Remarks on the nasal classes in Mungbam and Naki

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1. Understanding the origin of nasal classes in Bantu

Since Greenberg (1963: 65) and Crabb (1965: 14), the presence of nasal consonants in a number of noun class prefixes in Bantu languages has been considered important in the context of comparative Niger-Congo linguistics.[1] These nasals appear in Classes 1, 3, 4, 6, 9, and 10 and have counterparts outside of Bantu without nasal consonants, e.g., Class 1 *mu-* in Proto-Bantu against Class 1 *u-* in Proto–Western Grassfields, a Bantoid group closely related to Bantu (see Hyman 1980: 182). Miehe (1991) established that nasal classes have broad provenance within Niger-Congo, going well beyond Bantu and its close relatives (see also Dimmendaal 2011: 85–86). The complexity of their distribution raises important questions about their development within Niger-Congo, in particular regarding how they became so well-established in Bantu but have a less consistent distribution among Bantu's closest relatives and Niger-Congo more broadly.

The purpose of this paper is to add more material to the discussion by examining the noun class systems of two Bantoid languages of Cameroon, Mungbam [mij] and Naki [mff], which have only recently become the subject of detailed investigation. Mungbam will be examined from a polylectal perspective, taking variation from all five of its dialects into account, and Naki will be examined with reference to other languages in the small Beboid group, emphasizing the value of comparative data from closely related languages in shedding light on the origins of nasal classes in Niger-Congo. The nasal classes in these languages partly follow Bantu patterns, but also offer new complications, which clarify the extent to which any full explanation of nasal classes requires modelling their development as the result of distinct sets of innovations.

Section 2 of this paper describes the nasal class patterns of Mungbam, and Section 3 describes the nasal class patterns of Naki. Section 4 discusses what is found in these languages in light of the wider issues in comparative Niger-Congo.

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2. The nasal classes of Mungbam

Mungbam is a language of the referential Yemne-Kimbi subgroup of Bantoid spoken at the northern edge of the Grassfields region of Cameroon (see Good et al. (2011:107–108)). Lovegren (2013) provides a polylectal grammatical description of the language covering all five of its major dialects (each associated with one of the five Mungbam-speaking villages), and further details on the noun class systems and transcriptions conventions for those dialects can be found there.

For purposes of reference, we begin by presenting Lovegren's (2013: 110) reconstructions of the noun class prefixes for Pre-Mungbam in Table 1. These should be taken as a working hypothesis. Included are the correspondences between these Pre-Mungbam reconstructions and those of Proto-Beboid (PBBD), Proto–Western Grassfields (PWG), and Proto-Bantu (PB), and these comparisons will serve as a useful point of reference in Section 3 of the paper. The first set shows noun classes (to the left of the dashed line) that are singular or lacking a singular/plural opposition, and the second set (to the right of the dashed line) shows plural classes. Classes in the same row indicate common singular/plural pairings.

	PMGB	PBBD	PWG	PB		PMGB	PBBD	PWG	PB
1	*ù-	*u-	*ù(N)-	*mù-	2	*bá-	*ba-	*bɔ́-	*βà-
3	*ú-	*u-	*ú-	*mù-	4	*í-	*i-	*í-	*mì-
5	*i-	*i-	*í-	*lì-	6	*má-	*a-	*á-	*mà-
7	*kí-	*ki-	*kí-	*kì-	8	*bí-	*bi-	*bí-	*βị-
9	*ì-	*i-	*ì(N)-	*nì-	10	*í-	*i-	*í(N)-	*lị-nì-
12	*ká-	*ka-	—	*kà-	13	*kí-…-Cɔ	*ki-	*tí-	*tù-
19	*fí-	*fi-	*fí-	*pị-	18a	*mú-	*muN-	—	*mù-
6a	*má-	*m-	*mə-	—					
14	*bú-	*bu-	—	*βù-					

Table 1: Noun classes in Pre-Mungbam with comparison reconstructions

The Proto-Beboid reconstructions are drawn from Hombert (1980: 86), the Proto–Western Grassfields reconstructions are from Hyman (1980: 182), and the Proto-Bantu reconstructions are from Maho (1999: 51). Dashes in Table 1 indicate that a given class is not reconstructed for some subgroup. Class numbering follows Bantuist conventions where possible, with the addition of Class 6a for liquids following Welmers (1973: 163). Class 18a designates a plural class associated with diminutives (see Hyman (1980: 187) and Miehe (1991: 117, 370–372)). (The number 18 is used due to the formal overlap of Class 18a with the Proto-Bantu locative Class 18, though no further connection between the two is suggested.)

