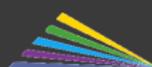


# Morphological complexity in Komnzo verbs

Christian Döhler, ANU - Canberra

1<sup>st</sup> May 2015

This paper was presented at "Diversity Linguistics: Retrospect and Prospect" at the Max Planck Institute for Evolutionary Anthropology, Leipzig. This pdf-version of the presentation has been annotated and commented after giving the talk.



- ▶ Introduction
- ▶ Glossing & Form-Function Relationship
- ▶ Example Categories
  - ▶ Number
  - ▶ Tense
  - ▶ Aspect
- ▶ Conclusion





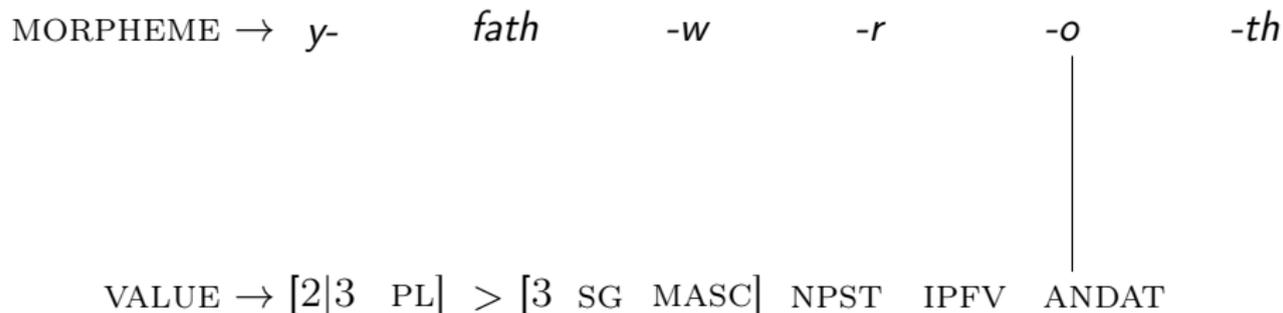
**Item-and-Arrangement Model:** aimed to show the segmentation and the relationship between form/meaning, but it comes at the cost of opaque glossing labels because of the high degree of morpheme underspecification in Komnzo

- (1) y-fath-w-r-o-th  
 3SG.MASC:α-hold.EXT-ND-LK-ANDAT-2|3NSG  
 'They hold him away.'

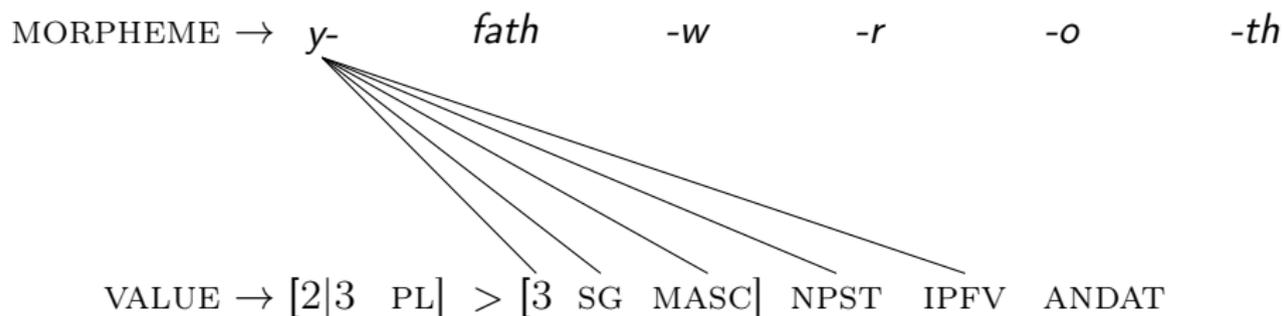
**Word-and-Paradigm Model:** aimed to place an inflected form in a complex paradigm without making the segmentation into morphemes transparent.

- (2) y\fath/wroth  
 2|3PL.A>3SG.MASC.U;NPST.(IPFV).ANDAT\hold  
 'They hold him away.'

