

A Progress Report on Sumbawa Annotated-spoken Corpus: Tentative Annotation Notes

SHIOHARA, Asako

ILCAA, Tokyo University of Foreign Studies

This paper is intended as a progress report on an on-going project of developing an annotated corpus of spoken texts from Sumbawa. It is being developed as part of a larger multi-lingual corpus called Multi-CAST (Multi-lingual Corpus of Annotated Spoken Texts, Schiborr 2016). A common glossing system called GRAID (Grammatical Relations and Animacy in Discourse, Haig and Schnell 2014) is employed in the Multi-CAST corpus, and the main part of this paper is devoted to the notes explaining how the GRAID system is applied to the Sumbawa corpus. As GRAID is a system for glossing major clause constituents in texts with their grammatical relations and overt forms (noun phrases, pronouns etc.), and aims at facilitating cross-linguistic research in corpus-based typology, the present paper also provides a brief sketch of Sumbawa morpho-syntax, based on its spoken corpus.

Keywords: Sumbawa, GRAID annotation, agreement, corpus-based grammar, argument structure

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1. Introduction

Sumbawa (indigenous designation: Samawa; ISO-639-3 code: SMW) is a Western Austronesian language spoken in the Western part of Sumbawa Island, Indonesia. Administratively, the area belongs to two districts, namely Sumbawa district (Kabupaten Sumbawa) and West Sumbawa district (Kabupaten Sumbawa Barat), in the province of West Nusa Tenggara¹ (NTB: Nusa Tenggara Barat). Sumbawa belongs to the Bali-Sasak-Sumbawa subgroup of the Malayo-Polynesian branch of the Austronesian language family (Adelaar 2005, Mbetje 1990).

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¹ Nusa Tenggara means 'Southeast' in Malay.

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The structure of this paper is as follows. In section 2, I will explain the source of the data included. In Section 3–6, a tentative version of annotation notes is given; I survey the clause types and structures in Section 3, in Sections 4 and 5, I examine how referential expressions and the constituents of the predicates can be glossed by GRAID conventions, respectively. In Section 6, I will investigate the types of subordinate clauses and how these clauses and direct speech are glossed by GRAID conventions.

Each example cited from our corpus consists of four lines; the first line shows the Sumbawa sentence², the second line shows word-by-word glosses, the third line shows the GRAID annotations, while the fourth line shows the free translations. The list of symbols employed in the GRAID convention is given in the appendix of Schnell and Schiborr (2018).

2. Data included in the corpus

The corpus is a collection of spoken monologues obtained by the present author in 1996 and 1997 from speakers living in Empang, a small town in the eastern part of the Sumbawa district. According to Mahsun (1999), the language spoken in the town is classified as the Sumbawa Besar dialect, which is distributed in a large area of the western part of the Sumbawa-spoken area. At present, the data comprise the five folktales listed below. The forms in parenthesis are used to code the source of each example sentences in sections that follow.

- Tanjung menangis ‘Weeping Cape’ <TM>
- Batu nampar ‘A flat stone’ <FS>
- Tutir Lalu Kurekkure ‘The story of Prince Kurekkure’ <LK>
- Tutir *ba*³ ‘A story of a flood’ <flood>

² The transcription employed here basically follows the orthography of Indonesian, using the following conventions: ng for [ŋ], ny for [ɲ], c for [tʃ], j for [dʒ], y for [j], and e for [ə]. There are also some additional distinctions in the transcription of some vowels, as in open-mid unrounded front vowel è [ɛ], the close-mid unrounded front vowel é [e], a the open-mid rounded back vowel o [ɔ], and the close-mid rounded back vowel ó [o]. An apostrophe (') in the word final is used to show stress when it is heavier than usual.

³ The word *ba* means a flood in Sumbawa.

- Sajara Samawa ‘A history of Sumbawa’ <history>

The annotation notes given in the following sections are mainly based on the five stories mentioned above. Sentences from another source, however, are cited in Section 5.2, to display a pattern that is not found in the stories above but is often observed in daily conversation.

3. Overview of clause structures

Clauses in Sumbawa may be grouped into two types: verbal clauses (See Section 5.1) and non-verbal clauses (See Section 5.2). A verbal clause has a verbal predicate while a non-verbal clause has a non-verbal predicate as the clause head. In both types, the predicate is the only obligatory constituent. Arguments may not occur when the referent is inferable from the discourse context, as seen in Sentences (3b) and (4c,d) below. Sentences (1) and (2) are examples of non-verbal clauses. Sumbawa does not have a copula; the argument and the predicate are simply juxtaposed in a non-verbal clause. An argument may occur either before or after the predicate. In Sentence (1), the argument, which is glossed by the symbol <np:s> (S argument realized as an NP) follows the predicate, which is glossed by the symbol <np:pred> (a predicate realized as an NP), while in Sentence (2), the argumen precedes the predicate.

- (1) *yanansi penyakit berong singin.*
 that.is disease leprosy name
 ## other np:pred rn np:s
 ‘That is, the name is leprosy disease.’ (TM007)
- (2) *cowèk singin talang tau dunung’.*
 cowek name dish people before
 ## np:s np:pred rn rn rn
 ‘Cowek is a name of dish of people of long time ago.’ (BL: 053)

Sentences (3) and (4) are examples of verbal clauses. The single intransitive argument (S) may either follow the predicate as seen in (3f) or precedes the predicate, as seen in (3a). Similarly, the patient (P) may either follow the predicate as seen in (3c) and (3e), or precedes the predicate, as seen in (4b). The core arguments for the transitive agent (A) precedes the predicate, as seen in sentence (4a). The transitive agent may be expressed in the PP with the preposition *ling* ‘by’, as seen in *ling lala* in sentence (d). A PP with the preposition *ling* ‘by’ always follows the predicate.