Proto-Beboid is chosen for comparison due to the fact that the small Beboid group of languages is spoken in the same region as Mungbam, and the language is in contact with the Beboid language Naki, considered in Section 3. Proto–Western

Grassfields is chosen for a similar reason. The Ring group of languages, which are a major part of Hyman's (1980) Western Grassfields, are mostly spoken in the area just to the south of where Mungbam is spoken, and one Ring language, Kung, is in direct contact with it. Proto-Bantu is included due to the important role it plays in the study of comparative Benue-Congo.

The precise distribution of nasal classes across Mungbam varieties is not fully consistent. All dialects show the presence of nasals in Classes 6a and 18a, while nasals are not found in Class 6 in the Biya and Missong dialects (see Table 4 and Table 5). Unlike Proto-Bantu, Classes 1, 3, and 4 are not associated with nasals in any dialect. One does encounter a significant number of Gender 1/2 nouns beginning with nasal-obstruent clusters, in which case a vocalic prefix is generally not found. Examples are given in Table 2, along with two nouns with a stem-initial nasal and a Class 1 prefix *ù-*. The presence of these nouns may be due to borrowing of stems from languages where nasals are associated with Class 1 or sporadic loss of the initial prefix (see Lovegren 2013: 119). We leave this pattern aside below.

CLASS 1	CLASS 2	GLOSS	DIALECT
Ø-ŋ̀kpằnə	bə̀-ŋ̀kpằnə	'clay dish'	Munken
Ø-nám	bə́-nám	'husband'	Munken
Ø-m̀bɔ̀ŋ	bə́-mbɔ̀ŋ	'cow'	Munken
ù-ndĭnə	bə̀-ndĭnə	'woman'	Biya
ù-nɛ̀	bə̀-nɛ̀	'person'	Munken

Table 2: Mungbam Class 1 nouns with initial nasals

The noun class systems for each dialect of Mungbam are summarized in Tables 3–7 below. These presentations leave out various complications discussed in detail by Lovegren (2013). The shape of the prefixes appearing on noun stems is provided in the first column for a class, and a representation of the shape of the associated concord is in the second column. Typical singular/plural class pairings are indicated via their placement in the same row.

ABAR					
1	ù-/Ø-	w`-	2	bwe-/bə-/a-	bw-
3	ú-	w´-	4	í-	j´-
5L	ì-	j`-	6	mwe-/məN-/a-	mw´-
5H	í-	j´-	13	i-/ki-…(-lɔ)	kj´-
12	kə-/a-	k´-	8	bi-/i-	bj´-
9	ì-	j`-	10	í-	j´-
19	çi-/i-	fj´-	18a	m͡N-	mw´-
6a	məN-/aN-	mw´-			
14	bu-/u-	bw`-			

Table 3: The noun class system of Abar

BIYA					
1	ù-/Ø-	w`-	2	bə-	bɥ´-
3	ú-	w-	4	í-	j´-
5L	ì-	j`-	6	a-	w´-
5H	í-	j´-	13	kə-…(-lə)	kj´-
12	kə-	k´-	8	bi-	bj´-
9	ì-	j`-	10	í-	j´-
19	fi-	fj´-	18a	mN-	mw´-
6a	N-	mw´-			
14	bu-	bɥ`-			

Table 4: The noun class system of Biya

MISSONG					
1	ù-/Ø-	w`-	2	ba-	bu´-
3	ú-	w´-	4	í-	j´-
5L	ì-	j`-	6	a-	w´-
5H	í-	j´-	13	ki-…(-Cə)	kj´-
12	ki-	k´-	8	bi-	bj´-
9	ì-	j`-	10	í-	j´-
19	fi-	f´-	18a	mu-	mu´-
6a	aN-	mu´-			
14	bu-	bu-			

Table 5: The noun class system of Missong

MUNKEN					
1	ù-/Ø-	w`-	2	bə-	b´-
3	ú-	w´-	4	í-	j´-
5L	ì-	j`-	6	a-	n´-
5H	í-	j´-	13	ki-…(-lə)	kj´-
12	a-	k´-	8	bi-	bj´-
9	ì-	j`-	10	í-	j´-
19	ɕi-	ɕ´-	18a	mu-	mw´-
6a	N-	m´-			
14	bu-	bw`-			

Table 6: The noun class system of Munken

Diacritics on the concords in the tables indicate that they are associated with a higher or lower tone as compared to other concords, with the precise tonal realization depending on the stem that they combine with. A capital *N* indicates a nasal that assimilates to the place of a following consonant. The *j* is used for a palatal glide. Classes listed with more than one prefix show lexical variation in prefix choice. Class 13 can show circumfixal coding, as indicated.

