

# Fluidity in argument indexing in Komnzo

Christian Döhler

Leibniz-Zentrum Allgemeine Sprachwissenschaft, Berlin

## Abstract

This article addresses the verb morphology of Komnzo, a language of Southern New Guinea. It provides a description of verb indexing in the first part, which is followed by a corpus analysis of a small class of verbs. Komnzo verb morphology encodes transitivity by distinct alignment patterns in the verb morphology, which I call “verb templates”. Templates encode participant constellation, for example transitive or ditransitive, as well as event structure, for example dynamic versus stative. The system allows for some fluidity as to which lexemes can be used in which template. In addition to the description, the main contribution of the article lies in an in-depth examination of the interaction between lexical semantics and the morphological structure in Komnzo. The article takes an empirical approach, which draws on evidence from a text corpus of over twelve hours of natural speech and comprises more than 12,000 inflected verb forms.

## Keywords

verb morphology, indexing, agreement, split-s, fluid-s, labiality, Papuan languages, Yam languages

## 1 Introduction

This article focusses on Komnzo [ISO 639-3: tci, Glottocode: komn1238], a language of the Yam family in the south-west of Papua New Guinea. Komnzo is spoken by approximately 200-250 speakers in the village of Rouku and Morehead Station. It belongs to the Tonda subgroup of the language family. Figure 1 below provides a map of the Yam language family.

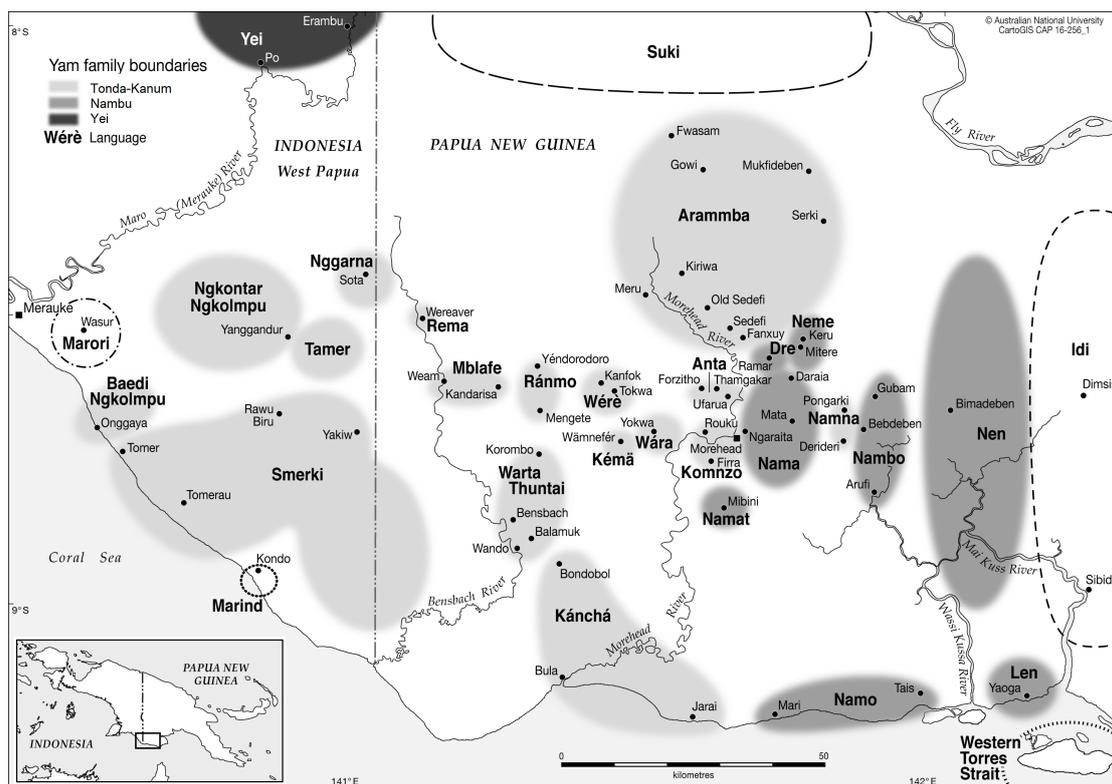


Figure 1: The Yam language family

The aim of this article is to describe the interaction between lexical semantics and the morphological structure of verb indexing. The latter will be called “verb template” in this article. I describe and analyse that some lexemes can occur in different verb templates, while other lexemes cannot. Examples (1) and (2) below serve here as introductory examples. The verb *räzsi* ‘erect’ can occur in what I call the “transitive template” (1a) as well as in the “prefixing template” (1b). The verb *yrsi* ‘build’ can only occur in the “transitive template” (2a), and placing it in the “prefixing template” renders the clause ungrammatical (2b).

- (1) a. TRANSITIVE TEMPLATE:  
*naf far y-rä-zr-Ø.*  
 3SG.ERG post(ABS) 3SG.MASC-erect-ND-2|3SG  
 ‘He erects the post.’
- b. PREFIXING TEMPLATE:  
*far y-räs-thgr.*  
 post(ABS) 3SG.MASC-erect-ND.STAT

‘The post is erected.’

- (2) a. TRANSITIVE TEMPLATE:

*naf*            *mnz*            *y-r-wr-Ø*.  
3SG.ERG house(ABS) 3SG.MASC-build-ND-2|3SG

‘He builds the house.’

- b. PREFIXING TEMPLATE:

\**mnz*            *y-r-thgr*.  
house(ABS) 3SG.MASC-build-ND.STAT

intended meaning: ‘The house is built.’

The article is structured in the following way: Section 2 provides information on the text corpus and the dataset used in this article. Section 3 introduces Komnzo verb morphology with a focus on distributed exponence (§3.1) and verb templates (§3.2). Section 4 contains a detailed corpus study of those lexemes that can be encoded in one particular template, namely in the prefixing template. Section 5 draws together the observed patterns and provides a conclusion.

## 2 Text corpus

The data discussed in this chapter comes from a subset of the Komnzo text corpus. The subset comprises those recording sessions that have been fully interlinearised and glossed. The texts were collected during the author’s PhD project between 2010 and 2015.

The subset of the corpus used here comprises well over twelve hours of natural speech of various text genres, including both natural and stimuli-based narratives and conversations (See Table 1). The overall size is around 55,000 word tokens, which makes the Komnzo text corpus a typical language documentation corpus (Mosel, 2012). I make an effort to use almost exclusively examples from the text corpus in this article. All corpus examples are referenced with a source code of the following format: tciYYYYMMDD-NN SSS ##. The first part identifies the transcription file. Each item in the archive starts with the ISO 639-3 code for Komnzo (tci). Next is the date of the recording (YYYYMMDD) and number of session on that date (NN). The second part identifies the annotation within the transcription file. Transcription tiers are sorted by speaker (SSS). Intonation units on the respective transcription tiers are numbered (##). Thus, example (9) in this article has the source code: [tci20130914-01 KAB 16] which means: it was the first recording session on September 14<sup>th</sup> 2013. The speaker is Kaumb Bai (KAB). This is intonation unit number 16 on the KAB text tier. The names of the corresponding

files follow the formatting of the source code: ELAN transcription file (tci20130914-01.eaf), audio-file (tci20130914-01.aif), and video-file (tci20130914-01.mpeg)

The corpus can be accessed in two ways. The complete collection is archived with TLA, Nijmegen (Döhler, 2015). The corpus of transcribed texts has been archived at Zenodo (Döhler, 2021). The latter contains all transcription files in ELAN format (.eaf) in a single zip file. The associated audio and video files are accessible in separate session nodes at both locations. The title of a session node follows the formatting of the source code but often adds a title of the recording.

Table 1: Database

Text type	hh:mm
Conversations	01:01:55
Conversational tasks	01:49:51
Narratives	06:40:18
Procedural texts	02:11:36
Public speech	00:42:38
Total	12:26:18

### 3 Grammatical background

This section introduces the relevant grammatical background of Komnzo. I describe the principle of distributed exponence in §3.1, which is important for understanding verb morphology in Komnzo, as well as for understanding the glossing conventions of examples in this article. In §3.2 follows a description of verb templates, which are important for the topic of this article.

#### 3.1 Distributed exponence

Like other languages of the Yam family, Komnzo has complex verb morphology. Verbs express person, number and gender of up to two participants, 18 TAM categories, valency, directionality and deictic status. Complexity lies not only in the amount of grammatical categories that can be expressed morphologically in the verb, but also in the way in which these categories relate to their exponents. I use the term “distributed exponence” for this type of morphological complexity, a term which surfaced in the recent literature on multiple exponence (Caballero and Harris, 2012). Carroll defines distributed exponence as “the phenomenon in which morphosyntactic and morphosemantic properties are marked non-redundantly at multiple inflectional sites” (2016: 268). In Komnzo verb morphology, this plays out as underspecification of individual morphs. Consider Table 2 below, in which

the verb *thoraksi* ‘appear’ is inflected for different TAM categories.<sup>1</sup>

Table 2: *thoraksi* ‘appear’ in a 3SG.MASC frame

#	TAM category	Inflected form
1	non-past	<i>y-thorak-wr</i>
2	recent-past imperfective	<i>su-thorak-wr</i>
3	recent-past durative	<i>y-thorak-wr-m</i>
4	recent-past perfective	<i>sa-thor</i>
5	past imperfective	<i>y-thorak-wr-a</i>
6	past durative	<i>su-thorak-wr-m</i>
7	past perfective	<i>sa-thor-a</i>
8	iterative	<i>su-thor</i>

It becomes clear from the table that the inflectional sites (the prefix, the verb stem, and the suffixes) contribute some information to TAM without encoding a particular TAM value. For example, the prefix *y-* occurs in non-past, recent-past and past tense, (in lines 1, 3 and 5). Moreover, it is involved in marking imperfective (lines 1 and 5) and durative aspect (line 3). Likewise, the verb stem *thor* is involved in expressing perfective aspect (lines 4 and 7), but also iterative aspect (line 8). In other words, morphs are underspecified as to their grammatical meaning, in this case the TAM category. Underspecification of this type is also found for other grammatical categories, such as number and valency.

