Multi-CAST

Jinghpaw annotation notes

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1 Introduction

This document is a revised reproduction of the first half of Kurabe (2018). It contains notes on the implementation of the GRAID (Haig & Schnell 2014) and RefIND (Schiborr et al. 2018) annotation conventions in the Multi-CAST Jinghpaw corpus, corresponding to version 2108 of the annotations, published in August 2021. Unless a more recent version of this document exists, it also applies to any later versions of the annotations.

The aim of this paper is two-fold: To outline an implementation of the GRAID glossing conventions (Haig & Schnell 2014) to Jinghpaw (kach1280), a language spoken in northern Burma (Myanmar) and neighboring areas of China and India; and to give initial findings drawn from the Jinghpaw corpus. The language is affiliated with the Tibeto-Burman branch of the Sino-Tibetan language family. Within Tibeto-Burman, it is closely related to Luish (Asakian) languages such as Cak, Kadu, and Ganan, which are distributed in small discontinuous pockets situated across northwestern Burma, southeastern Bangladesh, and northeastern India.

The linguistic data in our Jinghpaw corpus are based on a variety spoken in and around Myitkyina, the Kachin State of Burma, and it is considered to be the standard dialect of the language in Burma. The corpus data consist of traditional narrative texts, all of which are primary data, selected from 1 805 narrative recordings in Jinghpaw. They were collected in Burma by the author and local collaborators between 2009 and 2017 with the help of 196 native narrators. As of January 2018, 939 stories have been transcribed by the author and native collaborators using the Jinghpaw orthography. All recordings and transcriptions are available online at PARADISEC, the Pacific And Regional Archive for Digital Sources in Endangered Cultures (Kurabe 2013, 2017).^{2,3}

This paper is structured as follows. Beginning with an overview of clause structures in Section 2, Section 3 takes a closer look at Jinghpaw referential expressions with the GRAID glossing in terms of their forms, semantics, and functions. Annotations of predicates, including verbal, nominal, copula, and non-canonical predicates, are given in Section 4. Section 5 explores complex sentences in Jinghpaw, offering an implementation of the GRAID glossing to complement clauses, relative clauses, adverbial clauses, direct speech, and coordinate constructions. Our treatment of constructions with special features, including external possessor constructions, serial verb constructions, tail-head constructions, and repetition, is provided in Section 6.

2 Overview of clause structures

A predicate, both verbal and non-verbal, is always placed at the end of a clause, as illustrated by the following examples with linguistic glosses and GRAID annotations. The two major clause types are verbal clauses headed by a verbal predicate as in (1a), and copula/nominal clauses headed by a nominal predicate with or without a copula as in (1b) and (1c).

```
(1) a. shi nta de wa ai da.

shi nta = de wa = ai = da
3sG house = ALL return = DECL = HS
## pro.h:s np:g = rn v:pred = rv = other

'She went back home, it's said.' [mc_jinghpaw_natga_0051]
```

- 1 Kurabe, Keita. 2018. The GRAID-annotated Jinghpaw corpus: Annotations and initial findings. Asian and African Languages and Linguistics 12. 37–73. (http://hdl.handle.net/10108/91142).
- 2 https://catalog.paradisec.org.au/collections/KK1
- 3 https://catalog.paradisec.org.au/collections/KK2

```
ndai ngai na nga nan re.
```

```
ndai
                 ngai
                                                    re
                               =na nga
                 1sg
                               =GEN COW
 ##ds dem_pro:s ln_pro.1:poss =ln np:pred other cop
 "'This is exactly my cow."'
                                                      [mc_jinghpaw_nga_0040]
ndai ngai na nga.
```

```
ndai
                ngai
                            =na nga
     this
                1sg
                            =GEN COW
##ds dem_pro:s pro.1:poss =rn np:pred
"'This is my cow."'
                                                                      (elicited)
```

All nominal expressions, excluding afterthoughts, occur before predicates, as shown above. NPs, especially non-core arguments, are marked by postpositive case marking clitics to indicate their relationship to the predicate. The order of NPs, as seen in (2a) and (2b), is relatively free, being determined by pragmatic factors. Because predicates are the only obligatory constituents of clauses, references of arguments, when pragmatically retrievable from the context, are freely omitted in Jinghpaw, as seen in (2c).

(2) nang ngai hpe grau tsawra ai i?

```
=hpe grau tsawra =ai
              ngai
     nang
                       =ACC more love
              1s<sub>G</sub>
                                           =DECL =Q
##ds pro.2:a pro.1:p =rn other v:pred =rv
"'Do you love me more (than him)?"'
                                                    [mc_jinghpaw_hkaili_0065]
```

nanhte hpe ngai tsawra nga na yaw

```
nanhte =hpe ngai
                           tsawra =nga na
             =ACC 1sg
                           love =CONT =IRR =SFP
##ds pro.2:p =rn pro.1:a v:pred =aux =aux =other
"'I will love you (always)."
                                                   (KK1-0474_026 in PARADISEC)
```

c. nta du hkra hkan shachyt ai da.

```
duhkra hkan shachyt =ai
house TERM follow run_after =DECL =HS
              lv
                     v:pred =rv
                                     =other
np:g rn
'(The spirit) chased (her) to the house, it's said.'
                                                      [mc_jinghpaw_natga_0066]
```

Referential expressions 3

Glossing of referential expressions is a fundamental part of GRAID annotations. This section, following Haig & Schnell (2014), explores Jinghpaw referential expressions in terms of their forms (Section 3.1), semantics (Section 3.2), and functions (Section 3.3).

3.1 Form of referential expressions

The distinction between NP, pronoun, and zero is captured by the form glosses (np), (pro), and (0), respectively.

categories	forms	interrogative	indefinite	negative indefinite
person thing place amount time manner	gadai hpa gara gade galoi ganing	'who' 'what' 'where' 'how many' 'when' 'how'	'anybody' 'anything' 'anywhere' 'any amount' 'anytime' 'anyhow'	'nobody' 'nothing' 'nowhere' 'no amount' 'never' 'no way'

Table 1 The interrogative–indefinite relationship.

3.1.1 NPs

In GRAID annotations, the form gloss $\langle np \rangle$ is given to what in the literature is labeled "lexical mention/expression", and so on (Du Bois 1987; Haig & Schnell 2014). As with other corpora, the most typical NPs glossed with the form gloss $\langle np \rangle$ in our corpus are those headed by common nouns. NPs are also headed by kinship terms, person and place names, and so on. These NPs are introduced with or without case-marking postclitics depending on their functions and/or semantic roles (see Section 3.3). Examples:

(3) a. ndai u hka mung mau mat na she...

```
ndai u-hka =mung mau =mat =na =she
this bird-crow =also be.surprised =COMPL =SEQ =then
## ln_dem np.d:s =other v:pred =aux =other =other
'This crow was surprised and...' [mc_jinghpaw_hpaji_0032]
```

b. ganu hpe bai yu dat ai shaloi wa, ...

```
ganu =hpe bai yu =dat =ai shaloi =wa
mother =ACC again look =away =DECL when =TOP

## 0.h:a np.h:p =rn other v:pred =aux =rv other =other

'When (he) saw his mother again, ...' [mc_jinghpaw_ganu_0024]
```

Numerals also receive the form gloss $\langle np \rangle$ when they head NPs. Unlike neighboring classifier languages, such as Shan and Burmese, Jinghpaw numerals, displaying a similar distribution of common nouns, can occur in the absence of semantic heads and classifiers. Numerals, as such, can express different types of referents. The numeral masum 'three', for instance, may denote 'three persons', 'three dogs', 'three houses', 'three books', and so on, unlike other languages in the region.

(4) ora masum gaw yup rawt ai hte...

Interrogative pro-forms are also glossed with the form gloss (np) when they head NPs. Interrogatives, often followed by additive particles meaning 'also', can be employed to express indefiniteness as well. The relationship between major interrogative and indefinite meanings is summarized in Table 1. Examples follow:

(5) a. ma e kadai ni hte sa na ma nga na?

