

Chapter 7

More reflections on the nasal classes in Bantu

Larry M. Hyman

University of California, Berkeley

Although long considered to be a Bantu innovation, Miede (1991) proposed that the nasal consonants present in Bantu noun classes 1, 3, 4, 6, 9 and 10 should be reconstructed in pre-Proto-Bantu, even possibly at the Proto-Niger-Congo stage. Since there has been no comprehensive response to Miede, the two of us organized a workshop to look at the question in more detail. In this paper I update the problem from Hyman (1980b) and Miede (1991), expanding the coverage and considering various scenarios that could have led to innovation (or loss). While there have been three hypothetical reconstructions (nasal consonants, nasalized vowels, no nasal consonants), we have not yet arrived at a “solution” that answers the relevant questions discussed in this paper.

The purpose of this paper is to update what we know about the distribution of nasal consonants within certain Bantu noun class prefixes and their cognates outside of Bantu proper. Whereas Narrow Bantu languages have nasal consonants in the noun prefixes in classes 1, 3, 4, 6(a), 9 and 10, found also in certain Wide Bantu/Bantoid languages, these nasals are either missing or only partially present in other Bantoid, Benue-Congo and further outlying subbranches of Niger-Congo. Table 1 presents the reconstructions which have been proposed for Proto-Bantu (Meeussen 1967), Proto-Benue-Congo (de Wolf 1971), Proto-Eastern and Western Grassfields Bantu (Hyman 1980c), and Proto-Gur (Miede et al. 2007). Where two columns appear, the first represents the shapes of noun prefixes, the second the shapes of concord prefixes on agreeing elements. (For a broader discussion of East Benue-Congo noun class systems and their use of nasal consonants as noun prefixes, see Good, Chapter 2 of this volume, and in particular §1.)



Table 1: Reconstructions of Relevant Niger-Congo Noun Class Prefixes

class	Proto-Bantu	Proto-Benue-Congo	Proto-EGB	Proto-WGB	Proto-Gur
1 (sg.)	*mò- *jò-	*ù-, *ò-	*gwu-, *à-	*N` - *ò-	*ò(N)- *ò- *ó, *a
3 (sg.)	*mò- *gó-	*ú-	*gu-, *u-	*N` - *ó-	*ó- *ó- *ɲɔ
4 (pl.)	*mì- *gí-	*í-	*zí- (?), í-	— —	*í- *í- *i
6 (pl.)	*mà- *gá-	*à	*ga-, *a-	*mè- mó-	*á- *gá- *ɲa
9 (sg.)	*N` - *jì-	*è-, *ì-	*zì-	*N` - *ì-	*ì(N)- *ì-
10 (pl.)	*N` - *jí-	*í-	*zí- (?), í-	*N` - *í-	*í(N)- *Cí- *ni
6a (-)	*mà- *gá-	*mà-, *nà-	*ma-, *na-	*mè- *mó-	*mè- *mó- *ma
6b (pl)	*mò- *mò-	(?*mɔ-)			*mɔ
7 (sg.)	*kì- *kí-	*kì-, *kè-	*kì-	à- *í-	kí- *kí- —

As seen, only classes 6a and 6b reveal nasal prefixes through all of the above groups. In the last row I have shown the shapes of class 7 prefixes to illustrate one of the noun classes that is oral throughout Niger-Congo.¹

Such forms as in Table 1 immediately raise two questions: (i) Where do the nasals come from? Are they innovated in Bantu according to the Crabb-Greenberg hypothesis (Crabb 1965; Greenberg 1963) or should they be reconstructed at the level of Proto-Niger-Congo (Miehe 1991)? (ii) Whichever position one takes, how does one derive the above and other distributions of nasal vs. oral noun class markers? If innovated, why should this occur only on noun markers in Bantu? If lost, why should this occur so generally outside of Bantu—and perhaps more mysteriously, only on concord markers within Narrow Bantu?

It is generally assumed that cognate noun class markers can be reconstructed at the Proto-Niger-Congo (PNC) level. Thus consider the resemblance in forms in Table 2, modified from the German Wikipedia entry “Kordofanische Sprachen”, following Schadeberg (1981); Schadeberg (2011). While some of these resemblances are unmistakable, it is sometimes difficult to identify cognate noun classes between the most distant sub-branches, e.g. North Atlantic (Fula, Sereer) vs. Bantu (Wilson 1989: 96). While Schadeberg (2011) presents Kordofanian classes which are cognate with Bantu classes 1, 3, 4, 6, as in Table 3, there are several Kordo-

¹I have changed Meeussen’s and my transcriptions for Proto-Bantu and Proto-Grassfields Bantu, respectively. While Adere (EGB) has a class 7 nominal prefix *e-*, its prevocalic realization *cw-* may suggest **kɪ-* for Eastern Grassfields Bantu as well. (Voorhoeve 1980).

fanian pairings that Schadeberg is not able to identify with Bantu genders, e.g. Talodi *ts-/ɲ-*, *ɲ-/s-*, *g-/n-*, *ɖ-/r-* etc.

