A grammar of Komnzo

Christian Döhler

Studies in Diversity Linguistics 99

language science press

Studies in Diversity Linguistics

In this series:

1. Handschuh, Corinna. A typology of marked-S languages.
2. Rießler, Michael. Adjective attribution.
3. Klamer, Marian (ed.). The Alor-Pantar languages: History and typology.
4. Berghäll, Liisa. A grammar of Mauwake (Papua New Guinea).
5. Wilbur, Joshua. A grammar of Pite Saami.
6. Dahl, Östen. Grammaticalization in the North: Noun phrase morphosyntax in Scandinavian vernaculars.
7. Schackow, Diana. A grammar of Yakkha.
8. Liljegren, Henrik. A grammar of Palula.
9. Shimelman, Aviva. A grammar of Yauyos Quechua.
10. Rudin, Catherine & Bryan James Gordon (eds.). Advances in the study of Siouan languages and linguistics.
11. Kluge, Angela. A grammar of Papuan Malay.
12. Kieviet, Paulus. A grammar of Rapa Nui.
13. Michaud, Alexis. Tone in Yongning Na: Lexical tones and morphotonology.
14. Enfield, N. J (ed.). Dependencies in language: On the causal ontology of linguistic systems .
15. Gutman, Ariel. Attributive constructions in North-Eastern Neo-Aramaic.
16. Bisang, Walter & Andrej Malchukov (eds.). Unity and diversity in grammaticalization scenarios.

ISSN: 2363-5568

A grammar of Komnzo

Christian Döhler

language
science
press

Christian Döhler. 2018. *A grammar of Komnzo* (Studies in Diversity Linguistics 99).
Berlin: Language Science Press.

This title can be downloaded at:
http://langsci-press.org/catalog/book/000

ISBN: no digital ISBN
no print ISBNs!
ISSN: 2363-5568
no DOI
Source code available from www.github.com/langsci/000
Collaborative reading: paperhive.org/documents/remote?type=langsci&id=000

Cover and concept of design: Ulrike Harbort
Typesetting: Christian Döhler
Fonts: Linux Libertine, Libertinus Math, Arimo, DejaVu Sans Mono
Typesetting software: XeLaTeX

Language Science Press
Unter den Linden 6
10099 Berlin, Germany
langsci-press.org

Storage and cataloguing done by FU Berlin

no logo

For Nakre and Tayafe

Contents

5 Verb morphology

5.1 Introduction

This chapter describes the verbal morphology of Komnzo, which is by far the most complex subsystem in the language, and reaches a scale of complexity which is found in polysynthetic languages.[1] Morphological complexity in Komnzo verbs arises not only from the number of affixes which the verb may host, but also from the way these combine to encode grammatical categories (see §5.2). In its simplest form a verb exists as an infinitive, that is the stem plus a nominaliser suffix. At their most complex, verbs may host a large number of affixes and clitics. Table 5.1 gives an overview of the verb template, the inflectional categories and the formatives to be discussed in this chapter.

The central feature that reverberates throughout Komnzo verb morphology is its cumulative and distributed combinatorics. The particular values of most grammatical categories are only arrived at after unifying information from several morphological slots within the verb structure. This feature has shaped my descriptive approach which bounces back and forth between a functional and a formal perspective. I address alignment and valency in §5.4, person, gender and number in §5.5, deixis and directionality in §5.6. At the same time, the functional perspective is interspersed with the description of structural phenomena like the two stem types in §5.3 or the suffixing subsystem in §5.5.1.1. Tense, aspect and mood will be described in Chapter 6. I describe the formatives and the possible combinations thereof in §6.2, the contribution of TAM particles in §6.3, and the semantic nuances of the TAM categories in §6.4. In order to avoid too much repetition, many cross-references in the text link related topics.

[1] Most definitions of polysynthesis stress two main criteria: noun incorporation and the expression of syntactic relations by pronominal affixes (Baker 1996: 16; Evans & Sasse 2002: 2; and Mithun 2009). Komnzo lacks noun incorporation, but cross-references up to two participants with pronominal affixes. Typically, a verb consists of 3 up to 9 morphs.

Table 5.1: Templatic representation of verb inflection

	clitic	PREFIX SLOTS			stem	SUFFIX SLOTS				
	-4	-3	-2	-1	√	1	2	3	4	5
VALENCY			val change: *a-*							
person		undergoer: 1, 2, 3 or MIDDLE								actor: 1, 2|3 or ∅
GENDER		undergoer: 3SG.F, 3SG.MASC								
number		undergoer: SG, NSG	dual: ∅- non-dual: *a-*				dual: *-n* non-dual: *-nzr, -wr, -r*			actor: SG, NSG
DEIXIS & DIRECTION	PROX: *z=* MED: *b=* DIST: *f=*			ventive: *n-*					andative: *-o*	
TAM	apprehensive: *m=* imminent: *n=*	prefix series: *α*, *β*, *β*1, *β*2, *γ*	irrealis: *ra-*		stem type: EXT (extended) RS (restricted)	stative: *-thgr*		past: *-a* durative *-m*		imperative: actor suffixes

5.2 Morphological complexity

The relationship between the value of a grammatical category and its exponents exhibits varying degrees of complexity in Komnzo verbs. At its simplest, we find a one-to-one mapping between function and form, which exists for the directional affixes. For the most part, however, Komnzo verbs are characterised by complexity of exponence of the type one-to-many and many-to-many. Concerning the former, we find what Matthews (1974: 147-149) calls "cumulative exponence", whereby one exponent expresses several grammatical categories, as well as "extended exponence", whereby several exponents express one grammatical category. Note that the latter has also been called "multiple exponence" in the literature (Caballero & Harris 2012: 163). For example, the Komnzo verb prefixes are portmanteau realisations of the categories person, gender, number, tense and aspect. Conversely, a category like tense is encoded in three different slots on the verb. These slots can be independently manipulated, which results in a many-to-many mapping. Complex exponence of this type is a feature found in all Yam languages.

Let us take one inflected verb form to illustrate these types of exponence. Example (1) gives the inflected verb form *yfathwroth* 'they hold him away'.[2]

(1) *yfathwroth*
y\fath/wroth
2|3PL:SBJ>3SG.MASC:OBJ:NPST:IPFV:AND/hold
'They hold him away.'

Here we find a one-to-one mapping between the directional value (andative) and the suffix *-o*. This is expressed in Figure 5.1 below where the verb form has been segmented into morphs. A line indicates the exponence relationship between the value (AND) and the formative (*-o*).

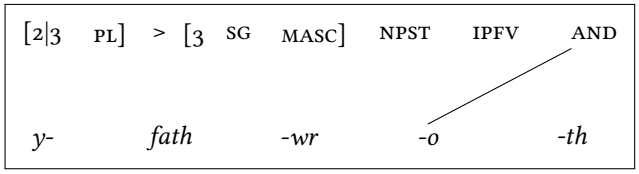

Figure 5.1: One-to-one mapping for the directional

Cumulative exponence is found in the verb prefix *y-* which fuses information on person (3), number (SG), and gender (MASC) of the object argument. In addition, *y-* contains information on tense (NPST) and aspect (IPFV). This is schematised in Figure 5.2.

Note that the prefix *y-* is necessary, but not sufficient, to establish the values for some of these categories. For example, the aspectual value of the verb (IPFV) is not expressed

[2]This verb form can have a stative as well as a dynamic reading: someone is holding a baby moving it away from the deictic centre (dynamic), or someone holds the baby in such a way that the toddler is facing away from the deictic centre (stative).

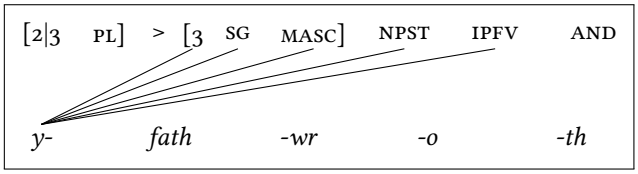

Figure 5.2: Cumulative exponence of person, number, gender, tense and aspect

solely by *y-*. This is what Matthews calls "extended exponence" (1974: 147-149) and Caballero & Harris refer to as "multiple exponence" (2012: 163). It is essentially the mirror image of Figure 5.2. Thus, Figure 5.3 below shows that aspect is distributed over three exponents in *yfathwroth*.

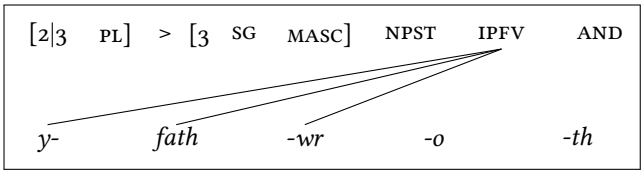

Figure 5.3: Extended exponence of aspect

A change in any one of the three slots above will cause a change in the TAM value. For example, the prefix *y-* can be replaced by *su-* to form a recent past imperfective (*sufathwroth*) or a suffix *-m* can be added after *-wr* to form a recent past durative (*yfathwrmoth*). If both of these changes are made at the same time, we get a past durative (*sufathwrmoth*). It follows that we are not dealing with a circumfix where separated formatives always occur together, but rather with a circumfixal paradigm where the formatives in the different slots are quite independent. Although there are some combinatorial restrictions, it would be a distortion to describe this as a circumfix. The essence of the system is that only by unifying the information from each slot are we in a position to calculate the correct value of a given grammatical category.

Thus, the overall complexity of Komnzo verbs results from the co-ocurrence of different types of exponence relationships. Figure 5.4 below captures all the dependencies between the values of a grammatical category and the morphs that make up *yfathwroth*. Quite literally, we find a web of tightly interwoven dependencies.

Anderson uses the term "reciprocal conditioning" (1992: 55) for this phenomenon, whereby exponents depend on several grammatical categories, while being underspecified for a single grammatical category.[3] I adopt the term "distributed exponence" from

[3]Morpheme underspecifiation does not stop at the word boundary in Komnzo. For example, the actor argument in *yfathwroth* can be either second or third person. Without context, this ambiguity can only be resolved by the personal pronouns. The same is true for future tense or event completion, which are ex-

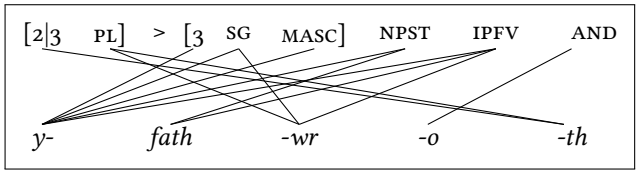

Figure 5.4: Reciprocal conditioning

Caballero & Harris (2012: 170), who point out that it may be related to multiple/extended exponence. Although it is excluded from the survey, Caballero & Harris mention distributed exponence in the theoretical discussion by explaining some aspects of Georgian verb morphology (Gurevich 2006). Baerman (2012) describes a phenomenon that could also be called distributed exponence for Nuer, a Western Nilotic language. The complexity of marking case and number in Nuer builds on suffixes and stem alternations, which are independently manipulated and give rise to inflectional classes. Baerman stresses the noniconicity of the system "in that these operations characterise simply a contrast of meaning, without being linked to any particular meaning" (2012: 490). Similarly, Komnzo verb morphology must be understood as a system where morphs contribute to a grammatical category, but a specific value of a given grammatical category requires information from several slots. Caroll provides the most detailed study of distributed exponence in his grammar on Ngkolmpu (2017), a related Tonda language.

There are practical consequences for the description of such a system. I have used a glossing style which follows the Word-and-Paradigm model (Matthews 1974: 67) throughout this grammar to give the reader effortless access to the morphosyntactic features of an inflected verb form. Since this chapter addresses verbal morphology, I will employ a double glossing and a verb like *yfathwroth* will be glossed as in (2) below. The first line gives a maximally segmented gloss in the Item-and-Arrangement style, while the second line in smaller print gives a unified gloss in the Word-and-Paradigm style.[4]

(2) *yfathwroth*
y-fath-w-r-o-th
3SG.MASC:α-hold.EXT-ND-LK-AND-2|3NSG
2|3PL:SBJ>3SG.MASC:OBJ:NPST:IPFV:AND/hold
'They hold him away.'

The Item-and-Arrangement style provides more transparency in the morphological structure which is the aim of this chapter. In spite of that, widespread underspecification means that the gain in structural transparency comes at the cost of somewhat opaque glossing labels. For example, while we find in (2) established labels like SG (singular) and NSG (non-singular) to encode number, we also need to recruit ND (non-dual). As for tense

pressed periphrastically with the preverbal particles *kwa* and *z* respectively.

[4]Elsewhere in the grammar - where there is no double glossing, but only the unified gloss - the verb stem is shown by slanted lines \…/ on the segmentation line.

and aspect, we have to introduce even more abstract labels like α (alpha) in the prefixes or EXT (extended) with the verb stem. These will be explained in the following sections. A further drawback of the Item-and-Arrangement style is that some of the grammatical values like non-past (NPST) or imperfective (IPFV) as well as subject (SBJ), object (OBJ) and indirect object (IO) cannot be shown on the gloss line because they can be inferred only after integrating several exponents.

5.3 Stem types

Komnzo verbal stems have two forms; an 'EXTENDED STEM' (EXT) and a 'RE-STRICTED STEM' (RS). As these labels indicate, the distinction is sensitive to aspect without encoding a specific aspectual category. For now it is sufficient to state that the labels refer to the temporal structure of the event, i.e. 'extended in time' and 'restricted in time'. The two stems differ (i) in their form, (ii) in the order of slots with respect to dual marking and (iii) in their combinatorial possibilities with the prefix series. I describe each point below.

5.3.1 The formal relationship of extended and restricted stems

Komnzo has pairs of verb stems whose relationship is often unpredictable from any formal or semantic criteria. Nevertheless, there is a cline of similarity in form between the two stems which allows us to divide the verbal lexicon into seven classes (Table 5.2). For thirty percent, there is a rule-based relation between the shapes of the two stems. At the other end of the spectrum, we find suppletive pairs of stems in five percent of the verbal lexicon. For more than two thirds of the lexicon the shape of the stems is unpredictable.

In class I, which makes up 13% of verbs, the two stems are identical (EXT=RS). Class II verbs (16%) derive their extended stems from the restricted stem with a suffix (EXT=RS-*ak*). Thus class I and class II make up that portion of the verb lexicon with a rule-based relationship between the two stems. However, only a few generalisations can be made about the scope of the rule, i.e. given a particular lexeme, one cannot decide straightforwardly which class it belongs to. Amongst those few generalisations is the fact that most verbs in class I end in /n/, but this is not true of all. Moreover, verbs ending in /n/ are also found in the other classes.

The majority of verbs involve unpredictable changes at the right edge of the stem. In class III, which makes up 25% of verbs, a consonant is added to the extended stem in order to form the restricted stem (RS=EXT-C). The stem pairs of class IV verbs (30%) involve final consonant mutation. In class III and IV, the affected consonants are not conditioned by the phonological environment. Class V verbs (8%) are irregular, i.e. the difference involves more than the last consonant. The stems of class VI (5%) are fully suppletive. Finally, a handful of verbs in class VII are defective, and have only one of the two stems.

We can make a few observations from Table 5.2. First, we find a cline of similarity which ranges from identity of the two stems to suppletive pairs with the bulk of verbs between the two extremes. Classes II–V all have in common that the difference in form

Table 5.2: The formal relationship between EXT and RS stem

class	rule	EXT	RS	gloss	count
i	EXT=RS		*mar-*	see	42
			zik-	turn off	
			rikn-	destroy	
			rmän-	close	
			matukn-	shake	
ii	EXT⇐RS-ak	*rfitfak-*	*rfitf-*	answer	52
		morak-	*mor-*	lean	
		bthak-	*bth-*	finish	
		ritak-	*rit-*	cross	
		msak-	*ms-*	sit	
iii	EXT-C⟹RS	*gar-*	*garf-*	break	81
		fsi-	*fsir-*	count	
		tri-	*trinz-*	scratch	
		rni-	*rnith-*	smile	
		thari-	*tharif-*	dig	
iv	mutation	*thwek-*	*thweth-*	be glad	96
		mthek-	*mthef-*	lift up	
		moneg-	*mones-*	wait	
		trakumg-	*trakumth-*	smash	
		bnaz-	*bnaf-*	wake up	
v	irregular	*rsör-*	*rsöfäth-*	descend	26
		thorak-	*thothm-*	search	
		myukn-	*myuf-*	twist	
		rirkn-	*rirkfth-*	avoid	
		tur-	*turam-*	kiss	
vi	suppletive	*re-*	*zigrthm-*	look around	15
		ru-	*mg-*	shoot, spear	
		fn-	*kwr-*	hit, kill	
		na-	*znob-*	drink	
		zä-	*thor-*	carry	
		si-	*füs-*	cook	
vii	RS only	-	*-kuk*[a]	stand	1
	EXT only	*rug-*	-	sleep	6
		rmug-	-	envy	
TOTAL					319

[a] This verb has a second stem *-kogr*, which I analyse as a positional stem (see §5.4.4.2).

occurs the right edge of stem. Secondly, the classes and processes (consonant mutation, consonant addition, suffixation of *-ak*) are neither phonologically conditioned, nor can we detect a semantic basis for them. Thirdly, the system shows little productivity, which I take as evidence for lexicalisation. In Table 5.2, it is only class II for which a regular process can be formulated; the suffixation of *-ak*. Finally, we find that for almost all verbs, both stems are attested. As a result, virtually all verbs can be inflected for the entire range of TAM categories, which leaves little role to play for lexical aspect (or Aktionsart) in Komnzo.

I will offer a historical explanation below (see §5.3.4) as to how the two stems have evolved in Komnzo and in the Tonda subgroup more generally.

5.3.2 Dual marking with extended and restricted stems

The most salient difference between the two stems is the location of the dual marker, which follows the extended stem but precedes the restricted stem. I describe number marking in detail in §5.5.3. In the examples (3a-3c) and (4a-4c), I contrast the imperfective and perfective imperatives of 'hit'. The former often has a continuative interpretation ('keep on x-ing!') while the latter points to inception ('start doing x!'). In (3) and (4), all grammatical categories are held constant, and only the actor argument is cycled through the three number values. In (3a-3c), dual is shown by a suffix (*-n*), which contrasts with a non-dual (*-z*). In (4a-4c), dual is expressed by a zero which contrasts with a non-dual prefix (*a-*).

(3) a. *be* *fi* *s-fn-z-é*
2SG.ERG 3.ABS 3SG.MASC:*β*-hit.EXT-ND-2SG.IMP
2SG:SBJ>3SG.MASC:OBJ:IMP:IPFV/hit
'You keep hitting him!'

b. *bné* *fi* *s-fn-n-e*
2NSG.ERG 3.ABS 3SG.MASC:*β*-hit.EXT-DU-2NSG.IMP
2DU:SBJ>3SG.MASC:OBJ:IMP:IPFV/hit
'You (2) keep hitting him!'

c. *bné* *fi* *s-fn-z-e*
2NSG.ERG 3.ABS 3SG.MASC:*β*-hit.EXT-ND-2NSG.IMP
2PL:SBJ>3SG.MASC:OBJ:IMP:IPFV/hit
'You (3+) keep hitting him!'

(4) a. *be* *fi* *s-a-kwr-∅*
2SG.ERG 3.ABS 3SG.MASC:*β*-ND-hit.RS-2SG.IMP
2SG:SBJ>3SG.MASC:OBJ:IMP:PFV/hit
'You hit him!'

b. *bné* *fi* *s-∅-kwr-e*
2NSG.ERG 3.ABS 3SG.MASC:*β*-DU-hit.RS-2NSG.IMP
2DU:SBJ>3SG.MASC:OBJ:IMP:PFV/hit
'You (2) hit him!'

c. *bné* *fi* *s-a-kwr-e*
2NSG.ERG 3.ABS 3SG.MASC:β-ND-hit.RS-2NSG.IMP
2PL:SBJ>3SG.MASC:OBJ:IMP:PFV/hit
'You (3+) hit him!'

The post-stem non-dual marker, *-z* in (3), has a number of phonologically conditioned allomorphs (see §5.5.3.3). The dual marker is always *-n*. In terms of segmentation, the post-stem slot is simple to recognise. This is not the case with the pre-stem duality marker which is zero for dual and *a-* for non-dual in (4). For purposes of illustration, I have selected the imperatives here because the segmentation is clearest. In other parts of the paradigm, segmentation is messier because the dual marker fuses with the valency change prefix resulting in an ablaut contrast; *a-* for dual and *ä-* for non-dual (see §5.5.3.4). From a historical perspective, this structural split between a pre-stem and a post-stem slot is a way of preserving dual marking after the original suffix had fused with the stem (see §5.3.4).

5.3.3 The combinatorics of extended and restricted stems

Extended and restricted stems taken alone are underspecified for a particular TAM value and information from other morphological sites is required. With respect to the five prefix series α, β, β_1, β_2, γ (see §5.5.1.1), the two stems differ in their combinatorial possibilities. For example, the α prefixes combine with the extended stem and the γ prefixes combine with the restricted stem, but not vice versa. The α series is recruited to form non-past, immediate past, recent past or past in imperfective or durative aspect depending on suffixal material. The γ series is employed for recent past or past, both perfective. The β prefixes combine with both stems to form imperatives and irrealis with imperfective and perfective aspect. The β_1 and β_2 prefixes combine with the extended stem (the latter exclusively so) to form recent past and past in imperfective or durative aspect, again depending on suffixal material. The β_1 prefixes combine with the restricted stem to form an iterative. The details of the five prefix series as well as the aspectual distinctions will be addressed in §6.2. For present purposes, it is sufficient to stress that there are some limitations on the combinatorial possibilities for extended and restricted stems.

5.3.4 A comparative note on multiple stems

Verb stem pairs which are sensitive to aspect are known from other Papuan languages, for example Mian (Fedden 2011: 245). In the Southern New Guinea region, Marind shows striking architectural similarities to the Komnzo system. Drabbe reports on 4 verb classes in Marind (1955: 31). The first two classes which make up the main distinction are labelled "momentaan" versus "duratief." Members of a third class can be both, and only the affixes signal the aspectual value of an inflected verb form. The fourth class is characterised as "momentaan," but it can be turned into "duratief" by suffixing *-a(t)*. The overall design of the Marind system looks similar once we equate "duratief" with extended and "momentaan" with restricted. Drabbe's third class in Marind bears resemblance to that group of

Komnzo verbs where only one form is attested (class I in Table 5.2). The fourth class is very close to those stem pairs in Komnzo which add the suffix *-ak* to the restricted stem in order to form the extended stem (class II in Table 5.2). Moreover, the two suffixes, *-a(t)* in Marind and *-ak* in Komnzo, are formally similar. However, neglecting Drabbe's group three and four, the Marind system differs in that most verbs fall into either "momentaan" or "duratief." As we have seen above, almost all verbs in Komnzo have both stems.