'He also knows nothing.'

```
ma
                               gadai
                                           =ni =hte
                                                                    =ma
            child
                       =SFP
                               who
                                           =PL =COM go
                                                              =IRR = Q
                                                      v:pred =aux =other ##
##ds 0.2:s np.h:voc =other np.h:other =rn =rn
          nga
                  =na
          say
                  =SEO
0.h:s_ds v:pred =other
"'Child, who[PL] will (you) go with?"'
                                                         [mc_jinghpaw_dwi_0028]
shi mung hpa ma n-chye ai le
       shi
                =mung hpa = ma
                                     n-chye
                                                       =le
                                                =ai
       3s<sub>G</sub>
               =also what =also
                                     NEG-know =DECL =SFP
```

=rv

[mc_jinghpaw_dwi_0212]

For complex NPs, the form gloss $\langle np \rangle$ is given to their heads, and other NP-internal subconstituents, excluding possessors that are specified for their own functions (see Section 3.4), are glossed as $\langle 1n \rangle$ or $\langle rn \rangle$ depending on their relative positions to the head. Typical NP-internal subconstituents in our corpus include: adnominal demonstratives, numerals, adjectives, and the pluralizing postclitic ni, which encodes additive, collective, and associative plural meanings. Examples:

##neg pro.h:a =other np:p =other v:pred

(6) a. dai la masum dai ni gaw...

```
dai la masum dai =ni =gaw
that man three that =PL =TOP
## ln_dem np.h:s rn_qfr nc_dem_np nc =other
'These three men, they (are labourers and)...' [mc_jinghpaw_nchyang_0011]
```

b. nga kaba ni nlu rim ai majaw...

In conjunctive coordination of NPs, whether monosyndetic (i.e. [A-co] [B]) or disyndetic (i.e. [A-co] [B-co]), the form gloss $\langle np \rangle$ is given to the last coordinant in our corpus, and other coordinants to its left are glossed with the form gloss $\langle 1n \rangle$. Jinghpaw has various kinds of coordinators, including comitative case postclitic *hte* 'with, and', additive particle *mada* 'also', and a special coordinator yen that is restricted to binary coordination of human beings.

(7) a. makaw yen magam dai ni gaw nanau...

```
makawyenmagamdaini=gawnannaufirst_daughterandfirst_sontoday=TOP2DUbrothers##dsln_nplnnp.d:vocother=otherpro.2:apposnp.d:s"'My daughter and son, today you siblings..."[mc_jinghpaw_shanngayi_0017]
```

	SG (NOM)	SG (GEN)	dual	plural
1 st	ngai	nye	an	anhte
2 nd	nang	na	nan	nanhte
3 rd	shi	shi	shan	shanhte

Table 2 Personal pronouns.

b. shan nga ni gaw ah yi mada ah la mada nrung grai tsawm na...

```
shannga =ni =gaw
                       avi
                               =mada ala
                                                 =mada nrung grai
                       female
   deer
                               =also male
           =PL =TOP
                                                 =also
                                                        horn
                                                               very
## np.d:dt =rn =other ln_np.d =ln
                                                              other
                                      np.d:appos =rn
                                                        np:s
tsawm
          =na
be.beautiful =seo
v:pred
          =other
```

'As for deer, both male and female, their horns were very beautiful and...'

[mc_jinghpaw_shanngayi_0002]

3.1.2 Pronouns

Our corpus, following Haig & Schnell (2014: 9) who intend to capture "definite pronouns", labels personal and demonstrative pronouns with the form gloss (pro). Examples of personal pronouns include:

(8) a. ngai nang hpe garum hpyi mayu ai.

```
ngai nang =hpe garum hpyi =mayu =ai
1SG 2SG =ACC help ask =DESID =DECL
##ds pro.1:a pro.2:p =adp lv v:pred =aux =rv
""I want to ask you for help." [mc_jinghpaw_chyeju_0067]
```

b. shi gaw dai ni hpe hta la na she...

```
shi
            =gaw
                    dai
                              =ni =hpe hta
                                                =la
                                                       =na
                                                               =she
   3s<sub>G</sub>
            =TOP
                    that
                              =PL =ACC pick
                                                =take =seo
                                                              =then
## pro.h:a =other dem_np:p =rn =rn v:pred =aux =other =other
   0002
                    0026
```

'He took these (fish) and then...'

[mc_jinghpaw_dwi_0067]

Jinghpaw personal pronouns are encoded as free pronouns with full forms whose systems exhibit three-way splits in person (first, second, third) and in number (singular, dual, plural), yielding the paradigm given in Table 2. All personal pronouns, as can be seen, are formally distinguished, and there is no syncretism of person or number contrasts. The dual/plural distinction is only found in personal pronouns. Separate genitive forms exist for singular, which have their diachronic sources in a contraction of singular personal pronouns plus the obsolete genitive case marker a.

Demonstratives, when they head NPs, also receive the form gloss $\langle pro \rangle$. They are glossed with an additional gloss $\langle dem \rangle$, which is combined with other glosses separated by an underscore, for example, $\langle dem_pro.h:s \rangle$. Demonstratives in Jinghpaw function as free pronouns, and distinguish speaker-addressee orientation, relative distance, or relative height from the deictic center: ndai [proximate; speaker-centered]; dai [proximate; addressee-centered]; htora [distal; up]; wora [distal; level]; lera [distal; down]. Demonstratives, in terms of qualitative features of the ref-

erent, are specified for inanimate by default, as in (9a), unless followed by the plural marker ni, which turns demonstratives into neutral for humanness and animacy, as in (9b).

(9)shi gaw dai hpe lang di na...

```
shi
             =gaw
                     dai
                                 =hpe lang
                                                di
                                                       =na
   3s<sub>G</sub>
             =TOP
                     that
                                 =ACC hold
                                                LV
                                                       =SEO
## pro.d:a =other dem_pro:p =rn v:pred other =other
'She held it [= meat] and....'
                                                         [mc_jinghpaw_hpaji_0010]
```

ndai ni gaw ngai hpe gara hku wa masu sha na i?

```
=ni = gaw
                                    =hpe gara
                                                =hku
                            ngai
                                                       wa
     this
                =PL =TOP
                                                =like
                                                       return
                            1sg
                                    =ACC how
##ds dem_np.h:a =rn =other pro.1:p =adp other =other lv
masusha =na =i
lie
        =IRR =O
v:pred =aux =other
```

"'How will these ones come back and lie to me?"'

[mc_jinghpaw_nchyang_0050]

Complex NPs headed by pronouns, including personal and demonstrative pronouns, show reduced possibilities for their internal subconstituents. Unlike common nouns and numerals, they cannot take multiple types of adnominals, such as adjectives, demonstratives, genitives, and relative clauses. Typical complex NPs with pronoun heads in our corpus, as in (9b), are those with numerals and pluralizing markers.

3.1.3 Zero

Almost all references of arguments, when pragmatically recoverable from the context, can be freely omitted in Jinghpaw. In our corpus, zero arguments are assumed when they are: (a) licensed by the argument structure of a verb; (b) recoverable from the discourse; and (c) not constructionally suppressed. Usually, these zero arguments can alternatively be expressed by overt forms. Zero arguments receive the form gloss (0). Because all NPs, as noted in Section 2, occur before predicates and their order is relatively free, it is impossible to determine the exact position of zero arguments. Instead of arbitrarily determining their positions, we put all of them at the beginning of clauses regardless of their syntactic functions.

(10)shi hpe la taw ai.

```
shi
                   =hpe la
                                =taw
                                       =ai
          3sg
                  =ACC wait
                                =CONT =DECL
## 0.h:a pro.h:p =rn v:pred =aux
'(She) was waiting for him.'
                                                      [mc_jinghpaw_ganu_0060]
```

nang gaw sa rim u!

```
nang
                  =gaw
                          sa rim
                                      =u
                                           rai =na
          2sg
                  =TOP
                          go catch
##ds 0:p pro.2:a =other lv v:pred =rv
"'You go catch (them)!"'
                                                    [mc_jinghpaw_chyeju_0017]
```

c. hpai wa na she...

We assume a zero in the S position of imperative and hortative clauses, despite them often being omitted, as in (11a) and (11b), because they can alternatively be expressed by overt forms, as in (11c) and (11d). For cases where we do not assume a zero, see Section 4.3.

