

## Is Ubangi a part of Niger-Congo? The case of prothesis in Banda

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One of the arguments that Greenberg (1970) employs for the inclusion of the Ubangi (aka Eastern) group within Niger-Congo is his claim that there are relics of the Niger-Congo noun class system prefixes within Banda. In this regard he states the following:

Except for Mondunga and the closely related Mba, the languages of the Eastern section of the Adamawa-Eastern branch show only a few uncertain survivals of the Niger-Congo system of affixes. The situation in Banda is typical of most of the group. We have vowel prefixes in *o-tu* ‘ear,’ *o-wu* ‘nose,’ *a-ma* ‘mouth,’ and similar words. That these are prefixes is, of course, suggested by comparative data: *to*, for example, is the morpheme meaning ‘ear’ throughout most of the Niger-Congo family, combined with some classificational affix. That the *a-* in *a-ma* is a prefix is further shown within Banda itself by the occurrence of *ma* in place of *a-ma* in certain compounds. (Greenberg 1970: 12–13)

Olson (2005: 75–78; 2006: 166) argues that these initial vowels are not prefixes. Rather, they result from a synchronic process of prothetic augmentation, with an initial vowel inserted in order to satisfy a minimality condition on nouns and adjectives that exists in many of the Banda languages. Consider the data in (1) (from Moñino 1988, Olson & Schrag 2000, and Olson 2005):

(1)	Mono	Linda	Langbasi	Gloss
	[i-ʒī]	[ə-ʒī]	[ʒī-ʒī]	‘tooth’
	[i-gī]	[ə-gī]	[gī-gī]	‘neck’
	[ú-ŋgú]	[é-ŋgú]	[ŋgú-ŋgú]	‘water’
	[ē-jē]	[ə-jē]	[jē-jē]	‘root’
	[ə-rə]	[ə-rə]	[ʁə-ʁə]	‘thing’
	[ò-gò]	[ə-gò]	[gò-gò]	‘hunger’
	[à-mà]	[à-mà]	[mà-mà]	‘mouth’
	[ə-lə]	[à-lə]	[lò-lò]	‘sun’

In Mono, the prothetic vowel is a copy of the root vowel. In Linda, the prothetic central vowel agrees in the feature [low] with the root vowel. In Langbasi the root is reduplicated in order to satisfy the minimality condition. In each case the prothetic form is predictable from the root, so there is no resemblance in form between the prothetic vowels and prefixes in other Niger-Congo languages. Also, the set of words exhibiting this behavior does not form a semantic class, so there is no resemblance in meaning. (See Cloarec-Heiss 1978: 21, however, for one attempt to identify a semantic class for these forms.)

In this paper, I provide evidence that prothesis is not just operative in the synchronic phonology, but also occurs historically in the diachronic development of Banda. First, corresponding non-augmented forms do in fact occur in some extant Banda languages, including Ngbugu (Olson & Mbomate 2007) and Ngbundu (Cloarec-Heiss 1978: 21). Ngbugu data are given in (2):

(2)	Ngbugu	Gloss
	[ʒī]	‘tooth’
	[gī]	‘neck’
	[ŋgú]	‘water’
	[jē]	‘root’
	[ɛ̀]	‘thing’
	[gò]	‘hunger’
	[mà]	‘mouth’
	[lò]	‘sun’

Two sound changes account for the segmental variation. First, the change  $*r > \mathfrak{r}$  is posited for Langbasi and Ngbugu (cf. Olson 1996: 273). /r/ occurs in most Banda varieties (Olson 1996: 273) and is crosslinguistically more common than /ɛ̀/ (Maddieson 1984: 78ff; Ladefoged & Maddieson 1996: 215). Second, the merger  $*\mathfrak{o}, *\mathfrak{ɔ} > o$  is posited for Langbasi and Ngbugu (which do not have the phoneme /ɔ/). To posit a split, reference would need to be made to lexical information.

Augmentation that satisfies word minimality is common crosslinguistically, so it is reasonable to suggest monosyllabic forms for Proto-Banda. Since the prothetic forms are predictable, we can posit regular sound changes to account for the Mono, Linda, and Langbasi data:



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