, §21.8). With the exception of right dislocated constituents (§22.1.3), only a handful of other words can occur post-verbally.

Some ideophones (mainly pattern II, §10.1.7.4) can be put after the verb, optionally with the emphatic *zo* as in (89), even in some relative clauses (§23.3.6).

- 30655 (89) *nure tu-rŋyβ-nui prwŋprwŋ zo*
DEM:LOC IPFV-attach-PL IDPH(II):solidly EMPH
30656 'They attach it (the plough) solidly there (on the hybrid yaks' horns).' (25-stuxsi, 12)

Only three adverbs can occupy postverbal position. First, the emphatic *zo* (§26.1.1.5) commonly occurs after the main verb in constructions expressing high degree (§26.1), as in (90).

- 30657 (90) *tce nunu tú-wy-ndza rca wi-tu-tcur*
LNK DEM IPFV-INV-eat UNEXP:FOC 3SG.POSS-NMLZ:DEG-be.sour
30658 *saxas zo.*
be.extremely:FACT EMPH
30659 'When one eats it, it is very sour.' (16-CWrNgo, 232)

Second, the degree adverb *tsa* 'a little' is postverbal when used in a comparative construction (§26.2.2), as in (91).

22 Simple clauses

- 30672 (91) *tc^hitcum paxci nuu tce tce, ui-jwab naura izora ji-paxci*
TOPO apple DEM LNK LNK 3SG.POSS-leave DEM:PL 1PL 1PL.POSS-apple
30673 *st^huci muu-nuu-yrtaum kuu nuu-rŋji tsa*
so.much NEG-SENS-be.round ERG SENS-be.long a.little
30674 ‘Pears (Chuchen apples), their leaves are not as round as (those of) our
30675 apples, but a bit longer.’ (07-paXCi, 54)

30676 Third, the temporal adverb and quantifier *ntsui* ‘always’ has the same ranges of
30677 meaning as when in preverbal position (§22.2.1) when following the main verb:
30678 it can either indicate a constant state (92) or a recurrent action (93).

- 30679 (92) *tuxpalyskyr a<nuu>rŋi ntsui.*
whole.year <AUTO>be.green:FACT always
30680 ‘It remains always green the whole year.’ (08-saCW, 19)
- 30681 (93) *tc^heme ui-skyt kuu-snur~sna ci kuu zo*
girl 3SG.POSS-voice SBJ:PCP-EMPH~be.nice INDEF ERG EMPH
30682 *tú-wy-nuu-ŋk^hyzŋga-nuu ntsui.*
IPFV-INV-APPL-call-PL always
30683 ‘A girl whose voice was very nice was calling them again and again.’
30684 (2003 kandZislama, 9)

22.3 Non-verbal predicates

30685 While a Japhug sentence generally requires a finite verb forms to be complete,
30686 there are nevertheless some constructions in which a noun or a nominalized verb
30687 form serves as predicate by itself.

30688 First, zero copula predicate nominals are attested, in particular to name a ref-
30689 erent (object or person) by showing it/him/her. For instance, in (94), the subject
30690 is the demonstrative *kuki* ‘this’ and the nominal predicate *sŋndyr* ‘thimble’.

- 30691 (94) *kuki sŋndyr. kuki sŋndyr. izora kuruu ra tce sŋndyr*
DEM.PROX thimble DEM.PROX thimble 1PL Tibetan PL LNK thimble
30692 *tu-kui-ti nyu.*
IPFV-GENR-say be:FACT
30693 ‘(Pointing to a thimble) This is a thimble. This is a thimble. We Tibetans
30694 call it ‘thimble’.’ (video-2014-04-29-09-5104, 3-5)

30696 Absence of copula is also attested in multicausal constructions, for instance
 30697 in alternative concessive conditionals (§25.2.3.2) as in (95).

- 30698 (95) *tce tuu-ci* *nunuu, puu-nuu-xtci* *nr tatc^hoŋtc^hoŋ,*
 LNK INDEF.POSS-water DEM PST.IPFV-AUTO-be.small ADD waterfall
 30699 *puu-nuu-wxti* *nr tatc^hoŋtc^hoŋ.*
 PST.IPFV-AUTO-be.big ADD waterfall

30700 Water (falling down from a cliff), whether it is big or small, (is called) a
 30701 'waterfall.' (hist 180428 tatChoNtChoN, 9)

30702 The zero copula construction is however considerably rarer than the copular
 30703 construction (§22.5.1.1), even in the same context, when the speaker names a
 30704 referent and points it/him with the finger as in (96).

- 30705 (96) *kuuki cnat nyu*
 DEM.PROX heddle be:FACT
 30706 '(Pointing to a heddle) This is a heddle.' (video-2014-04-29-09-0403, 27)

30707 Second, exclamative expressions with a degree nominal (§16.3.3), exclamative
 30708 nouns (§5.1.2.8) can also be used as main predicate, followed by a sentence final
 30709 particle such as *nuu*, without any finite verb form.

30710 Third, inflectionalized phatic expressions (§14.7.1) and interjections (§10.2.1)
 30711 such as *mts^hyri* 'how strange' as in (97) can form complete utterances on their
 30712 own without any verb.

- 30713 (97) *ki mts^hyri, kuuki a-βyo ki a-taŋ*
 DEM.PROX how.strange DEM:PROX 1SG.POSS-FB DEM:PROX 1SG.POSS-on
 30714 *w-tuu-pe* *nuu*
 3SG.POSS-NMLZ:DEG-be.good SFP
 30715 'How strange, this uncle of mine is so nice to me.' (140511 alading-zh, 54)

30716 Fourth, the nouns *w-mdor* 'colour' and *smulym* 'prayer' have been grammaticalized as sentence-final modality markers (§21.8.3).

30718 22.4 Noun-verb collocations and light verb constructions

30719 While Japhug has a very productive system of denominal verbalizer prefixes de-
 30720 scribed in Chapter 20, it is also possible to build predicates out of nouns using
 30721 noun-verb collocations, built in particular from a few highly frequent light verbs.

30722 Apart from nouns, ideophones are also used with light verbs, but this question
 30723 is studied in §10.1.7.

30724 **22.4.1 Intransitive verbs**

30725 In collocations involving intransitive verbs, the associated noun is the intransitive subject, so that the verb verb form is invariably 3SG (§14.2.7).

30727 **22.4.1.1 Motion verbs**

30728 The motion verbs *yi* ‘come’ and *ce* ‘go’ (§15.1.2.1) are used with the nouns of cognition *u-sum* ‘mind’ and *u-*kjiz** ‘wish’ in the lexicalized collocations *u-sum + ce/ yi* ‘want’ and *u-*kjiz* + yi* ‘wish’, which take complement clauses (§24.6.3.3).

30731 They also occur with temporal nouns. The verb *ce* ‘go’ occurs with *tr-rzax* ‘time’ and *ta-*xa** ‘free time’ to express the meaning ‘spend (one’s time)’, as in (98), an excerpt from a conversation where Tshendzin describes her daily activities. In this function, the whole collocation can be subjected to the facilitative *y-* derivation (§18.9.1).

30736	(98)	<i>nui kui-fse ntsui a-rzax pui-ce ηu.</i>
		DEM SBJ:PCP-be.like always 1SG.POSS-time IPFV:WEST-go be:FACT
30737		<i>tr-nypyri-a q^he li ci <sanbu> ju-ce-a q^he, tce nui</i>
		AOR-have.dinner-1SG LNK again once walk IPFV-go-1SG LNK LNK DEM
30738		<i>kui-fse ntsui spikuku a-<i>xa</i> c^hu-<i>ce</i></i>
		SBJ:PCP-be.like always everyday 1SG.POSS-free.time IPFV:DOWNTSTREAM-go
30739		<i>ηu.</i>
		be:FACT

30740 ‘(...), this is how I spend my time. And after dinner, I go on a walk, this is
30741 how I spend my time every day.’ (conversation 2015-12-05)

30742 The verb *yi* ‘come’ on the other hand is found with nouns referring to seasons
30743 (99) or parts of the day (100).

30744	(99)	<i>unuanui ftcar jy-ye q^he, nui pur-<i>ka</i>s q^he</i>
		DEM summer AOR-come[II] LNK DEM IPFV-hatch LNK
30745		‘When the warm season (spring) comes, it hatches, and ...’
30746		(25-akWzgumba, 104)

30747	(100)	<i>turmui ko-yi</i>
		evening IFR-come
30748		‘The evening came.’ (many examples)

30749 It also expresses the occurrence of specific events like catastrophes (101).

- 30750 (101) *taŋi to-yi*
drought IFR-come
30751 ‘There was a drought.’ (25-kAmYW, 1)

30752 The combination of *ce* ‘go’ with the locative noun *w-pa* ‘below’ (§8.3.4.1), in
30753 addition to the trivially predictable meaning ‘go below *X*’, is also used in the
30754 sense of ‘take all of *X* for oneself (of things that do not exclusively belong to
30755 oneself)’ (102) when the verb has the Autive *nu-* (§19.1.3). In this construction,
30756 the agent (the person taking the things) is encoded as possessor of *w-pa*, and the
30757 patient (the things taken) as the intransitive subject of *nu-ce*.

- 30758 (102) *wzo w-pa jy-nui-ce*
3SG 3SG.POSS-down IFR-AUTO-go
30759 ‘S/he took all of it for him/herself.’ (elicited)

30760 The verb *ce* ‘go’ also occurs in collocation with a few nouns designating places
30761 or objects to express the meaning ‘go and do’, in particular with *skyrwa* ‘circam-
30762 bulation’ and *jyyt* ‘terrace’, ‘toilet’¹¹ as in (103) and (104).

- 30763 (103) *skyrwa ko-ce*
circambulation IFR-go
30764 ‘He went to do circumbulations.’ (elicited)

- 30765 (104) *azo jyyt ci lu-ce-a ny*
toilet INDEF IPFV:UPSTREAM-go-1SG SFP
30766 ‘I am going to the toilet.’ (2005 khu, 13)

30767 These collocations correspond to denominal verbs in *ru-* (§20.4.1).

30768 The ablative motion verb *toŋ* ‘come out’ (§15.1.2.1) is commonly found in the
30769 meaning ‘grow’ (of plants), but also occurs in a few more lexicalized collocations,
30770 with *ty-re* ‘laugh’ as in (105) or with *ty-rmi* ‘name’ (106). More of these collocations
30771 have corresponding transitive constructions with *tçyt* ‘take out’ (§22.4.2.3), such
30772 as *ty-re + tçyt* ‘mock’ and *ty-rmi + tçyt* ‘give a name’.

- 30773 (105) *w-re pty-toŋ*
3SG.POSS-laugh IFR-come.out
30774 ‘S/he laughed.’ (elicited; refers to an involuntary action)

¹¹ In 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.

- 30775 (106) *wi-rmi to-tor.*
 3SG.POSS-name IFR:UP-come.out
 30776 ‘He became famous.’ (elicited)

30777 22.4.1.2 The anticausative verb *ndzor* ‘be attached’

30778 The anticausative *ndzor* ‘be attached’ (§18.5.3), in addition to its function as a
 30779 quasi-existential verb (§22.5.1.2) and also its dynamic meaning ‘cling onto, lean
 30780 on, grab’ (example 119, §18.5.5) or ‘land’ (with flying creatures),¹² occurs in lex-
 30781 icalized collocations with a few nouns. With nouns referring to plant parts, it
 30782 can mean ‘grow’ (§18.5.3); with *tr-rjít* ‘offspring’ or *tr-puu* ‘young’, its meaning is
 30783 ‘become pregnant’ (of humans or non-human animals), as in (107).

- 30784 (107) *icq^ha <sanshengmu> nuu yuu wi-rjít*
 the.aforementioned ANTHR DEM GEN 3SG.POSS-offspring
 30785 *ko-ndzor*
 IFR-ACAUS:attach
 30786 ‘Sanshengmu became pregnant with a child.’ (150826 baoliandeng, 46)

30787 With time periods such as *qartsui* ‘winter’ or *ftcar* ‘summer’, it is synonymous
 30788 with the motion verb *yi* ‘come’ above (§22.4.1.1) as shown by (108).

- 30789 (108) *tce wi-fsaq^he ftcar ky-ndzor q^he li*
 LNK 3SG.POSS-next.year summer AOR-ACAUS:attach LNK again
 30790 *tu-tor.*
 IPFV-come.out
 30791 ‘The next year, when the warm season (spring) arrives, it comes out
 30792 again.’ (8-qromJoR, 142)

30793 It can also be used like the dummy transitive *ta* ‘put’ (§22.4.2.6) with the noun
 30794 *sya* ‘rust’ (109) in the meaning ‘become rusted, get rust’, with a function similar
 30795 to that of the *nu-* denominal prefix (compare *nusya* ‘get rust’, §20.7.1).

- 30796 (109) *sya ko-ndzor*
 rust IFR-ACAUS:attach
 30797 ‘It became rusted.’ (elicited)

¹² The meaning ‘land’ is more commonly expressed with the verb *zo* ‘land’, probably borrowed from the Tshobdun cognate of *ndzor* ‘be attached’.

30798 22.4.1.3 Existential verbs

30799 Existential verbs (§22.5.1.2) commonly take inalienably possessed nouns as subjects. Some of these collocations can be analyzed as instances of the *mihī est*
 30800 possessive construction (§22.5.2). For instance, the combination of *ta-ka* ‘free
 30801 time’ with the existential verbs has the compositional meaning ‘have time’ (83,
 30802 §21.3.3.2, 175, §21.5.1.4), and apart from the fact that it can take complement
 30803 clauses (§24.6.3.4), this collocation does not stand out as particularly lexicalized.
 30804 The present section focuses on cases where the meaning of the collocation is not
 30805 straightforwardly derivable from that of its constituent parts.

30806 The noun *tu-sumpa* ‘mind’ (borrowed from 脳の‘mind’ *sems.pa* ‘mind’), occurs with
 30807 the existential verb *tu* with the meaning ‘keep/have in mind, remember’, with
 30808 the experiencer marked as possessor, for instance 1SG in (110).

- 30810 (110) *txjmry w-sy-tu nuu a-sumpa tu*
 mushroom 3SG.POSS-OBL:PCP-exist DEM 1SG.POSS-mind exist:FACT
 30811 ‘I have in mind (I know, I did not forget) the places where there are
 30812 mushrooms.’ (elicited)

30813 The collocation of the noun *w-gryl* ‘order, rule’ (from Tibetan གྱା ‘gral’ ‘row’, a
 30814 meaning still preserved in the intransitive denominal verb *nugryl* ‘be in a row’)
 30815 with the negative existential verbs *me* or *maje* is very commonly used to indicate
 30816 high degree, in particular in the degree nominal construction (§26.1.2.1), as in
 30817 (111).

- 30818 (111) *w-tuu-syy-mu w-gryl maje*
 3SG.POSS-NMLZ:DEG-PROP-fear 3SG.POSS-order not.exist:SENS
 30819 ‘It is extremely frightening/fearsome.’ (khu 2012, 43)

30820 It is also compatible with dynamic verbs, as in (112).

- 30821 (112) *tsu w-tuu-mbuut w-gryl maje*
 road 3SG.POSS-NMLZ:DEG-ACaus:take.off 3SG.POSS-order not.exist:SENS
 30822 ‘The road had collapsed to a considerable extent.’ (2010-1, 17)

30823 This collocation has a second unrelated meaning: ‘be impudent, be shameless,
 30824 act in an outrageous way’ as in (113), where the possessive prefix can be other
 30825 than 3SG.

- 30826 (113) *tua-si* *ty-mdä* *kumy nuu* *kua-fse* *nuu-tua-nyre, nuu*
 2-die:FACT AOR-be.the.time also DEM SBJ:PCP-be.like SENS-2-laugh DEM
 30827 *ny-gryl* *uu-tua-me* *nuu!*
 2SG.POSS-order 3SG.POSS-not.exist SFP
 30828 ‘Even as you are about to die, you are laughing like that, what
 30829 impudence!’ (140516 guowang halifa-zh, 70-71)

30830 This collocation can be causativized and reflexivized (§18.3.4) as *uu-gryl+zyyryme*
 30831 ‘cause oneself to act shamelessly’ as in (114).

- 30832 (114) *ji-wa* *c^ho* *c^ha* *ku-tshi-ndzi* <*shafa*> *uu-tar* *zuu*
 1PL.POSS-father COMIT alcohol IPFV-drink-DU sofa 3SG.POSS-on LOC
 30833 *tu-nuijmyzdyβ-ndzi* *tce* *ku-rŋgu-ndzi* *q^he tce*
 IPFV-sleep.on.opposite.directions-DU LNK IPFV-lie.down-DU LNK LNK
 30834 *uu-gryl* *zo* *nuu-zyy-yx-me-ndzi* *nuu-cti*
 3SG.POSS-order EMPH IPFV-REFL-CAUS-not.exist-DU SENS-be.AFF:FACT
 30835 ‘He and my father would drink alcohol, sleep on the sofa one over the
 30836 other in opposite directions, presenting themselves in a poor light.’
 30837 (17-lhazgron, 112-113)

30838 While the constructions above do not have any equivalent denominal derivation,
 30839 the collocation of existential verbs with nouns relating to meals such as
 30840 *t^ha* ‘tea, breakfast’, *saxsu* ‘lunch’ or *ty-pyri* ‘dinner’ has the same meaning as
 30841 the intransitive *nuu-/ny-* denominal prefix (§20.7.1). For instance, (116) with the
 30842 denominal verb *nyypyri* ‘have dinner’ is a natural answer to (115) with the existential
 30843 verb (see also 53b, §20.7.1).

- 30844 (115) *ny-pyri* *uu-puú-tu?*
 2SG.POSS-dinner QU-PST.IPFV-exist
 30845 ‘Did you have dinner?’
- 30846 (116) *puu-tu,* *nuu kosmuuz* *ty-ny-pyri-i-j*
 PST.IPFV-exist DEM just.before AOR-DENOM-dinner-1PL
 30847 ‘We did, we just had dinner.’ (conversation, 2016-04-12)

30848 22.4.1.4 The intransitive auxiliary *pa*

30849 The transitive verb *pa* ‘do’ (§22.4.2.5) has an intransitive counterpart *pa* (§14.5.1.4),
 30850 which is used as auxiliary for ideophones (§10.1.7.1), and can also select a numeral
 30851 as subject, meaning ‘pass X years’ (117) (see also 106, §7.3.4.3).

- 30852 (117) *tcizo ni kx-amuufse-tci* *nur jinde* *kuaþdysqi*
 1DU DU AOR-know.each.other-1DU DEM nowadays forty
 30853 *tu-ro* *to-pa*
 3SG.POSS-excess IFR-pass.X.years
 30854 ‘We have known each other for more than forty years.’ (‘More than forty
 30855 years passed’, 12-BzaNsa, 3)

30856 It is not possible in this construction to replace the bare numeral by the counted
 30857 noun *tu-xpa* ‘one year’. For a historical perspective on this construction, see
 30858 §7.3.1.7 and §7.3.4.3.

30859 22.4.1.5 Other intransitive collocations

30860 The categories listed above do not exhaust all lexicalized collocations involving
 30861 intransitive verbs. Table 22.2 provides additional examples. In addition, there are
 30862 also frozen collocations with nouns and/or verbs not otherwise attested (§22.4.3).

Table 22.2: Other intransitive collocations (excluding orphan nouns/
 verbs)

Noun	Verb	Meaning
<i>çyrkʰa</i> ‘dawn’	<i>ngras</i> ‘be torn’	‘break (of dawn)’
<i>tu-kxrnob</i> ‘brain’	<i>mtçur</i> ‘turn’	‘feel dizzy’
<i>tu-sum</i> ‘mind’	<i>βdi</i> ‘be well’	‘be relieved’
<i>tu-skʰru</i> ‘body’	NEG+ <i>βdi</i> ‘be well’	‘be pregnant’
<i>tu-ro</i> ‘chest’, ‘breast’	<i>ŋyrr</i> ‘be narrow’	‘be petty-minded’

30863 Some of these collocations resemble Chinese constructions, and may have
 30864 been calqued, for instance *tu-ro + ŋyrr* ‘be petty-minded’ (compare with 心胸
 30865 狹窄 <xīnxiōng xiázhǎi> ‘be petty-minded’). In other case, the resemblance
 30866 with Chinese may be a parallel development: the use *ngras* ‘be torn’, ‘break(vi)’
 30867 (§18.5.1) in *çyrkʰa + ngras* ‘break (of dawn)’ reminds of 破曉 <pòxiǎo> ‘daybreak’,
 30868 but this metaphor is not limited to Chinese.

30869 The collocation meaning *tu-skʰru + NEG + βdi* ‘be pregnant’ (118) requires a neg-
 30870 ative prefix (§13.1.3) on the verb form. The denominal verb *nuskʰru* ‘be pregnant
 30871 with’ (§20.7.2) derived from this construction however is only based on the noun,
 30872 and does not integrate the verbal root as could have been expected (§20.13.1).

22 Simple clauses

- 30873 (118) *tua-sk^hruu* *my-βdi* *tce numuu qarts^haz u-se*
GENR.POSS-body NEG-be.well:FACT LNK DEM deer 3SG.POSS-blood
30874 *yuu-ts^hi* *my-βdi* *ma*
INV-drink:FACT NEG-be.well:FACT LNK
30875 ‘(People say that) when one is pregnant, it is not good to drink deer
30876 blood.’ (27-qartshAz, 108-109)

30877 22.4.2 Transitive verbs

30878 22.4.2.1 *βzu* ‘make’

30879 The verb *βzu* ‘make’, borrowed from 藏语 *bzo* ‘make; manufacture’, serves as a
30880 causative auxiliary (§24.5.1.1), and occurs in a wide range of complex predicates,
30881 in particular with action nominals (§24.4.3.1), simultaneous action nominals (§16.4.3,
30882 §24.4.3.2) and compound action nouns (§24.4.3.3). In this section, we focus on
30883 constructions with nouns that are not derived from verbs.

30884 The verb *βzu* is found with noun meaning ‘method’ or ‘manner’ such as *ftçaka*
30885 and *kowa* in complement-taking collocations meaning ‘try to *X* by any means’
30886 or ‘prepare’ (§24.6.3.1).

30887 It also occurs with nouns of speech activity (of Tibetan origin), as in *k^hramba+βzu*
30888 ‘tell lies’ (147, §21.4.3.1), *tua-sk^hrt+βzu* ‘do/say something meaning *X*’ (§24.6.3.2)
30889 or *tua-lxn+βzu* ‘give an answer’ (with the addressee as possessor of the object,
30900 119).

- 30891 (119) *a-lxn* *na-βzu*
1SG.POSS-answer AOR:3→3'-make
30892 ‘He gave me an answer.’ (elicited)

30893 With names of languages, *βzu* means ‘speak *X*’ as in (120). It is also found with
30894 abstract nouns and also relator nouns in a variety of collocations (Table 22.3).

- 30895 (120) *mbroχpa-sk^ht* *ky-βzu* *jnu-mk^hyz-nuu*.
nomad-language INF-make SENS-be.expert-PL
30896 ‘They speak the nomad language (Amdo Tibetan) very well.’ (140522
30897 RdWrJAt, 129)

30898 The verb *βzu* ‘make’ is attested in the dummy subject construction (§14.3.5)
30899 with three types of nouns.

30900 First, it occurs with nouns of natural phenomena (Table 22.4), as illustrated by
30901 (121).

Table 22.3: Collocations of βzu ‘make’ with abstract nouns

Noun	Meaning when used with βzu	Reference
<i>w-rtsot</i> ‘vengeance’	‘get revenge on’	
<i>w-ts^hyt</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

Table 22.4: dummy subject collocations with βzu ‘make’ (natural phenomena)

Noun	Orientation	Meaning
<i>qale</i> ‘wind’	upwards	‘blow (of wind)’
<i>t^hye</i> ‘sun’	westwards, upwards	‘appear (of the sun)’
<i>t^hrmbja</i> ‘lightning’	upwards	‘appear (of lightning)’
<i>mbyurlo^h</i> ‘thunder’	upwards	‘occur (of thunder)’
<i>t^hrtsa</i> ‘wave’	upwards	‘appear (of a wave)’

- 30902 (121) *nunu qale a-t^h-βze* *q^he, icq^ha* *nui*
DEM wind IRR-PFV-make[III] LNK the.aforementioned DEM
30903 *yuu-nu^h-tsum* *q^he,*
INV-AUTO-take.away:FACT LNK
30904 ‘Whenever there is wind, it blows (this insect) away.’ (28-kWpAz, 163)

30905 Second, it is found with parts of plants or animals in the meaning ‘grow’ or
30906 ‘develop’, as in *t^h-spu+βzu* ‘fester, have pus’ (§20.1.2). A defective verb βzu ‘grow’
30907 based on the third stem of βzu has been created by backformation from this func-
30908 tion (§12.2.2.3).

30909 Third, the abstract nouns *w-ts^hyt* ‘with proper measure’ (distinct from its use in
30910 Table 22.3, see §8.3.3) and *w-tsa* ‘with proper measure, fit, adapted’ are found in a
30911 transitive but subjectless construction meaning ‘*X* fit/be the right size/quantity/
30912 degree for *Y*’ which encodes the referent *Y* as possessor, and *X* as an absolute
30913 phrase: in (122), the head-internal relative clause (§23.5.3.3) in brackets does not
30914 receive ergative marking.

- 30915 (122) (*a-xtsa l_x-tui-sur-yuit-ndzi nuu*) *a-tsa wuma*
 1SG.POSS-shoe AOR:UPSTREAM-2-CAUS-bring-DU DEM 1SG.POSS-fit really
 30916 *nua-βze*
 SENS-make[III]
 30917 ‘The shoes that you have sent me fit me very well.’ (conversation,
 30918 2015-04-18)

30919 Many of the locutions in *βzu* have a semantics close to denominal derivations
 30920 in *ru-/rv-* and *nuu-* (§20.1.2). In addition, *βzu* corresponds to the *yuu-* prefix in the
 30921 case of *yulym* ‘answer’ (§20.5.2), a verb similar in meaning to *tui-lvn+βzu* (119)
 30922 and also to *suu-* in *sundzupe* ‘sit without crossing legs’ (§20.3.2).

30923 22.4.2.2 *lvt* ‘release’

30924 The basic meaning of the verb *lvt* is ‘throw’ when employed with an inanimate
 30925 object (like *tudi* ‘arrow’, see 24, §22.1.1.5), ‘pour’ when applied to liquids or con-
 30926 tainers (§127, §18.5.6) and either ‘release, let go’ (72, §8.2.3.2) or ‘see *X* off’ with
 30927 a human object (144, §8.2.9). It is very productively used with noun-verb com-
 30928 pounds with *rpu* ‘bump into’ or *t_chu* ‘gore’ as second element (see examples 231
 30929 and 232, §16.4.7).

30930 Like *βzu* ‘make’, *lvt* is attested with *tu-* action nominals (§24.4.3.1), though this
 30931 construction is less productive and limited to a few items such as *tu-murbzuz+lvt*
 30932 ‘make a scratch’ (from *murbuz* ‘scratch’) or *tu-rk_vz+lvt* ‘make an engraving’
 30933 (from *rk_vz* ‘carve’). It also occurs with the inalienably possessed bare action
 30934 nominal *tu-suso* ‘thought’ (§16.4.6). From *tu-suso+lvt* ‘think’, the antipassive
 30935 verb *rususo* ‘think’, ‘ponder’ (§18.6.1) was derived by denominal derivation.

30936 With iterative counted nouns (§7.3.2.5) as object, *lvt* is highly common with
 30937 the meaning ‘do *X* times’, where *X* represents the numeral prefix on the counted
 30938 noun (123).

- 30939 (123) *mbro nuu kua rirvβ rayri χsui-tyxur ta-lvt*
 horse DEM ERG mountain each three-lap AOR:3→3'-release
 30940 ‘The horse made three laps around each mountain.’ (2003 Kunbzang,
 30941 480)

30942 With the counted nouns *tu-rzuy* ‘one section’ and *tu-ydvt* ‘one section’, *lvt*
 30943 means ‘cut into *X* pieces’, as in (124).

- 30944 (124) *kuiβde-rzuy zo tó-wy-lvt pjy-wy-sat*
 four-section EMPH IFR-INV-release IFR-INV-kill
 30945 ‘(The thief) killed him by cutting him into four pieces.’ (140512
 30946 alibaba-zh, 115)

30947 Example (124) shows that the counted noun is not the direct object: the inverse
 30948 (§14.3.3.3) on both verbs *tó-wy-lvt* and *pjy-wy-sat* (§25.4.1.4) shows that both share
 30949 the same (obviative) object, and therefore that the object is the patient (the person
 30950 that was killed), not the counted noun. This referent is also relativized like an
 30951 object (§23.5.3) using an object participial relative (125).

- 30952 (125) *k^ha kui-qanu~nuw u-ŋgaw zuu, nykinuu, tuu-cpvβ*
 house SBJ:PCP-EMPH~be.dark 3SG.POSS-in LOC FILLER INDEF.POSS-corpse
 30953 *kuiβde-rzuy t^h-k^h-lvt nunuu*
 four-section AOR-OBJ:PCP-release DEM
 30954 *ku-su-iyllyi-a c^ha-a cti ny!*
 IPFV-CAUS-be.connected[III]-1SG can:FACT-1SG be.AFF:FACT SFP
 30955 ‘(not only this, but) I am (even) able to put together a corpse that had
 30956 been cut into four pieces in a dark house.’ (140512 alibaba-zh, 170)

30957 With *tuu-* action nominals, *lvt* also has an iterative meaning, but the number of
 30958 occurrences of the action is indicated by a numeral after the noun as in (126).

- 30959 (126) *tuu-muurtsey χsum to-lvt*
 NMLZ:ACTION-pinch three IFR-release
 30960 ‘He pinched him three times.’ (elicited)

30961 Noun expressing hitting actions such as *tuqartsu* ‘kicking’¹³ in collocation
 30962 with *lvt* also indicate the number of hits by a free numeral (127). In this con-
 30963 struction, the patient is not encoded as direct object, but as an oblique argument
 30964 with the relator *u-taε* ‘on, above’ (§8.3.4.3).

- 30965 (127) *u-taε nuutcu tuqartsu үnuz to-lvt*
 3SG.POSS-on DEM:LOC kicking two IFR-release
 30966 ‘He kicked two times on it.’ (150824 kelaosi-zh, 64)

30967 A handful of action nominals such as *tuu-tṣuβ* ‘sewing’ can however take nu-
 30968 meral prefixes to indicate the number of iterations, as in (128).

¹³ The *tuu-* prefix on this noun synchronically neither an action nominal prefix nor a numeral prefix).

- 30969 (128) *bnur-tur-tṣuβ* *ntsui* *c^bú-wy-lvt* *ra.*
 two-NMLZ:ACTION-sew always IPFV-INV-release be.needed:FACT
 30970 ‘It has to be sewed two times.’ (12-kAtsxWb, 83)

30971 Table (22.5) presents examples of collocations with *lvt* ‘release’. From the
 30972 meaning ‘throw, release’ (an arrow), *lvt* acquired the sense of ‘shoot’ with shoot-
 30973 ing weapons, and then ‘hit’ with body parts or other weapons. Additionally, it
 30974 came to mean ‘use’ with various types of instruments and implements.

Table 22.5: Examples of collocations with *lvt* ‘release’

Noun	Orientation	Meaning
<i>tū-mci</i> ‘saliva’	UPWARDS	‘spit’
<i>txŋk^hut</i> ‘first’	UPWARDS	‘punch’
<i>çrmuydu</i> ‘gun’	UPWARDS	‘shoot (with a gun)’
<i>mdaʂzuy</i> ‘bow’	UPWARDS	‘shoot (with a bow)’
<i>ts^ha</i> ‘salt’	DOWNWARDS	‘put salt (on)’
<i>taqaβ</i> ‘needle’	UPWARDS	‘prick with a needle’
<i>tū-mke</i> ‘neck’	DOWNWARDS	‘slit X’s throat’
<i>tx-mtsui</i> ‘button’	UPWARDS	‘button up’
<i>tx-mtui</i> ‘knot’	‘up-, down-, eastwards, downstream’	‘tie a knot’
<i>sṛcu</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’

30975 The verb *lvt* is the productive way to derive predicates from recent Chinese
 30976 loanwords designating machines. Combined with 电话 <diànhuà> ‘telephone’
 30977 (131, §21.4.2.2, 210, §21.5.2.3) and 汽车 <qìchē> ‘car’ it means ‘phone’ and ‘drive
 30978 a car’, respectively. It also occurs with nouns expressing actions derived from
 30979 verbs such as 放假 <fàngjià> ‘have a holiday’, with a 3PL generic subject (§14.6.2)
 30980 in (129).

- 30981 (129) *a-ye* *ra yuu pŋjk^hu zatsa <fangjia> mūj-lvt-nu*
 30982 1SG.POSS-grandchild PL GEN yet early vacation NEG:SENS-release-PL
 ‘My grandchild (and the rest of his class) are not yet on vacations.’

30983 (conversation, 2014-12-24)

30984 Some nouns occurring with *lvt* are also compatible with other light verbs, with
 30985 slightly different semantics. For instance, from the noun *rryo* ‘song’, the locution
 30986 *rryo + βzu* has the trivial meaning ‘sing, sing a song’ (87, §24.4.3.1), synonymous
 30987 with the denominal *nurryo* ‘sing’ (§20.7.1), while *rryo + lvt* means ‘play a tune on
 30988 an instrument’, reminiscent of the use of *lvt* with musical instruments.

30989 The verb *lvt* is also found with nouns referring to meteorological phenom-
 30990 ena in the dummy subject construction (§14.3.5), for instance with *tui-muu* ‘sky,
 30991 weather’ (130) and *tvipa* ‘snow’ (131). In both examples, it takes the C-type EAST-
 30992WARDS preverb *ka-* (*tui-muu* also occurs with the orientation DOWNWARDS).

30993 (130) *tui-muu ka-lvt ur-mp^hru nu tu.*
 INDEF.POSS-sky AOR:3→3'-release 3SG.POSS-after DEM exist:FACT
 30994 ‘It is found after rain (has fallen).’ (23-mbrAZim, 79)

30995 (131) *qartsu tce tcendyre tvipa wuma zo ka-lvt tce*
 winter LNK LNK snow really EMPH AOR:3→3'-release LNK
 30996 ‘In winter, when a lot of snow has fallen,’ (24-kWmu, 21)

30997 Collocation with *lvt* correspond to various denominal derivations: *ru-* (*juli + lvt*
 30998 ‘play the flute’ → *rujuli* ‘play the flute’, §20.4.1), *nu-* (*çrmuydu + lvt* ‘shoot with a
 30999 gun’ → *nuçrmuydu* ‘shoot at’, §20.7.2) and *sui-* (*tuqartsu + lvt* ‘kick’ → *suqartsu*
 31000 ‘kick’, §20.3.2).

31001 22.4.2.3 *tçrt* ‘take out’

31002 The manipulation verb *tçrt* ‘take out’ (§15.1.2.2) has a wide range of derived mean-
 31003 ings, including the relatively straightforward ‘remove’ (3, §26.1.1.1), ‘expel, ban-
 31004 ish’ (29, §6.5), ‘take off (clothes)’ (24, §23.3.4), but also ‘raise (a child)’ (46, §6.5.1)
 31005 and ‘earn (food)’ (25, §6.4). It occurs as auxiliary in a marginal causative con-
 31006 struction (111, §24.5.1.1).

31007 Unlike *βzu* and *lvt*, it almost never used with *tui-* action nominals, except with
 31008 the lexicalized noun *tupyar* ‘field clearing’ (§16.4.5), from which the irregular
 31009 antipassive *rypyas* ‘reclaim land’ is derived by denominal derivation (§18.6.3).

31010 Table 22.6 collects the most common collocations with *tçrt*. Most of the nouns
 31011 in this table are inalienably possessed. In the case of body parts, with the meaning
 31012 ‘stick out’, the possessive prefix is coreferent with the transitive subject (3SG in
 31013 132).

- 31014 (132) *ts^hut^h-o-puu tuu-rdo_B kuu ur-ku to-tc_Yt.*
 kid-DIM one-piece ERG 3SG.POSS-head IFR-take.out
 31015 ‘One of the little kids stuck its head out of (the wolf’s belly).’ (140430
 31016 lang he qizhi xiaoshanyang-zh, 135)

31017 In the collocations whose gloss contains an *X*, the possessive prefix corre-
 31018 responds to this *X* referent, for instance the recipient in *u-ftc_Yfkyt+tc_Yt* (133).

- 31019 (133) *a-ftc_Yfkyt ci ty-tc_Yt tce jisŋi tc^hi zo puu-nŋme-a*
 1SG.POSS-idea INDEF IMP-take.out LNK today what EMPH IPFV-do[III]-1SG
 31020 *pe*
 be.good:FACT
 31021 ‘Make me a suggestion, what should I do today?’ (140515 jiesu de
 31022 laoren-zh, 130)

31023 The nouns in the first section of Table 22.6 are also compatible with *to_B* ‘come
 31024 out’ as light verb (§22.4.1.1). In most cases, the *to_B* collocations are functional an-
 31025 ticausatives of the *tc_Yt* collocations, as in *u-tc^has+to_B* ‘have a handicap, be muti-
 31026 lated’ vs. *u-tc^has+tc_Yt* ‘cause a handicap, mutilate’ (134b) (a noun borrowed from
 31027 疮 *tc^hag* ‘decrease, break’) or *tuu-sro_B+to_B* ‘lose one’s live’ vs. *tuu-sro_B+tc_Yt* ‘cause
 31028 to lose one’s life’. The only exception is *ty-rmi+to_B* ‘become famous’, whose se-
 31029 mantics is not derivable from *ty-rmi+tc_Yt* ‘give a name’.

- 31030 (134) a. *a-mi uu-tc^has puu-to_B*
 1SG.POSS-leg 3SG.POSS-handicap AOR-come.out
 31031 ‘My leg became handicapped (as a result of an accident).’ (elicited)
 b. *azo kumy, a-tc^has puu-tuu-tc_Yt puu-ŋu*
 1SG also 1SG.POSS-handicap IPFV-2-take.out SENS-be
 31033 ‘(Not only did you do all these crimes), you also mutilate me.’ (tou
 31034 dongxi de xiaohai-zh, 27)

31035 The noun *u-bl^u* ‘trick’, ‘idea’ forms its corresponding intransitive construction
 31036 with the existential verb *tu* (example 162, §22.5.1.2).

31037 The collocation of *tc_Yt* with *u-qa* ‘(its) root’ can have the compositional mean-
 31038 ing ‘uproot’ (135) like the denominal verb *nŋqa* ‘uproot’ (§20.7.2), but it also used
 31039 in the sense of ‘do completely, until the end’ as in (136). This meaning is also
 31040 found with the nouns *rjama* (from 犬 *rja.ma* ‘tail’), *ty-jme* ‘hair’ and the relator
 31041 noun *u-ndo* ‘edge, border’ (§8.3.4.2).

22.4 Noun-verb collocations and light verb constructions

Table 22.6: Examples of collocations with *txyt* ‘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-srok</i> ‘life’	UPWARDS	‘cause <i>X</i> to lose one’s life’
<i>tuu-ctsi</i> ‘sweat’	DOWNWARDS	‘cause <i>X</i> to sweat’
<i>tx-re</i> ‘laugh’		‘mock <i>X</i> ’
<i>uu-tçʰas</i> ‘handicap’	DOWNWARDS	‘cause <i>X</i> a handicap, mutilate <i>X</i>
<i>tx-rmi</i> ‘name’	UPWARDS	‘give a name to <i>X</i> ’
<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>uu-blu</i> ‘trick’, ‘idea’	UPWARDS	‘suggest an idea, a trick to <i>X</i> ’
<i>uu-ftçrfkrt</i> ‘idea’, ‘advice’	UPWARDS	‘make a suggestion to <i>X</i> ’
<i>txndvyyri</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 <i>X</i> to completion, do <i>X</i> until the end’

- 31042 (135) *tsxcpʰyt n̩anuui uu-qa tú-wy-txyt tce,*
 plaintain DEM 3SG.POSS-root IPFV:UP-INV-take.out LNK
 31043 *pjú-wy-yv-la tce tuu-cya kui-mjym phvn*
 IPFV-INV-CAUS-soak LNK GENR.POSS-tooth SBJ:PCP-hurt be.efficient:FACT
 31044 *tu-ti-nuu*
 IPFV-say-PL
 31045 ‘People say that, if one digs out the plantain’s root and soak it in water,
 31046 it is efficient against toothache.’ (12-ndZiNgri, 46-47)

- 31047 (136) *nua ky-ndan lonba uizo pjui-syze tce ui-qa c^hu-tc^yt*
DEM INF-read all 3SG IPFV-start[II] LNK 3SG.POSS-root IPFV-take.out
31048 ‘(This monk is in charge) of reading (the sūtras) from the beginning until
31049 the end.’ (160721 XpWN, 44)

31050 Some of the collocations in *tc^yt* correspond to denominal verbs in *nua*, for
31051 instance *nuaqay* ‘fish’ (§20.7.1) or *nyre* ‘laugh’, a labile verb meaning ‘mock’ when
31052 transitive (§14.5.1.3) like *tr-re+tc^yt*. Alternatively, *tr-rmi+tc^yt* ‘give a name’ and
31053 *tua-ctsi+tc^yt* ‘cause to sweat’ rather correspond to sigmatic causative denominal
31054 verbs (§20.3.2).

31055 22.4.2.4 *ndo* ‘take’

31056 The basic meaning of *ndo* is ‘take’ (1, §19.1.1) or ‘have in the hand’ with the UP-
31057WARDS orientation, ‘catch’ (24 §16.1.1.2), ‘grab’ (56, §14.3.2.5), or ‘get attach to,
31058 stick on’ (137) with the EASTWARDS preverbs.

- 31059 (137) *pua-wy-nymyle tua-jas ku-ndym zo cti ma,*
IPFV-INV-touch GENR.POSS-hand IPFV-take[III] EMPH be.AFF:FACT LNK
31060 *ui-tax, ui-ndzuy zo kui-fse tu.*
3SG.POSS-on 3SG.POSS-resin EMPH SBJ:PCP-be.like exist:FACT
31061 ‘When one touches it (a type of mushroom), it sticks on one’s hand, as
31062 there is some kind of resin-like thing on it.’ (21-kuGrummAG, 21)

31063 Table 22.7 presents a non-exhaustive list of lexicalized collocations with *ndo*.
31064 With the noun *tua-jas* ‘hand’, it can predictably mean ‘grab by the hand’ (118,
31065 §21.4.1.3) or ‘stick on the hand’ (137), but in the imperative it can be interpreted
31066 as ‘don’t interfere, don’t meddle in it’.

31067 The collocation of *ndo* with *u-k^hrvt* ‘set, determined’ can take finite comple-
31068 ment clauses as in (138).

- 31069 (138) *tce kuki xsui-ldzi ra ci, kuiβde-ldzi*
LNK DEM.PROX three-long.object be.needed:FACT QU four-long.object
31070 *ra nunuu, tuzo ui-k^hrvt kú-wy-nur-ndo*
be.needed:FACT DEM GENR 3SG.POSS-determined IPFV-INV-AUTO-take
31071 *tce*
LNK
31072 ‘One has to control whether one needs three or four threads (for a given
31073 colour).’ (vid-2014-04-29-092115, 76)

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>tṣu</i> ‘road’	EASTWARDS	‘guard the road’
<i>tuu-mtçʰi</i> ‘mouth’	EASTWARDS	‘shut up’
<i>tr-puu</i> ‘young’	UPWARDS	‘get pregnant’ (animals)
<i>w-rtsuz</i> ‘number’, <i>w-χsyr</i> ‘number’	number of	EASTWARDS
<i>rjylpu</i> ‘king’	‘upwards, upstream’	‘become king’
<i>turma</i> ‘household’	EASTWARDS	‘establish a family’

31074 In addition to *rjylpu* ‘king’ in Table 22.7, *ndo* can be used with all nouns referring
 31075 to a status or a charge (such as *χpum* ‘monk’) to mean ‘become *X*, assume
 31076 the charge of *X*’. In this function, collocations in *ndo* correspond either to *ru-*/
 31077 *rr-* (§20.4.1) or *nu-* (§20.7.1) denominational derivations.

31078 With numerals, *ndo* indicates ‘be moving into one’s *X*’, without using the
 31079 counted noun *-p̥rme* ‘*X* years old’, as shown by (139).

- 31080 (139) *kuβdesqaptuŋ*, *kuβdesqamnuz* *ko-ndo* *juŋ-ŋu* *ma*
 forty.one forty.two IFR-take SENS-be LNK
 31081 ‘She is moving into her forty-one, forty two years old.’ (14-siblings, 339)

31082 In addition, *ndo* is used in the meaning ‘catch (a disease)’ in the dummy subject
 31083 construction, with *trmtšʰvz* ‘hyperostosis’ as only argument for instance.

31084 Another dummy subject construction of *ndo* with the noun *tua-pʰonjbu* ‘body’,
 31085 is only found as the infinitive complement of either *kʰw* ‘be possible’ or *sṛčʰa* ‘be
 31086 possible’ in negative form, the whole construction meaning ‘cannot help shivering-
 31087 ing’ (due to cold), as in (140).

- 31088 (140) *w-tua-muactas* *kx-ti* *kua* [*tua-pʰonjbu* *kx-ndo*] *zo*
 3SG.POSS-NMLZ:DEG-be.cold INF-say ERG GENR.POSS-body INF-take EMPH
 31089 *mu-pur-sy-cʰa*
 NEG-PST.IPFV-PROP-can
 31090 ‘It was so cold that one could not help shivering.’ (29-RmGWzWn2, 15)

31091 22.4.2.5 *pa* ‘do’

31092 The native verb *pa* ‘do’¹⁴ has been largely superseded by the Tibetan borrowing
 31093 *βzu* ‘make’ (§22.4.2.1) in the sense of ‘do, make’. It still means ‘do what’ when used
 31094 with the interrogative *tʂʰi* ‘what’ (236, §15.2.10.2), but as a complement-taking
 31095 verb it rather means ‘discuss and decide’ (§24.5.2). It is one of the few verb with
 31096 ergative lability (§14.5.1.4), and its intransitive counterpart is a light verb used
 31097 with numerals (§22.4.1.4) and ideophones (§10.1.7.1).

31098 The causative *supa* either has a tropative function ‘consider to be’ (§17.2.5.9),
 31099 or serves in various periphrastic constructions (§24.5.1.1; §24.5.1.3). Its passive
 31100 *apa* ‘become’ (§18.1.2) is used as inchoative copula (§22.5.1.1), and its reflexive is
 31101 the verb of pretense *zypypa* ‘pretend’ (§18.3.1.1, §24.4.2.3; see 141 below).

31102 As a transitive light verb, *pa* occurs in relatively fewer constructions than the
 31103 previous verbs. It means ‘close’ when used with *kum* ‘door’ (141) or *kʰuyŋŋu*
 31104 ‘window’, but also with nouns meaning ‘light’, ‘lamp’ or electrical implements
 31105 like phones, with either DOWNSTREAM or EASTWARDS orientations.

- 31106 (141) *ju-kum-ce* *ty-zypypa* *ny, kum nuu ci la-cuu,* *ci*
 IPFV-SBJ:PCP-go AOR-pretend ADD door DEM once AOR:3→3'-open once
 31107 *tʰa-pa* *ny, ky-anbas nuu-ŋu*
 AOR:3→3'-close ADD AOR-hide SENS-be
 31108 ‘She pretended to go (out), she opened the door, and then closed it, and
 31109 hid (inside the house).’ (2003 Kunbzang, 405)

31110 Although *pa* does occur with *ci* in its adverbial meaning ‘once’ (§22.2.1) as in
 31111 (141), a lexicalized collocation *ci+pa* ‘get married’ is also found (142).

- 31112 (142) *amanj, βdaŋmu, ci ky-pa-tci nuistʰuci zo ty-nyrzaŋ ny*
 INTERJ lady one AOR-do-1DU so.much EMPH AOR-pass(time) ADD
 31113 *ri*
 LNK
 31114 ‘Oh, my lady, so much time has passed since we got married, but ...’
 31115 (2005 Kunbzang, 414)

31116 With the Autive prefix (§19.1.3), *pa* occurs with nouns such as *βzajsa* ‘friend’ or
 31117 *yufsu* ‘friend’ in the meaning ‘become friend’. This construction is also possible
 31118 with social relation collectives in *kyndzi-* (§5.7.8.1) as in (143).

¹⁴ The root *pa* is cognate of Tibetan དེ་ ‘*b'ed*; *b'as* ‘do’; the yod medial Tibetan is unexplained, but not shared by cognates in its closest relatives (Jacques 2013d).

- 31119 (143) *a! jinde kyndzi-yuufsu nuu-pa-tci*
 INTERJ now COLL-friend AUTO-do:FACT-1DU
 31120 ‘Let us be friends!’ (smanmi 2003.1, 53)

31121 22.4.2.6 *ta* ‘put’

31122 The manipulation verb *ta* ‘put’ also means ‘leave (vt)’ (168, §14.6.1.5) and ‘let go’
 31123 like *lvt* ‘release’ (a polysemy reminiscent of Chinese 放过 <fàngguò> ‘let pass’).
 31124 Its lexicalized agentless passive *ata* ‘be on’ (§18.1.2) is used as an existential verb
 31125 (§22.5.1.2).

31126 Unlike *βzu* (§22.4.2.1) and *lvt* (§22.4.2.2), it is not used with *tuu-* action nomi-
 31127 nals, except for the lexicalized nominalization *tupu* ‘moxibustion’ (on which see
 31128 §16.4.5).

31129 Table 22.8 presents a representative sample of collocation in which it occurs.

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>tr-çpʰyt</i> ‘patch’	EASTWARDS	‘put a patch’
<i>tupu</i> ‘moxibustion’	EASTWARDS	‘use moxibustion’
<i>fsaq</i> ‘fumigation’	DOWNTOWARDS	‘make fumigations’
<i>kʰon</i> ‘steamer’	EASTWARDS	‘cook by steam’
<i>tsʰa</i> ‘tea’	EASTWARDS	‘made tea’
<i>tr-rte</i> ‘hat’	UPWARDS	‘put on, wear’

31130 The collocations *tsʰa+ta* ‘make tea’ and *kʰon+ta* ‘steam’ derive from ‘put *X*
 31131 on (the hearth tripod)’, a meaning that is still obvious in examples such as (144).

- 31132 (144) *tr-teuu nuu kuu qapi χstum nuu pa-ta*
 INDEF.POSS-boy DEM ERG white.stone three DEM AOR:3→3’:DOWN-put
 31133 *ndyre, nuu uu-taꝝ ndži-tsʰa ka-nuu-ta-ndzi*
 LNK DEM 3SG.POSS-on 3DU.POSS-tea AOR:3→3’-AUTO-put-DU
 31134 ‘The boy placed the three stones (on the ground), and they made their
 31135 tea on it.’ (2003 Kunbzang, 186-187)

22 Simple clauses

With head covers or implements worn on one's body (such as *χερλмuy* 'glasses'), the verb *ta* occurs with the autive in the meaning 'put on, wear'.

In dummy subject construction (§14.3.5), *ta* 'put' is also attested with nouns such as *εja* 'verdigris' or *tx-rq^hu* 'shell, hull, cuticle' to express spontaneous growth on a surface, as in (145) with the orientation 'toward east' *ku-* and stem III.

- (145) *zaŋ c^ho raŋ ni εnaεna zo εja ku-te nuŋ-ŋu*
copper COMIT brass DU both EMPH verdigris IPFV-put[III] SENS-be
'Both copper and brass get verdigris.' (30-Com, 101)

22.4.2.7 *rku* 'put in'

The manipulation verb *rku* 'put in' occurs in considerably fewer collocations than the previous verbs. In addition to its basic meaning, it can be used in the sense of 'pour (water, grain) into a container' (example 82, §8.2.3.2), 'give a parting present' (236, §16.5.1) and also 'fix a joint dislocation'.

Prefixed with the Autive *nu-* (§19.1.3), it occurs with the relator noun *w-pa* 'below, under' (§8.3.4.1) and *tu-ku* 'head' in *w-pa+nurku* 'subjugate, vanquish' (146), literally 'put *X* under oneself' and *tu-ku+nurku* 'meddle into (other people's business)'. In both cases, the possessive prefix on the noun is coreferent with the subject.

- (146) *nui rjylpu kui~kuu-tu nui pjui-cui-nŋam-a,*
DEM king TOTAL~SBJ:PCP-exist DEM IPFV-CAUS-be.defeated[III]-1SG
nunuu a-pa pjui-nui-rke-a ra
DEM 1SG.POSS-under IPFV-AUTO-put.in[III]-1SG be.needed:FACT
'I have to defeat all the kings (in the world), to subjugate them.' (150821
edu de wangzi-zh, 8)

Without Autive prefix, *rku* is also found in oblique nominalized form with *tu-ku* and the negative existential *me* as in (147)

- (147) *nx-ku sx-rku kui-me*
2SG.POSS-head OBL:PCP-put.in SBJ:PCP-not.exist
'(Something) that is none of your business.' (elicited)

In the dummy subject construction (§14.3.5), *rku* is attested with *tč^huwur* 'blister' and *cimb^hrom* 'blister' (148) (see also 66, §23.5.3.4).

- 31163 (148) *ty-rzab* *kur-ryŋfi* *tu-kur-ŋke* *q^he,*
 INDEF.POSS-time SBJ:PCP-be.long IPFV-GENR:S/O-walk LNK
 31164 *tu-myŋpa* *ri cimbyrom tu-rke* *ŋgryl.*
 GENR.POSS-sole LOC blister IPFV-put.in[III] be.usually.the.case:FACT
 31165 'If one walks for a long time (with bad shoes), one gets blisters on one's
 31166 soles.' (27-tWfCAI, 140)

31167 22.4.2.8 *ts^hor* 'attach'

31168 The verb *ts^hor* 'attach' (§18.5.3) only occurs in a handful of collocations with non-
 31169 dummy subject: *tu-χpum + ts^hor* 'knee' (§17.2.4.9) and *k^huna + ts^hor* 'hunt with
 31170 dogs'.

31171 In the dummy subject construction (§14.3.5), *ts^hor* has the sense of 'grow' with
 31172 nouns referring to plant parts (§18.5.3), in particular *w-mat + ts^hor* 'bear fruits' (see
 31173 examples 160, §8.2.11 or 67, §23.5.3.4). Its anticausative *ndzor* 'attach' (§22.4.1.2)
 31174 also occurs with the same meaning.

31175 22.4.2.9 Other transitive collocations

31176 Table 22.9 presents a list of collocations with verbs other than those discussed
 31177 above. The manipulation verb *mja* 'take', 'pick up' (whose historical morphol-
 31178 ogy is discussed in §19.7.3) and *cui* 'open' each occur in a few non-compositional
 31179 expressions. Note that *tutso* 'experience' is the lexicalized action nominal of *tso*
 31180 'know, understand' (§14.2.3).

Table 22.9: Other transitive collocations (excluding orphan nouns/verbs)

Noun	Verb	Meaning
<i>w-mp^hru</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>tu-rnoř</i> 'brain'	<i>cui</i> 'open'	'deafen'
<i>tsu</i> 'road'	<i>cui</i> 'open'	'give way'
<i>tu-nja</i> 'debt'	<i>sti</i> 'stop up'	'pay a debt by labour'
<i>trts^hor</i> 'nail'	<i>no</i> 'drive' (cattle)	'hammer nails'

31181 Although the noun *trts^hor* 'nail' probably derives from *ts^hor* 'attach' (§22.4.2.8),

31182 the two cannot be used as a collocation, and *tr̥tsʰor* rather selects *no* ‘drive’ or
 31183 the causative verb *s̥r̥tsa* ‘pierce’ with the DOWNWARDS preverbs to express the
 31184 meaning ‘hammer nails into’.

31185 22.4.3 Frozen collocations

31186 The noun-verbs collocations studied in the previous sections involve partially
 31187 grammaticalized verbs that can be combined with a considerable variety of nouns.
 31188 The following focuses on more opaque collocations, which comprise either nouns
 31189 or verbs that are not otherwise attested (§22.4.3.1, §22.4.3.2) and/or which are
 31190 borrowed from Tibetan (§22.4.3.3).

31191 22.4.3.1 Orphan noun

31192 Orphan nouns do not exist in free form, and are only found in collocations, or as
 31193 members of frozen compounds.

31194 Some orphan nouns are found in collocations with (mainly transitive) light
 31195 verbs (§22.4.2). A few items from this list originate from Tibetan verbs: *s̥as* is
 31196 from སྙେg ‘burn’, *ndaj* from ཅନ୍ତ୍ୟ ‘think about, long for’ and *mtʰor* from མୃତ୍ୟୁ
 31197 ‘see’, while *w̥-rtsa* is from the noun རୁଁ ‘root’. Pure Tibetan collocations
 31198 are treated in §22.4.3.3.

31199 The orphan noun *w̥-s̥puržu* is borrowed from ས୍ପିନ୍ ବ୍ରଜୁ *s̥pin̥.b̥z̥os* ‘comfort’; the
 31200 variant *w̥-snuržu* is semi-nativized by reanalyzing the *snu-* from ସ୍ନିଃ *s̥ni̥j* ‘heart’
 31201 as the *status constructus* *snu-* of its native cognate *tu-sni* ‘heart’.

31202 The nouns *tr̥-rt̥cʰyās* and *w̥-snuržu* are otherwise attested as the bases from
 31203 which the denominal verbs *s̥r̥tcʰyās* ‘quibble about’ and *y̥r̥tcʰyās* ‘quibble’ on
 31204 the one hand, and *nusnuržu* ‘comfort’ on the other, are derived.

31205 Some of the orphan nouns in Table 22.10 are treated as direct object (for in-
 31206 stance *tr̥lyo*, *s̥as*, *w̥-snuržu*), and other ones are semi-objects. The noun *ndaj* can
 31207 have both grammatical functions; in (149a) it is direct object (and the stimulus is
 31208 encoded as its possessor), whereas in (149b) it is semi-object (and the stimulus is
 31209 encoded as direct object and is indexed on *l̥st*).

- 31210 (149) a. *ny-ndaj* *lat-a* *cti*
 2SG.POSS-think.about release:FACT-1SG be.AFF:FACT
- 31211 b. *ndaj* *ta-l̥st* *cti*
 think.about 1→2-release:FACT be.AFF:FACT
- 31212 ‘I will think about/be considerate of you.’ (elicited)

22.4 Noun-verb collocations and light verb constructions

Table 22.10: Orphan nouns used with light verbs

Noun	Light verb	Orientation	Meaning
<i>uu-mt^honj</i>	<i>tɔk</i> ‘come out’	<i>nū-</i>	‘be exposed’
<i>ngartum</i>	<i>yut</i> ‘bring’	<i>pū-</i>	‘dive’ (of birds of prey)
<i>jasa</i>	<i>ta</i> ‘put’	<i>tr-</i>	‘respect’
<i>prvdrja</i>		<i>pū-</i>	‘claw around, make a mess’
<i>sas</i>		<i>kṛ-</i>	‘brand’ (with iron)
<i>taṣmbra</i>	<i>lṛt</i> ‘release’	<i>tr-</i>	‘jump’ (of horse)
<i>trlyo</i>		<i>kṛ-</i>	‘catch with a lasso’
<i>uu-ndaj</i>		<i>pū-</i>	‘think about’
<i>uu-puu</i>	<i>pa</i> ‘do’	<i>tr-</i>	‘keep well, preserve’
<i>tr-rtç^hyaṣ</i>	<i>tçṛt</i> ‘take out’	<i>nū-</i>	‘hinder’
<i>uu-rtsa</i>		<i>mu-</i>	‘investigate, get at the root of’
<i>uuŋaj</i>	<i>βzu</i> ‘make’	<i>nū-</i>	‘be self-satisfied’
<i>uu-snurzu,</i>		<i>nū-</i>	‘comfort’
<i>uu-ṣnurzu</i>			

31213 Other collocations with orphan nouns listed in Table 22.11 involve verbs not otherwise used in light verb constructions.

31214 Table 22.11: Orphan nouns in lexicalized collocations

Noun	Light verb	Meaning
<i>uu-rça</i>	<i>mjym</i> ‘hurt’	‘cherish’
<i>uu-tsui</i>	<i>rmas</i> ‘be deep’	‘keep the secret’
<i>uu-ndzuy</i>	<i>mas</i> ‘not be’	‘be terrible’
<i>uu-rka</i>	<i>γyn</i> ‘be evil’	‘harbour bad intentions’
<i>uu-lu</i>	<i>cui</i> ‘open’	‘lose consciousness’

31215 Most of the verbs in Table 22.11 are intransitive; the experiencer/main referent is encoded as the possessive prefix on the intransitive subject, as the 2SG in (150).

- 31217 (150) *ny-tsuu* *jua-rnax*
 2SG.POSS-secret SENS-be.deep
 31218 ‘You are keeping the secret very well.’ (elicited)

31219 The collocation *u-lu + cuu* is a transitive dummy construction (§14.3.5): the ex-
 31220 perienter is marked as possessor of the object *u-lu* (151), and no overt subject can
 31221 appear. To express the meaning ‘cause to lose conscience’, the causative *suu-cuu*
 31222 is needed.

- 31223 (151) *a-lu* *pjy-cuu* *k^hi*
 1SG.POSS-lose.conscience(1) IFR-lose.conscience(2) HEARSAY
 31224 ‘I lost conscience (people said).’ (elicited)

31225 Some of the nouns in Table 22.11 have etymologies. The noun *u-tsuu*, though
 31226 not otherwise attested, presumably originally meant ‘secret’, as it serves as the
 31227 base of the denominal transitive verb *nytsuu* ‘hide’. The nominal root *-lu* is possibly
 31228 related to the last syllable of *nukulu* ‘be lost’, ‘lose one’s way’, a denominal verb
 31229 (§20.7.1) from the *kuu-* participle (§16.1.1.7) of a verb **lu*, from which *u-lu* would
 31230 be derived (§16.4.2, §16.4.6).

31231 The noun *u-rca*, though non-attested on its own, occur in several collocations,
 31232 respectively *u-rca + myym* ‘cherish’ with *myym* ‘hurt’ (example 90b, §20.13.1),¹⁵ *u-*
 31233 *rca + xtrt* ‘concentrate, focus’ with the transitive *xtrt* ‘lean on’, and *u-rca + ts^ha*
 31234 ‘be thoughtful and considerate of the feelings of others’ with the orphan verb *ts^ha*
 31235 (§22.4.3.2).

31236 22.4.3.2 Orphan verbs

31237 Orphan verbs are much fewer than orphan nouns. Among the verbs in Table 22.12,
 31238 *ri* (example 132, §14.5.1.4) is the transitive labile counterpart of *ri* ‘remain’, ‘be left’
 31239 (§14.5.1.4), and *ts^ha* and *lo_g* are borrowed from Tibetan བྲྷ བྲྷ ‘hot’ and ཆྱ ཆྱ ‘be
 31240 upside down’. The rest of the verbs are obscure.

31241 The lower half of the Table includes collocations comprising both a orphan
 31242 noun and an orphan verb. In such cases, the noun and the verb are given the
 31243 same gloss, with the indices (1) on the former and (2) on the latter, as in (152).

¹⁵ This collocation can be denominalized as *nyrcymyym* ‘cherish’ (Table 20.21, §20.13.1).

Table 22.12: Orphan verbs

Noun	Verb	Meaning
<i>tuu-sro^b</i> ‘life’	<i>ri</i> (vt)	‘save X’s life’
<i>tuu-sro^b</i> ‘life’	<i>nuwṛtku</i> (vt)	‘risk one’s life’
<i>tuu-tca</i> ‘mistake’	<i>nujṛt</i> (vt)	‘make amends, apologize’
<i>tx-mbru</i> ‘anger’	<i>ŋgu</i> (vi)	‘get angry’
<i>tuu-mt^chi</i> ‘mouth’	<i>χo</i> (vi)	‘talk big, exaggerate’
<i>w-rca</i>	<i>ts^ha</i> (vi)	‘be thoughtful and considerate’
<i>tuu-zi</i>	<i>lo^b</i> (vi)	‘have nausea’
<i>sala</i>	<i>zruu</i> (vt)	‘be in the way, be a hindrance’
<i>w-ko</i>	<i>p^hi</i> (vt)	‘be disappointed by’

31244 (152) *nuitcu tx-ryru ma sala jnur-tua-zri*
 DEM:LOC IMP-get.up LNK be.a.hindrance(1) SENS-2-be.a.hindrance(2)

31245 *jnu-ŋu*
 SENS-be

31246 ‘Get up from there, you are in the way.’ (elicited)

31247 Several orphan verbs are denominalized together with their noun in an incor-
 31248 porating construction (Table 20.21, §20.13.1).

31249 Some orphan verbs can be subjected to voice derivations. For instance, *w-*
 31250 *ko + p^hi* ‘be disappointed by’ has an anticausative *w-ko + mbi* ‘be discouraged’ (§18.5.4)
 31251 and a facilitative (§18.9.1). The verb *ŋgu* has an irregular *quu-* causative (§17.2.2.1).

31252 22.4.3.3 Borrowed collocations

31253 Several synchronically opaque noun-verb collocations (with orphan verbs and/or
 31254 nouns) have been borrowed as a whole from Tibetan, unlike some constructions
 31255 described in previous sections which combine a noun or a verb from Tibetan
 31256 with a native word.

31257 Among Tibetan collocations, *t^hurzi + zuu* comprises the noun *t^hurzi* ‘mercy’
 31258 (from རྒྱନྤ୍ୱେ རྩ୍ୱ ‘compassion’), which has many functions in Japhug (§8.3.6.2),
 31259 while the transitive verb form *zuu* (from གླྷ ཡྴ ‘ask’) is not otherwise attested,¹⁶
 31260 with the meaning ‘ask for mercy’ (153).

¹⁶ Note however the verb *ndzuu* ‘accuse, report on’, which is probably borrowed from a non-classical present from **ndzu* of the verb གླྷ ‘ask’.

- 31261 (153) “wortc^{hi} ny wojyr” to-ti-nuu t^hurzi to-zui-nuu.
 please ADD please IFR-say-PL mercy IFR-ask-PL
 31262 ‘(The boys) asked for mercy, saying ‘please’ one after the other.’ (160704
 31263 poucet4-v2, 24-25)

31264 In other collocations, both the noun and the verb are orphan forms. For in-
 31265 stance, *t^has + t^hot* ‘take a decision’ was borrowed from the locution བྱାକ୍ བྱାକ୍ *t^hag.t^hod*
 31266 ‘be decided’, built from the noun བྱାକ୍ *t^hag.pa* ‘rope’ and the intransitive verb བྱାକ୍.
 31267 *t^hod* ‘be cut off’, neither of which are attested as independent words into Japhug.
 31268 It does not take complement clause, and is better translated as ‘take a decision’
 31269 rather than ‘decide’. The verbal element *t^hot* is transitive (unlike Tibetan བྱାକ୍ *t^hod*
 31270 ‘be cut off’), and the person making the decision is indexed as subject (154).

- 31271 (154) *t^has puu-tc^hot-a*
 decide(1) AOR-decide(2)-1SG
 31272 ‘I took a decision.’ (elicited)

31273 Similarly, the intransitive impersonal constructions *t^ho + t^huy* ‘match up’, ‘be
 31274 compatible’, ‘be conform to each other’ (155) from བྱାକ୍ *t^ho.t^hug* ‘match’, and *uu-*
 31275 *ηgu + t^hon* ‘be well-off’, ‘able to take care of oneself’ (156) from བྱାକ୍ *"go.t^hon* ‘able
 31276 to take care of oneself’ are synchronically opaque from a Japhug-internal per-
 31277 perspective.

- 31278 (155) *uozo kuu ta-tuit c^ho nyj tu-tuu-ti nuu t^ho*
 3SG ERG AOR:3→3'-say[II] COMIT 2SG IPFV-2-say DEM match.up(1)
 31279 *nuu-t^huy*
 SENS-match.up(2)
 31280 ‘What he said and what you are saying match up.’ (elicited)

- 31281 (156) *ci t^hur-kuu-rguu~rgyz juu-cti tce, ci*
 one AOR-SBJ:PCP-EMPH~be.old SENS-be.AFF LNK one
 31282 *kuu-xtcur~xtci juu-cti tce, ndzi-ηgu*
 SBJ:PCP-EMPH~be.small SENS-be.AFF LNK 3DU.POSS-be.well.off(1)
 31283 *my-t^hon tce, azo my-yi-a*
 NEG-be.well.off(2):FACT LNK 1SG NEG-come:FACT-1SG
 31284 ‘One of them is very old, the other one is very young, they are not able
 31285 to take care of themselves, I will not come (to the palace and leave them
 31286 behind).’ (2011-05-nyima, 140)

In addition, there are also partially compositional collocations, both of whose elements independently exist in Japhug. For instance, although *tuu-sum + βdi* ‘be relieved’ (§22.4.1.5) takes its specific meaning from Tibetan བྱତ୍ତନ୍ତୁ ༂ ད୍ବେ: *sems.bde* ‘be relieved’, both *tuu-sum* ‘mind’ (§24.6.3.3) and *βdi* ‘be well’ are otherwise found, and also used in a variety of constructions not calqued from Tibetan.

There is at least one case of collocation from Situ: *kʰyli + rgi* ‘be respected, have good reputation’, from *kʰalí* ‘wind, reputation’ (cognate of *qale* ‘wind’ and *u-ble* ‘reputation’, §5.1.2.2), with a verb from ད୍ଗେ: *dge* ‘virtuous’.

22.5 Copulas and existential verbs

Copulas and existential verbs stand out not simply by their morphological specificities (suppletive negation §13.1.2, infix person index §14.2.2 and other §22.5.5), but also by their uses as auxiliaries in periphrastic tenses (§21.2.2), and various additional functions, including possessive constructions (§22.5.2), emphasis (§22.5.3.1), focalization (§23.6.1, §22.5.3.2), universal negation (§22.5.4), superlative (§26.4.3) and concessive conditionals (§16.2.2.2).

22.5.1 Basic functions

22.5.1.1 Copulas

With the exception of a handful of predicative nouns (§22.3), a copula is required to make a noun phrase or a pronoun predicative in Japhug.

The copulas are a distinct subclass of semi-transitive verbs (§14.2.3), whose semi-object is the nominal predicate. There are two assertive copulas, the neutral *yu* ‘be’ and the emphatic affirmative *cti* ‘be’, and one suppletive negative copula *ma* ‘not be’ (§13.1.2). The emphatic affirmative copula occurs in particular to express contrast, as in (157).

- (157) *azo βzuu cti-a ma, nyki, pya mas-a*
 1SG mouse be.AFF:FACT LNK FILLER bird not.be:FACT
 ‘(The bat said:) I am a mouse, not a bird.’ (140427 bianfu yu
 huangshulang-zh, 7)

The copulas cannot be used with inchoative meanings (‘become’) in the Aorist (§21.5.1.3) or the Inferential (§21.5.2.4) unlike other stative verbs. The Aorist of the copulas are only attested to fix a point of temporal reference (§25.3.4.1) and in periphrastic tenses (examples 256 in §21.6.2.1 and 94 in §25.5.3). The lexicalized

31318 passives *apa* and *aβzu* (§18.1.2) replace the copula to express inchoative meaning,
 31319 as shown by (158).

- 31320 (158) *azo tumukumpci ra nuu-tcui pui-ŋu-a ri, [ki*
 1SG heaven PL 3PL.POSS-SON PST.IPFV-be-1SG LNK DEM.PROX
 31321 *kui-fse] nuu-aβzu-a*
 SBJ:PCP-be.like AOR-become-1SG
 31322 ‘I used to be a son of heaven, but I became like that.’ (divination 2003,
 31323 30-31)

31324 Person indexation on copula generally follows the subject, in particular when
 31325 both subject and semi-object are non-third person as in (159).

- 31326 (159) *azo nyzo mab-a kui, a-mu my-nymqe-a.*
 1SG 2SG not.be:FACT-1SG ERG 1SG.POSS-mother NEG-scold:FACT-1SG
 31327 ‘I am not you, I will not scold my mother.’ (elicited)

31328 However, when the predicate is a first or second person pronoun and the
 31329 subject third person, the copula indexes the non-third person argument. In the
 31330 pseudo-cleft (160) for instance, it would not be grammatical to replace *azo cti-a*
 31331 with a third 3SG copula †*azo cti*. (see also 126 in §23.6.1).

- 31332 (160) *[pui-kui-cʰa] nuu azo cti-a*
 AOR-SBJ:PCP-can DEM 1SG be.AFF:FACT-1SG
 31333 ‘The one who succeeded (in doing these things) was me.’ (qachGa 2003,
 31334 176)

31335 We also find examples of indexation with a (third person) predicative noun, as
 31336 in (161), where the verb has plural indexation like the predicative noun phrase
 31337 *stymku nura*, whereas the subject is in the singular. Note that the plural *nura*
 31338 here cannot be interpreted as approximate location (§9.1.1.2), because in the next
 31339 sentence the grasslands are analogically referred to by the plural demonstrative
 31340 pronoun *nura* (§6.9.1).

- 31341 (161) *stu uu-sy-dyn nuu [stymku nura] ŋu-nuu. tce*
 most 3SG.POSS-OBL:PCP-be.many DEM grassland DEM:PL be:FACT-PL LNK
 31342 *nura nuu-ŋguu tce tu-łor ŋu tce*
 DEM:PL 3PL.POSS-inside LOC IPFV-come.out be:FACT LNK
 31343 ‘The place where it is most numerous is the grasslands, and it grows in
 31344 these’ (19-qachGa mWntoR, 24-25)

31345 22.5.1.2 Existential verbs

31346 Unlike other languages of the area such as Khroskyabs (Lai 2017: 250–252), Ja-
 31347 phug is relatively poor in existential verbs. The verb *tu* ‘exist’ and its supple-
 31348 tive forms (the Sensory *yrrzu* §14.2.2, the negative *me* ‘not exist’ and the Sensory
 31349 negative *maje*, §13.1.2) have no selection restrictions on their subjects, and are
 31350 compatible with abstract nouns (162), inanimate objects (163) and humans (164,
 31351 165).

- 31352 (162) *azō a-βlu ci tu*
 1SG 1SG.POSS-trick INDEF exist:FACT
 31353 ‘I have an idea.’ (150829 taishan zhi zhu-zh, 199)
- 31354 (163) *kuciunγui nūnūtcu kʰyNqra ci pjy-tu.*
 in.former.times DEM:LOC house.in.ruin INDEF IFR.IPFV-exist
 31355 ‘In former times, there used to be a house in ruin there.’ (140522 Kamnyu
 31356 zgo, 258)

31357 The existential verbs index the person of the intransitive subject, as shown in
 31358 (164) (see §23.7 on this construction).

- 31359 (164) *[juymur kuu-nypxri] azō ma me-a.*
 this.evening SBJ:PCP-have.dinner 1SG apart.from not.exist:FACT-1SG
 31360 ‘This evening nobody is having dinner (at home) apart from me.’
 31361 (conversation, 16-04-28)

31362 With third person subjects, number indexation is possible as in (165), but op-
 31363 tional (§14.6.1.1), and never found in the possessive construction (§22.5.2).

- 31364 (165) *kuciunγui bzymi ci pjy-tu-ndzi*
 in.former.times couple INDEF IFR.IPFV-exist-DU
 31365 ‘In former times, there was a husband and his wife.’ (rkangrgyal 2002.2,
 31366 1)

31367 The assertive existential verbs can mean ‘be located’, and take associated mo-
 31368 tion prefixes (§15.2) as in (166).