- (3) a. *tapi tau ta nongka bernang,*
 but person DEM_P NEG.PST stop
 ##neg⁴ other np:s rn lv v:pred

⁴ A clause boundary is marked by the symbol <#> in the GRAID convention. Main clauses are marked by the symbol

- b. *teris* *si*,
 go.on DM
0:h:s v:pred rv
- c. *ya=surung* *sampan ta*,
 3=push boat DEM_P
pro.h:a=v:pred np:p rn
- d. *ya=turit* *ling lala*,
 3=follow by princess
0.h:p pro.h:a=v:pred adp np.h:dt_a
- e. *dapat* *tenga*,
 arrive middle
0.h:a v:pred np:p
- f. *balawas* *mo tau ta*.
 recite.a.poem DM person DEM_P
v:pred rv np:s rn

‘But the person didn’t stop, (he) went on. He pushed the boat. The princess followed. Arriving in the middle (of the sea), the person recited a poem.’ (TM062–064)

- (4) a. *sópó waktu ina tuja padé*,
 one time mother pound rice
other other np.h:a v:pred np:p
- b. *anak ya=satokal pang bao Batu Langlélo ta*,
 child 3=sit at above stone Langlelo DEM_P
np.h:p pro.h:a=sit adp np:l rn rn rn
- c. *nó.poka basebó*,
 not.yet have.breakfast
##neg 0.h:s lv v:pred
- d. *nó.poka mangan*,
 not.yet eat
##neg 0.h:s lv v:pred
- e. *karing beling mo anak*.
 then say DM child
other v:pred rv np:s

‘One day, the mother was pounding rice. (She) sat the children on the Langlelo Stone. (They) had not had breakfast, (they) had not had eaten. Then the children said.’ (FS006–009)

(#), while independent clauses are marked by an additional symbol for distinguishing the types of clause (e.g., #ac for an adverbial clause, and #cc for a complement clause). See the appendix of Schnell and Schiborr (2018) for details.

The relative order of the predicate and the argument is, to a larger extent, determined by the information structure of the clause, the details of which we will not discuss further here. When an A argument and a P argument co-occur before the predicate, the A argument always is rendered by the clitic pronoun, and the P argument precedes it, as seen in (4b).

4. Referential expressions

Glossing of referential expressions is a fundamental part of GRAID annotations. This section, following Haig and Schnell (2014), explores Sumbawa referential expressions.

4.1. Forms of referential expressions

In Sumbawa, as seen in Section 3, core arguments may not occur when the referent is inferable from the discourse context. The symbol $\langle \emptyset \rangle$ is employed to code such core arguments. As seen in 4.1.2 below, A and S function may be coded by a clitic pronoun, which is given the symbol $\langle \text{pro}=\rangle$, as well as free form, which is given the symbol $\langle \text{np} \rangle$ or $\langle \text{pro} \rangle$, depending on whether it is a lexical NP or a pronoun.

4.2. NP

In GRAID annotations, the symbol $\langle \text{np} \rangle$ is given to so-called lexical NPs, or what in literature is labelled ‘lexical mention/expression’, etc. (Du Bois 1987, Haig and Schnell 2014). In sentence (5), the symbol $\langle \text{np} \rangle$ is given to the NP headed by a common noun, while, in Sentence (6) and (7), it is given to the NP headed by the proper noun—such as the personal name *Kerekkure* in sentence (6) or the place name *Berangkorong* in sentence (7).

(5) *menong' soara ta ling bidadari pitu ta.*
listen voice DEM_P by fairy seven DEM_P
\emptyset .h:a v:pred np:p rn adp np.d:dt_a rn rn
‘The seven fairies heard the voice.’ (LK039)

(6) *ada sópó tau, basingin Lalu KerèkKurè.*
exist one person be.named prince Kerekkure
v:predex np:s rn ## \emptyset .h:s v:pred ln np:other
‘There was a man named Lalu Kurekkure.’ (LK001)

(7) *Dadap nan bakatokal pang Berangkorong.*
Dadap DEM_M be.located in Berangkorong
np:s rn v:pred adp np:l
‘Dadap is located in Berangkorong.’ (LK003)

In GRAID, glosses are aligned with grammatical words, but they essentially trigger clause level constituent phrases that may in turn have more than one constituent word.

For complex NPs, the form gloss ⟨np⟩ is written underneath of the head noun, and the symbol ⟨ln⟩ (NP-internal subconstituent occurring left of the verb) or ⟨rn⟩ (NP-internal subconstituent occurring right of the verb) is written underneath of other NP-internal sub-constituents—excluding possessors which are specified for their own function by the symbol ⟨poss⟩—depending on their relative position to the head. In Sumbawa, the head noun almost always occurs in the NP initial position followed by adnominal demonstratives, adjectives, and another lexical noun (if any), which are glossed as ⟨rn⟩. The only exception is the article, which is glossed by the symbol ⟨ln⟩, that indicates the gender or status of a personal name. The default articles are *si*, which is used for a female referent, and *nya*, which is used for a male referent. Other articles include *Lalu* ‘prince’, as seen in Sentence (6). Numerals may either be the head noun or the post-head noun modifier (⟨rn⟩) according to the information status of the referent of the whole NP; when the referent is newly introduced in the discourse, the numeral occurs as a head noun, as in *sópó tau* ‘one person’ in Sentence (6), otherwise, the lexical noun occurs as a head noun, as in *bidadari pitu* ‘seven fairies’ in Sentence (5)⁵. Interrogative pronouns are also glossed with the form gloss ⟨np⟩ when they head NPs, since they are not since these are not ‘definite pronoun’ in the sense of Lyons (1968: 275ff). Reduplicated forms of interrogatives expressing indefinite referent(s) are glossed with the gloss ⟨np⟩, too. Table 1 shows the list of interrogative pronouns and its reduplicated form.

Table 1 Interrogative pronouns and their reduplicated forms

| categories | forms | reduplicated form |
|------------------|------------------------|--|
| person | <i>sai</i> ‘who’ | <i>sai-sai</i> ‘anyone, whoever’ |
| thing | <i>apa</i> ‘what’ | <i>apa-apa</i> ‘anything, whatever’ |
| time | <i>pidan</i> ‘when’ | <i>pidan-pidan</i> ‘anytime, whenever’ |
| amount or number | <i>pida</i> ‘how many’ | <i>pida-pida</i> ‘any or many number’ |
| manner | <i>mé</i> ‘how, which’ | <i>mé-mé</i> ‘however, whichever’ |

Sentence (8) is an example of *sai-sai* ‘whoever’, and Sentence (9) is an example of *pida-pida* ‘many numbers’.