Within the Yam family, multiple verb stems are found in the Nambu as well as the Tonda subgroup. However, the system as laid out here seems to be more developed in the Tonda languages. Pairs of verb stems are attested in Arammba, where Boevé & Boevé (2003) label them "common root" and "limited action root." In my own fieldwork, I found stem pairs in Anta, Wára, Wèré, Kámá, Kánchá, Blafe, Ránmo and Wartha Thuntai. As for Ngkolmpu[5], there are up to three stems for some verbs and these are sensitive to aspect as well as verbal number (Carroll 2017). More descriptive work is needed to understand how the two stems are employed in the respective TAM systems of these languages.

I will offer a first tentative historical explanation based on the comparison of duality/TAM marking and multiple stems within the Yam family. In the Nambu subgroup, aspect-sensitive stems are only a marginal phenomenon. However, part of the verb inflection is a suffix which combines aspectual information with dual marking. For example, in Nen (Evans 2015a) and Nama (Siegel 2014) a thematic suffix follows the verb stem encoding TAM plus dual versus non-dual. In Komnzo, the suffix following the stem encodes only duality, but the presence versus absence of this suffix is determined by the stem type. Thus, it is involved in marking aspect (see §5.3.2).

I have shown above that the differences in form between the two stem types are located at the right edge. It is therefore a likely scenario that multiple stems have emerged through a process of demorphologisation (Hopper 1990: 154), i.e. through a fusion of suffixal material with the stem. Until more decriptive material is available, we are left to speculate on the nature of the original system. Logically, there are at least two possibilities: (i) the original suffix followed the Nambu pattern encoding TAM and duality simultaneously or (ii) there were separate suffixes for each category. Since both the occurrence of multiple stems as well as cognate forms are attested in all varieties of the Tonda languages, demorphologisation would constitute an innovation, which supports Tonda as a subgroup of the Yam family. This is of some importance, because other systematic differences between Nambu and Tonda, like word-initial velar nasals[6] or gender marking on verbs, can be explained by assuming the loss of a particular feature in Nambu rather than assuming an innovation in Tonda.

The historical scenario advanced above gave rise to different inflectional patterns within the Tonda subgroup. Languages further to the west including Blafe, Ránmo, Wartha Thuntai and to some extent Kánchá have lost dual marking except in some high frequency verbs like the copula. Other varieties like Wára, Anta and Komnzo have kept post-stem dual marking for one stem type, but requisitioned a different slot in the template for the other stem type. This would explain why, in terms of morphological segmen-

[5]Ngkolmpu, as well as Bädi, Smerky and Sota, were classified as varieties of Kanum in the past.

[6]The Nambu language Dre which is spoken close to other Tonda languages has preserved initial velar nasals.

tation, the pre-stem dual marking with restricted stems is much messier than post-stem dual marking with extended stems (compare §5.3.2 and §5.5.3.4). We could say that in a historical process, dual marking has "hijacked" a slot which was hitherto solely employed for marking valency. A third pattern is attested in Wèré, where dual marking is consistently post-stem for both stem types. However, irregularities involving a vowel change in the prefixes for some parts of the paradigm show that the Wèré pattern is a case of regularisation of the Komnzo system rather than an independent development.

The scenario developed here has to be treated with some caution, as there are exceptions to the generalisations made above. For example, Nen has multiple stems for a few verbs like $\sqrt{}$*waram* versus $\sqrt{}$*warama* 'give', encoding imperfective and perfective aspect respectively (Evans forthcoming). Another exception is the Nambu language Nä, which has pre-stem dual marking for some middle verbs. Much more comparative work needs to be done to fully account for the emergence of multiple verb stems in these languages.

5.4 Alignment and verb templates

5.4.1 Grammatical relations

This section describes the argument structure in Komnzo. The term is understood as "the configuration of arguments that are governed by a particular lexical item" (Haspelmath & Müller-Bardey 2004: 1130). For the purpose of defining argument structure, we need to take into account particular constructions (Bickel 2011: 433). In Komnzo, these are case and agreement (i.e. verb indexing). There are no other constructions restricted to a set of arguments (e.g. control, relativisation, coordination, nominalisation of verbs).

First, I identify generalised semantic roles (GSRs) for each verb form. Following Bickel (2011), these roles are labelled as follows: A is the most agent-like argument and P is the most patient-like argument of a transitive verb, S is the sole argument of an intransitive verb. For ditransitive verbs, T is the most theme-like argument and R the most recipient-like argument.

In the following, I will outline the two parameters of argument structure in Komnzo. In (5a-c), I show the basic structure for one-argument and two-argument predicates in a reduced glossing style. A is assigned ergative case, while S and P are assigned absolutive case. Example (5c) shows that A is indexed in the suffix and P is indexed in the prefix. S has to be split into S_P, which is indexed in the prefix (5a), and S_A, which is indexed in the suffix (5b). The underlying factor is the dynamicity of the predicate (see §5.4.4).

(5) a. *fi* *y-kogr*
3(ABS) 3SG.MASC-stand
'He stands.'

b. *fi* *ŋamränzr-th*
3(ABS) stroll-3PL
'They stroll around.'

c. *nafa fi y-fnzr-th*
3PL.ERG 3(ABS) 3SG.MASC-hit-3PL
'They hit him.'

Examples (6a-c) show the argument structure for three-argument predicates. Note that I discuss why there are some problems in describing ditransitives in §5.4.6. For case assignment, the examples show that P and T are marked by the absolutive case and R by the dative case. The R is always indexed in the prefix, not P nor T. Furthermore, the verb form is inflected with the *a-* prefix, which I label VC for valency change.

(6) a. *nafa giri nafan y-a-rithr-th*
3PL.ERG knife(ABS) 3SG.DAT 3SG.MASC-VC-give-3PL
'They give him the knife.'

b. *nafa bone zokwasi nzun w-a-rbänzr-th*
3PL.ERG 2SG.POSS speech(ABS) 1SG.DAT 1SG-VC-explain-3PL
'They explain your message to me.'

c. *nafa srak nafan y-a-brigwr-th*
3PL.ERG boy(ABS) 3SG.DAT 3SG.MASC-VC-return-3PL
'They return the boy for/to him.'

From the types of argument structure shown above, we can define the following grammatical relations in Komnzo:

1. The subject relation is characterised by either ergative or absolutive case assignment.
   a) If the noun phrase is in the ergative, it will always be indexed in the suffix.
   b) If the noun phrase is in the absolutive, it may be indexed in the suffix or the prefix. It is considered to be a subject, iff the clause contains no ergative-marked noun phrase.
2. The object relation is characterised by absolutive case assignment and indexation in the prefix. This only applies in the presence of another ergative noun phrase which is indexed in the suffix.
3. The indirect object relation is characterised by dative (or possessive) case assignment and indexation in the prefix. Additionally, the verb form receives the valency change prefix *a-*.

Similar to other grammatical categories, for example TAM and number, grammatical relations are constructed by unifying information from different sites. These are the person marking affixes and the diathetic prefix, but also the case assignment on the respective noun phrases. I describe the person marking affixes on the verb as the actor suffix and the undergoer prefix.[7] However, in the unified gloss, which is employed throughout this grammar, I use SBJ (subject), OBJ (object) and IO (indirect object). A reviewer

[7] I use a semantic definition of the term undergoer as that argument which is affected by the event.

suggested to use A (actor) und U (undergoer) and avoid using categories like subject and object. I agree that there is no strong evidence for a subject category in Komnzo. Nevertheless, I employ the terms subject, object and indirect object as metalinguistic labels that I find useful in communicating with other linguists. I do not claim that these play an overly important role in the grammar of Komnzo. In addition, there are practical reasons for using SBJ (subject), OBJ (object) and IO (indirect object) in the gloss line. If I employ A (actor) und U (undergoer), it would be impossible to show the distinction between an object and an indirect object in the unified gloss line.

5.4.2 Morphological templates

This section describes the structure of verbs by looking at the slots involved in the indexation of arguments. More precisely, I describe the arrangement of slots, the presence vs. absence of slots, as well as their content.

Based on the inflectional pattern, Komnzo verbs can be classified into prefixing, middle and ambifixing verbs, depending on whether prefix, suffix or both are employed. I use the term "template" for the different inflectional patterns. Hence, we can say that a verb form occurs in "a prefixing template" or in "an ambifixing template". These templates are lexically determined for some verb lexemes, which means we can speak of "a prefixing verb" or "a middle verb". For the majority of verb lexemes, the system is flexible and verbs occur in different templates. We can describe a particular verb lexeme by stating that "it occurs in the middle template and the ambifixing template, but not in the prefixing template".

The slots involved in the definition of templates are the following: (i) the undergoer prefix, (ii) the diathetic prefix, and (iii) the actor suffix. The undergoer prefix can index an argument, or it can be filled by the middle prefix, which is person-invariant. The diathetic prefix can be absent or be filled by the valency change prefix.[8] The actor suffix can be either absent or present. Figure 5.5 provides a first schematic overview of the possible templates. Note that there are more than the three templates mentioned above. This is because the prefixing and the ambifixing template can be further subdivided depending on the presence versus absence of the valency change prefix. Hence, there is a prefixing template and an indirect object prefixing template; and there is a transitive ambifixing template and a ditransitive ambifixing template.

I briefly describe each template here and refer the reader to the subsequent sections in which a detailed description follows (§5.4.4-6). In the prefixing template, only the undergoer prefix is used for person indexing. In the indirect object prefixing template also, only the undergoer prefix is used for person indexing. However, the undergoer prefix indexes an indirect object (beneficiary or possessor). This is formally marked by the valency change prefix *a-*. In the middle template, the prefix is filled by a middle marker which is invariant for person and number. The sole argument is indexed in the suffix.

[8] I use the neutral term "valency change" because its function is to either increase or decrease the valency of a verb.

[9] The label 'actor suffix' is problematic with some lexemes which employ the middle template for a passive function. In this case, the suffix encodes a patient argument (see §5.4.5).

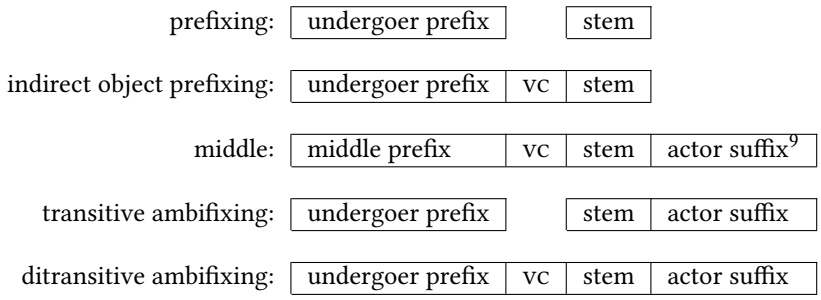

Figure 5.5: Morphological templates and argument structure

The middle marker is always followed by the valency change prefix *a-*. The middle template is used for a variety of functions, and depending on the function of the argument in the suffix it may index an agent or patient. The ambifixing transitive template uses both affixes for person indexing. The prefix encodes the object (patient, theme, experiencer) and the suffix encodes the subject (agent, stimulus). The ditransitive ambifixing template follows the pattern of the transitive template with the addition of the valency change prefix *a-*. The undergoer prefix indexes the indirect object (goal, beneficiary, possessor).

I illustrate the five templates with the verb *migsi* 'hang' in examples (7a-e). Note that although the system is flexible, i.e. verbs occur in different templates, there is only a small amount of verb lexemes which can occur in all five templates. I choose the positional verb *migsi* 'hang' in (7). Positional verbs have a number of peculiarities, for example a special verbstem and stative suffix, which also encodes number (see §5.4.4.2). This can be seen in (7a) and (7b).

(7) a. PREFIXING:
y-mi-thgr
3SG.MASC-hang.POS-STAT.ND
'He is hanging.'

b. INDIRECT OBJECT PREFIXING:
y-a-mi-thgr
3SG.MASC-VC-hang.POS-STAT.ND
'(Something) is hanging for him.'

c. MIDDLE:
ŋ-a-mig-wr-∅
M-VC-hang.EXT-ND-2|3SG
'It hangs itself up.'

d. TRANSITIVE AMBIFIXING:
y-mig-wr-∅
3SG.MASC-hang.EXT-ND-2|3SG
'S/He hangs him up.'

e. DITRANSITIVE AMBIFIXING:
y-a-mig-wr-∅
3SG.MASC-VC-hang.EXT-ND-2|3SG
'S/He hangs it up for him.'

The templates do not align neatly with transitivity. For example, only a small minority of intransitive verbs are prefixing (8a), while most employ a middle template (8b). The underlying semantic factor is the dynamicity of the event (see §5.4.4). On the other hand, the middle template covers a wide range of functions including reflexives and reciprocals, passives, as well as antipassives (see §5.4.5). Transitive verbs are usually expressed in the ambifixing template (8c). Ditransitive verbs occur in the ambifixing template with the addition of the valency change prefix *a-*, whereby an indirect object is introduced to the clause. The corresponding noun phrase is flagged with dative (8d) or possessive case, and it is indexed in the undergoer prefix (see §5.4.6).

(8) a. *ktktme erfikwr.*
kt-kt=me e-rfik-wr
REDUP-group=INS 2|3NSG:*α*-grow.EXT-ND
2|3PL:SBJ:NPST:IPFV/grow
'They grow in groups.'

b. *nagayé ŋakwinth.*
nagayé ŋ-a-kwi-n-th
children M:*α*-VC-run.EXT-DU-2|3NSG
2|3DU:SBJ:NPST:IPFV/run
'The two children run.'

c. *nafa ŋad yrbänzrth.*
nafa ŋad y-rbä-nzr-th
3NSG.ERG rope 3SG.MASC:*α*-untie.EXT-ND-2|3NSG
2|3PL:SBJ>3SG.MASC:OBJ:NPST:IPFV/untie
'They untie the rope.'

d. *nze nafan wawa yarithé.*
nze nafan wawa y-a-ri-th-é.
1SG.ERG 3SG.DAT yam 3SG.MASC:*α*-VC-give.EXT-ND-1SG
1SG:SBJ>3SG.MASC:IO:NPST:IPFV/give
'I give him the yam(s).'

It follows that the valency change prefix *a-* (VC) has a double function. It increases and decreases the valency of a verb. This is exemplified with *migsi* 'hang' in examples (7a-e) above. There are a number of deponent verbs attested, for example prefixing verbs or transitive ambifixing verbs which obligatorily take the *a-* prefix. I analyse them as deponent in the sense of Baerman et al (2006) because in these cases the undergoer prefix indexes a direct object, although the presence of the VC prefix suggests an indirect object.[10]

[10]Deponency is defined as a "mismatch between morphology and morpho-syntax" (Baerman et al. 2006).

Table 5.3: Argument marking

template	semantic role in the prefix	diathetic prefix	semantic role in the suffix	case frame	construction
prefixing	experiencer, (agent)[a]	∅	n/a	ABS	intransitive (stative)
indirect object prefixing	beneficiary or possessor	*a-*	n/a	DAT or POSS	intransitive (stative)
middle	n/a	*a-*	agent	ABS	intransitive (dynamic)
middle	n/a	*a-*	agent	ABS	impersonal
middle	n/a	*a-*	patient	ABS	passive
middle	n/a	*a-*	agent	ABS	reflex. & recip.
middle	n/a	*a-*	agent	ERG (ABS)[b]	suppressed-object
transitive ambifixing	patient, theme	∅	agent	ERG ABS	transitive
transitive ambifixing	experiencer	∅	stimulus	ABS ERG	experiencer-object
ditransitive ambifixing	beneficiary, goal	*a-*	agent	ERG ABS DAT	ditransitive
ditransitive ambifixing	possessor	*a-*	agent	ERG ABS POSS	ditransitive

[a] This is a marginal pattern as almost all prefixing verbs have stative semantics.
[b] In suppressed-object clauses, the object is suppressed from the indexation in the verb.

Table 5.3 provides a fine-grained overview of the templates. I show the semantic roles of the arguments indexed in the affixes, the presence/absence of the valency change prefix, the case frame and the name of the corresponding construction. These constructions are described in the section on clause types (§8.3).

5.4.3 Valency alternations

In Komnzo, valency alternations are achieved by placing the verb in different templates. There is only a handful of verbs which occur in all the templates. I choose the verb *msaksi* 'sit, dwell' to show its possibilities below with text examples (9-12). Note that *msaksi* deviates in two ways from other verbs. First, it takes the valency change prefix obligatorily when it occurs in a prefixing template, as can be seen in (9). Secondly, there is a special verbstem for the prefixing template: *m.* In other templates, *msaksi* has the extended stem *msak* and the restricted stem *ms*, i.e. it is a class II verb (compare Table 5.2).

In example (9), the speaker showed me a place which used to be inhabited by a spirit. He states that nobody knows where the spirit lives nowadays. Hence, the verb *msaksi* has a stative meaning in the prefixing template and can be translated into English with 'dwell, live, stay', or 'be sitting'.

(9) *watik ŋafäniza … ni miyamr mä zena* ***yamnzr****.*
watik ŋ-a-fäni-z-a-∅ (.)ni miyamr mä zena y-a-m-nzr
then M.α-VC-shift.place.EXT-ND-PST-2|3SG (.) 1NSG ignorance where today 3SG.MASC.α-VC-dwell.EXT-
2|3SG:SBJ:IPFV:PST/shift.place 3SG.MASC:SBJ:NPST:IPFV/dwell
'Then he shifted (location). We don't know where he lives today.'
[tci20120922-19 DAK #37]

Example (10) was uttered in the context of me visiting a garden place in the forest, where I was accompanied by the owner of the garden. The speaker happened to cycle past the garden place catching sight of me and the owner. The speaker comments on how he saw the two of us sitting down. Thus, *msaksi* in the middle template encodes a dynamic event and can be translated into English with 'sit down' or 'assume a sitting position'.

(10) *nze nimäwä! boba thnmaré* ***ŋamsakrnmth****.*
nze nima=wä boba th-∅-n-mar-é
1SG.ERG like.this=EMPH MED:ABL 2|3NSG.γ-DU-VENT-see.RS-1SG
1SG:SBJ>2|3DU:OBJ:RPST:PFV:VENT/see
ŋ-a-msak-rn-m-th
M.α-VC-sit.EXT-DU-DUR-2|3NSG
2|3DU:SBJ:RPST:DUR/sit
'Me too! I saw you two from there and you were just sitting down.'
[tci20130823-06 STK #90]

Example (11) shows *msaksi* in a transitive ambifixing template. The example comes from a narrative, in which an angry man is forcefully seated and calmed down by giving him kava to drink.

(11) *wati* ***ymsakwrth*** *fof krär* ***yarinakwrth*** *bänemr fof nafane noku frazsir.*
wati y-msak-wr-th fof krär
then 3SG.MASC.α-sit.EXT-ND-2|3NSG EMPH kava
2|3PL:SBJ>3SG.MASC:OBJ:NPST:IPFV/sit

y-a-rinak-wr-th bän=mr fof nafane noku
3SG.MASC.α-VC-pour.EXT-ND-2|3NSG DEM:MED=PURP EMPH 3SG.POSS anger
2|3PL:SBJ>3SG.MASC:IO:NPST:IPFV/pour

fraz-si=r
extinguish-NMLZ=PURP
'So they sit him down properly and pour kava for him to cool down his anger.'
[tci20120909-06 KAB 93-94]

Example (12) is an elicited example showing *msaksi* in a ditransitive ambifixing template, where the undergoer prefix indexes the possessor ('his child'). Note that the same template is found in the second verb in (11), where the undergoer prefix indexes a beneficiary ('pour kava for him').

(12) *nze nafange* ***yamsakwé****.*
nze nafa-nge y-a-msak-w-é.
1SG.ERG 3.POSS-child 3SG.MASC:α-VC-sit.EXT-ND-1SG
1SG:SBJ>3SG.MASC:IO:NPST:IPFV/sit
'I sit his child down.'

The above examples show that valency alternations are achieved by using the same verb in different templates. It is important to note that all the inflected verb forms share the same infinitive, which is formed by suffixing the nominaliser *-si* to the stem. In (13) and (14) I show the infinitive with a stative and a dynamic interpretation. Example (13) is the conclusion of a short narrative about taboos and customs that involve the bird of paradise. The speaker uses *msaksi* with a locative case suffix in a possessive construction to express 'in our life'. In example (14), the speaker showed me a beautiful place on the bank of Morehead river. She comments that this is a good place to sit down and rest. Hence, the infinitive *msaksi* is used for both interpretations, a timeless state in (13) and a dynamic event in (14).

(13) *nzenme trtha mrmren nzenme* ***msaksin*** *… wtrikarä anema fof ŋamränzre.*
nzenme trtha mrmr=en nzenme msak-si=n (.) wtri=karä
1NSG.POSS life inside=LOC 1NSG.POSS sit-NMLZ=LOC (.) fear=PROP

ane=ma fof ŋ-a-mrä-nzr-e
DEM=CHAR EMPH M.α-VC-stroll.EXT-ND-1NSG
1PL:SBJ:NPST:IPFV/stroll
'In our way of life … in our living … we walk about with fear because of this.'

[tci20120817-02 ABB #40-43]

(14) *camp rä … zmbo fthé nanyak* ***msaksir****.*
camp rä (.) zmbo fthé n-a-n-yak
camp 3SG.F.COP.ND (.) PROX.ALL when 1NSG.α-VC-VENT-walk.EXT.ND
3SG.F:SBJ:NPST:IPFV/be 1PL:SBJ:NPST:IPFV/come
msak-si=r
sit-NMLZ=PURP
'This is a camp … We come here to sit down (and rest).'

[tci20130907-02 RNA #331-333]

The meaning of a verb in one template may differ substantially when used in another template. For example, the verb *rfiksi* 'grow' occurs in the prefixing template (8a), but it can be used in a transitive ambifixing template with the meaning 'nurture' (Lit. 'grow somebody'). A second example is the verb *rbänzsi* 'untie' which usually occurs in a transitive ambifixing template (8c). Used in a ditransitive ambifixing template it has the meaning 'explain' (Lit. 'untie for somebody'). Nevertheless, inflected verbs in different templates all share the same infinitive. In this aspect Komnzo differs from other Yam languages. For example in Nen, there are no infinitives for prefixing verbs, but instead valency-altered forms have distinct infinitives which include the relevant formatives from a set of diathetic prefixes (Evans 2015b). For example, one pair of infinitives is: *amzs* 'sit (v.i.)' versus *wamzs* 'set, sit (v.t.)'. There are even triplets: *anḡws* 'return (v.i.)' versus *wanḡws* 'return (v.t.)' versus *wawanḡws* 'return to/for (v.t.)'. In Komnzo, there are no distinct infinitives for valency-altered forms. Hence, *rfiksi* is the infinitive of both 'grow' and 'nuture', and *rbänzsi* is the infinitive of 'untie' and 'explain'.