- 31369 (166) *ŋotcu c-puu-tuu-tu-nur?*
 where TRAL-PST:IPFV-2-exist-PL
 31370 ‘Where (in which places) have you been?’ (2003sras, 57)

31371 Other meanings include ‘be alive’ as in (167), and ‘be present’ (especially in
 31372 converbial form *X ku-tu zo* ‘in *X*’s presence’, see 172, §16.2.1.7).

- 31373 (167) *nxj ku-tu-tu út-ŋu*
 2SG PRS-2-exist QU-be:FACT
 31374 ‘Are you (still) alive?’ (Nyima Wodzer 2003.2, 27)

31375 The negative existential verb *me* is also employed in a comparative construc-
 31376 tion (§26.2.5), and with infinitives in a construction expressing impossibility (§16.2.1.6,
 31377 §24.4.2.4).

31378 Unlike copulas, existential verbs can be used in Aorist, Inferential and Imper-
 31379 fective with an inchoative meaning (see 130 in §15.1.5.6 and 137 in §15.1.5.7).

31380 The lexicalized agentless passives (§18.1.2) *ata* ‘be on’ and *arku* ‘be in’, are
 31381 nascent existential verbs. They do not have semantic restrictions on the subject
 31382 as in Khroskyabs or Stau (they are attested with first or second person human
 31383 subjects, as in 6, §18.1), but indicate the location of the subject: on a surface or in
 31384 a building in the case of *ata* (168) and inside a closed and narrow space (or inside
 31385 a compact matter) for *arku* (169).

- 31386 (168) *mu-to-ndo-t-a, kʰa a-ta cti tce*
 NEG-IFR-take-PST:TR-1SG house PASS-put:FACT be.AFF:FACT LNK
 31387 ‘I did not take it (with me), it is (I left it) in my home.’ (150830 afanti-zh,
 31388 132)
- 31389 (169) *a-wa u-kur u-ŋgu zwi, nutcu*
 1SG.POSS-father 3SG.POSS-mouth 3SG.POSS-in LOC DEM:LOC
 31390 *tʂ-rye ci a-arku tce*
 INDEF.POSS-pearl INDEF PASS-put.in:FACT LNK
 31391 ‘In my father’s mouth, there is a pearl.’ (150902 hailibu-zh, 37)

31392 In addition, the anticausative verb *ndzob* ‘be attached’ (§18.5.3, §22.4.1.2 can
 31393 be used to describe the presence of limbs, appendices, excrescence, thorns, hairs
 31394 and twigs on living organisms, as in (170) (see also 19, §18.1.3).

- 31395 (170) *u-ku u-rku ri ʂja zo u-mʂlyjas ra*
 3SG.POSS-head 3SG.POSS-side LOC completely EMPH 3SG.POSS-limb PL
 31396 *ku-ndzob pŋu-ŋu*
 IPFV-ACAUS:attach SENS-be
 31397 ‘Its legs are located (attached) next to its head.’ (26-mYaRmtsaR, 49)

31398 22.5.2 Possessive constructions

31399 There are two main possessive constructions in Japhug. In the first one, illustrated by (171a), the possessum is the intransitive subject of an existential verb (§22.5.1.2) and the possessor is indicated by a possessive prefix on the possessum (§5.1.1.2) and (optionally) a genitive phrase (example 172 below, §8.2.3.1). In the second one (171b), involving the semi-transitive verb *aro* ‘own’ (§14.2.3), the possessor is subject, and the possessum semi-object (§8.1.5); when the possessum is an inalienably possessed noun (§5.1.2), it selects the indefinite possessor prefix.

- 31406 (171) a. *a-mkum tu*
1SG.POSS-pillow exist:FACT
31407 b. *ty-mkum aro-a*
INDEF.POSS-pillow have:FACT-1SG
31408 (Both) ‘I have a pillow.’ (elicited)

31409 22.5.2.1 Mihi est possessive

31410 The *mihi est*-type construction in (171a) is by far the most frequent one. It differs from the usual existential construction in that the number of the possessum (intransitive subject) is never indexed on the verb: in (172) for instance, the subject *w-tçu* takes the numeral *sqaptuy* ‘eleven’ but the existential verb *pjy-tu* lacks plural indexation. Although number indexation in the existential construction is optional (§22.5.1.2, §14.6.1.1), its presence is however more common than its absence. The non-indexation in (172) is thus indicative of a significant syntactic difference between the existential and the possessive constructions, despite superficial similarity.

- 31419 (172) *rjylpu numu yu w-tçu sqaptuy zo pjy-tu.*
king DEM GEN 3SG.POSS-son eleven EMPH IFR.IPFV-exist
31420 ‘The king had eleven sons.’ (140520 ye tiane-zh, 4)

31421 Inalienably possessed possessums normally take a possessive prefix coreferent with the possessor, even when the possessor is overt and marked with the genitive. In (173), we observe a string of possessive clauses in parataxis, each sharing the same possessor with the genitive (*tuu-tupu rajri yu*). The possessums of all of these clauses are inalienably possessed nouns (domestic animals). In the first three clauses, the expected 3PL possessor prefix is present. In the last two however the possessive prefix is absent; this is one of the very rare cases where the possessor is not marked on the possessum in this construction in the corpus.

- 31429 (173) *tua-tupuu rayri yu, nykinuu, nua-mbro pjy-tu,*
 one-household each GEN FILLER 3PL.POSS-horse IFR.IPFV-exist
 31430 *nua-jla pjy-tu, nua-nuiga pjy-tu, qazo*
 3PL.POSS-hybrid.yak IFR.IPFV-exist 3PL.POSS-cow IFR.IPFV-exist sheep
 31431 *pjy-tu, ts^hyt pjy-tu.*
 IFR.IPFV-exist goat IFR.IPFV-exist
 31432 ‘Every household used to have horse(s), cow-s), hybrid yak(s), sheep and
 31433 goat(s).’ (150820 kAnWCkat, 2)

31434 The *mihi est* construction can be causativized by subjecting the existential *tu* to
 31435 the *y-* derivation (§17.3.2.3), yielding the verb *yrtu* ‘cause to have’, which marks
 31436 the beneficiary (corresponding to the possessor of the intransitive construction)
 31437 with the genitive case, as *nyzuy* in (174), or a as possessor of the object (as in 81,
 31438 §17.3.2.3).

- 31439 (174) *tu-βze-a ky-c^ha nuara lonba zo nyzuy*
 IPFV-make[III]-1SG INF-can DEM:PL all EMPH 2SG:GEN
 31440 *t^h-y^h-tu-t-a cti tce*
 AOR-CAUS-exist-PST:TR-1SG be.AFF:FACT LNK
 31441 ‘I endowed you with all the things I could make.’ (140425 shizi
 31442 puluomixiusi he daxiang-zh, 16)

31443 When the *mihi est* possessive construction undergoes relativization, there is
 31444 ambiguity as to whether the relativized element is the possesum or the posses-
 31445 sor, since both intransitive subjects (§23.5.10.1) and possessors (§23.5.1) are rela-
 31446 tivized by means of (mostly head-internal) subject participial relatives (§16.1.1.4).
 31447 In (175), the relativized element is the possesum, and in (176) its is the possessor,
 31448 but these two relative clauses have exactly the same surface structure.

- 31449 (175) *[nuucunguu yu w-laxt^ha pu-kui-tu] nuara*
 before GEN 3SG.POSS-thing PST.IPFV-SBJ:PCP-exist DEM:PL
 31450 *c-tú-wy-su-rto^h tce,*
 TRAL-IPFV-INV-CAUS-look LNK
 31451 ‘They go (there) and show (the child_i) [objects that he_i used to have
 31452 before] (in his_i previous life, when he_i was a lama).’ (160722 skWBli, 6)
- 31453 (176) *[jla nur-bruu kui-tu] ra kumy, nua-rpas*
 hybrid.yak 3PL.POSS-horn SBJ:PCP-exist DEM:PL also 3PL.POSS-shoulder

31454 *kur puu-z-ryci-nuu puu-ŋu tce,*
 ERG IPFV-CAUS-pull-PL PST.IPFV-be LNK

31455 ‘Even the hybrid yaks that had horns used to pull (the plough) with their
 31456 shoulders (rather than with their horns).’ (25-stuxsi, 21-22)

31457 Possessive constructions with the existential verb *kua-tu* in participial form can
 31458 be combined with a negative existential verb *kua-tu me/kua-tu mage* to express the
 31459 meaning ‘not have any’ as in (177).

31460 (177) *wi-ru nuunu, kua-mpcuu~mpcu zo ŋu,*
 3SG.POSS-stalk DEM SBJ:PCP-EMPH~be.smooth EMPH be:FACT
 31461 [*wi-mdzu ri kua-tu] me*
 3SG.POSS-thorn also SBJ:PCP-exist not.exist:FACT
 31462 ‘Its stalk, it is very smooth, and it does not have any thorns.’
 31463 (11-qrontshom, 42)

31464 The *mihi est* possessive construction can be a gradable predicate and occur
 31465 in a superlative construction (§26.4.3) as in (178) with the abstract noun *tsʰuxtor*
 31466 ‘loyalty’.

31467 (178) *fsapaŋ nuu wi-ŋguu zuu (...) kʰuna kua-fse zo, n̥ki,*
 animal DEM 3SG.POSS-in LOC dog SBJ:PCP-be.like EMPH FILLER
 31468 *wi-tsʰuxtor kua-tu me kʰi*
 3SG.POSS-loyalty SBJ:PCP-exist not.exist:FACT HEARSAY
 31469 ‘Among domestic animals, the dog is the most loyal one. (among
 31470 domestic animals, there isn’t any one which has loyalty like a dog).’
 31471 (05-khWna, 5-6)

31472 Some possessive constructions, involving in particular abstract nouns, are lex-
 31473 icalized and are better described as noun-verb collocations (§22.4.1.3).

31474 22.5.2.2 Non-genitive possessor

31475 There is in addition a third construction, intermediate between those illustrated
 31476 in (171), involving an existential verb, but in which the possessor is rather intrans-
 31477 sive subject, indexed on the verb. It is only attested in double negative, with
 31478 the negative existential verb *me* ‘not exist’ and a negative verb participle such
 31479 as *mr-kua-pe* ‘(something) that is not good’ as possesum: compare the *mihi est*
 31480 construction (179a) with this third construction (179b), where the verb has 1SG

22 Simple clauses

31481 indexation. Only one example is found in the whole corpus (identical to example
31482 179a, but with 1PL possessor).

31483 (179) a. *azuy my-kui-pe ku-me*
31484 1SG:GEN NEG-SBJ:PCP-be.good PRS-not.exist

31485 b. *azo my-kui-pe ku-me-a*
31486 1SG NEG-SBJ:PCP-be.good PRS-not.exist-1SG

(Both) 'I don't have any problem/anything bad.' (elicited, based on
real examples)

31487 22.5.3 Postverbal copulas

31488 Copulas are commonly found in postverbal position, in periphrastic TAME con-
31489 structions (§21.2.2, §21.5.1.8, §21.5.3.5, §21.6.2.1) and in emphatic and focalization
31490 functions, as detailed below.

31491 These constructions have in common that the copula remains in 3SG form,
31492 regardless of the core arguments of the preceding verb. In (180) for instance, the
31493 copula *yu* lacks the 1SG suffix found on the verb *ce-a*, and using here the 1SG form
31494 *yu-a* would be ungrammatical.

31495 (180) *nutcu ce-a yu*
31496 DEM:LOC go:FACT-1SG be:FACT

'(For all these reasons) I am going there.' (2011-04-smanmi, 46)

31497 A question concerning the syntactic structure of these constructions is whether
31498 part of the clause preceding the copula (*nutcu ce-a*) is a subordinate clause, the
31499 copula being the main verb of the sentence. The fact that post-verbal adverbs
31500 such as *ntsui* (§22.2.7) can be located between the verb and the sentence-final copula,
31501 as in (181), is a clue that the part of the sentence preceding the copula is a
31502 syntactic constituent.

31503 (181) *tur~ty-tur-nyma-t rcanui, pe ntsui cti*
31504 TOTAL~AOR-2-make-PST:TR UNEXP:FOC be.good:FACT always be.AFF:FACT

'Everything that you do is always good.' (150822 laoye zuoshi zongshi
duide-zh, 252)

31507 The pre-copula constituents (*nutcu ce-a* and *pe ntsui*) cannot be analyzed as fi-
31508 nite relative clauses (§23.2.2), since this type of relatives are restricted to relativiz-
31509 ing 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 *maʂ* can be used to mark an emphatic contrast between two predicates, as in (182) and (183) (§13.2).

- (182) *tú-wy-ctʂo* *ŋu* *ma* *tú-wy-skyr* *maʂ*
 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* *ndʐa* *cti* *wo ma, tce a-mŋaʂ*
 SENS-have.smoke reason be.AFF:FACT SFP LNK LNK 1SG.POSS-eye
 ŋuu-cui-mŋym *ndʐa* *cti* *ma, ŋuu-yŋwu-a maʂ*
 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).

- (184) *tcetʰa nyzo tuu-si* *cti*
 later 2SG 2-die:FACT be.AFF:FACT
 ‘(Otherwise) you will (certainly) die.’ (2011-04-smanmi, 70)

The postverbal negation *maʂ* can be combined with the interrogative form of the assertive copula *ú-ŋu*, as in (185), to express a rhetorical question concerning something that both the speaker and the addressee are supposed to know.

- (185) *'u-kyrme* *tuu-ldza* *a-mʂ-jy-tuu-yuit* *ra'*
 3SG.POSS-hair one-long-object IRR-NEG-PFV-2-bring be.needed:FACT
 ty-tuat-a *maʂ* *tú-ŋu*
 AOR-say[II]-1SG not.be:FACT QU-be:FACT
 ‘Didn’t I say: ‘Do not bring back anything, not even a hair (from her

³¹⁵³⁷ head).” (2014-kWLAG., 691)

31538 22.5.3.2 Focalization of a constituent

The most common focalization construction in Japhug is not a pseudo-cleft construction (§23.6.1) or a focus marker (§9.1.6), but the combination of an overt noun phrase or pronoun (§22.1.2.3) with a postverbal copula, as in (186).¹⁷ The focalized constituents are indicated in bold. In this construction, the copula is never adjacent to the focalized constituent, which is also marked by a specific intonation.

- 31545 (186) a. *nyzo ny-tu-ci* *c-tx-tu-nu-ru-t*
 2SG 2SG.POSS-INDEF.POSS-water TRAL-AOR-AUTO-bring-PST:TR
 tú-ŋu?
 QU-be:FACT
 'Was it for yourself that you brought the water?'
 31546
 31547
 31548 b. *azō c-tx-nu-ru-t-a* *ŋu*
 1SG TRAL-AOR-AUTO-bring-PST:TR-1SG be:FACT
 'I brought it for myself'
 31549

Given the fact that many periphrastic TAME categories use copulas (§21.2.2, §21.5.1.8, §21.5.3.5, §21.6.2.1), there are many cases where this focalizing function of the copula is ambiguous (for this reason, most of the examples presented below involve verbs in Aorist and Inferential form, which do not occur with the copulas in periphrastic tenses).

The postverbal copula construction is used to indicate focus on all core arguments, including intransitive subject (187), transitive subject (188, 189, with optional ergative on the overt pronoun, §8.1.2) and object (190, 191).

In (§186b), although the focalized argument is in transitive subject function, it is not focalized as subject ('it is I who brought it') but as beneficiary ('it is for myself that I brought it'), as this referent has both functions, the latter marked by the autive prefix *nua-* (§19.1.3).

All three copulas (§22.5.1.1) are found in this construction, including the emphatic affirmative *cti* (187, 190) and the negative *maš* (190, 192).

¹⁷ These 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.

- 31564 (187) *tceri, u-pi* *mu-pjy-ryzi* *q^hendyre, u-las*
 LNK 3SG.POSS-elder.sibling NEG-IFR.IPFV-stay LNK 3SG.POSS-aunt
 31565 *nua pju-ryzi* *cti* *q^he*
 DEM NEG-IFR.IPFV-stay be.AFF:FACT LNK
 31566 ‘But his elder brother was not there, it was his brother’s wife who was
 31567 there.’ (140512 alibaba, 62)

- 31568 (188) *pymawombyr kuu* [...] *t^h-wy-suu-χtua-a* *ŋu*
 ANTHR ERG AOR-INV-CAUS-sell-1SG be:FACT
 31569 ‘It is Padma ’Od’bar who sold it to me.’ (2012 Norbzang, 157)

31570 Focalized first or second person core arguments, in addition to being marked
 31571 by an overt pronoun, are also obligatorily indexed on the verb (§14.2, §14.3), as
 31572 shown by 1SG and 2SG marking in (189) and (190) below and in (186) above.

- 31573 (189) *kuki tc^heme ki* *ndyre azuwy a-pui-ŋu* *tsaŋ* *ma*
 DEM.PROX girl DEM.PROX LNK 1SG.GEN IRR-IPFV-be be.fair:FACT LNK
 31574 *tce azo pui-nuu-mto-t-a* *cti* *tce*
 LNK 1SG AOR-AUTO-see-PST:TR-1SG be.AFF:FACT LNK
 31575 ‘This girl, it would be fair if she were mine, as it was I who found her.’
 31576 (140517 buaishuohua, 102)

- 31577 (190) *azo pymawombyr tu-ti-a* *cti* *ma, nɔj*
 1SG ANTHR IPFV-say-1SG be.AFF:FACT LNK 2SG
 31578 *pui-ta-nuu-ŋk^hyzŋga maŋ*
 IPFV-1→2-APPL-call not.be:FACT
 31579 ‘I am saying “Padma ’Od ’bar”, it is not you that I am calling.’ (2012
 31580 Norbzang, 163)

- 31581 (191) *k^huyŋju ri pytciu ni pui-ŋnauyo-ndzi tce, nua pui-nŋre-a*
 window LOC bird DU SENS-play-DU LNK DEM IPFV-1SG
 31582 *cti wo*
 be.AFF:FACT SFP
 31583 ‘On the window two birds were playing, this is what I was laughing
 31584 about.’ (2014-kWIAG, 396)

31585 This construction is also attested to focalize adjuncts, such as the causal phrase
 31586 marked with the ergative (§8.2.2.5) in (192).

- 31587 (192) *nua u-ndza kuu nuu-si bo puu-mav.*
 DEM 3SG.POSS-reason ERG AOR-die ADVERS PST.IPFV-not.be
 'It was not because of this that shed died.' (150907 srWn, 23)

31589 The postverbal copula can be nominalized, and the whole sentence turned into
 31590 a non-finite clause. This type of construction is also used for constituent focal-
 31591 ization as in (193). The form *kuu-ŋyu* is ambiguous between a stative infinitive and
 31592 a subject participle (§16.2.1.1), and therefore the non-finite clause is either ana-
 31593 lyzable as an infinitival complement clause (§16.2.1.5) or a participial clause in
 31594 semi-object function (§24.4.1).

- 31595 (193) *[xčiri nua kuu qapri buksi pŋy-sat kuu-ŋyu] nuunu ko-tso*
 weasel DEM ERG snake python IFR-kill SBJ:PCP-be DEM IFR-understand
 'He realized that it was the weasel that had killed the python.' (140518
 31596 xuezhe he huangshulang-zh, 34)

31598 22.5.4 Postverbal negative existential verb

31599 Like the negative copula *mav* (§22.5.3.1), the negative existential verbs *me* and
 31600 *maje* occur postverbally as periphrastic negative construction (§13.2).

31601 With transitive verbs, this construction can express universal negative object
 31602 ('nothing'), in particular with the adverbial intensifier *maka* (§22.2.4), which can
 31603 be located either before the main verb (194a) or directly before the negative exis-
 31604 tential verb (194b).

- 31605 (194) a. *maka zo puu-mto-t-a me*
 at.all EMPH AOR-see-PST:TR-1SG not.exist:FACT
 b. *puu-mto-t-a maka me*
 EMPH AOR-see-PST:TR-1SG at.all not.exist:FACT
 'I did not see anything/any of it at all.' (elicited)

31608 With secundative verbs (§14.4.2), negative meaning can apply either to the
 31609 object or to the theme (semi-object). In (195), the object (*rŋwul* 'silver') is definite,
 31610 while the non-overt theme (the manner) is universal negative.

- 31611 (195) *azo rŋgwul cti-a qhe, rŋwul ste-a me*
 1SG boulder be.AFF:FACT-1SG LNK silver do.like:FACT-1SG not.exist:FACT
 31612 *qhe, nyzo ny-ŋgra a-puu-ŋyu tce ty-nua-ndym*
 LNK 2SG 2SG.POSS-salary IRR-PFV-be LNK IMP-AUTO-take[III]
 31613 'I am a boulder, I have no use of (this) silver, may this be your reward'

31614 (for helping me), take it.' (divination, 98)

31615 The postverbal negative construction can also indicate a non-specific, but not
 31616 completely indefinite entity ('not any *X*, none of the *X*' rather than 'nothing').
 31617 In (196), the zero object anaphorically refers to *quandroy* 'crane' (§22.1.2.1), the
 31618 main topic of the story from which this sentence is taken.

- 31619 (196) *tce jinde aj puu-mto-t-a me ri,*
 LNK nowadays 1SG AOR-see-PST:TR-1SG LNK not.exist:FACT
 31620 *puu-kuu-xtci tce puú-wy-mto*
 AOR-GENR:S/O-be.small LNK AOR-INV-see
 31621 'These days I have not seen any (crane), but I did see (some) when I was
 31622 young.' (22-qomndroN, 25)

31623 The scope of the negation is however not necessarily restricted to the object. In
 31624 (197) for instance, the non-overt object anaphorically refers to *jima* 'maize' men-
 31625 tioned in the previous sentences, but the scope of negation is rather on the essive
 31626 participial clause *zara nuu-ky-nuu-ndza* 'as food for themselves/for themselves to
 31627 eat' (§8.1.7): the villagers do plant maize, but for a different purpose.

- 31628 (197) *tce zara nuu-ky-nuu-ndza tce koyla ji-nuu*
 LNK 3PL 2PL.POSS-OBJ:PCP-AUTO-eat LNK completely plant:FACT-PL
 31629 *manje woma*
 not.exist:SENS SFP
 31630 'They don't plant any (maize) for themselves to eat, (they plant it to feed
 31631 their pigs).' (140522 kAmYW tWji, 68)

31632 With intransitive verbs, this construction is used to indicate the complete ab-
 31633 sence of the action 'not ... at all' (198).

- 31634 (198) *tuu-ci uu-rkuu zuu ku-ryzi-a tce nure ri*
 INDEF.POSS-water 3SG.POSS-side LOC IPFV-stay-1SG LNK DEM:LOC LOC
 31635 *ku-nuu-ts^{hi}-a cti ma uu-ηguu ri*
 IPFV-AUTO-drink-1SG be.AFF:FACT LNK 3SG.POSS-in also
 31636 *ky-ari-a me, c-tu-nηηkuŋke-a ri*
 AOR:EAST-go[II]-1SG not.exist:FACT TRAL-IPFV-DISTR:walk-1SG also
 31637 *me*
 not.exist:FACT
 31638 'I am staying near the water and drinking (water) there, I did not go into
 31639 the water at all, I am not walking around in it.' (aesop lang he yang 16-17)

22 Simple clauses

The intransitive stative verb *sna* ‘be good, be worthy’ (§19.7.10) is commonly used with negative existential verbs, with the meaning ‘not good for anything’, as in (199). The scope of universal negation in this case is on the essive adjunct (for instance *nuŋa u-ndza* ‘cow fodder’ in the first clause of 199).

- (199) *nuŋa wi-ndza sna ma nuŋ ma sna*
 cow 3SG.POSS-food be.good:FACT LNK DEM apart.from be.good:FACT
 me
 not.exist:FACT

‘(Oat) is good as fodder for cattle, but apart from that it is not good for anything.’ (08-qaJAGi, 8)

The clause preceding the negative existential verb can be embedded within a participial clause with the existential verb *kuu-tu*, as in (200). A similar use of *kuu-tu* is also found in the possessive construction (example 177, §22.5.2).

- (200) [[*azo joβ tci c-tv-nur-tut-a*] *kur-tu*]
 1SG INTERJ also TRAL-AOR-AUTO-say[II]-1SG SBJ:PCP-exist
me q^he [azo ndyre nui-χβzu-a ri kur-ra]
 not.exist:FACT LNK 1SG ADVERS IPFV-become-1SG also SBJ:PCP-be.needed
me q^he, nχ-rcw~rca zo yi-a
 not.exist:FACT LNK 2SG.POSS-EMPH~together.with EMPH come:FACT-1SG
nu ma nui ma [[azuiy kur-ra] ku-tu]
 be:FACT LNK DEM apart.from 1SG:GEN SBJ:PCP-be.needed SBJ:PCP-exist
me
 not.exist:FACT

'I did not go and heed (the girl who was calling us), and I don't need to become anything special, I don't need anything, apart from following you.' (2003 kandZislama, 36-38)

The postverbal negative existential verb can be combined with a verb taking the negative prefix, forming a double negation (§13.3) expressing universal quantification (201).

- (201) *kui-ŋyn* *mx-nyma-ndzi* *maka me*
 SBJ:PCP-be.evil NEG-do:FACT-DU at.all not.exist:FACT
 'There is no evil thing that they do not do/They do all kinds of evil things.' (140428 vonggan de xiaocaifeng-zh, 175)

In addition, postverbal negative existential verbs are used in one of the superlative constructions (§26.4.3). (§16.2.2.2)

31667 **22.5.5 Verb doubling**

31668 Copulas are exceptional in being the only verbs that can be repeated to express
31669 emphasis. This usage is only found in the traditional story register, as in (202).
31670 This construction differs from partial reduplication, which only targets one syllable
31671 ([§4.1](#)).

- 31672 (202) *nua kur-fse ci tu-ŋu, nua my-kua-naχtəwuy*
DEM SBJ:PCP-be.like INDEF 2-be:FACT DEM NEG-SBJ:PCP-be.the.same
31673 *ci tu-ŋu tu-ŋu*
INDEF 2-be:FACT 2-be:FACT
31674 ‘You are (someone) like that, you are different (from normal people).’
31675 (2011-04-smanmi, 47)

31676 **22.5.6 Other constructions**

31677 Apart from the constructions discussed above, existential verbs are attested in
31678 an unusual type of alternative concessive conditional ([§25.2.3.2](#)), combined with
31679 the bare stem of the verb ([§16.2.2.2](#)).

31680 Existential verbs can also occur with the adverb *jamar* ‘about’ to build an equa-
31681 tive construction ‘as big as *X*’ ([§26.3.1.4](#)) as in (203).

- 31682 (203) *ki azo a-jas ki jamar yŋzu.*
DEM.PROX 1SG 1SG.POSS-hand DEM.PROX about exist:SENS
31683 ‘The wild yak horn is about as big as my hand here.’ (20-RmbroN, 28)

31684

23 Relative clauses

31685

23.1 Introduction

This chapter, building on previous work by J. T.-S. 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 *kua-* (§16.1.1), object *ky-* (§16.1.2) and oblique *sy-/z-* (§16.1.3).

The subject participle (§16.1.1.4) 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

31712 marginally relativize locative arguments (§16.1.2.5, §23.5.5) and possessor of ob-
 31713 jects (§23.5.10.2). Unprefixed object participles in *ky-* are not easily distinguish-
 31714 able from subject participles of passive forms *kua-y-*, due to vowel contraction
 31715 (§16.1.2.3).

31716 The oblique participle can relativize many non-core functions, including loca-
 31717 tive adjuncts (§16.1.3.5), instruments (§16.1.3.6) and other adjuncts (§16.1.3.7), and
 31718 compete in these functions with prenominal finite relatives (§23.5.5, §23.5.9).

31719 Since participial relative clauses are described in detail in chapter 16, the reader
 31720 is referred to the relevant sections in that chapter for a focused discussion.

31721 23.2.2 Finite relative clauses

31722 Some relative clauses in Japhug have a verb in finite form, with person indexation
 31723 and TAME marking. For instance, the verb *puu-mto-t-a* in 1SG→3 (§14.3.2.1) Aorist
 31724 form of the headless relative clause in (1) could stand on its own as a complete
 31725 sentence meaning ‘I saw/have seen it’. The only clue that this appositive clause
 31726 is a relative is the presence of the determiner *nua*, whose status in this context is
 31727 discussed in §23.3.5.2.

- 31728 (1) *ma uzo ui-mdor nuna, [aj puu-mto-t-a] nua,*
 LNK 3SG 3SG.POSS-colour DEM 1SG AOR-SEE-PST:TR-1SG DEM
 31729 ‘The colour of (wolf’s fur), (the ones) that I have seen.’ (27-spjaNkW, 21)

31730 Finite relative clauses are not however completely identical to the correspond-
 31731 ing independent clauses, even when the head is internal (§23.4.3). Four main
 31732 morphosyntactic differences can be observed.

31733 First, the verb of finite relative clauses can be subjected to totalitative redu-
 31734 plication (§23.3.2), a morphological category that is restricted to relative clauses,
 31735 and not found in main clauses or other types of complement clauses.

31736 Second, possessor prefixes in finite relative clause can undergo possessor neu-
 31737 tralization (§23.3.4).

31738 Third, some TAME categories are not allowed in relative clauses, including
 31739 Modal categories such as Irrealis (§21.4.1) and Imperative (§21.4.2) and Evidential
 31740 categories such as Inferential (§21.5.2), Sensory (§21.3.2) and Egophoric Present
 31741 (§21.3.3). The TAME categories attested in finite relatives are Imperfective (§21.2),
 31742 Factual Non-Past (§21.3.1), Aorist (§21.5.1, as in 1 above) and Past Imperfective
 31743 (§21.5.3).

31744 Fourth, there are restrictions on person indexation in some finite relative clauses:
 31745 monotransitive verbs are only found in third person object direct forms (§23.5.3.1),

31746 inverse and local person forms being only found in relatives with ditransitive
 31747 verbs.

31748 Finite relative clauses are not compatible with subject relativization, but they
 31749 can be used when relativizing objects (§23.5.3), semi-objects (§23.5.4), possessors
 31750 of objects (§23.5.10.2), goals (§23.5.1.1), objects embedded in object complement
 31751 clauses (§23.5.11.3) and some time adjuncts (§23.5.9).

31752 23.2.3 Genitival relative

31753 Both participial and finite prenominal relatives (§23.4.2) are attested with a gen-
 31754 itive marker *yuu* (§8.2.3.3) before the head noun, which generally does not take
 31755 a possessive prefix in this construction. This type of construction is common in
 31756 texts translated from Chinese, and is certainly due to calquing from Chinese in
 31757 many cases, for instance in (2).

- 31758 (2) [u₂zo ku-ryzi] yuu si u-pa nuteu jy-azyut-nuu
 3SG IPFV-stay GEN tree 3SG.POSS-down DEM:LOC AOR-arrive-PL

31759 ‘They arrived at the bottom of the tree where he was staying.’ (140512
 31760 alibaba-zh, 22)

31761 A similar tendency to calque Chinese relative constructions with the genitive
 31762 is observed in other Gyalrongic languages (Lai 2018). For this reason, examples
 31763 of genitival relative clauses from translated stories will not be taken into account
 31764 in this chapter.

31765 In non-translated texts and in conversations, prenominal genitival clauses are
 31766 also marginally attested to relativize core arguments, as in (3), though this is un-
 31767 common. Finite prenominal genitival clauses are however often used for locative
 31768 and temporal adjunct relativization (§23.5.5.1).

- 31769 (3) [tu-ryuu yuu sm..., u-kui-nusmyu] yuu
 INDEF.POSS-bone GEN incomplete word 3SG.POSS-SBJ:PCP-treat GEN
 31770 smynba yu.
 doctor be:FACT

31771 ‘It is a (type of) doctor who treats bone (fractures).’ (140426 laxthab, 34)

31772 This construction should not be confused with complement-taking nouns (§5.1.2.6),
 31773 and with true genitival constructions with a headless relative clause possessor,
 31774 as in (4), where the noun following the genitive (*tu-ryja* ‘one’s face’) is not an
 31775 argument of the relative clause.

23 Relative clauses

- 31776 (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
31777 ‘It looks a bit like the face of someone crying.’ (18-qromJoR, 103)

31778 23.2.4 Relator nouns

31779 Some prenominal relatives (§23.4.2) have semantically bleached head nouns, which
31780 are in the process of becoming grammaticalized as relativizers: *uu-stu* ‘place’, *uu-sta*
31781 ‘place’ and *uu-spa* ‘material’. These three nouns are fossilized oblique participles
31782 (Table 16.4, §16.1.3.10). The former two are used to relativize locative adjuncts,
31783 more exceptionally goals (§23.5.5.3), while *uu-spa* ‘material’ serves to build instrument
31784 (§23.5.6) and in some cases object relative clauses.

31785 The noun *uu-spa* still preserves its original meaning in examples such as (5),
31786 from which its other uses derive.

- 31787 (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
31788 pjuú-wy-su^hor ηu
IPFV-INV-CAUS-press be:FACT
31789 ‘One presses with the left hand on the piece of cloth that is to be patched.’
31790 (12-kAtsxWb, 37)

31791 From the purposive object relative meaning ‘(material) that is to be *X*ed’ as in
31792 (5), an instrumental interpretation ‘(material) that is used to *X*’ arose: example (6)
31793 illustrates the semantic proximity between oblique instrumental relative clauses
31794 (§16.1.3.6) and the *uu-spa* clauses. Purposive clauses in *uu-spa* (§25.5.4) also derive
31795 from this type of constructions.

- 31796 (6) [pas uu-sy-χsu] ηu, [pas ky-mbi] uu-spa
pig 3SG.POSS-OBL:PCP-feed be:FACT pig OBJ:PCP-give 3SG.POSS-material
31797 ηu
be:FACT
31798 ‘It is pig fodder, it is (something (that can) be given to pigs.’ (150822 laoye
31799 zuoshi zongshi duide-zh, 173)

31800 The relator nouns differ from other nouns serving as heads of relative clause in
31801 that they can occur even when an overt non-generic head noun is present, such
31802 as *k^huna* ‘dog’ in (7) and *kuspo^h* ‘hole’ in (8).

- 31803 (7) *tyrbabkci nur icq^ha, kur-yrrbab, [ky-tsum]*
 hunting.dog DEM FILLER SBJ:PCP-hunt OBJ:PCP-take.away
 31804 *w-spa k^huna nur ju-ŋu.*
 3SG.POSS-material dog DEM SENS-be
 31805 ‘Hunting dogs are dogs that are taken to hunt.’ (140426 liegou he
 31806 zhonggou-zh, 1)

- 31807 (8) *[βzur w-sy-yi] w-stu kuspor nutcu,*
 mouse 3SG.POSS-OBL:PCP-come 3SG.POSS-place hole DEM:LOC
 31808 *icq^ha nunui z-nur-rku-nur.*
 the.aforementioned DEM TRAL-IPFV-put.in-PL
 31809 ‘People put it (the flower of the burdock) in the holes from which mice
 31810 come (as a trap).’ (13-tCamu, 78)

31811 These examples are very rare, and not unproblematic¹ but nevertheless suggest
 31812 that *w-spa*, *w-stu* and *w-sta* are advancing in the grammaticalization cline. In the
 31813 closely related language Khroskyabs (Lai 2017: 580), the clitic =*spi*, exact cognate
 31814 of *w-spa* (Table 16.4, §16.1.3.10), has become the main object relativizer.²

31815 23.2.5 Interrogative pronouns and correlative constructions

31816 All interrogative pronouns, including *tç^hi* ‘what’ (§6.5.1), *çuu* ‘who’ (§6.5.2), *ŋotcu*
 31817 ‘where’ (§6.5.4) and *t^hyjt^hcu* ‘when’ (§6.5.3), can be used in correlative relative con-
 31818 structions as free-choice indefinites ‘whoever/whatever/whenever’ (§6.6). The
 31819 pronoun can occur on its own or in apposition with an overt head noun as in (9).

- 31820 (9) *uzo kur [<cai> tç^hi ta-ndza] nur yur w-mdoꝝ nur*
 3SG ERG vegetable what AOR:3→3'-eat DEM GEN 3SG.POSS-colour DEM
 31821 *nur-ndym nur-ŋu.*
 IPFV-take[III] SENS-be
 31822 ‘It bears the colour of whatever vegetable it has eaten.’ (25-caiqajW, 22)

31823 When a postclausal relator noun head (§23.4.2, §23.5.5.3) is present as in (10),
 31824 the interrogative pronoun remains *in situ*.

¹ It could be alternatively possible to analyze *kui-spor* as a subject participle (Table 16.2, §16.1.1.7), and argue that *w-stu kui-spor* is a participial relative ‘the place that has a hole’.

² The clitic =*spi* has a function that is still close to that of *w-spa* in examples such as (6): Lai (2017: 514) explains that it refers to ‘un objet spécifiquement destiné à subir l'action’.

23 Relative clauses

- 31825 (10) [*notcu jy-kui-yri]* *w-stu* *nwtcu* *kui-mvrzaβ*
 where AOR-SBJ:PCP-go[II] 3SG.POSS-place DEM:LOC SBJ:PCP-marry
 31826 *kui-ce* *ra* *tu-ti-nuu* *ηgrvl.*
 GENR:S/O-go:FACT be.needed:FACT IPFV-say-PL be.usually.the.case:FACT
 31827 ‘People say that whatever place (the ladybug) flies to, one has to go to get
 31828 married there.’ (26-kWlAGpopo, 42)

31829 Correlative relatives can be participial (10, 11) or finite (9), depending on the
 31830 function of the relativized element (§23.5).

- 31831 (11) [*w-jas* *tc^{hi}i* *nui-kui-ye* *zo*] *tu-ndze*
 3SG.POSS-hand what AOR:WEST-SBJ:PCP-come[II] EMPH IPFV-eat[III]
 31832 ‘It eats whatever it can get its hands on.’ (28-qapar, 12)

31833 In (12), the fact that the interrogative pronoun *ciu* ‘who’ takes the ergative
 31834 shows that it belongs to the same clause as the transitive verb *lu-ky-tcyst*, as the
 31835 matrix verb *c^{ha}a* ‘can’ is intransitive (§14.2.3): it is therefore embedded within the
 31836 complement clause.

- 31837 (12) [[*ciu* *kui* [*kui-murkui kui-ηu*] *lu-ky-tcyst*] *pui-kui-c^{ha}a*] *nui*,
 who ERG SBJ:PCP-steal SBJ:PCP-be IPFV-INF-take.out AOR-SBJ:PCP-can DEM
 31838 *a-sci* *rjylpu c^{hu}-ta-sui-ndo-nuu* *ηu*
 1SG.POSS-instead king IPFV-1→2-CAUS-take-PL be:FACT
 31839 ‘Whoever succeeds in catching the one who is the thief, I will make him
 31840 the king in my stead.’ (2003 qachGA, 5)

31841 Possessors of subjects (§23.5.10.1) can also undergo correlative maximalizing
 31842 relativization, as in (§23.5.10.1).

- 31843 (13) [*ciu* *w-tui-ji* *kui-nytuy*] *nunura kui*
 who 3SG.POSS-INDEF.POSS-field SBJ:PCP-happen.to.be DEM:PL ERG
 31844 *ty-mt^hum* *ku-sqa-nuu* *tce*,
 INDEF.POSS-meat IPFV-cook-PL LNK
 31845 ‘Whoever_i (it is) whose_i fields happen to be (those that are ploughed by
 31846 the whole village_j), those people_i cook meat (for the village_j).’ (150909
 31847 kWnWjlAmtshi, 17)

31848 Correlative relatives have commonalities with universal concessive condition-
 31849 als (§25.2.3.3), but in the latter the subordinate clause and the main clause do not
 31850 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 *nua* 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 *wzo* 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 *wzo_i ri kui-sna* in (14).

- (14) *nunuu [w_i-p^hwu ri kui-wxti] [wzo_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) *nunuu qajuu kui-syjlur~jlob nun jo-yi tce, [wzo_i ri
DEM bug SBJ:PCP-EMPH~disgusting DEM IFR-come LNK 3SG also
kui-wxti], [wzo_i ri kui-syjlur~jlob] ci pŷr-ŋu.*
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)

³ The Chinese original has 这只癞蛤蟆又大又丑 <zhè zhī làiháma yòu dà yòu chōu> ‘the toad was big and ugly’.

23.3.2 Totalitative reduplication

The main verb of relative clauses, whether in participial (18) or in finite form (16, 17), can undergo reduplication of the first syllable (§12.4.1) to express universal quantification of the relativized element, whose syntactic function can be object (16), semi-object (17) or intransitive subject (18), and even transitive subject (19) (however some transitive subject participle cannot undergo initial reduplication for morphological reasons, see §12.4.1.5).

- (16) [t₁**u**-ryi pur~pa-yut-ndzi zo] nunu
 INDEF.POSS-seed TOTAL~AOR:3→3':DOWN-bring-DU EMPH DEM
 lo-ji-ndzi.
 IFR-plant-DU

'They planted all the seeds that they had brought (down from heaven).'
 (31-deluge, 147)

- (17) [azo tur~ty-fse-a] nu₁ ty-fse tce
 1SG TOTAL~AOR-be.like-1SG DEM IMP-be.like LNK
 'Do everything like me.' (140426 jiagou he lang-zh,18)

- (18) <zhengfu> kuu [kuu~kuu-ngo], nunu
 government ERG TOTAL~SBJ:PCP-be.sick DEM
 [kuu~ky-kuu-nyndza zo] nu₁, andi comuco tcetu ta₁ ri,
 TOTAL~AOR-SBJ:PCP-have.leprosy EMPH DEM west TOPO up.there up LOC
 nyki ts^bupa ci tu tce, unture to-su₁-ywurwum.
 FILLER village INDEF exist:FACT LNK DEM:LOC IFR-CAUS-gather
 'In the west up there in Kyomkyo there is a village. The government
 gathered all the sick people, all the lepers there.' (25-khArWm, 64-66)

- (19) tce nu₁ra qarts^baz mu nu₁ra, [pu₁-pu₁-ku₁-mts^bym] nu₁
 LNK DEM:PL deer female DEM:PL TOTAL~AOR-SBJ:PCP-hear DEM
 u₁-rkuu nutcu tu-owurwum-nu₁ yu
 3SG.POSS-side DEM:LOC IPFV-gather-PL
 'All the does that have heard (the deer) gather around it.' (27-qartshAz,
 133-134)

Although initial reduplication occurs with finite verb forms in main clauses with various meanings (§12.4.1), totalitative reduplication is exclusively attested in relative clauses. A more detailed discussion of this phenomenon is provided in §12.4.1.5.

31901 Totalitative reduplication is specificity to relative clauses, and does not occur
 31902 in complement clauses. It can be used as a test to distinguish between the two
 31903 types of clauses in ambiguous cases (§23.8).

31904 23.3.3 Genitive possessor

31905 In object relative clauses (§23.5.3), transitive subjects can sometimes be marked
 31906 by the genitive instead of the ergative, in particular when the agent can be con-
 31907 strued as a possessor of the object, as in the finite headless relative in (20).

- 31908 (20) *azuy* [nui-nui-βde-t-a] nui iú-ŋu
 1SG:GEN AOR-AUTO-throw-PST:TR-1SG DEM QU-be:FACT
 31909 ‘Is it the one that I have lost?’ (140427 bianfu jingji he shuiniao-zh, 30)

31910 Example (21) illustrates the hesitation between the ergative in the first rela-
 31911 tive clause, and the genitive in the second one (where the agent is the *former*
 31912 possessor of the object).

- 31913 (21) *tce* [atu tuumukyrŋi kuu u-jas nui-ky-kʰo] nui,
 LNK up.there heavenly(god) ERG 3SG.POSS-hand AOR-OBJ:PCP-give DEM
 31914 *smynmimitoš numuš yuu* [nui-ky-kʰo] numuš, ko-ctʰuž
 ANTHR DEM GEN AOR-OBJ:PCP-give DEM IFR:EAST-turn.towards
 31915 ‘He turned (the magical object) that the god from heaven had given him,
 31916 that Smanmi Metog had given him, (towards the direction of the
 31917 râkshâsas).’ (2011-04-smanmi, 110)

31918 In the case of participial object relatives with a possessive prefix, the transitive
 31919 subject/possessor does not require genitive marking, just in the same way as
 31920 possessive prefixes on the possessum (with optional genitive) are sufficient to
 31921 mark possession between two nouns (§5.1.1.2, §8.2.3.1). In (22) for instance, the
 31922 pronoun *užo* ‘it’ (the camel) directly precedes the participle *u-ky-tsʰi* ‘the (water)
 31923 that it drinks’ without either ergative or genitive marker.

- 31924 (22) *u-zgo* u-ŋgu *nwtcu* *užo* [u-ky-tsʰi]
 3SG.POSS-mountain 3SG.POSS-inside DEM:LOC 3SG 3SG.POSS-OBJ:PCP-drink
 31925 *tu-nui-rke* nui-kʰui
 IPFV-AUTO-put.in[III] SENS-be.possible
 31926 ‘(The camel) can keep the (water) that it drinks in its hump.’ (19-rNamoN,
 31927 54)

23 Relative clauses

31928 The transitive subject in these constructions is formally a possessor, external
31929 to the relative clause. In (23) in particular, the presence of the degree adverb *stu*
31930 ‘most’ (§26.4.1) between the pronoun *uzo* and the head noun *u-sytc^ha* ‘its place’
31931 is a clue that *uzo* is not included in the relative clause.

- 31932 (23) *tceri uzo [stu u-sytc^ha u-ky-nuu-rga] nu,*
LNK 3SG most 3SG.POSS-place 3SG.POSS-OBJ:PCP-APPL-like DEM
31933 ‘The place that it likes most...’ (20-xsar 10)

31934 23.3.4 Possessive prefix neutralization

31935 In relative clauses, the possessor of inalienably possessed nouns can be neutral-
31936 ized to the indefinite possessor prefix *tu-/tr-* (§5.1.3), even when the possessor
31937 is definite. In (24) for example, the possessor of *-yga* ‘clothes’ is the transitive
31938 subject of both sentences (the main character of the story), and is marked with
31939 the 3SG prefix *u-* in the first sentence. In the second sentence, the noun *-yga* is lo-
31940 cated in a head-internal relative clause (§23.5.4), and even though the possessor
31941 is the same as in the previous sentence, the indefinite prefix *tu-* appears.

- 31942 (24) *tcendyre u-yga ra ny-tcyt tce icq^ha, [rgynmuu ku*
LNK 3SG.POSS-clothes PL IFR-take.off LNK FILLER old.woman ERG
31943 *tu-yga nuu-ky-mbi] nura ny-tcyt tce*
INDEF.POSS-clothes AOR-OBJ:PCP-give DEM:PL IFR-take.off LNK
31944 ‘He took off his clothes, he took off the (magical) clothes that the old
31945 woman had given him.’ (140508 shier ge tiaowu de gongzhu-zh, 172-173)

31946 Some inalienably possessed nouns have constraints on the syntactic function
31947 of the referent indexed by the possessive prefix (§5.1.2.13). In particular, *tr-pyro*
31948 ‘present’ indexes the agent (the person giving the present) as possessor, never
31949 the recipient, as shown by (25), where a 2SG *ny-pyro* or an indefinite possessor
31950 *tr-pyro* would be ungrammatical (see also examples 46 and 47 in §5.1.2.13).

- 31951 (25) *a-pyro jnu-ta-mbi nyu*
1SG.POSS-present IPFV-1→2-give be:FACT
31952 ‘I give it to you as a present.’ (elicited)

31953 In relative clauses (whether participial or finite ones), it is possible to index
31954 the agent like in main clauses (26), but possessor neutralization is also possible,
31955 as in (27).

- 31956 (26) [a-pyro *nua-mbi-t-a*] *nua a-rfit* *ŋu*
 1SG.POSS-present AOR-give-PST:TR-1SG DEM 1SG.POSS-child be:FACT
 31957 ‘The one to whom I gave a present is my child.’ (elicited)

- 31958 (27) [*ty-pyro* *nua-mbi-t-a*] *ty-rfit* *nua*
 INDEF.POSS-present AOR-give-PST:TR-1SG INDEF.POSS-child DEM
 31959 *a-tcua* *ŋu*
 1SG.POSS-son be:FACT
 31960 ‘The child to whom I gave a present is my son.’ (Elicited)

31961 Relative clauses are not the only syntactic contexts where possessor neutraliza-
 31962 tion is attested: it also occurs when inalienably possessed nouns take prenominal
 31963 modifiers (§5.1.4).

31964 23.3.5 Determiners

31965 23.3.5.1 Determiners on internal head

31966 In head-internal and postnominal relatives, postnominal determiners such as the
 31967 indefinite marker *ci* (§9.1.4.1) or the demonstrative *nua* (§9.1.5.4) can appear both
 31968 on the internal head noun and repeated following the relative clause. In (28) for
 31969 instance, *ci* occurs after the noun *rjylpu* ‘king’ and at the end of the relative after
 31970 the participle *kua-ŋyn* ‘(the one) who is evil’.

- 31971 (28) [*wuma zo rjylpu ci kua-ŋyn*] *ci pŷ-tu tce,*
 really EMPH king INDEF SBJ:PCP-be.evil INDEF IFR.IPFV-exist LNK
 31972 ‘There was a very evil king.’ (140511 1001 yinzi-zh, 9)

31973 In (29), the indefinite *ci* is also repeated after the head noun *kuuspob* ‘hole’ (a
 31974 lexicalized participle, §16.1.1.7) and following the participle *sry-nua-łok* ‘through
 31975 which (the smoke) comes out’ (with locative §16.1.3.5 or instrumental §23.5.6 rela-
 31976 tivizing function). In this case the relative can be analyzed as either postnominal
 31977 or head-internal.

- 31978 (29) [*kua-spos ci ty-kʰu sry-nua-łok*]
 SBJ:PCP-have.a.hole INDEF INDEF.POSS-smoke OBL:PCP-AUTO-come.out
 31979 *ci nua-βze*
 INDEF IPFV-make[III]
 31980 ‘(The potter) makes a hole through which the smoke comes out.’
 31981 (30-kWrAfcAr, 32)

23 Relative clauses

Determiner repetition is also found with relativized transitive subjects marked with the ergative (see 44 in §23.4.3.2).

Examples like (28) and (29) are however relatively rare, in most cases the determiner either follows the relative (see for example 53 in §23.5.1) or the head noun (30)

- (30) [pyxtci kui-mpciu~mpcir zo] jy-ye
bird INDEF SBJ:PCP-EMPH~be.beautiful EMPH AOR-come[II]
'A beautiful bird came.' (2003qachga, 14)

In the case of prenominal relatives, the determiner *ci* can be found between the head noun and the relative clause, as in (31). This usage is not to be confused with that of prenominal *ci* (§9.1.7).

- (31) tce [nuu kui-fse] ci qajuu yvzu.
LNK DEM SBJ:PCP-be.like INDEF bug exist:SENS
'There is a bug (invertebrate animal) that is like that.' (hist180421 haixing,
46)

23.3.5.2 Determiner or complementizer

An important proportion of relative clauses are followed by the forms *nui* and *nunu*, whose functions in other contexts include distal demonstrative pronouns (§6.9), demonstrative determiners (§9.1.2) or topic markers (§9.1.5.4, §9.1.4.3), and *ra* (and *nura*), a plural marker (§9.1.1.2). In the case of finite relative clauses (§23.2.2), whose main verb generally has the same form as that of the corresponding independent sentence (in 32 for instance), the presence of these words may be the only clue that the clause is a relative.

- (32) [izo ndyre puu-χsu-j] nui, tuu-rdor tc^{hi} muu-puu-nnu-pe
1PL LNK AOR-feed-1PL DEM one-piece what NEG-PST.IPFV-AUTO-be.good
my-xsi ma nunuu nufse pju-si
NEG-GENR:know LNK DEM like.that IFR-die
'Of the (tortoises) that we raised, one (of them) died just like that, I don't
know what went wrong.' (140510 wugui, 53)

Given the fact that many languages have complementizers, including relative pronouns, which are homophonous with (and historically related to) demonstratives (for instance 'that' in English), it is legitimate to wonder whether such an analysis is possible for the *nui* or *nura* that follow relative clauses.

23.3 Morphosyntactic specificities of relative clauses

32011 However, in prenominal relatives such as (33), *nuu* is located *after* the head
32012 noun, for instance *čku* ‘Allium’ in (33), never before it. If it were a subordinator,
32013 one would expect *nuu* to be located between the head noun and the relative.

- 32014 (33) *tce [azo a-ky-suaz] čku nuu nura ηu*
LNK 1SG 1SG.POSS-OBJ:PCP-know Allium DEM DEM:PL be:FACT
32015 ‘These are the (plants belonging to the gender) *Allium* that I know about.’
32016 (07-Cku, 165)

32017 Another clue that *nuu*, *nunu* and *nura* in this context are better analyzed as
32018 demonstrative determiners (§9.1.2, with or without topicalizing function, §9.1.5.4,
32019 §9.1.4.3) is that relative clauses can take circumposed demonstratives (exactly like
32020 circumnominal demonstratives, §9.1.2), as shown by the pre- and post-clausal
32021 *nunu* in (34).

- 32022 (34) *nunu [pyyrnoꝝ ky-ti] numu t̥ymꝝ tyrca juu-ηu*
DEM fungus.sp OBJ:PCP-say DEM mushroom together SENS-be
32023 *umꝝ-kuu-ηu-ci ma*
PROB-PEG-be-PEG LNK
32024 ‘That (thing that) is called *pyyrnoꝝ* is probably (to be classified) among the
32025 fungi.’ (22-BlamajmAG, 140)

23.3.6 Postverbal elements

32027 Although Japhug is a strict verb-final language, some words can appear post-
32028 verbally in independent sentences, including sentence-final particles (§10.2.1),
32029 ideophones (§10.1.1) and some adverbs (§22.2.7).

32030 Relative clauses never take sentence-final particles (unlike some complement
32031 clauses, §24.2.5.1), but some postverbal elements are nevertheless possible.

32032 First, the adverb *tsa* ‘a little’ can occur postverbally with a semantic scope
32033 clearly restricted to the relative clause, as in (35)

- 32034 (35) *[nuu-luuz t̥u-kuu-ye tsa] nura tce, udiurjꝝt*
3PL.POSS-age AOR-SBJ:PCP-come[II] a.little DEM:PL LNK TOPO
32035 *u-skvt tu-βze-a nuu-tso-nuu,*
3SG.POSS-language IPFV-make[II]-1SG SENS-understand-PL
32036 ‘Those who are a little older, they understand when I speak the (Japhug)
32037 language of Gdongbryad. (150901 tshuBdWnskAt, 11)

23 Relative clauses

32038 Ideophones are very commonly postverbal even in relative clauses, as in (36),
32039 though mainly with stative verbs in subject participle form.

- 32040 (36) *tce nuu u-βri u-taꝝ nuura qandzi*
LNK 3SG.POSS-body 3SG.POSS-TOP DEM:PL be.dark:FACT SBJ:PCP-be.like
32041 *kui-fse, ayrryrum kui-fse ma [kui-wyrur~wyrum zo*
be.whitish:FACT SBJ:PCP-be.like LNK LNK SBJ:PCP-emph~be.white EMPH
32042 *sunjsunj] mas*
IDPH(II):pure.white not.be:FACT
32043 ‘The top part (of the mushroom called *kuyrummxy* ‘white mushroom’) is
32044 dark, whitish, it is not pure white.’ (21-kuGrummAG, 23)

32045 The emphatic *zo* (§26.1.1.5) is also analyzable as a postverbal adverb especially
32046 when followed by a demonstrative determiner as in (37) (see also 16 and 18,
32047 §23.3.2).

- 32048 (37) *[skrm-ndzi kui-juijaꝝ], [stu kui-jaꝝ zo] nuu*
ox-skin SBJ:PCP-EMPH~be.thick most SBJ:PCP-be.thick EMPH DEM
32049 *tu-qyr-nuu tce*
IPFV-select-PL LNK
32050 ‘People select very thick ox skin, the thickest one.’ (24-mbGo, 71)

32051 However, the indefinite determiner *ci* is also attested before the emphatic *zo* as
32052 in (38), showing that it is external to the relative in this case, since *ci* itself must
32053 be external (otherwise it would be located just after the head noun *smar* ‘river’,
32054 §23.3.5.1).

- 32055 (38) *[smar kui-wxtu~wxti] ci zo puu-tu puu-ŋu*
river SBJ:PCP-EMPH~be.big INDEF EMPH PST.IPFV-exist SENS-be
32056 ‘There was a huge river.’ (2005 Kunbzang, 161)

32057 In the absence of determiner (as in 16, §23.3.2), it is unclear whether postverbal
32058 *zo* belongs to the relative or not.

23.4 Position of the relativized element

32060 Pre-, post-nominal and head-internal relative clauses are all attested in Japhug,
32061 though the position of the relativized element is not free and depends on various
32062 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-kuu-si] *w-ca* *nuu* *tu-ndze* *ηu* *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).

⁴ The noun *w-ča* ‘its meat/flesh’ in (39) is not the head of the relative, but the possessee of that head (§23.2.3).

23 Relative clauses

- 32093 (40) [ty-rme *kua tuu-ŋga* *t^buu-ky-βzu]* *nura*
INDEF.POSS-hair ERG INDEF.POSS-clothes AOR-OBJ:PCP-make DEM:PL
32094 *βja* *tu-ndze* *nuu-ŋu.*
completely IPFV-eat[III] SENS-be
32095 ‘It eats all of the clothes that are made of (animal) hair.’ (28-kWpAz, 112)
- 32096 (41) *pax-ndzi kua tuu-ŋga* *c^buu-βzu-nu,* *pax-ndzi kua*
pig-skin ERG INDEF.POSS-clothes IPFV-make-PL pig-skin ERG
32097 *tuu-xtsa* *tu-βzu-nu* *ra nuu-ŋgryl*
INDEF.POSS-shoes IPFV-make-PL PL SENS-be.usually.the.case
32098 ‘(Nowadays, unlike in former times, people) make clothes and shoes from
32099 pig hide.’ (05-paR, 115-116)

32100 The following subsections focus on the conditions where head-internal relatives
32101 are selected rather than prenominal ones (§23.4.3.1), and on the criteria
32102 that can be used to distinguish between head-internal and postnominal relatives
32103 (§23.4.3.2).

32104 23.4.3.1 Head-internal vs. prenominal relatives

32105 Core argument relatives can be either head-internal or prenominal. When the
32106 relativized element is the transitive subject, prenominal position is more com-
32107 mon (§23.5.2), but for intransitive subject (§23.5.1), direct object (§23.5.3) and
32108 quasi-objects (§23.5.4), head-internal relatives are by far the most common type.

32109 When the relativized element is a noun such as *tuu-tçʰa* ‘news’ or *ftçaka* ‘man-
32110 ner’ which can take adnominal complements (§24.6), only head-internal relatives
32111 are possible, as prenominal clauses are interpreted as complements instead of
32112 relatives. For instance, the head noun *tuu-tçʰa* in (42) cannot be moved after the
32113 participle: †*a-tçuu kua jy-ky-yut tuu-tçʰa nu* is not accepted.

- 32114 (42) [a-tçuu *kua tuu-tçʰa* *jy-ky-yut]* *nuu nuu-pe*
1SG.POSS-son ERG INDEF.POSS-news AOR-OBJ:PCP-bring DEM SENS-be.good
32115 ‘The informations that my son has brought are nice.’ (elicited)

32116 23.4.3.2 Head-internal vs. postnominal relatives

32117 Since Japhug has strict verb-final order (§22.1.1), in head-internal relative clauses
32118 the verb follows the head noun, as it would in a postnominal relative. In many
32119 cases it is indeed impossible to ascertain whether the head-noun belongs or not to

32120 the relative. For instance, in (43) *kʰutsa puu-kv-βvum* ‘a bowl that has been turned
 32121 upside down’ there is no clear evidence for analyzing the head noun *kʰutsa* ‘bowl’
 32122 as internal or external to the relative.

- 32123 (43) *kʰutsa puu-kv-βvum zo juu-fse.*
 bowl AOR-OBJ:PCP-turn.upside.down EMPH SENS-be.like
 32124 ‘It looks like a bowl that has been turned upside down.’ (23-mbrAZim,
 32125 209)

32126 However, with other types of relative clauses there is sometimes positive ev-
 32127 idence that the head noun is internal. When the function of the relativized ele-
 32128 ment is that of transitive subject (§23.5.2), the presence of ergative marking can
 32129 be a criterion for analyzing it as relative-internal. In (44) for instance, the phrase
 32130 *tr-pvtsø ci kuu* is necessarily internal to the participial relative clause, since the
 32131 main verb *jv-ye* is intransitive, and only the transitive verb *uu-kuu-numbrvpuu* in
 32132 the relative clause can have triggered ergative marking.⁵

- 32133 (44) [*tr-pvtsø ci kuu <yangma> uu-kuu-numbrvpuu*] ci
 INDEF.POSS-child INDEF ERG bicycle 3SG-SBJ.PCP-ride INDEF
 32134 *jv-ye tce*
 AOR-come[II] LNK
 32135 ‘A boy who was riding a bicycle arrived.’ (Pear story, Tshendzin, 5)

32136 In (45) however, the transitive subject *turme* owes its ergative to the main verb
 32137 *juu-jtsʰi* rather than to the participle *tr-kuu-rqob*. The clause *tr-rjít tr-kuu-rqob* ‘hug-
 32138 ging the child’ is analyzable either as an appositive postnominal relative clause,
 32139 or as a participial clause.

- 32140 (45) [*turme kuu [tr-rjít tr-kuu-rqob]*] *tuu-nuu*
 person ERG INDEF.POSS-child AOR-SBJ:PCP-hug INDEF.POSS-breast
 32141 *juu-jtsʰi]* *nuu kuu-fsuu-fse zo juu-jtsʰi*
 IPFV-give.to.drink DEM SBJ:PCP-EMPH~be.like EMPH IPFV-give.to.drink
 32142 *juu-ŋu.*
 SENS-be
 32143 ‘(The female monkey) breastfeeds in the same way as a human
 32144 breastfeeds, hugging her child.’ (19-GzW, 26)

⁵ In addition, example (44) provides an interesting case of double determiner marking (§23.3.5.1).

23 Relative clauses

32145 In the case of object relatives, the presence of the transitive subject (*tx-tcu nu*
 32146 *kui* ‘the boy’ in 46), of an adjunct (the instrumental phrase *rjul kui* ‘from silver’
 32147 in 47) or of an adverb (*at^{hi} DOWNSTREAM* in 48) belonging to the relative before
 32148 the head noun are sufficient criteria to show that the relative is head-internal,
 32149 and cannot be analyzed as post-nominal.

- 32150 (46) [*tx-tcu* *nua kui u-t^{hi}pi* *nua ka-t^hui*] *nua*
 INDEF.POSS-son DEM ERG 3SG.POSS-staff DEM AOR:3→3':EAST-spread DEM
 32151 *u-ta^h* *ky-nua-tor-ndzi*
 3SG.POSS-on AOR:EAST-AUTO-come.out-DU
 32152 ‘They crossed (the river) on the staff that the boy had put across it as a
 32153 bridge.’ (2005 Kunbzang, 162)

- 32154 (47) [*rjul kui qas t^hui-ky-sui-βzu*] *nura ko-sui-γzirja-nua*.
 silver ERG hoe AOR-OBJ:PCP-CAUS-make DEM:PL IFR-CAUS-be.align-PL
 32155 ‘They aligned the hoe that had been made from silver.’ (28-qAjdoskAt,
 32156 102)

- 32157 (48) *kuki* [*at^{hi}* *qacti ky-ntsye lu-ky-yuit*] *nua*
 DEM.PROX downstream peach INF-sell IPFV:UPSTREAM-OBJ:PCP-bring DEM
 32158 *c^ho* *naxtcuy*
 COMIT be.the.same:FACT
 32159 ‘(Wild peaches) are like those peaches that are brought from areas
 32160 downstream (the Sichuan plains) to be sold.’ (08-qaCti, 46)

23.4.4 Postnominal

32162 There are only few unambiguous postnominal relative clauses in Japhug, since
 32163 most relative clauses comprising a noun and a verb can be analyzed as minimal
 32164 head-internal relatives. The only clear cases are provided by transitive subject
 32165 (§23.5.2) participial relative clauses in *kui-* (§16.1.1.4). In these cases, the head
 32166 noun, being a transitive subject, must take the ergative *kui* (§8.2.2.1) if embed-
 32167 ded in the clause. The presence or absence of ergative flagging can therefore
 32168 be used as a criterion to distinguish between postnominal and head-internal
 32169 clauses (§23.4.3.2). Examples are rather uncommon, since transitive subject rela-
 32170 tive clauses are most commonly prenominal (§23.5.2).

32171 Many examples of postnominal relatives are preceded by a pause, as in (49),
 32172 and are appositive clauses, rather than truly subordinate clauses.

- 32173 (49) *tr-mu ci, [tu-sŋab ra*
 INDEF.POSS-mother INDEF NMLZ:ACTION-enchant PL
 32174 *wi-kui-spa] ci pjy-tu tce*
 3SG.POSS-SBJ:PCP-be.able INDEF IFR.IPFV-exist LNK
 32175 ‘There was an old woman who knew enchantments.’ (150818 muzhi
 32176 guniang-zh, 16)

32177 Several examples of postnominal clauses are found with perception verbs with
 32178 totalitative reduplication, such as (50) below, (19) in §23.3.2 above and (56) in
 32179 §23.5.2.

- 32180 (50) *[twarme ra [pu~puu-kui-mto]] kuu “wo, nuu*
 person PL TOTAL~AOR-SBJ:PCP-see ERG INTERJ DEM
 32181 *wi-tur-pe nuu” ntsuu to-ti-nuu.*
 3SG.POSS-NMLZ:DEG-be.good SFP always IFR-say-PL
 32182 ‘All the people who saw it said ‘It is so nice!’’ (150827 mengjiangnv-zh,
 32183 24)

32184 When the relativized element is the intransitive subject, head-internal and
 32185 postnominal relatives can be distinguished by the relative position of head nouns
 32186 and adjuncts. It is particularly clear in the case of the comparative construction
 32187 (§23.5.1.2).

32188 23.5 Function of the relativized element

32189 This section presents a classification of relative clauses based on the syntactic
 32190 function of the relativized element inside the relative.

32191 Core arguments, possessor of core arguments as well as a certain number of
 32192 adjuncts can be relativized using participial or finite clauses. The syntactic func-
 32193 tions that are not accessible to relativization are listed in §23.5.12.

32194 23.5.1 Intransitive subject

32195 The only way to relativize intransitive subjects in Japhug is by a subject particip-
 32196 ial relative in *kuu-* (§16.1.1.4).

32197 23.5.1.1 Position of the head noun

32198 When the head noun of an intransitive subject relative is overt, it is generally
 32199 located before the participle as in (51). This example can be analyzed either as a

23 Relative clauses

32200 postnominal relative (§23.4.4) or as minimal head-internal relative (§23.4.3).

32201 (51) [ty-rza β] *jy-kui-ye* *numuu k^hro*
INDEF.POSS-wife AOR-SBJ:PCP-come[II] DEM much

32202 *mui-puu-sna* *pui-ŋu.*
NEG-PST.IPFV-be.good SENS-be

32203 ‘The wife that had come (to their house, that they had married) was not
32204 nice.’ (meimeidegushi, 20)

32205 The presence of adjuncts, such as *kuu-m^hku* ‘before’ (§16.2.1.8) before the head
32206 noun offers evidence that, in some cases, the head-internal relative analysis is
32207 preferable (§23.4.3). Example (52) also illustrates that head-internal relatives with
32208 embedded purposive complements located between the head noun and the verb
32209 are possible.

32210 (52) *icq^ha* [kuu-m^hku] *tcaχpa* [kuu-nyrura]
the.aforementioned INF:STAT-be.before thief SBJ:PCP-look.around
32211 *jy-kui-ŋri]* *nui bnuuz nui pjy-sat.*
AOR-SBJ:PCP-go[II] DEM two DEM IFR-kill

32212 ‘He killed the two thieves that had gone scouting just before.’ (140512
32213 alibaba-zh, 199)

32214 Prenominal clauses (§23.4.2) are less common than head-internal or postnomi-
32215 ninal ones in the case of intransitive subject relativization, but still attested, espe-
32216 cially in the case of multiple relative clauses sharing the same head noun, as in
32217 (53).

32218 (53) [*muiŋi ky-kui-ye*] *χpum* [*t^hw-kui-rgyz*] *ci*
TOPO AOR:EAST-SBJ:PCP-come[II] monk AOR-SBJ:PCP-be.old INDEF
32219 *pjy-tu* *tce*
IPFV.IFR-exist

32220 ‘There was an old monk who had come from Mengi.’ (08-kWqhi, 19)

32221 Particles of adjectival stative verbs in attributive function are one of the most
32222 common type of subject relative clauses (this construction is discussed in more
32223 detail in §9.1.8.3).

32224 23.5.1.2 Comparee

32225 The compared element of comparative constructions is relativized like a normal
32226 intransitive subjects, but with an overt standard. Head-internal (54a), postnomi-

32227 nal (54b) and prenominal (54c) relatives are all attested and equally common, and
 32228 can be distinguished by the relative position of the head noun and the standard
 32229 of comparison *wizo syz* ‘than him/her/itself’.

- 32230 (54) a. [*wizo syz rūdās kui-xtci*] *nura tu-ndze*
 3SG COMP animal SBJ:PCP-be.small DEM:PL IPFV-eat[III]
 ‘It eats the animals that are smaller than itself.’(20-sWNgi, 20)
- 32231 b. *rūdās* [*wizo syz kui-xtci*], *p̥ya* [*wizo syz kui-xtci*]
 animal 3SG COMP SBJ:PCP-be.small bird 3SG COMP SBJ:PCP-be.smal
 nura tu-ndze jui-cti.
 DEM:PL IPFV-eat[III] SENS-be.AFF
 ‘It eats the animals and the birds that are smaller than
 itself.’(24-ZmbrWpGa, 95)
- 32234 c. [*wizo syz kur-xtci*] *qajw ra tu-ndze*
 3SG COMP SBJ:PCP-be.small bug PL IPFV-eat[III]
 ŋgryl my-ŋgryl
 be.usually.the.case:FACT NEG-be.usually.the.case:FACT
 my-xsi ma
 NEG-GENR:know LNK
 ‘I don’t know whether it eats the bugs that are smaller than itself.’
 (26-kWrNukWGndZWr, 53)

32241 23.5.2 Transitive subject

32242 Transitive subjects are exclusively relativized using subject participial relative
 32243 clauses in *ku-* (§16.1.1.4) like intransitive subjects (§23.5.1), but take a posses-
 32244 sive prefix coreferent with the object (§16.1.1.1), unless another prefix is present
 32245 (§16.1.1.2).

32246 In a minority of cases, the transitive subject head noun can occur before the
 32247 verb. In this position, it sometimes takes the ergative, as illustrated by the phrase
 32248 *tr-nmas nu kui* in (55). The presence of the ergative here unambiguously indicates
 32249 that the relative is head-internal and that the transitive subject is embedded in-
 32250 side it, since the main verb *pjy-tu* ‘there used to be’ is intransitive (§23.4.3.1).

- 32251 (55) [*tr-nmas nu kui w-rzaβ kui-γntc^hu*
 INDEF.POSS-husband DEM ERG 3SG.POSS-wife SBJ:PCP-be.several
 pui-kui-nui-car], [*aγyndundyt tñndyyri*
 IPFV-SBJ:PCP-AUTO-search everywhere illegitimate.child

- 32253 *tu-kuu-βzu]* *pjy-tu.*
 IPFV-SBJ:PCP-make IFR.IPFV-exist
- 32254 ‘There were men who had several female companions, and made
 32255 illegitimate children everywhere.’ (140427 tAndAGri, 3-4)
- 32256 Alternatively, the transitive subject can occur in absolute form (for instance
 32257 *turme* ‘person’ in 56),⁶ showing that the relative is postnominal (§23.4.4).
- 32258 (56) *[turme [puu~puu-kuu-mto]] kuu puu-ny-mpcyr-nuu tce*
 person TOTAL~AOR-SBJ:PCP-see ERG SENS-TROP-be.beautiful-PL LNK
 “*nuu-pe*” *tu-ti-nuu pjy-ŋu*
 SENS-be.good IPFV-say-PL IFR.IPFV-be
 ‘All the people who saw it found it beautiful it said it was nice.’ (140510
 32261 sanpian yumao-zh, 87)
- 32262 There are no examples of double ergative marking, with a head-internal rela-
 32263 tive in transitive subject function in the main clause itself, taking the ergative
 32264 both on the head noun and at the end of the clause, for instance as construction
 32265 such as ?*[turme kuu puu~puu-kuu-mto] kuu* instead of *[turme [puu~puu-kuu-mto]] kuu*
 32266 in (56).

32267 23.5.3 Object

32268 Relativization of direct objects allows for a greater variety of constructions than
 32269 that of subjects: both finite and participial relative clauses are possible.

32270 In object participial relatives, the participle can be prefixed with an orienta-
 32271 tion preverb as in (57), or with a possessive prefix coreferent with transitive sub-
 32272 ject. In the first case (restricted to third person subjects), the relatives are most
 32273 commonly head-internal (or postnominal) as in (57), but other constructions are
 32274 possible. Attested types of object participial relatives are described in §16.1.2.4.

- 32275 (57) *[tçʰeme puu-ky-sat] nuu pyxtci ci to-sci qʰe,*
 girl AOR-SBJ:PCP-kill DEM bird INDEF IFR:UP-be.born LNK
 ‘The girl who had been killed was reborn as a bird.’ (2014-kWLAG, 493)

32277 Since object participles cannot take both possessive prefixes and orientation
 32278 preverbs (§16.1.2.1), finite relativization is the only way to specify both TAME
 32279 and person in an object relative, as in (58) and (59).

⁶ In (56), the ergative *kuu* 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-kuu-mto*.

- 32280 (58) *nua [qajua kui-pas tu-ti-a] nua nua kui-fse*
DEM worm SBJ:PCP-black IPFV-say-1SG DEM DEM SBJ:PCP-be.like
32281 *nua-βze nua-ŋu.*
IPFV-grow SENS-be
32282 ‘The black worm that I am talking about grows like that.’ (28-kWpAz, 30)
- 32283 (59) *nyzo [icq^ha ndzruu t^hui-tui-fse-t] nua ci ty-nua-ts^hyt tce*
2SG just.before chisel AOR-2-whet-PST:TR DEM a.little IMP-AUTO-try LNK
32284 ‘Try the chisel that you have just whetted.’ (150902 luban-zh, 130)

32285 Object finite relatives with overt head noun are mainly head-internal, as (59)
32286 (see also §23.4.3.2), or ambiguous between postnominal and head-internal as in
32287 (58). Premotional finite relatives are attested, but rarer. All four possibilities to rel-
32288 ativize objects (finite vs? participial, head-internal vs. premotional) are illustrated
32289 in (60).

- 32290 (60) a. *[a-tciu kui pya pa-mto] nua*
1SG.POSS-son ERG bird AOR:3→3'-see DEM
32291 b. *[a-tciu kui pya pur-ky-mto] nua*
1SG.POSS-son ERG bird AOR-OBJ:PCP-see DEM
32292 c. *[a-tciu kui pa-mto] pya nua*
1SG.POSS-son ERG AOR:3→3'-see bird DEM
32293 d. *[a-tciu kui pur-ky-mto] pya nua*
1SG.POSS-son ERG AOR-OBJ:PCP-see bird DEM
32294 ‘The bird that my son saw.’ (elicited)

32295 There are some contexts where finite relatives have to be head-internal or post-
32296 nominal and where the premotional position is ungrammatical (§23.4.3.1).

23.5.3.1 Monotransitive verbs

32298 When the object of monotransitive verbs are relativized using a finite relative,
32299 the verb must be in direct form, even when the transitive subject of the relative
32300 has a possessive prefix coreferent with the object. For instance, in (61), only the
32301 3→3' form *ka-nupor* is possible, the inverse 3'→3 configuration *ký-wy-nupor* is
32302 not possible in the context.