Distributed exponence prompts us to take the inflected word, rather than the morpheme, as the level of analysis. As a practical consequence, I gloss verbs in a word-and-paradigm style (Matthews, 1974), as in (3a) and (4a) below, and refer the reader to the morphology chapter of the Komnzo grammar for information on the finer details of exponence (Döhler, 2018: 175ff.). In this glossing convention, only the verb stem is separated from the inflectional material by slanted lines on the morpheme tier. In the corresponding gloss tier, the inflected verb form is then positioned within its paradigm by listing the grammatical information in the following order: argument structure (person, number, gender, transitivity), TAM, directionality. Additionally, I put the entire verb gloss in square brackets followed by the type of verb template in subscript. For example, *thoraksi* ‘appear’ in (3a) occurs in the [prefixing template]<sub>PREF</sub>, while the verb *zä-* ‘carry’ in (4a) occurs in the [transitive template]<sub>TRANS</sub>. The system of verb templates is addressed below.

<sup>1</sup>Komnzo verb lexemes have two stems, which are sensitive to aspect. The formal relationship between the two stems ranges from identity (i.e., there is only one stem) over suffixation and consonant mutation to full suppletion. In this article, I will list the two stems in brackets after the infinitive in this way: *thoraksi* (*thorak-*|*thor-*) ‘appear, search’.

- (3) a. *kabe y\thorak/wr.*  
 man(ABS) [3SG.MASC:NPST:IPFV/appear]<sub>PREF</sub>  
 b. *kabe y-thorak-wr-Ø.*  
 man(ABS) 3SG.MASC.α-appear.EXT-ND  
 ‘The man appears.’
- (4) a. *emoth=f wawa en\zä/nzr.*  
 girl=ERG.SG yam(ABS) [2|3SG>2|3PL:NPST:IPFV:VENT/carry]<sub>TRANS</sub>  
 b. *emoth=f wawa e-n-zä-nzr-Ø.*  
 girl=ERG.SG yam(ABS) 2|3NSG.α-VENT-carry.EXT-ND-2|3SG  
 ‘The girl carries the yams.’

Note that if I were to use the item-and-arrangement glossing style, which breaks up the word in its segments, as in (3b) and (4b), I would have to use rather opaque glossing labels. An example is the gloss ND for non-dual, because the three way number system is composed by combining a singular vs. non-singular distinction in one slot with a dual vs. non-dual distinction in another slot. Likewise, the prefixes come from the alpha series, glossed as  $\alpha$ , which is used for building the non-past tense in imperfective aspect.<sup>2</sup> For these practical reasons, I adopt the word-and-paradigm style throughout this article. The only exceptions are examples (5a-e), where it is necessary to show the segmentation.

### 3.2 Verb templates

Komnzo is a double marking language. In addition to a rich case system for flagging nominals, up to two arguments can be indexed on verbs. Inflected verb forms can be categorised as either prefixing or ambifixing, as we have seen in (3) and (4) respectively. The difference is whether core arguments are indexed only by the prefix, or by the prefix and the suffix. Below I introduce further subdivisions of these two types. I use the term “verb template” here for the different morphological arrangements, or indexing patterns. A noteworthy characteristic of Komnzo verb morphology is that most verb stems can occur in different templates. I use the term “template fluidity” to describe this phenomenon. Template fluidity is the main mechanism to encode valency alternations in Komnzo, but also to express subtle differences in event semantics that have to do with volitionality and dynamicity.

<sup>2</sup>There are three prefix series in Komnzo, which I label  $\alpha$ ,  $\beta$  and  $\gamma$ . The three series all encode person, number and gender of the undergoer argument. The difference between the three series lies in their respective ability or inability to combine with other morphological elements to express various TAM categories. In this way, the prefix series are not the sole exponents of any particular TAM category, and, hence, they are glossed in an opaque manner using Greek letters.

### 3.2.1 The definition of verb templates

For a complete description of verb templates, it is useful to expand our categorisation and make further subdivisions beyond prefixing versus ambifixing. The morphological slots involved in the definition of templates are the following: (i) the undergoer prefix, (ii) the diathetic prefix, and (iii) the actor suffix.<sup>3</sup> Based on the presence versus absence of these slots, and based on what is encoded in them, we can define the five templates that are shown in Table 3 below. The undergoer prefix can either index the P argument of a transitive verb form, or the S argument of an intransitive verb form. Furthermore, it can be filled with a person/number-invariant form, which I call the middle prefix. The diathetic prefix slot can be empty or be filled by the diathetic prefix *a-* (DIA). The neutral label “diathetic” is used here because its function is underspecified, as it can either decrease or increase valency (cf. Döhler 2022a, Döhler 2022b). Finally, the actor suffix can index the A argument of a transitive verb form, or the S argument of an intransitive verb form. Moreover, the actor suffix can be absent for those intransitives, which index the S argument in the prefix.

Thus, Komnzo is an example of a split-intransitive system (Merlan, 1985), or split-s system (Dixon, 1994). One type of intransitives index their S argument in the prefix like the P argument in the transitive template. I call this pattern prefixing template. The second type of intransitives index their S argument in the suffix like the A argument in the transitive template. This is one function of what I call the middle template.

Table 3: Verb templates

	Template name	Undergoer	Diathetic	Stem	Actor
prefixing	prefixing	( <i>y-</i> ) S	-	✓	-
	prefixing (IO)	( <i>y-</i> ) BEN, POSS	( <i>a-</i> )	✓	-
ambifixing	middle	( <i>η-</i> ) ∅	( <i>a-</i> )	✓	( <i>-th</i> ) S
	transitive	( <i>y-</i> ) P	-	✓	( <i>-th</i> ) A
	transitive (IO)	( <i>y-</i> ) BEN, POSS	( <i>a-</i> )	✓	( <i>-th</i> ) A

From the possibilities of these three morphological slots, we can now define five verb templates, as shown in Table 3.<sup>4</sup> As mentioned above, the presence versus absence of the actor suffix creates a distinction between prefixing and ambifixing

<sup>3</sup>The term “undergoer” is used rather than “object” because the same prefixes are also used with stative intransitive subjects, that is “undergoer” prefixes represent objects and stative subjects, while “actor” suffixes represent subjects of transitive and dynamic intransitive verbs.

<sup>4</sup>The column for the undergoer prefix lists the morph *y-* from the  $\alpha$  series for 3SG.MASC, with the exception of *η-* in line 3, which is the middle marker also from the  $\alpha$  series. The column actor suffix lists *-th* for 2|3NSG. The corresponding 2|3SG is a zero morph.

templates. A second criterion is the presence versus absence of the diathetic prefix, which changes the reference of the undergoer prefix from a P to a beneficiary (BEN) or possessor (POSS).<sup>5</sup> The corresponding nominal is then flagged with either dative or possessive case. I call this template, the “(IO) template”, i.e., IO for indirect object. This is possible for verbs in the transitive template creating the “transitive (IO) template”, which could also be called “ditransitive template”. However, I avoid this term because the process is so productive in the language, that it is better to analyse all ditransitives as being derived (cf. §3.2.3). The diathetic prefix is also possible for intransitive verbs in the prefixing template, which creates the “prefixing (IO) template”. Finally, the diathetic prefix is used together with the middle prefix creating the “middle template”.<sup>6</sup> Henceforth, I use the labels prefixing, prefixing (IO), middle, transitive and transitive (IO) when referring to the five templates. I give concrete examples below in (5a-5e).

As mentioned above, template fluidity is one of the main characteristics of the system in Komnzo. This does not mean that all verb stems can occur in all templates. While the system is fluid for some verbs, there are restrictions for most verb lexemes. In fact, only a small number of lexemes can occur in all templates. An example is the verb *migsi* (*mig|mir-*) ‘hang’ in (5a-5e). In the examples, we can see how the different templates change the meaning of the verb. Note that the examples are all elicited and appear here in a reduced gloss, which ignores all TAM information. The examples (5a-5e) correspond to the five templates as they are listed in Table 3 above.

- (5) a. PREFIXING TEMPLATE:  
*y-mi-thgr*  
 3SG.MASC-hang-STAT.ND  
 ‘He is hanging.’
- b. PREFIXING (IO) TEMPLATE:  
*y-a-mi-thgr*  
 3SG.MASC-DIA-hang-STAT.ND  
 ‘Something of his (or for him) is hanging.’

<sup>5</sup>A reviewer asked whether the undergoer prefixes are referential in Komnzo. They are “Appositional Referential Markers” in the typology of (Hengeveld, 2012: 474), because (a) they optionally co-occur with corresponding noun phrases, and (b) they are referential, in that they encode semantic functions not encoded on the lexical arguments themselves, for example the gender of the referent. Komnzo distinguishes feminine and masculine gender in third person singular for all animate and inanimate nominals.

<sup>6</sup>I use the term “middle” here as a label for the template. The situation types expressed by this template fit into the semantic model of middles developed by Kemmer (1993), which includes: reflexives, reciprocals, impersonals and the like. For an in-depth analysis of the middle template, I refer the reader to (Döhler, 2022b).

c. MIDDLE TEMPLATE:

*η-a-mig-wr-th*

M-DIA-hang-ND-2|3NSG

‘They hang themselves up.’ (or: ‘They assume a hanging position.’)

d. TRANSITIVE TEMPLATE:

*y-mig-wr-th*

3SG.MASC-hang-ND-2|3NSG

‘They hang him up.’

e. TRANSITIVE (IO) TEMPLATE:

*y-a-mig-wr-th*

3SG.MASC-DIA-hang-ND-2|3NSG

‘They hang up something of his (or for him).’

### 3.2.2 The semantics of verb templates

Since I address the topic of lexical semantics and how this interacts with template fluidity, it seems appropriate to first describe the meaning contributed by the different templates. This can be done in two ways. First, we can cycle a single verb lexeme through the five templates and see how this affects its meaning, as was done in examples (5a-5e) above. Secondly, we can examine the verb forms in the corpus for each template and refine more general semantic categories. This is done below.

The prefixing template (5a-5b) is used for intransitive verbs. Typical verb meanings found in the prefixing template are shown below in (6), which is a non-exhaustive list. It follows from the list that the prefixing template expresses state-like meanings, and these are often non-volitional. Notable exceptions are a few dynamic verbs like *yak-* ‘walk, come’, *thefäsi* ‘jump’ and *yarenzsi* ‘look around’.