(11) a. atsawm rai na bai wa u yaw!

```
a-tsawm rai =na bai wa =u =yaw
ADV-be.beautiful COP =SEQ again return =IMP =SFP

##ds 0.2:s other other =other other v:pred =rv =other

""(You) come back carefully!"' [mc_jinghpaw_dwi_0038]
```

b. mare kaba de sa mat ga.

```
mare kaba = de sa = mat = ga
village big = ALL go = COMPL = HORT
##ds 0.1:s np:g rn_adj = rn v:pred = aux = rv

"Let (us) go to a big village." [mc_jinghpaw_hkaili_0057]
```

c. nang atsawm rai na bai wa u yaw.

```
nang atsawm rai =na bai wa =u =yaw
1sG well LV =SEQ again return =IMP =SFP

##ds pro.2:s other other =other other v:pred =rv =other

'You come back carefully!' (elicited)
```

d. anhte mare kaba de sa mat ga.

```
anhte mare kaba =de sa =mat =ga
1PL village big =ALL go =COMPL =HORT

##ds pro.1:s np:g rn_adj =rn v:pred =aux =rv

'Let us go to a large village.' (elicited)
```

3.2 Animacy and person of referential expressions

Four animacy and person glosses, that is, $\langle .h \rangle$, $\langle .d \rangle$, $\langle .d \rangle$, and $\langle .2 \rangle$, are considered in the Jinghpaw corpus. Reference to speech-act participants, glossed with $\langle .1 \rangle$ and $\langle .2 \rangle$, only occur in direct speech in our corpus because it consists of narrative texts. Examples include:

(12) a. shi ganu hpe grai tawng ban ai i.

b. nang ngai hpe grau tsawra ai i?

Because our corpus contains some fables that feature animals and spirits, the animacy gloss $\langle .d \rangle$ is also employed to gloss anthropomorphized discourse participants. These referents are given human qualities, such as the ability to speak human language. Examples:

(13) a. shi gaw hi na kasha hpe tsun ai, ...

```
shi=gawshi=nagasha=hpetsun=ai3sG=TOP3sG.GEN=GENchild=ACCsay=DECLpro.d:a_ds=otherln_pro.d:poss=lnnp.d:p=rnv:pred=rv'He [= the deer] said to his children, ...'[mc_jinghpaw_shanngayi_0016]
```

b. aba ngai ora maling de agu wa du brang ni dumsi ni kaw sa lam na

```
maling =de agu
     elder.brother 1sG
                          over.there forest =ALL uncle boar
                                                                 brother =PL
##ds np.d:voc
                                            =rn ln_np ln_np.d ln_np =ln
                 pro.1:s ln_dem
                                    np:g
           =ni =kaw sa lam
porcupine
           =PL =LOC go wander =IRR
                     lv v:pred =aux
np.d:appos =rn =rn
"'Brother [= a deer], I will go to wander to the forest over there, to uncle boar and brothers
porcupine."
                                                 [mc_jinghpaw_shanngayi_0031]
```

Animacy features are given depending on semantic role consideration of the referent rather than its form. Thus, the same noun may be assigned different animacy values depending on its meaning in context. For example, a place noun *mare* 'village' is treated as a goal and receives no animacy feature in (14a), in contrast to (14b), where the same noun is metonymically used for those who live in the village.

(14) a. mare langai mi kaw du yang gaw...

b. Mare ting nga nawng jawm htawk ai nhtoi lamang langai galaw ya ai da.

```
nga-nawng jawm
                                                                      htawk
                                      ting
                              village
                                      whole
                                              fish-pond
                                                          do.together
                                                                      pick.up
## 0.h:a #rc rel_f0:other np.h:a rn_qfr np:p
                                                                      v:pred
                                                          lν
              nhtoi-lamang langai galaw =ya
=ai
                                                         =da
                                    do
              day-program one
                                            =BEN =DECL =HS
=DECL.NMLZ
            % np:p
=rv
                            rn_qfr v:pred =aux =rv
                                                         =other
'(They) held a festival program where the whole villagers removed water from a pond (to
catch fish), it's said.'
                                                       [mc_jinghpaw_ganu_0008]
```

3.3 Function of referential expressions

3.3.1 Core argument functions

NPs, as noted in Section 2, may be marked by postpositive case marking clitics. The case marking pattern, as shown in (15a) and (15b), is the nominative-accusative type (S/A vs. P), where the S and A functions occur without any overt case marker in contrast to the P, which may be case-marked by an accusative postclitic. The P function, as seen in (15c), may also be introduced without any overt marker (see below).

(15) a. ngai sa na law.

```
ngai sa =na =law
1sG go =IRR =SFP
##ds pro.h:s v:pred =aux =other
"'I will go."' [mc_jinghpaw_dwi_0035]
```

b. ngai nang hpe garum hpyi mayu ai.

c. raitimmung nang hpaji naw ra ai yaw.

```
raitimung nang
                         hpaji
                                                         =yaw
                                   naw
                                                  =ai
                                          ra
     but
                         knowledge still
                2sG
                                          need
                                                  =DECL =SFP
##ds other
                pro.2:a np:p
                                   other v:pred =rv
                                                         =other
"But you still need knowledge."
                                                      [mc_jinghpaw_hpaji_0036]
```

The P function is obligatorily marked by the accusative when the P outranks or is equal to the A on the animacy hierarchy given in (16), and is left unmarked or optionally marked by the accusative when the P is lower than the A. This case marking pattern is well motivated by the need to differentiate between two potential agents by overtly case marking the P with the accusative, leaving the A unmarked (Kurabe 2012). In other words, the P is case marked when there is a possibility that it may be misconstrued with the A otherwise, the situation of which arises when the P is equally high or higher than the A on the animacy hierarchy, as the prototypical P is lower than the A in animacy (Comrie 1981: 121).⁴

4 This type of case marking employed for disambiguation of the P from the A is widespread among TB languages

(16) Animacy hierarchy (Comrie 1981: 178) human > animal > inanimate

A similar case marking pattern is also observed for ditransitive constructions whose case frame is that the A remains unmarked, the recipient is obligatorily marked by the accusative, and the theme is left unmarked. This is due to the fact that the recipient is typically human; this is in contrast to the theme, which is typically non-human, and ranked lower than the agent and recipient on the animacy hierarchy.⁵ To illustrate this, consider (17). In our corpus, the theme is glossed as $\langle :p2 \rangle$.

(17) nang ngai hpe manu jahpu jaw na...

```
nang ngai =hpe manu-jahpu jaw =na
2sG 1sG =ACC price-price give =IRR

#ds_cc:p pro.2:a pro.1:p =rn np:p2 v:pred =aux

"'[Give me] what [you said] you would give me." [mc_jinghpaw_chyeju_0088]
```

3.3.2 Oblique function

Obliques are encoded by means of case-marking postclitics. As core arguments, obliques always precede verbal predicates with relatively free orders. Following the GRAID manual (Haig & Schnell 2014: 14–16), our corpus considers three types of adjuncts: locations $\langle:1\rangle$, goals $\langle:g\rangle$, and other semantic roles $\langle:ob1\rangle$. Locations and goals can both be encoded by the locative case kaw that marks physical locations (18a), goals (18b), and sources (18c) (in the last case, with an ablative case). Examples follow:

(18) a. ndai kaw jahkring mi naw hkring la ga.

b. shi gaw lup kaw du ai hte i...

as well as is crosslinguistically common (LaPolla 1992; Malchukov 2008; and others). The definitness of the P function, although known to play some role in some languages, does not play a role in Jinghpaw. This can be seen in the fact that P arguments low in definiteness, such as interrogatives, can potentially be marked with the accusative.

5 When equally-ranking recipient and theme NPs are involved, both of them must be case marked with the accusative. In such situations, the interpretation of the recipient and theme is determined by context, as scrambling of the recipient and theme NPs does not contribute to the meaning (Kurabe 2012).

c. ma nang ndai gara kaw na la wa ai rai?

```
ndai
     ma
                                  gara
                                         =kaw = na
                                                     la
     child
                        this
                                  where =LOC =ABL take
                                                             =VEN =DECL
                                               =rn
##ds np.h:voc pro.2:a dem_np:p np:l =rn
                                                     v:pred =aux =rv
=rai
=O
=other
"'Child, where did you bring this from?"'
                                                      [mc_jinghpaw_dwi_0203]
```

Goals can also be marked by the allative case de, as in (19a), which, unlike the locative kaw, is sensitive to the animacy of the goal NP it marks: It can only mark inanimate goals, for example, $nta\ de$ 'to the house' vs. *manang de 'to the friend'. The allative can mark animate goals only by means of hpang (originally a locator noun meaning 'behind'), which is employed to "locationalize" animate nouns, as in (19b).