There are two ways of analyzing shared infinitives in Komnzo and I argue that both are needed. On the one hand, we can understand it as a system where valency is fluid and lexemes are flexible. Under this analysis a lexeme can alter its valency by occuring in different templates. On the other hand, we could adopt the notion of heterosemy (Lichtenberk 1991 and Evans 2010: 524) to capture that different lexical items and meanings are expressed by different templates.[11] A verb like *msaksi* shows that we need both perspectives. On the one hand, $msaksi_1$ means 'dwell, live' in a prefixing template, while $msaksi_2$ means 'sit down' in a middle/ambifixing template. We would understand $msaksi_1$ as being heterosemous to $msaksi_2$ because there is a significant shift in meaning due to the template. The same holds for pairs like *rfiksi* meaning 'grow' or 'nuture' and *rbänzsi* meaning 'untie' or 'explain'. On the other hand, the system of valency alternations in Komnze is very productive. Especially the middle template and the ditransitive ambifixing template can be used for almost every verb which can also occur in the transitive ambifixing template. Thus, describing the alternation between *msaksi* in (11) 'sit someone down' and (12) 'sit down someone's (child)' in terms of heterosemy would fall short of an exhaustive description. It would not adequately capture the productivity of the system, nor would it fully explain shared infinitives for verb forms of different templates.

[11] This assumes a definition of the linguistic sign as having three parts: form, meaning and combinatorics (or syntax) as put forward by (Mel'čuk 1973) and (Pollard & Sag 1987: 51).

5.4.4 The prefixing template

5.4.4.1 Introduction

Prefixing verbs are a small class with around 20 lexical items attested so far. Some of them can occur in other templates, but most occur only in the prefixing template. Table 5.4 lists all the members of the prefixing class. Furthermore, there is a class of 41 positional verbs, which can occur in the prefixing template (see §5.4.4.2).

Table 5.4: Prefixing verbs

infinitive or stem[12]	gloss	possible templates	gloss
-rug	'sleep'	pref. only	-
-yak	'walk, go'	pref. only	-
[a] *-nyak*	'come'	pref. only	-
[a] *yathizsi*	'suffer'	pref. only	-
[a] *mthizsi*	'rest'	pref. only	-
[a] *-nor*	'shout, emit sound'	pref. only	-
wäksi	'be caught by daybreak'	pref. only	-
fogsi	'be caught by nightfall'	pref. only	-
rmigfaksi	'be in the middle of (doing) sth.'	pref. only	-
-thn	'be lying'	pref. only	-
[a] *yarenzsi*	'look around'	pref. only	-
-ythk	'be finished'	pref. only	-
[a] *namgsi*	'be panting, gasping'	pref. only	-
thfäsi	'jump'	pref./middle	'fly'
[a] *thgusi*	'forget'	pref./trans.	'confuse sth.'
thoraksi	'appear, arrive'	pref./trans.	'find, search'
wokraksi	'float'	pref./trans.	'make sth. float'
-rä	'be'	all templates	'do'
[a] *msaksi*	'dwell, live'	all templates	'sit (self or sb.)'
sufaksi	'grow old'	all templates	'bring to an end'
ziksi	'turn off, be on the side'	all templates	'put to the side'
rfiksi	'grow'	all templates	'nurture'

[a] These verbs are deponent, i.e. they use the VC prefix obligatorily.

[12] Infinitives are marked with the nominaliser suffix *-si*. Prefixing verbs are irregular in many respects. Some of the verbs listed here lack an infinitive and only the extended stem is given, while others employ a common noun as their infinitive, for example *etfth* 'sleep,' *moth* 'path, walk, come' and *kwan* 'noise, shout.' This does not correlate with whether there are other templates available. Where a nominalised form with *-si* is lacking, I give the extended stem. Another irregularity are verbs where the stem is sensitive to the dual versus non-dual distinction, for example 'walk' *-yak* (ND) versus *-yan* (DU) or 'shout' *-nor* (ND) versus *-rn* (DU). In these cases, the non-dual stem is listed.

Prefixing verbs are special in their morphology in that they can encode a fourth number value. The somewhat odd combination of a non-singular prefix and a dual suffix yields a large plural. This is attested in other Yam languages, for example for positional verbs in Nen and Nä (Evans 2014). I describe the four-way number contrast in §5.5.3.2.

Prefixing verbs are mostly stative in their semantics. Comparative work on split intransitivity has shown that differences in alignment are often semantically motivated (Merlan 1985, Mithun 1991 and Arkadiev 2008). In Komnzo, the semantic parameters involved are the dynamicity of the event and the volitionality of the participant, the former plays the dominant role. As we have seen in §5.4.3, predicates in a prefixing template tend to be more stative (9), while predicates in middle or ambifixing templates tend to be more dynamic (10-12). In other languages of the Yam family, the split between stative and dynamic event types is congruent with the distinction between prefixing and middle intransitives, for example in Nen (Evans 2015a) and Nama (Siegel 2014).[13]

In Komnzo, although all verbs in a middle or ambifixing template depict dynamic event types, we find a somewhat mixed picture with prefixing verbs. Table 5.4 contains a few dynamic events, for example *-nor* 'shout', *thoraksi* 'appear, arrive' and *rfiksi* 'grow'. In some cases, volitionality is the semantic parameter involved in the prefixing/middle/ambifixing alternation: *thoraksi* and *rfiksi* in an ambifixing transitive template mean 'find' and 'nurture' respectively.[14] The verb *-nor* 'shout' allows no alternation, but occurs only in a prefixing template. Interestingly, *-nor* is often used in a pseudo-cognate object construction: *kwan yannor*[15] 'He shouts (the shout)' or *ya yannor* 'He cries (the tears)'. Hence, with this verb a less volitional meaning like 'emit a sound' might be licenced. Pseudo-cognate object constructions are described in §8.3.11. Nevertheless, with other predicates in Table 5.4 such an explanation fails, for example *ziksi* 'turn off, go in' or *thfäsi* 'jump'. Keeping the unusually small size of the prefixing class in mind, I interpret these cases as exceptions to the overall rule. Furthermore, the existence of a class of positional verbs (§5.4.4.2) underscores the split along the lines of event dynamicity and volitionality.

All prefixing verbs can take the valency change prefix *a-*. This template was labelled indirect object prefixing in Table 5.3. However, in doing so they remain monovalent in their cross-referencing. The 'additional argument', usually a Beneficiary or Possessor, replaces the 'original argument', usually an Experiencer. However, the event itself remains to 'be about' the original argument. A common usage of this pattern involves the copula: When handing something to a person, one would say *bnarä!* 'There you are!' (literally: '(It) is there for you!'). A textual example comes from a stimulus task in which two speakers are describing the content of picture cards (15). The picture in the example shows a policeman who hands some personal belongings to another man. After describing the scene, one of the two speakers points to a few things on the side asking what these were.

[13] Siegel uses different terminology in his description of Nama. What I call the prefixing template or stative intransitives equals "patientive intransitives", and what I label the middle template or dynamic intransitives equals "agentive intransitives" (Siegel 2014: 213).

[14] In ambifixing templates, the case marking of a more agent-like argument is ergative. This is also found in middle templates with an suppressed-object function.

[15] *-nor* lacks a nominalised infinitive and instead the common noun *kwan* 'shout, call' is used.

The first verb in (15) 'be lying down' indexes the (assumed) possessor and not the things on the ground. The second clause is accompanied by a pointing gesture in order to draw the interlocutor's attention to the objects. Here, the copula indexes the things on the ground.

(15) *mrmr ra **yathn**? zane **zerä**!*
mrmr ra y-a-thn zane
inside what.ABS 3SG.MASC.α-VC-lie.EXT.ND DEM:PROX
3SG.MASC:IO:NPST:IPFV/lie
z=e-rä
PROX=2|3NSG.α-be.EXT.ND
PROX=2|3PL:SBJ:NPST:IPFV/be
'What are these (of his) inside? These ones here!' [tci20111004 TSA #29-30]

Table 5.4 indicates that eight out of 20 prefixing verbs obligatorily use the *a-* prefix without introducing an argument. I analyse these verbs as deponent (Baerman et al. 2006).

5.4.4.2 Positional verbs

The class of 41 positional or postural verbs underscores the role of dynamicity in the alignment of S. Positional verbs express states of the type 'be in position X' ('be leaning,' 'be standing,' 'be submerged' etc). Example (16) shows the verb *migsi* 'hang'.

(16) *bidrthatha zbo **sumithgrm** wämnen.*
bidr=thatha zbo su-mi-thgr-m wämne=n
flying.fox=SIMIL PROX.ALL 3SG.MASC.β1-be.hanging-STAT.ND-DUR tree=LOC
3SG.MASC:SBJ:PST:DUR:STAT/be.hanging
'He was hanging like a flying fox on the tree.' [tci20130901-04 RNA #48]

Like most positional verbs, *migsi* can enter into other templates, for example a middle template ('assume a hanging position') or a transitive template ('hang something'). This is shown below in examples (17) and (18) respectively. Example (17) is part of a plant walk around Rouku village. The speaker shows me a plant in the part of the land which is inundated during the rainy season. Example (18) comes from a procedural text in which the speaker shows me around his yam storage house. He remarks that small yam suckers are called *sagusagu* and they are stored by tying several yams into bundles.

(17) *bubukr zä zf kwa **ŋamigwrth** … watik kofäyé zbo zf kwa erkunzrth.*
bubukr zä zf kwa ŋ-a-mig-wr-th (.) watik kofä=é zbo
insect PROX IMM FUT M.α-VC-hang.EXT-ND-2|3NSG (.) then fish=ERG.NSG PROX.ALL
2|3PL:SBJ:NPST:IPFV/hang

zf kwa e-rku-nzr-th
IMM FUT 2|3NSG.α-knock.down.EXT-ND-2|3NSG
2|3PL:SBJ>2|3PL:OBJ:NPST:IPFV/knock.down
'The insects will hang (themselves) from here and the fish will knock them down right here.' [tci20130907-02 RNA #657]

(18) *nima yamme ane fof ŋafrmnzre bnrä … **bemigwre** ane sagusagu.*
nima yam-me ane fof ŋ-a-frm-nzr-e
like.this custom-INS DEM EMPH M.α-VC-prepare.EXT-ND-1NSG
1PL:SBJ:NPST:IPFV/prepare
b=n-rä (.) b=e-mig-wr-e ane sagusagu
MED=1NSG.α-COP.ND (.) MED=2|3NSG.α-hang.EXT-ND-1NSG DEM sagusagu
MED=1PL:SBJ:NPST:IPFV/be MED=1PL:SBJ>2|3PL:OBJ:NPST:IPFV/hang
'We prepare them in this way … We hang up those *sagusagu*.'
[tci20121001 ABB #38]

Positionals are attested in languages throughout the Yam family (Evans 2014). For Komnzo, I define them as a class of lexemes with positional or postural semantics which share the following morphosyntactic properties: (i) the ability to occur in the prefixing template, (ii) the ability to take the stative suffix *-thgr*, (iii) the ability to form related middle and transitive verb forms, and (iv) to inflect only for a subset of TAM categories when used in a prefixing template. Table 5.5 lists the 41 members of the class which are currently attested. We find both very general meanings (*rzarsi* 'be tied', *yufaksi* 'be bent over') and very specific meanings (*rngthksi* 'be stuck in a tree fork', *mgthksi* 'be in the mouth'). Some of these verbs occur with prototypical participants, for example *zaksi* 'be anchored' with *garda* 'canoe' or *thamsaksi* 'be spread out' with *yame* 'mat'.

Table 5.5 compares the extended (EXT) and restricted stem (RS) and shows that for some verbs a positional stem (POS) can be postulated. The positional stem is the lexical base to which the stative suffix *-thgr* attaches. In the first two groups of Table 5.5, the base is formally identical to the extended or restricted stem. Only in the third group, is the base different from both, in that it is always shorter. The last group contains three lexemes which are irregular in a number of ways: (i) they take a slightly different form of the stative suffix, which is given in parentheses for each, (ii) the last two lexemes in this group occur only as positionals, (iii) the second lexeme in the group lacks an infinitive.

The data from Table 5.5 shows that for some of the verbs we need to posit a third stem type, the positional stem, in addition to the extended and restricted stems we already encountered. The formal difference or similarity between the positional stem and the other two stem types for a given lexeme cannot be predicted on semantic or phonological grounds, but must be seen as lexicalisation in a specific morphosyntactic context. Furthermore, one should keep in mind that positional stems are not in a paradigmatic relationship of the kind we have seen with extended and restricted stems (§5.3). For example, the stative semantics of positionals blocks all perfective TAM categories.

Just like other verbs in the prefixing template, positionals may add a possessor or beneficiary by using the valency change prefix *a-*. An example of this is given in (19)

Table 5.5: Positional verbs

infinitive	POS stem	EXT STEM	RS STEM	gloss
mosisi	*mosi-*	*mosi-*	*mosir-*	be gathered, piled
moyusi	*moyu-*	*moyu-*	*moyuth-*	be shrunk
rfakusi	*rfaku-*	*rfaku-*	*rfakuth-*	be sprinkled
ttüsi	*ttü-*	*ttü-*	*ttüth-*	be printed, carved
tharasi	*thar-*	*thar-*	*tharf-*	be underneath
worsi	*wor-*	*wor-*	*won-*	be planted
brüzsi	*brüs-*	*brüz-*	*brüs-*	be submerged
krsi	*kr-*	*krth-*	*kr-*	be blocked off
räzsi	*räs-*	*räz-*	*räs-*	be erected
[a] *rfuthraksi*	*rfuth-*	*rfuthrak-*	*rfuthr-*	be piled up
rmithraksi	*rmithr-*	*rmithrak-*	*rmithr-*	be joined together
rmnzüfaksi	*rmnzüf-*	*rmnzüfak-*	*rmnzüf-*	be side by side / parallel
rthbraksi	*rthbr-*	*rthbrak-*	*rthbr-*	be sticking (on sth.)
rzarsi	*rzaf-*	*rzar-*	*rzaf-*	be tied
thamsaksi	*thams-*	*thamsak-*	*thams-*	be spread out
[a] *yufaksi*	*yuf-*	*yufak-*	*yuf-*	be bent
zaksi	*z-*	*zak-*	*z-*	be anchored
fätfaksi	*fät-*	*fätfak-*	*fätf-*	be across sth.
fethaksi	*fe-*	*fethak-*	*feth-*	be dipped in water
fifthaksi	*fif-*	*fifthak-*	*fifth-*	be lying straight
migsi	*mi-*	*mig-*	*mir-*	be hanging
moraksi	*mo-*	*morak-*	*mor-*	be leaning
[a] *mgthksi*	*mg-*	*mgthk-*	*mgthm-*	be in the mouth
mreznsi	*mre-*	*mrezn-*	*mrezn-*	be straight
[a] *mtheksi*	*mthe-*	*mthek-*	*mthef-*	be lifted up
myuknsi	*myu-*	*myukn-*	*myuf-*	be twisted
nänzüthzsi	*nänzü-*	*nänzüthz-*	*nänzütham-*	be covered with soil
rafigsi	*rafi-*	*rafig-*	*rafinz-*	be on top of sth.
rakthksi	*rak-*	*rakthk-*	*rakthm-*	be on top of sth.
rinaksi	*ri-*	*rinak-*	*rin-*	be poured into
rngthksi	*rng-*	*rngthk-*	*rngthm-*	be in a tree fork
[a] *rgsi*	*rk-*	*rg-*	*rg-*	be wearing clothes
sisraksi	*si-*	*sisrak-*	*sisr-*	be sticking out of sth.
sümraksi	*süm-*	*sümrak-*	*sümr-*	be widened, be open
thäfrsi	*thäfrs-*	*thäf-*	*thäfrs-*	be covered
tharuksi	*tharu-*	*tharuk-*	*taruf-*	be inside (open container)
ththaksi	*th-*	*ththak-*	*ththm-*	be pinned on sth.
wäthsi	*wä-*	*wäth-*	*wäf-*	be wrapped
thorsi	*th-(kgr)*	*thor-*	*thb-*	be inside (closed container)
n/a	*wä-(gr)*	n/a	n/a	be up high
yukrasi	*ko-(gr)*	n/a	*-kuk*	be standing

[a] These verbs are deponent, i.e. they use the VC prefix obligatorily.

where the speaker describes how he carried two fish up from the river. The first verb in (19) indexes the two catfish, but the second verb indexes a first singular, in this case the possessor ('my shoulder'). Thus, although the predicate is about the two fish ('They were on top.'), the verb only indexes the first singular.

(19) *thwä* ***femithgrn*** *zane zazame* ***nwanwägr*** *… fatren.*
thwä f-e-mi-thgrn zane zaza=me
catfish DIST=2|3NSG:*α*-be.hanging-STAT.DU PROX carrying stick=INS
DIST=2|3DU:SBJ:NPST:STAT/be.hanging

n=wo-a-n-wä-gr (.) fatr=en
IPST=1SG-VC-VENT-be.on.top-STAT.ND (.) shoulder=LOC
1SG:IO:IPST:STAT:VENT/be.on.top
'Those two catfish are hanging there. I just brought them here on my shoulder with the carrying stick.' [tci20121008-03 MAB #13]

As Table 5.5 shows, there are a five out of 41 positional verbs which I analyse as deponent, i.e. they take the *a-* prefix obligatorily without adding an additional argument to the clause.

5.4.5 The middle template

The majority of verb stems can enter into what I call the middle template. In the middle template, the prefix slot is filled by a person-invariant middle marker (glossed as M) and the single argument is cross-referenced in the suffix. In addition, the valency change prefix *a-* is employed. As we will see below, the suffix in this template may cross-reference an A, S or P argument. The distinction is signalled by the case marking on the NP (ergative vs. absolutive).

I employ the term "middle", as defined by Kemmer (1993: 207-210) for situation types with a low degree of elaboration. Low degree of elaboration may refer to the event and/or to the participants involved in the event. The middle template in Komnzo covers a range of functions: intransitives, passive-impersonals, reflexives and reciprocals as well as suppressed-object middles (or antipassives). Kemmer describes these events as typical "middle situation types" (1993: 15).

Intransitive event types in Komnzo are distributed over the prefixing and the middle template (see §5.4.4). The majority of syntactically intransitive verbs employ the middle template. As a consequence for the description of the middle template, we have to draw a distinction between intrinsic middle verbs and derived middle verbs. Intrinsic middles can only occur in the middle template. Derived middle verbs are derived from transitive verbs, whereby the middle template is used for different valency decreasing functions. There is a third group of verb stems, which almost always occur in the middle template, but with which a derived transitive or ditransitive is possible. These groups will be discussed below. For now, the main distinction is between verbs, for which the middle template is one strategy amongst others and verbs, which only occur in the middle template. I call the latter intrinsic middle verbs.

Table 5.6: Intrinsic middle verbs

infinitive	EXT STEM	gloss
[a] *moth*	*kwi-*	'run'
mränzsi	*mränz-*	'stroll'
sogsi	*sog-*	'ascend, climb up'
rsörsi	*rsör-*	'descend, climb down'
[a] *mni*	*rsir-*	'burn, cook' (v.i.)
müsinzsi	*müsinz-*	'glow'
rfeksi	*rfek-*	'limp'
frezsi	*frez-*	'come up (from river)'
risoksi	*risok-*	'look down'
rnäthsi	*rnäth-*	'get stuck'
rninzsi	*rninz-*	'smile'
[a] *wath*	*rnzür-*	'dance'
rüsi	*rü-*	'rain'
sufaksi	*sufak-*	'gulp down, guzzle'
fänizsi	*fäniz-*	'shift location'
bznsi	*bzn-*	'work'
thärkusi	*thärku-*	'crawl'
farksi	*fark-*	'set off'
fsknsi	*fskn-*	'doze'
borsi	*bor-*	'laugh, play'
thweksi	*thwek-*	'rejoice'
n/a	*ko-*	'become'
n/a	*rä-*	'do, think'

[a] These verbs employ a common noun as their infinitive

Some intrinsic middle verbs are listed in Table 5.6. In her cross-linguistic survey, Kemmer identifies a number of situation types which commonly occur with middle morphology (1993: 16-21). In Komnzo these are: translational motion ('run', 'climb up', 'climb down', 'shift location'), emotion middle ('laugh', 'rejoice', 'smile'), cognition middle ('think') and spontaneous events ('change', 'become'). The tendency to encode intransitive verbs with a dynamic event type in the middle template has been discussed above in §5.4.4.

In addition to intrinsic middle verbs, most verb stems can occur in the middle template with various related functions. One such verb is *brigsi* 'return'. In the examples (20) and (21), the S argument is indexed in the suffix, while the prefix is filled with the middle morpheme. Since there is no formal difference in the middle template between intransitives, impersonals and reflexives, these should be understood as reflexiva tanta (Geniušienė 1987) and example (20) could also be translated as 'I return myself'.

(20) *oh nzä karfo zena zf* ***ŋabrigwé****.*
oh nzä kar=fo zena zf ŋ-a-brig-w-é
oh 1SG.ABS village=ALL today IMM M.α-VC-return.EXT-ND-1SG
1SG:SBJ:NPST:IPFV/return
'Oh, now I will go back to the village.' [tci20111004 RMA 437]

(21) *oh kaimätdbo fam* ***ŋabrigwrth****.*
oh kaimät=dbo fam ŋ-a-brig-w-r-th
oh sister.in.law=ALL.ANIM thoughts M.α-VC-return.EXT-ND-LK-2|3NSG
2|3PL:SBJ:NPST:IPFV/return
'Oh, (my) thoughts are returning to my sister-in-law.' [tci20130907-02 JAA 665]

Examples (22a-22b) show *brigsi* in different templates. Both examples are taken from the same story about a headhunt which took place in the narrator's village Firra. In (22a), the ambifixing transitive template is used (Lit. 'They returned the payback'). Just a few clauses later, the narrator concludes this part of the story in (22b) where the same referent, which was indexed in the prefix in (22a), is now indexed in the suffix with a passive or impersonal interpretation (Lit. 'Revenge (was) returned').