- (6)
- STATE-LIKE VERBS: *etfth* ‘sleep’, *msaksi* ‘dwell’, *methizsi* ‘rest’, *rä-* ‘be’, *sufaksi* ‘be old’, *-ythk* ‘be finished’
  - POSITIONAL VERBS: *migsi* ‘be hanging’, *moraksi* ‘be leaning’, *rngthksi* ‘be in a tree fork’, *sisthgsi* ‘be sticking out of something’, *yukrasi* ‘be standing’, *-thn* ‘be lying down’
  - NON-VOLITIONAL VERBS: *fogsi* ‘be caught by nightfall’, *kwan* ‘emit sound’, *rfiksi* ‘grow’, *thgusi* ‘forget’, *yathizsi* ‘die’

The middle template is used for dynamic (and often volitional) events. These involve the verb meanings in (7). In fact, the majority of intransitives are expressed in the middle template, i.e., they are morphological middles or *reflexiva tanta* (in

the sense of Geniušienė 1987). The middle template is multifunctional. In example (5c) we saw the verb *migsi* ‘hang’ in an inchoative, reflexive alternation (‘hang self up’, or ‘assume hanging position’). The middle template is used for various valency alternations including impersonals, reflexives/reciprocals, and passives (cf. §3.2.3). The interpretation of an inflected verb form in the middle template, e.g. whether it is impersonal or passive, results from lexical semantics interacting with case marking on the nominal (Döhler, 2018: 187).

- (7)
- MOTION: *brigsi* ‘return’, *farksi* ‘set off’, *fänizsi* ‘shift place’, *frezsi* ‘come up from river’, *kwir-* ‘run’, *mräsi* ‘stroll’, *sogsi* ‘climb’, *rsörsi* ‘descend’, *rzür-* ‘dance’, *thfäsi* ‘fly’
  - CONTROLLED ACTIVITY: *bznsi* ‘work’, *karksi* ‘pull’, *rafigsi* ‘paddle’, *rä-* ‘do’
  - UNCONTROLLED ACTIVITY: *rsir-* ‘burn’ (intr.), *rüsi* ‘rain’, *wäsi* ‘happen’
  - CONTROLLED BODILY PROCESSES: *borsi* ‘laugh’, *zübraksi* ‘close eyes’
  - UNCONTROLLED BODILY PROCESSES: *kumgsi* ‘smell’, *mzeraksi* ‘fall asleep’, *rkwiyasi* ‘give birth’, *rfeksi* ‘limp’, *traksi* ‘fall’, *thäknsi* ‘shake’, *yarizsi* ‘hear’
  - NOISE EMISSION: *fasisi* ‘make noise’, *naf-* ‘talk’, *rusi* ‘bark’, *warksi* ‘howl’
  - PHASE: *bthaksi* ‘finish’, *ko-* ‘become’, *mäyogsi* ‘continue’, *thkäsi* ‘start’

The transitive template (5d) is the main “biactant construction” in Komnzo (in the sense of Lazard 2002). The corresponding actor nominal is flagged with the ergative case, while the undergoer is unmarked, i.e., in the absolutive case. We have seen examples of this above in (1a), (2a), and (4). Typical verb meanings found in the transitive template are shown in (8).

- (8)
- CAUSED CHANGE OF STATE: *fönzsi* ‘burn down’ (tr.), *frazsi* ‘extinguish’, *thrsi* ‘tear’ (tr.), *transi* ‘carve’, *wäthsi* ‘wrap’, *yafüsi* ‘open’ (tr.)
  - PHYSICAL TRANSFER: *maträksi* ‘take out’, *thorsi* ‘put inside’, *zinaksi* ‘put down’, *zrin* ‘carry’
  - PHYSICAL IMPACT: *rtmaks* ‘cut’, *rziraksi* ‘bend’, *rusi* ‘shoot’, *zan* ‘hit, kill’
  - CAUSATION: *fathasi* ‘hold, grab’, *gars* ‘break’, *nagusi* ‘poke’, *näbüsi* ‘smash with stick’, *mthnzsi* ‘cause’, *fiyoksi* ‘make’, *yrsi* ‘build’
  - CONSUMPTION: *dagon* ‘eat’, *mgthksi* ‘feed’

- PERCEPTION: *figthksi* ‘lick’, *fiknsi* ‘touch’, *marasi* ‘see’
- INTERACTION: *monegsi* ‘wait’, *rsoknsi* ‘bother’, *thofiksi* ‘disturb’, *weksi* ‘invite’, *yaroksi* ‘escort’
- SPEAKING: *bräknsi* ‘call out’, *ko-* ‘speak’, *rfitfaksi* ‘answer’, *szsi* ‘ask’

The transitive (IO) template is the ditransitive construction in Komnzo. In comparison with the (simple) transitive template, the addition of the diathetic prefix changes the reference of the prefix from a patient or theme to a beneficiary or possessor, as in (5e). The dependent nominal is accordingly flagged with dative or possessive case. Examples of verbs in this template are: *yarisi* ‘give’, *trikasi* ‘tell’, *fänzsi* ‘show’, and *rbänzi* ‘explain’. However, these verb stems may also occur in the transitive template, in which case they index the patient or theme, rather than the beneficiary, and they change their meaning slightly (e.g. *trikasi* ‘tell’ becomes ‘report’, or *yarisi* ‘give’ becomes ‘transfer’). As a consequence one can argue that all ditransitives are derived (Döhler, 2018: 206). I expand this argument in the following section.

### 3.2.3 Valency alternations

The system of templates is used for valency alternations. For example, the verb *marasi* (*mar-*) ‘see’ occurs in the transitive (9) and in the middle template (10) below. There are 302 inflected forms of this lexeme in the corpus. The vast majority of tokens (290) are in the transitive template. It follows that the use of the middle template in (10) is best analysed as a reciprocal alternation. Note that reflexives and reciprocals are encoded identically in Komnzo (Döhler, 2022b).

- (9) *ɲaf=yé*                      *thu\mar/wrme*                      *ɲatr*  
 father=ABS.NSG [1PL>2|3PL:PST:DUR/see]<sub>TRANS</sub> bowstring(ABS)  
*mon=me thu\rzirak/wrmth.*  
 how=INS [2|3PL>2|3PL:PST:DUR/tie]<sub>TRANS</sub>  
 ‘We were watching the fathers how they were tying the bowstring.’  
 [tci20130914-01 KAB 16]

- (10) *zagr si=me kwa\mar/wrme.*  
 far eye=INS [1PL:PST:DUR/see]<sub>MID</sub>  
 ‘We were seeing each other from a distance.’                      [tci20120922-08 DAK 118]

Another example is the causative alternation in (11), where the speaker describes how gardens are shifted to a new location from year to year. The verb *brigsi* (*brig-*|*brim-*) ‘return’ is used in the middle template in (11a). In (11b), the transitive template introduces a causer to the argument structure, thus, ‘bring

back’ is a better translation. The verb *brigsi* occurs 171 times in the corpus. The majority of tokens (133) are in the middle template. Thus, the use of the transitive template in (11b) is best analysed as a causative alternation.

- (11) a. *fthmäsi za\bth/e* *bä we*  
 meanwhile [1PL>3SG.FEM:RPST:PFV/finish]<sub>TRANS</sub> MED also  
*kwan\brig/wre* *we z=n\rä/*  
 [1PL:RPST:IPFV:VENT/return]<sub>MID</sub> also PROX=[1PL:NPST:IPFV/be]<sub>PREF</sub>  
*zēna ...*  
 now (.)  
 ‘Meanwhile we finished (the soil) and we returned now ...’
- b. *zane ysakwr=en zf za\thkäf/e*  
 PROX season=LOC IMM [1PL>3SG.FEM:RPST:PFV/start]<sub>TRANS</sub>  
*z=\rä/* *ḡarake*  
 PROX=[3SG.FEM:NPST:IPFV/be]<sub>PREF</sub> garden(ABS)  
*thun\brig/wre* *zēna.*  
 [1PL>2|3PL:RPST:IPFV:VENT/return]<sub>TRANS</sub> NOW  
 ... this year we started (making gardens) right here. We brought back  
 the gardens now.’ [tci20120922-08 DAK 80-81]

A third example is the applicative alternation, which is encoded by the transitive (IO) template. In example (12), we see the verb *brigsi* in the transitive (IO) template. In addition to the adverb *nezä* ‘in return’, it is the template that expresses the meaning ‘pay him back’. A more literal translation of (12) would be ‘return something for him’.

- (12) *thufth kabe tüfr zane dagon*  
 in.law man plenty PROX food(ABS)  
*thun\zä/nzr.* *nezä mon kwa*  
 [2|3SG>2|3PL:RPST:IPFV:VENT/carry]<sub>TRANS</sub> in.return how FUT  
*ya\brig/wre?*  
 [1PL>3SG.MASC:NPST:IPFV/return]<sub>TRANS(IO)</sub>  
 ‘The in-law brought plenty of food. How will we pay him back?’  
 [tci20120805-01 ABB 736-737]

Almost all verbs can be applicativised in this way in Komnzo. The argument indexed in the prefix is usually flagged with the dative case or possessive case. This is shown with the verb *rinaksi* (*rinak-|rin-*) ‘pour’ in example (14). The verb is in the transitive template in (13), while it occurs in the transitive (IO) template in the following example.

- (13) *we kwot zän\brim/é no*  
 again properly [1SG:RPST:PFV:VENT/return]<sub>MID</sub> water(ABS)  
*zf\rinak/wro.*  
 [SG>3SG.FEM:RPST:IPFV:AND/pour]<sub>TRANS</sub>  
 ‘I returned again and poured the water.’ [tci20120902-24 MAA 59-60]
- (14) *nzenme kaubu=n ane no*  
 1PL.POSS Kaubu=DAT.SG DEM water(ABS)  
*sä\rin/e!*  
 [2PL>3SG.MASC:IMP:PFV/pour]<sub>TRANS(IO)</sub>  
 ‘Pour some of that water for our Kaubu!’ [tci20121019-04 SKK 9]

Applicativisation is also possible for prefixing verbs. In example (15), the s argument (‘old man’) of *yukrasi* ‘stand’ is indexed the verb, while in the following example (16) it is the possessor (‘the old man’), even though it is clear that the state-of-affairs described by the verb is about the s argument (‘taros’). Note that the inflection in (16) is still mono-valent, because only one argument can be indexed in either of the two prefixing templates. The same is true for (14) above. The verb remains bivalent in its morphology, because no more than two arguments can be indexed in this template.

