

NOUN CLASSES IN THE GRASSFIELDS BANTU BORDERLAND

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PREFACE

The present volume, *NOUN CLASSES IN THE GRASSFIELDS BANTU BORDERLAND*, assembles ten studies on the noun class systems of a variety of Grassfields and near-Grassfields Bantu languages and their relatives. Except for the first paper, these studies were carried out as part of a multinational effort by the Grassfields Bantu Working Group to document the linguistics of the North West and South West provinces of Cameroon. The present study goes slightly beyond this aim in including work on Tuki (a Bantu zone A language) and Amo (a Plateau language). The results vary in their definitiveness. Several of the analyses are based on years of field work on individual languages (e.g. Anderson's Bamileke paper and Watters' Ejagam paper). At the opposite extreme, my own paper on Tuki is based on three hours informant work with one speaker. These results will, we hope, provide a useful contribution to the linguistics to this area and to linguists desiring information on these still understudied languages.

The first eight articles can be seen as arranged in pairs of two, representing relative distance from hypothetical Narrow Bantu. Thus, the first two deal with two zone A languages, Bakossi (A.15) and Tuki (A.64). Robert Hedinger's paper "The noun classes of Akóssé (Bakossi)" presents a complete outline of class concord in that language, which can be noted for its almost complete adherence to the Narrow Bantu model. My own contribution, "Esquisse des classes nominales en tuki" clearly establishes that language as belonging to Narrow Bantu, but documents significant divergences in classes 4 and 6/6a, as well as in the plural of class 19.

The second two articles treat aspects of two Eastern Grassfields Bantu languages. The first, Stephen C. Anderson's "The noun classes of Ngyemboon-Bamileke", describes a Western Bamileke dialect closely related to Dschang, and provides a detailed account of the consonant, vowel and tonal concords. The second article, Jan Voorhoeve's "Noun classes in Adere", provides the first documentation of a virtually unknown language of the northern branch of Eastern Grassfields. Although surrounded by related languages having lost almost all traces of noun classes, Adere provides a remarkably conservative system and, thus, valuable information on what the Proto Grassfields Bantu noun class system was like.

The following two articles address languages which are the closest relatives to Grassfields Bantu. Marie Anne Boum's "Le groupe menchum: morphologie nominale" provides a comparative study of eight Menchum languages and reveals systems of considerable complexity. Jean-Marie Hombert's "Noun classes of the Beboïd languages" is also comparative and like Boum's article, also provides noun class information on languages previously unstudied. Both groups provide interesting noun class anomalies, including the same mu-plural of class 19 noted in Tuki.

This same noun class finds traces in the languages treated in the following two chapters. These languages share important noun class features with Grassfields Bantu, but are not as closely related as the Menchum and Beboïd languages. John R. Watters' article "The Ejagam noun class system: Ekoid Bantu revisited" is important both for its in depth account of this Ekoid language, as well as for its contribution to comparative Ekoid and Proto Wide Bantu. Kenneth L. Stallcup's article "Noun classes in Esimbi" describes a very Benue-Congo-like system in what remains an isolate in the linguistic sub-

classification of the area. (It is regretted that we were not able to include more studies on the languages of the South West province, on which Erhard Voeltz is expected to report.)

The article by Stephen C. Anderson entitled "The noun class system of Amo" was written two years ago for a Field Methods course at the University of Southern California, but is included here since the relationship between the Plateau languages and Wider Bantu will ultimately have to be accounted for. The system developed in this paper is in many respects very Bantoid-like. In fact, Anderson uses the same numbers as are used to refer to the noun classes in Bantu.

Finally, my article "Reflections on the nasal classes in Bantu" is alas! more an apology than a solution to this most perplexing noun class phenomenon on all of our minds. The introduction of nasals into the Bantu noun class system--including Eastern, but not Western Grassfields Bantu--continues to be a mystery, and in this paper I simply attempt to sort out the data and weigh alternative explanations. I hope this "reflective" paper will be of use in the on-going search for a nasal source.

Each of the ten articles individually acknowledges support of different agencies and persons who have made these studies possible. On behalf of the entire Grassfields Bantu Working Group, I would like to acknowledge with thanks the financial support of National Science Foundation grant no. BNS76-81261, which has at one time or another facilitated the research efforts of all but one of our ten authors. The lone exception is Robert Hedinger of the Summer Institute of Linguistics, Yaounde, whom I thank for allowing us to include his paper with our own. Finally, I would like to thank my colleagues at the University of Southern California for allowing me to reflect on nasals and especially Ms. Nonie Reed, who typed the bulk of this volume.

THE NOUN CLASSES OF AKÓŪSĒ (BAKOSSI)

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0. INTRODUCTION

The purpose of this paper¹ is to describe the Noun Class system of AkóŪsĒ² using the commonly adopted system for labelling noun classes in Bantu languages.

In section I, reference is made to Dorsch (1910/11) and Richardson (1957), who have previously described the AkóŪsĒ noun classes³.

1. THE NOUN CLASSES

AkóŪsĒ has been analysed as having fifteen noun classes, including the infinitive (class A) and the locative (class B) (see below). In Table 1 the noun prefixes and concordial morphemes for each class (except A and B) are presented. This table gives evidence of the fact that each class is contrastive.

Table 1

The Noun Prefixes and Concordial Morphemes

Noun Class	Noun Prefixes	1	2	3	4	5	6	7	8
1	N-, m-, mw-, w- } ∅-	aw-	an-	n [!]	mw-	m-	n-	a-	a-
1a									
2	be-, b-	áb-	áb-	b-	b-	b-	be-	bé-	bé-
3	N-, mpw-, mw-, m-	ám-	ám-	m-	m-	m-	N-	ám-	mé-
4	N-, {mpy-}, {my-}, m- {mpw-} {mw-}	ám-	ám-	m-	m-	m-	N-	ám-	mé-
5	a-, d-, dy-	ád-	ád-	d-	d-	d-	a-	ád-	dé-
6	me-, m-, my-	ám-	ám-	m-	m-	m-	me-	mé-	mé-
7	e-, cw-, cy-, c-	éc-	éc-	c-	c-	c-	e-	éc-	éc-
8	e'-, b-, by-	áb-	áb-	b-	b-	b-	e'-	éc'-	bé-

Table 1 (continued)

Noun Class	Noun Prefixes	1	2	3	4	5	6	7	8
9	∅-, n-, N-	ec-	en-	n ¹	c-	c-	∅-	e-	e-
10	∅-, n-, N-	éc-	éc-	c-	c-	c-	e-	é-	é-
13	l-	ád-	ád-	d-	d-	d-	a-	á-	dé-
14	e'-, bw-, b-	áb-	áb-	b-	b-	b-	e'-	é'-	bé-
19	hy-, h-	áb-	áb-	b-	b-	b-	e'-	é'-	bé-

The numbers above each column refer to the following:

- 1: Prefix of the possessive pronoun, relative pronoun and demonstrative pronoun C (cf. below).⁴
- 2: Prefix of demonstrative pronouns A.
- 3: Prefix of demonstrative pronouns B.⁴
- 4: Prefix of the stem /-ən/ '...self' and of the emphatic demonstrative pronoun.
- 5: Prefix of the subject and object pronoun.
- 6: The numeral prefix.
- 7: Verb prefix I and associative marker (AM) I.
- 8: Verb prefix II and AM II.

The following criteria have been used to establish the individual noun classes as contrastive:

- 1) the occurrence of the nouns with a specific set of concording elements,
- 2) the noun prefixes,
- 3) the pairing of a certain class with another class as singular and plural. This criterion can of course not be applied when the singular/plural dichotomy is irrelevant (i.e. for mass and abstract nouns, etc.).

Having established these thirteen different classes (excluding classes A and B), it must be pointed out that some of the contrasts are very weak and may, in fact be disappearing.

1.1 *The contrast between classes 3 and 4:* The following facts indicate the weakness of the contrast between classes 3 and 4:

- a) the concordial morphemes of the two classes are identical.
- b) the majority of the nouns in both classes have a homorganic nasal as their class prefix.
- c) some speakers do not maintain the contrast exhibited by the very few nouns listed below that do have a distinctive class 3 and class 4 prefix: they use the class 3 prefix for both the singular and the plural of these nouns.

Ex.:	/mw-εsú/	(3)	'fork'	/my-εsú/	(4)	or	/mw-εsú/	'forks'
	/mw-ě/	(3)	'year'	/my-ě/	(4)	or	/mw-ě/	'years'
	/mw-εd/	(3)	'prong'	/my-εd/	(4)	or	/mw-εd/	'prongs'
	/mw-ên/	(3)	'broom'	/my-ên/	(4)	or	/mw-ên/	'brooms'
	/mpw-εd/	(3)	'nostril'	/mpy-εd/	(4)	or	/mpw-εd/	'nostrils'
	/mpw-εn/	(3)	'pincer'	/mpy-εn/	(4)	or	/mpw-εn/	'pincers'

A problem then arises when establishing the class membership of nouns belonging to a single class gender. In the absence of a distinctively class 3 or class 4 prefix, should they be assigned to class 3 or class 4?

Also, the class membership of count nouns can only be known if they co-occur with qualifiers which give an indication of singular and plural, such as the numerals.

1.2. *The contrast between classes 8 and 14:* The case of classes 8 and 14 is very similar. The concord sets are identical. Nouns of both classes have the noun prefix /e'-/ and the only contrast is carried by the noun prefixes /by-/ (class 8) and /bw-/ (class 14) in a very few words.

For the nouns which pair with another class, there is no problem in establishing their class membership: nouns with plural meanings which pair with class 7 (singular) are assigned to class 8. Nouns with a singular meaning which pair with class 6 (plural) are assigned to class 14.

The problem remains as to whether non-count nouns with the prefix /e'-/ and /b-/ should be assigned to class 8 or 14. It has been decided to assign these nouns to class 14.

<i>Ec.:</i>	/e'-bʔ:/	'knowledge'	(14)
	/e'-wú:/	'hardness'	(14)
	/e'-lóngé/	'fortune telling'	(14)
	/b-ðŋ/	'brain'	(14)
	/b-ɔmbé/	'sugar'	(14)
	/b-ŋn/ ⁵	'day'	(14)

Some other classes have identical sets of concord elements but there is no question as to the class membership of these nouns because of their distinctive noun prefixes. (cf. class 5 vs. class 13, class 7 vs. class 10, and class 19 vs. classes 8 and 14.)

The question can be asked whether the contrasts between classes 3 and 4 and that between classes 8 and 14 are disappearing, or whether they have already collapsed with some speakers. It is significant that Dorsch (1910) reported a clear contrast in the concord set between the two pairs of classes. From Table 1 (above) and Table 2 (overleaf), it is obvious that the major distinguishing features of these classes have disappeared over the last 70-80 years.

Compare the following extract from Dorsch (1910/11:248-9) rewritten with the symbols used in this paper.

Table 2
The Noun Prefixes and the Concordial Morphemes
Extracted from Dorsch's Grammatik

Noun Class	Noun prefixes (Dorsch's class numbering)	1	2	4	5	6	7	8
3	mw-, n- (4a and b sg.)	mw- ⁶	mw- ⁶	mw-	m-	n-	n-	mwé-
4	my-, n- (4a and b pl.)	m- ⁶	m- ⁶	mw- ⁷	m-	n-	(n-)	me-
6	m-, me- (3a and b pl. 5a and b pl. 6b pl.)	m-/am-?	m-	m-/mw- ⁷	m-	me-	me-	me(:)-
8	e'- (6a pl.)	ab-	ab-	b-	b-	e'-	e-	be-
14	bw-, e'- (5a and b sg.)	abw-	abw-	bw-	b-	e'-	a-	bwé-

Richardson, in his 'Linguistic Survey of the Northern Bantu Borderland' (1957:21) observed that there was no clear contrast between classes 3 and 4. He wrote,

"It would appear that in the variety of kooṣe investigated by Dorsch in 1910, a 3/4 gender existed. This took the shape of mu-/mī- in vowel junction and n-/n- with consonant stems. It is not clear whether this was the same dialect as that examined by us, or whether our failure to find such a gender was due to its having disappeared over the years. A third alternative is that by chance our questionnaire did not include any 3/4 gender words owing to their eccentric distribution in kooṣe. Dorsch's 3/4 gender must, however, be treated as suspect since he states that only in the singular has it a distinctive agreement, the plural agreement being identical with that of Class 6."

Several comments can be made: 1) from our own study of akōṣṣe it is clear that Richardson investigated a different dialect from Dorsch; 2) a comparison of Tables 1 and 2 above has shown that a very important feature distinguishing classes 3 and 4 has disappeared in the dialect studied by Dorsch, apparently that spoken in the Nyasoso area; 3) it is quite possible that Richardson did not record any of the nouns having distinctive class 3 and 4 prefixes because there are so few of them; 4) Richardson represents Dorsch as saying that the plural agreement (i.e. the class 4 concord) is identical with that of class 6 but the extract from Dorsch in Table 2 shows that he recorded a contrast between classes 4 and 6 at least in the numeral prefix (6) and a certain verb prefix (7).

2. THE NOUN PREFIXES

In this section, each class will be taken in turn and the noun prefix with its allomorphs and their distribution will be given. In each class the allomorph with the widest distribution has been chosen as the basic allomorph. It can be

noted that in most classes a non-basic allomorph corresponds with the Proto-Bantu form listed.

Class 1 (PB: *mo-)⁸

{N-} (/m-/ ~ /mw-/ ~ /w-/) ~ /N-/ 'class 1 noun prefix'
 /m-/, /mw-/ and /w-/ precede vowel initial stems:
 /m-/ precedes /-od/ 'person' and related stems,
 /mw-/ precedes /-án/ 'child', /-ǎ/ 'small' and related stems,
 /w-/ precedes /-ǎ:d/ 'my friend', /-ǎ:n/ 'your friend', and
 /-ǎ:b/ 'his friend'.⁹
 /N-/ occurs elsewhere.

Examples of /N-/¹⁰:
 /N-tâŋ/ 'slave'
 /N-ken/ 'guest, stranger'
 /N-jóm/ 'male, husband'
 /N-hon/ 'rich man'

A common derivation is the addition of the /N-/ prefix to the verb root to give the person who performs the action, as in

/N-wú:/ 'killer'
 /N-ced/ 'baby nurse'
 /N-jîb/ 'thief'
 /N-wan/ 'fighter'

Class 1a (PB: *ø-)

/ø-/ 'class 1a noun prefix'

Examples: /ø-bobé/ '(rope)',¹¹ /ø-mbɛlé/ 'cat'
 /ø-awalɛ:/ 'flu epidemic' /ø-ndumɛ:/ '(bark)'
 /ø-ékwé:/ 'clockbird' /ø-nso:soŋ/ 'spear grass'

Proper names are also considered part of class 1a:

Examples: /ø-sóne:/ 'Sone' /ø-nzɛlé:/ 'Njelle'
 /ø-élon/ 'Elong' /ø-mecane/ 'Mechane'

There is an interesting feature characterizing nouns in this class. Almost without exception, nouns with final /ɛ(:)/ (in non-nuclear syllable) belong to class 1a.

Examples: /ø-etombe:/ '(plum)' /ø-bó|é:/ '(dance)'
 /ø-apúne:/ 'cattle' /ø-kókó|ɛ:/ '(small cocoyam)'
 /ø-ŋhe:tɛ:/ '(bird)'

Class 2 (PB: *βa-)

{be-} /b-/ ~ /be-/ 'class 2 noun prefix'
 /b-/ precedes vowel initial stems of class 1,
 /be-/ occurs elsewhere.

Examples: /b-ad/ 'persons' */be-awaɛ:/ > /bewaɛ:/ 'flu epidemic'
 /b-ǎn/ 'children' */be-ék'wé:/ > /bék'wé:/ 'clockbirds'
 /b-ǎ/ 'small' /be-mbeɓé/ 'cats'
 /b-ǎ:d/ 'my friends' /be-ndume:/ '(barks)'
 /be-bóbé/ '(ropes)' /be-nso:soŋ/ 'spear grasses'

There is one noun with an irregular singular/plural pattern:
 /mmw-ǎ:d/, /beb-ǎ:d/ 'woman, women'. Two explanations for the irregular
 /mmw-/ and /beb-/ prefixes seem possible:

- 1) to consider each as an additional allomorph of the respective classes, or
- 2) to consider each as consisting of a repetition of the class prefix:
 /m-mw-/ (class 1) and /be-b-/ (class 2).

Class 3 (PB: *mo-)

{N-} (/mpw-/ ~ /mw-/) ~ /m-/ ~ /N-/ 'class 3 noun prefix'
 /mpw-/ precedes /-ɛd/ 'nostril' and /-ɛn/ 'pincer',
 /mw-/ precedes other stems with initial /ɛ/ or /a/,
 /m-/ precedes other vowel initial stems,
 /N-/¹² occurs elsewhere.

Examples: /mpw-ɛd/ 'nostril' /m-ǔ:/ 'fire'
 /mw-ǎ/ 'year' /N-si:/ 'file'
 /mw-ê:n/ 'broom' /N-dim/ 'corpse'
 /m-og/ 'soot'

Class 4 (PB: *me-)

{N-} (/mpy-/ ~ /my-/¹³ ~ /m-/ ~ /N-/ 'class 4 noun prefix'
 /mpw-/ /mw-/
 /mpy-/ precedes /-ɛd/ 'nostrils' and /-ɛn/ 'pincers',
 /mpw-/
 /my-/ precedes other stems with initial /ɛ/ and /a/,
 /mw-/
 /m-/¹⁴ precedes other vowel initial stems,
 /N-/¹⁵ occurs elsewhere.

Examples: /mpy-ɛn/ 'pincers' /m-ǔ: mé ŋká:lé/ 'matches'
 /my-ǎ/ 'years' /N-si:/ 'files'
 /my-ɛsú/ 'forks' /N-dim/ 'corpses'

Class 5 (PB: *|e-)

{a-} /d-/ ~ /dy-/ ~ /a-/ 'class 5 noun prefix'
 /d-/ precedes stems with initial high vowels,
 /dy-/ precedes other vowel initial stems,
 /a-/ occurs elsewhere.

Examples: /d-ŷd/ 'eye' /dy-ŏm/ 'parcel'
 /d-û/ 'nose' /a-ba:/ 'liver'
 /dy-ĕsid/ 'crab' /a-nag/ '(palm)'

Class 6 (PB: *ma-)

{me-} /m-/ ~ /my-/ ~ /me-/ 'class 6 noun prefix'
 /m-/ precedes stems with initial high vowels,
 /my-/ precedes other vowel initial stems,
 /me-/ occurs elsewhere.

Note: The rule given above for /my-/ and /m-/ represents the most conservative stage of development and is not true for all speakers and dialects, some of whom use the /m-/ prefix before all vowels.

Examples: /m-ŷd/ 'eyes' /me-ba:/ 'livers'
 /m-û/ 'noses' /me-nag/ '(palms)'
 /my-ĕsid/ or /m-ĕsid/ 'crabs'
 /my-ŏm/ or /m-ŏm/ 'parcels'

Class 7 (PB: *ke-)

{e-} (/cw-/ ~ /cy-/) ~ /c-/ ~ /e-/ 'class 7 noun prefix'
 /cw-/ precedes /-âi/ '(leaf, plant)',
 /cy-/ precedes /-ă:/ 'leaf',
 /c-/ precedes other vowel initial stems,
 /e-/ occurs elsewhere.

Examples: /cw-âi/ '(leaf, plant)' /c-ŏm/ 'thing'
 /cy-ă:/ 'leaf' /e-lém/ 'domestic animal'
 /c-ɔi/ 'boil, tumour' /e-pum/ 'fruit'

Class 8 (PB: *βi-)

{e'-} (/b-/ ~ /by-/) ~ /e'-/ 'class 8 noun prefix'
 /b-/ precedes /-ŏŋ/ 'hoe',
 /by-/ precedes other vowel initial stems,
 /e'-/ occurs elsewhere.

Examples:	/b-ǝŋ/	'hoes'	/e'-lém/	'domestic animals'
	/by-ém/ ¹⁶	'things'	/e'-pum/	'fruits'
	/by-ɔl/	'boils'	/e'-sɛ/	'toothsticks'

Class 9 (PB: *ne-)

{ǝ-}	/ŋ-/ ~ /n-/ ~ /ǝ-/	'class 9 noun prefix' ¹⁷
	/ŋ-/	precedes vowel initial stems,
	/n-/ ¹⁸	precedes stems with initial /b, d, g, and z/,
	/ǝ-/	occurs elsewhere.

Examples:	/ŋ-am/	'meat, animal'	/n-zi:/	'road'
	/ŋ-ɔl/	'wooden chisel'	/ǝ-kúb/	'hen, fowl'
	/n-bâg/	'plucking stick'	/ǝ-pá:/	'cutlass'
	/n-dáb/	'house'	/ǝ-yǎl/	'body'
	/n-gu:/	'pig'		

Class 10 (PB: *|i-ne-)

{ǝ-}	/ŋ-/ ~ /n-/ ~ /ǝ-/	'class 10 noun prefix' ¹⁹
	/ŋ-/	precedes vowel initial stems,
	/n-/ ¹⁸	precedes stems with initial /b, d, g, and z/,
	/ǝ-/	occurs elsewhere.

Examples:	/ŋ-am/	'animals'	/n-zi:/ ²⁰	'roads'
	/ŋ-ɔl/	'sawdust'	/ǝ-kúb/	'hens'
	/n-bód/	'goats'	/ǝ-pá:/	'cutlasses'
	/n-dáb/ ²⁰	'houses'	/ǝ-pól/	'(skin diseases)'
	/n-gu:/	'pigs'	/ǝ-yǎl/	'bodies'

Note that the class 9 and 10 noun prefixes are identical and the singular/plural distinction is signalled only by the concord elements. There is one noun which is an exception: /mbwé/ 'dog' has as plural /mbyé/, resembling somewhat the class 3 and 4 prefixes. However, /mbwé/ and /mbyé/ take the class 9 and 10 concord elements respectively.

Class 13 (PB: *to-)

	/l-/	'class 13 noun prefix'		
Examples:	/l-ɛn/	'mushrooms'	/l-ǝ/	'pangolins'
	/l-ŷ:/	'camwood (pl.)'	/l-ǝ:b/ ²¹	'hawks'
	/l-ǝn/	'firewood (pl.)'	/l-ɔ:b/ ²¹	'wild peppers'
	/l-ɔ:/	'laughter'		

Class 14 (PB: *βo-)

{e'-} /bw-/ ~ /b-/ ~ /e -/ 'class 14 noun prefix'
 /bw-/ precedes stems with initial /ε/ and /a/,
 /b-/ precedes other vowel initial stems,
 /e'-/ occurs elsewhere,

Examples: /bw-ε:/ 'tree' /e'-iám/ 'trap'
 /bw-a:/ 'trough' /e'-sé:/ 'duiker'
 /b-ŷn/22 'day' /e'-wε/ 'pain'
 /b-ombé/ 'sugar'

Class 19 (PB: *pi-)

{hy-} /h-/ ~ /hy-/ 'class 19 noun prefix'
 /h-/ precedes stems with initial /i/,
 /hy-/ occurs elsewhere.

Examples: /h-ŷ:/ 'camwood' /hy-ŝn/ 'firewood'
 /hy-ŝ/ 'pangolin' /hy-ŝ:b/ 'hawk'
 /hy-εn/ 'mushroom' /hy-ɔ:b/ 'wild pepper'

Note that this class and class 13 have not been recorded by Dorsch, probably due to the small number of nouns in these classes and the fact that their concurring elements are identical with those of classes 8 and 5 respectively.

The infinitive and the locative classes

Both these classes have an /a-/ prefix and take the class 5 concords.

The infinitive prefix (class 5) may be added to any verb root like other verbal prefixes. When this prefix is added, there are very clearly definable tone patterns. Of the forms given in Section 4, only the relative pronoun and the associative marker may occur with the infinitive.

The locative prefix (class B) may be added to any noun in addition to the respective class prefix. It always has the tone pattern H!. Of the forms given in Section 4, only /dén/ 'itself' may occur with the locative.

Forms with the infinitive and locative prefixes each have a very limited distribution in larger grammatical structures.

Class A (= class 5)

/a-/ 'infinitive prefix'

Examples: This prefix can be added to any verb root to form an infinitive or verbal noun.

/a-heb/ '(the) jumping' /a-pe:n/ '(the) bringing'
 /a-téd/ '(the) taking'

These verbal nouns occur in constructions such as given below, showing that they take the class 5 (= class 13) concord.

/a-héb á-dé á-hébé/
 'the-jump which he-jumped'
 'jumping up he

/a-téd á-dé á-tédé ehid é pam/
 'the-taking which he-took bone of animal'
 'taking the bone he

/a-kí: é-bwóg á-ke (A) dé (5) á-sóm (A) ngun .../
 'he-went outside to-go AM to-peck corn'
 'he went outside to peck up the corn'

/me-mbíd á-ke (A) dé (5) á-héd (A) mel./
 'I-went-out to-go AM to-look-for sticks'
 'I went out in search of sticks.'

/a-pém (A) á (5) lón/
 'the-carrying AM firewood'
 'The carrying of firewood ...'

/a-na: (A) dé (5) epin/
 'the sleeping AM sleeplessness'
 'He had a sleepless night.'

Class B

/á¹-/24 'locative marker'

Examples: This marker is always prefixed to the first word of a locative phrase, frequently a noun.

*/á ¹ -N-dáb/	>	/ándáb/	'in/at the house'
*/á ¹ -e-dífb/	>	/édífb/	'at/to the stream'
*/á ¹ -e'-lám/	>	/á ¹ lám/	'in the trap'
*/á ¹ -a-hín/	>	/áhín/	'to the bush'

Such locative constructions take the class 5 concord elements:

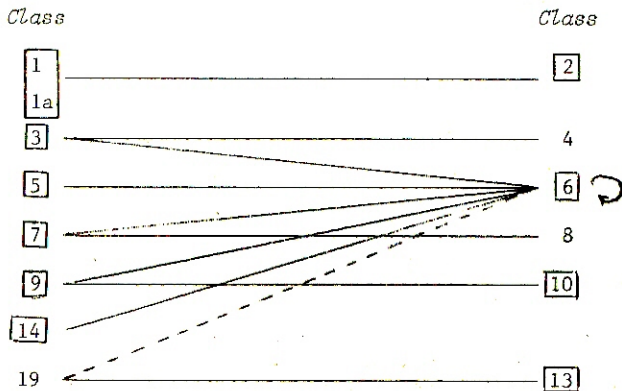
/N-dáb (9) cén (9)/	/ándáb (B) दें (5)/
'house itself'	'in the house itself'
/e-dífb (7) cén (7)/	/édífb (B) दें (5)/
'stream itself'	'at the stream itself'
/e'-lám (14) bèn (14)/	/á ¹ lám (B) दें (5)/
'trap itself'	'in the trap itself'
/a-hín (5) दें (5) /	/áhín (B) दें (5)/
'bush itself'	'in the bush itself'

Classes A and B will not be considered further in the following sections.