| | | | | | | | |
|-----|------------|-------------------|------------|-----------|-----------------|----------------|---------------|
| (8) | <i>isi</i> | <i>pengumuman</i> | <i>nan</i> | <i>nè</i> | | <i>sai-sai</i> | |
| | content | announcement | that | ITJ | | whoever | |
| ## | np:s | rn | | rn other | #ds_cc:pred | np.h:p | #rc |
| | <i>adè</i> | <i>bau</i> | | | <i>saterang</i> | <i>anak</i> | <i>kaku</i> % |
| | REL | can | | | heal | child | 1SG.GEN |
| | 0.h:s | other | v:pred | #cc 0.h:a | v:pred | np.h:p | pro.1:poss %% |

⁵ We might be able to see the lexical noun is always the head and the position of the head noun relative to the modifier changes depending on the information structure. I don’t take the analysis, however, because the numerals may form an NP by themselves (e.g., *ada dua* [exist two] ‘There are two (things, people).’), playing a role as a head noun, and that supports the analysis that the numeral is the head noun in an example such as Sentence (6).

lamin sawai % ku=ètè < ... >
 if female 1SG=take

#ds_ac 0.1:s other v:pred % pro.1:a=v:pred

‘The content of the announcement was “whoever who could heal my child, if she is female, I would take (her) (as my daughter)” ...’ (TM011)

- (9) *pida-pida mo kena laló ngènèng tulung.*
 many.numbers DM distination go ask.for help
 ## np:pred rv np:s #rc 0.h:a v:other v:pred np:p
 ‘(She) went to many places asking for help. (*lit.* The destinations to which (she) went asking for help are many.)’ (FS071)

In conjunctive coordination of NPs, the form gloss <np> is given to the first co-ordinant, and other co-ordinants to its right are glossed with the form gloss <rn>. Coordination within an NP is marked by the coordinator *ké* ‘and’.

- (10) *dadi pengumman ta ya=menong mo ling*
 then announcement DEM_P 3=hear DM by
 ## other np:p rn pro.h:a=v:pred rv adp
sandro-sandro pang tana Samawa ké sandro-sandro pang kerajaan lin.
 doctor.RED in land Sumbawa and doctor.red in kingdom line
 np.h:dt_a rn rn rn rn rn rn rn rn rn
 ‘Then the doctors in Sumbawa and doctors in other kingdoms heard the announcement.’ (TM014)

4.2.1. Pronouns

The gloss <pro> is used for personal and demonstrative pronouns. Examples of personal pronouns include:

- (11) *aku tedu ké kau.*
 1SG stay with 2PL
 ## pro.1:s v:pred adp pro.2:obl
 ‘I stay with you.’ (LK200)

The distinction between a free pronoun and a clitic pronoun is observable in Sumbawa. Table 2 shows a list of clitic and free pronouns. There is no distinction between singular and plural in the third person. The third person clitic *ya=* occurs only with a transitive verb.

Table 2 Sumbawa free and clitic pronouns

| | Free pronoun | Clitic pronoun |
|----------|-----------------|-------------------|
| 1SG | <i>aku</i> | <i>ku=</i> |
| 1PL.INCL | <i>kita</i> | <i>tu=</i> |
| 1PL.EXCL | <i>kami</i> | <i>tu=</i> |
| 2SG | <i>kau</i> | <i>mu=</i> |
| 2PL | <i>nènè</i> | <i>nènè=</i> |
| 3 | <i>nya</i> | <i>*ya=</i> |

*The third person clitic occurs only with a transitive verb.

In addition to the forms shown in Table 1, the humble form *kaji* ‘1SG.HBL’ and the honorific form *sia* ‘2SG.HON’ are used when the addressee is of a higher social status than the speaker, and a special humble form for the first person *kajulin* and a special honorific form for the second person singular *kelépé* and *kelépé-kaji* are used when the addressee is a member of the nobility. Distinction in form between the free pronoun and the clitic pronoun are not exhibited in all these forms.

A free pronoun is used as an argument or the complement of a preposition, while a clitic pronoun is either procliticized to the verb indicating the person of the transitive agent (A) or the single argument of an intransitive predicate (S), or encliticized to the noun indicating the person of the possessor. In Sentences (12)–(14), the clitic pronouns of the first person singular, the first person plural, and the second person singular attached to the verb, respectively.

- (12) *ao’ anak é ta po muntu*
 ITJ child ITJ DEM_P DM time
 ##ds 0.1:s other np:voc other pro:pred rn np:s #rc:rn
ku=nepé.
 1SG=winnow
 pro.1:s=v:pred
 ‘Ok, children, just now (finally) I am winnowing rice.’ (FS023)
- (13) *ka mo suda tu=tuja padé ta*
 PST DM finish 1PL=pound rice DEM_P
 ##ds 0.h:s lv lv v:pred #cc pro.1:a=v:pred np:p rn ##
ta muntu tu=tepé.
 DEM_P time 1PL=winnow
 pro:s np:pred #rc 0:p pro.1.a=v:pred
 ‘We have finished ponding rice now, now is the time for us to winnow.’ (FS024)
- (14) *dadi, ao, ba mu=tedu ninta mo*
 then ITJ ITJ 2SG=stay here DM
 ##ds_pred other other other pro.2:s=v:pred pro:l other

ling.
words
np:s

‘Then (she) said, ‘you just stay here. (*lit.* Then (her) words were ‘you just stay here.’)’ (KK: 062)

In Sentence (11) above, the S argument is rendered by a free pronoun. In sentence (15) below, the free form of the first person pronoun occurs as a P argument, while in sentence (16), the free pronoun occurs as an A argument.

- (15) *ta* *luk* *anak* *ta* *é,*
 DEM_P way child DEM_P ITJ
##ds pro:s np:pred np.h:voc pro.rn other ##
ma=mu=bada *aku* *tegas* *ling* *kau* *nan.*
let=2SG=tell 1SG meaning by 2SG DEM_M
pro.2:a:v:pred pro.1:p np:p2 adp pro.2:dt_a rn
‘This is the way, boy, please tell me the meaning (*lit.* I hope you would tell me the meaning.)’ (flood)

- (16) *kasuda* *nya* *sedo'* *lamong,* *maning.*
 then 3 remove clothes take.a.bath
other pro.h:a v:pred np:p ## Ø.h:s v:pred
‘Then she removed the clothes and took a shower.’ (LK030)

A complex distribution is observed as to the form that indicates the possessor within an NP. Either a special possessive form *kaku* ‘1poss’ or the clitic *ku* is used for the first person singular, while both forms can appear as the possessor constituent in the other categories that exhibit the distinction of the clitic form and free form, that is, the first person plural and second person singular.