(19) a. mare kaba de sa mat ga.

```
mare kaba = de sa = mat = ga
village big = ALL go = COMPL = HORT
##ds 0.1:s np:g rn_adj = rn v:pred = aux = rv

"Let (us) go to a big village." [mc_jinghpaw_hkaili_0057]
```

b. shanhte ni hkawhkam wa hpang de wa sa ya na she...

```
shanhte =ni hkawhkamwa hpang =de wa
                                                              =ya
         3<sub>PL</sub>
                  =PL king
                                    place =ALL return send
                                                              =BEN =SEQ
## 0.h:p pro.h:a =rn ln_np
                                    np:g
                                          =rn lv
                                                      v:pred =aux =other
   0002 0054
                                    0046
=she
=then
=other
'(they) took (him) to the king's place and'
                                                     [mc_jinghpaw_dwi_0196]
```

Other obliques receive the function gloss $\langle :ob1 \rangle$, marking semantic roles such as companion (20a), instrument (20b), and so on.

(20) a. gwi hte rau hpun hta sa na she...

```
gwi =hte rau hpun hta sa =na =she
dog =COM together wood pick go =SEQ =then

## 0.h:a np:other =rn other np:p lv v:pred =other =other

('He) went to pick wood with his dog and then...' [mc_jinghpaw_dwi_0113]
```

b. shupsheng hte bau ni hte shangoi na...

```
shupsheng =hte bau =ni =hte shangoi =na
cymbal =COM drum =PL =COM make.a.noise =SEQ
## 0.h:s np:other =rn np:other =rn =rn v:pred =rv

'(They) played cymbals and drums and...' [mc_jinghpaw_dwi_0233]
```

Circumstantial adjuncts, even when marked by the locative case kaw like locations, are given the function gloss $\langle : other \rangle$ in accordance with the GRAID manual (Haig & Schnell 2014: 17), where

obliques are glossed depending on semantic role considerations rather than their forms.

3.4 Other syntactic functions

Other glosses for syntactic functions considered in the Jinghpaw corpus include: $\langle : dt \rangle$ for dislocated topics, $\langle : voc \rangle$ for vocatives, $\langle : appos \rangle$ for appositionals, and $\langle : poss \rangle$ for possessors. The gloss $\langle : dt \rangle$ is given to NPs that occur outside clause boundaries. No distinction is made between right and left dislocation. The function of clause-internal co-referential elements, when relevant, is also marked for dislocated phrases.

(21) a. dai mare langai mi ndai kaw...

```
dai mare langai mi ndai =kaw
well village one one this =LOC
## other np:dt_l rn_qfr rn_qfr dem_pro:l =rn

'Well, in one village, there...' [mc_jinghpaw_hkaili_0002]
```

b. nang da nang kahpu re majaw...

The function gloss (:voc) is applied to vocative phrases, which are typically kinship terms. Examples:

(22) a. adwi n matsing sai.

b. ma nang ndai gara kaw na la wa ai rai?

```
ma
               nang
                        ndai
                                   gara
                                         =kaw = na
                                                     la
     child
               2sg
                        this
                                   where =LOC =ABL take
                                                             =VEN =DECL
                                                     v:pred =aux =rv
##ds np.h:voc pro.2:a dem_np:p np:l =rn
                                              =rn
=rai
=O
=other
"'Child, where did you bring this from?"'
                                                      [mc_jinghpaw_dwi_0203]
```

The function gloss (:appos) is given to appositional phrases, which are co-referent with juxtaposed phrases, adding additional information to the referent.

(23) a. Anhte shinggyim masha ni gaw...

```
anhte shinggyim-masha =ni =gaw
1PL human.being =PL =TOP
## pro.1:s_ds np.h:appos =rn =other
'We human beings, ...' [mc_jinghpaw_natga_0004]
```

b. shi na kasha magam wa hpe jaw ai.

```
shi =na kasha magam-wa =hpe jaw
3sG =GEN child first_born_son-man =ACC give
## 0.h:a 0:p2 ln_pro.h:poss =ln np.h:p np.h:appos =rn v:pred
=ai
=DECL
=rv

'(The mother) gave (them) to her son, the firstborn son.'
```

[mc_jinghpaw_hkaili_0012]

Possessors, which are typically encoded with the genitive case marker na, are glossed with the functional gloss $\langle : poss \rangle$, which is the only NP-internal function in GRAID. Separate genitive forms, as noted in Section 3.1.2, exist for singular personal pronouns, for example na 'your (sg)'.

(24) a. ndai gumra wa anhte na mam nli mahkra sha kau ya sai.

```
gumra =wa
                      anhte
                                                      mahkra sha
                                                                      =kau
this
       horse =TOP
                      1pl
                                     =GEN paddy-seed all
                                                              eat
                                                                      =away
ln_dem np:a =other ln_pro.1:poss =ln np:p
                                                      rn_qfr v:pred =aux
=va =s-ai
=BEN =CSM-DECL
=aux =rv
"'This horse ate all of our rice seeds."'
                                                  [mc_jinghpaw_nchyang_0057]
```

b. na kashu she rai sai gaw.

```
na kashu =she rai =s-ai =gaw
2sG.GEN grandson =then COP =CSM-DECL =SFP
##ds 0.h:s ln_pro.2:poss np.h:pred =other cop =rv =other
"'If it is indeed your grandson." [mc_jinghpaw_dwi_0249]
```

4 Predicates

This section provides the GRAID glossing of predicates in the Jinghpaw corpus, beginning with verbal predicates (Section 4.1), followed by copula/nominal (Section 4.2), and non-canonical predicates (Section 4.3).

4.1 Verbal predicates

Predicates headed by verbs receive the form gloss $\langle v \rangle$ and function gloss $\langle :pred \rangle$. The copula, although it is morphosyntactically a verb in Jinghpaw, is glossed differently with the gloss $\langle cop \rangle$ (see Section 4.2). Jinghpaw is an aspect- and mood-prominent language with no grammatical tense. Verbs are typically followed by mood-marking postclitics consisting of six paradigmatic values, for example, ai 'DECL' and u 'IMP', which mark the end of the verbal predicate. Mood markers, as illustrated by (25), are glossed with the form gloss $\langle rv \rangle$. Elements occurring after mood markers, such as sentence-final particles, are elements outside the verbal predicate, and thus receive the form gloss $\langle other \rangle$, as in (25b).

```
(25)
          shi gasha hpe grai tsaw ra ai.
              shi
                       gasha
                               =hpe grai
                                            tsaw-ra =ai
                       child
                               =ACC very
                                            love-like =DECL
          ## pro.h:a np.h:p =rn other v:pred =rv
          'She loved her son very much.'
                                                                  [mc_jinghpaw_ganu_0033]
          raitimmung nang hpaji naw ra ai yaw.
                raitimung nang
                                    hpaji
                                               naw
                                                      ra
                                                              =ai
                                                                     =yaw
                but
                           2sg
                                    knowledge still
                                                      need
                                                             =DECL =SFP
          ##ds other
                           pro.2:a np:p
                                               other v:pred =rv
                                                                     =other
          "'But you still need knowledge."'
                                                                 [mc_jinghpaw_hpaji_0036]
```

Jinghpaw verbs fall into two primary lexical aspect classes: the active verb, which semantically encodes a dynamic situation or 'something happens', and the stative verb, which encodes a stative situation or a non-happening. The importance of this classification primarily lies in the temporal interpretation of verbs with the declarative mood marker ai. When followed by this marker, an active verb, as in (26a), normally indicates the time prior to the moment of speech, while a stative verb, as in (26b), normally indicates the present moment (although time reference is changeable with the help of temporal adverbs, such as shani shagu 'every day' and moi 'long ago'). Both active and stative verbs receive the gloss $\langle v:pred \rangle$ in our corpus.

```
(26)
          shi gaw dai kaw yup ai.
              shi
                       =gaw
                               dai
                                         =kaw yup
                                                       =ai
              3sg
                       =TOP
                               that
                                         =LOC sleep
                                                       =DECL
          ## pro.h:s =other dem_np:l =rn
          'He slept there.'
                                                                [mc_jinghpaw_galang_0052]
         jan grai ja ai law.
                jan
                     grai
                            ja
                                     =ai
                                            =law
                     very
                            be.hard =DECL =SFP
          ##ds np:s other v:pred =rv
                                           =other
          "'It is very hot.""
                                                               [mc_jinghpaw_nchyang_0018]
```