3. THE NOUN GENDERS

Nouns of the classes described in the previous section (except classes A and B) frequently pair as to singular and plural. This pairing is commonly referred to as "gender". Certain nouns "for which enumeration is irrelevant"²⁵ (e.g. mass and abstract nouns, etc.) are members of one class only.

Table 3
The Noun Genders²⁶



In the above table, double class genders are indicated by lines joining two class numbers. The numbers on the left refer to the singular nouns, those on the right to plural nouns, except in Gender 6/6 where the 6 refers to both singular and plural nouns. Class 6 is clearly seen to be the most widely used as plural: in fact, it is used with all singular classes except class 1.

Noun classes occurring as single class genders are marked by boxes.

In Table 4 below, figures are given to indicate the size of the various genders.

Table 4

The Relative Size of the Genders

Double class genders			Single class genders		
Gender	Number of nouns	%	Gender	Number of nouns	%
1(a)/2	167	11	1(a)	5	1
3/4	141	10	2	1	1
3/6	1	1	3	105	7
5/6	178	13	5	10	1
6/6	16	1	6/6	51	3
7/6	8	1	7	21	1

Table 4 (continued)

Double class genders			Single class genders		
Gender	Number of nouns	%	Gender	Number of nouns	%
7/8	297	21			
9/6	3	1	9	49	3
9/10	235	17	10	24	2
14/6	11	1	13	1	1
19/6	3	1	14	15	2
19/13	6	1			
<i>Total</i>	1,166	c.80%	<i>Total</i>	282	c.20%

The following are apparent from the above chart:

- 1) About 80% of the nouns in this sample are count nouns having a singular and plural.
- 2) The Genders 1/2, 3/4, 5/6, 7/8 and 9/10 are the most typical double class genders (72%).

The Semantics of the Noun Genders: In the past, the Bantu noun classes may have been based on a semantic classification of the nouns, but now it appears to be a purely arbitrary system where in no one class can nouns of only one semantic class be found.

There are still, however, some features worth noting as far as semantics and the noun classes in Akɔ̄sɔ̄sɔ̄ are concerned:

- a) Most nouns which have a human referent are in Gender 1(a)/2.
- b) Many liquids are found in Gender 6.
- c) Many paired body parts are in Gender 7/6.
- d) Abstract nouns formed from verb roots by adding the prefix /e' -/ are in Gender 8 (=14).
- e) Many animals are found in Gender 9/10.

3.1. *The Double Class Genders:*

Examples of each double class gender are presented below.

Gender 1(a)/2	{N-}	(∅-)	and	{be-}	
/m-od/		/b-ad/			'person(s)'
/m-o:poŋ/		/b-ǎ:poŋ/			'human being(s)'
/mw-ǎn/		/b-ǎn/			'child(ren)'
/mw-ǎpaŋ/		/b-ǎ:paŋ/			'sibling(s)'
/w-ǎ:b/		/b-ǎ:b/			'my friend(s)'
/w-ě:n/		/b-ě:n/			'your friend(s)'
/N-sɔ̄:bwog/		/be-sɔ̄:bwog/			'mortar carver(s)'
/N-lem/		/be-lem/			'wizard(s)'

Gender 1(a)/2 (continued)

/ø-awagte:/, */be-awagte:/	> /bewagte:/	'(plant(s))'
/ø-él'ě:/, */be-él'ě:/	> /b'ěl'ě:/	'(bird(s))'
/ø-nlage:/, /be-nlage:/		'large antelope(s)'
/ø-bobé/, /be-bobé/		'(rope(s))'

Gender 3/4 {N-} and {N-}

/mpw-ed/, /mpy-ed/	'nostril(s)'	or	/mpw-ed/	'nostrils'
/mpw-en/, /mpy-en/	'pincer(s)'	or	/mpw-en/	'pincers'
/mw-ě/, /my-ě/	'year(s)'	or	/mw-ě/	'years'
/mw-ed/, /my-ed/	'prong(s)'	or	/mw-ed/	'prongs'
/N-jág/, /N-jág/	'handle(s)'			
/N-bôŋ/, /N-bôŋ/	'central rafter(s)'			

Gender 3/6 {N-} and {me-}

Only one example has been found:

/N-woŋ/, /me-N-woŋ/	'joint(s)'
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Gender 5/6 {a-} and {me-}

/dy-ôŋ/, /m-ôŋ/	'parcel(s)'	or	/my-ôŋ/
/dy-ad/, /m-ad/	'village(s)'	or	/my-ad/
/dy-ěm/, /m-ěm/	'pregnancy, pregnancies'		
/d-û/, /m-û/	'nose(s)'		
/d-ŷn/, /m-ŷn/	'name(s)'		
but /d-usé/, /me-d-usé/	'rack(s) above fire'	or	/m-usé/
/dy-ené/, /me-dy-ené/	'mirror(s)'	or	/my-ené/
/a-nag/, /me-nag/	'(palm(s))'		
/a-ba:/, /me-ba:/	'liver(s)'		

Gender 6/6 {me-} and {me-}

/me-hâ:/, /me-hâ:/	'forked stick(s)'
/me-longé/, /me-longé/	'bucket(s)'
/m-ě/, /m-ě/	'junction(s)'
/m-ž:/, /m-ž:/	'headband(s)'

<i>Gender 7/6</i>	{e-}	and	{me-}	
	/e-ku:/,	/me-ku:/		'foot, feet'
	/e-tû:/,	/me-tû:/		'ear(s)'
	/e-hó b /,	/me-hó b /		'voice(s)'
	/e-tud/,	/me-tud/		'raffia palm(s)'
	/e-si soŋ /,	/me-si soŋ /		'elephant grass(es)'

<i>Gender 7/8</i>	{e-}	and	{e'-}	
	/cy-ǎ/,	/by-ǎ/		'leaf, leaves'
	/c-ǒ m /,	/by-ǒ m /		'thing(s)'
	/c-ǒ ŋ /,	/b-ǒ ŋ /		'hoe(s)'
	/e-kǎ:/,	/e'-kǎ:/		'fishing basket(s)'
	/e-l óm /,	/e'-l óm /		'cave(s)'

<i>Gender 9/6</i>	{N-}	and	{me-}	
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Only three examples of this gender have been found, two of which also have a class 10 plural form.

	/N-de/,	/me-N-de/		'gift(s)'
	/N-dáb/,	/me-N-dáb/		'house(s)' or /N-dáb/ (cl.10)
	/N-zi:/,	/me-N-zi:/		'path(s)' or /N-zi:/ (cl.10)

<i>Gender 9/10</i>	{ø-}	and	{ø-}			
	/ø-kú b /,	/ø-kú b /	'hen(s)'	/N-bâ g /,	/N-bâ g /	'plucking stick(s)'
	/ø-pá:/,	/ø-pá:/	'cutlass(es)'			
	/ø-se b /,	/ø-se b /	'squirrel(s)'	/ŋ-am/,	/ŋ-am/	'animal(s)'
	/ø-yǎ l /,	/ø-yǎ l /	'body, bodies'	/ŋ-ɔ l /,	/ŋ-ɔ l /	'chisel(s)'
	/N-gu:/,	/N-gu:/	'pig(s)'	but /mbw-é/,	/mby-é/	'dog(s)'

<i>Gender 14/6</i>	{e'-}	{me-}				
	/bw-ɛ l /,	/m-ɛ l /	'tree(s)'	/e'-m l /,	/me-m l /	'finger(s)'
	/e'-com/,	/me-com/	'stick(s)'	/e'-sé l /,	/me-sé l /	'duiker(s)'
	/e'-lám/,	/me-lám/	'trap(s)'			

<i>Gender 19/6</i>	{hy-}	and	{me-}	
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Only the following examples of this gender have been found but each has a more regular plural in Gender 19/13.

	/hy-ǎ/,	/me-hy-ǎ/	'pangolin(s)'	/hy-ɔ:b/,	/me-hy-ɔ:b/	'wild pepper(s)'
	/hy-ǒ b /,	/me-hy-ǒ b /	'(hawk(s))'			

Gender 19/13 {hy-} and {l-}

/hy-ě/, /l-ě/	'pangolin(s)'	/hy-ǝn/, /l-ǝn/	'firewood(s)'
/hy-ɛn/, /l-ɛn/	'mushroom(s)'	/hy-ǝ:b/, /l-ǝ:b/	'(hawk(s))'
/h-ĩ:/, /l-ĩ:/	'camwood(s)'	/hy-ɔ:b/, /l-ɔ:b/	'wild pepper(s)'

3.2. The Single Class Genders:

Examples of each single class gender are presented below.

Gender 1(a) {N-} (class 1)
{∅-} (class 1a)

/mw-ǎnkum/	'(secret society)'	/∅-ngǔ:sé/	'Ngussi - place name'
/∅-abǎ:/	'honey-like substance'	/∅-ngǔ:mé/	'Ngome - person's name'
/∅-apabé/	'wax in the ear'	/∅-mécane/	'Mechane - person's name'
/∅-mbwembwe/	'morning'		

Gender 2 {be-}

Only one example of this gender has been found.

/be-cəŋ éne/	'wasting of time'
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Gender 3 {N-}

/mw-ane/	'trick, way out'	/m-úte/	'afternoon'
/mw-ǎntud/	'smoke'	/N-be sú/	'(dance)'
/m-og/	'soot'	/N-pá /	'hunting'
/m-ú:/	'fire'	/N-kwǎ/	'salt'

Gender 5 {a-}

/a-ken/	'starchy water'	/a-kǎ:sé/	'Bakossi language'
/a-kĩ:/	'being an in-law'		

Gender 6 {me-}

/m-ǝ /	'oil'	/me-lǝ/	'oath'
/m-ĩn/	'madness'	/me-ndí b/	'water'
/me-cangé/	'pleading'	/me-ní:/	'(mushroom)'
/me-kĩ:/	'blood'		

Gender 7 {e-}

/c-ěd/	'chin'	/e-dúbé/	'honour, respect'
/c-ú/	'death ceremony'	/e- od/	'scent'
/cw-ǎ /	'(leaf for medicine)'	/e-pame/	'stubbornness'

Gender 9 {∅-}

/p-am/	'meat'	/N-gɔn/	'moon'
/N-bú:/	'rain'	/∅-kúmbe/	'pride'
/N-dɔ:b/	'ground'	/∅-píd/	'thirst'
/N-dóǵ/	'deafness'	/∅-láke/	'credit'

Gender 10 {∅-}

/p-ɔl/	'sawdust'	/N-gɔn/	'groundnuts'
/N-bag/	'clouds'	/∅-kón/	'beans'
/N-du:/	'bitter leaf'	/∅-pól/	'(ulcer)'

Gender 13 {l-}

Only one example has been found;

/l-ɔ:/ 'laughter'

Gender 14 {e'-}

/e'-bî:/	'knowledge'	/b-ŷn/	'day'
/e'-wû:/	'hardness'	/b-ɔŋ/	'brain'
/e'-wáŋ/	'(tree)'	/bw-ǎl/	'trough'

4. THE CONCORDIAL MORPHEMES

In the previous sections, the noun classes, the noun prefixes and the noun genders have been discussed. In this section, the distribution of the eight sets of concordial morphemes as given in Table 1 (above) will be described. The meanings given for the various stems taking these sets of concords can only be approximate. A more precise statement will have to be made in a description of the grammatical system.

Set 1:

The following stem classes take the first set of concord prefixes:

- a) the possessive pronouns,
 - b) the relative pronouns,
 - c) the demonstrative pronoun C.
- a) *The possessive pronouns:*

There are six possessive pronoun stems:

	<i>singular</i>	<i>plural</i>
'first person'	/-em/	/-ɛd/
'second person'	/-oŋ/	/-ɛn/
'third person'	/-l/	/-ab/

Tone on these stems varies, sometimes freely, sometimes according to

context. The following chart gives the distribution of tones occurring on the different possessive pronoun stems but a rule for their conditioning is outside the scope of this paper.

Table 6

The Occurrence of Tone on the Possessive Pronoun Stems

		L	HL	H	LH
(1st pers. sg.)	-em	x	x		
(2nd pers. sg.)	-oŋ	x	x	x	
(3rd pers. sg.)	-i	x	x	x	
(1st pers. pl.)	-ed	x	x	x	x
(2nd pers. pl.)	-en	x	x	x	x
(3rd pers. pl.)	-ab	x	x	x	x

Note that following a high tone, HL and H are downstepped.

Table 7

The Possessive Pronouns ²⁷

Class	singular			plural		
	1st	2nd	3rd	1st	2nd	3rd
1	áwem	awoŋ	awi	awed	awen	awab
2	ábem	áboŋ	ábi	ábed	áben	ábab
3	ámém	ámóŋ	ámi	áméd	ámen	ámab
4	ámém	ámóŋ	ámi	áméd	ámen	ámab
5	ádem	ádoŋ	ádi	áded	áden	ádab
6	ámém	ámóŋ	ámi	áméd	ámen	ámab
7	écem	écoŋ	éci	écéd	écen	écab
8	ábem	áboŋ	ábi	ábed	áben	ábab
9	ecem	ecoŋ	eci	eced	ecen	ecab
10	écem	écoŋ	éci	écéd	écen	écab
13	ádem	ádoŋ	ádi	áded	áden	ádab
14	ábem	áboŋ	ábi	ábed	áben	ábab
19	ábem	áboŋ	ábi	ábed	áben	ábab

Possessive pronouns may either precede or follow the noun, the former being the most common position.

b) The Relative Pronoun: /-e/

The tone on the stem /-e/ may be L, !H or LH. The rising tone only occurs with the class 1 and 9 concords.

Table 8
The Relative Pronoun

Class	/-e/	Class	/-e/	Class	/-e/
1	awe	5	áde	9	ece
2	ábe	6	ńme	10	éce
3	ńme	7	éce	13	áde
4	ńme	8	ábe	14	ábe
				19	ábe

The function of the relative pronoun includes that of possessive marker.

/e'-mi: (14) ábe kêm/ 'finger monkey'	'the monkey's finger'
/mwǎn (1) awe akumé/ 'child Akume'	'the child of Akume'
/bǎ:paŋ (2) ábe kǎŋ/ 'siblings chief'	'the siblings of the chief'

c) *The Demonstrative Pronoun C:* /-edé/ 'that, those particular...'

The tone pattern on the stem is either LH or !HH. LH occurs with classes 1 and 9 concord prefixes (following a low tone), !HH occurs elsewhere.

Table 9
The Demonstrative Pronoun C

Class	/-edé/	Class	/-edé/	Class	/-edé/
1	awedé	5	á [!] dédé	9	ecedé
2	á [!] bédé	6	ń [!] médé	10	é [!] céde
3	ń [!] médé	7	é [!] céde	13	á [!] dédé
4	ń [!] médé	8	á [!] bédé	14	á [!] bédé
				19	á [!] bédé

This demonstrative pronoun always precedes the noun.

Set 2:

This set of concord prefixes is identical with Set 1 with the exception of classes 1 and 9. It is prefixed to the following demonstrative pronoun stems:

/-én/	'this one here'	/-íní:/	'that one over there'
/-e/	'that one there'		

Table 10

The Demonstrative Pronouns A

Class	/-én/	/-e/	/-íní:/	Class	/-én/	/-e/	/-íní:/
1	anén	ane	aníní:	7	écén	écé	écíní:
2	ábén	ábé	ábíní:	8	ábén	ábé	ábíní:
3	ámén	ámé	ámíní:	9	enén	ene	eníní:
4	ámén	ámé	ámíní:	10	écén	écé	écíní:
5	ádén	ádé	ádíní:	13	ádén	ádé	ádíní:
6	ámén	ámé	ámíní:	14	ábén	ábé	ábíní:
				19	ábén	ábé	ábíní:

The stem /-e/ carries a low tone in the environment of classes 1 and 9, high or falling tone elsewhere. These demonstrative pronouns precede the noun qualified.

Set 3:

Set 3 is prefixed to the same three stems as given in the preceding section: /-én/, /-e/ and /-íní:/. The difference between the two sets is that the initial vowel or syllabic nasal is absent from Set 3.

Table 11

The Demonstrative Pronouns B

Class	/-én/	/-e/	/-íní:/	Class	/-én/	/-e/	/-íní:/
1	nén	ne	níní:	7	cén	cê	cíní:
2	bén	bê	bíní:	8	bén	bê	bíní:
3	mén	mê	míní:	9	nén	ne	níní:
4	mén	mê	míní:	10	cén	cê	cíní:
5	dén	dê	díní:	13	dén	dê	díní:
6	mén	mê	míní:	14	bén	bê	bíní:
				19	bén	bê	bíní:

If following a high tone, /nén/ and /níní:/ of classes 1 and 9 are down-stepped.

These demonstrative pronouns are used in two ways, in each case following the noun which governs them:

1) as attributive to the noun, as in

/kúb (9) nén/	'this hen'	/mwă:d (1) ne/	'that woman'
/abad (5) dén/	'this cloth'	/e'non (14) bê/	'that bird'

2) as predicate in a non-verbal clause, as in

/ekog (7) cén/	'this is bark'	/ndáb (9) nén/	'this is a house'
/átog (3) mén/	'this is (a certain type of) cocoyam'		

Set 4:

This set is prefixed to the following stems:

- /-ěŋ/ 'himself, herself, etc. (not reflexive)' and
 /-ěde/ 'emphatic demonstrative pronoun'.

Table 12

'...self' and the Emphatic Demonstrative Pronoun'

Class	/-ěŋ/	/-ěde/	Class	/-ěŋ/	/-ěde/
1	mwěŋ	mwěde	7	cěŋ	cěde
2	běŋ	běde	8	běŋ	běde
3	měŋ	měde	9	cěŋ	cěde
4	měŋ	měde	10	cěŋ	cěde
5	děŋ	děde	13	děŋ	děde
6	měŋ	měde	14	běŋ	běde
			19	běŋ	běde

These items always follow the noun:

- /ábé bad (2) běŋ/ 'those people themselves'
 /mod (1) mwěde/ 'the person (whom we talked about)'

Set 5:

Set 5 (see Table 1) is prefixed to the stem /-ə/ to form the subject and object third person pronouns.

The subject pronoun has a falling tone and occurs in addition to the verb prefix which it precedes.

The object pronoun has a high tone.

Set 6:

Set 6 is prefixed to the numeral stems 1 to 5: /-hóg/ ~ /póg/ 'one, some', /-be/ 'two', /-lá:n/ 'three', /-ni:n/ 'four', /-tâ:n/ 'five' and also to the question word /-tétŋ/ 'how many'.

Table 13

The Numerals

Class	/-hóg, póg/	/-be/	/-lá:n/	/-ni:n/	/-tâ:n/	/-tétŋ/
1	hóg	-	-	-	-	-
2	behóg	bébe	bélá:n	béni:n	bétâ:n	bététŋ
3	hóg	-	-	-	-	-
4	hóg	mbe	hílá:n	híni:n	hítâ:n	hítétŋ
5	ahóg	-	-	-	-	-
6	mehóg	mébe	méíá:n	méni:n	métâ:n	mététŋ

Table 13 (continued)

Class	/-hóg, póg/	/-be/	/-lá:n/	/-ni:n/	/-tâ:n/	/-tén/
7	ehóg	-	-	-	-	-
8	e'hóg	é'be	é'lá:n	é'ni:n	é'tâ:n	é'tén
9	póg	-	-	-	-	-
10	ehóg	ébe	élá:n	éni:n	étâ:n	étén
13	ahóg	ábe	álá:n	áni:n	átâ:n	átén
14	e'hóg	-	-	-	-	-
19	e'hóg	-	-	-	-	-

Note that all the prefixes have a high tone except when occurring before /-hóg/ 'one, some' where they carry a low tone in all classes. The meaning of the numeral /-hóg/ is either 'one' when collocating with singular nouns or 'some' when occurring with plurals and non-count nouns.

The numerals always follow the noun.

Sets 7 and 8:

These two sets of concordial morphemes are used as a) verb prefixes, b) associative markers and c) prefixes of the qualifiers.

a) The Verb Prefixes:

Both sets occur as verb prefixes. Set 8 occurs before tense/aspect/polarity prefixes, Set 7 occurs elsewhere.

The basic prefix tone patterns are as indicated in Table 1 but they do change with some verb forms.

Examples:	/mod (1) a-syè a-súú	ándáb/	'Everyone went home.'
	'person (1)-all he (1)-returned to-house'		
	/pò d (10) é-pántéd	áte/	'The bees scattered.'
	'bees they (10)-scattered into'		
	/mendíb (6) mé-hyédé/		'The water is hot.'
	'water it (6)-is-hot'		
	/donge dé-ŋkêŋ-hɛn é	a-ke/	'Some couldn't go.'
	'some they (5)-past/neg.-can to (A)-go'		
	/nsoń (3) mèn *(mé-é-mă:')	> mé-mă: '	'The work itself didn't finish'
	'work itself it (3)-neg.-finished'		

b) The Associative (genitive) Marker (AM):

Both sets are used as associative markers occurring between two nouns to indicate a variety of relationships. The class membership of the first noun determines the class membership of the AM. However, the choice of a marker from either Set 7 or 8 is determined by the phonological shape of the second noun. Set 8 occurs before noun initial /a-/, /e-/, /e'-/, /be-/, /me-/ and /N-/, except before /N-/ in the sequences /mb-/, /nd-/, /ŋg-/ and /nz-/ of classes 1, 9 and 10 (where the nasals are non-syllabic). Set 7 occurs elsewhere.

For all forms of the associative marker, see Table 1.

Examples:	/e'tog (8)	é'(8)	kúb (9)/	'The feathers of a hen'
	'feathers	AM	hen'	
	/donge (5)	á (5)	póndé (9)/	'Sometime'
	'some	AM	time'	
	/abé (5)	dé(5)	bebã:d (2)/	'The habit of women'
	'habit	AM	women'	
	/e'lám(14)	bé(14)	e'só (14)/	'The first trap'
	'trap	AM	face'	

c) *The Qualifiers*:

Meanings which in English are commonly expressed by adjectives are usually expressed in Akóóse by verbal forms or nouns. Exceptions to this are the following stems:

/-syě /	'all'	/-mbá:/	'big'	/-sad/	'small'
/-hé:/	'which?'	/-mpê:/	'other'	/-ekó:lé/	'new'

These six are considered as qualifiers rather than verbs or nouns for the following reasons:

- 1) They cannot be declined as verbs.
- 2) They do not occur independently as nouns do.
- 3) When /-syě|/, /-mpê:/ and /-ekó:lé/ qualify a noun they do not parallel noun 2 in the associative construction. Noun 2 which follows the associative marker is not downstepped whereas a downstep can be observed with these qualifiers.

Table 14
The Qualifiers

Class	/-syě /	/-mbá:/	/-sad/	/-hé:/	/-mpê:/	/-ekó:lé/
1	asyě	ambá:	asad	ahé:	ampê:	ekó:lé
2	bésyě	bémba:	bésad	béhé:	bémpê:	békó:lé
3	ńsyě	ńmbá:	ńsad	ńhé:	mémpê:	mékó:lé
4	ńsyě	ńmbá:	ńsad	ńhé:	mémpê:	mékó:lé
5	ásyě	ámmbá:	ásad	áhé:	démpê:	dékó:lé
6	mésyě	mémmbá:	mésad	méhé:	mémpê:	mékó:lé
7	ésyě	émbá:	ésad	éhé:	émpê:	ékó:lé
8	é'syě	é'mbá:	é'sad	é'hé:	bémpê:	békó:lé
9	esyě	embá:	esad	ehé:	empê:	ekó:lé
10	ésyě	émbá:	ésad	éhé:	émpê:	ékó:lé
13	ásyě	ámmbá:	ásad	áhé:	démpê:	dékó:lé
14	é'syě	é'mbá:	é'sad	é'hé:	bémpê:	békó:lé
19	é'syě	é'mbá:	é'sad	é'hé:	bémpê:	békó:lé

All these qualifiers follow the noun qualified.

The first four take the Set 7 prefixes, the last two, Set 8. Note that the prefixes assimilate to the initial /e/ of /ekó:lé/ as follows:

*/a-/ + /ekó:lé/ > /ekó:lé/ (1)

*/bé-/ + /ekó:lé/ > /békó:lé/ (2)

NOTES

1. This paper reflects mainly the dialect spoken in Ndom and Nyasoso where our research has been carried out.

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The following near phonemic transcription has been used in the paper:

Vowels: i, e, ε, a, ə, ɔ, o, u. Vowel length is indicated by a colon.

Consonants: p, t, k, b, d, g, c, j, s, z, h, m, n, ɲ, ŋ, N (homorganic nasal), l, y, w, ' (glottal stop). (c and j, h and ', ɲ and ŋ do not contrast.)

Tones: high tone (H): ' ; low tone (L): unmarked (note that all nasals word-initially before a consonant bear a tone although not all are phonetically syllabic); rising tone (LH): ˇ; falling tone (HL): ^; falling to a downstepped high tone (H|H): ʔ; downstep: !.

2. Akɔ̄sɛ̄ is spoken mainly in the Tombel and Bangem Sub-Divisions of the South-West Province of the United Republic of Cameroon by approximately 60,000 people. It is a Bantu language belonging to the so-called Mbo cluster (Guthrie's A.15).
Akɔ̄sɛ̄ written according to the transcription in Note 1 is akɔ̄:sé.
3. Dorsch refers to Akɔ̄sɛ̄ as Nkosi, Richardson as Kɔ̄sɛ̄.
4. The demonstrative pronouns may be divided grammatically into three word classes and are labelled A, B and C for convenience of reference.
5. Some dialects have /bwɛ̄n/ 'day' and Dorsch (1910/11: 249) records buin for this dialect.
6. These items we have recorded with a preceding syllabic /m/.
7. The /w/ is apparently a feature of class 3 rather than of class 4 (or class 6) and so its presence here is surprising.
8. PB means the Proto-Bantu form, as in Welmers (1973: 165).
9. For these forms, see the plural possessive pronouns below.
10. /N-/ is a homorganic nasal bearing tone but it is not phonetically syllabic before b, d, g, and z in this class.
11. Brackets around glosses should be read as 'a kind of ...'.
12. The homorganic nasals of class 3 are always syllabic.
13. See above for a comment on the y/w alternation in this class.