Table 2: Comparison of selected noun class marking across NC groups

	Class 1 Man, Woman	Classes 3/4 Tree(s), Wood(s)	Classes 5/6 Head(s), Name(s)	Class 6a Blood, Water		
Kordofanian	<i>gu-</i> , <i>w-</i> , <i>b-</i>	<i>gu-</i> , <i>w-</i> , <i>b-</i>	<i>j-</i> , <i>g-</i>	<i>li-</i> , <i>j-</i>	<i>ɲu-</i> , <i>m-</i>	<i>ɲ-</i>
Atlantic	<i>gu-</i>	<i>gu-</i>	<i>ci-</i>	<i>de-</i>	<i>ga-</i>	<i>ma-</i>
Gur	<i>-a</i>	<i>-bu</i>	<i>-ki</i>	<i>-de</i>	<i>-a</i>	<i>-ma</i>
Kwa	<i>o-</i>	<i>o-</i>	<i>i-</i>	<i>li-</i>	<i>a-</i>	<i>n-</i>
Benue-Congo	<i>u-</i>	<i>u-</i>	<i>ti-</i>	<i>li-</i>	<i>a-</i>	<i>ma-</i>
Bantu nouns	<i>mɔ̀-</i>	<i>mɔ̀-</i>	<i>mì-</i>	<i>ì-</i>	<i>à-</i>	<i>mà-</i>
Bantu agr.	<i>(j)ɔ̀-</i>	<i>gɔ̀-</i>	<i>gí-</i>	<i>dí-</i>	<i>gá-</i>	<i>má-</i> ~ <i>gá-</i>

Table 3: Cognate noun classes in three branches of Kordofanian (Schadeberg 2011)

class	<i>Heiban</i>	<i>Talodi</i>	<i>Rashad</i>	class	<i>Heiban</i>	<i>Talodi</i>	<i>Rashad</i>
1 (sg.)	<i>gw-</i>	<i>b-</i>	<i>w-</i>	? (sg.)	<i>ɲ-</i>	<i>ɲ-</i>	—
3 (sg.)	<i>gw-</i>	<i>b-</i>	<i>w-</i>	? (pl.)	<i>ɲ-</i>	<i>ɲ-</i>	<i>ɲ-</i>
4 (pl.)	<i>j-</i>	<i>g-</i>	<i>y-</i>	? (pl.)	<i>n-</i>	<i>n-</i>	—
6 (pl. of 5)	<i>ɲw-</i>	<i>m-</i>	<i>ɲ-</i>				

As seen in Table 3, the assumed cognates classes cognate with Bantu 1, 3 and 4 do not exhibit nasal prefixes, while class 6, the plural of class 5, does. However, Kordofanian has other unidentified nasal classes, as seen to the right in Table 3. Where would these nasals have come from?

As mentioned, the position of Greenberg (1963) and Crabb (1965) is that Bantu innovated nasals in the noun prefixes of classes 1, 3, 4, 6, 9 and 10:

... Bantu has the prefixes **mu-* and **mi-* as against Semi-Bantu and West Sudanic **u-* and **i-*. This is certainly a Bantu innovation.” (Greenberg 1963: 35)

It is significant, however, that other than the merger of class 6 **a-* (plural of class 5) with liquid class 6a **ma-*, no compelling explanation has been provided

for how this might have happened. In addition, the actual situation is much more complex (cf. the extensive review in Hyman 1980c and below).

Contrasting with the Greenberg-Crabb hypothesis, Miede's (1991) position is that the nasal prefixes should be reconstructed at the PNC stage. Two arguments are given: (i) There are reasonable cognate nasal prefixes and frozen relics for several nasal class markers outside of Bantu; (ii) The nasals in classes 1, 3, 4, 6, 9 and 10 are claimed to be gradually lost through erosion and possible re-prefixation.

