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Complementation in Japhug Gyalrong*

Guillaume Jacques
July 20, 2017


Abstract: This article provides a detailed survey of complement clauses and complementation strategies in Japhug. It shows the bewildering diversity of constructions attested in these languages, which are largely unpredictable and need to be specified for each complement-taking verb. Special focus is given to typologically unusual constructions, in particular Hybrid Indirect Speech.

Keywords: Japhug; Reported Speech; Complement clauses; Infinitive; Participle; Serial Verb Constructions; Causative; Motion Verbs

Introduction

Japhug, like other Gyalrong languages, has a complex verbal morphology and a rich array of complement clauses. Building on previous research, in particular Jacques (2008, 337-356) and Sun (2012), this article presents a detailed survey of all known types of complement clauses in Japhug and their distribution among complement-taking verbs.

The framework of this article is based on Dixon (2006, 9) and adopts a terminology close to that used in Sun’s (2012) study of Tshobdun.

The article comprises four main sections. First, I present background information on essive adjuncts and the difference between infinitives and participles. Second, I provide an overview of the various types of complement clauses and complement strategies in Japhug. Third, I describe some

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*The glosses follow the Leipzig glossing rules. Other abbreviations used here are: AUTO autobenefactive-spontaneous, ANTICAUS anticausative, ANTI PASS antipassive, APPL applicative, EMPH emphatic, FACT factual, GENR generic, IFR inferential, INDEF indefinite, INV inverse, LNK linker, POSS possessor, EGO.PRS egophoric present, PROG progressive, SENS sensory. The examples are taken from a corpus that is progressively being made available on the Pangloss archive (Michailovsky et al. 2014, http://lacito.vjf.cnrs.fr/pangloss/corpus/list_rsc.php?lg=Japhug). This research was funded by the HimalCo project (ANR-12-CORP-0006) and is related to the research strand LR-4.11 “Automatic Paradigm Generation and Language Description” of the Labex EFL (funded by the ANR/CGI). I would like to thank two anonymous reviewers, as well as Alec Coupe, for providing detailed and helpful comments and corrections on a previous version of this article.
syntactic peculiarities found in complement clauses in Japhug, for instance concerning coreference restrictions between the complement and the matrix clause. Fourth, I propose a list of complement-taking verbs classified by semantic categories, indicating for each verb which types of complements are possible.

1 Background information

This section presents general information on Japhug, and focuses on two issues of morphosyntax that are relevant to properly understanding complementation in Japhug: arguments and adjuncts that occur in absolutive form (without case marking) on the one hand, and a classification of nominalized forms (including participles and infinitives) on the other.

1.1 Japhug and other Gyalrongic languages

Japhug (Chinese Chabao 茶堡) is a Trans-Himalayan language spoken in 'Barkhams county, Rngaba prefecture, Sichuan province, China. All Japhug data in this work come from the author’s fieldwork, and reflect the dialect of Kamnyu (kɤmɲɯ, 干木鸟) village.

Japhug belongs to the Gyalrong branch of the Gyalrongic subgroup (Sun 2000b), alongside three other non-mutually intelligible languages, Tshobdun (Caodeng 草登), Zbu (a.k.a Showu, Ribu 日部) and Situ (四土, a.k.a. Eastern Gyalrong), which includes in particular the Cogtse (Zhuokeji 卓克基) and Somang (Suomo 梭磨) dialects on which most early research on Gyalrong languages has focused. Gyalrongic languages are argued to belong to a Burmo-Gyalrongic clade including Lolo-Burmese and Naish (Jacques & Michaud 2011), but this question is still debated (Thurgood to appear).

Gyalrongic languages are among the few truly polysynthetic languages of the Trans-Himalayan family, and are known for their complex verbal morphology (Sun 2000a; Jacques 2013b; Lai 2013; DeLancey 2015), direct-inverse indexation system (DeLancey 1981; Sun & Shidanluo 2002; Jacques 2010; Gong 2014; Lai 2015), incorporation (Jacques 2012b; Lai 2015), and large consonant clusters (Sun 2007; Jacques 2013c).

1.2 Unmarked arguments and adjuncts

Like all Gyalrong languages, Japhug is very strongly head-marking, with obligatory indexation of one or two arguments and morphological marking of transitivity. There are nevertheless some case markers, such as the ergative

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1 My main consultant is ʧrund svm Chenzhen 陈珍, born 1950.
2 There are several distinct convergent criteria for distinguishing between transitive and intransitive verbs in Japhug: the former have Stem 3 alternation in sg→3 non-past verb forms, the past transitive -ɾ suffix in 1/2sg→3 forms, orientation prefixes in ɐ- in past
/ instrumental *ku* (obligatory on third person subjects\(^3\) of transitive verbs, as in 1), the comitative *c'sʰ*, the genitive *ɣɯ* and the dative *ɯ-ɕki*.

(1) *tv-tau mu ku xu r qa-pa mu c'v-mqla*<br>INDEF.POSS-BOY DEM ERG gold frog DEM IFR-SWALLOW

‘The boy swallowed the golden frog.’ (Nyima Wodzer.1, 131)

Subjects of intransitive verbs and objects of transitive verbs are indexed on the verb morphology but receive no case marking.

### 1.2.1 Semi-transitive verbs

A small class of verbs in Japhug are intransitive (ie, their subject does not take ergative marking, only one argument is indexed, and they do not present the morphological properties mentioned in fn. 2), but take an unmarked argument which presents object-like properties.

In example (2), the verb *rqa* ‘like’ occurs with an overt noun *ndɯχu* ‘flower sp.’, but verbal morphology shows that the verb is not transitive (otherwise a stem 3 alternation *rge-a* instead of *rqa-a* would be expected).

(2) *aʑo ndɤre ndɯχu rqa-a*<br>1SG TOPIC flower.sp like:FACT-1SG

‘As for me, I like the *ndɯχu* flower.’ (14-sWNgWJu, 131)

The syntactic status of nouns like *ndɯχu* ‘flower sp.’ in (2) is better understood if relativization is taken into account. Like the objects of transitive verbs, these nouns can be relativized by using the *kɤ*-P-participle (on which see section 1.3.1), with an optional possessive prefix coreferential with the subject. Compare the relativized object of the transitive verb *sɯz* ‘know’ in (3) with the construction in (4) involving the intransitive verb *rqa* ‘like’.

(3) *paχɕi [aʑo a-kɤ-sɯz] mu mura yɛɛ*<br>apple 1SG 1SG.POSS-NMLZ:P-know DEM DEM:PL exist:sens

‘The (types of) apples that I know about are these.’ (hist-07-paXCi, 73)

(4) *[pya ra mu-kr-rga] mu qa j ntsu yu*<br>bird PL 3PL.POSS-NMLZ:P-like TOPIC wheat always be:FACT

‘(The food) that birds like is always wheat (not barley).’ (23 pGA-YaR, 29)

\(^3\) direct forms, while the latter don’t.

\(^3\) Subjects and objects in Japhug can be defined on the basis of relativization patterns, in addition to case marking and indexation, see Jacques (2016b).
In the following, arguments selected by verbs such as *rga* ‘like’ that can be relativized using P-participles are referred to as *semi-objects*; semi objects are considered to be one subtype of core arguments. Verbs that take semi-objects are called *semi-transitive*. Semi-transitive verbs are few, but some of them are among the most common verbs in the language, and several of them can take complement clauses, including *rga* ‘like’, *cʰa* ‘can’ and even the adjectival stative verb *mku* ‘be expert’.

### 1.2.2 Essive adjuncts

A type of unmarked adjunct not previously described in the literature on Gyalrongic languages but crucial for understanding complement clauses and complementation strategies in Japhug is that of the essive adjunct. Essive noun phrases are not arguments of the sentence, but are used to indicate ‘the property of fulfilling the role of an N’ (Creissels 2014, 606); in English for instance, they are marked by *as* in a sentence such as ‘I am saying this as your friend’.

In Japhug, bare noun phrases without any case marker can be interpreted as essive adjuncts, such as *ny-.decorate* ‘your wife’ in (5), which is neither the object (recipient) nor the theme of the verb *mbi* ‘give’.

(5)  
\[ a\text{-}me \ nɯ \ ny\text{-}decorate \ mɯ\text{-}ta\text{-}mbi \ \nuu \]
\[ 1\text{sg.poss-daughter} \ \text{dem} \ 2\text{sg.poss-wife} \ \text{ipfv-1→2-give be:fact} \]
\[ ‘I will give you my daughter in marriage. (=I will give her to you as your wife)’ \]

Noun phrases headed by the possessed noun *ɯ-spa* ‘material’ are often used as an essive adjuncts as in (6), a construction that is in the process of grammaticalizing into a purposive phrase, and serves as a grammaticalization strategy with verbs of manipulation (see section 2.6.3).

(6)  
\[ zɣɤmbu \ ɯ-spa \ mɯ\text{-}nu\text{-}pʰɯt\text{-}nu \]
\[ \text{broom} \ 3\text{sg.poss-material} \ \text{ipfv-auto-cut-pl} \]
\[ \text{ŋgrv}} \]
\[ \text{be.usually.the.case:fact} \]
\[ ‘They cut it to make brooms. (=as a material for brooms.)’ (140505 sWjno, 22) \]

### 1.3 Participles vs infinitives

All Gyalrong languages, including Situ (Lín 2003), Tshobdun (Sun 2012) and Japhug, distinguish many different types of non-finite verb forms. (Sun & Lín 2007; Genetti et al. 2008; Prins 2011).

In the present work, I propose to additionally distinguish between several sub-types of nominalizations.
I call *participles* the nominalized verb forms that can be used as noun modifiers and that refer to an entity that is either argument or adjunct of the nominalized verb (Creissels 2006a, 224). The main function of participles in Japhug is to build relatives (Jacques 2016b); these relatives are known as *participial relatives* (on which, see for instance Lehmann 1984, 50-58, 73-5, 156-7 and Creissels 2006b, 214), and include in particular adjectival stative verbs in attributive function, as in (7).

(7) \text{tɕʰeme ku-mpɕɯ~mpɕɤr} \\
\text{girl NMLZ:S/A-EMPH–be.beautiful} \\
‘A beautiful girl’ = ‘A girl who is beautiful’

Infinitives are nominalized verb forms that refer to the action itself (not to an argument or an adjunct of the nominalized verb), can be used in complement clauses and preserve the argument structure of the verb, as in example (8), where the transitive verb \text{pʰɯt} ‘cut’ in infinitival form takes an overt object:

(8) \text{aʑo nɤ-mɤlɤjaʁ kɤ-pʰɯt mɤ-cʰa-a} \\
\text{1sg 2sg.poss-limbs INF-cut NEG-can:FACT-1sg} \\
‘I cannot cut your limbs.’ (The fox03, 190)

There are in addition a few other non-finite forms, such as action nominals (Jacques 2014b) and degree nominals (on which see Jacques 2016a) which are neither infinitives nor participles.

The formal distinction between participles and infinitives in Japhug is quite subtle, as there are both infinitives and participles in \text{ku-} and \text{kɤ-} (or \text{kə-} and \text{kɐ-} depending on the transcription system). Since both categories are formally similar and can occur in similar contexts, it is crucial to clearly explain the distinction between the two, especially since Japhug slightly differs from the other Gyalrong languages in this regard.

1.3.1 Participles

The system of core argument participles in Japhug is relatively straightforward (Jacques 2016b). The prefix \text{ku-} is used to build the S-participle of intransitive verbs, and the A-participle of transitive verbs. A-participles differ from S-participles in taking an additional possessive prefix coreferential with the P, as in (9).

(9) \text{a-me a-ku-fstun ṅu} \\
\text{1sg.poss-daughter 1sg.poss-NMLZ:S/A-serve be:FACT} \\
‘My daughter is the one who takes care of me.’ (The prince, 74)
The prefix *kɤ-* on the other hand serves to build the P-participle, and can optionally take a possessive prefix coreferential with the A, as in (10). Participles are compatible with polarity and associated motion prefixes (Jacques 2016b).

(10) \[ aze \ a-ny-kɤ-sɯz \quad tvjmvv \quad nu \ kv-ndza \]
1SG 1SG-NEG-NMLZ:P-know mushroom DEM INF-eat

\[ my-naz-a \]
NEG-dare:FACT-1SG

‘I do not dare to eat the mushrooms that I do not know.’ (23 mbrAZim,103)

1.3.2 Infinitives

There are four types of infinitives in Japhug: *ku*- , *kɤ*- , *tu*- and bare infinitives. The latter two are restricted to very specific constructions (see 2.2), and only the former two types are discussed in this section.

Infinitives in *kɤ*- are by far the most common form in Japhug. The *kɯ*- form is restricted to stative verbs (including adjectives, copulas and existential verbs) and impersonal auxiliaries, but even with these verbs, *kɤ*- infinitives are used in several contexts.

Aside from complement clauses (for which see section 2.1), infinitives are used in two types of constructions, a brief overview of which is provided below.

First, infinitives occur as the citation forms of verbs and in metalinguistic discussion in Japhug, as in examples (11) and (12) for stative vs non-stative infinitives.

(11) \[ umumu \ tee \ tee \ w-tu-tsɯβ \]
DEM LNK LNK 3SG.POSS-NMLZ:ACTION-sew

\[ my-kɯ-βdi \quad tu-kɯ-iti \quad yu \]
NEG-INF:STAT-be.good IPFV-GENR:A-say be:FACT

‘People call this ‘badly sewn’.” (12-kAtsxWb, 12)

(12) \[ pjɯ-su-sndi \quad tee \ pjɯ-su-sat. \quad tee \ nu \ koɯmɯz \ ny \]
IPFV-CAUS-hit[III] LNK IPFV-CAUS-kill LNK DEM only.then LNK cʰu-nɯtsɯm \ jɯ-ra. \ tee \ numu
IPFV:DOWNSTREAM-take.away SENS-have.to LNK DEM

\[ ky-nɤɾarphɤβ \quad tu-kɯ-iti \quad yu \]
INF-strike.with.wings IPFV-GENR:A-say be:FACT

‘It strikes it and kills it (with its wings) and only then takes it away. This is called *ky-nyarphɤβ* ‘strike with one’s wings!’ (hist150819 RarphAB, 11)
In the topical position, the infinitive is neutralized to the \( k茑 \) form even for stative verbs, as in (13).

\[(13) \quad k茑rziriri pjiy-rzi,\]
\[\text{INF}-\text{be.heavy} \quad \text{also IFR.IPFV}-\text{be.heavy}\]
\[\text{‘As for being heavy, (the old man) was heavy.’} \quad (140511 \text{ xinbada, 138)}\]

Second, infinitives are used as converbs to indicate the manner in which the action of the main clause occurs (example 14), or a background event (Jacques 2014a). The \( ku- \) infinitive form occurs with stative verbs (as \( sɤscit \) ‘nice (of an environment)’ in example 15) but it is also attested with a handful of dynamic verbs in lexicalized form such as \( mvk-k茑mbrt \) ‘without stopping’ in (16).\(^4\) This latter use is the last trace of the contrast between human \( k茑 \) and non-human \( kə- \) action nominals reported by Sun (2012, 476) and Sun 2014, which otherwise appears to have been lost in the variety of Japhug under study.

\[(14) \quad k茑ŋke jərari puu-ra\]
\[\text{INF-walk PFV}-\text{go}[\Pi] \text{PST.IPFV}-\text{have.to}\]
\[\text{‘He had to go on foot.’} \quad (\text{elicited})\]

\[(15) \quad xɤriger \text{ mutɕu kuw-sx-sc}${\text{scit}} \text{ zo}\]
\[\text{night LNK DEM:LOC INF:STAT-DEEXP-EMPH} \quad \text{be.happy EMPH}\]
\[\text{ɕ-ku-nu-rŋgɯ} \quad \text{ŋu}\]
\[\text{TRANSLOC-IPFV-AUTO-lie.down be:FACT}\]
\[\text{‘In the night, he goes in there to sleep cosily.’} \quad (26-\text{NalitCaRmbWm, 35})\]

\[(16) \quad nu maka \text{mvk-k茑mbrt} \quad \text{zo} \quad \text{juu-}'\text{vma}\]
\[\text{DEM at.all NEG-INF-ANTCAUS:break EMPH IPFV-work}\]
\[\text{juu-}'\text{etiri} \quad \text{we}\]
\[\text{SENS-be:AFFIRM LNK}\]
\[\text{‘It works without stopping.’} \quad (\text{hist-26-GZo.txt 67})\]

Infinitives can take orientation, negation and even associated motion prefixes, but not possessive prefixes.