- (15) *oroman wotu=karä y\ko/gr.*  
 old.man(ABS) stick=PROP [3SG.MASC:NPST:IPFV/stand]<sub>PREF</sub>  
 ‘The old man with the walking stick is standing.’ [tci20111004 RMA 142]
- (16) *nafane duga fobo ya\ko/gr*  
 3SG.POSS taro(ABS) DIST.ALL [3SG.MASC:NPST:IPFV/stand]<sub>PREF(IO)</sub>  
*oroman=ane.*  
 old.man=POSS.SG  
 ‘His taros are standing over there, the old man’s (taros).’  
 [tci20150916-03 SKK 131]

### 3.2.4 Deponency

A number of verbs in Komnzo are deponent with respect to the diathetic prefix. I understand deponency here as a mismatch between morphology and morpho-syntax (Baerman et al., 2006). These verbs employ the diathetic prefix obligatorily, that is they always occur in the prefixing (IO) or transitive (IO) template, but the argument indexed in the undergoer prefix is the s argument and the p argument, respectively. The dependent nominal is then in the absolutive, and not in possessive or dative case. For example, the prefixing verb *yathizsi* (*-thiz|-thif*)

‘suffer, die’ only occurs in the prefixing (10) template. One would expect that the prefix indexes a recipient or possessor in this template, as in (5b) or (16) above. However, as we can see in (17) and (18), it is the S argument in absolutive case, which is indexed.<sup>7</sup>

- (17) *fafen nge zi swa\thiz/rm.*  
 meanwhile child(ABS) pain [3SG.MASC:PST:DUR/suffer]<sub>PREF(10)</sub>  
 ‘Meanwhile, the boy was in pain.’ [tci20100905 ABB 90-91]
- (18) *nagayé nafane=mä=wä nä z*  
 children(ABS) 3SG.POSS=CHAR=EMPH INDF already  
*ä\thiz/rako.*  
 [2|3PL:PST:AND/die]<sub>PREF(10)</sub>  
 ‘Some of her own children have passed away already.’ [tci20120922-26 DAK 54]

There are also deponent transitive verbs, which always employ the transitive (10) template. The prefix in these inflections always indexes the P argument. Examples for deponent transitives are *fiyoksi* (*fiyok-|fiyoth-*) ‘make’, *frmnzsi* (*frmnz-|frms-*) ‘prepare’ and *dagon* (*na-|wob-*) ‘eat’. As this article is concerned with prefixing verbs, I will not address deponent transitive verbs here.

### 3.2.5 Summary

It follows from the description that there is a certain degree of template fluidity. Most verbs can occur in different templates and labels such as ‘transitive verb’ or ‘middle verb’ are often a matter of (corpus) frequency. As we have seen, verbs of the type *brigsi* ‘return’ can be characterised as middle verbs, because they occur in this template most of the time, whereas verbs of the type *marasi* ‘see’ can be characterised as transitive verbs on the same grounds.

There are two types of exceptions to template fluidity. First, there are many verb stems that are fixed in their template choice. For example *moth* (*kwir-|math-*) ‘run’ and *thweksi* (*thwek-|thweth-*) ‘rejoice’ always occur in the middle template. We may call these middle-only verb. Likewise, the verbs *mthizsi* (*mthiz-|mthif-*) ‘rest’ and *etfth* (*ru-*) ‘sleep’ always occur in the prefixing template. We may call these prefixing-only verb.

Secondly, template choice alters the meaning for some verbs to such a degree that it would be misleading to call this an alternation. For example, the verb

<sup>7</sup>A reviewer commented that verbs expressing an experiential state-of-affairs often index their S argument as recipients. While this is true for *yathizsi* in (17) and (18), this type of mismatch occurs with many non-experiential verbs, for example *mthizsi* ‘rest’, *-nyak* ‘come’, *-ythk* ‘be finished’, *namgsi* ‘gasp’ from the prefixing group.

*rbänzsi* (*rbänz-|rbs-*) has the meaning ‘untie’ in a transitive template, but ‘explain’ in a transitive (IO) template. A more literal translation of the latter would be ‘to untie something for someone’ and by semantic extension this means ‘explain’. Another example of this type is *karksi* (*kark-|kar-*), which has the meaning ‘pull’ in a middle template, but ‘take away from someone’ in a transitive template. A more literal translation of the latter would be ‘to pull something from someone’ and by semantic extension this means ‘take’. Such pairs are best analysed as separate lexemes, but often a clear-cut decision between analysing them as alternations or as separate lexemes is not possible.

## 4 Corpus study

We can now turn to the corpus study, which targets the prefixing and the prefixing (IO) template. For practical reasons, these two are treated together here. The guiding research question of the corpus analysis is to what extent is a particular lexeme (or a group of lexemes) fluid. I am especially interested in the ability (or inability) to occur in the prefixing template and also in one of the ambifixing templates, that is the middle, transitive and transitive (IO) templates. The main questions are: Which lexemes appear in the prefixing template? What is the semantic profile of these verbs? Can they be divided into groups? If so, on what semantic or morphological grounds? What are the special morphological operations in this template? Which of these lexemes show what degree of template fluidity?

There are two publications on the verb morphology of two related languages from the Nambu subgroup. Siegel (2017) describes intransitive and transitive verbs in Nama, the direct neighbour of Komnzo to the East. Evans (2014) analyses positional verbs in Nen, the easternmost language of the family. Both publications make similar observations to the ones described here, but they place the focus on different aspects of the verb morphology.

### 4.1 Methodology

The methodology for this corpus study is both qualitative and quantitative. The specific dataset prepared for this study contains 65 ELAN transcription files. From these, all verb tokens were exported using ELAN’s search function on the part-of-speech tier. There are 12,404 inflected verb forms and 554 infinitives in the dataset. These were imported into OpenRefine,<sup>8</sup> a software for cleaning up and harmonizing messy data. Next, all inflected verb forms were coded for template type. OpenRefine allows to view specific subsets of the data, so-called facets, for

---

<sup>8</sup>The software can be found under: <https://openrefine.org/>

example all inflections in the prefixing (IO) template, or all tokens of a particular lexeme. An example of the data can be seen in Table 7 in the Appendix for the verb *migsi* ‘hang’. The final list of verb tokens was exported as a comma-separated file (.csv) and archived under: [\[INSERT URL\]](#).

The quantitative part of the methodology comes in the form of token frequencies for a given lexeme or a group of lexemes in a particular verb template. The qualitative analysis was to comb through the dataset to detect patterns as well as to find particularly good examples to showcase the semantic differences.

## 4.2 Results

The results are shown in Tables 4-6. The tables list those prefixing verbs (57) which are attested in the corpus. Note that I have added six prefixing verbs, which are not attested in the corpus, but whose membership in this class is attested through elicitation. In total there are 63 prefixing verbs.

Prefixing verbs can be divided into three subclasses based on their morphology. The first and largest subclass comprises 40 positional verbs (Table 4).<sup>9</sup> Membership is assigned by two features: (i) positional verbs take the stative suffix *-thgr*, and (ii) they can occur in other templates. Due to their ability to occur in other template, we may call them fluid prefixing verbs. The second subclass with 11 members are also fluid prefixing verbs, but they not do take the stative suffix (Table 5). The third subclass with 12 members are those verbs which cannot occur in other templates, i.e., they are prefixing-only verbs (Table 6).

---

<sup>9</sup>The translation of the lexemes in Table 4 is the stative meaning (e.g. ‘be hanging’). In other templates, these verbs have a dynamic meaning (‘hang’).

Table 4: Fluid prefixings verbs: positionals

Lexeme	Translation	PREF	PREF(10)	MID	TRANS	TRANS(10)	NMLZ
<i>brüksi</i>	be submerged	-	-	21	5	-	2
<i>fätfaksi</i>	be across sth.	-	-	-	-	-	-
<i>fethaksi</i>	be dipped in water	-	-	1	3	-	-
<i>fifthaksi</i>	be lying straight	-	-	1	3	-	-
<i>krsi</i>	be blocked	-	-	-	10	-	7
<i>mgthksi</i>	be in the mouth	* <sup>a</sup>	4	-	22	2	5
<i>migsi</i>	be hanging	18	1	8	13	4	3
<i>moraksi</i>	be leaning	-	-	2	4	-	-
<i>mosisi</i>	be gathered	-	-	9	16	1	-
<i>moyusi</i>	be shrunk	-	-	-	-	-	-
<i>mreznsi</i>	be straight	-	-	-	1	-	-
<i>mtheksi</i>	be lifted up	*	-	4	16	-	1
<i>myuknsi</i>	be twisted	-	-	-	2	-	1
<i>nänzüthksi</i>	be covered with soil	1	-	-	10	-	-
<i>rafigsi</i>	be on top of sth.	2	-	7	26	2	-
<i>rakthksi</i>	be on top of sth.	-	-	-	4	1	-
<i>rfakusi</i>	be sprinkled	-	-	2	2	-	-
<i>rfuthraksi</i>	be piled up	*	-	1	-	-	-
<i>rgsi</i>	be wearing clothes	*	6	15	-	-	1
<i>rinaksi</i>	be poured into	1	-	-	10	5	1
<i>rmiththraksi</i>	be joined together	-	-	-	3	-	-
<i>rmnzüfaksi</i>	be side by side	-	-	-	1	-	-
<i>rngthksi</i>	be in a tree fork	-	-	-	-	-	-
<i>rthbraksi</i>	be sticking on sth.	1	-	-	1	-	-
<i>rzarsi</i>	be tied together	-	1	3	12	-	3
<i>rziraksi</i>	be bent	1	-	2	21	2	4
<i>räzsi</i>	be erected	14	-	4	28	2	5
<i>sisraksi</i>	be sticking out	1	-	-	-	-	-
<i>sümraksi</i>	be widened, be open	-	-	-	-	-	-
<i>thamsaksi</i>	be spread out	-	-	2	2	1	-
<i>tharasi</i>	be underneath sth.	1	-	6	6	2	-
<i>tharuksi</i>	be inside sth.	2	-	20	17	-	1
<i>thäfrsi</i>	be covered by sth.	-	-	1	6	-	1
<i>thfuksi</i>	be covered with leaves	-	-	-	1	-	-
<i>thorsi</i>	be inside sth.	62	-	43	56	1	6
<i>ththaksi</i>	be pinned on sth.	3	1	2	7	-	-
<i>ttüsi</i>	be painted on sth.	-	-	1	6	-	8
<i>wäthsi</i>	be tied, be wrapped	-	-	-	24	1	13
<i>worsi</i>	be planted in ground	-	-	6	19	-	26
<i>zaksi</i>	be anchored	-	-	1	2	-	-
TOTAL		107	13	162	359	24	88

<sup>a</sup>An asterisk marks ungrammaticality; in the PREF column this signals deponency.