Many morphosyntactic properties show that words denoting property concepts, such as ja 'be hot', can be best treated as stative verbs in Jinghpaw, being thus glossed with $\langle v:pred \rangle$. Note further that some stative verbs, especially those denoting the four core semantic types of adjectives (Dixon 1982), unlike other stative verbs, have an additional ability to modify nouns in the post-nominal position without any marker of syntactic dependency. We label them as "adjectives" and treat them as a subclass of stative verbs. When functioning as predicates, adjectives receive the gloss $\langle v:pred \rangle$, and when functioning as modifiers, they receive the gloss $\langle rn \rangle$. Compare:

```
(27) a. ndai nga ni gaba ai.
```

```
ndai nga =ni gaba =ai
this fish =PL be_big =DECL
## ln_dem np:s =rn v:pred =rv
'These fish are big.' (elicited)
```

b. nga kaba ni nlu rim ai majaw...

```
nga gaba =ni n-lu rim =ai majaw
fish big =PL NEG-get catch =DECL because

#ac.neg 0.h:a np:p rn =rn lv v:pred =rv other

'Because (she) could not catch big fish...' [mc_jinghpaw_ganu_0021]
```

Verbs may be followed by an array of optional auxiliaries, expressing meanings associated with aspectuality, modality, evidentiality, intensity, and so on. Auxiliaries are glossed with the form $gloss \langle aux \rangle$ in our corpus.

(28) a. shi hpe la taw ai.

```
shi =hpe la =taw =ai
3sG =ACC wait =CONT =DECL

## 0.h:a pro.h:p =rn v:pred =aux =rv

(She) was waiting for him.' [mc_jinghpaw_ganu_0060]
```

b. dai ma gaw manang ni hte grai chyai mayu ai.

```
dai ma =gaw manang =ni =hte grai chyai =mayu =ai
that child =TOP friend =PL =COM very play =DESID =DECL
## ln_dem np.h:s =other np.h:obl =rn =rn other v:pred =aux =rv
0002
```

'the child (orphan) wanted to play with friends.'

[mc_jinghpaw_dwi_0016]

4.2 Verbless and copula predicates

Verbless predicates typically consist of nominal predicates. The relation, encoded by a nominal predicate, may be identity (equation), classification, and location, as illustrated by the following examples. The nominal predicate receives the gloss (np:pred).

(29) a. shi gaw anhte na manang.

b. dai namlap dai gaw ndai tsi hkrung tsi nan i.

```
namlap dai
   dai
                           =gaw
                                   ndai
                                          tsi-hkrung-tsi-nan
   that
           leaf
                                   well
                                          medicine-alive-medicine-NC =SFP
                   that
                           =TOP
## ln_dem np:s
                   rn_dem =other other np:pred
                                                                     =other
'This leaf was an elixir of life, you know?'
                                                        [mc_jinghpaw_dwi_0086]
```

c. shi gaw ya nta kaw.

```
shi =gaw ya nta =kaw
3sG =TOP now hours =LOC
## pro.h:s =other other np:pred_1 =rn
'He is at home now.' (elicited)
```

Nominal predicates show reduced morphosyntactic possibilities. They cannot express properties associated with verbs. For example, they cannot be negated, cannot be specified for aspect and mood, cannot be elaborated by auxiliaries, and cannot be modified by adverbs. These morphosyntactic properties must be encoded by means of a verb, in this case, the copula verb. All relations encoded by a nominal predicate, as shown below, can also be expressed with a copula. A copula, which has the function to relate the subject of a clause with a copula complement, receives a special gloss $\langle cop \rangle$. In a copula clause, the copula complement always follows the copula subject. This is in contrast to a transitive clause, which also takes two core arguments, but they have a flexible order.

```
(30) a. ndai ngai na nga she re gaw.
```

b. nat-ga re nga na tsun ma ai.

```
'(They) say (it) is a spirit language.' [mc_jinghpaw_natga_0017]
```

c. shi gaw ya nta kaw re.

```
shi = gaw ya nta = kaw re

3sG = TOP now hours = LOC COP

## pro.h:s = other other np:pred_1 = rn cop

(Ho is at home now)
```

'He is at home now.' (elicited)

4.3 Non-canonical predicates

Predicates that exhibit reduced possibilities for government of verbal arguments receive the gloss (vother:pred) (Haig & Schnell 2014: 22–23). Three predicates heading dependent clauses fall into this category in the Jinghpaw corpus, all involving the core functions S and A. Because arguments are systematically suppressed, no zeros are assumed in the glossing for these cases. The first example comes from a predicate with the subordinator let, which forms a simultaneous adverbial clause. One constraint imposed on this construction is that the S or A argument in the dependent clause, which is always coreferential with the S or A argument in the main clause, must not be overtly expressed. Consider:

(31) ganu gaw grai matsan let sha grai gasha hpe bau maka ai.

```
=sha
   ganu
                                    matsan
                                                                 grai
                                                                        gasha
   mother =TOP
                             very
                                    be_poor
                                                 SIM
                                                       =only
                                                                 very
## np.h:a =other #ac 0.h:s other vother:pred other =other % other np.h:p
=hpe baumaka
=ACC take_care_of =DECL
=rn v:pred
'The mother, while being very poor, took good care of her son.'
```

[mc_jinghpaw_ganu_0005]

The next example comes from a negated nominalized clause that forms an adverbial clause conveying the sense of privation. Again, the S or A in the dependent clause, being coreferential with the S or A in the main clause, is systematically suppressed.

(32) shi nba nhpun ai sha yup ai.

```
shi nba n-hpun =ai =sha yup =ai
3SG blanket NEG-wear =DECL.NMLZ =only sleep =DECL
## pro.h:s #ac.neg np:p vother:pred =rv % =other v:pred =rv

'He slept without a blanket.' (observed)
```

The last example is illustrated by complementation verb serialization, where one serialized verb takes a clause headed by another verb as its complement. Only complement-taking transitive verbs are involved, where the S or A in the complement, which is always coreferential with the S or A argument in the main clause, must not be overtly expressed.

(33) shi gaw ganu hpe shat shadu garum nga ai.

5 Complex sentences and direct speech

5.1 Subordination and nominalization

The pervasive use and multifunctionality of clausal nominalization are prominent features of Jinghpaw grammar. A nominalized clause can be used not only nominally but also adnominally and adverbially, being exploited to form all the three major types of subordinate clauses: complement clauses, relative clauses (headed and headless), and adverbial clauses. Clausal nominalization is achieved by adding the nominalizer ai to a verb, which also marks the verb citation and declarative mood. Thus, an identical clause may occur as a well-formed main clause, complement clause, headed and headless relative clause, and adverbial clause, as illustrated by elicited examples in (34), respectively.

```
(34)
           shi shat sha ai.
               shi
                         shat sha
                                        =ai
               3sg
                         food eat
                                        =DECL
           ## pro.h:a np:p v:pred =rv
           'He ate food.'
                                                                                           (elicited)
           ngai shi shat sha ai chye ai.
               ngai
                                           shat sha
                                                          =ai
                                                                    chye
                                                                             =ai
               1s<sub>G</sub>
                                 3s<sub>G</sub>
                                           food eat
                                                          =DECL
                                                                    know
                                                                             =DECL
           ## pro.h:a #cc:p pro.h:a np:p v:pred =rv
                                                                 % v:pred =rv
           'I know that he ate food.'
                                                                                           (elicited)
           shi shat sha ai lakung...
                    shi
                              shat sha
                                                        lakung
                                             =ai
                    3s<sub>G</sub>
                              food eat
                                             =DECL
                                                        spoon
           ## #rc pro.h:a np:p v:pred =rv
                                                     % np:s
           'The spoon that he ate food with (is)...'
                                                                                           (elicited)
           shi shat sha ai hte...
                         shi
                                   shat sha
                                                   =ai
                                                             =hte
                         3sG
                                   food eat
                                                  =DECL
                                                             =сом
           ## #rc:obl pro.h:a np:p v:pred =rv
           'With which (spoon) he ate food...'
                                                                                           (elicited)
           shi shat sha ai majaw...
                     shi
                              shat sha
                                             =ai
                                                        majaw
                                             =DECL
                    3sG
                              food eat
                                                        because
           ## #ac pro.h:a np:p v:pred =rv
                                                     % np:other
           'The spoon that he ate food with (is)...'
                                                                                           (elicited)
```

Despite the fact that all the clauses in (34) are headed by the same verb form, we differentiate nominalized (subordinate) clauses from main clauses based on the fact that the former do not exhibit full-fledged properties of main clauses; for example, topic and sentence-final particles never occur within nominalized clauses.