### 1.3.3 Japhug vs Tshobdun

The inventory of participial and infinitive forms presented above for Japhug differs from other previous descriptions of Gyalrong languages. In Tshobdun, Sun (2012, 476) describes five types of verbs forms with \( kə- \) or \( k茑- \) prefixes (Table 1), corresponding to Japhug \( ku- \) and \( k茑- \) respectively.

\(^4\) The implied S of the verb \( mbrt \) ‘break, stop suddenly’ (the anticausative of \( prt \) ‘break’) in this sentence is the work of the subject.
Table 1: Nominalization types in Tshobdun (Sun 2012, 476)

<table>
<thead>
<tr>
<th>Type</th>
<th>Scope</th>
<th>Finiteness</th>
<th>Argument Coding</th>
<th>Prefix</th>
</tr>
</thead>
<tbody>
<tr>
<td>purposive</td>
<td>clausal</td>
<td>non-finite</td>
<td>possessor</td>
<td>ka-</td>
</tr>
<tr>
<td>participant</td>
<td>clausal</td>
<td>non-finite</td>
<td>possessor</td>
<td>ka-</td>
</tr>
<tr>
<td>infinitive</td>
<td>clausal</td>
<td>non-finite</td>
<td>normal</td>
<td>ko-</td>
</tr>
<tr>
<td>action / state</td>
<td>clausal</td>
<td>non-finite</td>
<td>normal</td>
<td>ko-</td>
</tr>
<tr>
<td>finite</td>
<td>clausal</td>
<td>finite</td>
<td>normal</td>
<td>ka-</td>
</tr>
</tbody>
</table>

While Japhug and Tshobdun have very close systems, the present analysis conflates some of Sun’s categories. The correspondences between the two terminologies are as follows.

First, the categories ‘purposive’ and ‘participant’ in Tshobdun in Table (1) correspond to the Japhug participles. The difference here is partially terminological, but also has to do with the fact that in Japhug not just the subject participle, but also the object participle ko-, can appear as a purposive complementation strategy of motion verbs (see section 2.6.2) and there is little reason to distinguish between the two.

Second, the categories ‘infinitive’ and ‘action / state’ in Table (1) correspond to the Japhug infinitive. Tshobdun and Japhug differ by the fact that the humanity contrast on these non-finite forms, quite prominent in Tshobdun, has become marginal in the variety of Japhug under study, making it unnecessary to differentiate between action/state nominalization and infinitive.

Third, the category ‘finite’, which refers to verbs forms prefixed in ko- with reduced inflection (no person / number marking), appear not to exist under exactly the same form in Japhug. Sun (2012, 481) mentions the occurrence of these clauses with verb of pretence like nəʃpəz ‘pretend’. In Japhug, verbs of this type (like nɯɕpɯz ‘pretend’, cognate with the Tshobdun verb) do take clauses whose verb is prefixed in ku-, but there are reasons to analyze these as head-internal relative clauses with a verb in participial form (see section 2.6.2) rather than postulating a distinct morphological category.

Little data is available on Zbu (the only publications specifically on this language are Sun 2004 and Gong 2014, with some data in Lin 1993 and Jacques 2008), but this language seems to have a system of nominalization similar to that of Japhug and Tshobdun. Situ on the other hand appears to be markedly different, as this language has an additional type of nominal-

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5 Data on nominalization is available from three varieties of Situ: Cogtse (Lin 1993; Wei 2001; Sun & Lin 2007; Genetti et al. 2008), Kyomkyo (Prins 2011) and Bragdbar (personal fieldwork).
ized verb form with the same set of person indexation affixes as finite verb forms. Comparison between the nominalization system of Situ and those of the other Gyalrong languages is more difficult and must await later research (Jacques to appear presents preliminary ideas on this issue).

2 Complement types

This section illustrates the different categories of complements attested in Japhug. Five main types of complement clauses are distinguished: \( \text{kv-}/\text{ku-} \) infinitival complements, bare infinitival complements, finite complements and reported speech. In additional, Japhug has many distinct complementation strategies.

2.1 Infinitive

The most common types of complement clauses in Japhug are \( \text{kv-} \) and \( \text{ku-} \) infinitival complements. As seen in section 1.3.2, there are \( \text{kv-} \) and \( \text{ku-} \) infinitives in Japhug, the latter found in the citation forms of stative verbs and modal impersonal auxiliary verbs. In complement clauses, stative verbs take the \( \text{kv-} \) infinitive like dynamic verbs in many cases.

2.1.1 Case marking

While infinitives bear no person indexation markers, noun phrases receive the same case markers in infinitive clauses as in main clauses, showing that infinitives have the same argument structures as finite verb forms.

When an argument is shared between the complement and the matrix clause, it often has a different syntactic function in the two clauses, as in (17), where \( \text{tvxime} \) ‘princess’ is A in the complement clause (\( \text{stu} \) ‘do like this’ is transitive) and S in the matrix clause (\( \text{cʰa} \) ‘can’ is semi-transitive; the complement clause is its semi-object).

(17) \[ \text{tvxime nu ku nura kv-stu} \] \( \text{pvjv-cʰa} \)
    princess DEM ERG DEM:PL INF-do.like.this IFR-can
    ‘The princess succeeded in doing it.’ (140511 alading, 252)

In this sentence, the noun takes the ergative marker \( \text{ku} \) in accordance with the verb of the complement clause, showing that it belongs to the complement clause rather than to the matrix clause directly. This is the most commonly observed pattern in Japhug texts: in infinitival clauses, the shared arguments more often take the case marking selected by the verb of the complement clause than that of the matrix clause.

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2.1.2 Coreference between matrix and complement clause

Coreference restrictions between complements in ka-infinitives and their matrix clauses vary from verb to verb, and three cases can be distinguished.

First, in the case of impersonal verbs such as ra ‘have to, need’ (see section 4.1.3), the complement clause is the S and there is no argument coreference between the matrix clause and the complement clause.

Second, with a few transitive complement-taking verbs such as spa ‘know how to’ (see section 4.1.1) and ny ‘dare’ (4.5), the subjects of both clauses must be coreferential.

Third, for most verbs taking infinitives (like the semi-transitive rga ‘like’ or the transitive rm ‘experience’), the subject of the matrix clauses can be coreferential to either the S (18), the A (19) or even the P (20 and 21) of its infinitival complement clause (Jacques 2016b).

(18) tsuku tce  ka-nuŋŋo wuma zo rga-nu we
some LNK INF-sing really EMPH like:FACT-PL LNK
‘Some people like to sing.’ (26 kWrNukWGndZWr, 104) (S=S)

(19) aʑo qa[j i nu ra ka-nuŋŋo pɯ-rɡa-a tce
1SG bugs DEM PL INF-observe PST.IPFV-like-1SG LNK
‘I liked to observe bugs.’ (26 quspunnbro, 15) (A=S)

(20) maka tɯ-kɑ-nuŋŋo, tɯ-kɑ-fstɤt nu pɯ-rɡa-nu
at.all IPFV-INF-flatter IPFV-INF-praise DEM IPFV-like-PL
‘They like to be flattered or praised.’ (140427 yuanhou, 53) (P=S)

In (21), while ¥p Taliban is semantically a patient, it receives obligatory ergative marking due to the fact that the matrix verb rm ‘experience’ is transitive.6

(21) aʑo kɑ-nɑ-ɡu mu-pɯ-rɡo-t-ɑ ri, ¥p Taliban ku
1SG INF-bite NEG-PFV-experience-PST:TR-1SG but Dalpcan ERG
IPR-experience
‘I have never been stung (by a wasp), but Dalpcan has.’ (26-ndzWnnaR, 19) (P=A)

The subject of the matrix clause can even be coreferential with the possessor of the S, as in example (22), where the non-overt S should be a-xtu ‘my belly’ (1SG.POSS-belly). The verb mɤm ‘hurt’ can only take a body part as its S – the experiencer is indicated by a possessive prefix on the body part, as in (23).

6This example illustrates the fact that ergative marking on third person referents in Japluug is syntactically conditioned, unlike many other languages of the family with optional ergative marking (see DeLancey 2011 and other articles in the same volume of LTBA.).
When I was very small, I had dysentery, (my belly) ached.’ (24-pGArtsAG, 121)

‘My belly hurts.’

2.1.3 Stative infinitive

Stative verbs, when occurring in a complement clause, generally take the kɤ-infinitive, as in example (24) and (25). The main verb of the complement clauses in these examples have the kɤ-infinitive, even though both tu ‘exist’ and scit ‘be happy’ are stative verbs and have a citation form with the kɯ-prefix.

I used to have money’. (elicited)

‘She succeeded in being happy.’ (150818 muzhi guniang, 6)

In complement clauses, kɯ-infinitives are uncommon, and only occur in two cases.

First, the conversion to kɤ-infinitive only applies to stative verbs, not to impersonal modal verbs such as ra ‘have to, need’. When the latter occur in a complement clause, as in example (26), they always have the kɯ-prefix.

‘I used to have to take medicine.’ (elicited)

Second, complements of verb of perception or thought like sɯpa ‘consider as’ or sɯχsɤl ‘recognize, realize’ can take complement clauses with stative infinitives as objects, as in (27).

‘That she was a râkshasî, the father did not realize it, her husband.’ (28-smAnmi, 62)
2.2 Bare infinitive and *tu*-infinitives

Several phasal verbs, such as *za* ‘begin’, *syza* ‘begin’, *stʰut* ‘finish’, *jɤɣ* ‘finish’, causative verbs derived from adjectives such as *ɣɤtɕʰom* ‘overdo, do too much’ or *ɣɤβdi* ‘do well’ and the aspectual verb *ŋno* ‘experience, have already’ are compatible with bare infinitival and *tu*-infinitival complements. The verbs *syza* ‘begin’ and *ŋno* ‘experience’ are more commonly used with *kv*-infinitives. With the exception of *jɤɣ* ‘finish’, these verbs are all transitive.

Bare infinitives without possessive prefixes are attested in a very marginal construction involving negative existential verbs (see section 4.8).

2.2.1 Bare infinitives and transitivity

Bare infinitives are formed by combining the stem 1 of the verb with a possessive prefix coreferential with the object of the complement clause, as in examples (28). Intransitive verbs do not form bare infinitives.

(28) *nɤʑo ku-fse a-ŋkʰor nu*

\begin{verbatim}
  you  NMLZ:STATIVE-be.like 1SG.POSS-subj  TOP  \\
  u-mto  mu-pu-ŋno-t-a
\end{verbatim}

‘I never saw anyone like you among my subjects.’ (Smanmi metog koshana1.157)

Bare infinitives are in complementary distribution with *tu*-infinitives, which occur when the verb of the complement is morphologically intransitive. There is obligatory coreference between the S/A of the matrix verb and the S of the *tu*-infinitival complement. When the verb of the matrix clause is transitive and that of the complement clause intransitive, there is a conflict in case assignment on their common subject: the transitive verb requires the ergative on third person subjects, while the intransitive one precludes it. In most cases of this type, such as example (29), the common subject is in the absolutive in accordance with the intransitive verb of the complement clause. However in a few examples such as (30), the shared argument takes the ergative in accordance with the transitive matrix verb (the verb *za* ‘begin’ is transitive). I consider that this difference is related to the boundary of the complement clause: in this first case the shared subject belongs to the complement clause, while in the second case it lies outside it.

(29) \[<xinbada> mu tce li tu-ŋke] to-za

\begin{verbatim}
  Sinbad  DEM LNK again INF-walk IFR-begin
\end{verbatim}

‘Sinbad started to walk again.’ (140511 xinbada, 217)

(30) *pyrɛm mu ku [nuɛːumumma zo tu-nurɤo] cʰɤ-za*

\begin{verbatim}
  bird  DEM ERG immediately EMPH INF-sing IFR-begin
\end{verbatim}
'The bird immediately started to sing.' (140514 huishuohua de niao, 221)

Bare infinitives and tu- infinitives are only compatible with polarity prefixes (as in example 31 below), and cannot take TAM or possessive prefixes. Crucially, semi-transitive verbs are treated like intransitive verbs: they cannot form a bare infinitive, and use tu- infinitives instead (example 31), although their semi-object does present some object-like syntactic properties (see section 1.2.1).

(31) qay uy-me nunu, teendyre k’ro mny-tu-rga to-sa
fish 3SG.POSS-daughter DEM LNK a.lot NEG-INF-like IFR-start

‘He started not liking the mermaid that much.’ (hist150819 haidenver, 154)

The only exceptions to this distribution are some transitive verbs used in complex predicates referring to weather phenomena, in particular lɤt ‘throw’ and βzu ‘make, do’, which take tu- infinitives as in (32). Note that in these complex predicates, the light verbs lɤt ‘throw’ and βzu ‘make, do’, although transitively conjugated, cannot take an overt A marked with the ergative.

(32) tu-mu ku-wxtu–wxti so tu-lɤt
INDEF.POSS-sky NMLZ:S/A-EMPH–be.big EMPH INF-throw
pʃv-sa
IFR-start

‘A big rain started.’ (hist150819 haidenver, 104)

2.2.2 Coreference restrictions

Bare infinitives and kɤ- infinitives strongly differ as to their coreference restrictions. With kɤ- infinitives, the subject of the matrix clause can be coreferential with either the subject, the object or even the possessor of the intransitive subject of the complement clause (see example 22 above). This ambiguity is particularly clear with the verb nɤkʰu ‘invite to one’s home as a guest’ (see examples 33 and 34), as with this verb both arguments are equal in terms of volition and control.

(33) uzo ku  kɤ-nvkʰu  pu-ŋə-t-a
3SG ERG INF-invite PFV-experience-PST:TR-1SG

‘I have been to his house as a guest.’ (= ‘He has invited me to come to his house as a guest and I came.’) (P=A)

(34) uzo kɤ-nvkʰu  pu-ŋə-t-a
3SG INF-invite PFV-experience-PST:TR-1SG

‘He has been to my house as a guest.’ (= ‘I have invited him to come to my house as a guest and he came.’) (A=A)
In the case of bare infinitives, on the other hand, the subjects of the matrix and complement clause must be identical, but the object of the matrix clause can however be neutralized to third person.\(^7\)

In example (35), the shared subject (referring to the host) is 3SG. The verb of the matrix clause takes the complement clause as a 3SG object (hence the verb takes the 3→3′ form without 1SG marking), while the verb of the complement clause takes a 1SG object (referring to the guest), marked by the possessive prefix \(a\).\(^8\)

\[(35) \quad \text{\texttt{a-nɤkʰu}} \quad \text{\texttt{pa-ŋno}}
\]
\(1\text{SG.Poss-Bare.Inf:invite PFV:3→3′-experience}
\)
\(‘I have been to his house as a guest.’ (‘He has invited me to come to his house as a guest and I came.’)
\]

\[(36) \quad \text{\texttt{wso w-nɤkʰu}} \quad \text{\texttt{pu-ŋno-t-a}}
\]
\(3\text{SG 3SG.Poss-Bare.Inf:invite PFV-experience-PST:TR-1SG}
\)
\(‘He has been to my house as a guest.’ (‘I have invited him to come to my house as a guest and he came.’)
\]

This generalization is observed for all transitive verbs taking bare infinitive complement clauses. The intransitive impersonal verb \(jɤɣ\) ‘finish’ takes the bare infinitive clause in \(S\) function, and remains in third person singular regardless of the subject and object of the complement clause, as in (37), where although the subject of the complement clause is third person plural, no plural marker can appear on \(jɤɣ\).

\[(37) \quad \text{\texttt{nuɾa \texttt{u-ti}}} \quad \text{\texttt{to-jɤɣ}} \quad \text{\texttt{tɕe}}
\]
\(\text{DEM:PL 3SG.Poss-Bare.Inf:say IFR-finish LNK}
\)
\(‘After having finished saying that, (they went to the park)’ (140515 congming de wusui xiaohai, 15)
\]

### 2.2.3 Historical origin

Bare infinitives probably derive from action nominals. There are marginal examples in Japhug of bare infinitives used in this way, as in example (38) (Jacques 2014b).

\[(38) \quad \text{\texttt{ndzi-mi}} \quad \text{\texttt{u-tsʰok}} \quad \text{\texttt{u-tsʰuŋa}} \quad \text{\texttt{nuɾa}}
\]
\(\text{3DU.Poss-foot 3SG.Bare.Inf:attach.to 3SG.Poss-form DEM:PL}
\]
\(\text{\texttt{wuma zo}} \quad \text{\texttt{naχtɕɯɣ-ndzi.}}
\]
\(\text{very EMPH NPST:similar-DU}
\)

\(^7\)Note that apart from this syntactic difference, there is no detectable meaning difference between examples (33) and (34) on the one hand and their bare infinitive equivalents (35) and (36) on the other.