14. Only one example has been observed.
15. The homorganic nasals of class 4 are always syllabic.
16. Another plural form of this word is /bw-^ǂem/ (class 14), apparently an exception since class 14 is a class of singular nouns.
17. To analyse class 9 and 10 prefixes purely descriptively would yield a \emptyset - prefix in all cases. We have, however, chosen to analyse / η -/ and /N-/ as class 9 and 10 prefixes to highlight the relationship with Bantu in general. The zero allomorph is chosen as the basic one because it has the widest distribution.
18. The homorganic nasal of this class and of class 10 is non-syllabic.
19. See Note 17.
20. The plural of /N-dáb/ 'house' and /N-zi:/ 'road' is also formed by adding the class 6 prefix /me-:/ /me-N-dáb/ 'houses' and /me-N-zi:/ 'roads'.
21. The plural of these words is also formed by adding the class 6 prefix to the singular (class 19) prefix: /hy-^ǂ/ > /me-hy-^ǂ/ 'pangolins', /hy-^ǂ:b/ > /me-hy-^ǂ:b/ 'hawks', and /hy-^ǂ:b/ > /me-hy-^ǂ:b/ 'wild peppers'.
22. See Note 5.
23. The infinitive could perhaps be derived from PB noun class 12 (*ka-), and the locative from noun class 16 (*pa-) with deletion of the initial *p.
24. Another locative marker used mainly with names is /wê/. It takes the same (class 5) concord. Maybe this could be identified as PB class 16: *pa-.
25. Welmers (1973:160).
26. I have recently found two nouns which give a gender 3/2:

/N-jun ^ǂ mod/,	/be-jun bé bad/	'old person, people'
/N-hon ^ǂ mod/,	/be-hon bé bad/	'rich man, men'

Since these nouns occur almost always with /mod, bad/, it is not clear whether they should be put on an equal footing with the other genders.
27. There is a class of 'locative possessives' /áwem, áwon, áwi, áwed, áwen, áwab/ which may ultimately be reflexes of a PB locative class (16: *pa?).

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ESQUISSE DES CLASSES NOMINALES EN TUKI

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0. INTRODUCTION

A la suggestion du Révérend Père François de Gastines du Collège Libermann à Douala, nous avons passé trois heures le 19 décembre 1977 à prendre contact avec la langue tuki, une langue du groupe Sanaga (A.64) de Guthrie. Notre informateur était M. Joseph Benga, originaire de Bacenga. Puisque nos connaissances sont si limitées, nous n'essayerons pas de proposer une phonologie, ni une tonologie sérieuses. Notre méthode a été de prendre la liste d'environ 130 substantifs établie par le Groupe Travaillant sur le Grassfields (singuliers et pluriels) et ensuite d'investiguer les accords grammaticaux conditionnés par ces classes. La notation phonétique utilisée dans cette étude est la suivante:

(i) Consonnes:

p b	t d		k g	kp gb	
	ts	c j			
β	s z				h
	l	y			w
m	n	ɲ	ŋ		
mb	nd	nj	ng	mgb	
			(ŋkʔ)		

(ii) Voyelles:

i		u	(e se prononce [ɛ] devant -NC)
e	ə	o	
		ɔ	
	a		

(iii) Tons:

á	H	(ton haut)
ā	M	(ton moyen--probablement pas un H abaissé)
à	B	(ton bas)

1. LES GENRES

Les genres 1/2, 3/4, 3a/4a, 5/6, 5/6a, 7/8, 9/10, 11/6a, 11/13, 14/6a et 19/18 sont attestés en tuki. La classe 6a peut également servir de genre sans distinction singulier/pluriel (voir le tableau suivant).

1/2 (sg. Ø-, mw-, mò-; pl. bà-)

kàndā/bàkàndā	'ceinture'	mòtò/bàtò	'personne'
mwānā/bānā	'enfant'	mbítà/bàmbítà	'pipe'
mbēlē/bàmbēlē	'ami'	òngìnt/bòngìnt	'étranger'
zàmbé/bàzàmbé	'Dieu'	òkòtò/bàkòtò	'femme'
(zàmbí òŋ)		kpátì/bàkpátì	'fufu'
nāmbā T/bānāmbā T	'couteau'		

3/4 (sg. ò-, ù-, òn-, ÷N-; pl. ì-, ìN-)

òmbòṣ/ìmbòṣ	'bras'	òngūtē/ìngūtē	'bouche'
ògTnT/ìgTnT	'bois à brûler'	òhòmbā/ìhòmbā	'nez'
òngò ṣ/ìngò ṣ	'pied'	òngàngā/ìngàngā	'racine'
ùcē/ìcē	'tête'	òmyṣ/ìmyṣ	'queue'
òtēmā/ìtēmā	'cœur'	òngūngūbī/ìngūngūbī	'voleur'
òmbènò/ìmbènò	'jambe'	òmbàβē/ìmbàβē	'aile'
òngēnē/Tngēnē	'montagne'		

3a/4a (sg. Ì-; pl. mì-)

hókúkúmé/mìkúkúmé	'chef'	hókúté/mìkúté	'nuage'
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5/6 (sg. ì-, nì-; pl. àn-, à-)

ìbùmù/ànbùmù	'ventre'	h̀nìó/àngìó	'nom'
ìbāné/ànbāné	'sein'	ìbTilé/àngbTilé	'palmier'
ìgìT ^h /ànggìT	'oeuf'	ìjòngṣ/àngjòngṣ	'lance'
nìsṣ/ànggTṣṣ	'œil'	ìtānē/àtānē	'pierre'
ìbànù/ànbànù	'kola'	nìó/àngTó	'dent'

5/6a [?] (sg. nè-; pl. mà-)

nètT/màtT	'salive'	(sg. dérivé du pl. ?)
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7/8 (sg. ì-, è-; pl. bì-)

yèmbā/byèmbā	'bamboo'	èβwēlā/bìβwēlā	'fossé'
ìkündē/bìkündē	'lit'	èβānā/bìβānā	'trou'
ètētē/bìtētē	'os'	ìnemé/bìnemé	'mari'
ìgwē/bìgwē	'cadavre'	ìhùhù/bìhùhù	'médicament'
èbōmā/bTbōmā	'fruit'	ìyāβé/bìyāβé	'léopard'
ènàlà/bìnàlà	'singe'	ìtākì/bìtākì	'gorge'
ètōndṣ/bìtōndṣ	'nombril'	èlēmbe/bìlēmbe	'langue'
èpēsá/bìpēsá	'filet [poissons]'	èdòngò/bìdòngò	'village'
Ttúní/bTtúní	'fer'	ìpū/bìpū	'igname'
ètōmbā/bìtōmbā	'mouton'		

9/10 (sg. = pl. Ø-, Ì-)

h̀nàmà	'animal'	h̀gì ^h	'mouche'	h̀dí sànggá	'piment'
h̀nTṵṵ	'abeille'	h̀gā é	'fusil'	(h̀jí ànggā = pl.)	
pā ā	'branche'	kūmbú	'poil'	h̀gbì ì	'pipe'
h̀dòàè	'vache'	h̀gwā	'poulet'	kū T	'canarie en argile pour
cùnū	'tissu'	nānggā	'maison'	h̀mbākt	'esclave' l'eau'
kānā	'crabe'	h̀gò	'léopard'	h̀nṣṣ	'serpent'
h̀mbūā	'chien'	mbàsà	'maTs'	h̀jT í	'termite'
h̀jò	'éléphant'	h̀jāmbò	'viande'	tṣendē	'épine'
kūmbú	'plume'	cōmá	'message'		
cW T	'poisson'	h̀nānā	'ongle'		

11/6a (sg. nò-; pl. mà-)

nòpó à/màpó à	'endroit'
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11/13 (sg. nù-, nò-; pl. tù-, tò-)

nùgwē/tùgwē	'mort'	nòwōlā	'pluie'
nòàné/tòàné	'feuille'	nòàlT	'corde'

14/6a (sg. wù-, bwè-; pl. mà-)

wùsT/māsí	'jour'	wàndā/màmàbà	'chose'
wùsyō/màsyō	'visage'	bwèlēté/màlēté	'arbre'

19/18 (sg. ì-; pl. mù-, mò-)

ìiāngū/mùlāngū	'hache'	ìtōngó/mùtōngó	'corne'
ìtsàkà/mùtsàkà	'sac'	ìkpèlè/mùkpèlè	'arme blanche'
ìnōnì/mùnōnì	'oiseau'	ìbòmā/mòbòmā	'marché'
ìtàngàrà/mùtàngàrà	'pont'	ìkàlà/mùkàlà	'natte'
ìhyāné/mùhyāné	'feu'	ìtāmbó/mòtāmbó	'piège'
ìsōiā/mùsōiā	'houe'		

3 (aucun pluriel)

òlēsē	'riz'	òngōnā	'soleil'
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6a (aucun singulier)

màtō	'cendre'	mèβā	'njamanjama'
mīnē	'sang'	màtTā	'eau'
māwūtē	'graisse'	mòwó	'vin'
māné	'charbon'	mànònbò	'travail'
mèndō	'foie=poumons'		

8 (aucun singulier)

bìlélò	'légume'	bìtā	'guerre'
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9 (aucun pluriel; N.B. 9=4)

m̀b̀t̀t̀h̀	'huile'	nōtó	'corps'
̀ǹj̀ám̀è̀ǹā̀	'ciel'	̀m̀m̀ū̀l̀ù	'poussière'
̀h̀g̀ò̀ǹò̀	'sel'		

10 (aucun singulier)

nūwí	'fumée'
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18 (aucun singulier)

m̀ǹǹū̀	'cerveau'
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Genres exceptionnels:

5/13	̀h̀p̀ò̀l̀ò̀/̀t̀ìò̀l̀ò̀	'cou'
3/6	̀ò̀t̀ū̀h̀/̀à̀t̀ū̀h̀	'oreille'
4 10/6a	̀ì̀h̀ò̀s̀ ỳà̀p̀ò̀s̀/̀m̀à̀p̀ò̀s̀	'marmite'
9/13	̀h̀ǹì̀m̀ḕ/̀t̀ì̀m̀ḕ	'dos'
16/6a	̀h̀ò̀m̀ā̀/̀m̀ā̀h̀ò̀m̀ā̀	'endroit'

Comme on peut voir, quelques noms n'ont pas de pluriel, tandis que d'autres sont au pluriel sans singulier correspondant.

On peut faire, à partir de ce tableau, les remarques suivantes:

(i) Le préfixe de la classe 1 (singulier du genre principalement humain) est *mò-* devant une racine monosyllabique (*mò-tò* 'personne'), *mw-* devant une racine à initiale vocalique (*mw-àṅā* 'enfant'), \emptyset ou *ò-* dans les autres cas (*kàṅdā* 'ceinture' [du pidgin], *ò-kòtó* 'fufu'). Si la consonne initiale peut prendre une nasale (c-à-d. si cette consonne est b, d, j, ou g), le préfixe est *òN-* (*òṅ-g*)*nT* 'étranger').

(ii) Les préfixes des classes 3 et 4 consistent en une voyelle suivie d'une nasale si la consonne initiale peut prendre une nasale (*òṅ-gūtē* 'bouche', mais *ò-tēmā* 'coeur'). Le nom *ò-gTnT* 'bois à brûler' est exceptionnel, puisque g peut en général accepter la présence d'une nasale précédente. La voyelle de la classe 3 est généralement o (plus rarement u ou ɔ); la voyelle de la classe 4 est i.

(iii) Deux noms appartiennent à un genre appelé 3a/4a. Nous savons par les accords (voir plus bas) que le singulier de ce genre est dans la classe 3. La forme *ṅ-* est exceptionnelle en tuki non seulement à cause du manque d'une voyelle, mais également à cause du fait que la séquence *ṅk-* de ces deux noms (*ṅ-kúṅkúme* 'chef', *ṅkūtē* 'nuage') est autrement interdite dans la langue. La forme *mì-* du pluriel est la forme attendue du préfixe de la classe 4 en bantou, mais est rare en tuki.

(iv) Le préfixe de la classe 5 est *nì-* devant une racine à initiale vocalique (*nì-ó* 'dent'), *ì-* devant une racine à initiale consonantique (*ì-bāné* 'sein'). (Nous avons transcrit 'dent' et 'nom' différemment mais avons manqué de vérifier cette différence.) Le préfixe de la classe 6 est *àN-* (généralement prononcé [àṅ]) devant consonne, *àṅg-* devant voyelle (*àṅ-bāné* 'seins', *àṅg-tó* 'dents'). Remarquons la forme *à-tāné* 'pierres' où il n'y a pas de nasale puisque la séquence *nt* n'est pas admise en tuki.

(v) Le préfixe de la classe 7 est *y-* devant une voyelle (*y-èmbā* 'bamboo'), *ì-* ou *è-* devant une consonne (*ì-kūndē* 'lit', *è-tētē* 'os'). Le préfixe de la classe 8 est *by-* devant une voyelle, *bì-* devant une consonne (*by-èmbā* 'bambos', *bì-kūndē* 'lits', *bì-tētē* 'des os').

(vi) Les noms du genre 9/10 ont la même forme au singulier et au pluriel: *ṅ-* si la consonne initiale peut prendre une nasale, \emptyset autrement (*ṅ-būā* 'chien/s', *kānā* 'crabe/s').

(vii) La classe 11 a un préfixe *nù-* ou *nò-* (*nù-gwē* 'mort'). Un seul nom de la classe 11 prend son pluriel dans la classe 6a au lieu de 13.

(viii) La classe 14 a les formes préfixales *wù-*, *w-* et *bwè* (*wù-sT* 'jour', *w-àṅdā* 'chose', *bwè-lēté* 'arbre'). Son pluriel est de la classe 6a (notons le pluriel *ṅm-àmbà* 'choses', où il y a également un changement dans la consonne interne et dans le ton final).

(ix) Il y a une classe 19 avec un préfixe *ì-* (*ì-nóóní* 'oiseau'). Son pluriel est appelé classe 18 ici et porte un préfixe *mù-* ou *mò-* (*mù-nóóní* 'oiseaux'). Cette classe, qui ressemble formellement à la classe locative en bantou, n'est trouvé que dans le sous-groupe Sanaga et dans le groupe noni (bebe) (avec quelques suggestions douteuses d'une ancienne classe 18 ailleurs en dehors du bantou étroit).

(x) Parmi les noms sans distinction singulier/pluriel sont à noter les noms non-comptables en classe 6a, préfixe m suivi d'une voyelle (mà-tō 'cendre', mī-nē 'sang', etc.).

(xi) Seul le nom hò mā 'endroit' semble avoir été de la classe locative 16; actuellement, ses accords sont de la classe 14 (voir plus bas).

2. PRONOMS POSSESSIFS

Nous commençons notre étude des accords de classe par les pronoms possessifs, que nous présentons dans le tableau suivant.

1	2	3	4	5	6	7	8
ámè	bámé	lámé	lámè	námé	lámé	ámé	ámé
wóó	wóó	lóó	lóó	nóó	lóó	yóó	byóó
wáá	wáá	láá	láá	náá	láá	yáá	byáá
í sō	í sō	lí sō	lí sō	ní sō	lí sō	yí sō	lí sō
í nō	í nō	lí nō	lí nō	ní nō	lí nō	yí nō	(b) lí nō
á wō	á wō	lá wō	lá wō	ná wō	lá wō	yá wō	byá wō
9	10	11	13	14	6a	19	18
lámè	lámé	ámé	támé	ámé	mámé	lámé	mwámé
lóó	lóó	nóó	tóó	wóó	móó	lóó	mwóó
láá	láá	náá	táá	wáá	máá	láá	máá
lí sō	lí sō	ní sō	tí sō	wí sō	mí sō	lí sō	mí sō
lí nō	lí nō	ní nō	tí nō	wí nō	mí nō	lí nō	mí nō
lá wō	lá wō	ná wō	tá wō	wá wō	má wō	lá wō	mwá wō

Pour comprendre les formes dans ce tableau les faits suivants sont à noter:

(i) Les six formes données pour chaque classe réfèrent, respectivement, à la 1ère personne du sg, à la 2ème personne du sg, à la 3ème personne du sg, à la 1ère personne du pl, à la 2ème personne du pl, et à la 3ème personne du pl.

(ii) Les noms qui ont été utilisés pour éliciter ces accords (et tous les autres accords qui suivent) sont les suivants:

1	mwà nā	'enfant'	9	mbūā	'chien'
2	bā nā	'enfants'	10	mbūā	'chiens'
3	ò ngàngā	'racine'	11	nò àné	'feuille'
4	ì ngàngā	'racines'	13	tò àné	'feuilles'
5	l bTlé	'palmier'	14	bwèlètè	'arbre'
6	à ngTlé	'palmiers'	6a	màlètè	'arbres'
7	ètètè	'os'	19	ì nò ní	'oiseau'
8	blètè	'des os'	18	mùnò ní	'oiseaux'

(iii) La quantité vocalique des pronoms des personnes pluriel n'est pas certaine. Dans certains cas j'ai transcrit, par exemple, lí sō, lí nō et lá wō (classe 3), mais í sō, í nō et á wō (classe 10). Il n'y a probablement pas d'opposition de quantité vocalique dans les pronoms possessifs.

(iv) Dans ce tableau on voit que les classes 3, 6, 10 et 19 ont les mêmes accords (avec l-). La classe 9 a également des accords avec l, mais avec quelques différences tonales. Dans le dialecte des Cinga (selon M. Benga), tous ces pronoms commencent par y au lieu de l, par ex. ò ngàngā yámé 'ma racine', au lieu de ò ngàngā lámé. Les deux variantes sont probablement épenthétiques, plutôt que dues à un développement naturel à partir des accords

originiaux (qui étaient, historiquement, w ou γ [classe 3], γ [classe 6], γ [classes 9, 10--et 19?]).

(v) Sauf dans les formes de la troisième personne du singulier, il y a des différences tonales entre les classes 1, 4 et 9 par rapport à toutes les autres classes. Ce regroupement est intéressant dans le sens que beaucoup de langues bantoues d'Afrique de l'Est montrent également une identité entre classes 4 et 9 (qui sont différenciées en tuki seulement par le fait que la classe 4 est une classe pluriel et la classe 9 une classe singulier). Nous proposons les formes historiques suivantes pour expliquer ces différences:

9	íá-'-mè	í-'-í'só	10	íá-mè'	í-'-í'só
	í-'-ò	í-'-í'nó		í-'-ò'	í-'-í'nó
		íá-'-wó			íá-'-wó

(vi) Les pronoms possessifs des classes 5 et 11 sont identiques, sauf pour la première personne du singulier, où j'ai transcrit une légère différence (qui doit être vérifiée).

3. PRONOMS DEMONSTRATIFS

Le tuki distingue trois démonstratifs, dont les locatifs correspondants sont les suivants: ènā 'ici' [près de celui qui parle], là 'là' [près de celui qui écoute], et wōkō 'là-bas' [loin des deux]:

	celui-ci	celui [près de toi]	celui-là [loin]
1	ōjó	ómōjò	ónTí
2	āpá	ámāwà	áwTí
3	ōjó	ómōjò	ónTí/óJTí
4	ējé	émēsè	ínTí/íJTí
5	ēné	émōnè/émōyè	ínTí
6	ājá	ámājà	ánTí
7	ēyé	émōyè	íyTí
8	íwí	ímTí	íwTí
9	ējé	émēsè	ínTí
10	íjí	ímTí	ínTí
11	ēné	émōnè	ínTí
13	ótó	ómótó	tTí
14	ōwó	ómōwó	wTnTí
6a	āmá	ámamá	mTí
19	íjí	ímTí	nTí
18	ómó	ómómó	mTnTí

Dans les formes dans la première colonne, nous constatons une différence de fermeture dans les voyelles des classes 8, 10 et 19 par rapport à celles dans les classes 7, 9 et 4 (cp. le *í reconstruit pour 8, 10 et 19 en Proto-Bantu). Notons également le s des classes 4 et 9, qui s'explique difficilement. (Les formes dans la troisième colonne doivent être vérifiées, surtout puisque je n'ai pas transcrit de préfixe dans les classes 13, 6a et 19. J'ai noté wTí pour 'celui-là [loin]', classe 16 [hómā 'endroit'].)

4. NUMÉRAUX

Les numéraux de 'un' à 'dix' sont les suivants (formes utilisées pour compter):

ōmwáàsTí	'un'	mwāiātó	'six'
māpā	'deux'	mwāiātó nō mwàsTí	'sept'
mātót	'trois'	mwēlémān	'huit'
māné	'quatre'	mwēlémān nō mwàsTí	'neuf'
mōtānó	'cinq'	mābwāt	'dix'

('sept' et 'neuf' peuvent avoir mwàsTí à la fin pour insister)

Nous avons pris les accords des numéraux de 'un' à 'six', 'huit' et 'dix'. D'abord, avec le numéral 'un':

1	ōmwáàsTí	9	TmwáàsTí
3	ōmwáàsTí	11	nōmwáàsTí
5	ēmwáàsTí	14	ōmwáàsTí
7	ēmwáàsTí	19	TmwáàsTí

	'deux'	'trois'	'quatre'	'cinq'	'six'	'huit'	'dix'
2	bāpān	bātót	bāané	bāānó	bāiātó	bēlémān	bābwāt
4	Tbēn	Ttót	Tiné	Itānó	Iātātó	Jémān	yābwāt
6	ābān	ātót	āané	ātānó	Iātātó	Jémān	ābwāt
8	bTbēn	bTtót	bTIní	bTItānó	bTAlātó	byēlémān	bTābwāt
10	Tbēn	Tsót	TIní	Tsānó	Iātātó	Jémān	yābwāt
13	tōpān	tōtót	tōané	tōtānó	toaiātó	tēlémān	tābwāt
6a	māpān	mātót	māané	mātānó	māiātó	mēlémān	mābwāt
18	mōpān	mōtót	mweené	mōtānó	mwāiātó	mwēlémān	mwābwāt

Remarques:

(i) Le n final de 'deux' est facultatif, par ex. bānā bāpān ou bānā bāpān 'deux enfants'.

(ii) La classe 4 montre une différence tonale par rapport aux autres classes dans les numéraux 'trois', 'cinq', 'six' et 'dix'. Nous attribuons cette différence à un ton bas dans l'accord de la classe 4, qui est intercalé entre le préfixe à ton haut et la racine du numéral.

(iii) Le numéral 'six' semble subir une dissimilation de l à t lorsque l'accord est avec i. Ainsi on dit ñgàngā Iātātó 'six racines' au lieu de ñgàngā Iáiātó. Ces formes avec t peuvent se prononcer également avec c; ainsi cp. ñgàngā Iácātó (même sens).

Il est assez rare qu'une langue bantoue ait tous ces accords dans les numéraux supérieurs à 'cinq'.

5. INTERROGATIFS

Nous avons pris les accords avec les interrogatifs 'quel(les)' et 'combien de':

	'quel(les)'	'combien de'
1	óndūm	
2	bāndūm	bāní
3	óndūm	
4	índūm	Tní
5	néndūm/índūm	
6	ándūm	āní
7	índūm	

8	bíndūm	bTní
9	índūm	
10	índūm	Tní
11	nóndūm	
13	tóndūm	tōni
14	óndūm	
6a	mándūm	māní
19	índūm	
18	móndūm	mōní

6. ACCORDS DU SUJET

Les accords du sujet sont morphologiquement identiques aux pronoms du sujet. Les pronoms suivants ont été pris dans le cadre 'X est tombé':

1	á (~à?)	9	í
2	bā	10	T
3	ō	11	nēí
4	í	13	tā
5	nēí	14	ō
6	ā	6a	mā
7	eí	19	T
8	bT	18	mō

Encore une fois on observe une différence tonale entre les classes 1, 4 et 9 et toutes les autres classes.

7. AUTRES ACCORDS

Les phrases relatives sont formées avec les pronoms démonstratifs 'celui-ci' mais avec des tons M-M; cp. mwānā ōjō 'cet enfant-ci', mwānā ōjō ōgōnō 'l'enfant qui est grand', mwānā ōjō ngē mēnā 'l'enfant que j'ai vu'.

Il n'y a pas d'accords d'objet, puisque les êtres humains seuls peuvent apparaître comme pronom d'objet:

à méngēnā	'il m'a vu'	à mésēnā	'il nous a vus'
à mwēēnā	'il t'a vu'	à mōnēnā	'il vous a vus'
à mémēnā	'il l'a vu'	à mēβēnā	'il les a vus'

Les adjectifs et les constructions associatives (nom + nom) n'ont pas été examinés systématiquement.

8. CLASSE 4a

Après avoir pris les accords des 16 classes illustrées plus haut, nous avons découvert que la classe 4a (prefixe m-) prend des accords avec une nasale labiale. Ainsi nous pouvons comparer:

4	ìggàngā ējé	'ces racines-ci'	4a	mìḡkúnkúmé Tmí	'ces chefs-ci'
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Malheureusement nous n'avons pas étudié les accords de la classe 4a dans toutes les constructions, quelque chose de très important qui reste à faire. Bien qu'il soit possible que les deux noms en 3a/4a soient empruntés à une langue voisine, il est également possible que la distinction entre 4 et 4a nous mène à une meilleure compréhension du problème de l'origine des nasales dans les préfixes de certaines classes nominales en bantou étroit.

9. CONCLUSION

Nous avons vu que le tuki distingue au moins 16 classes nominales (1-11, 13, 14, 6a, 19, et 18). Nous avons dit que la classe 18 est rare en bantou et est en même temps mystérieuse et mal comprise. La structure des préfixes des classes 3 et 4 (ON-/IN-) reste à expliquer, ainsi que la forme an- de la classe 6 (qui n'est pas équivalent à la forme n plus voyelle de la classe 6a). Le tuki et ses parents peuvent être très importants dans toutes nos tentatives historiques. Le Père Degastines nous a fait remarquer dès le début de notre petite enquête que les Camerounais de cette région considèrent le tuki comme une sorte de langue mère. Les racines comme mwānā 'enfant', mbūā 'chien', ìbūmū 'ventre' etc. suggèrent par leur forme conservatrice que cette langue renferme beaucoup de renseignements historiques qui se sont perdus dans les langues voisines.