Given the importance of these nasals in the history of Niger-Congo, it is surprising how little reaction there has been to Miede's evidence, and the issue has been almost ignored. On the one hand there have been some brief reviews, e.g. Hedinger (1993) and Heath (1994), from which we can assume skepticism, but open-mindedness on the part of the latter:

... the heavy preponderance of *N- forms in the survey makes direct comparison with Bantu **mu-* and **mi-* adventurous. Unraveling cognate relationships among noun class prefixes is treacherous because of mergers and splits among noun classes, and analogical interaction between nominal prefixes and verbal agreement markers, in addition to phonological attrition and (in some languages) contraction or elimination of the prefix system. However, M does succeed in making a strong case for an original wide distribution of nasal prefixes in the semantic domains typical of Bantu classes, 1, 3 and 4 (among others). (Heath 1994: 863)

One can also cite positive mention by Williamson (1989: 40; 1993: 43-44), who however accepts Stewart's (1999b, 1999a; 2002) PNC reconstruction of nasalized V- prefixes instead of VN- (and presumably NV-):

Accepting Stewart's hypothesis that the prefixes of classes 9 and 10 were originally close nasalized vowels rather than homorganic nasals, it is somewhat easier to explain why these old prefixes surface sometimes as close vowels, sometimes as homorganic nasals, and sometimes as both. (Williamson 1993: 44)

If we include Stewart in the mix, we are left with three hypotheses concerning nasality in the indicated noun classes: proto nasal consonants, proto nasalized vowels, no nasality. In my view we have not yet arrived at a solution that answers all of the relevant questions. Those following the Greenberg-Crabb hypothesis have to address the following questions: (i) Where did the Bantu nasals come from? This is not a problem for Miede, who assumes they were present in PNC.

(ii) How do we account for the nasals that Mieke reports outside Bantu? Again, this is not a problem for Mieke, as these represent retentions from PNC. However, even if these questions disappear with Mieke's hypothesis, other questions remain unresolved: (i) Why were the nasals lost in so much of Niger-Congo? While we can attribute this to phonetic erosion or replacement, it would seem odd that only nasal consonants were lost in those Benue-Congo languages which otherwise maintain CV- prefixes. (ii) Why were nasal consonants preserved in Bantu? (iii) Why does Bantu have nasal marking on nominals, but reconstructed non-nasal concord marking? E.g. Luganda class 3 *ò-mù-tí gù-nó* 'this tree'; class 4 *è-mi-tí gù-nó* 'these trees'. (iv) Is the nasal/oral distinction found anywhere in Niger-Congo outside Bantu? If not, why not? (v) What is the relation of the two sets of marking, e.g. class 3/4 **mò-/*mì-* vs. **gò-/*gí-*? Why labial nasals vs. voiced oral velars? Why L tone on noun prefixes vs. H concord tone in most noun classes? Significantly, it is the concord forms which generally correspond to noun marking outside of Bantu.

To explain the nasal vs. oral marking of classes 1, 3, 4, 6, 9 and 10 in Bantu one might adopt one of three strategies: The first would be to reconstruct two sets of PNC allomorphs for these classes. While this could work, it simply delays the ultimate question of why there should be two sets of markers? We would want to know how they arose in pre-PNC, if that's the correct historical stage. To respond to this problem we might instead reconstruct two sets of distinct noun classes, which subsequently merged, as everyone assumes in the case of class 6 **a-* (plural of class 5) and liquid/mass class 6a **ma-*. There might also have been a plural class **mò-* that merged with class 4 **mì-*. In this view, PNC likely had more noun classes than Proto-Bantu (PB).

A quite different proposal would be to reconstruct one set of markers which split into two sets of allomorphs in a way as yet unexplained.² In order to consider how a single set of reconstructions might have split into labial nasal vs. velar oral allomorphs, note the partial or complete complementarity between reconstructed V, N, mV and gV markers in Table 4.

Among the gaps seen in Table 4, PB clearly lacks voiced velars on noun prefixes.³ The concord prefixes, however, fill this gap: **jò-* (1), **gò-* (3), **gí-* (4), **gá-* (6), **jì-* (9), **jí-* (10). Perhaps Gur **ŋV* fills in the **gV* gap, in which case Proto-Gur may have nasalized PNC **gò-* and **ga-*, which are of course identical to

²It is generally assumed that the [m] of classes 1, 3, and 4 and the homorganic nasal N- ([n]?) of classes 9 and 10 have similar distributions, although possibly different origins.

³I am ignoring cases where certain Bantu languages exploit a concord marker in secondary derivations, e.g. Luganda augmentative class 3 *gu-*/class 6 *ga-*: *o-gu-tí* 'a big tree', pl. *a-ga-tí*.