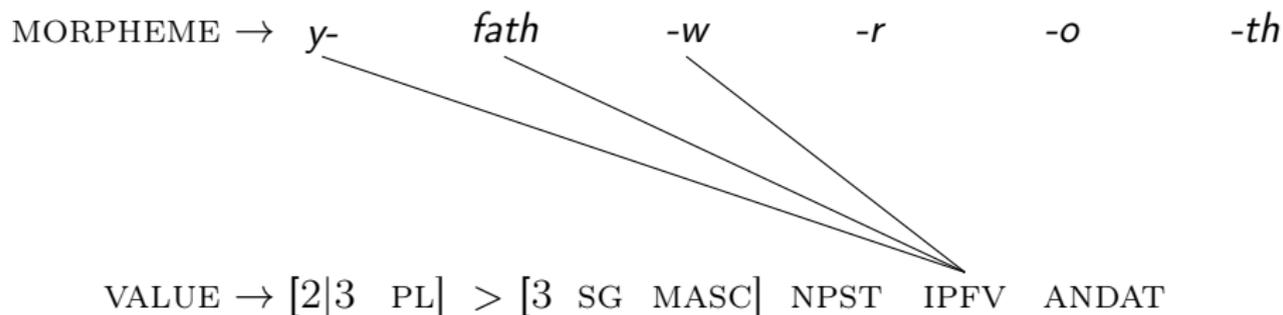
Relationship between a value of a grammatical category and a morpheme: in its simplest form this is a one-to-one mapping as shown with the andative ('away') below.



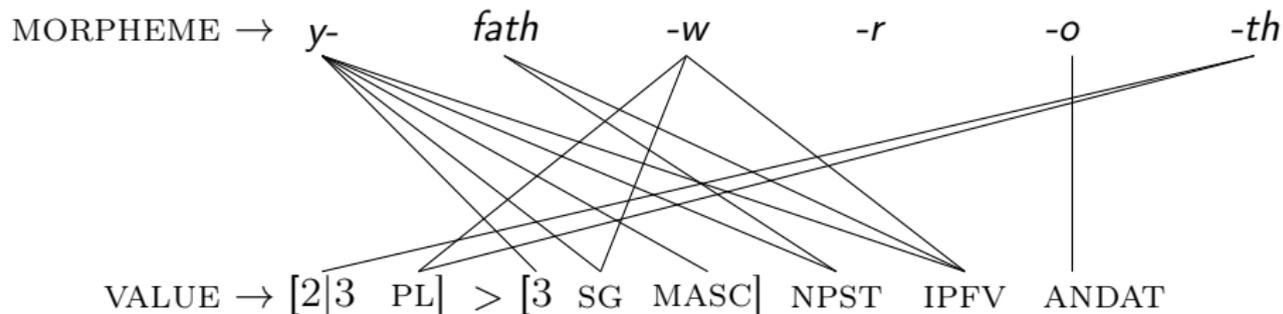
“cumulative exponence” (Matthews, 1979)<sup>1</sup> or “multifunctionality” (Szymanek, 1989)<sup>2</sup> or “fusion”: one-to-many mapping

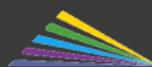


“extended exponence” (Matthews, 1979) or “cofunctionality” (Szymanek, 1989): many-to-one mapping



“reciprocal conditioning” (Andersen, 1992: 70)<sup>3</sup>: “reciprocal conditioning and structure without meaningful morphemes are cases in which a (possibly complex) content is irreducibly linked to several distinct and separable formatives within the complex word.”