- 32303 (61) *[wi_i-mu kui ka-nupor] ty-pytso_i nua*
3SG.POSS-mother ERG AOR:3→3'-kiss INDEF.POSS-child DEM
32304 ‘The child whose mother kissed him.’ (elicited)

32305 In addition, only third person object forms (excluding inverse 3→1/2 and local
 32306 configurations) of monotransitive verbs can be relativized. This constraint does
 32307 not apply to triactantial causative (§23.5.3.3) or secundative verbs (§23.5.4.2).

32308 23.5.3.2 Theme of indirective verbs

32309 The theme of indirective verbs such as *k^ho* ‘give’ or *ti* ‘say’ (§14.4.1) has the same
 32310 morphosyntactic status as the direct object of a monotransitive verb, both from
 32311 the point of view of person indexation and of relativization: it is also relativizable
 32312 by both finite clauses (62) and object participial clauses (63).

- 32313 (62) *t_xtcupuu nuu kuu [icq^ha mbala-do nuu kuu t_x-ky-tut]* nuu
 boy DEM ERG just.before ox-old DEM ERG AOR-OBJ:PCP-say[II] DEM
 32314 *to-suŋjít.*

IFR-remember

32315 ‘The boy remembered (the words) that the old ox had told him.’ (150828
 32316 niulang-zh, 57)

- 32317 (63) *tceri [mbala kuu ta-tut]* nuu to-stu
 LNK OX ERG AOR:3→3'-say[II] DEM IFR-do.like

32318 ‘He did it (the way that) the ox had said.’ (150828 niulang-zh, 136)

32319 23.5.3.3 Object of causativized transitive verbs

32320 Causativized transitive verbs are triactantial (causer, causee and object, §14.4.3)
 32321 and differ from monotransitive verbs (§23.5.3.1) in that their object can be rel-
 32322 ativized using finite relatives with a verb in inverse configuration (64) or with
 32323 a first or second person object (including local configurations, as in 65). The
 32324 theme of secundative verbs can be relativized using the same type of construc-
 32325 tions (§23.5.4.2).

- 32326 (64) *[t_y-wy-z-nympo] nurā kuu~kui-fsu~fse zo*
 AOR-INV-CAUS-watch DEM:PL TOTAL~SBJ:PCP-EMPH~be.like EMPH
 32327 *to-βzu p_y-c^ha.*
 IFR-make IFR-can

32328 ‘(Luban)_i succeeded in making all (the objects) that (his teacher)_j had
 32329 shown him_i exactly as they were (before).’ (150902 luban-zh, 169)

- 32330 (65) [mbaly-puŋ jy-kui-sui-cyaz-a] nuŋ pa-mto tce
 OX-DIM AOR-2→1-CAUS-take.back-1SG DEM AOR:3→3'-see LNK

32331 'She saw the calf that you had me take back home.' (140512 fushang he
 32332 yaomo1-zh, 134)

32333 In examples (64) and (65), the person configuration indexes causer and causee,
 32334 not the direct object.

32335 23.5.3.4 Only argument of transitive verbs with dummy subjects

32336 The only argument of dummy transitive verbs (§14.3.5), despite resembling a di-
 32337 rect object, is relativized with subject participles, as *tu-kui-rku* in (66) (§22.4.2.7)
 32338 and *ku-kui-ts^hob* in (67) (§22.4.2.8).

- 32339 (66) nuŋ ri tce^hurwur tu-rke nyu tce, tce [tce^hurwur
 DEM:LOC LOC blister IPFV-put.in[III] be:FACT LNK LNK [blister
 32340 tu-kui-rku] nuŋnu cimbyrom nyu
 IPFV-SBJ:PCP-put.in] DEM phlycten be:FACT

32341 '(At the place where the skin is burnt), a blister forms there, the blister
 32342 that forms is a phlycten.' (27-tWfCAL 122, 123)

- 32343 (67) tce icq^ha mbryz yuŋ [u-mat ku-kui-ts^hob]
 LNK the.aforementioned rice GEN 3SG.POSS-fruit IPFV-SBJ:PCP-attach
 32344 nuŋ u-ts^huya nyu-fse
 DEM 3SG.POSS-shape SENS-be.like
 32345 'Its form is a bit like that of grains of rice (growing on the stalk).'
 32346 (19-khWlu, 94)

32347 Finite clauses and object participial clauses cannot be used to relativize these
 32348 arguments. This is one of the clues (§16.2.3, §14.3.5) that the verbs in these con-
 32349 structions are only partially transitive.

32350 23.5.4 Quasi-objects

32351 A certain number of absolutive arguments that are not indexed as direct objects
 32352 on the verb (§14.3.2) have objectal properties: the semi-objects of semi-transitive
 32353 verbs (§14.2.3) and the themes of secundative verbs (§14.4.2). They can be rela-
 32354 tivized like direct objects of monotransitive verbs, both with finite and participial
 32355 relatives (Jacques 2016d).

32356 23.5.4.1 Semi-objects

32357 Semi transitive verbs like *rga* ‘like’, *βjyt* ‘obtain’ or *aro* ‘own’ are morphologically
 32358 intransitive and their subject is marked in the absolutive (§14.2.3), but they take
 32359 in addition an absolutive semi-object (§8.1.5). The semi-object can be relativized
 32360 with either object participial relatives (68) or finite relative clauses as in (69) and
 32361 (70).

- 32362 (68) [pya ra nuu-kx-rga] nuu qaj ntsuη ηu
 bird PL 3PL-OBJ:PCP-like DEM wheat always be:FACT
 32363 ‘(The food) that birds like is always wheat (not barley).’ (23 pGAYaR, 30)
- 32364 (69) [laχtçʰa puu-βfat-a] nuu kʰutsa puu-ηu
 thing AOR-obtain-1SG DEM bowl PST.IPFV-be
 32365 ‘The thing that I obtained was a bowl.’ (elicited)
- 32366 (70) [azo qazo aro-a] nuu kuuki ηu
 1SG SHEEP OWN:FACT-1SG DEM DEM.PROX be:FACT
 32367 ‘The sheep that I own is this one.’ (elicitation)

32368 23.5.4.2 Theme of secundative verbs

32369 Secundative verbs such as *mbi* ‘give’ or *suxçyt* ‘teach’ index the recipient as direct
 32370 object, but also take a non-indexed absolutive argument referring to the theme
 32371 (§14.4.2). When both the subject and the direct object are third person, theme can
 32372 be relativized either with a finite clause (71, 72) or an object participial clause (ex-
 32373 ample 24, §23.3.4). Head-internal clauses are most common (71), but prenominal
 32374 and even genitival ones (§23.2.3) are also found, as in (72).

- 32375 (71) [sla kuη, nyki, kumpyx-ηgwm nuú-wy-mbi] nuu pjy-qruη
 moon ERG FILLER hen-egg AOR-INV-give DEM IFR-break
 32376 ‘She broke the egg that the moon had given her.’ (140506 shizi he
 32377 huichang de bailingniao-zh, 260)
- 32378 (72) [ty-tcuη nuu kuη, saŋrjyʂ ra kuη ptá-wy-suxçyt] yuη kʰyndwηn
 INDEF.POSS-son DEM ERG buddha PL ERG AOR-INV-teach GEN mantra
 32379 nuu uη-rzɑβ χsum nuu pjy-suxçyt
 DEM 3SG.POSS-wife three DEM IFR-teach
 32380 ‘He taught the mantra that the Buddhas had taught him to his three
 32381 wives.’ (2012 Kunbzang, 358)

32382 In finite relative clauses, the inverse 3' → 3 configuration is most often found
 32383 when the transitive subject of the main clause corresponds to the direct object
 32384 (recipient) of the relative clause, as in (71) and (72), and the relativized element
 32385 is the theme. Secundative verbs resemble in this regard causativized transitive
 32386 verbs (§23.5.3.3) and differ from monotransitive verbs, whose objects cannot be
 32387 relativized using a finite 3' → 3 configuration (§23.5.3.1).

32388 The themes of secundative verbs being relativized with the same constructions
 32389 as their direct objects, ambiguity can arise especially in the case of short relatives.
 32390 For instance, the participle *a-kyr-suxçyt* of *suxçyt* 'teach' can be understood as relativizing the direct object/recipient (73a) or the theme (73b). The antipassive can
 32391 be used to disambiguate: since this derivation removes the object, the only interpretation left for the antipassive participle *a-kyr-sy-suxçyt* is theme relativization
 32392 'the (subject) that I taught' (see also example 80, §16.1.2.4).

- 32395 (73) a. [a-kyr-suxçyt] *nuu lamu puu-ŋu.*
 1SG-OBJ:PCP-teach DEM ANTHR PST.IPFV-be
 'The person whom I taught (it) to was Lhamo.' (elicited)
- 32396 b. [a-kyr-suxçyt] *nuu <shuxue> puu-ŋu.*
 2SG-OBJ:PCP-teach DEM mathematics PST.IPFV-be
 'The (subject) that I taught (them/him/her) was maths.' (elicited)
- 32398 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)

32401 Finite relatives in direct form can also be used to relativize both the direct
 32402 object (74a) or the theme (74b).

- 32403 (74) a. [*rŋual nui-tui-mbi-t*] *nui ciu puu-ŋu?*
 silver AOR-2-give-PST:TR DEM who PST.IPFV-be
 'Whom did you give money to?'
- 32404 b. [*a-tciu tr-pyro nui-mbi-t-a*] *nui kumtc^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)

32408 Finite clauses are needed to specify both TAME and a first or second person
 32409 subject, as in (74a) and (74b), as object participles cannot index the subject (73a)
 32410 while at the time taking an orientation preverb.

23 Relative clauses

32411 Finite relative clauses are also required to index a first or second person direct
32412 object (recipient), for instance in local configurations such as ‘the thing that I
32413 have (taught/given) you’ in (75). This type of clause is only interpretable as theme
32414 relativization.

- 32415 (75) *a-twu tur~tur-ŋu ny, [pwi-ta-suxcyt] nuw ci nuu-ndum*
1SG.POSS-son COND~2-be:FACT ADD AOR-1→2-teach DEM a.little IMP-recite
32416 *ra*
be.needed:FACT
32417 ‘If you are my son, recite (the mantra) that I have taught you.’ (2012
32418 Kunbzang, 221)

32419 23.5.5 Goal and locative

32420 Relativization of locative/goal adjuncts or arguments with oblique participial
32421 clauses is described in §16.1.3.5. This section presents the relativization of locative
32422 phrases with finite clauses, object participles and relator nouns.

32423 23.5.5.1 Finite relativization

32424 Locative marking on goals and locative arguments and adjuncts is optional, and
32425 they can occur in absolute form (§8.1.8), like semi-objects (§8.1.5). Another
32426 commonality between goal/locative arguments and semi-objects is the ability to
32427 be relativized using finite relative clauses (§23.5.4.1).

32428 Finite locative relative clauses are most often prenominal, in particular with a
32429 genitive marker (§23.2.3), as in (76).

- 32430 (76) *[zara kuu-l^{yy} nuu-ce-nuu] yuu t_su ci tu tce*
3PL SBJ:PCP-herd IPFV:WEST-go-PL GEN path INDEF exist:FACT LNK
32431 ‘(At that place), there is a path which they take to go to herd (cattle).’
32432 (140522 Kamnyu zgo, 303)

32433 Headless (77) and head-internal (78) finite locative relatives are also attested.
32434 In the latter case, the head noun cannot receive locative case, and must be in
32435 absolute form.

- 32436 (77) *[ku-ryzi] nuu k^hu u-sta cti nd_xre*
IPFV-stay DEM tiger 3SG.POSS-place be.AFF:FACT LNK
32437 ‘The place where he is (now) is a tiger’s lair.’ (2003kandZislama, 98)

- 32438 (78) [k^ha jy-wy-tsum-nu] nuunu, [lonba com kuu
 house IFR-INV-take.away-PL DEM all iron ERG
 32439 nu-ky-sui-βzu] k^ha pjy-ŋu
 AOR-OBJ:PCP-CAUS-make house IFR.IPFV-be
 32440 ‘The house where (the king) had taken them, it was a house made
 32441 completely from iron.’ (140505 liuhaohan zoubian tianxia-zh, 151-153)

32442 Non-permanent and non-specific location can be relativized with finite rela-
 32443 tive clauses, as in (77) and (78). Thus, the finite relative *ku-ryzi nu* in (77) can be
 32444 translated as ‘the place where he happens to be’ while ‘the place where he stays
 32445 (permanently), his staying place’ is better expressed with an oblique participle
 32446 *u-(s)z-ryzi* (§16.1.3.5).

32447 23.5.5.2 Object participle

32448 The negative object participle of the perception verbs *mto* ‘see’ and *mts^hym* ‘hear’
 32449 has a special use: in (79) for instance, *u-mx-ky-mto* means ‘(somewhere) s/he
 32450 cannot see him/her’, the relativized element being locative rather than object (see
 32451 §16.1.2.5 for further discussion). This type of relative clauses are always headless.

- 32452 (79) [icq^ha qacpa kuu u-mx-ky-mto zo] jo-ce
 32453 the.aforementioned frog ERG 3SG.POSS-NEG-OBJ:PCP-see EMPH IFR-go
 32454 ‘She went to (a place) where the frog would not find her.’ (150818 muzhi
 guniang-zh, 149)

32455 23.5.5.3 Relator noun

32456 The two inalienably possessed nouns *u-stu* ‘place’ and *u-sta* ‘place’, both origi-
 32457 nating from lexicalized oblique participles (Table 16.4, §16.1.3.10) can be used as
 32458 relator nouns of prenominal locative relative clauses.

32459 The noun *u-stu* ‘place’ either selects subject participial clauses, as in (80) and
 32460 (81), or oblique participial clauses (82). The relativized element can be a static
 32461 location, but also a goal (see 10, §23.2.5).

- 32462 (80) [uzo kui-ryzi] u-stu zo nuu kú-wy-sui-ysuwy.
 32463 3SG SBJ:PCP-stay 3SG.POSS-place EMPH DEM IPFV-INV-CAUS-be.tight
 32464 ‘One presses the place (in the cow’s hide) where (the bug) is.’
 (25-akWzgumba, 12)

23 Relative clauses

- 32465 (81) [numuu tui-*yntym* *ly-kur-za*] *wi-stu* *nua*
 DEM INF:II-be.flat AOR:UPSTREAM-SBJ:PCP-start 3SG.POSS-place DEM
 32466 *wi-mp^busku* *tu-kui-ti* *ŋu*.
 3SG.POSS-rump IPFV-GENR-say be:FACT
 32467 ‘(When one goes upstream), the place where (the slope on the mountain)
 32468 starts to become flatter (the point of inflection in the slope of the
 32469 mountain) is called the ‘rump’ (of the mountain).’ (150908 Wmphsku, 8)

- 32470 (82) *zara* [*nua-sy-ynbab*] *wi-stu* *nuitcu*
 3PL 3PL.POSS-OBL:PCP-hide 3SG.POSS-place DEM:LOC
 32471 *jo-nua-lob-nua* *tce*,
 IFR-AUTO-come.out-PL LNK
 32472 ‘They came out of their hiding place.’ (140426 luozi he qiangdao-zh, 24)

32473 The noun *wi-sta*, though also compatible with subject participial clauses, is
 32474 more often found with finite relative clauses, as illustrated by (83) and (85).

- 32475 (83) [*pui-nŋŋkuŋke*] *wi-sta* *nura* *rcauu*, *tui-cnaβ*
 PST.IPFV-DISTR:walk 3SG.POSS-place DEM:LOC UNEXP:FOC INDEF.POSS-snot
 32476 *pui-ky-βde* *zo* *fse*
 AOR-OBJ:PCP-throw EMPH be.like:FACT
 32477 ‘The places on which it (the slug) has moved look like snot has been
 32478 spilled (on them).’ (26-qro, 138-139)

32479 While *wi-stu* and *wi-sta* have very close meanings, in the case of verbs taking
 32480 a goal such as *ru* ‘look at’ (§15.1.2.4), a semantic difference can be observed: the
 32481 former specifically indicates the goal (84a), while the latter is used to indicate the
 32482 place where the action takes place (84b).

- 32483 (84) a. *ly-ru* *wi-stu* *nuitcu*
 AOR:UPSTREAM-look 3SG.POSS-place DEM:LOC
 32484 ‘The direction (upwards) towards which he looked.’ (elicited)
 b. *ly-ru* *wi-sta* *nuitcu*
 AOR:UPSTREAM-look 3SG.POSS-place DEM:LOC
 32486 ‘The place where/from which he looked upwards.’ (elicited)

32487 For instance, in (85), the clause *t^bwi-nŋq^baru wi-sta* cannot be understood as ‘the
 32488 place towards which he had looked back’.

- 32489 (85) *lo-ce tce tcelo [t^hu-n_yq^haru]*
 IFR:UPSTREAM-go LNK upstream AOR:DOWNSTREAM-look.back
 32490 *wi-sta ly-azyut n_y li c^hy-n_yq^haru.*
 3SG.POSS-place AOR-reach ADD again IFR:DOWNSTREAM-look.back
 32491 ‘He went up there, and when he arrived at the place up there from which
 32492 he had looked back, he looked back again.’ (2003 kAndzwsqhaj.2, 116)

32493 23.5.6 Instrument

32494 Instruments are most commonly relativized using oblique participial relatives
 32495 (§16.1.3.6). All instrument oblique relatives in the corpus are headless, and of-
 32496 ten limited to the participle itself. When the nominalized verb is transitive, the
 32497 participial relative can contain an object as in (86).⁷

- 32498 (86) *nunu [qandzi c^hu-s_y-ynda] nuu t^honj^hyr nuu-rmi*
 DEM bullet IPF-OBL:PCP-ram DEM ramrod SENS-be.called
 32499 ‘What is used to ram a bullet (into the muzzle of the gun) is called a
 32500 ramrod.’ (28-CAmWGdW, 55)

32501 Instrumental participial relative clauses can take the generic inalienably pos-
 32502 sessed noun *wi-spa* ‘its material’ as overt head, to disambiguate with other types
 32503 of relatives, in particular locative ones, built with an oblique participle (§16.1.3).
 32504 For instance, in (87), the focus is on the use of the path (a path specially made in
 32505 order to be able to walk inside the field), rather than simply on the location ('the
 32506 place where one walks').

- 32507 (87) *tce tuu-ji wi-χcyl tu-kui-ŋke*
 LNK INDEF.POSS-field 3SG.POSS-middle IPFV-GENR:S/O-walk
 32508 *my-k^hu ma ty-ryku tu tce tce, nuu yuu*
 NEG-be.possible:FACT LNK INDEF.POSS-crops exist:FACT LNK LNK DEM GEN
 32509 *[tu-s_y-ŋke] wi-spa, wi-t_ʂu <zhuānmen>*
 IPFV-OBL:PCP-walk 3SG.POSS-material 3SG.POSS-path specially
 32510 *wi-rkoz nuu-wy-βzu ηgryl tce ununuu*
 3SG.POSS-special IPFV-INV-make be.usually.the.case:FACT LNK DEM
 32511 *t_ʂu nuu ftcyr u tu-kui-ti ηu*
 path DEM summer.path IPFV-GENR-say be:FACT
 32512 ‘One cannot walk in the middle of the fields, because there are crops, so

⁷ Antipassivization is required to demote the direct object even for participial verb forms (§18.6.7.4).

23 Relative clauses

32513 that as a way to walk into it, one specially makes a path, and that path is
32514 call ‘summer path’ (definition, 15-06-05)

32515 Alternatively, in the case of verbs with a sigmatic causative prefix in instru-
32516 mental function (§17.2.5.8), the instrument can be relativized as if it were a trans-
32517 sitive subject using the *kui-* participle (§16.1.1.4, §23.5.2), for example *u-kui-sui-*
32518 *mp^hul* ‘(the thing) that it reproduces with, (the thing) which makes it reproduce’
32519 in (88).

- 32520 (88) *tceri nuunu [u-kui-sui-mp^hul]* *nuu li uu-zrym*
but DEM 3SG-SBJ:PCP-CAUS-reproduce DEM again 3SG.POSS-root
32521 *nuu-cti ma u-ryi nuu-mas.*
SEVE-be.AFF LNK 3SG.POSS-seed SEVE-not.be
32522 ‘What it reproduces with is its root, not its seeds.’ (11-paRzwamWntoR,
32523 113)

32524 23.5.7 Comitative

32525 Comitative arguments marked with the postposition *c^ho* (§8.2.5) can be relativized
32526 with the oblique participle (§16.1.3.7). Such relatives are generally headless, as in
32527 (89).⁸

- 32528 (89) *uozo uu-χti* *jny-me tce, nuu-syzduuxpa tce*
3SG 3SG.POSS-companion IFR-not.exist LNK SENS-be.pitiful LNK
32529 *uu-syz-rykryz ri manje, uu-kui-qur ri*
3SG.POSS-OBL:PCP-discuss also not.exist:SENS 3SG.POSS-SBJ:PCP-help also
32530 *manje*
not.exist:SENS
32531 ‘Her husband passed away, poor of her, she has nobody to talk with, and
32532 nobody to help her.’ (12-BzaNsa, 127-128)

32533 If overt, the head does not take the comitative postposition *c^ho* as in (90), show-
32534 ing that this type of relative cannot be head-internal and is rather postnominal
32535 (§23.4.4).

- 32536 (90) *turme [a-sy-ymumi]* *nuu l^yβzaŋ nuu-rmi.*
person 1SG.POSS-OBL:PCP-be.in.good.terms DEM ANTHR SENS-be.called
32537 ‘The person with whom I am in good terms with is Lobzang.’ (elicited)

⁸ The verb *rykryz* ‘discuss’ can select a comitative argument (see example 124, §8.2.5).

32538 **23.5.8 Dative**

32539 Dative arguments (marked with the relator nouns *u-cki* or *u-pe*, §8.3.1) can only
 32540 be relativized with oblique participial clauses (§16.1.3.7). For example, the recipi-
 32541 ent of the indirective verb *ti* ‘say’ (§14.4.1) is relativized with the participle *sr-ti*
 32542 ‘(person) to whom one talks to’, as in (91).⁹

- 32543 (91) *tceri* [“*a-bi*” *sr-ti]* *dən* *ma azo yuu,*
 LNK 1SG.POSS-younger.sibling OBL:PCP-say be.many:FACT LNK 1SG GEN
 32544 *nəkinuu, a-bi,* *[tci-mu* *tci-wa*
 FILLER 1SG.POSS-younger.sibling 1DU.POSS-mother 1DU.POSS-father
 32545 *kuu-naχtəuy]* *a-bi,* *nunura nuu-cki* *tce*
 SBJ:PCP-be.the.same 1SG.POSS-younger.sibling DEM:PL 3PL.POSS-DAT LOC
 32546 “*a-bi”* *tu-ti-a,* *a-wymuu* *uu-rjít*
 1SG.POSS-younger.sibling IPFV-say-1SG 1SG.POSS-brother 3SG.POSS-children
 32547 *tce* “*a-bi”* *tu-ti-a.*
 LNK 1SG.POSS-younger.sibling IPFV-say-1SG

32548 ‘There are many (people) to whom one says ‘my younger sibling’, those
 32549 of my “younger siblings” whose parents are the same as mine, I say ‘my
 32550 younger sibling’ to them, and I (also) say ‘my younger sibling’ to the
 32551 children of my brothers.’ (140425 kWmdza02, 80-81)

32552 The subject can be optionally indexed as a possessive prefix on the oblique
 32553 participle, as in (92).

- 32554 (92) [“*a-z-rγ-t^hu*” *nuu ts^hundzun <laoshi> γu*
 1SG.POSS-OBL:PCP DEM ANTHR teacher be:FACT
 32555 ‘The (person) to whom I ask questions is teacher Tshendzin. (elicited)

32556 There are no examples of head-internal dative relative clauses, with the rela-
 32557 tivized element taking dative marking.

32558 **23.5.9 Time adjuncts**

32559 Oblique participial clauses can have a temporal interpretation, both with transi-
 32560 tive verbs (93) and intransitive stative verbs (94). This way of relativizing tempo-
 32561 ral adjuncts is however quite limited (§16.1.3.7).

⁹ The relative clause *tci-mu tci-wa kuu-naχtəuy* is analyzed in §23.5.10.1.

23 Relative clauses

- 32562 (93) [u-sy-p^hut] nuu, u-sŋi nuu a-my-pur-pe tce
 3SG.POSS-OBL:PCP-CUT DEM 3SG.POSS-day DEM IRR-NEG-IPFV-be.good LNK

32563 tce li tu-kui-cuu-ngo juu-ŋgryl
 LNK again IPFV-GENR:S/O-CAUS-be.sick SENS-be.usually.the.case

32564 'If the day when (the tree) is cut is not auspicious, it causes people to
 32565 become sick.' (24-kWqar, 9)

- 32566 (94) [txjmyy u-sy-dyn] zo juu-ŋu, t^hamt^ham.
 mushroom 3SG.POSS-OBL:PCP-be.many EMPH SENS-be now

32567 'It is a (period) when mushrooms are many, now' (conversation, 16-08-11)

32568 The more common way of relativizing temporal adjuncts is by using finite
 32569 clauses followed by a temporal relator noun in 3sg possessive form such as *u-sŋi*
 32570 'the day when...' (95), *u-xpa* 'the year when...' (96), or *u-raŋ* 'the time when...' etc.

- 32572 (95) [[sl̥zun tu] c^ho] [u^mb^yuzun tu] u-sŋi
 32573 lunar.eclipse exist:FACT COMIT solar.eclipse exist:FACT 3SG.POSS-day

nunu, skyrma my-sna ra tu-ti-nuu ŋu
 32574 DEM time NEG-be.good:FACT PL IPFV-say-PL be:FACT

32575 'They said that the day when there is a lunar or a solar eclipse is not
 auspicious.' (29-mWBZi, 175)

32576 When these prenominal relatives are used as temporal adjuncts in the main
 32577 clause, with or without (96) locative marking, they serve to express temporal
 32578 clause linking (§25.3.4.1).

- 32579 (96) [izora <maozhuxi> nui-me] u-xpa nunuu, skyrtcin
 1PL chairman.Mao AOR-not.exist 3SG.POSS-year DEM Venus

32580 maje tu-ti-nuu pur-ŋgryl.
 not.exist IPFV-say-PL PST.IPFV-be.usually.the.case

32581 'They say that the year when our Chairman Mao passed away, Venus did
 32582 not appear.' (29-LAntshAm, 89)

23.5.10 Possessor

32584 Possessors of intransitive subjects and direct objects can be relativized using the
 32585 same relative constructions as their possessees. It is unclear whether possessors
 32586 of other arguments can be relativized (in particular possessors of transitive sub-
 32587 jects).

32588 23.5.10.1 Possessor of intransitive subject

32589 Possessors of intransitive subjects are relativized with subject participial clauses
 32590 (§16.1.1.5). In this construction, the subject of the clause is overt and takes an
 32591 obligatory possessive prefix, such as the 3PL *nua-* in (97).¹⁰

- 32592 (97) [nua-mtc^{hi} kui-dyn] nura
 3PL.POSS-mouth SBJ:PCP-be.many DEM:PL

32593 ‘Those who talk too much.’ (‘whose mouths are (too) many’) (24-qro, 121)

32594 The head noun can be overt as in (98), with determiner repetition (§23.3.5.1).

- 32595 (98) akui zuu [qapri ci u-kycl u-bruu kui-tu]
 32596 east LOC snake INDEF 3SG.POSS-top.of.head 3SG.POSS-horn SBJ:PCP-exist
 ci yyzu tce
 INDEF exist:SENS LNK
 32597 ‘In the east, there is a snake with a horn on his head.’ (2005, divinitation,
 32598 44)

32599 Prenominal possessor relatives are also attested, but extremely rare, and the
 32600 third person possessive prefix on the possessee is required as in (99).

- 32601 (99) [u-cu kui-tu] rjyti pjy-cti
 32602 3SG.POSS-additive SBJ:PCP-exist tsampa IFR.IPFV-be.AFF
 32603 ‘It was tsampa mixed with broad beans.’ (poor quality tsampa)
 (2003-kWBRa, 20)

32604 Subject possessor relative can also occur in apposition with another relative
 32605 clause, as in (100).

- 32606 (100) [u-mi kui-zur~zri zo] [rkangray kui-rmi]
 32607 3SG.POSS-leg SBJ:PCP-EMPH~be.long EMPH ANTHR SBJ:PCP-be.called
 ci pui-tu nua-nyu
 32608 INDEF PST.IPFV-exist SENS-be
 32609 ‘There was someone called Rkangring, who had long legs.’ (2005
 Kunbzang, 5)

32610 First or second person possessors can also be relativized, as in (101) and (102)
 32611 (see also 4, §6.1).

¹⁰ This expression may be a nativized calque from Chinese 多嘴 <duōzui> ‘big mouth’.

23 Relative clauses

- 32612 (101) *azō [a-χti kur-tu] juu-ηu-a*
 1SG 1SG.POSS-companion SBJ:PCP-exist SENS-be-1SG
 32613 ‘I am someone who has a husband (whose husband is still alive, unlike
 32614 hers).’ (12-BzaNsa, 126)

32615 This type of relative can trigger either third person singular indexation, or
 32616 index the relativized element: both options (3SG *ηu* ‘s/he/it is’ and 2SG *tuu-ηu* ‘you
 32617 are’) have been tested and are possible, as shown in example (102).

- 32618 (102) *[nyzo ny-mu ny-wa kui-ts^hoz]*
 2SG 2SG.POSS-mother 2SG.POSS-father SBJ:PCP-be.complete
 32619 *ηu/tuu-ηu*
 be:FACT/2-be:FACT
 32620 ‘You are someone both of whose parents are still alive.’ (elicited)

32621 In example (103),¹¹ the relativized element corresponds to the *third person com-*
 32622 *ponent* of the first dual (exclusive) possessive prefix *tci-* on the noun dyad *tci-mu*
 32623 *tci-wa* ‘our parents’ (§9.2.2.2).

- 32624 (103) *[tci-mu tci-wa kui-naχtcuwy]*
 1DU.POSS-mother 1DU.POSS-father SBJ:PCP-be.the.same
 32625 ‘Those whose parents are the same as mine.’ (140425 kWmdza02, 80)

32626 Although the verb *naχtcuwy* ‘be the same’ can take a comitative argument (§8.2.5),
 32627 (103) is not an example of comitative relativization (§23.5.7); rather, the construc-
 32628 tion from which (103) has been relativized is the one in (104).

- 32629 (104) *tci-mpite^hyz ra juu-naχtcuwy*
 1DU.POSS-character PL SENS-be.the.same
 32630 ‘We have the same character = She has the same character as I.’
 32631 (12-BzaNsa, 58)

32632 In the participial relative taking *my-kuu-sy-mto* ‘the one that is not visible’ as its
 32633 main verb in (105), the head *smar* ‘river’ is not the possessor of the subject in the
 32634 proper sense, but the possessor of a noun (*w-βzur* ‘its side’) subject of a clause
 32635 embedded within another clause (headed by the participle *kui-fse* ‘that is like...’)
 32636 serving as the subject of *my-kuu-sy-mto* ‘the one that is not visible’.

¹¹ The context of the relative clause (103) is found in example (91) (§23.5.8).

- 32637 (105) [maka tcekua ku-kuu-ru *tce tcendi smar* [[*u*-βzur
at.all east IPFV:EAST-GENR:S/O-look LNK west river 3SG.POSS-side
32638 *tcʰi kui-fse ηu] kw-fse]*] *mɣ-kui-sy-mto* *zo]*
what SBJ:PCP-be.like be:FACT SBJ:PCP-be.like NEG-SBJ:PCP-PROP-see EMPH
32639 *scʰiz nuu-azyut nuu-ηu.*
APPROX.LOC AOR:WEST-reach SENS-be
32640 ‘He arrived at a river which was such that if one looked from one bank
32641 to the other side, what was on the other side was not at all visible.’
32642 (Divination 2005, 27)

This particularly convoluted example is however not representative of what is usually found in the corpus.

In (106), we find a prenominal relative containing another verb in subject participle form that can be interpreted a possessor relativization, as in (34): *u-kuu-χsu kuu-me* ‘having no feeder’.

- 32648 (106) [u-pci kui-r_Yzi] [u-kui-χsu kui-me]
 3SG.POSS-outside SBJ:PCP-stay 3SG.POSS-SBJ:PCP-feed NMZL:S/A-not.exist
 32649 lu_{lu} y_rzu tce numu kupa kui <yemao> tu-ti ηu
 cat exist:SENS LNK DEM Chinese ERG wild.cat IPPV-say be:FACT
 32650 ‘There are cats that live outside, that nobody feeds, Chinese people call
 32651 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 *tx-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).

- 32658 (107) *pyystciu nuu kuunx [[tuu-yjyn cinx zo ty-kui-mbri]*
 bird DEM also one-time even.one EMPH AOR-SBJ:PCP-make.noise
 32659 *kua-me], nuu to-yyscysct zo to-mbri juu-ju,*
 SBJ:PCP-not.exist DEM IFR-do.quickly EMPH IFR-make.noise SENS-be
 32660 ‘Even the bird, who had not even sung once (since coming to the palace),
 32661 immediately started singing.’ (2012 qachGa, 170)

The clause *tu-yjvn cinr zo* *tx-kuu-mbri kuu-me* here is in fact the nominalized version of the postverbal negative construction (§22.5.4). In main clauses, this

23 Relative clauses

32664 construction combines a negative existential verb in impersonal (third singular)
32665 form with a complement clause in finite form. In (107), we see that when the in-
32666 transitive subject of a postverbal negative construction is nominalized, both the
32667 matrix verb *me* ‘not exist’ and the verb of the complement clause *tr-kuu-mbri* oc-
32668 cur in subject participle form (§23.5.11.4). This construction, though superficially
32669 similar to that in (106), is therefore different from it.

32670 23.5.10.2 Possessor of object

32671 Possessors of objects can be relativized with object participial relatives (108) or fi-
32672 nite relatives (109) exactly like direct objects (§23.5.3), but like subject possessors,
32673 they require the possessee to be overt and to bear a possessive prefix (*u-sro&* ‘its
32674 life’ in 108 and *u-k^ho* ‘its house’ in 109).

- 32675 (108) *icq^ha* [p_yrt_cu_w u_w-sro& k_y-k_y-ri] *nua*
the.mentioned bird 3SG.POSS-life AOR-OBJ:PCP-save DEM
32676 *to-tcyt* *tce*
IFR-take.out LNK

32677 ‘He took out (from his bag) the bird whose life he had saved.’ (140428
32678 yonggan de xiaocaifeng-zh, 74)

- 32679 (109) [*qro ta-fsraj*] *nunua*, [*u^w-k^ho*
ant AOR:3→3'-protect DEM 3SG.POSS-hive
32680 *mu^w-t^ha-su^w-p^huit*] *nunura yui nu^w-r_fy_lpu* (*nua*) *kui, qro*
NEG-AOR:3→3'-CAUS-take.off DEM:PL GEN 3PL.POSS-king DEM ERG ant
32681 *rcanu_w*, *stoŋtsu* *kumju zo jo-yut*.
UNEXP:FOC thousand five EMPH IFR-bring
32682 ‘The queen of the ants that he had saved, whose hive he had prevented
32683 from being destroyed (by his brothers) brought five thousand ants.’
32684 (140510 fengwang-zh, 103)

32685 23.5.11 Relativization out of complement clause

32686 Relativization of arguments and adjuncts out of complement clauses is possible
32687 in certain conditions.¹²

¹² For an example of arguments inside complements which *cannot* be relativized, see §15.2.10.6.

32688 23.5.11.1 Intransitive matrix verbs

32689 In the case of modal verbs taking subject complement clauses such as *ra* ‘be
 32690 needed’, ‘be necessary’ and *kʰu* ‘be possible’, subject participle clauses are at-
 32691 tested to relativize not the intransitive subject of these verbs (§23.5.1), but rather
 32692 arguments of the subject complement clause, including direct objects (110), 111)
 32693 or transitive subjects (112).

- 32694 (110) *tce jisŋi [[tui-tʰe]] kui-ra] ú-tu?*
 LNK today 2-ask[III]:FACT SBJ:PCP-be.needed QU-exist:FACT
 32695 ‘Is there anything you need to ask today?’ (conversation 17-08-21)
- 32696 (111) *[kʂ-nutsu kui-ra] ra kumx tu-kui-nui-ti]*
 [[[INF-hide] SBJ:PCP-be.needed] PL also IPFV-SBJ:PCP-AUTO-say
 32697 *nunura tcayi tu-syrm̩i-nui ñgryl.*
 DEM:PL parrot IPFV-call-PL be.usually.the.case:FACT
 32698 ‘People call ‘parrots’ those who say (everything), including things that
 32699 should (remain) hidden.’ (24-qro, 131)
- 32700 (112) *[ty-ryku tu-kui-nui-ndza], [[turme ntsu tu-nxjo-nui]*
 INDEF.POSS-crop IPFV-SBJ:PCP-AUTO-eat people always 2-wait:FACT-PL
 32701 *my-kui-ra], [koŋla turme kui-pur~pe zo]*
 NEG-SBJ:PCP-be.needed really people SBJ:PCP-emph~be.good EMPH
 32702 *a-nui-tui-ʂzu-nui smulym*
 IRR-PFV-2-become-PL prayer
 32703 ‘May you become nice people, who eat crops and do not need to wait
 32704 (ambush) for humans (to eat them).’ (Norbzang 2005, 438)

32705 In addition to core arguments, subject participial clauses are also used to rela-
 32706 tivitize goals (113) and locative adjuncts (114).

- 32707 (113) *[[ce-a] kui-ra] nui alo ñu*
 go:FACT-1SG SBJ:PCP-be.needed DEM upstream be:FACT
 32708 ‘(The place) where I have to go is upstream.’ (elicited)
- 32709 (114) *[[azo-suuso pu-nui-pe-a] kui-kʰu] nautcu*
 1SG-as.wish IPFV-AUTO-do[III]-1SG SBJ:PCP-be.possible DEM:LOC
 32710 *nui-ce-a ñu*
 VERT-go:FACT-1SG be:FACT
 32711 ‘I am going back to a place where I can do as I like.’ (140426 jiagou he
 32712 lang-zh-zh, 78)

32713 23.5.11.2 Semi-transitive matrix verbs

32714 The subject participle of the semi-transitive *c^ha* ‘can’ can be used to relativize the
 32715 subject of the complement clause, when it is at the same time subject of *c^ha* itself,
 32716 as in (115) or in (122) below (§23.5.11.4).

- 32717 (115) [si [wuma tu-mbro] mx-kui-c^ha] ci ηu tce,
 tree really IPFV-be.high NEG-SBJ:PCP-can INDEF be:FACT LNK
 32718 ‘It is a tree that cannot grow very high.’ (12-Zmbroko, 86)

32719 Objects in complement clauses are relativized with the object participle *ky-c^ha*
 32720 as in (116), which can in addition take a possessive prefix coreferent with the
 32721 transitive subject of the complement clause (§16.1.2.1). In (116) for instance, the
 32722 prefix *u-* on *u-mx-ky-c^ha* is coreferent with *qalia_k* ‘eagle’.

- 32723 (116) [[qalia_k kui, nykinu, nucimuma kui-susu
 eagle ERG FILLER immediately SBJ:PCP-be.alive
 32724 c^hui-nui-tsum] u-mx-ky-c^ha] nunura
 IPFV:DOWNSTREAM-VERT-take.away 3SG.POSS-NEG-OBJ:PCP-can DEM:PL
 32725 ‘Those (the animals) that the eagle is not able to take away while they
 32726 are still alive.’ (150819 RarphAB, 1)

32727 23.5.11.3 Transitive matrix verbs

32728 With transitive complement-taking verbs such as *rjo* ‘experience’ (§24.5.6.1) or
 32729 *spa* ‘be able’ (§24.5.3.4), the subject participle occurs if the relativized element
 32730 is the (transitive or intransitive) subject of the complement clause, as in (117) or
 32731 (118).

- 32732 (117) pya [[ky-ruicmi] u-kui-spa] ci
 bird INF-speak 3SG.POSS-SBJ:PCP-be.able INDEF
 32733 ‘A bird that is able to speak.’ (Norbzang 2005, 14)
- 32734 (118) [ky-ce] puu-kui-rjo pju-dyn-nui ri
 INF-go AOR-SBJ:PCP-experience IFR.IPFV-be.many-PL LNK
 32735 ‘Many people have gone there (those who have gone there were many).’
 32736 (140514 huishuohua de niao-zh, 86)

32737 To relativize the direct object of a transitive verb in the complement clause, the
 32738 complement-taking verb can be in finite form (119) or in object participle form

32739 (120), as if the complement-internal objects were the direct objects of the main
 32740 verb of the relative clause (§23.5.3).

- 32741 (119) *[azo [kx-mto] puu-rno-t-a] tce^hemypuu ci tu*
 1SG INF-see AOR-experience-PST:TR-1SG girl INDEF exist:FACT
 32742 *tce,*
 LNK
 32743 ‘There is a girl whom I saw before and...’ (150819 haidenver-zh, 391)
- 32744 (120) *[[bmyrpiuy kui kx-mtsuy] puu-kx-rno] turme nuu*
 mosquito ERG INF-bite AOR-OBJ:PCP-experience person DEM
 32745 ‘Someone who has been stung by mosquitoes before.’ (elicited)

32746 The contrast between *puu-kui-rno* in (118) and *puu-kx-rno* (120) is not as straight-
 32747 forward as it might seem at first glance. The transitive verb *rno* lacks non-generic
 32748 inverse forms, and treats both subjects and objects of its velar infinitive clauses
 32749 in the same way as transitive subject in the matrix clause, both in terms of index-
 32750 ation and flagging (§24.5.6.1).

32751 23.5.11.4 Complement type

32752 The complements whose arguments or adjuncts are relativized can be either fi-
 32753 nite (110, 112, 113, 114, 115) or infinitival clauses (111, 117, 119), just like when the
 32754 complement-taking verbs are in finite form. In addition, the verb of the comple-
 32755 ment clause can also bear subject participle form if the relativized element is the
 32756 subject of the complement clause, as in (121) and (122) (see also §16.1.1.5, §16.1.1.6).

- 32757 (121) *[[smynk^haŋ kui-ce] kui-ra] yyzu.*
 hospital SBJ:PCP-go SBJ:PCP-be.needed exist:sens
 32758 ‘There are people (with nosebleed) who have to go to the hospital.
- 32759 (122) *[[kuuki uu-ku-kui-ndun] kui-c^ha] ci ηu*
 DEM.PROX 3SG.POSS-IPFV-SBJ:PCP-read SBJ:PCP-can INDEF be:FACT
 32760 ‘She is someone who can read this.’ (2003ras, 48)

32761 Pairs of verbs in subject participle form should not necessarily be analyzed
 32762 as complement clauses embedded in relatives. In (123), *puu-kui-nghlut* ‘(bone) that
 32763 has been broken, fracture’ is not a (subject) complement of *kui-t^huu* ‘the one that is
 32764 serious’ (which is not a complement-taking stative verb). Rather, *wuma zo puu-kui-*
 32765 *nghlut kui-t^huu* is simply a head-internal relative clause (§23.4.3) with the subject
 32766 participle (itself a headless relative clause) *puu-kui-nghlut* as its subject.

23 Relative clauses

- 32767 (123) [wuma zo [puu-kuu-n-glut] kuu-t^huu] nura q^he
 really EMPH AOR-SBJ:PCP-ACAU:break SBJ:PCP-be.serious DEM:PL LNK
 ndyre, tc^haχcaŋ tu-te q^he tce tu-xtcyr ηu.
 LNK splinter IPFV-put[III] LNK LNK IPFV-attach be:FACT
 32769 'The fractures that are serious, he puts a splinter on them and attaches
 32770 it.' (140426 laxthab, 7)

32771 23.5.12 Constraints on relativizability

32772 Table 23.1 summarizes the syntactic functions accessible to relativization in main
 32773 clauses in Japhug, indicating the clause types available for relativizing each func-
 32774 tion. The relatives can be headless in all cases, except that of possessor rela-
 32775 tivization, where a possessive prefix on the possessee is required (§23.5.10). In-
 32776 transitive subjects and object are preferentially relativized with head-internal
 32777 clauses, while transitive subjects, goals and adjuncts are more often relativized
 32778 by prenominal clauses.

Table 23.1: Summary of relative clauses in Japhug

Function	Participial Clause			Finite Clause
	kuu-	k ^h u-	s ^h u-	
S	✓			
possessor of S	✓			
A	✓			
O		✓		✓
possessor of O		✓		✓
semi-object		✓		✓
theme		✓		✓
goal		✓		✓
dative		✓		
comitative		✓		
instrument	(✓)		✓	
time adjunct		✓		✓ (prenominal)
locative adjunct		✓		✓ (prenominal)

32779 Not all adjuncts are relativizable in Japhug: causees (§8.2.2.6), standards of

comparative constructions (marked by the postpositions *srvz* or *staz*, §8.2.7) and exceptive phrases in *ma* ‘apart from’ (§8.2.8) apparently cannot be relativized, following a well-known cross-linguistic generalization (Keenan & Comrie 1977).

In addition, relativization of the direct object of transitive verbs (in subject participle form) in the purposive clauses of motion verbs is not possible, as discussed in §15.2.10.6. Many arguments or adjuncts from complement clauses can be relativized (§23.5.11), but the limits on relativizability in embedded clauses is a topic for further fine-grained research.

23.6 Relative clauses and focalization

23.6.1 Pseudo-cleft constructions

Among the possible means of focalizing noun phrases, most if not all languages use an equative construction with a headless relative clause (or a relative clause with an overt head noun, if this head noun is different from the focalized noun phrase) in the topicalized position and the focalized noun phrase as the nominal predicate, as in English ‘[What matters] are **his ideas**’ or ‘[The thing that matters] is **meaning**’.

Such constructions are generally referred to as pseudo-clefts, by contrast with cleft sentences, a type of construction (such as English ‘It is **his ideas** [that matter]’) where the focalized noun is the head of the clause defining it, that clause being built like a relative, but sometimes presenting language-specific differences with relative clauses of the same type.¹³

Pseudo-cleft constructions in Japhug consist of a headless relative clause (generally with the determiner *nua* in topicalizing function, §9.1.5.4) followed by a nominal predicate with an affirmative (*ŋu* ‘be’, *cti* ‘be’) or negative (*mar* ‘not be’, §13.1.2) copula.

Pseudo-clefts in Japhug do occur in intransitive subject (124 and 160), direct object (125 and 126) or semi-objects (68, §23.5.4.1) functions.

- (124) [stu kuu-mvku jx-kuu-ye] nua rjyłpu pjx-ŋu.
 most SBJ:PCP-be.before AOR-SBJ:PCP-come[II] DEM king IFR.IPFV-be
 ‘The one who came first was the king.’ (140514 xizajiang he lifashi-zh, 66)

¹³ Creissels (2006c: 123–124) points out for instance that in French clefting of dative phrases (*C'est à Jean que tu as donné le livre*) differs from the corresponding relativization (*La personne à laquelle tu as donné le livre*).

23 Relative clauses

- 32809 (125) *wi-ky-ndza nuunu nuu tce, tuu-ci wi-ŋgu*
 3SG.POSS-OBJ:PCP-eat DEM DEM LNK INDEF.POSS-water 3SG.POSS-inside
 32810 *qajuu nura puu-ŋu rca ma*
 bugs DEM:PL SENS-be SFP LNK

32811 ‘What (the otter) eats is aquatic animals, probably.’ (28-qapar, 90)

32812 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).
 32813 In (126) for instance, replacing the copula in the predicate *nyzo tuu-ŋu* by third
 32814 person form *tnyzo ŋu* would be completely ungrammatical.

- 32816 (126) *[ažo a-ky-nuu-rga] nuu nyzo tuu-ŋu tce*
 1SG 1SG.POSS-OBJ:PCP-APPL-like DEM 2SG 2-be:FACT LNK
 32817 ‘The one that I love is you.’ (160708 riquet5, 27)

32818 Pseudo-cleft used to focalize transitive subjects (127) are rare, and mainly concerns instruments (§23.5.6) rather than agents.

- 32820 (127) *[wi-xt̪pa tu-kuu-rqob] nuu p̪vctʰyβ ŋu.*
 3SG.POSS-belly IPFV-SBJ:PCP-hug DEM belly.band be:FACT
 32821 ‘(The thing that) is attached around (‘hugs’) its belly is the belly band.’
 32822 (30-tAsno, 94)

32823 Oblique participles can be used in pseudo-clefts to focalize locative adjuncts
 32824 (128).

- 32825 (128) *ma [ui-sx-dyn] nuu tcetu ruŋgu ŋu.*
 LNK 2SG.POSS-OBL:PCP-be.many DEM up.there pasture be:FACT
 32826 ‘The (place) where they are (most) numerous is up there on the pastures.
 32827 (17-xCAj, 85)

32828 Most pseudo-clefts are participial relatives as in the examples above, but there
 32829 are also finite object relatives (§23.5.3) as in (129).

- 32830 (129) *[tu-tuu-mtsʰi] nuunu, mbaly-pui puu-mas*
 IPFV-2-lead DEM OX-DIM SENS-not.be
 32831 ‘What you are leading is not a calf, (rather, it is...).’ (140512 fushang he
 32832 yaomo, 147)

32833 An alternative (and much rarer) type of pseudo-cleft has the headless relative
 32834 as the nominal predicate, as in (130).

- 32835 (130) *jy-yywu matci tcendyre nuu [stu zo u-w-ky-nuazduy] nuu*
 IFR-cry because LNK DEM most EMPH 3SG.POSS-OBJ:PCP-worry DEM
 32836 *pjy-cti tce*
 IFR.IPFV-be.ADD LNK
 32837 'He cried because it was what he was most worried about.' (140506 shizi
 32838 he huichang de bailingniao-zh, 65-66)

32839 Although pseudo-cleft constructions are well-attested in the corpus, they are
 32840 not the main morphosyntactic device to focalize constituents in Japhug. Other fo-
 32841 calizing constructions include sentence-final copulas (§22.5.3.2) and focus parti-
 32842 cles (§9.1.6). Some focalized noun phrases are also devoid of any specific marking
 32843 of focalization, even intonational ones (§22.1.2.3).

32844 23.6.2 Non-equative pseudo-cleft

32845 In addition, we find pseudo-cleft constructions whose second member is not a
 32846 nominal predicate with a copula, but rather a clause which could stand as a com-
 32847 plete sentence. The subject participle of *pe* 'be good' is commonly used in these
 32848 constructions in affirmative (*kui-pe* 'what is good is that...', 'fortunately...') or
 32849 negative form (*kui-pe* 'what is bad is that...', 'unfortunately...') as in (131).

- 32850 (131) *[my-kui-pe] tce icq^ha, [u-mu nu,*
 NEG-SBJ:PCP-be.good LNK FILLER 3SG.POSS-mother 3SG.POSS-mother
 32851 *βdaεmu nuu zatsa jy-si].*
 DEM queen DEM soon IFR-die
 32852 'Unfortunately (what is bad is that...), her mother, the queen, died early.'
 32853 (140504 baixuegongzhu-zh, 12-13)

32854 In such constructions, the (topicalized) participial clause is followed by the
 32855 linker *tce* in topicalizing function (§9.1.5.5) rather than the determiner *nuu*.

- 32856 (132) *tceri [my-kui-naχtceuy] tce, [u-ndzruu yyzu].*
 but NEG-SBJ:PCP-be.similar LNK 3SG.POSS-claw exist:SENS
 32857 'What is different (between the footprints of the bear and those of a
 32858 small child) is that (the former) has claws.' (21-pri, 37)

32859 23.7 Quantification

32860 Relative clauses are found in three quantificational constructions.

32861 First, correlative relative clauses occur with interrogative pronouns used as
 32862 free-choice indefinites (§23.2.5). In (133) for instance, the relative whose main
 32863 verb is the participle *kui-tu* has the pronoun *tç'i* ‘what’ in apposition with the
 32864 object participle *nr-kyr-t'u* ‘(the things) that you ask’ as head, with the meaning
 32865 ‘any’ or ‘whatever’.

- 32866 (133) [[*nr-kyr-t'u*] *tç'i kui-tu*] *tx-t'h e*
 32867 2SG.POSS-OBJ:PCP-ask what SBJ:PCP-exist IMP-ask[III]
 32868 *jxy-o*
 32869 be.possible:FACT-SFP
 32870 ‘Ask any/whatever question you (might) have.’ (conversation, 17-09-06)

32869 Second, totalitative reduplication (§12.4.1.5) indicates universal quantification
 32870 of the relativized element (§23.3.2). In particular, the reduplicated form of the
 32871 *kui~kui-tu* ‘all those that/who exist’ of the existential verb *tu* ‘exist’ can follow
 32872 nouns (134), with a meaning similar to the adverbial determiner *t'amtçrt* ‘all’
 32873 (§9.1.3.1).

- 32874 (134) *a-zda* *ra kui~kui-tu* *zo*
 32875 1SG.POSS-companion PL TOTAL~SBJ:PCP-exist EMPH
 32876 *a-tx-buy-nu* *smalym*
 32877 IRR-PFV-miss.home-PL prayer
 32878 ‘May all of my companions miss home!’ (Norbzang 2005, 229)

32877 Constructions such as that in (134) originate from head-internal (or postnom-
 32878 inal) participial relatives (‘all my existing companions’). However, it is unclear
 32879 whether this analysis is still valid synchronically, and even whether *kui~kui-tu*
 32880 is still a participle. It may have been reanalyzed as a postnominal quantifier, as
 32881 suggested by the fact that it can occur with pronouns, as in (135), where an inter-
 32882 pretation in terms of a relative clause, whether restrictive (‘all those of you who
 32883 exist?’) or non-restrictive (‘you, all the existing ones?’) is more difficult.

- 32884 (135) *nuzora kui~kui-tu* *zo* *ly-nur-jyrt-nu*
 32885 2PL TOTAL~SBJ:PCP-exist EMPH IMP:UPSTREAM-VERT-turn.back
 32886 ‘Turn back and go to your homes.’ (Norbzang 2005, 225)

32886 Third, headless relative clauses (§23.4.1) in existential constructions (§22.5.1.2)
 32887 are more often used than indefinite pronouns (§6.6) to express non-specific indef-
 32888 itate entities, whether humans (‘someone’, 136) or inanimate ones (‘something’,
 32889 137).

- 32890 (136) [a-<diānhuā> ui-kui-lyt] yyyzu
 1SG.POSS-phone 3SG.POSS-SBJ:PCP-release exist:SENS
 32891 ‘There is **someone** calling me on the phone!’ (conversation, 22-08-2018)

- 32892 (137) sun̄gu si ui-mat a-pur-dyn tce, nuu ui-xpa
 forest tree 3SG.POSS-fruit IRR-IPFV-be.many LNK DEM 3SG.POSS-year
 32893 nuu nuu-rkum ma khro ky-mto muáj-yi ma
 DEM SENS-be.few LNK much OBJ:PCP-see NEG:SENS-come LNK
 32894 [ui-ky-ndza] yyyzu.
 3SG.POSS-OBJ:PCP-eat exist:SENS
 32895 ‘When there are many fruits on the trees in the forest, in those years the
 32896 *Garrulax sp.* (*gmurcuu*) are fewer because they do not come (where they
 32897 can be) seen, because they have **something** to eat (in the forest).’
 32898 (23-pGAYaR, 89)

32899 Head-internal relatives (§23.4.3) can have a similar meaning if their head noun
 32900 is a generic noun like *turme* ‘person’ (§6.2.2), as in (138).

- 32901 (138) icq^ha [tūrme kui-ngo] yyyzu tce, ui-kui-rto_B
 just.before person SBJ:PCP-be.ill exist:SENS LNK 3SG.POSS-SBJ:PCP-see
 32902 jy-ari-a wo!
 AOR-go[II]-1SG SFP
 32903 ‘There is **someone** who is sick, I went to see him/her.’ (conversation,
 32904 2013)

32905 Headless relative clauses also occur with a partitive meaning (some individuals
 32906 among a group), as in (139). Note the difference in interpretation of the
 32907 proposition *ui-ky-ndza* yyyzu in (137) ‘it has something to eat’ and in (139) ‘there
 32908 are some (fishes) that it eats’.

- 32909 (139) qafy c^ho qajui ui-ŋguuz kuy, [ui-ky-ndza]
 fish COMIT bugs 3SG.POSS-inside:LOC also 3SG.POSS-OBJ:PCP-eat
 32910 yyyzu, [ui-my-ky-ndza] yyyzu.
 exist:SENS 3SG.POSS-NEG-OBJ:PCP-eat exist:SENS
 32911 [ui-ky-ny-mum], [ui-my-ky-ny-mum]
 3SG.POSS-OBJ:PCP-TROP-be.tasty 3SG.POSS-NEG-OBJ:PCP-TROP-be.tasty
 32912 yyyzu.
 exist:SENS
 32913 ‘Among fishes and other marine animals, there are **some** that (whales)_i

23 Relative clauses

eat and **some** that they_i don't eat, **some** that they_i find tasty and **some** that they_i don't find tasty.' (160703 jingyu, 21-23)

Since Japhug lacks negative pronouns (§6.6), the only way to express a meaning corresponding to negative pronouns in Japhug is by combining a headless relative clause with a negative existential verbs (§13.4.2), as in (140).

- (140) *nx-kui-nuy-mu me*
2SG.POSS-SBJ:PCP-APPL-be.afraid not.exist:FACT
'Nobody is afraid of you!' (2002 qaCpa, 38)

Headless relative clauses in negative constructions are often embedded in a participial relative with the positive existential verb *tu* 'exist', as in (141).

- (141) *tceri [nura [w-cuu-kur-p^hut] ra kui-tu]*
LNK DEM:PL 3SG.POSS-TRAL-SBJ:PCP-take.off PL SBJ:PCP-exist
me ma
not.exist:FACT LNK
'But nobody picks (wild strawberries, because nobody likes to eat them).' (11-paRzwamWntoR, 90)

23.8 Relative vs. complement clauses

This section discusses constructions which present real or apparent ambiguity between relative and complement clauses, and proposes a few syntactic tests to disambiguate the two.

To the cases studied below, the adnominal complement clauses (§24.6), which resemble prenominal relatives (§23.4.2), must be added.

23.8.1 Ambiguity (finite clauses)

Finite relative clauses (§23.2.2), when they occur as objects or semi-object of verbs of perception (*mto* 'see', *mts^hym* 'hear' etc) or cognition (*tso* 'understand', 'know' etc) may not be easily distinguishable from complement clauses, as this type of verb can take either nominal objects/semi-objects or complement clauses, and both finite relatives and finite complements are found with the same demonstrative determiners *nu* and *nunu* (§23.3.5.2, §24.3.3).

For instance, in (142), the clause *mbrutçiu la-tçxt* (§23.5.3) can either be interpreted as a head-internal finite object relative clause (§23.4.3, §23.5.3) 'the knife

that (the butcher) had unsheathed' or as a complement clause (§24.2.3) 'that (the butcher) had unsheathed his knife'. Both interpretations would make sense in the context (§24.4.1).

- (142) *spjaŋkua bniuz ni kua numia nrki, [mbrut̚cua la-tcxt] nuw pa-mto-ndzi tce, wuma zo p̚y-mu-ndzi.*
 AOR:3→3'-see-DU LNK really EMPH IFR-be.afraid-DU
 'The two wolves, seeing (that he had unsheathed his knife/the knife that he had unsheathed), were very afraid. (150902 liaozhai lang, 31)

Three criteria (already mentioned in §23.2.2) can however help disambiguating between the two analyses in specific contexts.

First, the presence of totalitative reduplication (§23.3.2) indicates that the subordinate clause can only be analyzed as a relative, as in (143).¹⁴

- (143) *stu kua-xtci nuu kua nura [tur~ty-amui-ti-ndzi] nuu p̚y-mts^bym.*
 most SBJ:PCP-be.small DEM ERG DEM:PL TOTAL~AOR-RECIP-say-DU DEM
 IFR-hear
 'The youngest (boy) heard all the things that they had said to each other.' (160630 poucet1, 34)

Second, finite subordinate clauses whose verb is in the Inferential, Sensory, Egophoric, Irrealis or Imperative cannot be relative clauses. For instance *mu-p̚y-pe* in Inferential Imperfective must be a complement clause.

- (144) *tce uizo si ty-mda kóbmuaž ny nuu [muu-p̚y-pe] nuu ko-tso ri p̚y-maq^bu muu-ŋu.*
 LNK 3SG die:FACT AOR-be.the.time only.then ADD DEM
 NEG-IFR.IPFV-be.good DEM IFR-understand LNK IFR-be.late SENS-be
 'Just before dying, he understood that (what he had done) was not good, but it was too late.' (aesop nongfu yu she, 24)

Third, finite relative clauses cannot relativize subjects, and therefore 'plain' intransitive verbs (excluding semi-transitive verbs §14.2.3 and verbs with goals §14.2.4) cannot occur in finite relative clauses (except in the case of locative and

¹⁴ The 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'.

32967 time adjunct relativization, §23.5.9). Therefore, clauses such as *mu-pjx-pe* ‘it was
 32968 not good’ in (144) and *tu-yrwu* ‘it cries/howls’ in (145) cannot be interpreted as
 32969 subject relatives ‘(the thing) that was not good’ or ‘(the wolf) that howls’.

- 32970 (145) *nua [tu-yrwu] nua u-mts^{hym} pua-rno-t-a*
 32971 DEM IPFV-cry DEM 3SG.POSS-BARE.INF:hear AOR-experience-PST:TR-1SG
 32972 *ma*
 LNK
 32973 ‘I did hear (wolves) howl.’ (27-spjaNkW, 27)

32973 23.8.2 Ambiguity (non-finite clauses)

32974 Due to the resemblance between the velar infinitives *kua-* and *kya-* (§16.2.1) on the
 32975 one hand and the subject (§16.1.3) and especially object participles (§16.2.1.1),
 32976 distinguishing between infinitival clauses and participial relatives is not always
 32977 trivial.

32978 In (146), we find a series of non-finite verb forms in *kua-* and *kya-* in clauses that
 32979 are object of the complement-taking verb *fçxt* ‘tell’ (§24.2.1). Given the mean-
 32980 ing of this example, it could appear to be preferable to analyze these examples
 32981 as complement clauses, translating <*yazi*> *tx-kya-murkuu*, *tx-kya-ndza* as ‘(he told
 32982 him) that he had stolen and eaten a duck’ and *u-βri* ... *nuu-kua-łob* as ‘that his body
 32983 started itching, and that feathers started growing on it’.

- 32984 (146) *tce nura [pur~pua-kur-fse] nura, [<yazi>*
 32985 LNK DEM:PL TOTAL~PST.IPFV-SBJ:PCP-be.like DEM:PL duck
tx-kya-murkuu, tx-kya-ndza], q^he cyr tce [u-βri
 32986 AOR-OBJ:PCP-steal AOR-OBJ:PCP-eat LNK evening LOC 3SG.POSS-body
tx-kua-ryza] q^he, [u-βri tce icq^ha, <yazi>
 32987 AOR-SBJ:PCP-itch LNK 3SG.POSS-body LOC the.aforementioned duck
yuu u-muj nuu-kua-łob], nura pjx-fçxt.
 32988 GEN 3SG.POSS-feather AOR-SBJ:PCP-come.out DEM:PL IFR-tell
 32989 ‘He told (the old man) everything that had happened, **the duck that he**
 32990 **had stolen and eaten, and his body itching, and the duck feathers that**
had grown on it.’ (150904 maya-zh, 55-56)

32991 However, the problem with analyzing these clauses as infinitival complement
 32992 clauses is that the intransitive motion verb *łob* ‘come out’, being dynamic, never
 32993 takes a *kya-* infinitive, and that the form *nuu-kua-łob* can only be a subject participle
 32994 ‘(something) that has come out’. For this reason, the non-finite clauses in (146)

32995 have to be analyzed as head-internal and headless (object and subject) participial
 32996 relative clauses.

32997 An analysis of clauses in *ky-* as infinitive complement clauses is restricted to
 32998 complement-taking verbs which unambiguously select *ky-* infinitives of plain
 32999 intransitive verbs (§16.2.1.1, §24.2.1).

33000 23.8.3 Participial clauses in core argument function

33001 Some verbs such as the verbs of pretence *zyypa* ‘pretend’ and *nuçpuuz* ‘pretend’
 33002 ‘disguise as’, ‘imitate’ select subject participle clauses as objects or semi-objects
 33003 such as *kui-ngo* in (147), which could appear to be similar to the purposive com-
 33004plement of motion verbs (§24.4.2.1).

- 33005 (147) [*kui-ngo*] *to-zyypa tce*
 SBJ:PCP-be.sick IFR-pretend LNK
 33006 ‘She pretended to be sick.’ (Nyima Wodzer 2002, 16)

33007 However, there is clear evidence that these clauses are in fact headless rela-
 33008 tives: (147) can literally be translated as ‘she pretended to be a sick person’. The
 33009 difference with purposive clauses can be shown by three tests.

33010 First, unlike motion verbs, pretence verbs can take nouns as objects (as shown
 33011 by 148 and 156) instead of clauses with subject participles.

- 33012 (148) *qacpa to-nuçpuuz, qacpa u-rq^hu to-ŋga,*
 frog IFR-pretend frog 3SG.POSS-skin IFR-wear
 33013 ‘He disguised as a frog, he wore a frog’s skin.’ (2002 qaCpa, 10)

33014 Second, these verbs can occur with a participial clause whose subject is overt
 33015 and different from the subject of the verb of the matrix clause, as in (149) where
 33016 *tr-pytsø* ‘child’ is the subject of the verb *yŋwu* ‘cry’ in the participial clause, but
 33017 not the subject of *nuçpuuz* ‘pretend, disguise as, imitate’ (§24.4.2.3). Such a subject
 33018 mismatch would be completely ungrammatical with a purposive clause.

- 33019 (149) [*tr-pytsø kui-yŋwu*] *zo ky-nuçpuuz*
 INDEF.POSS-child SBJ:PCP-cry EMPH INF-imitate
 33020 *my-spe-a ma nuu muma spe-a*
 NEG-be.able[III]:FACT-1SG LNK DEM apart.from be.able[III]:FACT-1SG
 33021 ‘I cannot imitate a child crying, but apart from that I can imitate
 33022 (anything).’ (27-kikakCi, 143)

Third, we find examples like (150) where the subject of the verb in the main clause is not coreferent with the subject of the participial clause but with the possessor of the subject. These cases can be accounted for as possessor relative clauses (§16.1.1.5, §23.5.10.1): (150) could thus be literally translated as ‘he pretended to be someone whose leg hurt’.

- (150) *tce [u-mi kui-mijym] to-nuicpuiz*
 LNK 3SG.POSS-leg SBJ:PCP-hurt IFR-pretend
 ‘He pretended to have a pain in the leg.’ (140426 lang yisheng-zh, 9)

23.8.4 Relativized complement clauses

In (151), the clause *sŋaŋspa kuu tu~ta-tut* ‘all (the things that) the sorcerer had said’ is a headless object finite relative (§23.5.3); the presence of totalitative reduplication in particular, shows that it cannot be interpreted as a complement clause (§23.3.2).

- (151) *tceri [sŋaŋspa kuu tu~ta-tut] nuu to-stu*
 LNK sorcerer ERG TOTAL~AOR:3→3'-say[II] DEM IFR-do.like
 ‘He did it everything the way that the sorcerer had said.’ (140511
 alading-zh, 86)

The syntactic function of this relative clause in the main clause is semi-object of the secundative verb *stu* ‘do like’, which encodes the manner of the action as semi-object, and the entity subjected to the action as the direct object (§14.4.2).

In view of (151), it is tempting to analyze the clause “*nuu a-tr-fse nuu-ra*” *tr-tuu-tut* ‘(that) you said “it should be (done) like that” in (152), which occurs in the same syntactic context, as a finite object relative clause too, differing from that of (151) by being head-internal (§23.4.3) instead of headless.

- (152) *[[“nuu a-tr-fse nuu-ra”] tr-tuu-tut] nuu*
 DEM IRR-PFV-be.like SENS-be.needed AOR-2-say[II] DEM
tr-stu-t-a nuu
 AOR-do.like-PST:TR-1SG be:FACT
 ‘I did it (the way that) you said should be done.’ (28-smAnmi, 333)

What is remarkable about the construction in (152) is that the relativized element is not a noun, but the (object) complement clause *nuu a-tr-fse nuu-ra* ‘it should be (done) like that’, embedded within the relative.

33051 A common example of relativized complement clause is found when the transitive perception verb *mts^hym* ‘hear’ (§24.5.5) occurs with the object participle *kṛ-ti*
 33052 of the verb *ti* ‘say’ as in (153). In this example, *turme nuu ko-nurju* has a double
 33054 status: it is the object complement clause of *kṛ-ti* within the relative, and at the
 33055 same time, it constitutes the relativized element of the head-internal participial
 33056 clause (§23.5.3).

- 33057 (153) [[‘turme nuu ko-nurju’] *kṛ-ti*] *muu-pur-mts^ham-a*
 person DEM IFR-have.pig.disease SBJ:PCP-say NEG-AOR-hear-1SG
 33058 ‘I have never heard that people get the pig disease.’ (25-khArWm, 90)

33059 The literal meaning of this construction can be conveyed in English as ‘I have
 33060 not heard “a man got the pig disease” being said’.

33061 24 Complement clauses

33062 24.1 Introduction

33063 This chapter, based on Sun’s (2012) work on Tshobdun and on earlier research on
33064 Japhug (Jacques 2008a; 2016a), presents an account of complement clauses and
33065 complementation strategies¹ in Japhug.

33066 This chapter comprises six sections. The first section following the introduc-
33067 tion §24.2 provides a classification of complement clauses based on the form of
33068 the main verb in the clause. Second, §24.4 presents an overview of complemen-
33069 tation strategies (including ambiguous relative clauses). Third, §24.3 analyses
33070 a certain number of morphosyntactic specificities of complement clauses (aside
33071 from verbal morphology) that distinguishes them from the corresponding inde-
33072 pendent clauses. Fourth, §24.5 surveys complement-taking verbs and describes
33073 the complement clause types and complementation strategies that they are com-
33074 patible with. Fifth, §24.6 discusses complement-taking nouns and noun-verb col-
33075 locations and how they differ from prenominal (§23.4.2) and genitival (§23.2.3)
33076 relative clauses. Finally, §24.7 briefly analyzes syntactic errors related to comple-
33077 mentation in the corpus.

33078 In this chapter, all complement clauses are systematically indicated between
33079 square brackets (with double embedding in some cases).

33080 The sections on participles (§16.1) and infinitives (§16.2) in a previous chapter
33081 partially overlap with some of the topics covered in this chapter.

33082 24.2 Complement types

33083 This section illustrates the different categories of complements attested in Ja-
33084 phug. Five main types of complement clauses are distinguished: velar infinitival
33085 complements, bare infinitival complements, finite complements, multicausal
33086 complements and reported speech. In addition, Japhug has many different com-
33087 plementation strategies, discussed in §24.4.

¹ On the notion of complementation strategy, see (Dixon 2006: 34–40) and §24.4.

33088 24.2.1 Velar infinitive clauses

33089 Velar infinite clauses (§16.2.1) are one of the most common types of complement
 33090 clauses in Japhug (§16.2.1.5). Two velar infinitives are attested, *kua-* for stative
 33091 verbs and impersonal intransitive verbs, and *ky-* for dynamic and/or morpholog-
 33092 ically transitive verbs.

33093 A recurrent problem in the study of subordinate clauses in Japhug is the am-
 33094 biguity between velar participles and infinitives (§16.2.1.1), making participial
 33095 clauses and infinitival clauses only distinguishable in specific contexts, and the
 33096 ambiguity between complement clauses and relative clauses with some complement-
 33097 taking verbs (§23.8, §24.4.1). As a result, participial (§23.2.1) and finite relative
 33098 clauses (§23.2.2) are in some case difficult to differentiate from velar infiniti-
 33099 val complement clauses (§24.2.1) and finite complement clauses (§24.2.3), respec-
 33100 tively.

33101 24.2.1.1 Case marking

33102 While velar infinitives bear no person indexation markers, noun phrases receive
 33103 the same case markers in infinitive clauses as in independent clauses, showing
 33104 that infinitives have the same argument structures as finite verb forms.

33105 When an argument is shared between the complement and the matrix clause,
 33106 it does not necessarily have the same syntactic function in both clauses, as in
 33107 (1), where *tycime* ‘lady’ is transitive subject in the complement clause (see §14.4.2
 33108 on the argument structure of *stu* ‘do like’) and intransitive subject in the matrix
 33109 clause (§14.2.3).

- 33110 (1) [tycime nua kua nura ky-stu] *pjy-c^ha*
 33111 princess DEM ERG DEM:PL INF-do.like.this IFR-can
 33111 ‘The princess succeeded in doing it.’ (140511 alading-zh, 252)

33112 In this sentence, the noun takes the ergative marker *kua* in accordance with the
 33113 verb of the complement clause (§8.2.2.1), showing that it belongs to the comple-
 33114 ment clause rather than to the matrix clause directly. This is the most commonly
 33115 observed pattern in Japhug texts: in infinitival clauses, the shared arguments
 33116 more often take the case marking selected by the verb of the complement clause
 33117 than that of the matrix clause.

33118 However, when the complement-taking verb is a stative verb, there are cases
 33119 where the ergative on the transitive subject is optional, as shown by (2) (without
 33120 ergative on *turme* ‘person’; Tshendzin has confirmed that this example is correct)

³³¹²¹ and (3) (with ergative). The precise conditions for this phenomenon still remain
³³¹²² to be investigated.

- ³³¹²³ (2) [uu-mat nuu ky-ndza] sna, [tuarne ky-ndza] sna
 3SG.POSS-fruit DEM INF-eat be.good:FACT people INF-eat be.good:FACT
³³¹²⁴ ‘Its fruit is nice to eat, it is nice for people to eat.’ (09-stoR, 48)

- ³³¹²⁵ (3) [numuu tuarne kuu ky-ndza] sna
 DEM people ERG INF-eat be.good:FACT
³³¹²⁶ ‘It is nice for people to eat.’ (13-NanWkWmtsWG, 167)

³³¹²⁷ 24.2.1.2 Coreference restrictions

³³¹²⁸ Coreference restrictions between the arguments of complement clauses with *ky-*
³³¹²⁹ infinitives and their matrix clauses differ from verb to verb, and four cases can
³³¹³⁰ be distinguished.

³³¹³¹ First, in the case of impersonal verbs such as *ra* ‘be needed’, ‘be necessary’
³³¹³² (§24.5.3.1), there is no argument coreference between the matrix clause and the
³³¹³³ complement clause. In this case, the arguments are neither indexed on the matrix
³³¹³⁴ verb nor on the verb in the complement clause.

³³¹³⁵ Second, with a few transitive complement-taking verbs such as the transitive
³³¹³⁶ *spa* ‘be able’ (§24.5.3.4) and the intransitive *nryz* ‘dare’ (§24.5.3.5), coreference be-
³³¹³⁷ tween the subject of the matrix clause and that of the complement clause is re-
³³¹³⁸ quired.

³³¹³⁹ Third, a handful of verbs, including *suxch'a* (§24.5.3.3), the causative of *c'h'a* ‘can’
³³¹⁴⁰ (§17.2.4.8), have coreference between the subject of the complement clause and
³³¹⁴¹ the *object* of the matrix clause.