Table 5: Fluid prefixing verbs: non-positionals

Lexeme	Translation	PREF	PREF(IO)	MID	TRANS	TRANS(IO)	NMLZ
<i>-rū</i>	be (do) <sup>a</sup>	3683	116	143	172	8	*
<i>msaksi</i>	dwel, sit	* <sup>b</sup>	330	41	6	-	15
<i>rfiksi</i>	grow (nurture)	16	-	-	-	-	1
<i>rmigufaksi</i>	be in the middle	1	-	-	-	-	-
<i>sufaksi</i>	be old	6	-	-	-	-	-
<i>thfäsi</i>	fly (jump)	37	-	17	*	*	-
<i>thgusi</i>	forget	*	3	5	3	-	-
<i>thoraksi</i>	appear (find)	129	-	-	16	1	6
<i>wokraksi</i>	float	2	-	-	-	-	-
<i>yufaksi</i>	be bent over	*	-	-	-	-	-
<i>yukrasi</i>	be standing	119	1	1	2	-	2
TOTAL		3993	450	207	199	9	24

<sup>a</sup>Translations in brackets refer to the translation in the ambifixing templates.

<sup>b</sup>An asterisk marks ungrammaticality; in the PREF column this signals deponency.

Table 6: Prefixing-only verbs

Lexeme	Translation	PREF	PREF(IO)	MID	TRANS	TRANS(IO)	NMLZ
<i>-nor</i>	shout, emit sound	* <sup>a</sup>	108	*	*	*	-
<i>-ru</i>	sleep	61	-	*	*	*	*
<i>-thn</i>	be lying down	91	6	*	*	*	*
<i>-wä</i>	be up high	23	2	*	*	*	*
<i>-yak/-tf<sup>b</sup></i>	walk	277	2	(28)	*	*	*
<i>-nyak/-tf</i>	come	*	184	(11)	*	*	*
<i>-ythk</i>	come to end	*	28	*	*	*	*
<i>fogsi</i>	be away, caught by night	13	-	*	*	*	-
<i>mothizsi</i>	rest	*	6	*	*	*	-
<i>namgsi</i>	gasp	*	-	*	*	*	-
<i>wäksi</i>	wake up, caught by day	6	-	*	*	*	8
<i>yarenzsi</i>	look	*	50	*	*	*	-
<i>yathizsi</i>	die, suffer	*	8	*	*	*	-
TOTAL		471	394	(39)	*	*	8

<sup>a</sup>An asterisk marks ungrammaticality; in the PREF column this signals deponency.

<sup>b</sup>The verbs ‘walk’ and ‘come’ share the same stems *-yak* and *-tf*.

### 4.3 Discussion

In the following discussion, I describe template fluidity of prefixing verbs as well as some of the peculiarities found with this group of verbs. Prefixing verbs are a

small class of 63 from around 350 verb stems that have been documented so far. Prefixing verbs bring together most of the irregularities that are found in the verb morphology. Irregularities include limitations on possible TAM categories, stem suppletion for TAM, stem changes for dual number, stem changes according to template choice, lack of infinitival forms, deponency, and the ability to construct a fourth number value. One could say that despite them being simple with respect to indexing, i.e., they are monovalent, prefixing verbs are the locus of irregularity in what is already a rather complex morphological system.

### 4.3.1 Template fluidity

With respect to template fluidity, prefixing verbs can be divided into two groups: those that occur only in the prefixing template, and those that occur in other templates as well. Out of 63 prefixing verbs, only 12 are prefixing-only. The remaining 51 verbs can occur in one or all of the ambifixing templates.

An example of a prefixing-only verb is *wäksi*, which means literally ‘be caught by daybreak’ or ‘experience daybreak’.<sup>10</sup> The verb is shown in example (19) below. In the text, the speaker describes the malignant actions of a sorcerer during the night time.

- (19) *keke kwa bä sra\ru/gr o*  
 NEG FUT MED [3SG.MASC:IRR:IPFV/sleep]<sub>PREF</sub> or  
*sra\wäk/wr.*  
 [3SG.MASC:IRR:IPFV/daybreak]<sub>PREF</sub>  
 ‘He would not sleep there or stay until morning.’ [tci20130903-04 RNA 110]

By semantic extension this lexeme can also be used to mean ‘wake up’, as in example (20). The speaker here describes how they stayed overnight for an event in the neighbouring village.

- (20) *n\ru/gwr n\wäk/wr ezi-ezi*  
 [1PL:NPST:IPFV/sleep]<sub>PREF</sub> [1PL:NPST:IPFV/wake.up]<sub>PREF</sub> REDUP-morning  
*zä\brim/ake.*  
 [1PL:PST:PFV/return]<sub>MID</sub>  
 ‘We slept, we woke up and returned early in the morning.’  
 [tci20120904-01 MAB 173]

After what has been described previously, one would expect that this lexeme can also be used in a more dynamic sense in the middle template (‘awaken’), and also with a more volitional sense in the transitive template (‘wake someone’).

<sup>10</sup>There is a corresponding verb *fogsi* ‘be caught by nightfall’, also a prefixing-only verb.

However, *wäksi* never occurs in these templates. This gap in the system is filled by a distinct lexeme: *bnazsi* ‘wake up, get up, rise’. This is shown for the middle template in (21), and the transitive template in (22). In turn, *bnazsi* cannot be used in the prefixing template. Thus, it seems that in this case, it is the lexical semantics of the two verbs that constrains template fluidity.

- (21) *ɲaf=yé*                      *zafe kwa\bnaz/rmth.*  
 father=ABS.NSG early [2|3PL:PST:DUR/wake.up]<sub>MID</sub>  
 ‘The fathers were getting up early.’ [tci20210805-01 MAB 568]
- (22) *su\bnaz/rm*    *fof*    (.) *sain*  
 [SG>3SG.MASC:PST:DUR/wake.up]<sub>TRANS</sub> EMPH (.) sign  
*swa\ri/thrm.*  
 [SG>3SG.MASC:PST:DUR/give]<sub>TRANS(10)</sub>  
 ‘She was waking him up really. She was giving him a sign.’  
 [tci20120901-01 MAK 98-99]

A contrasting example is the verb *thgusi* ‘forget’, which occurs in the prefixing template as well as the ambifixing templates in the corpus.<sup>11</sup> I provide a longer example below in (23), which comes from a botanical walk, during which two speakers were showing me various plants. In the example, the speakers RNA and JAA comment on a particular tree. In (23a), RNA points out that they do not know its name. At first, this is done with *thgusi* in the prefixing template, which frames ‘forget’ as a stative. Note also the use of the iamitive marker *z* ‘already’. After some further elaboration in (23b) and (23c), she returns to the fact that she does not know the name. In (23d), she intends to say *fämmäre z yf zäziré* (literally: ‘I fell down without thinking’), which is a more metaphorical way of saying that one has forgotten something. However, she interrupts her speech and corrects herself by using *thgusi* again. This time the verb occurs in the middle template, which has a more dynamic meaning.<sup>12</sup>

- (23) a. RNA: *bäi, wämne zane \yé/*    *yf*  
           Bäi tree(ABS) PROX [3SG.MASC:NPST:IPFV/be]<sub>PREF</sub> name(ABS)  
           *z*                      *nzwa\thgu/n.*  
           already [1DU:RPST:IPFV/forget]<sub>PREF(10)</sub>  
           ‘Bai, this is the tree here. Its name is already lost to us.’
- b. JAA: *komnzo sa\thor/*    *waniwani=me!*  
           just            [2SG>3SG.MASC:IMP:PFV/carry]<sub>TRANS</sub> picture=INS  
           ‘Just take a picture of it!’

<sup>11</sup> *Thgusi* is a deponent verb. Therefore, it occurs in the prefixing (10) template. More on deponent prefixing verbs in §4.3.7.

<sup>12</sup> The tree was later identified as *grnzari* (Chantium sp).

- c. RNA: *nafane yawi mane \yé/*  
 3SG:POSS fruit(ABS) which [3SG.MASC:NPST:IPFV/be]<sub>PREF</sub>  
*dagon=ma \yé/*  
 food=CHAR [3SG.MASC:NPST:IPFV/be]<sub>PREF</sub>  
 ‘As for its fruit, it is for eating.’
- d. RNA: *fam=märe z yf* (.) *keke fam=märe* (.)  
 thought=PRIV already name(ABS) (.) NEG thought=PRIV (.)  
*zä\thguf/é* *yf*.  
 [1SG:RPST:PFV/forget]<sub>MID</sub> name(ABS)  
 ‘It has slipped from memory ... no, not slipped from memory ... I forgot the name.’
- e. JAA: *kafar=wä e\fath/wrth* *bäne* (.)  
 big=EMPH [2|3PL>2|3PL:NPST:IPFV/hold]<sub>TRANS</sub> what’s-that (.)  
*mane miyatha e\rä/*.  
 which knowledge(ABS) [2|3PL:NPST:IPFV/be]<sub>PREF</sub>  
 ‘The old people hold this what’s-that ... it is them who have the knowledge.’ [tci20130907-02 RNA 581-584 JAA 488-489]

We can see from the example that there are more lexical constraints for *wäksi* than for *thgusi* in terms of template fluidity. It follows that template choice creates a difference in meaning for *thgusi*, whereas this is done via lexeme choice for *wäksi* vs. *bnazsi*. As we will see below, template fluidity is highest for verbs that express postures and position.

#### 4.3.2 The verb ‘be’

It is worth pointing out the idiosyncracies for the existential verb *-rä* ‘be’ with respect to template fluidity. This verb can occur in all templates, but in the ambifixing templates it is used as a light verb meaning ‘do’. In terms of frequency, the vast majority of tokens (3799) are in the prefixing template meaning ‘be’. Only 323 tokens are in ambifixing templates meaning ‘do’. Below I give an example of *-rä* in each of the five templates (24-28).