\(^8\)In the English translation, the 1SG is rendered as a subject, because translating \(a-nɤkʰu \quad \text{\texttt{pa-ŋno}}\) as ‘He has invited me’ would be inexact, as this English sentence does not imply that the 1SG did attend the invitation.
‘The way their feet (of fleas and crickets) touch the ground is very similar.’ (26-mYaRmtsaR, 17)

As for the tu- infinitives, there are at least two possible ways of analyzing their origin.

First, they could be related to the tu- action nominals (Jacques 2014b), found in light verb constructions such as (39) or (40)\(^9\) and used to build abstract nouns (si ‘die’ → tu-si ‘death’). This solution is attractive due to the fact that tu- action nominals are relatively common, but it does not account well for the complementary distribution of bare infinitives and tu- infinitives, since both intransitive and transitive verbs can build tu- action nominals.

\[(39)\] tu-ʁjaʁ pu-βzu-t-a
NMLZ:ACTION-dance PFV-do-PST:TR-1SG
‘I danced.’

\[(40)\] kuxtɕo c’ondrophe kurtʂy nura u-pa mɯtsɯ
basket COMIT leopard DEM:PL 3SG-down DEM:LOC
tu–tu-tʂaβ zo pjɤ-βzu
TOGETHER–NMLZ:ACTION-cause.to.roll EMPH IFR:DOWN-make
‘(The rabbit) caused the leopard and the basket to roll down together.’ (The rabbit 2002, 72)

Second, one could interpret the tu- here as the indefinite possessor prefix tu-, which is added to inalienably possessed nouns when no definite possessor is present (Jacques to appear). In this hypothesis, the bare infinitive takes a possessive prefix coreferential with its P with transitive verbs, but in the case of intransitive verbs, given the absence of P argument, the indefinite possessor is used instead.

2.3 Finite complements

Finite subordinate\(^10\) clauses are common in Japhug and other Gyalrong languages. For instance, some specific types of relative clauses (Sun 2006; Jacques 2016b) or temporal subordinate clauses (Jacques 2014a) take a verb in finite form, in some cases without a subordinator.\(^11\) Likewise, finite complement clauses are common in Japhug and other Gyalrong languages.\(^12\)

\(^9\)When the tu- nominalization prefix is reduplicated as in (40), it conveys the meaning of several persons/objects being subjected to the same action together.

\(^10\)In this work, ‘subordinate clauses’ is understood as a cover term for relative, complement and adverbial clauses.

\(^11\)Finite relatives, however, have some properties that distinguish them from corresponding independent clauses (Jacques 2016b, 18-21).

\(^12\)Sun (2012, 475-7) uses the term ‘S-like’ (sentence-like) clause instead of ‘finite’, which in his terminology refers to a different type of clause (see section 1.3.3). I chose ‘finite’ rather than ‘S-like’ to avoid confusion with ‘S’ as ‘intransitive subject’.
2.3.1 TAM forms

Like finite relatives, there are constraints on the TAM forms that the main verb of a finite complement can take. Two cases can be distinguished.

The most common type of finite complement have their verb in the imperfective, regardless of the TAM category of the complement-taking verb, whether in sensory or imperfective form as in (41), in irrealis form as in (42), or even in inferential or perfective forms as in (43) and (44).

(41)  
**tɤjpa ku-xteu—xtɕi ka-lvt ri,**  
snow INF:STAT-EMPH=be.small PFV:3→3'-throw but  
**mɯj-udug, pɔjɛ̃tu-ndeji jɯw-cʰa**  
NEG:SENS=be.serious still IPFV=melt SENS-can  
‘There was a little snow, but it doesn’t matter, it can still melt.’  
(conversation, 2015/12/17)

(42)  
**nɤʑo koŋla zo tu-ku-tɕat-a a-pɯ-tɯ-cʰa**  
2SG really EMPH IPFV-2→1-take.out-1SG IRR-IPFV-2-can  
a-pɯ-ŋu IRR-IPFV-be  
‘If you can take me out of here...’ (140516 huli de baofu, 82)

(43)  
**ko-spa-nɯ qʰendɤre, nunu rɤɣo cʰu-tɯ-za qʰe, xrrɯrca**  
IFR-be.able-PL LNK DEM song IPFV-IMM-start LNK together  
zo cʰu-ti-nɯ to-cʰa-nɯ.  
EMPH IPFV-say-PL IFR-can-PL  
‘They had learned (its songs) and as soon as it would start his song, they had become able to sing together with it.’ (140519 yeying, 156)

(44)  
**a-rɤɣo jɯw-tɯ-ʃyʃo tv-tɯ-sus-o-t sce,**  
1SG.POSS-song IPFV-2-listen PFV-2-think-TR:PST LNK  
a-ɡɯ-jv-kɯ-sɯ-ye-a qʰe nu ɕti  
IRR-CISLOC-IPFV-2→1-CAUS-COME-1SG LNK DEM be.AFFIRM:FACT  
‘When you want to listen to my song, just come and ask me.’ (140519 yeying, 238)

Imperfective complements are the preferred construction when cʰa ‘can’ takes adjectival stative verbs as complements, as in (45). The meaning of this construction is specifically ‘be able to become X’.

(45)  
**cɤtʂʰa nunu w-tɯ-mbro nu tw-mtʰɤɣ**  
plant.sp DEM 3SG.NMLZ:DEGREE-be.high DEM INDEF.POSS-waist  
w-fsu jamar ma tu-mbro mv-cʰa  
3SG.POSS-size about apart.from IPFV-be.high NEG-can:FACT  
‘The cɤtʂʰa plant can only grow as high as a person’ waist.’ (18-NGolo, 182)
Second, some complement-taking verbs, including impersonal modal verbs such as *ntsʰi* ‘have better’, *lɔw* ‘have to’ or *ra* ‘have to, need’ or transitive verbs such as *susο* ‘think’ allow complements in the irrealis form, as (46).  

(46)  
\[ndɤre\ ku-xτau−xtɕi\]  
\[LNK\ INF:STAT-EMPH−be.small\]  
\[a-my-p)i-wy-nu-cluy\]  
\[IRR-NEG-PFV:DOWN-INV-AUTO-drop\ SENS-need because\]  
\[ra\]  
\[nu\]  
\[nu-ndos\]  
\[q’e\ clau\]  
\[so\]  
\[UNEXPECTEDLY\ DEM\ SENS-be:brittle\ LNK\ at.once\ EMPH\]  
\[pjʉ-saru\]  
\[pjʉ-ɕti\]  
\[IPFV-ACUS:break\ SENS-be:AFFIRM\]  
‘However, one should not let it drop even a little, otherwise, as it is very brittle, it would break at once.’ (30-Com, 27)

Finally, complements in direct or hybrid indirect speech (in the case of verbs of speech and thought) do not have restrictions on TAM or person marking as found with other types of finite complements (see section 2.5).

### 2.3.2 Coreference restrictions

Verbs taking finite complements can be divided into three groups depending on the coreference restrictions holding between the complement and the matrix clause.

First, verbs such as *cʰa* ‘can’ require subject coreference between the clauses. For instance, in (47) and (48), the semi-transitive main verb *cʰa* ‘can’ respectively takes second and first singular person indexation, like the subject of the transitive complement verbs. Absence of person indexation on the verb of the matrix clause or indexing the object of the complement clause is impossible.

(47)  
\[aso\]  
\[nu-ku-cuy-mu-a\]  
\[IPFV-2→1-CAUS-be.afraid-1SG NEG-2-can:FACT\]  
‘You cannot scare me.’ (140516 guowang halifa, 54)

(48)  
\[cʰu-ta-cu-fka\]  
\[IPFV-1→2-CAUS-be:satiated NEG-can:FACT-1SG\]  
‘(If you eat me, as I am lean,) I will not be able to satiate your hunger.’ (140516 guowang halifa, 92)

Second, other verbs such as *rga* ‘like’ allow coreference of the subject of the main clause with either the subject or the object of the complement clause (as in 49).

---

13 The same is also found in Tshobdun, see Sun (2012, 483).
Unlike infinitival complements (as in example 22), coreference with a possessor is not possible. While it is possible to say (50), it is not grammatical to use a finite complement here, and one cannot replace the infinitive *kɤ-mŋɤm* (INF-hurt) with a finite form such as *ɲɯ-mŋɤm* (SENS-hurt) for instance.

(50) *a-xtu kɤ-mŋɤm ny-rga-a*

1SG.POSS-belly INF-hurt NEG-like:FACT-1SG

‘I don’t like to have belly ache.’ (elicited)

Third, in the case of complement clauses in S function, the verb of the matrix remains in third person singular form regardless of the person of the subject and object in the complement clause, as in (51) (had the matrix verb been in 1SG form like the subject of the complement clause, an (impossible) form such as *ɲɯ-ntsʰi-a* would have been expected).

(51) *ki maka qala kau pjɪ-wy-nɯβlu-a tɕe z-ɲɯ-ɕar-a jɯu-ntsʰi-a*

DEM at.all rabbit ERG IFR-INV-cheat-1SG LNK TRANSLOC-IPFV-search-1SG SENS-have.better

‘That rabbit has cheated me, I have to go to look for him.’ (31-qala, 39)

### 2.4 Complement-taking nouns

Not all subordinate clauses modifying a noun should be analyzed as relative clauses: only subordinate clauses whose head noun (overt or covert) has a syntactic role in the clause (whether argument, adjunct or noun modifier) can be considered to be a relative clause (Sun 2006; Jacques 2016b).\(^\text{14}\)

In example (52), the head noun *fɪcaka* ‘method, manner’ is neither a core argument nor an adjunct. It is not possible to transform the subordinate clause into an independent clause that would include this noun. This sentence is thus a complement clause, rather than a relative, despite having a noun rather than a verb as its head.

\(^\text{14}\)This point of view is not shared by scholars such as Matsumoto (1988) and Comrie (1998), but whatever the theoretical merits of their approach, for the purpose of detailed language description it is always better to err on the side of splitting than on that of lumping. In Japhug, there are in any case observable, though subtle, differences between relative and complement clauses modifying a noun.
Let us make dances to look for a wife (for the prince).’ (The Prince, 8)

There are also examples of reported speech finite complement clauses of this type, with nouns relating to speech and information, such as the possessed nouns -fɕɤt ‘story’ or -tɕʰa ‘information’, as in examples 53 and 54.

People say that Zlaba shesrab was studying religion, not that he was looking for a wife.’ (The prince, 79-80)

Complement-taking nouns all have corresponding complement-taking verbs, which can be either denominal verbs (-tɕʰa ‘information’ → γųtɕʰa ‘answer’), verbs from which the nouns are derived (fɛrt ‘tell (a story)’ → -fɛrt ‘story’) or complement-taking noun-verb collocations, such as fɛtaka+βzu (from fɛtaka ‘method, manner’ and βzu ‘do, make’) which can either mean ‘do by any means possible’ as in (55) or ‘prepare to X’ (as in 56; in this meaning, this collocation is homonymous with the denominal verb nɯftɕaka ‘prepare to’).

I do whatever I can to prevent my blood sugar being too high’. (conversation, 15/12/05)
Complement clauses with nominal heads differ from relatives in one important respect: while most types of relative clauses can be either prenominal, postnominal or head-internal (Jacques 2016b), complement clauses are exclusively prenominal.

2.5 Reported speech

Verbs of speech and cognition can take reported speech complements, in which the speaker either (exactly or partially) reproduces a sentence uttered by the person he is quoting, or verbalizes the words he assumes a person is thinking. These clauses have finite verb forms, and are thus a sub-category of finite complement clauses, but present some properties distinguishing them from the complements studied in the previous section.

While Japhug allows direct speech quotation, the corpus reveals examples of mismatches between the viewpoint of the original speaker (the person whose speech or thoughts are quoted) and the current speaker (the person quoting the words of the original speaker), which following Tournadre (2008) I will refer to as Hybrid Indirect Speech (also called Semi-Indirect Speech, Aikhenvald (2008)). In Hybrid Indirect Speech, the verb morphology (in particular person indexation) invariably presents the viewpoint of the original speaker, while pronouns and adverbs follow that of the current speaker.

Since grammatical relations are mainly marked by verb morphology, and overt pronouns are not common in texts in Japhug and other Gyalrongic languages (a typological feature shared with Kiranti languages, see Bickel 2001), distinguishing between Direct Speech and Hybrid Indirect Speech is only possible in a minority of cases. Mismatch between pronouns and person indexation only occurs when a pronoun or possessive prefix is overt and when at least one argument in the sentence is referred to by a different person form by the original speaker and the current speaker.

Example (57) provides an example of this phenomenon. The verb nuɣi ‘he comes/will come back (home)’ in the complement clause of the verb kɤ-susuo ‘think’ is in the Factual third person singular form. In the same clause we find the second person singular pronoun nyzo ‘you’; there is no pause between the pronoun and the verb, and no indication from the prosody that nyzo is left-dislocated.

This type of mismatch between pronouns and indexation on the verb is anomalous and never found in independent sentences. Here the verb form
corresponds to the point of view of the original speaker (indicated in blue in all following examples), whose original sentence would have been *uzo muyi* 3SG come.back:FACT ‘he is coming back’. The pronoun reflects the point of view of the current speaker (in red), for whom the equivalent sentence would be converted to *nzo tu-nuyi* 2SG 2-come.back:FACT ‘you are coming back’, since the addressee of the current situation corresponds to the subject of the original situation.

Three distinct translations are proposed here: a direct speech translation, reproducing the words used by the original speaker in his thoughts, an indirect speech translation, and an attempt at representing Japhug Hybrid Indirect Speech in English.

(57)  
\[
\begin{align*}
\text{Direct:} & \quad \text{Your father, thinking ‘He is coming back’}, \text{ put three circles of soldiers around the house.} \\
\text{Indirect:} & \quad \text{Your father, thinking that you are coming back,} \\
\text{Hybrid indirect:} & \quad \text{Your father, thinking that you} \text{i} \text{ is coming back, (qachGa 2003, 154)}
\end{align*}
\]

Examples (58) and (60) illustrate the case of possessive prefixes on nouns, which undergo the same shift towards the point of view of the current speaker, while the verb remains in the same form that was either thought or uttered by the original speaker.

(58)  
\[
\begin{align*}
\text{Direct:} & \quad \text{The (younger) sister thought ‘I have to get revenge on my brother’}. \\
\text{Indirect:} & \quad \text{The (younger) sister wanted to get revenge on her brother.} \\
\text{Hybrid indirect:} & \quad \text{The (younger) sister thought I have to get revenge on her brother’}. (xiong he mei, 17)
\end{align*}
\]

The original sentence corresponding to the complement clause in (58) is presented in (59): the possessive pronoun was first person (coreferential
with the A of the main verb) and undergoes a shift to third person in (58) (representing the point of view of the person telling the tale).