Table 3 Forms of pronoun expressing possessors

| Categories | Forms and examples |
|-------------|--|
| 1SG | the clitic <i>ku</i> and the possessive form <i>kaku</i> (e.g., <i>anak=ku</i> ‘my child’ and <i>anak kaku</i> ‘my child’) |
| 1PL and 2SG | the clitic <i>tu</i> or <i>mu</i> and the free forms <i>kita/kami</i> and <i>kau</i> (e.g., <i>anak=tu</i> ‘our child’, <i>anak kami</i> ‘our child’, <i>anak=mu</i> ‘your (sg) child’, <i>anak kau</i> (sg) ‘your child’) |
| Others | The form <i>nya</i> is invariably used. (e.g., <i>anak nya</i> ‘his/her/their child’) |

Demonstratives, when they head NPs, are glossed as <dem_pro>. They exhibit three-fold distinctions, as shown below, based on the relative distance of a referent from the speaker and the addressee. Each category exhibits a distinction of the basic form and the nominalized form, which are derived with the form *dè*, which is the short

form of the relativiser *adè*. Roughly speaking, the basic form refers to a situation or manner, while the nominalized form refers to entities, that is, things or people.

Table 4 Forms of pronoun expressing possessors

| Categories | Forms and examples |
|---------------------------------|---|
| <i>ta/dèta</i> | nearer the speaker than the addressee |
| <i>nan/dènan</i> or <i>dèan</i> | nearer the addressee than the speaker |
| <i>ana/dena</i> | distant from both the speaker and the addressee |

4.2.2. Zero

As mentioned in Section 3, the predicate is the only obligatory constituent in a Sumbawa clause. Arguments are often not overt when the referent is inferable from the discourse context. The symbol $\langle \emptyset \rangle$ is used to code unexpressed argument. Since core-arguments, as noted in Section 3, occur either before or after the predicate according to the information status, the symbol $\langle \emptyset \rangle$ are put in the beginning of the clauses as a rule. I will return to this point in 4.4.1, where I will discuss the core argument functions.

4.3. Animacy and person of referential expressions

The symbol $\langle d \rangle$, which marks anthropomorphized referent in the GRAID convention, is employed for animals when they are personified; it often happens in folktales, as seen in Sentence (17).

- (17) *laló gagak ga... ga... % léng gagak*
 go crow ga ga words crow
 ## v:pred np.d:s #ds:pred other other % np:s np.d:poss
keliong batu ta ling gagak.
 go.around stone this by crow
 ## \emptyset .h:a v:pred np:p rn adp np.d:dt_a

‘The crow went. The crow said (*lit.* the crow’s words are) ‘Ga..., Ga...’ The Crow flew around the stone.’ (FS064)

4.4. Function of referential expressions

4.4.1. Core argument function

S argument may occur either before or after the predicate. It may be pro-cliticized as seen in sentences (12) and (14) above. A argument may occur only before the predicate. It also may be pro-cliticized as seen in sentence (13) above. As seen in sentences (3d), (5), and (10), a transitive agent may be rendered by the PP with the preposition *ling* ‘by’, which always occurs after the predicate; the function of the PP is glossed by the symbol $\langle dt_a \rangle$. It may co-occur with a clitic pronoun, as seen in sentence (3d).

P argument may occur either before or after the predicate. It always occur in unmarked NPs, as seen in sentences in (4a) and (4b); it never cliticized to the verb.

4.4.2. Non-core argument function

The three symbols, namely ⟨g⟩: goal, ⟨l⟩: locative, and ⟨oblique⟩ are used to encode the non-core argument function.

4.4.2.1. Goal

In Sumbawa, a goal argument of a verb of motion occurs as a complement of the preposition *lakó* ‘to’ or *kó* ‘to’.

- (18) *ya=mólé lakó tana Makasar.*
 FUT=return to land Makasar
 ## 0.h:s v:pred adp np:g rn
 ‘(He) will return to the land of Makasar.’ (TM058)

- (19) *ba silamo tu=lalo kó bao bangsa kita*
 ITJ please 1PL=go to above ship 1PL
 ## other other pro.1:s=v:pred adp np:g rn pro.1:poss
ta, bangsa kami ta.
 DEM_P ship 1PL DEM_P
 rn np:appos pro.1:poss rn
 ‘Let’s go onto our ship.’ (history069)

A recipient argument of a verb of transfer also may occur as a complement of the preposition *lako* ‘to’, and therefore glossed by the symbol ⟨g⟩.

- (20) *lalo mo antat lala ta lakó*
 go DM bring princess DEM_P to
 ## 0.h:s v:pred other ## 0.h:a v:pred np:h:p rn adp
kerajaan.
 kingdom
 np:g
 ‘(He) went and took the princess to the kingdom.’ (TM050)

- (21) *mudi nó sia=bau’ antat mèn nan*
 later NEG 2SG.HON=can bring rice DEM_M
 ## other lv pro.2:a=v:pred #cc 0.2:a v:pred np:p rn
kó kami ta.
 to 1PL DEM_P
 adp pro.1:g rn
 ‘Later you cannot bring the rice to us.’ (FS: 022)

As for the verb *bèang* ‘give’, two patterns are found in our corpus; a recipient argument occurs either in an unmarked NP, as in Sentence (22) or as a complement of the preposition *lakó* ‘to’, as in Sentence (23). In Sentence (22), the recipient NP is

glossed by the symbol ⟨p⟩ and the theme NP is glossed by the symbol ⟨p2⟩, based on Haig and Schnell (2014: 16).

- (22) *nampo ku=bau bèang nènè mè.*
 then 1SG=can give 2PL rice
 ## other pro.1:a=v:pred #cc 0.1:a v:pred pro.2:p np:p2
 ‘Then I can give you(PL.) rice.’ (fl: 015)
- (23) *lamin kalèpè bèang ijin lakó kajulin lah.*
 if 2SG.HON.(special) give permission to 1SG.HBL ITJ
 #ac other pro.2:a v:pred np:p adp pro.1:g other
 ‘If you give the permission to me, you know.’ (TM027)

An addressee of the speech is expressed by the P argument of the verb *bada* ‘tell’ in an unmarked NP as seen in Sentence (24).⁶ In such an example, the addressee NP is glossed by the symbol ⟨p⟩ and the theme NP is glossed by the symbol ⟨p2⟩, based on Haig and Schnell (2014: 16).