THE NOUN CLASSES OF NGYEMBOON-BAMILEKE

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1. INTRODUCTION

The Ngyemboon language has recently been classified by the Grassfields Bantu Working Group (including Hyman and Voorhoeve) as one of the Bamileke languages of the Eastern Grassfields branch of the Grassfields Bantu language family. The approximately 80,000 speakers of this language, estimated via census and birthrate figures, live for the most part in the Bamboutos Department of Western Cameroon. The department is well named as the people are busy tending their coffee trees on the fertile foothills leading up to Mount Bamboutos, the second highest mountain in the country.

Most of the research on this particular language has been carried out by the present author who has been resident in the area on and off since early 1974. A list of several of his papers, mostly unpublished, is included in the bibliography. As usual, none of this work would have been possible without the assistance of his long-time language consultant, Frederic Ngonda. It is our hope that the present paper will acquaint a wider audience with the fascinating nature of this complex language.

The orthography used in this paper is the one approved for the Ngyemboon language by the National Office of Scientific and Technical Research (the French acronym being O.NA.RE.S.T.) of the Cameroonian government. Where significant, the actual phonetic sounds will be indicated in the text. For the reader interested in the phonological aspect, a complete phonological statement is provided in Anderson (1976). The many different tonal marks, however, represent the phonetic tones involved. These are marked according to the following system:

- á (high tone)
- à° (level low tone - before pause only)
- à (low-falling tone)
- ǎ (low-high rising tone)
- â (high-low falling tone)

In addition, each of the above tones can be further modified by the addition of a preceding downstep feature (marked ').

2. THE NOUN CLASSES

The following chart shows that each of the ten Ngyemboon noun classes has an associated noun prefix, consonant concord marker, vowel concord marker and tone concord marker.

Noun Class	Noun Prefix	Typical Example	Concord Markers		
			Consonant	Vowel	Tone
1.	varies	pfóm "ant"	w	a	L
2.	mè-	mè-pfóm "ants"	p	e	H
3.	N-	ḥ-ká? "field"	w	e	H
4.	mèn-	mèn-ḥ-ká? "fields"	m	e	H
5.	lè-	lè-pfò° "kolanut"	s	e	H
6.	mè-	mè-pfò° "kolanuts"	m	e	H
7.	(à)-	à-pòon "sack"	y	a	H
8.	(è)-	è-pòon "sacks"	s	e	H
9.	N-	ḥ-tú? "calabash"	y	e	L
10.	N-	ḥ-kò?° "roosters"	y	e	H

The following notes help explain the preceding chart:

- The noun prefix for noun class 1 varies greatly, though the concord markers never change. It is possible to divide this noun class into three parts; noun class 1a whose prefix is most often zero, as in the following examples:

pú ? 'lion' sòb 'pepper'

noun class 1b whose members are mostly human and whose prefix is (à)N-, as below:

àm' bú? 'deaf man' ànd' úm 'husband'

and noun class 1c whose members are mostly animals and whose prefix is usually mèn-, as below:

mémv' fò° 'goat' mèn' kò?° 'rooster'

Most of the class 1 nouns in gender 1/10 are from subclass 1c.

- The homorganic nasal consonants (symbolized "N") of classes 1b, 1c, 3, 4, 9 and 10 all drop out before the voiceless fricative consonants f, s and ṣ (written "sh"). By a general phonological rule, all /N-/ prefixes are replaced by /e-/ except in the case of class 1b where the vowel /a-/ is already present. Some typical examples:

áf' úo 'chief' (class 1b) à'só 'friend' (class 1b)
 è'sóon 'market' (class 3) mès'óon 'markets' (class 4)

èshyúo 'elephant' (class 9) mèshyúo 'elephants' (class 4)

3. The noun class prefixes of classes 1b, 7 and 8 contain a vowel in parentheses. These parentheses indicate that the enclosed vowel is usually present when the word in question is preceded by a certain level of juncture. Since this kind of juncture is usually written as either a period or a comma, we will refer to the conditioning factor as "clause-initial". When the word in question is not clause-initial, this initial vowel always drops out. In the same clause-initial position in very careful speech, an optional "e" vowel may also appear before the homorganic nasal prefixes of classes 3, 9 and 10.
4. An interesting case of phoneme metathesis occurs in noun class 6 when the root begins with the phoneme /b/ (which is alternately [p] when not preceded by a nasal consonant). Most class 5 nouns take their plural in class 6, as below:

lèpfò° 'kolanut' mèpfò° 'kolanuts'

However, whenever the noun root begins with the phoneme /b/, the class 6 plural prefix is metathesized with the resulting initial "e" vowel being subject to deletion when not clause-initial, as described in the preceding note. Some examples:

lèpyè	'liver'	(è)mbyè	'livers'
lèpyú	'breast'	(è)mbyú	'breasts'
lèpàb°	'wing'	(è)mbàb°	'wings'
lèpùm°	'egg'	(è)mbùm°	'eggs'
lèpwò?°	'melon'	(è)mbwò?°	'melons'

This synchronic metathesis rule in a limited environment suggests that such a rule may often be the diachronic source of homorganic nasal noun class prefixes, so prevalent in Grassfields Bantu languages.

5. The chart at the beginning of this section follows the Grassfields Bantu practice (which in turn follows the Narrow Bantu practice) of numbering noun classes alternately odd, for singular nouns, and even, for plural nouns. Thus, most noun roots belong to two noun classes, one singular and one plural. This pairing of noun classes is referred to as "gender" and is discussed in section 3 below.
6. In a departure from typical noun class descriptions, we have divided the concord markers into three groups: consonant, vowel and tone. Indeed, the noun classes are distinguished primarily on the basis of their concord markers, as the prefixes on the nouns sometimes vary. Some of the concord consonants have morphophonemic alternants before various high vowels as will be discussed in later sections. The concord vowel is always "e" except for classes 1 and 7 where it is "a". And, as in most Bantu languages, the concord tone is always high (H) except in classes 1 and 9 where it is low (L). The main body of this paper is concerned with the occurrence and co-occurrence of these three concord markers in their various grammatical environments.
7. As in any noun class system, there always exist a few irregular nouns whose irregularity is due to the high frequency of their occurrence in normal speech, as in the following examples:

'm'ŋ	'child'	gwùbé	'children'
'ny'ŋ	'person'	'pyùá	'persons/people'

More numerous are the examples of an archaic noun pre-prefix /pà-/ for noun class 2, as below:

(à)ntz'wé	'woman'	pàntz'wé	'women'
(à)nt'è	'sir'	pànt'è	'sirs'
'mânḡḡḡon-n'j'ýú?	'ancestor'	pàmânḡḡḡon-n'j'ýú?	'ancestors'
mêḡkyú	'small child'	pèḡkyú	'small children'
'múo	'baby animal' or 'human baby'	'púo	'baby animals' but 'human babies' only as an insult

2.1. CONSONANT CONCORD

2.1.1. *Relative Pronouns.* The relative pronouns present one of the clearest cases of the concord consonant used alone as a sign of agreement with the noun. The relative pronoun has the root /-ie/ (final "e" left off in some dialects) with a constant low tone, prefixed by the concord consonant.

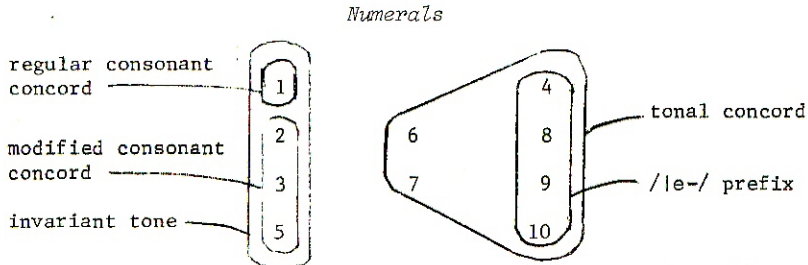
A couple of phonological rules should be noted before examining our examples. The first inserts a fricative [ɣ] (written "g") whenever a word begins with a semiconsonant (y or w) and is followed by a high vowel (i or u). The second rule transforms a back rounded semivowel (w) to a front rounded semivowel (w̥) before (i). With these two rules in mind, the reader will find the concord consonant of each class reflected below:

1.	pfóm	g'w̥ie	pó	jú	'the ant that they bought'
	<i>ant</i>	<i>REL</i>	<i>they</i>	<i>buy</i>	
2.	mèpfóm	p'ie	pó	jú	'the ants that they bought'
3.	h'ká?	g'w̥ie	pó	jú	'the field that they bought'
4.	mèn'ká?	m'ie	pó	jú	'the fields that they bought'
5.	lèpfò	's'ie	pó	jú	'the kolanut that they bought'
6.	mèpfò	'm'ie	pó	jú	'the kolanuts that they bought'
7.	àpòon	gy'ie	pó	jú	'the sack that they bought'
8.	èpòon	s'ie	pó	jú	'the sacks that they bought'
9.	h't'ú?	gy'ie	pó	jú	'the calabash that they bought'
10.	h'kò?	'gy'ie	pó	jú	'the roosters that they bought'

By comparing noun class 3 (with H tone concord) with noun class 9 (with L tone concord), one can see that tonal concord (which is a very frequent phenomena) does not play a role here. The additional downstep features on the noun can only be explained by tonal rules which are beyond the scope of this paper.

2.1.2. *Lower Numerals.* The agreement of numerical adjectives with the noun modified is very complex in Ngyemboon. Five different systematic differences can

be found with the numbers from 1 to 10, as shown by the circles in the following chart:



This complex system has a basic division between numerals with and without tonal concord. In following our outline, the lower numerals without tonal concord will be described in this section and the higher numerals which take tonal concord in section 2.2.2. below. The preceding chart, though more complicated, shows interesting parallels with a similar chart on the Amo language (Anderson 1980b:11). The inclusion of the Ngyemboon number 4 in the tonal class, while both 3 and 5 remain in the non-tonal class, makes the Ngyemboon system discontinuous and therefore more complex than a system like Amo. An examination of the numerical system in languages related to Ngyemboon might reveal the historical reasons for its current synchronic complexity.

The number "one" follows fairly closely the consonant concord described for relative pronouns above. Since the number "one" is by definition singular, it can only be used to modify the odd-numbered singular noun classes, as below:

1.	pfóm wé'mòʔó	'one ant'
3.	h'káʔ wé'mòʔó	'one field'
5.	lèpfò sé é'mòʔó	'one kolanut'
7.	àpòon yé'mòʔó	'one sack'
9.	h'túʔ yé'mòʔó	'one calabash'

The number "one" has two irregularities. The first is the prefix /sé|é-/ for noun class 5 concord instead of the expected /sé-/. The second irregularity is that a completely separate system using the morpheme /t'àʔ/ before the noun modified also exists (but only for the numeral "one"). Since this other system contains no concord markers, it is described in section 2.5.2. below. All of the "regular" numerals occur after the noun.

The numerals 2, 3 and 5 share a modified consonant concord system. Since these numbers are plurals, they can only be used to modify the even-numbered plural noun classes. Typical examples of this system using the number 3 are given below:

2.	mèpfóm p'etá }	'three ants'
2.	mèpfóm m'etá }	
4.	mèn'káʔ méntá	'three fields'
6.	mèpfò méntá	'three kolanuts'

8.	èpòon	sétá	'three sacks'
10.	h̀kò?	yétá	'three roosters'

While classes 8 and 10 have normal consonant concord, the other three classes have improvised various modifications. Noun class 2 accepts the prefix /me-/ as well as the prefix /pe-/. Both noun classes 4 and 6 have added a homorganic nasal consonant to give the prefix /mèn-/ instead of the expected /me-/. The fact that this /mèn-/ is identical to the noun class prefix of class 4 (but not class 6) nouns offers interesting possibilities for the historical spreading of concord prefixes (from class 4 to class 6 in this case). It should be remembered that the above systematic modifications hold for all occurrences of the numerals 2, 3 and 5. The reader is again referred to section 2.2.2. below for a description of the tonal concord with the higher numerals.

2.1.3. *Interrogatives.* The interrogative words take consonant concord alone. The first root /shyóʔó/ "how many?" co-occurs only with the even-numbered plural classes. Just like the immediately preceding example (which was also only with plural classes), this word takes "modified consonant concord", as below:

2.	mé'pfóm	péshyóʔó	'how many ants?'
2.	mé'pfóm	méshyóʔó	
4.	mén'ká?	méshyóʔó	'how many fields?'
6.	mépfò	méshyóʔó	'how many kolanuts?'
8.	épòon	séshyóʔó	'how many sacks?'
10.	h̀kò?	yéshyóʔó	'how many roosters?'

The only difference of the above with previous examples of modified consonant concord is that the homorganic nasal consonant normally associated with classes 4 and 6 drops out. This is the result of a very general phonological rule which deletes homorganic nasal consonants before any voiceless fricative consonant (like "sh").

The other interrogative word takes full consonant concord for all ten noun classes. It is the root /-ěe/ "which?" which always precedes the noun in question, as below:

1.	wěe	pfóm	'which ant?'
2.	pěe	mé'pfóm	'which ants?'
3.	wěe	n'káʔá	'which field?'
4.	měe	mén'káʔá	'which fields?'
5.	sěe	lépfò	'which kolanut?'
6.	měe	mépfò	'which kolanuts?'
7.	yěe	'pòon	'which sack?'
8.	sěe	'pòon	'which sacks?'
9.	yěe	n'tú?'ú	'which calabash?'
10.	yěe	nkòʔó	'which roosters?'

The complicated tonal changes in the above examples are the result of additional floating tones (and sometimes even an extra vowel) associated with the interrogative mood.

2.1.4. *Demonstrative Pronouns.* The demonstrative pronouns take consonant concord only. The roots of the three pronouns are as below:

-òŋ°	'this'	(near speaker) (n.s.)
-ê	'that'	(near hearer) (n.h.)
-ì°	'that'	(far away from both speaker and hearer (f.a.))

Since the roots of the demonstratives /-òŋ/ 'this' and /-ì/ 'that' are segmentally identical to the possessive pronouns /-òŋ/ 'my' and /-ì/ 'your(pl)', and both groups of pronouns take identical consonant concord, tone is the crucial factor. Especially significant is the fact that personal pronouns (see 2.3.1. below) take tonal concord while demonstrative pronouns do not. This absence of tonal concord with demonstratives is best shown by comparing a class 5 noun (which takes H tone concord) with a class 9 noun (which takes L tone concord), as below:

5.	lè'z'íŋ	'name'
	lè'z'íŋ sòŋ°	'this name' (n.s.)
	lè'z'íŋ sê	'that name' (n.h.)
	lè'z'íŋ sì°	'that name' (f.a.)
9.	h'dá	'house'
	h'dá yòŋ°	'this house' (n.s.)
	h'dá yê	'that house' (n.h.)
	h'dá gyì°	'that house' (f.a.)

It is clear from the above examples that tonal concord does not play a role, as the tone on the demonstrative pronoun remains the same regardless of the noun class which the noun modified. For examples where the pronoun tone does change, the reader is directed to the more complex personal pronoun concord system in section 2.3.1. below.

2.2. TONE CONCORD

2.2.1. *Associative Noun Phrase.* An associative construction occurs when a noun is modified by another noun in a noun phrase. The complex tonal alternations which result were described in Anderson (1978). Sufficient for the purposes of this paper will be to show that classes 1 and 9 take a "floating L tone" while all the other classes take a "floating H tone". These "floating tones" are tonal morphemes which separate the two nouns. According to various tonal rules, the floating L tone modifies the tone of the preceding noun while the floating H tone modifies the following noun. The nature of this tonal morpheme is always determined by the noun class of the head noun (the first in the series). The following examples are characteristic:

5.	lètýð	'point' (class 5 noun; H tone concord)
	lèkwòŋ°	'spear'

	lètɥǒ	lékwòŋ°	'point of the spear'
9.	ñzəm		'shadow' (class 9 noun; L tone concord)
	ñzəm	lèkwòŋ°	'shadow of the spear'

The preceding example shows that the floating H concord tone raises the tone of the following /lè-/ prefix to H tone, while the floating L concord tone forces the preceding rising tone of the root /-zəm/ to stay low. Though the above examples give a peek at the most straightforward influence of the underlying floating tones, the full complexity of the tonal changes involved can only be appreciated by examination of the paper which is dedicated to that purpose alone.

2.2.2. *Higher Numerals*. The numerical concord system was outlined in its glorious complexity in section 2.1.2. above. We only wish to show here that the numbers 4, 6 and above exhibit tonal concord. However, the evidence of this concord is a bit weak since these plural numbers always co-occur with even-numbered plural noun classes which all take high tone concord. Therefore, the strongest evidence that we can put forward is that the tone changes in this construction are identical to the tone changes caused by a H concord tone in the associative noun phrase of the preceding section. Some examples:

6.	mènzəm		'shadows' (class 6 noun; H tone concord)
	lèkùà		'four' (with its tone when spoken alone)
	mènzəm	lèkùà	'four shadows'

The raising of the /lè-/ prefix to H tone is exactly what we saw for the associative construction in the preceding section. One can thus conclude that the higher numbers in the following chart behave as if they are full nouns in the modifying position of an associative noun phrase:

Higher Numbers

4.	lèkùà	8.	lèfʒɔŋ
6.	ñtògɔ́	9.	lèpfwɔ́ʒɔ́
7.	sòɔŋ-m'byúà	10.	lè'gém

2.2.3. *Contrastive Adjectives*. By the term "contrastive adjectives", we refer to two Ngyemboon roots with almost identical meaning, /tso/ and /ndyeʔe/. Both of these words take a wide variety of concord options. Each of them means something close to the English word "other", but not exactly. The following examples will show the difficulty involved:

1.	ny\ŋ		'person' (class 1 noun)	
	tsǒ	ny\ŋ	'another person' (known to me)	
		ny\ŋ	ndyeʔè	'another person' (unknown to me)
	tsǒ	ny\ŋ	ndyeʔè	'another person' (?)

Whereas the adjective /tso/ seems to indicate an "other" more closely related to the speaker than with /ndyeʔe/, the fact that both co-occur causes difficulties. It has been impossible so far to isolate the implications of this last construction.

It thus seems better to wait for further discourse analysis before deciding upon the exact meaning of these two words. Whatever their precise meaning turns out to be, both of these adjectives are unusual in that they have an option of several different concord strategies.

First, the adjective /tso/ can modify a noun using only tonal concord, as in the following examples:

- | | | |
|----|-------------|---|
| 5. | lètɥǒ | 'point' (class 5 noun; H tone concord) |
| | tśó l'é'tɥó | 'another point' |
| 9. | ńzém | 'shadow' (class 9 noun; L tone concord) |
| | tśǒ n'zém | 'another shadow' |

The tonal concord in the above examples is not the same as with the associative noun phrase described earlier. The difference is visible in the tone on the adjective /tso/, always being a rising tone (L before H) for classes 1 and 9, and high tone (H before H) for the other classes. For some unknown reason, the tonal concord is not present with the unmodified adjective /ndyeʔɛ/ as seen below:

- | | | |
|----|--------------|------------------|
| 5. | lètɥò ndyèʔè | 'another point' |
| 9. | ńzém ndyèʔè | 'another shadow' |

The oddness of the above tonal neutralization only becomes apparent when it is compared with its alternative form which contains both tonal and consonant concord, as below:

- | | | |
|----|------------------|------------------|
| 5. | lètɥǒ sèn'dyèʔè° | 'another point' |
| 9. | ńzém yèndyèʔè° | 'another shadow' |

The above consonant concord is obvious. The tonal concord is indicated by the downstep feature on the syllable /dyɛ/ with class 5 (and other H tone concord) nouns. The lack of such a downstep feature is characteristic of the L tone concord classes 1 and 9. What is therefore unusual is the lack of such a downstep feature when the consonant concord is also lacking.

Just as /ndyeʔɛ/ can take consonant and tone concord, so can /tso/, as seen below:

- | | | |
|----|---------------|------------------|
| 5. | sètśó l'é'tɥó | 'another point' |
| 9. | yètśǒ n'zém | 'another shadow' |

Once again, we find that the tonal concord is evident only on the root /tso/. It should be mentioned that the examples we have just seen from classes 5 and 9 are characteristic of the kind of concord found throughout the remaining classes. All ten classes follow the full consonant concord found in 2.1.1. above.

Finally, /tso/ can optionally take vowel and consonant concord when it is clause-initial, as below:

- | | | | |
|----|------|---------|--|
| 1. | àtsǎ | pfóm | 'another ant' (class 1 only) |
| 2. | ètsó | mé'pfóm | 'other ants' (class 2 and other classes) |
| 7. | àtsó | pòon | 'another sack' (class 7 only) |
| 9. | ètsǎ | n'tú? | 'another calabash' (class 9 only) |

The preceding examples show the vowel concord as a low tone prefix, while once again the tonal concord is reflected on the root /tso/. This vowel and tone concord is possible with the adjective /tso/ because this adjective precedes the noun and therefore can exist clause-initial. Since the adjective /ndye?e/ always follows the noun, it can never be clause-initial and thus it can never take vowel concord. Further examples of vowel plus tone concord are found in section 2.4.1. below.

2.3. CONSONANT AND TONE CONCORD

2.3.1. *Possessive Pronouns.* The possessive pronouns are the only noun modifiers to take a combination of consonant and tone concord. The various roots are as below:

Possessive Pronoun Roots

-òŋ°	'my'	-ég	'our(exc)'
-ògò°	'my & your(sg)'	-ègè°	'our(inc)'
-ù°	'your(sg)'	-í	'your(pl)'
-é	'his/her/its'	-ób	'their'

Since the tonal alternations involved are almost as complex as those mentioned in 2.2.1. above, the following examples are given only to prove the existence of the "floating" tonal concord marker:

- | | | |
|----|----------|---|
| 5. | lètýǒ | 'point' (class 5 noun; H tone concord) |
| | lètýò sé | 'his point' |
| 9. | ńzém | 'shadow' (class 9 noun; L tone concord) |
| | ńzém yè° | 'his shadow' |

The presence of the floating concord tone is indicated by the difference of tone on the personal pronoun. The many different tone patterns which result are explained in detail in Anderson (1978). The personal pronoun always takes a consonant from the set of regular consonant markers described above. Some examples:

- | | | | |
|----|---------|-----|----------------|
| 1. | pfóm | wè° | 'his ant' |
| 2. | mèpfóm | pé | 'his ants' |
| 3. | h'kà? | wé | 'his field' |
| 4. | mèn'kà? | mé | 'his fields' |
| 5. | lèpfò | 'sé | 'his kolanut' |
| 6. | mèpfò | 'mé | 'his kolanuts' |

- | | | | |
|-----|-------|-----|----------------|
| 7. | àpòon | yé | 'his sack' |
| 8. | èpòon | sé | 'his sacks' |
| 9. | h'tù? | yè° | 'his calabash' |
| 10. | h'kò? | yé | 'his roosters' |

Some of the concord consonants shown above vary phonologically according to the vowel of the personal pronoun, as below:

- | | | | |
|----|-------|------|--------------------|
| 3. | h'kà? | gwú | 'your(sg) field' |
| 5. | lèpfò | 'shú | 'your(sg) kolanut' |
| 7. | àpòon | jú | 'your(sg) sack' |
| 3. | h'kà? | gwí | 'your(pl) field' |
| 7. | àpòon | gyí | 'your(pl) sack' |

In addition, some dialects have /-yug/ and /-yuge/ as the roots of 'our' exclusive and 'our' inclusive respectively. These people then have the following automatic consonant change as well:

- | | | | |
|----|-------|-----------|---------------|
| 5. | lèpfò | 'shyúg(è) | 'our kolanut' |
| 7. | àpòon | gyúg(è) | 'our sack' |

In the preceding examples, a concord semiconsonant (y or w) takes a preceding (g) (phonetically a fricative [ɣ]) before the high front vowel (i). The semiconsonant (w) also takes a (g) before the high back vowel (u). The semiconsonant (y) changes to (j) (phonetically the alveopalatal fricative [ʃ]) when not preceded by a nasal consonant) before the high back vowels (u) and (yu) (this digraph represents phonetically the high back unrounded vowel [ɯ]). In this same high back vowel environment, the consonant (s) changes to (sh) (this digraph represents the alveopalatal fricative [ʃ]). All of these consonant changes have in common that they are only triggered by high vowels. For the interested reader, all of the phonological changes are described in full in Anderson (1976).

2.4. VOWEL AND TONE CONCORD

2.4.1. *Anaphoric Pronouns.* In Ngyemboon, there is more than a complete set of human pronouns in the subject position, as below:

Subject Pronouns (human)

h	'I'	pógò	'you(sg) and I'
mèn	'I'	pég	'we(exc)'
ò	'you(sg)'	pégè	'we(inc)'
gwù	'you(sg)'	p†	'you(pl)'
à	'he/she'	pó	'they'
mè	'one' (impersonal)	pób	'they'

It is interesting that all of the plural pronouns begin with a "p". This would seem to be a modern reflex of the old Bantu class 2 prefix /ba-/ which also referred to humans in the plural. The three "full" pronouns, /mèn/, /gwù/ and /pób/, have not at the present moment revealed any underlying conditioning factor favoring their occurrence in a specific context over their "shorter forms". Thus, for the moment, they remain synonymous, as below:

a.	h	tè	'jú	wó.	} 'I didn't buy (it)'
b.	mèn	tè	'jú	wó.	
	I	NEG	buy	NEG	
c.	ó	tè	'jú	wó.	} 'You(sg) didn't buy (it)'
d.	gwù	tè	'jú	wó.	
e.	à	tè	'jú	wó.	'He/she didn't buy (it)'
f.	pógò	tè	'jú	wó.	'You(sg) and I didn't buy (it)'
g.	pêg	tè	'jú	wó.	'We(exc) didn't buy (it)'
h.	pégè	tè	'jú	wó.	'We(inc) didn't buy (it)'
i.	pî	tè	'jú	wó.	'You(pl) didn't buy (it)'
j.	pó	té''	jú	wó.	} 'They didn't buy (it)'
k.	pób	té''	jú	wó.	