(59)  

```
      a-pi      yu  u-sci        tu-nyme-a
1SG.POSS-elder.sibling GEN 3SG.POSS-revenge IPFV-make[III]-1SG
have.to:FACT
'I have to get revenge on my brother.' (elicitation based on 58)
```

Example (60) illustrates the same phenomenon as (58), but with the verb of speech ti ‘say’ instead of suso ‘think’. In this example, we know from the context that the girl is the addressee, so that if the sentence were in direct speech, a second person singular prefix form nv-kamtcʰu (2SG.POSS-toy) ‘your toy’ would be expected instead.

(60)  

```
      tɤɕime      nɯ  dem  kɯ  erg
      pjɯ-tɯ-mtsʰɤm    ipfv-conv:imm-hear
      tɕe,    [nɯnɯ  dem ɯ-kɯmtɕʰɯ 3sg.poss-toy
      nɯ  dem  ju-ɣɯt-a  ipfv-bring-1SG be:FACT 3SG-NMLZ:S/A-say IFR.IPFV-exist
      ndɤre,
      LNK
  Direct: ‘As soon as the girl heard that there was someone saying “I will bring your toy”!’
  Indirect: ‘As soon as the girl heard that there was someone saying that he would bring her toy.’
  Hybrid indirect: ‘As soon as the girl heard that there was someone saying “I will bring her toy.”’ (140429 qingwa wangzi, 49)
```

In example (61), the pronoun uzo ‘he’ has no case marking, while the matrix verb suso ‘think’ is transitive and requires its subject to be marked with the ergative, indicating that uzo ‘he’ belongs to the complement clause whose verb rɤʑi ‘remain, stay’ is intransitive. The verb form mɯ-pɯ-rɤʑi-a with first singular marking reflects the viewpoint of the original speaker, while the pronoun uzo ‘he’ corresponds to that of the current speaker.

(61)  

```
      “uzo  χsɯ-sŋi  χsɤ-rẓaʁ  ma  mɯ-pɯ-rɤʑi-a”
3SG  three-day three-night apart.from NEG-PST.IPFV-stay-1SG
      pjɤ-ŋu
IPFV-AUTO-think[III] IFR.IPFV-be
  Direct: ‘He was thinking “I have only stayed for three days and three nights”:’
  Indirect: ‘He was thinking that he had only stayed for three days and three nights.’
```

22
Hybrid Indirect: ‘He was thinking that he have only stayed for three days and three nights.’

A potentially even more confusing case occurs when the original speaker is the current speakers’ addressee, and when both the original and the current speakers are referred to in the original utterance. This is the situation observed in example (62), a sentence pronounced by a fox who helped a prince to succeed in various tasks. Here, the first singular possessive prefix a- on the possessed noun -tʂɯnlɤn ‘favour’ and the first person singular suffix -a on the verb jɯu-nɯ-fsɯɣ-a do not correspond to the same referent. The verb form jɯu-nɯ-fsɯɣ-a ‘I will pay back’ is the sentence that the fox attributes to his addressee (the prince), so that the first person here corresponds to the prince, while the possessive prefix on -tʂɯnlɤn ‘favour’ reflects the point of view of the fox and thus refers to himself.

(62) a-tʂɯnlɤn jɯu-nɯ-fsɯɣ-a nɤ,
1SG.POSS-favour IPFV-AUTO-pay.back-1SG Q-IPFV-2-think[III] LNK
mu tx-ste ti jɯu-ɲɯ
dem imp-do.this.way[III] say:FACT SENS-be

Direct: ‘If you think “I will requite the favour (which I received from you)”, do like that.’

Indirect: ‘If you want to requite the favour (which you received from me), do like that.’

Hybrid Indirect: ‘If you think “I will requite the favour (which you received from me), do like that.’

In such a situation, the referents corresponding to first and second person are exactly reversed between the point of view of the current and the original speaker, and therefore between pronouns and possessive prefixes on the one hand and verbal indexation on the other hand.

The corresponding sentence in Direct speech would be (63), with a second person singular possessive prefix on the noun -tʂɯnlɤn ‘favour’ instead.

(63) nɤ-tʂɯnlɤn jɯu-nɯ-fsɯɣ-a
2SG.POSS-favour IPFV-AUTO-pay.back-1SG
‘I will requite the favour (which I received from you).’

Surprisingly, despite this complex shift of perspective between the original speaker and the current speaker, there is no logophoric pronoun in Japhug (Hagège 1974; Nikitina 2012). A logophoric pronoun is however attested in the closely related Stau language, which appears to have a similar system of Hybrid Indirect Speech (Jacques et al. 2017).
2.6 Complementation strategies

Dixon (2006) introduces the term ‘complementation strategy’ to refer to constructions corresponding with a meaning expressed by complement clauses in some languages, which either are not core arguments or the verb of the main clause or are not clauses with a complete argument structure (Dixon 2006, 34-40). Complementation strategies include nominalizations (when the verb sheds its argument structure as it becomes a noun), relative clauses (which are formally a modifier of a core argument), serial verb constructions and clause linking.

2.6.1 Headless relative clauses in core argument function

Not all clauses occurring in subject, object or adjunct function are complement clauses.

Most relative clauses in Japhug are headless (Jacques 2016b). When headless relative clauses occur in subject or object function, they may be superficially similar to complement clauses.

In example (64), the main verb ʰcʰa ‘can’ takes a finite complement clause. Note that the subject of the matrix clause and that of the complement clause are coreferential.

(64) ʨe li ngsi-prt̥ cʰp ɾ̥st̥ st̥ kʊŋɡʊt jama
LNK again 3DU.POSS-space.in.between yojana nine about
ɨnu-su-r̥li ɬɪ干预-cʰa
IPFV-CAUS-become[III] IFR-can
‘He succeeded in making (the distance) between them to be of nine yojanas.’ (hist-28-smAnmi, 237)

In example (65), despite the fact that we have the same form pjɤ-cʰa in the matrix clause as in (64), the subordinate clause nɯ-ta-tɯt ‘all that he had said’ is here a headless relative clause. Evidence for this analysis is as follows.

(65) ʨu-pɾtsɔ nɯ kɯ u lab [nɯ-ta-tɯt]
INDEF.POSS-child DEM ERG DEM:PL TOTAL~PFV:3→3’say[II]
ɨnu pjɤ-cʰa
IPFV-CAUS-can
‘The child had succeeded in doing everything that (the old king) had said.’ (140428 yonggan de xiaoacai, 256)

First, the subject of both clauses are not coreferential (this example cannot be interpreted as meaning ‘the boy succeeded in saying all these things’). If the subordinate clause in (65) were a complement clause, subject coreference would be expected with the verb cʰa ‘can’ (see section 2.3.2).
Second, the verb of the relative clause has totalitative reduplication, which is attested in relatives and some temporal subordinate clauses (Jacques 2014a, 295), but not in complement clauses. Third, the verb of the relative clause is in the perfective form while that of the the main clause is in the inferential; in finite complement clauses other than reported speech, the verb should be in imperfective form (see section 2.3.1). Fourth, although demonstrative and plural markers can follow a complement clause (see section 3.3), only relative clauses can take both preclausal and postclausal demonstratives as in (65), like any noun phrase. Fifth, it is possible to make a sentence with an overt head noun in (65), while this option does not exist with (64).

The contrast between finite headless relative and complement clauses in object function is not always as clear as that between (65) and (64), but one of the criteria presented above, or a combination thereof, can be used to discriminate between the two.

Formal near-ambiguity between headless relative and complement clauses can also exist in the case of non-finite subordinate clauses. In (66), the intransitive verb *ŋgrɯ* ‘succeed’ takes an infinitive complement in *kɤ* as its subject, while in (67), its subject is a headless relative clause with an object participle, as is shown by the fact that it can take a possessive prefix coreferential with its A. Note also the semantic difference between a relative (*‘may what you wish for come true’*) and a complement clause (*‘may you succeed to wish it.’*).

A more delicate ambiguous case of relative vs complement clause is discussed in section (2.6.2) in the case of pretence verbs.

Besides plain finite relatives and participial relatives, correlatives (with an interrogative pronoun) can also appear in subject or object function, as in (68).

(66) *kv-nusmvn a-mv-pw-ŋgrɯ*  cʰo  *w-nusmvn*
INF-treat  IRR-NEG-IPFV-succeed  COMIT 3SG.POSS-BARE.INF:treat
*a-mv-tx-fdi  tɕe  pju-ku-sat*
IRR-NEG-IPFV-be.good  LNK IPFV-GENR:S/P-kill
*puu-ngrvl*
sens-be.usually.the.case
‘If one cannot treat it (rabies), if one does treat it well, it is fatal.’
(29-chWsYu, 29)

(67) *nx-kv-nusmvnvl*
2SG.POSS-NMLZ:P-wish DEM IRR-IPFV-succeed
‘May your wishes (=the things that you wish for) succeed.’ (elicited)

(68) *[w-wa  tʰi  tɤ-stu-t-a]  nu*
3SG.POSS-father what PFV-do.like-PST:TR-1SG DEM
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)
(Slob.dpon2, 159)

There are, however, cases where a surface form can be analyzed either as a complement clause or as a relative, in particular with verbs of perception. In example (69), the verb form ʈɤ-kɤ-ta can either be analyzed as the object participle, or as the infinitive of ta ‘put’, resulting in two slightly different but semantically nearly identical translations.\footnote{Genetti (2007) discusses similar cases of formally ambiguous ‘bistructural’ constructions in Dolakha Newar (in particular p. 375) and their crucial importance for understanding grammaticalization processes.}

(69) nɯɕɯmɯma zo ɨsqʰa kum nуту
immediately EMPH the.mentioned door DEM:LOC
 w-ʃtau ʈɤ-kɤ-ta mu pʃv-mto
3SG.POSS-mark PFV-INF/NMLZ:P-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, 183)

Similar ambiguities can also occur with finite relatives. Example (70) can be either parsed as having a finite complement clause nɯra ta-tɯt ‘He said these words’,\footnote{With verbs of cognition, speech or perception, there are no coreference or TAM restrictions between the complement and the matrix clause, see (4.3).} or a relative ta-tɯt ‘what he said’ (with preclausal and postclausal demonstratives nɯra ‘these’), with little semantic difference.

(70) w-sjou mu kɯ nɯra ta-tɯt nɯra
3SG.POSS-servant DEM ERG DEM:PL PFV:3→3′-say[II] DEM:PL
 pʃv-msʰɤm
IFR-hear
‘His servant heard what (the king) had said / that he had said these (words).’ (140428 yonggan de xiaocaifeng, 265)

In the case of example (71), the speaker started by saying the relative clause [spjɑŋku kuŋgi u-ɛki ʈɤ-kɤ-tɯt] ‘what the wolf had said to the lion’ and then corrected herself and said the verb form pɯ́-wʃ-numtɕʰu, which can either be interpreted as a relative (‘The slandering words that the wolf said’)\footnote{The verb numtɕʰu ‘slander’ takes the person slandered as its object, but it can be construed as a secundative ditransitive verb whose third argument (the slandering words) can also be relativized with a finite relative clause, like the theme of the verb mɓi ‘give’ (see Jacques 2016b, 16-17).} or alternatively as a complement clause (‘that the wolf had slandered him’), showing the close proximity of these two possible analyses.
spjaŋkɯ ku suŋgi u-čki tv-ky-tut,... pũ-wy-numtsʰu
wolf ERG lion 3SG-DAT PFV-NMLZ:P-say[II] PFV-INV-slander
numuura pįv-nsʰyrm.
DEM:PL IFR:hear
‘(The fox) heard what the wolf had said to the lion... (that the wolf)
had slandered him.’ (140425 shizi lang huli, 16)

2.6.2 Participial clauses

Japhug, like Tshobdun (Sun 2012) has a highly grammaticalized type of
complementation strategy involving participial clauses. It occurs with motion
verbs (će ‘go’, yi ‘come’, but not rɯuy ‘run’) and a few aspectual verbs
(rɤŋgat ‘be about to’, ȥɤɤɲo ‘prepare to’). These verbs are all morpholog-
ically intransitive. These subordinate clauses, although lexically selected
by the verbs, are neither objects nor semi-objects, and therefore cannot be
considered to be complement clauses in Dixon’s sense (see also Sun’s 2012
analysis of Tshobdun).

Example (72) illustrates this construction, with the A-participle u-ku-n-
nyjo ‘waiting for him’. Note that the common argument shared between the
participial clause (whose verb is transitive) and the matrix clause (whose
verb is intransitive) takes the ergative, showing that it belongs to the par-
ticipial clause, a pattern already observed with infinitival complements (see
section 2.1.1).

(72) [u-wa
3SG.Poss-father
mu ku kʰpa tće
DEM ERG downstairs LNK
u-ku-n-nyjo]
3SG-NMLZ:S/A-AUTO-wait IFR:DOWN-come
pįv-yi
PFV:COME
‘His father had come downstairs to wait for him.’ (140506 loBzi, 5)

S/A- vs P-participles In examples such as (72), the S or A of the par-
ticipial clause is obligatorily coreferential with the S of the matrix clause.

Coreference between the P of the participial clause and the S of the ma-
trix clause is possible but requires using the P-participle. Several examples
of this construction are found in the corpus with the verb nɤkʰu ‘invite to
one’s home as a guest’, as in (73) (see section 2.2.2 concerning the argument
structure of the verb nɤkʰu).

(73) <xingqi> rapi zo tće numu sɤβʑɯ ɣɯ u-kʰa
week EMPH LNK DEM mouse GEN 3SG.Poss-house
nɯtɕu ky-nɤkʰu]
DEM:LOC NMLZ:P-invite IFPV-come IFPV:IFR:be
ju-ɣi pįv-ɣu
PFV:COME
‘He would come to the mouse’s house as a guest.’ (150818 muzhi
guniang, 299).

27
We know that this form is the P-participle rather than the infinitive because it is possible to optionally add a possessive prefix coreferential with the A, as in (74).

(74)  
\[a-kr-nrk\u014du \quad jo-yi\]  
\[1SG.POSS-NMLZ:P-invite\] \[IFR\] \[come\]  
‘He came to my house as a guest.’ (elicited)

Coreference between the P of the complement clause and the S of the matrix clause is possible only if the P has control over the action, something that is possible for only a few transitive verbs and explains the rarity of this construction.

**Verbs of pretence**  The transitive verb nuqpuz ‘pretend, imitate’ and the semi-transitive pyypa ‘pretend’ superficially appear to have the same complementation strategy as motion verbs, as could be deduced from examples such as (75).

(75)  
\[tɤ-mu \quad mu \quad ku \quad u-ku \quad ci\]  
\[INDEF.POSS\] \[mother\] \[DEM\] \[ERG\] \[3SG.POSS\] \[head\] \[INDEF\]
\[jnu-ku-rgbrau \quad to-nuqpuz\]  
\[IPFV-NMLZ:SA\] \[scratch\] \[IFR\] \[pretend\]
‘The (râkshasî)-mother pretended to scratch her head.’ (Slob.dpon1,

However, unlike verbs such as xe ‘go’ or rɤŋgat ‘be about to’, coreference between the subject of pretence verbs and the subject of the verb in participial form is not required, as in example (76).

(76)  
\[u-zda \quad nura, \quad [pyypo ku-yrywu], \quad [k'una\] \[3SG.POSS\] \[companion\] \[DEM:PL\] \[bird\] \[NMLZ:S/A\] \[cry\] \[dog\]
\[ku-nynzut,\] \[lulu ku-yrywu,\] \[gac'ya ku-mbri\]  
\[NMLZ:S/A\] \[bark\] \[cat\] \[NMLZ:S/A\] \[cry\] \[fox\] \[NMLZ:S/A\] \[cry\]
\[ku-fse, \quad nura \quad tu-nuqpuz \quad juw-spe.\]  
\[INF:STAT\] \[be.lik\] \[DEM:PL\] \[IPFV\] \[imitate\] \[SENS\] \[be.able\] \[III\]
‘It is able to imitate other animals, cry like a bird, bark like a dog, meow like a cat or call like a fox.’ (27-kikakCi, 141)

Since the verb nuqpuz ‘pretend, imitate’ is transitive and can take as its P the person imitated by the A, as in (77), a different analysis of (75) and (76) offers itself: the clauses containing the S/A-participles there (indicated here between square brackets) are in fact head-internal/postnominal relatives.