- (24) *ta luk anak ta è,*
 DEM_P way child DEM_P ITJ
 ##ds dem_pro:s np:pred np.h:voc rn other ##
ma=mu=bada aku tegas ling kau nan.
 let=2SG=tell 1SG meaning by 2SG DEM_M
 pro.2:a=v:pred pro.1:p np:p2 adp pro.2:dt_a rn
 ‘This is the way, boy, please tell me the meaning (*lit.* (I) let you tell me the meaning.)’ (flood)

4.4.2.2. Locative

A locative argument typically occurs as a complement of the preposition *pang* ‘at,

⁶ In other source, such as Jonker (1934), however, examples of the verb *beling* ‘say’, in which an addressee constituent occurs as a complement of the preposition *lakó* ‘to’ or *ké* ‘with’ are found, as in (i) and (ii), respectively. Such constituents can be considered as goal arguments, which should be glossed by the symbol ⟨g⟩.

- (i) a. *dadi beling Salam lakó guru mè ké gula ké nyir*
 then say Salam to teacher rice or sugar or coconut
 # other v:pred np.h:s adp np.h:g #ds np:p other rn rn rn
tu=bèang.
 1PL=give
 pro.1:a=v:pred
 ‘Then Salam said to (his) teacher, ‘Shall we give rice, sugar or coconut (to the dog)?’ (Jonker 1934: 214)
- b. *dadi beling nya Salam ké sowai è lalo basió*
 then say Mr. Salam with wife ITJ go hide.onself
 # other v:pred ln np.h:s adp np.h:g ##ds other v:other v:pred
kau lèma.
 2SG quickly
 pro.2:s other
 ‘Then Salam said to (his) wife, ‘Ah, go and hide yourself quickly.’ (Jonker: 222)

in', as seen in sentences (25) and (26) or as an NP attached with nasal prefix 'N-' that is homorganic to the initial sound of the NP, as seen in sentence (27). It also includes a source, which occurs as a complement of the preposition *kaling* or *kalis* 'from', as seen in sentence (28) and (29).

- (25) *ada* *mo* *sopo* *kerajaan* *pang* *tana* *Samawa* *ta.*
 exist DM one kingdom at land Sumbawa DEM_P
 ## v:predex other np:s np:rn adp np:l rn rn
 'There was a kingdom in Sumbawa.' (TM002)

- (26) *anak* *ya=satokal* *pang* *bao* *Batu* *Langlelo* *ta.*
 child 3=sit at above stone Langlelo DEM_P
 ## np.h:p pro.h:a=v:pred adp np:l rn rn rn
 'She sat the children onto the Langlelo Stone.' (fl007)

- (27) *óló'* *mo* *n=dalam* *cowèk* *mè* *ta.*
 put DM at=inside clay.dish rice DEM_P
 ## Ø.h:a v:pred other adp=np:l rn np:p rn
 '(She) put the rice in the clay dish.' (fl067)

- (28) *tu=ètè* *pènèk* % *tu=ètè* *pènèk* % *datang* *mo*
 1PL=take short 1PL=take short % come dm
 ##ac pro.l:s=v:pred rn % nc nc % v:pred other
sandro *kaling* *ano-siup* *adè* *ya⁷=saterang* *lala*
 doctor from east rel FUT=cure princess
 np.h:s adp np:l #rc Ø.h:a other v:pred np.h:p
ta.
 DEM_P
 rn
 'To put it briefly, the doctor who are going to cure the princess came from the east.'
 (TM017)

- (29) *lis* *mo* *ina* *nya* *Lalu* *KerékKuré* *ta* *é*
 go.out DM mother Mr. Prince KurekKure DEM_P ITJ
 ## v:pred other np.h:s ln ln np.h:poss rn other
kalis *dalam* *balé* *ta.*
 from inside house DEM_P
 adp np:l np:poss rn
 'The mother of Prince KurekKure went out from the house.' (KK: 063)

4.4.2.3. Oblique

In Sumbawa corpus, instrumental and commutative, both of which occur as a complement of the preposition *ké* 'with' are glossed by this symbol.

⁷ The clitic *ya=* 'FUT' is homonymous to the third person clitic *ya=*, which was introduced in section 4.2.1.

- (30) *tapi lamin salaki % ku=sukat*
 but if male 1SG=marry
 ## other #ac 0.h:s other male % 0.h:p pro.1:a=v:pred
ké anak kaku.
 with child 1SG.POSS
 adp np:obl pro.1:poss
 ‘But if (he is) male, I will marry (him) with my child.’ (TM013)
- (31) *ya=paning ké ai’.*
 3=give.shower with water
 ## 0.h:p pro.h:a=v:pred adp np:obl
 ‘(He) gave (her) a shower with water.’ (TM042)
- (32) *ai ta bacampir ké geti.*
 water DEM_P mixed with blood
 ## np:s rn v:pred adp np:obl
 ‘The water was mixed with blood.’ (TM043)

4.4.3. Dislocated topic

As mentioned in 4.4.1, the PP with the preposition *ling* ‘by’ indicating an agent is treated as a dislocated topic. (See example (3d).) In addition to that, a dislocated topic may correspond to various relations expressed in the clause that follows. In example (36), the dislocated topic *pantèk* is co-referential to the S argument *nya*.

- (33) *pantèk ta, nya singin colo’ tau dunung’.*
 flint this 3 name match person before
 ## np:dt_s rn dem_pro:s np:pred np:poss np:poss rn
 ‘Pantek, it is (*lit.* the name of) flint of people long time ago.’ (FS032)

The dislocated topic may correspond to the possessor of the referent of the argument in the clause that follows, as seen in Sentences (34) and (35); the possessor NP of the existential verb *ada* ‘exist’ almost always occurs in this position.