In addition to the above human pronouns, there also exists a separate set of anaphoric pronouns which take both vowel and tone concord according to the following chart:

Subject Pronouns (general)

à	(class 1)	è	(class 9)
á	(class 7)	é	(other classes)

To return to our earlier list, whenever the word in parenthesis is in the linguistic context, one may refer back to it as in the following sentences:

1. (píóm). à tè wó. (ant). 'There isn't any'
NEG NEG
2. (mèpíóm). é té wó. (ants). 'There aren't any'
3. (h'ká?). é té wó. (field). 'There isn't any'
4. (mèn'ká?). é té wó. (fields). 'There aren't any'
5. (lèpíò°). é té wó. (kolanut). 'There isn't any'
6. (mèpíò°). é té wó. (kolanuts). 'There aren't any'
7. (àpòòñ). á té wó. (sack). 'There isn't any'
8. (èpòòñ). é té wó. (sacks). 'There aren't any'
9. (h'tú?). è tè wó. (calabash). 'There isn't any'
10. (h'kò?°). é té wó. (roosters). 'There aren't any'

It is important to note that the human set of pronouns and the general set of pronouns overlap with regards to human nouns which occur in noun class 1. Thus, since most human nouns belong to noun classes 1 (for the singular) and 2 (for the plural), a human noun like /fyù/ 'blindman' can only be referred back to as /à/ (because the human third person plural pronoun is identical to the class 1 pronoun), but its plural /mèfyù/ 'blindmen' can be referred back to by either of the two human pronouns /pó/ or /pób/, or by the general class 2 pronoun /é/.

One might argue that the anaphoric pronoun /é/ is "ambiguous" in that it can refer back to a noun from anyone of seven different classes. It might even be added that it is therefore a poor grammatical tool. Quite to the contrary, in normal discourse and conversation, one does not usually have an item from class 5 and class 8 in the immediate context any more often than two separate items from the same class 5. In the rare case when an anaphoric pronoun would be ambiguous in context, the speaker can always use an alternate strategy to make his reference clear (such as the anaphoric adjective described in section 2.5.1. below). Thus, this group of four anaphoric subject pronouns can be seen to be a very useful tool in keeping the various referents straight in a Ngyemboon discourse.

2.5. NO CONCORD

2.5.1. *Anaphoric Adjective.* Ngyemboon has a separate anaphoric adjective /ŋwé/ which is used together with a noun in order to refer back to a previous referent associated with an earlier mention of that same noun. Because of the many uses of the English article "the" (including the anaphoric use), it seems best to use the more precise, but slightly archaic, gloss 'the aforementioned' when translating /ŋwé/. For our purposes, it is only necessary to look at a few examples to assure ourselves that this adjective, at least, does not use either consonant, vowel or tone concord to show agreement with the head noun, as below:

- | | | | |
|----|--------|-----|-------------------------------|
| 1. | pfóm | ŋwé | 'the aforementioned ant' |
| 2. | mèpfóm | ŋwé | 'the aforementioned ants' |
| 7. | àpòon | ŋwé | 'the aforementioned sack' |
| 9. | h'tú? | ŋwé | 'the aforementioned calabash' |

2.5.2. *Numeral One.* As mentioned in 2.1.2. above, the numeral 'one' has an alternate form /tà?/ which precedes the noun modified and does not concord with it by either consonant, vowel or tone, as below:

- | | | | |
|----|-----|-------|----------------|
| 3. | tà? | h'ká? | 'one field' |
| 9. | tà? | h'tú? | 'one calabash' |

2.5.3. *Quantifier of Degree.* There exists one quantifier /tè?°/ meaning 'many'. This quantifier co-occurs with the odd-numbered plural noun classes and it never takes a concord marker. Since all plural classes take H tone concord, the fact that /tè?°/ occurs with an invariant low tone shows that not even tonal concord is involved, as below:

- | | | | |
|----|---------|------|---------------|
| 2. | mèpfóm | tè?° | 'many ants' |
| 4. | mèn'ká? | tè?° | 'many fields' |

- | | | | |
|-----|-------|-------|-----------------|
| 6. | mèpfò | 'tè?° | 'many kolanuts' |
| 8. | èpòòn | tè?° | 'many sacks' |
| 10. | hìkò? | 'tè?° | 'many roosters' |

2.6. MISCELLANEOUS CONCORD

2.6.1. *Quantifier of Totality*. The quantifier /tsem/ meaning either 'the whole' (with odd-numbered singular classes) or 'all the' (with even-numbered plural classes) has a very different concord system. Noun class 2 nouns cause this quantifier to take a /mé-/ prefix while all the other classes take a homorganic nasal consonant /N-/ prefix, as in the following examples:

- | | | | |
|-----|---------|--------|----------------------|
| 1. | pfóm | ntsèm | 'the whole ant' |
| 2. | mèpfóm | métsèm | 'all the ants' |
| 3. | h'ká? | ntsèm | 'the whole field' |
| 4. | mèn'ká? | ntsèm | 'all the fields' |
| 5. | lèpfò | 'ntsèm | 'the whole kolanut' |
| 6. | mèpfò | 'ntsèm | 'all the kolanuts' |
| 7. | àpòòn | ntsèm | 'the whole sack' |
| 8. | èpòòn | ntsèm | 'all the sacks' |
| 9. | h'tú? | ntsèm | 'the whole calabash' |
| 10. | hìkò? | 'ntsèm | 'all the roosters' |

It should be noticed that the root /tsem/ is invariant, always occurring with the same low-falling tone. Thus the only variation with this construction is when the typical /N-/ prefix changes to a /mé-/ prefix for class 2 nouns. This /me-/ prefix, though with a different tone, takes on additional significance when seen in the light of the adjectives in the following section.

2.6.2. *Adjectives*. Perhaps the most surprising of all the noun modifiers are the adjectives. They combine two unusual features: the modifying adjective precedes the noun modified, and the concord system operates according to a singular/plural contrast instead of a noun class system. These adjectives might therefore be the first step in the breakdown of the Ngyembòòn noun class system and its replacement by singular/plural concord. If this is so, the historical process still has a long way to go as is revealed by the variety of concord uses shown so far in this paper.

If the noun class system is changing in the direction of singular/plural concord, several interesting questions arise from the quantifier /tsem/ of the preceding section. Does the /mé-/ prefix used with /tsem/ only with class 2 nouns reveal the beginnings of a creeping change to a /me-/ plural marker? Does the fact that all the other classes take the same prefix indicate that the noun class concord system must break down to a "no concord" system before it can start to reestablish a singular/plural system? Whatever the historical answers to these questions, the unique nature of adjective concord is radically different from all of the previous systems, as seen in the following examples:

1.	sésé	'pfóm	'black ant'
2.	mèsésé	mé'pfóm	'black ants'
3.	sésé	n'ká?	'black field'
4.	mèsésé	mén'ká?	'black fields'
5.	sésé	l'èpfò°	'black kolanut'
6.	mèsésé	mé'pfò°	'black kolanuts'
7.	sésé	pòon	'black sack'
8.	mèsésé	(mé)pòon	'black sacks'
9.	sésé	n'tú?	'black calabash'
10.	mèsésé	nkò?°	'black roosters'

A couple of observations on the preceding examples are in order. First, besides the low tone /mè-/ prefix being obligatory on the adjective, it is already becoming optional on noun roots where it is not already present, as /mé-pòon/ for 'sacks' clearly shows. If this direction of change continues unchecked, one would expect a future system with /me-/ being the mark of plurality on both nouns and all their modifiers. The class 10 noun above offers an interesting counter-example. Since /mèn-kò?°/ is the class 1 singular of 'rooster', it would cause semantic confusion to say /mèsésé ménkò?°/ because it seems to mix a singular noun with a plural modifier. This kind of a modification of a basic system because of semantic conflict is the underlying cause of many "exceptions" in Ngyembɔn phonology and grammar.

Close examination of the tones in the preceding examples will reveal additional evidence for a singular/plural distinction. All of the even-numbered plural classes have the adjective ending in a high tone and a high tone /mé-/ prefix on the noun when it is present. All the odd-numbered singular classes, on the other hand, have a low tone effect between the two words. This is shown by a downstep feature with class 1 and a high-low falling tone with the other singular classes on the last syllable of the adjective. It must be stressed here that these two words are not behaving like two nouns (as in our associative construction). If they were, all prefixes on the second noun would be H tone with the H tone concord noun classes. The crucial example above is with the (H tone concord) class 5 where the prefix remains low. We thus seem to have retained our high/low concord distinction, but now it is being triggered by a singular/plural criteria instead of by the noun classes.

It is not too difficult to see the historical process of generalization as playing a large part in this change. It seems significant that under the noun class system, all five plural classes already take H tone concord. And L tone concord is only found with singular classes, albeit only 2 out of 5. The simple generalisation is thus to expand low tone concord from just classes 1 and 9 to include classes 3, 5 and 7 as well. By this simple expedient, the underlying criteria of the system has been altered. In the same way, noun classes 2, 4 and 6 already contain a 'me' as part of their prefix. One only has to generalize upon this characteristic and expand its domain to include classes 8 and 10 and, once again, noun class criteria have been transformed into singular/plural criteria. Of course, this kind of historical generalization takes place most simply where the influence of the noun class concord markers has been either greatly reduced or wiped out altogether. Along this same line, one can reflect back upon the "modified consonant concord" of sections 2.1.2. and 2.1.3. above,

where the normal /pe/ in the plural class 2 already alternates with the new /me/. This kind of breakdown in the concord system paves the way for a later breakdown in the noun class prefixes themselves.

The singular/plural system for adjective agreement is not confined to the preceding examples, but exists for all "regular" adjectives, some of which are shown below:

1.	fóǵó	'pfóm	'white ant'	
2.	mèfóǵó	mé'pfóm	'white ants'	
3.	pâŋ	n'ká?	'red field'	
4.	mèpâŋ	'ménká?	'red fields'	
5.	mâa	lèpfò°	'big kolanut'	
6.	mèmâa	mépfò°	'big kolanuts'	
7.	shyùshyù	pòon	'long sack'	
8.	mèshyùshyù	(mé)pòon	'long sacks'	
9.	mâa	mâa	n'tú?	'very big calabash'
10.	mèmâa	mé'mâa	nkò?°	'very big roosters'

3. NOUN GENDERS:

As mentioned above, most nouns belong to one of the odd-numbered singular classes and one of the even-numbered plural classes. This pairing of a singular with a plural class for a given noun root is called its "gender". The Ngyembõon system does not allow a random pairing of any singular class with any plural class, but confines itself to the following double-class genders: 1/2, 3/4, 5/6, 7/8, 9/4 and 1/10. Thus there exist only six productive double-class genders for the ten underlying noun classes. This system can be summarized as in the following chart:

		<i>Genders</i>	
		<i>Singular</i>	<i>Plural</i>
		<i>Classes</i>	
(varies)	1.	-----	2. me-
N-	3.	-----	4. meN-
te-	5.	-----	6. me-
a-	7.	-----	8. e-
N-	9.	-----	10. N-

In addition to the above, a certain number of nouns belong to only one noun class for semantic reasons. The most productive of these single-class genders are class 1a for abstract nouns, class 6a for mass nouns and class 7a for the names of villages.

This paper is based upon a corpus of 720 nouns. For the interested reader, all of these nouns are included in a 1500 word Ngyembõon-French wordlist together with their noun gender. This wordlist has been published as Anderson (1980c)

and is available in the Ngyemboon region or through the author. The number of noun roots found in each of the double-class and single-class genders is summarized in the following chart:

Size of Genders

	<i>Gender</i>	<i>Noun Roots</i>
(Double-class Genders)	1/2	191
	3/4	65
	5/6	60
	7/8	182
	9/4	151
	1/10	9

(Single-class Genders)	1a	9
	3a	5
	4a	4
	5a	3
	6a	23
	7a	14
	8a	2
	10a	2

=====
720 noun roots in corpus

It should be mentioned that some 7/8 roots are increasingly taking 7/6 concord. This seems to be a gradual word-by-word change (once again) toward the /me-/ plural prefix of class 6. Since the situation is in such a state of flux, all noun roots which can be 7/6 have been counted as 7/8, which is usually an optional if not the preferred alternative.

If we assume that single-class genders only lack the second class because of the semantic restrictions created by the nature of the real world we live in, we can distribute the nouns in these genders (dividing up 1a and 4a according to the percentage of their double genders) giving us a more representative chart for the double-class genders, as below:

<i>Gender Frequency</i>		
<i>Gender</i>	<i>Noun Roots</i>	<i>Percentage</i>
1/2	199	27.6
3/4	71	9.9
5/6	86	11.9
7/8	198	27.5
9/4	154	21.5
1/10	12	1.7
<hr/>		
Totals:	720	100.1

The above chart reveals three large genders (1/2, 7/8, 9/4), two medium-sized genders (3/4, 5/6) and one extremely small gender (1/10). Each of the three large genders covers roughly one fourth of the nouns in the corpus while the remaining fourth is divided up between the three remaining genders.

As for the relationship between specific genders and various semantic categories, there is no one-for-one relationship. Most of the human and animal nouns occur in gender 1/2, while at the same time most of the nouns found in gender 1/10 are either human or animal. Though the rest of the categories are spread out over various genders, there are significant numbers of plants in 1/2 and body parts in both 5/6 and 7/8. Material objects are spread quite proportionately through all six genders. The strongest link, therefore, is between the semantic feature [+animate] and genders 1/2 and 1/10.

4. CONCLUSION

The Ngyemboon concord system presents a great deal of variety. This variety has been attacked by noting the separate consonant (C), vowel (V) and tonal (T) concord marker for each class, and then describing each grammatical construction in terms of which element or elements are present and which are not. Combining these three markers in their various combinations could result in eight possible combinations (best represented by a three-dimensional box chart). We will content ourselves with the following two-dimensional summary chart. The occurrence of a feature is represented by a plus (+), and its absence by a minus (-), and the numbers inside the various boxes refer to the sections of the present paper where that specific type of concord is described. Our summary chart:

Concord Co-occurrence

	[+T]	[-T]
[+C, +V]		
[+C, -V]	2.3.	2.1.
[-C, +V]	2.4.	
[-C, -V]	2.2.	2.5.

The above box shows that only five out of the eight possible systems actually occur. Consonant (+C) and vowel (+V) concord never co-occur. Also, vowel concord (+V) cannot occur without an accompanying tone concord marker (+T).

It is difficult to tell which of the three concord markers (C,V,T) is the most important. One could argue that tonal concord is the most important, as its occurrence (three times) in the preceding chart is more frequent. According to such criteria, consonant concord would be next with two occurrences and then vowel concord with one.

From a different viewpoint, one could argue that consonants carry more information than either vowels or tone. Since there are five possible consonant choices (p,m,s,w,y) while only two choices each for vowel (e,a) and tone (H,L), the occurrence of a specific consonant is more unpredictable and therefore carries more informational weight when it does occur.

From yet another viewpoint, one might argue that vowel concord is more important than consonant concord. In looking at a variety of Ngyemboon texts (both conversational and narrative styles), one is impressed by the extremely high frequency with which anaphoric pronouns (and thus vowel concord) occur.

In sum, it seems that all three kinds of concord markers are very well ingrained in the Ngyemboon language. This puts the emergence of a singular/plural distinction (section 2.6.2. above) into its proper place. Since to our knowledge, no other Grassfields Bantu language has demonstrated such an emerging singular/plural system, it is not at all sure that the complex noun class system will quickly collapse. On the contrary, the concord markers serve the important conversational functions of providing a certain amount of redundancy in the noun phrase and of keeping the various referents of the discourse clearly identified. Before the noun class system collapses, these functions will need to be handled by other linguistic means. On the other hand, it may be the sheer complexity and variety of the concord system in Ngyemboon which is producing pressure towards a simpler (sg/pl) system. In that case, the seeds of the future would already be present in today's adjectives. Only the future will tell.

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NOUN CLASSES IN ADERE¹

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1. INTRODUCTION

The language of Adere, locally known as Dzòdínká, is the most Northern language of a group of languages, called Mbam-Nkam or Eastern Grassfields. This language was studied in relation to a much greater survey of Grassfields Bantu languages. The language is spoken by inhabitants of the five quarters which make up Adere: Wugo, Bang, Bangang, Bankem and Amba. The last quarter (Amba) is situated on the other (Northern) side of the Donga river, in Nigeria. The number of speakers is roughly estimated at about 1700. The village is surrounded by speakers of Mbembe, a Jukunoid language. Inter-marriage with Mbembe speakers is rather common and most inhabitants seem to speak Mbembe as a second language. The language borders in the South-East on other Mbam-Nkam languages: the languages of the villages Lus and Kom (generally called Mfumte) and the languages of Butui and Ncha, which we have not studied. It is said that the Adere migrated during the First World War from Mbot in a Limbum speaking area to their present site. It is indeed remarkable that the class system of Adere is well-preserved, even better than that of Limbum, while the neighbouring Mfumte languages only show vague remnants of an original class system. Limbum (Van Reenen and Voorhoeve 1980) and Adere are the only Northern Mbam-Nkam languages (as far as we know) preserving a fully developed Bantu class system with concord. Adere and Limbum also share other specific elements, as a dual pronoun 'we'.

But the language is also distinct from Limbum, and at a time depth which clearly exceeds the 60 years indicated by the speakers (the First World War). Adere is in fact one of the most conservative members of Eastern Grassfields. It has kept most of the final consonants intact, while many of them have disappeared in Limbum. Another remarkable fact in this respect is that Adere has a class 19 (prefix fj-), which among the Mbam-Nkam languages is otherwise found only in the Ngemba languages. Up till now we assumed that Ngemba acquired this class 19 from the neighbouring, but more distantly related Momo and Ring languages. The existence of class 19 in Adere makes this hypothesis less probable. In other respects (shared lexical retentions mainly) Adere clearly belongs to the subgroup of Northern Mbam-Nkam, which is distinct from the other Mbam-Nkam subgroups (Nun, Ngemba and Bamileke).

Pastor Mathew Bashie Mbakson was an inspiring informant with great insights in his language. But time was much too short to solve the many problems that the language poses. We have only vague ideas about the Adere phonology and it will become clear as we proceed in our exposition of the class data, that this hampers our understanding of the class system. The data are, however, important enough to warrant publication. Moreover, the village is so small and inaccessible that better data will not easily become available in future.

2. NOUN STEMS

Adere noun stems are mostly monosyllabic with a CV(C) structure. In isolation noun stems show 6 tone patterns (only class 1 and 7 nouns with zero prefix are used as examples):

- a) Low Falling [˨] in b̀ap 'wing', ǹam 'animal', ts̀o 'mouth', c̀in 'thorn', v̀o 'slave', l̀e 'bridge', etc.
- b) Stable Low [˨˨] in g̀un̄o 'corpse', j̀ik̄o 'place, bed', bl̄t̄o 'war', k̀um̄o 'medicine', m̀ek̄o 'dew', bl̄o 'kola nut', etc.
- c) Mid [-] in z̄on 'friend', t̄e 'tree', b̄o 'arm, hand', w̄om 'thing', n̄et 'body', m̄on 'child', etc.
- d) High [˨˨] in a limited number of stems: s̀ak 'profit', t̀u 'market', k̀am 'crab', ʃ̄iŋ 'bird', b̀ok 'chimpanzee', nd̄o 'throat' and nc̄um 'bottom'.
- e) Rising [˨˨] also in a limited number of items: d̄a 'cutlass', nḡat 'ant' and t̄s̄ 'intestines'.
- f) Falling [˨] in two items only: ŋk̄om̄ 'elephant' and kw̄a 'maize'.

Low Falling represents Proto Eastern Grassfields (PEG) *LL, Stable Low PEG *LH, Mid often PEG *HL, High and Rising both PEG *HH. There are, however, some switches between *HL and *HH. There exists a synchronic relation between High and Rising, as will become evident in the following sg/pl pairs: s̀ak/v̀e-s̀ak 'profit(s)', k̀am/v̀i-k̀am 'crab(s)', t̀u/v̀e-t̀u 'market(s)', ʃ̄iŋ/v̀i-ʃ̄iŋ 'bird(s)', nc̄um/v̀i-c̄um 'bottom(s)', nd̄o/v̀i-nd̄o 'throat(s)'. All High stems belong to class 1, except nd̄o (class 7) and nc̄um (class 9). In Ngemba (Leroy 1979) the HH pattern was only found in class 1a with zero prefix. All other HH stems were realized as LH in isolation, because of a rule which assimilates the first H tone of a HH stem to the preceding L of the noun prefix. We might assume that in this language, too, the L tone of the noun prefix spills over into the stem and produces a Rising tone. This might explain why High stems are only found in classes 1, 7 and 9 which (as will be shown later) all have a zero prefix. However, an opposition between High and Rising stems is found in class 7: nd̄o 'throat' (with High tone) versus t̄s̄ 'intestines' and nḡat 'ant' (with Rising tone).

Another observation is important in this respect. In certain constructions, noun prefixes are absent or replaced by noun suffixes. Under these conditions, Rising stems (supposedly caused by a Low prefix) remain Rising and do not appear as High:

ʃ̄iŋ b̄i: nḡet	'the birds of the chief'
m̄e ye s̀ak-b̀e	'I saw profits'

The same seems to happen in the two-syllable stem: kpé|á/vì-kpè|á 'yam' (class 7/8), where a form kpé|á vín 'the yams' with rising tone on the first syllable is also found.

It seems hard to explain the rising tone in the absence of a low prefix, which is supposed to condition it. Two explanations are possible. One is based on a late deletion of the prefix after it has had its influence on the tone of the stem. This also happened in Aghem (Hyman 1979: 14): k̄t-t̄éɛ + k̄n 'this cricket' produces k̄t-t̄éɛ k̄n before the prefix is deleted. The final output is t̄éɛ k̄n. An alternative solution is based on a morphologization of the original tone rule. The relation between high and rising tone on the stem is in that case part of the morphological relation between singular and plural. High tone stems are only found in singular classes with a zero prefix, pairing with plural classes with a CV-prefix: class pairs 1/2 (sák, tú), 1/6 (bók), 1/8 (ǎín, kám), 7/8 (ndó, kpé|á), 9/8 (ncúm). The rising tone could also be interpreted as a mark of plurality, even where no prefix is found (c.q. is deleted).²

The noun prefixes are Ø- in classes 1 and 7 and have a CV structure in classes 2 (bè-), 5 (dì-) and 8 (bì-). In classes 6, 9, 10 and 19 a homorganic nasal precedes the stem (still preceded by CV prefixes in 6 and 19). The morphemic status of this homorganic nasal is a problem. In most cases the homorganic nasal is not syllabic and bears no tone. All the other segmental noun prefixes have Low tone. The homorganic nasal seems also in other respects not to function as a prefix. Prefixes are deleted under specific conditions, e.g. if the noun is determined by a possessive element: v̄ì-t̄ə 'trees' vs. t̄ə vyám 'my trees'. The homorganic nasal is not deleted under the same conditions:

nḡt̄ə	'ropes'	vs.	nḡt̄ yám	'my ropes'
mù:ɲfù	'feathers'	vs.	ɲfù mám	'my feathers'
f̄l̄:ɲk̄ōn	'bean'	vs.	ɲk̄ōn fyám	'my bean'

We assume therefore, that the homorganic nasal is no longer considered to be a Prefix, but is interpreted as part of the stem. This means that class 9/10 nouns are also considered to have a zero prefix: Ø-mbū/Ø-mbú-mbū 'goat(s)'. The stems in this class pair almost always start with a nasal or nasal complex (NC). The same can be observed in class 1/2 nouns. The homorganic nasal of the singular is also present after the plural prefix: ɲf̄òt/v̄ə-ɲf̄òt 'he-goat(s)', mbò/v̄ə-mbò 'cock(s), rooster(s)'.

It is clear that this has not always been the case, and that the homorganic nasal was once a real prefix. The class 1/2 noun z̄ōn/v̄ə-s̄ōn 'friend' presents an interesting case. The voiced fricative must once have been an allophone of the voiceless one after a homorganic nasal, alternating with the plural prefix bè- of class 2. A similar development (but without deletion of the nasal prefix) is found in another class 1/2 noun: ɲ-jw̄ə/v̄ə-yw̄ə 'wife'. In this respect it is interesting to note that the only class 9/10 nouns without a nasal are: z̄ándì 'fly', z̄ū 'fish', z̄ə 'soil', v̄ōn 'sore' and vȳèə 'vegetable'. All these items show initial voiced fricatives, just like z̄ōn 'friend', and could have originated as voiced allophones of voiceless fricatives after a homorganic nasal.

Former vowel initial stems show the same alternation between a nasal and a bè- prefix in classes 1/2:

ɣwùn/bèn	'person'	mɔ̄ɲwēngē/bɔ̄byēngē	'girl'
mɔ̄n/və-bɔ̄n	'child'	mónté/bónté	'youth'
ɲwēngē/və-byēngē	'woman'		

Other former vowel initial stems with amalgamated prefixes are found in classes 5/6 and 7/8:

l̩- Tt/mù:-mTt	'eye'	(cl. 5/6)
wóm/(vì-)byēm	'thing'	(cl. 7/8)

We have only noted one minority gender (cl. 5/10) with a regular alternation between a nasal and a CV- prefix:

gùn°/h̩-gùn°	'corpse'
l̩-kāp/h̩-kāp	'money'
l̩-gt°/h̩-gt°	'rope'

These are the only items found in this gender. gùn° 'corpse' is irregular in that it does not admit a l̩- prefix. The nasal may in this case be syllabic and tonal (as indicated), but we can not be certain. There might exist an opposition between a syllabic homorganic nasal (in the plural of gender 5/10) and a non-syllabic one in the singular of classes 1 and 9. We lack the opportunity to verify this.

In one other gender (classes 5/6) a nasal prefix can be isolated: l̩-sò°/mù:-n-sò° 'tooth', l̩-bì°/mù:-m-bì° 'kola nut', etc. Still, by the other criterion (the deletion of a prefix under certain conditions), the homorganic nasal seems to be part of the stem:

mē yé bì-dē	'I saw a kola nut'
mē yé mbì-mē	'I saw kola nuts'

The homorganic nasals in class pair 19/6 can not be isolated. They do not alternate with zero: f̩:-ɲkwàŋ/mù:-ɲkwàŋ 'ring(s)'. In object position the nasal remains part of the stem:

mē yé ɲkwàŋ-fē	'I saw a ring'
mē yé ɲkwàŋ-mē	'I saw rings'

If we disregard the tonal alternation between High and Rising stems (treated above), we still have to account for a number of tonal alternations in disyllabic stems:

tàntō/və-tǎntō	'hat' (cl. 1/2)
mēngvūb/və-méngvūb	'chicken' (cl. 1/2)
mbāngùm/mbáŋgùm	'man' (cl. 1/10)
ɲàrà/ɲǎrà	'cow' (cl. 9/10)
tòtō/vì-tótō	'ear' (cl. 7/8).