(77)  
\[yaa \quad ra \quad ku \quad li \quad zwi \quad tu-wy-nuqpuz-ndzi\]  
\[monkey\] \[PL\] \[ERG\] \[again\] \[3\] \[DU\] \[IPFV-INV\] \[imitate\] \[DU\]
‘The monkeys imitated the two of them (and repeatedly threw back the coconuts at them).’ (140511 xinbada, 262)
Examples (75) and (76) could be literally translated as ‘The mother pretended to be someone who is scratching her head’ and ‘It is able to imitate a crying bird, a barking dog, a meowing cat, a crying fox’ respectively.

In Tshobdun, Sun (2012, 481-2) posits a distinct category of finite nominalized predicates in ko- to refer to the verb forms in nominalized clause in core argument position and in subordinate clauses associated with verbs of pretence. In Japhug, this analysis is not necessary for three reasons.

First, transitive verbs occurring with nuqpuz ‘pretend’ or zvmpa ‘pretend’ take a possessive prefix coreferential with the object, optional if TAM or polarity prefixes are present (78) and obligatory if no other prefix is found.

(78) ɯ-ŋga  w-qʰu  nu
3SG.POSS-clothes 3SG.POSS-behind DEM
w-tu-ku-rvi  ra  to-zvmpa-nu
3SG.POSS-IPFV-NMLZ:S/A-pull PL IFR-pretend-PL.
‘They pretended to pull the train of his gown.’ (140521 huangdi de xinzhuang, 176)

Second, verbs of pretence are compatible with object participles in ko-, with coreference of the subject of the main clause and the object of the participial clause (79).

(79) ɛɕɯ-kɤ-nɤkʰu  to-nuqpuz
transloc-NMLZ:P-invite IFR-pretend
‘He pretended to go there as a guest.’ (not: ‘He pretended to invite him.’)

Third, the prefix kɯ- in Japhug cannot be used to express action nominalization as the prefix ko- in Tshobdun (Sun 2012, 482).

For these reasons, despite the surface similarity of the constructions in Japhug and Tshobdun, there is no need to establish a morphological category distinct from participles in Japhug.

From a historical perspective, it is possible that the use of participles with motion verbs and with reŋgar ‘be about to’ was grammaticalized from a construction with such a head-internal relative clause in essive function (cf section 1.2) instead of P function, as in (80). Reanalysis was complete when coreference between the subjects of the matrix and of the participle became obligatory.

(80) ɯ-kɯ-nvjo  pʃv-yi
3SG-NMLZ:S/A-wait IFR:DOWN-come
*‘He came as someone waiting for him’ ⇒ ‘He came to wait for him’.
(from example 72)
In order to test this hypothesis however, data from other Gyalrong languages, in particular Situ, need to be taken into account, and this topic has to be deferred to future work on comparative Gyalrong morphosyntax.

2.6.3 Relative clause in essive function

While motion verbs use purposive participial clauses (section 2.6.2), manipulation verbs such tsuṁ ‘take away’ or yu.setMinimum ‘bring’ cannot. Examples such as (81), with ky- prefixed verb forms appearing before a manipulation verb, could appear to be an example of purposive participial clauses.\(^{18}\)

(81) \(\text{ɯ-}n\text{bro} \quad \text{ɯ-nda} \quad \text{nura} \quad \text{ky-ntsye jo-tsu} \)

3SG.POSS-horse 3SG.POSS-skin DEM:PL ???-sell IFR-take.away

‘He took the horses’ skins to (the market) to sell them.’ (150814 kelaosi, 85)

However, in all examples such as (81), the noun ɯ-spa ‘material’ can be added after the verb prefixed in ky- without changing the meaning (ky-ntsye ɯ-spa jo-tsu). This indicates that the syntactic function of ky-ntsye here is in fact that of an essive adjunct (see section 1.2), meaning literally ‘He took the horses’ skins (there) as something to sell’, and that it should be analyzed not as an infinitive form, but as an object participle meaning ‘which is to be sold’.\(^{19}\)

This construction markedly differs from the purposive participial clauses of motion verbs in not being fully grammaticalized.

2.6.4 Action nouns

The transitive verb kʰɤt ‘do repeatedly, do a long time’ and its causative sɯ-kʰɤt ‘cause to do repeatedly, cause to do a long time’ can take infinitival complements, but they more commonly occur in a construction with instrumental-like noun phrases marked with the ergative / instrumental kɯ, indicating the action which is performed repeatedly or done over a long time. These noun phrases can include either an action nominal derived from a verb with the prefix tɯ- as in (82), or a action noun from which verbs are derived by denominal prefixes, as (83).\(^{20}\)

\(^{18}\)It cannot be a P-participle, as this would require coreference between the subject of the matrix clause and the object of the participial clause, see section 2.6.2.

\(^{19}\)An anonymous reviewer suggested the alternative possibility of viewing this infinitival form as an adverbial clause. While infinitives are indeed used as converbs in Japhug (see Jacques 2014a, 321-2), they are used in manner clauses, not purposive clauses.

\(^{20}\)The noun ta-ma ‘work’ in (83) is the base from which several common verbs such rɤma ‘work, do work (vi)’ and nɤma ‘work on (vt)’ are derived.
`(82)  nu-qioq  kw  tô-wy-su-kʰɤt  zo  te,  
NMLZ:ACTION-vomit  ERG  IFR-INV-CAUS-do.a.long.time  EMPH  LNK  
te  nôsnu  ny  tay  nunu  tô-wy-su-tɕɤt  
LNK  only.then  LNK  poison  DEM  IFR-INV-CAUS-take.out  
‘(The medicine) caused (Gesar) to vomit a long time until he expelled  
the poison.’ (Gesar, 266)

`(83)  ta-ma  kw  ta-kʰɤt  zo  
INDEF.POSS-work  ERG  PFV:3→3'-do.a.long.time  EMPH  
‘He did a lot of work.’

Since the action nominals in *nu-*, have a neutralized valency, this  
construction cannot be considered to be a type of complement clause.

### 2.6.5 Compound action nouns

Beside action nouns derived from verbs by means of a nominalization prefix,  
Japhug is also rich in compound action nouns (either noun-verb or verb-verb,  
see Jacques 2012b). Used in combination with light verbs, some compound  
nouns form complex predicates with very specific meanings.

The most frequent construction of this type involves compounds comprising  
the noun *kʰramba* ‘lie, cheating’ as the first element and a verb root  
as the second element. The combination of these compounds with the light  
verb *βzu* ‘do, make’, has the meaning ‘pretend to do X’ as shown by example  
(84) (see sections 2.6.2 and 4.6 for other constructions with a similar  
meaning).

`(84)  za-ra  ku  cʰa  nu  kʰramba-tsʰi  ka-βzu-nɯ,  tɕʰem  nɯra  
3PL  ERG  alcohol  DEM  lie-drink  PFV:3→3'-do-PL  girl  DEM:PL  
ntsɯ  ka-znɤrko-nɯ  jɯu-ŋu  
always  PFV:3→3'-force-PL  SENS-be  
‘They pretended to drink alcohol, and forced the women (to drink).’  
(Slobdpon05, 100)

In this construction, the light verb *βzu* ‘do, make’ takes the orientation  
prefix selected by the verb included in the compound (similar phenomena  
are observed with complement clauses, see section 3.4). In example (84)  
for instance, the lexeme *tsʰi* ‘drink’ selects prefixes with the ‘toward east’  
orientation in finite forms and some participial forms (Perfective/Irrealis *kɤ-*,  
Perfective 3→3’ *ka-, Imperfective *ku- etc). The compound *kʰramba-tsʰi* cannot  
take any orientation prefix (or any verb morphology, for that matter), but  
the verb form *ka-βzu-nɯ* inherits the orientation selected by *tsʰi* ‘drink’ and  
thus appears with the Perfective 3→3’ *ka- corresponding to the orientation
Another similar construction involves compounds noun with the adverb *kuzya* 'for a long time' as first element: compare examples (85) and (86) (with raising of the Inferential 'toward west' orientation prefix *ɲɤ*- on the light verb).

(85) *kuzya* ɗo ɲɤ-ɕar
long.time EMPH IFR-search
‘He looked for him for a long time.’ (elicited)

(86) *kuzɣɤ-ɕar* ɗo ɲɤ-βzu
long.time-search EMPH IFR-do
‘He looked for him for a long time.’ (elicited)

2.6.6 Serial verb constructions

In Japhug, as in Tshobdun (*Sun 2012*, 490-1), we find a serial verb construction comprising two verbs sharing TAM category, core argument(s) (both subject and object in the case of transitive verbs) and transitivity. One of the verbs expresses the main action, and the other describes the manner in which the action is performed. Unlike Tshobdun, there is no constraint in Japhug against inserting a linker such as *tɕe* between the two verbs in the serial construction.

This construction is most common with deideophonic verbs, as exemplified by (87), where *nɯdrɯβ* ‘gore again and again’ can only be used in this construction together with *tɕʰɯ* ‘gore’. The ideophonic verb can either follow (87) or precede the main verb (88), the latter construction being by far more common. Some non-ideophonic verbs expressing manner (such as Japhug *nɤxɕɤt* ‘do with force’, like its Tshobdun cognate *nɐʃeʃet* ‘exert oneself’) can also be used in this construction.

(87) *iɕqʰa* srɯnmɯ râkshasî nɯ ɗo-tɕʰɯ to-nɯdrɯβ to-nɯdrɯβ tɕe
the.aforementioned râkshasî DEM IFR-gore IFR-repeatedly.gore LNK IFR-kill

‘(The rhinoceros) gored the râkshasî repeatedly and killed her.’ (28-smAnmi, 403)

(88) srɯnmɯ nɯ ɗo-nɯdrɯβ ɗo to-tɕʰɯ
râkshasî DEM IFR-repeatedly.gore EMPH IFR-gore

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21 The verb *βzu* ‘do, make’ when used as a full verb most commonly takes the orientation ‘up’, never ‘toward east’.

22 It takes the status constructus form *kuzya*- in these compounds.

23 On deideophonic verbs and their morphosyntactic properties, see Sun & Shidanluo (2004) and Jacques (2013c).
‘(The rhinoceros) gored the râkshasî repeatedly and killed her.’ (elicited on the basis of 87)

The second most common type of serial verb construction in Japhug involves the manner deixis verbs stu ‘do like this’ (transitive) and fse ‘be like this’ (intransitive).

Examples like (89) could seem to indicate that stu ‘do like this’ and the lexical verb do not share the same object, as ki ‘this’, which obligatorily occurs before the manner deixis verbs, appears to be its object.

(89) u-ru nu ki tí-wy-stu pju-wy-qlut
3sg.poss-stalk dem dem:prox ipfv-inv-do.like ipfv-inv-break
‘One breaks its stalk like this.’ (14-tasa, 81)

However, when the lexical verbs takes a non-third person object, the manner deixis verb indexes it as its object too, as in (90): stu ‘do like this’ is in fact a secundative ditransitive verb, and the demonstrative is an unmarked T argument.

(90) aʑo kuки ntsu ki-wy-stu-a-nu tɕe,
1sg dem:prox always ipfv-inv-do.like-1sg-pl lnk
ki-wy-znukʰrɯm-a-nu
ipfv-inv-punish-1sg-pl
‘They punished me like this.’ (Gesar, 278)

The verb stu ‘do like this’ cannot be used with intransitive verbs in a serial construction. Instead, its intransitive counterpart fse ‘be like this’ occurs with a demonstrative such as ki as in (91).

(91) aʑo nu sjicvr zo kutɕu ki fse-a
1sg dem night.and.day emph here dem:prox be.like:fact-1sg
ndzur-a ntsu nu-ra tɕe,
stand:fact-1sg always sens-have.to like
‘I have to stand like this night and day.’ (The divination, 2002, 44)

Third, some verbs which usually take complements are also compatible with serial verb constructions, including the causative form of adjectives (see section 4.10.2) as well a phasal and modal verbs like za ‘begin’ and cʰa ‘can’. These serial verb constructions differ from the corresponding complement constructions in that the verbs cannot take either negative or associated motion prefixes.

The phasal verb za ‘begin’, though most commonly used with bare infinitive or nu- infinitive complements, can also appear in a serial verb construction expressing the specific meaning ‘start doing X from ... until...’, as in (92).
Likewise, the modal verb cʰa ‘can’ occurs in a serial verb construction, as in example (93), which slightly differs from the previous ones in allowing an intransitive verb to combine with a transitive one (one possible factor for this exception is that cʰa ‘can’ is semi-transitive, and thus presents morphosyntactic features of both transitive and intransitive verbs).

Finally, there is a closed class of idiomatic serial verb constructions whose meaning is not predictable from that of the two verb roots (either because meaning is not compositional, or because one of the verb roots only appear in the serial construction, never independently). The most common example is stu+mbat ‘try hard’, as in (94).

In Japhug, some attitudinal verbs such as ṛnɯ ‘suspect’, nɯsɯmɲiz ‘hesitate’, nuʃlumbuy ‘guess, estimate’ or nuʃjuʃtsʰrt ‘guess, estimate’ do not take complement clauses. Rather, they occur in a coordinating construction strikingly similar to that described in Tshobdun by Sun (2012, 487-8): the attitudinal verb is followed by the affirmative copula ɕti ‘be’ and an adversative linker such as ri ‘but’, as in (95).
3 Morphosyntactic properties of complement clauses

This section discusses various topics related to the syntax of complement clauses in Japhug, including word order, syntactic pivots (coreference restrictions and restrictive neutralization), demonstratives as possible complementizers, and case marking mismatch.

3.1 Word order and constituency

Complement clauses in Japhug have the same position in the sentence as core arguments: they are strictly pre-verbal. While complement clauses are generally located directly before the verb, we find examples in which the subject appears between the complement clause and the (transitive) main verb, as in (27) above.

Discontinuous complement clauses are rare in Japhug. The only clear example in my corpus is (96). In this example, the 1SG pronoun aʑo (the subject of the matrix clause, which has no syntactic role in the complement clause) appears between the A lɯlu kɯ ‘the cat’ and the P ʁnɯz ‘two’ of the complement clause. Despite the rarity of this construction, this sentence was not considered to be unusual by my consultant when listening again to the recording.

(96) tɕe [lɯlu kɯ aʑo ʁnɯz zo ka-n] puu-mto-t-a
LNK cat ERG 1SG two EMPH PFV:3→3'-take PFV-see-PST:TR-1SG
‘I saw a cat catching two of them.’ (22-kumpGatCW, 61)

3.2 Syntactic pivots

Table (2) presents a summary of coreference restrictions between matrix and complement clauses in Japhug, based on the data in section (2).