- (34) *raja ta ada sópó anak dadara.*
 king DEM_P exist one child girl
 ## np.h:dt rn v:predex np.h:s rn rn
 ‘The king had a daughter.’ (TM004)
- (35) *tapi dèan cowèk singin sebab ka=tana’.*
 but DEM_P earthenware.dish name because PST=clay
 ## other np:dt np:pred np:s other 0:s aux=np:pred
 ‘But as for that, “cowek” is the name (*lit.* its name), because it is made of clay.’ (FS056)

In Sentence (36), the dislocated topic corresponds to the S argument, *anak nan* ‘the child’, which is S argument of a complement clause that in turn functions as Argument P of the adverbial clause.

- (36) *dadi lala ta ling to' ling*
 then princess DEM_P because know by
 ## other dt rn #ac 0.h:a other v:pred adp
raja ta anak nan sakit,
 king DEM_P child DEM_M sick
 np.h:dt_a rn #cc np.h:s rn v:pred ## 0.h:a
ya=utus mo pengawa ya=umumkan lakó
 3=order dm vassal FUT=announce to
 pro.h:a=v:pred other np.h:p #cc 0.h:s v:pred adp
rakyat.
 people
 np.h:g
 ‘Then the princess, as the king knew that the daughter was ill ...’ (TM009)

5. Predicates

The predicate constituents vary depending on whether it is a verbal predicate or a non-verbal predicate. In Sumbawa, the noun and verb as word category are distinguished by whether they can co-occur with a clitic pronoun. For example, the word *gera* ‘beautiful’ may be attached to the clitic pronoun, as in the sentence *mu=gera* [2sg=beautiful] ‘you are beautiful’, while the word *guru* ‘teacher’ may not be attached to the clitic pronoun, thus, the sentence *mu=guru* [2sg=teacher] ‘(intended meaning) You are a teacher.’ is not accepted by the speakers. On the basis of this distinction, the word *gera* is classified into the verb, while the word *guru* is classified into the noun.

5.1. Verbal predicates

Verbal predicates have a lexical verb as the predicate head. (37) shows the structure of the predicate; only the verb as predicate head is an obligatory element in the predicate. Elements in parenthesis are optional constituents in a clause.

- (37) constituents: (negator, TAM marker) (pronominal clitic (A/S)=) verb
 symbols: <lv> (pro:a/s=) <v:pred>

The negators are glossed by the symbol, <lv>, i.e., ‘subconstituent of the verb complex occurring to the left of the verbal head’ (Haig and Schnell 2014: 9).

- (38) *dadi peno mo sandro adè datang,*
 then many DM doctor REL come
 ## other v:pred rv np:s #rc other 0:s v:pred

serèa nó bau saterang lala ta.
 all NEG can cure princess DEM_P
 ## np:s lv v:pred #cc 0.h:a v:pred np:p rn

‘Then many doctors came, but all (of them) couldn’t cure the princess.’ (TM019)

The pronominal clitics for S and A are glossed by the symbols, ⟨pro:s=⟩ or ⟨pro:a=⟩ according to their function, as seen in 4.2. In addition to the constituents mentioned above, a discourse particle (DM) may occur after the first constituent of the predicate. They are glossed either by the symbol ⟨lv⟩ before the verb, as in Sentence (13) above, or by the symbol ⟨rv⟩ after the verb, as seen in sentence (38) above.

5.2. Non-verbal predicates

Non-verbal predicates may include an NP or PP as head, and co-occur with an NP argument in the clause, which is glossed by the symbol ⟨s⟩. Non-verbal predicates normally consist of only the predicate head, but they may include the negator *siong*, which is marked by the symbol ⟨lv⟩. Sentences (39) is an examples of the negator *siong*.

(39) *tau Indonesia si tapi siong*
 person Indonesia DM but NEG
 ##ds 0.h:s np:pred np:rn rn ##ds.neg 0.h:s other ln
tau Samawa.
 person Sumbawa
 np:pred np:rn

‘(They) are Indonesians, but not Sumbawans.’ (conversation)⁸

6. Complex sentences and direct speech

6.1. Relative clauses

When one of the core arguments are relativised, relative clauses are introduced by a relativiser *adè*, as seen in Sentence (40) and (41).

(40) *dadi peno mo sandro adè datang,*
 then many DM doctor REL come
 ## other v:pred rv np:s #rc 0:s v:pred

serèa nó bau saterang lala ta.
 all NEG can cure princess DEM_P
 ## np:s lv v:pred #cc 0.h:a v:pred np:p rn

‘Then many doctors came, but all (of them) couldn’t cure the princess.’ (TM019)

⁸ This is an example cited from the video in which conversation is recorded, which is mentioned in section 2.

- (41) *dadi pengawal adè baèng ka=gita' karing sisi*
 then guard REL PFT PST=see from side
 ## other np:s #rc other lv v:pred adp np:l
tampar % kamelas,
 seashore be.surprised
 np:poss % v:pred

ling gita' tau ta dadi tau
 because see person DEM_P become person
 #ac 0.h:a other v:pred #cc np:s rn v:pred np.h:other
gera kapasir:
 beautiful clean
 rn rn
 'Then the guard who had seen from the seashore was surprised, as he saw the person
 become a handsome and clean guy.' (TM071)

When the head nouns are nouns such as *pang* 'place', *ling* 'words, what is said', *seda* 'voice', *muntu* 'time', *luk* 'manner, way', a relative clause directly modifies the head noun without a relativiser.

- (42) *mé pang' tedu kau.*
 which place stay 2SG
 ## np:pred np:s #rc 0:l v:pred pro.2:s
 'Where do you live? (*lit.* Which is the place you live?)' (TM030)
- (43) *Batu nampar Batu=Langlelól ta pang'*
 stone flat stone=Langlelo DEM_P place
 ## np:s rn np:appos rn np:appos #rc_rn
ka=sia=satokal kami % ta,
 PST=2SG=make.sit 1PL.EXCL DEM_P
 pro.2:a=v:pred pro.1:p % rn

pang' kami bagedèk % ta, narang lè
 place 1PL.EXCL play DEM_P the.more long
 np:appos #rc_rn pro.1:s v:pred % rn other other
narang tingi.
 the.more high
 other v:pred
 'The flat stone, the Langlelo stone, the place onto which you made us sit, the place
 on which we are playing is getting higher.' (fl: 017–019)
- (44) *nan nya seda beling.*
 DEM_M 3 sound say
 ## dem_pro:s pro:appos np:pred ##rc 0.h:s v:pred
 'That was the voice (he) said.' (FS68)

- (45) *ao' anak é ta po muntu*
 ITJ child ITJ DEM_P DM time
 ## 0.1:s other np:voc other dem_pro:pred rn np:s #rc:rn
ku=nepé.
 1SG=winnow
 pro.1:s=v:pred
 'Ok, children, just now (finally) I am winnowing rice.' (FS023)

The relativiser *adè* may introduce a so-called headless relative clause (e.g., *adè datang nan* [REL come this] 'the one coming', which is glossed by the symbol <#rc> and is assigned the function, as in <#rc:s>, in example (46), following Haig and Schnell (2014: 24).