NGUN					
1	ù-/Ø-	w`-	2	bə-	bw´-
3	ú-	w´-	4	í-	j´-
5L	ì-	j`-	6	a-	mw´-
5H	í-	j´-	13	kə-…(-Cə)	k´-
12	kə-/a-	k´-	8	bi-	bj´-
9	ì-	j`-	10	í-	j´-
19	fi-	fj´-	18a	mN-	mw´-
6a	N-	mw´-			
14	bu-	bw`-			

Table 7: The noun class system of Ngun

Classes 5L and 5H seem to be associated with Proto-Bantu Class 5, but they lack a consistent tone in Mungbam, which is why they are separated into a low ("L") and high ("H") class here (see Lovegren 2013:121). Classes 6a and 14 are associated with nouns that do not encode a singular/plural distinction, and are, thus, presented as unpaired in the tables.

Table 8 provides examples of nouns distributed across each of the noun classes of the Munken dialect of Mungbam. Nasal prefixes can be seen in Classes 6a and 18a. The Class 1 noun in the table shows a zero prefix, of the sort exemplified earlier in Table 2.

	SINGULAR	GLOSS		PLURAL	GLOSS
1	m̀fà	'slave'	2	bə̀mfà	'slaves'
3	úɕɛ́	'knife'	4	íɕɛ́	'knives'
5L	ìsɛ̀	'face'	6	ásɛ́	'faces'
5H	íjí	'watch'	13	kíjílɛ́	'watches'
12	átsɛ̄	'lizard type'	8	bìmfɛ̄	'cocoyams'
9	īsù	'fish (sg.)'	10	ísû	'fish (pl.)'
19	ɕìbûs	'cat'	18a	mūwáhá	'puppies'
6a	ɲ́ŋɲé	'water'			
14	būtù	'day'			

Table 8: Example nouns from the Munken dialect

As indicated in Tables 3–7, Classes 6a and 18a consistently show nasals in both noun prefixes and concords. The situation for Class 6 is more complicated. It only shows a nasal in the noun class prefix in some forms in Abar and in the concords of three of the dialects: Abar, Munken, and Ngun. There is no evidence for nasals in Class 6 in the other two dialects, Biya and Missong.

Table 9 gives the full concord paradigms for the preverbal pronouns of the five dialects of Mungbam as an illustration the concord patterns across the dialects. The three classes associated with nasals are grouped together at the bottom of the table.

	ABAR	BIYA	MISSONG	MUNKEN	NGUN
1	(w)ù	(w)ù	(w)ù	(w)ù	(w)ù
2	bwé	bɥə̋~bə̋	bú	bé	bɥə̋
3	(w)ú	wə̋	(w)ú	(w)ú	ɥə̋
4/5H/10	(j)í	(j)ǐ	(j)í	(j)í	(j)ǐ
5L/9	(j)ì	(j)ì	(j)ì	(j)ì	(j)ì
7/12/13	kí	kə̋	kí	kí	kə̋
8	bí	bǐ	bí	bí	bǐ
14	bú	bɥə̋	bú	bú	bɥə̋
19	ɕí	fǐ	fǐ	ɕí	fǐ
6	mwé	wə̋	ú	né	mɥə̋
6a	mwé	mú	mún	mé	mɥə̋
18a	ḿ	mə̋	mú	mú	mɥə̋

Table 9: Preverbal pronouns across all noun classes in the five Mungbam dialects

The most noteworthy patterns in Table 9 are (i) the absence of nasals in the Biya and Missong Class 6 pronouns, even though they are found in the other varieties, and (ii) the different patterns of syncretism seen for the nasal classes. For instance, in Ngun all nasal classes show the same pronominal form, while in Abar only Class 6 and Class 6a do. Munken shows distinct pronominal forms across all three classes, including an *n* in Class 6 as opposed to an *m*, which is otherwise more characteristic of nasal classes (see Miehe (1991:375) for discussion of *nV*-plurals in the Plateau group of Benue-Congo). However, these patterns do not extend to all concordant elements, as illustrated by the data in Table 10, which presents the distal demonstrative forms across four of the five dialects (data for Ngun is not available).