Some verb classes are named by a representative example (for instance rga ‘like’) because at this stage of research, it is not yet clear to what extent the classes of all verbs with the same behaviour can be given a simple functional label.
Table 2: Coreference restrictions in complement clauses in Japhug

<table>
<thead>
<tr>
<th>Verb class</th>
<th>Complement type</th>
<th>Coreference</th>
</tr>
</thead>
<tbody>
<tr>
<td>motion verb</td>
<td>kɤ- participle</td>
<td>{P}={S}</td>
</tr>
<tr>
<td>motion verb</td>
<td>kɯ- participle</td>
<td>{S,A}={S}</td>
</tr>
<tr>
<td>transitive verb</td>
<td>bare infinitive</td>
<td>{A}={A}</td>
</tr>
<tr>
<td>transitive verb</td>
<td>tu- infinitive</td>
<td>{S}={A}</td>
</tr>
<tr>
<td>spa ‘be able’</td>
<td>infinitive, finite</td>
<td>{S,A}={A}</td>
</tr>
<tr>
<td>e’a ‘can’</td>
<td>infinitive, finite</td>
<td>{S,A}={S}</td>
</tr>
<tr>
<td>suxx’e ‘(cause to) be able’</td>
<td>infinitive</td>
<td>{S,A}={P}</td>
</tr>
<tr>
<td>rga ‘like’</td>
<td>infinitive</td>
<td>{S,A,P,P’}={S}</td>
</tr>
<tr>
<td>rga</td>
<td>finite</td>
<td>{S,A,P}={S}</td>
</tr>
<tr>
<td>cognition, perception</td>
<td>finite</td>
<td>no constraint</td>
</tr>
<tr>
<td>impersonal</td>
<td>bare infinitive</td>
<td>zero</td>
</tr>
<tr>
<td>impersonal</td>
<td>tu- infinitive</td>
<td>zero</td>
</tr>
<tr>
<td>impersonal</td>
<td>finite, infinitive</td>
<td>zero</td>
</tr>
</tbody>
</table>

This table confirms the observation that although Gyalrong languages have ergative case marking, syntactic pivots mainly follow an accusative alignment, with restrictive neutralization of S and A (Van Valin & LaPolla 1997, 275, Sun 2003; Jacques 2016b). Note that the construction with motion verbs and kɤ- participial complements, despite showing obligatory coreference between the intransitive subject of the main clause and the object of the complement (S=P), cannot be considered to have an ergative-absolutive pivot, since the same construction cannot express coreference between the intransitive subject of the main clause and that of the complement clause (S=S).

Some verbs such as rga ‘like’ present looser coreference restrictions, with differing rules depending on the construction. It is possible that additional subtypes will be revealed by finer examination of the behaviour of individual complement-taking verbs.

### 3.3 Plural and demonstrative markers

Finite, infinitival or participial complements in Japhug can be optionally followed by the distal demonstrative nu ‘that’ (97), the plural ra (98) or a combination of the two nura ‘those’. In example (97), nu ‘that’ has a topicalizing function (‘as for growing high, it can grow high, but on the other hand it cannot grow thick’).
‘Although it can grow high, although it can grow two or three stairs high,...’ (16-CWrNgo, 151)

The marker *ra* is an associative plural; in examples such as (98), the use of *ra* implies an open list of activities (‘crawl, walk etc’).

(98) *ky-*nuurtsu *ky-*ŋke *ra* *tu-v-a* *tse*

INF-crawl INF-walk PLPFV-can LNK

‘When (the baby) becomes able to crawl or to walk, ...’ (140426 tApAtso kAnWBdaR, 65)

In Tshobdun, Sun (2012, 481) analyzes these demonstratives as complementizers, an analysis which would imply a grammaticalization pathway identical to that of English ‘that’. No attempt will be made to solve this complex question in the present article. An argument for the special status of demonstratives with complement clauses is that they can only be post-clausal, whereas in the case of relatives (or any noun phrase) demonstratives can be pre-clausal or circum-clausal (see section 2.6.1).

Demonstrative and plural markers are not the only grammatical elements that can follow a complement clause. For instance, to express a restriction (‘only’) having scope over a complement clause, the postposition *ma* ‘apart from’ is used after the complement, sometimes with the postposition repeated two times [X *ma nuu ma*] ‘apart from X, apart from it’ as in example (99).

(99) *ky-*msʰem *ma* *nuu* *ma*

INF-hear apart.from DEM apart.from

*nuu-pu-ŋu-t-a*

NEG-PFV-experience-PST:TR-1SG

‘I only heard about it.’ (I did not see it and even do not claim that it exists, of a mythological animal) (20-RmbroN, 118)

### 3.4 Orientation prefixes

In Japhug, all finite verb forms except the Factual take an orientation prefix. For some categories (egophoric present, sensory, past imperfective),

---

24See for instance Jacques (2014a, 2014b) for a brief description of the system. In Japhug as in all Gyalrong languages, six orientations are possible: up’, down’, ‘upstream’, ‘downstream’, ‘east’ and ‘west’, to which can be added the ‘unspecified orientation’ prefix used with motion verbs. Only three verbs have defective conjugations and lack orientation prefixes (Jacques 2012b). Similar systems of orientation prefixes are widespread in the area (Sun 1983; Lin 2002; Shirai 2009; Lin 2011).
all verbs take the same orientation prefix (respectively the directions for ‘east’, ‘west’ and ‘down’). In the rest of the conjugations, each verb selects one or more orientations, and consistently uses it to build all TAM forms. Table 3 illustrates some examples of lexically selected orientation prefixes. The forms indicated are third person singular (intransitive verbs) and 3→3’ (transitive verbs).

Table 3: Examples of lexically selected orientation prefixes in Japhug

<table>
<thead>
<tr>
<th>Base form</th>
<th>Orientation</th>
<th>Perfective</th>
<th>Inferential</th>
<th>Imperfective</th>
</tr>
</thead>
<tbody>
<tr>
<td>ndza ‘eat’ (tr)</td>
<td>Up</td>
<td>ta-ndza</td>
<td>to-ndza</td>
<td>tu-ndze</td>
</tr>
<tr>
<td>fcn ‘tell’(tr)</td>
<td>Down</td>
<td>pa-fcn</td>
<td>pj-fcn</td>
<td>pju-fcn</td>
</tr>
<tr>
<td>fso ‘be day’ (intr)</td>
<td>Upstream</td>
<td>lv-fso</td>
<td>lo-fso</td>
<td>lu-fso</td>
</tr>
<tr>
<td>mury ‘sing’ (intr)</td>
<td>Downstream</td>
<td>thw-mury</td>
<td>c’r-mury</td>
<td>c’u-mury</td>
</tr>
<tr>
<td>ts’h ‘drink’ (tr)</td>
<td>Toward east</td>
<td>ka-ts’h</td>
<td>ko-ts’h</td>
<td>ku-ts’h</td>
</tr>
<tr>
<td>car ‘search’ (tr)</td>
<td>Toward west</td>
<td>na-car</td>
<td>pr-car</td>
<td>jnu-car</td>
</tr>
</tbody>
</table>

In non-finite complement clauses, verbs rarely take orientation prefixes (they are even impossible in the case of bare infinitives and participial complements).

Most complement-taking verbs select one or two orientation prefixes and use them regardless of the verb in the complement. This is the case of r’no ‘experience’, which takes the ‘down’ series of prefixes (Inferential pju- and Perfective pju-) irrespective of the verb complement. Thus, in (100), while the verb ts’h ‘drink’ in the complement clause selects the ‘towards east’ orientation, the main verb r’no ‘experience’ takes the ‘down’ prefix.

(100) ɯ-se \(^{3}3\) sg.poss -blood  kɤ-ts’h \(^{inf}\) -drink pju-r’no-t-a \(^{pfv}\) -experience -pst:tr -1sg

‘I have drunk its blood.’ (27-qartshAz, 106)

A minority of complement-taking verbs, including phasal verbs and causative verbs, systematically inherit the lexical orientation of the verb of the complement clause.

The following examples show how the verb za ‘start’ takes the orientation prefix of its complements’ verbs, respectively ‘up’ (example 101), ‘down’ (102), ‘upstream’ (103), ‘downstream’ (104) and ‘towards west’ (105). The Inferential forms of these verbs are provided in Table 3 above.

(101) ɯ-ndza \(^{3}\) sg.poss-food pfu:DOWN-NMLZ:PFV:put DEM:PL

ɯ-ndza \(^{3}3\) sg.poss.BARE-INF:eat IFR:start

‘(The horse) started eating the food that had been put (there for him).’ (140507 jinniao, 384)
(102) `tɤtɕɯpɯ nu kɯ li w-ʂpi w-fʃvt
boy DEM ERG again 3SG.POSS-story 3SG.POSS-BARE.INF:tell
PFN-za
IFR-start
‘The boy told her again a story.’ (140517 buaishuhua, 69)

(103) tuo-fʃoʊ lo-za tʃe,
INF-be.clear IFR-start LNK
‘The light of day started to appear.’ (140511 1001 yinzi, 39à

(104) pjɤ-ʑa ifr
‘The light of day started to appear.’ (140511 1001 yinzi, 39à

(105) nɯnɯ dem ɯ-ɕar 3sg.poss-bare.inf -search
ɲɤ-ʑa-ifr start
‘They started searching for it.’ (140518 jinyin chengbao, 59)

The raising of the orientation prefix of the verb in the infinitival clause is observed with verbs such as ɣɤβdi ‘do well’ or ɣɤtɕʰom ‘do too much’ (derived from the adjectives βdi ‘be good’ and tɕʰom ‘be too much’ respectively; see Jacques 2015, 184).

(106) cʰa ɐv-tsʰi ko-ʃy-tɕʰom
alcohol INF-drink IFR-CAUS-be.too.much
‘He drunk too much alcohol.’ (elicited)

A related phenomenon occurs in light verb constructions with verbs such as βsu ‘do, make’, ɬt ‘throw’ or ti ‘say’. When these verbs form complex predicates with their objects, they take the same orientation as the corresponding verb derived by denominal derivation (Jacques 2012b, 1220).

For instance, both the denominal verb nɯɰɤo ‘sing’ derived from rɤɣo ‘song’ and the corresponding collocation rɤɣo,βsu ‘sing’ (‘make a song’) select the ‘downstream’ orientation (Inferential cʰɤ-, Imperfective cʰɯ- etc), as shown by examples (107), (108), (109).

(107) nɯnɯ te-ʃme nu ku li rɤɣo cʰɤ-βsu tʃe,
DEM girl DEM ERG again song IFR-make
‘The girl sung again.’ (140428 nu e guniang, 167)

(108) nɯ-ɬɤɣo cʰɯ-læt-a tʃe, nɯɰora pu-ɬa-ɰɯ-ɰɯ
3PL.POSS-song IPFY-throw-1SG LNK 2PL IMP-dance-PL
‘I will play a song for you, dance!’ (140513 mutong de disheng, 100)
An extension of this phenomenon occurs in the compound action noun complementation strategy (section 2.6.5).

3.5 Case marking

When the verb of the matrix and the complement clauses sharing the same subject have distinct transitivity values, the subject noun phrase can either take absolutive or ergative marking.

Examples (110) and (111) provide a minimal pair illustrating this optional treatment. In both examples, the matrix verb rga ‘like’ is semi-transitive (and its subject cannot take ergative marking), while ndsa ‘eat’ is transitive (and requires a subject with the ergative).

In example (110), the common subject paʁ ra ‘pigs’ takes the ergative kɯ selected by the verb ndsa ‘eat’ in the complement clause, suggesting that it should be analyzed as belonging to the complement clause.

          pig  PL ERG INF-eat very EMPH like:FACT-PL
          ‘Pigs like to eat it.’ (12 ndZiNgri, 149)

In (111), the subject fsaʁ ra ‘domestic animals’ has no ergative marking, a difference which can be accounted for by assuming that the complement clause in this example is restricted to the sole infinitive verb form kv-ndsa to eat’.

          animals PL INF-eat very like:FACT-PL
          ‘Domestic animals like to eat it.’ (hist-19-qachGa mWntoR, 116)

3.6 Complements of participles

When a complement-taking verb is itself in the S/A-participle form, it is possible for the complement either to be in the expected form (infinitive or finite), or to be in S/A-participle form itself, as in example (112).

(112) [ŋul ku] ndzki-ku-nd[aa] 
          silver ERG 3DU-NMLZ:S/A-exchange NMLZ:S/A-can
          ku-fse p[aa]-p[aa]-tu n[aa] 
          NMLZ:S/A-be like COND-PST.IPFV-exist if
          ‘If there was someone who could redeem (the life of two brothers) with money, …’ (140507 jinniao, 339)
Such examples are rare, but not considered to be mistakes by consultants when listening again to the recordings.

4 A classification of complement-taking verbs

4.1 Modal verbs

This section includes complement-taking verbs expressing deontic and epistemic modality, to the exclusion of verbs of volition (want, wish etc) and attitudinal verbs, which are classified among verbs of cognition and speech.

Table 4 presents the list of all the auxiliary verbs in this category. They can take both finite and infinitival complement clauses – since all verbs in this category are relatively uniform with regards to the type of complements they can take, complement types are not indicated in this table. The impersonal verbs are not compatible with person or number marking, and take the complement clause as their subject.

A detailed study of the fine semantic differences between these verbs goes beyond the topic of the present article. More detailed data is provided for three of them, spa ‘be able, know how to’ (section 4.1.1), suxcʰə ‘be able’ (4.1.2) and ra ‘have to’ (4.1.3).

<table>
<thead>
<tr>
<th>Meaning</th>
<th>Transitivity</th>
<th>Coreference</th>
</tr>
</thead>
<tbody>
<tr>
<td>cʰa</td>
<td>can</td>
<td>semi-tr</td>
</tr>
<tr>
<td>spa</td>
<td>know how to</td>
<td>tr</td>
</tr>
<tr>
<td>suxcʰə</td>
<td>(cause to)</td>
<td>inverse</td>
</tr>
<tr>
<td>sna</td>
<td>be worthy of</td>
<td>inverse</td>
</tr>
<tr>
<td>kʰu</td>
<td>be possible</td>
<td>stative</td>
</tr>
<tr>
<td>ɬoʁ</td>
<td>have to</td>
<td>imp.</td>
</tr>
<tr>
<td>ra</td>
<td>have to</td>
<td>imp.</td>
</tr>
<tr>
<td>nzi</td>
<td>need</td>
<td>imp.</td>
</tr>
<tr>
<td>nishi</td>
<td>be preferable</td>
<td>imp.</td>
</tr>
<tr>
<td>mna</td>
<td>be preferable</td>
<td>imp.</td>
</tr>
<tr>
<td>ŋgru</td>
<td>succeed</td>
<td>imp.</td>
</tr>
<tr>
<td>zgɛt</td>
<td>should</td>
<td>imp.</td>
</tr>
<tr>
<td>jɪɣy</td>
<td>be possible,</td>
<td>imp.</td>
</tr>
</tbody>
</table>

4.1.1 spa ‘be able to, know how to’ and cʰa ‘can’

The verb spa ‘be able to, know how to’ originates from the abilitative form of the verb pa ‘do’ (Jacques 2015) and has a cognate in Tangut (Jacques
2014c, 255-6), showing that its lexicalization occurred even earlier than proto-Gyalrongic.

The verb *spa* ‘be able to’ can have a noun phrase as its object, as in (113).

(113) **conβsu ko-spa**
carpentry FFR-be.able
‘He learned carpentry.’ (elicited)

As a complement-taking verb, *spa* ‘be able to, know how to’ takes both infinitival (examples 114 and 115) or finite (116) complements, and its A is coreferential with the S or the A of the complement clause. The subject coreference is required, and no example of coreference with objects, adjuncts or other elements of the complement clause have been observed with this verb.

(114) **nuw nu-mdow nuw aj kv-ti muºj-spe-a**
DEM 3sg.poss-colour DEM 1SG INF-say NEG:SENS-be.able[III]-1sg
‘I am not able to name its colour.’ (06-qazmbri, 57)

(115) **kvr-nurre w-tº-spa?**
INF-laugh Q-PFV:3→3'-be.able.to
‘Is he now able to laugh?’ (conversation, 2014, of a three month old infant)

(116) **w-tºow nu kw-fse, svteºa nu**
3SG.POSS-ground DEM INF:STAT-be.like ground DEM
ju-rvtye kw-fse qºe,
IPFV-measure.handspan.by.handspan INF:STAT-be.like LNK
tu-nµe ma nu ma nuu-nuqambjombom ra
IPFV-walk apart.from DEM apart.from IPFV-AUTO-fly PL
muºj-spe
NEG:SENS-be.able[III]
‘It is only able to move on the ground as if measuring it handspan by handspan, it cannot fly.’ (26-qambalWla, 79)

The verb *cºa* ‘can’ occurs in the same construction as *spa* ‘be able to, know how to’, except that it is a semi-transitive verb (section 1.2.1), whose subject is not marked with the ergative and whose semi-object is not indexed by verb morphology.