³³¹⁴² Fourth, for most verbs taking infinitives (like the semi-transitive *rga* ‘like’ or
³³¹⁴³ the transitive *rjo* ‘experience’), the subject of the matrix clauses can be corefer-
³³¹⁴⁴ ential to either the subject of an intransitive verb (4), the subject of a transitive
³³¹⁴⁵ verb (5), the object (6) and also possessors of core arguments (§24.5.6.1).

- ³³¹⁴⁶ (4) tsuku tce [ky-nurryyo] wuma zo rga-nuu tce
 some LNK INF-sing really EMPH like:FACT-PL LNK
³³¹⁴⁷ ‘Some people like to sing.’ (26-kWrNukWGndZWr, 104) (S=S)
- ³³¹⁴⁸ (5) azo [qajuu nura ky-nyrtoχpjyt] puu-rga-a tce
 1SG bugs DEM:PL INF-observe PST.IPFV-like-1SG LNK
³³¹⁴⁹ ‘I liked to observe bugs.’ (26-quspunmbro, 15) (A=S)

24 Complement clauses

- 33150 (6) *maka* [tu-ky-nvjo_bjob], [tu-ky-fstvt] *nur* *nur-rga-nur*
at.all IPFV-INF-flatter IPFV-INF-praise DEM IPFV-like-PL
33151 ‘They like to be flattered or praised.’ (140427 yuanhou-zh, 53) (P=S)

33152 Other types of complement clauses differ from velar infinitive clauses by their
33153 constraints on coreference (see §24.2.2.2).

33154 24.2.2 Bare infinitives and dental infinitives

33155 Complement clauses with bare (§16.2.2) and dental infinitives (§16.2.3) are less
33156 widespread than those with velar infinitive. Only a limited number of complement-
33157 taking verbs select them: phasal verbs (including *za* ‘begin’, *svza* ‘begin’, *st^hut*
33158 ‘finish’, and *jvγ* ‘finish’), causative verbs derived from adjectives, the aspectual
33159 verb *rjio* ‘experience’ and the causative *supa* ‘cause to do’ (§24.5.1.3). With the
33160 exception of *jvγ* ‘finish’, these complement-taking verbs are all morphologically
33161 transitive.

33162 In the Tshobdun corpus Sun & Blogros (2019), the cognate verbs *je?* ‘begin’ and
33163 *joy?* ‘finish’ take velar infinitives, and there is no infinitival form comparable to
33164 the Japhug dental infinitive.

33165 24.2.2.1 Complementary distribution

33166 Bare and dental infinitives are found in complementary distribution. Bare infini-
33167 tives occur when the main verb of the complement clause is morphologically
33168 transitive (§14.3.1) as in (7).

- 33169 (7) *p^hjk^hu pju-si cuŋgu zo* [u-*ca* *u-n^hza*]
still IPFV-die before EMPH 3SG.POSS-flesh 3SG.POSS-BARE.INF:eat
33170 *tu-za-nur* *cti*
IPFV-start-PL be.AFF:FACT
33171 ‘(The lions) start eating its flesh before it dies (while it is still alive).’
33172 (20-sWNgi, 47)

33173 Dental infinitives on the other hand are found when the verb of the comple-
33174 ment clause is intransitive as in (8) (including labile verbs §14.5.1.1) or transitive
33175 with dummy subject (9) (§14.3.5).

- 33176 (8) [*azo a-ku* (*a-mytsa*), *tui-mjym*] *ta-za*
1SG 1SG.POSS-head 1SG.POSS-MZCh INF:II-hurt AOR:3→3'-start
33177 ‘My head_i, cousin, when it_i starts hurting...’ (TaRrdo 2003 conversation)

- 33178 (9) *u-mumto&* *nua pu-&ggra* *tce [u-&ggu]*
 3SG.POSS-flower DEM AOR-ACAU:cause.to.fall LNK 3SG.POSS-inside
 33179 *u-mat* *tua-&azu]* *na-za* *ri tce*
 3SG.POSS-fruit INF:II-make AOR:3→3'-start LOC LNK
 33180 ‘When its flower has fallen, and its fruit has started growing in the
 33181 inside...’ (12-ndZiNgri, 118)

33182 Since most complement-taking verbs selecting dental infinitives are transitive,
 33183 case marking on the common subject can either be in the ergative or in the ab-
 33184 solutive (§24.3.2).

33185 24.2.2.2 Coreference restrictions

33186 Bare and dental infinitives strongly differ from velar infinitives as to their coref-
 33187 erence restrictions. When the verb *r̩yo* ‘experience’ occurs with velar infinitives,
 33188 the subject of the matrix clause can be coreferential with either the subject, the
 33189 object or even the possessor of the intransitive subject of the complement clause
 33190 (§24.5.6.1).

33191 The ambiguity between transitive subject or object coreference is particularly
 33192 clear with the verb *nykʰu* ‘invite’ (to one’s home as a guest, see examples 10 and
 33193 11), as with this verb both arguments are equal in terms of volition and control.

- 33194 (10) *[uzo kui ky-nykʰu] pu-&r̩po-t-a*
 3SG ERG INF-invite AOR-experience-PST:TR-1SG
 33195 ‘I have been to his house as a guest.’ (= ‘He has invited me to come to his
 33196 house as a guest and I came.’) (P=A)
 33197 (11) *[uzo ky-nykʰu] pu-&r̩po-t-a*
 3SG INF-invite AOR-experience-PST:TR-1SG
 33198 ‘He has been to my house as a guest.’ (= ‘I have invited him to come to my
 33199 house as a guest and he came.’) (A=A)

33200 In the case of bare infinitives, on the other hand, the subjects of the matrix and
 33201 complement clause must be coreferent, but the object of the matrix clause can
 33202 however be neutralized to third person.

33203 In example (12), the shared subject (referring to the host) is 3sg. The verb of
 33204 the matrix clause takes the complement clause as a 3sg object (hence the verb
 33205 takes the 3→3’ form without 1sg marking), while the verb of the complement

24 Complement clauses

33206 clause takes a 1SG object (referring to the guest), marked by the possessive prefix
33207 *a-*².

33208 (12) [a-nyrk^hu] pa-rpo
1SG.POSS-BARE.INF:invite AOR:3→3'-experience

33209 ‘I have been to his house as a guest.’ (= ‘He has invited me to come to his
33210 house as a guest and I came.’)

33211 (13) [uozo u-nyrk^hu] puu-rpo-t-a
3SG 3SG.POSS-BARE.INF:invite AOR-experience-PST:TR-1SG
33212 ‘He has been to my house as a guest.’ (= ‘I have invited him to come to my
33213 house as a guest and he came.’)

33214 This generalization is observed for all transitive verbs taking bare infinitive
33215 complement clauses. However, the intransitive impersonal verb *jyy* ‘finish’ takes
33216 the bare infinitive clause as intransitive subject, and remains in third person singular
33217 regardless of the subject and object of the complement clause, as in (14),
33218 where although the subject of the complement clause is third person plural, no
33219 plural marker can appear on *jyy*.

33220 (14) [nura u-ti] to-jyy tce
DEM:PL 3SG.POSS-BARE.INF:say IFR-finish LNK

33221 ‘After having finished saying that, (they went to the park)’ (140515
33222 congming de wusui xiaohai-zh, 15)

33223 With dental infinitives, the constraint subject coreference is the same, except in
33224 the case of transitive verb with dummy subject (example 9, §24.2.2.1), where the
33225 subject of the matrix verb is coreferent with the sole argument of the complement
33226 clauses, whose status is intermediate between that of a subject and an object
33227 (§8.1.4).

33228 24.2.3 Finite complements

33229 Complement clauses, like relative clauses (§23.2.2), can have a verb in finite,
33230 rather than infinitival form in Japhug and other Gyalrong languages. These

² In the English translation, the 1SG is rendered as a subject, because translating *a-nyrk^hu pa-rpo* as ‘He has invited me’ would be inexact, as this English sentence does not imply that the 1SG did attend the invitation.

constructions are called ‘finite complement clauses’ in the present work, corresponding to Sun’s (2012: 475–477) ‘S-like (sentence-like) clauses’.³ This category excludes reported speech complement, which present different characteristics (§24.2.5).

24.2.3.1 TAME forms

In finite clauses other than reported speech, TAME marking in the complement clause presents some restrictions. Of the 11 primary TAME categories (§21.1), only the Imperfective (§21.2.4) and the Factual Non-Past (§21.3.1.3) are compatible with most if not all verbs selecting finite complement clauses, regardless of the TAME category of the matrix verb. In (15) for instance, the verb of the complement clause is the Imperfective while that of the matrix clause is in the Aorist.

- (15) [azo a-ŋga ra tu-nur-ŋge-a, jxyxt ju-nur-ce-a] ra
 1SG 1SG-clothes PL IPFV-AUTO-wear[III]-1SG toilet IPFV-AUTO-go-1SG PL
³³²⁴³ *tx-c^ha-a*
³³²⁴⁴ AOR-can-1SG

‘I am able now to wear clothes by myself and go to toilets by myself (again, after an accident).’ (conversation, 17-08-21)

The Irrealis (§21.4.1.4) and Imperative (§21.4.2.4) are also found, but only with modal auxiliaries such as *ra* ‘be needed’ as in (16). Unlike in Tshobdun (J. T.-S. Sun 2007b: 807), verbs of cognition such as *suso* ‘think’ do not select the Irrealis; although complement clauses in the Irrealis are found with these verbs, they are best analyzed in Japhug as reported speech (§21.4.1.4, §24.2.5).

- (16) *ndyre* [kui-xtcui~xtci a-my-pú-wy-nur-cluy]
 LNK INF:STAT~be.small IRR-NEG-PFV:DOWN-INV-AUTO-drop
³³²⁵² *nur-ra* *ma* *rca* *nui* *nur-ndor* *q^he clas* *zo*
 SENS-be.needed because UNEXP:FOC DEM SENS-be.brittle LNK at.once EMPH
³³²⁵³ *pjui-NGRU* *nur-cti*.
 IPFV-ACAUS:break SENS-be:AFF

‘However, one should not let it drop even a little, otherwise, as it is very brittle, it would break at once.’ (30-Com, 27)

Other TAME categories, such as Aorist (§21.5.1.7) or Inferential (18), are only attested in the complement clause if the matrix verb is also in the Aorist or in

³ I chose ‘finite’ rather than ‘S-like’ to avoid confusion with ‘S’ as abbreviation for ‘intransitive subject’.

33258 the Inferential, respectively.⁴ No semantic difference has yet been ascertained
 33259 between Imperfective complements (15) and complements whose TAME category
 33260 is copied from that of the matrix verb (17); the latter are considerably rarer.

- 33261 (17) [kui-xteui-xtei *tx-nŋukuiŋke-a*] *tx-cʰa-a*.
 SBJ:PCP-EMPH~be.small AOR-walk.around-1SG AOR-can-1SG
 33262 ‘I have become able to walk around a little bit (again, after an accident).’
 33263 (conversation, 17-08-21)

- 33264 (18) [zdium kui-ɻav *nua cʰy-sui-jyvt*] *pjy-cʰa*
 cloud SBJ:PCP-be.black DEM IFR:DOWNTREAM-CAUS-turn.back IFR-can
 33265 *nua-ŋu*.
 SENS-be
 33266 ‘He succeeded in making the black cloud retreat.’ (25-kAmYW-XpAltCin,
 33267 70)

33268 The TAME agreement between the matrix verb and the verb of the complement
 33269 clause is not limited to Aorist and Inferential, and is also attested with Irrealis
 33270 and Egophoric Present, as in (19) and (20), respectively.

- 33271 (19) [*nunu a-ky-yut*] *a-puu-cʰa* *tce nunuu pʰyn*
 DEM IRR-PFV:EAST-bring IRR-PFV-can LNK DEM be.efficient:FACT
 33272 ‘If he succeeds in bringing him, it will be efficient (to cure my disease).’
 33273 (2011-04-smanmi, 21)
- 33274 (20) [*ny-cqʰe* *smyn* *ku-tui-ndze*] *u-kú-ra?*
 2SG.POSS-cough medicine PRS-2-eat[III] QU-PRS-be.needed
 33275 ‘Do you have to take medicine for your cough (now)?’ (conversation
 33276 2019-08-16)

33277 Examples like (17), (18) and (19) are not analyzable as serial verb constructions,
 33278 since subject coreference is not always observed, depending on the matrix verb
 33279 (§24.2.3.3).

33280 24.2.3.2 Coreference restrictions

33281 There are four different patterns of coreference restriction between the argu-
 33282 ments of finite complement clauses and those of the matrix verb.

⁴ This constraint may not apply to complements of perception and cognition verbs such as *mto* ‘see’ (§24.5.5).

33283 The first type includes verbs like *spa* ‘be able’ (§24.5.3.4), which require coreference
 33284 between their subject and the (transitive or intransitive) subject of the complement clause. In (21), both the verb of the complement clause and the matrix
 33285 verb are in 1SG→3 form, with 1SG coreference. The same coreference restriction
 33286 is observed when this verb takes a velar infinitive complement (§24.2.1.2).
 33287

- 33288 (21) [*<weixin> tu-lat-a*] *nura muáj-spe-a.*
 Wechat IPFV-release-1SG DEM:PL NEG:SENS-be.able[III]-1SG
 33289 ‘I am not able to use Wechat.’ (conversation, 17-03-27)

33290 The second type is represented by the semi-transitive complement-taking verb
 33291 *rga* ‘like’, which allows co-reference between its subject and either the (transitive
 33292 or intransitive) subject (22) or the object (23) of the complement clause (Jacques
 33293 2016a: 238).

- 33294 (22) [*nua ku-nu-ta-j*] *wuma zo rga-j*
 DEM IPFV-AUTO-put-1PL really EMPH like:FACT-1SG
 33295 ‘We like to put it (in the tea kettle to make tea).’ (30-macha, 11)
 33296 (23) [*nyzo kuu tu-kui-nyjobjob-a*] *nura rga-a*
 2SG ERG IPFV-2→1-flatter-1SG DEM:PL like:FACT-1SG
 33297 ‘I like it when you flatter me.’ (elicited)

33298 The third type includes impersonal modal and aspectual verbs such as *ra* ‘be
 33299 needed’, ‘be necessary’ or *nts^{hi}* ‘have better’, which take their complement clause
 33300 as an intransitive subject (§24.5.3.1. For instance, in (24), the modal auxiliary *nts^{hi}*
 33301 can only occur in 3SG form, and cannot take the 2SG indexation of the verb in
 33302 complement clause.

- 33303 (24) [*nyzo mylyn zo pjur-tuu-si*] *nts^{hi}*
 2SG absolutely EMPH IPFV-2-die be.better:FACT
 33304 ‘You must die!’ (140512 fushang he yaomo1-zh, 23)

33305 Fourth, verbs of perception and cognition such as *mto* ‘see’ (§24.5.5) have no
 33306 constraints on person indexation and neither require nor prohibit any coreference
 33307 between main and complement clause.

33308 24.2.3.3 Finite complements vs. serial verb constructions

33309 Some complement-taking verbs such as *c^ha* ‘can’ occur with clauses sharing the
 33310 same subject and the same TAME category, as in (25). This could appear to be

24 Complement clauses

33311 analyzable as a serial verb construction (§25.1.5) or pseudocoordination (Lødrup
33312 2014).

- 33313 (25) *qajdo nuu kuu [tua-ci ko-ts^hi] pjy-c^ha.*
crow DEM ERG INDEF.POSS-water IFR-drink IFR-can
33314 ‘The crow succeeded in drinking water.’ (aesop kouke de wuya-zh, 22))

33315 However, I prefer to analyze these constructions are analyzed as a particular
33316 type of finite complements with TAME agreement between the matrix verb and
33317 the complement verb (§24.2.3.1).

33318 Subject coreference is not a specificity of this construction, but rather a prop-
33319 erty of the complement-taking verb (§24.2.3.2). With impersonal verbs such as
33320 *ra* ‘be needed’, which do not require subject coreference, TAME agreement is
33321 also attested, as in (26), where the verb *to-ti-nuu* is in the Inferential (a category
33322 that does not normally occur in finite complement clauses, §24.2.3.2) by agreeing
33323 with the matrix verb *pjy-ra*.

- 33324 (26) [*“ya” ny “ya” nuu to-ti-nuu*] *pjy-ra.*
yes ADD yes DEM IFR-say-PL IFR.IPFV-be.needed
33325 ‘They had no other choice but to say ‘yes’.’ (140518 jinyin chengbao-zh, 57)

33326 Phasal verbs such as *za* ‘start’ and *st^hut* ‘finish’ (§24.5.6), which generally select
33327 bare/dental infinitives (§24.2.2), are marginally used in the construction, as in
33328 (§27).

- 33329 (27) [*juuxco tc^hi ty-tua-nyma-t ty-tua-za-t*] *zo nuu, cyr*
this.morning what AOR-2-do-PST:TR AOR-2-start-PST:TR EMPH DEM night
33330 *myctsa uizo ty-nyme ra*
until 3SG IMP-do[III] be.needed:FACT
33331 ‘What you have started doing this morning, do it until the night.’ (140515
33332 jiesu de laoren-zh, 133)

33333 24.2.4 Multiclausal complements

33334 Complements are not always restricted to one single clause. Example (28) illus-
33335 trates a finite biclausal complement: *c^ha* ‘can’ (§24.5.3.2) has two complement
33336 clauses, the first of which *uu-mi pjuu-su-rtse* specifies the manner of the second
33337 one (§25.4.1).

- 33338 (28) *ma ju-mtsab bja zo ma nur ma [[u-mi*
 LNK IPFV-jump completely EMPH LNK DEM apart.from 3SG.POSS-foot
 33339 *pju-su-rtse] [tu-ŋke]] muáj-cʰa*
 IPFV-CAUS-be.inserted[III] IPFV-walk NEG:SENS-can
 33340 ‘It only jumps, as it is not able to walk by treading with its feet.’
 33341 (28-qaCpa2, 4)

33342 Multiclausal infinitive complements are also found, as in (29), though they are
 33343 ambiguous with infinitive complements embedded within other infinitive com-
 33344 plements, as in (30) (a manner causative complement, §24.5.1.4) or complements
 33345 containing converbal manner clauses (§16.2.1.7).

- 33346 (29) *[kʂ-nurtsui] [kʂ-ŋke] ra tx-cʰa*
 INF-crawl INF-walk PL AOR-can
 33347 ‘When (the baby) has become able to crawl and walk.’ (140426 tApAtso
 33348 kAnWBdaR1, 67)

- 33349 (30) *[[kʂ-ndza] kʂ-γγ-nduiβ] muáj-kʰuu tce*
 INF-chew INF-CAUS-be.minute NEG:SENS-be.possible LNK
 33350 *lú-wy-suŋ-qioŋ puŋ-ŋu tce*
 IPFV-INV-CAUS-vomit SENS-be LNK
 33351 ‘(Dogs)_i cannot chew (*prŋŋxçaj*, a type of grass)_j into fine parts, and it_j
 33352 causes them to vomit.’ (140505 panaxCAj, 4)

33353 Another type of biclausal complement, exemplified by (31) and (32), comprises
 33354 an affirmative verb form, followed by its negative counterpart, expressing a dis-
 33355 junction ‘whether *X* or $\neg X$ ’.

- 33356 (31) *[[u-ngra pe] [mʂ-pe]] nu, [[kʂ-nŋma pe]*
 3SG.POSS-salary good:FACT NEG-be.good:FACT DEM INF-work good:FACT
 33357 *[mʂ-pe]] arytčʰa*
 NEG-be.good:FACT be.determined.from:FACT
 33358 ‘Whether his salary is good or not is determined by/depends on whether
 33359 his work is good or not.’ (elicited)

- 33360 (32) *[[u-spa rtaŋ] [mʂ-rtaŋ]]*
 3SG.POSS-material be.enough:FACT NEG-be.enough:FACT
 33361 *tx-z-rytčʰe*
 IMP-CAUS-be.determined.from[III]
 33362 ‘Determine (the quantity of clothes that you are going to make)

24 Complement clauses

33363 depending on whether the (quantity of) cloth is enough or not.' (elicited)

33364 With bare and dental infinitives, multicausal complements are only attested
33365 in the simultaneity construction (§24.5.1.3).

33366 24.2.5 Reported speech

33367 Verbs of speech (such as *ti* 'say' or *fçrt* 'tell') and cognition (in particular *suso*
33368 'think', 'want') can take reported speech complements, in which the speaker ei-
33369 ther (exactly or partially) reproduces a sentence uttered by the person he is quot-
33370 ing, or verbalizes the words he assumes a person is thinking. These clauses have
33371 finite verb forms, and are thus a sub-category of finite complement clauses, but
33372 present some properties distinguishing them from the complements studied in
33373 §24.2.3.

33374 24.2.5.1 Sentence final particles

33375 Reported speech clauses stand out among complement clauses in have no restric-
33376 tion on the verb form, in particular in terms of TAME (§24.2.3.1), and also in their
33377 ability to occur with sentence final particles, which are otherwise never found in
33378 subordinate clauses, including relatives, complements and other types of clauses

33379 .

33380 For instance, the complement clause in (33) contains the imperative/hortative
33381 particle *je* (§10.4.1) as well as an interjection, and in (34) we find the utterance
33382 mitigation particle *loβ* (§sec:fsp.attitude).

33383 (33) "ja, t^hui-numbjam-nuu je" to-ti.

INTERJ IMP-warm.by.fire-PL SFP IFR-say

33384 'She said: 'Come on, get warm by the fire!' (160703 poucet3-v2, 27)

33385 (34) *ty-tcuu nuu kuu "nuu my-nxtsa loβ" to-ti, k^hro*
INDEF.POSS-son DEM ERG DEM NEG-be.appropriate:FACT SFP IFR-say much
33386 *muu-to-k^huu.*

NEG-IFR-agree

33387 'The boy said 'This is inappropriate' and did not agree (to marry her).

33388 (150828 donglang, 56)

33389 24.2.5.2 Hybrid indirect speech

33390 While Japhug allows direct speech quotation, the corpus reveals examples of
33391 mismatches between the viewpoint of the original speaker (the person whose

33392 speech or thoughts are quoted, subject of the complement-taking verb of speech/
 33393 thought which selects the reported speech clause) and the current speaker (the
 33394 person quoting the words of the original speaker).

33395 In the present work, these phenomena are referred to as Hybrid Indirect Speech
 33396 ([Jacques 2016a](#) following [Tournadre \(2008\)](#)).⁵ In Hybrid Indirect Speech, the verb
 33397 morphology (in particular person indexation) invariably presents the viewpoint
 33398 of the original speaker, while pronouns and adverbs follow that of the current
 33399 speaker.

33400 Since grammatical relations are mainly marked by verb morphology and overt
 33401 pronouns are not common (§6.1), distinguishing between Direct Speech and Hy-
 33402 brid Indirect Speech is only possible in a minority of cases. Mismatch between
 33403 pronouns and person indexation only occurs when a pronoun or possessive pre-
 33404 fix is overt and when at least one argument in the sentence is referred to by a
 33405 different person form by the original speaker and the current speaker.

33406 Example (35) provides an example of this phenomenon. The verb *nuyi* ‘he
 33407 comes/will come back (home)’ in the complement clause of the verb *ky-suso*
 33408 ‘think’ is in the Factual Non-Past 3SG. In the same clause we find the 2SG pronoun
 33409 *nyzo*; there is no pause between the pronoun and the verb, and no indication from
 33410 the prosody that *nyzo* is left-dislocated.

- 33411 (35) *ma ny-wa kuu [nyzo nuyi] ky-suso kuu kʰa*
 LNK 2SG.POSS-father ERG 2SG come.back:FACT INF-think ERG house
 33412 *wi-rkuu tce ɻmaɻ ɻsui-tyxur pa-sui-lt*
 3SG.POSS-side LNK soldier three-circle ARO:3→3'-CAUS-release
 33413 *cti tce*
 be.AFF:FACT LNK

33414 **Direct:** ‘Your father, thinking ‘[He is coming back](#)’, put three circles of
 33415 soldiers around the house.’

33416 **Indirect:** ‘Your father, thinking that [you are coming back](#),’

33417 **Hybrid indirect:** ‘Your father, thinking that ‘[you](#)’ is coming back’,
 33418 ([qachGa 2003, 154](#))

33419 This type of mismatch between pronouns and indexation on the verb is anom-
 33420alous and never found in independent sentences. Here the verb form corresponds
 33421 to the point of view of the original speaker (indicated in blue in all following ex-
 33422 amples), whose original sentence would have been *wzo nuyi* (3SG come.back:FACT
 33423 ‘he is coming back’). The pronoun reflects the point of view of the current speaker

⁵ [Aikhenvald \(2008\)](#) also uses the term ‘Semi-Indirect Speech’.

33424 (in red), for whom the equivalent sentence would be converted to *n_{yo} tu-nuyi*
 33425 (2SG 2-come.back:FACT ‘you are coming back’), since the addressee of the current
 33426 situation corresponds to the subject of the original situation.

33427 Examples (36a), (36b) and (38) illustrate that possessive prefixes on nouns un-
 33428 dergo the same shift towards the point of the view of the current speaker, while
 33429 the verb remains in the same form that was either thought or uttered by the
 33430 original speaker.

33431 In (36a) and (36b), the possessive forms *u-t_{cw}* ‘his son’ and *u-pi* ‘her brother’
 33432 underwent a shift to third person (representing the point of view of the current
 33433 speaker). The original sentences corresponding to the complement clauses in
 33434 (36a) and (36b) are presented in (37a) and (37b): the possessive pronoun is first
 33435 person and coreferential with the subject of the main verb.

- 33436 (36) a. *rgytpu nuu kuu “u-t_{cw} nuu a-nuu-xtuy-a” jny-suuso*
 old.man DEM ERG 3SG.POSS-son DEM IRR-PFV-meet-1SG IFR-think
 33437 *cti*
 be.AFF:FACT

33438 Direct: ‘The old man thought “I wish I could meet my son”’.

33439 Indirect: ‘The old man_i wanted to meet his_i son.’

33440 Hybrid indirect: ‘The old man_i thought I_i wish I_i could meet
 33441 his_i son’’. (150908 menglang-zh, 40)

- 33442 b. *t_{cendyre} ta-bi nuu kuu [u-pi*
 LNK INDEF.POSS-younger.sibling DEM ERG 3SG.POSS-elder.sibling
 33443 *yuu u-t_{sci} tu-n_{yme}-a ra] jny-suoso*
 GEN 3SG.POSS-revenge IPFV-make[III]-1SG be.needed:FACT IFR-think
 33444 *tce,*
 LNK

33445 Direct: ‘The (younger) sister thought “I have to get revenge on my
 33446 brother”’.

33447 Indirect: ‘The (younger) sister_i wanted to get revenge on her_i brother.’

33449 Hybrid indirect: ‘The (younger) sister_i thought I_i have to get revenge
 33450 on her_i brother’’. (xiong he mei, 17)

- 33451 (37) a. *a-t_{cw} nuu a-nuu-xtuy-a (ra)*
 1SG.POSS-son DEM IRR-PFV-meet-1SG be.needed:FACT
 ‘I wish I could meet my son.’ (elicitation based on 36a)

- 33453 b. *a-pi* *yuu uu-sci* *tu-nyme-a*
 1SG.POSS-elder.sibling GEN 3SG.POSS-revenge IPFV-make[III]-1SG
 33454 *ra*
 be.needed:FACT
 33455 ‘I have to get revenge on my brother.’ (elicitation based on 36b)

33456 Example (38) illustrates the same phenomenon as in (36a) and (36b), but with
 33457 the verb of speech *ti* ‘say’ instead of *suso* ‘think’. In this example, we know from
 33458 the context that the girl is the addressee, so that if the sentence were in direct
 33459 speech, a second person singular prefix form *nx-kumtc^huu* (2SG.POSS-toy) ‘your
 33460 toy’ would be expected instead.

- 33461 (38) *txcime nuu kuu pjuu-tuu-mts^hym tce, [nuunu uu-kumtc^huu nuu*
girl DEM ERG IPFV-CONV:IMM-hear LNK DEM 3SG.POSS-toy DEM
 33462 *ju-yuit-a ηu] uu-kuu-ti pjy-tu ndre,*
IPFV-bring-1SG be:FACT 3SG.POSS-SBJ:PCP-say IFR.IPFV-exist LNK
 33463 Direct: ‘As soon as the girl heard that there was someone saying “I will
 33464 bring your toy”’.
 33465 Indirect: ‘As soon as the girl heard that there was someone saying that
 33466 he would bring her toy’.
 33467 Hybrid indirect: ‘As soon as the girl_i heard that there was someone
 33468 saying “I will bring her_i toy”. (140429 qingwa wangzi-zh, 49)

33469 In (39), one could be tempted to analyze the pronoun *uzo* ‘he’ as exterior to the
 33470 reported speech clause, as the subject of the matrix verb *suso* ‘think’. However,
 33471 since *suso* is transitive and requires its subject to be marked with the ergative
 33472 (§8.2.2.1), this analysis is not possible. Instead, *uzo* ‘he’ belongs to the comple-
 33473 ment clause whose verb *r_zi* ‘remain, stay’ is intransitive. The person mismatch,
 33474 as in (35) above, is due to Hybrid Indirect Speech: the verb form *mu-pu-r_zi-a*
 33475 with first singular marking reflects the viewpoint of the original speaker (the
 33476 subject of the verb *juu-nuu-suusym*), while the pronoun *uzo* ‘he’ corresponds to
 33477 that of the current speaker (the narrator of the story).

- 33478 (39) “*uzo χsui-sŋi χs_z-r_za_z ma mu-pu-r_zi-a*”
 33479 3SG three-day three-night apart.from NEG-PST.IPFV-stay-1SG
juu-nuu-suusym pjy-ηu
IPFV-AUTO-think[III] PST.IPFV-be
 33480 Direct: ‘He was thinking “I have only stayed for three days and three

24 Complement clauses

33481 nights”:

33482 Indirect: ‘He was thinking that **he had only stayed** for three days and
33483 three nights.’

33484 Hybrid Indirect: ‘He was thinking that **he have only stayed** for three
33485 days and three nights.’

33486 A potentially even more confusing case occurs when the original speaker is the
33487 current speakers’ addressee, and when both the original and the current speak-
33488 ers are referred to in the original utterance. This is the situation observed in
33489 (40), a sentence pronounced by a fox who helped a prince to succeed in vari-
33490 ous tasks. Here, the first singular possessive prefix *a-* on the possessed noun
33491 *uu-tṣunlyn* ‘favour’ and the first person singular suffix *-a* on the verb *nui-nui-fsuy-a*
33492 do not correspond to the same referent. The verb form *nui-nui-fsuy-a* ‘I will pay
33493 back’ is the sentence that the fox attributes to his addressee (the prince), so that
33494 the first person here corresponds to the prince, while the possessive prefix on
33495 *uu-tṣunlyn* ‘favour’ reflects the point of view of the fox and thus refers to himself.

33496 (40) *a-tṣunlyn nui-nui-fsuy-a ur-nui-tui-susym ny, nui*
1SG.POSS-favour IPFV-AUTO-pay.back-1SG Q-IPFV-2-think[III] LNK DEM
33497 *tx-ste ti nui-ŋu*
IMP-do.this.way[III] say:FACT SENS-be

33498 Direct: ‘If you think “**I will requite the favour (which I received from**
33499 **you)**”, do like that.’

33500 Indirect: ‘If you want to **requite the favour (which you received from me)**,
33501 do like that.’

33502 Hybrid Indirect: ‘If you think “**I will requite the favour (which you**
33503 **received from me)**, do like that.’

33504 In such a situation, the referents corresponding to first and second person
33505 are exactly reversed between the point of view of the current and the original
33506 speaker, and therefore between pronouns and possessive prefixes on the one
33507 hand and verbal indexation on the other hand.

33508 The corresponding sentence in Direct speech would be (41), with a second
33509 person singular possessive prefix on the noun *uu-tṣunlyn* ‘favour’ instead.

33510 (41) *ny-tṣunlyn nui-nui-fsuy-a*
2SG.POSS-favour IPFV-AUTO-pay.back-1SG
33511 ‘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 *kṛ-sṛ-fstun* ‘to serve’ in (42) (§24.5.7).

- (42) *tc^{hi} tu-tur-ste* *ŋu*, [*kṛ-sṛ-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) *[nṛzo kṛ-cu-nṛo]* *ažo mui-pui-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 *ažo* 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 *bmuz* ‘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 ažo bmuz zo ka-ndo]* *pui-mto-t-a*
 cat ERG 1SG two EMPH AOR:3→3'-take AOR-see-PST:TR-1SG
 ‘I saw a cat catching two of them.’ (22-kumpGatCW, 61)

33539 **24.3.2 Case marking**

33540 When the verb of the matrix and the complement clauses sharing the same sub-
 33541 ject have different transitivity values, there is a conflict in case assignment on
 33542 their common subject, which can either take absolutive (§8.1.1) or ergative
 33543 marking (§8.2.2).

33544 Examples (45) and (46) provide a minimal pair illustrating this optional treat-
 33545 ment. In both examples, the matrix verb *rga* ‘like’ is semi-transitive (and its
 33546 subject cannot take ergative marking), while *ndza* ‘eat’ is transitive (and thus
 33547 requires a subject with the ergative).

33548 In (45), the subject *fsapaꝝ ra* ‘domestic animals’ has no ergative marking, show-
 33549 ing that its case marking is assigned by the semi-transitive *rga* ‘like’ (§14.2.3), and
 33550 therefore that the infinitival complement clause in this example is restricted to
 33551 the sole infinitive verb form *ky-ndza* ‘to eat’.

- 33552 (45) *fsapaꝝ ra [ky-ndza] wuma rga-nuu*
 animals PL INF-eat very like:FACT-PL
 33553 ‘Domestic animals like to eat it.’ (19-qachGa mWntoR, 116)

33554 By contrast, in example (46), the common subject *paꝝ ra* ‘pigs’ takes the erga-
 33555 tive *kuu* selected by the transitive verb *ndza* ‘eat’ in the complement clause, sug-
 33556 gesting that it should be analyzed as belonging to the complement clause.

- 33557 (46) *[paꝝ ra kuu ky-ndza] wuma zo rga-nuu*
 pig PL ERG INF-eat very EMPH like:FACT-PL
 33558 ‘Pigs like to eat it.’ (12 ndZiNgri, 149)

33559 In (46) it is not possible to argue that the case marking on the subject is a case
 33560 of long-distance ergative (§8.2.2.2), since *paꝝ ra kuu* does not serve as subject for
 33561 a transitive verb located a few clauses afterwards; in fact there is no mention of
 33562 the pigs in the rest of the text.

33563 Examples (47) and (48) with dental infinitive complements (§24.2.2) contain-
 33564 ing an intransitive verb (§16.2.3) and the transitive matrix verb *za* ‘start’ illustrate
 33565 the opposite situation: the transitive verb requires the ergative on third person
 33566 subjects (§8.2.2), while the intransitive one precludes it. In (47), the common sub-
 33567 ject is in the absolutive, showing that it owes its case marking to the intransitive
 33568 verb *ŋke* ‘walk’, and therefore that it belongs to the complement clauses.

- 33569 (47) *[<xinbada> nuu tce li tui-ŋke] to-za*
 Sinbad DEM LNK again INF-walk IFR-begin
 33570 ‘Sinbad started to walk again.’ (140511 xinbada-zh, 217)

33571 In (48), the common subject is in the ergative following the transitive matrix
 33572 verb *za* ‘begin’ (§24.5.6.2), and is thus located outside of the complement clause.

- 33573 (48) *pyxtci nuu kui [nuucimama zo tui-nuuryyo] c^hy-za*
 bird DEM ERG immediately EMPH INF-sing IFR-begin
 33574 ‘The bird immediately started to sing.’ (140514 huishuhua de niao-zh, 221)

33575 In the case of transitive matrix verbs such as *rno* ‘experience’ that allow coref-
 33576 erence between the subject of the matrix clause and either the subject or ob-
 33577 ject of the complement clause, the common argument receives ergative marking
 33578 even when it is object in the complement clause, as illustrated by example (169)
 33579 (§24.5.6.1).

33580 24.3.3 Determiners

33581 Finite (§24.2.3), reported speech (§24.2.5) and infinitive (§24.2.1) complement
 33582 clauses, like relative clauses (§23.3.5.2), are often followed by *nuu* and *nunu* (49)
 33583 (which occur as demonstrative pronouns and determiners, §6.9, §9.1.2, §9.1.5.4,
 33584 §9.1.4.3) and/or by the plural marker *ra* (50) (§9.1.1.2), which adds the nuance
 33585 that other activities may be implied. For instance, in (50), *nuu-nuqambumbjom ra*
 33586 *múj-spe* can be glossed as ‘it is not able to fly (and do other related activities)’.

- 33587 (49) *[my-ky-ce] nuu my-k^huu ri*
 NEG-INF-go DEM NEG-be.possible:FACT LNK
 33588 ‘(I) have no choice but to go.’ (Norbzang 2005, 267)

- 33589 (50) *sxtc^ha nuu ju-rytye kur-fse q^he, tu-ηke ma*
 ground DEM IPFV-measure.by.span INF:STAT-be.like LNK IPFV-walk LNK
 33590 *nuu ma [nuu-nuqambumbjom] ra m^húj-spe*
 DEM apart.from IPFV-fly PL NEG:SENS-be.able[III]
 33591 ‘The (inchworm) moves (in a motion like) it were measuring the ground
 33592 span by span, and otherwise it is not able fly.’ (26-qambalWla, 80)

33593 These markers are analyzed in this grammar as determiners of the entire com-
 33594 plement clause rather than as complementizers, the analysis proposed by J. T.-S.
 33595 Sun (2012: 481) concerning a similar construction in Tshobdun. As evidence for
 33596 the analysis as determiners, note that the position of the markers *nuu* and *ra* rel-
 33597 ative to complement clauses is exactly the same as that between demonstrative
 33598 and plural determiners and nouns in a noun phrase (§9.1.2). In particular, circum-
 33599 composed determiners are attested with complement clauses as in (51), where the

24 Complement clauses

33600 reported speech complement *tc^heme jy-yuut-a* ‘I brought a girl’ is both preceded
33601 and followed by plural markers.⁶

- 33602 (51) *nura [tc^heme jy-yuut-a] ra muu-to-ti.*
DEM.PL girl AOR-bring-1SG PL NEG-IFR-say
33603 ‘He did not say that he had brought a girl (and the related events).’
33604 (150909 hua pi-zh, 55)

33605 Bare and dental infinitival clauses (§24.2.2) rarely take the determiners *nuu* and
33606 *ra*, but examples such as (52) are attested in the corpus.

- 33607 (52) *[pyytcau ra tui-mbri] ra ta-za-nuu pui-ts*
bird PL INF:II-cry PL AOR:3→3-start-PL PST.IPFV-have.time.to
33608 ‘(The solar eclipse) lasted enough time for the birds to start crying (as if it
33609 were night).’ (29-RmGWzWn, 34)

33610 24.3.4 Restrictive and additive focus

33611 Various focus markers are inserted between the complement clause and the ma-
33612 trix verb, including the additive/scalar focus marker *kuny* ‘also, even’ (§9.1.6.1)
33613 in (53).

- 33614 (53) *[ky-nuu-βlta] kuny mx-sna*
INF-AUTO-burn also NEG-be.good:FACT
33615 ‘It is not even good to be burnt (as firewood).’ (11-qarGW, 116)

33616 In (54), the exceptive construction *ma nuu ma* ‘apart from that’ (§8.2.8) located
33617 between the infinitival clause *ky-mts^hym* and the matrix verb has a different status
33618 from *kuny* in (117), as the matrix verb *pui-rno-t-a* (AOR-experience-PST:TR-1SG) in
33619 affirmative form can be inserted after the complement clause (*ky-mts^hym pui-rno-*
33620 ***t-a*** *ma nuu ma muu-pui-rno-t-a*) and its absence in (54) is due to elision.

- 33621 (54) *[ky-mts^hym] ma nuu ma muu-pui-rno-t-a*
INF-hear LNK DEM apart.from NEG-AOR-experience-PST:TR-1SG
33622 ‘I only heard about it.’ (I did not see it and even do not claim that it exists,
33623 of a mythological animal) (20-RmbroN, 118)

⁶ Examples like (51) directly refute my previous claim (Jacques 2016a: 258) that determiners of complement clauses are strictly postclausal.

24.3.5 Raising of preverb orientation

With the exception of finite complements and some velar infinitives (§16.2.1.2), verbs in complement clauses generally lack orientation preverbs, and only the matrix verb encodes orientation.

While some complement-taking verb keep the same orientation regardless of the complement type and the lexical orientation of the verb in the complement clause (for instance, *rno* ‘experience’ always takes the orientation DOWNWARDS, §24.5.6.1), other matrix verbs, in particular causative verbs (§24.5.1.4) and phasal verbs such as *za* ‘begin’ (§24.5.6.2), select the orientation of the complement verb. This phenomenon is illustrated in Table 24.1 and the following examples.

Table 24.1: Examples of raising of preverb orientation from the complement clause of *za* ‘begin’, Inferential 3SG(→3’))

Orientation	Example		Dental/bare inf. + <i>za</i> ‘begin’	
upwards	<i>to-mna</i> ‘s/he got better’	(213), §21.5.2.4	<i>tu-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-fsor</i> ‘the day broke’	(68), §24.4.2.1	<i>tu-fsor lo-za</i> ‘the day started breaking’	(57)
downstream	<i>cʰr-lrt</i> ‘s/he played’ (the flute)	(151), §15.1.5.8	<i>w-lrt cʰr-za</i> ‘s/he started playing’ (the flute)	(58)
eastwards	<i>ko-rjas-ndzi</i> ‘they danced’		<i>tu-rjas ko-za-ndzi</i> ‘they started dancing’	(59)
westwards	<i>jx-munmu</i> ‘s/he moved’		<i>tu-munmu jx-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.

(55) *tu-mna to-za tce*
INF:II-be.better IFR:UP-start LNK

24 Complement clauses

- 33639 ‘He started getting better.’ (150907 yingning-zh, 56)
- 33640 (56) *wi-χpi* *wi-fcrt* *pjy-za.*
 3SG.POSS-story 3SG.POSS-BARE.INF:tell IFR:DOWN-start
- 33641 ‘He started telling her a story.’ (140517 buashuohua-zh, 69)
- 33642 (57) *tui-fsoꝝ* *lo-za* *tce,*
 INF:II-be.light IFR:UPSTREAM-start LNK
- 33643 ‘The day broke.’ (150819 haidenver-zh, 121)
- 33644 (58) *juli wi-lyt* *c^hy-za*
 flute 3SG.POSS-BARE.INF:release IFR:DOWNSTREAM-start
- 33645 ‘He started playing the flute.’ (140513 mutong de disheng-zh, 151)
- 33646 (59) *tui-rfaz* *ko-za-ndzi*
 INF:II-dance IFR:EAST-start-DU
- 33647 ‘They started dancing.’ (140504 huiguniang-zh, 147)
- 33648 (60) *tui-munmu ny-za*
 INF:II-move IFR:WEST-start LNK
- 33649 ‘It started moving.’ (150904 yaoshu-zh, 83)

33650 When an orientable verb (§15.1.2) is found in the complement clause, *za* can
 33651 take the indefinite orientation preverbs as in (61).

- 33652 (61) *li tui-ce jo-za*
 again INF:II-go IFR:INDEFINITE-start
- 33653 ‘He started going.’ (140511 xinbada-zh, 285)

33654 The verb *za* ‘begin’ can also be used with nominal objects as in (62).

- 33655 (62) *rryo c^hy-za*
 song IFR:DOWNSTREAM-start
- 33656 ‘It started singing (began a song).’ (140519 yeing-zh, 80)

33657 If the object in question has a corresponding denominal verb, such as *nurryo*
 33658 ‘sing’ from *rryo* ‘song’ (§20.7.1), the same orientation preverb that *za* takes when
 33659 used with the base noun will be the same as that selected by the corresponding
 33660 denominal verb: for instance, DOWNSTREAM is found in both cases in (62) and
 33661 (63).

- 33662 (63) *pvtcui nuu kuu nuacimuma zo tu-nurryo c^hy-za*
 bird DEM ERG immediately EMPH INF-sing IFR:DOWNSTREAM-start
 33663 ‘The bird immediately started singing.’ (140514 huishuohua de niao, 221)

33664 All phasal verbs (§24.5.6.2) and causative complement-taking verbs behave like
 33665 *za*. Additional examples of this phenomenon with *st^hut* ‘finish’ are presented in
 33666 §24.5.6.2.

33667 24.4 Complementation strategies

33668 Dixon (2006) introduces the term ‘complementation strategy’ to refer to con-
 33669 structions with a meaning corresponding to that expressed by complement clauses
 33670 in some languages, but which either are not core arguments or the verb of the
 33671 main clause or are not clauses with a complete argument structure (Dixon 2006:
 33672 34–40). Complementation strategies include nominalizations (when the verb
 33673 sheds its argument structure as it becomes a noun), relative clauses (which are
 33674 formally a modifier of a core argument), serial verb constructions and clause
 33675 linking.

33676 24.4.1 Relative clauses in core argument function

33677 Some complement-taking verbs can alternatively select (semi-)objects instead of
 33678 complement clauses. For instance *c^ha* ‘can’ occurs with the noun 考试 *<kǎoshi>*
 33679 ‘exam’ (borrowed from Chinese) (64).

- 33680 (64) *<kǎoshi> puu-c^ha*
 exam AOR-can
 33681 ‘He succeeded the exam.’ (12-BzaNsa, 76)

33682 In (65), the clause *tu~ta-tut* superficially resembles a finite complement clause
 33683 (§24.2.3), but four pieces of evidence indicate that it should rather be analyzed
 33684 as a headless relative clauses in semi-object function like the noun *<kǎoshi>* in
 33685 (64).

- 33686 (65) *tx-pvtso nuu kuu naura [tu~ta-tut] nura*
 INDEF.POSS-child DEM ERG DEM:PL TOTAL~AOR:3→3'-say[II] DEM:PL
 33687 *pjy-c^ha*
 IFR-can
 33688 ‘The child had succeeded in doing everything that (the old king) had said.’
 33689 (140428 yonggan de xiaocaifeng-zh, 256)

First, the subject of both clauses are not co-referential (this example cannot be interpreted as meaning ‘the boy succeeded in saying all these things’). If the subordinate clause in (65) were a complement, subject coreference would be expected (§24.2.3.2). Second, the verb of the relative clause has totalitative reduplication, a morphological device found in relative clauses (§23.3.2), but not in complement clauses. Third, the verb of the relative clause is in the Aorist while that of the main clause is in the Inferential; in finite complement clauses other than reported speech, the verb could be in the Aorist only if the matrix verb were in Aorist form too (see §24.2.3.1). Fourth, it is possible to add an overt head noun in (65).

Correlative relative clauses (§23.2.5) particularly commonly occur as objects or semi-objects. For instance, in (66) the clause *wi-wa tc^{hi}i tx-stu-t-a* to be analyzed as the semi-object of the secundative verb *stu* ‘do like’ (§14.4.2, §24.5.7).

- (66) [wi-wa *tc^{hi}i tx-stu-t-a]nui tu-ste-a*
 3SG.POSS-father what AOR-do.like-PST:TR-1SG DEM IPFV-do.like[III]-1SG
nui-tor
 SENS-be.needed

‘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)

Ambiguity between finite or participial relative clauses on the one hand, and finite and infinitival complement clauses on the other hand, is pervasive in the case of verbs of cognition and perception such as *mto* ‘see’ (§23.8.1, §23.8.2) as in (67), where *tx-kr-ta* can be either analyzed as an object participle (§16.1.2) or a velar infinitive (§24.2.1). Disambiguation between the two analyses is possible when the verb is dynamic intransitive (§23.8.2).

- (67) *nucimuma zo icq^{ha}* *[kum nutcu wi-fta]*
 immediately EMPH the.aforementioned door DEM:LOC 3SG.POSS-mark
tx-kr-ta] *nui pjx-mto*
 PDV-INF/OBJ:PCP-put DEM IFR-see
 ‘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

Putting aside participial relative clauses used with verbs compatible with both nouns and complement clauses (§24.4.1, §23.8.2), participial clauses are found in

33720 four types of complements and complementation strategies: purposive clauses,
 33721 constructionalized object relative clauses, essive participial clauses and genuine
 33722 participial complements.

33723 **24.4.2.1 Purposive clauses of motion verbs**

33724 The motion verbs *ce* ‘go’, *yi* ‘come’ and *tox* ‘come out’ (§15.1.2.1) select purposive
 33725 clauses whose verb is obligatorily in participle form (§15.2.10).⁷ The participles
 33726 in this construction cannot take orientation, polarity and associated motion pre-
 33727 fixes.

33728 Both subject and object purposive clauses are found. Subject purposive clauses
 33729 are subject participial clauses (§16.1.1.6), as in (68) and (69). In this construction,
 33730 there is obligatory coreference between the subject of the motion verb and that of
 33731 the purposive clause, unlike other superficially similar constructions (§24.4.2.3).

- 33732 (68) *lo-fsox tce tce tx-mu nuu [u-tcuu*
 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
 33734 ‘When the sun came up (in the morning), the mother went to look for her
 33735 son.’ (tWJo 2012, 33)

- 33736 (69) *pri nuu [u-zda u-kui-car] jo-tox.*
 bear DEM 3SG.POSS-companion 3SG.POSS-SBJ:PCP-search IFR-come.out
 33737 ‘The bear came out to look for its companion (another bear).’ (elicited)

33738 To express coreference with the *object* of the purposive clause (in the case of a
 33739 transitive verb), the object participle is normally used instead (§16.1.2.6). Corefer-
 33740 ence between the object of the complement clause and the subject of the matrix
 33741 clause is possible only if the object has control over the action as in (70); control
 33742 of the subject of the purposive clause is not necessary in this case.

- 33743 (70) *[k^hro kx-mto] muj-yi ma u-kx-ndza yzsu.*
 much OBJ:PCP-see NEG:SENS-come LNK 3SG.POSS-OBJ:PCP-eat exist:SENS
 33744 ‘(In the years when there are a lot of things to eat in the forest), it_i does
 33745 not come to (places where it_i can) be seen, because it_i has things to eat.
 33746 (23-pGAYaR, 89)

⁷ This construction reminds of the use of the future participle with motion verbs in Ancient Greek (Vernhes 1996: §177.B).

There is however at least one unexplained exception. The verb *nuflymtc^hyt* ‘ask to perform a task’ (71) consistently occurs in *subject* participle form in the purposive construction in the meaning ‘go/come to perform a task (upon someone’s invitation)’, where coreference is thus between the subject of the motion verb and the object of the transitive verb. The *kṛ*-participle is also acceptable with motion verbs, but this construction is not attested in texts. This problem deserves additional research.⁸

- (71) *azo blama t̪-nufl̪yntc^hat-a*
 1SG lama AOR-ask.to.perform.a.task-1SG
 ‘I asked a lama to perform a (ceremony) for me.’ (elicited)

- (72) *kui-nufl̪yntc^hyt ce-a ra*
 SBJ:PCP-ask.to.perform.a.task go:FACT-1SG be.needed:FACT
 ‘(Their lama said:) ‘I have to go to perform (a ceremony upon someone’s invitation).’ (160720 kandZislama, 5)

When the verb in the subject purposive clause is transitive, the participle has a possessive prefix coreferent with the object as in the case of relative clauses (§16.1.1.1), and the subject can either take absolute marking following the motion verb (which is morphologically intransitive), as in (68), or ergative marking following the verb of the purposive clause as in (73). This difference in case marking can be analysed as reflecting clausal structure: in (73), the subject *t̪-rjít ra* ‘the children’ belongs to the purposive clauses, whereas in (68), the subject *t̪-mu nu* lies outside of it.

- (73) *u-fso-soz t̪ce, [t̪-rjít ra kui nu]*
 3SG.POSS-tomorrow-morning LNK INDEF.POSS-child PL ERG DEM
u-kui-car] jo-ce-nu] nu-ŋu t̪ce
 3SG.POSS-SBJ:PCP-search IFR:UPSTREAM-go SENS-be LNK
 ‘The morning of the next day, the children went (there) to look for him.’
 (Norbzang, 325)

The goal of the motion verb can however occur within the purposive clause, as in (74), where the subject in ergative form *u-wa nu kui* ‘his father’ is stranded from the transitive verb *u-kui-n-myjo* by the goal *k^hapa t̪ce* ‘downstairs’.

⁸ Another puzzling feature of this construction is the fact that there is no obligatory possessive prefix of the , and that when present, it indexes the subject rather than the object.

- 33774 (74) [u-wa nu kuu k^hapa tce u-kur-n-nvjo]
 3SG.POSS-father DEM ERG downstairs LOC 3SG.POSS-SBJ:PCP-AUTO-wait
 33775 pjy-yi.
 IFR:DOWN-come

33776 'His father came downstairs to wait for him.' (140506 loBzi, 5)

33777 Motion verb with purposive clauses have some semantic overlap with the
 33778 corresponding associated motion prefixes (§15.2.1); the functional difference be-
 33779 between the two constructions is discussed in §15.2.10.

33780 Apart from the three motion verbs above, a few verbs expressing imminent
 33781 aspect such as *ayuyu* 'be about to' also selects participial clauses (§24.5.6.3), as
 33782 shown by (75).

- 33783 (75) kuu-maq^hu tce, ty-tcuu nuu [kuu-si] to-rxŋgat
 SBJ:PCP-be.after LNK INDEF.POSS-son DEM SBJ:PCP-die IFR-be.about.to
 33784 'The man was about to die.' (2002 rkongrgjal2, 24)

33785 While there is potential ambiguity between purposive clauses and headless
 33786 participial relative clauses (§23.4.1) used with motion verbs, in practice ambigu-
 33787 ous sentences are not common in the corpus, as the presence of determiners such
 33788 as the indefinite *ci* in (76) suffices to show that the participial clause can only be
 33789 a relative and is not interpretable as a purposive clause (however *uu-kui-mts^hi jy-ye*
 33790 without the determiner could indeed be parsed as 's/he came to lead it').

- 33791 (76) [ts^hy^t uu-kui-mts^hi] ci jy-ye tce
 goat 3SG.POSS-lead INDEF AOR-come[II] LNK
 33792 'Someone leading a goat came.' (chen-pear, 15)

33793 24.4.2.2 Purposive clauses of manipulation verbs

33794 Manipulation verbs such as *tsum* 'take away' or *yut* 'bring' (§15.1.2.2) occur with
 33795 non-finite purposive clauses in *kry-*, as in (77), rather than subject participles like
 33796 the motion verbs (§24.4.2.1) despite obligatory subject coreference.

- 33797 (77) uu-mbro uu-ndzi nura [kry-ntsye] jo-tsum
 3SG.POSS-horse 3SG.POSS-skin DEM:PL OBJ:PCP-sell IFR-take.away
 33798 'He took the horses' skins to (the market) to sell them.' (150814 kelaosi-zh,
 33799 85)

The non-finite verb form *kṛ-ntsyē* could in principle be either analyzed as an infinitive or as an object participle (§16.2.1.1). Unlike infinitival clauses, the *kṛ-* clauses in this construction can be optionally followed by quantifiers as in (78) and by the relator noun *wi-spa* ‘material’ as in (79) and (80).

In addition, all of these examples present coreference between the object of the transitive verb of the main clause and that of the participial clause, reminiscent of the use of object participles in the purposive clauses of motion verb to express coreference between the intransitive subject of the motion verb and the object of the transitive verb of the purposive clause (see example 70 in §24.4.2.1 above and §16.1.2.6).

- (78) *kutcu rca [kṛ-ntsyē] wi-kuxtcui~xtco*
DEM.PROX:LOC UNEXP:FOC OBJ:PCP-sell 3SG.POSS-EMPH-basket
ju-yuit-nuu cti.
IPFV-bring-PL be.AFF:FACT
‘(People) bring many basketfulls (of mushroom) to sell.’ (23-mbrAZim, 111)

- (79) *[kṛ-sat] wi-spa jó-wy-tsum juw-ŋu.*
OBJ:PCP-kill 3SG.POSS-material IFR-INV-take.away SENS-be
‘He was taken away to be executed.’ (tou dongxi de xiaohai-zh, 17)

- (80) *turme nuu kuu laxtcʰa [kṛ-ntsyē] (wi-spa)*
person DEM ERG thing OBJ:PCP-sell 3SG.POSS-material
kui-dur~dyn jo-yuit.
SBJ:PCP-EMPH~be.many IFR-bring
‘The man brought a lot of things to sell.’ (elicited)

These clauses are (at least historically) to be analyzed as participial clauses in essive function (§8.1.7): *kṛ-ntsyē* (*wi-spa*) and *kṛ-sat* (*wi-spa*) in the examples above literally mean ‘(bring/take away) as something to be sold/as someone to be killed’, hence their use in purposive function. This construction is not specific to manipulation verbs: in (81), the verb of the main clause *χsu* ‘raise’, ‘feed’ is also found with the same type of participial clause.⁹

- (81) *pas nura bo luski, [ca kṛ-ndza] wi-spa*
pig DEM:PL ADVERS of.course meat OBJ:PCP-eat 3SG.POSS-material

⁹ In (81) however, the object of *kṛ-ndza* is not coreferent with that of the main verb, unlike what is found with the manipulation verbs.

- 33825 *ku-χsu-nuu pŷ-ŋu ri*
 IPFV-feed-PL IFR.IPFV-be LNK
 33826 ‘The pigs, of course, people raise them for their meat.’ (150820 kAnWCkat,
 33827 29)

33828 24.4.2.3 Constructionalized participial relative clauses

33829 The verbs of pretense select subject participial relative clauses as objects or semi-
 33830 objects.¹⁰

33831 The status of the clauses with subject participles occurring with these verbs,
 33832 though superficially similar to the purposive clause (§24.4.2.1), is however en-
 33833 tirely distinct: these clauses are not specific constructions, but simply headless
 33834 relative clauses in object or semi-object function. This is shown by the fact that
 33835 the same verbs are also found with participial head-internal clauses as in (82),
 33836 where the three nouns *pŷrtcw* ‘bird’, *kʰuna* ‘dog’ and *lulu* ‘cat’ are intransitive
 33837 subjects of the participial clauses, and are not coreferent with the subject of their
 33838 matrix verb *tu-nučpuwz*. This example can be literally translated as ‘it is able to
 33839 imitate a singing bird, a barking dog and a meowing cat.’ (see also §23.8.3).

- 33840 (82) *u-zda nura, [[pŷrtcw kui-yyw], [kʰuna kui-ndzuit],*
 3SG.POSS-companion DEM:PL bird SBJ:PCP-cry dog SBJ:PCP-bark
 33841 *[lulu kui-yyw] kui-fse, nura tu-nučpuwz] nu-spe*
 cat SBJ:PCP-cry INF:STAT-be.like DEM:PL IPFV-imitate SENS-be.able[III]
 33842 ‘It is able to imitate other animals, sing like a bird, bark like a dog, meow
 33843 like a cat or call like a fox.’ (27-kikakCi, 141)

33844 24.4.2.4 Participial complements

33845 In addition to the constructions studied above, subject participles also occur in
 33846 a handful of syntactic contexts where an infinitival complement is normally ex-
 33847 pected; I call these clauses ‘participial complements’.

33848 The velar infinitive + existential verb construction expressing impossibility
 33849 (§16.2.1.6) has a variant with Imperfective subject participles, as in (83).

- 33850 (83) *tu-kui-yi pŷ-yy-me qʰe,*
 IPFV:UP-SBJ:PCP-come IFR-CAUS-not.exist LNK
 33851 ‘She made it impossible for her to come out (again).’ (2003-kWBRA, 97)

¹⁰ Unlike the cases discussed in §24.4.1, these verbs cannot take genuine complement clauses, and require participial relatives.

33852 In addition, when a complement-taking verb is itself in the subject participle
 33853 form, it is possible for the complement either to be in the expected form (infinitive
 33854 or finite), or to be in subject participle form itself. For instance, in example
 33855 (84) the subject participle *kua-c^ha* ‘the one who can’ takes a complement whose
 33856 verb is a subject participle with a possessive prefix coreferent with the object
 33857 (*ndzi-kua-syndu*), instead of the expected *ky-* infinitive (or finite clause).

- 33858 (84) [[rŋwl kua ndzi-kua-syndu] kua-c^ha] kua-fse
 silver ERG 3DU-SBJ:PCP-exchange SBJ:PCP-can SBJ:PCP-be.like
 33859 *pua~pua-tu* n^y
 COND~PST.IPFV-exist if
 33860 ‘If there was someone who could redeem (the life of two brothers) with
 33861 money, ...’ (140507 jinniao-zh, 345)

33862 24.4.3 Action nominals

33863 Some light verbs, in particular *βzu* ‘make’ (§22.4.2) are combined with action
 33864 nominals (§16.4) in highly grammaticalized constructions.

33865 24.4.3.1 Action nominals

33866 The *tu-* action nominals (§16.4.1) can be combined with the verb *βzu* ‘make’ to
 33867 express habitual actions, especially actions taking a considerable amount of time.
 33868 For instance *tu-ta^hs c^hu-βze* ‘she was weaving’ in (85) and *tu-çk^ho pjú-wy-nu-βzu*
 33869 ‘(when) we dry (grains in the field)’ refer to actions taking place every day (and
 33870 taking up most of the day) during a certain time period.

33871 The main verb *βzu* takes over the orientation selected by the verb in action
 33872 nominal form (§24.3.5): DOWNSTREAM in (85) (§15.1.4.5) and DOWNTOWARDS in (86).

- 33873 (85) t^y-tcw nu^u lu-ry-ji, tce tc^heme nu^u kua li
 INDEF.POSS-boy DEM IPFV-APASS-plant LNK girl DEM ERG again
 33874 tu^u-ta^hs c^hu-βze tce, muntob ra
 NMLZ:ACTION-weave IPFV:DOWNSTREAM-make[III] LNK flower PL
 33875 tu-t^hu^uβ q^he ku-nu^u-ryzi-ndzi p^y-ηu.
 IPFV-sew LNK IPFV-AUTO-stay-DU IPFV.IFR-be
 33876 ‘The boy was working in the fields, the girl was weaving and doing
 33877 embroidery, they were living like that.’ (150828 donglang, 137)

- 33878 (86) *tcendyre tur-ck^ho* *pjút-wy-nuu-βzu* *q^he,*
 LNK NMLZ:ACTION-dry.in.the.sun IPFV:DOWN-INV-AUTO-make LNK
 33879 *nuu kr-yndzur u-spa* *nuu pjút-wy-ck^ho*
 DEM OBJ:PCP-grind 3SG.POSS-material DEM IPFV:DOWN-INV-dry.in.the.sun
 33880 *tce nuu-rom kóbmuz c^hút-wy-ndzur ra* *tce, ununura*
 LNK AOR-be.dry only.after IPFV-INV-grind be.needed:FACT LNK DEM:PL
 33881 *yur-tu-murki tu-ndze ηu.*
 CISL-IPFV-steal[III] IPFV-eat[III] be:FACT
 33882 ‘When we do drying in the sun, when we dry the grains that are to be
 33883 ground (one grinds them only after they have dried), it comes, steals
 33884 them and eats them.’ (22-CAGpGa, 66-68)

33885 This construction is found with both transitive (86) and intransitive verbs (87).
 33886 In the former case, the object is not overt. Although *βzu* remains transitive, this
 33887 construction shares with the antipassive derivations (§18.6) the function of de-
 33888 moting the object (§18.6.8.3).

- 33889 (87) *rÿyo ra c^hui-βzu-nuu, tuu-rjaꝝ* *ra pjui-βzu-nuu*
 song PL IPFV-make-PL NMLZ:ACTION-dance PL IPFV-make-PL
 33890 *pjy-ηgryl* *nuu-ηu*
 INDEF.IPFV-be.usually.the.case SENS-be
 33891 ‘(Every year, when the festival took place, people), would sing and dance.’
 33892 (150906 toutao-zh, 17)

33893 Action nominals either refer to the action itself or an object affected by the
 33894 action (§16.4.1). While the collocation with *βzu* ‘make’ probably derives from the
 33895 first meaning of the action nominals, in some examples it cannot be excluded
 33896 that the second meaning also intervenes. For instance, in (86), *tuçk^ho+βzu* can
 33897 be understood as ‘to do the action of drying in the sun’, but also as ‘to do the
 33898 action related to grains that are dried in the sun’, since the grains in question are
 33899 directly referred to in the next clause as *kr-yndzur u-spa* ‘(grains) to be ground’.

33900 Action nominals can also occur with *lyt* ‘release’, though this construction is
 33901 considerably less productive. This collocation can be used to indicate a sudden
 33902 semelfactive action as in (88), and the object can be overt.

- 33903 (88) *tce azo a-mt^hum ta-nuu-tsum* *q^he, a-jas*
 LNK 1SG 1SG.POSS-meat AOR:UP:3→3'-VERT-take.away LNK 1SG.POSS-hand
 33904 *ra tuu-murkuuz c^hy-lyt* *q^he, ty-se*
 PL NMLZ:ACTION-scratch IFR:DOWNSTREAM-release LNK INDEF.POSS-blood

- 33905 *pa-tcxt.*
 AOR:3→3'-take.out
- 33906 ‘The kite took away the meat (that was in my hand), it made a scratch on
 my hand, and caused a bleeding.’ (150909 qandZGi, 11-12)
- 33908 Apart from *βzu* and *lvt*, the transitive verb *kʰyt* ‘do repeatedly’, ‘do for a long
 time’ also selects action nominals, but with ergative case marking (§8.2.2.10). The
 modal verb *ra* ‘be needed’ (§24.5.3.1) can take degree nominals as subjects (§16.3.5)
 instead of finite or infinitival complements.
- 33912 **24.4.3.2 Simultaneous action nominals**
- 33913 The simultaneous action nominals, prefixed in *tui-tuu-* (§16.4.3), are also used in
 collocation with *βzu* ‘make’. As in the previous construction, there is raising of
 the orientation preverb onto the main verb *βzu* (§24.3.5). For instance, in (89) the
 DOWNWARDS orientation preverb *pjy-* on *βzu* from the nominalized verb *numdar*
 ‘jump’.
- 33918 With an intransitive verb, the simultaneous constructions occur with a dual or
 plural subject, and means that several individuals referred do an action together
 at the same moment, as *tui-tuu-numdar* ‘jumping together’ in (89). The auxiliary
 βzu can even take the indefinite orientation prefixes *jy-* *ja-* as in (214) when oc-
 curring with a motion verb.
- 33923 (89) *mtsʰu wi-ŋgur tui-tuu-numdar pjy-βzu-ndzi*
 lake 3SG.POSS-inside SIMULT-NMLZ:ACTION-jump IFR:DOWN-make-DU
 ‘They (the two of them) had jumped together at the same time into the
 lake.’ (nyima wodzer 2003, 104)
- 33926 When used with transitive verbs, this construction is only found with dual
 or plural object, and implies that several entities were subjected to the action
 together at the same time, as *tui-tuu-tṣaβ* ‘causing to roll down together’ in (90),
 or that several object end up being tied together as result of the action as with
 tui-tuu-tṣuβ ‘sewing together’ in (91).
- 33931 (90) *pri cʰo jlykruu nura tui-tuu-tṣaβ zo*
 bear COMIT DEM:PL basket SIMULT-NMLZ:ACTION-cause.to.roll.down EMPH
 pjy-βzu
 IFR:DOWN-make
 ‘He made the basket with the bear (in it) roll down together.’ (2011-13-qala,
 53)

33935 The comitative (§8.2.5) can be used as in (90) and example (213) in (§16.4.3) to
 33936 link two nouns referring to the patients that undergo the action together.

- 33937 (91) *tui-ŋga tui-tui-tsuiβ kʂ-βzu-t-a*
 INDEF.POSS-clothes SIMULT-NMLZ:ACTION-sew AOR-make:PST:TR-1SG
 33938 ‘I sewed the clothes together.’ (elicited)

33939 In the case of transitive verbs, the verb *βzu* ‘make’ takes the indexation of both
 33940 subject and object, as in (92) where it takes the portmanteau *ta-* prefix, showing
 33941 that the simultaneous action nominal does *not* have object function.

- 33942 (92) *nuzora tui-tui-qur ty-ta-βzu-nu*
 2PL SIMULT-NMLZ:ACTION-help AOR-1→2-make-PL
 33943 ‘I helped you all at the same time.’ (elicited)

33944 24.4.3.3 Compound action nominals

33945 The verb *βzu* ‘make’ is also combined with noun-verb compound action nomi-
 33946 nals (§16.4.7) as semi-object. Two such compound nominals have been identified.
 33947 With *kʰramba* ‘lie’ as first element, this construction means ‘pretend to do *X*’
 33948 (where *X* stands for the second element of the compound) as in (93) and (94).

- 33949 (93) *[kʰramba-qur] ma-ty-kui-βzu-a*
 lie-help NEG-IMP-2→1-make-1SG
 33950 ‘Do not pretend to help me!’ (elicited)

- 33951 (94) *[kʰramba-nv̥re] nv̥-βzu*
 lie-laugh IFR-make
 33952 ‘He pretended to laugh.’ (elicited)

33953 With the lexicalized participle *kuzya* ‘a long time’ as first element of the com-
 33954 pound, it means ‘do *X* for a long time’ as in (95) (§16.4.7).

- 33955 (95) *qajyi pjut-wy-rypyi tce tce, li [kuzyy-rvlaj] zo*
 bread INF-INV-mix.flour.and.water LNK LNK again long.time-knead EMPH
 33956 *pjut-wy-βzu.*
 IPFV-INV-make
 33957 ‘When one mixes flour and water to make bread, one has to knead (the
 33958 dough) for a long time.’ (160706 thotsi, 36)

When the verbal component of the compound action nominal is transitive, both its subject and objects are indexed on the verb *βzu* ‘make’, as shown by the 2→1 configuration in (93). In addition, the orientation preverb on *βzu* reflects the lexicalized orientation of the verb in the compound (§24.3.5), for instance UPWARDS in (93), WESTWARDS in (94) and DOWNWARDS in (95).

The verb *lvt* ‘release’ (§22.4.2.2) is also productively used with action nominal compounds (§16.4.7) comprising a verb root such as *rpu* ‘bump into’ or *tçʰu* ‘gore’ as second element.

24.4.4 Coordination

Some verbs take post-verbal coordinated clauses instead of complement clauses. A clausal linker is inserted before that clause, showing its non-subordinated status. There are several constructions of this type.

First, some attitudinal verbs such as *vnui* ‘suspect’, *nusumvñiz* ‘hesitate’, *nusvlum-buy* ‘guess, estimate’ or *nusjuvβtsʰyt* ‘guess, estimate’ occur in a coordinating construction strikingly similar to that described in Tshobdun by J. T.-S. Sun (2012: 487–488): the attitudinal verb is followed by the affirmative copula *cti* ‘be’ and a linker such as *ri* or *ma*, as in (96) and (97).

- (96) *nui tu-nusvlumbuy-a cti ri, uzo kui ky-nyma nui*
 DEM IPFV-guess-1SG be.AFF:FACT LNK 3SG ERG OBJ:PCP-work DEM
sype
 do.well:FACT

‘I guess that he will perform this task well.’

- (97) *tu-vnui-a cti ma uzo kui ta-tuit nyu*
 IPFV-suspect-1SG be.AFF:FACT LNK 3SG ERG AOR:3→3'-say be:FACT
ma *mx-xsi*
 not.be:FACT NEG-GENR:know

‘I am wondering whether what he said is true or not (suspecting that it is not true).’ (elicited)

Second, the verbs of perception *rtoꝝ* ‘look’, *ru* ‘look at’ and *sryo* ‘listen’ occur (exclusively in the Imperfective, §21.2.7) in narratives in a coordinating construction with the linkers *tce* or *qʰe* as in (98) and (99).

- (98) *ku-rtoꝝ tce [tçʰeme nui wuma zo pjy-mpcyr]*
 IPFV-look LNK girl DEM really EMPH IFR.IPFV-be.beautiful
 ‘He saw that that the girl was very beautiful.’ (150909 xiaocui-zh, 45)

- 33988 (99) *tce lu-ru* *tce [w-ŋgw]* *nautcu wzo*
 LNK IPFV:UPSTREAM-look.at LNK 3SG.POSS-inside DEM:LOC himself
 33989 *lu-ntc^hyr* *pwu-ŋu]*
 IPFV:UPSTREAM-be.reflected SENS-be
 33990 ‘(The rooster) looked at (a window) and (saw) its own reflection in it.’
 33991 (150819 kumpGa, 63)

33992 The verb of speech *fçrt* ‘tell’ is often used in the Imperfective with a zero object
 33993 cataphorically referring to reported speech clause(s) following it. The reported
 33994 speech clause(s) can serve as complement of another verb of speech as in (100)
 33995 or be free-standing.

- 33996 (100) *kucungw* *pjuu-fçrt-nuu tce, “nautcu tcaxpa pjy-tu”*
 in.former.times IPFV-tell-PL LNK DEM:LOC bandit IFR.IPFV-exist
 33997 *tu-ti-nuu tce,*
 IPFV-say-PL LNK
 33998 ‘In former times, people used to tell that there were bandits there.’
 33999 (17-lhazgron, 21-22)

34000 These constructions are particularly common in texts translated from Chinese,
 34001 where they might reflect calque from original language since in Chinese the per-
 34002 ception verb precedes the complement, but it is also found in non-translated texts
 34003 as in (101) (see also *ku-rtob* ‘he saw that...’ in 10, §21.2.2) and there is no doubt that
 34004 it is a native construction.

- 34005 (101) *pwu-syŋo tce, smxt kwaβwa nura, wuma zo nui-me,*
 IPFV-listen LNK TOPO noble DEM:PL really EMPH 3PL.POSS-daughter
 34006 *nui-me xsum pjy-tu tce*
 3PL.POSS-daughter three IFR.IPFV-exist LNK
 34007 ‘He had heard that the nobles of Smad had three daughters.’ (2002
 34008 qaCpa, 7)

34009 Third, some verbs optionally use a coordinating construction instead of com-
 34010 plementation, without constructionalized semantic difference, in particular sim-
 34011 ilative verbs (§24.5.7).

34012 24.5 Complement-taking verbs

34013 An exhaustive survey of complement-taking verbs in Japhug would require a
 34014 much larger corpus than the one available and a complete monograph of at least

24 Complement clauses

34015 the size of the present grammar. For this reason, only a selection of the most
34016 frequent complement-taking verbs in the corpus is treated in this section. For
34017 each verb, the available complement types and complementation strategies are
34018 listed and exemplified.

34019 Negative existential verbs can also take (subject) complements, but are dis-
34020 cussed in §22.5.4.

34021 24.5.1 Causative verbs

34022 Some verbs derived with the causative prefixes (§17.2, §17.3) take complements or
34023 occur in complementation strategies. Three types of constructions are attested,
34024 expressing periphrastic causative, simultaneous events and manner.

34025 24.5.1.1 Periphrastic causative constructions

34026 In addition to the sigmatic and velar causative derivations (§17.2, §17.3), a variety
34027 of periphrastic causative constructions are also attested. Four groups of verbs
34028 are used as causative auxiliaries, including both causative verbs and non-derived
34029 verbs.

34030 First, *βzu* ‘make’ can be combined with subject participles of adjectival stative
34031 verbs to express change of state or increase of degree, as in (102) and (74).

- 34032 (102) *c^hui-nduil-nuu tce [kuu-ndur~nduif]* zo *c^hui-βzu-nuu*
IPFV-grind-PL LNK SBJ:PCP-EMPH-be.fine EMPH IPFV-make-PL
34033 ‘They grind (tobacco) and make it very fine-grained.’ (30-CnAto, 38)

34034 Example (103) illustrates the fact that the velar causative *γγwxti* ‘make bigger’
34035 is semantically similar to the use of *βzu* with the participle *kuu-wxti*.