(22) a. *okay, nafa nezä z faw* ***wbrigrnath*** *… bänema nafanme mayawa kakafar z bramöwä thäkwrath firran.*
okay nafa nezä z faw w-brig-r-n-a-th (.)
okay 3NSG.ERG revenge ALR payment 3SG.F.α-return.EXT-LK-DU-PST-2|3NSG (.)
2|3DU:SBJ>3SG.F:OBJ:PST:IPFV/return
bäne=ma nafanme mayawa ka-kafar z bramöwä
DEM:MED=CHAR 3NSG.POSS mayawa REDUP-big ALR all

th-ä-kwr-a-th firra=n
2|3NSG.γ-VC|ND-hit.RS-PST-2|3NSG firra=LOC
2|3PL:SBJ>2|3PL:OBJ:PST:PFV/kill
'Okay, then the two took revenge, because all their Mayawa elders had been killed in Firra.' [tci20111107-01 MAK 126-127]

b. *watik, faw z* ***ŋabrigwa*** *ane … ane ebar nimame firran rera fof.*
watik faw z ŋ-a-brig-w-a-∅ ane (.) ane ebar nima=me
then payment ALR M.α-VC-return.EXT-ND-PST-2|3SG DEM (.) DEM head like.this=INS
2|3SG:SBJ:PST:IPFV/return
firra=n rä-r-a fof
firra=LOC 3SG.F.COP-LK-PST EMPH
3SG.F:SBJ:PST:IPFV/be
'Then, revenge was taken. This is really how the head(hunting) took place in Firra.' [tci20111107-01 MAK 134-135]

Consequently, I refrain from using the terms 'middle voice' or 'passive voice'. It is more adequate to speak of a middle template with a specific function. This function might be

reflexive, reciprocal, passive or impersonal. Consider example (23) below, in which the speaker describes how he got home after a hard day of work in his garden. The first two verbs in (23) are prefixing verbs. The last three verbs occur in the middle template and could be translated as either reflexive ('wash self', 'change self', 'bring oneself up from river') or intransitives ('wash', 'get changed', 'come up from the river').[16]

(23) *yoganai worärm, kwofiyak,* ***kwamaikwé****, sänis* ***kwaräré****,* ***zänfrefé****.*
yoganai wo-rä-r-m kwof-yak kw-a-mayk-w-é sänis
tiredness 1SG.α-be-LK-DUR 1SG.β2-walk.EXT.ND M.β1-VC-wash.EXT-ND-1SG change
1SG:SBJ:RPST:DUR/be 1SG:SBJ:RPST:IPFV/walk 1SG:SBJ:RPST:IPFV/wash
kw-a-rä-r-é z-ä-n-fref-é
M.β1-VC-do.EXT-LK-1SG M.γ-VC.ND-VENT-come.up.from.river.RS-1SG
1SG:SBJ:RPST:IPFV/do 1SG:SBJ:RPST:PFV:VENT/come-up-from-river
'I was tired. I walked. I washed myself. I got changed and I came up here from the river.' [tci20120922-24 MAA 78-80]

We find the same ambiguity between reflexive and reciprocal interpretations. In (24), the speaker describes how his ancestors used to live in small hamlets which comprised a clan or often a single patriline. The reciprocal interpretation of the second verb only comes from the context. The verb form *kwamarwrme* in a different context could equally be translated as a reflexive: 'We were looking at ourselves'.

(24) *mrnmenzo nzwamnzrm. zagr sime* ***kwamarwrme****.*
mrn=me=nzo nzu-a-m-nz-r-m zagr si=me
clan=INS=ONLY 1NSG.β1-VC-dwell.EXT-ND-LK-DUR far eye=INS
1PL:SBJ:PST:DUR/dwell
kw-a-mar-w-r-m-e
M.β1-VC-see-LK-DUR-1NSG
1PL:SBJ:PST:DUR/see
'We used to stay in our clans. We saw each other only from a distance.' [tci20120922-08 DAK 117-118]

We have seen an impersonal usage of the middle template in (22b) above. An example with a much clearer passive reading is provided in (25) below, where the speaker talks about sorting and selecting yam tubers in his storage house. The context reveals that it is the patient argument of the verbs ('choose', 'put down') which is indexed in the suffix. Keenan and Dryer include the entailment of an agent in their definition of passives setting them apart from middles (2007: 352). In Komnzo, this is dependent on the semantics of the verb. Prototypical transitive verbs, like 'choose' and 'put down' in (25), invite a passive interpretation rather than an impersonal one. However, in terms of morpho-syntax, there is no dedicated passive marking. Furthermore, the agent noun

[16]Note that 'get changed' is expressed with a nominal *sänis* (< English 'change') and a generic verb 'do', literally 'I do the change'. The nominal is not indexed in the verb. I describe light verb constructions in §8.3.12.

phrase cannot be included in the clause, because it would have to be indexed in the suffix of the verb, which is already occupied by the patient argument.

(25) *zane zf woksimär erä. gaba foba fof* ***kräwokthth*** *bobo we kwa* ***ŋanakwrth*** *a nima berä.*

zane zf wok-si=mär e-rä gaba foba fof
DEM:PROX IMM choose-NMLZ=PRIV 2|3NSG.α-COP.ND eating yam DIST.ABL EMPH
2|3PL:SBJ:NPST:IPFV/be

k-ra-a-wokth-th bobo we kwa
M.β-IRR-VC|ND-choose.RS-2|3NSG MED.ALL also FUT
2|3PL:SBJ:IRR:PFV/choose

ŋ-a-nak-w-r-th a nima b=e-rä
M.α-VC-put.down.EXT-ND-LK-2|3NSG and like.this MED=2|3NSG.α-COP.ND
2|3PL:SBJ:NPST:IPFV/put.down MED=2|3PL:SBJ:NPST:IPFV/be

'These have not been selected. They will be selected over there and then put down there like those ones.' [tci20121001 ABB 41-42]

A somewhat different function of the middle template is the suppressed-object middle. The formal difference with respect to the previous functions of the middle template lies in the marking of the NP, which receives an ergative. Thus, the argument is an actor and the event is inherently transitive. Consider example (26), which is taken from a conversation between two young men. The speaker reports to his friend what his wife thinks about his plan to shift the garden place to another location. In (26), the pronoun *naf* is in the ergative case and agrees with the verb *ŋanafr* which is in the middle template. The object is suppressed from indexation and without context we are left to speculate what it might be: the goal ('she said to me') or the clausal theme ('to continue the old garden').

(26) *naf* ***ŋanafr*** *drdr mäyogsir.*

naf ŋ-a-na-f-r-∅ drdr mäyog-si=r
3SG.ERG M-VC-speak.RS-ND-LK-2|3SG old.garden repeat-NMLZ=PURP
2|3SG:SBJ:NPST.IPFV/speak

'She suggested/said to continue the old garden.' [tci20130823-06 STK 161]

The suppressed-object middle is obligatory for a few lexemes, for example *na-* 'speak (v.t.)' in (26), *karksi* 'pull (v.t.)' or *yonasi*[17] 'drink (v.t.)'. For most verbs, the suppressed-object middle is a possible alternation and should be seen as derived from verbs which normally employ an ambifixing transitive template.

There are pragmatic reasons for suppressing the object, for example when the referent is common ground or when the event is somehow generic.[18] These motivations can

[17] Interestingly, 'drink' and 'eat' share the same extended stem (*na*), but 'eat' almost always occurs in an ambifixing transitive template and it employs a common noun as its infinitive (*dagon* 'food'). The verb 'drink' on the other hand employs the infinitive *yonasi* with a regular nominaliser suffix and it always occurs in a (suppressed-object) middle template. The restricted stems of 'drink' and 'eat' are different: *nob* and *wob* respectively.

[18] During the translation of texts, consultants would often rephrase the suppressed-object middle with a generic event ('He did the X-ing') instead of a specific event ('He X-ed it').

be subsumed under Kemmer's criterion of low degree of (participant) elaboration with middle morphology. Consider example (27), where the speaker talks about how yams are stored. He says that the yams are heaped and sorted into separate piles and that the spatial layout signals the use of the yams. This last proposition is expressed as *naf ŋa-trikwr* 'it indicates'. The verb *trikasi* 'tell' is usually used for story telling or for reporting on something, but the event depicted in example (27) is generic and less elaborated.

(27) *mnz mrmr fof enakwre zena monwä zane ethn zerä.* ***naf ŋatrikwr*** *zane zf ŋatr wawa erä zerä. zane gaba zf erä zerä.*

mnz mrmr fof e-nak-w-r-e zena mon-wä zane
house inside EMPH 2|3NSG.α-put.down.EXT-ND-LK-1NSG now how-EMPH DEM:PROX
1PL:SBJ>2|3PL:OBJ:NPST:IPFV/put-down

e-thn z=e-rä naf
2|3NSG.α-lie.down.EXT.ND PROX=2|3NSG.α-COP.ND 3SG.ERG
PROX=2|3PL:NPST:IPFV/lie.down PROX=2|3PL:NPST:IPFV/be

ŋ-a-trik-w-r-∅ zane zf ŋatr wawa
M.α-VC-tell.EXT-ND-LK-2|3SG DEM:PROX IMM rattan.vine yam
2|3SG:SBJ:NPST:IPFV/tell

e-rä z=e-rä zane gaba zf
2|3NSG.α-COP.ND PROX=2|3NSG.α-COP.ND DEM:PROX eating yam IMM
2|3PL:SBJ:NPST:IPFV/be PROX=2|3PL:SBJ:NPST:IPFV/be

e-rä z=e-rä
2|3NSG.α-COP.ND PROX=2|3NSG.α-COP.ND
2|3PL:SBJ:NPST:IPFV/be PROX=2|3PL:SBJ:NPST:IPFV/be

'We put (the yams) down in the house, how these are laying here. That will indicate that these are measuring yams[19] here and these are eating yams here.'

[tci20121001 ABB 15-16]

Another motivation for suppressing the object, partly relevant to the previous example, lies in the relative salience of the referent. There is a tendency for inanimate referents not to be indexed, as we can see in example (28). This example is taken from a stimulus task about domestic violence. The speaker takes over the role of one of the characters in the story. He uses the verb *fiyoksi* 'make' twice, first in a middle template and then in a transitive template.[20] The crucial difference between the two situation types lies in the salience of the referent. In the first clause the referent is generic and inanimate (*yam* 'custom, event'), but in the second clause it is a close relative (*nzenme emoth* 'our sister').

[19] *ŋatr* is a rattan piece which is often used to measure the dimensions of a particularly big tuber. Large yams are used in competitions or as special gifts.

[20] As we will see in §5.4.6, some transitive verbs like *fiyoksi* obligatorily take the valency change prefix *a-*. Since the argument is in absolutive case, one would expect the inflected verb to be *wfiyokwr* (without the *a-* prefix). But this is ungrammatical and *fiyoksi* never occurs without the *a-* prefix. Thus, I regard *fiyoksi* and similar verbs as being deponent.

(28) *"be nima yam **ŋafiyokwr**. nzenme emoth be nima **wäfiyokwr**!"*
be nima yam ŋ-a-fiyok-w-r-∅ nzenme emoth be
2SG.ERG like.this event M.α-VC-make.EXT-ND-LK-2|3SG 1NSG.POSS sister 2SG.ERG
2|3SG:SBJ:NPST:IPFV/make
nima w-a-fiyok-w-r-∅
likeħis 3SG.F.α-VC-make.EXT-ND-LK-2|3SG
2|3SG:SBJ>3SG.F:OBJ:NPST:IPFV/make
"You are behaving like this. You are doing this to our sister."
[tci20120925 MAE 89]

We can conclude that intrinsic middles are intransitive event types, but the middle template is used for various functions. The uniting characteristic of these functions is a relatively low degree of elaboration. This may apply either to the participants (28), i.e. they rank low in importance/salience, or to the event itself (27), i.e. the event is less elaborated.

5.4.6 The ambifixing template

The ambifixing template employs both affixes to index referents. The subject argument appears in the suffix, while the object argument is indexed in the prefix (29).

(29) *gwamf nafangth **sräkor**: "muri zba känrit nzuzawe!"*
gwam=f nafa-ngth s-ra-a-kor-∅ muri zba
gwam=ERG 3.POSS-younger.sibling 3SG.MASC.β-IRR-ND-say.RS-2|3SG muri PROX.ABL
2|3SG:SBJ>3SG.MASC:OBJ:IRR:PFV/says
k-ä-n-rit-∅ nzu-zawe
M.β-ND-VENT-cross.over.RS-2SG.IMP 1SG.POSS-side
2SG:SBJ:IMP:PFV:VENT/cross.over
'Gwam said to his brother: "Muri, come over here to my side!"'
[tci20131013-01 ABB #96]

In most cases, the suffix indexes an Agent, as in (29) above. Example (30) shows an experiencer-object construction, in which the suffix encodes a Stimulus. After an evening of stories about sorcery, the speaker announces that she will go to sleep now because 'fear has taken hold of her already'.

(30) *nze rokar kwa thräfrmsé. wtrif z **zwefaf**.*
nze rokar kwa th-ra-a-frms-é wtri=f z zu-ä-faf-∅
1SG.ERG thing FUT 2|3NSG.β-IRR-VC|ND-prepare.RS-1SG fear=ERG.SG ALR 1SG.γ-ND-hold.RS-2|3SG
1SG:SBJ>2|3PL:OBJ:IRR:PFV/prepare 2|3SG:SBJ>1SG:OBJ:RPST:PFV/hold
'I will prepare (my) things. I am already scared.' [tci20130901-04 RNA #164]

Since no more than two referents can be indexed on a verb, the same ambifixing template encodes transitive and ditransitive events. The differences lie in the presence versus absence of the valency change prefix *a-* and the case marking of that argument NP which

is indexed in the prefix. In ambifixing transitives, the prefix encodes a Patient ('prepare' in 30), Theme (29) or Experiencer ('hold' in 30), all in the absolutive. The prefix in ambifixing ditransitives encodes a Goal (31) in dative case or a Possessor (32) marked with a possessive.

(31) *nzun nafaemoth **zwärath** fof … bänemr … fäms ŋarer*
nzun nafa-emoth zu-ä-r-a-th fof (.) bäne=mr
1SG.DAT 3.POSS-sister 1SG.γ-VC.ND-give.RS-PST-2|3NSG EMPH (.) RECOG=PURP
2|3PL:SBJ>1SG:IO:PST:PFV/give
(.) fäms ŋare=r
(.) exchange woman=PURP
'They gave me their sister as that … as an exchange woman.'
[tci20120805-01 ABB #791-792]

(32) *nzone miyo kwa **wabthakwr**.*
nzone miyo kwa wo-a-bthak-w-r-∅
1SG.POSS desire FUT 1SG.α-VC-finish.EXT-LK-2|3SG
2|3SG:SBJ>1SG:IO:NPST:IPFV/finish
'You will fulfill my wish.' [tci20130823-06 CAM #23]

Because the middle template is used for reflexives, the two argument slots of the ambifixing template may not be coreferential. Thus, if we wanted to change example (32) above to an auto-benefactive ('I fulfill my wish / I fulfill the wish for me'), it would be ungrammatical to say **nzone miyo wabthakwé*. The underlined segment in the verb marks the actor as first singular. Instead, one would have to employ a middle construction for the verb: *nzone miyo ŋabthakwé*.

Example (33) shows both a possessor and a goal in the first and second verb form respectively. The example is taken from a story about sorcerers, who – according to local belief – visit the grave sites of recently deceased people. The first clause shows that the possessor noun phrase can be dropped. The noun *mitafo* 'spirit' is usually feminine, but the verb encodes a masculine referent ('his spirit').

(33) *befé mitafo **sabrim** nzun fefe **kwagathif**!*
be-wä mitafo s-a-brim-∅ nzun fefe
2SG.ERG-EMPH spirit 3SG.MASC.β-VC.ND-return.RS-2SG.IMP 1SG.DAT body
2SG:SBJ>3SG.MASC:IO:IMP:PFV/return
kw-a-gathif-∅
1SG.β-VC.ND-leave.behind.RS-2SG.IMP
2SG:SBJ>1SG:IO:IMP:PFV/leave.behind
'You take his spirit back and leave the body for me!' [tci20130903-04 RNA #92-93]

Example (33) highlights a problem that occurs with verb forms using the restricted stem. As I have shown in §5.3.2, with restricted stems the dual versus non-dual contrast and the valency change is expressed by a vowel change in the prefix. Although there are differences in the vowel pattern for different number combinations, which show the

absence versus presence of the valency change prefix, there are a number of neutralisations (§5.5.3.4). The first verb *sabrim* in example (33) can mean both 'return him' (with a direct object) or 'return X for him' / 'return his X' (with an indirect object). Only the fact that *mitafo* 'spirit' is feminine, while the prefix is governed by a masculine referent, indicates that the indirect object is indexed ('return his spirit').

The valency change prefix *a-* attaches productively to almost all transitive verbs introducing a third argument into the clause, usually a beneficiary (dative) or possessor (possessive). A number of lexemes are deponent in the sense that they obligatorily take the valency change prefix *a-*, while the clause remains transitive and the referent indexed in the prefix is flagged with the absolutive case. Such deponent verbs are *frmnzsi* 'prepare' (30) or *fiyoksi* 'make' (28). Given the basic productivity of the ditransitive alternation, we may ask whether the category 'ditransitive' exists in Komnzo at all or whether it is better to view the phenomenon merely as applicativisation, in other words whether all ditransitives are derived.[21] Two counterarguments can be brought forward. First, there are a few verbs which only exist in an ambifixing ditransitive template, the obivous one being *yarisi* 'give'. Secondly, while the ditransitive alternation simply introduces a beneficiary for some verbs, there are rather idiosyncratic changes in meaning for other verbs. For example, *säminzsi* means 'whisper' in the ambifixing transitive template, but 'teach' in the ambifixing ditransitive template. Another example was given above in (8c) where *rbänzsi* means 'untie' as a transitive, but 'explain' in a ditransitive template. Although the meanings of the different templates share the same infinitive/nominalisation and are clearly related ('untie' → 'untie for sb.' = 'explain'), they often differ in idiosyncratic ways ('whisper' → 'whisper for sb.' = 'teach'). Thus, it is better to recognise ditransitive verbs as an independent category.

5.5 Person, gender and number

5.5.1 Person

Person marking in Komnzo verbs exhibits various patterns of syncretism and neutralisation in certain contexts. These patterns differ in the two sites of person marking: the prefix and the suffix. The suffixes show more complexity in their syntagmatic distribution: under certain conditions they are reduced to zero morphemes, neutralise their person values and, in addition, the status of the first singular as an independent morpheme is questionable. On the other hand, the suffixes show less paradigmatic complexity. They encode only two person values and there is only one suffix series. As for the prefixes, the opposite seems to be the case. Although they can be neatly separated and recognised, the prefix slot is equipped with five prefix series and widespread syncretism within the paradigm is a central characteristic. I will address each subsystem of person marking below.

[21] Please note that the *a-* prefix cannot be called an applicative prefix because it fulfills both functions: increasing and decreasing the valency. Thus, I prefer to label it valency change or valency switch.

5.5.1.1 Person suffixes

The person suffix differentiates two person values: first and non-first person. Thus, second and third person are always neutralised and additional information from the personal pronouns or from context is required. As I will explain below, in certain morphological contexts, even this basic distinction is neutralised and only number marking is retained. Table 5.7 lists the suffix forms in indicative and irrealis mood.

Table 5.7: Person suffixes

gloss	formative	example	translation
1SG	*-é*	*ŋakwiré*	'I run'
1NSG	*-e*	*ŋakwire*	'we run'
2|3SG	*-∅*	*ŋakwir*	'you run' or 's/he runs'
2|3NSG	*-th*	*ŋakwirth*	'you run' or they run'

In middle and ambifixing templates, the person suffixes are involved in marking imperative mood. Table 5.8 below shows that the indexing of the addressee employs formatives which are identical to the first person suffixes in indicative or irrealis mood. Evans (2012b) describes an inflectional category in Nen called the assentive. The assentive is the second part of an adjacency pair (or dyadic sequence), and it follows an imperative ('Boil the water!' > 'I will boil the water.'). In the assentive, the person suffix deviates from indicative inflection in that it is identical to the preceding imperative; both being zero in perfective aspect. Although assentive inflections are not attested in Komnzo, the formal identity of first person indicative and second person imperative suffixes can be explained by such conversational adjacency pairs.

Komnzo imperatives can be imperfective ('Keep on doing X!') or perfective ('Do X!'). An example of this is shown in (34) below. This distinction is signalled by the stem type, but also by the fact that the second singular suffix in perfective imperatives is zero. The formatives are listed in Table 5.8 below.

Table 5.8: Imperative person suffixes

	gloss	formative	example	translation
EXT stem	2SG.IMP	*-é*	*kakwiré*	'You keep running!'
	2NSG.IMP	*-e*	*kakwire*	'You (pl) keep running!'
RS stem	2SG.IMP	*-∅*	*kamath*	'You run!'
	2NSG.IMP	*-e*	*kemathe*	'You (pl) run!'

In Table 5.8 above, the middle verb *-kwi* 'run' is shown. The distinction between second singular and non-singular is expressed in the suffix. Another quirk in the system, is that

the suffix *-é* is used even if the verb is a prefixing verb, despite the fact that the number distinction is shown in the prefixes only: *gn-* 2SG vs. *th-* 2NSG (see §5.5.1.2). A prefixing verb like *-kogr* 'stand' will be *gnkogré* 'You (SG) keep standing!' versus *thkogré* 'You (PL) keep standing!' In these cases I gloss *-é* as marking solely imperative mood, as in (34). However, prefixing verbs do follow the pattern in that only extended stems (imperfective imperative) receive the *-é* suffix, not the restricted stems (perfective imperatives). I show this in example (34), in which the speaker reports about the rough ways of going hunting with the Suki people.[22] See also §6.2.5 for further discussion of imperative marking.

(34) *fiwä we nima ane kwa änor: "kwot fthé **gnäkuk** fathfathenwä **gnkogé**!"*
fi=wä we nima ane kwa e-a-nor kwot fthé
3.ABS=EMPH also like.this DEM FUT 2|3NSG-VC-shout.EXT.ND properly when
3PL:SBJ:NPST:IPFV/shout
gn-ä-kuk fath-fath=en=wä
2SG.β.IMP-ND-stand.RS REDUP-clear.place=LOC=EMPH
2SG:SBJ:IMP:PFV/stand
gn-kog-é
2SG.β.IMP-stand.EXT.ND-IMP
2SG:SBJ:IMP:IPFV/stand
'They will also yell at one another like this "You stand properly in the clearing! Keep on standing!"' [tci20130927-06 MAB #52-53]

The morphemic status of the first singular *-é*

I want to discuss the morphemic status of *-é* and provide evidence for the emergence of a marginal phoneme *é* [ə]. Both tables above include a suffix *-é* which for the purpose of the following discussion I will call 'first person singular suffix' disregarding that it may also signal a second singular in imperative mood without person marking in the prefixing template. This suffix is realised as a short schwa [ə] and I have argued in §2.2.2 that schwa is the epenthetic vowel whose distribution is predictable. Schwa is not predictable in word final position and, thus, has to be represented by a grapheme <é>. There are a handful of morphs in which schwa is attested word-finally, for example nominals (*kayé* 'tomorrow, yesterday', *megé* 'green coconut leaf'), function words (*fthé* 'when') and suffixes (*-thé* ADJZR, *-é* 1SG). The following discussion puts forward the argument that *-é* is the result of a truncation of the non-dual suffix in extended stems, which might have originated in some verbs and was later generalised to all verbs. A possible historical explanation in terms of vowel reduction comes from neighboring varieties in which the first person is marked by an *-a* suffix, for example in Wára and Anta. In Komnzo, there exists a suffix *-a*, but it is a past marker.