- (24) *tüfr kabe keke thf\rä/rm*.  
 plenty people(ABS) NEG [2|3PL:PST:DUR/be]<sub>PREF</sub>  
 ‘There were not plenty of people.’ [tci20120805-01 ABB 522]

In a prefixing (IO) template, the verb *-rä* may express possession, as in (25), where the possession is negated.

- (25) *zafe kabe nafa thu\r/wrmth*  
 old people(ABS) 3NSG.ERG [2|3PL>2|3PL:PST:DUR/weave]<sub>TRANS</sub>  
*net fthé keke thwa\rä/rm.*  
 fishnet(ABS) when NEG [2|3PL:PST:DUR/be]<sub>PREF(10)</sub>  
 ‘The old people were weaving these, when they didn’t have (fishing) nets.’  
 [tci20120906 SKK 90-92]

As a light verb, its meaning is often specified by another nominal or by a following full verb. In (26) *-rä* occurs in the middle template and is further specified by the nominal *fam* ‘thought’. This is in fact the most common way to express the concept of ‘thinking’ in Komnzo (lit. ‘do thoughts’).

- (26) *emoth=f we neba fam b=ŋa\rä/r.*  
 girl=ERG.SG also opposite thought(ABS) MED=[2|3SG:NPST:IPFV/do]<sub>MID</sub>  
 ‘The girl is also thinking there on the other side.’ [tci20111004 RMA 362]

In (27), *-rä* occurs in the transitive template and is followed by the full verb *kwthenzsi* ‘change’, which further specifies its meaning.

- (27) *nzürna trikasi za\r/ath*  
 nzürna story(ABS) [2|3PL>3SG.FEM:PST:PFV/do]<sub>TRANS</sub>  
*za\kwthef/ath.*  
 [2|3PL>3SG.FEM:PST:PFV/change]<sub>TRANS</sub>  
 ‘They made it into a *nzürna* story. They changed it.’  
 [tci20111119-06 MAB 146-147]

Finally, the verb *-rä* can occur in the transitive (10) template with the meaning ‘do for someone’. In (28), its meaning is not further specified because the context was enough to know that the speaker meant ‘get for someone’. Note that the beneficiary indexed in the prefix is flagged with the dative case (*tayafeŋn* ‘for Tayafe’).

- (28) *namä kitr e\rä/. tayafe=ŋn*  
 good river.pandanus(ABS) [2|3PL:NPST:IPFV/be]<sub>PREF</sub> tayafe=DAT.SG  
*bobo n zrä\r/e.*  
 MED:ALL IMN [1PL>3SG.FEM:IRR:PFV/do]<sub>TRANS(10)</sub>  
 ‘These are good pandanus leaves. We will get some for Tayafe from here.’  
 [tci20130907-02 JAA 253-254]

### 4.3.3 Fourth number value

Prefixing verbs allow for various types of special morphology. One such type is the formation of a fourth number value. As in most Yam languages, argument

number is distributed over two morphological slots. The person affixes (as well as free pronouns and case markers) make a distinction between singular and non-singular. Dual number is encoded in a special slot, which makes a distinction between dual and non-dual. Singulars combine a singular with a non-dual, duals a non-singular with a dual, and plurals a non-singular with a non-dual. Prefixing verbs allow for the construction of a large plural by combining the singular in the person affix with a dual.<sup>13</sup> The semantic reading of a large plural can be either exhaustive (“all X”) or large (“many X”). This fourth number value is possible only if the particular lexeme occurs in the prefixing template. Those prefixing verbs which can occur in other templates, for example in the middle template, cannot encode large plurals in the middle template.

Speakers have commented on large plural inflections as something “that old people say”. Indeed, in the whole corpus there is a single example of a large plural (29) that occurs in a story told by an older speaker who is now deceased.<sup>14</sup>

- (29) a. “*eh, ngthé bana! sgeru komnzo*  
 hey younger.sibling poor palmwine(ABS) still  
*e\mi/thgr?*”  
 [2|3PL:NPST:STAT/be.hanging]<sub>PREF</sub>  
 ‘Hey, poor little brother! Are the palmwine (containers) still hanging?’”
- b. “*ah, sgeru komnzo y\rn/.*”  
 yes palmwine(ABS) still [2|3LPL:NPST:IPFV/be]<sub>PREF</sub>  
 ‘Yes, they are all there.’ [tci20130927-06 MAB 189]

#### 4.3.4 Positional verbs

Another example of special morphology is the stative suffix, which simultaneously encodes dual number: *-thgr* (non-dual) and *-thgn* or sometimes *-thgrn* (dual). Based on the ability to take this suffix, one can set up a class of positional verbs. These are shown in Table 4 as the first group of verbs. With its 40 members, positional verbs form the largest group within the prefixing verbs. They may express inherent disposition without reference to a ground, for example *mreznsi* ‘be straight’ or *myuknsi* ‘be twisted’. Most verbs of this groups express position of a figure with respect to some ground, for example *thorsi* ‘be inside a closed container’ or *ththaksi* ‘be pinned on something’. These meanings can be very

<sup>13</sup>This has been attested so far only for third person. Note that there is a gender distinction in the 3SG in Komnzo, for example in the  $\alpha$  series: *y-* 3SG.MASC vs. *w-* 3SG.FEM. The form used for constructing large plurals is always the masculine.

<sup>14</sup>In the example, the verb ‘be’ occurs in the large plural. This prefixing verb encodes the dual versus non-dual contrast in its stem: *-rā* (non-dual) versus *-rn* (dual).

specific as in *rngthksi* ‘be wedged in a tree fork’ (usually of pig’s jaw as hunting trophies) or *zaksi* ‘be anchored’ (usually of a canoe by the riverbank). Example (30) below shows the verb *räzsi* ‘erect’ in the prefixing template with the stative suffix. Accordingly, the gloss for this lexeme in this template is ‘be erected’.

- (30) *masu mane \rä/ra nä far fä*  
 Masu(ABS) which [3SG.FEM:PST:IPFV/be]<sub>PREF</sub> INDF post(ABS) DIST  
**y\räs/thgra.**  
 [3SG.MASC:PST:STAT/be.erected]<sub>PREF</sub>  
 ‘As for Masu, there was another post erected over there.’  
 [tci20120805-01 ABB 477]

All positional verbs can be used in all other templates. The following examples show this again for the verb *räzsi* ‘erect’. Note that this was already exemplified in section 3.2 for *migsi* ‘hang’ with elicited examples. Example (31) shows *räzsi* in the middle template and describes how a person fell from a tree and landed head-first in the mud.

- (31) *ebar=me ze\räs/a warfo zawe thabr*  
 head=INS [SG:PST:PFV/erect]<sub>MID</sub> above side legs  
*thf\rä/rm.*  
 [2|3PL:PST:DUR/be]<sub>PREF</sub>  
 ‘(He fell down and) planted his head (in the mud). His legs were on top.’  
 [tci20120904-02 MAB 268-269]

Example (32) shows *räzsi* in the transitive template. The speaker instructs his friends in this text to build, that is to ‘erect’, a house at this place.

- (32) *mnz nä zä z\räs/e ηa*  
 house(ABS) INDF PROX [2PL>3SG.FEM:IMP:PFV/erect]<sub>TRANS</sub> and  
*zäre=r!*  
 shade=PURP  
 ‘You must build another house here (to sit in the) shade!’  
 [tci20120922-26 DAK 140]

There are some prefixing verbs, which do not take the stative suffix, but nevertheless have positional semantics. The first group is a set of the four verbs: *msaksi* ‘be sitting’, *rmigufaksi* ‘be in the middle’, *yufaksi* ‘be bent over’ and *yukrasi* ‘be standing’. These share with positionals that they can also occur in all other templates. The second set consists of two prefixing-only verbs with positional semantics: *wä-* ‘be up high’ and *-thn* ‘be lying down’.

Taken as a group, positional verbs occur more often in one of the ambifixing templates than in the prefixing template. The figures from Table 4 show that there are 116 tokens in the prefixing templates versus 545 tokens in one of the three ambifixing templates. This varies a lot for individual lexemes, but taken together, one should analyse the prefixing template for this subclass of verbs as an alternation. In other words, their spatial or positional semantics allows them to be used in the prefixing template with the stative suffix (*-thgr/-thgn*). This ability makes positional verbs the subclass with the highest degree of template fluidity.

#### 4.3.5 Restrictions on TAM

Another morphological irregularity of prefixing verbs is the fact that they are limited in their ability to express certain TAM categories. Most of them cannot express perfectives. Similar to the expression of the fourth number, this restriction only applies when these verbs are used in the prefixing template. For example, positional verbs cannot express perfectives in the prefixing template. This is only possible when they are used in a middle or transitive template, as can be seen with *räzsi* in (31) and (32) above.

It seems that the stative semantics of the template are the reason for this restriction. However, there are a few prefixing-only verbs which do allow perfectives, for example *yak-* ‘walk, come’ and *yarenzsi* ‘look around’. I take these as exceptions to the rule that the prefixing template encodes stative, non-volitional semantics.

#### 4.3.6 Infinitival forms and stem changes

Many prefixing verbs lack an infinitive. Regular infinitives are formed by adding the nominalizing suffix *-si* to the verb stem, for example *msak* is the stem of ‘sit, dwell’ and the corresponding infinitive is *msaksi*. Some verbs have irregular stems and they employ a noun instead, for example *fn-* is the stem of ‘hit, kill’. Instead of a regular infinitive, the nominal *zan* ‘hitting, killing’ is used, which can also mean ‘fight, war’. Lastly, there are many verbs which lack an infinitival form. The point here is that this happens more often for prefixing-only verbs. About half of them lack an infinitive. Note that this is not the case for the more labile prefixing verbs that may occur in the ambifixing templates, including all positional verbs. Komnzo positionals differ from Nen in this respect, where Evans explains that all positionals lack an infinitive (2014: 236).

Most prefixing verbs have a distinct, usually shorter, stem for this template. For example, the verb *msaksi* has, like most verbs, two stems which are sensitive to aspect: *msak* and *ms*. The latter is used to form perfectives.<sup>15</sup> These two stems

<sup>15</sup>In the grammar of Komnzo, I call these stem types “extended” (*msak*) vs. “restricted” (*ms*),

are only used in ambifixing templates, whereas in the prefixing template the stem of this verb is simply *m*. Such pairs (or rather triplets) can be found for many of the positional verbs (cf. Döhler 2018: 198).