	ABAR	BIYA	MISSONG	MUNKEN
1	ù-ʤən	ʤən	ù-ʤò	ù-ʤèn
2	bə̄-ʤən	bā-ʤən	bə́-ʤò	bə̄-ʤèn
3	ū-ʤən	ú-ʤən	ú-ʤò	ū-ʤèn
4/5H/10	ī-ʤən	í-ʤən	í-ʤò	ī-ʤèn
5L/9	ì-ʤən	ì-ʤən	í-ʤò	ì-ʤèn
7/12	kə̄-ʤən	kí-ʤən	kə́-ʤò	ā-ʤèn
13	bī-ʤən	bí-ʤən	bí-ʤò	bī-ʤèn
8	kī-ʤən	kí-ʤən	kə́-ʤò	kī-ʤèn
14	bū-ʤən	bú-ʤən	bú-ʤò	bū-ʤèn
19	ɕī-ʤən	fǐ-ʤən	fǐ-ʤò	ɕī-ʤèn
6	mən-ʤən	á-ʤən	á-ʤò	ā-ʤèn
6a	ān-ʤən	án-ʤən	mún-ʤò	mɛ̄-ʤèn
18a	mūn-ʤən	mún-ʤən	mún-ʤò	mū-ʤèn

Table 10: Distal demonstratives across noun classes in four Mungbam dialects

The forms in Table 10 repeat the pattern where Biya and Missong lack nasals for Class 6 concords, but here Munken also lacks a nasal for Class 6. With respect to patterns of syncretism, Abar distinguishes all three nasal classes in this paradigm while, for the preverbal pronouns in Table 9, it shows only a two-way distinction. Similarly, Missong collapses the distinction between Classes 18a and 6a for the distal demonstrative, even though it is present for the preverbal pronouns. Finally, Abar and Biya show an *n*, rather than *m*, as the nasal for their Class 6a forms (which is reminiscent of the *n* found in the preverbal pronoun of Munken in Table 9, except, in that case, the *n* is associated with Class 6). This is likely connected to the fact that the Class 6a prefixes in Abar and Biya have shape *VC-*, where their one nasal would be expected to assimilate to the following stem-initial consonant.

Further concord paradigms for Mungbam can be found in Lovegren (2013), but the key patterns have been illustrated by the data presented here. In addition to points already mentioned above (such as the lack of nasals in Class 6 in Biya and Missong), additional aspects to note about these noun class systems are: (i) On the whole, they show comparable tone patterns to what is found for Western Grassfields Bantu, especially when compared to Narrow Bantu. In particular, Classes 1 and 9 are associated with lower tones than the other classes—a pattern not found in Narrow Bantu but which is found in Western Grassfields (Hyman 1981: 184). (ii) To the extent that there is a pattern, nasals are more typical of concords than they are of noun prefixes (see, e.g., Munken Class 6 in Table 6), which runs counter to the pattern seen in Grassfields Bantu where nasals are more typical of prefixes than concords (Hyman 1981: 185). And, (iii) Classes 6 and 6a are generally not merged, though they come close to merging in Abar and, perhaps, Ngun, the dialect for which the least data is available.[2]

The third point is especially interesting from a comparative perspective since, as Hyman (1980: 183) points out, "with only few exceptions, languages which have acquired nasals do not distinguish between [Classes] 6 and 6a". That is, they show the same pattern of merger found in Proto-Bantu. Mungbam, by contrast, shows that nasals can develop in Class 6 through a process not resulting in merger with Class 6a. Munken shows this especially clearly, as seen in Table 9.

The complexity of the distribution of nasal classes in Mungbam must be considered alongside other evidence that suggests that the divergence resulting in Mungbam's contemporary dialects has taken place only in the last few centuries or so (Di Carlo 2011: 93–94). Given this, it seems clear that we cannot view

[2] Another noteworthy feature of nasal classes in Mungbam is the presence of the "doubly" nasal Class 18 prefix *m͡N-* in Abar, Biya, and Ngun. We assume that this is the result of a relatively shallow sound change along the lines of **mu-* > **mə̃-* > *m͡N-* (cf. Class 18a *muN-* in Noni (Hyman 1981: 11) where a similar change seems to have taken place from a reconstructed form of **mu-*).

developments involving nasal classes as a rare historical event of the sort that would be able to establish the validity of a comparatively old subgroup such as Bantu. (See also Watters (1981: 133) for comparable data from the relatively shallow Ekoid group of Bantoid.) We will return to this issue in Section 4.