As we can see in both tables above, *-é* contrasts with *-e* (1NSG) and -∅ (2|3SG). The first singular *-é* could be analysed either as a morpheme in its own right or as the result of a truncation process of the non-dual suffix, which leaves no possible syllabification other

[22] This verb is irregular in that it encodes dual versus non-dual in the positional stem, *-kogr* ND vs. *-kogrn* DU, but not in the restricted stem *-kuk*.

than schwa in a word-final context. I am not claiming that truncation is a synchronic process, but I want to argue that truncation of the non-dual suffix plays a role in the explanation. I draw on evidence from more general properties of the suffix subsystem such as the non-dual suffix, the presence of a linking consonant and the neutralisation of person distinctions. As we will see below, the argumentation is only applicable to inflected forms which build on the extended stem. Restricted stems encode the duality contrast in pre-stem position. Hence, we have to assume that the result of the truncation process, the word final schwa *-é*, has been extended to other morphological contexts.

First, let us turn to the non-dual marker for extended stems. The verb *kwi-* 'run' in Table 5.7 is irregular in that it employs *-r* for signalling the non-dual. The regular pattern, attested for 90% of verb lexemes, involves one of the three non-dual allomorphs *-wr*, *-nzr* and *-thr*. Consider the verb *marasi* 'see' in (35a-35f), which takes the *-wr* allomorph. In first person singular (35a), the non-dual suffix is *-w* instead of *-wr*.

(35) a. *y-mar-w-é*
3SG.MASC-see-ND-1SG
'I see him.'

b. *y-mar-n-e*
3SG.MASC-see-DU-1NSG
'We two see him.'

c. *y-mar-wr-e*
3SG.MASC-see-ND-1NSG
'We see him.'

d. *y-mar-wr-∅*
3SG.MASC-see-ND-2|3SG
'S/He sees him.' or 'You see him.'

e. *y-mar-n-th*
3SG.MASC-see-DU-2|3SG
'They (two) see him.' or 'You (two) see him.'

f. *y-mar-wr-th*
3SG.MASC-see-ND-2|3NSG
'They see him.' or 'You see him.'

In the examples above, only the first singular (35a) deviates in that it takes a truncated form *-w*, from which final *-r* is cut. This truncation with the first singular is attested for all three allomorphs of the non-dual suffix: *-wr* ⟶ *-w*, *-nzr* ⟶ *-nz* and *-thr* ⟶ *-th*. What weakens this particular piece of evidence is the fact that there is some variation between the non-truncated and the truncated formative even when other suffixal material follows like AND *-o*, 1NSG *-e* or 2|3NSG *-th*. For example, looking at the token frequency in the corpus of 2|3NSG *-th* preceded by *-nzr* (non-truncated) versus *-th* preceded by *-nz* (truncated), we find 91 verb forms with the non-truncated non-dual *-nzrth* and 13 with the truncated non-dual *-nzth*.[23] A similar distribution is found with the first

[23]This search can be replicated by a simple search query: "nzrth" versus "nzth" in word final context (in

non-singular *-e* suffix. There is no variation with the 2|3SG, which is a zero morpheme. The 2|3SG is never preceded by the truncated formative. In conclusion, the non-dual is never truncated with the 2|3SG zero, it shows some variation with other suffixes (but the non-truncated formative has a much higher frequency), and it is always truncated with the first singular.

Further evidence comes from person neutralisation patterns. The first singular *-é* disappears when further suffixes are added, for example the past suffix *-a*, the durative suffix *-m* or the andative suffix *-o*. Consider examples (36a, 36d and 36e) which neutralise the person value completely. In (35), the distinction between first and second/third person is basically a contrast between the surface result of a truncation process *-é* (35a) and a zero morpheme (35d). In (36a, 36d and 36e) below, we have to postulate a zero marker, which now only encodes number (SG) and contrasts with 1NSG *-e* (36b) and 2|3NSG *-th* (36c).

(36) a. *y-mar-wr-a-∅*
3SG.MASC-SEE-ND-PST-SG
'I saw him.' or 'You saw him.' or 'S/He saw him.'

b. *y-mar-wr-a-k-e*
3SG.MASC-SEE-ND-PST-LK-1NSG
'We saw him.'

c. *y-mar-wr-a-th*
3SG.MASC-SEE-ND-PST-2|3NSG
'You saw him.' or 'They saw him.'

d. *y-mar-wr-m-∅*
3SG.MASC-SEE-ND-DUR-SG
'I was seeing him.' or 'You were seeing him.' or 'S/He was seeing him.'

e. *y-mar-wr-o-∅*
3SG.MASC-SEE-ND-AND-SG
'I see him that way.' or 'You see him that way.' or 'S/He sees him that way.'

A third piece of evidence comes from a linking consonant in the suffix subsystem. Example (36b) above shows that the past suffix *-a* and the 1NSG *-e* are separated by *-k*. We have seen in §2.4.3, that the phonology of Komnzo allows strings of consonants which are broken up by epenthesis. However, the phonological system does not tolerate strings of vowels, which is demonstrated by the appearance of the linker in (36b). This can be used to strengthen the argument that the first singular *-é* deviates from other suffixes. We would expect (36a) not to neutralise the person value, and instead to insert the linker between the past suffix *-a* and *-é* analogous to (36b). However, the predicted inflection * *ymarwraké* is ungrammatical.

The first singular *-é* occurs in other morphological contexts, where there is no truncated preceding element. As pointed out above, the template of restricted stems marks the dual versus non-dual contrast in pre-stem position and, thus, there is no non-dual

REGEX syntax: "nzrth\b" versus "nzth\b").

marker to truncate (37a).[24] Likewise, there is no truncation of the dual marker *-n* in the template of extended stems (37b). However, the person neutralisations described above also occur in these contexts (37c and 37d).

(37) a. *s-a-mar-é*
3SG.MASC-ND-see(RS)-1NSG
'I saw him.'

b. *e-mar-n-é*
2|3NSG-see(EXT)-ND-PST-SG
'I see both of them.'

c. *s-a-mar-a-∅*
3SG.MASC-ND-see(RS)-PST-SG
'I saw him.' or 'You saw him.' or 'S/He saw him.'

d. *e-mar-n-a*
2|3NSG-see(EXT)-ND-PST-SG
'I saw both of them.' or 'You saw both of them.' or 'S/He saw both of them.'

We have to conclude that a case of truncation or a negative morpheme as a synchronic process can only be made for a very circumscribed morphological context: for non-dual inflected verbs built from the extended stem. For other contexts, we have to postulate a suffix formative *-é*. This is best explained by a historical process of vowel reduction or syllable loss, which created a new marginal phoneme *é*. This can be used to explain word-final schwa in other items.[25] As I mentioned in the beginning of this section, surrounding varieties like Wára or Anta mark the first person singular with an *-a* suffix. Comparative material from other Tonda varieties is needed to settle this question.

Linking *-k*, person neutralisation and morpheme slots

In the preceding discussion, the linking consonant *-k* was introduced as a way of separating two adjacent vowel suffixes. This purely phonological explanation is insufficient and, on closer inspection, we find that the linker *-k* helps to arrange the suffixal material into morpheme slots. In addition to the first singular *-é*, the suffixal material includes the following morphemes: past *-a*, durative *-m*, andative *-o*, 1NSG *-e* and 2|3NSG *-th*. In the following section, I describe how these suffixes line up, which of them are mutually exclusive, and in which context person neutralisations occur.

First, the past suffix *-a* and the durative suffix *-m* never co-occur. The combinatorial system of Komnzo verb morphology employs a different strategy to express a past durative category, discussed in §6.2.

Secondly, the andative *-o* and the 1NSG *-e* stand in syntagmatic opposition to each other occuping the same slot. Consider examples (38a-38d) below. In examples (38b) and (38d) the person value is fully neutralised, because the suffix *-th*, which was indexing

[24] The verb *marasi* belongs to the class which has identical forms for restricted and extended stems (see Table 5.2), and only the template and the affixal material signal the aspectual value.

[25] The adjectivaliser *-thé* might be a reduced form of the similative case marker *-thatha*.

2|3NSG in earlier examples (35e-35f and 36c), can now only be glossed as NSG.[26] The important observation in (38b) is that the linker *-k* is not used. If its appearance could be predicted on purely phonological grounds, we would expect a form like * *ymarwroke*. But this is ungrammatical. Thus, I characterise the linking consonant in the following way: *-k* occurs (i) after the past suffix *-a*, (ii) if the following suffix consists of a vowel formative.

(38) a. *y-mar-wr-e*
3SG.MASC-see-ND-1NSG
'We see him.'

b. *y-mar-wr-o-th*
3SG.MASC-see-ND-AND-NSG
'We see him that way.' or 'You see him that way.' or 'They see him that way.'

c. *y-mar-wr-a-k-e*
3SG.MASC-see-ND-PST-LK-1NSG
'We saw him.'

d. *y-mar-wr-a-k-o-th*
3SG.MASC-see-ND-PST-LK-AND-NSG
'We saw him that way.' or 'You saw him that way.' or 'They saw him that way.'

Examples (38b) and (38d) also show that amongst the three categories (person, number, direction) it is person which is neutralised first. In the discussion of examples (36a-36e), we found the same to be true for person values of the singulars.

Below in (39), we find a textual example of the person neutralisation in (38d). In the example, a woman talks about her marriage and how she and her husband prepared a feast for her brothers and uncles. In (39) the first person interpretation of the actor of *tharakoth*[27] is clear from the preceding verb *yafiyokrnake* which lacks the andative *-o* suffix and, thus, is inflected with the first non-singular *-e* suffix.

(39) *dagon yafiyokrnake. babainm ane* ***tharakoth****.*
dagon y-a-fiyok-rn-a-k-e babai=nm ane
food 3SG.MASC-VC-make.EXT-PST-LK-1NSG uncle=DAT.NSG DEM
1DU:SBJ>3SG.MASC:OBJ:PST:IPFV/make

th-a-r-a-k-o-th
2|3NSG.*y*-VC.DU-give.RS-PST-LK-AND-NSG
1DU:SBJ>2|3PL:IO:PST:PFV:AND/give
'We prepared the food. We gave that to the uncles.' [tci20130823-08 WAM #66-67]

[26] An alternative would be to analyse *-th* as marking only number (NSG) not person. I reject this analysis, because (i) this would result in a system where only first person is marked overtly and (ii) the 1NSG in examples like (38a) would be an exception to the regular non-singular (*-th*).

[27] In *tharakoth* the pre-stem marker operates on a plural versus non-plural opposition. This pattern of pre-stem marking is discussed in §5.5.3.4.

The suffix subsystem of Komnzo verbs is summarised in Figure 5.6. The elements which share a column or an extended column in the figure are mutually exclusive. For example, if *-é* occurs, all the other material will not appear or if the durative suffix *-m* occurs, the past suffix *-a* (along with the linker *-k*) will not appear. The system as described here is applicable to both stem types. For the restricted stem the only difference lies in the fact that duality is marked in pre-stem position as in *tharakoth* in (39). Therefore, some of the morphemes in the suffix system are optional: the dual/non-dual morphemes, the two TAM markers (PST *-a* and DUR *-m*) and the andative *-o*. Number (SG vs. NSG) is always marked.

<table>
<tr><th>STEM</th><th>(duality)</th><th>(TAM)</th><th colspan="3">(DIRECTION, PERSON), NUMBER</th><th></th></tr>
<tr><td rowspan="4">√</td><td rowspan="4">-nzr, wr-, r-
-n</td><td colspan="4">-é</td><td rowspan="4"></td></tr>
<tr><td rowspan="2">-m</td><td colspan="3">-e</td></tr>
<tr><td rowspan="2">-o</td><td>-∅</td></tr>
<tr><td>-a(-k)</td><td>-th</td></tr>
</table>

Figure 5.6: Suffix subsystem of Komnzo verbs

The suffixing system is thus characterised by syntagmatic complexity, i.e. the chain of suffixes does not allow a straightforward segmentation into slots and respective functions. Moreover, the presence versus absence of individual suffixes impacts on the form and function of other suffixes.

5.5.1.2 Person prefixes

The person prefixes are syntagmatically less complex than the person suffixes. The prefix system comprises a single slot which is always filled with a formative, i.e. there are no zero morphemes.[28] On the other hand, the prefix system is paradigmatically more complex. The prefix fuses person and number marking with information relevant to TAM. However, we have to draw on abstract glossing labels because the five prefix series are underspecified for a particular TAM value. Table 5.9 lays out the five prefix series: α, β, β_1, β_2, and γ.

Before we look at the patterns of person marking, I will provide some justification as to why there are five independent series. Table 5.9 shows that there is widespread syncretism between the series, especially in the third person between the β and γ series. The formal difference between the α, β and γ series is clearest in the first person singular and the middle marker, each of which distinguishes overtly all five series. Furthermore, the table shows that we can speak of three main series: α, β, γ, plus two subseries: β_1 and β_2. These two subseries add an /*u*/ and /*f*/ element to the β series. I will discuss in detail why I still treat them as independent series in §6.2.1. An additional quirk is added to the system by the fact that, within the β series, the first nonsingular and the second

[28] The only formative which occurs in the person marking slot, but does not encode person, is the middle marker, which is used for other purposes (§5.4.5).

Table 5.9: Person prefixes

gloss	*α*	*β*	*β*1	*β*2	*γ*
1SG	*wo-*	*kw-*	*ku-*	*kwof-*	*zu-*
1NSG	*n-*	*nz-* / *nzn-*	*nzu-*	*nzf-*	*nzn-*
2SG	*n-*	*nz-* / *gn-*	*gu-*	*gf-*	*nzn-*
3SG.F	*w-*	*z-*	*zu-*	*zf-*	*z-*
3SG.MASC	*y-*	*s-*	*su-*	*sf-*	*s-*
2|3NSG	*e-*	*th-*	*thu-*	*thf-*	*th-*
M	*ŋ-*	*k-*	*kw-*	*kf-*	*z-*

singular have two different formatives for the two modal categories: the imperative and irrealis.[29]

The prefixes differentiate three person values in the singular: first, second and third. The values of second and third person in non-singular are always neutralised, leaving this ambiguity for either context or the personal pronouns to resolve. The same holds true for the syncretism between the first non-singular and the second singular in the *α* and the *γ* series.[30] This pattern of syncretism is found in languages across the Yam family (Evans et al. 2017).

The overview of the verb template presented in the introduction of this chapter (Table 5.1) shows that the person prefix is followed by the valency change prefix *a-* whose presence impacts on the formatives of the person prefixes in various ways. The *α* series shows a number of irregularities given in Table 5.10, for example with the first singular: /*wo-a-*/ ⟶ *wa-*.

The other prefix series behave more regular in the presence of the valency change prefix *a-*, but there is some influence of the valency change prefix. For example, the formatives of the *β*2 series all end in a high back vowel [u], which turns into the corresponding glide when *a-* is present: 2SG *gu-* ⟶ *gwa-*. The *β* and *β*2 series end in consonants. For both series, the *a-* prefix is simply added, for example 2|3NSG *th-* ⟶ *tha-* for the *β* series and 2|3NSG *thf-* ⟶ *thfa-* for the *β*2 series.

[29] The second singular differs in a number of ways which will be discussed in §6.2.1. Note that the second singular *gn-* is only used in the imperatives of prefixing verbs where the addressee argument is encoded in the prefix. Verbs in middle and ambifixing templates on the other hand employ the suffix to encode the addressee argument in the imperatives, leaving the prefix *β* series for the middle marker or the indexing of the undergoer argument.

[30] Table 5.9 also includes identical formatives *nz-* for first non-singular and second singular in the *β* series. The *β* series is used for irrealis inflection. The neutralisation is there on an abstract paradigmatic level, but the inflected verbs are never identical, because - unlike all other person/number combinations - the second singular does not take the irrealis prefix *ra-*. This will be further discussed in §6.2.1.

[31] In a Komnzo recording from the 1980's made by the anthropologist Mary Ayres, I found a different realisation of this prefix, namely [eja-]. In terms of segmentation, this is a much more transparent realisation. The recording was made with an older man, maybe in his late 60's. In modern Komnzo, there is no variation and the prefix is realised as given in the table [æ-].

Table 5.10: Person prefixes: α-series with valency change prefix *a-*

gloss	formative	segmentation
1SG	*wa-*	*wo-a-*
1NSG	*na-*	*n-a-*
2SG	*na-*	*n-a-*
3SG.F	*wä-*	*w-a-*
3SG.MASC	*ya-*	*y-a-*
2|3NSG	*ä-*	*e-a-*[31]
M	*ŋa-*	*ŋ-a-*

As I have discussed in §5.3.3, the β, β1 and γ series may combine with the restricted stem, the last of the three exclusively so. With the restricted stem, dual marking takes place in pre-stem position (see §5.3.2) and the *a-* prefix simultaneously encodes valency change and the dual vs. non-dual contrast. As the marking pattern does not impact on the formatives of the person prefixes, I will defer this topic to the discussion of number marking in §5.5.3.4.

5.5.2 Gender

The agreement target of gender is the third singular prefix of the verb. There is a feminine and masculine gender category. Metalinguistic statements by speakers are often expressed as *madema rä* 'It is a girl' for feminine or *srak yé* 'It is a boy' for masculine. The formatives employed to encode gender across the prefix series are given in Table 5.9 above.

The discussion in §5.4 has shown that the prefix indexes the direct and indirect object in the ambifixing transitive template, and the subject of intransitives in the prefixing template. It follows that only those types of argument roles show agreement in gender, whereas the more agent-like arguments never show gender agreement.

The semantic perspective of gender classification of the noun lexicon is discussed in §3.1.3.

5.5.3 Number

Komnzo verbs encode three number values: singular, dual and plural. There exists an additional large plural which is available only for prefixing verbs or verbs in the prefixing template. I describe the fourth number value in §5.5.3.2.

The peculiarity of number marking in Komnzo lies in the fact that it is distributed over two separate slots which, looked at individually, do not distinguish all three values, but operate on a binary opposition. Hence, the overall ternary number opposition is reduced to a binary opposition in the respective slots on the verb. There are three logical possibilities for this reduction because each of the three number values can be contrasted

with its opposite: singular vs. non-singular; dual vs. non-dual; plural vs. non-plural. The combination of any two of the three binary oppositions is sufficient to encode all three number values. Figure 5.7 below shows the principle behind this reduction.

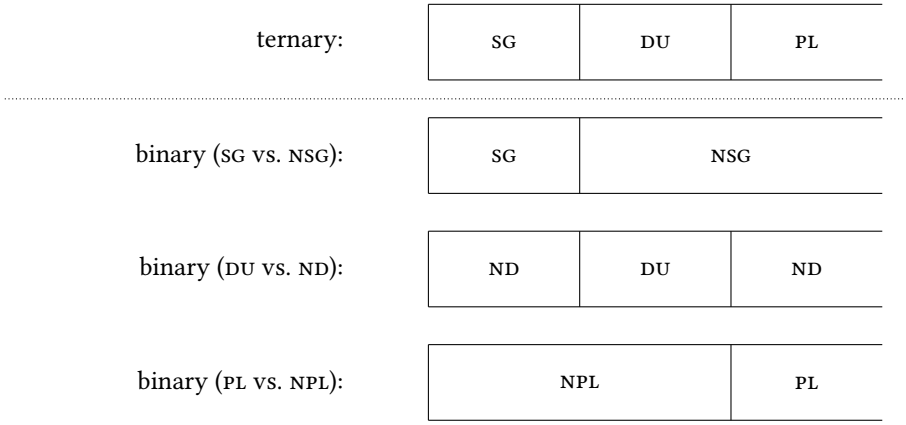

Figure 5.7: Three ways of breaking up a ternary opposition

Komnzo makes use of all three oppositions, but only two of the possible combinations. The person affixes operate always on a singular vs. non-singular opposition. A separate affix, which I call the duality affix, makes a distinction between dual vs. non-dual. I will show below that under certain circumstances, the same affix encodes plural vs. non-plural, but this is a marginal pattern (§5.5.3.4). The basic system of distributed number marking integrates a SG-NSG opposition in the person affixes with a DU-ND opposition in the duality affix. Figure 5.8 provides an overview of this principle.

		DUALITY AFFIX	
		DU	ND
PERSON AFFIX	SG		singular
	NSG	dual	plural

Figure 5.8: Basic principle of distributed number marking on verbs

Figure 5.8 shows that out of four possible combinations, in fact only three are normally put to use, namely those that are logically compatible. Prefixing verbs and stems in a prefixing template, which includes positional verbs, are exceptional in that they utilise the fourth, seemingly non-sensical, combination SG-DU to encode a large plural (§5.5.3.2).

The two sites involved in number marking have very different properties. The binary opposition in the person prefixes and suffixes is much more stable in the sense that (i) the encoded value can be straightforwardly associated with an argument, because person and number marking are fused into one morpheme, (ii) the position of these affixes with respect to the stem is fixed and (iii) the values encoded are always SG and NSG. The duality affix differs in all three points and the subsequent discussion of number marking will focus on its peculiarities. But to give an overview here: first, if there are two participants indexed in the verb, the duality affix is ambiguous as to which of the two it is indexing. Secondly, duality is marked in a suffix with extended stems, but in a complex portmanteau prefix with restricted stems. Finally, as was mentioned above, in part of the paradigm, the DU-ND opposition is replaced by a PL-NPL opposition. I will discuss these points below.

5.5.3.1 Ambiguities in the reference of the duality affix

Examples (40a-g) show the verb *fathasi* 'hold' with different number combinations of the two arguments.[32] Only in example (40f), we find several possibilities with respect to number marking because both person affixes signal non-singular. The ambiguity stems from the fact that the duality marker is ambiguous as to which of the two arguments it is referencing. In other words, the dual morpheme *n-* in (40f) signals that one the two participants is dual, but not which one. This does not create any ambiguities in cases where one of the the two person affixes is singular (40a-e). Likewise, it is not a problem if both person affixes are non-singular and the duality affix in non-dual (40g). Although examples (40a-g) show the extended stem of the verb *fathasi*, this ambiguity is also found with restricted stems where the duality affix occurs in pre-stem position.