### 4.1.2 **suxaºa ‘(cause to) be able’**

The verb *suxaºa* ‘(cause to) be able’ is the causative derivation of *cºa* ‘can’. It can take both an object and an infinitival complement. This verb nearly
exclusively occurs in inverse form with a non-overt causer (subject), and has the specific meaning of ‘(cause to) be physically able to X’, ‘(cause to) be strong enough to X’, as in examples (117) and (118). The subject is not expressed, but implicitly as the heavy object in (117) and the animal taken by the eagle in (118).

(117) \text{ɲɯ-ʁʑi} \text{sens-be.heavy} \text{tɕe} \text{lnk-kɤ-fkur-inf-cʰa.} \text{neg:sens-2-inv-caus-can} \text{‘It is heavy, you won’t be able to carry it on your back.’ (elicitation)}

(118) \text{tʰɯ-wxti-nɯ} \text{pfv-be.big-PL} \text{a.little} \text{lnk lnk pfv:3→3’-take.away} \text{lnk} \text{tu-γɣʁŋyfjyβ jɯ-ɕti tce uzo kɤ-tsum} \text{ipfv-struggle} \text{SENS-be.AFFIRM lnk 3SG inf-take.away} \text{mu-mɯ-ŋɯ-sɯx-cʰa.} \text{neg-sens-inv-caus-can} \text{‘When (piglets, lamb) have grown up, when (the eagle tries to) take away (one of them), it struggles and (the eagle) is not strong enough to take it away. (150819 RarphAB, 6)}

The object (causee) of \text{sɯx-cʰa} ‘(cause to) be able’ is coreferential with the subject of the complement clause.\textsuperscript{25} Such a coreference restriction is extremely rare in Japhug, but it is the logical consequence of the fact that the base verb \text{cʰa} ‘can’ has subject coreference restriction, and that the causative derivation demotes the subject of the base verb (causee) to object status.

Exceptionally, this verb is attested in direct forms, as in (119), but only in its use as a plain transitive verb ‘cause to be able to bear’, and does not take infinitival complements.

(119) \text{kʊmpɣa} \text{pʰu} \text{mu juw-bəa tce, mu mura} \text{fowl} \text{male DEM SENS-win lnk female DEM:PL} \text{mu-ŋɯ-sɯx-cʰe} \text{neg-sens-caus-can[III]} \text{‘(Otherwise) the roosters are too strong, and and the hens cannot bear it. (150819 kumpGa, 9)}

4.1.3 \text{ra} ‘have to’

The modal verb \text{ra} ‘have to, need’ cannot take any person or number marker. Its subject is either a noun phrase or a complement clause. If the intransitive

\textsuperscript{25}In these examples the subject of \text{sɯx-cʰa} ‘(cause to) be able’ is coreferential with the object of the clause, but this is not a requirement.
subject of ra ‘have to, need’ is a noun phrase, the experiencer is marked with the genitive case, as in (120). In complement clauses however, the experiencer does not receive special marking, as in (122).

(120) aʑɯɣ ɯ-ɕa ra ma nu ma
1SG:GEN 3SG.POSS-meat have.to:FACT apart.from DEM apart.from
ku-ra me
NMLZ:S/A-have.to not.exist:FACT
‘I need its meat, I don’t need anything else.’ (02-deluge2012, 14)

The verb ra ‘have to, need’ is compatible with either finite (see 46 or 58 above) or infinitive (example 121) complements. Other types of complements or complementation strategies are not attested.

(121) tɤ-pɤtso nu, tuu-prreme roro jamar tɕe tɕe
INDEF.POSS-child DEM one-year.old over about LNK LNK
tu-nu kv-su-fde pʃ-ra
INDEF.POSS-breast INF-CAUS-abandon IPFV.IFR-have.to
‘Children had to be weaned at about one year old.’ (140426 tApAtso kAnWBdaR, 83)

The verb in the complement clause is almost always either in imperfective or irrealis form. It can be in the Perfective if ra ‘have to’ takes the past puu-prefix, as in (122).

(122) tɕe iʑo ji-kʰa kunɣ kv-fstun-i
LNK 1PL 1PL.POSS-house also PFV-take.care.of-1PL
puu-ra
PST.IPFV-have.to
‘We also had to take care of him at our home.’ (14-tApitaRi, 358)

The modal ra ‘have to’ is one of the few verbs that can take one or several complement clauses in the imperative, as in (123). In this construction, ra ‘have to’ appears in the factual form.

(123) a-mke ky-rqov qʰe a-ra ca tv-yi
1SG.POSS-neck IMP-hug LNK 1SG.POSS-following IMP:UP-come
ra
have.to:FACT
‘Hug my neck and come with me (in the heavens).’ (31-deluge, 109)

4.2 Phasal verbs and other aspectual auxiliaries
Aspectual and phasal complement-taking verbs present a much greater variety of constructions than modal verbs. Table 5 summarizes the constructions
attested with each verb, not all of which are equally common.\(^\text{26}\)

As shown in section 2.2.2, verbs in this group have different coreference restrictions depending on the complement type. With ννο ‘experience’ for instance, when used with a bare infinitive / τɯ- infinitival complement, subject coreference is obligatory, while when it takes a κν- infinitival complement, coreference with the object or with a possessor of the subject is also possible.

Table 5: Inventory of phasal and aspectual auxiliaries in Japhug

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>I.</th>
<th>BI</th>
<th>F.</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>ννο</td>
<td>experience</td>
<td>tr.</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>σσξα</td>
<td>begin, start</td>
<td>tr.</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>σα</td>
<td>begin, start</td>
<td>tr.</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>στkut</td>
<td>finish</td>
<td>tr.</td>
<td>✓</td>
<td>✓</td>
<td>serial</td>
</tr>
<tr>
<td>σσταусι</td>
<td>continue</td>
<td>tr.</td>
<td>✓</td>
<td>✓</td>
<td>serial</td>
</tr>
<tr>
<td>μμfσακα</td>
<td>prepare to</td>
<td>tr.</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>σσυργψγ</td>
<td>finish</td>
<td>tr.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>κνντ</td>
<td>do repeatedly</td>
<td>tr.</td>
<td>✓</td>
<td></td>
<td>(2.6.4)</td>
</tr>
<tr>
<td>ννγψγ</td>
<td>be finished</td>
<td>imp.</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>ννγρψγ</td>
<td>be usually the case</td>
<td>imp.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>νγψγα</td>
<td>be about to</td>
<td>intr.</td>
<td>✓</td>
<td></td>
<td>participle</td>
</tr>
<tr>
<td>ννννγψγ</td>
<td>prepare to</td>
<td>intr.</td>
<td>✓</td>
<td></td>
<td>participle</td>
</tr>
<tr>
<td>μμδα</td>
<td>be time to</td>
<td>imp.</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

In addition to ννο ‘experience’, which has been treated in previous sections, data are provided for στkut ‘finish’ (the verb in this group with the greatest diversity of complement types) and ννγρψγ ‘be usually the case’ (as a representative of impersonal aspectual verbs).

4.2.1 στkut ‘finish’

Of all the complement-taking verbs in Japhug, στkut ‘finish’ is one of those which are compatible with the greatest diversity of complement types.

It appears with κν- infinitives (124), bare infinitives (125) or in serial verb constructions (126), with respectively 16, 8 and 3 examples in the corpus.

(124)  τυ-νυν  κν-ννσι  ρα-στkυτ  τετε  
INDEF.POSS-breast INF-give.to.drink PFV:3→3'-finish LNK LNK

τρ-νπτσο  μν  λι  υ-στα  μντσα  κο-συ-ργαυ  
INDEF.POSS-child DEM again 3SG.POSS-bed DEM:LOC IFR-CAUS-CAUS-lay

\(^{26}\)The abbreviations are as follows: I. (κν- Infinitive), BI (bare infinitive and τɯ- infinitive), F. (finite complement), tr. (transitive), imp. (intransitive impersonal).
‘After she had finished breastfeeding, she put back the child on his bed.’ (140429 jiedi, 270)

(125) \texttt{nuw \textipa{u-ti} ta-stʰut} \\
\texttt{DEM 3SG.POSS-BARE.INF:say PFV:3\textsuperscript{\textacr}-finish} \\
‘When she finished saying that,’(150818 muzhi guniang, 125)

(126) \texttt{nura pa-βzjoz pa-stʰut tɕe u-sloχpun} \\
\texttt{DEM:PL PFV:3\textsuperscript{\textacr}-learn PFV:3\textsuperscript{\textacr}-finish LNK 3SG.POSS-teacher} \\
\texttt{nu ku taqaβ tu-lāza pr-y-wy-mbi} \\
\texttt{DEM ERG needle one-CL IFR-INV-give} \\
‘When he finished learning this (craft), his teacher gave him a needle.’ (140508 benling gaoqiang de si xiongdí, 97)

Like \textit{sa} ‘start’ (see section 3.4), \textit{stʰut} ‘finish’ inherits the orientation of the verb in the complement clause. In the examples (124), (125) and (126) above, \textit{stʰut} ‘finish’ respectively takes the ‘towards west’ (Perfective \textit{na-}), ‘up’ (Perfective \textit{ta-}) and ‘down’ (Perfective \textit{pa-}) orientations, which are the orientations lexically selected by \textit{jtsʰi} ‘give to drink’,

\footnote{This verb is the causative of \textit{nə} ‘drink’ which take the ‘towards east’ orientation: despite being etymologically related, these two verbs select distinct orientations.}

\textit{βzjoz} ‘learn’ respectively.

4.2.2 \textit{ŋgrɤl} ‘be usually the case’

The verb \textit{ŋgrɤl} ‘be usually the case’, although very common, occurs in a very restricted construction. It cannot take person/number marking, and is only used with finite complements. The verb in the complement clause is nearly always in the imperfective, as in (127), except for existential verbs such as \textit{tu} ‘exist’, which appear in the factual (128).

(127) \texttt{aʑo kumpɣa cʰɯ-nu-χse-a pu-ŋgrɤl} \\
\texttt{1SG chicken IPFV-AUTO-feed[III]-1SG PST.IPFV-be.usually.the.case} \\
‘I used to raise chickens / (for my own sake).’ (150819 kumpGa, 69)

(128) \texttt{ɕɤr tɕe tu ŋgrɤl, tu-mbri} \\
\texttt{nacht LNK exist:FACT be.usually.the.case:FACT IPFV-call} \\
\texttt{ŋgrɤl} \\
(be.usually.the.case:FACT) \\
‘(Owls) appear, howl during the night.’ (22-pGAkhW, 19)

4.3 Verbs of cognition and speech

Verbs and complex predicates expressing cognition, perception and speech can be divided into three categories depending on the type of complements they can take.
First, some verbs accept both infinitival and finite (including reported speech, see 2.5) complements; this category mainly includes modal verbs of volition, verbs of thought and attitudinal verbs (‘fear’, ‘hate’).

Second, some verbs of perception and cognition accept finite complements, but cannot take infinitival complements.

Third, some attitudinal verbs and intentional perception verbs (‘look at’, ‘listen to’) cannot take complement clauses, and can only use the coordination complementation strategy (section 2.6.7).

Table 6: Inventory of verbs of cognition, perception and speech in Japhug

<table>
<thead>
<tr>
<th>Verb</th>
<th>Meaning</th>
<th>I.</th>
<th>B.</th>
<th>F.</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>suso</td>
<td>think, want</td>
<td>tr</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>jmut</td>
<td>forget</td>
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<td>rga</td>
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<td>nuqmu</td>
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<td>qʰa</td>
<td>hate</td>
<td>tr</td>
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<tr>
<td>umuŋyu</td>
<td>intend to</td>
<td>tr</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>numgaa</td>
<td>want to obtain</td>
<td>tr</td>
<td>✔</td>
<td>✔</td>
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<td>u-u-sum + ce</td>
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<td></td>
<td>✔</td>
<td></td>
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<tr>
<td>u-u-tiz + yi</td>
<td>wish</td>
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<td>✔</td>
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<tr>
<td>surxɔxl</td>
<td>realize that</td>
<td>tr</td>
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<td>✔</td>
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<tr>
<td>mto</td>
<td>see</td>
<td>tr</td>
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<td>✔</td>
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<tr>
<td>mtsʰrm</td>
<td>hear</td>
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<td>auftax</td>
<td>remember</td>
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<td>tso</td>
<td>know, understand</td>
<td>semi-tr</td>
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<td>musumupnis</td>
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<td>it</td>
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<td>musumupyn</td>
<td>suspect</td>
<td>it</td>
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<tr>
<td>umu</td>
<td>suspect</td>
<td>it</td>
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<td></td>
<td>coordination</td>
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<tr>
<td>musumumbuy</td>
<td>estimate</td>
<td>it</td>
<td></td>
<td></td>
<td>coordination</td>
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</tbody>
</table>

4.4 Motion verbs

Two motion verb ce ‘go’ and yi ‘come’ take participial purposive clauses (see section 2.6.2, example 129 below). Other motion verbs (such as ƞke ‘walk’, ƞuy ‘run’, nuqambumbjom ‘fly’) and verbs of manipulation (yut ‘bring’
and *tsum* ‘take away’) cannot take purposive clauses, though the latter use relative clauses in essive function as a complementation strategy (section 2.6.3).

Japhug has both motion verbs with purposive clauses and associated motion prefixes (venitive *ju*- and andative *su*- grammaticalized from *yi* ‘come’ and *ce* ‘go’ respectively). As shown in Jacques (2013b, 203), these two constructions present an obvious semantic contrast when used in the perfective. In the purposive clause construction, when the motion verb is in the perfective, only the motion is implied to have taken place, nothing is said about the action described by the complement. For instance, example (129) makes sense only if the action of the purposive clause has not taken place yet.

(129) *ʨʰi ɯ-ku-nɤma jy-tu-ye?*
    what 3SG-NMLZ:S/A-do PFV-2-come[II]  
    ‘What have you come to do?’

By contrast, the associated motion construction implies that both the motion event and the action following it have been completed, as in example (130).

(130) *ɕɯ ra nu-kʰa tɕe ɕ-pɯ-tɯ-rɤ-tʂɯβ tɤ-ti*
    who PL 3PL.POSS-house LNK TRANSLOC-PFV-2-APASS-sew IMP-say ra  
    have.to:FACT  
    ‘Tell us in whose house you have gone to do sewing.’ (140512 alibaba, 162)

4.5 Attempt

The verbs *tsʰɤt* ‘try’ and *rɤtsʰɤt* ‘try’ (no discernible semantic difference between the two could be ascertained) are not attested with complement clauses in the corpus. They can occur with a coordinated reported speech (section 2.6.7), as in example (131).

(131) *ʨe juu-βẓow-nu ɯkʰukʰa qraw numu tu-tsʰɤt-nu tɕe*
    LNK IPFV-carve-PL while ploughshare DEM IPFV-try-PL LNK  
    *u-juu-ᵊtʰom'bɤ-rɤ ku numu tu-tsʰɤt-nu ntsu ra*
    QU-SENS-fit QU DEM IPFV-try-PL always have.to:FACT  
    ‘While they shape (the hole to insert the ploughshare), they try the ploughshare, they try it to determine whether or not it fits in.’ (24-mbGo, 31)

The verbs *nzo* ‘dare’ and *pʰot* ‘dare’ (the second is barely used in the Kamnyu dialect) can be used with both infinitival and finite complements. They are among the few verbs whose infinitival complements require subject
coreference. In example (132) with the verb \textit{nɤkʰu} ‘invite to one’s home as a guest’ (one of the few transitive verbs implying a volitional action of both subject and object, see section 2.2.2), the interpretation ‘I do not dare to go to his house as a guest’ (with coreference of the object of the complement clause and the subject of the main clause) is not possible.