3. The nasal classes of Naki

Naki is a language of the Beboid subgroup of Bantoid spoken in the same general region as Mungbam (Good et al. 2001: 151–157). The data on Naki provided here is drawn from the fieldwork of the first author, building on earlier work of Hombert (1980). The Naki noun class system is schematized in Table 11, following the conventions seen for Mungbam in Section 2. The symbol *y* is used for a palatal glide, unlike in the Mungbam data, and *j* represents an affricate. Other aspects of the transcription conventions are described in Good et al. (2011: 111).

NAKI					
1	Ø-	w`-	2	bu-	b´-
3	Ø-/$^{w-}$	w´-	6	-ŋ/Ø	n´-
7	a-	k´-	8	bi-	b´-
9	`-	y`-	10	´-	y´-
19	fi-	fy´-	18a	m-	m´-
6a	m-	m´-			
14	u-	w´-			

Table 11: The noun class system of Naki

Class numbering in Table 11 relates Naki noun classes to Proto-Bantu noun classes, though the Gender 3/6 assignment is complicated and will be considered below. (See Section 2 for discussion of Class 18a.) Noun class prefix tones in Naki can vary depending on the stem they attach to (Hombert 1980: 94), which is why they are not indicated with tones in the table. Gender 9/10 is coded purely via tone on the noun stem, where the singular form has a lower tone and the plural a higher tone, with the precise details depending on the stem itself (Hombert 1980: 91).

Gender 3/6 is coded partly via a consonant mutation in some nouns where the singular is associated with a consonant, typically involving a labial articulation, that is not labial in the plural (see Kießling (2010) for relevant discussion in Naki's areal context). This pattern is indicated with the superscript *w* for Class 3. As can be seen, Class 6 is a nasal class in Naki, where a suffix with shape *-ŋ* is used to code the plural of some nouns and the concord is associated with an *n*. Examples of Gender 3/6 nouns illustrating these patterns are presented in Table 14.

The other nasal classes in Naki are Classes 6a and 18a, giving it comparable nasal class patterns to what was seen for Mungbam in Section 2, though Class 6a

and Class 18a are not formally distinguished in Naki. Words in both classes sometimes end in a nasal consonant that may be part of a secondary encoding of their class (see, e.g., the word for 'smoke' in Table 12). While Class 14 is generally associated with mass nouns, some Class 14 nouns have plurals in Class 18a (e.g., *ūnə̄* 'fufu'/*mnām* 'balls of fufu'). Like Mungbam, Naki shows tone patterns in its noun class system similar to those seen in Western Grassfields (see Section 2).

Table 12 provides example nouns across each of the Naki noun classes. The Gender 3/6 noun in the table shows no prefixal encoding in the singular.

SINGULAR		PLURAL		GLOSS
1	ŋkūŋ	2	būŋkūŋ	'chief'
3	fú	6	fúŋ	'head'
7	ànyɛ̄nə̄	8	bìnyɛ̄nə̄	'bird'
9	shè	10	shé	'fowl'
19	fīnzún	18a	mzún	'star'
6a	mnyə̀ŋ			'smoke'
14	ūnə̄			'fufu'

Table 12: Examples of Naki nouns

The most interesting aspect of the Naki nasal classes is the pattern found in what is here labelled Class 6. In speculating on the historical origins of this class, we must be careful to justify its identification with Class 6 in Proto-Bantu. In fact, it seems most likely that Gender 3/6 has a hybrid origin as a merger of Proto-Bantu Genders 3/4 and 5/6 (see also Hombert (1980: 87)).

The Class 3 label is used for the singular part of the pairing since this is more consistent with the *w* segmental shape of the concord. The choice between Class 4 and 6 for the plurals is less straightforward. We would risk circularity if we assigned these plurals to Class 6 simply on the basis of the presence of a nasal given that the goal in the present context is to understand the origins of these classes. Class 6 has been chosen here due to the way this class is realized in certain concordant forms, such as the pronouns given in Table 13.