(40) a. *y-fath-wr-∅*
3SG.MASC-hold.EXT-ND-2|3SG
'S/He holds him.'

b. *y-fath-n-th*
3SG.MASC-hold.EXT-DU-2|3NSG
'They (2) hold him.'

c. *y-fath-wr-th*
3SG.MASC-hold.EXT-ND-2|3NSG
'They (3+) hold him.'

d. *e-fath-n-∅*
2|3NSG-hold.EXT-DU-2|3SG
'S/He holds them (2).'

e. *e-fath-wr-∅*
2|3NSG-hold.EXT-ND-2|3SG
'S/He holds them (3+).'

[32] Note, that the English translations are all in third person, although some of the person indexing morphemes neutralise the distinction between second and third person and, thus, could also be translated as second person.

f. *e-fath-n-th*
2|3NSG-hold.EXT-DU-2|3NSG
'They (2) hold them (3+).' or 'They (2) hold them (2).' or 'They (3+) hold them (2).'

g. *e-fath-wr-th*
2|3NSG-hold.EXT-ND-2|3NSG
'They (3+) hold them (3+).'

For verbs in the transitive ambifixing and ditransitive ambifixing template, the distribution of the dual and non-dual markers can be expressed in an abstract way as in Figure 5.9.

		ACTOR		
		SG	DU	PL
UNDERGOER	SG	wr	n	wr
	DU	n	n	n
	PL	wr	n	wr

Figure 5.9: The duality matrix with *fathasi*

For verb forms which index only one argument the marking pattern is simpler, as there is no ambiguity in reference of the duality suffix. This is relevant for verbs in a prefixing or middle template. Examples (41a-c) show the verb *thoraksi* 'appear' in a prefixing template cycled through all three number values.

(41) a. *wo-thorak-wr*
1SG-appear.EXT-ND
'I arrive.'

b. *n-thorak-n* (~ *n-thorak-rn*)
1NSG-appear.EXT-DU
'We (2) arrive.'

c. *n-thorak-wr*
1NSG-appear.EXT-ND
'We (3+) arrive.'

Note that there are two variants for the dual morpheme, *-n* and *-rn* in (41b), which are attested for almost all members of the small class of prefixing verbs. This variation is both intra-speaker and inter-speaker and, thus far, no patterning along social lines could be detected (e.g. age of the speaker, speaker's exposure to other varieties, etc).

5.5.3.2 Large plurals with prefixing verbs

The prefixing template indexes the sole argument of the verb in the prefix, while the suffix slot is not used. We have seen that only a small number of verbs are inherently prefixing (§5.4.4), and about fifty stems may enter into this template. The latter group includes positional verbs (§5.4.4.2). I show below that because there is no ambiguity in the reference of the duality marker, all four cells in the paradigm can be exploited. This allows for a fourth number value, the large plural, which is formed by combining the dual marker with a singular. Figure 5.10 illustrates the pattern.

		DUALITY AFFIX	
		DU	ND
PERSON AFFIX	SG	large plural	singular
	NSG	dual	plural

Figure 5.10: Principle of distributed number marking for prefixing verbs

Consider example (42) below. The speaker in the story has been away from Rouku for a long time. He asks his brother whether the palm wine containers are still hanging, and the brother replies 'there are plenty'. This is expressed by the copula in dual and the prefix in singular. Note that the stem of the copula is sensitive to dual versus non-dual. I used the gloss label LPL for large plural.

(42) *"eh ngthé bana! sgeru komnzo emithgr?" "ah, segeru komnzo **yrn**"*
eh ngthé bana sgeru komnzo e-mi-thgr ah
hey brother poor palm.wine still 2|3NSG:α-hang.EXT-STAT.ND ah
2|3PL:SBJ:NPST:STAT/hang

segeru komnzo y-rn
palm.wine still 3SG.MASC:α-COP.DU
3LPL:SBJ:NPST:IPFV/be

"Hey brother, are the palm wine (containers) still hanging?" "Yes, there are still plenty." [tci20130927-06 MAB #189]

Examples (43a-d) are elicited forms showing the positional verb *räzsi* 'erect, stand up' in all four number values.[33]

(43) a. *woz w-räs-thg-r*
bottle 3SG.F-erect-STAT-ND
'The bottle is standing.'

[33]Note that we find the same variation in the dual morpheme (*-n* and *-rn*) as with other prefixing verbs. Compare with examples 41a-c above.

b. *woz e-räs-thg-n* (~ *e-räs-thg-rn*)
bottle 2|3NSG-erect-STAT-DU
'The two bottles are standing.'

c. *woz e-räs-thg-r*
bottle 2|3NSG-erect-STAT-ND
'The bottles are standing.'

d. *woz y-räs-thg-n* (~ *y-räs-thg-rn*)
bottle 3SG.MASC-erect-STAT-DU
'All the bottles are standing.' or 'Many bottles are standing.'

Example (43d) shows the large plural construction in which the seemingly non-sensical combination of a singular in the person prefix and a dual in the duality slot yields a large plural or exhaustive plural interpretation. There are some restrictions to the large pural. First, as we have seen, it only occurs in the prefixing template. Even though a stem like *räz-* 'erect' can appear in a middle or ambifixing template, it cannot form large plurals in these templates. Secondly, large plurals only occur in third person, not in first or second. Note that it is always the masculine prefix which is used in the large plural construction, even if the referent is feminine, as with *woz* 'bottle' (43a). In this way, the large plural construction substantiates the principle of distributed exponence, whereby the morphological material at the language's disposal is employed in ways that are not predictable by looking at individual morphemes.

Unfortunately, the large plural construction is attested only once in the corpus (42). The evidence presented above comes from eliciation.[34] Although the large plural is readily understood and judged grammatical by all my informants, I have not overheard it in daily conversation. Speakers commonly refer to this construction as 'a way the old people spoke'. Therefore, we have to assume that it will fade from the speakers' passive knowledge eventually and disappear altogether. In fact, the speaker in example (42) was an older man.

Although on different levels of comparison, dual marking in pre-stem position and the formation of large plurals are not compatible. This is partly caused by the stative semantics of verbs in the prefixing template. For example, positionals take the stative suffix *-thgr* which blocks all perfective semantics. Pre-stem dual marking on the other hand occurs only with restricted stems, and restricted stems are used to form perfectives. A positional verb like *räzsi* 'erect', can occur outside the prefixing template and form perfectives, but in this case the large plural does not apply. We saw in §5.4.4, that there are some prefixing verbs, which are not stative, for example *yarenzsi* 'look around' or *ziksi* 'turn to side'. These do form perfectives in the prefixing template. However, the large plural combination results in an ungrammatical inflection.

I suggest that a historical perspective explains why this is the case. I show in §5.5.3.4, that pre-stem dual marking is messier than post-stem dual marking in the sense that it is less segmentable and there are more patterns of syncretism. I have argued in §5.3.4

[34] I want to thank Nick Evans for pointing out the combinatorial possibility (SG+DU) in Nen (Evans 2014) which allowed me to test this pattern with Komnzo speakers.

that pre-stem dual marking is an innovation, and that post-stem dual marking is an older pattern. Thus, the large plural construction has not survived the change in the pattern shift. Therefore, prefixing verbs with dynamic semantics cannot form large plurals in their perfectives.

5.5.3.3 Allomorphy in the post-stem duality slot

Before I turn to the dual marking in pre-stem position with restricted stems, I discuss the topic of allomorphy in post-stem position. The dual morpheme in the duality slot shows little variation. The above described variation between *-n* and *-rn* is found with prefixing verbs only; elsewhere the dual morpheme is always *-n*. As for the non-dual morpheme, the situation is different. There are three allomorphs (*wr-*, *nzr-*, *-r*) and their distribution is phonologically conditioned by the final element of the verb stem. The conditioning rules layed out in Table 5.11 account for 85% (275/322) of the attested verb lexemes.

Table 5.11: Allomorphs of the non-dual suffix

formatives	rule	count	EXAMPLE	gloss
formative	rule	count	EXAMPLE	gloss
-wr	/ k]$_{\text{stem}}$_	92	*mätrak-*	‘bring out’
			wek-	‘invite’
	/ g]$_{\text{stem}}$_	38	*mäyog-*	‘repeat’
			brig-	‘return’
	/ n]$_{\text{stem}}$_	34	*wathkn-*	‘pack up’
			myukn-	‘twist’
	/ r]$_{\text{stem}}$_	25	*rsr-*	‘fish (poison)’
			wagr-	‘meet’
-nzr	/ V]$_{\text{stem}}$_	62	*yagu-*	‘pour out’
			yafü-	‘open’
			mrä-	‘stroll’
			fsi-	‘count’
			tha-	‘uncover’
-r	/ z]$_{\text{stem}}$_	24	*brüz-*	‘submerge’
			rifthz-	‘hide’
			räz-	‘erect’
TOTAL		275		

The remaining 15% of verb lexemes are irregular (i) in taking a different formative to mark non-dual (e.g. *-thr* or *-∅*), (ii) in taking one of the three allomorphs under violation

of the conditioning rules or (iii) in expressing the dual/non-dual contrast by irregular changes in the verb stem, for example *moth* 'walk' (*-yak* ND vs. *-yan* DU) or *kwan* 'shout' (*-nor* ND vs. *-rn* DU).

5.5.3.4 Pre-stem dual marking with restricted stems

The previous discussion concentrated on dual marking with extended stems. For restricted stems, this suffix slot is not available and the dual vs. non-dual contrast is marked in the vowel of the prefix, which changes to *ä* for non-dual. Pre-stem dual marking is relevant only for those TAM categories which build their inflection on the restricted stem. These are verbs inflected for iterative and perfective aspect. The latter include indicative (recent past and past tense), imperative or irrealis forms. In the following description, I use the irrealis perfective forms to explain the pattern and point to other TAM categories where they deviate.

Interestingly, it is the non-dual that receives a marker (*ä-*), while the dual is zero marked. At the same time, pre-stem dual marking is less segmentable and harder to gloss than post-stem dual marking, because the non-dual *ä* vowel superposes vowels from other prefixal material, for example the valency changer *a-* or the irrealis prefix *ra-*. This leads to patterns of syncretism which span several grammatical dimensions (valency, number, aspect, mood, etc).

Irrealis mood is expressed by the prefix *ra-*, which directly follows the person/number prefix or the middle marker of the *β* prefix series (see Table 5.9 in §5.5.1.2). The non-dual marker *ä* replaces the vowel of the *ra-* prefix for all the person/number combinations which involve a non-dual participant. This pattern is uniform for prefixing as well as ambifixing verbs. Below in (44-50), I provide textual examples of the number combinations with a third person actor and a first person undergoer.[35] We find the *ä* vowel for the following actor>undergoer combinations: SG>SG (44), PL>SG (46), SG>PL (48) and PL>PL (49).

(44) *adif nima **kwräs** "ranzo?"*
adi=f nima kw-rä-s-∅ ra=nzo
aunt=ERG.SG QUOT 1SG.*β*-IRR.ND-ask.RS-2|3SG what=ONLY
2|3SG:SBJ>1SG:OBJ:IRR:PFV/ask
'Aunt asked me: "What is it?"' [tci20120922-25 ALK #15-16]

(45) *yare kma nzä nafa **kwrakarth**.*
yare kma nzä nafa kw-ra-kar-th
bag POT 1SG.ABS 3NSG.ERG 1SG.*β*-IRR.DU-pull.RS-2|3NSG
2|3DU:SBJ>1SG:OBJ:IRR:PFV/pull
'They (2) should take the bag from me.' [tci20130907-02 JAA #10]

[35] Irrealis mood may be used in narratives for pragmatic reasons (backgrounding) and refer to events which actually took place (§6.4.3)

(46) *ngatha fäth ferä nafa* ***kwränbrmth*** *e …*
ngatha fäth f=e-rä nafa
dog DIM DIST=2|3NSG.α-COP.ND 3NSG.ERG
DIST=2|3PL:SBJ:NPST/be

kw-rä-n-brm-th e (.)
1SG.β-IRR.ND-VENT-follow.RS-2|3NSG until (.)
2|3PL:SBJ>1SG:OBJ:IRR:PFV:VENT/follow
'The small dogs over there, they follow me until…' [tci20111119-03 ABB #94]

(47) *foba* ***nzrans*** *"bä mon ern?"*
foba nz-ra-n-s-∅ bä mon e-rn
DIST.ABL 1NSG.β-IRR.DU-VENT-ask.RS-2|3SG 2.ABS how 2|3NSG.α-COP.DU
2|3SG:SBJ>1DU:OBJ:IRR:PFV:VENT/ask 2|3DU:SBJ:NPST:IPFV/be
'He asked us (2): "Who are you?"' [tci20120904-02 MAB #125]

(48) *paituaf* ***nzräkor*** *"nzä fiyafr wiyak."*
paitua=f nz-rä-kor-∅ nzä fiyaf=r
old.man=ERG.SG 1NSG.β-IRR.ND-speak.RS-2|3SG 1SG.ABS hunting=PURP
2|3SG:SBJ>1PL:OBJ:IRR:PFV/speak

wo-yak
1SG.α-walk.EXT.ND
1SG:NPST:IPFV/walk
'He said to us: "I will go hunting."' [tci20120821-02 LNA #11-12]

(49) *kar zf rä zf masu … manema* ***nzräkorth*** *masu kar.*
kar zf rä zf masu (.) mane=ma
place IMM 3SG.F.COP.ND IMM masu (.) which=CHAR
3SG.F:SBJ:NPST.IPFV/be

nz-rä-kor-th masu kar
1NSG.β-IRR.ND-speak.RS-2|3NSG masu place.
2|3PL:SBJ>1PL:OBJ:IRR:PFV/speak
'This place right here is Masu, which is why they call us Masu people.'
[tci20120922-08 DAK #87]

(50) *ni* ***nzrakorth*** *"bä!" … oroman babua … "bä kwa ŋakwinth zmbär aki kwayanen!"*
ni nz-ra-kor-th bä (.) oroman babua (.) bä kwa
1NSG 1NSG.β-IRR.DU-speak.RS-2|3NSG 2.ABS (.) old.man babua (.) 2.ABS FUT
2|3PL:SBJ>1DU:OBJ:IRR:PFV/speak
ŋ-a-kwi-n-th zmbär aki kwayan=en
M.α-VC-run.EXT-DU-2|3NSG night moon light=LOC
2|3DU:SBJ:NPST:IPFV/run
'They said to us (2): "You!" to old man Babua "You two will run at night in the moonlight"' [tci20120904-01 MAB #135-137]

Note that just like in post-stem dual marking (§5.5.3.1), pre-stem dual marking is ambiguous as to which of the two arguments is dual or non-dual. The verb *nzrakorth* 'they said to us' in (50) could be any of the three possible actor>undergoer combinations (PL>DU, DU>DU or DU>PL) because both person affixes index a non-singular participant. Thus, the absence of the *ä* vowel indicates that one of the two participants is dual, but not which one. Only context may solve this structural ambiguity, which in (50) is clear from the second verb *ŋakwinth* 'you two go'. For verbs in a prefixing template, there is no ambiguity since they index only one argument. Non-dual participants receive the *ä* vowel, while dual participants do not. The same holds for verbs in the middle template.

The marking pattern can be expressed in an abstract matrix as in Figure 5.11. In terms of structure, not in its formatives, this matrix is identical to post-stem duality marking (see Figure 5.9 above).

		ACTOR		
		SG	DU	PL
UNDERGOER	SG	ä	∅	ä
	DU	∅	∅	∅
	PL	ä	∅	ä

Figure 5.11: The duality matrix without VC prefix

There are some exceptions for the third singular prefixes (both feminine and masculine). The combination of SG>3SG in the ambifixing template and 3SG in the prefixing template receive the vowel *a* and not *ä* in all relevant TAM categories. In the imperatives, it is *a* for both combinations SG>3SG and PL>3SG. Inflections involving a dual participant would receive a zero marker. In a discussion after listening to old recordings made by the anthropologist Mary Ayres in the 1980's, I was able to elicit one inflectional form that is relevant to this topic. The informant contrasted the modern Komnzo inflection *santhor* 'He arrived here' with an older form of the same verb *snäthor*.[36] A first observation is that the *ä* does occur in the older form. Interestingly, it occurs after the ventive *n-* prefix. At the current stage of documentation, not much can be said about the time frame during which this change has occured. The informant who provided this information is now in his mid-60's and he remembers 'old people' using this form. I was not able to elicit a full paradigm of these older inflections and, thus, we are denied insight into the changes that took place in the verb template. As for now, we can only state that the non-dual *ä* vowel existed at some point in time with third singulars in the prefix.

As I mentioned above, since pre-stem duality marking involves the *ä* vowel, it occupies a slot in the template which may be filled by other prefixal material, for example the irrealis prefix *ra-* and the valency changer *a-*, or both. We saw in the examples above,

[36] *s-a-n-thor* — *s-n-ä-thor*
3SG.MASC.*y*-ND-VENT-arrive.RS — 3SG.MASC.*y*-VENT-ND-arrive.RS

that the non-dual *ä* vowel superposes the irrealis *ra-* prefix which results in the form *rä-*. This is not the case for the imperatives and indicative inflected verbs. As we have seen in §5.3.3, restricted stems combine only with prefixes of the *β*, *β*2 and *γ* series. Most formatives of these series are composed of only a consonant (See Table 5.9 in §5.5.1.2). Only the 1SG.*γ* (*zu-*) and all formatives of the *β*2 series end in /u/, which resyllabifies as part of a complex onset (*zw-*) in the presence of *ä* or *a*. For example, the 1SG.*γ* *zu-* in (51) is followed by a zero. Therefore, the verb is inflected for dual. In (52), the 1SG.*γ* is followed by the non-dual *ä* vowel and the prefix changes into *zwä-*. Therefore, I analyse the distribution of the *ä* vowel as was shown above in Figure 5.11.

(51) *nzä nima **zukorth**: "be fafä zane nagayé fäth zä thamonegwé!"*
nzä nima zu-∅-kor-th be fafä zane
1SG.ABS QUOT 1SG.*γ*-DU-speak.RS-2|3NSG 2SG.ERG after.this DEM:PROX
2|3DU:SBJ>1SG:OBJ:RPST:PFV/speak
nagayé fäth zä th-a-moneg-w-é
children DIM PROX 2|3NSG.*β*-VC-wait.EXT-ND-2SG.IMP
2SG:SBJ>2|3PL:IO:IMP:IPFV/wait
'They (2) said to me: "You will look after these small children here later!"'
[tci20121019-04 ABB #97]

(52) *watik, naf **zwäkora**: "watik, nzone efoth fof zefafth."*
watik naf zu-ä-kor-a-∅ watik nzone efoth fof z-ä-faf-th
then 3SG.ERG 1SG.*γ*-ND-speak.RS-PST-2|3SG then 1SG.POSS sun|day EMPH M.*γ*-ND.VC-hold.RS-2|3NS
2|3SG:SBJ>1SG:OBJ:PST:PFV/speak 2|3NSG:SBJ:PST:PFV/hold
'Then she said to me: "Well, my days are over now."' [tci20130911-03 MBR #76]

Pre-stem duality marking co-occurs with the valency change prefix *a-*. The resulting vowel pattern is summarised in the matrix in Figure 5.12, which shows that the non-dual *ä* vowel (i) replaces the *a-* prefix and (ii) that it patterns differently to the forms given so far. Compare Figure 5.11 above with Figure 5.12 below. Note that this neutralises the valency change prefix *a-* for some of the actor>undergoer combinations: PL>SG, SG>PL and PL>PL. For these combinations, it is only the case frame which identifies whether the undergoer argument is a direct object (ABS case) or an indirect object (DAT or POSS case).

		ACTOR		
		SG	DU	PL
UNDERGOER	SG	a	a	ä
	DU	a	a	a
	PL	ä	a	ä

Figure 5.12: The duality matrix with VC prefix

One exception is the combination of SG>SG. As we can see in Figure 5.12, this combination receives no *ä* vowel although both participants are non-dual. This pattern is regular for all persons. Thus, a PL>3SG would receive *ä*, whereas DU>3SG and SG>3SG would not receive it. For the last combination and all prefixing verbs with a 3SG this means that the valency change is neutralised and again only the case frame shows what type of undergoer is indexed. It is not neutralised for the other person values (SG>1SG, SG>2SG and 1SG, 2SG on prefixing verbs) precisely because SG>SG (and the SG in prefixing verbs) does not take *ä* but *a*.

Note that prefixing verbs with the valency change prefix *a-* show a pattern where *ä* only occurs on a plural, while *a* occurs with a singular and dual participant. At least on the surface, this results in the binary opposition of plural vs. non-plural. In (53) below, the prefixing verb *rfiksi* 'grow' occurs in the inflected form *zarfif* 'sth. grew for/over it'. From the context, it is clear that the speaker is talking about the grass growing over the path. The verb encodes a feminine undergoer, which can only be interpreted as being the pathway (*moth*), because *yusi* 'grass' is masculine. A dual number of the undergoer would be *tharfif* and a plural *thärfif*. Thus, under several conditions (presence of valency change, prefixing template, restricted stem), the duality marker marks an opposition between plural and non-plural.

(53) *gathagatha moth rä … z wrfrwake we ane* ***zarfif****.*

gathagatha	moth	rä	(.) z
bad	path	3SG.F:COP:ND	(.) ALR
		3SG.F:SBJ:NPST:IPFV/be	

w-rfr-w-a-k-e		we	ane	z-a-rfif
3SG.F.α-trim.EXT-ND-PST-LK-1NSG	also	DEM	3SG.F.γ-ND.VC-grow.RS	
1PL:SBJ>3SG.F:OBJ:PST:IPFV/trim			3SG.F:IO:RPST:PFV/grow	

'This is a bad path. We cut it already, but (the grass) grew over it again.'

[tci20130907-02 RNA #39-41]

Before I conclude this section on number marking, I want to look at the behaviour of the *ä* vowel when the irrealis prefix *ra-* and valency change prefix *a-* come together. Since the irrealis prefix includes a vowel, the valency change prefix is neutralised in most parts of the paradigm. For extended stems, this neutralisation is complete, i.e. only the case frame indicates whether the undergoer argument is a direct object (ABS) or an indirect object (DAT or POSS). This will be further discussed in §6.2.2. For restricted stems, the valency change prefix *a-* is likewise neutralised, but the number marking pattern differs in those actor>undergoer combinations which involve SG>SG (Figure 5.12). Consider the vowel contrast between (44) which was given above and (54) below. The participant combination is held constant: 3SG>1SG. In (44) we find the *ä* vowel, because it is ditransitive and the valency change prefix *a-* is employed, but in (54) it is missing, because (44) is transitive and lacks the *a-* prefix. Compare (54) with (55) where the same verb *yarisi* 'give' shows the *ä* because the actor participant is plural.