- (46) *adè terahir maning' % ta dèan,*
 REL finally take.shower DEM_P DEM_M
 ## #rc:s other other v:pred % rn dem_pro:s
 dè paling balong.
 #rc:appos REL most good
 #rc:appos 0.h:s other other v:pred
 'That, the one who was most beautiful was the one who took the shower at last.'
 (LK032)

6.2. Complement clauses

In examples (47) and (48), the complement clause occurs after the main verb, such as *gita* 'see' or *to* 'know' without any complementiser. In the examples given below, the complement clauses correspond to Argument P semantically and are tentatively glossed by the symbol p (thus <#cc:p>), though we do not have enough examples to observe their syntactic function. (See Haig and Schnell (2014: 47) for a discussion on the grammatical function of complement clauses.)

- (47) *ina' ina' ina' né sia=gita' mo*
 mother mother mother ITJ 2SG=see DM
 ## np.h:voc np.h:voc np.h:voc other pro.2:a=v:pred rv
 batu ta narang lè' narang tingi <...>
 stone DEM_P the.more long the.more high
 #cc:p np:p rn other other other v:pred
 'Mother, mother, mother, please see that the stone is growing up ...' (FS049)
- (48) *dadi lala ta ling to' ling*
 then princess DEM_P because know by
 ## other dt rn #ac 0.h:a other v:pred adp
 raja ta anak nan sakit,
 king DEM_P child DEM_M sick
 np.h:dt_a rn #cc:p np.h:s rn v:pred ## 0.h:a

ya=utus *mo* *pengawa* *ya=umumkan* *lakó*
 3=order dm vassal FUT=announce to
 pro.h:a=v:pred other np.h:p #cc 0.h:s v:pred adp
rakyat.
 people
 np.h:g

'Then the princess, as the king knew that the daughter was ill ...' (TM009)

6.3. Adverbial clauses

Adverbial clauses are glossed with the symbol <#ac>. In our corpus, the clause that is introduced by a conjunction that indicates its semantic relation to the adjacent main clause is glossed as an adverbial clause; adverbial clauses cannot be distinguished from the main clause by their morpho-syntactic features.

Sentences (49) and (50) are examples of adverbial clauses indicating a time relation between the two events expressed.

(49) *ina'* *ina'* *ènèng* *mè* *gama*
 mother mother ask.for rice please
 # np.h:voc np.h:voc 0.1:a 0.h:a=v:pred np:p other
ina' *muntu* *nó.poka'* *tingi* *batu=Langlelóló'.*
 mother when not.yet high stone=Langlelo
 np.h:voc #ac other lv v:pred np:s

'Mother, mother, give (us) rice, please, when the stone has not got high, yet.'
 (FS026)

(50) *tapi* *lamin* *salaki* % *ku=sukat* *ké*
 but if male % 1SG=marry with
 # other #ac 0.h:s other male % 0.h:p pro.1:a=v:pred adp
anak *kaku.*
 child 1SG.POSS
 np:obl pro.1:poss

'But if (he is) male, I will marry (him) with my child.' (TM013)

Sentence (51) is an example of an adverbial clause of reason, while Sentence (52) is an example of an adverbial clause of condition.

(51) *apa* *lagi* *datu* *ta* *makin* *ka=susa* *ling*
 what more king DEM_P the.more PST=suffer because
 # other other np.h:s rn other v:pred #ac other
lala *ta* *baè* *anak* *soai* *datu* *ta.*
 princess DEM_P only child female king DEM_P
 np:s rn other np.h:pred rn np.h:poss rn

'Needless to say, the king's agony increased, because the princess was the king's only daughter.' (TM022)

- (52) *lamén ka mo tingi batu=Langlelól' % mudi nó*
 if PST DM high stone=Langlelól' later NEG
 ## #ac other lv lv v:pred ln=np:s % other lv
sia=bau' *antat mèn nan kó' kami*
 2SG.HON=can bring rice DEM_M to 2PL
 pro.2:s=v:pred #cc 0.2:a v:pred np:p rn adp pro.1
ta.
 DEM_M
 rn
 'If the Langlelo stone got high, you cannot bring the rice to us later.' (FS021–022)

6.4. Direct speech

Direct speeches are glossed by the symbol <#ds>. Typically, a direct speech clause follows the verb *beling* 'say', as in Sentence (53)

- (53) *karing beling mo anak ina ina*
 then say DM child mother mother
 # other v:pred other np:s #ds 0.h:a np.h:voc np.h:voc
ènèng mèn gama ina.
 ask.for rice please mother
 v:pred np:p other np:voc
 'Then the child said, 'Mother, Mother, I beg rice, please, Mother.'

A direct speech clause may occur as a predicate of non-verbal clause, in which the NP headed by the noun *ling* 'words, what is said' is S argument.

- (54) *kajulin=tedu pang sisi olat anosiap ana*
 1SG.HON=stay at side mountain east DEM_D
 ## #ds_pred pro.1:s=v:pred adp np:l np:poss rn rn
 <ling sa>⁹ % ling *samong ling tau*
 <words ?> words answer by person
 nc nc % np:s #rc 0.p 0.h:a v:pred adp np.h:dt_a
loka ta.
 old DEM_P
 rn rn
 'I stay at the mountain side of the east', the old man answered. (*lit.* The words the old man answered was 'I stay at the mountain side of the east.' (TM030–032)

- (55) *tapi lamin salaki¹⁰ % ku=sukat ké*
 but if male 1SG=marry with
 # other #ac 0.h:s other v:pred % pro.1:a=v:pred adp

⁹ It seems that this is a false start and we do not consider this part. This type of constituent is glossed by the symbol <nc> 'not considered' in the GRAID convention.

anak kaku.
 child 1SG.POSS
 np:obl pro.1:poss
 ‘But if (he is) male, I will marry (him) with my child.’ (TM013)

- (56) *dadi, ao, ba mu=tedu ninta*
 then ITJ ITJ 2SG=stay here
 ## #ds_pred other other other pro.2:s=v:pred dem_pro:l
mo, ling.
 DM words
 other np:s
 ‘Then (she) said, ‘you just stay here. (*lit.* Then (her) words were ‘you just stay here.’)’ (KK: 062)

In some clauses, a direct speech clause occurs without a quotative frame. Sentence (57)(=Sentence (12) given above) is a mother’s reply to what her son said in Sentence (52) given above. Here, two direct speeches are simply juxtaposed like lines in a drama.