5.2 Complement clauses

Complement clauses, as noted in Section 5.1, are formed by means of clausal nominalization. The beginning of complement clauses is glossed by the clausal operator $\langle \#cc \rangle$, and the end of them by a clause boundary marker $\langle \% \rangle$. Complement clauses may function as the S or P argument, and are thus glossed in the same way as those of other referential expressions. Verbs that have the ability to take nominalized complements may be intransitive verbs from specific semantic classes, such as emotion (e.g. # pyo 'be fun'), difficulty (e.g. yak 'be difficult'), speed (e.g. lawan 'be quick'), and judgment (e.g. teng 'be true'), or transitive verbs from such semantic classes as knowledge and acquisition of knowledge (e.g. ce 'know'), conception (e.g. shadu 'think'), perception (e.g. mu 'see'), fearing (e.g. hkrit 'fear'), preference (e.g. ra 'like'), demonstration (e.g. sharin 'teach'), manipulation (e.g. sharin 'help'), and phrasal aspect (e.g. sharin 'finish'). Examples:

(35) a. jawng sa ai pyaw ai i?

b. marang htu ai gaw ra ai.

Complement clauses, as demonstrated in Section 4.3, can also be formed by means of verb serialization, in which case, suppression of verbal arguments is observed, unlike nominalized complements, which do not exhibit them. Compare:

(36) a. shi gaw ganu hpe shat shadu garum nga ai.

```
shi =gaw ganu =hpe shat shadu
3sG =TOP mother =ACC food cook
## pro.h:a =other np.h:p =rn #cc:p np:p vother:pred %

garum =nga =ai
help =CONT =DECL
v:pred =aux =rv

'He is helping his mother cook food.' (elicited)
```

b. shi gaw ganu shat shadu ai garum nga ai.

5.3 Relative clauses

Relative clauses, as noted in Section 5.1, are formed by means of clausal nominalization. Relativization involves no explicit indication of the relationship between the head noun and the relative clause. A relative clause construction may be analyzed as a simple juxtaposition of a nominalized clause and a head noun. This is supported by the flexible position of a relative clause, as shown below, although a relative clause is most commonly prepositive.

(37) a. grai gaba ai hpun ni moi grai nga ai.

```
grai gaba =ai hpun =ni moi grai
very be_big =NMLZ tree =PL before very

## #rc rel_f0:s other v:pred =rv % np:s =rn other other

nga =ai
be =DECL
v:pred =rv

'There were many trees which had been very big before.' (elicited)
```

b. hpun grai gaba ai ni moi grai nga ai.

'There were many trees which had been very big before.'

(elicited)

The "gapped" argument of relative clauses, as in (37), receive the form gloss $\langle rel_f0 \rangle$ followed by semantic and function glosses depending on the function of the coreferential head noun, which include not only core arguments such as agent, patient, recipient, and theme, but also obliques, such as companion, instrument, material, vehicle, location, source, goal, and so on. Examples from our corpus include:

(38) a. htora lupwa kaw yup ai dai wa gaw dai kaw yup na she...

```
htora
                         lupwa
                                  =kaw yup
                                                           dai
                                                                   wa
                 that
                         cemetery =LOC
                                        sleep
                                                 =DECL
                                                           that
                                                                   man
#rc rel_f0.h:s ln_dem np:1
                                                        % ln_dem np.h:s
                                  =rn
                                         v:pred =rv
                 =kaw yup
=gaw
                               =na
=TOP
       that
                 =LOC sleep
                               =SEQ
=other dem_np:1 =rn
                       v:pred =other =other
'That man who slept at the cemetery slept there and...'
```

[mc_jinghpaw_galang_0058]

b. ngai hpe lup da ai shara kaw nampan langai pu wa na re.

```
=hpe lup
                                                                 shara =kaw
                           ngai
                                                  =da
                                                        =ai
                                                                 place =Loc
                           1s<sub>G</sub>
                                    =ACC bury
                                                  =RES =NMLZ
##ds #rc 0.h:a rel_f0:l pro.1:p =rn
                                         v:pred =aux =rv
                                                                 np:1 = rn
nampan langai pu
                       =wa =na re
flower
        one
               bloom =VEN =IRR COP
np:s
               v:pred =aux =aux other
"'There will bloom a flower at the place where (they) bury me."
```

(KK1-0474_030 in PARADISEC)

The head noun is not always co-referential with an argument or adjunct of the modifying clause. In (39a), for example, the modifying clause expresses the content of the head noun, and thus the head noun cannot be interpreted as an argument or adjunct of the modifying clause. Another example comes from (39b), where the head noun, which is not coreferential with an argument or adjunct of the modifying clause, is characterized in relation to the event described by the modifying clause. These examples show that Jinghpaw is a language with a single construction that covers all ranges of the noun modifying clause expressions, which comes to be called the "general noun-modifying clause construction" (GNMCC) in the literature (Matsumoto et al. 2017). These modifying clauses are "gapless", and we assume no gaps (i.e. $\langle rel_f0 \rangle$) for these examples.

(39)bungli hpe mung a tsawm rai galaw ya mayu ai myit n rawng ai.

```
bungli =hpe =mung atsawm rai
                                                            =ya
                        =ACC =also
                                      well
                                                            =BEN =DESID
                                              other v:pred =aux =aux
##neg #cc 0.h:a np:p
                        =adp =other other
=ai
               myit n-rawng =ai
               mind NEG-have =DECL
=DECL
      % 0.h:a np:p v:pred
'They did not have the mind to want to work for (him).'
```

[mc_jinghpaw_nchyang_0014]

ngai gaw shu ngoi ai nsen na ai re.

```
ngai
            =gaw
                         shu
                               ngoi
                                             =ai
                                                       nsen
                                                              na
                                                                      =ai
   1s<sub>G</sub>
            =TOP
                         frog make_a_noise =NMLZ
                                                       sound hear
                                                                      =DECL
## pro.1:a =other #cc np:s v:pred
                                             =rv
                                                             v:pred =rv
                                                    % np:p
re
COP
other
```

'I heard the sound of a frog making noise.'

(observed)

Jinghpaw also has headless relative clauses whose semantic heads are phonologically null. Headless relatives are similar to nominalized complements in that they have a full constituent structure of clauses, and that they constitute an NP head. The empty semantic head of headless relatives may be virtually any semantic role, for example, agent, patient, companion, instrument, location, goal, cause, and so on. Headless relatives that take on argument positions are referential, and thus receive glosses in the same way as those of other referential expressions.

(40)gaga lusu ai ni mung sa ai.

```
=ai
                                             =ni =mung sa
                    be_wealthy =DECL.NMLZ =PL =also
   other
                                                                  =DECL
                                                          go
## ln_qfr #rc.h:s v:pred
                                          % =rn =other v:pred =rv
                               =rv
'The rich people also went (to the festival).'
                                                       [mc_jinghpaw_ganu_0015]
```

nang mung nang kam ai kaw yup u.

```
nang
                 =mung nang
                                 kam
                                          =ai
                                                 =kaw yup
                                                               =u
     2sg
                 =also
                        2sg
                                 be.willing =DECL =LOC sleep
                                                               =тмр
##ds pro.2:dt_s =other pro.2:s np:1
                                                       v:pred =rv
                                          =rn
                                                 =rn
"'You also sleep where you want!"'
                                                   [mc_jinghpaw_galang_0035]
```

Adverbial clauses 5.4

Adverbial clauses, except afterthoughts, are preposed to or interposed within main clauses. Jinghpaw has two main strategies to form adverbial subordinate clauses: (a) to employ subordinators that directly follow verbs; and (b) to exploit nominalization-relativization as a subordination strategy with a head noun from generic nouns (e.g. ten 'time'), locator nouns (e.g. hpang 'after'), and postpositions (e.g. majaw 'because').

(41) a. ganu gaw grai matsan let sha grai gasha hpe bau maka ai.

```
let
   ganu
           =gaw
                                    matsan
                                                       =sha
                                                                 grai
   mother =TOP
                             very
                                    be_poor
                                                       =onlv
                                                                 very
                                                SIM
## np.h:a =other #ac 0.h:s other vother:pred other =other % other
      =hpe baumaka
                        =ai
       =ACC take_care_of =DECL
np.h:p =rn v:pred
```

'The mother, while being very poor, took good care of her son.'