- ▶ Number
- ▶ Tense
- ▶ Aspect

- ▶ three number categories: singular, dual, plural
  - ▶ person affixes (and pronouns): singular versus non-singular
  - ▶ duality affix: dual versus non-dual

- (3) a. *kabe roku-n ya-m-nzr.*  
 man PROP.N-LOC 3 **SG**.MASC.α-dwell- **ND**  
 'The man lives in Rouku.'
- b. *kabe roku-n ä-m-rn.*  
 man PROP.N-LOC 2|3 **NSG**.α-dwell- **DU**  
 'The two men live in Rouku.'
- c. *kabe roku-n ä-m-nzr.*  
 man PROP.N-LOC 2|3 **NSG**.α-dwell- **ND**  
 'The men (3+) live in Rouku.'

distributed marking of number in the person affixes (singular vs. non-singular) and the duality affix (dual vs. non-dual)

	SINGULAR	NON-SINGULAR
DUAL		DU
NON-DUAL	SG	PL

In transitive verbs, the duality marker is agnostic as which of the two arguments it is indexing. This leads to ambiguities if both argument slots index non-singular which can only be resolved with a numeral on the dependent noun phrase.

- (4) a. *kabe-yé*            *ɲatha y-mar-n-th.*  
 man-ERG.NSG dog    3 SG .MASC.α-see- DU -2|3 NSG  
 'The two men see the dog.'
- b. *kabe-yé*            *ɲatha e-mar-n-th.*  
 man-ERG.NSG dog    2|3 NSG .α-see- DU -2|3 NSG  
 'The two men see the dogs.' or: 'The men see the two dogs.'

positional verbs: positional/postural semantics, stative suffix,  
prefixing (intransitive)

This semantic class of verbs makes use of the seemingly non-sensical combination of SG in the prefix and DU in the duality slot. This combination receives a “large plural” interpretation.

(5) *woz y-räs-thgr-n.*

bottle 3 SG .MASC.α-be.erected-STAT- DU

‘All the bottles are standing.’

Thus, positional verbs exploit all the possible combinations.

	SINGULAR	NON-SINGULAR
DUAL	LARGE PL	DU
NON-DUAL	SG	PL

Please note: Gender (FEM versus MASC) is marked in prefixes for third singular. For the large plural, the masculine form is used as a default irrespective of the gender category of the argument. Thus, “all the bottles stand” is expressed with a masculine (previous example), but “the bottle stands” (below) receives a feminine.

(6) *woz w-räs-thgr-Ø.*

bottle 3SG. **FEM**.α-be.erected-STAT-ND

‘The bottle is standing.’

- ▶ three (morphological) tense categories: non-past (NPST), recent-past (RPST), past (PST)
  - ▶ prefix series:  $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\delta$
  - ▶ past suffix: *-a*
  - ▶ durative suffix: *-m*

A morpheme is underspecified for a particular tense value. For example, the  $\alpha$  prefix series occurs in non-past, recent-past and past. The tense values depend on suffixal material.

TAM value	prefix-root-suffix	example	translation
NPST	$\alpha$ - root	$y$ <i>fathwr</i>	'He holds him.'
RPST.DUR	$\alpha$ - root - <i>m</i>	$y$ <i>fathwr m</i>	'He was holding him.'
RPST.IPFV	$\beta$ - root	<i>su fathwr</i>	'He held him.'
PST.DUR	$\beta$ - root - <i>m</i>	<i>su fathwr m</i>	'He was holding him.'
PST.IPFV	$\alpha$ - root - <i>a</i>	$y$ <i>fathwr a</i>	'He held him.'

- ▶ perfective (PFV)
- ▶ imperfective (IPFV)
  - ▶ basic (IPFV)
  - ▶ durative (DUR)
  - ▶ iterative (ITER)
  
- ▶ prefix series:  $\alpha, \beta, \gamma, \delta$
- ▶ verb root: extended (EXT), restricted (RS)
- ▶ durative suffix: *-m*

Root types differ in their combinatoric abilities. the restricted root combines with the  $\gamma$  series; the extended root combines with the  $\alpha$  series, but not vice versa. However, for a number of TAM values, both root types combine with the same prefix series and, thus, the root type signals the distinction.

TAM value	prefix-root type	example	translation
PFV	$\gamma$ - RS	safaf	'He held him.'
IPFV	$\alpha$ - EXT	yfathwr	'He holds him.'
	$\beta$ - EXT	sufathwr	'He held him.'
ITER	$\beta$ - RS	swefaf	'He held him.'