SINGULAR		PLURAL	
1	lù	2	bú
3	wí	6	nú
7	kí	8	bí
9	yì	10	yí
19	fī	18a	mú
6a	mú		
14	wí		

Table 13: Postverbal pronouns in Naki

As seen in Table 13, some classes are associated with a front vowel in their concords, while others are associated with a back vowel. Proto-Bantu noun class prefixes are themselves associated with different vowels (see Table 1).[3] Proto-Bantu Classes 2 and 6, in particular, are associated with *a*. If the relevant Naki class is cognate with Proto-Bantu Class 6, this could explain why it has the same vowel in its concords as seen for Class 2. By contrast, if Naki Class 6 were associated with Proto-Bantu Class 4, one would expect a different vowel in the concord given that Proto-Bantu Class 4 is based on an *i* vowel and all other Proto-Bantu classes with this vowel appear in Naki with a front unrounded vowel in their concords.[4]

Table 14 offers further examples of Naki Gender 3/6 nouns, including possible cognate forms with Proto-Bantu and their reconstructed noun classes. In two cases, Noni [nhu] cognates are given (Hyman 1981).[5] The variable patterns of plural formation in this class in Naki, and associated Proto-Bantu reconstructions, point to its historically hybrid nature as an apparent merger of Genders 3/4 and 5/6.

CLASS 3	CLASS 6	GLOSS	PROTO-BANTU
fō	fōŋ	'axe'	
gí	gəŋ	'egg'	< *gí (5/6)
gú	gúŋ	'spear'	< *gòŋgá (5/6) (cf. Noni *gɔ́ɔ̄*/*ɛ̄gɔ́ŋ*)
jū	jūŋ	'nose'	< *júdù (3/4, 5/6)
lī	lāŋ	'tongue'	< *dímì (11/10)
wəní	wəŋní	'tail'	
díd	dəŋ	'whisker'	< *dèdù 'beard' (7/8, 9/10, 11/10)
dāŋ	dāŋ	'pumpkin'	< *dèŋgè (5/6) (cf. Noni *lɛ̄ɛ̀*/*ɛ̄lɛ̄ŋ*)
bɔ́d	bɔ́d	'fire/gun'	
sɔ́ŋ	sɔ́ŋ	'flute'	
yəd	yəd	'eye'	< *jícò (5/6)
fìmfì	fìmfì	'quill'	
bwɛ̀	bɛ̀	'foot'	
kpə̀	kà	'palm (of hand)'	
mgbáŋ	ŋgáŋ	'root'	< *gàŋgà (1/2, 9/10) 'medicine man'
nyō	nāŋ	'bamboo'	

Table 14: Gender 3/6 nouns in Naki, with Proto-Bantu and Noni cognates

[3] DeWolf (1971: 50–59) gives comparable reconstructions for the vowels of the noun classes of Proto–Benue-Congo.

[4] There are complications, however, and a number of the Proto-Bantu and Naki associations must be considered tentative. For instance, the appearance of *i* as the vowel in the Class 3 and 14 forms is unexpected. Class 3 and Class 14 have collapsed in the concord system, and perhaps the *i* represents a relic of a merger of Class 3 and 5 with a subsequent merger of Class 3 and 14.

[5] The reconstructions given in Table 14 are drawn from Bastin et al. (2002).

The data in Table 14 is separated into three groups. The first contains nouns that code Class 6 with a suffixal *-ŋ* (including the irregular, and apparently bipartite, noun 'tail'). Most of these nouns consist of a single open syllable (see Hombert (1980: 90) for further examples). The second group shows no formal distinction between the singular and plural on the noun itself. The third group codes the singular/plural distinction via the consonant mutation discussed above, which most typically involves a labialized/non-labialized alternation in the stem-initial consonant. (The plural form for 'bamboo' exhibits both a consonant mutation and a nasal suffix.) This group of Gender 3/6 nouns does not appear to be particularly large, but is especially indicative of a historical connection to Class 3.

An examination of the data in Table 14 makes clear the complex origins of Naki Gender 3/6. On the one hand, there are words like 'spear', where the coda nasal in the plural appears to represent a historical retention, while, on the other hand, in a word like 'egg' the presence of this nasal is almost certainly historically innovative. At the same time, words like 'pumpkin' and 'root' provide a potential historical source for a nasal-coded plural, along the lines of what is seen for 'spear', but, instead, this nasal is retained in both the singular and the plural.