(54) *nafane bärbärnzo keke* ***kwrar****.*

nafane bärbär=nzo keke kw-ra-r-∅
3SG.POSS half=ONLY NEG 1SG.β-IRR.ND.VC-give.RS-2|3SG
2|3SG:SBJ>1SG:IO:IRR:PFV/give
'She will not give me half of her (fish).' [tci20120922-26 DAK #125]

(55) *nä kwot* ***kwrärth*** *fafä.*
nä kwot kw-rä-r-th fafä
some again 1SG.β-IRR.PL.VC-give.RS-2|3NSG after.that
2|3PL:SBJ>1SG:IO:IRR:PFV/give
'They might give me some more later.' [tci20120805-01 ABB #226]

We can conclude from the examples that the irrealis inflection complies with the number marking patterns as they were shown in Figure 5.12 above. The only difference lies in the fact that the irrealis prefix *ra-* creates neutralisations in more combinations (with regard to the valency change) because *ra-* contains a vowel. However, there is one important caveat to this conclusion. As I have pointed out in §5.4.4 and §5.4.6, there are some verbs which are deponent in the sense that they obligatorily take the *a-* without a change in the valency. Two examples are the transitive verb *fiyoksi* 'make' and intransitive/prefixing verb *yarenzsi* 'look'. Consequently we would expect them to comply with the pattern in Figure 5.12. Consider example (56) with a SG>SG participant combination and example (57) with its single referent in SG. Both show the *ä* non-dual vowel, i.e. they violate the pattern in Figure 5.12 which predicts the vowel to be *a* and not *ä*. This violation occurs only with deponent verbs and only in irrealis mood. The natural explanation is that, for deponent verbs, the distinction between the presence vs. absence of the valency change prefix is redundant.

(56) *katan kwa* ***sräfiyothé****. kafar minzü yé.*
katan kwa s-rä-fiyoth-é kafar minzü
small FUT 3SG.MASC.β-IRR.ND.VC-make.RS-1SG big very
1SG:SBJ>3SG.MASC:OBJ:IRR:PFV/make

\yé/
3SG.MASC.COP.ND
3SG.MASC:SBJ:NPST:IPFV/be
'I will make it smaller. It is very big.' [tci20120914 RNA #41-42]

(57) *wati, we nima n* ***kwräzigrthm*** *"eh, ra gru zane ŋamitwanzr nabi tutin?"*
wati we nima n kw-rä-zigrthm eh ra gru
then also QUOT IMN 1SG.β-IRR.ND.VC-look.RS eh what shooting.star
1SG:SBJ:IRR:PFV/look

zane ŋ-a-mitwa-nzr-∅ nabi tuti=n
DEM.PROX M.α-VC-swing.EXT-ND-2|3SG bamboo branch=LOC
2|3SG:SBJ:NPST:IPFV/swing
'Then, I was about to look around and thought: "Hey, what is this shooting star swinging on the bamboo branch?"' [tci20111119-03 ABB #126-127]

Another observation relevant for all TAM categories with pre-stem dual marking is the fact that the middle marker also obligatorily takes the valency change prefix *a-*. Likewise, a verb in the middle template which indexes a singular participant does not pattern along the lines of Figure 5.12, and instead it employs the *ä* vowel. Again, this can only be explained by taking into account that there is no need to make a distinction between the presence vs. absence of the valency change prefix, because it always occurs with the middle morpheme.

The patterning of *ä*, *a* and ∅ in the prefixes cannot be adequately captured by the traditional notion of a morpheme with a distinct meaning. It seems to be the case that the vowel change is employed only to mark a difference in meaning without being easily linked to a specific meaning. The vowel change or the *ä* vowel in the prefix can be glossed as a non-dual for only part of the paradigm. In other parts of the paradigm, the distribution is employed to maximise the possible grammatical categories that can be encoded. Thus, pre-stem duality marking is much messier than post-stem duality marking. Both show some ambiguities and neutralisations, and in both cases the duality marker has to be integrated with the singular vs. non-singular opposition of the person affixes. But at the same time, pre-stem dual marking is sensitive to more grammatical categories and shows more idiosyncrasies.

5.6 Deixis and directionality

Komnzo verbs may be inflected for deixis and directionality. Deictic inflection comprises the values of proximal, medial, distal and interrogative. Directionality comprises a ventive ('hither') and an andative ('thither') category. Both deixis and directionality operate from a deictic center, which is usually the speaker, but may be extended to cover a particular character or place in a narrative, or a point in time. Morphologically, both sets are simple in that there is a one-to-one mapping between form and function.

5.6.1 The directional affixes *n-* and *-o*

Directional inflection takes place in two slots on the verb: the ventive prefix *n-* precedes the verb stem, while the andative suffix *-o* occurs in the second last slot on the verb preceding the person/number suffixes. Although morphologically possible, the two morphemes may not co-occur, i.e. a verb is marked either ventive or andative. In other Yam languages, the two morphemes share one slot in the verb template, for example in Nen (Evans 2015a). I have described in §5.5.1.1 how the presence of the andative suffix can lead to the neutralisation of the person value in the actor suffix. Example (39) in that section provided a text example of this neutralisation.

The use of directional marking is shown below in example (58). The sentence concludes a mythical story which explains why two particular clans do not intermarry, but instead 'help each other out' with girls to be exchanged with other groups. The speaker assumes the position of one of the two clans, both spatially as well as in terms of kin relations. The verb *yarisi* 'give' is then marked with an andative in the first clause ('give away')

and a ventive ('give towards') in the second clause. Additionally, both clauses contain a deictic in ablative case (*zba* 'from here', *boba* 'from there').

(58) *zba nezä **ärithroth** fäms ŋarer. boba nezä **änrithrth** fäms ŋarer*
zba nezä e-a-ri-thr-o-th fäms
PROX.ABL in.return 2|3NSG.α-VC-give.EXT-ND-AND-NSG exchange
2|3PL:SBJ>2|3PL:IO:NPST:IPFV:AND/give

ŋare=r boba nezä e-a-n-ri-thr-th
woman=PURP MED.ABL in return 2|3NSG.α-VC-VENT-give.EXT-ND-2|3NSG
2|3PL:SBJ>2|3PL:IO:NPST:IPFV:VENT/give

fäms ŋare=r
exchange woman=PURP
'From here, they give them girls to exchange. In return, they give them girls to exchange from there.' [tci20110802 ABB #159-161]

The directional affixes can be used with dynamic events as in (58) or with stative verbs as in (59), which is taken from the description of a picture card. The image depicts an older man who is standing in the background watching what is happening. The ventive inflection on 'stand' refers to the direction of his posture, i.e. he is standing facing towards the deictic centre.

(59) *wotukarä ane **ynkogr**. sinzo foba **ynrä**.*
wotu=karä ane y-n-kogr si=nzo foba
stick=PROP DEM 3SG.MASC.α-VENT-stand.ND eye=ONLY DIST:ABL
3SG.MASC:SBJ:NPST:IPFV:VENT/stand

y-n-rä
3SG.MASC.α-VENT-COP.ND
3SG.MASC:SBJ:NPST:IPFV:VENT/be
'He stands there with his walking stick and he is just looking from there.' [tci20111004 RMA #253]

The copula may receive a directional inflection, giving the interpretation of 'come' (59) and 'go' (60), literally translated as 'be hither' and 'be thither'.

(60) *watik, teacher zwäkor "keke kayé kwa **nrno**."*
watik teacher zu-ä-kor-∅ keke kayé kwa
then teacher 1SG:γ-ND-speak.RS-2|3SG NEG tomorrow FUT
2|3SG:SBJ>1SG:OBJ:RPST:PFV/speak

n-rn-o
1NSG:α-COP.DU-AND
1DU:SBJ:NPST:IPFV:AND/be
'Then, the teacher said to me: "No, we will go tomorrow."' [tci20130823-06 STK #67-68]

The spatial semantics of directional inflection can be extended to cover metaphorical uses. Example (61) shows a temporal use where the speaker explains the old custom of tying a bowstring. Thus, he literally says that he 'follows the custom hither'. Example (62) is a description of a very old woman, who has outlived some of her own children. The speaker uses the andative inflection on the verb *yathizsi* 'die' which is best translated into English as 'pass away'.

(61) *nzenme bada nimame zf ŋatr thuzirakwrmth. watik, ni ane* ***wänbragwre*** *zenathamar.*
nzenme bada nima=me zf ŋatr
1NSG.POSS ancestor like.this=INS IMM bowstring

thu-zirak-wr-m-th watik ni ane
2|3NSG.β1-tie.EXT-ND-DUR-2|3NSG then 1NSG DEM
2|3PL:SBJ>2|3PL:OBJ:PST:DUR/tie
w-a-n-brag-wr-e zena=thamar
3SG.F.α-VC-VENT-follow.EXT-ND-1NSG today=TEMP.ALL
1PL:SBJ>3SG.F:OBJ:NPST:IPFV:VENT/follow
'Our ancestors where tying the bowstring this way. We have been following (this custom) until today.' [tci20130914-01 KAB #1-3]

(62) *nagayé nafanemäwä nä z* ***äthizrako****.*
nagayé nafane=ma=wä nä z
children 3SG.POSS=CHAR=EMPH some ALR

e-a-thiz-r-a-k-o
2|3NSG.α-VC-die.EXT-ND-PST-LK-AND
2|3PL:SBJ:PST:IPFV:AND/die
'Some of her own children have already passed away.'
[tci20120922-26 DAK #54]

5.6.2 The deictic clitics *z=*, *b=*, *f=* and *m=*

Deictics include the three categories proximal *z=*, medial *b=* and distal *f=*. Additionally, there is an interrogative form *m=* which behaves slightly different. These morphemes are analysed as proclitics because they (i) attach to the outer layer of the verb, (ii) are not assigned stress (if they create an initial syllable through epenthesis) and (iii) are reduced forms of the demonstratives. In §3.1.12.3 and §3.5 I have labelled these clitic demonstratives.

Clitic demonstratives are always used situationally in order to point, direct or show the location of an event or a referent in relation to the deictic center. Example (63)[37] comes from a narrative. The deictic center of that part of the story is a man who sits in his camp and happens to hear someone shouting from the river. Note that both verbs

[37] The verb *-nor* 'shout' is deponent and takes the valency change prefix *a-* prefix without an impact on the argument structure.

('hear' and 'shout') are inflected with a ventive marker. Thus, we can translate the second verb *byannor*, to which the medial clitic demonstrative (*b*= MED) is attached, as 'He shouts there towards here'.

(63) *nafafämsf srenkaris "oh, kabe **byannor** gardar."*
nafa-fäms=f s-rä-n-karis-∅ oh
3.POSS-exchange.man=ERG.SG 3SG.MASC.β-IRR.ND-VENT-hear.RS-2|3SG oh
2|3SG:SBJ>3SG.MASC:OBJ:IRR:PFV:VENT/hear
kabe b=y-a-n-nor garda=r
man MED=3SG.MASC.α-VC-VENT-shout.EXT.ND canoe=PURP
MED=3SG.MASC:SBJ:NPST:IPFV:VENT/shout
'His exchange man heard him (and said:) "Oh, there is a man calling out for the canoe."' [tci20111119-01 ABB #68]

If the inflected verb is vowel initial or begins in a glide (only some formatives of the α series), the clitic demonstrative simply attaches as an onset, for example in (64)[38] or (66) below. Elsewhere, an initial syllable is created through epenthesis, as in (63) and (65).

(64) *frükakmenzo nzwamnzrm. ane mrn **fämnzr**. ane mrn **fämnzr**. ane mrn **fämnzr**.*
frükak=me=nzo nzu-a-m-nzr-m 3x[ane mrn
alone-DISTR=INS=ONLY 1NSG.β2-VC-sit.EXT-ND-DUR 3x[DEM clan
1PL:SBJ:PST:DUR/sit
f=e-a-m-nzr]
DIST=2|3NSG.α-VC-sit.EXT-ND]
2|3PL:SBJ:NPST:IPFV/sit
'We used to live in groups. One clan lives over there, one clan lives over there and one clan lives over there.' [tci20120922-08 DAK #114-117]

(65) *ane bä **bkwaruthrmth** büdisnen mnz znen.*
ane bä b=kw-a-ru-thr-m-th büdisn=en mnz
DEM MED MED=M.β1-VC-bark.EXT-ND-DUR-2|3NSG büdisn=LOC house
MED=2|3PL:SBJ:PST:DUR/bark
zn=en
place=LOC
'Those (dogs) were barking there in Büdisn at the house.' [tci20111119-03 ABB #95]

Clitic demonstratives are found most frequently attached to the copula which then follows the main verb of a clause. In the discussion of demonstratives, I have labelled this construction demonstrative identifier (see §3.1.12.3). In (66), the speaker points to another person cutting off the branches of a tree. Note that the deictic value (MED) is held constant on the demonstrative pronoun *bäne*, the clitic demonstrative on *rtmaksi* 'cut' and the demonstrative identifier *byé*.

[38] The verb *msaksi* 'sit|dwell' is deponent and takes the valency change prefix *a-* without an impact on the argument structure

(66) *nima* ***bäne birtmakwr byé***.
nima bäne b=y-rtmak-wr-∅
like.this DEM:MED MED=3SG.MASC.α-cut.EXT-ND-2|3SG
MED=2|3SG:SBJ>3SG.MASC:OBJ:NPST.IPFV/cut
b=\yé/
MED=3SG.MASC.COP.ND
MED=3SG.MASC:SBJ:NPST:IPFV/be
'She cuts off that one there.' [tci20130907-02 JAA #441]

I choose the label demonstrative identifier for the whole construction (clitic demonstrative plus copula), because the copula is inert to tense marking, i.e. it always occurs in non-past. In example (67), the speaker took me to a place on the riverbank which used to be a 'story place' a long time ago. Story places are always inhabited by spiritual beings and, therefore, they must not be disturbed by people. The verbs *rafisi* 'paddle' and *yak* 'walk, go' are in past tense and only the copula is in non-past.

(67) *gardame fthé kwarafinzrmth, boba wozinzo thfiyakm* ***berä***.
garda=me fthé kw-a-rafi-nzr-m-th boba wozi=nzo thf-yak-m
canoe=INS when M.β1-VC-paddle.EXT-ND-DUR-2|3NSG MED.ABL side=ONLY 2|3NSG.β2-walk.EXT-DUR
2|3PL:SBJ:PST:DUR/paddle 2|3PL:SBJ:PST:DUR/walk
b=e-rä
MED=2|3NSG.α-COP.ND
MED=2|3PL:SBJ:NPST:IPFV/be
'When paddling with the canoe, they only went there on the side there.'
[tci20120922-19 DAK #8]

Naturally, deictic markers are found mostly in situations where visual identification is important. Example (68) is taken from a plant walk where the speaker points out two different kinds of trees: *mni bäwzö* and *fothr* (sometimes called *fothr bäwzö*).[39] In the recording, *fothr bäwzö* trees stood between the speaker and some *mni bäwzö* trees. Hence, the latter are marked as being further away and all deictic markers are medial: the deictic (*bä* 'there'), the proclitic on the verb (*bikogro* 'it stands there') and the deictic in ablative case (*bobafa* 'from there'). Note that the verb is also inflected with an andative because more trees of the *mni bäwzö* kind were growing in that direction. As for the other tree, *fothr bäwzö*, it is marked by a proximal deictic (*zä* 'here'), a proximal demonstrative identifier (*zyé* 'it is here') and another proximal deictic in ablative case (*zbafa* 'from here').[40]

(68) ***bä*** *ane mni bäwzö* ***bikogro***. ***zä*** *yé* ***zyé*** *fothr* ***zbafa***. ***bobafa*** *mni bäwzö.*

[39]The words *bäwzö* and *fothr* are proper nouns. However, *mni* means 'fire' and the name *mni bäwzö* 'fire bäwzö' is used because the bark of this tree is hardened over the fire and later used for house walls.
[40]Both deictics *bobafa* and *zbafa* are doubly ablative, i.e. *boba* is already ablative and contrasts with allative *bobo*. This is the only example in the corpus of doubly marked deictics.

bä ane mni bäwzö b=y-kogr-o zä
MED DEM fire bäwzö MED=3SG.MASC.α-stand.ND-AND PROX
MED=3SG.MASC:SBJ:NPST:IPFV/stand

\yé/ z=\yé/ fothr zba=fa
3SG.MASC.COP.ND PROX=3SG.MASC.COP.ND fothr PROX.ABL=ABL
3SG.MASC:SBJ:NPST:IPFV/be PROX=3SG.MASC:SBJ:NPST:IPFV/be

boba=fa mni bäwzö
MED.ABL=ABL fire bäwzö
'There, *mni bäwzö* is standing there. From here it is *fothr bäwzö* and from there (it is) *mni bäwzö*.' [tci20130907-02 RNA #166-168]

The three proclitics *z=*, *b=* and *f=* can in principle attach to verb forms of all TAM categories. For example in (65), the medial *b=* is cliticised to a verb in past durative. Nevertheless, they occur most frequently with verbs in present tense because of their situational use.

The clitic *m=* only occurs with the copula and the meaning 'where is X?' as in (69). As I will discuss in §6.3, *m=* can attach to verbs in irrealis or imperative mood with an apprehensive ('you might do X!') and prohibitve interpretation ('you must not do X!') respectively. Formally, the *m=* clitic patterns with the other demonstratives (See Table 3.8 in §3.1.12).

(69) ***mern**? ni wmägne zöbthé.*
m=e-rn ni w-mäg-n-e zöbthé
where=2|3NSG.α-COP.DU 1NSG 3SG.F.α-lead.EXT-DU-1NSG first
where=2|3DU:SBJ:NPST:IPFV/be 1DU:SBJ>3SG.F:OBJ:NPST:IPFV/lead
'Where are they? We will lead (the path) first.' [tci20130907-02 JAA #12]

References

Anderson, Stephen R. 1992. *A-Morphous Morphology*. Cambridge: Cambridge University Press.

Andrews, Avery. 2007a. Relative clauses. In Timothy Shopen (ed.), *Language typology and syntactic description. volume II: complex constructions (2nd edition)*, 206–236. Cambridge: Cambridge University Press.

Andrews, Avery. 2007b. The major functions of the noun phrase. In Timothy Shopen (ed.), *Language typology and syntactic description. volume I: clause structure (2nd edition)*, 132–223. Cambridge: Cambridge University Press.

Arka, I Wayan. 2012. Projecting Morphology and Agreement in Marori, an isolate of Southern New Guinea. In Nicholas Evans & Marian Klamer (eds.), *Melanesian languages on the edge of Asia: Challenges for the 21st century.* (Language Documentation & Conservation Special Publication No. 5). Manoa: University of Hawai'i Press.

Arkadiev, Peter M. 2008. Thematic roles, event structure, and argument encoding in semantically aligned languages. In Mark Donohue & Søren Wichmann (eds.), *The typology of semantic alignment*, 101–117. Oxford: Oxford University Press.

Ayres, Mary C. 1983. *This side, that side: locality and exogamous group definition in Morehead area, Southwestern Papua.* Chicago: University of Chicago dissertation.

Baerman, Matthew. 2012. Paradigmatic chaos in Nuer. *Language* 88(3). 467–494.

Baerman, Matthew, Greville G Corbett, Dunstan Brown & Andrew Hippisley. 2006. *Surrey Typological Database on Deponency*. Surrey Morphology Group. University of Surrey. URL: http://dx.doi.org/10.15126/SMG.15/1.

Baker, Mark. 1996. *The polysynthesis parameter*. Oxford: Oxford University Press.

Ballard, Chris. 2010. Synthetic histories: possible futures for Papuan Pasts. *Reviews in Anthropology* 39(4). 232–257.

Bickel, Balthasar. 2011. Grammatical relations typology. In Jae J Song (ed.), *The Oxford handbook of linguistic typology*, 399–444. Oxford: Oxford University Press.

Biggs, Bruce. 1963. A non-phonemic central vowel type in Karam, a "pygmy" language of the Schrader Mountains, Central New Guinea. *Anthropological Linguistics* 5(4). 13–17.

Blake, Barry. 1994. *Case*. Cambridge: Cambridge University Press.

Blevins, Juliette. 1995. The syllable in phonological theory. In John A Goldsmith (ed.), *The handbook of phonological theory (1st edition)*, 206–244. Cambridge: Basil Blackwell.

Blevins, Juliette & Andrew Pawley. 2010. Typological implications of Kalam predictable vowels. *Phonology* 27. 1–44.

Boevé, Alma & Marco Boevé. 2003. *Arammba grammar essentials*. Ukarumpa: SIL Unpublished Ms. 110.

Bybee, Joan L. 2010. Markedness: iconicity, economy and frequency. In Jae J Song (ed.), *Handbook of linguistic typology*, 131–147. Oxford: Oxford University Press.

Bybee, Joan L & Östen Dahl. 1989. The creation of tense and aspect systems in the languages of the world. *Studies in Language* 13(1). 51–103.

Bybee, Joan L, Revere Perkins & William Pagliuca. 1994. *The grammaticalization of tense, aspect and modality in languages of the world*. Chicago: The University of Chicago Press.

Caballero, Gabriela & Alice C Harris. 2012. A working typology of multiple exponence. In Ferenc Kiefer, Mária Ladányi & Péter Siptár (eds.), *Current issues in morphological theory: (ir)regularity, analogy and frequency. Selected papers from the 14th International Morphology Meeting, Budapest, 13-16 May 2010*, 163–188. Amsterdam; Philadelphia: John Benjamins.

Carroll, Matthew. 2017. *The Ngkolmpu Language - with special reference to distributed exponence*. Canberra: Australian National University dissertation.

Chappell, John. 2005. Geographic changes of coastal lowlands in the Papuan past. In Andrew Pawley, Robert Attenborough, Jack Golson & Robin Hide (eds.), *Papuan pasts: cultural, linguistic and biological histories of Papuan-speaking peoples*, 525–540. Canberra: Pacific Linguistics.

Clifton, John M, Geoff Dyall & Paul O'Rear. 1991. *The linguistic situation south of the Fly River, Western Province*. Ukarumpa: SIL Unpublished Ms.

Comrie, Bernard. 1976. *Aspect: an introduction to the study of verbal aspect and related problems*. Cambridge: Cambridge University Press.

Comrie, Bernard & Michael Cysouw. 2012. New Guinea through the eyes of WALS. *Language and Linguistics in Melanesia* 30(1). 65–94.

Comrie, Bernard & Sandra A Thompson. 2007. Lexical nominalization. In Timothy Shopen (ed.), *Language typology and syntactic description. volume III: grammatical categories and the lexicon (2nd edition)*, 334–381. Cambridge: Cambridge University Press.