Table 4: Reconstructed Noun Class markers arranged by place of articulation

	Labial	Dental-Alveolar	Velar	Vowel/Nasal
PBC	* <i>(pi-</i> * <i>ba-</i> , * <i>bi-</i> , * <i>bù-</i>	* <i>ti-</i> * <i>li</i> , * <i>lu-</i> * <i>ma-</i> ~ * <i>na-</i> (6a)	* <i>kà-</i> , * <i>ki-</i> , * <i>ku-</i> [REDACTED]	* <i>ù-</i> (1), * <i>i-</i> (9), * <i>ú-</i> (3), * <i>i-</i> (4,10), * <i>a-</i> (6)
PGur	* <i>pɔ</i> , * <i>fɔ</i> * <i>ba</i> , * <i>bi</i> , * <i>bɔ</i> , * <i>wa</i> * <i>ma</i> (6a), * <i>mɔ</i> (pl.)	* <i>sɪ</i> , * <i>tɔ</i> * <i>dɑ</i> , * <i>dɪ</i> * <i>ni</i> (9), * <i>ni</i> (10), * <i>na</i>	* <i>ka</i> , * <i>kɔ</i> [REDACTED] * <i>ɲɔ</i> (3), * <i>ɲa</i> (6)	* <i>ɔ</i> (1), * <i>i</i> (4), * <i>a</i>
PB (nouns)	* <i>pi-</i> , * <i>pà-</i> * <i>bà-</i> , * <i>bi-</i> , * <i>bò-</i> * <i>mò-</i> (1,3), * <i>mi-</i> (4), * <i>mà-</i> (6a),	* <i>tò-</i> * <i>dì-</i> , * <i>dò-</i> [REDACTED]	* <i>kà-</i> , * <i>kɪ-</i> , * <i>kò-</i> [REDACTED]	* <i>i-</i> (5) * <i>N'</i> - (9,10)

the PB class 3 and 6 concords. A proposal made by the students in my Spring (2013) Bantu and Niger-Congo seminar, inspired by the correlation between [gw, ɲw] and [b, m] in Kordofanian (Table 3), is the historical derivation **g^w* > *ɲ^w* > *m* (in PB noun prefixes).⁴ The major question is where the nasality would have come from? Perhaps there was a nasal that preceded PB noun prefixes, thereby producing a derivation such as: **N-g^w* > *ɲg^w* > *ɲ^w* > *m*.

Although this is speculative, and there are other possibilities (e.g. why not **bɔ-*, **bɪ-*, etc.?), Table 5 shows that there are attested shifts between labials and velars in Niger-Congo languages (Hyman 1980c: 200).

However, we still have the issue of determining where the nasality would have come from. Since Mieke (1991) there have been other developments that potentially interface with the problem at hand. First, Stewart (1999b), 1999a; 2002 proposes PNC nasalized vowels, which Williamson (1989: 40; 1993: 43-44) extends to noun class prefixes (although they are almost totally lacking in present-day languages). Also of potential importance is the role of the PB determiner prefix known as the “augment”:

A correct view of the augment as a correspondence in Bantu may enable us to bridge a gap between Bantu and the other Benue-Congo languages, by showing how the system of prefixes with differential *m-* ... arose. (Meeussen 1973: 13)

⁴Table 3 shows that Kordofanian likes nasals in its noun prefixes, including palatals and velars, which may represent an innovation of the sort considered here. Cf. Williamson’s (1989: 40) proposal: **g^wu-* > *wu-* > *mũ* > *mu-*.

Table 5: Labial-velar correspondences in Nupoid and Grassfields Bantu

a.	Gwari	Nupe	PNupoid	cf.	PB
	<i>ēbí</i>	<i>ēgī</i>	* <i>bí</i>	‘child’	*- <i>bí-al-</i> ‘give birth’
	<i>ēbwá</i>	<i>ēgwā</i>	* <i>bó(k)</i>	‘hand’	*- <i>bókò</i> ‘arm, hand’
b.	Mankon	Bafmeng	PGB		
	<i>àbô</i>	<i>āyó’</i>	*- <i>bó’</i>	‘hand’	*- <i>bókò</i> ‘arm, hand’
	<i>nìbòmá</i>	<i>īyūm̄</i>	*- <i>bùm’</i>	‘egg’	
	<i>bí</i>	<i>yá</i>	*- <i>bá</i>	‘they’	* <i>bá-</i> SM, class 2

As seen in Table 6, the augment resembles oral noun prefixes with H tone as found outside Bantu, but also in the PB concord markers (de Blois 1970):⁵

Table 6: The augment in PB and two daughter languages

PB:	* <i>ɔ-mɔ-</i> (1)	* <i>gɔ-mɔ-</i> (3)	* <i>gí-mí-</i> (4)	* <i>gá-mà-</i> (6(a))	* <i>ɪ-Ñ-</i> (9)	* <i>(j)í-Ñ-</i> (10)
Bukusu:	<i>ó-mu-</i>	<i>kú-mù-</i>	<i>kí-mì-</i>	<i>ká-mà-</i>	<i>é-N-</i>	<i>cí-N-</i>
Haya:	<i>ó-mu-</i>	<i>ó-mu-</i>	<i>é-mi-</i>	<i>á-ma-</i>	<i>é-N-</i>	<i>é-N-</i>