The most likely account for the rise of the nasal suffixes on some Gender 3/6 nouns is that they result from a generalization of a minor pattern that arose due to sound change (see Hombert (1980: 90)). In this respect, it is likely significant that nouns connected to this class in other Beboid languages show various irregularities, including the formation of plurals via deletion of material found in the singular, and, in Noni, a pattern where there is a vowel suffix in the singular and a prefix in the plural of Gender 5/6 words, as seen in, for example, *ɨów-ɐ/ɛ-ɨów* 'bean' (Hombert 1980: 88–90). (Unlike Naki, Noni retains a clear distinction between Classes 3 and 5.) If the Noni pattern were once present in other Beboid languages, it may have triggered lenition at the end of Class 5 words, but not their Class 6 counterparts, due to the presence of word-final *VCV* sequences. The result would be irregularities that could serve as the basis for analogical extension.

To illustrate this proposal more concretely, in (1) and (2) we outline a possible set of changes to two roots given in Table 14, 'pumpkin' and 'spear', for Noni and Naki respectively (see also Hombert (1980: 94, 1981: 56)). These scenarios assume an initial change involving stem reduction connected to broader historical trends in non-Bantu Bantoid languages (see Good (2012)). A subsequent stage of lenition is connected to the reconstructed presence of a vocalic Class 5 suffix on these forms in both languages. (Class 5 would then merge with Class 3 at a later stage of Naki.)

(1) Historical development of 'pumpkin' in Noni

Singular (Class 5)	*í-dèŋgè > *í-dèŋ > *dèŋ-ē > lēè
Plural (Class 6)	*á-dèŋgè > *á-dèŋ > ɛ̄lɛ̄ŋ

(2) Historical development of ‘spear’ in Naki

Singular (Class 5): *í-gòŋgá > *í-gòŋ > *í-gòŋē > gú
Plural (Class 6): *á-gòŋgá > *á-gòŋ > gúŋ

In Noni, only three forms are known to show an alternation comparable to what is found in the Naki Class 6 nouns exemplified in the first part of Table 14 (Hyman 1981: 9).[6] As seen, the word for ‘spear’ is associated with a nasal suffix in the plural in both Naki and Noni, and this strongly suggests that words with irregular, truncated singulars like ‘spear’ ultimately gave rise to more generalized nasal marking of Class 6 in Naki.

While this scenario can account for the presence of nasal suffixes on Class 6 nouns, there is still the question of the initial *n* in the concord forms. Any attempt to explain this pattern must, at this stage, be considered more speculative, and here we expand on a proposal first made by Hombert (1980: 94). Specifically, comparative evidence within Beboid suggests that this nasal may have arisen as the result of transfer of nasalization from a nasal-final Class 6 noun to a following concord element. We sketch out the possible steps of such a change in (3), using the Naki root for ‘tongue’ as an example (see Table 14). This scenario invokes a similar process of truncation for the noun root as that depicted in (2) and (3), and is exemplified with the distal demonstrative as the concord element. For purposes of comparison, Table 15 provides the full class paradigm for distal demonstratives in Naki, which, except for Class 1, show a very similar pattern to the pronouns given in Table 14, but with mid, rather than high, vowels.

(3) Historical development of nasal concord in Class 6 in Naki

*í-dímì Cá > *í-dīm Cá > *dīm ná > lə̄ŋ nó

SINGULAR		PLURAL	
1	wè	2	bó
3	wé	6	nó
7	ké	8	byé
9	yè	10	yé
19	fyé	18a	mó
6a	mó		
14	wé		

Table 15: Distal demonstratives in Naki

The scenario in (3) assumes that, at some historical stage, the Class 6 concord in Naki was consonantal, but not nasal. Comparative evidence for this assumption

[6] In addition to ‘spear’ and ‘pumpkin’, as seen in Table 14, the third of these is *gíí/ɛgíŋ* ‘rice, guinea corn’. We are not aware of a Proto-Bantu cognate for this word.

comes from the fact that other Beboid languages show a consonant in at least part of their concord series in Class 6. For instance, in Noni and Sari (Akweto) [asj], Class 6 is associated with a *y* in some forms (Hombert 1980: 88, Hyman 1981: 33), and in Nchane [ncr] it is associated with a *k*. In Naami (Bebe) [bzv], it shows a nasal concord, like Naki, but with an *ŋ* rather than an *n*. In nearby Proto–Western Grassfields, Hyman (1980: 182) reconstructs Class 6 concord with a **g*. These patterns point to a Beboid reconstruction along the lines of **g*,**y*, **w*, or **y* with the *ŋ* of Naami perhaps representing an intermediate stage of Naki.