The first four items can be explained by interpreting them as associative constructions. In associative constructions, the singular classes 1 and 9 are characterized by a Low associative marker, while the corresponding plural classes 2 and 10 are characterized by a High associative marker:

tàn +`+ tō	'hat of head'	/	və-tàn +`+ tō	'hats of head'
mé +`+ ngvūb	'X of chicken'	/	mé +`+ ngvūb	'X's of chicken'
mbá +`+ ngùm	'male of X'	/	mbá +`+ ngùm	'males of X'
nà +`+ nà	'animal of cow'	/	nà +`+ nà	'animals of cow'

Another (non-tonal) irregularity might be explained along the same lines: Ẓándí/Ẓá:ndí 'fly' (cl. 9/10), if one can prove that Ẓá +` produces a long vowel. The normal associative marker is segmental (cf. 4.3), but tonal associative markers are common in other Mbam-Nkam languages. There may have existed a tonal and a segmental associative marker side by side at some earlier stage of the language, with a small difference in meaning.

The last irregular item of classes 7/8 can not be explained in the same way, because the associative markers of classes 7 and 8 are both High. Here we may think at a possible influence of tone patterns in reduplications, which are however not fully understood. Some examples are given below.

Classes 9 and 10 have zero prefixes. This means that there is no distinction in prefix between the singular and the plural in the sg/pl pair 9/10. The plural forms are, however, reduplicated in this gender. Reduplication of a Low Falling and a Stable Low tone results in a Rising tone on the reduplicated element (we assume that the first element is the reduplicated one). Examples are:

njì / njí:-njì	'road'
ngòk / ngó:-ngòk	'grinding stone'
nòt° / nót°:-nòt°	'body hair'

We also noted the irregular reduplication njù°/njú:-njù° 'excrement', but the irregularity may be based on a notational error. Mid-tone stems have a High-Mid reduplication pattern:

mbē / mbé-mbē	'leopard'
vēŋ / vé-vēŋ	'sore'

Our notation of vowel length has not been without errors, so that we can not state that the absence of vowel length in this pattern is important.

Reduplication of the only noun with Falling tone results in a pattern High-Low: ŋkóm/ŋkó:-ŋkóm 'elephant'.

The first element of the reduplication is treated as a prefix. This means that under the same conditions in which the prefix is deleted, the first element of the reduplication can be deleted with compensatory vowel lengthening of the second element:

njí:-njì yí:-wō`	or	njí: yí:-wō`	'their roads'
vì-bàm bí:-wō`	or	bàm bí:-wō`	'their bags'

3. NOUN AFFIXES

Adere is the only Mbam-Nkam language with regularly alternating noun prefixes and suffixes. The prefixes have always Low tone and can optionally be deleted if the noun is accompanied by a concurring element (determiner). In some constructions, the absence of a prefix is compensated by the presence of a related suffix. The following constructions have been noted in this respect:

- a) if the noun is followed by a numeral:
tā-vè ví-tyét 'three trees' (class 8),
- b) if the noun is followed by tsəmēn 'all':
tā-vè tsəmēn 'all the trees',
- c) if the noun is followed by sēn 'how many?':
tā-vè sēn 'how many trees?',
- d) if the noun functions as a subject of the verb:
tā-vè vyā bō-šT 'the trees are lost',⁴
- e) if the noun functions as an object of the verb:
mā yé tā-vè 'I have seen trees'.

A relation exists between noun prefixes and suffixes, as will appear from the following table:

Table 1

Noun Prefixes and Suffixes in Adere

<i>Classes</i>	<i>Prefix</i>	<i>Suffix</i>
1	∅-	-o
2	bà-	-be
5	dì-	-de
6	mù:-	-me
7	∅-	-e
8	bì-	-be
9	∅-	-e
10	∅-	-e
19	fì:-	-fe

A number of complications have been avoided in this table. The problem of the status of the homorganic nasal in classes 1, 6, 9, 10 and 19 has been treated in the preceding section, where we interpreted this nasal as part of the stem. The arguments were not completely convincing in class pairs 5/6 and 5/10 (minority gender):

lì-bì°/mù:-mbì°	'kola nut' (cl. 5/6)
lì-kāp/ḥ-kāp	'money' (cl. 5/10).

The allomorphic variation is phonologically conditioned. The prefixes bə- (class 2) and bì- (class 8) have allomorphs vè- and vì- after a vowel or pause. The graph [v] symbolizes a labiodental approximant or a bilabial stop or approximant followed by a labiodental fricative release. The prefix dì- (class 5) is realized lì- after a vowel or pause. We are not always completely sure about the length of the vowels in the prefixes mù:- (class 6) and fì:- (class 19). We, in fact, noted several instances of mù- and fì- (lì-byān/mù-mbyān 'brain' next to lì-sòḡ°/mù:-n-sòḡ° 'tooth'). Notational errors are possible.

The suffixes -bè and bè- have the same allomorphs:

bīt-bè 'wars'	varies with mē-vè 'mothers',
bàb-bè 'wings'	varies with kpě á-vè 'yams'.

The suffix -de has no variant.

The suffix -o has a variant -wo and the suffix -e a variant -ye after a vowel: mē-vò 'mother', mbū-yè 'goat'.

The tone of the suffix is predictable. It is Mid after a Low Falling stem and Low after a Stable Low, Mid, High or Rising stem:

mā yé mfòt-ò	'I saw a he-goat' (mfòt)
mā yé bīt-ò	'I saw a war' (bīt°)
mā yé mī-mè	'I saw eyes' (mù:-mīt)
mā yé kpě á-vè	'I saw yams' (vì-kpě á)

The existence of a formal relation between prefixes and suffixes is clear. A closed vowel in the prefix corresponds with a non-closed vowel in the suffix. A long vowel in the prefix is not found back in the suffix. A zero prefix corresponds with a vocalic suffix. The only exceptional match is found in class 6 between a prefix mù:- and a suffix -mè. It is in this respect important to note that the concord prefix mé:- is realized mó: before a stem with a vowel u or o.

The relation between a closed vowel in the prefix and a non-closed one in the suffix supports a hypothesis that in a former stage of the language we had vocalic prefixes: u- in class 1, ə- in class 7, and i- in classes 9 and 10. They must have been followed by a nasal, which has become part of the stem in classes 1, 9 and 10. The historical prefixes, as far as we can reconstruct them from the Adere evidence, may have been u-N- (class 1), i-N- (class 9) and i-N- (class 10). The homorganic nasal of class 1 may be reconstructed even further back to u-mu-, if we take into account the vowel initial stems discussed in the preceding section. In the case of class 7 we have the evidence of the class 7/8 pair wōm/byēm 'thing', which may present evidence that the prefix ə- was followed by some consonant, presumably the consonant g which figures in the concord prefix gé-. This internal reconstruction points in the direction of the former existence of preprefixes in Adere.⁵

The noun stem may also be altered before a noun suffix. A homorganic stop is inserted between a final nasal consonant of the stem and a non-low vocalic

suffix. This stop consonant is not found before the class 7 suffix which is low. Relevant examples are:

zōn-d-ò	'friend' (class 1)
ndzām-b-è	'axe' (class 9)
ŋkóŋkōm-b-ē	'elephants' (class 10)

The homorganic stop is not found in: kūn-è 'hill' (class 7), because the vocalic suffix is in this case low. The final consonant t̄ is deleted before class 5 and 6 suffixes: |T-dè/mT-mè 'eye' (|Tt/mTt). We have not enough evidence to generalize this statement. But cf. also p̄t°/p̄š:-p̄št° 'body hair' and ŋgòk/ŋgòš:-ŋgòk 'grinding stone', where voiceless consonants are deleted before a consonant.

The allomorphs -və of -bə and -ve of -be follow the same rules as the corresponding allomorphs of the prefixes: -və and -ve are found after a vowel, -bə and -be after a consonant. All realization rules taken together, one might encounter minimal pairs like kùm-bē 'medicines' (class 8) and ŋkàm-b-ē 'year' (class 9), which resemble each other in suffix, but belong to different classes.

4. CONCORDS

We observed concord in the possessives (4.1), the demonstratives (4.2), the associative (4.3), the interrogative (4.4), the adjective (4.5), the numerals '2' and '3' (4.6), and in the words 'other' (4.7) and 'some' (4.8). Table II compares noun suffixes and concord prefixes.

Table II

Noun Suffixes and Concord Prefixes

Class	Noun Suffix	Concord Prefix
1	-o	gù-
2	-bə	bé:-
5	-de	dí-
6	-mə	mé:-
7	-ə	gé-
8	-be	bí:-
9	-e	jì-
10	-e	jí:-
19	-fe	fí-

Long vowels seem to be general in plural concords, but the notation has not been consistent. As in other Bantu languages, the concords of classes 1 and 9 have Low tone and are tonally distinct from all other concords.

The following allomorphs are noted: gù- (class 1) is realized wù- after a vowel, bé:- (class 2) is realized vé: after a vowel, dí- (class 5) is realized

í- after a vowel, mé: (class 6) is realized mú:- before a stem with u or o (but not o), gé- (class 7) is realized yé- after a vowel, bí:- (class 8) is realized ví: after a vowel, jì- (class 9) is realized yì- after a vowel and jí:- (class 10) is realized yí:- after a vowel. The vowels ə and u of the concord prefix are deleted before a vowel. The vowel i of the concord prefix is deleted before i and changed into y between i and non-i.

All this allomorphic variation is illustrated in the following examples:

zō w-àm	'my friend' (class 1, see also the loss of final n of zōn)
zō wù-sēñ	'our friend'
mfòt gù-n°	'the he-goat'
sōm bé-wùn°	'your (pl) friends' (class 2, vowel length was not always noted correctly)
vò vé:-wùn°	'your (pl) slaves'
bōk dí-ám	'my pumpkin' (class 5)
gɸ lɣ-ám	'my rope'
bōk d-í	'his pumpkin'
mfù m-ám	'my feathers' (class 6)
mfù mé:-sēñ	'our feathers'
mfù mú:-wùn°	'your (pl) feathers'
mfù mú:-wō	'their feathers'
mfù mé:-sō	'our (dual) feathers'
bàp gé ngēt	'the wing of the chief' (class 7)
tē yé ngēt	'the tree of the chief'
tē ɣ-í	'his tree'
tē v-í	'his trees' (class 8)
tē ví-wùn°	'your (pl) trees'
mbū y-àm	'my goat' (class 9)
nàn j-àm	'my animal'
nàn j-ám	'my animals' (class 10)
ŋkōn fy-ám	'my bean' (class 19).

4.1. Possessive. The possessive stems are:

-àm	1 singular	'my'	-sēñ	1 plural inclusive	'our'
-sō	1 dual	'our'	-wùt°	1 plural inclusive	'our'
-ò	2 singular	'your'	-wùn°	2 plural	'your'
-ì°	3 singular	'his'	-wō	3 plural	'their'

The tone rules have not been studied. We tried to use the same tone patterns as those found in noun stems. The tonal distinctions are reliable: -àm (1 s) and ò (2 s) are opposed to -sô (1 d), -sên (1 p incl) and -wô (3 p), and both groups are opposed to -ì° (3 s), -wùt° (1 p excl) and -wùn° (2 p). For the rest we can not be sure. We will illustrate the rules by citing possessive forms of nàm/nǎ-nàm 'animal' (classes 9/10):

nàm jì-àm [nànjàm]	'my animal'	nàm jí:-àm [nànjàm]	'my animals'
jì-ò [nànjò]	'your animal'	jí:-ò [nànjó]	'your animals'
jì-sô [nànjìsō]	'our animal'	jí:-sô [nànjí:sō]	'our animals'
jì-sên [nànjìsên]	'our animal'	jí:-sên [nànjí:sên]	'our animals'
jì-wô [nànjìwô]	'their animal'	jí:-wô [nànjí:wô]	'their animals'
jì-ì° [nànjì°]	'his animal'	jí:-ì° [nànjí]	'his animals'
jì-wùt° [nànjìwùt°]	'our animal'	jí:-wùt° [nànjí:wùt°]	'our animals'
jì-wùn° [nànjìwùn°]	'your animal'	jí:-wùn° [nànjí:wùn°]	'your animals'

It is clear that the tonal rules are more complicated or that the tonal patterns are more complex than suggested above. High Falling stems and Stable Low stems might have a preceding H tone like -'sô and -'ì°, but it does not seem relevant in this stage of research to complicate the underlying tone patterns. The noun prefix is almost always deleted in the possessive construction. The only exception noted was mū:mbōk mām 'my pumpkins'.

4.2. *Demonstrative.* The demonstrative stems are:

-né	'this' (near speaker)
-'nènéné	'that' (away from speaker and addressee)
-èn°	'the' (anaphoric)

A fourth demonstrative is very complex and has not been studied:

-fěpēdyòyē	'that' (near addressee).
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Examples are cited with a class 1/2 noun zōn/và-sōn 'friend':

zō wù-né	'this friend'	sō:m bá-né	'these friends'
zō wù-nènéné	'that friend'	sō:m bá-nènéné	'those friends'
zō wù-n°	'the friend'	sō:m bé-n	'the friends'

The vowel length in so:m might be produced by the following nasal complex. This can also explain the vowel length in the noun prefixes mù:- (class 6) and fì:- (class 19), which are only found before a nasal complex (prenasalized stems). We noted in class 7 tē yá-fěpēdyòyē 'that tree' (near addressee).

The realisation of concords before -èn° is special in that the vowel ø assimilates to the concord vowel:

mfòt gù-èn°	[mfòt gùn°]	'the he-goat'	(class 1)
sǎk bé:-àn°	[sǎk bán]	'the profits'	(class 2)
gèk dí-èn°	[gèk dín]	'the jaw'	(class 5)
kpǎjá bí:-èn°	[kpǎjá vín]	'the yams'	(class 8)
mbū jì-èn°	[mbū yìn°]	'the goat'	(class 9)
mbū jí:-èn°	[mbū yín]	'the goats'	(class 10)

The tone rules are again not clear.

The anaphoric forms must be used as object pronouns, except those in classes 1, 2, 9 and 10:

mā yé lTn	'I have seen it'	(class 5)
mā yé yēn	'I have seen it'	(class 7)

The tone is Mid. The exceptional classes have special forms:

mā yé yē	'I have seen it'	(classes 1, 9 and 10)
mā yé wō	'I have seen them'	(class 2)

4.3. *Associative*. The associative construction consists of two nouns (without prefixes), separated by the concording prefix. Examples are:

bòk dí ngēṭ	'the pumpkin of the chief'	(class 5)
mùmbòk mú: ngēṭ	'the pumpkins of the chief'	(class 6)
bàp gé ngēṭ	'the wing of the chief'	(class 7)
ngkwàn fí ngēṭ	'the ring of the chief'	(class 19)

The second example is exceptional. The noun keeps its prefix (which may sometimes happen with class 6 nouns), and the concord has an u vowel (as in the noun prefix). It is possible that u is an allophone of ə before a nasal complex. The associative stem may be set up as -ə, if the same rules as in 4.2 are applied.

4.4. *Interrogative*. The interrogative consists of a concording element followed by -fé. Examples are:

tē yé-fé	'which tree?'	(class 7)
tē ví-fé	'which trees?'	(class 8) (No long vowel in my notes)
mbū yì-fé	'which goat?'	(class 9)

The form wù-fé (class 1) can also be used as an independent pronoun 'which one?'

4.5. *Adjective*. The adjective is preceded by a concord prefix, which can however be deleted in class 1:

zō (wù-)mfṭ	'a new friend'
sōm bé-mfṭ	'new friends'

tē ví-mfT 'new trees'

4.6. *Numerals*. Only the numerals '2' and '3' are preceded by a concord prefix. The noun is here followed by a suffix:

ngT-yè jí-bâ 'two ropes'

tē-vè ví-tyét 'three trees'

sōm-bè vé-bâ 'two friends'

4.7. *'Other'*. The word for 'other' is rendered by a stem -ncè° preceded by a concord prefix:

kám bí-ncè° 'other crabs'

ɲkwàŋ mú:-ncè° 'other rings'

4.8. *'Some'*. The word 'some' is rendered by a stem -mòk° (the stem for 'one'), preceded by a tonal concord, i.e. Low tone in classes 1 and 9, High tone in all other classes.⁶ Examples are:

zō mòk° 'some friend'

sō mók 'some friends'

As far as the tone rules are concerned, the Stable Low tone should be interpreted as a pattern LH (-mòk') as in the other Mbam-Nkam languages. One should then state that the concord tone replaces the tone of the stem vowel, just as is the case with other vowel initial stems with a Stable Low pattern: jí-ì° [jí°], jí:-ì° [jí] (cf. 4.1), jí-èn° [jín] (cf. 4.2). One should accept a rule which assimilates the vowel e to the preceding vowel and then deletes the prefix vowel completely, leaving its tone behind. This floating tone has the same effect as the floating concord tone before -mòk'. A sample derivation would be jí:-èn° (class 10) → jí:-ìn° → j'-ìn° → jín. Cf. '-mòk° → mók.

5. GENDERS AND CLASSES

Two-class genders with a large content are 1/2, 5/6, 7/8, 9/10 and 19/6. Human beings are concentrated in gender 1/2, animals in gender 9/10. One class genders with reasonable large content are 6 and 9. The content of these genders is given in an appendix.

Minority genders are presented in the text.

1/8 kám 'crab', šín 'bird', ɲwè 'ground, God'

1/6 bók 'chimpanzee'

1/10 mbāŋgùm 'man' (pl. mbāŋgùm)

5/10 -kāp 'money', gùn° 'corpse', -gɛ° 'rope'

7/6 kǒkò/mù:ɲkò 'leg, foot', bì/mù:mbì 'thigh'. This gender corresponds to the Proto Bantu gender 15/6.

9/8 ncúm/vìcùm 'bottom'

Two single class genders have small content:

- 1 mǎnsù 'groundnuts', kwâ 'maize'
 2 -lè 'beard', -šT 'face'

Some single class genders can form a singular in the same class (with the same concord in sg and pl):

- 6/6 ngūt/mù:-ngūt 'oil'
 2/2 šT/vèšT 'face'

The data in this paper are summarized in the following table:

Table III

The Adere Class System

SG				PL			
Class	Pref	Suff	Conc	Class	Pref	Suff	Conc
1	∅	(w)o	gù	2	bà	bə	bé:
5	dì	de	dí	6	mù:	mə	má:
7	∅	e	gé	8	bì	be	bí:
9	∅	(y)e	jì	10	∅	(y)e	jí:
19	fì:	fe	fí				

APPENDIX TO NOUN CLASSES IN ADERE

Gender 1/2:

zōn 'friend' (pl. -sōn), sék 'profit', mfòt 'he-goat', nkàndá 'belt',
tàn tō 'hat' (pl. -tǎn tō), kúkù 'horse', mbò 'rooster', fèfēn 'knife'
(pl. fèfēn), mōn 'child' (pl. -bōn), cìn 'thorn', vò 'slave', nwèngē
'woman' (pl. -byēngē), njwē 'wife' (pl. -ywē), bit° 'war', lōm 'husband',
mōnté 'youth' (pl. bōnté), tú 'market', mē 'mother', tūk 'night', tèt°
'father', gwùn 'person' (pl. bèn), lè 'bridge', mēngvūb 'chicken' (pl.
-mēngvūb), mēmē 'brother, sister', tēmòk 'uncle', nōŋ 'day', mōc° 'daylight'.

Gender 5/6:

-byān 'brain', -sōŋ° 'tooth', -nèk° 'yellow yam', -gèk 'jaw', -bì° 'kolanut',
-kòŋ° 'spear', -lōn 'tongue', -kèŋ° 'pot', -kwō 'death', -lōn 'name',
-tōŋ° 'navel', -līt 'eye' (pl. -mīt), -bòn 'egg', -tēn 'palm tree', -fù
'feather', mvēmvé 'dust' (no prefix in sg.), mək° 'dew' (no prefix in sg.),
-bùm 'belly', -lāk 'village', -bēn 'breast', -bō 'sky', -njT 'smoke' (sg.
can appear without a prefix), -jēn 'grass'.

Gender 7/8:

bāp 'wing', tē 'tree', ngōn 'firewood' (also possible in gender 7/10),
bēp 'young goat', tsò 'mouth', bō 'arm', ngēt 'chief', wōm 'thing' (pl.
byēm with optional prefix), ntēm 'heart, liver', kūn 'hill', ndōŋ 'horn',
bēn 'corn fufu, food', jìk° 'place, bed', tsōk 'iron', mōt 'fire, gun',
tō° 'leaf', ngát 'ant', ndó 'throat', bōn 'hip', sō 'hoe', kpálá 'yam',
tō 'intestines', bēt 'lizard', gwō 'moon, month', kòkpò 'cocoyam', gòn°
'illness', kùm 'medicine', vŋē 'nose', tōtō 'ear' (pl. -tótō), yūp 'bone',
ntō 'pipe', ngwéngwé 'plantain', ténfòt° 'lung', nkòn 'tail', ngāŋ° 'root',
bām 'bag', lòm 'dry season', lēm 'blood', kō 'taro', tō 'head', fēp 'wind',
ncwēn 'penis', lòt° 'stone', ncT 'river', bū 'ashes', ntō 'hole', lāk
'calabash', šōŋ 'arrow', lāk 'fishtrap', tām 'net', kòp° 'bark'.

Gender 9/10:

nām 'animal, meat', nkām 'year', nkē 'bamboo', pàná 'cow' (pl. pǎná), mbū
'goat', ngwō 'dog', pēt 'body', nkôm 'elephant', njù° 'excrement', njè
'hunger', mbēp 'coldness', ndzám° 'axe', mbē 'leopard', ntōm 'message',
šándì 'fly' (pl. šá:ndì), ndzè 'sheep', mbāk 'cloud', ngāk 'nail' (pl.
vīngāk), nòt° 'body hair', zū 'fish', mbàp° 'bushrat', ndzèm° 'dream',
njì 'road', nō 'snake', nkēn 'monkey', nùm 'sun', ngōk 'termite', šē
'soil', ntsèk° 'cloth', ntsàn 'vagina', vōŋ 'sore', ndōŋ 'horn', mbèŋ
'rain', ndā 'house', mbàŋ° 'seed', vŷè° 'vegetable'.

Gender 19/6:

-kwàŋ 'ring', -dzòt 'red pepper', -(n)kēnkèn 'egusi', -cwē 'saliva',
-gwāŋ 'salt', -fìlō 'sleep', -kēt 'louse', -jwákēt 'star'.

Gender 6: (single class gender)

-jēn 'thatch', -dTp 'water', -cèn 'urine', -gūt 'oil'.

Gender 9: (single class gender)

ncèmbì 'front', ndìm 'back', mbótìn 'tiredness', lápmbèṅ 'thunder'.

NOTES

1. Research was financed by the Netherlands Organisation for Tropical Research WOTRO under No. W 39-40. Mathew Bashie Mbakson acted as informant for four successive days (21-24/11 1977). Jacqueline Leroy participated in the research project and concentrated on the verb. I thank both for the inspiring sessions.
2. Prefix deletion has also been found in Aghem and other Wum dialects. As far as I know, these Ring languages are with Adere (Eastern Grassfields) the only languages showing prefix deletion. A direct historical link between the two languages is not obvious. Adere forms very much part of the Northern Group of Eastern Grassfields.
3. According to the rules, the suffix should have Low tone in this item (after a Stable Low stem). We can not be sure now whether the rule is defective or the notation wrong.
4. The suffix in d) is not a subject referent (or verbal prefix). The following form vyā consists of a verbal prefix vi- attached to a tense marker ā. It has been demonstrated that in Aghem the defocused object after a tense which is inherently [+focus], is in the B-form (with a suffix). Cf. Hyman (1979: 59). We cannot at the moment check objects after other tenses to see whether an alternation between prefixed and suffixed nouns in object position exists.
5. We assume that the preprefix in PB was formally identical with the concord prefix, and was indeed a kind of concord prefix (De Blois 1970). If in Adere the suffix coincided with a preprefix and so with the concord prefix, the allomorphs -wɔ (class 1) and -yɛ (classes 9 and 10) are very important. The concord prefixes are gù- (with an allomorph wù-) in class 1, jì- (with an allomorph yì-) in class 9 and jí:- (with an allomorph yí:-) in class 10.
6. In discussing disyllabic stems in section 2 of this paper, I mentioned the possibility that the tonal alternation between singular and plural could be explained, if these disyllabic stems were associative constructions, the associative marker being Low in classes 1 and 9 and High in all other classes. This same tonal concord is found in constructions with -m̀k̀.

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LE GROUPE MENCHUM: MORPHOLOGIE NOMINALE

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0. INTRODUCTION

Le groupe MENCHUM, qui constitue avec RING, MOMO, et MBAM-NKAM, les différents groupes linguistiques de la zone Grassfields, se compose de 6 parlars (mòdèlè, mùkùrù, bэфáŋ, bàŋgùì, óbáŋ) dont nous présentons ici le système des classes nominales ainsi que les différents accords rencontrés dans le cadre du syntagme nominal. Mais n'ayant pu trouver d'informateur compétent pour un des parlars, òkòmánjàŋ nous n'en donnons que les classes nominales, nos notes sur les accords étant lacunaires.

SYSTEME DES CLASSES NOMINALES

1. LES CLASSES

Le tableau ci-dessous (T1) présente pour chacun des parlars, les préfixes nominaux. La première colonne donne le numéro de la classe.