- (57) *ao’ anak é ta po muntu*
 ITJ child ITJ DEM_P DM time
 ## 0.1:s other np:voc other dem_pro:pred rn np:s #rc:rn
ku=nepé.
 1SG=winnow
 pro.1:s=v:pred
 ‘Ok, children, just now (finally) I am winnowing rice.’ (FS023)

6.5. Coordination

Each coordinated clause is treated as an independent clause, and therefore glossed by the symbol <##> in our corpus. It includes clauses either simply juxtaposed without any conjunctions, which often indicate a series of events in a narrative, as seen in Sentence (3) given above, or clauses co-ordinated by what Haig and Schnell (2014: 24) call ‘neutral’ coordinators, such as *karing* ‘and then’, *dadi* ‘and then’, and *tapi* ‘but’. These conjunctions indicate a semantic relation not only to a specific adjacent clause, but also to the situation expressed by a series of clauses or a situation not explicitly mentioned. We do not observe any formal dependence between the two clauses linked by such coordinators, which Haig and Schnell (2014) mention as a possibility. Sentence (58) is an example of *tapi* ‘but’. Sentence (4e) is an example of *karing* ‘and’.

- (58) a. *cowèk singin talang tau dunung’.*
 cowek name dish people before
 ## np:s np:pred rn rn rn

¹⁰ The word *salaki* belongs to the word class of verb in Sumbawa.

- b. *cowèk nan ka=tana', ka=tana'.*
 cowek DEM_M PST=clay PST=clay
 ## np:s rn np:pred np:appos
- c. *jadi samacam talang, nan.si samacam piring.*
 then a.kind.of dish that.is a.kind.of dish
 ## 0:s other other np:pred other other np:appos
- d. *tapi dèan cowèk singin sebab*
 but DEM_P earthenware.dish name because
 ## other np:dt_poss np:pred np:s #ac other 0:s
ka=tana'.
 PST=clay
 np:pred

'*Cowek* is a name of dish of people of long time ago. *Cowek* is made of clay. So, (it is) a kind of dish (*talang*), that is, a kind of dish (*piringè*). But as for that, "cowek" is the name (*lit.* its name), because it is made of clay.' (FS053–056)

7. Final remarks

In this paper, I have given a progress report on an on-going project of developing a Sumbawa annotated-spoken corpus. After a brief summary of the language, the project, and the nature of the data included in the corpus in Sections 1 and 2, an annotation note is provided that explains how the GRAID annotation system is applied to the Sumbawa corpus. First, we survey the clause types and structures in Section 3. Sumbawa clauses may be grouped into two categories: the verbal clause and the non-verbal clause. The predicate is the only obligatory constituent in each clause, and the arguments, if any, may follow the predicate, or only one argument may precede the predicate. In Sections 4 and 5, we examine how referential expressions and the constituents of the predicates can be glossed by GRAID conventions, respectively. In Section 6, we study the types of subordinate clauses and how these clauses and direct speech are glossed by GRAID conventions.

Abbreviations

| | | | |
|---------|---|------|------------------|
| 1, 2, 3 | the 1st, 2nd, 3rd person | ITJ | interjection |
| DEM_D | distal demonstrative | ITR | interrogative |
| DEM_M | medial demonstrative | NEG | negation |
| DEM_P | proximal demonstrative | PL | plural |
| EXCL | exclusive | POSS | possessive |
| FUT | future | PST | past |
| HBL | the humble form (of the 1st person pronoun) | DM | discourse marker |
| HON | honorific | RED | reduplication |
| | | SG | singular |

References

- Adelaar, Alexander. 2005. "Malayo-Sumbawan". *Oceanic Linguistics* 44(2). pp.357–388.
- Du Bois, John W. 1987. "The discourse basis of ergativity". *Language* 63(4). pp.805–855.
- Haig, Geoffrey and Stefan Schnell. 2014. *Annotations using GRAID (Grammatical Relations and Animacy in Discourse): Introduction and guidelines for annotators (version 7.0)*. (<https://lac.uni-koeln.de/en/multicast/>) (accessed 2018-01-14)
- Lyons, John. 1968. *Introduction to Theoretical Linguistics*. Cambridge: Cambridge University Press.
- Mahsun. 1999. *Variasi Dialektal Bahasa Sumbawa-Kajian Dialektologi Diakronis [Dialect Variation in the Sumbawa Language - A Study of Diachronic Dialectology]*. Unpublished manuscript, University of Mataram, Lombok.
- Mbete, Aaron Neko. 1990. *Rekonstruksi protobahasa Bali-Sasak-Sumbawa [Reconstruction of the proto-language Bali-Sasak-Sumbawa]*. PhD thesis. Universitas Indonesia, Jakarta.
- Schiborr, Nils N. 2016. "Multi-CAST corpus overview and description". In Geoffrey Haig and Stefan Schnell (eds.) *Multi-CAST (Multilingual Corpus of Annotated Spoken Texts)*. https://www.uni-bamberg.de/fileadmin/aspra/Multi-CAST_corpus-overview.pdf (Accessed 2018-01-14)
- Schnell, Stefan and Nils N. Schiborr. 2018. "Corpus-based typological research in discourse and grammar GRAID and Multi-CAST". *Asian and African Languages and Linguistics* 12. pp.1–16.
- Jonker, J. C. G. 1934. "Soembawareesche Teksten met Vertaling [Sumbawa text with translation]". *Bijdragen tot de Taal-, Lan- en Volkenkunde* 92(1). pp.211–335.