Coulmas, Florian. 1982. Some remarks on Japanese deictics. In Jürgen Weissenborn & Wolfgang Klein (eds.), *Here and there: cross-linguistic studies on deixis and demonstration*, 209–223. Amsterdam; Philadelphia: John Benjamins.

Cristofaro, Sonia. 2004. Past habituals and irrealis. In Yuri A Lander, Vladimir A Plungian & Anna Y Urmanchieva (eds.), *Irrealis and irreality*, 256–272. Moscow: Gnosis.

Croft, William. 1991. *Syntactic categories and grammatical relations: the cognitive organization of information*. Chicago: The University of Chicago Press.

de Vries, Lourens. 2005. Towards a typology of tail–head linkage in Papuan languages. *Studies in Language* 29(2). 363–384.

Diessel, Holger. 1999. The morphosyntax of demonstratives in synchrony and diachrony. *Linguistic Typology* 3(1). 1–49.

Dik, Simon C. 1997. *The theory of functional grammar. part I: the structure of the clause (edited by K. Hengeveld)*. Berlin; New York: Mouton de Gruyter.

Dingemanse, Mark. 2012. Advances in the cross-linguistic study of ideophones. *Language and Linguistics Compass* 6(10). 654–672.

Dixon, R. M. W. 1972. *The Dyirbal language of North Queensland.* Cambridge: Cambridge University Press.
Dixon, R. M. W. 2003. Demonstratives: a cross-linguistic typology. *Studies in Language* 27(1). 61–112.
Donohue, Mark. 2008. Complexities with restricted numeral systems. *Linguistic Typology* 12(3). 423–429.
Drabbe, Peter. 1955. *Spraakkunst van het Marind: Zuidkust Nederlands Nieuw-Guinea. Studia Instituti Anthropos. volume 11.* Wien-Mödling: Missiehuis St. Gabriel.
Dryer, Matthew S. 2007. Word order. In Timothy Shopen (ed.), *Language typology and syntactic description. volume I: clause structure (2nd edition)*, 61–130. Cambridge: Cambridge University Press.
Evans, Nicholas. 1995. *A grammar of Kayardild: with historical-comparative notes on Tangkic.* Berlin; New York: Mouton de Gruyter.
Evans, Nicholas. 1997. Sign metonymies and the problem of flora-fauna polysemy in Australian languages. In Darrell T Tryon & Michael Walsh (eds.), *Boundary Rider - Essays in Honour of Geoffrey O'Grady*, 133–153. Canberra: Pacific Linguistics.
Evans, Nicholas. 2009. Two pus one makes thirteen: senary numerals in the Morehead-Maro region. *Linguistic Typology* 13(2). 321–335.
Evans, Nicholas. 2010. Semantic typology. In Jae J Song (ed.), *The Oxford Handbook of Linguistic Typology*, 504–533. Oxford: Oxford University Press.
Evans, Nicholas. 2012a. Even more diverse than we had thought: the multiplicity of Trans-Fly languages. In Nicholas Evans & Marian Klamer (eds.), *Melanesian languages on the edge of Asia: challenges for the 21st century* (Language Documentation & Conservation Special Publication No. 5), 109–149. Manoa: University of Hawai'i Press.
Evans, Nicholas. 2012b. Nen assentives and the problem of dyadic parallelisms. In Andrea C Schalley (ed.), *Practical theories and empirical practice. facets of a complex interaction*, 159–183. Amsterdam; Philadelphia: John Benjamins.
Evans, Nicholas. 2014. Positional verbs in Nen. *Oceanic Linguistics* 53(2). 225–255.
Evans, Nicholas. 2015a. Inflection in Nen. In Matthew Baerman (ed.), *The Oxford handbook of inflection.* Oxford: Oxford University Press.
Evans, Nicholas. 2015b. Valency in Nen. In Andrej L Malchukov & Bernard Comrie (eds.), *Valency classes in the world's languages*, 1049–1096. Berlin; New York: Walter de Gruyter.
Evans, Nicholas. 2017. Quantification in Nen. In Denis Paperno & Edward Keenan (eds.), *Handbook of quantification in natural language. volume II*, 571–607. New York: Springer.
Evans, Nicholas. Forthcoming. *A grammar of Nen.*
Evans, Nicholas, Wayan Arka, Matthew Carroll, Christian Döhler, Eri Kashima, Emil Mittag, Kyla Quinn, Jeff Siegel, Philip Tama & Charlotte van Tongeren. 2017. The languages of Southern New Guinea. In Bill Palmer (ed.), *The languages and linguistics of the New Guinea area*, 641–774. Berlin; Boston: Walter de Gruyter.
Evans, Nicholas & Alan C Dench. 1988. Multiple case-marking in Australian languages. *Australian Journal of Linguistics* 8(1). 1–47.

Evans, Nicholas & Alan C Dench. 2006. Introduction. In Felix K Ameka, Alan C Dench & Nicholas Evans (eds.), *Catching language: the standing challenge of grammar writing*, 1–40. Berlin; New York: Mouton de Gruyter.

Evans, Nicholas & Julia Colleen Miller. 2016. Nen. *Journal of the International Phonetic Association* 46(3). 331–349.

Evans, Nicholas & Hans-Jürgen Sasse. 2002. Introduction. In Nicholas Evans & Hans-Jürgen Sasse (eds.), *Problems of polysynthesis*, 1–13. Berlin: Akademie Verlag.

Fedden, Sebastian O. 2011. *A grammar of Mian*. Berlin; Boston: Walter de Gruyter.

Fillmore, Charles. 1968. The case for case. In Emmon Bach & Robert T Harms (eds.), *Universals in linguistic theory*, 1–25. London: Holt, Rinehart & Winston.

Foley, William A. 1986. *The Papuan languages of New Guinea*. Cambridge: Cambridge University Press.

Foley, William A. 2000. The languages of New Guinea. *Annual Review of Anthropology* 29. 357–404.

Frawley, William. 1992. *Linguistic semantics*. Hillsdale: Lawrence Erlbaum Associates.

Garde, Murray. 2013. *Culture, interaction and person reference in an Australian language: an ethnography of Bininj Gunwok communication*. Amsterdam; Philadelphia: John Benjamins.

Geniušienė, Emma. 1987. *The typology of reflexives*. Berlin; New York: Mouton de Gruyter.

Givón, Talmy. 1994. Irrealis and the subjunctive. *Studies in Language* 18(2). 265–337.

Givón, Talmy. 2001. *Syntax - an introduction. volume II*. Amsterdam; Philadelphia: John Benjamins.

Goddard, Cliff. 1985. *A grammar of Yankunytjatjara*. Alice Springs: Institute of Aboriginal Development.

Golson, Jack. 2005. Introduction to the chapters on archaeology and ethnology. In Andrew Pawley, Robert Attenborough, Jack Golson & Robin Hide (eds.), *Papuan pasts: cultural, linguistic and biological histories of Papuan-speaking peoples*, 221–234. Canberra: Pacific Linguistics.

Grummit, John & Janell Masters. 2012. *A survey of the Tonda Sub-Group of languages*. Ukarumpa: SIL Electronic Survey Report 2012-018. URL: http://www.sil.org/silesr/2012/silesr2012-018.pdf.

Gurevich, Olga. 2006. *Constructional morphology: the Georgian version*. Berkley: University of California dissertation.

Hale, Kenneth L. 1976. The adjoined relative clause in Australia. In R. M. W. Dixon (ed.), *Grammatical categories in australian languages*, 78–105. Canberra: Australian Institute of Aboriginal Studies.

Hammarström, Harald. 2009. Whence the Kanum base-6 numeral system? *Linguistic Typology* 13(2). 305–319.

Hartzler, Margaret. 1983. Mode, aspect, and foregrounding in Sentani. *Language & Linguistics in Melanesia* 14. 175–194.

Haspelmath, Martin. 1997. *Indefinite pronouns*. Oxford: Clarendon.

Haspelmath, Martin. 2001. The European linguistic area: Standard Average European. In Martin Haspelmath, Wulf Oesterreicher & Wolfgang Raible (eds.), *Language typology and language universals, Handbücher zur Sprach- und Kommunikationswissenschaft*, 1492–1510. Berlin; New York: Mouton de Gruyter.

Haspelmath, Martin. 2007. Coordination. In Timothy Shopen (ed.), *Language typology and syntactic description. volume II: complex constructions (2nd edition)*, 1–51. Cambridge: Cambridge University Press.

Haspelmath, Martin. 2013. Negative indefinite pronouns and predicate negation. In Matthew Dryer & Martin Haspelmath (eds.), *The world atlas of language structures online*. Leipzig: Max Planck Institute for Evolutionary Anthropology. URL: http://wals.info/chapter/115.

Haspelmath, Martin & Thomas Müller-Bardey. 2004. Valency change. In Gert Booij, Christian Lehmann & Joachim Mugdan (eds.), *Morphologie / Morphology. Ein internationales Handbuch zur Flexion und Wortbildung / An international handbook on inflection and word-formation*, chap. 107, 1130–1145. Berlin; New York: Mouton de Gruyter.

Heath, Jeffrey. 1984. *Functional grammar of Nunggubuyu*. Canberra: Australian Institute of Aboriginal Studies.

Heine, Bernd & Tania Kuteva. 2005. *Language contact and grammatical change*. Cambridge: Cambridge University Press.

Hercus, Luise & Jane Simpson. 2002. Indigenous placenames: an introduction. In Luise Hercus & Jane Simpson (eds.), *The land is a map*, 1–23. Canberra: Pacific Linguistics.

Himmelmann, Nikolaus P. 1996. Demonstratives in narrative discourse. In Barbara Fox (ed.), *Studies in anaphora*, 205–254. Amsterdam; Philadelphia: John Benjamins.

Hitchcock, Garrick. 2009. William Dammköhler's third encounter with the Tugeri (Marind-Anim) - manuscript XX. *The Journal of Pacific History* 44(1). 89–97.

Hopper, Paul J. 1979. Aspect and foregrounding in discourse. In Talmy Givón (ed.), *Discourse and syntax*, 213–241. New York: Syntax & Semantics Ann Arbor.

Hopper, Paul J. 1990. Where do words come from? In William Croft, Keith Denning & Suzanne Kemmer (eds.), *Studies in typology and diachrony: papers presented to Joseph H. Greenberg on his 75th birthday*, 151–160. Amsterdam; Philadelphia: John Benjamins.

Keenan, Edward L & Matthew S Dryer. 2007. Passives in the world's languages. In Timothy Shopen (ed.), *Language typology and syntactic description. volume I: clause structure (2nd edition)*, 325–361. Cambridge: Cambridge University Press.

Keenan, Elinor O & Bambi B Schieffelin. 1976. Topic as a discourse notion. In Charles N Li (ed.), *Subject and topic*, 335–384. New York: Academic Press.

Kemmer, Suzanne. 1993. *The middle voice*. Amsterdam; Philadelphia: John Benjamins.

Kennedy, Christopher & Louise McNally. 2005. Scale structure, degree modification, and the semantics of gradable predicates. *Language* 81(2). 345–381.

Knauft, Bruce M. 1993. *South coast New Guinea cultures: history, comparision, dialectic*. Cambridge: Cambridge University Press.

König, Ekkehard. 1991. *The meaning of focus particles: a comparative perspective*. London & New York: Routledge.

Kubota, Yusuke. 2010. Marking aspect along a scale: the semantics of *-te iku* and *-te kuru* in Japanese. *Semantics and Linguistic Theory* 20. 128–146.
Lichtenberk, Frantisek. 1983. *A grammar of Manam* (Oceanic Linguistics Special Publications). Manoa: University of Hawai'i Press.
Lichtenberk, Frantisek. 1991. Semantic change and heterosemy in grammaticalization. *Language* 67(3). 475–509.
Lichtenberk, Frantisek. 2000. Inclusory pronominals. *Oceanic Linguistics* 39(1). 1–32.
Luraghi, Silvia. 2001. Syncretism and the classification of semantic roles. *STUF - Language Typology and Universals* 54(1). 35–51.
Luraghi, Silvia. 2003. *On the meaning of prepositions and cases: the expression of semantic roles in Ancient Greek*. Amsterdam; Philadelphia: John Benjamins.
MacGregor, William. 1890. *Annual report on British New Guinea from 1st July 1889 to 30th June 1890 with appendices*. Brisbane: Govt Printer. URL: http://nla.gov.au /nla.obj-82702440.
MacGregor, William. 1896. *Annual report on British New Guinea from 1st July 1895 to 30th June 1896 with appendices*. Brisbane: Govt Printer. URL: http://nla.gov.au /nla.obj-82720595.
Makihara, Miki & Bambi B Schieffelin. 2007. Cultural processes and linguistic mediations: Pacific explorations. In Miki Makihara & Bambi B Schieffelin (eds.), *Consequences of contact: language ideologies and sociocultural transformations in Pacific societies*, 3–30. Oxford: Oxford University Press.
Matthews, Peter H. 1974. *Morphology: an introduction to the theory of word-structure*. Cambridge: Cambridge University Press.
Meakins, Felicity & Rachel Nordlinger. 2014. *A grammar of Bilinarra: an Australian Aboriginal language of the Victoria River District (NT)*. Berlin; New York: Mouton de Gruyter.
Mel'čuk, Igor. 1973. The structure of linguistics signs and possible formal-semantic relations between them. In Rey-Debove Josette (ed.), *Recherches sur les sytèmes signifiants. Symposium de Varsovie*, 103–135. The Hague-Paris: Mouton.
Merlan, Francesca. 1981. Land, language and social identity in Aboriginal Australia. *Mankind Quarterly* 13. 133–148.
Merlan, Francesca. 1985. Split intransitivity: functional oppositions in intransitive inflection. In Johanna Nichols & Tony Woodbury (eds.), *Grammar inside and outside the clause: some approaches to theory from the field*, 324–362. Cambridge: Cambridge University Press.
Merlan, Francesca. 2001. Form and context in Jawoyn placenames. In Jane Simpson, David Nash, Mary Laughren, Peter Austin & Barry Alpher (eds.), *Forty years on: Ken Hale and Australian languages*, 367–383. Canberra: Pacific Linguistics.
Mithun, Marianne. 1991. Active/agentive case marking and its motivations. *Language* 67(3). 510–546.
Mithun, Marianne. 2009. Polysynthesis in the arctic. In Marc-Antoine Mahieu & Nicole Tersis (eds.), *Variations on polysynthesis: the Eskimo-Aleut languages*, 3–18. Amsterdam; Philadelphia: John Benjamins.

Mühlhäusler, Peter. 2006. Naming languages, drawing language boundaries and maintaining languages with special reference to the linguistic situation in Papua New Guinea. In Denis Cunningham, David E Ingram & Kenneth Sumbuk (eds.), *Language diversity in the pacific : endangerment and survival*, 24–39. Clevedon: Multilingual Matters.

Olsson, Bruno. 2013. *Iamitives: perfects in Southeast Asia and beyond*. Stockholm: Stockholms Universitet MA thesis.

Olsson, Bruno. 2017. *The Coastal Marind language*. Singapore: Nanyang Technological University dissertation.

Paijmans, Kees. 1970. Land evaluation by air photo interpretation and field sampling in Australian New Guinea. *Photogrammetria* 26(2-3). 77–100.

Paijmans, Kees, D H Blake & P Bleeker. 1971. Land systems of the Morehead-Kiunga area. In Kees Paijmans, D H Blake, P Bleeker & J R McAlpine (eds.), *Land resources of the Morehead-Kiunga area, territory of Papua and New Guinea (land research series no. 29)*, 19–45. Melbourne: Commonwealth Scientific & Industrial Research Organization, Australia.

Pawley, Andrew. 1966. *The structure of Karam*. Auckland: University of Auckland dissertation.

Pawley, Andrew. 2005. Introduction to the chapters on historical linguistics. In Andrew Pawley, Robert Attenborough, Jack Golson & Robin Hide (eds.), *Papuan pasts: cultural, linguistic and biological histories of Papuan-speaking peoples*, 1–14. Canberra: Pacific Linguistics.

Pawley, Andrew, Robert Attenborough, Jack Golson & Robin Hide. 2005. *Papuan pasts: cultural, linguistic and biological histories of Papuan-speaking peoples*. ANU Canberra: Pacific Linguistics.

Pawley, Andrew, Simon P Gi, Ian S Majnep & John Kias. 2000. Hunger acts on me: the grammar and semantics of bodily and mental process expressions in Kalam. *Oceanic Linguistics Special Publications, No. 29, Grammatical Analysis: Morphology, Syntax, and Semantics* (29). 153–185.

Pollard, Carl J & Ivan A Sag. 1987. *Information-based syntax and semantics*. Stanford: Center for the Study of Language & Information.

Ray, Sidney H. 1907. Papuan languages west of the Fly River. In Sidney H Ray (ed.), *Linguistics*, vol. III (Reports of the Cambridge Anthropological Expedition to Torres Straits), 291–301. Cambridge University Press.

Ray, Sidney H. 1923. The languages of the western division of Papua. *Journal of the Royal Anthropological Institute of Great Britain and Ireland* 53. 332–360.

Ray, Sidney H. 1926. *A comparative study of the Melanesian island languages*. Cambridge: Cambridge University Press.

Reesink, Ger. 1987. *Structures and their functions in Usan: A Papuan language of Papua New Guinea*. Vol. 13. Amsterdam; Philadelphia: John Benjamins.

Reesink, Ger. 2009. A connection between Bird's Head and (Proto) Oceanic. In Bethwyn Evans (ed.), *Discovering history through language*, 181–192. Canberra: Pacific Linguistics.

Ross, Malcolm. 2005. Pronouns as a preliminary diagnostic for grouping Papuan languages. In Andrew Pawley, Robert Attenborough, Jack Golson & Robin Hide (eds.), *Papuan pasts: cultural, linguistic and biological histories of Papuan-speaking peoples*, 15–66. Canberra: Pacific Linguistics.

Rumsey, Alan. 1990. Wording, meaning, and linguistic ideology. *American Anthropologist* 92(2). 346–361.

Saeed, John I. 1984. *The syntax of focus and topic in Somali*. Hamburg: Helmut Buske.

Sarsa, Risto. 2001. *Studies in Wára verb morphology*. Helsinki: University of Helsinki MA thesis.

Sasse, Hans-Jürgen. 2002. Recent activity in the theory of aspect: accomplishments, achievements, or just non-progressive state. *Linguistic Typology* 6(2). 199–271.

Schachter, Paul & Timothy Shopen. 2007. Parts-of-speech systems. In Timothy Shopen (ed.), *Language typology and syntactic description. volume I: clause structure (2nd edition)*, 1–60. Cambridge: Cambridge University Press.

Schultze-Berndt, Eva. 2000. *Simple and complex verbs in Jaminjung*. Nijmegen: Katholieke Universiteit Nijmegen dissertation.

Siegel, Jeff. 2014. The morphology of tense and aspect in Nama, a Papuan language of Southern New Guinea. *Open Linguistics* 1. 211–231.

Silverstein, Michael. 1976. Hierarchy of features and ergativity. In R. M. W. Dixon (ed.), *Grammatical categories in Australian languages*, 112–171. Canberra: Australian Institute of Aboriginal Studies.

Silverstein, Michael. 1979. Language structure and linguistic ideology. In Paul Clyne, Williams Hanks & Carol Hofbauer (eds.), *The elements: a parasession on linguistic units and levels*, 193–247. Chicago: Chicago Linguistic Society.

Singer, Ruth. 2001. *The inclusory construction in Australian languages*. Melbourne: The University of Melbourne honours thesis.

Smith, Carlota. 1997. *The parameter of aspect (2nd edition)*. Dordrecht: Kluwer.

Sutton, Peter. 1978. *Wik: Aboriginal society, territory and language at Cape Keerweer, Cap York Peninsula*. Brisbane: University of Queensland dissertation.

Thompson, Sarah A, Robert E Longacre & Shin JJ Hwang. 2007. Adverbial clauses. In Timothy Shopen (ed.), *Language typology and syntactic description. volume II: complex constructions (2nd edition)*, 237–300. Cambridge: Cambridge University Press.

Turner-Lister, Robert & J B Clark. 1935. *A dictionary of the Motu language of Papua (2nd edition by P. Chatterton)*. Sydney: Pettifer.

Usher, Timothy & Edgar Suter. 2015. The Anim languages of Southern New Guinea. *Oceanic Linguistics* 54(1). 110–142.

van Enk, Gerrit & Lourens de Vries. 1997. *The Korowai of Irian Jaya: their language in its cultural context* (Oxford Studies in Anthropological Linguistics). Oxford: Oxford University Press.

White, John P & James F O'Connell. 1982. *A prehistory of Australia, New Guinea and Sahul*. Sydney: Academic Press.

Wichmann, Soeren & Jan Wohlgemuth. 2008. Loan verbs in a typological perspective. In Thomas Stolz, Dik Bakker & Rosa Salas Palomo (eds.), *Aspects of language contact: new*

theoretical, methodological and empirical findings with special focus on romancisation processes, 89–121. Berlin; New York: Mouton de Gruyter.
Williams, Francis E. 1936. *Papuans of the Trans-Fly*. Oxford: Clarendon Press.
Wurm, Stephen A. 1971. Notes on the linguistic situation of the Trans-Fly area. In Thomas E Dutton, Clemens L Voorhoeve & Stephen A Wurm (eds.), *Papers in New Guinea linguistics 14*, 115–172. Canberra: Pacific Linguistics.
Wurm, Stephen A. 1975. *New Guinea area languages and language study, 1: Papuan languages and the New Guinea linguistic scene*. Canberra: Pacific Linguistics.
Zwicky, Arnold & Goeffrey Pullum. 1983. Cliticization vs. inflection: English n't. *Language* 59(3). 502–513.

A grammar of Komnzo

Komnzo is a Papuan language of Southern New Guinea spoken by around 250 people in the village of Rouku. Komnzo belongs to the Tonda subgroup of the Yam language family, which is also known as the Morehead Upper-Maro group. This grammar provides the first comprehensive description of a Yam language. It is based on 16 months of fieldwork. The primary source of data is a text corpus of around 12 hours recorded and transcribed between 2010 and 2015.

Komnzo provides many fields of future research, but the most interesting aspect of its structure lies in the verb morphology, to which the two largest chapters of the grammar are dedicated. Komnzo verbs may index up to two arguments showing agreement in person, number and gender. Verbs encode 18 TAM categories, valency, directionality and deictic status. Morphological complexity lies not only in the amount of categories that verbs may express, but also in the way these are encoded. Komnzo verbs exhibit what may be called 'distributed exponence', i.e. single morphemes are underspecified for a particular grammatical category. Therefore, morphological material from different sites has to be integrated first, and only after this integration can one arrive at a particular grammatical category.

The descriptive approach in this grammar is theory-informed rather than theory-driven. Comparison to other Yam languages and diachronic developments are taken into account whenever it seems helpful.