It has therefore been attractive to relate the non-Bantu oral prefixes to the augment. The significance of this move is seen from Grégoire & Janssens’ (1999) demonstration that the augment+noun prefix sequence can simplify in one of two ways: (i) loss of the augment: V-CV- > CV-; (ii) loss of the noun class prefix: V-CV > V-. Starting with a PB reconstruction such as class 3 **gɔ-mɔ-*, loss of the augment would leave *mɔ-* as the noun prefix, while loss of the prefix would yield *gɔ-* in concords (and in noun prefixes and suffixes outside of Bantu). This still does not explain why the two noun class markers should be different from each other.⁶

⁵In Table 6 Bukusu devoices **g* > *k* by the Luyia Law (Hinnebusch et al. 1981), while Haya deletes the augment consonant, as in most Bantu. While the classes 1 and 9 augments are reconstructed as **L*, I know of no Bantu language where they are distinguished tonally from other noun class augments.

⁶Williamson (1993) relates the class 9/10 split to the augment: *Ñ-* (or a nasal vowel?) is the class 9/10 prefix, with class 10 often enhanced by an augment, e.g. Kikongo *m-bwa* ‘dog’, pl. *zi-m-bwa*.

Note that de Wolf (1971) reconstructs the above noun class prefixes in PBC with the shape V-, not CV-. However, Hyman (1980c), Mieke (1991) and especially Grégoire & Janssens (1999) show different ways to derive a V- prefix (variant VN-). In the following potential changes, note the potential differences in tonal outcome (although high tone prefixes, especially V-, can independently become L as a kind of reduction process):

- (1) a. CV prefix without augment
- i. the consonant drops: *CṼ- > Ṽ-, e.g. class 7 *kì- > ì-; class 12 *kà- > à-
 - ii. the NV metathesizes: *mṼ- > Ṽm- > ṼN-
- b. CV prefix with vocalic augment
- i. the prefix drops: *Ṽ-CṼ- > Ṽ -, e.g. class 7 *í-kì- > í-; class 12 *á-kà- > á-
 - ii. the prefix vowel drops: *Ṽ-mṼ- > Ṽ-N- (>Ṽ-), e.g. class 3 *ó-mò- > óN-; class 4 *í-mì- > *iN-

With this in mind, note the different realization of classes 1, 3, 4, 6 vs. 6a and plural “18a” in Tuki (Hyman 1980a; cf. Musada (1995)), which derives VN- from /V-mV-/):

- (2) a. class 1: *òṅ-gìní* ‘guest, stranger’ (but cf. *mo-to* ‘person’, *mw-àná* ‘child’)
- class 3: *òṅ-gòlò* ‘foot’ *òm-bàḃḃē* ‘wing’ *ò-tēmā* ‘heart’
- class 4: *iṅ-gòlò* ‘feet’ *im-bàḃḃē* ‘wings’ *i-tēmā* ‘hearts’
- class 6: *àṅ-bāné* ‘breasts’ *àṅ-bīlé* ‘palm tree’ *à-tāné* ‘stones’ (*àṅ-* > *à-*)
- b. class 6a: *mà-tiá* ‘water’ *mà-wūtē* ‘fat’
- class 18a: *mù-nū* ‘brain’ *mù-nóóní* ‘birds’ (cf. PNC “6b”, PGur 22 **mɔ*)

In (2b), the two *mV-* classes (6a, 18a) perhaps lacked an augment by virtue of their semantics. Tuki has other CV- prefixes, *bà-* (2), *bì-* (8), *nò-* (11), *wù-* (14) without augment, which may have fallen out. Dugast (1971: 65) reports comparable data concerning collectives in Tunen (cf. Mous 2003: 302–303), e.g. *ò-n-dòmb* ‘sheep’ (class 3), pl. *è-n-dòmb* (class 4), *mà-n-dòmb* ‘types of sheep’ (class 6).

Signalons enfin que nous rencontrerons un collectif dont le préfixe paraît présenter un prépréfixe (*ama-* > *am-*, *əm-*). (Dugast 1971: 65)

The history of noun class marking and ultimately nasality may thus implicate the presence of an augment—or different augments, as the case may be. The differential behavior of 1, 3, 4, 6, 9, 10 marking may also be attributed to a reconstructed (or evolved) **V* vs. **CV* shape. One attractive idea (for which, unfortunately, there is no evidence), is that there was a morpheme whose final [m] syllabifies with *V*-initial prefixes, but otherwise drops out before a consonant-initial prefix:

- (3) a. **Vm-V*- > *V-mV*- > *mV*- (1, 3, 4, 6)
 b. **Vm-CV*- > *V-CV*- > *CV*- (2, 7, 8 etc.)

The loss of the initial **j* or **g* may also account for the merger of classes 4 (pl.) and 9 (sg.) in a number of Bantu languages (Tables 7 & 8).