[mc_jinghpaw_ganu_0005]

b. masusha ai majaw grau pawt mayu mat na...

```
masusha =ai
                             majaw
                                              grau
                                                    pawt
                                                             =mayu
                      =DECL because
                                                    get_angry =DESID
                                              more
                             other % 0.h:s other v:pred
## #ac 0.h:s v:pred
                      =rv
                                                             =aux
=mat
       =na
=COMPL =SEQ
       =other
=aux
```

'Because they lied to him, (he) got even angrier and...'

[mc_jinghpaw_nchyang_0061]

5.5 Direct speech

Direct speech (or thought, content, intention, and so on), unlike the subordinate clauses described above, exhibits full properties of sentences, and is thus treated as a full-fledged sentence, not involving nominalization. Direct speech, as illustrated by (42), is introduced by the lexical verb ngu 'say that'. This quotative verb, when no addressee is involved, is treated as an intransitive verb as in (42a). It is treated as a transitive verb when, as in (42b), an overtly expressed addressee that is marked by an accusative case just like the P argument function (see Section 3.3.1) occurs. Direct speech is not analyzed as a P argument in our corpus, but is treated as independent clauses signaled by a clausal operator $\langle \#ds \rangle$.

(42) a. oi, sa ga ngu ai!

b. u ni wa shi hpe, anhte a mun ni shabai la na ngu nna,...

```
=ni =wa
                       shi
                                =hpe
                                                  anhte
и
                                                                  =a
                                                                        mun
           =PL =TOP
                       3s<sub>G</sub>
                                =ACC
                                                  1pL
np.d:a_ds =rn =other pro.d:p =rn ##ds 0.1:a ln_pro.1:poss =ln
=ni shabai la
                   =na
                                  =nna
                           ngu
=PL return take
                   =IRR
                          say
                                  =SEO
=rn lv
           v:pred =rv % v:pred =other
```

'The other birds (said) to him, "We will take back our feathers!", and...'

[mc_jinghpaw_manau_0029-0030]

Direct speech is also introduced by means of a quotative complementizer ngu. The complementizer, although apparently having a diachronic connection with the quotative verb, is treated as a particle, glossed $\langle other \rangle$, based on the fact that it is followed by other verbs of utterance and conception, including ngu 'say that', and a full syntactic element may be interposed between complementizers and verbs. Example:

(43) madu jan gaw madu wa hpe ndai asi ni yawng hkra di la ga ngu tsun ai da.

```
madu-jan
                     madu-wa
                                  =hpe
                                                   ndai
              =gaw
                                                           asi
                                                                =ni yawng
   host-female =TOP
                     husband-man =ACC
                                                   this
                                                           fruit =PL all
## np.h:a_ds =other np.h:p
                                       ##ds 0.1:a ln_dem np:p =rn rn_qfr
                                  =rn
=hkra di la
                           ngu
                                        =ai
                                               =da
                  =ga
                                 tsun
=until
       cut take
                  =HORT
                           QUOT say
                                        =DECL =HS
=other lv v:pred =rv
                        % other v:pred =rv
```

'The wife said to her husband, "Let us pick all of these fruit," it is said.'

[mc_jinghpaw_hkaili_0082]

5.6 Coordination

Jinghpaw does not have a genuine sentence-level coordinating conjunction. A sequence of events is expressed by co-subordination (Foley & Van Valin 1984), where a sequential particle na ($\sim nna$) is directly added to verbs (or auxiliaries, if any), with only the final verb being marked for aspect and mood. All arguments involving cosubordination can be expressed overtly although often left unexpressed due to their redundancy. A co-subordinate clause, a dependent clause in a strict sense, is simply treated like an independent clause in the Jinghpaw corpus, with its beginning marked by the leftward-boundary marker (##).

(44) a. ngai akatsi sha lagu sa na bai wa na yaw.

```
a-katsi
                             =sha
      ngai
                                     lagu sa
                                                   =na
               ADV-be.silent =ADV
                                                   =SEQ
     1s<sub>G</sub>
                                     steal go
##ds pro.1:s other
                             =other lv
                                         v:pred =other
             hai
                    wa
                            =na yaw
            bai
                    return =IRR =SFP
##ds 0.1:s other v:pred =rv =other
"'I will go silently and secretly and (I) will come back."
```

[mc_jinghpaw_shanngayi_0035]

b. dai kaw rim na sha kau ai da.

```
dai
                          =kaw rim
                                         =na
               that
                          =LOC catch
                                         =SEQ
## 0:a 0.h:p dem_pro:l =rn
                                 v:pred =other
               sha =kau =ai
                                =da
               eat =away DECL =HS
## 0:a 0.h:p eat =aux
                                =other
                         rv
'(The tiger) caught (him) there and (it) ate (him), it is said.'
                                                        (KK1-0265_073 in PARADISEC)
```

Coordinating conjunctions are also expressed by means of the subordinator *yang*, which forms temporal (i.e. 'when') and conditional (i.e. 'if') clauses, as in (45a). This subordinator, often followed by the particle *she* 'then', is further deprived of its semantic content, as in (45b), being merely used to coordinate successive events. In such case, the clause is often simply treated like an independent clause.

(45) a. nanhte ngai hpe nmu yang mung...

b. bai sa yang =she langai mi kaw bai du yang gaw...

```
bai sa yang =she langai mi =kaw bai again go when =then one one =Loc again ## 0.h:a other v:pred other =other ## 0.h:s np.h:g rn =rn other du yang =gaw arrive when =Top v:pred other =other '(They) went further, and (they) again arrived at another person...'
```

(KK1-0265_041 in PARADISEC)

A sequence of events, as shown below, is also encoded by means of serial verb constructions (SVCs). Unlike the abovementioned cases, an SVC is treated as a single clause because serialized verbs form a single predicate. The constraint against role-doubling (Durie 1997), by which a serial verb complex is blocked from containing duplicate roles, that is, two agents, two patients, two instruments, and so on, indicates that an SVC is monoclausal in contrast to the abovementioned biclausal constructions, which allow duplicate roles to occur within them. For more details of SVCs, see Section 6.2 below.

(46) shi na manang-wa hpe sa shaga ai da.

6 Constructions with special features

6.1 External possessor constructions

External possessor constructions are constructions where an NP that is semantically understood as the possessor is coded as a core grammatical relation of the verb (Payne & Barshi 1999). In our corpus, external possessors, as exemplified below, are treated as dislocated phrases.

6 This kind of neutralization between conditionals and temporal clauses, especially with predictive conditionals and future clauses, is cross-linguistically common since, as Thompson et al. (2007: 258) put it, the distinction between temporal and conditional clauses 'is simply one of degree of expectability'.

```
(47) a. shi gaw hkum gaba ai.
```

```
shi =gaw hkum gaba =ai
3sG =TOP body be_big =DECL

## pro.h:dt =other np:s v:pred =rv

'As for him, (his) body is big.' (elicited)
```

b. shi gaw kalang ta nrung mung daw daw re na i.

```
kalangta nrung = mung daw
              =gaw
                                                         daw
                                                                    re
   3sc
             =TOP
                     at_once
                              horn
                                      =also
                                              be_broken be_broken LV
## pro.d:dt =other other
                               np:s
                                      =other nc
                                                         v:pred
                                                                    other
       =i
=na
       =SFP
=SEQ
=other =other
'As for her, her horn was broken at once and, OK?'
```

[mc_jinghpaw_shanngayi_0046]

6.2 Serial verb construction

The pervasive use of serial verb constructions (SVCs), where verbs are serialized productively in a single predicate without any marker of syntactic dependency, is one of the prominent features of Jinghpaw grammar. Serialized verbs are contiguous, and no syntactic elements are interposed between their components. SVCs describe (a) a sequential action, which is expressed by temporally iconic ordering of verbs, where recurrent semantic relationships held between component verbs are consecutivity, means, and cause-effect; and (b) a simultaneously occurring event where component verbs are related in concomitance and manner relationships. Serialized verbs, as a single predicate, receive only one $\langle v:pred \rangle$ gloss, which is given to the last verb in serialization. The remaining verbs preceding it automatically receive $\langle 1v \rangle$, regardless of the head of the serialized verbs. As a result of verb serialization, the argument structures of component verbs are conflated into a single structure, following the constraint against role-doubling (Section 5.6). Overt expressions of duplicate roles are systematically suppressed, and thus, no zeros are assumed for them.