- 34036 (103) *ui-p^hui jui-wxti tce, nura t^hamt^hxt ma-t^h-tui-γγ-wxti,*
3SG.POSS-price SENS-be.big LNK DEM:PL all NEG-IMP-2-CAUS-be.big
34037 *azō nuu tu-nu^h-χti-a [nu^hra st^huci kui-wxti]*
1SG DEM IPFV-AUTO-buy[III]-1SG DEM:PL as.much SBJ:PCP-be.big
34038 *ui-p^hui ma-t^h-tui-βze, [kuu-t^hsaŋ] ci t^h-βze*
3SG.POSS-price NEG-IMP-2-make[III] SBJ:PCP-be.fair a.little IMP-make[III]

34040 ‘It is too expensive, don’t make it that expensive, I will buy it, don’t
34041 make its price that expensive, give it for a fair price.’ (Bargaining 12, 12)

34042 This construction is not restricted to stative verbs. It is attested with transitive
 34043 verbs as in (104) to express indirect causation.

- 34044 (104) *cuqbjiz kuu-fse cʰy-ta tce, u-kur*
 flat.stone SBJ:PCP-be.like IFR:DOWNSTREAM-put LNK 3SG.POSS-mouth
 34045 *u-ŋgwu tce, [tu-ci pui-kuu-lst] to-βzu*
 3SG.POSS-in LOC INDEF.POSS-water IPFV-SBJ:PCP-release IFR-make
 34046 ‘He placed (the leaf of a rhododendron) like a flat stone (next to his
 34047 younger brother’s mouth) in such a way that water could flow in his
 34048 mouth.’ (2011-05-nyima, 63-64)

34049 With dynamic verbs however, the preferred construction is to use an im-
 34050 personal modal verb such as *kʰu* ‘be possible’ or *ra* ‘be needed’ (§24.5.3.1) in particip-
 34051 ial form taking a complement verb, as in (105).

- 34052 (105) *la-ryci-nuu tce, [[lu-nuu-łob]*
 AOR:3→3'-pull-PL LNK IPFV:UPSTREAM-AUTO-come.out
 34053 *my-kuu-kʰu]* *tu-βzu-nuu*
 NEG-SBJ:PCP-be.possible IPFV-make-PL
 34054 ‘They pull (on the thread to close the opening) and prevent it from
 34055 coming out.’ (30-CnAto, 42)

34056 Second, the sigmatic causative forms *sui-βzu*, *sui-pa*, *sui-γβzu* and *sui-γpa* derived
 34057 from the verbs *βzu* ‘make’, *pa* ‘do’, *qβzu* ‘become’ and *apa* ‘become’ (on the latter
 34058 two verbs see §18.1.2) are also commonly used as causative auxiliaries.

34059 Like the base verb *βzu*, these causative verbs are also most often used with a
 34060 modal impersonal auxiliary in subject participle form as in (106), (107) and (110).

- 34061 (106) *[cuu-kγ-βde my-kuu-ra]* *nuu ndzizo kuu*
 TRAL-INF-throw NEG-SBJ:PCP-be.needed DEM 2DU ERG
 34062 *nuu-tuu-sui-γβzu-ndzi nyu*
 AOR-2-CAUS-become-DU be:FACT
 34063 ‘Thanks to both of you, there is no need to throw (people in the lake)
 34064 anymore.’ (2011-05-nyima, 191)

- 34065 (107) *a-tuu-ci jnuu-tuu-s-qarndtum tce [[azo*
 1SG.POSS-INDEF.POSS-water IPFV-2-CAUS-be.muddy LNK 1SG
 34066 *tuu-ci kuu-γmgri kγ-tsʰi] my-kuu-kʰu]*
 INDEF.POSS-water SBJ:PCP-be.clear INF-drink NEG-SBJ:PCP-be.possible

24 Complement clauses

- 34067 *nui-tur-sui-ype* *nui-ŋu*
 IPFV-2-CAUS-become[III] SENS-be
 34068 ‘You have spoiled my water, you caused me to be unable drink clear
 34069 water.’ (lang he yang, 26)

34070 Other complement-taking stative verbs such as *sna* ‘be good’, ‘be fit’ also occur
 34071 in this causative construction, as in (§108).

- 34072 (108) *tce t̪y-mt^hum* *t^hamtctx [ky-ndza my-kui-sna]*
 LNK INDEF.POSS-meat all INF-eat NEG-SBJ:PCP-be.good
 34073 *nui-sui-ŋβze* *nui-c^ha.*
 IPFV-CAUS-become[III] SENS-can
 34074 ‘(Maggots) can make all the meat improper for consumption (unfit to
 34075 eat).’ (25-akWzgumba, 109)

34076 The causee can be indexed as object on the causative verb, as in (109) or (110)
 34077 (which have 2SG and 1SG causees, respectively), but this indexation is only op-
 34078 tional, as shown by examples such as (107) which rather select a 3SG object de-
 34079 spite the 1SG causee.

- 34080 (109) *pras u-pa* *nuitcu* (...) *ku-ta-z-ryzi* *tce,*
 cliff 3SG.POSS-down DEM:LOC IPFV-1→2-CAUS-stay LNK
 34081 *[tu-ci* *nunu spikuku* *zo* *teetu* (...) *ny-tak*
 INDEF.POSS-water DEM every.day EMPH up.there 3SG.POSS-on
 34082 *nuitcu* *pjui-kui-lyt]* *zo* *tu-ta-sui-ŋβzu*
 DEM:LOC IPFV:DOWN-SBJ:PCP-release EMPH IPFV-1→2-CAUS-become
 34083 *ŋu* *tce*
 be:FACT LNK
 34084 ‘(I will not kill you), but will have you stay under the cliffs, in such a
 34085 way that the water flows down onto you.’ (150901 changfamei-zh, 162)

- 34086 (110) *[mui-tu-ky-nxtuti* *kui-ra]* *t̪y-wy-sui-βzu-a-nui*
 NEG-IPFV-INF-DISTR:say SBJ:PCP-be.needed AOR-INV-CAUS-make-1SG-PL
 34087 *ndža cti* *ma*
 reason be.AFF:FACT LNK
 34088 ‘It is because they made me (swear) not to tell anyone about it.’ (tWxtsa
 34089 2003, 157)

Another verb that can be used with the modal verbs *ra* and *k^hu* in a periphrastic causative construction is *t_{CY}t* ‘take out’. It is rarer and only compatible with negative participial forms to express the meaning ‘prevent from *X*’.

- (111) [ky-ylualxt my-kur-ra] *jy-tui-tcyt*
 INF-fight NEG-SBJ:PCP-be.needed IFR-2-take.out
 ‘You prevented them from fighting.’ (elicited)

Fourth, the velar causatives *y_Yra* ‘cause to have to’ and *y_Yk^hu* ‘make it possible to’ of the modal auxiliaries involved in the constructions above can take infinitive or finite complement clauses (§17.3.2.3) to express indirect causation as in (112).

- (112) [ky-sci] *mu-nui-tui-y_Y-k^hu-t*
 INF-be.born NEG-IPFV-2-CAUS-be.possible-PST:TR
 ‘You made it impossible for me to be born.’ (Gesar, 61)

24.5.1.2 Periphrastic tropative

The causative verb *supa* ‘cause to do’ (from *pa* ‘do’, on which see §24.5.2, §22.4.2.5), among other functions (for instance §24.5.1.3), has the meaning ‘consider *X* to be *Y*’.

The parameter *Y* can be a stative verb in participle form, such as *kua-βdi* in (113).

- (113) *ty-çp^hyt* *nui a-pui-yndzymstu tce, nui [kua-βdi]*
 INDEF.POSS-patch DEM IRR-IPFV-be.level LNK DEM SBJ:PCP-be.well
 tu-sui-pa-nui *ŋu*
 IPFV-CAUS-do-PL be:FACT
 ‘If the patch is level (if it is neatly sewn), people consider it to (have been sewn) well.’ (12-kAtsxWB-29)

The object *X* can receive ergative case (§8.2.2.7) to express a comparative meaning ‘consider *X* to be more *Y*’ (§26.2.1), as in (114). Ergative marking in this construction can be ambiguous, since the subject (experiencer) of *supa* also receives ergative case.

- (114) *nui u-spua* *ra pui-naχteuy cti, tce*
 DEM 3SG.POSS-material PL SENS-be.the.same be.AFF:FACT LNK
 t^hoŋra_B *nui kua [kua-mum]* *tu-sui-pa-nui* *ŋu*
 bucket.alcohol DEM ERG SBJ:PCP-be.tasty IPFV-CAUS-do-PL be:FACT
 ‘Although its ingredients are the same (as those used to make other

types of alcohol), (some people) consider alcohol in bucket to be more tasty.' (30-thoNraR, 16-17)

The combination of *sui-pa* with participles is semantically similar to the tropative *ny-* derivation (§17.5). For instance, the second clause in (114) can be glossed as (115) with the tropative verb *nyumum* ‘consider to be tasty’ (in this example, the ergative on *t^hoŋraꝝ* ‘alcohol in bucket’ is also a comparee marker, and does not mark transitive subject).

(115) *t^hoŋraꝝ nu kur sui ny-mum-nu*
bucket.alcohol DEM ERG SENS-TROP-be.tasty-PL

‘They consider alcohol in bucket to be more tasty.’ (elicited)

Unlike the *ny-* tropative derivation,¹¹ the *sui-pa* periphrastic tropative can be used with nouns as parameters, instead of stative verbs. As shown in (116), the direct object is the person/entity that the subject considers to have the property described by the parameter *Y* (here the noun *ŋgumdzuy* ‘leader’) is a semi-object, not indexed on the verb.

(116) *nyzo ŋgumdzuy tu-ta-sui-pa nyu*
2SG leader IPFV-1→2-CAUS-do be:FACT
‘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*’.

24.5.1.3 Simultaneity

In addition to its periphrastic causative and tropative functions discussed in the previous section, the causative verb *supa* ‘cause to do’ also occurs in a construction 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*.

¹¹ The *nu-* nominal prefix can be sporadically used with a tropative meaning (§20.7.2), for instance *nuŋgra* ‘treat as an enemy’ from *ŋgra* ‘enemy’, but it synchronically different from the tropative *ny-*, though these two prefixes are historically related (§20.10.3).

- 34144 (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
34145 *to-sur-pa*
IFR-CAUS-do
34146 ‘As he said it, he put it into application at the same time.’ (150826 liyu
34147 tiao longmen-zh, 40)

34148 (118) *nuacimuma u-ti* *c^hondyre* *u-tuu-ce* *ci*
immediately 3SG.POSS-BARE.INF:say COMIT 3SG.POSS-INF:II-go one
34149 *to-sur-pa* *tce*
IFR-CAUS-do LNK
34150 ‘As he said this, he immediately went (there).’ (150830 baihe jiemei-zh,
34151 179)

34152 Unlike other syntactic contexts (§24.2.2) where dental infinitives does not take
34153 possessive prefixes, in this construction they obligatorily take a possessive prefix
34154 coreferent with the intransitive subject, as shown by the forms *u-tuu-ce* vs. *a-tuu-ce*
34155 in (118) and (119), respectively.

34156 (119) *u-ti* *c^ho* *a-tuu-ce* *ci*
3SG.POSS-BARE.INF:say COMIT 1SG.POSS-INF:II-go one
34157 *ty-sui-pa-ta*
AOR-CAUS-do-PST:TR-1SG LNK
34158 ‘I said it and went there (at the same time).’ (elicited based on 118)

24.5.1.4 Manner

- 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 which the action described in the complement clause takes place.

This construction is found with dental/bare infinitival complements as in (120) or velar infinitival complements (121). Additional examples are presented in §17.2.4.7 and §17.3.2.2.

(120) *ki tʂ-ndym tce, koŋla zo, [u-pu]*
DEM.PROX IMP-take[III] LNK completely EMPH 3SG.POSS-keep(1)
u-pa] a-ty-tui-ɣ-βdi ma
3SG.POSS-BARE.INF:keep(2) IRR-PFV-2-CAUS-be.well LNK
‘Take this and keep it well (make sure not to lose it).’ (140428 mu e
guniang-zh, 24)

- 34170 (121) [n_y-ku-m_ym korla k_y-rto_b] a-pur-tur-sui-bzy_b
2SG.POSS-SBJ:PCP-hurt completely INF-look IRR-PFV-2-CAUS-be.careful
34171 ‘Let (a doctor) carefully examine your condition.’ (elicited)

34172 24.5.2 *pa* ‘do’

34173 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
34174 the meaning ‘discuss and agree/decide to do *X*’ (122). All examples of this con-
34175 struction in the corpus occur with B-type orientation preverbs on the infinitive
34176 (§16.2.1.2).

- 34178 (122) [nutcu tce puu-k_y-ytuy tce ku-k_y-y-nxjur~jo] to-pa-ndzi ri,
DEM:LOC LNK IPFV-INF-meet LNK IPFV-INF-RECIP-wait IFR-do-DU LNK
34179 ‘The two of them agreed to meet there and wait for each other.’ (150820
34180 qaprANar, 47)

34181 The verb *pa* can take more than one infinitive complement. There is generally
34182 subject coreference between the clauses. However, in example (123) the singular
34183 subject of the infinitive clauses corresponds to only part of the dual subject of
34184 *pa*.¹²

- 34185 (123) [uzo ku-k_y-ryzi tce tu-k_y-qur] to-pa-ndzi.
3SG IPFV-INF-stay LNK IPFV-INF-help IFR-do-DU
34186 ‘They_{i+j} discussed and decided that he_i would stay and help him_j.’
34187 (140512 fushang he yaomo-zh, 48)

34188 The verb of speech *krtupa* ‘tell’, which selects reported speech complements,
34189 is derived from *pa* (§14.3.4, §20.13.1).

34190 24.5.3 Modal verbs

34191 Modality in Japhug is encoded by TAME categories (§21.4), derivations such as
34192 the abilitative (§19.3), various sentence final particles (§10.4.4), and most im-
34193 portantly by complement-taking modal auxiliaries and noun-verb collocations

¹² This 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.

³⁴¹⁹⁴ ([§24.6.3.3](#)). This section provides a description of the use of some of the most common auxiliaries.

³⁴¹⁹⁶ In addition to the verbs discussed in this section, some verbs of cognition such ³⁴¹⁹⁷ as *suso* ‘think’ also have modal functions ([§24.5.4.1](#)).

³⁴¹⁹⁸ 24.5.3.1 Impersonal modal verbs

³⁴¹⁹⁹ An important number of modal auxiliary verbs in Japhug are intransitive, and ³⁴²⁰⁰ take a complement clause as their subject, and are therefore in 3SG invariable ³⁴²⁰¹ form ([§14.2.7](#)), regardless of the subject or object in the complement clause. The ³⁴²⁰² verbs *ra* ‘be needed’, ‘need’, *tox* ‘have to’, ‘have better’,¹³ and *kʰuu* ‘be possible’ ³⁴²⁰³ are used with either finite complements ([§24.2.3](#)) or velar infinitives ([§24.2.1](#)), as ³⁴²⁰⁴ shown by (124) and (125) on the one hand, and (126) on the other hand. In addition, ³⁴²⁰⁵ *ra* is also attested with degree nominals ([§16.3.5](#)).

- ³⁴²⁰⁶ (124) *tʰa [azo-suso puu-nuu-pe-a] kʰuu*
later 1SG-as.wish IPFV-AUTO-do[III]-1SG be.possible:FACT
(Once he dies), it will become possible for me to do whatever I want.’
(28-smAnmi, 61)
- ³⁴²⁰⁹ (125) *[kutcu ku-ryzi-a] puu-tox*
DEM.PROX:LOC IPFV-stay-1SG SENS-be.needed
'I will (have better/have no choice but) stay here.' (28-qAjdoskAt, 78)

³⁴²¹¹ When impersonal verbs are combined with velar infinitive complement, the ³⁴²¹² subject is not indexed anywhere in the clause; this construction occurs with ³⁴²¹³ generic person, as in (126) and (127), but not exclusively, as shown by (128) with ³⁴²¹⁴ an implicit 1SG transitive subject in the complement clause, which has the same ³⁴²¹⁵ meaning as that in (124) above.

- ³⁴²¹⁶ (126) *[zara nuu-skyt my-ky-βzu] muúj-kʰui.*
3PL 3PL.POSS-speech NEG-INF-make NEG:SENS-be.possible
'There was not choice but to speak their language (with them, as they did not understand Japhug or Chinese)' (150901 tshuBdWnskAt, 22)

¹³ This modal verb is probably grammaticalized from the motion verb *tox* ‘come out’ ([§15.1.2.1](#)).

24 Complement clauses

- 34219 (127) *nua nur-mbuat q^he, tce [tua-mnitsi ky-γ<nu>χa]*
 DEM AOR-ACAU:take.off LNK LNK GENR.POSS-life INF-<AUTO>have.a.gap
 34220 *tɔs*
 be.needed:FACT
 34221 ‘If it (one’s tooth) falls off, one has no choice but have a gap (in one’s teeth) all of one’s life.’ (27-tWCGArgu, 61)
 34222
- 34223 (128) *[azo-suso ky-nur-pa] tu-k^hu cti*
 1SG-as.wish INF-AUTO-do IPFV-be.possible be.AFF:FACT
 34224 ‘Then it will become possible for me to do whatever I want.’ (150907
 34225 niexiaojian-zh, 115)

34226 The auxiliaries *nts^hi* ‘have better’, *zg^yt* ‘have to’ and *j^yy* ‘be allowed’ are almost
 34227 only attested with finite complement clauses, as in (129) and (130).

- 34228 (129) *a-βi kuteu ky-ryzi tce, [azo*
 1SG.POSS-younger.sibling DEM.PROX:LOC IMP-STAY LNK 1SG
 34229 *tua-ci z-nur-car-a] jnui-nts^hi*
 INDEF.POSS-water TRAL-IPFV-look.for-1SG SENS-have.better
 34230 ‘Brother, stay here, let me look for water.’ (2011-05-nyima, 60)
- 34231 (130) *[azo pjau-si-a] jnui-zg^yt ma*
 1SG IPFV-die-1SG SENS-be.needed LNK
 34232 ‘I have to/deserve to die.’ (nongfu yu she-zh, 19)

34233 Despite being homophonous to the phasal verb *j^yy* ‘be finished’ (§24.5.6), the
 34234 modal verb *j^yy* ‘be allowed’ differs from it both in meaning and in complement
 34235 type: the modal *j^yy* takes finite complements (131), while the phasal *j^yy* selects
 34236 dental/bare infinitives (see example 14, §24.2.2.2).

- 34237 (131) *q^he [jnui-k^ham-a] j^yy ri, [nγ-rca*
 LNK IPFV-give[III]-1SG be.allowed:FACT LNK 2SG.POSS-together.with
 34238 *tu-kui-tsuum-a] ra*
 IPFV:UP-2→-take.away-1SG be.needed:FACT
 34239 ‘I can give it to you (I agree to give it to you), but then you have to take
 34240 me (to heaven) with you.’ 31-deluge, 101)

34241 Both verbs however are compatible with velar infinite complements, as shown
 34242 by (132) and (133), respectively. However, examples of infinitive complements
 34243 with the modal *j^yy* as in (133) are extremely rare.

- 34244 (132) [ty-lu ky-tçyt] puw-jyγ
 INDEF.POSS-milk INF-take.out AOR-be.finished
 34245 ‘After she had finished milking, (he said).’ (2014-kWLAG, 230)
- 34246 (133) tceri t^ham tce [nuara ky-stu] muúj-jyγ ma,
 LNK now LNK DEM:PL INF-do.like NEG:SENS-be.allowed LNK
 34247 ‘Now it is not allowed to do these things (kill whales).’ (160703 jingyu, 61)

34248 Impersonal modal verbs, in addition to finite complements in the Imperfec-
 34249 tive, are also found with Imperative (§21.4.2.4, §21.4.3.2) and Irrealis (§21.4.1.4)
 34250 complements.

34251 Verbs without alternation between stem I and stem III (§12.2.2; in particular
 34252 intransitive verbs) that select the EASTWARDS orientation take the *ky-* orientation
 34253 preverb in the Imperative (§21.4.2.1), a form which can be superficially similar to
 34254 a velar infinitive. For instance, the form *ky-nuu-ryzi* in (134) could in principle
 34255 either be parsed as infinitive or Imperative; that the latter interpretation is the
 34256 only one possible is shown by the fact that the Imperative dual *ky-nuu-ryzi-ndzi*
 34257 or plural *ky-nuu-ryzi-nu* forms can occur in the same context, while the Infinitive
 34258 does not inflect for person and number.

- 34259 (134) [nyzo kutcu ky-nuu-ryzi] jyγ
 2SG DEM.PROX:LOC IMP-AUTO-stay be.allowed:FACT
 34260 ‘You can stay here (we agree that you stay here).’ (140504
 34261 baixuegongzhu-zh, 96)

34262 The impersonal auxiliary *ŋgru* ‘succeed’, on the other hand, is only found with
 34263 velar infinitive complements, as in (135).

- 34264 (135) uu-k^ha ky-nuu-βzu muu-pjy-ŋgru
 3SG.POSS-house INF-AUTO-make NEG-IFR-succeed
 34265 ‘(As he spend all time singing rather than working, in the end) he did
 34266 not succeed in building his house.’ (26-NalitCaRmbWm, 52)

34267 The verbs *k^hu* ‘be possible’ and *jyγ* ‘be allowed’ both encode epistemic modal-
 34268 ity, but the former is used in the case of possibility due to external circumstances,
 34269 while the latter expresses permission by the speaker (30, 134), the addressee (in
 34270 interrogative forms such as *úu-jyγ*, see 288, §21.7.4.1), or another referent (136).

24 Complement clauses

- 34271 (136) *tce [tui-xpa tui-yjyn ma nur-tyuy-nuu] muj-jyγ*
 LNK one-year one-time apart.from IPFV-meet-PL NEG:SENS-be.allowed
 34272 ‘They can only meet each other (they are not allowed by the gods of
 34273 heaven to meet more than) once a year.’ (150828 niulang-zh, 184)

34274 Among the verbs discussed in this section, only *ra* and *k^hu* are attested in forms
 34275 other than 3SG. The verb *k^hu*, in addition to its function as modal auxiliary, can
 34276 occur with any person when used in the meaning ‘agree, listen to, obey’ (without
 34277 complement clause) as in (137) with a 2PL subject.

- 34278 (137) *muáj-tui-k^hu-nuu q^he tce, tce atu a-mu ci*
 NEG:SENS-2-agree-PL LNK LNK up.there 1SG.POSS-mother INDEF
 34279 *tu tce, nuu w-cki zuu yuu-ty-nuu-t^hu-nuu ma*
 exist:FACT LNK DEM 3SG.POSS-DAT LOC CISL-IMP-AUTO-ask-PL LNK
 34280 ‘(I am telling you that I am not the person you are looking for), you
 34281 don’t want to (listen to me), my mother is up there, come and ask her
 34282 (about it) as suits you.’ (2003 sras, 65)

34283 As for *ra*, in the meaning ‘need’ it does not need to have a complement clause
 34284 as subject, and can select a noun or even a first or second person referent as in
 34285 (138) (see also 37, §14.2.7).

- 34286 (138) *azuiy mx-tui-ra*
 1SG:GEN NEG-2-need:FACT
 34287 ‘I don’t need you’ (elicited)

34288 The experiencer (the person/entity in need) is marked as a genitive oblique
 34289 argument (§8.2.3.2), either as a genitive pronoun (138) or as a possessive prefix
 34290 (139).

- 34291 (139) *nyzo ny-kui-qur ty-ra tce*
 2SG 2SG.POSS-SBJ:PCP-help AOR-need LNK
 34292 ‘When you need someone to help you...’ (140506 shizi he huichang de
 34293 bailingniao-zh, 160)

34294 The causative verbs *yrra* ‘cause to have to’ and *yrk^hu* ‘make it possible to’
 34295 (derived by the velar causative prefix from *ra* ‘be needed’ and *k^hu* ‘be possible’,
 34296 respectively), are also complement-taking verbs, used in one of the periphrastic
 34297 causative constructions (§17.3.2.3, §24.5.1.1).

34298 24.5.3.2 *c^ha* ‘can’

34299 The verb *c^ha* ‘can’ is morphologically intransitive, and can either be used as a
 34300 plain intransitive (in the meaning ‘be fine’, see for instance 6, §21.1.4) or as a
 34301 semi-transitive verb (§14.2.3) selecting either a finite complement (§24.2.3) or an
 34302 infinitive one (§24.2.1), as shown by (140).

- 34303 (140) [a-sro_K k_X-ri] ri mx-tui-c^ha, [tu-kui-qur-a] ri
 1SG.POSS-life INF-save also NEG-2-can:FACT IPFV-2→1-help-1SG also

34304 mx-tui-c^ha

34305 NEG-2-can:FACT

34306 ‘You are neither able to save my life nor to help me.’ (shizi he laoshu-zh,
 18)

34307 With finite complements, *c^ha* ‘can’ can either have subject coference as in (140),
 34308 141a, 142) or be used as an impersonal verb as in (141b), with slightly different
 34309 meanings.

- 34310 (141) a. [c^hui-tui-myci] tui-c^ha

34311 IPFV-2-be.rich 2-can:FACT

34312 ‘You can become rich.’ (elicited)

- 34313 b. [c^hui-tui-myci] c^ha

IPFV-2-be.rich can:FACT

34314 ‘It will be possible for you to become rich.’ (140515 facaimeng-zh, 13)

34315 Since the 1SG form *c^ha-a* (can:FACT-1SG) is phonetically identical to the 3SG *c^ha*
 34316 (can:FACT), distinguishing between these two patterns is not possible when the
 34317 subject is 1SG (or 3SG). Clear examples of the *c^ha* in impersonal use (where it can
 34318 be tested) are rare.

34319 All examples in the corpus of *c^ha* ‘can’ with a verb in 2SG→1SG form in the
 complement clause have 2SG indexation as in (140) above and (142) below.

- 34320 (142) [azo pu_R-kui-cuy-mu-a] mx-tui-c^ha

1SG IPFV-2→1-CAUS-be.afraid-1SG NEG-2-can:FACT

34321 ‘You cannot scare me.’ (140516 guowang halifa-zh, 54)

34322 24.5.3.3 *suxc^ha* ‘can’

34323 The verb *suxc^ha* is the sigmatic causative derivation (§17.2) of *c^ha* ‘can’ (§24.5.3.2).
 34324 It is nearly always in negative form. It can occur with an overt nominal ob-
 34325 ject in the meaning ‘cause to be (un)able to bear’ (example 37, §17.2.4.8). As a

34326 complement-taking verb, it requires a velar infinitive complement (§24.2.1), and
 34327 exclusively occurs in inverse form with a non-overt causer, and has the specific
 34328 meaning of ‘make (physically) unable to *X*’, with a non-overt implicit agent, the
 34329 piglet or lamb in (143) and the bee in (144).

- 34330 (143) *t^huu-wxti-nuu tsa tce tce, ta-tsum tce tu-yyrbyjyβ*
 AOR-be.big-PL a.little LNK LNK AOR:3→3'-take.away LNK IPFV-struggle
 34331 *nuu-cti tce uzo [kx-tsum] muu-nú-wy-sux-c^ha.*
 SENS-be.AFF LNK 3SG INF-take.away NEG-SENS-INV-CAUS-can
 34332 ‘When (piglets, lamb) have grown up, when (the eagle tries to) take
 34333 away (one of them), it struggles and (the eagle) is not strong enough to
 34334 take it away. (150819 RarphAB, 6)

- 34335 (144) *yzo kui-fse kui-wxti nuura rcanuu, [zaza zo kx-sat]*
 bee SBJ:PCP-be.like SBJ:PCP-be.big DEM:PL UNEXP:FOC soon EMPH INF-kill
 34336 *mý-wy-sux-c^ha ma uzo nuu-xtci, ci nuu nuu-wxti*
 NEG-INV-CAUS-can:FACT LNK 3SG SENS-be.small INDEF DEM SENS-be.big
 34337 *tce*
 LNK
 34338 ‘In the case of (relatively) big (insects) like bees,_i (the spider)_j cannot kill
 34339 it_i quickly, because it_j is small while the other one_i is bigger.’

34340 The transitive subject of the infinitival clauses *kx-tsum* and *zaza zo kx-sat* in
 34341 (143) and (144) is here coreferent with the causee of *sux-c^ha*. Since *c^ha* is morpho-
 34342 logically intransitive, this causee is syntactically equivalent to the direct object.
 34343 It is one of the rare complement-taking verb with obligatory object-subject coref-
 34344 erence (§24.2.1.2).

34345 24.5.3.4 *spa* ‘be able’

34346 The transitive *spa* ‘be able’, ‘know how to’ is historically a lexicalized abilitative of
 34347 *pa* ‘do’ (§19.3.1). It indicates ability that was acquired through a learning process.
 34348 This verb can either select a noun or a noun phrase as object (145, 146).

- 34349 (145) *azo kupa-skvt muúj-spe-a*
 1SG Chinese-language NEG:SENS-be.able[III]-1SG
 34350 ‘I am not able to (speak) Chinese.’ (160721 XpWN, 90)

34351 In Inferential or Aorist forms, it can be understood as ‘learn how to’ (‘acquire
 34352 the ability to’).

- 34353 (146) *cɔŋβzu ko-spa*
 carpentry IFR-be.able
 34354 ‘He learned carpentry.’ (elicited)

34355 Alternatively, *spa* takes infinitival (§24.2.1) or finite complement clauses (§24.2.3)
 34356 as in (147). Subject coreference between *spa* and the verb in the complement
 34357 clause is required (§24.2.1.2, §24.2.3.2).

- 34358 (147) [“*a-mu*” *tu-ti]* *w-n̄t̄-spe?*
 1SG.POSS-mother IPFV-say QU-SENS-be.able[III]
 34359 ‘Can he (a baby) say “mummy”? (conversation, 15-01-13)

34360 24.5.3.5 *n̄z* ‘dare’, *pʰot* ‘dare’

34361 The verbs *n̄z* ‘dare’ and *pʰot* ‘dare’ (the second is barely used in the Kamnyu
 34362 dialect) can be used with both infinitival and finite complements. They require
 34363 subject coreference.

34364 In example (148) with the verb *n̄kʰu* ‘invite’ (to one’s home as a guest’ (one
 34365 of the few transitive verbs implying a volitional action of both subject and ob-
 34366 ject, §24.2.2.2), the interpretation ‘I do not dare to go to his house as a guest’
 34367 (with coreference of the object of the complement clause and the subject of the
 34368 main clause) is not possible, and a different construction is needed to express
 34369 this meaning (149, with an object participle as explained in §24.4.2.1).

- 34370 (148) [*cui-ky-n̄kʰu*] *mx-naz-a*
 TRAL-INF-invite NEG-dare:FACT-1SG
 34371 ‘I do not dare to go and invite him.’ (elicited)
- 34372 (149) [[*ky-n̄kʰu*] *ky-ce]* *mx-naz-a*
 OBJ:PCP-invite INF-go NEG-dare:FACT-1SG
 34373 ‘I do not dare to go (to his house) as a guest.’ (elicited)

34374 The verb *n̄z* ‘dare’ is attested in a double negation constructions ‘not dare not
 34375 to *X*’ (example 23, §13.3).

34376 24.5.4 Verbs of cognition

34377 24.5.4.1 *suso* ‘think’, ‘want’

34378 The verb *suso* describes either a cognitive process (‘think that *X*’) or volitional
 34379 deontic modality (‘want to *X*’).

As a modal verb, it either takes infinitive complement clauses (150, §24.2.1), or finite clauses (151, 152, §24.2.3), with subject coreference between the complement and the main clause.

- (150) [c^hyci k_Y-ts^hi] ta-suoso-nuu tce, tce ki
alcohol INF-drink AOR:3→3'-want-PL LNK LNK DEM.PROX
u-q_a u-thuum nuu nuu-χcɔB-nuu tce
3SG.POSS-bottom 3sg.POSS-cork DEM IPFV-remove-PL LNK
‘When people want to drink the alcohol, they remove the cork at the bottom (of the jar).’ (160703 araR, 64-65)
- (151) [ku-yuat-a] nuu-suoso-t-a ri jy-nuu-jmat-a ma
IPFV:EAST-bring-1SG AOR-want-PST:TR-1SG LNK IFR-AUTO-forget-1SG LNK
‘I wanted to bring it but I forgot it.’ (23-tshAYCANW, 2)
- (152) [a-ryyo nuu-tuu-syŋo] ty-tuu-suoso-t tce, a-yuu-jy-kuu-suoye-a
1SG.POSS-song IPFV-2-listen AOR-2-want-PST:TR LNK IRR-CISL-invite-1SG
q^he nuu cti
LNK DEM be.AFF:FACT
‘When you want to listen to my songs, send people to coma and invite me and that’s it.’ (140519 yeying-zh, 249)

The verb *suoso* normally selects the orientation WESTWARDS as in (151) (or DOWNWARDS when used in the Past or Inferential Imperfective (§21.5.3), but examples (150) and (152) also show that it sometimes occurs with the Aorist UPWARDS orientation preverbs *ty-* or *ta-* in temporal clauses meaning “when X wants to Y” (§21.5.1.4).

34399 24.5.4.2 *tso* ‘understand’, ‘know’, *swχsyl* ‘recognize’, ‘realize’

34400 The semi-transitive verb *tso* ‘understand’, ‘realize’, ‘know’ can take nominal semi-
34401 objects (§14.2.3), and occur with three types of complement clauses or comple-
34402 mentation strategy. First, it takes finite complete clauses (§24.2.3) as in (153).

- (153) nunuu [ty-tcuu nuu yuu u-k^ha nuatcu tc^heeme
DEM INDEF.POSS-son DEM GEN 3SG.POSS-house DEM:LOC girl
kuu-mpcyr ci yyzu] nuu ko-tso-nuu.
SBJ:PCP-be.beautiful INDEF exist:SENS DEM IFR-understand-PL
‘They realized that there was a beautiful girl in the boy’s house.’ (150828
donglang, 92)

³⁴⁴⁰⁷ Second, subject participial clauses in *kui-* occur as semi-objects of this verb
³⁴⁴⁰⁸ (§24.4.1), as in (154).

- ³⁴⁴⁰⁹ (154) *li [icq^ha tycime nuu muu-puu-kui-si] nuu*
 again the.aforementioned girl DEM NEG-AOR-SBJ:PCP-die DEM
³⁴⁴¹⁰ *ko-tso*
 IFR-understand
³⁴⁴¹¹ ‘She realized that the girl had not died (the girl not having died).’
³⁴⁴¹² (140504 baixuegongzhu-zh, 182)

³⁴⁴¹³ Third, *tso* also selects a (finite or participial) correlative clauses with an inter-
³⁴⁴¹⁴ rogative pronoun as in (155).

- ³⁴⁴¹⁵ (155) *[ty-rza^hs t^hystuy nuu-ari] muu-pjy-tso*
 INDEF.POSS-time how.much AOR-go[II] NEG-IFR-understand
³⁴⁴¹⁶ ‘He had not realized how much time had passed.’ (28-smAnmi, 263)

³⁴⁴¹⁷ The transitive *suxsyl* ‘recognize’, ‘realize’ also takes finite complement clauses
³⁴⁴¹⁸ (see 210, §15.2.8.1) or participial clauses as in (156).

- ³⁴⁴¹⁹ (156) *tce nuunu kui [gazo t^h-kui-nuicpwaz] nuu pjy-suxsyl.*
 LNK DEM ERG sheep AOR-SBJ:PCP-disguised DEM IFR-recognize
³⁴⁴²⁰ ‘He (the shepherd boy) had noticed that the (nobleman) was disguised as
³⁴⁴²¹ a sheep.’ (40513 mutong de disheng-zh, 63)

³⁴⁴²² However, despite being superficially identical to (154) above, in (157) *suxsyl*
³⁴⁴²³ selects as direct object the 1sg intransitive subject of the participial clause. A
³⁴⁴²⁴ possible way to explain this observation is to analyze the participial clause *azo*
³⁴⁴²⁵ *te^heme kui-ηu* as a relative clause whose head is *azo* (‘me who am a girl’).

- ³⁴⁴²⁶ (157) *<liangshanbo> nuu kui [azo te^heme kui-ηu] nuu*
 ANTHR DEM ERG 1SG girl SBJ:PCP-be DEM
³⁴⁴²⁷ *a-mx-puú-wy-suxsal-a*
 IRR-NEG-PFV-INV-realize-1SG
³⁴⁴²⁸ ‘(I hope that) Liang Shanbo will not realize that I am a girl (will
³⁴⁴²⁹ recognize me being a girl).’ (150826 liangshanbo zhuyingtai-zh, 76)

³⁴⁴³⁰ 24.5.4.3 *βzjoz* ‘learn’ and *suxçrt* ‘teach’

³⁴⁴³¹ The verbs of learning *βzjoz* ‘learn’ and *suxçrt* ‘teach’ take infinitive complements,
³⁴⁴³² as shown by (158) and (159).

In the case of the secundative verb *suxçrt* (§14.4.2), the direct object is the person being taught, the 2sg in (159), while the infinitive clause is the theme.

- 34437 (159) [tyfsyri ky-βzu] ci pjui-ta-suixer
 thread INF-make a.little IPFV-1→2-teach
 34438 ‘Let me teach you how to make a thread.’ (vid-20140506043657, 43)

34439 24.5.5 Verbs of perception

34440 The transitive perception verbs *mto* ‘see’ and *mts^hym* ‘hear’, ‘smell’, ‘feel (non-
34441 visually)’ express non-volitional perception. The contrast between *ru* ‘look at’
34442 (§24.4.4) and *mto* can be illustrated by (160), where the latter has a meaning close
34443 to ‘find’.

These two verbs are compatible with finite complements (§24.2.3), as in (161), without any coreference restriction.

- 34449 (161) [sun̥gi nuŋ puŋ-yŋwu] nuŋ pŋy-mts^hym
 lion DEM IPFV-cry DEM IFR-hear
 34450 ‘(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).

- 34456 (162) *tce [uu-rdo& nuu kuu-fse ky-ntsye] nuu*
LNK 3SG.POSS-grain DEM SBJ:PCP-be.like OBJ:PCP-sell DEM
34457 *mui-puu-mto-t-a*
NEG-AOR-see-PST:TR-1SG
34458 'I have not seen its grains (of buckthorn) sold like that (it is always sold
34459 in processed form).' (09-mi, 61)

34460 The verb *mts^hym* is often used in combination with the form *k^r-ti* as in (163).
 34461 This form could be analyzed as a complementizer, but since positive evidence
 34462 of its grammaticalized status is not obvious, I analyze *k^r-ti* here as an object
 34463 participle taking an object complement clause (*nuu nuu-s^r-mtsuuy*). That comple-
 34464 ment clause itself is in addition the relativized element of the head-internal ob-
 34465 ject participial clause [“**nuu nuu-s^r-mtsuuy**” *k^r-ti*] (§23.8.4), a construction that can
 34466 be glossed as ‘I have not heard ‘It bites people’ being said’.

- 34467 (163) [[*nua nua-s^r-mtsuuy*] *k^r-ti*] *muu-puá-wy-mts^hym*.
 34468 DEM SENS-APASS-bite OBJ:PCP-say NEG-AOR-INV-hear
 ‘I have not heard that it bites people.’ (28-tshAwAre, 71)

34469 With intransitive verbs, the subject participle in *kuu-* is always found in the
 34470 clauses occurring as object of *mto* and *mts^hym*, as in (164). Such clauses are to
 34471 be analyzed as participial relatives (§24.4.1).

- 34472 (164) *pjuu-ru* *q^he* [*tceki tur-ci*] *uu-ηguu* *u^zo*
 34473 IPFV:DOWN-look LNK down INDEF.POSS-water 3SG.POSS-in 3SG
pua-kuu-ntc^hyr] *nua pju-mto*.
 AOR:DOWN-SBJ:PCP-appear DEM IFR-see
 34474 ‘He looked down, and saw his own reflection in the water below
 34475 (himself reflected in the water).’ (140519 chou xiaoya-zh, 180)

34476 In (165), *mts^hym* even takes as object a head-internal relative clause in *kuu-*
 34477 (rather than *k^r-* as in 163 above), with the transitive subject as relativized ele-
 34478 ment (§23.5.2).

- 34479 (165) *nua-s^ryo* *tce* [*icq^ha*] *s^ga^uspa nua* *kuu* “*tytšu*
 34480 IPFV-listen LNK the.aforementioned sorcerer DEM ERG lamp
yuu-ty-syndu-nua” *uu-kuu-ti*] *nua pju-mts^hym tce*
 CISL-IMP-exchange-PL 3SG.POSS-SBJ:PCP-say DEM IFR-hear LNK
 34481 ‘She heard the sorcerer saying ‘Come and exchange (your) lamp’.’
 34482 (140511 alading-zh, 222)

34483 Verbs of perception and cognition also occur with finite clauses containing
 34484 interrogative pronouns which look like correlatives (§23.2.5), such as *ŋotču j^r-*
 34485 *nua-łor* in (166).

- 34486 (166) [ŋotcu jy-nua-tob] tci mui-puu-mto-j, [ŋotcu jy-cq^hlyt]
 where IFR-AUTO-come.out also NEG-AOR-see-1PL where IFR-disappear
 34487 tci ky-cuftas mui-pjy-c^ha-j
 also INF-remember NEG-IFR-can-1PL
 34488 ‘We neither saw where she came from, nor can we remember towards
 34489 which direction she disappeared.’ (2003 sras, 38)

34490 The volitional perception verbs *syo* ‘listen’ (labile), *rto* ‘look’ (transitive) and
 34491 *ru* ‘look at’ (§15.1.2.4), though they can have nominal objects or semi-objects, do
 34492 not take complement clauses, but do occur in a coordinating complementation
 34493 strategy (§21.2.7, §24.4.4).

34494 24.5.6 Phasal verbs and other aspectual auxiliaries

34495 Aspectual and phasal complement-taking verbs present a much greater variety
 34496 of constructions than modal verbs. Table 24.2 summarizes the constructions at-
 34497 tested with each verb, not all of which are equally common.¹⁴

Table 24.2: Inventory of phasal and aspectual auxiliaries in Japhug

Verb		I.	BI	F.	Compl. strategy
<i>ŋno</i> ‘experience’	tr.	✓	✓		
<i>sza</i> ‘begin’	tr.	✓	✓		
<i>za</i> ‘begin’	tr.	✓	✓		§24.2.3.3
<i>st^hut</i> ‘finish’	tr.	✓	✓		§24.2.3.3
<i>srtçut^hi</i> ‘continue’	tr.	✓			§24.2.3.3
<i>nuftçaka</i> ‘prepare’	tr.	✓		✓	
<i>suyjy</i> ‘finish’	tr.	✓			
<i>k^hyt</i> ‘do repeatedly’	tr.	✓			§24.4.3
<i>jy</i> ‘be finished’	impers.	✓	✓		
<i>ŋgr^hl</i> ‘be usually the case’	impers.			✓	
<i>ryŋgat</i> ‘be about to’	intr.				§24.4.2.1
<i>aywyu</i> ‘be about to’	intr.				§24.4.2.1
<i>mda</i> ‘arrive’ (of time)	impers.	✓		✓	

¹⁴ The abbreviations are as follows: I. (velar infinitive, §24.2.1), BI (bare infinitive and *tua-* infinitive, §24.2.2), F. (finite complement, §24.2.3), tr. (transitive), impers. (intransitive impersonal).

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 *r̥no* can be used with a nominal object in the meaning ‘try, taste’ (of food), as shown in (167) with the sigmatic causative *sui-r̥no* ‘let X taste’ (§17.2).

- (167) *azo ny-paχci ci tu-kui-sui-r̥no-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, *r̥no* 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.

In example (168), the first sentence *azo k̥y-mtsuy mu-puu-r̥no-t-a* is ambiguous, and could be translated as either ‘I have never bitten it’ (subject coreference) or ‘I have never been bitten by it’ (object coreference), regardless of the fact that the 1SG is transitive subject in both cases as shown by the absence of inverse prefix and the presence of the *-t-* suffix (§14.3.2.1, §21.1.3). The verb *r̥no* ‘experience’ lacks inverse other than generic subject (§14.3.2.5), and the 3→1SG inverse form *†muu-pú-wy-r̥no-a* is rejected to express the meaning expressed by *muu-puu-r̥no-t-a* in (168).

- (168) *azo [k̥y-mtsuy] muu-puu-r̥no-t-a ri, χp̥ylteun kuw p̥jy-r̥no*
 1SG INF-bite NEG-AOR-experience-PST:TR-1SG but p.n ERG
 IFR-experience
 ‘I have never been stung (by a wasp), but Dpalcan has.’ (26-ndzWrnaR, 19)

In the second sentence, the personal name *χp̥ylteun* predictably takes the ergative, being the transitive subject of *r̥no* ‘experience’. However, it is at the same time object of (elided) infinitive *k̥y-mtsuy* ‘to bite’ present in the first clause, and the absolute form would be expected if the verb in the complement clause had

24 Complement clauses

34529 precedence over the matrix verb, as it happens in some cases (§24.3.2). The com-
34530 plete clause without elision would *χpryltcun kuu kr-mtsuy pjr-rŋo* ‘Dpalcan has
34531 been stung (by a wasp) before’.

- 34532 (169) *χpryltcun kuu [kr-mtsuy] pjr-rŋo*
p.n ERG INF-bite IFR-experience
34533 ‘Dpalcan has been stung (by a wasp) before’. (elicitation based on 168)

34534 The sentence (169) is also ambiguous, but can be interpreted as expressing
34535 coreference between the transitive subject of *rŋo* ‘experience’ with the object of
34536 the transitive verb *mtsuy* ‘’, with the ergative flagging of the matrix clause taking
34537 over the absolute marking expected in the complement clause.

34538 The subject of *rŋo* ‘experience’ can also be coreferential with the possessor of
34539 the intransitive subject in the complement clause, as in example (170), where the
34540 non-overt subject should be *a-xtu* ‘my belly’, as in (171) (§22.4.1.5).

- 34541 (170) *azō puu-xtcw~xtci-a zo ri tuxtvŋym nuu-atury-a tce,*
1SG PST.IPFV-EMPH~be.small-1SG EMPH LOC dysentery AOR-meet-1SG LNK
34542 *[nuu kr-mŋym] puu-rŋo-t-a*
DEM INF-hurt AOR-experience-1SG
34543 ‘When I was very small, I had dysentery, (my belly) ached.’
34544 (24-pGArtsAG, 121)

- 34545 (171) *[a-xtu kr-mŋym] puu-rŋo-t-a.*
1SG.POSS-belly INF-hurt AOR-experience-PST:TR-1SG
34546 ‘I have had belly ache.’ (elicited)

34547 However, despite the fact that *rŋo* indexes either the subject or the object of
34548 its complement clause without difference in the matrix clause as illustrated by
34549 (168) and (169) above, their relativization patterns are different. The subject of
34550 the infinitive clause is relativized by means of the subject participle *puu-kuu-rŋo*,
34551 while the object is relativized by using either a finite relative clause or the object
34552 participle *puu-kr-rŋo* (§23.5.11.3).

34553 24.5.6.2 Phasal verbs

34554 Phasal verbs such as *za* ‘begin’ and *st^hut* ‘finish’ are most often attested with
34555 dental or bare infinitives (§24.2.2.1) as in (172). They can also take velar infinitives
34556 as in (173).

- 34557 (172) [nui *wi-ti*] *ta-st^hut*
DEM 3SG.POSS-BARE.INF:say AOR:3→3'-finish
'When she finished saying that...' (150818 muzhi guniang-zh, 125)
- 34558 (173) [*tui-nui* *ky-jts^hi*] *na-st^hut* *tce tce*
INDEF.POSS-breast INF-give.to.drink AOR:3→3'-finish LNK LNK
tx-pytso *nui li* *wi-sta* *nuitcu ko-cui-rŋgw*
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.'
(140429 jiedi-zh, 270)

34563 In addition, some phasal verbs are also attested with finite complements sharing
34564 the same TAME and person indexation (§24.2.3.3), though this construction
34565 is considerably rarer.

- 34566 (174) [*nura pa-βzjoz*] *pa-st^hut* *tce wi-sloχpun* *nui kui*
DEM:PL AOR:3→3'-learn AOR:3→3'-finish LNK 3SG.POSS-teacher DEM ERG
34567 *taqaβ tui-ldzi pŋ-wy-mbi*
needle one-CL IFR-INV-give
'When he finished learning this (craft), his teacher gave him a needle.'
(140508 benling gaoqiang de si xiongdi-zh, 97)

34570 Unlike *rŋo* 'experience' for instance (which selects the orientation DOWNWARDS),
34571 phasal verbs take the lexical orientation of the verb in the complement clause
34572 (§24.3.5), UPWARDS in (172) (§15.1.5.8), EASTWARDS in (173) (§15.1.5.10) and DOWN-
34573 WARDS in (174).

34574 24.5.6.3 Imminent aspect

34575 The intransitive verb *rŋgat* means 'prepare to depart' when used on its own
34576 without subordinate clause. It also selects participial clauses like motion verbs
34577 (§24.4.2.1), with the meaning 'be about to'. With subject participial clauses in
34578 *kui-* as in (175), there is coreference between the subject of *rŋgat* and that of its
34579 subordinate clause.

- 34580 (175) [*kui-si*] *tx-rŋgat*, *tu-rŋru* *mui-nui-c^ha ri*, *nui*
SBJ:PCP-die AOR-be.about IPFV-get.up NEG-AOR-can LNK DEM
34581 *wi-cya* *ra pui-ts^hoz* *zo.*
3SG.POSS-tooth PL PST.IPFV-be.complete EMPH
'Even when she was about to die (due to an advanced age), when she

24 Complement clauses

34583 was not able to get up anymore, (...) she still had all her teeth.'
 34584 (27-tWCGArgu, 23)

34585 Like motion verb, *rŋgat* 'be about to' also takes object participial clauses in
 34586 *kx-* with coreference with the object of the clause 'be about to be *X*' as in (176).

34587 (176) *jx-tur-ari tce, (...) turme [kx-sat] tx-kui-rŋgat* (...)
 AOR-2-go[II] LNK person SBJ:PCP-kill AOR-SBJ:PCP-be.about.to

34588 *vnuz tua-mtym ri*
 two 2-see[III]:FACT LNK

34589 'When you go there, you will see two person who are about to be killed.'
 34590 (140507 jinniao-zh, 320)

34591 The intransitive contracting verb *ayuyu* 'be about to' has the same meaning
 34592 as *rŋgat*, and is used in the same constructions (177), though it is slightly less
 34593 frequent.

34594 (177) *[a-kui-vndua] tu-tui-γyayu juu-ju tce*
 1SG.POSS-SBJ:PCP-hit IPFV-2-be.about.to SENS-be LNK

34595 'You are about to hit me.' (2014-kWLAG, 506)

34596 The meaning of the imminent aspect auxiliaries overlaps with that of the Prox-
 34597 imitative (§21.6.2, §21.6.2.1), as shown by examples (178) and (179) from the same
 34598 passage of two versions of the same story, the former (178) with Periphrastic
 34599 Proximative (§21.6.2.1) and the latter with *rŋgat* 'be about to'.

34600 (178) *azo yui-caβ-a tx-ju tce, nyzo χcʰa nu*
 1SG INV-catch.up:FACT-1SG AOR-be LNK 2SG right DEM

34601 *a-nur-tui-ctʰuz*
 IRR-PFV:WEST-2-turn.towards

34602 'When they are about to catch up with me, turn the (thing in your) right
 34603 (hand) in (their direction).' (2011-04-smanmi, 146)

34604 (179) *[azo a-kui-caβ] tx-rŋgat-nu tce, nyzo kui sŋas*
 1SG 1SG.POSS-SBJ:PCP-catch.up AOR-be.about.to-PL LNK 2SG ERG sorcery

34605 *kumtcʰoxsum a-nur-tui-ctʰuz*
 triratna DEM IRR-PFV:WEST-2-turn.towards

34606 'When they are about to catch up with me, turn the triratna in (their
 34607 direction).' (2003 smanmi, 95)

34608 24.5.6.4 Habitual aspect

34609 The habitual aspect auxiliary *ŋgryl* ‘be usually the case’ is not compatible with
 34610 infinitival complements. It only occurs with finite complements, as in (180).

- 34611 (180) [cyr tce tu] *ŋgryl*, [tu-mbri]
 night LOC exist:FACT be.usually.the.case:FACT IPFV-call
 34612 *ŋgryl*
 be.usually.the.case:FACT
 34613 ‘(Owls) appear, howl during the night.’ (22-pGakhW, 19)

34614 In the Past Perfective with an Imperfective complement, it expresses a former
 34615 habit ‘use to X’ (181).

- 34616 (181) [azo kumpya c^bu-nuu-χse-a] *pui-ŋgryl*
 1SG chicken IPFV-AUTO-feed[III]-1SG PST.IPFV-be.usually.the.case
 34617 ‘I used to raise chickens / (for my own sake).’ (150819 kumpGa, 69)

34618 The auxiliary *ŋgryl*, especially in negative form, can have overtones of epis-
 34619 temic (182) or deontic modality (183).

- 34620 (182) nyzo tur-ma_b maka my-ŋgryl ma,
 2SG 2-not.be:FACT NEG-be.usually.the.case:FACT LNK 2SG
 34621 nyzo ma ji-zda pui-kui-ryzi me
 apart.form 1PL.POSS-companion AOR-SBJ:PCP-stay not.exist:FACT
 34622 ‘It is impossible that it is not you (who stole it), since there was nobody
 34623 apart from you in our vicinity.’ (31-deluge, 99)

- 34624 (183) tc^beme u-cki “a-βyo” tu-kui-ti
 girl 3SG.POSS-DAT 1SG.POSS-FB IPFV-GENR-say
 34625 my-ŋgryl
 NEG-be.usually.the.case:FACT
 34626 ‘(One cannot/It is not appropriate to) say ‘my uncle’ to a woman.’
 34627 (140425 kWmdza 02, 99)

34628 24.5.7 Similative verbs

34629 The verbs *fse* ‘be like’ and *stu* ‘do like’ are semi-transitive (§14.2.3) and secundative
 34630 (§14.4.2), respectively. Both select as semi-object the manner in which the action
 34631 is performed.

These verbs are found with velar infinitive complements (§24.2.1), either with a demonstrative expressing the action (such as *nua* in 184) or in questions with the interrogative pronoun *tc^hi* ‘what’ (§6.5.1) as in (185). The demonstrative or the interrogative pronoun are always located closer to the similitative verb than the infinitive clause.

- (184) *tce [cymuydu kx-lxt] nua tu-stu-nua pnu-nu*
 LNK gun INF-release DEM IPFV-do.like-PL SENS-be

‘People shoot with guns like that.’ (28-CAmWGdW, 96)

- (185) *[kx-p^hyo] tc^hi a-tx-fse-j?*
 INF-flee what IRR-PFV-be.like-1PL

‘How will we flee?’ (Norbzang 69)

The subject of the infinitival clause is always coreferent with that of *fse* or *stu*, but its object is never indexed on the matrix verb. For instance, although *fsray* ‘protect’, ‘save’ and *buwa* ‘carry on the back’ are transitive verbs that can index first or second person objects (see for instance 44, §14.3.2.3), in (186) and (187) the 2SG object is not indexed on the matrix verb *stu*, otherwise the forms *tu-ta-stu* (IPFV-1→2-do.like) and *a-tx-tú-wy-stu* (IRR-PFV-2-INV-do.like) would be expected. 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) *pyxtcuu kuu [nyzo kx-burwa] tc^hi a-tx-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 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^{hy}n*
 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) *[tx-wuu nuu kuu tur~ta-stu] zo*
 INDEF.POSS-grandfather DEM ERG TOTAL~AOR:3→3'-do.like EMPH
to-stu
 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).

- (191) *wi-nma^v jx-kuu-ye nuu coŋβzu mk^{hyz}*
 3SG.POSS-husband AOR-SBJ:PCP-come[II] DEM carpentry be.expert:FACT
tce
 LNK
 ‘Her husband who came (to live in her family) is very good at carpentry.’
 (14-siblings, 273)
- (192) *tcizo rcanuu, [kx-ta^v] wuma zo mk^{hyz-tci}*
 1DU UNEXPECTED INF-weave really EMPH be.expert:FACT-1DU
 ‘We are very good at weaving.’ (140521 huangdi de xinzhuang-zh, 20)

Adjectives such as *nqa* ‘be difficult’, *mbat* ‘be easy’, which unlike *mk^{hyz}* ‘be expert’ do not have a semi-object, can take infinitival or finite complement clauses

24 Complement clauses

34683 as their subject (193).¹⁵

- 34684 (193) <*gang> st^huci muúj-rko q^he, pui-mpuu q^he*
steel as.much NEG:SENS-be.hard LNK SENS-be.soft LNK
34685 [*tu-ŋgyy, pui-ŋjbu] nura pui-mbat*
IPFV-ACaus:bend IPFV-be.curved DEM:PL] SENS-be.easy
34686 ‘(Iron) is not as hard as steel, it is soft and bends easily.’ (30-Com, 42)

34687 Even in nominalized forms such as the degree nominals (§16.3), these verbs
34688 retain the ability to take subject complements (§16.3.2), as in (194).

- 34689 (194) [*c^huu-wxti] uu-tuu-mbat* pui-syre zo
IPFV-be.big 3SG.POSS-NMLZ:DEG-be.easy SENS-be.ridiculous EMPH
34690 ‘It grows extremely easily.’ (25-akWzgumba, 77)

34691 Other adjectival stative verbs selecting infinitival complements as intransitive
34692 subjects include *apaj* ‘be done quickly’ (195) or *pe* ‘be good’ (196).

- 34693 (195) [*ky-nurdoꝝ*] ri my-apaj ma kuu-nduu-nduuꝝ^β
INF-pick.up also NEG-be.quick:FACT LNK SBj:PCP-EMPH~be.small
34694 *cti*
be.AFF:FACT
34695 ‘It takes a lot of time (it is not done quickly) to pick up (the
34696 Zanthoxylum seeds), because they are very small.’ (07-tCGom, 16)

34697 (196) *tvtso uu-ŋguu nutcu [staxpuu ky-ji]* my-pe
earth.type 3SG.POSS-in DEM:LOC pea INF-plant NEG-be.good:FACT
34698 ‘Planting peas in *tvtso*-type earth is not good.’ (25-cWXCWz, 64)

34699 Some adjectival verb such as *uzvβ* ‘be careful’ select bare infinitive comple-
34700 ments (§16.2.2) like their causative form (§24.5.1.4).

24.6 Complement-taking nouns

34702 Not all noun-modifying clauses should be analyzed as relative clauses: only sub-
34703 ordinate clauses whose head noun (overt or covert) has a syntactic role in the
34704 clause (whether argument, adjunct or possessor) can be considered to be a rela-
34705 tive.

¹⁵ Note that this construction has a meaning close to that of the facilitative *nuyuu-* derivation (§18.9).

24.6.1 Complement-taking nouns and denominal verbs

In examples (197) and (198), the head noun *ftçaka* ‘method’, ‘manner’ is neither a core argument nor an adjunct. It is not possible to convert the infinitive subordinate clauses *muu-tu-kyr-mbro* ‘not become too high’ and *qartsyβ kyr-kyr-βzu ra kyr-tyrβ* ‘thresh the (grains) that have been harvested’ into independent sentences that would include *ftçaka*. These clauses should therefore be analyzed as adnominal complement clauses, rather than a prenominal relatives.

- (197) *a-<xuetang> wu-tur-mbro <kongzhi>*
 1SG.POSS-blood.sugar 3SG.POSS-NMLZ:DEG-be.high control
 tu-βze-a nyu. [muu-tu-kyr-mbro] ftçaka tu-βze-a
 IPFV-do[III]-1SG be:FACT NEG-IPFV-INF-be.high manner IPFV-do[III]-1SG
 nyu.
 be:FACT
 ‘I control my blood sugar, I do what I can to prevent it from being too high’. (conversation, 15-12-05)
- (198) *[qartsyβ kyr-kyr-βzu ra kyr-tyrβ] ftçaka yuu-βzu*
 harvest AOR-OBJ:PCP-make PL INF-thresh manner INV-make
 ra
 be.needed:FACT
 ‘Then one has to prepare to thresh the (grain) that have been harvested.’
 (2010.10, 101)

The construction exemplified by (197) and (198) is a collocation combining the complement-taking noun *ftçaka* with the verb *βzu* ‘make’, meaning either ‘do by any means possible’ (as in 197) or ‘prepare to X’ (198). In the latter meaning, the collocation is homonymous with the transitive denominal verb *nuftçaka* ‘prepare’ (§20.7.2), which also selects velar infinitive complements, as shown by (199), uttered just before (198) in the same recording.

- (199) *[kyr-tyrβ] kú-wy-nuftçaka ra*
 INF-thresh IPFV-INV-prepare be.needed:FACT
 ‘One has to prepare the threshing.’ (2010.10, 100)

The infinitive complement *kyr-tyrβ* in (199) is exactly parallel to the adnominal complement clause in (198). This parallelism between complement-taking noun and the complement-taking denominal verb derived from it is not found in all the cases (§24.6.3), but confirms the observation that the adnominal clause in (198) is not a prenominal relative.

24.6.2 Adnominal complement clause and possessor

Among complement-taking nouns, some like *ftçaka* ‘method’, ‘manner’ (§24.6.1, §24.6.3.1) and *kowa* ‘manner’ (§24.6.3.1) are alienably possessed nouns, but most (§24.6.3) are inalienably possessed (§5.1.2.6).

Among these inalienably possessed nouns, two categories must be distinguished. First, some nouns such as *w-skrt* ‘language’, ‘sound’ (§24.6.3.2) always take a 3sg possessive prefix coreferent with the complement clause (treated as possessor of the noun), as in (200).

- (200) *ji-wuu kuu “a-my-jy-tuu-yi-nuu” w-skrt*
 1PL.POSS-grandfather ERG IRR-NEG-PFV-2-come-PL 3SG.POSS-language
to-βzu cti
 IFR-make be.AFF:FACT
 ‘(By these words) our father-in-law means that he does not want us to come back (he means: ‘don’t you come (back)’). (2005 tAwakWcqraR, 30)

Other nouns like *w-sum* ‘mind’ (§24.6.3.3) on the other hand select as possessor the experiencer, which may not be 3sg, and the complement clause is not syntactically a possessor. For instance, in (201) the possessor of *-sum* is 2sg, not 3sg as would be expected if the finite clause *nū-βdaṣmu nū tu-tuu-ndṛm* where the possessor of this noun.

- (201) *[nū-βdaṣmu nū tu-tuu-ndṛm] ny-sum úr-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)

24.6.3 Overview of complement-taking nouns

Complement-taking nouns selecting infinitive (§24.2.1), finite (§24.2.3) or reported speech complements (§24.2.5) can be divided into three semantic groups.

24.6.3.1 Nouns of manner

The semantically close alienably possessed nouns *ftçaka* ‘method’, ‘manner’ (§24.6.1) and *kowa* ‘manner’,¹⁶ both borrowed from Tibetan (from བ୍ରୋ བ୍ରୋ *btça ka* ‘implement’ and བ୍ରୋ བ୍ରୋ *bkod pa* ‘arrangement’, ‘method’, respectively), occur in collocation with the verb *βzu* ‘make’ (§22.4.2.1) in the meanings ‘try to *X* by any means’ (in Chinese 想尽办法 *<xiǎng jìn bànfǎ>* ‘try to do by any means’) or ‘prepare’. They

¹⁶ These nouns are both translated into Chinese as 办法 *<bànfa>* ‘method’, ‘means’, ‘manner’.

34763 can select an infinitive clause with raising of the person indexation on the main
 34764 verb, as shown by the 3→2SG form *tú-wy-βzu* ‘they will X you’ in (202).

- 34765 (202) *a-r̥fit* *ra nuu-yi-nuu* *cti* *tce^ba, [kx-ndza]*
 1SG.POSS-offspring PL VERT-come:FACT-PL be.AFF:FACT soon INF-eat
 34766 *kowa* *tú-wy-βzu* *cti* *tce ku-ta-sui-ynbaš*
 manner 2-INV-make:FACT be.AFF:FACT LNK IPFV-1→2-CAUS-hide
 34767 *ŋu*
 be:FACT
 34768 ‘My children are coming back home soon, and they will try to eat you, I
 34769 will hide you.’ (Norbzang 2012, 300)

34770 The complement-taking transitive denominal verbs *nuftçaka* ‘prepare’ and *nukowa*
 34771 ‘prepare’ (§24.6.1) can be derived from these two nouns.

34772 24.6.3.2 Nouns of speech and sound

34773 The inalienably possessed nouns related to speech and noise *wu-ti* ‘way of saying’,
 34774 ‘wording’, ‘expression’, *wu-fçrt* ‘story’, *wu-skrt* ‘language’, ‘sound’, *tx-zgra* ‘sound’,
 34775 ‘noise’ and *tu-tq^ba* ‘news’ (about someone) (§5.1.2.13), and the alienably possessed
 34776 *k^bycrl* ‘discussion’ can occur with finite complement clauses (203, 204) (see also
 34777 18, §10.1.2.10) or reported speech complements (205).

- 34778 (203) *tceri* [*zlawicγryβ kuu tc^boz puw-asuw-zgruβ*] but Zlaba.shesrab ERG religion PST.IPFV-PROG-accomplish
 34779 *wu-fçrt* *tu* *ma* [*jum puw-asuw-car*] 3SG.POSS-story exist:FACT but wife:HON PST.IPFV-PROG-search
 34780 *wu-fçrt* *me* 3SG.POSS-story not.exist:FACT
 34781 ‘People say that Zlaba shesrab was studying religion, not that he was
 34782 looking for a wife.’ (sras 79-80)
- 34783 (204) [*puw-nuqambumbjom*] *wu-zgra* *nuu* “*vuurwuurwuur*” *tu-ti*
 34784 IPFV-fly 3SG.POSS-noise DEM ONOM IPFV-say
 34785 *ŋgryl*.
 34786 be.usually.the.case:FACT
 ‘The sound it makes when it flies is ‘vrvr’ (as its flying sound, it says
 ‘vrvr’).’ (26-quspunmbro, 13)

As shown by (203) and (204), *w-fçrt* ‘story’ and *tr-zgra* ‘sound’ can take complements even without a noun-verb collocation.

The noun *w-skrt* ‘language’, ‘sound’ mainly takes complements when occurring with *βzu* ‘make’ (§22.4.2.1) or *stu* ‘do like’. The collocation with this verbs means ‘do/say something that means X’ as in (205)¹⁷ or (200) (in §24.6.2 above).

- (205) [wortc^{hi} zo pyjk^hu ma-ty-tuu-lst tce, n̄kinu, p̄yjk^hu
 please EMPH yet NEG-IMP-2-release LNK FILLER yet
 a-puu tuu-nuu puu-jts^{hi}-a
 1SG.POSS-young INDEF.POSS-breast IPFV-give.to.drink-1SG
 ra] w-skrt ra to-βzu tce [...] tce nuunu
 be.needed:FACT 3SG.POSS-speech PL IFR-make LNK LNK DEM
 nuu-jyy tce tcendyre w-puu nuu ki kui-fse
 AOR-finish LNK LNK 3SG.POSS-young DEM DEM.PROX SBJ:PCP-be.like
 jny-γyntaβ, tce [ty-lst jyy] w-skrt
 IFR-put LNK IMP-release be.allowed:FACT 3SG.POSS-speech
 kura to-stu
 DEM.PROX:PL IFR-do.like
- ‘(The monkey mother) made (sign to the hunter) meaning ‘Please don’t shoot yet, I still have to breastfeed my young one.’ (...) and once she had finished, she put her young one aside like that, and made a sign like that meaning ‘(now) you can shoot’. (19-GzW, 73-74)

The noun *tuu-tç^ha* ‘news’ takes reported speech clauses when used in collocation with *yut* ‘bring’ in the meaning ‘(go somewhere) and come back to tell about X’, as in (206) (see also 50, §5.1.2.13). This construction is also compatible with participial complementation strategies (§24.6.4).

- (206) <donggua> c^ho <qiezi> ni tç^hi zo muúj-naχtcwuy] yuu
 gourd COMIT eggplant DU what EMPH NEG:SENS-be.the.same GEN
 w-tç^ha a-jy-tur-yut ra
 3SG.POSS-information IRR-PFV-2-bring need:FACT
- ‘(Go there and come back to) to tell me in what way gourds and eggplants are different.’ (yici bi yici you jinbu-zh, 7)

¹⁷ The 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).

34810 Among the nouns of speech and sound, *u-ti* ‘way of saying’ and *u-fçrt* ‘story’
 34811 are bare action nominals (§16.4.6) deriving from *ti* ‘say’ and *fçrt* ‘tell’, respec-
 34812 tively. The rest were borrowed from Tibetan as nouns; their sources are གྲାଡ୍ *skad*
 34813 ‘language’, ཁྚྰ ଶ୍ରାଦ୍ଧା *sgra* ‘sound’ and བྱା ତ୍ରେଣ୍ଟା *tch'a* ‘part’, respectively.

34814 24.6.3.3 Nouns of cognition

34815 The noun of cognition *tuu-sum* ‘mind’ occur in collocation with the motion verb
 34816 *ce* ‘go’ in the meaning ‘want to X’ (§22.4.1.1) with either finite clause as in (207)
 34817 and (209a) (see also 201 in §24.6.2) or an infinitival one as in (208)(209b).

- 34818 (207) [[*nycz*o *ju-tuu-ce*] *a-sum* *muíj-ce*] *ndža* *ŋu*
 2SG IPFV-2-go 1SG.POSS-mind NEG:SENS-go reason be:FACT

34819 ‘This is because I don’t want you to leave.’ (140506 shizi he huichang de
 34820 bailingniao-zh, 71)

- 34821 (208) [“*ya*” *ky-ti*] *uu-sum* *mu-pjy-ce*
 yes INF-say 3SG.POSS-mind NEG-IFR.IPFV-go
 34822 ‘He did not want to say ‘yes’.’ (140506 shizi he huichang de
 34823 bailingniao-zh, 71) 58)

34824 The possessive prefix on the complement-taking noun encodes the experiencer,
 34825 while the motion verb *ce* ‘go’ remains in 3SG form. When the complement clause
 34826 is an infinitival clause, its subject must be coreferent with the experiencer in the
 34827 main clause as in (209b) and (208). However, when the complement clause is
 34828 finite, subject coreference is possible (209a, 201) but not required (207).

- 34829 (209) a. [*c-ku-nui-rŋgw-a*] *a-sum* *muíj-ce*
 TRAL-IPFV-AUTO-lie.down-1SG 1SG.POSS-mind NEG:SENS-go

- 34830 b. [*c-ur-ky-rŋgw-a*] *a-sum* *muíj-ce*
 TRAL-INF-lie.down 1SG.POSS-mind NEG:SENS-go

34831 ‘I don’t want to go to sleep.’ (elicited)

34832 The verb *ce* ‘go’ in this construction is never found in the Aorist or the Inferen-
 34833 tial. To express an inchoative meaning, the motion verb *yi* ‘come’ occurs instead
 34834 with *tuu-sum*, as in (210).

- 34835 (210) *daltsutsa tce tce ky-nui-ce tsa uu-sum to-yi*.
 slowly LNK LNK INF-VERT-go a.little 3SG.POSS-mind IFR-come

34836 ‘He slowly started thinking of going home.’ (150907 laoshandaoshi-zh,
 34837 59)

24 Complement clauses

Like *tu-sum*, the noun *w-βjiz* ‘wish’ (a fossil -z nominalization, §16.5.1) occurs in collocation with *yi* ‘come’ (§22.4.1.1). This collocation, which means ‘feel like/want to *X*’, has the same morphosyntactic properties as those described above: it is compatible with both infinitive complement clauses (211) and finite ones (212).

- (211) [ky-nyma] *tua-βjiz* *maka my-yi*.
INF-work GENR.POSS-wish at.all NEG-come[III]:FACT
(When one is sick), one does not feel like working.’ (27-tWfCAI, 19)

- (212) *icqʰa* [*χpum kuu-tsʰu*] *nuu kuu tua-ci*
the.aforementioned monk SBJ:PCP-be.fat DEM ERG INDEF.POSS-water
c-tu-re] *nuu w-βjiz* *muu-pjy-yi*
TRAL-IPFV:UP-bring[III] DEM 3SG.POSS-wish NEG-IFR.IPFV-come
‘The fat monk did not feel like (going down the river and) bring the water (up to the monastery).

24.6.3.4 Time

The noun *ta-βa* ‘free time’ can take infinitival complements, in particular when occurring in collocation with existential verbs (§22.4.1.3) as in (213).

- (213) [*βdurjyt azo ky-ce*] *a-βa* *maye*
TOPO 1SG INF-go 1SG.POSS-free.time not.exist:SENS
'I don't have time to go to Gdongbrgyad.' (conversation, 2016-03-20)

24.6.3.5 Cause

The noun *w-ndža* ‘reason’, which is used as a relator noun to indicate the cause or the beneficiary (§8.3.6.2) with noun phrases, is also attested with finite and infinitive complement clauses, as in (214). With ergative marking, they can either serve as causal (§25.5.2) or purposive (§25.5.4) subordinate clauses.

- (214) *tce nuu [rjydum muu-juu-ky-βzu]* *w-ndža* *kua*
LNK DEM lumps NEG-IPFV-INF-make 3SG.POSS-reason ERG
tua-ci *kui-muictas* *nuutcu pjú-wy-fkri tce tce*
INDEF.POSS-water SBJ:PCP-be.cold DEM:LOC IPFV-INV-melt LNK LNK
rjydum my-βze
lumps NEG-make[III]
'In order to prevent lumps from forming, one melts the flour in cold water (by mixing it) and lumps do not form.' (140428 rJAdWm, 9)

34863 **24.6.4 Relative clauses as a complementation strategy**

34864 Like complement-taking verbs (§24.4.1, §23.8.3), some inalienably possessed nouns
 34865 can take subordinate clauses that look like complement clauses but are in fact rel-
 34866 atives. For instance, in (215), the clause *tu-ndze* ‘(the thing that) he eats’ is formally
 34867 a headless finite object relative clause (§23.5.3). The head noun *tr-di* ‘smell’ has
 34868 no syntactic role in that clause and is not the relativized element, otherwise the
 34869 construction would be nonsensical, its expected meaning being something like
 34870 ‘the smell that he eats’. The relation between the prenominal clause and its head
 34871 in (215) is simply the same as that between a possessor and its possessee (§8.2.3.1),
 34872 and it is preferable not to analyze here *tu-ndze* as a complement clause, since its
 34873 meaning is not ‘the smell of him eating’ (on the ambiguity between finite relative
 34874 and complement clauses, see §23.8.1).¹⁸

- 34875 (215) [tu-ndze] *nuu yuu ur-di* *nuu pjy-mts^hym-nuu tce tce*
 IPFV-eat DEM GEN 3SG.POSS-smell DEM IFR-perceive-PL LNK LNK
 34876 *jo-yi-nuu.*
 IFR-come-PL

34877 ‘(The flies) smelled (the jam) that he was eating and came.’ (140428
 34878 yonggan de xiaocafeng-zh, 12)

34879 Example (216) provides a similar case with a head-internal finite relative. It is
 34880 obvious here that *ur-χpi* cannot be the relativized element (since the head noun
 34881 *çkom* ‘muntjac’ is overt). At the same time, if *azo çkom tu-mts^hi-a* were a comple-
 34882 ment clause, the expected meaning would be ‘a story about (why) I am leading
 34883 this muntjac’.

- 34884 (216) *kuki [azo çkom tu-mts^hi-a]* *ki yuu ur-χpi*
 DEM.PROX 1SG muntjac IPFV-lead-1SG DEM.PROX GEN 3SG.POSS-story
 34885 *ci pjur-fcat-a*
 INDEF IPFV-tell-1SG
 34886 ‘I will tell a story about this muntjac that I am leading.’ (140512 fushang
 34887 he yaomo-zh, 81)

34888 The adnominal clauses in (215) and (216) are thus relative clauses used as pos-
 34889 sessors of inalienable nouns.