(132) \textit{ɕɯ-kɤ-nɤkʰu mɤ-naz-a} \\
TRANSLOC-INF-invite NEG-dare:FACT-1SG \\
‘I do not dare to invite him.’ (elicited)

4.6 Pretence

The verbs of pretence \textit{nɯɕpɯz} ‘pretend, imitate’ and \textit{ʑɣɤpa} ‘pretend’ do not accept complement clauses, they only take participial relatives as their objects or semi-object, as described in section 2.6.2. An alternative construction for expressing pretence involves complex predicates with the auxiliary verb \textit{βzu} ‘do’ and a compound noun with \textit{kʰramba} ‘lie, cheating’ as the first element (see 2.6.5).

4.7 Deixis

There are two manner deixis verbs in Japhug, the transitive verb \textit{stu} ‘do like this’ (transitive) and the intransitive \textit{fse} ‘be like this, look like’. Both can take an essive noun phrase not indexed in the verb morphology (often restricted to a demonstrative). They can be combined with other verbs in a serial verb construction to express the meaning ‘do X like Y’ (2.6.6).

(133) \textit{ɯ-xɕɤt cʰɯ-lɤt-nɯ tɕe} \\
3SG.POSS-power IPFV-throw-PL this IPFV-do.like.this PL LNK \\
‘People insert (bullets in the muzzle of the gun) forcefully like this.’ (28-CAmWGdW, 61)

Alternatively, the same meaning can be expressed with an infinitive complement clause, as in (134).

(134) \textit{tɕe cʰɯ-slɤ-mnu tu-stu-nɯ pu-ŋu} \\
LNK gun INF-throw DEM IPFV-do.like.this SENS-be \\
‘They shoot it like that.’ (28-CAmWGdW, 96)

4.8 Negative existential verbs

Although Japhug, like other Gyalrongic languages, has a series of negative prefixes (whose form vary depending on the TAM category), negation can also be expressed by post verbal negative auxiliaries like \textit{maʁ} ‘not be’, \textit{me} ‘not exist’ or \textit{maŋe} ‘not exist (sensory)’. Example (135) illustrates both negative forms (negative prefix \textit{mu-pu-mto-t-a} vs negative auxiliary \textit{pu-mto-t-a me}).
tɕejɛnkmɔrd3sg.poss-colour what emph be.like:FACT NEG:GENR:know a-kr-ti me ma
1sg.poss-nmlz:P-say not.exist:FACT LNK
mu-pu-mto-t-a. wNdɛ kumrapu-mto-t-a
NEG-pfv-see-pst:tr-1SG 3SG.Poss-skin also pfv-see-pst:tr-1SG me
not.exist:FACT
‘I don’t know what its colour is, I cannot say as I have not seen it.
I never even saw its hide.’ (27-kikakCi, 21-22)

This situation is not unusual in Sino-Tibetan, and has led in some languages to the complete replacement of pre-verbal by post-verbal negation (see Post 2015).

The negative copula maʁ ‘not be’ is used as a negative auxiliary in compound tenses (on which see Jacques 2014a, 268-9), to express focus (example (136)) or polar questions (example (137)).

(136) nyxo ny-pʰe tu-ti-a maʁ, pynuma wombɤr u-pʰe
2SG 2SG-Dat ipfv-1SG not.be:FACT p.n. p.n. 3SG-Dat
tu-ti-a s̪i
ipfv-say-1SG be:AFFIRM:FACT
‘I am not talking to you, I am talking to Padma ’Od.’bar.’ (Slobdpon, 190)

(137) ‘u-kærme tu-ilda ci ny a-mr-ju-tu-yut’
3SG.Poss-hair one-cl one even irr-neg-pfv-2-bring
tr-tut-a maʁ udder-pfv
pfv-say[II]-1SG not.be:FACT QU-be:FACT
‘Didn’t I say ‘Don’t bring her back, not even one hair?’” (2014-kWlAG, 686)

The negative existential verbs me ‘not exist’ and maŋe ‘not exist (sensory)’ differ from negative prefixes in that they express emphatic negation, their meaning being translatable with an indefinite negative pronoun or adverb such as ‘nothing’ or ‘never’, as in (135) and (138).

(138) kumarpnyme-a nu-su-so-t-a me
other ipfv-work[III]-1SG pfv-think-pst:tr-1SG not.exist:FACT
‘I never thought of doing anything else.’ (150819 woniu, 39)

With transitive verbs, this construction is often used to express negation with an indefinite object, but it is not necessarily the case, as in (139).
I don’t take it much on the streets, I wear it at home.’ (conversation 150418)

Negative prefixes can be combined with negative auxiliaries to build a double negation construction, as in (140).

‘I have seen everything (there is nothing I do not see), I know really a lot.’ (2002qajdoskat, 36)

The nature of the finite clauses occurring in this construction is in question. It could seem at first glance that these are relative clauses. Indeed, one of the most common ways of expressing a negative indefinite in Japhug is by using participial relative clauses with a negative existential verb, as in examples (141) and (142).

Since Japhug also has finite relatives, the same analysis could be applicable to examples such as (140) (‘the things I do not see do not exist’). However, in Japhug only objects can be relativized with finite verb forms (Jacques 2016b, 12-3). If this analysis were correct, we would thus not expect to find intransitive verbs negated by negative existential verbs, and negated transitive verbs should only have an indefinite object reading – thus *puu怼t-a me* (PFV-see-PST-1SG not.exist:FACT) in (135) should only be interpretable as ‘I did not see anything’, not ‘I never saw it.’

Thus, while this construction probably originates from a negated finite relative, in the synchrony of Kamnyu Japhug it is better analyzed as a complement clause.
The negative existential verbs me ‘not exist’ and maŋe ‘not exist (sensory)’ also appear in a very unusual construction, [X mv-X negation] (where X stands for the bare stem of the verb) meaning ‘whether or not X, it amounts to the same’. This form is not even the bare infinitive, since no possessive prefix can be added.

In this construction, contrary to all previous ones, the negative auxiliaries can take person marking, and are obligatorily coreferential with the object if the verb in the complement clause is transitive, as in (143). With intransitive verbs, no person marking appears on the negative verb, as in (144). In this construction, the subject (whether of transitive or intransitive verbs) cannot be expressed.

(143) ndsa mv-ndsa me-a
    eat  NEG-eat not.exist:FACT-1SG
‘Whether (you) eat me or not, it amounts to the same.’ (sentence obtained as the correction of a sentence I produced to translate a story in Japhug)

(144) tɕe u-qiɯ juu-mtsʰam-a, u-qiɯ
    LNK 3SG.POSS-half SENS-hear-1SG 3SG.POSS-half
    mɯ́j-mtsʰam-a qʰe, ce mv-ce maŋe
    NEG:SENS-hear-1SG LNK go NEG-go not.exist:SENS
‘I can hear half of it, can’t hear the other half, whether or not (I) go it amounts to the same.’ (conversation 140510)

4.9 Analytic causative constructions

While Japhug has two productive causative prefixes, γɤ- restricted to (some) stative verbs and the general causative (su/-su/-z (see Jacques 2015 and Sun 2014; Lai 2014 for a comparative perspective on Tshobdun and Khroskyabs), it also presents no less than two main analytic causative constructions.

The first type of analytic causative construction involves an auxiliary (including βzu ‘do, make’, syβzu ‘cause to become, make’, syʔa ‘cause to become, consider’ and tɕyt ‘take out’) and a subordinate clause with its main verb in subject participle form.

This construction is especially common with adjectives, as in (145), and (146). In example (146), both the synthetic causative verb γvwxti ‘make bigger’ and the analytic causative with βzu are attested.

(145) cʰu-ndul-nu tɕe ku-ndu-nduβ zo cʰu-βzu-nu
    ipfv-grind-PL LNK NMLZ:S/A-EMPH-fine EMPH ipfv-make-PL
‘They grind (tobacco) and make it very fine-grained.’ (30-CnAto, 38)
(146) \( w-p'\mu \text{nul-wxti tce, nura t'ant\_c\_rt} \)
3SG.POSS-price SENS-be.big LNK DEM:PL all
\( \text{ma-tv-tu-yr-wxti, azo nu \ } tu-nu-\_\chi\_i-a \text{ nura} \)
NEG-PFV-2-CAUS-be.1SG DEM IPFV-AUTO-bu[III]-1SG DEM:PL
\( \text{st'\_u\_ci kw-wxti u-p'\mu nul-tv-\_\_f\_z\_e} \)
as.much NMLZ:S/A-be.big 3SG.POSS-price NEG-PFV-2-make[III]
\( \text{t\_h\_am\_t\_c\_o} \text{ ci tr-\_\_f\_z\_e} \)
NMLZ:S/A-be.fair a.little IMP-make[III]
‘It is too expensive, don’t make it that expensive, I will buy it, don’t make its price that expensive, give it for a fair price.’ (Bargaining 12, 12)

With dynamic verbs, examples of this construction are not attested in the corpus. Rather, the preferred construction is to use an impersonal modal verb such as k'\( u \) ‘be possible’ or ra ‘have to’ in participial form taking a complement verb, as in (147) and 148 (note that these complements can be either in finite or infinitive form).

(147) \( \text{la-ry-\_ci-nu} \text{ tce, lu-nu-\_\_ow} \)
PFV:3\_\_pull-pl LNK IPFV:UPSTREAM-AUTO-come.out
\( \text{mv-kw-k'\_u} \text{ tu-f\_\_z\_u-nu} \)
NEG-NMLZ:S/A-be.possible IPFV-make-PL
‘They pull (on the thread to close the opening) and prevent it from coming out.’ (30-CNato, 42)

(148) \( \text{cu-ky-\_\_f\_de} \text{ mv-kw-\_ra} \text{ nu nd\_\_s\_i\_z\_o ku} \)
TRANSLOC-INF-throw NEG-NMLZ:S/A-have.to DEM 2DU ERG
\( \text{nu-tu-syf\_\_z\_u-nd\_\_s\_i} \text{ nu} \)
PFV-2-cause.to.become-DU be:FACT
‘Thanks to both of you, there is no need to throw (people in the lake) anymore.’ (2011-05-nyima, 191)

In this construction, the causative auxiliary verb takes the participial clause as its object. When the participial clause clause has a first or second person object, as in (149) and (150), the auxiliary remains in third person object form (a form such as \( \text{\_tu-kw-syf\_\_z\_u-ju} \) IPFV-2->1-cause.to.become-1PL ‘you caused us to become X’ would not be possible).

(149) \( \text{iz\_\_ra \_ky-nu\_\_z\_u\_\_fi} \text{ mv-kw-k'\_u} \)
1PL INF-sleep NEG-NMLZ:S/A-be.possible
\( \text{tu-tu-syf\_\_z\_e} \text{ ju-nu} \)
IPFV-2-cause.to.become[III] SENS-be
‘You prevent us from sleeping.’ (elicitation)
‘You have spoiled my water, you caused me to be unable to drink clear water.’ (lang he yang, 26)

As shown by examples (148) and (150) in particular, the use of causative auxiliaries with dynamic verbs is common to express indirect causation, the (voluntary or involuntary) indirect result of the action performed by the causer.

The verb tɕɤt ‘take out’ is very rare as a causative auxiliary, and only occurs with negative participial forms, as in (151).

(151)  
\[ kɤ-sci \quad mɯ-nɯ-tɯ-ɣɤ-kʰɯ-t \]
\[ \text{INF-be.born} \quad \text{NEG-IPFV-2-CAUS-be.possible-PST:TR} \]

‘You prevented me from being born.’ (Gesar, 61)

Future research will be necessary to ascertain the precise semantic difference between all causative constructions, a task made difficult by the dearth of examples of the constructions illustrated by examples (151) and (152) in the corpus.

4.10 Complements of adjectives

Adjectives in Japhug can be formally defined as the subclass of stative verbs allowing the tropative nɤ- derivation, a derivation that turns a stative verb into a transitive verb meaning meaning ‘find/consider X’ (eg ‘beautiful’ → ‘find/consider to be beautiful’, see Jacques 2013a).28

28This definition excludes some noun-like property words.
4.10.1 Infinitival and finite complements

A few adjectives are semi-transitive, like mkʰɤz ‘be expert, be knowledgeable’ and optionally take either a noun (153) or a complement clause (154) addition to their S. The complement clause can be either infinitival or finite, with a verb in the imperfective.

(153) u-nmaʁ jɤ-kɯ-ɣe nu ɕoŋβzu
3SG.POSS-husband PFV-NMLZ:S/A-come[II] DEM carpentry
mkʰɤz tce
be.expert:FACT LNK
‘Her husband (who came to live in her family) is very good at carpentry.’ (14-tApitaRi, 273)

(154) tɕiʑo 1du kɤ-taʁ wuma zo mkʰɤz-tɕi
1DU UNEXPECTED INF-weave really EMPH be.expert:FACT-1DU
‘We are very good at weaving.’ (140521, huangdi de xinzhuang, 20)

4.10.2 Causative forms of adjectives

The causative forms of adjectives, in addition to their base causative meaning ‘cause to become X’, can also be used with complement clauses to express manner (Jacques 2015, 184). In this construction, both kr- infinitives and bare infinitives are possible. For instance, the verb ɣɤ-βdi derived from βdi ‘be good, be well’ can either mean ‘repair, treat’, as in (155) or ‘do well, do properly’ with a complement clause as in (156).

(155) a-ʁi ku nu ma spe
1SG.POSS-younger.sibling ERG DEM apart.from be.able[III]:FACT
me ri, 〈tuolaji〉 kuw-fse, mkʰurlu
not.exist:FACT but tractor NMLZ:S/A-be.like.this machine
nura nu-ɣɤβdi spe
DEM:PL IPPV-CAUS-be.well be.able[III]:FACT
‘My brother is only able to do one thing, repair tractors and cars.’
(14-tApitaRi, 166)

(156) k’a u-ewri nuʦu u-fkrvm
house 3SG.POSS-front.of DEM:LOC 3SG.POSS-BARE.INF:place
a-kɤ-tɯ-ɣɤ-βdi tce, 〈c-pu-srɪse
IRR-PFV-2-CAUS-be.good LNK TRANSLOC-IMP-stick.into[III]
‘Place these in front of your house in orderly fashion and stick them (into the ground).’ (Smanmi 2003, 129)

The complement-taking causative verbs inherit the orientation prefix and person marking of the complement verb (see 3.4).
Alternatively, causative verbs derived from adjectives can occur in a serial verb construction similar to the one found with manner deixis verbs (see sections 2.6.6 and 4.7), as in example (157) where the causative form of the verb \textit{aswy} ‘be tight’ shares the same TAM, person and orientation marking as the other member of the serial construction \textit{xtcvr} ‘tie’.

(157) \textit{tce tumbridir-\textit{car} tce \textit{uu-\textit{myu}} nura k\textit{ogla zo}}  
\textit{LNK rope} \textit{IFR-search LNK 3SG.POSS-opening DEM:PL really EMPH}  
\textit{ko-xtcvr ko-su-\textit{ysuw} zo}  
\textit{IFR-tie IFR-CAUS-be.tight EMPH}  

‘He looked for a rope, and tied the opening (of the bag) very tight.’  
(kelaosi, 288)

\section*{Conclusion}

This article is the first step towards a comprehensive description of complementation in Japhug, but much remains to be done, in particular in ascertaining fine-grained semantic differences between related constructions. It has three main contributions.

First, it confirms the observation from previous research on subordinate clauses in Gyalrong languages (Jacques 2016b, Sun 2003) that while Japhug has ergative case marking, in complex clauses only neutral or accusative pivots are attested, and not a single ergative pivot is found – the only ergatively-aligned construction being generic person marking on the verb (Jacques 2012a).

Second, it illustrates how the reanalysis of unmarked relative clauses in essive function (1.2) is a widespread mechanism to create complement clauses (2.6.2, 2.6.3).

Third, this article documents several typologically unusual constructions, in particular Hybrid Indirect Speech (section 2.5), the verb \textit{s\textit{uxca}} ‘(cause to) be able’ which only appears in inverse forms (4.1.2) and the puzzling construction \textit{[X m\textit{r}-X negation]} meaning ‘whether or not X, it amounts to the same’ (4.8) with exclusive indexation of the object of the complement clause on the negative auxiliary.

\section*{References}