### 4.3.7 Deponency

Quite a number of prefixing verbs are deponent in the sense explained in §3.2.4 above. 14 out of the 63 prefixing verbs occur in the prefixing (IO) template, even though the indexed argument is an S argument in the absolutive case, not in the dative or the possessive. This observation might help in explaining some of the idiosyncrasies for certain lexemes. For example, the prefixing-only verb ‘shout’ has the stem *-nor*. This is shown in example (33).

- (33) *fä mane n=wän\nor/*  
 DIST which(ABS) IPST=[3SG.FEM:NPST:IPFV:VENT/shout]<sub>PREF(IO)</sub>  
*zba zf ze\thfär/.*  
 PROX:ABL IMM [3SG.FEM:RPST:PFV/fly]<sub>PREF</sub>  
 ‘The (bird) that just shouted over there, flew away from here.’  
 [tci20210815 ABB 63-64]

At first sight, this verb violates the semantic profile of the prefixing template in being both dynamic and volitional. However, the stem *-nor* is often preceded by a nominal that specifies its meaning in some way. For example, *-nor* is often preceded by *kwan* ‘shout (n)’ to express the concept of shouting (literally: ‘to shout the shout’), which is similar to English cognate object constructions (‘sing a song’). In example (34), *-nor* is preceded by the nominal *ya* ‘tears’ and the combination of *ya* ‘tears’ + *-nor* ‘shout’ then means ‘cry’.

- (34) *ηame neba ya*  
 mother(ABS) opposite tears(ABS)  
*wän\nor/ nge neba.*  
 [3SG.FEM:NPST:IPFV:VENT/shout]<sub>PREF(IO)</sub> child(ABS) opposite  
 ‘The mother is crying on the one side, and the child on the other.’  
 [tci20111004 RMA 120]

There are a number of such combinations: *wth* ‘excretes’ + *-nor* means ‘fart’, or even *frk* ‘blood’ + *-nor* ‘shout’ meaning ‘bleed’. In the light of these kinds of examples, one could translate *-nor* in a more non-volitional sense as ‘emit a sound’. Once we adopt this translation, the transitive (IO) template comes as a natural coding strategy because the sounds that are emitted must be ‘someone’s sounds’,

---

which means that they are extended in time versus restricted in time (Döhler, 2018: 180).

i.e., they are possessed by the person, or animal, or object that emits them. The expected possessive case marking was probably lost, or simply reanalysed at some point in time, resulting in a deponent structure.

## 5 Conclusion

The topic of this article was the interaction between the morphological structure of indexing, what I have called verb templates, and lexical semantics. I have argued that this is best understood by looking at template fluidity: the ability or inability of certain lexemes or groups of lexemes to occur in different templates. We have seen that for a number of lexemes the template choice is fixed. The S argument of dynamic intransitives are encoded in the middle template, like the A argument of transitives, while the S argument of non-volitional, stative intransitives are encoded in the prefixing template, like the P argument of transitives. Such systems have been called split-S in the literature (Merlan, 1985). We have also seen that a number of lexemes can be used in different templates based on semantic considerations. Cross-linguistically the latter kinds of systems have been described as fluid intransitives (Dixon 1994, Witzlack-Makarevich 2011) and they often involve dependent marking, as in Hindi/Urdu (Davidson, 1999), head marking, as in Acehnese (Durie, 1985), or a mix of both, as in the oft-cited example Tsova-Tush (Holisky, 1987). In Komnzo, fluid intransitivity is exhibited by the head marking. Split-S or fluid-S systems seem to be an areal feature of Southern New Guinea. Not only do they occur in other languages of the Yam family, but also in unrelated languages of the region, for example in Marind (Olsson, 2021) or Marori (Arka, 2012).

In Komnzo, template fluidity is highest for those lexemes which are unspecified in terms of agentivity. This explains why the most fluid lexemes are those verbs that describe physical postures or the position with respect to some ground, but also the verb ‘be’. These can occur in the prefixing template with its stative and non-volitional semantics, but also in all of the ambifixing templates with their more dynamic and agentive semantics. If we compare these verbs to typical change-of-state verbs like *rmatksi* ‘cut’ or *zan* ‘hit’ on the one hand, we find that the latter are less fluid. They cannot occur in the prefixing template, and the best explanation is that change-of-state verbs presuppose agentivity in their event semantics. On the other hand, if we compare them to non-volitional statives like *ru-* ‘sleep’ or *yathizsi* ‘die, suffer’ non-volitional events like *fogsi* ‘be caught by nightfall’, we find that these show the lowest degree of fluidity. They occur only in the prefixing template, and the best explanation is that they preclude agentivity in their event semantics. Thus, we may conclude that being unspecified for agentivity grants the greatest freedom within Komnzo verb morphology.

As I have shown, template fluidity does not only concern the way in which intransitives can be expressed, namely by the prefixing or the middle template. Fluidity is possible between all templates, that is for intransitives, transitives and ditransitives. Hence, the term “fluid intransitivity” seems to be a misnomer for what has been described in this article. Therefore, I suggest the term “fluid transitivity” as a more suitable label for Komnzo verb morphology.<sup>16</sup>

## 6 Acknowledgments

I would like to thank my Komnzo-speaking language teachers Nakre Abia and Abia Bai, as well as the people of Rouku for welcoming me to their village and for their continued support of my work. The fieldwork on which this work is based was funded by the DoBes program of the Volkswagen Foundation and by the Australian National University. I thank both of these institutions for their support of language documentation and description. The map in Figure 1 was produced by Kay Dancey and her team at the cartographic unit at ANU, Canberra. I would also like to thank the two reviewers, whose comments and questions have helped me to improve the article.

---

<sup>16</sup>A reviewer has invoked the notion of lability for the phenomenon described here. While I agree that this would be a suitable term, I found that most of the literature on lability speaks of ‘labile pairs’ (Letuchiy, 2009: 224), i.e., an intransitive-transitive pair. I hope to have shown that template fluidity in Komnzo goes beyond that.

# Appendix

Table 7: Data example: 47 tokens of the verb *migsi* ‘hang’

State	Template	Word	Morpheme	Stem	Inflectional values	Lexeme	Timecode	Speaker	Filename
INFL	MID	zámira	zá  mir/a	mir	2 3SG.SBJ:PST:PFV	hang	307788	ABB	tci20100905a.eaf
INFL	TRANS	zamirath	zá  mir/ath	mir	2 3PL.SBJ>3SG.FEM.OBJ:PST:PFV	hang	338535	ABB	tci20111119a-03.eaf
INFL	PREF	zimitgr	y  mi/thgr	mi	3SG.MASC.SBJ:NPST:STAT	be.hanging	386895	ABB	tci20111119a-03.eaf
INFL	PREF	wmithgr	w  mi/thgr	mi	3SG.FEM.SBJ:NPST:STAT	be.hanging	433058	ABB	tci20111119a-03.eaf
INFL	TRANS	thrámir	thrá  mir/	mir	2 3SG.SBJ>2 3PL.OBJ:IRR:PFV	hang	282335	MAB	tci20111119a-06.eaf
INFL	TRANS	smigwrm	s  mig/wrm	mig	2SG.SBJ>3SG.MASC.OBJ:FUTIMP:IPFV	hang	608867	ABB	tci20120805a-01.eaf
INFL	PREF	enmithgr	en  mi/thgra	mi	2 3PL.SBJ:PST:STAT:VENT	be.hanging	1248880	ABB	tci20120814a.eaf
INFL	TRANS	wmigwre	w  mig/wre	mig	1PL.SBJ>3SG.FEM.OBJ:NPST:IPFV	hang	180550	CAA	tci20120824a.eaf
INFL	MID	krámir	krá  mir/	mir	2 3SG.SBJ:IRR:PFV	hang	189295	CAA	tci20120824a.eaf
INFL	TRANS	thámira	thá  mir/a	mir	SG.SBJ>2 3PL.OBJ:PST:PFV	hang	296785	MAK	tci20120901a-01.eaf
INFL	TRANS	zamir	zan  mir/	mir	2 3SG.SBJ>3SG.FEM.OBJ:RPST:PFV:VENT	hang	175849	ALK	tci20120922a-25.eaf
INFL	TRANS(10)	sámirath	sá  mir/ath	mir	2 3PL.SBJ>3SG.MASC.IO:PST:PFV	hang	649694	MKA	tci20120925a-01.eaf
INFL	TRANS(10)	sámirath	sá  mir/ath	mir	2 3PL.SBJ>3SG.MASC.IO:PST:PFV	hang	655341	MKA	tci20120925a-01.eaf
INFL	TRANS	emigwre	e  mig/wre	mig	1PL.SBJ>2 3PL.OBJ:NPST:IPFV	hang	97560	ABB	tci20121001a.eaf
INFL	PREF	zemithgr	e  mi/thgr	mi	2 3PL.SBJ:NPST:STAT	be.hanging	116026	ABB	tci20121001a.eaf
INFL	TRANS	bemigwre	e  mig/wre	mig	1PL.SBJ>2 3PL.OBJ:NPST:IPFV	hang	139258	ABB	tci20121001a.eaf
INFL	PREF	bemithgr	e  mi/thgr	mi	2 3PL.SBJ:NPST:STAT	be.hanging	141044	ABB	tci20121001a.eaf
INFL	MID	zámir	zá  mir/	mir	2 3SG.SBJ:RPST:PFV	hang	75482	MAB	tci20121008a-03.eaf
INFL	PREF	búmithgro	w  mi/thgro	mi	3SG.FEM.SBJ:NPST:STAT:AND	be.hanging	79788	MAB	tci20121008a-03.eaf
INFL	PREF	femithgrn	e  mi/thgrn	mi	2 3DU.SBJ:NPST:STAT	be.hanging	105806	MAB	tci20121008a-03.eaf
INFL	TRANS	thámiré	thá  mir/é	mir	1SG.SBJ>2 3PL.OBJ:RPST:PFV	hang	109444	MAB	tci20121008a-03.eaf
INFL	PREF	zimitgr	y  mi/thgr	mi	3SG.MASC.SBJ:NPST:STAT	be.hanging	113655	MAB	tci20121008a-03.eaf
INFL	PREF	womithgr	w  mi/thgr	mi	1SG.SBJ:NPST:STAT	be.hanging	1399607	SKK	tci20121019a-04.eaf
INFL	TRANS	emigwrake	e  mig/wrake	mig	1PL.SBJ>2 3PL.OBJ:PST:IPFV	hang	198677	WAM	tci20130823a-08.eaf
INFL	PREF	sumithgrm	su  mi/thgrm	mi	3SG.MASC.SBJ:PST:DUR:STAT	be.hanging	380868	RNA	tci20130901v-04.eaf
NMLZ		migsir		mig		hang	4347	MKW	tci20130903v-01.eaf
INFL	MID	kramir	kra  mir/	mir	2 3SG.SBJ:IRR:PFV	hang	142722	MKW	tci20130903v-01.eaf
INFL	TRANS(10)	ámigwr	á  mig/wr	mig	2 3SG.SBJ>2 3PL.IO:NPST:IPFV	hang	152650	MKW	tci20130903v-01.eaf
INFL	TRANS(10)	byámigwé	ya  mig/wé	mig	1SG.SBJ>3SG.MASC.IO:NPST:IPFV	hang	243264	MKW	tci20130903v-01.eaf
INFL	PREF	emithgr	e  mi/thgr	mi	2 3PL.SBJ:NPST:STAT	be.hanging	62540	MKW	tci20130903v-02.eaf
INFL	PREF(10)	namithgr	na  mi/thgr	mi	2SG.IO:NPST:STAT	be.hanging	74601	MKW	tci20130903v-02.eaf
INFL	TRANS	thrámiré	thrá  mir/é	mir	1SG.SBJ>2 3PL.OBJ:IRR:PFV	hang	201320	MKW	tci20130903v-03.eaf
INFL	TRANS	thrámiré	thrá  mir/é	mir	1SG.SBJ>2 3PL.OBJ:IRR:PFV	hang	204100	MKW	tci20130903v-03.eaf
INFL	TRANS	thrámiré	thrá  mir/é	mir	1SG.SBJ>2 3PL.OBJ:IRR:PFV	hang	274538	MKW	tci20130903v-03.eaf
INFL	PREF	emithgr	e  mi/thgr	mi	2 3PL.SBJ:NPST:STAT	be.hanging	850096	RNA	tci20130907a-02.eaf
INFL	MID	namigwrth	na  mig/wrth	mig	2 3PL.SBJ:NPST:IPFV	hang	1107819	RNA	tci20130907a-02.eaf
INFL	MID	namigwr	na  mig/wr	mig	2 3SG.SBJ:NPST:IPFV	hang	2431811	RNA	tci20130907a-02.eaf
INFL	MID	namigwrth	na  mig/wrth	mig	2 3PL.SBJ:NPST:IPFV	hang	3161812	RNA	tci20130907a-02.eaf
INFL	PREF	emithgr	e  mi/thgr	mi	2 3PL.SBJ:NPST:STAT	be.hanging	1325670	JAA	tci20130907a-02.eaf
INFL	PREF	emithgr	e  mi/thgr	mi	2 3PL.SBJ:NPST:STAT	be.hanging	1429345	JAA	tci20130907a-02.eaf
INFL	PREF	emithgn	e  mi/thgn	mi	2 3DU.SBJ:NPST:STAT	be.hanging	2723972	JAA	tci20130907a-02.eaf
INFL	MID	namigwrth	na  mig/wrth	mig	2 3PL.SBJ:NPST:IPFV	hang	3161995	JAA	tci20130907a-02.eaf
INFL	PREF	emithgr	e  mi/thgr	mi	2 3PL.SBJ:NPST:STAT	be.hanging	3194996	JAA	tci20130907a-02.eaf
INFL	PREF	bemithgro	e  mi/thgro	mi	2 3PL.SBJ:NPST:STAT:AND	be.hanging	369931	MAB	tci20130927v-06.eaf
INFL	PREF	emithgr	e  mi/thgr	mi	2 3PL.SBJ:NPST:STAT	be.hanging	526633	MAB	tci20130927v-06.eaf
NMLZ		migsir		mig		hang	87279	ABB	tci20150906v-10-1.eaf
NMLZ		migsi		mig		hang	145047	ABB	tci20150906v-10-1.eaf

