

Non-concatinative morphology in Nuer in diachronic perspective

Nuer is a Western Nilotic language spoken mainly in South Sudan. Although there is some suffixal morphology, morphological changes in all areas of grammar involve modifying the stem along one or more parameters: 1) stem vowel quality modification; 2) stem vowel quantity modification; 3) tonal melody modification; 4) stem-final consonant mutation (Western Nuer). Sample verbal and nominal paradigms are provided in 1.

The modification of the stem along the four parameters listed above gives rise to phonological contrasts that are not otherwise found as part of lexical specification. Some mid and low vowels (e, i, a), diphthongs, superlong vowels (in addition to long and short), stem-final fricatives, and falling tones are all segments/tones which do not occur in the underlying, i.e. unmodified, form of roots and affixes. All these emerge only in the course of morphological operations.

A plausible way to analyse this kind of non-concatinative morphology is to posit that some morphemes consist of floating features, tones and moras which superimpose onto the stem modifying it in various ways. The result is the full range of phonological contrasts that is observed on the surface.

The non-concatinative morphology of Nuer has origin in its diachronic development. At some point in the history, Western Nilotic languages possessed a richer inventory of suffixes than is found presently in Nuer. The loss of the suffixes translated in modifications of the properties of the stem. Compensatory lengthening due to the loss of suffixes caused lengthening of the stem vowels, bringing about the emergence of a third degree of vowel length in certain morphological contexts. Vowel harmony between the old suffixes and the stem translated into morphologically triggered changes in vowel quality. Former intervocalic lenition of the stem-final consonant before a suffix is retained in the synchronic grammar of some Western Nuer dialects in the form of stem-final consonantal mutation. Finally, it is plausible that tonal sandhi between old West Nilotic suffixes and the stem is behind the emergence of the morphologically-conditioned falling tone, although evidence for this is lacking at the moment due to deficiency of tonal data from related languages.

More conservative Burun languages still preserve much of the affixal morphology that was lost in Nuer (Andersen 1988, 1990, 1999a,b,c). As (2) shows, one can still trace the source of the vowel quality change, consonantal mutation and vowel lengthening by comparing data from Nuer to that of a Burun language Mayak (Mayak data is from Andersen 1999c). We do not have tonal data on Mayak but it should be noted that most Burun languages have only H and L in their tonal inventory, lacking the falling tone.

Therefore, diachronic development of Nuer provides us with a striking example of a language where the loss of suffixal morphology translated into an inventory of affixes that consist entirely of floating elements, bringing about a variety of phonological contrasts that are exclusively morphologically triggered.

1. a) 'to call'

	Sing	Pl	
		Excl	Incl
1 st	côaal-à	cǎal-kô	cǎal-nê
2 nd	côol-ì	cóal-ê	
3 rd	côol-è	cóal-kê	

b) 'to call for somebody'

	Sing	Pl	
		Excl	Incl
1 st	cólà	cól-kò	cǎl-nê
2 nd	cól-ì	cól-ê	
3 rd	cólè	cól-kè	

c) 'armpit'

	SINGULAR	PLURAL
NOM	róṭ	róaθ
GEN	róaθ	róaθ-nì
LOC	róccθ	

d) 'fish'

	SINGULAR	PLURAL
NOM	rɛ́y	rèc
GEN	rɛáç	rêey
LOC		

2.

Gloss	Form	Mayak	Nuer
'dog'	singular	gu:k	jó:k
	plural (marked)	guɣ-in	jê:ɣ
'faeces'	singular (marked)	ʔeð-it̚	cé:ð
	plural	ʔet̚	ceṭ

REFERENCES:

- Andersen, Torben. 1988. Consonant alternation in the verbal morphology of Pári. *Afrika und Ubersee*, Vol. 71, 1988, p. 63-113.
- Andersen, Torben. 1990. Vowel length in Western Nilotic languages. *Acta Linguistica Hafniensia*, Vol. 22, 1990, p. 5-26.
- Andersen, Torben. 1999a. Consonant Alternation and Verbal Morphology in Mayak (Northern Burun). *Afrika und Ubersee*, Vol. 82, 1999, p. 65-97.
- Andersen, Torben. 1999b. Vowel Quality Alternation in Mabaan and its Western Nilotic History. *Journal of African Languages and Linguistics*, Vol. 20, 1999, p. 97-120.
- Andersen, Torben. 1999c. Vowel Harmony and Vowel Alternation in Mayak (Western Nilotic). *Studies in African Linguistics*, Vol. 28, 1999, p. 1-29.