Table 1

classe	mòdèlè	mùkùrù	òkòmánjàŋ	bэфáŋ	bàŋgùì	óbáŋ
1	ù k- } φ- φ }	ù φ } φ-	ò-	ò-	ò-	ò-
2	bè-	bè-	bè-	ba-	ba } bè }-	bè-
3	ú-	ú-	ó-	ó-	ó-	ó-
4	kí-	kí-	tí-	ké-	ké-	té-
5	í-	í-	é-	é-	é-	é-
6	á-	á-	á-	á-	á-	á-
7	kV-ɔ	kV-ɔ-	a-	á-	á-	á-
8	bí-	bV-	o-	ó-	ó-	ó-
9	ì- } φ } ì- } φ }	ì- } φ } ì- } φ }	φ } è }	φ } v }	è-	è-

classe	mòdèlè	mùkùrù	òkómánjàŋ	béfáŋ	bànguì	óbáŋ
10	í	í-	é-	é-	é-	é-
19	fV-	fV-	fu-	fV-	fo-	fu-
18	ín-	ín-	mu-	m-	m-	m}
6a	mé-ò-	mé-à-	má	má } mé }	má } mé }	mu } má } mé }

Remarques:

1. Le numéro de la classe correspond à celui du proto-bantou à l'exception de notre 4, 18 et 6a. La class 6a dans le proto-bantou est amalgamée à la classe 6. Quant à notre 18 nous n'avons pu savoir son correspondant en proto-bantou: son préfixe ferait penser à la class 4. Et ce que nous appelons ici classe 4 fait penser tantôt à la classe 4 du proto-bantou avec le préfixe kV- (v. mòdèlè, mùkùrù, befáŋ, bànguì), tantôt à la classe 13 avec le préfixe tV- (v. òkómánjàŋ et óbáŋ).
2. Le tableau fait ressortir pour mòdèlè et mùkùrù, un double préfixe pour certaines classes dont 1, 7, 9 et 6a. Nous l'avons fait pour la bonne raison que, dans certains contextes tels qu'après un locatif et dans le mot en seconde position dans le syntagme complétif, une partie du préfixe tombe. On peut le voir dans les exemples suivants:

a) mòdèlè

ùmbù	'tête' (cl.1)	mbù	: áyé mbù	'dans la tête'
kákyèhè	'crabe' (cl.1)	ákyèhè	: únà ákyèhè	'la cuisse du crabe'
ndàŋ	'chaise' (cl.1)	ndàŋ	: ávyé ndàŋ	'sur la chaise'
ɲá	'animal' (cl.9)	ɲá	: ùmbù ɲá	'la tête de l'animal'
ìndé	'maison' (cl.9)	'ndé	: bèjú 'ndé	'les démons de la maison'
dzáŋ	'saison des pluies' (cl.9)	dzàŋ	: áyé dzàŋ	'pendant la saison des pluies'
zué	'serpent' (cl.9)	zué	: ùmbù zué	'la tête du serpent'
kùdèŋ	'chef' (cl.7)	òdèŋ	: ùmbù òdèŋ	'la tête du chef'
ménsóŋ	'vin' (cl.6a)	ònsóŋ	: ùjú ònsóŋ	'le démon du vin'

b) mùkùrù

ùmbù	'tête' (cl.1)	mbù	: ápfé mbù	'sur la tête'
ùndú	'habit' (cl.1)	'ndú	: ípfé 'ndú	'sur l'habit'
ɲá	'animal' (cl.9)	ɲá	: ùmbù ɲá	'la tête de l'animal'
ìndé	'maison' (cl.9)	'ndé	: bèmbù 'ndé	'les têtes de la maison'
dzá	'hache' (cl.9)	dzà	: ùmbù dzà	'la tête de la hache'
kúkúfú	'os' (cl.7)	ókúfú	: bèmbù ókúfú	'les têtes de l'os'
méŋkèn	'sang' (cl.6a)	àŋkèn	: ùmbù àŋkèn	'la tête du sang'

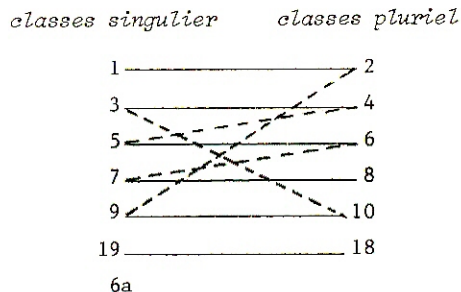
Il y a donc raison de penser que le préfixe dans ces classes, tel qu'il apparaît dans le mot en isolation, est le résultat de l'amalgame de deux préfixes: un prépréfixe qui peut disparaître en laissant le préfixe intact.

3. Le préfixe nominal est à ton bas dans les classes 1 et 9, haut pour les autres classes à l'exception des classes 2, 7, 8, 19 qui sont tantôt haut, tantôt bas, raison pour laquelle, nous ne marquons pas de ton dans ce cas. La classe 2 par exemple est à ton bas lorsqu'il s'agit du pluriel de la classe 1 ou 9 et à ton haut, s'il est le pluriel d'une autre classe à préfixe nominal ton haut. On pourrait donc supposer pour chaque classe singulier, un ton dont dépendra le ton du préfixe de la classe pluriel.

2. LES GENRES

Les 6 parlars présentent chacun 7 classes du singulier et 6 classes du pluriel. Les genres attestés dans notre corpus se résument dans le schéma ci-après où les traits pleins indiquent les genres majeurs et les pointillés les genres mineurs.

2.1. Les genres tels que nous les schématisons ici se retrouvent dans tout le groupe, et, dans au moins trois parlars pour les genres mineurs. Nous avons donc dû laisser de côté certains genres mineurs (2 ou 3) que nous n'avons trouvé que dans un ou deux parlars géographiquement voisins (par exemple genre 19/2, 19/8 ...)



2.2. Le contenu sémantique des genres.

- le genre 1/2: contient les noms désignant les humains et des noms d'emprunt.
- le genre 3/4: on y trouve des noms des parties du corps tels que: bras, jambe, cuisse, langue et aussi les mots pour feu, corde et couteau.
- le genre 5/6: contient des noms des parties du corps comme: œil, dent, nez, sein, nombril et aussi les mots pour œuf et pierre.
- le genre 7/8: s'y trouvent:
 - 1) les noms des parties du corps tels que: oreille, os, quelquefois tête;
 - 2) les noms pour arbre et poisson;
 - 3) les noms dérivés des verbes comme vol (< voler), savon (< laver)...
- le genre 9/10: contient les noms désignant les animaux comme: chien, chèvre, éléphant, buffle, animal, etc... et des noms pour désignant les saisons, la terre, le village, la maison (quelquefois), la calebasse, la faim, la guerre.
- le genre 19/18 désigne les petits éléments tels que: oiseau, étoile, serpent, arachide, piment. Ce genre sert de diminutif: le préfixe fV- de la classe 19 peut précéder tout radical du nom pour en faire le diminutif.

- le genre 6a contient les noms de masse tels que: eau, sang, huile, vin, sel, cendre. On y trouve aussi les infinitifs.
- le genre 5/4: On y trouve les mots pour cheveu, plume, aile, feuille.
- le genre 7/6: contient les mots pour main et pied.
- le genre 3/10: les mots pour bouche et bois.
- le genre 9/20: les mots pour léopard, souris s'y trouvent en même temps que nuage, habit, corne et aussi maison.

3. LES ACCORDS

L'accord est commandé par le nominal déterminé et se retrouve après celui-ci et devant le déterminant. Nous avons mis à jour dans notre groupe 3 types d'accord: un accord purement tonal, un accord préfixiel que nous appelons simple, et un accord avec préfixe et suffixe qui sera dit complexe par opposition à simple.

3.1. *L'accord tonal.* Il se retrouve dans la construction associative qui associe un nom en première position, i.e un déterminé, et un nom en deuxième position ou le déterminant. Entre les deux, nous observons, dans chacun des parlers du groupe MENCHUM et pour chacune des classes attestées les tons schématisés dans le tableau ci-après:

Table 2

Classe	Accord	Classe	Accord
1	`	7	'
2	'	8	'
3	'	9	`
4	'	10	'
5	'	19	'
6	'	18	^
		6a	^

De ce tableau, il ressort que l'accord se présente sous la forme d'un ton bas (`) dans les classes 1 et 9, d'un ton HB (^) dans les classes 18 et 6a et d'un ton haut (') dans toutes les autres classes.

3.2. *L'accord simple.* Il se rencontre généralement dans le pronom substitutif sujet, les numéraux de 1 à 3, le numéral indéfini "tout", le numéral interrogatif "combien", les démonstratifs proche et éloigné.

Nous présentons ci-dessous une série de 3 tableaux qui présentent cet accord tel qu'on le retrouve 1) dans le substitutif sujet, 2) devant un radical a initiale consonantique comme c'est le cas devant les numéraux: "un", "deux", "trois" "tout", et "combien"; 3) devant un radical à initiale vocalique dont les démonstratifs.

1) *Le pronom substitutif sujet:*

Table 3

classe	mòdèlè	mùkùrù	béfáŋ	bànguì	óbáŋ
1	ù	ù	ù	ò	ò
2	bé	bă	bé	bé	bé
3	ú	ú	ú	ó	ó
4	kí	kí	ké	ké	té
5	í	í	é	é	í
6	á	á	á	ké	ké
7	ká	ká	ké	ké	á
8	bí	bí	ó	bé	ó
9	ì	ì	è	è	è
10	í	í	é	é	é
19	fí	fí	fí	fó	fú
18	mè	mà	mè	mè	mà
6a	mè	mà	mè	mè	mà

2) *Devant initiale consonantique:*

Table 4

classe	mòdèlè	mùkùrù	béfáŋ	bànguì	óbáŋ
1	wú-	ú-	-	-	-
2	bé-	bé-	bé-	bé-	bé-
3	ú-	ú-	ú-	ó-	ú-
4	kí-	kí-	ké-	ké-	té-
5	í-	í-	é-	é-	í-
6	á-	á-	á-	á-	á-
7	kú-	kú-	á-	á-	á-
8	bí-	bí-	ó-	ó-	ó-
9	-	-	-	-	-
10	í-	í-	é-	é-	é-
19	fí-	fí-	fí-	fó-	fú-
18	ín-	ín-	mé-	má-	ín-
6a	mé-	mé-	mé-	ín-	ín-

3) *Devant initiale vocalique:*

Table 5

classe	mòdèlè	mùkùrù	béfáŋ	bàngguì	óbáŋ
1	w-	w-	w-	w-	w-
2	b-	b-	b-	b-	b-
3	úw-	úw-	w-	w-	w-
4	k-	k-	k-	k-	t-
5	íy-	íy-	y-	y-	y-
6	ák-	ák-	k-	k-	k-
7	k-	k-	k-	k-	k-
8	b-	b-	b-	b-	b-
9	y-	y-	y-	y-	y-
10	íy-	íy-	y-	y-	y-
19	f-	f-	f-	f-	f-
18	m-	m-	m-	m-	m-
6a	m-	m-	m-	m-	m-

En parcourant les 3 tableaux T3, T4 et T5, on remarque que les préfixes d'accord de T5 sont basés sur T4, CV- de T4 → C- en T5; V → VG en mòdèlè et mùkùrù (G = glide. Voir l'interprétation de k ci-dessous) ou G en befáŋ, bàngguì et óbáŋ; les classes 1 et 9 font apparaître les glides w(cl.1) et y(cl.10) en T5 alors que T4 y présente un ton sans support (sauf en mòdèlè et mùkùrù).

L'interprétation que nous proposons est la suivante devant voyelle, le P.A. CV perd sa voyelle, V se crée une consonne tampon entre elle et l'autre voyelle. Cette consonne est en fait le glide correspondant à la voyelle qui le nécessite, donc à la voyelle du préfixe. Ainsi, k des classes 6 et 7 viendrait de [ɣ] qui est le glide le plus proche de [a] de même que [y] de [i] et [e] et [w] de [u] et [o] puis une dernière étape qui ne concerne que les parlars du sud du groupe (befáŋ, bàngguì et óbáŋ), laisse tomber la voyelle pour ne conserver que le glide.

Donc, nos conclusions seront tirées à partir de T3 et de T4 qui sont les plus complets.

Ces 2 tableaux semblent reprendre les préfixes nominaux pour chacun des parlars tels qu'ils ont été présentés en T1 sauf en T3:

- 1) les classes 6, 7 dans les parlars du sud où apparaît kó tantôt dans l'une, tantôt dans l'autre et parfois dans les 2 classes.
- 2) la classe 8 en bàngguì avec bé au lieu de ó.
- 3) les classes 18 et 6a qui apparaissent ici avec ton bas.

T4 présente les préfixes nominaux V sans forme d'un ton, bas flottant, sauf en mòdèlè et mùkùrù où les phénomènes semblent plus compliqués. Ces

quelques différences notées entre T3, T4 et T1 seraient peut-être dues à leur différence de nature: préfixes et morphèmes complets. T5 présente les accords devant initiale vocalique.

3.3. *L'accord complexe.* Il se rencontre dans les adjectifs qualificatifs, les indéfinis 'quelque' et 'autre' et l'interrogatif 'quel'. Les tableaux ci-après schématisent les différentes classes d'accord.

1) *devant radical consonantique.*

Table 6

classe	mòdèlè	mùkùrù	béfán	bànguì	óbán
1	wú- ∅	wú- -∅	wú- ∅	wó- {∅	wú- ∅
2	bě- '	bě- '	bě- '	bǎ- '	bě- '
3	û- '	ũ- '	wǒ- '	wǒ- '	wũ- '
4	kĩ- '	kĩ- '	kě- '	kě- '	tĩ- '
5	ĩ- '	ĩ- '	yĩ '	yě- '	yĩ- '
6	â- '	ǎ- '	kǎ- '	kǎ- '	kǎ- '
7	kũ- '	kũ- '	kě- '	kǎ- '	kǎ- '
8	bỹ- '	bỹ- '	bǒ- '	bǒ- '	bǒ- '
9	yí- ∅	yí- ∅	yí- ∅	yé- {∅	yí- ∅
10	ĩ- '	ĩ- '	yĩ- '	yě- '	yĩ- '
19	fĩ- '	fĩ- '	fĩ- '	fǒ- '	fũ- '
18	mé- ^	mé- ^	m- ^	m- ^	m- ^
6a	mé- ^	mé- ^	m- ^	m- ^	m- ^

Ce tableau semble présenter les formes les plus complètes si nous le comparons à celui du même accord aux formes obtenues devant radical à initiale vocalique dont voici le tableau.

2) *devant radical à initial vocalique.*

Table 7

classe	mòdèlè	mùkùrù	béfán	bànguì	óbán
1	w'- ∅	w'- ∅	w'- ∅	w'- ∅	w'- ∅
2	b ^v - '	b ^v - '	'b'- '	'b'- '	'b'- '
3	úw ^v - '	úw ^v - '	'w'- '	'w'- '	'w'- '
4	k ^v - '	k ^v - '	'k'- '	'k'- '	'k'- '
5	íy ^v - '	íy ^v - '	'y'- '	'y'- '	'y'- '
6	ák ^v - '	ák ^v - '	'k'- '	'k'- '	'k'- '
7	k ^v - '	k ^v - '	'k'- '	'k'- '	'k'- '

Table 7 continued

classe	mòdèlè	mùkùrù	béfán	bànguì	óbán
8	b ^v - '	b ^v - '	\b'- '	\b'- '	\b'- '
9	y'- ø	y'- ø	y'- ø	y''- ø	y''- ø
10	f ^v - '	f ^v - '	\y'- '	\y'- '	\y'- '
19	f ^v - '	f ^v - '	\f'- '	\f'- '	\f'- '
18	m'- ^	m'- '	m''- '	m''- ^	m''- ^
6a	m'- ^	m'- '	m''- '	m''- ^	m''- ^

En effet, ce tableau présente dans ses préfixes d'accord les mêmes rapports avec T6 que ceux observés entre T5 et T4 à savoir, la perte de la voyelle pour le préfixe CV, la création d'une consonne tampon pour le préfixe V et ensuite la perte de V pour les parlers du sud.

Cet accord se présente sous la forme d'un préfixe d'accord et d'un suffixe, tous les deux dépendants du nominal déterminé. Le suffixe est un ton qui rappelle l'accord tonal dans la construction associative (v. T2) à la seule exception que le ton Bas devient très souvent nul. Il en ressort 3 groupes:

- 1) suffixe à ton ø ou Bas (classes 1 et 9);
- 2) suffixe à ton Haut-Bas (classes 18 et 6a) qui dans certains parlers se réalise Haut, Bas étant ø (classes 2, 3, 4, 5, 6, 7, 8, 10, 19);
- 3) suffixe à ton Haut.

Quant au préfixe, mòdèlè et mùkùrù présentent 3 catégories:

- 1) le type CV à ton Bas-Haut dans les classes 2, 4, 7, 8, 19.
- 2) le type V à ton Haut-Bas en mòdèlè et haut-bas-haut en mùkùrù pour les classes 3, 5, 6, 10.
- 3) le type CV (G = glide) à ton Haut dans les classes 1, 9, 18, et 6a.

Les autres parlers: befán, banguì, óbán, ne présentent que 2 catégories:

- le type CV à ton Bas-Haut dans les classes 2, 3, 4, 5, 6, 7, 8, 10, 19;
- le type GV- à ton Haut en befán et óbán, plus un ton Bas flottant précessif en banguì.

La différence de comportement entre le type CV- et V est annulée ici. V est précédé du glide qui correspond à V, ce qui produit une similitude de comportement avec CV-. Cette différence de forme du préfixe entre les deux sous-groupes de MENCHUM s'est déjà fait voir dans T5 dans l'accord primaire. Le groupe sud avec befán, banguì et óbán présentent une forme G, là où le groupe nord (mòdèlè et mùkùrù) a la forme VG-.

D'autre part, il est très probable que cet accord soit conçu sous la forme VCV pour les classes autres que 1, 9, 18 et 6a, VCV pour les classes 1, 9, et VC^v pour 18 et 6a. Nous trouvons ce schéma dans l'accord du possessif dans le sous-groupe sud dont le tableau ci après est une illustration.

3) Accord dans le possessif

Table 8

classe	béfán	bànguì	óbáŋ
1	ún-b`-	ón-w`-	ón-w`-
2	ùn-b'-	òn-b'-	òn-b'-
3	òn-b'-	òn-w'-	òn-w'-
4	è(N)-k'-	ò(N)-k'-	è(N)t'-
5	èn-y'-	èn-y'-	èn-y'-
6	è(N)-k'-	è(N)-k'-	è(N)-k'-
7	è(N)-k'-	è(N)-k'-	è(N)-k'-
8	òn-b'-	òn-b'-	on-b'-
9	én-y'-	én-y'-	én-y'-
10	èn-y'-	èn-y'-	èn-y'-
19	ò(N)-f'-	ò(N)f'-	ò(N)-f'-
18	ón-m^-	òn-m^-	òn-m^-
6a	ón-m^-	òn-m^-	òn-m^-

Ainsi, l'accord du possessif se présente sous la forme $\hat{V}NC'$ - pour la classe 1 et 9, $\hat{V}N-C^{\wedge}$ - pour les classes 18 et 6a, et VNC pour les autres classes. La présence de la voyelle ici serait peut-être nécessitée par N, une des marques du possessif. Ainsi en l'absence de N comme c'est le cas dans le qualificatif, les indéfinis 'quelque' et 'autre', la voyelle disparaîtrait en laissant son ton sans support. Celui-ci se déplacerait et s'amalgamerait avec le ton du préfixe pour donner les tons que nous trouvons depuis T6

Donc $\hat{V}C' \rightarrow C^{\vee}$ -
 $\hat{V}C^{\wedge} \rightarrow C^{\wedge}$ -
 $\hat{V}C^{\wedge} \rightarrow C^{\wedge}$ -

or, ton Bas peut devenir \emptyset comme on le voit dans les suffixes des cl. 1 et 9 dans T6: ainsi C^{\wedge} peut-être réalisé C' .

Mais les règles se compliquent un peu pour le P.A.V. dans le cas où la distinct $CV/-V-$ est maintenue. D'après ce qui apparaît en mùkùrù, le schéma général peut-être maintenu, mais la voyelle (préfixe) devrait précéder tout le schéma. Ainsi: $\hat{V}C'$ deviendrait $\hat{V}\hat{V}(C)'$ et

$\hat{V}\hat{V}C' \rightarrow \hat{V}\hat{V}/-C$
 $\hat{V}\hat{V}C^{\vee} \rightarrow \hat{V}\hat{V}G^{\vee}/-V$

Le mòdèlè, selon une règle que nous n'avons pas encore mise à jour, simplifierait \hat{V} en \hat{V} .

4. CONCLUSION

De cette morphologie nominale, il ressort que le groupe MENCHUM présente à la base de son système de classes nominales 3 catégories:

- 1) dans l'accord tonal qui présente soit le ton Bas soit le ton Haut, soit le ton Haut-bas.
- 2) dans les préfixes d'accord qui manifestent une différence de comportement suivant la forme du préfixe qui peut-être CV-, V ou ton flottant.
- 3) dans les préfixes nominaux qui présentent aussi une différence CV, V à ton haut et V à ton bas.

NOUN CLASSES OF THE BEBOID LANGUAGES

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1. LOCATION OF THE BEBOID LANGUAGES

The Beboid languages¹ are located in the Northwest Province of Cameroon between 6°20' and 6°50' north and between 10°10' and 10°40' east. They are surrounded by the Tiv and the Esimbi to the west, by Jukunoid languages to the north, and by Grassfields Bantu languages to the south and east. Since these languages are almost completely unknown we will mention the names and locations of the villages where they are spoken before looking at their noun class systems.

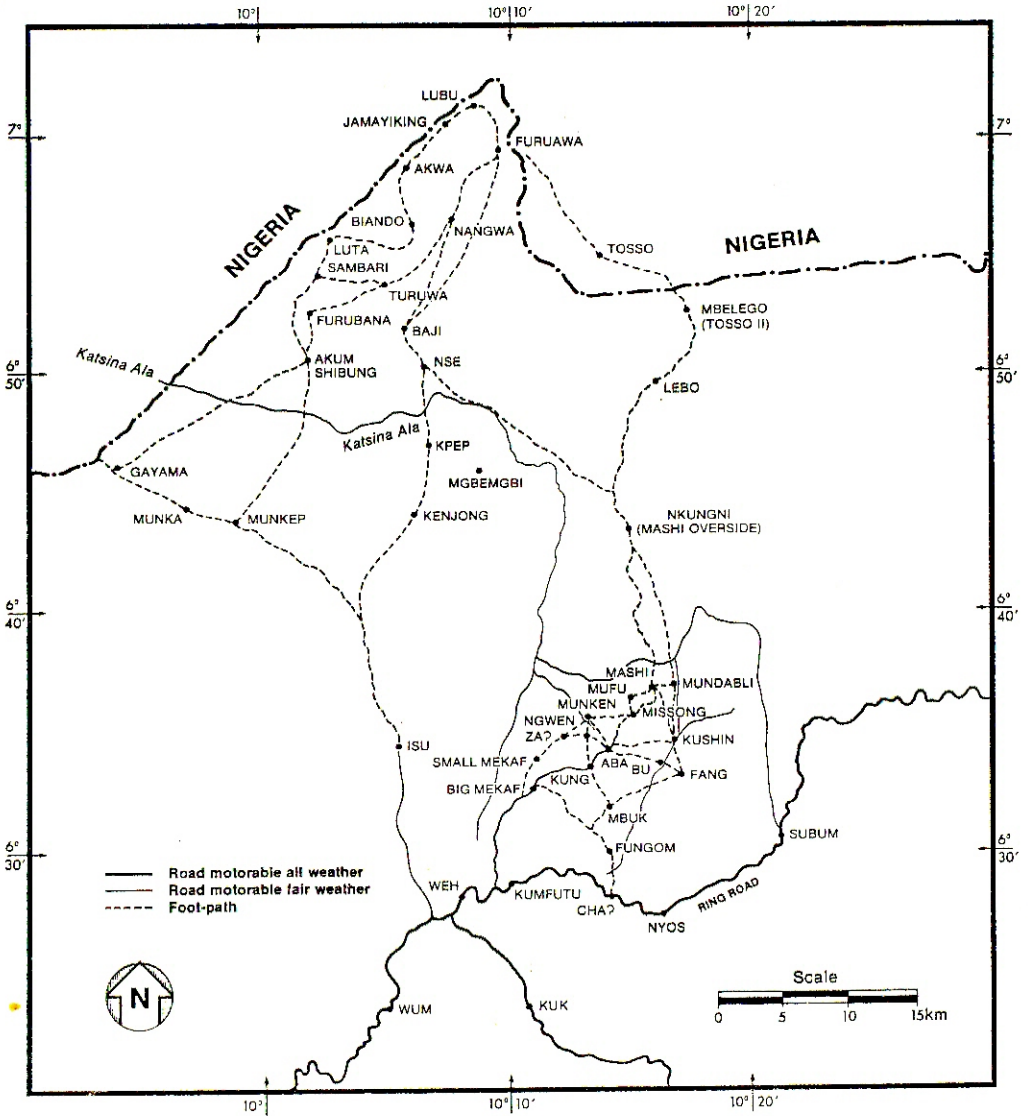
The Beboid languages are divided into two geographical zones: the western zone (Map 1) and the eastern zone (Map 2). The area located between these two zones is uninhabited. The subclassification presented in Table 1 and Table 2 is based on native speakers' impressions about mutual intelligibility.²

TABLE 1: *Subclassification of western Beboid languages*^{3,4}

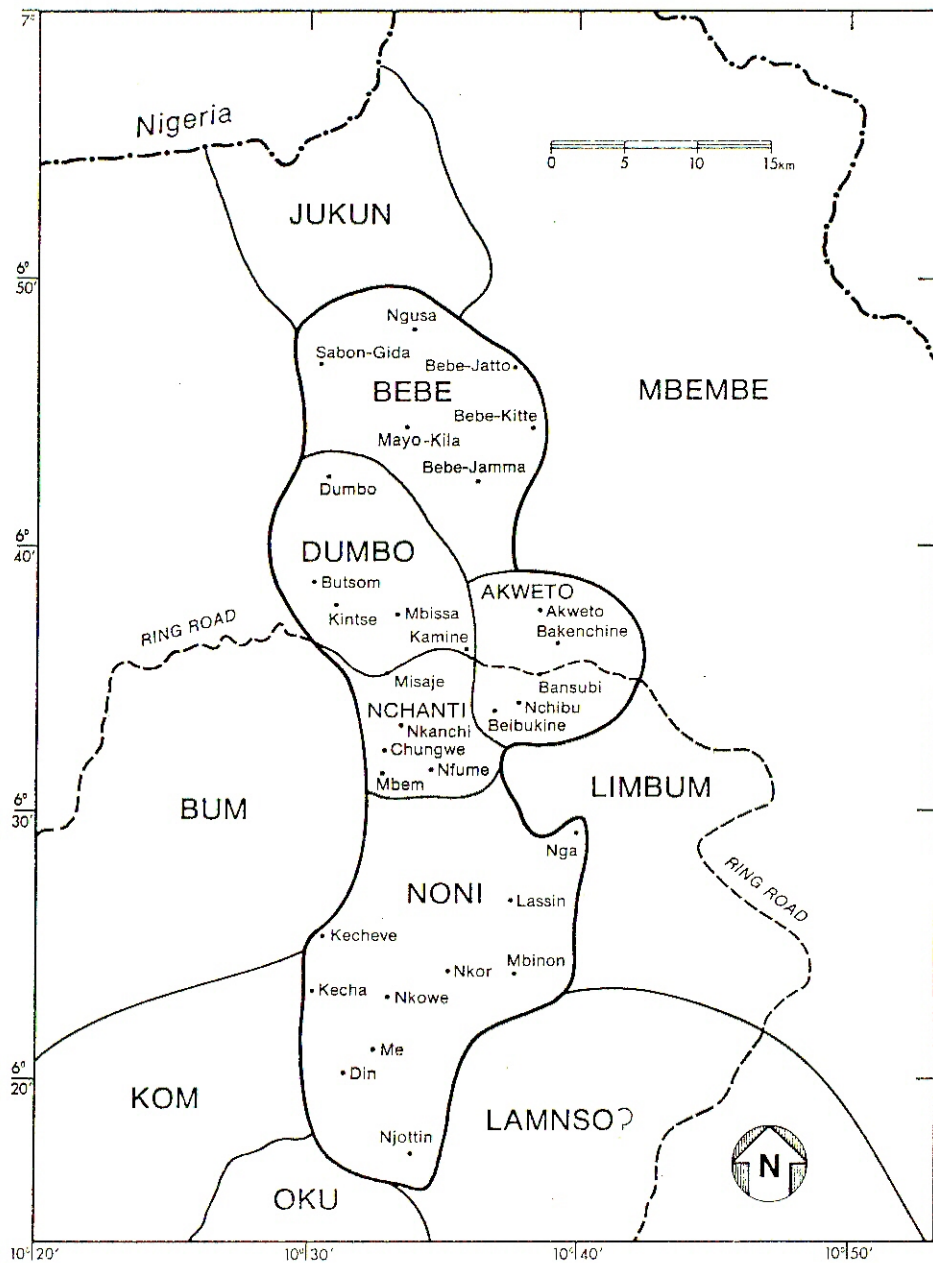
Group 1	Group 2	Group 3 ⁵	Group 4
Big Mekaf	Bu	Missong	Koshin
Small Mekaf	Za	Munken	Fang
Mashi	Ngwen	Aba	
Nkungi		Mufu	
Mbelego		Mundabli	
Tosso			
Nse			

TABLE 2: *Subclassification of eastern Beboid languages*⁶

Group 1 ⁷	Group 2	Group 3 (=Nchanti)	Group 4 (=Noni)	Group 5
Bebe-Jatto	Dumbo	Misaje	Nkor ⁸	Akweto
Bebe-Kitte	Kwej	Nkanchi	Nga	Bakenchine
Ye	Butsom	Chungwe	Lassin	Bansubi
Fung	Kintse	Nfume	Mbinon	Nchibu
Sabon Gida	Mbissa	Mbem	Kecheve	Beibukine
Mayo Kila	Kamine		Kecha	Bagem
Ngusa	Ndon		Nkowe, Me	
			Njottin, Din	
			Mbin, Dom	



Map 1. The western Beboid area.