Table 7: Merger of classes 9 and 4 in Haya (Byarushengo 1977: 8)

Haya	noun	subject	numeral	object	connective
class 9	<i>Ñ</i> -	<i>è</i> -	<i>è</i> -	<i>-gi-</i>	<i>ya-</i>
class 4	<i>mì</i> -	<i>è</i> -	<i>è</i> -	<i>-gi-</i>	<i>ya-</i>
cf. class 8	<i>bì</i> -	<i>bí</i> -	<i>bí</i> -	<i>-bi-</i>	<i>bya-</i>

Table 8: Merger of classes 9 and 4 in Tunen (Dugast 1971, Mous 2003: 300-2)

Tunen	noun	subject	numeral	ProPref	cl.6 collective
class 9	<i>mè</i> -, <i>èN</i> -	<i>yè</i> -	<i>é</i> -	<i>yè</i>	
class 4	<i>mè</i> -, <i>èN</i> -	<i>yé</i> -	<i>í</i> -	<i>yí</i>	<i>mà-Ñ</i> -
cf. class 8	<i>bè</i> -	<i>bé</i> -	<i>bé</i> -	<i>-bí</i> -	

Another factor that should be considered is the sporadic evidence of relic noun class suffixation in Bantu, which is more widespread elsewhere in Niger-Congo. It is likely that such suffixes never contained a nasal in classes 1, 3, 4, 6, 9 and 10. Again, the nasal classes may have had *-V* (vs. *-CV*) suffixes, as in Tiv (Voorhoeve & de Wolf 1969: 52, based on Arnott).

If classes 1, 3, 4, 6, 9 and 10 had a *-V* suffix, then when suffix vowels dropped, the whole suffix was lost. The alternative is that these classes had earlier *wV*, *yV* and *yV* markers, where the glide first drops out, then the vowel. Note also that class 14 and 15 **Cu*- prefixes drop out entirely (class 3 leaves relics). There

Table 9: Tiv Noun Classes

class	noun affixes	adjective	subject (pr.cont.)	subject (past)	'my'
1	∅	ù-	ηgù	a	w-ám
2	ù-, mbà- -v	mbà- -v	mbá↓	ve	á↓ -v
3	(ú-)	ú-	ηgú↓	u	w-ám
4, 5, 10	í-	í-	ηgí↓	i	y-ám
6	á-	á-	ηgá↓	a	ám
6a	m̄- -m̄	mà- -m̄	má↓	ma	á↓ -m̄
7	í- -ȳ	kì- -ȳ	kí↓	ki	y- á↓ -ȳ
8	í- -v	mbì- -v	mbí↓	mbi	á↓ -v
9	ì-	ì-	ηgì	i	y-ám
14	-v	mbù- -v	mbú↓	mbu	á↓ -v
15	-ȳ	kù- -ȳ	kú↓	ku	á↓ -ȳ

is a similar distribution of suffixes in Noni (Hyman 1980c: 188). Understanding the nasals thus necessarily means understanding that the forms from different parts of a paradigm may originally have been different, may come to be different, and may influence the future of a system, e.g. whether nasals are spreading vs. retracting.

Finally, it should be noted that having a nasal (N) vs. oral (O) concord is not an all or nothing thing (Hyman 1980c: 194-5). One of the aforementioned noun classes can have nasal concord, another oral. Thus note the following out of 52 Bantu languages (mostly Northwest, Table 10).

Table 10: Distribution of nasal concord by Noun Class

class 3	class 4	class 6(a)	total	observations
N	N	N	20	11/20 are in zone C
O	N	N	18	12/18 are in zones A-B
O	O	N	14	7/20 are in zones D-F

The class 3, 4, and 6(a) distributions N-O-N, N-N-O, O-N-O and O-O-N are all unattested. We thus can draw the following implicational scale: class 3 N \supset class 4 N \supset class 6 N.

Occasionally non-Bantu languages have a nasal in their pronoun system which resembles Bantu. Thus the Fula [North Atlantic] third person singular human subject and object pronoun *mo* (Arnott 1970) and the Wawa [Bantoid] third person singular human pronoun *mū* (Martin 2012: 169) ought to be cognate with the Proto-Bantu class 1 object marker **-mu-*. Similarly re class 1 *mù* and class 3 *mū* pronouns in Esimbi [Bantoid]. As seen in Table 11, from Stallcup (S) (1980: 142) and Koenig et al. (2013: 8–9, 27), the other pronouns resemble the corresponding noun class prefixes. For some reason the two sources give different oral vs. nasal reflexes on the noun prefixes of classes 2, 6a, 14, and 18a (Table 11).