¹⁸ The 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 yíqún 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.

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 relative serving as possessor or an infinitival complement clause is not trivial (on ambiguity between participial clauses and infinitival complements, see §23.8.2).

For instance, in (217), the Chinese borrowing 标准 <biāozhǔn> ‘criterion’ takes as possessor the clause(s) *tc^heme ku-pe my-ku-pe*, whose status is ambiguous. If one analyses the form *ku-pe* as a subject participle (§16.1.1), *tc^heme [ku-pe] [my-ku-pe]* can be seen as two post-nominal participial relative clauses in apposition sharing the same head noun, implying a translation ‘the criterion (distinguishing between) good and bad women’. If on the other hand *ku-pe* is analyzed as a stative infinitive (§16.2.1), the subordinative clauses are infinitival complements, and the translation would rather be ‘criterion (by which one judges whether) a woman is good or bad’. In this particular case, since both syntactic analyses are meaningful, the fact that the postclausal noun is a Chinese borrowing makes it difficult to reliably use elicitation to distinguish between the two possibilities (for instance, by testing whether a dynamic intransitive verb would rather have a *ky-*prefixed form in this context).

- (217) *[tc^heme ku-pe my-ku-pe] nuu yuu konyla zo*
 woman ?-be.good NEG-?-be.good DEM GEN really EMPH
u-<biao zhun> juu-ju
 3SG.POSS-criterion SENS-be
 ‘It is (one of the) criteria (by which one judges whether) a woman is good or bad.’ (thaXtsa 2002, 100)

Tests can be applied to non-finite adnominal clauses occurring with *tuu-tc^ha* ‘news’. This noun, in addition to finite complement clauses (§24.6.3.2), is compatible with non-finite clauses in *kuu-* or *ky-* as in (218). The fact that non-stative intransitive verbs in this construction have *kuu-* rather than *ky-* however (*jy-kuu-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-tcuu tr-kuu-ye] uu-tc^ha* in (218) thus literally means ‘news about my son who came’.

- (218) *[a-tcuu jy-kuu-ye] yuu uu-tc^ha ja-yuit*
 1SG.POSS-son AOR-SBJ:PCP-come[II] GEN 3SG.POSS-news AOR:3→3'-bring
 ‘S/he came to tell (me/you) that my son came.’ (elicited)

34921 24.7 Syntactic errors

34922 Example (219) presents an interesting case of incorrect exchange of prefix be-
 34923 between the verb in the complement clause and the complement-taking verb.

34924 Since the complement-taking verb *st^hut* ‘finish’ is embedded in a temporal
 34925 clause in *cunŋgu* ‘before’, it would be expected to be in the Imperfective (§25.3.2.1),
 34926 while its complement verb should either be in the bare infinitive or the velar
 34927 infinitive as in (220) (§24.5.6.2).

- 34928 (219) †[*užo kuu [nura tu-rxt] ky-st^hut]*] *cunŋgu tce*
 3SG ERG DEM:PL IPFV-draw INF-finish before LNK

34929 ‘Before he had finished drawing it.’ (160718 huashetianzu-zh, 29)

- 34930 (220) [*užo kuu [nura ky-rxt] tu-st^hut*] *cunŋgu tce*
 3SG ERG DEM:PL INF-draw IPFV-finish before LNK

34931 In (219) however, the complement-taking verb is in Velar Infinitive form and
 34932 the complement verb in the Imperfective, the opposite of the correct form (220).

34933 Tshendzin has no hesitation to recognize (219) as a speech error, which is nevertheless unusual enough to deserve mention.

34935 25 Other types of multicausal 34936 constructions

34937 25.1 Classification of multicausal constructions

34938 This chapter, based on Jacques (2014a), discusses multicausal constructions other
34939 than (headless or noun modifying) relative clauses, complement clauses in core
34940 argument function and clauses involving the expression of degree (discussed in
34941 chapters 23, 24 and 26, respectively).¹

34942 The constructions treated in this chapter involve different degree of subordi-
34943 nation, from highly dependent (§25.1.1) to loose parataxis (§25.1.6). This section
34944 provides an overview of the criteria that can be used to classify subordination
34945 subtypes in Japhug.

34946 25.1.1 Marked subordinate clauses

34947 Some subordinate clauses can be distinguished from main clauses by overt mor-
34948 phological marking. Four types of overt marks of subordination can be distin-
34949 guished.

34950 First, converbs (§16.2.1.7), found in particular in temporal (§25.3.3.2, §25.3.4.2)
34951 and manner (§25.4.2) clauses, being non-finite forms, cannot serve as predicate
34952 of main clauses.

34953 Second, verb-initial reduplication (§12.4.1.2) and the prefix *w-* in non-Interrogative
34954 clauses (§21.7.4) are non-ambiguous markers of the protasis of a conditional con-
34955 struction (§25.2.1).

34956 Third, relator nouns with prenominal complements (§24.6) or prenominal rel-
34957 atives (§23.2.4) in absolute, locative or ergative form are used to build temporal
34958 (§25.3.3.1, §25.3.4.1) and causality (§25.5.2, §25.5.4) clauses.

34959 Fourth, postpositions can either contribute to subordination marking in com-
34960 bination with relator nouns (for instance, the ergative in causal clauses, §25.5.2),

¹ Some 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

34961 or serve on there own as subordinating markers, as in the case of the locative
34962 position in temporal clauses (1, see also §25.3).

- 34963 (1) *a-ri* *kui [jy-ari]* *nutcu tce, nykinua,*
1SG.POSS-younger.sibling ERG AOR-go[II] DEM:LOC LOC FILLER
34964 *qapi jo-rymbumbri q^he, tcendyre nuu jo-nunq^hu-j qhe,*
white.stone IFR-drop.while.going LNK LNK DEM IFR-follow-1PL LNK
34965 *tce k^ha jy-azyut-i*
LNK house AOR-reach-1PL
34966 ‘When *he_i* went (to the forest), our younger brother_i dropped white
34967 stones_j one by one on the way as he was going, and we followed them_j
34968 and found our way home.’ (160701 poucet2, 42)

34969 Example (1) also illustrates that in addition to the markers listed above, word
34970 order and case marking are important additional clues of subordinating status.
34971 The subject *a-ri* ‘my younger brother’ takes ergative case following the transitive
34972 verb *jo-rymbumbri* ‘he dropped them one by one on the way’ (§8.2.2.2), instead of
34973 absolute case as would be expected if it belonged to the subordinate clause *jy-ari*
34974 *nutcu* ‘when he went there’ (since *jy-ari* is intransitive), showing that this clause
34975 is embedded within the main clause. In some cases the case marking mismatch
34976 is the only evidence that a clause is subordinate (§25.1.4).

25.1.2 Correlative clauses

34977 Correlative constructions comprise two or more clauses with a parallel syntac-
34978 tic structure, each obligatorily marked by overt coordinating markers. With the
34979 exception of correlative relatives (§23.2.5), correlative constructions are not very
34980 widespread in Japhug: usually only one of the two clauses has obligatory mark-
34981 ing.

34982 The correlative additive focus markers *ri* and *tci* (§9.1.6.2, §25.6.2) are one of
34983 the clearest case of correlative constructions. As shown by (3), they follow the
34984 noun phrase on which they have scope, and the rest of the clause, including the
34985 verb, can be repeated as in (2).

- 34987 (2) *zakastaka u-mdos tci my-kui-na^htcuwy yyzu,*
each.his.own 3SG.POSS-colour also NEG-SBJ:PCP-be.the.same exist:SENS
34988 *u-ts^hwya tci my-kui-na^htcuwy yyzu.*
3SG.POSS-shape also NEG-SBJ:PCP-be.the.same exist:SENS
34989 ‘Each of them (species of starfishes) have their own different colours and
34990 different shapes.’ (180421 haixing, 45)

34991 Other examples of correlative construction include the relator noun *uu-juja*
 34992 ‘along with’ with incremental initial reduplication (§12.4.1.4) in the second clause
 34993 (§25.3.4.2).

34994 25.1.3 Periphrastic tenses and subordination

34995 Japhug has quite a few periphrastic TAME categories, combining a verb in the
 34996 Imperfective or the Factual with a copula (§21.2.2, §21.4.1.7, §21.5.3.5, §21.6.2.1). It
 34997 is common to observe chains of verbs in the Imperfective sharing a single copula.
 34998 For instance, in (3), the copula *nui-cti* in the Sensory has scope over two verbs,
 34999 *pjuu-nuucurŋjo* and *pjuu-ŋgra*. Such chains can be long, and comprise more than ten
 35000 verbs in the Imperfective (example 10, §21.2.2).

- 35001 (3) *tceri qartsuu tce tce uu-jwab nui pjuu-nuucurŋjo tce*
 LNK winter LOC LNK 3SG.POSS-leaf DEM IPFV-redden LNK
 35002 *pjuu-ŋgra nui-cti.*
 IPFV-ACAU:cause.to.fall SENS-be.AFF
 35003 ‘In winter, its leaves redder and fall.’ (14-sWNgWJu, 12)

35004 In (4), the copula *nui-ŋu* occurs two times: the first occurrence has scope over
 35005 one verb (*tu-nui-łob*), and the second one over two verbs (*c-tu-nurdor* and *tu-ndze*).

- 35006 (4) *nunuu la-clu-nui cʰo la-lyaa-nui tce tce qandže*
 DEM AOR:3→3'-plough COMIT AOR:3→3'-dig LNK LNK earthworm
 35007 *tu-nui-łob nui-ŋu. tce nui c-tu-nurdor tce*
 IPFV-AUTO-come.out SENS-be LNK DEM TRAL-IPFV-collect LNK
 35008 *tu-ndze nui-ŋu.*
 IPFV-eat[III] SENS-be
 35009 ‘When (people) plough and dig the earth, earthworms come out, and
 35010 crows go (into the fields), pick (the earthworms one by one) and eat
 35011 them.’ (140511 qajdo kW qandzxe tundze, 21-22)

35012 Although all verbs in examples (3) and (4) are finite, only the last verb of the
 35013 chain can be considered to be fully conjugated, while the non-final verbs (*pjuu-*
 35014 *nuucurŋjo* in 3 and *c-tu-nurdor* in (4) lack an element of their conjugation. For this
 35015 reason, it is possible to consider that the last member of a periphrastic TAME
 35016 chain is the main verb, and that all preceding clauses are subordinate.

35017 **25.1.4 Unmarked embedded clauses**

35018 Embedded clauses such as *tc^{hi} a-tx-fse-a* in (5) lack any formal subordinating mor-
 35019 phology. However, their subordinating status is shown by the fact that they occur inside the main clause, located between two constituents: in (5), the em-
 35020 bedded clause is preceded by the transitive subject *txçime kuu* (which is not an
 35021 argument of that clause) and followed by the main verb.
 35022

- 35023 (5) *txçime kuu [tc^{hi} a-tx-fse-a] tce mÿ-wy-mto-a kuu*
 35024 princess ERG what IRR-PFV-be.like-1SG LNK NEG-INV-see:FACT-1SG SFP
 35025 ‘What should I do (in order) not to be seen by the princess?’ (140505
 xiaohaitu-zh, 78)

35026 In (6), the clause *u-mnaꝝ jy^z-z-nymbju* is inserted between the main verb *pjy-mto*
 35027 and its transitive subject *rjylpu nuu kuu*. This transitive subject is coreferent with
 35028 the 3SG possessor of *u-mnaꝝ*, object of the verb *jy^z-z-nymbju* ‘it dazzled it’ in the
 35029 embedded clause, and the presence of the ergative *kuu* shows that it receives its
 35030 case marking from the main verb rather than from the embedded subordinate
 35031 clause.

- 35032 (6) *ty-wi nuu kuu ty-ri nuu rjylpu*
 35033 INDEF.POSS-grandmother DEM ERG INDEF.POSS-thread DEM king
u-tc^habla sc^hiz pjy-k-yz-nyndundo-ci
 35034 3SG.POSS-yard APPROX.LOC IFR.IPFV-PEG-PROG-take.here.and.there-PEG
tce, rjylpu nuu kuu [u-mnaꝝ jy^z-z-nymbju] zo pjy-mto tce,
 35035 LNK king DEM ERG 3SG.POSS-eye IFR-CAUS-be.bright EMPH IFR-SEE LNK
 35036 ‘The old woman was taking the (well-spun) thread_i here and there in the
 35037 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)

35038 Unmarked embedding is also found in serial verb constructions. In (7), the
 35039 manner clause with *stu* ‘do like’ (§25.4.1.2) occurs between the instrument *u-jas*
 35040 *kuu* ‘with its paw’ and *lu-z-naꝝje* ‘it reaches into it’. The presence of the causative
 35041 prefix *z-* indicates that the instrumental phrase is selected by *lu-z-naꝝje* (§17.2.5.8),
 35042 not by *tu-ste*.

- 35043 (7) *tce uu-jas kuu [ki tu-ste] lu-z-naꝝje*
 35044 LNK 3SG.POSS-hand ERG DEM:PROX IPFV-do.like[III] IPFV-reach.into[III]
nuu-ŋu
 35045 SENS-be
 ‘(The cat) reaches with its paw (into the whole) like this.’ (27-spjaNkW, 48)

35046 The examples (5), (6) and (7) above illustrate that unmarked embedded finite
 35047 clauses have a considerable variety of semantic functions, including purposive
 35048 clauses (§25.5.4), temporal clauses of simultaneity (§25.3.4.2) and manner clauses
 35049 (§25.4.1), respectively.

35050 25.1.5 Serial verb constructions

35051 In Japhug, as in Tshobdun (J. T.-S. Sun 2012: 490–491), we find serial verb con-
 35052 structions comprising two verbs sharing TAME category and subject (and often,
 35053 but not in all cases, objects).

35054 One of the verbs expresses the main action, and the other describes the man-
 35055 ner in which the action is performed (§25.4.1). Unlike Tshobdun, there is no
 35056 constraint in Japhug against inserting a linker such as *tce* between the two verbs
 35057 in the serial construction, as shown by example (8).²

- 35058 (8) [ui-*kar* *nui ki* *tu-ste]* *tce*
 3SG.POSS-wing DEM DEM.PROX IPFV-do.like[III] LNK
 35059 [*tu-z-mbri*] *nui-ηu*
 IPFV-CAUS-make.noise SENS-be
 35060 ‘(The grasshopper) makes noise by (moving) its wings like this.’
 35061 (26-kWrNukWGndZWr, 78)

35062 In some cases, embedding of the first clause into the second one can occur
 35063 (§25.1.4), suggesting that a syntactic hierarchy exists between them.

35064 There are three main types of serial verb constructions in Japhug, involving
 35065 deideophonic verbs (§25.4.1.1), simulative verbs (§25.4.1.1) and bipartite verbs (treated
 35066 in §11.6.3 in another chapter). Constructions that are superficially similar to serial
 35067 verb constructions but better analyzed as finite complement clauses are discussed
 35068 in §24.2.3.3.

35069 25.1.6 Coordination and parataxis

35070 When none of the four set of criteria described above (§25.1.2, §25.1.3, §25.1.4,
 35071 §25.1.5) are applicable, there remain a residue of clauses in parataxis or linked by
 35072 *tce* (§8.2.4.3) or *q^he*, without a clear subordinating hierarchy.

² This 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.

35073 In (9), all verbs are in the Imperfective, without correlative element (§25.1.2), fi-
 35074 nal copula (§25.1.3) or embedding (§25.1.4). The verbs *pjuu-sat* ‘it kills it’ and *ju-yut*
 35075 ‘it brings it’ share the same subject and object, but unlike in serial constructions
 35076 (§25.1.5) where both verbs express two aspects of the same action, *pjuu-sat* and
 35077 *ju-yut* refer to two actions occurring one after the other.

35078 (9) *tce uu-pci ju-ce tce, ci ci pÿxtcui pjuu-sat ju-yut,*
 LNK 3SG.POSS-outside IPFV-go LNK one one bird IPFV-kill IPFV-bring
 35079 *ci ci þzui 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
 35080 *ju-yut.*
 IPFV-bring

35081 ‘(When her cubs are hungry, the cat mother) goes out and sometimes kills
 35082 a bird and brings it, sometimes kills a mouse and brings it, sometimes
 35083 kills a mole or something and brings it (to them).’ (21-lWLU, 37)

35084 Simple coordination and parataxis either express temporal subsequence (§25.3.3.1)
 35085 as in (9) between the first clause and all the following ones, and between *pjuu-sat*
 35086 and *ju-yut* in each of the three clauses, or disjunction (§25.6.4), as that between
 35087 the three pairs of clauses in (9).

35088 Coordination with *tce* and *q^he* can in addition be used to indicate logical con-
 35089 sequence (§25.5.1) and neutral addition (§25.6.2.1).

35090 25.1.7 Tail-head linkage

35091 Tail-head linkage is a type of linking strategy whereby an element (generally
 35092 the verb) of one clause is repeated in the following clause (see de Vries 2005
 35093 for a typological overview). Such constructions are well-attested in languages
 35094 of Western Sichuan (see for instance Sihong Zhang 2013: 688–693). In Japhug,
 35095 they occur predominantly with parataxis and loose temporal succession linking
 35096 with finite clauses coordinated by linkers such as *tce* or *q^he*. It is a very common
 35097 strategy both for ensuring narrative coherence, and providing time for the sto-
 35098 ryteller to prepare the narration of the following events without hesitating and
 35099 using speech fillers (§10.3).

35100 Tail-head linkage can involve an entire sentence, as in (10), but often leaves
 35101 out a constituent: for instance in (11) the intransitive subject *tr-pytso munuu* is not
 35102 repeated.

- 35103 (10) [nua-me stu kui-xtci nua p̥y-mbi-nua], tce
 3PL.POSS-daughter most SBJ:PCP-be.small DEM IFR-give-PL LNK
- 35104 [nua-me stu kui-xtci nua p̥y-mbi-nua tce], tce tc^he me
 3PL.POSS-daughter most SBJ:PCP-be.small DEM IFR-give-PL LNK LNK girl
- 35105 nua to-numbrypu,
 DEM IFR-ride
- 35106 ‘They gave (him) their daughter (in marriage), and as they gave (him)
 35107 their daughter (in marriage), the girl mounted (a horse).’ (2002 qaCpa, 62)
- 35108 (11) tcendyre [tx-pxtso nunuu li sungu zuu jo-ce]. [sunrguu zuu jo-ce] tce
 DEM boy DEM again forest LOC IFR-go forest LOC IFR-go LNK
- 35109 tcendyre, p^haergot nua kui tx-pxtso nua pa-mto tce
 LNK boar DEM ERG boy DEM IFR:3→3'-see LNK
- 35110 ‘The boy went again into the forest, and as he went into the forest, the
 35111 boar saw the boy.’ (140428 yonggan de xiaocafeng-zh, 232-233)

35112 In some cases, the verb form is slightly different in the repeated clause. For instance in (12), the verb form in the first clause is in inverse configuration 3'→3PL
 35113 (the TAME is probably Inferential, though in this context the contrast between
 35114 Inferential and Aorist is neutralized, §14.3.2.7) while that in the second clause is
 35115 in direct configuration 3SG→3'.³

- 35117 (12) sq^{hi} u-rkua nutcu kó-wy-sui-ymdzuu-nua. sq^{hi} u-rkua
 tripod 3SG.POSS-side DEM:LOC IFR-INV-CAUS-sit-PL tripod 3SG.POSS-side
- 35118 nutcu ka-sui-ymdzuu tce, (...) ra to-ti
 DEM:LOC AOR:3→3'-CAUS-sit LNK PL IFR-say
- 35119 ‘(The woman) had them sit by the hearth. She had them sit by the hearth,
 35120 and said (...).’ (160703 poucet3, 48-49)

35121 25.2 Conditional constructions

35122 Conditional constructions are biclausal, comprising a subordinate clause (the protasis) and a main clause (the apodosis). The apodosis describes a result which
 35123 takes place if the condition in the protasis is fulfilled. Depending on whether the
 35124 protasis is a fact or a hypothetical situation, several types of conditionals can

³ Aorist is used in the second clause of (12) to mark a point of temporal reference, §21.5.1.4, §25.3.4.1.

be distinguished: real, concessive, counterfactual and hypothetical. Some temporal clauses, such as iterative coincidence (§25.3.1), can also be considered to be a subtype of conditionals, but are treated in §25.3.

35129 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.

35134 Non-past TAME categories, in particular the Factual Non-Past (13) or the Sen-
35135 sory (14) are used when the protasis concern a present state or an ongoing action
35136 whose truth value is known to the speaker, as in (13) and (14).

- 35137 (13) [pynmawombyr tu~tu-ŋu] ny, pu-ta-suixext nuu nuu-ndun
 ANTHR COND~2-be:FACT ADD AOR-1→2-teach DEM IMP-read
 35138 ra
 be.needed:FACT
 35139 ‘If you (really) are Padma ’Od’bar, recite (the mantra) that I have taught
 35140 you.’ (Norbzang 2005, 249)

35141 (14) [turme puu~puu-maŋ] ny, a-ku puu-sx^phar-a ŋu
 person COND~SENS-not.be ADD 1SG.POSS-head IPFV-shake-1SG be:FACT
 35142 tce tce, jx-p^hyo
 LNK LNK IMP-flee
 35143 ‘If (the thing in the tree) is not a man, I will shake my head, and you (ha
 35144 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).

- 35147 (15) [turjw laχtcʰa cʰo rŋul ra mu~my-jy-tu-yut] ny, nskinu,
riches thing COMIT silver PL COND~NEG-AOR-2-bring ADD FILLER
35148 pjui-ta-sat ηu
IPFV-1→2-kill be:FACT
35149 'If you do not bring goods and money, we will kill you.' (160706 poucet6,
35150 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

35153 (removing bandages) has been applied, when the action or change of state in the
 35154 protasis cannot be directly observed.

- 35155 (16) *kuacnui-rzaš jamar t̪r-tsu tce tce pjau-rle tce tu-rtoš tce,*
 seven-day about AOR-pass LNK LNK IPFV-untie[III] LNK IPFV-look LNK
 35156 *tce u-tó-pe ny tce nuš ma my-ra,*
 LNK QU-IFR-be.good ADD LNK DEM apart.from NEG-be.needed:FACT
 35157 *u-mú-to-pe ny tce li tu-xtcyr ny.*
 QU-NEG-IFR-be.good ADD LNK again IPFV-attach be:FACT
 35158 ‘After seven days, (the doctor) unties (the splint) and looks, if the (the
 35159 fracture) has healed, (the splint) is not needed anymore, if it has not
 35160 improved, (the doctor) attaches (the splint) again.’ (140426 laxthab, 11-13)

35161 Although the postposition coming after the verb in the protasis is almost al-
 35162 ways *ny* as in the examples above, this is not a requirement; for instance in (17)
 35163 the form *mu~my-nú-wy-sui-q^hrut* ‘if one does not scrape it with it’ in the protasis
 35164 is rather followed by *q^he*.

- 35165 (17) *tce [tu-ndzruu kuu mu~my-nú-wy-sui-q^hrut] q^he*
 LNK GENR.POSS-nail ERG COND~NEG-AOR-INV-CAUS-scrape LNK
 35166 *mužj-ŋgra.*
 NEG:SENS-ACaus:cause.to.fall
 35167 ‘(Knits are firmly attached) and will not detach unless one scrapes them
 35168 with one’s nail.’ (21-mdzadi, 117)

35169 In reduplicated conditional forms, the negative prefix *mu-* has the special form
 35170 *mu~my-* (§13.1.1), while no such vowel alternation occurs with negative prefixes
 35171 in Interrogative forms (*u-mú-to-pe* in 16) or suppletive negative verbs (14).

35172 Apart from reduplicated conditional and Interrogative, a third way of marking
 35173 the protasis in a real conditional construction is the Irrealis (§21.4.1.5). While the
 35174 Irrealis usually marks counterfactuals (§25.2.4) conditionals, it also occurs in real
 35175 conditionals as in (18) and (19), in particular in the case of possible but not highly
 35176 frequent events. The Irrealis only very rarely follows by *ny*, and most commonly
 35177 occurs with the linker *tce*.

- 35178 (18) *a-nuš-nat-nuš tce tu-tc^ha ny tu-tc^ha nuš, nyki*
 IRR-PFV-be.tired-PL LNK one-pair LNK one-pair DEM electric.wire
 35179 *<dianxian> u-šaš, q^he suku u-šaš nautcu tu-nuna-nuš tce*
 3SG.POSS-ON LNK treetop 3SG.POSS-ON DEM LOC IPFV-rest-PL LNK
 35180 ‘If/Whenever (the swallows) are tired (from flying), they rest in pairs on

25 Other types of multiclausal constructions

- 35181 electric wires or on trees.' (03-mWrmWmbjW-zh, 54-55)
- 35182 (19) *k^huna nu a-tv-ngo tce tcendyre pu-snu kuu-fse pu-ŋu*
dog DEM IRR-PFV-be.ill LNK LNK IPFV-be.mad SBJ:PCP-be SENS-be
35183 'If a dog gets ill (from rabbies), it will become like mad.' (29-chWsYu, 3-4)

35184 25.2.2 Necessary condition

35185 Necessary condition ('only if') can be expressed using the postposition *kósmuz*
35186 'only after' (§8.2.11, §25.3.3.2) as connecting element between the two clauses.
35187 The protasis selects the Irrealis, the apodosis is in the Imperfective and the whole
35188 construction is under the scope of the modal verb *ra* 'be needed' as in (20) and
35189 (21).

- 35190 (20) *nua kysufse kuu a-pui-ts^hi-nua tce nua kósmuz ny kysufse*
DEM ALL ERG IRR-PFV:DOWN-drink-PL LNK DEM only.then ADD all
35191 *c^hwi-ts^hu-nua ra tce,*
IPFV-be.fat-PL be.needed:FACT LNK
35192 'It is only if all (of the pigs) get to eat (hogwash) that they will all grow
35193 fat.' (so that a person has to be appointed to prevent the pigs from
35194 fighting, otherwise the weaker pigs would get nothing to eat).' (160708
35195 paRtshi WkWrWru, 13)
- 35196 (21) *zraβ a-pui-tu kósmuz ny ts^hynmu c^hwi-rypwu tce*
male.goat IRR-IPFV-exist only.then ADD ewe IPFV-bear.young LNK
35197 *tce nua pu-mp^huul ra.*
LINK DEM IPFV-reproduce be.needed:FACT
35198 'Ewe can bear young and reproduce only if a male goat is present.'
35199 (05-qaZo, 6)

35200 25.2.3 Concessive conditional

35201 There are three types of concessive conditional constructions: scalar ('even if'),
35202 alternative ('whether ... or') and universal ('whatever, whenever, wherever etc')
35203 in Japhug. These conditional present two morphological commonalities concerning
35204 the verb in the protasis.

35205 First, in the majority of cases, this verb takes the Autive prefix *-nu-* §19.1.4,
35206 Jacques 2014a: 298–300), sometimes with emphatic gemination to *-nnu-*. Second,
35207 it never takes conditional initial reduplication (§12.4.1.2) or the Interrogative pre-
35208 fix (§21.7.4.2) unlike the verb in the protasis of real conditionals (§25.2.1).

35209 25.2.3.1 Scalar concessive conditional

35210 In scalar concessive conditionals, the protasis is followed by the scalar focus
 35211 marker *kuny* ‘also, even’ (§9.1.6.1), and contains a verb in the Past Imperfective
 35212 (22) or the Imperfective (23) with the autive prefix (§19.1.4).

- 35213 (22) *tx-mt^hum ndyre, [nur-kui-y^hdi puu-nuu-ηu] kuny*
 INDEF.POSS-meat LNK AOR-SBJ:PCP-be.smelly PST.IPFV-AUTO-be also
 35214 *tu-ndze cti.*

IPFV-eat[III] be.AFF:FACT

35215 ‘Meat_i, (crows) eat it_i, even if it_i has become smelly.’ (22-qajdo, 21)

- 35216 (23) *[c^húr-wy-nuu-βluu] kuny, tu-nuat eo ηu ri,*
 IPFV-INV-burn also IPFV-be.ignited ADVERS be:FACT LNK

35217 *wi-βryt nuu jaav zo q^he, maka*
 3SG.POSS-charcoal DEM be:black:FACT EMPH LNK at.all
 35218 *nuu-yy-mpje my-c^ha.*

IPFV-CAUS-be.warm[III] NEG-can:FACT

35219 Even when one burns it, although it does ignite, its charcoal is black and
 35220 it does not warm anything. (17-thowum, 8-10)

35221 25.2.3.2 Alternative concessive conditional

35222 Alternative concessive conditional constructions express that the outcome in
 35223 apodoses will occur irrespective of a list of alternative possibilities, indicated by
 35224 several protases.

35225 In (24), each of the protases contains copula *puu-nu-ηu* in Past Imperfective
 35226 (§21.5.3.1) Autive (§19.1.4) form, and share a single apodosis. In the clause *qajuu*
 35227 *kuu tu-ndze puu-nnuu-ηu*, this copula is combined with the Imperfective verb *tu-ndze*
 35228 ‘it eats it’ to build a Periphrastic Past Imperfective construction (§21.5.3.5).

- 35229 (24) *[tui-cya puu-kui-ngruu puu-nnuu-ηu],*
 INDEF.POSS-tooth IPFV-SBJ:PCP-ACAUS:break PST.IPFV-AUTO-be

35230 *[puu-kui-y^htsur puu-nnuu-ηu] q^he, [qajuu kuu tu-ndze*

AOR-SBJ:PCP-crack PST.IPFV-AUTO-be LNK bug ERG IPFV-eat[III]

35231 *puu-nnuu-ηu], nuufse tu-kui-m^hym puu-nnuu-ηu], nuunuu*
 PST.IPFV-AUTO-be like.that IPFV-SBJ:PCP-hurt PST.IPFV-AUTO-be DEM

35232 *kuu wuma zo nuismyn.*
 ERG very EMPH heal:FACT

35233 ‘Whether one’s tooth is broken, cracked, whether one has a decayed

25 Other types of multicausal constructions

35234 tooth or whether it simply hurts, he (a particular dentist) treats it very
 35235 well.' (27-tApGi, 142-145)

35236 The presence of a periphrastic TAME category with a copula is not required.
 35237 In (25), the protases contain an Aorist Autive verb form *ky-nuu-rŋgwi-nuu*.

- 35238 (25) [stymku kuu-fse *ky-nuu-rŋgwi-nuu*], [suku *wi-pa*
 pasture SBJ:PCP-be.like AOR-AUTO-lie.down-PL tree.top 3SG.POSS-under
 35239 *ky-nuu-rŋgwi-nuu*], [pras-pa *ky-nuu-rŋgwi-nuu*],
 AOR-AUTO-lie.down-PL cliff-under SBJ:PCP-be.like
 35240 *unumuu* *nau-ŋga wi-tas* *pjui-ta-nuu*.
 AOR-AUTO-lie.down-PL DEM 3PL.POSS-clothes 3SG.POSS-on IPFV-put-PL
 35241 'Whether (travelers) sleep on pastures, under trees or in caves, they put it
 35242 on their blankets.' (30-mboR, 38-39)

35243 The alternative is often between the affirmative and negative versions of the
 35244 same event (polar alternative concession), a meaning close to that of the scalar
 35245 concessive conditional. In such cases, the conditional constructions has two pro-
 35246 tases, the first in affirmative form, and the second with the corresponding nega-
 35247 tive form as in (26). The same apodoses can be repeated after each protasis.

- 35248 (26) [tui-sum *pui-a<nuu>ri*] *ny ju-kui-ce*,
 GENR.POSS-mind PST.IPFV-<AUTO>go[II] LNK IPFV-GENR:S/O-go,
 35249 [*muu-pui-a<nuu>ri*] *ny ju-kui-ce* *pui-ra*
 NEG-PST.IPFV-<AUTO>go[II] LNK IPFV-GENR:S/O-go PST.IPFV-be.needed
 35250 'One had to go whether one liked it or not.' (14-siblings, 215)

35251 The alternative concessive conditional is one of the few constructions where
 35252 even transitive verbs such as *nyla* 'agree' occur in the Past Imperfective (§21.5.3.1).⁴

- 35253 (27) [*pa-n-nyla*] *ce-a*, [*muu-pa-n-nyla*]
 PST.IPFV:3→3-AUTO-agree LNK IPFV:go-1SG
 35254 *ny* *ce-a ra*
 NEG-PST.IPFV:3→-AUTO-agree LNK IPFV:go-1SG be.needed:FACT
 35255 'I will go whether he agrees or not.' (elicited)

⁴ The verb *nyla* 'agree' selects the UPWARDS orientation, as shown by the form *to-nyla* 'he agreed' in example (169), §16.2.1.7.

35256 A more concise type of alternative concessive construction shown in (28) avoids
 35257 repeating the content of the protasis and of the apodosis, and marks the alterna-
 35258 tive by combining the affirmative (*pui-nui-ŋu*) and negative (*pui-nui-maŋ*) copulas
 35259 after the verb in the protasis.

- 35260 (28) [ta-nyla pui-nui-ŋu pui-nui-maŋ] ce-a
 35261 AOR:3→3-agree PST.IPFV-AUTO-be PST.IPFV-AUTO-not.be IPFV:go-1SG
 35262 *ra*
 be.needed:FACT
 35263 ‘I will go whether he agrees or not.’ (elicited)

35263 Another way to indicate alternative concession is the interrogative particle *ci*
 35264 (§10.4.2) as in (29).

- 35265 (29) [nunja ŋu] ci, [mbro ŋu] ma, pjui-nvndyŋ
 35266 cow be:FACT SFP horse be:FACT LNK IPFV-be.poisoned
 35267 *pui-ŋgryl*
 SENS-be.usually.the.case
 ‘Whether it is a cow or a horse, they get poisoned.’ (25-qarmWrwa, 21)

35268 In addition to these constructions, polar alternative concession ‘whether or
 35269 not’ can be expressed by a construction combining a negative existential verb
 35270 with biclausal complements, comprising the same verb in bare root form followed
 35271 by the bare root prefixed with the negative prefix *m-*, as in (30). This unusual
 35272 construction is discussed in more detail in §16.2.2.2.

- 35273 (30) [[ce] [m-ce] tu-me] ma kx-nyma tu-cʰa
 35274 BARE.INF:go NEG-BARE.INF:go 2-not.exist:FACT LNK INF-work 2-can:FACT
 35275 *me qʰe naŋtcuŋ* cti
 not.exist:FACT LNK be.the.same:FACT be:FACT
 35276 ‘(It does not matter) whether you go or not, you are not able to do
 anything, it amounts to the same.’ (elicited)

35277 25.2.3.3 Universal concessive conditional

35278 Universal concessive conditional constructions comprise a protasis with an in-
 35279 terrogative pronoun (in free-choice indefinite function, §6.6.6, §23.7) and a main
 35280 verb in the Aorist or Past Imperfective. In addition, the autive (§19.1.4) occurs
 35281 either in the protasis, with emphatic reduplication as (31) or (33) or in the main

25 Other types of multiclausal constructions

35282 clause as in (32). The emphatic marker *zo* (§26.1.1.5) often follows the subordinate
 35283 clause.

- 35284 (31) *kumcku nuu tce, ui-dauχun wuma zo mum tce, [...]*
 garlic DEM LNK 3SG.POSS-fragrance really EMPH be.tasty:FACT LNK
 35285 [*tc^hi <cai> t̪y-wy-nuu-βzui-βzu*] *zo pjui-tu ra.*
 what dish AOR-INV-AUTO-EMPH~make EMPH IPFV-exist be.needed:FACT
 35286 ‘Garlic has a nice smell, (...), whatever dish one prepares, there has to be
 35287 (garlic in it).’ (07-kWmCku, 26)

- 35288 (32) *tc^homba tce [t^hyjtcu ui-βjiz t̪y-ye] q^he ju-nnuu-yi*
 cold LNK when 3SG.POSS-wish AOR-come[II] LNK IPFV-AUTO-come
 35289 *cti ma*
 be.AFF:FACT LNK
 35290 ‘A cold (the disease) comes whenever it wants (it occurs spontaneously).’
 35291 (22-tAmbrWm, 7)

- 35292 (33) [*tc^hi puu-nuu-fsy~fse*] *zo ny-rca*
 what PST.IPFV-AUTO-EMPH~be.like EMPH 2SG.POSS-together
 35293 *tu-kuu-tsum-a ra*
 IPFV-2→1-take.away-1SG be.needed:FACT
 35294 ‘In any case (whatever (the circumstances) are like), take me with you.’
 35295 (07-deluge, 59)

35296 Examples of universal concessive conditionals without autive prefix are however
 35297 also attested, as in (34).

- 35298 (34) [*ŋotcu nuu-tuu~touŋ*] *zo wuma zo sxydauŋ*
 where AOR-EMPH~come.out EMPH really EMPH be.annoying:FACT
 35299 ‘No matter where it grows, it is very annoying.’ (5-khArWm, 19)

35300 Universal concessive conditionals are semantically close to correlative relative
 35301 clauses with free-choice interrogative pronouns (§23.2.5) such as (35).

- 35302 (35) *kuz tce [azo tc^hi tuu-t̪y-stu-t-a] nuu ty-ste*
 INTERJ LNK 1SG what TOTAL~AOR-do.like-PST:TR-1SG DEM IMP-do.like[III]
 35303 *je*
 SFP
 35304 ‘Come one, do everything in the same way as me.’ (In whatever way I act,
 35305 act in this way) (140511 xinbada-zh, 252)

35306 First, the verb *tu~ty-stu-t-a* totalitative initial reduplication (§23.3.2), a specificity of relative clauses.

35308 Second, the interrogative pronoun *tq^{hi}* has a different syntactic function in
 35309 these constructions. In the correlative relative (35), *tq^{hi}* is the relativized element,
 35310 and serves as direct object of both the verb in the subordinate clause and that in
 35311 the main clause.⁵ In the universal concessive conditionals (31) and (33), *tq^{hi}* in the
 35312 subordinate clauses has no syntactic role in the main clause.

35313 25.2.4 Counterfactuals

35314 In counterfactual constructions, the protasis describes a condition that is known
 35315 to be false, and the apodosis indicates an outcome that would have occurred if
 35316 the condition had been true. In Japhug, counterfactual conditionals have strict
 35317 requirements on TAME marking in both the protasis and the apodosis. The verb
 35318 in the protasis is in the Irrealis (§21.4.1.5), and the Past Imperfective is required
 35319 in the apodosis even for transitive dynamic verbs (§21.5.3.4), as illustrated by (36)
 35320 and (37).⁶

- 35321 (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
 35322 a-pui-ŋu] tce, nuunu wuma zo
 IRR-PST.IPFV-be LNK DEM really EMPH
 35323 pui-nr-pe-t-a ma
 PST.IPFV-TROP-be.good-PST:TR-1SG LNK

35324 ‘If you had come and helped me just right before, I would have
 35325 appreciated it.’ (140427 liangge shibiang he qiangdao-zh, 24-25)

- 35326 (37) t^ham tce nyki χawo [azo a-mi a-pui-tu] tce, nuu rjylpu
 now LNK FILLER if.only 1SG 1SG.POSS-leg IRR-IPFV-exist LNK DEM king
 35327 u-tcui nuu ui-rkui nutcu kui-ryzi nuu azo
 3SG.POSS-son DEM 3SG.POSS-side DEM:LOC SBJ:PCP-stay DEM 1SG
 35328 a-pui-ŋu-a pui-ra
 IRR-IPFV-be-1SG PST.IPFV-be-needed

35329 ‘Now, if only I had legs, the one staying next to the prince would have
 35330 had to be me.’ (said by the little mermaid, who has no legs) (150819)

⁵ See §14.4.2 for an account of the argument structure of the simulative verb *stu* ‘do like’.

⁶ In 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.

35331 haidenver-zh, 149)

35332 25.3 Temporal clauses

35333 25.3.1 Iterative coincidence

35334 Iterative coincidence is a biclausal construction comprising a temporal subordinate clause (*A*) and a main clause (*B*), expressing that each time the event in *A*
 35335 takes place, that in *B* necessarily follows, and that this has taken place several
 35336 times in the past. It can be generally translated as ‘each time *A* then *B*’. As
 35337 shown by (38) and (39), the temporal clause generally takes a verb in the Aorist
 35338 with initial reduplication (§12.4.1.3) like the protasis of a conditional construction
 35339 (§12.4.1.2, §25.2.1), followed by the emphatic marker *zo* (§26.1.1.5).

- 35341 (38) [turme ra ju~jy~ye-nuu] *zo* tu-nurmyzu p^jy-ηu *tce*
 people PL ITER~AOR-come[II]-PL EMPH IPFV-show.off IFR.IPFV-be LNK
 35342 ‘Each time people came, he would show off.’ (2011-10-qajdo, 2)

- 35343 (39) *tua-mui kur~ka-lyt* *zo* *zduumlabrua* *ju-nuu-łob*
 sky ITER~AOR-release EMPH snail IPFV-AUTO-come.out
 35344 *ŋu*
 be:FACT
 35345 ‘Each time it rains, snails come out.’ (elicited)

35346 Alternatively, unreduplicated Aorist in its function to mark a temporal refer-
 35347 ence point (§21.5.1.4, §25.3.4.1) can be interpretable as iterative coincidence when
 35348 the verb in the main clause is in the Imperfective, as in (40).

- 35349 (40) *tce* [*lx-zo-nuu*] *q^he* *tuturca lu-zo-nuu*,
 LNK AOR:UPSTREAM-land-PL LNK together IPFV:UPSTREAM-land-PL
 35350 [*t^huu-nuiqbumbjom-nuu*] *q^he* *tuturca c^hui-nuiqbumbjom-nuu*,
 AOR:DOWNSTREAM-fly-PL LNK together IPFV:DOWNSTREAM-fly-PL
 35351 ‘When they land they all land together, when they fly they all fly
 35352 together.’ (23-scuz, 79-80)

35353 25.3.2 Precedence

35354 Three types of constructions are used to express temporal precedence between
 35355 the event described in the main clause precedes that of the temporal subordinate
 35356 clause: neutral precedence, immediate precedence and terminative.

These temporal clauses normally occur before the main clause, hence resulting in a non-iconic temporal relationship between the two clauses, since the first (subordinate) clause describes an event occurring *after* that in the second one (the main clause).

25.3.2.1 Neutral precedence

There is only one available construction in Japhug to express that the action of the main occurs before that of the temporal clause without further aspectual specifications: clauses with the postposition *cuŋgu* ‘before’ (§8.2.11). The verb in *cuŋgu* clauses is required to be in the Imperfective (§21.2.3). In (41) for instance, replacing the Imperfective form *nui-si* by the corresponding Aorist (*nui-si*), an infinitive (*kṛ-si* or any other finite or non-finite form would result in a utterly ungrammatical sentence.

- (41) [nui-si] cuŋgu pui-nui-NGyt-ndzi
IPFV-die before AOR-AUTO-ACAUS:separate-DU
'They had divorced before she died.' (14-siblings, 331)

A syntactic error involving a verb in a temporal clause in *cuŋgu* ‘before’ is presented in §24.7.

25.3.2.2 Immediate precedence

Immediate precedence can be expressed by three constructions.

First, a clause in the Factual Non-Past (§21.3.1) with linker *txkʰa* ‘about to’ can describe an action that took place just before that of the main clause, as in (§42) and (§43).

- (42) *damu kui* [yi-ndzi] *txkʰa tce purwuu ui-eki uzo kui*
ANTHR ERG come:FACT-DU about.to LNK donkey 3SG-DAT 3SG ERG
ta-tut nura ci to-suubjit
AOR:3→3-say[II] DEM IFR-remember LNK
'Lhamo remembered (the word that) she had said to her donkey as they were about to depart (to come here).' (2002 qajdoskAt, 64-5)
- (43) *[ambo]* *txkʰa tce tce nui-mu-a tce, tce a-jas*
burst:FACT about.to LNK LNK SENS-be.afraid-1SG LNK 1SG.POSS-hand

- 35383 *nui-munmu nui-cti q^he*
 IPFV-move SENS-be:AFF LNK
 35384 ‘(When I was aiming), as (the gun) was about to burst, I was afraid and
 35385 my hand moved.’ (28-CAmWGdW, 134-135)

35386 Alternatively, the *ju-* Proximate prefix (§21.6.2) and the Periphrastic Proxi-
 35387 mative (§21.6.2.1) can be used to express this meaning, as illustrated by (44) and
 35388 (45).

- 35389 (44) [cyr juu-jy-azyut] tce (...) uu-kyrme nui pjy-cuu-nqos
 night PROX-AOR-arrive LNK 3SG.POSS-hair DEM IFR-CAUS-hang
 35390 ‘Just before the night fell, (the witch) hung her hair (on the window on
 35391 the tower).’ (140506 woju guniang-zh, 145)
- 35392 (45) turmuu ko-yi tce zatsa qanuu pjy-nyu
 evening IFR-come LNK soon be.dark:FACT IPFV.IFR-be
 35393 ‘The evening came and it was about to be dark (it was getting dark).’
 35394 (140510 fengwang-zh, 55)

35395 25.3.2.3 Terminative

35396 The terminative postposition *myctṣa* ‘until’ (§8.2.9) occurs with finite clauses to
 35397 express the end point of the event described in the main clause. In terminative
 35398 clauses, verbs nearly always take a negative prefix as in (46) and (47), and the
 35399 polarity contrast is neutralized.

- 35400 (46) nui-ky-k^ho nui [muu-t^ha-ckuit] myctṣa
 AOR-OBJ:PCP-give DEM NEG-AOR:3→3'-eat.completely until
 35401 tu-ndze nui-cti.
 IPFV-eat[III] SENS-be.AFF
 35402 ‘(The monkey cannot control its urge to eat), and eats (the things that
 35403 people) have given him until none is left (until he has completely finished
 35404 eating it).’ (19-GzW,
- 35405 (47) [“jy-ce jy” muu-ty-tuit-a] myctṣa ma-nui-tur-munmu
 IMP-go be.allowed:FACT NEG-AOR-say[II]-1SG until NEG-IMP-2-move
 35406 ra
 be.needed:FACT
 35407 ‘Don’t move until I tell (you) that you can go.’ (qala 2002, 58)

35408 Non-negative terminative clauses are rare but attested, as in (48), especially
 35409 when the main clause is in negative form itself.

- 35410 (48) [zimkʰym zo tu-ndza-nui] myčtsa kx-mqlas̥ muáj-βze.
 long.time EMPH IPFV-chew-PL until INF-swallow NEG:SENS-make[III]
 35411 '(The animals) do not swallow until they have chewed it for along time.'
 35412 (19-qachGa mWntoR, 204)

35413 25.3.3 Subsequence

35414 Temporal succession can be expressed by simple coordination, the order of the
 35415 clauses mirroring the temporal sequence of the events they describe (§25.1.6).
 35416 The present section however focuses on subordinating construction devoted to
 35417 encoding temporal subsequence between the subordinate clause and the main
 35418 clause.

35419 25.3.3.1 Neutral subsequence

35420 The most common way to specify temporal succession between two clauses is
 35421 to use the locative/temporal relator noun *wi-qʰu* ‘after, behind’ (§8.3.4.2). The
 35422 temporal clauses are in finite form, in particular in the Aorist as in (49) and (50).

- 35423 (49) [<weixiao> kuβde-xpa puu-stʰut-a] wi-qʰu tce tcendyre,
 nursing.school four-year AOR-finish-1SG 3SG.POSS-after LNK LNK
 35424 <fenpeigongzuo> tce սdturjxt lɣ-wy-lat-a-nu
 assign.work LNK TOPO AOR:UPSTREAM-INV-release-1SG-PL
 35425 ‘After I finished the four years of nursing school, they assigned me a
 35426 work position and sent me to Gdongbrgyad.’ (140501 tshering skyid, 118)

35427 The relator noun *wi-qʰu* can be optionally followed by the linker *tce*, by locative
 35428 postpositions such as *ri* (§8.2.4.1) and can even be modified by the adverb *tsa* ‘a
 35429 little’ as in (50).

- 35430 (50) [smuntʂuy nuuu tʂ-łoʂ] wi-qʰu tsa ri tce tce,
 Pleiades DEM AOR-come.out 3SG.POSS-after a.little LOC LNK LNK
 35431 qandže tu-łoʂ nyu.
 earthworm IPFV-come.out be:FACT
 35432 ‘The (constellation of the) earthworm appears a little after the Pleiades
 35433 have come out.’ (29-mWBZi, 26)

25 Other types of multicausal constructions

35434 Alternatively, and more rarely, the relator *u-mp^hru* ‘after, following’ (§8.3.5)
35435 can be used to indicate temporal subsequence, as in (51).

- 35436 (51) [tui-muu ka-lxt] u-mp^hru nuu tu.
INDEF.POSS-sky AOR:3→3'-release 3SG.POSS-after DEM exist:FACT
35437 ‘It is found after it has rained.’ (23-mbrAZim, 57)

35438 25.3.3.2 Immediate subsequence

35439 Temporal clauses with the immediate converb (§16.6.3) describe an event imme-
35440 diately followed by the action referred to in the main clause (52).

- 35441 (52) tce [nuu tu-tui-łob] zo q^he c^huu-p^hut-nuu
LNK DEM IPFV-IMM:CONV-come.out EMPH LNK IPFV-take.out-PL
35442 c^huu-βde-nuu cti.
IPFV-throw-PL be.AFF:FACT
35443 ‘As soon as it comes out (in fields), (the farmers) pluck it off and throw it
35444 away.’ (16-CWrNgo, 35)

35445 The main clause can also contain a stative verb, depicting a temporary state
35446 beginning just after the event of the converbial clause (53).

- 35447 (53) tce [tu-tui-łob] tce rq^hyrq^hyt zo
LNK IPFV-IMM:CONV-come.out LNK IDPH(II):fresh.and.firm EMPH
35448 jnuu-pa
SENS-AUX
35449 ‘When (this mushroom) has just come out, it is nice and firm.’
35450 (24-zwArqhAjmAG, 15)

35451 Another way to express immediate subsequence is a temporal clause with the
35452 temporal postposition *cimuma* ‘immediately after’ (§8.2.11) taking a clause with a
35453 verb in the Aorist. This construction is semantically very close to the immediate
35454 converb, but more commonly found when the main verb is a stative verb like
35455 *arvurku* ‘be wrinkled’ in (54).

- 35456 (54) nuu tx-łob cimuma tce jnuu-yrvurku
DEM AOR-come.out immediately.after LNK SENS-be.wrinkled
35457 ‘When (the stalk of the fern) has just come out, it is all wrinkled.’
35458 (13-NanWkWmtsWG, 13)

35459 The postposition *kósmuz* ‘only after’ (§8.2.11), which imposes no requirement
 35460 on the TAME category of the verb in the subordinate clause, indicates that the
 35461 event in the subordinate clause is a prerequisite for that in the main clause to
 35462 occur, as shown by (55).

- 35463 (55) [u-mi ra ku-xtcyr-nui] kósmuz t̪-lu pju-tcyt-nuu
 LNK IPFV-tie.up-PL 3SG.POSS-foot PL IPFV-attach-PL only.after
 35464 *nui-ra*
 INDEF.POSS-milk IPFV-take.out-PL SENS-be.needed
 35465 ‘People need to attach the legs (of the female hybrid yak) before milking.’
 35466 (They milk it only after they have attached its legs). (05-qambrW, 19)

35467 25.3.3.3 Ingressive

35468 The ingressive postpositions *cəŋpc̩i* ‘since’, ‘from ... on’ and *pçintçrt* ‘since’ (§8.2.11)
 35469 can take clauses with a verb in the Aorist, indicating the beginning of a period
 35470 lasting up until to the current point of temporal reference (utterance time, or a
 35471 reference point in the past in the case of narratives). The main clause is generally
 35472 in negative form, as in (56) and (57).

- 35473 (56) [ny-wa nui kui-fse jy-ari] cəŋpc̩i nui t̪ce
 2SG.POSS-father DEM SBJ:PCP-be.like AOR-go[II] since DEM LNK
 35474 *mu-jy-a<nu>z̪yut cti t̪ce*
 NEG-AOR-<VERT>arrive be.AFF:FACT LNK
 35475 ‘Ever since your father went (to the mission) like that, he has not come
 35476 back.’ (Norbzang 2005, 206)

- 35477 (57) [ci nura l̪-azyut-nui] cəŋpc̩i nui t̪ce, t̪cʰeme nui
 INDEF DEM:PL AOR:UPSTREAM-arrive-PL since DEM LNK girl DEM
 35478 *tui-yjyn ci kuny nui-nyre ky-mtsʰym pui-me*
 one-time INDEF also AOR-laugh OBJ:PCP-hear PST.IPFV-not.exist
 35479 ‘Even since the other ones had come back (to the king’s palace), the girl
 35480 (that they had brought with them) had not been heard laughing even
 35481 once.’ (qachGa 2003, 321)

35482 25.3.4 Concurrence

35483 25.3.4.1 Temporal reference point

35484 Aside from indicating the temporal relation and ordering between the events in
 35485 the subordinate and the main clauses, temporal clauses can also serve to specify
 35486 a temporal reference point for the main clause. There are four constructions of
 35487 this type.

35488 First, one of the functions of the Aorist is precisely to fix a temporal reference,
 35489 for both past and future events (§21.5.1.4).

35490 Second, prenominal clauses with temporal relator nouns in 3SG possessive
 35491 form such as *u-sŋi* ‘the day when...’, *u-xpa* ‘the year when...’ , *u-ray* ‘the time
 35492 when...’ or other ones as in (58) can mark the time period when the action in
 35493 the main clause takes place. These clauses can be formally as a subtype of finite
 35494 prenominal relative clauses (§23.5.9).

- 35495 (58) [puu-nuudar-ndži] *u-ymur* *nautcu* *tce* *mts^hu nuu*
 AOR-jump-DU 3SG.POSS-evening DEM:LOC LOC lake DEM
 35496 *c^humc^hum* *zo*, *tce*, *tuu-skym* *pjy-syza*
 IDPH(II):slowly EMPH LNK INF:II-dry.up IFR:DOWN-start
 35497 ‘In the evening when they jumped (into the lake), the level of the lake
 35498 started to go down slowly and the lake disappeared’ (2003, Nyimawozer
 35499 2, 105)

35500 Third, the locative postpositions *ri*, *tču* and *zū* (§8.2.4.1) can also occur with
 35501 finite clauses, with a temporal meaning even without temporal relator noun as
 35502 in (59).

- 35503 (59) *ununautcu* *zō* [tuzo puu-kuu-xtei] *ri*
 DEM:LOC ADVERS:TOP GENR PST.IPFV-GENR:S/O-be.small LOC
 35504 *rcauu*, *mtc^hi* *kuu-wxtuu~wxti* *zo* *puu-tu*.
 UNEXP:FOC sea.buckthorn SBJ:PCP-EMPH~be.big EMPH PST.IPFV-exist
 35505 ‘There, when we were young, there was a huge sea buckthorn.’ (140522
 35506 Kamnyu zgo, 344)

35507 Fourth, the temporal postposition *jvz* ‘when’ and its variant *jvznv* (§8.2.11) can
 35508 take finite clauses as in (60).

- 35509 (60) *ma [izora puu-xtci-j] jvz tu-ndza-j*
 LNK 1PL PST.IPFV-be.small-1PL when IPFV-eat-1PL
 35510 *muu-puu-ŋgryl ma*
 NEG-PST.IPFV-be.usually.the.case LNK
 35511 'When we were little, we did not eat it.' (13-NanWkWmtsWG, 177)

35512 25.3.4.2 Simultaneity

35513 There are two types of subordinate clauses expressing an ongoing action or event
 35514 taking place at the same time as that of the main verb without serving as a point
 35515 of temporal reference, unlike the constructions discussed in §25.3.4.1 above.

35516 First, finite clauses with the relator nouns *u-k^huk^ha* 'while' and *u-juja* 'along
 35517 with', 'while' describe events that occur together with, and serve as background
 35518 to the action of the main clause, as in (61) and (62). There are no coreference
 35519 restrictions on the arguments of the subordinate and the main clauses.

- 35520 (61) *tcendyre [tu-nusmyñ] u-k^huk^ha tu-ryma-nu*
 LNK IPFV-treat 3SG-the.same.time IPFV-work-PL
 35521 (The lepers)_i worked (there) while (the doctor) was treating them_i.
 35522 (25-khArWm, 68)
- 35523 (62) *[nuunu ju-rfway] u-k^huk^ha u-se ku-ts^hi*
 DEM IPFV-run 3SG-the.same.time 3SG.POSS-blood IPFV-drink
 35524 *juu-cti.*
 SENS-be:AFF
 35525 '(The lion) drinks (its prey's)_i blood while it_i is (still) running.' (20-sWNgi,
 35526 53)

35527 The relator *u-juja* 'along with' differs from *u-k^huk^ha* in that it implies a simu-
 35528 taneous gradual change of degree in both the event or state of the subordinate
 35529 clause and that of the main clause. The verb of the subordinate clause is generally
 35530 in the Perfective (though a few Imperfective forms are also attested), while that
 35531 of the main clause can be in any TAM form, in particular with incremental initial
 35532 reduplication (§12.4.1.4) indicating gradual increase as in (63).

- 35533 (63) *[uzo tx-wxti] u-juja tce uj-wa^h nuunu*
 3SG AOR-be.big 3SG.POSS-along LNK 3SG.POSS-leaf DEM
 35534 *juu~juu-ndu^h zo juu-ŋu.*
 INCR~IPFV-be.tiny EMPH SENS-be
 35535 'As it grows big, its leaves become more and more tiny.' (09-mi, 18)

35536 The clause in *w-juja*, rather than a gradual change of state across time, can
 35537 indicate change across space, as in (64), where *tx-mbro* does not mean that the
 35538 mountain becomes higher, but rather that the person observing the plants moves
 35539 higher in the mountain.

- 35540 (64) *zgoku tx-mbro w-juja nuu zmbri tu-tuu-ldzuz*
 mountain AOR-be.high 3SG.POSS-along DEM willow INCR~-IPFV-be.flexible
 35541 *zo ñu*
 EMPH be:FACT
 35542 ‘As (ones goes) higher in the mountain, the more the (wood) of the
 35543 willows is flexible.’ (07-Zmbri, 43)

35544 Second, gerundive clauses (§16.6.1.3) are an alternative possibility to indicate
 35545 a background event or state occurring concurrently with the event of the main
 35546 clause, as in (65), though in some cases gerunds rather express manner rather
 35547 than temporal overlap (§25.4).

- 35548 (65) *nunuw nuu-nuy-me riutci, nuu kuany ku-χse nuu-ra.*
 DEM IPFV-APPL-fear[III] LNK DEM also IPFV-feed[III] SENS-be.needed
 35549 *tce [syz-nuy-mu~ymu] zo ku-χse nuu-ra.*
 LNK GER-APPL-fear EMPH IPFV-feed[III] SENS-be.needed
 35550 ‘Even though it_i is afraid of it_j, it_i has to feed it_i, and it_i has to feed it_i
 35551 while being afraid of it_i’ (24-ZmbrWpGa, 110)

35552 25.3.4.3 Opportunity

35553 The postposition *baz* ‘while ... still’ (and its variant *bazny*; its etymology is dis-
 35554 cussed in §5.8.3) has a meaning close to that of Chinese 趁着 <chènzhe> ‘while
 35555 ... still’, ‘taking the opportunity of...’. It requires a finite clause as in (66) and (67).

- 35556 (66) *icqʰa tuu-ndzi nuu nyki, [yurŋi] bazny*
 the.aforementioned INDEF.POSS-skin DEM FILLER be.wet:FACT while
 35557 *nunuw nunaatcu pjuu-tṣaβ-nuu tce tce*
 DEM DEM:LOC IPFV-sew-PL LNK LNK
 35558 ‘They would sew the skin while it was still wet.’ (06-BGa, 53)

35559 The transitive verb *naxtʰyβ* ‘take the opportunity of’ can select as object a finite
 35560 clause or a participial clause with a similar meaning: in (67), both constructions
 35561 redundantly occur.

- 35562 (67) *nua^zora tce ki* *ju^u-nua^zuβ bazny, [kua-nua^zuβ] nu^u*
 2PL LNK DEM.PROX SENS-sleep while SBJ:PCP-sleep DEM
 35563 *k^y-na^χt^hγβ-nu^u* *tce, j^y-p^hyo-nu!*
 IMP-take.the.opportunity-PL LNK IMP-flee-PL
 35564 ‘Flee while this one (the ogre) is sleeping.’ (160706 poucet6, 83-84)

35565 25.4 Manner clauses

35566 25.4.1 Serial verb construction

35567 The main function of serial verb constructions (§25.1.5) in Japhug is to express
 35568 manner. The most grammaticalized serial constructions involve deideophonic
 35569 and simulative verbs.

35570 Serial verbs constructions can themselves occur as complements of a single
 35571 complement-taking verb, resulting in a multiclausal complement (§24.2.4).

35572 25.4.1.1 Deideophonic verbs

35573 Deideophonic verbs (§20.9) commonly occur in serial verb constructions. The
 35574 transitive deideophonic verb *nudru^uβ* ‘gore again and again’ for instance, is only
 35575 attested in serial construction with *tc^hu* ‘gore’ as in (68). The ideophonic verb can
 35576 either follow (68) or precede the main verb (69), the latter construction being by
 35577 far more common.

- 35578 (68) *icq^ha* *srūnmui nu^u to-tc^hu^u to-nudru^uβ* *tce*
 the.aforementioned râkshasî DEM IFR-gore IFR-repeatedly.gore LNK

35579 *pj^y-sat*
 IFR-kill

35580 ‘(The rhinoceros) gored the râkshasî repeatedly and killed her.’
 35581 (28-smAnmi, 403)

- 35582 (69) *srūnmui nu^u to-nudru^uβ* *zo* *to-tc^hu^u*
 râkshasî DEM IFR-repeatedly.gore EMPH IFR-gore

35583 ‘(The rhinoceros) gored the râkshasî repeatedly and killed her.’ (elicited
 35584 on the basis of 68)

35585 25.4.1.2 Similative verbs

35586 The similative verbs *stu* ‘do like’ and *fse* ‘be like’⁷ commonly occur in a serial verb
 35587 construction to indicate the way in which the action takes place. They are always
 35588 the first verb of the series.

35589 The ditransitive verb *stu* (§14.4.2) is found with transitive verbs, and shares its
 35590 subject and object with them, as shown by (70) (generic transitive subject) and
 35591 (71) (3PL→1SG).

- 35592 (70) [ui-ru nui ki tú-wy-stu] [pjúú-wy-qlut]
 35593 3SG.POSS-stalk DEM DEM:PROX IPFV-INV-do.like IPFV-INV-break
 ‘One breaks its stalk like this.’ (14-tasa, 81)

35594 In addition, in some cases it takes the orientation of the other verb (EASTWARDS
 35595 in 71), rather than its intrinsic orientation (UPWARDS as in 70).

- 35596 (71) [azo kuaki ntsui kú-wy-stu-a-nui] tce,
 35597 1SG DEM:PROX always IPFV-INV-do.like-1SG-PL LNK
 [kú-wy-znauk^hrum-a-nui]
 35598 IPFV-INV-punish-1SG-PL
 ‘They tortured me like this.’ (Gesar, 278)

35599 The demonstratives *ki* and *kuaki* in (70) and (71) are semi-objects that are not
 35600 shared with the other verb.

35601 With intransitive verbs, *fse* ‘be like’ is used instead of *stu*. It shares its intransitive
 35602 subject with the other verb, as shown by (72) where both *fse-a* and *ndzur-a*
 35603 have 1SG indexation.

- 35604 (72) azo nui sŋicyr zo kutcu [ki fse-a]
 35605 1SG DEM night.and.day EMPH here DEM:PROX be.like:FACT-1SG
 [ndzur-a] ntsui nua-ra tce
 stand:FACT-1SG always SENS-be.needed like
 35606 ‘I have to stand like this night and day.’ (The divination, 2002, 44)

35607 There are cases when *fse* rather than *stu* occurs with transitive verbs, and
 35608 which could superficially appear to be cases of serial verb constructions with
 35609 transitivity mismatch. In (73) the transitive verb *nuc^hymda* ‘drink with a straw’

⁷ I 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.

35610 is preceded by *fse*, with 1PL coreference between the object of the former and the
 35611 intransitive subject of the latter.

- 35612 (73) *t^huu-rgyz-i* *sna* *nua-me-j* *tce [ki* *tr-fse-j]*
 AOR-be.old-1PL be.good AOR-not.exist-1PL LNK DEM.PROX AOR-be.like-1SG
 35613 *tce [c^húú-wy-nuc^hymda-j]* *cti*
 LNK IPFV:DOWNSTREAM-INV-drink.with.a.straw-1SG be.AFF:FACT
 35614 ‘Now that we have become old and useless, we became like this, they
 35615 drink our (blood) with straws (planted in our back).’ (Norbzang 2005, 78)

35616 However, note that although *tr-fse-j* and *c^húú-wy-nuc^hymda-j* share one argument,
 35617 their TAME category is different, and the two clauses constitute a simple
 35618 case of coordination rather than a serial verb construction: *ki tr-fse-j* means ‘we
 35619 became like this’ rather than ‘(they treated) us like this’. The corresponding gen-
 35620 uine serial verb construction is shown by (74), where *nuc^hymda* occurs with *stu*
 35621 as expected, and the two verbs have the same person-number configuration and
 35622 TAME category (like 71 and 70 above).

- 35623 (74) *t^huu-tua-rgyz tce [ki* *tuú-wy-stu]*
 AOR-2-be.old LNK DEM.PROX 2-INV-do.like:FACT
 35624 *[tuú-wy-nuc^hymda]* *cti* *tce,*
 2-INV-drink.with.a.straw:FACT be.AFF:FACT LNK
 35625 ‘When you have become old, they will drink you (your blood) like this
 35626 with a straw (planted on your back)’ (Norbzang 2012, 67)

35627 Some non-deideophonic verbs expressing manner such as *nrxçrt* ‘do with
 35628 force’ (like its Tshobdun cognate *nsefet* ‘exert oneself’, J. T.-S. Sun 2012: 490–
 35629 491) can also be used in a serial verb construction.

35630 25.4.1.3 Other verbs of manner

35631 Other verbs of manner can also occur in a serial construction, for instance the
 35632 distributed action verb *amuzyut* ‘be evenly distributed’ (examples 177 and 178,
 35633 §18.7) or atelic motion verbs like *ŋke* ‘walk’ (19, §15.1.2.1) or *nuqambumbjom* ‘fly’
 35634 (example 63, §19.4).

35635 25.4.1.4 Simultaneous action

35636 Serial verb constructions can be used to describe a secondary action simultane-
 35637 ous with the main action, optionally marked with the emphatic *zo* (§26.1.1.5) as
 35638 *pjx-sŋur* ‘it was snoring’ in (75).

25 Other types of multicausal constructions

- 35639 (75) *pjy-sjur zo pjy-nuzuwβ cti ma, maka zo*
IFR.IPFV-snore EMPH IPFV.IFR-sleep be.AFF:FACT LNK at.all EMPH
35640 *mua-pjy-suχsyl.*
NEG-IFR-realize

35641 ‘The aquatic monster was sleeping with a snore, and did not realize
35642 anything.’ (140508 benling gaoqiang de si xiongdi-zh, 190)

35643 25.4.1.5 Degree

35644 Serial constructions can also describe the degree, intensity or extent of an ac-
35645 tion (§26.1.3), even for non-gradable predicates. In these constructions, the verb
35646 describing the main action or state is in the first position, and a stative verb of
35647 degree (such as *arco* ‘be finished’, *tçʰom* ‘be too much’ or *rtaš* ‘be enough’) occurs
35648 in second position, as in (76).

- 35649 (76) *wuma zo kur-tso nuara nu-si-nu nu-arco-nu*
really EMPH SBJ:PCP-understand DEM:PL AOR-die-PL AOR-be.finished-PL
35650 *cti*
be.AFF:FACT
35651 ‘The (elders) who knew (traditional stories) really well have all died.’
35652 (conversation, 2016-03-20)

35653 25.4.2 Manner converbs

35654 Infinitive converbial clauses (§16.2.1.7) can indicate the manner of the action of
35655 the main clause, or a background event. The converb can be optionally followed
35656 by the ergative *kua* and/or the emphatic *zo* (§26.1.1.5), as in (77) and (78).

- 35657 (77) *[kj-rfury] (kui) (zo) jo-ce*
INF-run ERG EMPH IFR-go
35658 ‘He went running.’ (elicited)

- 35659 (78) *tce kućunguji ji-si nuara [kj-fkur]*
LNK in.former.times 1PL.POSS-wood DEM:PL INF-carry.on.the.back
35660 *bjia kui jú-wy-sur-zyuat-nu pui-ra.*
completely ERG IPFV-INV-CAUS-reach-PL PST.IPFV-be.needed
35661 ‘In former times, one used to transport firewood exclusively by carrying
35662 it on the back.’ (140430 tWfkur, 21)

35663 The converb is often in negative form, meaning ‘without ...ing’ as in (79) and
 35664 (80).

- 35665 (79) [uu-yi ra nuu-mx-ky-suuz] nuu rŋwul nuu px-mbi.
 3SG.POSS-relative PL 3PL.POSS-NEG-INF-know DEM silver DEM IFR-give
 35666 ‘She_i gave him money without her_i relatives knowing (about it).’
 35667 (28-qAjdoskAt, 170)

- 35668 (80) tx-mu nuu kuu rcanuu, maka zo mx-ky-ruususo kuu
 INDEF.POSS-mother DEM ERG UNEXP:FOC at.all EMPH NEG-INF-think ERG
 35669 to-nxla
 IFR-agree
 35670 ‘The woman accepted without thinking at all.’ (150907 yingning-zh, 122)

35671 The manner infinitive clauses can express the degree of the state or action in
 35672 the main clause, as in (81) and (82).

- 35673 (81) [tua-mŋas ky-cuu mx-ky-sy-cʰa] zo mŋym
 GENR.POSS-eye INF-open NEG-INF-PROP-can EMPH hurt:FACT
 35674 ‘(This disease) hurts so much that one cannot open one’s eyes.’
 35675 (25-kACAl, 34)

- 35676 (82) βzui nuu kuu [tcʰi ky-cʰa] zo to-nurdoꝝ ny to-nurdoꝝ
 mouse DEM ERG what INF-can EMPH IFR-collect ADD IFR-collect
 35677 ‘The mouse collected as much (fruits) as it could.’ (lWlu 2002, 32)

35678 The stative/impersonal infinitives in *kua-* are also used as converbs for some
 35679 anticausative verbs, modal auxiliary and existential verbs (§16.2.1.7) as in (83),
 35680 and some have become lexicalized as adverbs (§16.2.1.8).

- 35681 (83) nuu [tua-jas ky-lxt mx-kua-ra]
 DEM GENR.POSS-had INF-release NEG-INF:STAT-be.needed
 35682 tua-ci kuu cʰui-sui-mtcuꝝ
 INDEF.POSS-water ERG IPFV:DOWNSTREAM-CAUS-turn
 35683 puu-ŋgrvl
 PST.IPFV-be.usually.the.case
 35684 ‘The water would make the (toy waterwheel) turn without any need to
 35685 use one’s hand.’ (08-kWmtChW, 23)

In addition, gerundive clauses (§16.6.1.3), which are used to describe actions that are simultaneous with that of the main clause (§25.3.4.2), occur in clauses that express manner more than temporal overlap, as in (§84).

- (84) [kutcu *sx-mtsu~mtsur*] *ku-ryzit-a* *tce, jisnj* *ndv*
DEM.PROX:LOC GER-be.hungry IPFV-stay-1SG LNK today ADVERS
tumukumpci kua *pút-wy-nui-mbi-a* *cti*
heaven ERG AOR:DOWN-INV-AUTO-give-1SG be.AFF:FACT
'I am staying here in hunger, but today heavens have sent down to me
(these humans to eat).' (Norbzang 2012, 291)

25.5 Causality

25.5.1 Consequence

The only specific marker of consequence is the linker *nündza* ‘for this reason’ (85).

- (85) *uu-mtuu* *yyzu* *tce, tce* *núndza* *qapyytumtumtu*
 3SG.POSS-crest exist:SENS LNK LNK for.this.reason hoopoe
tu-ti-nuu *nuu-ηu*
 IPFV-say-PL SENS-be
 ‘It has a crest, and for this reason it is called ‘hoopoe’.
 (23-qapGAmWmtW, 20)

This linker results from the fusion (§5.1.1.5) of the noun *u-ndža* ‘reason’ used in causal clauses (§25.5.2) with the distal demonstrative *nu* 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).

- (86) *tc^hem-y-puu puu-cti-a q^he ty-tcuu ra nuu-cki*
 girl-DIM PST.IPFV-be-1SG LNK INDEF.POSS-SON PL 3PL.POSS-DAT
ku-ryzi-a muúj-naz-a q^he ky-zyy-cuu-fka
 IPFV-stay-1SG NEG:SENS-dare-1SG LNK INF-REFL-CAUS-be.full

⁸ The phrase *nunu uu-ndža* without vowel fusion is also found in exactly the same context in the same text.

- 35708 *mui-pur-naz-a*
 NEG-PST.IPFV-dare-1SG
 35709 ‘Since I was a little girl, I did not dare to stay at a boy’s place, and thus did
 35710 not dare to eat to my full.’ (17-lhazgron, 45-46)

35711 25.5.2 Cause

35712 The causal linker *matći* ‘because’ is the main way to indicate cause in Japhug. In
 35713 this construction, it is not clear which clause is the main clause, since the linker
 35714 can be prosodically linked to both the preceding, or the following one, even with
 35715 a pause after *matći* as in (87). The clause preceding *matći* expresses the result/
 35716 consequence (consequence clause), and the one following it the cause (causal
 35717 clause).

- 35718 (87) *ma nunu kʰro my-sy-mto. matci pur-xtci.*
 LNK DEM much NEG-PROP-see:FACT because SENS-be.small
 35719 ‘That (species of ant) is barely visible. Because it is (so) small.’

35720 Example (88) cannot be analyzed as an attestation of a proposed *matći* causal
 35721 clause, since the clause that follows *qʰe uu-yli dyn* is a redundant consequence
 35722 clause (§25.5.1), repeating the real consequence clause *pas yuu uu-yli dyn*, which is
 35723 located in the expected place before the linker *matći*.

- 35724 (88) *pas yuu uu-yli dyn [matci my-ndze zo*
 pig GEN 3SG.POSS-manure be.many:FACT because NEG-eat[III]:FACT EMPH
 35725 *me] qʰe uu-yli dyn*
 not.exist:FACT LNK 3SG.POSS-manure be.many:FACT
 35726 ‘Pigs have a lot of manure because they eat anything, and so they have a
 35727 lot of manure.’ 05-paR, 106-107)

35728 The shorter form *ma*⁹ can also mark cause as in (89). However, *ma* has many ad-
 35729 ditional functions, including marking precautioning (§25.5.6), adversative (§25.6.1)
 35730 and exceptive (§25.6.3) clauses.

- 35731 (89) *uu-jwas nuu (...) tu-ostyko zo my-cʰa ma mpuu.*
 3SG.POSS-leaf DEM IPFV-be.straight EMPH NEG-can LNK be.soft:FACT
 35732 ‘Its leaves do not grow straight (they hang down), as they are soft.’
 35733 (07-kWmCku, 12)

⁹ The two forms are historically related: *matći* is probably a combination of *ma* with the additive topic marker *tći* (§9.1.6.2).