An important aspect of this interpretation of the rise of the nasal concord in Class 6 in Naki is the lack of a link between its development and the nasal in Class 6a. Instead, the crucial linguistic features are (i) the presence of stem-final nasals as the result of patterns of sound change which shortened stems but allowed nasals to be retained in coda position (Hombert 1980: 95) and (ii) the presence of a concord consonant that facilitated a process of transfer of nasality to a following concordant element. The generalization of nasal suffixes to a larger number of Class 6 nouns may have facilitated this process in Naki, assuming that change took place before the development of Class 6 nasal concords.

As discussed in Section 2, Hyman (1980: 183) emphasizes that in languages with a nasal Class 6 there is a strong tendency for it to merge with Class 6a. Given that this merger is not found for Mungbam or Naki and that the comparative Beboid picture points to a nasal origin for Class 6 disconnected from Class 6a, this suggests that pattern of merger of these classes seen in Proto-Bantu and other languages is, perhaps, better considered to be either coincidental or as the result of some analogical process distinct from the initial development of a nasal Class 6.

Before moving on, it is worth remarking on various other features of the Naki noun class system, as well as those of Beboid. First, Table 11 leaves out the fact that, like Mungbam (see Table 2), Naki also shows a number of Gender 1/2 nouns with an initial nasal (e.g., *nsɔ̄g*/*būnsɔ̄g* 'cup'), as well as a number of Gender 9/10 forms with this pattern (e.g., *ŋgə̄*/*ŋgə̄* 'garden egg'). The origins of these nasals and their possible implications for understanding the rise of nasal classes are not yet known. Moreover, it is clear that Beboid languages, in general, require more detailed investigation with respect to their nasal classes. A particularly striking development is a nasal Class 1 concord in Naami of shape *ŋg*^{w} *-*, where no prefix is found on Class 1 nouns (Hombert 1980: 88). This is another case, in addition to what was presented in Section 2, where languages at the northern edge of the Grassfields area show a reverse of the typical Grassfields pattern where nasals are more typical of noun prefixes than concords (Hyman 1980: 185), and it is also the only one that we are aware of involving Class 1.

4. Modelling the "mosaic" pattern of nasal classes

The data discussed here underscores the conclusions of Hyman (1980) and Miehe (1991) that a simplistic account of the nasal classes in Bantu which treats them as a unique Proto-Bantu innovation is almost certainly untenable. Even within the noun class systems of dialects of a single language, as seen for Mungbam in Section 2, there can be significant differences with respect to the presence of nasal classes. This suggests that their value for defining a large and old subgroup like Bantu is, at best, quite weak. Moreover, the examination of Naki in Section 3, as well as the comparative evidence within Beboid, indicates that the grammars of Benue-Congo languages contain features facilitating the development of nasal classes in general. In particular, the frequent appearance of concordant elements beginning with vowels or relatively weak consonants immediately following nouns may have provided an important bridge context for the development of nasal classes (see (3)).

The two cases discussed here also emphasize the diversity of possible outcomes in the development of nasal classes. Two points stand out in particular. The first of these is the fact that, unlike Grassfields Bantu and Proto-Bantu (Meeussen 1967: 97), Mungbam and Naki nasal classes are more robust in the concord system than the prefix system, which indicates that there is no strict implicational relationship between the two. In addition, in both Naki and the Munken variety of Mungbam, we see the development of a nasal Class 6 with *n*, rather than *m*. This indicates that the development of a nasal in this class need not be connected to a specific nasal consonant and also underscores the fact that a nasal Class 6 need not be associated with a merger with Class 6a.

More broadly, the picture painted by Mungbam and Beboid is one where the development of nasal classes should not be viewed as resulting from a single innovation, or even set of related innovations, within one branch of Niger-Congo. Rather, the more "mosaic" like distribution of nasal classes across the family seemingly requires the development of models that can account for the observed "spiral" patterns of change (Heine & Reh 1984: 68–71) in ways that relate the rise and fall of nasal elements to general features of Benue-Congo noun class systems. Making the development of these models more complex is the apparent stability of nasal classes in narrow Bantu. The fact that nasal classes can show such significant variation in a small group like Beboid—and even within a single language, as is the case with Mungbam—makes the apparent consistency of nasal classes within Bantu itself puzzling in its own right.

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