(48) a. dai gwi langai mi masha ni si mat na sa gabai da ai le i.

```
dai
          gwi
               langai mi
                               masha =ni si
                                                    =mat
                                                            =na
                                                                        sa.
          dog
               one
                       one
                               person =PL die
                                                   =COMPL =SEO
                                                                        go
                                                            =other ## lv
## other np:s rn_qfr rn_qfr np.h:a =rn v:pred =aux
gabai
           =da =ai
                               =i
throw.away = RES = DECL = SFP
                              =SFP
v:pred
           =aux =rv
                       =other =other
'(A dog) died and people threw (it) away, OK?'
                                                      [mc_jinghpaw_dwi_0098]
```

b. nmarawn shaga ga.

```
n-marawn shaga =ga
NEG-shout speak =HORT
##neg 0.1:s lv v:pred =rv
'Let's not speak by shouting.' (observed)
```

SVCs, as noted in Section 5.2, are also exploited for complementation strategies. The complementation serialization is asymmetrical (a term from Aikhenvald 2006 in that the last verbs in the serialization are drawn from a subset of complement-taking verbs, for example, *lanyan* 'be slow', *ra* 'like', and *garum* 'help'. SVCs also describe subevents linked by a purposive relationship. In purposive SVCs, as illustrated by (49b), the dependent clause headed by the preceding verb describes the purpose of the following verb in the main clause. Due to the constraint against role-doubling, overt expressions of duplicate roles are systematically suppressed, and, as noted in Section 4.3, no zeros are assumed for them.

(49) a. bugamasha ni gaw gaga kanbaubungli lata yak ai majaw...

```
buga-masha =ni =gaw
                                       gaga kanbau-bungli lata
    local-person =PL =TOP
                                       other living-work
                                                             choose
#ac np.h:dt
                  =rn =other #cc:s ln
                                                             vother:pred %
                                             np:p
yak
           =ai
                  majaw
be_difficult =NMLZ because
v:pred
           =rv
                  np:other
'Because it's difficult for locals to choose other work for a living...'
                                                                       (observed)
```

o. gwi hte rau hpun hta sa na she...

```
gwi =hte rau hpun hta sa =na =she
dog =COM together wood pick go =SEQ =then

## 0.h:a np:other =rn other np:p lv v:pred =other =other

(He) went to gather firewood with (his) dog and...' [mc_jinghpaw_dwi_0113]
```

6.3 Tail-head constructions

Tail-head linkage (THL) is a discourse strategy to connect clause chains by recapitulating the last clause of a chain at the beginning of the next chain (de Vries 2005). THL is also attested in Jinghpaw narrative text. Consider examples (50a) to (50c), which are successively occurring sentences in the same narrative, where every final clause is repeated in the first clause of the next chain to ease processing and/or to carry out discourse-structuring functions, such as referential coherence. The recapitulation, as seen below, is often done partially. We assume zeros in tail clauses in our Jinghpaw corpus.

```
(50) a. dai magam gaw num la sai
```

```
dai magam = gaw num la = s-ai
that first.born.son = TOP woman take = CSM-DECL
ln_dem np.h:a = other np.h:p v:pred = rv

'The first-born son got a wife.' [mc_jinghpaw_hkaili_0031]
```

b. num la na she nga rai yang she, dai shan nau hkai da ai hpun dai mung kaba wa sai.

```
la
                                   =she
           num
                           =na
                                                       nga
                                                                      yang
           woman take
                           =SEQ
                                   =then
                                                       live
                                                                      when
  0.h:a np.h:p v:pred =other =other ## 0.h:s v:pred other other
=she
           dai
                              shan
                                     nau
                                             hkai
                                                     =da =ai
                                                                         hpun
=then
           that
                              3<sub>DU</sub>
                                     brother plant
                                                     =RES =DECL.NMLZ
                                                                         tree
=other ## nc
               #rc rel_f0:p ln_np np.h:a v:pred =aux =rv
                                                                       % np:s
dai
        =mung kaba
                       =wa =s-ai
that
               be.big =VEN =CSM-DECL
rn_dem =other v:pred =aux =rv
'(He) got a wife and (they) lived and the tree they planted also became big.'
                                                [mc_jinghpaw_hkaili_0032-0033]
```

c. kaba wa na she...

```
kaba =wa =na =she
be.big =VEN =SEQ =then
## 0:s v:pred =aux =other =other
'(It) became big and...'
```

[mc_jinghpaw_hkaili_0034]

6.4 Phrase or clause repetition

Repetition of phrases and clauses prevails in Jinghpaw narrative texts. It, as illustrated by (51a), contributes to an iconic meaning associated with concepts such as iterativity and durativity. Repetition also performs the function of reinforcing communication, as in (51b), where the speaker repeats the command to ensure the hearer's attention. Repeated constructions are counted only once following Bickel (2003), and leaving others glossed (nc) (i.e. 'non-classified').

(51) a. hkawm hkawm hkawm re she...

```
hkawm hkawm hkawm re = she
walk walk LV = then

## 0.h:s nc nc v:pred other = other

'(He) walked, and walked, and walked, on and on...' [mc_jinghpaw_dwi_0157]
```

b. mare dai kaw wa she masha kadai n-nga taw-nga ai da, masha kadai mung n-nga taw-nga ai.

```
masha kadai n-nga
      mare
            dai
                    =kaw = wa
                                 =she
                                                              =taw-nga
                    =LOC =TOP
      village that
                                 =then
                                        person who
                                                    NEG-live =CONT-CONT
##neg np:1
            rn_dem =rn
                         =other =other np.h:s rn_np v:pred =aux
                  masha kadai =mung n-nga
=ai
      =da
                                              =taw-nga
                  person who
                              =also
                                      NEG-live =CONT-CONT =DECL
=DECL =HS
      =other #nc nc
                        nc
                              nc
                                              nc
```

'No one lived in the village, it's said. No one lived in the village.'

[mc_jinghpaw_galang_0012-0013]

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Appendices

A List of corpus-specific GRAID symbols

The following is a list of the non-standard GRAID symbols used in the annotation of the Multi-CAST Jinghpaw corpus. Please refer to the *GRAID manual* (Haig & Schnell 2014: 54–55) for an inventory of basic GRAID symbols.

Form symbols and specifiers

 $\langle rel_f0 \rangle$ gapped constituent in a relative clause

⟨dem_pro⟩ demonstrative pronoun

(pn_np) proper name

⟨dem_other⟩ other demonstratives

Function symbols and specifiers

⟨:s_ds⟩ subject of a verb of speech, intransitive

Subconstituent symbols

 $\begin{tabular}{ll} $\langle _adj \rangle$ & attributive adjective; attaches to $\langle 1n \rangle$ and $\langle rn \rangle$ \\ $\langle _dem \rangle$ & demonstrative determiner; attaches to $\langle 1n \rangle$ and $\langle rn \rangle$ \\ \end{tabular}$

 $\langle qfr \rangle$ qualifier; attaches to $\langle ln \rangle$ and $\langle rn \rangle$

Other symbols

⟨nc_⟩ specifier: marks form glosses with RefIND indices in segments otherwise

not considered (i.e. those marked (#nc))

B List of abbreviated morphological glosses

1	first person	INTJ	interjection
2	second person	INTNS	intensifier
3	third person	IRR	irrealis
ABL	ablative	KIN	kinship
ACC	accusative	LOC	locative
ADV	adverbializer	LV	light verb
AGT	agentive	NEG	negative
ALL	allative	NMLZ	nominalizer
BEN	benefactive	ONOM	onomatopoeia
CAUS	causative	PL	plural, pluralizing clitic
CLF	classifier	POS	possibility
COM	comitative	PROH	prohibitive
COMPL	completive	Q	question
CON	conative	QUOT	quotative
CONT	continuous	RECIP	reciprocal
CONTR	contrastive	RED	reduplicant
COP	copula verb	RES	resultative
COUP	couplet	SEQ	sequential
CSM	change-of-state marker	SFP	sentence-final particle
DECL	declarative	SG	singular
DESID	desiderative	SIM	simultaneous
DU	dual	SUPER	superlative
EMPH	emphatic	TERM	terminative
EXCL	exclamative	TOP	topic
EXP	experiential	VEN	venitive
GEN	genitive	VEN	verifitive
HORT	hortative	NO	not classifiable
HS	hearsay	NC	ווטו נומסטווומטופ
IMP	imperative		



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