25 Other types of multiclausal constructions

Alternatively, the relator noun *u-ndža* ‘reason’ (§8.3.6.2, §24.6.3.5) with ergative (and/or locative) postpositions can serve to build causal clauses, as in (90). In some rare cases, *u-ndža*-clauses can have a purposive meaning (example 214, §24.6.3.5).

- (90) [“nyzo u-ruz
 2SG 3SG.POSS-supernatural.power exist:SENS AOR-say[II]-1SG
 u-ndza] zui kui a-pa a-ma ni
 3SG.POSS-reason LOC ERG 1SG.POSS-father.HON 1SG.POSS-mother.HON DU
 kui “mts^huk^ha u-ngui tce (...) tyrca pu-œ ma
 ERG lake 3SG.POSS-in LOC together IMP:DOWN-go apart.from
 my-jy”
 NEG-be.allowed:FACT
 ‘Because I said that you had supernatural powers (§24.2.5.2), my parent
 (said) ‘go together with him into the lake.’(Nyima wodzer 2003.2, 70-73)

Instead of being marked with the ergative, the causal clauses can also serve as predicate of a copular construction (example 175, §21.5.1.4). Predicative causal clauses occur often standalone as in (91), without any overt clause expressing the result.

- (91) [“*nua ma-ty-tui-ste*, *nua ma-ty-tui-fse*” *tu-tui-ti-nua*] *ndza*
DEM NEG-IMP-2-do.like[III] DEM NEG-IMP-2-be.like IPFV-2-say-PL reason
ŋu *wo*
be:FACT SFP
‘(If your son wants so much to see his grandparents), this is because you
(his parents always) tell him ‘Don’t act like that, don’t be like that.’
(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-thurzi* ‘mercy’ is specifically used to indicate beneficial actions thanks to which a desirable result is obtained (92).

- (92) [*<guojia> kui ta-nuismyn*] *w-t^hurzi* *tce tce (...) tham tce*
 country ERG AOR:3→3'-heal 3SG.POSS-mercy LNK LNK now LNK
wuma zo *tx-pe-nui.*
 really EMPH AOR-be.good-PL
 'Thanks to the fact that (our) country('s government) has healed them,

35761 (...) now they are much better.' (140522 RdWrJAt, 139)

35762 The locution *X u-xçrt kuu Y* with the ergative specifically means 'do *X* so
 35763 much/to the extent that *Y*', as in (93), specifying not only that *X* is the cause
 35764 of *Y*, but in addition that *X* was performed to/with a sufficiently high degree/
 35765 frequency/ to make the action/situation *Y* possible.¹⁰ More data on degree causal
 35766 constructions is provided in §26.1.2.2.

- 35767 (93) *ts^hupa ci pŷr-tu tce tcendyre, [k^hu kuu tŷ-wy-ndza-nu]*
 village INDEF IFR.IPFV-exist LNK LNK tiger ERG AOR-INV-eat-PL
 35768 *u-xçrt kuu tŷ-mu kŷtsa ci*
 3SG.POSS-strength ERG INDEF.POSS-mother COLL:family INDEF
 35769 *pŷr-ri-ndzi tce*
 IFR.IPFV-remain-DU LNK

35770 'There was a village, but a tiger had eaten them (the villagers) to the
 35771 extent that only a mother and her daughter remained.' (khu 2012, 2)

35772 25.5.3 Prerequisite

35773 Prerequisite constructions do not express the direct cause of the action/situation
 35774 in the main clause, but simply the basic conditions for that action or situation to
 35775 be possible, like 既然 <jírán> 'since' in Chinese. This meaning is expressed by
 35776 a clause in the Aorist as in (94), formally similar to a temporal clause (§21.5.1.4,
 35777 §25.3.4.1).

- 35778 (94) <*huangdi*> (...) *tú-wy-su-ndo-a tŷ-c^ha tŷ-ŋu tce* (...)
 emperor IPFV-INV-CAUS-take-1SG AOR-can AOR-be LNK
 35779 <*jiaohuang*> *nuu zgrwyt tú-wy-su-ndo-a c^ha tce,*
 pope DEM certainly IPFV-INV-CAUS-take-1SG can:FACT LNK
 35780 *c-tx-ti ra*
 TRAL-IMP-go be.needed:FACT
 'Since (the golden fish) has succeed in making me emperor, he will
 35781 certainly succeed in making me pope, go and tell him that.' (140430 yufu
 35782 he tade qizi-zh, 204)

35783 The minimal clause *nuu tŷ-ŋu tce* can have a prerequisite interpretation 'given
 35784 these circumstances, in this case' as in (95).

¹⁰ The locution *X u-xçrt kuu* is reminds of French à force de *X*.

25 Other types of multicausal constructions

- 35786 (95) *nua tr-ŋu tce tce, si lú-wy-yxjuu, smi a-tr-wxti tce*
DEM AOR-be LNK LNK WOOD IPFV-INV-add fire IRR-PFV-be.big LNK
35787 *nua-p^hyn*
SENS-be.efficient
35788 'In this case, if one adds more wood, and increase the fire, it will work.'
35789 (150827 taisui-zh, 63)

35790 25.5.4 Purposive clauses

35791 Five main constructions are available in Japhug to express purpose.¹¹

35792 First, the purposive converb (§16.6.2) is a non-finite verb form dedicated to
35793 expressing the purpose of the action in the main clause. It is built by combining
35794 the prefix *syz(z)-* with a B-type preverb (§15.1.1.1), the reduplicated verb stem and
35795 a possessive prefix coreferent with one of the core arguments of the purposive
35796 clause (and almost always in negative form). Purposive converbs are productive:
35797 even denominal verbs of Tibetan origin such as *nutč^homba* 'catch a cold' (96) can
35798 derive this type of converbs. However, they are barely attested in the Japhug
35799 corpus, and simpler constructions are preferred to express purpose.

- 35800 (96) *a-tcuu ui-my-tu-syz-nutč^hombua~mba tur-ŋga*
1SG.POSS-son 3SG.POSS-NEG-IPFV-PURP:CONV INDEF.POSS-clothes
35801 *kua-jas tr-ž-ŋga-t-a*
SBJ:PCP-be.thick AOR-CAUS-wear-PST:TR-1SG
35802 'In order to prevent my son from catching a cold, I made him wear thick
35803 clothes.' (elicited)

35804 Second, the the verb *numga* 'want from' can be combined with an infinitival
35805 clause to express purpose, as in (97) to express the aim of the action in the main
35806 clause.

- 35807 (97) *tce [kuþyz nua muu-nua-kx-βzu kx-numga], izyra,*
LNK type.of.bug DEM NEG-IPFV-INF-grow INF-want.from 1PL
35808 *ji-mthum nura <binggui> tu-χtua-j tce nua ui-ŋguu ri*
1PL.POSS-meat DEM:PL refrigerator IPFV-buy-1PL LNK DEM 3SG.POSS-in LOC
35809 *pjua-nua-rku-j cti ma*
IPFV-auto-put.in-1PL be.AFF:FACT LNK
35810 'In order to prevent *kuþyz* bugs from growing (in the meat), we buy

¹¹ This section does not include the participial clauses (§16.1.1.6) used as supine purposive clauses of motion verbs (§24.4.2.1).

35811 refrigerators and put our meat in it.' (28-kWpAz, 46)

The verb *numga* in this function is generally a velar infinitive *ky-numga* in conversial function (§16.2.1.7) as in (97) and (98a), but a finite verb is also possible (98b). The infinitival clause can be focalized, serving as the predicate of a copular construction in *yu* (98c).

35826 Third, the relator noun *u-spa* 'its material' (§16.1.3.10, §23.2.4) can take object
35827 (99) and subject (100) participial clauses with a purposive meaning. These con-
35828 structions are to be analyzed as essive participial clauses (§24.4.2.2).

- 35829 (99) *turme ra kur u-<shipin> jo-lxt-nuu tce [numuu*
 people PL ERG 3SG.POSS-video IFR-release-PL LNK DEM
u-kx-nympo] u-spa jo-lxt-nuu juu-ŋu.
 3SG.POSS-OBJ:PCP-watch 3SG.POSS-material IFR-release-PL SENS-be
 35831 ‘People send him this video for him to watch it.’ (conversation 2019-02-26)

35832 (100) *[kuruu-skyt u-kw-βzjoz] u-spa, mbark^{hom}*
 Gyalrong-language 3SG.POSS-SBJ:PCP-learn 3SG.POSS-material TOPO
mxctsa jy-ye-a ju.
 until AOR-come[II]-1SG be:FACT
 35834 ‘I came all the way up to Mbarkham to learn the Gyalrong language.’
 35835 (elicited)

25 Other types of multicausal constructions

35836 Essive participial clauses without *wi-spa* can also have a purposive meaning, as
 35837 in (101).

- 35838 (101) *kua-yyrbaš ra kua 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

35839 *pjy-ŋgryl.*

IPFV.IFR-be.usually.the.case

35840 ‘(In former times), hunters would take (dogs to hunt). They would take
 35841 dogs to help them (as their helpers).’ (05-khWna, 39-40)

35842 Fourth, a biclausal construction comprising a clause containing a similitative
 35843 verb (*fse* ‘be like’ or *stu* ‘do like’) in finite form with the interrogative pronoun
 35844 (§6.5.1), and another finite clause *Y* linked by *tce*, specifically means ‘what should
 35845 *X* do in order to *Y*’ as in (102a) and (102b).

- 35846 (102) a. *izora yuu tc^hi tu-fse-j tce ji-tua-ci*
 1PL GEN what IPFV-be.like-1PL LNK 1PL.POSS-INDEF.POSS-water
 35847 *yzyu (...) tu-tui-t^he ui-tú-c^ha*
 exist:SENS IPFV-2-ask[III] QU-2-can:FACT
 35848 ‘Can you ask for us what we (need to) do in order to have water?’
 35849 (said by villagers living in a desert where there is no water,
 35850 divination 2005, 14)
- 35851 b. *nunura kuu tchi a-ty-stu-nui tce*
 DEM ERG what IRR-PFV-do.like-PL LNK
 35852 *nui-tui-ci yzyu?*
 3PL.POSS-INDEF.POSS-water exist:SENS
 35853 ‘What should they do in order to have water?’ (divination 2005, 38)

35854 The clause in *fse* can be embedded within the clause *Y*, as shown by example
 35855 (5) (§25.1.4).

35856 Fifth, purposive meaning can be expressed by a clause in the Irrealis (§21.4.1
 35857 with the adverb *tçet^ha* ‘later’ as in (103). This type of construction resembles pre-
 35858 cautioning clauses (§25.5.6), but with opposite polarity.

- 35859 (103) *lu-zyuit cuŋgu tce nuatcu ku-yyrat-a tcet^ha*
 IPFV:UPSTREAM-arrive before LNK DEM:LOC IPFV-throw-1SG later
 35860 *a-my-lx-zyuit*
 IRR-NEG-PFV:UPSTREAM-arrive
 35861 ‘Before it arrives, I will throw (the enchanted white stone), so that it
 35862 does not arrive.’ (25-kAmYW-XpAltCin, 62)

Finally, clauses with the relator *u-ndža* ‘reason’ can also have a purposive interpretation (example 214, §24.6.3.5, which resembles causal clauses §25.5.2).

25.5.5 Justification clauses

Justification clauses (Lopes 2009) differ from strictly clausal clauses in that there is no direct causal relationship between the main clause and the justification clause. Rather, the truth value of the latter allows to make an inference concerning the truth value of the latter.

In Japhug, there is no dedicated construction to express such meaning, and as in many languages, the clausal linkers *ma* and *matči* (§25.5.2) can be used (104).

- (104) *cʰa tci ko-tsʰi matči lo-βzi cti ri*
alcohol also IFR-drink LNK IFR-be.drunk be.AFF:FACT LNK
‘He had also drunk alcohol, since he was drunk.’ (140506 loBzi, 13)

The justification meaning is clearest when the verb of the main clause takes the Probabilitative *umy-* (§21.7.2.1) or the Rhetorical Interrogative *uβry-* (§21.7.3.3) prefixes with peg circumfix, and that in the clause following *ma* is in the Sensory, as in (105) and (106).

- (105) *cxco pynmawombyr jo-nu-yi umy-kui-ŋu-ci ma, kʰa jnu-γykʰu-nu*
these.days ANTHR IFR-VERT-come PROB-PEG-be-PEG LNK house
SENS-have.smoke-PL
‘Maybe Padma ’Od’bar came back the last few days, since there is smoke coming out from their house.’ (Norbzang 2012, 226-227)

- (106) *juufcweyr uβry-pui-tui-nuuzuβ-ci ma nγ-mraꝝ jnu-γurni*
last.night RH.Q-PST.IPFV-2-sleep-PEG LNK 2SG.POSS-eye SENS-be.red
‘It seems that you did not sleep (well) last night, since your eyes are red.’
(elicited)

The use of *ma* as a sentence final particle with the modal tenses (§10.4.4) possibly originate from constructions as in (105) and (106) with elided justification clauses.

25.5.6 Precautioning clauses

Precautioning constructions comprise a clause describing an undesirable result, and another clause referring to a measure that can be taken to prevent this result.

35891 The precautioning meaning can be expressed with a negative purposive clause
 35892 (§25.5.4); in particular, purposive conversbs, which are almost always in negative
 35893 forms (§16.6.2), could be described as a type of precautioning clauses.

35894 However, the most common way of expressing precautioning meaning in Ja-
 35895 phug is by coordinating a clause in the Irrealis (§21.4.1), the Imperative (§21.4.2)
 35896 or the Prohibitive (§21.4.3) indicating the preventive measure, with a clause in
 35897 the Factual Non-Past (§21.3.1) referring to the undesired event. The two clauses
 35898 are coordinated by the linker *ma* (107) and/or the adverb *tʰa* ‘later’ or *t̥etʰa*, as
 35899 illustrated by (108) and (109), a crosslinguistically common strategy to express
 35900 precautioning meaning (Angelo & Schultze-Berndt 2016).

- 35901 (107) *ma-jy-tui-ce ma tui-ndžaβ*
 NEG-IMP-2-go LNK 2-ACAUS:cause.to.roll.down:FACT
 35902 ‘Don’t go (to the temple on the mountain to do circumambulations), you
 35903 might fall down.’ (conversation, conversation 15-12-05)

- 35904 (108) *nuu kʰramba ma-tr-βze-a ra ma tce*
 DEM lie NEG-IMP-make[III]-1SG be.needed:FACT LNK LNK
 35905 *<lishijizai> pjui-tui-βze cti tcetʰa, nunuu rcanuu*
 history record IPFV-2-make[III] be:AFF:FACT LNK later
 35906 *<zuzubeibei> kuu yuu-nymqe-a-nuu.*
 generations ERG INV-scold:FACT-1SG-PL
 35907 ‘I cannot tell lies, as you are making a historical record, and previous
 35908 and future generations would scold me.’ (27-kikakCi, 224)

- 35909 (109) *a-my-tʰui-sta ma t̥etʰa ju-nuu-ce cti*
 IRR-NEG-PFV-wake LNK later IPFV-VERT-go be.AFF:FACT
 35910 ‘May she not wake up (Don’t wake her up), otherwise she will go away.’
 35911 (150818 muzhi guniang-zh, 106)

35912 There is no categorical requirement for the first clause to contain a modal
 35913 TAME category. In (110), we find instead the negative form *my-pe* ‘it is not good’
 35914 with a non-finite clause that can either be interpreted as a stative infinitive (‘it is
 35915 not good (if) they are thin’) or a subject participle (‘the thin ones are not good’).

- 35916 (110) *robre nuu kumy [wuma zo kuu-xtsʰum] my-pe ma*
 fence.rail DEM also really EMPH INF:STAT-be.thin NEG-be.good LNK
 35917 *tce pjui-qluat-nuu.*
 LNK IPFV-break-PL
 35918 ‘As for fence rails also, it is not good (if they are) too thin, otherwise (the

35919 hybrid yaks in the cowshed) will break them.' (150902 mkhoN, 42)

35920 25.6 Other constructions

35921 25.6.1 Adversative

35922 25.6.1.1 Concession

35923 The most common way of expressing concession is the linker *tceri* 'but, however',
 35924 which can occur in sentence-initial position, after a pause as in (111).

- 35925 (111) *wu-βri nura qapri wu-βri wuma zo juu-fse,*
 3SG.POSS-body DEM:PL snake 3SG.POSS-body really EMPH SENS-be.like
 35926 *wu-rme ri kui-tu maye. tceri wu-mylyjak*
 3SG.POSS-hair also SBJ:PCP-exist not.exist:SENS LNK 3SG.POSS-limb
 35927 *yyzu.*
 exist:SENS
 35928 'The gecko's) body looks a little bit like the body of a snake, and it has
 35929 also no hair. However, it has limbs.' (28-tshAwAre, 10)

35930 The shorter variant *ri*¹² is also used to indicate concession (112) when used be-
 35931 between coordinated clauses. When *ri* follows noun phrases or complement clauses,
 35932 it is a different marker, either that of additive focus 'also' as in (111) above (§9.1.6.2,
 35933 §25.6.2) or a locative postposition (§8.2.4.1).

- 35934 (112) *kuwu nuu izo kutcu ji-zimkʰym tce tu*
 bearded.vulture DEM 1SG DEM.PROX:LOC 1PL.POSS-region LOC exist:FACT
 35935 *ri my-dyn*
 LNK NEG-be.many:FACT
 35936 'Bearded vultures are found here in our region, but not many.'
 35937 (2011-08-kuwu, 28)

35938 The linker *ma* also has a concessive meaning in some contexts, as in (113).
 35939 This function possibly derives from its use as an exceptive postposition mean-
 35940 ing 'apart from' (§8.2.8, §25.6.3).

¹² The 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).

25 Other types of multicausal constructions

- 35941 (113) *qalias nuu to-z-nuymaz ma ky-sat nuu muu-pjy-cʰa*
 eagle DEM IFR-CAUS-have.a.wound LNK INF-kill DEM NEG-IFR-can
 'He wounded the eagle, but could not kill it.' (150902 hailibu-zh, 21)

35943 The topic marker *ndyre* (§9.1.5.3) can also indicate adversative meaning, with
 35944 scope overt one constituent of the sentence, in (114) over an infinitival clause.

- 35945 (114) *pas kuu tci ndze, nuŋa kuu tci ndze. tce [turme*
 pig ERG too eat[III]:FACT cow ERG too eat[III]:FACT LNK people
 35946 *ky-ndza] ndyre mx-sna.*
 INF-eat CONTRAST:FOC NEG-be.good:FACT
 'Pigs eat it, cows eat it, but it is not good for people to eat.' (17-ndZWnW,
 35947 125-126)

35949 In the register of traditional stories, the locution *jinbala zuu* is also employed
 35950 to mark adversative clauses as in (115). The linker *jinbala* is borrowed from Ti-
 35951 藏语 *jin.pa.la*, a non-finite form of the copula 藏语 *jin* 'be' which also has
 35952 adversative meaning in the classical language.

- 35953 (115) *tce rjylpu nuu nuu-rga jinbala zuu "e, a-tcui*
 LNK king DEM AOR-be.happy although LOC INTERJ 1SG.POSS-son
 35954 *ki stybtsʰyt ci muu-cui-cʰa ku"jy-suiso tce*
 DEM.PROX contest INDEF NEG-APPREHENSIVE-can SFP IFR-think LNK
 'Although the king was happy (about that), he thought 'I am worried
 35955 that my son will not succeed in the contest.' (2003 sras, 84)

35957 Finally, velar infinitive converbs (§16.2.1.7) with the ergative can have an adver-
 35958 sative interpretation, as in (116), where the converbial clause is better translated
 35959 by 'although ...' than 'without...'.¹³

- 35960 (116) *"jy-yi" kuny my-ky-ti kuu, "ny-rzaβ yuu-ku-βze-a"*
 IMP-come also NEG-INF-say ERG 2SG.POSS-wife CISL-IPFV-make[III]-1SG
 35961 *to-ti, rjylpu nuu u-cki.*
 IFR-say king DEM 3SG.POSS-DAT
 'Although (the king had not) said 'come' (Without (the king) saying
 35962 'come'), she told the king 'I am coming to become your wife.' (140511
 35963 yinzi-zh, 21)

¹³ In 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.

35965 25.6.1.2 Rectification

35966 The negative copula *ma* ‘not be’ followed by the ergative *ku* negates the first
 35967 clause (*A*), and indicates that the events described by following clause(s) *B* in-
 35968 stead are true. The meaning of this construction can be glossed ‘not *A*, but rather
 35969 *B*’ as in (117).

- 35970 (117) *kuijka nunuu sunjgu c^hiz c-ku-rylob pui-ma*
 chough DEM forest APPROX:LOC TRAL-IPFV-make.nest SENS-not.be
 35971 *kuu, (...) kuxteo u-mbe u-nguu ri ku-rylob*
 ERG basket 3SG.POSS-old.one 3SG.POSS-in LOC IPFV-make.nest
 35972 ‘The chough does not go in the forest and makes a nest there, but rather
 35973 makes a nest (in ..., or) in old baskets, (or in ...)’ (22-CAGpGa, 48-53)

35974 The adversative additive adverb *mýryrz* ‘instead’, ‘on the contrary’ (and its vari-
 35975 ant *mýryrz ny*), semantically similar to Chinese 反而 <fǎn’ér> ‘instead’, specifi-
 35976 cally indicates an undesirable result that occurs contrary to expectation instead
 35977 of the intended result.

35978 The clause expressing the intended result can take the comparative postposi-
 35979 tion (standard marker) *syz* ‘compared with’ (§8.2.7), as in (114).

- 35980 (118) *pjx-kuu-nui^hlu-a tce, nunuu kuu-p^hyn syzny, mýryrz*
 IFR-2→1-cheat-1SG LNK DEM SBJ:PCP-be.efficient COMP instead
 35981 *a-mp^huz u-ntc^hur pa-nui-p^huit*
 1SG.POSS-bottom 3SG.POSS-piece AOR:3→3'-AUTO-take.off
 35982 ‘You cheated me, not only was (your healing method) not efficient (to
 35983 treat my illness), but it took off a chunk of my bottom. (140427 qala cho
 35984 kWrtsAG, 44)

35985 In most cases however, *mýryrz* occurs without any additional marker, as in
 35986 (119).

- 35987 (119) *cyr tce zngri nuu nuu-myrlza^h zo tce tur-kyrme c^hút-wy-ryci*
 night LOC star DEM AOR-marry EMPH LNK GENR.POSS-hair IPFV-INV-pull
 35988 *ri, c^hui-kuu-zri mane, mýryrz pui-mjym ma.*
 LNK IPFV-PCP:SBJ-be.long not.exist:SENS instead SENS-hurt SFP
 35989 ‘In the night when there was a shooting star, we pulled our hair
 35990 (thinking that our hair would grow longer), but not only (our hair) did
 35991 not grow longer, (the only thing that it did) was hurt.’ (29-mWBZi, 108)

35992 25.6.1.3 Evidential rectification

35993 The Aorist *tx-mdā* (§21.5.1) of the verb *mdā* ‘arrive’ (of time), without complement
 35994 clause, and following a clause with the adversative linker *ri*, has the special mean-
 35995 ing ‘actually’, ‘it turns out that...’, ‘but in fact ...’. It is specifically used when a
 35996 referent realizes that the reality (the rectification clause) was different from
 35997 his/her/its original belief or expectation.

35998 This construction is common in stories translated from Chinese, as in (120) and
 35999 (121), where *tx-mdā* corresponds to the Chinese linkers 结果 <jiéguǒ> ‘in the end’
 36000 or 原来 <yuánlái> ‘it turns out that’.¹⁴

- 36001 (120) <*huangshang*> *nū kū ko-mja tce to-rto&* *ri, nykinu,*
 emperor DEM IFR-catch LNK IFR-look LNK FILLER
 36002 *tx-mdā tce, numu nyki, cōcōb kui-qarŋe ku*
 AOR-be.the.time LNK DEM FILLER paper SBJ:PCP-be.yellow ERG
 36003 *tx-ky-βzu pjy-cti.*
 AOR-OBJ:PCP-make IFR.IPFV-be.AFF
 36004 ‘(Wang Taichang_i was accused of holding an imperial robe, a crime
 36005 punishable by death) The emperor_j (had) him_i arrested, but when he_j
 36006 examined (the so-called imperial robe)_k it turned out that it_k was (just)
 36007 made of yellow paper.’ (150909 xiaocui-zh, 93-95)

36008 The rectification clause is always in the Inferential (§21.5.2), not only in narra-
 36009 tion as in (120), but also when reflecting the point of view of the speaker as in
 36010 (121).

- 36011 (121) *azo “nū cū tui-ŋu kū” nū-suiso-t-a ri, tx-mdā*
 1SG DEM who 2-be:FACT SFP AOR-think-PST:TR-1SG LNK AOR-be.the.time
 36012 *tce nykinu, a-ftsa pjy-tui-ŋu*
 LNK FILLER 1SG.POSS-ZCh IFR.IPFV-2-be
 36013 ‘I was wondering who you were, but it turns out that you are my
 36014 nephew!’ (150907 yingning-zh, 73-74)

36015 The adverb *təmdána* ‘actually’ in Tshobdun (Sun & Blogros 2019: 44;802) is
 36016 probably grammaticalized from a cognate construction.

¹⁴ For 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’.

36017 25.6.2 Addition

36018 25.6.2.1 Neutral addition

36019 Neutral additive constructions describe events that are related but for which neither a temporal sequence, a causal nor a hierarchical relationship can be assumed.
 36020 This type of meaning can be expressed by coordinated clauses (§25.1.6) with the
 36021 linkers *tce* or *q^he* as in (122) or parataxis (123).

- 36023 (122) *zara χsum ma pjy-me-nuu tce tcendyre nui-nuuya*
 they three apart.from IFR.IPFV-not.exist-PL LNK LNK 3PL.POSS-cow
 36024 *ci pjy-tu.*
 INDEF IFR.IPFV-exist

36025 ‘They were only the three of them, and they had a cow. (07-deluge, 3)

- 36026 (123) *w-p^hoŋbu ra nui-wxti, nui-ts^hu zo.*
 3SG.POSS-body PL SENS-big SENS-fat EMPH
 36027 ‘Its body is big and fat.’ (26-GZo, 12)

36028 A more specific way to indicate neutral addition is the comitative *c^ho* ‘and,
 36029 with’ and its variants *c^hondyre* and *c^honry* (§8.2.5), which are used as a clause link-
 36030 ers in addition to its function as noun phrase coordinator.

- 36031 (124) *mbro syzny nui-wxti. nui-mbro c^ho nui-wxti.*
 horse comp SENS-be.big SENS-be.high COMIT SENS-be.big
 36032 ‘It is larger than a horse. Higher and larger.’ (19-rNamoN, 15)

36033 The coordinated clauses do not need to have a completely parallel syntactic
 36034 structure: in (125), the clause preceding *c^ho* has an adjectival stative predicate,
 36035 while the second one contains an existential verb with the nominal *k^hator* ‘varie-
 36036 gated’ (§5.2.2).

- 36037 (125) *w-ku nura rcanui, wuma zo nui-mpcyr c^ho*
 3SG.POSS-head DEM:PL UNEXP:FOC really EMPH SENS-be.beautiful COMIT
 36038 *k^hator zo yyzu*
 variegated EMPH exist:SENS
 36039 ‘Its head, it is very beautiful, and variegated.’ (24-qro, 84)

36040 The comitative *c^ho* can follow the linkers *q^he* and *tce* when used to link clauses
 36041 as in (126), but notice that the emphatic marker (§26.1.1.5) and the linker *zo q^he*
 36042 are repeated in both the clause preceding *c^ho* and the one following it.

25 Other types of multiclausal constructions

- 36043 (126) *tce nui u-r̥i a-my-pur-će ra ma*
 LNK DEM 3SG.POSS-grain IRR-NEG-PFV:DOWN-go be.needed:FACT LNK
 36044 *pjui-tsyi my-cʰa tce tcendyre a-nui-yci zo qʰe*
 IPFV-be.rotten NEG-can:FACT LNK LNK IRR-PFV-get.wet EMPH LNK
 36045 *cʰo ftcar a-kx-ndzob zo qʰe li tu-łob*
 COMIT summer IRR-PFV-ACAUS:attach EMPH LNK again IPFV-come.out
 36046 *cti*
 be.AFF:FACT
 36047 ‘One should not let its grains go into (the ground), because they cannot
 36048 rot, and when they get wet and the spring comes, they grow again.’
 36049 (-08-qajAGi, 48)

25.6.2.2 Correlative addition

36050 The correlative (§25.1.2) additive focus markers *tci* and *ri* (§9.1.6.2) follow noun
 36051 phrases in a series of two or more clauses in parataxis. The main verbs of these
 36052 clauses are often identical and redundant, but are not always necessarily so, as
 36053 in (127), where a clause with *tsʰi* ‘drink’ is conjoined with clauses with *ndza* ‘eat’
 36054 as main verb.

- 36055 (127) *[ca] tci nui-ndze, [cyci] tci nui-tsʰi, [tx-lu*
 meat also SENS-eat[III] meat.stew also SENS-drink INDEF.POSS-milk
 36056 *ta-mar] tci nui-ndze*
 INDEF.POSS-butter also SENS-eat[III]
 36057 ‘(Pigs) eat meat, drink meat stew, and also eat butter and have milk.’
 36058 (05-paR, 30)

36059 These markers can also have scope over verbs, in the existential construction
 36060 as in (128) or with a modal auxiliary verb as main predicate as (129). The meaning
 36061 of this construction is ‘both X and Y’ when used with positive copulas or modal
 36062 verb, and ‘neither X nor Y’ with negative ones.

- 36063 (128) *kuroz kui-mum ri mage, kuroz*
 specially SBJ:PCP-be.tasty also not.exist:SENS specially
 36064 *my-kui-yx-mpyt ri mage qʰe,*
 NEG-SBJ:PCP-FACIL-be.spoiled also not.exist:SENS LNK
 36065 ‘(Scoring bread) neither (makes it) particularly tasty nor particularly
 36066 (prevents it from) spoiling.’ (160706 thotsi, 27)
 36067

- 36068 (129) *tcendyre tu-rwacmi ri my-kui-k^hui, c^hui-nauryo ri*
LNK IPFV-speak also NEG-SBJ:PCP-be.possible IPFV-sing also
36069 *my-kui-k^hui ci jy-k-yβzu-ci.*
NEG-SBJ:PCP-be.possible INDEF IFR-PEG-become-PEG
36070 ‘She became unable to speak and to sing.’ (150819 haidenver-zh, 301)

25.6.2.3 Incremental addition

36072 Four constructions meaning ‘not only ... but also ...’ (called in Chinese 递进复句
36073 <dījìn fùjù> ‘incremental complex clause’) are found in Japhug.

36074 First, the locutions *zo alala ri* or *zo alala ma*, comprising the adversative topic
36075 marker *zo* (§9.1.5.3) and the adversative *ri* (§25.6.1.1), can express incremental ad-
36076 dition as in (130).

- 36077 (130) *wzo [pjy-mpcyr] zo alala ri, ryyo ri*
3SG IPFV.IFR-be.beautiful ADVERS not.only LNK song also
36078 *pjy-mk^hyz, tui-rjaz ri pjy-mk^hyz.*
IFR.IPFV-be.expert NMLZ:ACTION-dance also IFR.IPFV-be.expert
36079 ‘Not only was he good-looking, he was also expert at singing and
36080 dancing.’ (160702 luocha-zh, 4)

36081 Second, the relator noun *w-t_yjui* ‘addition’, an alienabilized abstract noun (§16.4.2)
36082 from which the denominal verb *y_yjui* ‘add’ was originally derived, has the gram-
36083 maticalized meaning ‘in addition to *X*’, ‘not only *X*, but also *Y*’ when used as
36084 clausal linker as in (131).

- 36085 (131) *[cw-mηym] w-t_yjui tce nu-syzoŋzoz*
CAUS-hurt:FACT 3SG.POSS-addition LNK SENS-cause.numbing.sensation
36086 *zo nyu*
EMPH be:FACT
36087 ‘Not only does (nettle sting) hurts, it also cause a numbing sensation.’
36088 (140428 mtshalu, 6)

36089 The noun *w-t_yjui* can also follow the demonstrative *nu* (§6.9.1), anaphorically
36090 referring to the preceding clause(s) (132).

- 36091 (132) *rjylpu nu kui wuma zo (...) tó-wy-raxterz,*
king DEM ERG really EMPH IFR-INV-cherish
36092 *jy-wy-mgrum. tce nu w-t_yjui tce tcendyre li*
IFR-INV-receive.as.guest LNK DEM 3SG.POSS-addition LNK LNK again

25 Other types of multicausal constructions

- 36093 *icq^ha nu, ur-rzaβ ra jy-car.*
 FILLER DEM 3SG.POSS-wife PL IFR-search
36094 ‘The king (...) treated him well as a guest, and in addition found a wife
36095 for him.’ (140511 xinbada-zh, 33-35)

36096 Third, the locution *mÿra ma*, which is possibly grammaticalized from the neg-
36097 ative form of the modal verb *ra* ‘be needed’, ‘be necessary’ (§24.5.3.1) with the
36098 adversative linker *ma* (§25.6.1.1), also has the same meaning as the constructions
36099 described above.

- 36100 (133) *tutsye u-kui-βzu nuu kui paxci muu-jy-mbi myra ma*
 commerce 3SG.POSS-make DEM ERG apple NEG-IFR-give not.only LNK
36101 *nuu syzny to-nymqe tce jo-suix-ce.*
 DEM COMP IFR-scold LNK IFR-CAUS-go
36102 ‘The merchant not only did not give him (any) apple, but instead scolded
36103 him and sent him away.’ (150904 zhongli-zh, 15)

36104 Fourth, the form *mÿkuijy kui*, from the negative participle or infinitive of ei-
36105 ther the modal auxiliary *jy* ‘be allowed’ (§24.5.3.1) or the phasal verb *jy* ‘finish’
36106 (§24.5.6.2), also means ‘not only X, but’ as in (134).

- 36107 (134) *ty-mt^hum nura tu-ndze mÿkuijy kui, ur-di*
 INDEF.POSS-meat DEM:PL IPFV-eat[III] not.only ERG 3SG.POSS-smell
36108 *nuu-cuu-mnym*
 SENS-CAUS-smell
36109 ‘Not only does (the mouse) eat meat, it also makes it stinky.’
36110 (27-spjaNkW, 198)

36111 When the first clause is in negative form as in (133), the meaning of incremen-
36112 tal additive construction is similar to the adversative additive construction with
36113 *mÿryrz* ‘instead’ ‘not only $\neg X$, but on the contrary Y’ (§25.6.1.2). The locution
36114 *nuu syz(ny)* ‘rather than that, instead’ can be added in the second clause.

36115 These first three additive markers also found on noun phrases, instead of sub-
36116 ordinate clauses (§9.1.6.3).

36117 25.6.3 Exceptive

36118 25.6.3.1 *lažma* ‘apart from the fact that’

36119 The postposition *lažma* ‘apart from the fact that’, which derives from the excep-
36120 tive postposition *ma* ‘apart from’ (§8.2.8), cannot take a noun phrase, and requires

36121 a finite clause instead, as in (135)

- 36122 (135) *tce [u-rq^hu nuu yurni] la^hma u-ηguu nuu*
 LNK 3SG.POSS-skin DEM be.red:FACT apart.from 3SG.POSS-inside DEM
 36123 *s^hyku c^ho juu-naχteuy-ndzi ri*
 white.birch COMIT SENS-be.the.same-DU LNK
 36124 ‘Apart from the fact that its bark is red, its inside is the same as that of
 36125 the white birch.’ (06-mbrAj, 13)

36126 The semantic scope of *la^hma* can however be a noun phrase, if the verb in the
 36127 exceptive clause is repeated in the main clause, as in (136).

- 36128 (136) *[k^h-k^h-pu k^h-k^h-sqa k^hu-fse nuura*
 AOR-OBJ:PCP-bake AOR-OBJ:PCP-cook SBJ:PCP-be.like DEM:PL
 36129 *my-ndze] la^hma, nuu u-ro nuu lonba tu-ndze*
 NEG-eat:FACT apart.from DEM 3SG.POSS-rest DEM all IPFV-eat
 36130 *cti.*
 be.AFF:FACT
 36131 ‘Apart from the fact that it does not eat food that has been baked or
 36132 cooked, it eats everything else (=apart from cooked food, it eats
 36133 everything else).’ (19-GzW, 11)

36134 25.6.3.2 *tc^himavny* ‘at least’

36135 The linker *tc^himavny* or *tc^himas*, optionally combined with *tsa^h* ‘just, only’, occurs
 36136 in imperative or hortative sentences with the meaning ‘at least’. As illustrated
 36137 by (137) (where *tsa^h* occurs in one version of the story, and does not occur in
 36138 the other) and (138), *tc^himavny* is placed at the beginning of the clause, while *tsa^h*
 36139 either follows the verb or a constituent overt which it has scope.

- 36140 (137) *wortc^hi wojyr zo tc^himavny a-yi ra nuu-p^he*
 please please EMPH at.least 1SG.POSS-relative PL 3PL.POSS-DAT
 36141 *cui-ryfcyt-tci (tsa^h) ma tcet^ha yuu-nuzduuy-a-nuu*
 TRAL-tell:FACT-1DU just LNK later INV-worry.about:FACT-1SG-PL
 36142 ‘Please, at least let the two of us go and inform my relatives, otherwise
 36143 they will be worried about me.’ (qachGa 2012, 76)
- 36144 (138) *tc^himas “puu-tui-χcu” tsa^h tu-ti-a ma*
 at.least PST.IPFV-2-be.strong just IPFV-say-1SG LNK
 36145 ‘I (should) say at least ‘thank you’.’ (2014-kWLAG, 624)

The linker *tç'imavny* is built from the interrogative pronoun *tç'hi* ‘what’ (§6.5.1), the negative copula *maš* ‘not be’ (§13.1.2) and the postposition *nr* (§8.2.6). The original meaning of this locution was probably ‘whatever it is not’, with the free-choice indefinite function of *tç'hi* (§6.6.6).

25.6.4 Disjunction

Exclusive disjunction is expressed by the linker *numavny*, either between the two alternative clauses as in (139) or in a correlative construction (§25.1.2), repeated before each clause (140).

- (139) *tce c^hui-βde-nu* *numavny fsapav* *nu-mbi-nu*
 LNK IPFV-throw-PL otherwise animal IPFV-give-PL
 ŋgrvl *ma*
 be.usually.the.case:FACT LNK
 ‘(People uproot it) and either throw it away, or give it to the animals (to eat).’ (12-Zmbroko, 120-122)
- (140) *numavny tú-wy-nu-xsur*, *numavny <ban>* *tú-wy-βzu* *tce.*
 otherwise IPFV-INV-AUTO-fry otherwise mix IPFV-INV-make LNK
 ‘People either fry it, or mix it in salad.’ (conversation 14-05-10)

The linker *numavny* ‘otherwise’ has stress on the second syllable (*numávny*), and transparently comes from the demonstrative *nu* (§6.9.1), the copula *maš* ‘not be’ (§13.1.2) and the adposition *nr*, probably from what originally was the protasis of a conditional construction ‘if it is not’, with initial reduplication †*nu* *nu~maš nr* or Interrogative †*nu* *ú-maš nr* (§25.2.1, §12.4.1.2).

In questions, disjunction between several clauses can be express by adding the interrogative particle *ci* after each clause except the last, as in (141).

- (141) *χsyr rjyskxt u-taš* *tua-nu-če* *ci*, *rŋul rjyskxt u-taš*
 gold stairs 3SG.POSS-on 2-AUTO-go:FACT SFP silver stairs 3SG.POSS-on
 tua-nu-če *ci*, *com rjyskxt u-taš* *tua-nu-če* *ci*, *si*
 2-AUTO-go:FACT SFP iron stairs 3SG.POSS-on 2-AUTO-go:FACT SFP wood
 rjyskxt u-taš *tua-nu-če?*
 stairs 3SG.POSS-on 2-AUTO-go:FACT
 ‘Will you go on the golden stairs, the silver stairs, the iron stairs, or the wooden stairs? (2005 Kunbzang, 214)

Both *numavny* ‘otherwise’ and *ci* are only very rarely used with noun phrases 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 *myzui* ‘even more’ (treated in §26.2.3 below) and a superlative adverb *stu* ‘most’ (§26.4.1). There are no adverbs indicating a degree above or under a limit such as ‘too much’ or ‘not enough’; the degree nominal construction must be used instead to express this meaning (§26.1.2.1).

26.1.1.1 *wuma* ‘real, really’

The most common intensifier in Japhug is *wuma* ‘really’, from Tibetan ལྕ མ ཡ ཉ ‘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).

26 Degree and comparison

- 36198 (2) *w-χti nuu wuma zo turme pe ma*
 3SG.POSS-companion DEM really EMPH person be.good:FACT LNK
 36199 'Her husband is a very nice person (very nice as a person).' (14-siblings,
 36200 350)

36201 The flexibility in the position of *wuma* can be useful to distinguish head-internal
 36202 relatives from postnominal ones (§9.1.8.3, §23.4.3, §23.5.1.1).

36203 The intensifier *wuma* is not restricted to adjectival stative verbs. It can be
 36204 used with tropative verbs (§17.5) as in (3), but also modal verbs such as *cʰa* 'can'
 36205 (§24.5.3.2) and action verbs that do not have an intrinsic degree parameter such
 36206 as *ndza* 'eat' (4).

- 36207 (3) *tce nuu t'-wy-tcxt tce nuŋa nuu kuu wuma juu-nx-mŋym*
 LNK DEM AOR-INV-take.out LNK COW DEM ERG really SENS-TROP-hurt
 36208 'When one removes (the parasite by squeezing it out), the cow finds it
 36209 very painful.' (25-zrW, 28)

- 36210 (4) *maka tyci qaj nura wuma zo ndze.*
 at.all barley wheat DEM:PL really EMPH eat[III]:FACT
 36211 '(The dove) eats wheat and barley a lot.' (22-CAGpGa, 30)

36212 When *cʰa* 'can' takes an infinite complement, *wuma* generally follows the com-
 36213 plement clause, as in (5), whereas with finite complements it is generally located
 36214 inside of the complement clause (6).

- 36215 (5) *[si ky-pʰab] wuma zo cʰa-a*
 tree INF-chop really EMPH can:FACT-1SG
 36216 'I am very good at felling trees.' (2011-10-qajdo, 3)

- 36217 (6) *tur-ji uu-ŋgwi zuu tsʰyt uu-yli nuu*
 INDEF.POSS-field 3SG.POSS-in LOC goat 3SG.POSS-manure DEM
 36218 *cʰtú-wy-lst tce, [t'-ryku wuma zo tu-sype]*
 IPFV-INV-release LNK INDEF.POSS-crops really EMPH IPFV-do.well
 36219 *cʰa*
 can:FACT
 36220 'When one puts goat manure in fields, it can do a lot of good to the crops.'
 36221 (05-qaZo, 34)

36222 The intensifier *wuma* can be combined with *stʰuci* 'as much' (§5.8.4).

- 36223 (7) *nur fsapab ra kuu ndza-nur ri, wuma st^huci my-rga-nur.*
DEM animal PL ERG eat:FACT-PL LNK really so.much NEG-like:FACT-PL
36224 ‘The animals eat it, but don’t like it so much.’ (12-Zmbroko, 100)

36225 26.1.1.2 *k^hro* ‘much’

36226 The adverbs *k^hro* ‘much’ and *zimk^hym* ‘much’ can serve as intensifiers of noun
36227 phrases (§9.1.3.4) but can also have scope over the whole clause, in pre-verbal
36228 position. Unlike *wuma* and *nust^huci/ku^huci* (§26.1.1.3), they are more often used
36229 with action verbs, and can both refer to the quantity and intensity of actions
36230 (‘much’, ‘a lot’) or to the time taken by the action (‘for a long time’), as in (8) and
36231 (9), respectively.

- 36232 (8) *k^hro zo pjy-ŋke pjy-ra tcendyre, pjy-nuzwif.*
much EMPH IFR.IPFV-walk IFR.IPFV-be.needed LNK IFR-sleep
36233 ‘He had to walk a lot (on that day, was very tired), and fell asleep.’ (140430
36234 yufu he tade qizi-zh, 236)
- 36235 (9) *k^hro zo pjy-car ri mu-pjy-mto*
much EMPH IFR-search LNK NEG-IFR-see
36236 ‘(The prince) looked for her for a long time, but could not find her.’
36237 (140504 huiguniang-zh, 190)

36238 Both intensifiers can be reduplicated as *k^hu~k^hro* and *zuu~zimk^hym* as in (10).

- 36239 (10) *zuu~zimk^hym zo abyndundst zo pjy-nyt^hut^hu*
EMPH~much EMPH everywhere EMPH IFR-DISTR:ask
36240 ‘(The bear) asked around (about the rabbit) everywhere for a long time.’
36241 (2011-13-qala, 20)

36242 The adverb *zimk^hym* comes from *ჰინაკანა* *zij.k^hams* ‘country, universe’ (also bor-
36243 rowed as the noun *zijk^hym* ‘country, realm’, sometimes also pronounced *zimk^hym*),
36244 and its grammaticalization as an intensifier perhaps went through a semantic
36245 change ‘universe’ ⇒ ‘in the whole universe, universally’ ⇒ ‘everywhere’ ⇒ ‘for
36246 a long time; much’.

36247 26.1.1.3 Demonstrative+*st^huci* ‘as much’

36248 The combinations of the adverbs *st^huci* ‘as much’ and *st^hamtçyt* ‘as much’ (§5.8.4)
36249 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 nui-mpcyr, a-mbro ri*
1SG.POSS-wife also so.much SENS-be.beautiful 1SG.POSS-horse also
kust^huci nui-zru, a-pyxtci ri kust^huci nui-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 nui to-ndzur q^he, li pjy-rjaz.*
AOR-SBJ:PCP-ACAUS:cause.to.roll DEM IFR-stand LNK again IFR-dance
nust^hamtçṛt zo icq^ha ui-juli nui
that.much EMPH the.aforementioned 3SG.POSS-flute DEM
pjy-mpcyr.
IFR.IPFV-be.beautiful
‘(The rich man_i started dancing under the influence of the music, fell down). The one_i who had fallen down stood up and danced again. This was the extent to which (the shepherd boy’s) flute (music) was beautiful (his flute music was *that* beautiful).’ (140513 mutong de disheng-zh, 163-164)

The demonstrative can anaphorically refer to a previous entity or a previous clause, as in (12), where it is focalized.¹

26.1.1.4 Unexpected degree

The unexpected/high degree marker *rca* or *rcanu* indicates that the situation or action described by the predicate that follows is unexpected (13), intensifies to a noticeable (and not foreseeable) extent (14) or occurs with a remarkably high degree or intensity, with (15) or without (16) surprise.

¹ Although from a text translated from Chinese, this sentence was added by Tshendzin and is not in the original.

- 36274 (13) *wo nyzo rcanu^t tc^{hi} nui-tui-nyme ηu ma, azo*
 INTERJ 2SG UNEXP:DEG what SENS-2-do[III] be:FACT LNK 1SG
 36275 *tui-mui kui puu-kui-suu-χtci-a, t^yndzo nui!*
 INDEF.POSS-sky ERG AOR-2→1-CAUS-wash-1SG cold SFP
 36276 ‘You, what are you doing, you caused me to be drenched by the rain.’
 36277 (kWLAG 2014, 157)
- 36278 (14) *to-k-ynumqaj-ndzi-ci tce rcanu, zuruuzyri tce*
 IFR-PEG-RECIP:scold-DU-EVD LNK UNEXP:DEG progressively LNK
 36279 *ko-k-ynundo-ndzi-ci,*
 IFR-PEG-RECIP:take-DU-PEG
 36280 ‘They scolded each other and progressively started to fight,’ (IWlu2002,
 36281 52)
- 36282 (15) *mbro rcanuu u-xcyt kui-tui-tu zo nui-nts^hyr*
 horse UNEXP:DEG 3SG.POSS-strength SBJ:PCP-EMPH~exist EMPH AOR-neigh
 36283 *nui-nu,*
 SENS-be
 36284 ‘The horse neighed with all his strength.’ (qachGa2003, 158)

36285 The adverb *rcanuu* is particularly common in the degree construction with a *tui-*
 36286 degree nominal (§16.3), as in (16). In this particular construction, *rcanuu* does not
 36287 necessarily express unexpectedness.

- 36288 (16) *tce nuumi lalu a-pui-me rcanu, βzui*
 LNK DEM cat IRR-IPFV-not.exist UNEXP:DEG mouse
 36289 *u-tui-ηyn saχax.*
 3SG.POSS-NMLZ:DEG-be.evil be.extremely:FACT
 36290 ‘If there are no cats, the mice are extremely fierce (cause a lot of
 36291 damages).’ (21-IWlu, 32)

36292 In addition to its function as a degree adverb, *rcanuu* also contributes to infor-
 36293 mation structure: it marks the constituent preceding it as a topic, and the part of
 36294 the sentence following it as a focus.

36295 26.1.1.5 Emphatic

36296 The emphatic marker *zo* is one of the most common words in Japhug. It is never
 36297 obligatory, but frequently occurs after all the intensifiers described above.

26 Degree and comparison

It is one of the few adverbs that can follow the main verb (§22.2.7, §23.3.6), in particular with the stative verb *saxas* ‘be extremely’ as in (§17).

- (17) *tṣṛe u-rku* *tṣ-armbat* *q^he u-tu-sy-cke*
sun 3SG.POSS-side AOR:UP-be.near LNK 3SG.POSS-NMLZ:DEG-PROP-burn
pjṛ-saxas *zo* *ri*
IFR.IPFV-be.extremely EMPH LNK

‘When he approached the sun, it was extremely hot.’ (31-deluge, 112)

It also occurs after ideophones (§10.1.7) and deideophonic verbs (§20.9).

With personal pronouns, the emphatic *zo* can mean ‘by oneself’, as in (18) (§6.4).

- (18) *azō zo nuñui c-pjui-sat-a ra*
1SG EMPH DEM TRAL-IPFV-kill-1SG be.needed:FACT
‘I have to kill her myself.’ (140504 baixuegongzhu, 117)

It also appears on various types of subordinate clauses, in particular manner clauses (including serial verb constructions §25.4.1.4 and converbal clauses §25.4.2, §16.6.1.3), some temporal and conditional clauses (§16.6.3, §25.2.3.3, §25.3.1) and in neutral addition clauses (§25.6.2.1).

The emphatic marker may be historically related to the *-zo* stem of personal pronouns (§6.1) or, alternatively, be cognate to the Tibetan particle འཇུལྌ *jay* ‘also, even’.

26.1.2 Degree nominals

26.1.2.1 Monoclausal degree nominal construction

An alternative way to indicate the degree of a stative predicate is to use degree nominals (§16.3, §16.3.4) as intransitive subjects of degree verbs like *saxas* ‘be extremely’, *sṛre* ‘be ridiculous’, ‘be extremely’ (19), *tç^hom* ‘be too much’ (21) or *rtaś* ‘be enough’ (20). The TAME is expressed on the degree verb, which is always in 3SG (§14.2.7). Degree nominals can also serve as possessors of the subject *u-gryl* ‘order, rule’ in the collocation *u-gryl+me* ‘be extremely’ (example 111 in §22.4.1.3).

- (19) *azō kūnṛ a-xtu u-tu-mṇym juu-sṛre*
1SG also 1SG.POSS-belly 3SG.POSS-NMLZ:DEG-hurt SENS-be.extremely
zo
EMPH

‘Me too, my belly hurts a lot.’ (literally: ‘the degree of my hurting is

36326 ridiculously high') (qala 2002, 17)

- 36327 (20) *kuki tuu-ci ki u-tuu-rnaš*
DEM.PROX INDEF.POSS-water DEM.PROX 3SG.POSS-NMLZ:DEG-be.deep
36328 *múj-rtaš*
NEG:SENS-be.enough

36329 'This water is not deep enough.' (2010-03-zh, 4)

36330 The use of *syre* as degree verbs illustrates a semantic change from 'funny,
36331 ridiculous' to intensifier, similar to that of French *drôlement* (*drôlement difficile*)
36332 or of English *ridiculously* (*ridiculously difficult*).

36333 The possessive prefix is coreferent with the entity whose property is referred
36334 to by the nominalized verb, for instance 2SG in (21).

- 36335 (21) *nyzo ny-tui-xtci tc^hom-o*
2SG 2SG.POSS-NMLZ:DEG-be.small be.too.much:FACT-SFP
36336 'You are too young.' (150828 huamulan-zh, 28)

36337 Causative forms of degree verbs (§17.2.6), for instance *yxtc^hom* 'cause to be too
36338 much', can also be occur with degree nominals, as in (22).

- 36339 (22) *kuki maka u-tuu-cqraš*
DEM.PROX at.all 3SG.POSS-NMLZ:DEG-be.intelligent
36340 *tr-yx-tc^hom-a uþry-ŋu ye?*
AOR-CAUS-be.too.much-1SG RH.Q-be:FACT SFP
36341 'I hope that I did not cause her to become too intelligent.' (hist160709
36342 riquet6-v2)

36343 With *naxtçuy* 'be the same' as degree verb, the degree construction becomes an
36344 equative construction (§26.3.1), with the comitative postposition *c^ho* 'and, with'
36345 (§8.2.5).

- 36346 (23) *zmbri c^ho u-tuu-wxti naxtçuy*
willow COMIT 3SG.POSS-NMLZ:DEG-be.big be.the.same:FACT
36347 'It is as big as a willow (its degree of "bigness" is the same as that of a
36348 willow).' (08-qaCti, 3)

36349 The lexicalized infinitive form *kr-ti* of the verb *ti* 'say' and the ergative can
36350 optionally follow the degree nominal (24).

26 Degree and comparison

- 36351 (24) *kvtsa ni ndzi-tui-ŋguu ky-ti kuu*
parent.and.child DU 3DU.POSS-NMLZ:DEG-be.poor INF-say ERG
36352 *pui-saxaš zo*
PST.IPFV-be.extremely EMPH
36353 ‘The mother and her child were extremely poor.’ (Norbzang 2005, 152)

36354 Degree nouns are not the only type of nouns that can occur in this construction.
36355 Abstract nouns in *tr-* (§16.4.2) such as *trčpar* ‘thirst’ (25) or underived ab-
36356 stract nouns such as *rystom* ‘outrage’ can also be used, though much less com-
36357 monly. This construction however differs from the previous one in that the de-
36358 gree verb *sayaš* indexes the experiencer as intransitive subject (3PL in 25).

- 36359 (25) *tr-čpar ky-ti kuu pui-saxaš-nui zo*
NMLZ:ABSTRACT-thirst INF-say ERG PST.IPFV-be.extremely-PL EMPH
36360 *pui-ryzi-nui juu-ŋuu*
PST.IPFV-stay-PL SENS-be
36361 ‘(The people there) live in extreme thirst.’ (divination 2005, 8)

36362 Example (25) is in addition a hybrid construction combining the abstract nom-
36363 inal and the degree verb with a serial verb construction of degree (§26.1.3).

36364 Without degree verb, degree nominals and other abstract nouns can be used
36365 as predicates to express high degree in exclamation (§16.3.3), often with the sen-
36366 tence final particle *nui*, as in (26).

- 36367 (26) *ny-tui-syjndyt nui!*
2SG.POSS-NMLZ:DEG-be.cute SFP
36368 ‘You are so cute!’ (heard in context)

36369 26.1.2.2 Consequence degree construction

36370 Degree nominals and abstract nouns can also occur with the ergative marker *kuu*
36371 followed by a finite clause describing a consequence or a particular aspect of the
36372 high degree reached (‘so X that Y’; in the following, the clause X is referred
36373 to as ‘degree clause’, and Y as ‘consequence clause’), as in (27). This type of
36374 construction is a subtype of causality clause linking (§25.5).

- 36375 (27) *wu-tuu-nymbju* *kui* [*rjylpu kʰxtyno*] *kui-nujajnsa*
 3SG.POSS-NMLZ:DEG-be.shiny ERG king side.of.the.roof SBJ:PCP-be.idle
 36376 *nui* *yui* *wi-mraš* *na-z-nymbju* *zo* *nui-ŋu*.
 DEM GEN 3SG.POSS-eye AOR:3→3'-CAUS-be.shiny EMPH SENS-be
 36377 'It was so shiny that it dazzled the eyes of the king, who was staying idle
 36378 on the side of the roof (of the palace).' (Norbzang 2005, 177)

36379 It is possible for several degree nominals to share a consequence clause. For
 36380 instance, in (28), the degree nouns *nui-tuu-ŋyuzruy* and *a-tuu-ŋyuzruy* are followed
 36381 by only one marker *kui* and have a common consequence clause *múj-cha-a*. Here,
 36382 the additional clause *ci tu-pe tce* 'putting together' specifies that it is the conjoined
 36383 quantity (of lice) referred by the two degree nominals that is the cause of the
 36384 consequence clause, and therefore implies that the absence of a consequence
 36385 clause just after the first degree noun *nui-tuu-ŋyuzruy* is not due to ellipsis.

- 36386 (28) *pab ra ci* *nui-tuu-ŋyuzruy*, *azo ci*
 36387 pig PL one 3SG.POSS-NMLZ:DEG-have.a.lot.of.lice 1SG one
a-tuu-ŋyuzruy *kui* [*ci tu-pe tce*
 1SG.POSS-NMLZ:DEG-have.a.lot.of.lice ERG one IPFV-do[III] LNK
 36388 *múj-cʰa-a]*
 NEG:SENS-can-1SG
 36389 'Pigs have so many lice and I have so many lice that all put together, I
 36390 can't bear it.' (2005 Kunbzang, 43)

36391 As in the monoclausal construction, the lexicalized infinitive form *ky-ti* of *ti*
 36392 'say' can optionally be added before the ergative, as in (29) (see also 140, §22.4.2.4).

- 36393 (29) *wu-tuu-pat* *ky-ti* *kui* [*wi-ctsí*] *ra to-łob.*
 3SG.POSS-NMLZ:DEG-be.tired INF-say ERG 3SG.POSS-sweat PL IFR-come.out
 36394 'He was so tired that he started sweating (profusely).' (140513 mutong de
 36395 disheng-zh, 70)

36396 The same meaning '... is so *X* that ...' can also be expressed by a finite clause
 36397 *X* followed by the relator noun *wi-xçyt* 'strength' with the ergative *kui* (§8.3.6.2,
 36398 §25.5.2), as in (30).

- 36399 (30) *nui-maqʰu* *wi-xçyt* *kui*, [*kui-fsob*] *tx-ryŋgat* *ri*
 IPFV-be.after 3SG.POSS-strength ERG SBJ:PCP-be.light AOR-be.about LOC

26 *Degree and comparison*

- 36400 *kóbmuz tu-łor yu.]*
 only.then IPFV-come.out be:FACT
 36401 '(This star) is so late that it only comes out when the day is about to
 36402 break.' (29-mWBZi, 41)

36403 26.1.3 Serial verb construction

- Some stative verbs of degree (in particular *tç'om* ‘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.

- 36408 (31) a. *uu-tu-xtei* *juu-tc^{hom}*
 3SG.POSS-NMLZ:DEG-be.small SENS-be.too.much

36409 b. *juu-xtei* *juu-tc^{hom}*
 SENS-be.small SENS-be.too.much

36410 ‘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).

- 36414 (32) [nuŋa ra nui-taŋ tu-dyn tu-tc^hom] muáj-pe
 cow PL 3PL.POSS-on IPFV-be.many IPFV-be.too.much NEG:SENS-be.good

36415 *ma*
 LNK

36416 ‘It is not good when there are too many (ticks) on cows.’ (25-xCelwi, 31)

36417 26.1.4 Exceptive

- ³⁶⁴¹⁸ 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

² Example (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’.

- 36420 (33) a. *nui ma azo maka, ky-nui-rga muíj-k^hu zo*
DEM apart.from 1SG at.all INF-APPL-like NEG:SENS-be.possible EMPH
36421 *nui-rga-a*
SENS-like-1SG
36422 ‘I like it extremely (to the extent that it is not possible to like it more
36423 than I do).’ (140521 huangdi de xinzhuang-zh, 141)
36424 b. *nui ma ky-nui-rga my-kui-k^hu zo*
DEM apart.from INF-APPL-like NEG-INF:STAT-be.possible EMPH
36425 *nui-rga-a*
SENS-like-1SG
36426 ‘I like it extremely.’ (elicitation based on 33a)

36427 26.2 Comparative

36428 Adjectival stative verbs in Japhug do not have specific comparative or superlative
36429 forms,³ and comparison is expressed by means of postpositions, adverbs or verbs
36430 marking relative degree.

36431 26.2.1 The postpositions *syz* and *kui*

36432 As illustrated in (34), it is possible in Japhug to mark both the standard of com-
36433 parison (by the postposition *syz* ‘than’, §8.2.7), and the comparee (by the ergative
36434 *kui* (§8.2.2.7).⁴

- 36435 (34) *ui-bi syz ui-pi nui*
3SG.POSS-younger.sibling COMP 3SG.POSS-elder.sibling DEM
STANDARD STANDARD.MARKER COMPAREE
36436 *kui mpcyr*
ERG be.beautiful:FACT
COMPAREE.MARKER PARAMETER
36437 ‘The elder (sister/brother) is more beautiful than the younger (sister/brother).’
36438 (elicited)

³ There 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.

⁴ In this section, the term ‘standard marker’ corresponds to Dixon’s (2008) MARK. The ‘comparee marker’ could be equated with Dixon’s INDEX.

26 Degree and comparison

36439 The comparee marker is optional when the standard phrase is overt, as shown
36440 by (35), where the comparee *wi-rzaβ* ‘his wife’ is in absolute form.

- 36441 (35) *wi-rzaβ azo syz wxti*
3SG.POSS-wife 1SG COMP be.big:FACT
36442 ‘His wife is older than me.’ (14-siblings, 200)

36443 This construction is exclusively used for comparisons of superiority. To ex-
36444 press comparison of inferiority, one either has to select the antonym of the pa-
36445 rameter, or to reformulate with another construction such as that with egressive
36446 postpositions (§26.2.4).

36447 The standard marker can follow a genitive postpositional phrase, when the
36448 entities being compared are possessives, and the second one is elided, as in (36).
36449 The genitive is however optional in this context, as shown by (37), when we find
36450 *mbro syz* instead of expected *mbro yuu syz*.

- 36451 (36) *wi-rna nuu [mbro yuu] syz jnuu-wxti.*
3SG.POSS-ear DEM horse GEN COMP SENS-be.big
36452 ‘Its ears are bigger than those of the horse.’ (20-tArka, 5)
- 36453 (37) *tceri wi-phonju* *nuu mbro syz koŋla zo jnuu-wxti.*
LNK 3SG.POSS-body DEM horse COMP really EMPH SENS-be.big
36454 ‘Its body is bigger than (that of) a horse.’ (19-rNamoN, 38)

36455 When the standard is not overt, the comparee markers *kua* (as in 38) or *mrzua*
36456 (§26.2.3). obligatory.

- 36457 (38) *tua-yli kua-dyn wi-stu qandze tua kua*
INDEF.POSS-dung SBJ:PCP-be.many 3SG.POSS-place earthworm DEM ERG
36458 *jua-jpum.*
SENS-be.thick
36459 ‘The earthworms that are in places where there is a lot of dung (fertilizer)
36460 are fatter.’ (25-akWzgumba, 128)

36461 The comparee marker *kua* can occur on the *possessor* of the comparee rather
36462 than on the comparee itself, as in (39).

- 36463 (39) *azo kua a-laz jua-sna*
1SG ERG 1SG.POSS-karma SENS-be.good
36464 ‘I am luckier (than you).’ (140515 huli he yelv-zh, 19)

³⁶⁴⁶⁵ The parameter indexes the comparee, never the standard, as shown in (40),
³⁶⁴⁶⁶ where the main verb has 2SG indexation. The comparee can be relativized like a
³⁶⁴⁶⁷ normal intransitive subject (§23.5.1.2), but the standard cannot (§23.5.12).

- ³⁶⁴⁶⁸ (40) *t̪yrū u-tcui nui syz pui-tui-rzi!*
 chieftain 3SG.POSS-son DEM COMP SENS-2-be.heavy
³⁶⁴⁶⁹ ‘You are heavier than the prince!’ (140506 woju guniang-zh, 134)

³⁶⁴⁷⁰ The parameter can be combined with exceptive phrases with *ma* ‘apart from’
³⁶⁴⁷¹ (§8.2.8) containing counted nouns, to specify more precisely the difference in
³⁶⁴⁷² degree between the two referents as in (40).

- ³⁶⁴⁷³ (41) *wajt̪cin syzny b̪nui-p̪yrme ma my-xtci*
 ANTHR COMP [two-years apart.from] NEG-be.small:FACT
³⁶⁴⁷⁴ ‘He is only two years younger than Dbangcan.’ (14-siblings, 242)

³⁶⁴⁷⁵ Comparees and standards are generally nouns, noun phrases or postpositional
³⁶⁴⁷⁶ phrases as in the examples above, but can also be temporal adverbs (42) or sub-
³⁶⁴⁷⁷ ordinate clauses, in the Irrealis (§21.4.1), or other modal categories as in (43).⁵

- ³⁶⁴⁷⁸ (42) *juf̪eūr syz jusŋi kui pui-mpja*
 yesterday COMP today ERG SENS-be.warm
³⁶⁴⁷⁹ ‘Today is warmer than yesterday.’ (elicited)
- ³⁶⁴⁸⁰ (43) *nui syzny [a-pui-si] kui pui-mna*
 DEM comp IRR-PFV-die ERG SENS-be.better
³⁶⁴⁸¹ ‘It is better that he dies.’ (150909 xiaocui-zh, 118)

³⁶⁴⁸² 26.2.2 Intensifier *tsa* ‘a little’

³⁶⁴⁸³ The degree adverb *tsa* ‘a little’, one of the very rare adverbs to occur postverbally
³⁶⁴⁸⁴ (§22.2.7), can by itself express comparison of superiority as in (44).

- ³⁶⁴⁸⁵ (44) *kui-mvku cʰui-kui-tuit nui pui-tcur tsa*
 SBJ:PCP-be.first IPFV-SBJ:PCP-ripen DEM SENS-be.sour a.little
³⁶⁴⁸⁶ ‘The one (apple) that ripens earlier is a bit sourer.’ (07-paXCi, 48)

⁵ The original Chinese is 还不如死了算了 <háibùrú 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).

26 Degree and comparison

It can be combined with an overt standard marked by either *syz* ‘than’ (45) or *st^huci* ‘as much’ (example 91, §22.2.7).

- (45) *bstwarcuu syz pui-wxti tsa*
Garrulax COMP SENS-be.big a.little

‘It is a bit bigger than the Garrulax sp.’ (23-qapGAmtWmtW, 13)

26.2.3 The negative verb NEG+*z̄uu* ‘(not) just be’

The verb *NEG + z̄uu* ‘not just be’, which requires a negative prefix (§13.1.3) serves to build another comparative construction. It takes as semi-object the standard, and can be followed by the adverb *jamar* ‘about’ and a verb in parataxis specifying the parameter of comparison as in (46).

- (46) *t̄ci u-rdo& m̄t̄j-z̄uu jamar pui-wxti*
barley 3SG.POSS-grain NEG:SENS-just.be about SENS-be.big
‘It is a little bigger than a grain of barley.’ (28-kWpAz,104)

It can also be in infinitive form *m̄y-kui-z̄uu* as a manner converb (§16.2.1.7, §25.4.2) as in (47).

- (47) *u-ru nura tu-jasndzu m̄y-kui-z̄uu zo*
3SG.POSS-stalk DEM:PL INDEF.POSS-finger NEG-INF:STAT-just.be EMPH
pui-jpum c^ha
IPFV-be.thick can:FACT
‘Its stalk can grow thicker than a finger.’ (12-ndZiNgri, 5)

The stative verb expressing the parameter can be combined with modal verbs as in (47). Without an overt parameter, the default interpretation of the verb *m̄y-z̄uu* means ‘not just like that’ or ‘bigger than’. In (48) for instance, *m̄y-z̄uu* is redundantly followed by a comparative construction in *syz* (§26.2.1), and the two clauses *βz̄uu ndyre m̄y-z̄uu* and *βz̄uu syz ndyre wxti yu* have the same meaning.

- (48) *nunuu kui-xt̄ci ci tce, βz̄uu ndyre m̄y-z̄uu.*
DEM SBJ:PCP-EMPH-be.small INDEF LNK mouse ADVERS NEG-just.be:FACT
βz̄uu syz ndyre wxti yu
mouse COMP ADVERS be.big:FACT be:FACT
‘(The weasel) is a small (animal), but bigger than a mouse. It is bigger than a mouse.’ (27-spjaNkW, 32)

³⁶⁵¹² In this construction, *my-zuu* indexes as subject the comparee, as in (49).

- ³⁶⁵¹³ (49) *ki* *kum ki* *my-zuu-a*
DEM.PROX door DEM.PROX NEG-just.be:FACT-1SG
³⁶⁵¹⁴ ‘I am bigger than this door.’ (elicited)

³⁶⁵¹⁵ Alternatively, *my-zuu* can be combined with a degree nominal (§26.1.2.1) as in
³⁶⁵¹⁶ (50), in which case it only occurs in the 3SG.

- ³⁶⁵¹⁷ (50) *a-tuu-mbro* *ki* *kum ki* *my-zuu*.
1SG.POSS-NMLZ:DEG-be.high DEM.PROX door DEM.PROX NEG-just.be:FACT
³⁶⁵¹⁸ ‘I am bigger than this door.’ (elicited)

³⁶⁵¹⁹ The non-past form *my-zuu* has been further grammaticalized as a degree adverb
³⁶⁵²⁰ *myzuu* ‘even more’, which can be combined with the standard marker *syz*, as in
³⁶⁵²¹ (51). This construction indicates that the standard already has a very high degree
³⁶⁵²² relative to the parameter, and that the comparee’s degree is even higher.

- ³⁶⁵²³ (51) *qamtcuur nuu u-mtc^{hi}* *nunuu βzuu* *syzny myzuu* *zo*
shrew DEM 3SG.POSS-mouth DEM mouse COMP even.more EMPH
³⁶⁵²⁴ *amtcoꝝ*
be.pointy:FACT
³⁶⁵²⁵ ‘The mouth of the shrew is even more pointy than that of the mouse.’
³⁶⁵²⁶ (27-spjaNkW, 204)

³⁶⁵²⁷ 26.2.4 The egressive postposition *caytaꝝ* ‘up from’

³⁶⁵²⁸ The egressive postpositions (§8.2.10), in particular *caytaꝝ* ‘up from’, can be com-
³⁶⁵²⁹ bined with a verb (or a complex predicate) in negative form, meaning ‘no more
³⁶⁵³⁰ than *X*’, where the standard *X* is the noun phrase preceding *caytaꝝ* as in (52)
³⁶⁵³¹ and (53).

- ³⁶⁵³² (52) *[tuu-tya caytaꝝ] my-zri*.
one-span up.from NEG-be.long:FACT
³⁶⁵³³ ‘It is not longer than one handspan.’ (28-tshAwAre, 51)
- ³⁶⁵³⁴ (53) *uu-ru ra (...), [tuu-jabndzu caytaꝝ] juu-jpum*
3SG.POSS-stalk PL GENR.POSS-finger up.from IPFV-be.thick
³⁶⁵³⁵ *my-c^ha ma*
NEG-can:FACT LNK
³⁶⁵³⁶ ‘Its stalk cannot grow/become thicker than a finger.’ (15-babW, 23)

26 Degree and comparison

36537 The egressive *çantax* also occurs in one of the superlative constructions (§26.4.3).

36538 26.2.5 Negative existential verbs

36539 The negative existential verb *me* (§22.5.1.2), combined with the scalar focus marker
36540 *kuny* ‘even’ (§9.1.6.1), can have the meaning ‘not even as big as *X*’, as in (54),
36541 where the noun *zruy* ‘louse’ is the standard of comparison.

36542 (54) *qajuwβlama kx-ti ci tu tce, nui rca*
36543 bug OBJ:PCP-say INDEF exist:FACT LNK DEM UNEXP:FOC
kui-xtciw~xtci ci zo cti. zruy kuny
36544 SBJ:PCP-EMPH~be.small INDEF EMPH be.AFF:FACT louse also
36545 *me.*
36546 not.exist:FACT

36545 ‘There is an (insect) called *qajuwβlama*, it is very small. It is not even as big
36546 as a louse.’ (28-kWpAz, 149-150)

36547 Another example of this construction is found in (71) in (§8.2.3.1).

36548 26.3 Equative and similitative

36549 26.3.1 Entity equative

36550 This section discusses entity equative constructions, which express that two en-
36551 tities have a property in equal degree (‘X is as Y as Z’; Haspelmath & Buchholz
36552 1998). No less than five constructions are available to express this meaning.

36553 26.3.1.1 Nominalized equative construction

36554 The nominalized entity equative construction is a particular case of the degree
36555 nominal construction (§26.1.2.1), with *naxtçuy* ‘be the same’ as degree predicate.
36556 It has three subvariants.

36557 In the first variant (corresponding to Haspelmath’s (2017) type 5 – Primary
36558 reach equative unified), the comparee and the standard are included in a noun
36559 phrase, with the comitative marker *c^ho* (and its longer variant *c^hondyre*, §8.2.5)
36560 serving as the standard marker, as in (55).

- 36561 (55) *qalekuts^hi numuu c^hondvre* *βzar* *ni ndzi-tuu-wxti*
 bird.sp DEM COMIT buzzard DU 3DU.POSS-NMLZ:DEG-be.big
 COMPAREE STANDARD.MARKER STANDARD PARAMETER

36562 *naxtcuuy.*
 be.identical:FACT
 PARAMETER.MARKER

36563 ‘The *qalekuts^hi* bird is as big as the buzzard.’ (literally: ‘The *qalekuts^hi* bird
 36564 and the buzzard are identical in their degree of bigness.’) (23-RmWrcWftsa,
 36565 34)

36566 The degree noun can be in dual/plural as in (55) and (57), corresponding to the
 36567 sum of the numbers of the comparee and the standard, or in the singular as in
 36568 (56): even though two referents are present here, the 3SG possessive *u-* is used,
 36569 coreferent with the comparee.

- 36570 (56) *qro nuunu duduat c^ho u-tuu-wxti* *naxtcuuy.*
 pigeon DEM dove COMIT 3SG.POSS-NMLZ:DEG-be.big be.the.same:FACT
 36571 ‘The pigeon is as big as a dove.’ (24-qro, 2)

36572 These two possibilities are in free variation: example (57), from the same text
 36573 as (56) and referring to the same situation, has dual marking.

- 36574 (57) *tce duduat c^ho ndzi-tuu-wxti* *naxtcuuy* *zo*
 LNK dove COMIT 3DU.POSS-NMLZ:DEG-be.big be.the.same:FACT EMPH
 36575 ‘It is as big as a dove.’ (24-qro, 19)

36576 In the second variant, the nominalized parameter takes a possessive prefix only
 36577 coreferent with the comparee, and the standard together with the comitative (the
 36578 standard marker) follows the parameter, as in (58).

- 36579 (58) *qalias nuu u-tuu-wxti* *nuu qandzyi c^ho*
 eagle DEM 3SG.POSS-NMLZ:DEG-be.big DEM hawk COMIT
 COMPAREE PARAMETER STANDARD STANDARD.MARKER
 36580 *naxtcuuy tsa*
 be.identical:FACT a.little
 PARAMETER.MARKER PARAMETER.MARKER
 36581 ‘The eagle is about as big as the hawk.’ (19-qandZGi, 36)

36582 In the third variant, the parameter takes a third person singular possessive
 36583 prefix, and the comparee and standard are marked by person indexation on the

26 *Degree and comparison*

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*.