EXT and RS roots differ in their form: this is treated as lexicalization of aspect-sensitive values (“extended” versus “restricted events”). Both roots exist for almost all verbs. The formal relationship, although lexicalized, differs in interesting ways (see next table). We find the following groups: (i) roots are identical, (ii) extended roots are derived by a suffix *-ak*, (iii) restricted roots are derived by adding a consonant (the consonant cannot be predicted by semantics or phonological environment), (iv) final consonant mutation, (v) final syllable mutation, (vi) suppletion.

RULE	COUNT	INFINITIVE	EXT	RS	ENGLISH
EXT=RS	42	<i>marasi</i>		<i>mar-</i>	see
		<i>ziksi</i>		<i>zik-</i>	turn off
		<i>riknsi</i>		<i>rikn-</i>	destroy
EXT=RS-ak	52	<i>rfitfaksi</i>	<i>rfitfak-</i>	<i>rfitf-</i>	answer
		<i>moraksi</i>	<i>morak-</i>	<i>mor-</i>	lean
		<i>bthaksi</i>	<i>bthak-</i>	<i>bth-</i>	finish
RS=EXT-C	81	<i>garsi</i>	<i>gar-</i>	<i>garf-</i>	break
		<i>fsisi</i>	<i>fsi-</i>	<i>fsir-</i>	count
		<i>trisi</i>	<i>tri-</i>	<i>trin-</i>	scratch
RS-C≠EXT-C	96	<i>thweksi</i>	<i>thwek-</i>	<i>thweth-</i>	be glad
		<i>mtheksi</i>	<i>mthek-</i>	<i>mthef-</i>	lift up
		<i>trakumgsi</i>	<i>trakumg-</i>	<i>trakumth-</i>	smash
IRREGULAR	26	<i>rsörsi</i>	<i>rsör-</i>	<i>rsöfäth-</i>	descend
		<i>thoraksi</i>	<i>thorak-</i>	<i>thothm-</i>	search
		<i>myuknsi</i>	<i>myukn-</i>	<i>myuf-</i>	twist
SUPPLETION	15	<i>yarenzsi</i>	<i>re-</i>	<i>zigrthm-</i>	look around
		<i>rusi</i>	<i>ru-</i>	<i>mg-</i>	shoot, spear
		<i>yonasi</i>	<i>na-</i>	<i>znob-</i>	drink
TOTAL	319				

From the description of root type thus far, one would expect ambiguities/neutralizations in the case of verbs which have identical roots (the first group in the table above). As mentioned before, for some TAM values it is the root which signals the distinction.

The two root types differ in another way, namely in their template. Restricted roots mark duality in a prefix, whereas extended roots encode duality in a suffix. The imperative examples below show that in the continuative imperative (7) duality is marked in post-root position, but in the inchoative imperative (8) duality is marked in pre-root position.

post-root dual marking

U	EXT ROOT	DU - <i>n</i> ND - <i>w</i>	A
---	----------	--------------------------------	---

- (7) a. *be fi s-mar-w-é*  
 2SG.ERG 3.ABS 3SG.MASC.β- see - ND -2SG.IMP  
 'You keep looking at him.'
- b. *bné fi s-mar-n-e*  
 2NSG.ERG 3.ABS 3SG.MASC.β- see - DU -2NSG.IMP  
 'You two keep looking at him.'

pre-root dual marking

U	DU Ø- ND <i>a-</i>	RS ROOT	A
---	-----------------------	---------	---

- (8) a. *be fi s-a-mar-Ø*  
 2SG.ERG 3.ABS 3SG.MASC.β- ND - see -2SG.IMP  
 'You look at him.'
- b. *bné fi s-Ø-mar-e*  
 2NSG.ERG 3.ABS 3SG.MASC.β- DU - see -2NSG.IMP  
 'You two look at him.'

Morphological complexity in Komnzo arises from the complex dependencies between morphological material (affixes, roots, templates) and grammatical functions (number, tense, aspect) → “reciprocal conditioning”

This system can be described as having a high degree of morphological efficiency since there is little redundancy or overmarking: a tendency to assign a grammatical function to every paradigmatic contrast / combination of morphological material.