Table 11: Esimbi Noun Class prefixes and pronouns

class	noun (S)	noun (K et al)	Pronoun	/I, U, A/ =archiphonemes
1	(w)Û-	((w)U)-	<i>mù^a</i>	Koenig et al. exx. have L or M tone
2	<i>bĀ-</i>	<i>mA-</i>	<i>bú</i>	why L tone?
3	Û	U-	<i>mū</i>	
5	Í			
6	Á	A-	<i>zú</i>	
6a	<i>bĀ-, m-</i>	<i>mA-</i>	<i>bù</i>	note L tone; <i>m-</i> is used before /b/
7	<i>kI-</i>	<i>kI-</i>	<i>kī</i>	
8	<i>bI-</i>	<i>mI-</i>	<i>bī</i>	
9	Ì-	I-	<i>zù</i>	exx. from Koenig et al. have L tone
10	Ī-	I-	<i>zú</i>	exx. from Koenig et al. have non-L tone
12	<i>kA-</i>	<i>kU-, kA-</i>	<i>kū</i>	
13	<i>tA-</i>	<i>tU-, tA-</i>	<i>tí</i>	
14	<i>bŪ-</i>	<i>mU-</i>	<i>bú</i>	
18a	<i>bŪ-</i>	<i>mU-</i>	<i>bù</i>	note L tone
19	<i>sĪ-</i>	<i>sI-</i>	<i>sī</i>	

^aCf. the object marker *-ŋw-*. In symbols /I, U, A/ stand for archiphonemes whose vowel height depends on the following stem.

The fact that one dialect denasalizes class 6 and 18a prefixes and the other nasalizes class 2 and 8 prefixes is something which repeats itself elsewhere in Bantoid,

e.g. Ekoid (Watters 1980: 133), Kenyang (Voorhoeve 1980), and Mbe (Bamgbose 1965)—and even Narrow Bantu, e.g. zone C denasalization of **mV-* > *bV-*. Any proposed scenario such as **gw* > *m* must be grounded in what we know about the natural history of nasality.

In conclusion, Miede's (1991) demonstration of widespread nasals still leaves a lot to interpret: Who had what when? How did everyone get what they have today? What does this say about the evolution of noun class systems: mergers, splits, loss? (cf. Good 2012). There is still a lot of work to do before we can arrive at a definitive solution to the issues that I have outlined above.

Acknowledgements

I would like to thank Gudrun Miede, my co-organizer in Paris of the workshop “Nasal Noun Class Prefixes in Bantu: Innovated or Inherited?”, at the 5th International Conference on Bantu Languages, June 12, 2013, at which this paper was first presented, and the other presenters: Jeff Good, Jesse Lovegren, Konstantin Pozdniakov, Valentin Vydrin, and John Watters. I also thank the doctoral students in my Spring (2013) Seminar on Bantu and Niger-Congo who were full of ideas and enthusiasm: Matt Faytak, Florian Lionnet, Jack Merrill, Zachary O'Hagan, Nik Rolle.

References

- Arnott, D. W. 1970. *The nominal and verbal systems of Fula*. Oxford: Clarendon Press.
- Bamgbose, Ayo. 1965. Nominal classes in mbe. *Afrika und Übersee* 49. 32–53.
- Byarushengo, Ernest Rugwa. 1977. Preliminaries. In Alessandro Duranti Ernest R. Byarushengo & Larry M. Hyman (eds.), *Haya grammatical structure* (Southern California Occasional Papers in Linguistics 6), 1–15. Los Angeles: Department of Linguistics, University of Southern California. http://gsil.sc-ling.org/pubs/SCOPILS_6_7_8_9/Haya_grammatical_structure.pdf.
- Crabb, David W. 1965. *Ekoid Bantu languages of Ogoja, Eastern Nigeria* (West African Languages Monographs 4). Cambridge: Cambridge University Press.
- de Blois, Kees F. 1970. The augment in the Bantu languages. *Africana Linguistica* 4. 85–165.
- de Wolf, Paul P. 1971. *The noun class system of Proto-Benue-Congo*. The Hague: Mouton.
- Dugast, Idelette. 1971. *Grammaire du tunen*. Paris: Klincksieck.