- | | | |
|---|-------------------------------------|------------------------------------|
| 36587 | (59) <i>tce wi-tui-muctas</i> | <i>nw-naxtcuwy-tci</i> |
| LNK 3SG.POSS-NMLZ:DEG-be.cold SENS-be.identical-1DU | | |
| 36588 | PARAMETER | PARAMETER.MARKER-COMPAREE+STANDARD |
| | <i>tce, q^he nw-txjpa</i> | <i>nw-rkun ma</i> |
| LNK LNK 2PL.POSS-snow SENS-be.few SFR | | |

36589 'It is as cold here as it is in your place, you don't have a lot of snow.' ('You
36590 and I are identical as to coldness'; conversation, 2014/11)

36591 26.3.1.2 Serial verb constructions

Serial verb constructions with the similitative verb *fse* ‘be like’ (§25.4.1.2), or more rarely *naxtçuy* ‘be identical’ and *afsuja* ‘be of the same size’ as first verb can also be used a entity equative.⁶

The semi-transitive verb *fse* ‘be like’ (§14.2.3) takes the comparee as subject and the standard as semi-object. Since it is syntactically linked to the standard, it is analyzed here as the standard marker rather than as the parameter marker.

- | | | | | | | | |
|-------|------|--|-----------|-----------------|------------------|-----------------------|-----------------|
| 36598 | (60) | <i>nur</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 |
| 36599 | | <i>pjy-syjlob</i> | | | | | |
| | | IFR.IPFV-be.ugly | | | | | |
| | | PARAMETER | | | | | |
| 36600 | | '(The frog son) was as ugly as his father. '(150818 muzhi guniang-zh, 100) | | | | | |

The reduplicated degree adverb *fslajse* completely identical which derives from *fse* 'be like' optionally occurs in this construction as a parameter marker.

- 36603 (61) *uq-a* *nura li kumaš t̪ixmxy nura*
 3SG.POSS-ROOT DEM:PL again other mushroom DEM:PL
 36604 *fsufse* *zo fse.*
 completely.identical EMPH be.like:FACT
 36605 ‘Its root is completely identical to that of other mushrooms.’

⁶ These constructions correspond to Haspelmath's (2017) type 1 (Only equative standard-marker).

36606 (23-mbrAZim, 115)

36607 Both *fse* ‘be like’ and the stative verb occurring with it in the serial construction
 36608 (the parameter) are in participial form in (62), forming a relative clause with
 36609 the comparee as the relativized element. The superlative construction studied in
 36610 §26.4.3 is essentially a particular use of such relativized equative sentences.

36611	(62)	<i>ažo</i>	<i>kui-fse</i>	<i>kui-yc^htuc^ha</i>	<i>žo</i>	<i>bžunuu</i>	<i>yurža</i>
		1SG	SBJ:PCP-be.like	SBJ:PCP-be.capable	EMPH	young.man	hundred
		STANDARD	STANDARD	MARKER	PARAMETER		COMPAREE
36612		<i>kurcat ra</i>					
		eight	be.needed:FACT				

36613 ‘I need a hundred and eight young men as able as I am.’ (Norbzang 2012,
 36614 17)

36615 The verb *naxtgujy* ‘be the same’ requires in addition the comitative *c^ho* on the
 36616 standard (as in the preceding construction, §26.3.1.1), as shown by (63).

36617	(63)	< <i>bali></i>	<i>nii, kukutcu izora</i>	<i>c^ho</i>	<i>naxtgujy</i>
		TOPO	DEM here	1PL	COMIT
		COMPAREE	STANDARD	STANDARD	MARKER
36618		<i>jamar</i>	<i>pui-muictar pui-tui-ti tce</i>		
		about	SENS-be.cold	SENS-2-say	
		PARAMETER	LNK		

36619 ‘You said that it was as cold in Paris as here by us.’ (conversation, 11-08-
 36620 2016)

36621 26.3.1.3 Possessed noun

36622 The inalienably possessed noun *u-fsu* ‘equal in size to’ (§5.1.1.5, §20.8.2) can be
 36623 used as standard marker, as in (64) and (65). The possessive prefix is coreferent
 36624 with the standard; when the standard is the generic noun *turme* ‘person’, the
 36625 prefix can either be in 3SG as in (64), or with the generic possessor prefix (§6.2.2).

36626	(64)	<i>tu-mbro</i>	<i>tce, turme u-fsu</i>	<i>jamar tu-βze</i>
		IPFV-be.high	LNK man	3SG.POSS-equal.in.size about IPFV-grow
36627		<i>c^ha.</i>		

36628 ‘When it grows, it can grow about the size of a person.’ (12-ndZiNgri, 4)

26 Degree and comparison

- 36629 (65) *wi-tur-mbro* *nua tu-mt^hyy* *wi-fsu*
3SG.POSS-NMLZ:DEG-be.high DEM GENR.POSS-waist 3SG.POSS-equal.in.size
36630 *jamar ma* *tu-mbro* *mx-c^ha*
about apart.from IPFV-be.high NEG-can:FACT
36631 ‘As for its size, it can grow only about as high as a person’s waist.’
36632 (18-NGolo, 181)

36633 The parameter is optional in this construction. It can be expressed either as a
36634 coordinated clause as in (64), as a degree nominal or as the main predicate as in
36635 (65). Only *mbro* ‘be high’ and *wxti* ‘be big’ are compatible with *wi-fsu*.
36636 A similar construction is reported in Situ (Lín 1993: 377).

36637 26.3.1.4 *st^huci* ‘as much’ and *jamar* ‘about’

36638 The adverbs *st^huci* ‘so much’ (on its etymology, see §5.8.4) and *jamar* ‘about’ (from
36639 Tibetan ལྷར་མར་ *jar.mar* ‘about’) are used as standard marker. The former one *st^huci*
36640 essentially occurs in a negative equative construction ‘not as X as Y’ (where X
36641 is the parameter and Y the standard) as in (66).

- 36642 (66) *kuumcku wi-jwas* *st^huci* *mx-rjum*
garlic 3SG.POSS-leaf so.much NEG-be.broad
36643 ‘(Its leaves) are not as broad as garlic leaves.’ (07-Cku, 91)

36644 The latter one *jamar* ‘about’ can be combined with either adjectival stative
36645 verbs such as *wxti* ‘be big’ (67), or with existential verbs (§22.5.1.2) as in (68).

- 36646 (67) *qajdo knuz jamar wxti*
crow two about be.big:FACT
36647 ‘It is about as big as two crows.’ (19-qandZGi, 9)

- 36648 (68) *wi-mat* *yui wi-ru* *nua zri* *tce, tce tur-tya*
3SG.POSS-fruit GEN 3SG.POSS-stalk DEM be.long:FACT LNK LNK one-span
36649 *jamar, ki* *jamar tu* *tce*
about DEM.PROX about exist:FACT LNK
36650 ‘The stalk of its fruit is long, about a handspan long, about this long.’
36651 (16-CWrNgo, 224)

36652 26.3.2 Property equative

36653 Property equative constructions (‘ X_i is as Y as he/she/it_i is Z ’), in which two
36654 parameters (comparee parameter Y and standard parameter Z), rather than two

36655 entities, are compared, are not attested in the Japhug corpus. In Jacques (2018d),
 36656 I used Perrault's fairy tale *Riquet à la Houppe*, whose whole plot is based on
 36657 property equative sentences, as a way to conduct elicitation on this topic.

36658 Property equatives, e.g. ' X_i is as stupid as s/he_i is beautiful' (a sentence oc-
 36659 curring several times in the story), can be expressed in Japhug in three different
 36660 ways.

36661 First, the standard parameter is in degree nominal form, followed by the pos-
 36662 sessed noun *w-fsu* 'equal in size to' (§26.3.1.3), and the comparee parameter is the
 36663 main predicate of the construction, in finite form (69).

- 36664 (69) *w-tu-mpçyr* *yuu w-fsu* *jamar ci*
 3SG.POSS-NMLZ:DEG-be.beautiful GEN 3SG.POSS-equal.in.size about INDEF
 36665 *juu-k^he* *cti*
 SENS-be.stupid be.AFF:FACT
 36666 'S/he_i is stupid to the extent of his/her_i beauty.' (elicited)

36667 Second, the two verbs used as parameters are in degree nominal form, linked
 36668 by the comitative postposition *c^ho*, and serve as subject of the verb *afsuja* 'be of
 36669 the same size' (70).

- 36670 (70) *w-tu-mpçyr* *c^ho* *w-tu-k^he* *nua*
 3SG.POSS-NMLZ:DEG-be.beautiful COMIT 3SG.POSS-NMLZ:DEG-be.stupid DEM
 36671 *juu-ysuja* *cti*
 SENS-be.of.the.same.size be.AFF:FACT
 36672 'His/her beauty and his/her stupidity are equal.' (elicited)

36673 Third, it is possible to express the same meaning with a correlative construc-
 36674 tion, as in (71), though this may be a calque from Chinese.

- 36675 (71) *tc^hi jamar kuu-mpçyr* *nua, nua jamar ci* *juu-k^he*
 what about SBJ:PCP-be.beautiful DEM DEM about INDEF SENS-be.stupid
 36676 *cti*
 be.AFF:FACT
 36677 'A much as s/he is beautiful, s/he is stupid.' (elicited)

36678 26.3.3 Simulative

36679 Simulative constructions express similarity in the manner in which an action is
 36680 performed, rather than equal degree.

26.3.3.1 Similative verbs

The main similative construction involves the similative verbs *fse* ‘be like’ or *stu* ‘do like’ in parataxis as in (72).

- (72) *nunu pri nuu kuu, nyki, turme jnu-fse tce, nykinuu icq^ha nuu,*
DEM bear DEM ERG FILLER man SENS-be.like LNK FILLER FILLER DEM
ty-ryku tci tu-ndze, ca tci tu-ndze, (...)
INDEF.POSS-crops also IPFV-eat meat also IPFV-eat
jnu-ŋgryl.
SENS-be.usually.the.case

‘The bear, like a man, eats grains and meat.’ (21-pri, 17)

Alternatively, the infinitive *kuu-fse* of *fse* ‘be like’ as a manner converb (§16.2.1.7, §25.4.2) can convey similative meaning, either with a noun phrase or an infinitive clause (73).

- (73) *[ky-ynuwyro] kuu-fse tú-wy-ndza cti ma*
INF-play INF:STAT-be.like IPFV-INV-eat be.AFF:FACT LNK
‘People eat it for fun (as if to play, not as part of a real meal).’ (08-rasti, 59)

26.3.3.2 Similative denominal stative verbs

The denominal prefix *aru-/yrui-* derives stative verbs meaning ‘be *X*-like’ out of nouns (§20.2.2), as in (74), an example in degree nominal form (§16.3.3) spontaneously produced by Tshendzin as comment on a story that we were transcribing.

- (74) *uu-tuu-yrui-sujno nua!*
3SG.POSS-NMLZ:DEG-DENOM:SIMILATIVE-grass SFP
‘(The princess cuts their head as easily/casually) as if it were grass.’
(heard in context)

The more elaborated sentence (75) was given as an explanation for (74).

- (75) *ky-p^hut uu-tuu-mbat kuu*
INF-cut 3SG.POSS-NMLZ:DEG-DENOM:SIMILATIVE-easy ERG
jnu-yrui-sujno zo
SENS-be.like.grass EMPH
‘It is as easy to cut as if it were grass.’ (elicited)

36704 In this construction, the standard is the verbalized noun, the comparee is the
 36705 intransitive subject, and the denominal prefix *aru-/rru-* is the standard marker.
 36706 The parameter can be optionally indicated as a degree nominal as in (75).

36707 This unusual similitive construction is productive, since it can be applied to
 36708 nouns from Tibetan or Chinese. It does not fit in any of Haspelmath's (2017) six
 36709 types of equative constructions, but bears some resemblance to the "similitive
 36710 adjective" derivation in *-lágán* in Saami (Ylikovski 2017: 5.1).

36711 26.4 Superlative

36712 26.4.1 Degree adverb

36713 The superlative adverb *stu* 'most' is generally located before the verb, and option-
 36714 ally takes the emphatic *zo*. It most commonly expresses absolute superlative as
 36715 in (76).

- 36716 (76) *nyzo stu zo tuu-mkʰyz tce, tce nyzo c-tx-nyme*
 2SG most EMPH 2-be.expert:FACT LNK LNK 2SG TRAL-IMP-do[III]

36717 'You are the best at it, do it!' (150822 laoye zuoshi zongshi duide-zh, 37)

36718 When the subject has a certain property in the highest degree only relative to
 36719 a certain class (relative superlative), this class can be specified with the relator
 36720 noun *uu-ŋguuz* 'among' (§8.3.4.5), as in (77).

- 36721 (77) *nuu pyxtciu nuu-ŋguuz stu xtci low.*
 DEM bird 3PL.POSS-among most be.small:FACT SFP
 36722 'It is the smallest of all birds.' (24-ZmbrWpGa, 126)

36723 Most examples of this construction appear with subject participle (§16.1.1) of
 36724 adjectival stative verbs as in (78), and object participles (§16.1.2) with transitive
 36725 experiencer verbs as in (79).

- 36726 (78) *kuicunguu tce <aizheng> ky-ti puu-me tce,*
 long.ago LNK cancer OBJ:PCP-say PST.IPFV-not.exist LNK
 36727 *ky-kui-nyndza nuu stu zo kui-ŋyn*
 AOR-SBJ:PCP-have.leprosy DEM most EMPH SBJ:PCP-be.evil
 36728 *ky-pa puu-ŋu.*
 OBJ:PCP-consider PST.IPFV-be
 36729 'In former times, nobody talked about cancer, and leprosy was considered
 36730 to be the most terrible (of all diseases).' (25-khArWm, 35)

26 Degree and comparison

- 36731 (79) *tce tui-ci u-rkui tu-tob tce, nuu stu*
 LNK INDEF.POSS-water 3SG.POSS-side IPFV-come.out LNK DEM most
- 36732 *u-kv-nuu-rga ɻu tce*
 3SG.POSS-APPL-like be:FACT LNK
- 36733 ‘It grows near the water, it is what it likes the most.’ (09-mi, 6)
- 36734 The superlative adverb is also attested with transitive dynamic verbs of action,
 36735 as in the pseudo-cleft construction (§23.6.1) in (80).⁷
- 36736 (80) *[stu zo u-kv-ndza] nuunu tui-ɻga,*
 most EMPH 3SG.POSS-OBJ:PCP-eat DEM INDEF.POSS-clothes
- 36737 *tv-rme kuu-fse, tui-ɻga nura ɻu.*
 INDEF.POSS-hair SBJ:PCP-be.like INDEF.POSS-clothes DEM:PL be:FACT
- 36738 ‘What it eats most is clothes, clothes (made of animal fur).’ (28-kWpAz, 79)
- 36739 Oblique participles (§16.1.3) are also compatible with the superlative adverb,
 36740 as shown in (81).
- 36741 (81) *[stu u-sv-dyn] nuu stymku nura ɻu-nui.*
 most 3SG.POSS-OBL:PCP-be.many DEM grassland DEM:PL be:FACT-PL
- 36742 ‘The place where it is most numerous is the grasslands.’ (19-qachGa
 36743 mWntoR, 24-25)
- 36744 **26.4.2 Possessed participle**
- 36745 Another possibility to express superlative meaning is with a stative verb in sub-
 36746 ject participial form with a third plural possessive marker (§16.1.1.1), as in (82),
 36747 where the headless participial relative in square brackets, literally meaning ‘the
 36748 beautiful one (among/of) all birds’ is to be understood as ‘the most beautiful of
 36749 all birds.’
- 36750 (82) *tce [pya t^hamt^yt yuu nuu-kuu-mpcyr] nuu rmvβja*
 LNK bird all GEN 3PL.POSS-SBJ:PCP-be.beautiful DEM peacock
- 36751 *nuu-ɻu.*
 SENS-be
- 36752 ‘The peacock is the most beautiful of all birds.’ (24-ZmbrWpGa, 84)
- 36753 This construction is only attested with *mpcyr* ‘be beautiful’ and *mna* ‘be better’.

⁷ The phrase *tv-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 *tv-rme kuu tui-ɻga t^hu-kv-βzu* (see 40, §23.4.3).

36754 **26.4.3 Negative existential**

36755 Another way of expressing superlative meaning in Japhug is by means of a nega-
 36756 tive existential verb (§13.1.2, §22.5.4) combined with a participial relative of *fse* ‘be
 36757 like’, as in (83). This construction is a particular use of the equative construction
 36758 described in §26.3.1.2.

- 36759 (83) *ama, a-pi kʰu nu tcʰindza ku-tu-nypʰuphyo tce*
 SURPRISE 1SG.POSS-elder.sibling tiger DEM why PRS-2-DISTR:flee LNK
 36760 *[nzo ku-fse] ku-sy-mu me*
 2SG SBJ:PCP-be.like SBJ:PCP-PROP-fear not.exist:FACT
 36761 ‘Brother tiger, why are you running away like that, you are the most
 36762 dreadful (animal).’ (literally: ‘There is no one dreadful like you’) (2005
 36763 khu, 25)

36764 This construction is potentially ambiguous: the clause *X ku-fse ku-sy-mu me*
 36765 can be interpreted as meaning either ‘*X* is the most dreadful thing’ or ‘there is
 36766 nothing dreadful that is like *X*’.

36767 It is possible in some cases to use orientation preverbs to disambiguate be-
 36768 tween these two meanings. In example (84),⁸ the verbs *tso* ‘understand’ and *suz*
 36769 ‘know’ in the superlative construction take the *upwards* prefix *tu-* instead of the
 36770 expected EASTWARDS (*ku-tso-a* IPFV-understand-1SG) and DOWNWARDS (*pju-suz-a*
 36771 IPFV-know-1SG) prefixes that they normally select.

- 36772 (84) *azo [nu ku-fse] zo maka tu-tso-a*
 1SG DEM SBJ:PCP-be.like EMPH at.all IPFV:UP-understand-1SG
 36773 *me, tu-suz-a me*
 not.exist:FACT IPFV:UP-know-1SG not.exist:FACT
 36774 ‘This is what I know best.’ (literally: ‘There is nothing that I understand,
 36775 that I know like that.’ 140519 yeying, 62)

36776 With the UPWARDS prefix *tu-* as in (84), only the superlative interpretation is
 36777 possible, while with the DOWNWARDS prefix *pju-* as in (85) the superlative inter-
 36778 pretation is excluded, and only the negative existential one is found.

⁸ Example (84) is translated from 夜莺，我再熟悉不过了 <yèying, wǒ zài shúxī bùguò> ‘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).

- 36779 (85) *azō [nuu kuu-fse pjua-suaz-a]* *me*
 1SG DEM SBJ:PCP-be.like IPFV:DOWN-know-1SG not.exist:FACT
 36780 ‘I know of no such thing.’ (elicited)

36781 I interpret this difference as a matter of semantic scope. In (84), the clause *nuu kuu-fse* ‘like that’ is outside of the scope of the negation, and the negation applies
 36782 to the minimal relative clauses *tu-tso-a* ‘(that) I understand’ (§23.5.4.1) and *tu-suza* ‘(that) I know’ (§23.5.3.1) exclusively.

36783 With the downwards prefix *pju-* on *suaz* ‘know’ as in (85), the scope of the
 36784 negation is different: it applies to the whole constituent indicated between square
 36785 brackets (‘there is nothing like that that I know’).

36786 This contrast cannot however be generalized to all verbs; more research is
 36787 necessary to ascertain the extent and the functional explanation for this puzzling
 36788 phenomenon.

36789 Instead of *kuu-fse*, egressive postpositions such as *cantaa* ‘up from’ (§8.2.10,
 36790 §26.2.4) can also be used in a superlative construction as in (86).

- 36793 (86) *azō cantaa kur-c^ha kuu-rkanj me*
 1SG up.from SBJ:PCP-can SBJ:PCP-robust not.exist:FACT
 36794 ‘I am the most able one, the most robust one.’ (literally: ‘There is no one
 36795 that is more robust/able than me’) (140425 shizi huli he lu-zh, 28)

36796

27 Kinship

36797

27.1 Introduction

36798 Kinship terms (§5.1.2.4) in Japhug are all inalienably possessed nouns (§5.1.2),
 36799 and are presented in this section in their indefinite possessor form (§5.1.3), which
 36800 generally also serves as the citation form.

36801 This section not concerned with the morphosyntactic properties of these nouns
 36802 (which is treated in §5.1.3), but rather with the semantic structure of the system.

36803 The meanings of the terms is described using the abbreviations presented in
 36804 Table 27.1, which, combined with each other (for instance MB and eZ represent
 36805 ‘mother’s brother’ and ‘elder sister’, respectively), offer a concise way to repre-
 36806 sent the possible parameters relevant to the description of kinship terms (Kroeber
 36807 1909).

Table 27.1: Standard abbreviations used to describe kinship terms

F	Father	M	Mother	
B	Brother	Z	Sister	
S	Son	D	Daughter	Ch Child
H	Husband	W	Wife	
♂	Male possessor	♀	Female possessor	
e/+	Elder	y/-	Younger	

36808 The term ‘male/female possessor’ corresponds to what Kroeber (1909: 78–79)
 36809 calls ‘sex of the person through whom the relationship exists’ or ‘sex of the con-
 36810 necting relative’, encoded as inalienable possessor in Japhug. For instance, *tr-
 36811 snom* ‘sister’ ([♂]Z) is only used with reference to the sister of a male (§27.2.2.1).

36812 Kinship terms can be divided into self-reciprocal terms, in which both mem-
 36813 ber of the relationship use the same term to refer to each other (from instance
 36814 *tr-mytsa* ‘mother’s sister’s child’ MZCh, §27.2.3.1), and non-self-reciprocal ones,
 36815 which usually have to be described in reciprocal pairs.

36816 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 ($^{\Omega}S|^{^{\Omega}}D$): of the two options of ($\delta B|\delta Z$), the second one δZ is selected because the following element $^{\Omega}(S|D)$ has a female connecting relative, hence $\delta Z(S|D)$, equivalent to δZCh .

Table 27.2: Reciprocal terms

	Reciprocal		
	neutral	δ	Ω
F	δCh	δS	δD
M	$^{\Omega}Ch$	$^{\Omega}S$	$^{\Omega}D$
B		δB	δZ
Z		$^{\Omega}B$	$^{\Omega}Z$
S		δF	δM
D		$^{\Omega}F$	$^{\Omega}M$
Ch		F	M
W	$^{\Omega}H$		
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:

- ($\delta F|\delta M$) + ($^{\Omega}F|^{^{\Omega}}M$) + ($\delta B|\delta Z$) + ($\delta S|\delta D$) + ($\delta S|\delta D$)
- $\delta(F|M)^{\Omega} + (F|M)^{\delta} + (B|Z)^{\delta} + (S|D)^{\delta} + (S|D)$
- $\delta MFBS(S|D)$
- $\delta MFBSCh$

It makes it possible to easily recheck which configurations are intrinsically self-reciprocal, for instance maternal parallel cousins MZCh:

- ($F|M$) + ($^{\Omega}B|^{^{\Omega}}Z$) + ($^{\Omega}Ch$)
- ($F|M)^{\Omega} + (B|Z)^{\Omega} + Ch$

36834 • MZCh

36835 Japhug lacks a specific vocative form of kinship terms (§5.3.1), unlike Tshob-
 36836 dun, J. T.-S. Sun (1998: 133) for instance, and there are only few differences terms
 36837 of address and terms of reference.

36838 Given the important changes in the Gyalrong society since the 1950s, and in
 36839 particular the fact that all speakers of Japhug are now bilingual in Chinese, it is
 36840 not surprising that the kinship system is undergoing considerable reshaping. The
 36841 aim of this chapter is to document use of the kinship terms both by contemporary
 36842 younger speakers, and the system as it used to be in the traditional society, before
 36843 massive Chinese influence.

36844 The data in this chapter is mainly on Tshendzin's explanations of the use of the
 36845 system in a text from the corpus (140425 kWmdza), but also draws on observation
 36846 of the actual use of kinship terms in conversations.

36847 27.2 Kinship terms by generations

36848 This section is an overview of the uses of all kinship terms, first EGO's parents,
 36849 their siblings and their parents (§27.2.1), then EGO's siblings (§27.2.2), EGO's cousins
 36850 (§27.2.3) and finally EGO, EGO's siblings and EGO's cousins's children and grand-
 36851 children (§27.2.4). It also includes information on affines, though the terminology
 36852 is considerably poorer than for consanguines.

36853 27.2.1 Ascending generations

36854 27.2.1.1 EGO's parents

36855 Two series of terms are in use for EGO's parents, the common terms *tr-mu* 'mother'
 36856 and *tr-wa* 'father', and the honorific ones, borrowed from Tibetan *tr-pa* 'father'
 36857 and *tr-ma* 'mother'. The terms for 'mother' and 'father' can be combined without
 36858 any linker with a collective meaning 'parent', but the order is rigidly 'mother'
 36859 followed by 'father' (1)¹ in the case of the native terms, and the opposite in the
 36860 case of the honorific ones (*a-pa a-ma* 'my parents'), as is discussed in more detail
 36861 in §9.2.2.2.

- 36862 (1) *ny-mu* *ny-wa* *ni*
 36863 2SG.POSS-mother 2SG.POSS-father DU
 'Your parents.' (many occurrences)

¹ The opposite order *†ny-wa ny-mu* is ungrammatical.

The native terms *tx-mu* and *tx-wa* can be alienabilized (§5.1.2.9) and become terms of reference for elder people as in (2).

- (2) *k^ha u-βyri kui-nymbas tx-mu*
 house 3SG.POSS-before SBJ:PCP-have.a.good.time INDEF.POSS-mother
nura kui nu-syz-numbjam smi c^hu-nu-βlui-nu
 DEM:PL ERG 3PL.POSS-OBL:PCP-warm.by.fire fire IPFV-AUTO-burn-PL
pjx-ŋu
 IFR.IPFV-be
 ‘Old women who were resting in front of the house were burning a fire to keep themselves warm.’ (2002 qaCpa, 227)

27.2.1.2 EGO’s parent’s siblings

There are different terms for parallel and cross-uncles and aunts (Table 27.3), which are all native terms with cognates in Tangut (Jacques 2012e) except possibly for *tx-ji* ‘father’s sister’, which is borrowed from Tibetan རྣ བྱ ཉ ‘paternal 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-ji</i>	FZH <i>tx-βyo</i>

The terms for parallel aunts and uncles also serve to designate parent’s siblings’s spouses, as described in (3). Note in this excerpt the use of the active *nu-* on *tu-kui-nuu-ti* ‘one calls (them)’ reflecting the ‘casual’ spontaneous function (§19.1.4), emphasizing the fact that no specific term exists (compare with 28 in §19.1.4).

- (3) *tui-ni u-nmas c^hondyre tur-łas*
 GENR.POSS-FZ 3SG.POSS-husband COMIT GENR.POSS-MZ
u-nmas ra nu-cki tce tce li “a-βyo”
 3SG.POSS-husband PL 3PL.POSS-DAT LNK LNK again 1SG.POSS-FB
tui-kui-nuu-ti cti ma nuu ma zaka
 IPFV-GENR-AUTO-say be.AFF:FACT LNK DEM apart.from each

36884 *wu-rmi* *me.* (...) *tuw-rpuw* *yuu w-rzaβ*
 3SG.POSS-name not.exist:FACT GENR.POSS-MB GEN 3SG.POSS-wife
 36885 *wu-cki* *tce "a-ɬaʂ"* *tu-kui-ti* *ŋu.*
 3SG.POSS-DAT LNK 1SG.POSS-MZ IPFV-GENR-AUTO-say be:FACT
 36886 *tuw-βyo* *yuu w-rzaβ* *wu-cki* *li "a-ɬaʂ"*
 GENR.POSS-FB GEN 3SG.POSS-wife 3SG.POSS-DAT again 1SG.POSS-MZ
 36887 *tu-kui-ti* *cti.*
 IPFV-GENR-AUTO-say be.AFF:FACT
 36888 ‘One calls one’s father’s sister’s and one’s mother’s sister’s husbands
 36889 *a-βyo* ‘my father’s brother’, apart from that they don’t have their own
 36890 term. One calls one’s mother’s brother’s and one’s father’s brother’s
 36891 wives *a-ɬaʂ* ‘my mother’s sister’’ (140425 kWmdza05, 1)

36892 They can be used as polite address terms for elder people (§5.3.3). In addition,
 36893 *tr-βyo* is also a term of address for lamas, expressing respect.

36894 The mother’s siblings term *tr-rpuw* ‘mother’s brother’ and *tr-ɬaʂ* ‘mother’s sis-
 36895 ter’ can also designate their children (the maternal cross-cousins, §27.2.3.2) and
 36896 their grandchildren (§27.5).

36897 Conversely, the reciprocal of *tr-rpuw* ‘mother’s brother’, the term *tr-ftsa* ‘nephew’
 36898 (§27.2.4.2), can be applied to EGO’s paternal grandfather’s sisters’ children (FFZCh),
 36899 who belong to EGO’s parent’s generation, due to the same generational skewing
 36900 rule (§27.5).

36901 27.2.1.3 G⁺²

36902 The terms *tr-wu* ‘grandfather’ and *tr-wi* ‘grandmother’ are used to refer to EGO’s
 36903 grandparents and their siblings, and also as an affectionate for (unrelated) el-
 36904 ders who are two generations above EGO. This term is also applied to great-
 36905 grandparents and all generations above.

36906 As an effect of the Omaha skewing rules (§27.5), the children of EGO’s paternal
 36907 great-grandfather’s sisters (FFFZCh), who belong to EGO’s grandparents’ genera-
 36908 tion, are downgraded three generations, and called by the term *tr-ftsa* ‘nephew’
 36909 (§27.2.4.2) by EGO, and they answer back using the G⁺¹ terms *tr-rpuw* ‘mother’s
 36910 brother’ and *tr-ɬaʂ* ‘mother’s sister’ (§27.2.4.5).

36911 27.2.2 Siblings

36912 There are two competing systems for designating siblings in Japhug, one encod-
 36913 ing the gender of the sibling and that of the possessor and the other relative age.

36914 27.2.2.1 Gender-based system

36915 The gender-based sibling terminological system comprises four terms (Table 27.4),
 36916 which all have cognates in Tangut with identical functions (Jacques 2012e). The
 36917 ♂B and ♀Z terms (in grey shading) are self-reciprocal: for instance, anyone EGO
 36918 addresses as *a-xtry* ‘my brother’ replies back with the same word. The groups of
 36919 same-sex siblings calling each other *a-xtry* ‘my brother’ or *a-sq^haj* ‘my sister’ can
 36920 be referred to by the social relation collective nouns *k^yndzixtry* ‘brothers’ and
 36921 *k^yndzisq^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-w^yrmuu</i> ♀B	<i>tr-sq^haj</i> ♀Z

36922 By contrast, *tr-snom* ♂Z and *tr-w^yrmuu* ♀B are non-self-reciprocal, and are used
 36923 as reciprocal pairs of each other. If EGO is male, he refers his sister(s) as *a-snom*,
 36924 and they/she refers him as *a-w^yrmuu*, and reciprocally if EGO is female. The com-
 36925 pound collective noun *k^yndziw^yrmusnom* ‘brother and sisters’ built from these two
 36926 nouns (§5.7.8.1) is used to designate groups of siblings of different sex.

36927 In addition to siblings sharing the same parents, these terms can also be ap-
 36928 plied to paternal parallel cousins (FBCh, §27.2.3.1) and siblings of spouses (WB,
 36929 WZ, HB, HZ, §27.2.5).

36930 27.2.2.2 Relative age-based system

36931 The relative age-based system only comprises two terms, *tr-pi* ‘elder sibling’ and
 36932 *ta-^hi* ‘younger sibling’. It distinguishes the relative age of the kin and his/her
 36933 connecting relative (possessor).

36934 Like the terms of the first system, *tr-pi* and *ta-^hi* can be used for paternal par-
 36935 allel cousins (§27.2.3.1) and spouses of siblings (§27.2.5), and also as affectionate
 36936 address term for non-kins of the same generation. The paternal cross-aunt (FZ)
 36937 also uses *ta-^hi* to call her cross-nephews (♀BCh §27.2.4.2); the gender-based sib-
 36938 ling terminology cannot be used to refer to cross-nephews.

36939 Both systems are possible for address and reference, but the former (Table 27.4)
 36940 is more frequently used for reference, and the latter for address.

36941 27.2.3 Cousins

36942 Parallel and cross-cousins (children of parent's siblings) are designated by different terms in Japhug.
 36943

36944 27.2.3.1 Parallel cousins

36945 There is no dedicated term for paternal parallel cousins (FBCh). They are ter-
 36946 minologically identified with siblings (§27.2.2), and both the gender-based terms
 36947 (§27.2.2.1) and the relative age-base terms (§27.2.2.2) can be applied to them (4).

- 36948 (4) *tui-βyo yuu ui-tcui cʰondyre ui-me nura*
 GENR.POSS-FB GEN 3SG.POSS-son COMIT 3SG.POSS-daughter DEM:PL
 36949 *nui-cki tce, tce kui-wxti ra nui-cki*
 3PL.POSS-DAT LNK LNK SBJ:PCP-be.big PL 3PL.POSS-DAT
 36950 *“a-pi” tu-kui-ti, kui-xtei ra nui-cki*
 1SG.POSS-elder.sibling IPFV-GENR-say SBJ:PCP-be.big PL 3PL.POSS-DAT
 36951 *“a-ki” tu-kui-ti ηu.*
 1SG.POSS-elder.sibling IPFV-GENR-say be:FACT

36952 'One's father's brother's sons and daughters, one calls the elder ones *a-pi*
 36953 'my elder sibling' and the younger ones *a-ki* 'my younger sibling'. (140425
 36954 kWmdza01, 32)

36955 Maternal parallel cousins have a dedicated term *tr-mytsa*, probably a lexical-
 36956 ized compound from *tr-mu* 'mother' (in *status constructus my-*, §5.4.1) and *tr-ftsa*
 36957 'sister's child', literally 'mother's nephew'. A cognate compound is also found in
 36958 Situ ([Shuya Zhang forthcoming](#)). This term is self-reciprocal, as shown in (5) (see
 36959 also 91 §18.4.2.1 for a description of the same rule with a different wording).

- 36960 (5) *tui-ɬas yuu ui-rjiti nura tce tr-tcui*
 GENR.POSS-FZ GEN 3SG.POSS-offspring DEM:PL LNK INDEF.POSS-son
 36961 *pui-nui-ηu tcʰeme pui-nui-ηu tui-mytsa ηu (...)*
 PST.IPFV-AUTO-be girl PST.IPFV-AUTO-be GENR.POSS-MZCh be:FACT
 36962 *tužo kuny “a-mytsa” tu-kui-ti, užo kuny “a-mytsa”*
 GENR also 1SG.POSS-MZCh IPFV-GENR-say 3SG also 1SG.POSS-MZCh
 36963 *tu-ti*
 IPFV-say
 36964 'One's mother's sister's children, whether boy or girl, are one's maternal
 36965 parallel cousins (*tui-mytsa*). (...) One calls (them) *a-mytsa*, and they also
 36966 call one *a-mytsa*. (140425 kWmdza04, 1-4)

36967 However, some younger speakers also casually use the relative age sibling
 36968 terms to refer to maternal parallel cousins (6).

- 36969 (6) *jinde t^ham tce "a-pi a-bi"*
 nowadays now LNK 1SG.POSS-elder.sibling 1SG.POSS-younger.sibling
 36970 *tu-nui-ti-nuu nyu ma*
 IPFV-AUTO-say-PL be:FACT LNK
 36971 'Nowadays (maternal parallel cousin) call (each other) *a-pi* 'my elder
 36972 sibling' and *a-bi* 'my younger sibling'(casually).' (140425 kWmdza01, 45)

36973 27.2.3.2 Cross-cousins

36974 By contrast, the cross-cousins are referred to by unequal terms. As explained in
 36975 (7), the paternal cross-cousins (father's sister's children FZCh) are called using
 36976 the term *tr-ftsa*, the same as sister's children (§27.2.4), and they reply back by
 36977 calling their maternal parallel cousins (mother's brother's children MBCh) with
 36978 *tr-rpu* and *tr-lak*, terms that also refer to the parallel cousins's parents (mother's
 36979 brother MB and his wife MBW, §27.2.1).

- 36980 (7) *tui-ni yuu ui-rjiti nura kui tuzo tui-cki*
 GENR.POSS-FZ GEN 3SG.POSS-children DEM:PL ERG GENR GENR.POSS-DAT
 36981 "*a-rpu*", *tr-tciw* *pui-kui-nyu* *ny* "*a-rpu*"
 1SG.POSS-MB INDEF.POSS-SON PST.IPFV-GENR-be ADD 1SG.POSS-MB
 36982 *tu-ti-nuu*, *tc^heeme pui-kui-nyu* *ny* "*a-lak*" *tu-ti-nuu*
 IPFV-say-PL girl PST.IPFV-GENR-be ADD 1SG.POSS-MZ IPFV-say-PL
 36983 *kui-ra* *nyu*. *tceri*, *n^hkinuu*, *tuzo kui tce tce zara*
 INF:STAT-be.needed LNK FILLER GENR ERG LNK LNK 3PL 3PL.POSS-DAT
 36984 *nui-cki li* *a-ftsa* *tu-kui-ti* *kui-ra nyu*.
 again 1SG.POSS-ZCh IPFV-GENR-say INF:STAT-be.needed be:FACT
 36985 'One's paternal aunt's children call oneself *a-rpu* 'my maternal uncle', if
 36986 one is a man they say 'my maternal uncle', if one is a woman they say
 36987 *a-lak* 'my maternal aunt', but one calls them *a-ftsa* 'my sister's son'.
 36988 (140425 kWmdza03, 1-3)

36989 While parallel cross-cousins are given an equal status to siblings in terms of
 36990 generation, cross-cousins are associated to either the lower generation (paternal
 36991 cross-cousins) or the higher generation (maternal cross-cousins). This genera-
 36992 tional skewing rule is characteristic of Omaha kinship systems, and is discussed
 36993 in more detail in §27.1 (see Figure 27.5).

36994 27.2.4 Descending generations

36995 27.2.4.1 EGO's children

36996 The term for EGO's children *tr-tcū* 'son' and *tu-me* 'daughter' cannot be used for
 36997 nephews and children of cousins, but can also designate one's children's spouses.
 36998 The noun *tr-tcū* is also alienabilized (§5.1.2.9) in the sense of 'boy, man, member
 36999 of the male gender' (as opposed to *tc^heeme* 'girl').

37000 27.2.4.2 EGO's sibling's children

37001 Sister's children are called *tr-ftsa*, whether regardless of whether ego is a man or
 37002 a woman (8). This term is also applied to one's paternal cross-cousins (§27.2.3.2),
 37003 and reflects an Omaha-type generational skewing rule (§27.5).

37004 (8) *tr-rpuu* *nua kumy "a-ftsa"* *tu-ti,* *tr-las* *nua*
 37005 INDEF.POSS-MB DEM also 1SG.POSS-ZCh IPFV-say INDEF.POSS-MZ DEM
kumy "a-ftsa" *tu-ti*
 37006 also 1SG.POSS-ZCh IPFV-say

37007 'Both the maternal uncle and the maternal aunt call (their sister's
 37008 children) *a-ftsa*.' (140425 kWmdza04, 20-21)

37008 The brothers' children are called differently depending on whether EGO is male
 37009 or female. If EGO is female (9), one calls one's cross-nephews with the term *ta-ki*
 37010 used for younger siblings (§27.2.2.2) and male parallel cousins (§27.2.3.1), though
 37011 in this case they do not reply back with *tr-pi* 'elder sibling' as could have been
 37012 expected, but with the dedicated term *tr-ni* 'father's sister' (§27.2.1), infringing
 37013 the reciprocity rule between *ta-ki* and *tr-pi* (§27.2.2.2).

37014 (9) *azo tc^heeme puu-ŋu-a* *tce a-sq^haj* *yuu uu-rjít*
 37015 1SG girl SENS-be-1SG LNK 1SG.POSS-sister GEN 3SG.POSS-offspring
nua-cki *tce "a-ftsa"* *tu-ti-a* *ŋu.* ...
 37016 3PL.POSS-DAT LOC 1SG.POSS-FZCh IPFV-say-1SG be:FACT
a-wymuu *yuu uu-rjít* *ra nur-cki* *tce*
 37017 1SG.POSS-brother GEN 3SG.POSS-offspring PL 3PL.POSS-DAT LOC
"a-ki" *tu-ti-a* *kua-ra* *ŋu.* *zara*
 37018 1SG.POSS-younger.sibling IPFV-say-1SG INF:STAT-be.needed be:FACT 3PL
kua a-cki *"a-ni"* *tu-ti-nua* *tce, azo kua*
 ERG 1SG.POSS-DAT 1SG.POSS-FZ IPFV-say-PL LNK 1SG ERG

37019 ”*a-βi*” *tu-ti-a* *ŋu.*
 1SG.POSS-younger.sibling IPFV-say-1SG be:FACT
 37020 ‘I am a woman, and so I call my sisters’ children *a-ftsa* ‘my nephew’, (...)
 37021 and my brother’s children; *a-βi* ‘my younger sibling’. They_i call me *a-ji*
 37022 ‘my father’s sister’ and I call them *a-βi* ‘my younger sibling’ (140425
 37023 kWmdza02, 3-6)

37024 If EGO is male (10), one’s parallel nephews and nieces (brother’s children) are
 37025 called with the dedicated term *tx-mdū* BCh[♂]. This term cannot be used by women
 37026 (11).

- 37027 (10) *azō tx-tcū* *a-pui-ŋu-a* *q^he tce, a-xt^{ry}* *yu*
 1SG INDEF.POSS-son IRR-IPFV-be-1SG LNK LNK 1SG.POSS-brother GEN
 37028 *wi-rjīt* *nunura nuu-cki* *a-mdū* *ŋu.*
 3SG.POSS-offpsring DEM:PL 3PL.POSS-DAT 1SG.POSS-BCh be:FACT
 37029 ‘If I were a man, I would call my brother’s children *a-mdū* ‘my parallel
 37030 nephew’. (140425 kWmdza01, 17)
- 37031 (11) *tc^heme tce tce tuu-mdū* *me.*
 girl LNK LNK GENR.POSS-BCh not.exist:FACT
 37032 ‘Women do not have (any relative that can be called with the term)
 37033 *tx-mdū* ‘parallel nephew’. (140425 kWmdza02, 25)

37034 The reciprocal term of *tx-mdū* is *tx-βyo* ‘father’s brother’ (§27.2.1).

37035 27.2.4.3 EGO’s parallel cousins’ children

37036 In the same way as paternal parallel cousins (FBCh) are terminologically identi-
 37037 fied with siblings (§27.2.3.1), their children (FBChCh) are identified with siblings’
 37038 children: the children of one’s male paternal cross-cousins (FBSCh) are called *tx-*
 37039 *mdū* (§27.2.4.2), and those of female paternal cross-cousins (FBDCh) are *tx-ftsa*
 37040 (12).

- 37041 (12) *numutcu tce tce li “a-mdū” tu-tuu-ti, woja, tc^heme*
 DEM:LOC LOC LNK again 1SG.POSS-BCh IPFV-2-say INTERJ girl
 37042 *wi-rjīt nuu “a-ftsa” tu-tuu-ti, tuu-mu*
 3SG.POSS-child DEM 1SG.POSS-ZCh IPFV-2-say GENR.POSS-mother
 37043 *tuu-mu kuu-naχtcuay c^ho kuu-naχtcuay ŋu.*
 GENR.POSS-father SBJ:PCP-be.the.same COMIT SBJ:PCP-be.the.same be:FACT

37044

37045 '(Question: How do [♂]I address *a-wa u-xtry u-ye u-cki* my father's
 37046 brother's grandchildren? Response:) 'In that case, [♂]you say *a-mdwu* [♂]my
 37047 brother's son', in the case of a girl's child (FBDCh) you say *a-ftsa* 'my
 37048 sister's son', like (siblings sharing) the same parents.' (elicitation,
 37049 2019-11-30)

37050 The maternal parallel cousin are said by Tshendzin (13) to be referred to using
 37051 the same term as their parents *tx-mytsa* (§27.2.3.1).

37052 (13) *azo a-rfit* *ra kui* (...) *azo a-sq^haj* *yuu*
 1SG 1SG.POSS-offspring PL ERG (...) 1SG 1SG.POSS-sister GEN
 37053 *u-rfit* *ra nu-cki* *tce "a-mytsa"* *tu-ti-nuu*,
 37054 3SG.POSS-offspring PL 3PL.POSS-DAT LOC 1SG.POSS-MFZ IPFV-say-PL
 37055 *nunuara, yuu nuu-rfit* *ra nu-cki* *q^he li*,
 DEM:PL GEN 3PL.POSS-offspring PL 3PL.POSS-DAT LNK again
 37056 *"a-mytsa"* *tu-nuu-ti-nuu*
 37057 1SG.POSS-MZCh IPFV-AUTO-say-PL
 'My children (...) call my sister's children, *a-mytsa*, and also called their, i
 children *a-mytsa*' (140425 kWmdza01, 48-49)

37058 There is some evidence that this rule was applied to all descending generations
 37059 (§27.5) in the traditional society. However, Tshendzin also indicates that children
 37060 of MZCh can be alternatively called *tx-ftsa* like sister's children (§27.2.4.2), and
 37061 reciprocate (to their MMZCh or FMZCh) using the term for MB (§27.2.1.2). More
 37062 data is necessary to confirm or disprove this possibility.

37063 27.2.4.4 EGO's cross-cousins's children

37064 The children of EGO's maternal cross-cousins (EGO's mother's brother's grandchildren, MBChCh) are referred to by the same terms as their father and grandfather,
 37065 *tx-rpu* if male (14) and *tx-las* if female: they are uplifted by two generations.
 37066

37067 (14) *tuu-rpu* *yuu u-rfit* *u-cki* *tce "a-rpu"*
 37068 GENR.POSS-MB GEN 3SG.POSS-offspring 3SG.POSS-DAT LOC 1SG.POSS-MB
 37069 *tu-kui-ti, uu-ye* *u-cki* *tce "a-rpu"*
 IPFV-GENR-say 3SG.POSS-grandchild 3SG.POSS-DAT LOC 1SG.POSS-MB
 37070 *tu-kui-ti kur-ŋgryl* *pur-ŋu, izora kuruu kuu*
 IPFV-GENR-say INF:STAT-be.usually.the.case SENS-be 1PL Tibetan ERG

- 37070 *tce*
LNK
 37071 ‘One calls one’s maternal uncle’s children and his grandchildren *a-rpuu*
 37072 ‘my maternal uncle’, among us Tibetans.’ (140425 kWmdza07, 2)

37073 The children of EGO’s paternal cross-cousins (EGO’s father’s sister’s grandchil-
 37074 dren, FZChCh) and their descent are referred to with the term *tr-ftsa* ‘sister’s
 37075 child’, like their parents (15).

37076 (15) *nur-ni* *wi-rfit* *yuu wi-rfit* *nur wi-cki tce*
 37077 2SG.POSS-FZ 3SG.POSS-offspring GEN 3SG.POSS-DAT LOC LNK 1SG.POSS-FZ
tce “*a-ftsa*” *tu-tui-ti kui-ra*.
 37078 IPFV-2-say INF:STAT-be.needed
 37079 ‘You have to say *a-ftsa* ‘my sister’s child’ to the child of the child of your
 37080 paternal cross-aunt.’ (elicitation, 2019-11-30)

27.2.4.5 G⁻²

37081 For the generation of EGO’s grandchildren, the term *tr-ye* ‘grandchild’ is used for
 37082 EGO’s own grandchildren as well of the grandchildren of EGO’s siblings (16) and
 37083 paternal parallel cousins.

37084 (16) *nur wi-pa* *pui-ari* *tce tce, a-wymur*
 37085 DEM 3SG.POSS-down AOR:DOWN-go[II] LNK LNK 1SG.POSS-brother
wi-ye *pui-nur-ŋu,* *a-sq^haj* *yuu*
 37086 3SG.POSS-grandchild PST.IPFV-AUTO-be 1SG.POSS-sister GEN
wi-ye *pui-nur-ŋu* *tce azo tyrcurca*
 37087 3SG.POSS-grandchild PST.IPFV-AUTO-be LNK 1SG together
“*a-ye*” *tu-ti-a* *cti.*
 37088 1SG.POSS-grandchild IPFV-say-1SG be.AFF:FACT
 37089 ‘In the (generation) below (that of one’s nephews, see §15.1.4.1), I say *a-ye*
 37090 ‘my grandchild’ (to all grandnephews), whether they are my brother’s
 37091 grandchildren or my sister’s grandchildren.’ (140425 kWmdza02, 16)

37092 In the case of the maternal cross-cousins however, the Omaha skewing rule
 37093 still applies (§27.5), and the term *tr-rpuu* ‘mother’s brother’ is used to refer to their
 37094 grandchildren, who conversely call EGO *tr-ftsa* ‘nephew’ (§27.2.1.3).

³⁷⁰⁹⁴ **27.2.5 Spouses and affines**

³⁷⁰⁹⁵ The terminology for affines in Japhug is poor. The only dedicated terms are *tr-
rzaβ* ‘wife’ and *tr-nmaꝝ* ‘husband’; for all other affines, terms that also refer to
³⁷⁰⁹⁶ consanguines are used.

³⁷⁰⁹⁸ Both EGO’s spouse’s parents and parent’s sibling and spouses of EGO’s parent’s
³⁷⁰⁹⁹ sibling are called using the terms for parallel aunts and uncles (§27.2.1).

³⁷¹⁰⁰ Affines of EGO’s generation, including those of EGO’s siblings or of EGO’s cousins,
³⁷¹⁰¹ are called using the age-based sibling terms *ta-zi* ‘younger sibling’ or *tr-pi* ‘elder
³⁷¹⁰² sibling’ (§27.2.2.2). In the case of EGO’s spouse’s siblings, both the age-based and
³⁷¹⁰³ the gender-based (§27.2.2.1) sibling terms can be used (17).

- ³⁷¹⁰⁴ (17) *nunaura tce tuzo syz a-puu-wxti-nuu q^he “a-pi”*
DEM:PL LNK GENR COMP IRR-IPFV-be.big-PL LNK 1SG.POSS-elder.sibling
tu-kui-ti, tuzo syz a-puu-xtci-nuu q^he
IPFV-GENR-say GENR COMP IRR-IPFV-be.small-PL LNK
“*a-zi*” *tu-kua-nuu-ti cti.*
1SG.POSS-younger.sibling IPFV-GENR-AUTO-say be.AFF:FACT
“*a-xtry*” *ra tu-o<nu>mui-ti-nuu cti.*
1SG.POSS-brother PL IPFV-<AUTO>RECIP-say-PL be.AFF:FACT
‘Those (ego’s husband’s or wife’s siblings), if they are elder than oneself,
one calls them *a-pi* ‘my elder sibling’, if they are younger one calls them
a-zi ‘my younger sibling’. They also call each other *a-xtry* ‘my brother’
and the like.’ (140425 kWmdza05, 8)

³⁷¹¹² **27.3 Marriage rules**

³⁷¹¹³ Marriage is prohibited between siblings and across generations between EGO and
³⁷¹¹⁴ EGO’s parents siblings (whether parallel or cross-uncles and aunts).

³⁷¹¹⁵ Marriage is allowed between maternal parallel cousins (18), who call each other
³⁷¹¹⁶ *tr-mytsa* (§27.2.3.1).

- ³⁷¹¹⁷ (18) *kyndzi-mytsa numi tce ci ku-pa-ndzi kui-k^huu*
COLL-MZCh DEM:DU LNK one IPFV-make-DU INF:STAT-be.possible
jnu-ŋu, kui-ŋgryl jnu-ŋu, my-kui-ŋduy
SENS-be INF:STAT-be.usually.the.case SENS-be NEG-INF:STAT-be.harmful
jnu-ŋu.
SENS-be
‘For two maternal parallel cousins, it is possible to get married, it is the

37121 usage, it is not wrong.' (140427 kWmdza stWnmW, 03)

37122 Cross-cousin marriage is tolerated (19), despite the fact they use cross-generational
 37123 terms to refer to each other (§27.2.3.2, §27.5). There is here a contradiction be-
 37124 tween the terminology and the marriage rules.

- 37125 (19) *kyndzi-wymui-snom ui-rjít* *nui puþuŋuny, (...) unumi*
 COLL-brother-sister 3SG.POSS-offspring DEM TOP DEM:DU
 37126 *li ci ku-pa-ndzi kui-kʰui* *nui-ŋu. tceri nuunu*
 again one IPFV-make-DU INF:STAT-be.possible SENS-be LNK DEM
 37127 *nui-rkum.*
 SENS-be.rare

37128 'Cross-cousins (the children of siblings of different sex) can also get
 37129 married, but it is rare.' (140427 kWmdza stWnmW, 04-06)

37130 Marriage is prohibited between paternal parallel cousins (19), who refer to each
 37131 other with the age-based sibling terms (§27.2.3.1).

- 37132 (20) *kyndzi-xtry uí-rjít* *nui tʂ-ŋu tce tce, ci kú-wy-pa*
 COLL-brother 3SG.POSS-children DEM AOR-be LNK LNK one IPFV-INV-make
 37133 *maka mʂ-kui-kʰui* *nui-ŋu.*
 at.all NEG-INF:STAT-be.possible SENS-be
 37134 'As for brother's children, it is completely impossible for them to marry
 37135 each other.' (140427 kWmdza stWnmW, 11)

37136 27.4 Lineages

37137 Most speakers of Gyalrong languages lack a patrilineal family name in the Chi-
 37138 nese fashion, unless they are of partial Chinese ancestry.

37139 Family relatedness across generation can nevertheless be expressed by the
 37140 term *rjítpa* 'lineage', borrowed from 藏文 *rg'ud.pa* 'lineage', which parents transfer
 37141 to their children (21).

- 37142 (21) *azo nui praqwu rjítpa ɳu-a* *tce, a-rjít ni praqwu*
 1SG DEM TOPO lineage be:FACT-1SG LNK 1SG.POSS-offspring DU TOPO
 37143 *rjítpa kuŋy kui-ʂ-rtsi* *ɳu-ndzi,*
 lineage also SBJ:PCP-PASS-count be:FACT-DU
 37144 'I am (Tshendzin) from the lineage of Praqwu, and (therefore) my two
 37145 children also count as being from the lineage of Praqwu.' (140426 rJitpa,
 37146 4-5)

37147 Lineage is transmitted by both father and mother (22), so that a given person
 37148 can belong to several lineages.

- 37149 (22) *tui-mu pcov nui t̪y-wy-rtsuz tce, tui-mu*
 GENR.POSS-mother side DEM AOR:UP-INV-count LNK GENR.POSS-mother
 37150 *pcov r̪itpa tu-kui-rtsi ηu, tui-wa pcov*
 side lineage IPFV:UP-GENR:S/O-count be:FACT GENR.POSS-father side
 37151 *pa-rtsuz-nui tce, li tui-wa pcov r̪itpa*
 DEM AOR:DOWN-count-PL LNK GENR.POSS-mother side lineage
 37152 *nui pjui-rtsi-nui cti*
 DEM IPFV:DOWN-COUNT-PL be.AFF:FACT
 37153 ‘When one counts from one’s mother’s side, one is counted as being from
 37154 the lineage on one mother’s side, when people count from one’s father’s
 37155 side (downwards), they count as being from one’s father lineage.’ (140426
 37156 r̪itpa, 2-3)

37157 Lineage is preserved across many generations; even relatives who have moved
 37158 to other places and become members of another household are still considered
 37159 to belong to the same lineage (23). There are no rules against marriage between
 37160 two person from the same lineage, if no other rule applies (§27.3).

- 37161 (23) *tce turme nui-kui-ymp^hump^hri n̪*
 LNK people AOR-SBJ:PCP-across.generations ADD
 37162 *nui-kui-ymp^hump^hri nui r̪itpa tu-kui-ti ηu.*
 AOR-SBJ:PCP-across.generations DEM lineage IPFV-GENR-say be:FACT
 37163 *a-pui-ηu tce, taqrdo ra yui nui-r̪it nūnui, (...)*
 IRR-IPFV-be LNK TOPO PL GEN 3PL.POSS-offspring DEM
 37164 *t̪y-tciu pui-nui-ηu, tc^he me pui-nui-ηu, turme*
 INDEF.POSS-son PST.IPFV-AUTO-be girl PST.IPFV-AUTO-be people
 37165 *ui-k^ha z-jy-kui-mytciu, jy-kui-myrzaβ,*
 3SG.POSS-house TRAL-AOR-SBJ:PCP-adopted.as.son AOR-SBJ:PCP-marry
 37166 *nura yui nui-r̪it nui-r̪it nui-r̪it*
 DEM:PL GEN 3PL.POSS-offspring 3PL.POSS-offspring 3PL.POSS-offspring
 37167 *kui-fse nui-kui-ymp^hump^hri nūnūra tce (taqrdo)*
 SBJ:PCP-be.like AOR-SBJ:PCP-across.generations DEM:PL LNK TOPO
 37168 *r̪itpa tu-kui-ti pui-ηu.*
 lineage IPFV-GENR-say SENS-be
 37169 ‘People (related to each other) generation after generations are called a
 37170 lineage. For instance, the children from Taqrdo, (...) whether men or

37171 women, whether they have left and been adopted as sons in someone
 37172 else's household or have married away, their children's children's
 37173 children, generation after generation, are called the lineage (of Taqrdo).'
 37174 (140425 kWmdza08 1-5)

37175 27.5 Omaha skewing

37176 27.5.1 Skewing rules and merging rules

37177 A prominent specificity of the Japhug kinship system is the fact that the maternal
 37178 cross-cousins (MBCh) and their children (MBSCh) are referred to by the same
 37179 term as their parents (MB, MBW) as explained in (24), and conversely that the
 37180 maternal cross-cousins (FZCh) are identified with the sisters's children (ZCh)
 37181 (25).

37182 (24) *tu_{zo} tc^he_{me} yu_u tu_u-r_{fit}* *nun_{ua} k_{ui} t_{ce} t_{ce}*
 37183 GENR girl GEN GENR.POSS-offspring DEM ERG LNK LNK
tu_u-wym_{uu} *ra n_{uu}-r_{fit}* *n_{uu}-cki* *t_{ce} li*
 37184 GENR.POSS-brother PL 3PL.POSS-offspring 3PL.POSS-DAT LNK again
“a-rpu_u *a-ta_us”* *tu-ti-n_{uu}* *k_{ui}-ra.*
 37185 1SG.POSS-MB 1SG.POSS-MZ IPFV-say-PL INF:STAT-be.needed
 37186 ‘One's children (EGO being a women) call one's brother's children *a-rpu_u*
 37187 ‘my mother's brother' or *a-ta_us* ‘my mother's sister'. (140425 kWmdza01,
 60-62)

37188 (25) *a-wym_{uu}* *yu_u u-r_{fit}* *nun_{ua} k_{ui} azo a-r_{fit}*
 37189 1SG.POSS-brother GEN 3SG.POSS-child DEM ERG 1SG 1SG.POSS-child
u-cki *t_{ce}* *“a-ftsa”* *tu-ti* *p_uu-η_u.* *t_{ce} azo*
 37190 3SG.POSS-DAT 1SG.POSS-ZCh IPFV-say SENS-be LNK 1SG 1SG.POSS-child
a-r_{fit} n_{uu} k_{ui} *a-wym_{uu}* *u-r_{fit} n_{uu} t_{ce}*
 37191 DEM ERG 1SG.POSS-brother 3SG.POSS-child DEM LNK 1SG.POSS-MB
“a-rpu_u” *n_uma_uny* *“a-ta_us”* *tu-ti* *k_{ui}-ra.*
 37192 otherwise 1SG.POSS-MZ IPFV-say INF:STAT-be.needed
 37193 ‘My (woman speaking) brother's child calls my child *a-ftsa* ‘my sister's
 37194 child', and my child calls my brother's child either *a-rpu_u* ‘my mother's
 37195 brother' or *a-ta_us* ‘my mother'sister'. (140425 kWmdza04, 24)

37196 These two rules, also detailed in §27.2.3.1 and §27.2.4.2 above with a different
 37196 but semantically equivalent wording, are summarized in Figure 27.1. This chart

³⁷¹⁹⁷ represents the terms used to call siblings, cross-uncles and aunts, cross-cousins and their offspring for a male EGO. The system is similar for a female EGO, except for siblings (§27.2.2.1) and brother's children (§27.2.4.2).

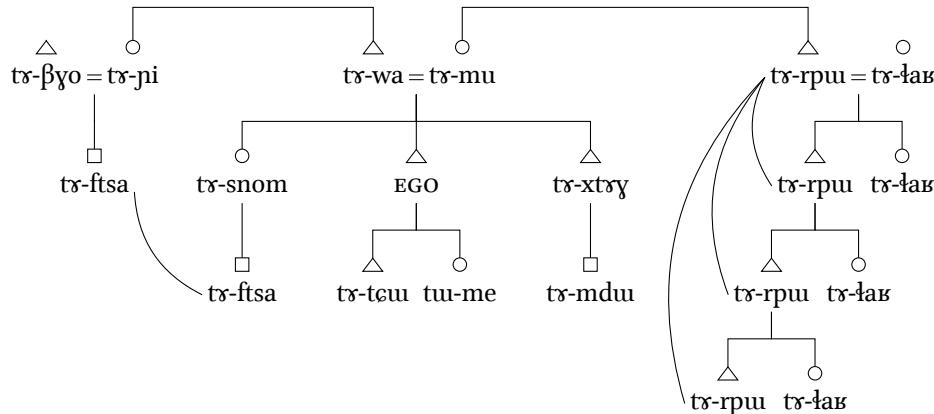


Figure 27.1: The Omaha Skewing system in Japhug (male EGO)

³⁷²⁰⁰ These *skewing* rules² are reciprocal of each other. They can be formally written as (26a) and (26b) in Lounsbury's (1964) fashion.³

- ³⁷²⁰² (26) a. **Skewing rule 1:** FZCh → ZCh
³⁷²⁰³ b. Corollaries: MBS → MB; MBD → MZ

³⁷²⁰⁴ 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).

- ³⁷²⁰⁷ (27) *nʂ-jpi* *yuu w-ye* *kua tce tee, nyj nʂ-cki*
³⁷²⁰⁸ 2SG.POSS-FZ GEN 3SG.POSS-grandchild ERG LNK LNK 2SG 2SG.POSS-DAT
³⁷²⁰⁹ “*a-rpuu*” *tu-ti* *kua-ra* *cti.*
³⁷²¹⁰ 1SG.POSS-MB IPFV-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)

² Lounsbury (1964: 357) defines this term as a ‘formal equivalence, in specific contexts, between kinds of different generations’.

³ The rules (26a) and (26b) are close to Lounsbury's (1964: 359) ‘Omaha type I’, but slightly less general.

- 37211 (28) a. **Skewing rule 2:** FZChCh → FZCh → ZCh
 37212 b. Corollaries: (F|M)MBS → MB; (F|M)MBD → MZ

37213 The rules (26a), (26b), (28a), (28b) are described by Tshendzin as being re-
 37214 cursive, implying the theoretical equivalences in (29). Although a considerable
 37215 amount of genealogies would be needed to confirm whether the system indeed
 37216 works in the way predicted in (29), an anecdote discussed in §27.5.2 confirms the
 37217 reality of the equivalence MMMBSSSS = MB.

- 37218 (29) a. $ZCh = (F)^*ZCh(Ch)^*$
 37219 b. $MB = (F|M)^*MB(S)^*S$
 37220 c. $MZ = (F|M)^*MB(S)^*D$

37221 Another skewing rule is observed in the case of female EGO: 9BS are called with
 37222 the relative age sibling terms (§27.2.4.2), though this skewing is only partial, since
 37223 they respond using the dedicated term *tr-ni* for FZ (§27.2.1.2).

37224 Finally, another skewing rule (30a) appears with maternal parallel cousins
 37225 (§27.2.4.3).

- 37226 (30) a. **Skewing rule 3:** MZChCh → MZCh
 37227 b. Corollary: (F|M)MZCh → MZCh

37228 If the rules (30a) and (30b) are also recursive, the formal equivalence (31) is im-
 37229 plied. Data is lacking to ascertain whether this theoretical possibility is verified,
 37230 but §27.5.3 discusses a case in these lines. In this system, unlike in that described
 37231 by Lounsbury (1964: 361), the MMZCh are not equated with the MB and MZ (due
 37232 to absence of the merging rules MZS → B and MZD → Z), but rather with the
 37233 MZCh.

- 37234 (31) $MZCh = (F|M)^*MZCh(Ch)^*$

37235 However, it appears to be possible to alternatively use the term *tr-ftsa* ‘ZS’ for
 37236 MZChCh. The implication of this rule for the whole system are not considered
 37237 here until further data is available.

37238 The terminological identification of paternal parallel cousins with siblings (§27.2.3.1)
 37239 defines the following merging rule (32).

- 37240 (32) **Merging rules:** FBS → B; FBD → Z

Unlike the Omaha systems described in Lounsbury (1964: 360), the merging rule (32) does not concern maternal parallel cousins (§27.2.3.1). It implies the equivalences MFBS = MB, MFBD = MZ, FFBS = FB and FFBD = FZ, and more generally (33), in combination with the skewing rules in (29) above.

- (33) a. $MB = (F|M)^*MFB(S)^*S$
- b. $MZ = (F|M)^*MFB(S)^*D$
- c. $FB = (F)^nFB(S)_{n \geq 1}^n$
- d. $FZ = (F)^nFB(S)^{n-1}D_{n \geq 1}$

Some uncertainty remains in parts of the system. In particular, the status of the MBDCh (and its reciprocal MFZCh) is unclear. In theory, given the $MBD \rightarrow MZ$ rule (28b), one would expect that $MBDCh = MZCh$ (*tr-mytsa*), and likewise that the $MFZCh = MZCh$ (due to the reciprocal rule 29a). However, at the moment of writing I could not confirm whether this is true or not.

The Japhug system shows prototypical Omaha characteristics, in particular the basic skewing rules (26a) and (26b), and the identification of paternal parallel cousins with siblings (32). It differs from prototypical Omaha systems described in the literature in lacking an Iroquois pattern identifying parallel uncles and aunts with parents ($FB \rightarrow F$, $MZ \rightarrow M$, Trautmann 2012: 34), maternal parallel cousins with siblings ($MZS \rightarrow B$, $MZD \rightarrow Z$), and the fact that preferred marriage is with maternal parallel cousins (§27.3) rather than with cross-cousins (Trautmann 2012: 41).

27.5.2 Cross-cousin lineages

A logical consequence of the recursivity of the skewing rule (29, §27.5.1), as they are described by Tshendzin (§27.2.4.4) is that a considerable divergence between 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.

- 37274 (34) *izo ji-wi* *nunuu ts^hapa nur-kur-ye*
 1PL 1PL.POSS-grandmother DEM TOPO AOR:WEST-SBJ:PCP-come[II]
- 37275 *pjx-ŋu.* (...) *azo tx-nukonjso-a u-q^hu* *tce, ts^hapa ju-ce-a*
 IFR.IPFV-be 1SG AOR-work-1SG 3SG.POSS-after LNK TOPO IPFV-go-1SG
- 37276 *tce, ts^hapa nuu ji-kumdzza* *ŋja* *ŋuu-ŋu tce, (...) tce*
 LNK TOPO DEM 1PL.POSS-relative completely SENS-be LNK LNK
- 37277 *a-rpuu a-ta_b* *ntsuu tu-kur-ti* *ŋuu-ra* *ma*
 1SG.POSS-MB 1SG.POSS-MZ always IPFV-GENR-say SENS-be.needed LNK
- 37278 *nuu-<beifen>* *ŋuu-mbro,* (...) *tx-pytso*
 3PL.POSS-age.rank SENS-be.high INDEF.POSS-child
- 37279 *kur-xtcu~xtci* *ra kur nuu a-p^he* “*a-ftsa*
 SBJ:PCP-EMPH~be.small PL ERG DEM 1SG.POSS-DAT 1SG.POSS-ZCh
- 37280 *a-ftsa”* *tu-ti-nuu,* “*a-rpuu a-ta_b”* *ky-ti*
 1SG.POSS-ZCh IPFV-say-PL 1SG.POSS-MB 1SG.POSS-MZ INF-say
- 37281 *ŋuu-ra, tcendyre tu-ti-a* *kur-zgxt* *ŋuu-cti*
 SENS-be.needed LNK IPFV-say-1SG INF:STAT-be.needed SENS-be.AFF
- 37282 *ri nunuu azo muáj-nyx-tsaj-a*
 LNK DEM 1SG NEG:SENS-TROP-be.fair-1SG
- 37283 ‘(One of) our grandmothers was from Tshapa (...) After I started working,
 37284 when I went to Tshapa, there everybody is our relatives, (...) I had to call
 37285 all of them ‘my mother’s brother, my mother’s sister’, because they are of
 37286 higher 輩分 <bèifen> ‘age rank’, (...) even small children called me ‘my
 37287 sister’s son’, and I had to call them ‘my mother’s brother, my mother’s
 37288 sister’. Although this was what I had to say, I found it unfair.’ (2010-06)

37289 He thus had to call all the inhabitants of the village using the MB and MZ terms
 37290 *tx-rpuu* and *tx-ta_b*, even young children. This report suggests that the recursivity
 37291 of the rules as described in (29) above is a reality: descendants of MMMB or
 37292 MMMMB, even one or two generations below oneself, are still called MB and
 37293 MZ. It also suggests that not only MBS*, but also MBDCh and their descendants
 37294 might keep the privileged status (and thus not be equated with maternal parallel
 37295 cousins MZCh as predicted in §27.5.1), though this has to be tested with additional
 37296 data.

37297 Tshendzin reports the same anecdote (35), and also indicates that the recur-
 37298 sivity of the skewing rule is felt clumsy by younger speakers, who prefer to use
 37299 terms for parallel uncles, aunts or siblings: this aspect of the Japhug languages
 37300 is thus highly endangered.

- 37301 (35) *wi-wi* *yuu wi-wi* *nunu ts^bapa nuutcu*
 3SG.POSS-grandmother GEN 3SG.POSS-grandmother DEM TOPO DEM:LOC
 37302 *nui-kui-ye* *pjy-ηu* *tce tce nuu yuu*
 AOR:WEST-SBJ:PCP-come[III] IFR.IPFV-be LNK LNK DEM GEN
 37303 *wi-wi* *yuu wi-wymui* *nunu yuu*
 3SG.POSS-grandmother GEN 3SG.POSS-brother DEM GEN
 37304 *wi-rjit* *yuu ur-rjit* *yuu ur-rjit* *yuu*
 3SG.POSS-offspring GEN 3SG.POSS-offspring GEN 3SG.POSS-offspring GEN
 37305 *wi-rjit* *kur-fse* *nunura nui-cki* *tce tce*
 3SG.POSS-offspring SBJ:PCP-be.like DEM:PL 3PL.POSS-DAT LOC LNK
 37306 “*a-rpuu* *ny a-ta^bs*” *ntsui tu-ti* *pjy-ra* (...)
 1SG.POSS-MB ADD 1SG.POSS-MZ always IPFV-say IPFV.IFR-be.needed
 37307 *t^bam tce nura* *st^buci u-kui-ti* *maje,* *tce*
 now LNK DEM:LOC so.much 3SG.POSS-SBJ:PCP-say not.exist:SENS LNK
 37308 *kui-xtei* *nura kumy “a-ftsa”* *ky-ti* *nuu-nyzra^bs-nuu*
 SBJ:PCP-be.small DEM:PL also 1SG.POSS-ZCh INF-say SENS-be.ashamed-PL
 37309 *q^be “a-βyo”* *ra tu-nui-ti-nui,* *“a-pi”* *ra*
 LNK 1SG.POSS-FB PL IPFV-AUTO-say-PL 1SG.POSS-elder.sibling PL
 37310 *tu-nui-ti-nui.* *tce t^bam tu-otšoblos cti.* *kuicwηgur*
 IPFV-AUTO-say-PL LNK now IPFV-be.mixed be.AFF:FACT in.former.days
 37311 *a-pui-ηu* *tce nuu tu-kui-ti* *kui-ra* *pjy-cti* *ny.*
 IRR-IPFV-be LNK DEM IPFV-GENR-say INF:STAT-be.needed IFR.IPFV-be SFP
 37312 ‘His grandmother’s grandmother had come from Tshapa, and he had to
 37313 call all of his grandmother’s brother’s children’s children’s
 37314 children (etc) ‘my mother’s brother, my mother’s sister’ (including small
 37315 children). (...) Now no one says this any more, this young ones are
 37316 ashamed of calling (elders) ‘my sister’s child’ and instead say ‘my father’s
 37317 brother’ or ‘my elder sibling’. Now it is all mixed up, but in former times,
 37318 one had to speak like that.’ (140425 kWmdza07, 8-12)

27.5.3 Maternal parallel cousin lineages

- 37319 The reliability of the skewing rule (30a) concerning maternal parallel cousins is
 37320 confirmed by one particular case, in which a lady addressed her mother-in-law by
 37321 the term *tr-mṛtsa* ‘MZCh’ (who answered using the same term, §27.2.3.1). When
 37322 I asked her whether they were actual maternal parallel cousins (children of two
 37323 sisters, MZCh), she answered that she used this term because her father himself
 37324 called her mother-in-law (and her mother-in-law’s mother) *tr-mṛtsa*, though they
 37325

were not themselves true first cousins, the eventual consanguine relationship going back several generations. She also specified that she called her husband *tr-mytsa* before marrying him (§27.3).

This case suggests that the reciprocal *tr-mytsa* ‘maternal parallel cousin’ relationship remains regardless of the number of generations in each lineages (as formalized in 31 above).

27.5.4 Application

As an illustration of the rules established in the previous sections, Table 27.6 summarizes the theoretical possibilities for first and second cousins *once removed*, including the main points of uncertainty in grey shading. The equivalences are given below each term in brackets, referring to the equivalent focal kin (Table 27.5); for instance (=ZCh) should be read ‘called like the ZCh’ (*tr-ftsa*, §27.2.4.2).

Table 27.5: Focal kin terms

Kin	term	Reciprocal	term
M	<i>tr-mu</i>	$\text{♀S}/\text{♂D}$	<i>tr-t̄cui/tui-me</i>
F	<i>tr-wa</i>	$\text{♂S}/\text{♂D}$	<i>tr-t̄cui/tui-me</i>
MB	<i>tr-rpuu</i>	♂ZCh	<i>tr-ftsa</i>
MZ	<i>tr-kax</i>	♀ZCh	<i>tr-ftsa</i>
FB	<i>tr-βyo</i>	♂BCh	<i>tr-mduu</i>
FZ	<i>tr-ni</i>	$\text{♂BCh}=\text{yB} Z$	<i>ta-ki</i>
MZCh	<i>tr-mytsa</i>	=	
eB Z	<i>tr-pi</i>	$\text{yB} Z$	<i>ta-ki</i>
♂Z	<i>tr-snom</i>	♀B	<i>tr-wymuu</i>
♂B	<i>tr-xtxy</i>	=	
♀Z	<i>tr-sq^haj</i>	=	

The reciprocal terms can be rechecked using the inversion table 27.2 above. It is difficult to be fully certain of the reliability of these extrapolations without an in-depth study of genealogies. This Table provides a framework for future research on kinship systems in Japhug and Gyalrong-speaking areas.

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)	MFBSCh (=MBCh=MB Z)
FFZCh (=ZCh)	MBSS (=MB)	FFZChCh (=ZCh)	(F M)MBSS (=MB)
FMBS (=MB)	δ FZSCh (=ZCh)	FMBSCh (=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 (=FZCh=ZCh)
MFBD (=MZ)	φ FBDCh (=FZCh=ZCh)	MFBDCCh (=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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