## Abbreviations

\.../ = verb stem (e.g. y\fath/wr)  
 (.) = speech pause  
 . = multi-item gloss (e.g. old.man)  
 | = used in cases of syncretism (e.g. 2|3 person)  
 1 = first person  
 2 = second person  
 3 = third person  
 ABS = absolutive case  
 ABL = ablative case  
 ALL = allative case  
 ALR = iamitive (‘already’)  
 AND = andative (‘thither’)  
 ASSOC = associative case

CHAR = characteristic case, source  
 DEM = demonstrative  
 DIA = diathetic prefix  
 DIST = distal (deictic)  
 DU = dual  
 DUR = durative  
 EMPH = emphatic  
 ERG = ergative case  
 EXT = extended verb stem  
 FEM = feminine  
 FUT = future  
 IMM = immediate (‘right here’)  
 IMM = imminent (‘about to’)

IMP = imperative  
INDF = indefinite  
INS = instrumental case  
IO = indirect object  
IPFV = imperfective  
IPST = immediate past  
IRR = irrealis  
LPL = large plural  
M = middle  
MASC = masculine  
MED = medial (deictic)  
MID = middle template  
NDU = non-dual  
NPST = non-past  
NSG = non-singular  
ONLY = exclusive marker ('only', 'just')

PFV = perfective  
PL = plural  
POSS = possessive  
PREF = prefixing template  
PROX = proximal (deictic)  
PST = past  
PURP = purposive case  
RECOG = recognitional ('whatchamacallit')  
REDUP = reduplication  
RPST = recent past  
RS = restricted verb stem  
SG = singular  
STAT = stative  
TRANS = transitive template  
VENT = venitive ('hither')

## References

- Arka, I. W. (2012). Projecting morphology and agreement in Marori, an isolate of Southern New Guinea. In N. Evans and M. Klamer (Eds.), *Melanesian Languages on the Edge of Asia: Challenges for the 21st Century*, Language Documentation Conservation Special Publication No. 5, pp. 150–173. University of Hawai'i Press.
- Baerman, M., G. G. Corbett, D. Brown, and A. Hippisley (2006). *Surrey Typological Database on Deponency*. University of Surrey: Surrey Morphology Group. URL: <http://dx.doi.org/10.15126/SMG.15/1>.
- Caballero, G. and A. Harris (2012). A working typology of multiple exponence. In F. Kiefer, M. Ladányi, and P. Siptár (Eds.), *Current issues in morphological theory: (ir)regularity, analogy and frequency*. John Benjamins.
- Carroll, M. J. (2016). *The Ngkolmpu Language with special reference to distributed exponence*. Ph. D. thesis, Australian National University, Canberra.
- Davidson, A. (1999). Ergativity: functional and formal issues. In M. Darnell, E. Moravcsik, F. Newmeyer, M. Noonan, and K. Wheatley (Eds.), *Functionalism and Formalism in Linguistics, Volume I: General Papers*, pp. 177–208. Amsterdam: John Benjamins.
- Dixon, R. M. W. (1994). *Ergativity*. Cambridge: Cambridge University Press.
- Döhler, C. (2010-2015). *DoBeS Documentation: Nen and Komnzo, two languages of Southern New Guinea*. Nijmegen: The Language Archive. URL: <https://hdl.handle.net/1839/00-0000-0000-0017-B0AC-C>.
- Döhler, C. (2018). *A grammar of Komnzo*. Berlin: Language Science Press.

- Döhler, C. (2021). *Komnzo text corpus*. Zenodo. URL: <http://doi.org/10.5281/zenodo.4695271>.
- Döhler, C. (2022a). Expressions of directed caused accompanied motion in Komnzo. In A. Margetts, S. Riesberg, and B. Hellwig (Eds.), *Caused Accompanied Motion. Bringing and taking events in a cross-linguistic perspective*, Number 134 in Typological Studies in Language (TSL), pp. 273–300. Amsterdam/Philadelphia: John Benjamins.
- Döhler, C. (2022b). Reflexive constructions in Komnzo. In K. Janic, N. Puddu, and M. Haspelmath (Eds.), *Reflexive constructions in the world's languages*, Research on Comparative Grammar. Berlin: Language Science Press.
- Durie, M. (1985). *A Grammar of Acehnese*. Dordrecht: Foris Publications.
- Evans, N. (2014). Positional verbs in Nen. *Oceanic Linguistics* 53(2), 225–255.
- Geniušienė, E. (1987). *The typology of reflexives*. Berlin: Mouton de Gruyter.
- Hengeveld, K. (2012). Referential markers and agreement markers in Functional Discourse Grammar. *Language Sciences* 34(4), 468–479.
- Holisky, D. A. (1987). The case of the intransitive subject in Tsova-Tush (Batsbi). *Lingua* 71, 103–132.
- Kemmer, S. (1993). *The Middle Voice*, Volume 23 of *Typological studies in language*. Amsterdam/Philadelphia: John Benjamins.
- Lazard, G. (2002). Transitivity revisited as an example of a more strict approach in typological research. *Folia Linguistica* 36, 141–190.
- Letuchiy, A. (2009). Towards a typology of labile verbs: Lability vs. derivation. In P. Epps and A. Arkhipov (Eds.), *New Challenges in Typology: Transcending the Borders and Refining the Distinctions*, pp. 247–268. Berlin, New York: De Gruyter Mouton.
- Matthews, P. H. (1974). *Morphology*. Cambridge: Cambridge University Press.
- Merlan, F. (1985). Split intransitivity: Functional oppositions in intransitive inflection. In J. Nichols and A. C. Woodbury (Eds.), *Grammar inside and outside the clause: Approaches to theory from the field*, pp. 324–362. Cambridge: Cambridge University Press.
- Mosel, U. (2012). Advances in the accountability of grammatical analysis and description by using regular expressions. *Language Documentation & Conservation Special Publication* 4, 235–250.

Olsson, B. (2021). *A Grammar of Coastal Marind*. Berlin/Boston: De Gruyter Mouton.

Siegel, J. (2017). Transitive and intransitive verbs in Nama, a Papuan language of Southern New Guinea. *Oceanic Linguistics* 56(1), 123–142.

Witzlack-Makarevich, A. (2011). *Typological variation in grammatical relations*. Ph. D. thesis, Universität Leipzig, Leipzig.

revised draft version