- Good, Jeff. 2012. How to become a “Kwa” noun. *Morphology* 22. 294–335.
- Greenberg, Joseph H. 1963. The languages of Africa. *IJAL* Part II, No. 1(29).
- Grégoire, Claire & Baudouin Janssens. 1999. L’augment en bantou du nord-ouest. In Jean-Marie Hombert & Larry M. Hyman (eds.), *Bantu historical linguistics: Theoretical and empirical perspectives*. 413–429. Stanford: CSLI. http://gsil.sc-ling.org/pubs/SCOPILS_1_3_4/studies_in_bantu_tonology.pdf.
- Heath, Jeffrey. 1994. Review of Mieke (1991). *Language* 70. 862–3.
- Hedinger, Robert. 1993. Review of Mieke 1991. *Afrika und Übersee* 76. 145–147.
- Hinnebusch, Thomas H., Derek Nurse & Martin Mould. 1981. *Studies in the classification of Eastern Bantu languages*. Hamburg: Helmut Buske Verlag.
- Hyman, Larry M. 1980a. Esquisse des classes nominales en tuki. In Larry M. Hyman (ed.), *Noun classes in the Grassfields Bantu borderland* (Southern California Occasional Papers in Linguistics 8), 27–36. Los Angeles: Department of Linguistics, University of Southern California.
- Stallcup, Kenneth L. 1980. Noun classes in Esimbi. In Larry M. Hyman (ed.), *Noun classes in the Grassfields Bantu borderland* (Southern California Occasional Papers in Linguistics 8), 139–153. Los Angeles: Department of Linguistics, University of Southern California.
- Hyman, Larry M. 1980b. Reflections on the nasal classes in Bantu. In Larry M. Hyman (ed.), *Noun classes in the Grassfields Bantu borderland* (Southern California Occasional Papers in Linguistics 8), 179–210. Los Angeles: Department of Linguistics, University of Southern California. http://gsil.sc-ling.org/pubs/SCOPILS_6_7_8_9/Noun_classes_in_the_grassfields_bantu_borderland.pdf.
- Hyman, Larry M. 1980c. Reflections on the nasal classes in Bantu. In Larry M. Hyman (ed.), *Noun classes in the Grassfields Bantu borderland* (Southern California Occasional Papers in Linguistics 8), 179–210. Los Angeles: Department of Linguistics, University of Southern California.
- Koenig, Brad, Arnie Coleman & Karen Coleman. 2013. *Grammar sketch of Esimbi*. Ms.
- Martin, Marieke. 2012. *A grammar of Wawa*. University of Kent Doctoral dissertation.
- Meeussen, A. E. 1967. Bantu grammatical reconstructions. *Africana Linguistica* 3. 79–121.
- Meeussen, A. E. 1973. Test cases for method. *African Language Studies: Papers on Comparative Bantu* 14. 6–18.
- Mieke, Gudrun. 1991. *Die Präfixnasale im Benue-Congo und im Kwa: Versuch einer Widerlegung der Hypothese von der Nasalinnovation des Bantu*. Berlin: Reimer.

- Mous, Maarten. 2003. Nen (A44). In Derek Nurse & Gérard Philippson (eds.), *The Bantu languages*, 283–306. London: Routledge.
- Musada, Augustin. 1995. *Éléments de description du tuki (langue bantoue du Cameroun A61)*. Université Libre de Bruxelles Mémoire de Licence.
- Schadeberg, Thilo. 1981. The classification of the Kadugli language group. In Thilo C. Schadeberg & M. Lionel Bender (eds.), *Nilo-Saharan*, 291–305. Dordrecht: Foris Publications.
- Schadeberg, Thilo C. 2011. *The unique nature of the Niger-Congo noun class system, and a comparison of event participant marking in Bantu and Ebang (Kordofanian)*. Paper presented at the Fourth International Conference on Bantu Languages, Berlin.
- Stewart, John M. 1999a. An explanation of Bantu vowel height harmony in terms of a pre-Bantu nasalized vowel lowering. *Journal of African Languages and Linguistics* 21. 161–178.
- Stewart, John M. 1999b. Nasal vowel creation without nasal consonant deletion, and the eventual loss of nasal vowels thus created: The pre-Bantu case. In Jean-Marie Hombert & Larry M. Hyman (eds.), *Bantu historical linguistics: Theoretical and empirical perspectives*, 207–233. Stanford: CSLI.
- Stewart, John M. 2002. The potential of Proto-Potou-Akanic-Bantu as a pilot Proto-Niger-Congo, and the reconstructions updated. *Journal of African Languages and Linguistics* 23. 197–224.
- Voorhoeve, Jan. 1980. Kenyang. In Larry M. Hyman & Jan Voorhoeve (eds.), *Les classes nominales dans le bantou des grassfields*, 275–285. Paris: SELAF.
- Voorhoeve, Jan & Paul P. de Wolf (eds.). 1969. *Benue-Congo noun class systems*. Leiden: Afrika Studiecentrum.
- Watters, John R. 1980. The Ejagham noun class system: Ekoid Bantu revisited. In Larry M. Hyman (ed.), *Noun classes in the Grassfields Bantu borderland* (Southern California Occasional Papers in Linguistics 8), 99–137. Los Angeles: Department of Linguistics, University of Southern California.
- Williamson, Kay. 1993. The noun prefixes of Benue-Congo. *Journal of African Languages & Linguistics* 14. 29–45.
- Wilson, W. A. A. 1989. Atlantic. In John Bendor-Samuel (ed.), *The Niger-Congo languages*, 81–104. Lanham, MD: University Press of America.