Map 2. The eastern Beboid area.

What we propose to call the western Beboïd zone in this paper has been called the Fungom area in the colonial documents. This is unfortunate for language classification since the language spoken in the village of Fungom itself does not belong to the Bebe group but is a Ring language of the Western Grassfields group. The name Misaje has been used in the literature to refer to some of the languages of the eastern zone. Both because Misaje itself is a fairly recent settlement and because the languages mentioned in this paper cover a larger area than what is usually meant by the Misaje area, we prefer to refer to these languages as the Eastern Beboïd languages.

2. NOUN CLASS SYSTEM OF PROTO-BEBOÏD (PBb) AND EIGHT DESCENDANTS

We will first present the reconstructed noun class system for Proto-Beboïd and then the reflexes of this system in eight Beboïd languages. When the correspondence between PBb and Proto-Bantu (PB) noun classes is clear, we shall use the customary PB class numbers to characterize PBb classes. In three cases however, such correspondences could not be established. Consequently, the numbers 25, 26 and 27, not used in PB, are proposed.

The following classes are reconstructed for PBb.

TABLE 3.

<i>Singular classes</i>	<i>Noun prefix</i>	<i>Concord</i>
1	u-	w ^ʰ
3	u-	w ^ʰ
5	i-	ly ^ʰ
7	ki-	k ^ʰ
9	i-	y ^ʰ
12	ka-	k ^ʰ
14	bu-	bw ^ʰ
19	fj-	fy ^ʰ
<i>Plural classes</i>		
2	ba-	b ^ʰ
4	i-	y ^ʰ
6	a-	aw ^ʰ
8	bi-	by ^ʰ
10	i-	y ^ʰ
13	to-	t ^ʰ
25	man-	m ^ʰ
26	mun-	mw ^ʰ
27	ki-	k ^ʰ
<i>Single classes</i>		
6a	m-	m ^ʰ
14	bu-	bw ^ʰ

The genders are formed by the following pairings: 1/2, 3/4, 5/6, 7/8, 9/10, 12/8, 14/25, 19/26, 3/13, 5/13, 3/27 and 5/27.

The noun class prefixes and concords are now given for the following eight Beboïd languages in Table 4: 1. Mekaf. 2. Koshin. 3. Missong. 4. Bu. 5. Noni. 6. Nchanti. 7. Akweto. 8. Bebe-Jatto.

TABLE 4. *Noun prefixes and concords from eight Beboïd languages*

1. <i>Mekaf</i>			<i>noun affixes</i>		<i>concords</i>	
1/2	∅-	bu- (-bə)	w`	b ^ʔ		
3/6	∅w-		w ^ʔ			
5/6	∅-	-ŋ	w ^ʔ	n ^ʔ		
9/10	∅`-	∅ ^ʔ -	y`	y ^ʔ		
12/8	a-	bi-	k ^ʔ	b ^ʔ y ^ʔ		
14/28	u-	m- (-m)	w ^ʔ	m ^ʔ		
19/26	ʃfi-		ʃt ^ʔ			
6a	m-		m ^ʔ			
2. <i>Koshin</i>			<i>noun affixes</i>		<i>concords</i>	
1/2	∅-	bo-	w`	b ^ʔ		
3/4 & 3/13	∅w-	∅y-	w ^ʔ	y ^ʔ		
5/13	∅-	to-	w ^ʔ	t ^ʔ		
7/8	kə-	bə-	ts ^ʔ	b ^ʔ		
9/10	∅`-	∅ ^ʔ -	y`	y ^ʔ		
19/6a	fi-	n-	f ^ʔ	m ^ʔ		
6a	n-		m ^ʔ			
14=8	bə-		b ^ʔ			
3. <i>Missong</i>			<i>noun affixes</i>		<i>concords</i>	
1/2	∅, u-	ba-	w`	b ^ʔ		
3/4, 3/6, 3/27	u-	i-	w ^ʔ	y ^ʔ		
5/6, 5/27	i-	a-	y ^ʔ	w ^ʔ		
7/8	ki-	bi-	k ^ʔ	b ^ʔ		
9/10, 9/6, 9/27	i-	i-	y`	y ^ʔ		
14/6a	bu-	an-	b ^ʔ	m ^ʔ		
19/26	fi-	mun-	f ^ʔ	m ^ʔ w ^ʔ		
6a	an-		m ^ʔ or am ^ʔ	m ^ʔ or am ^ʔ		
		27. ki- -le		k ^ʔ		
4. <i>Bu</i>			<i>noun affixes</i>		<i>concords</i>	
1/2	∅-	bə-	w`	b ^ʔ		
3/4, 3/27	∅w-	∅y-	w ^ʔ	y ^ʔ		
5/6, 5/27	∅(y)-	∅-	w ^ʔ	y ^ʔ		
		27. kə- -tə		k ^ʔ		

7/8	kə-	_____	bə-	kʰ	bʸʰ
9/10	∅-	_____	∅ʰ-	yʰ	yʰ
19/26	fə-	_____	mə-	fʸʰ	mʸʰ
6a	n-			mʰ	
14 or 8	bə-			bʸʰ	

5. *Noni*

	noun affixes			conCORDS	
1/2	∅-	_____	bə-	wʰ	bʰ
3/4 & 3/27	∅ʰ-	_____	∅-	wʰ	yʰ
5/6 & 5/27	-e	_____	ε-	dʸʰ	εʸʰ
			ji-		dʸʰ
7/8	ke-	_____	bi-	kʰ	bʸʰ
9/10	∅ʰ-	_____	∅ʰ-	yʰ	yʰ
12/8	ε-	_____		kʰ	
14/25	bvu-	_____	mən- -m	bʷʰ	mʰ
19/26	fe-	_____	mUN- -m	fʸʰ	mʷʰ
6a	m-	-m		mʰ	

6. *Nahanti*

	noun affixes			conCORDS	
1/2	∅(w)-	_____	bə-	wʰ	bʰ
3/4 & 3/27	∅ʰ-	_____	∅-	wʰ	yʰ
5/6 & 5/27	∅-	_____	a-	čʰ	aʷʰ
			či-		čʰ
7/8	ki-	_____	bi-	kʰ	bʸʰ
9/10	∅ʰ-	_____	∅ʰ-	yʰ	yʰ
14/25	bu-	_____	man-	bʷʰ	mʰ
19/26	fi-	_____	mUN-	fʸʰ	mʷʰ
6a	n-			mʰ	

7. *Akweto*

	noun affixes			conCORDS	
1/2	∅-	_____	bə-	wʰ	bʰ
3/4	∅ʰ-	_____	∅-	wʰ	yʰ
5/4	∅-	_____		čʰ	
7/8	ki-	_____	bi-	kʰ	bʸʰ
9/10	∅ʰ-	_____	∅ʰ-	yʰ	yʰ
14/25	bu-	_____	mε(N)-	bʷʰ	mʰ
19/26	fi-	_____	mu-	fʸʰ	mʷʰ
6a	n-			mʰ	
14	bu-			bʷʰ	

8. *Bebe-Jatto*

	noun affixes			conCORDS	
1/2	∅-	_____	bʌ-	ŋgʷʰ	bʰ
3/6	∅ʰ-	_____	∅-	wʰ	
5/6	∅-	_____		lʰ	ŋʰ
7/8	kə-	_____	bi-	kʰ	bʰ
9/10	∅ʰ-	_____	∅ʰ-	njʰ	yʰ
12/8	∅-	_____		kʰ	
19/26	fə-	_____	mUN-	fʰ	mʷʰ
6a	m-			mʰ	
14	bu-			bʰ	

3. GENERALIZATIONS BY GENDER

*Gender 1/2: *u-/*ba-*. Although Missong is the only Beboid language which has retained the vowel prefix *u- for class 1, this prefix has in some cases left traces of its existence by labializing the initial consonant of class 1 noun stems, as seen in the following Nchanti examples:

(1) Nchanti	<i>sg. cl. 1</i>	<i>pl. cl. 2</i>	
(Ø(w)-ba-)	čw ^h ē	bāčē	'witch(es)'
	mfwà	bāmfà	'slave(s)'
	kwēšē	bākēšē	'woman/women'

The tone of the concord is low for class 1 and high for class 2.

*Gender 3/4: *u-/*i-*. The class 3 prefix *u- has disappeared in all the Beboid languages except Missong. In all of the other languages we find traces of labialization on the initial consonant of the stem. In Mekaf and Bebe-Jatto class 4 has merged with class 6. *i- is retained in Missong, but it has been dropped in Koshin and Bu after palatalizing the initial consonant of the stem. Examples from Nchanti in (2) show the effects of labialization in class 3 without palatalization in class 4. Examples under (3) from Koshin illustrate both labialization in class 3 and palatalization in class 4.

(2) Nchanti	<i>singular class 3</i>	<i>plural class 4</i>	
(Øw-/Ø-)	gw ^h ō ^h	gō ^h	'bamboo'
	kw ^h ōŋ	kōŋ	'firewood'
	gw ^h ē	gē	'hill'
	kw ^h ēe	kēe	'moon'
	bw ^h ēŋ	bēŋ	'mosquito'
	gw ^h ēé	gēé	'fishing net'
	gw ^h ōŋ	gōŋ	'root'
	šw ^h ēé	šēé	'tadpole'

(3) Koshin	<i>singular class 3</i>	<i>plural class 4</i>	
(Øw-/Øy-)	gbēà	dzāà	'house'
	gbān	dzān	'branch'
	gb ^h ŋ	dz ^h ŋ	'root'
	gb ^h ʼ	dz ^h ʼ	'rope'
	kpēn	tsēn	'firewood'
	kp ^h ʼ	ts ^h ʼ	'pot'
	wf	j ^h f	'eye'
	wfn	j ^h fn	'leaf, tooth'

*Gender 5/6: *i-/*a-*. As in the previous gender, Missong has been the most conservative Beboid language preserving both the singular and the plural vowel prefixes. In some rare cases we find traces of palatalization of the initial consonant of the stem caused by the *i- prefix as in Bu b^hyēn/bēn 'breast'. In Akweto class 6 has merged with class 4 and in Koshin class 5 is paired exclusively with class 13 to-. Noni has a suffix -e in class 5 as seen in (4) (Hyman 1977; in preparation).

(4) Noni	<i>singular class 5</i>	<i>plural class 6</i>	
(-e/ε-)	tēm-é	ē-tēm	'axe'
	lēm-é	ē-lēm	'tongue'

gvūn-è	Ē-gvūh	'feather'
mbēnè	Ē-mbēh	'breast'
lōw-è	Ē-lōw	'bean'
kāw-è	Ē-kāw	'fingernail'

If the stem is bisyllabic (C₁V₁C₂V₂), the second syllable C₂V₂ is deleted to form the plural in Bebe-Jatto, Nchanti and Akweto, as seen in (5), (6) and (7).

(5) Bebe-Jatto (∅-/∅-)	<i>singular class 5</i>	<i>plural class 5</i>	
	bTǹ	bT̀	'breast'
	gšβf	gš	'egg'
(6) Nchanti (∅-/a-)	jTsé	āJT	'eye'
	tēdē	ātā	'stone'
	jólē	ājú	'bean'
	gūnè	āgū	'feather'
(7) Akweto (5/4: ∅-/∅-)	dókT ¹⁰	dō	'bean'
	gfK̄T	gf̄	'egg'
	lTs̄	l̄f̄	'eye'

It could be argued that, as in Noni, there is a suffix for class 5 and that this suffix keeps C₂ from being deleted in the singular form. However, when C₂ is η it is not deleted in the plural forms as seen in the following examples:

(8) Nchanti	sōŋō	āsōŋ	'palm tree'
	jšŋē	ājšŋ	'pumpkin'
(9) Akweto	gōŋè	gōŋ	'spear'

In Noni, final η is preserved in class 6 but dropped in the singular form:

(10) Noni	lēè	ēlēŋ	'pumpkin'
	gšō	ēgšŋ	'spear'

This process has been completely generalized in Mekaf, as seen in (11).

(11) Mekaf	gf̄	gēŋ	'egg'
	lT̄	lēŋ	'tongue'
	bT̄	bēŋ	'cracked egusi'
	dzf̄	dzēŋ	'maize'
	fō	fōŋ	'axe'
	jō	jōŋ	'sun'
	kū	kūŋ	'country'
	fú	fúŋ	'head'
	tū	tūŋ	'horn'
	jū	jūŋ	'nose'
	gú	gúŋ	'spear'
	nú	núŋ	'knee'
	dē	dēŋ	'pumpkin'

In Mekaf, -ŋ could be analyzed as a class 6 suffix (but see discussion in section 5).

*Gender 7/8: *ki-/*bi-*. The fact that the concord is palatalized for class 8 (but not in class 7) in Bu, Noni, Nchanti and Akweto suggests that the vowel of the prefix was more closed than the corresponding vowel of the singular prefix (corresponding to the PB reconstruction *ki-/bi-). This difference in vowel quality is also confirmed by the fact that when the vowels are different between classes 7 and 8, we get kə- for the singular prefix, but bi- for the plural prefix. Since the PBb sound system has not been reconstructed as of yet, we did not include this vowel quality difference in our reconstructed prefixes. In Akweto we have an unexplained alternation in the final vowels of some items of gender 7/8:

(12) Akweto	kTbēnè	bTbēnù	'arm'
	kTfābè	bTfābù	'bark'
	kTnkōfē	bTnkōfū	'bone'
	kTnkērè	bTnkērù	'nail'
	kTmfēmè	bTmfēmù	'mouth'
	kTnzēzè	bTnzēzù	'urine'

*Gender 9/10: *ì-/*í-*. The vowel prefixes of this gender are maintained in Missong (ì-/í-); elsewhere tone differences are found on the stem with relatively lower tones associated with the singular form. Tone alternations between singular and plural forms are summarized in (13) and examples are provided in (14). (Bidirectional arrows indicate tonal mergers in (13).)

(13) TABLE 5. *Tone alternations of monosyllabic stems in gender 9/10.*

	Category I (<i>< *LL</i>)	Category II (<i>< *LH</i>)	Category III (<i>< *HL</i>)	Category IV (<i>< *HH</i>)
Mekaf	L / ML	L° / H	L° / M	LM / H
Koshin	L / ML	←→ L / ML	L° / H	←→ L° / H
Missong	L / ML	M / ML	LM / H	←→ LM / H
Bu	L / ML	M / HM	LM / H	←→ LM / H
Noni	L / ML	L / H	LM / M	LH / H
Nchanti	L / ML	L / H	L° / 'M	M / H
Akweto	L / ML	L / H	L° / H	←→ L° / H
Bebe-Jatto	L / ML	L / H	M / H	←→ M / H

(14)	'animal'	'fowl'	'snake'	'dog'
Mekaf	nàm / nām	švè° / švé	dzù° / dzū	bwè° / bwé
Koshin	nòm / nōm	šìè / šTè	jùà° / jùá	bì° / bí
Missong	<i>diff. root</i>	švèā / Tšvèā	<i>diff. gender</i>	ìbT / Tbf
Bu	nàm / nām	šT / šT-	yùā° / yùá	jT / jf
Noni	nàm / nām	šàè / šáé	yō° / yó	bwè / bwé
Nchanti	nàñ / nāñ	šìì / šíí	yō° / yó	bū / bú
Akweto	nàñ / nāñ	švè / švé	yō° / yó	bwì° / bwí
Bebe-Jatto	nà / nā	šìè / šíé	yō / yó	bwT / bwí

There is a maximum of four different categories of alternations (Mekaf, Noni, and Nchanti). In Missong, Bu, Akweto and Bebe-Jatto two of these categories have merged, while in Koshin only two types of alternations are found: L/ML and L°/H.

*Gender 12/8: *ka-/*bi-*. This gender is found in three languages: Mekaf (a-/bi-), Noni (ε-/bi-) and Bebe-Jatto (∅-/bi-). In these last two languages gender 7/8 also exists, but in Mekaf a- is the only singular prefix which can be paired with bi-. Since the singular consonant concord is k', we propose to reconstruct the prefix as *ka-. The initial consonant of the prefix has been lost in a relatively recent development. The reasons why we identify this prefix with PB class 12 will be made clear in section 6.

*Genders 3/13 (*u-/*to-) and 5/13 (*i-/*to-)*. These pairings are only found in Koshin. Notice that in this language class 6 has disappeared and that all the plurals of class 5 are in class 13.

*Gender 14/25: *bu-/*man-*. The initial consonant of the singular prefix has been lost in Mekaf. Classes 14 and 8 have merged in Koshin and Bu. We did not call the plural of class 14 class 6a because of the different shapes of the prefixes. A homorganic nasal is characteristic of 6a. A homorganic nasal is also found in the plural of 14, but it is preceded by a full CV prefix, as can be seen in the examples presented in (15) from Nchanti.

(15) Nchanti	būdēē	māndēē	'bridge'
	būbT	māmbT	'bundle'
	būšf	mānšf	'face'
	būkš	mānkš	'ladder'
	būkš	mānkš	'name'
	būjúsē	mānjúsē	'place'

Class 25 is probably a recent development, the prefix ma- having been added to the earlier homorganic nasal. It is not surprising to find this type of innovation for this gender since class 14 contained mostly abstract nouns, plurals not being necessary. When new items were put into this class and then a plural was needed for new non-abstract nouns, the prefix and concord of class 6a were used since class 6a contained liquids and masses which could be considered as plurals in nature. As in class 6a, Noni has a -m suffix in class 25 (which Hyman 1977 does not differentiate from 6a). In Missong classes 25 and 6a have merged and in Mekaf 25 and 26 have merged.

*Gender 19/26: *fi-/*mu(N)-*. This gender has a diminutive function as seen in (16).

(16) Missong	fTš hT	mūnš hT	'small knife'
	fTšūmfš	mūnšūmfš	'small village'

Although the plural prefix is similar to PB class 18, we decided to give it a different class number since we do not think it corresponds to the locative PB class 18. It should be noted that this gender is found outside the Beboid languages, e.g. in the Menchum languages (Boum 1980) and in some Narrow Bantu languages of Guthrie A.60 (Tuki (Hyman 1980a); Yambasa (Paulian 1980)). Hyman (1980b) suggests that this class could be a secondary development where an initial m- (perhaps even that of 6a ma-) would have been added to u- (possibly from an earlier class 13 *tu-).

Genders 3/27, 5/27 and 9/27: *u-/*ki-, *i-/*ki- and *|-//*ki-. Class 27 has a -tə suffix for all stems in Bu, but in Missong it has a -lə suffix for vowel final stems, a -nə suffix when the final consonant of the stem is -ŋ and a -ə elsewhere:

(17) Bu	tsǎŋ kě	kǎtsǎntǎ kǎkǎtǎ	'bamboo' 5/27 'country' 5/27
(18) Missong	lyō lpT̃ Tš Ttǎm k n̄ lyūn̄ ln̄om̄ tsūŋ Ttǎŋ	kTyō ə kTpT̃ ə kTšT̃ ə kTtǎmǎ kTk nǎ kTyūnǎ kTn̄omǎ kTtsūŋǎ kTtǎŋnǎ	'bee' 9/27 'death' 9/27 'market' 5/27 'axe' 5/27 'headpad' 9/27 'thatching grass' 9/27 'work' 9/27 'bamboo' 9/27 'belt' 5/27

Notice that Koshin does not have these genders but has 3/13 and 5/13. Since class 13 has a tǒ- prefix, it is possible that the suffixes found in Bu and Missong have the same origin as class 13 tǒ-. As for the prefix of class 27, it should be reconstructed with a super-closed vowel, similar to PB *|. The reason for this reconstruction is that this prefix palatalized in Noni (j|-) and Nchanti (č|-), while class 7 *ki- did not (see ke- in Noni and ki- in Nchanti). Let us also point out that in neighboring Menchum languages we find either a kǎ- or a tǎ- prefix for this class. This tǎ- prefix (or ti-) is also found in a number of Western Grassfields languages and in fact has been reconstructed for Proto-Benue-Congo (de Wolf 1971). How many classes do we have? Are ti- and tu- two different classes? Is ki- (or k|-) different from both then? It is not impossible that all three of them would have the same origin *t|-. If this is the case the backing of a dental to a velar place of articulation would have to be accounted for in acoustic terms (e.g. from noise burst) rather than in articulatory terms, since we would not expect a dental to become a velar before a front vowel. The fact that we have a kǎ- prefix but a -tǎ suffix in Bu does not necessarily imply that they have two different origins; it is possible that the change from *t to [k] occurred in word-initial position but not in intervocalic position. But since this issue is far from being resolved, we made a distinction between class 13 and class 27 in this paper. (Note finally in this regard that Kenyang class 13 is marked with a [k] (Voorhoeve 1977).)

*Single class genders 6a (*m-) and 14 (*bu-).* The class 6a prefix is either m- (Mekaf, Noni, Bebe-Jatto), n- (Koshin, Bu, Nchanti and Akweto) or an- (Missong). In Noni a -m suffix is found. This class contains mass nouns and liquids. Class 14 is found as a single class gender in Koshin, Bu, Akweto and Bebe-Jatto. As we mentioned earlier, its pairing with class 25 mǎn- is certainly a secondary development.

4. TONE OF PREFIXES

Although the correlation is not perfect, the tone of prefixes seems to be a function of the tone of the first syllable of the stem. If the first tone of the stem is mid or high, the tone of the prefix is raised to mid. Examples are given from Mekaf in (19).

(19) Mekaf	àŋkèl	bìŋkèl	'nail'
	àbè	bìbè	'bag'
	àlè	bìlè	'sweet yam'
	àndòŋ°	bìndòŋ°	'cocoyam'
	àdùn°	bìdùn°	'snail'
	àntàm°	bìntàm°	'trap'
	ābān	bībān	'arm'
	ābē	bībē	'calabash'
	ākām	bīkām	'crab'
	ātī	bītī	'tree'
	ānzāmā	bīnzāmā	'fly'
	ātú	bītú	'ear'
	āpéné	bīpéné	'bird'

5. DEVELOPMENT OF NASAL CONCORDS

In all of these languages we have a nasal concord for class 6a and for classes 25 and 26 when these classes exist. But as we mentioned earlier these two classes are probably secondary developments. More interestingly, nasal concords are also found in class 6 in Mekaf and in classes 6, 1 and 9 in Bebe-Jatto. The development of these nasal noun class markers is extremely important since this issue has always been central to the distinction between Bantu and non-Bantu languages of the Benue-Congo group. The historical scenario for the Beboid languages seems to be as follows:

(a) Stem-final consonants were lost except when they were nasals. This can be seen from Table 6 where the percentages of types of endings in the eight Beboid languages are presented. In all languages except Mekaf the only possible final consonant is a nasal. (The final -w and -y of Noni are not considered here; see Hyman, in preparation.)

TABLE 6. Percentages of types of endings (computed from about 200 nouns)

	Mekaf	Koshin	Misong	Bu	Noni	Nchanti	Akweto	Bebe-Jto.
-ŋ	43	51	54	44	53	54	59	73
-ŋ̃	0	7	0	0	0	23	21	12
-m	17	15	21	24	19	0	0	0
-n	8	16	12	16	11	0	1	3
-ŋ̃	13	11	13	16	17	23	19	12
p, t, k	9							
l, r, q	10							

(b) Final consonants could be used to distinguish singular vs. plural, especially for genders which had lost a distinction in the noun prefixes. This is the case for instance in gender 5/6 in Mekaf, where final ŋ indicates the plural form.

(c) For classes with vowel or glide concords, the final consonant of the stem could be copied in front of the concord in order to get the more classic C(G)V(C) syllable structure:

(V)- CVN	G...	>	(V)-CVN	NG	>	(V)-CV	NG
<i>pref stem concord</i>							
<i>Stage 1</i>			<i>Stage 2</i>			<i>Stage 3</i>	

Stage 2 is illustrated by class 6 in Mekaf and stage 3 (i.e. where the final nasal of the stem has been dropped) is found in the same class 6 in Bebe-Jatto.¹¹

6. GENDER 7/8 vs. 12/8

One of the puzzling problems encountered in the Grassfields languages located both to the south and east of the Beboid languages is that the noun prefix of the class paired with class 8 turns up either as *ki-* or *a-*. A phonetic change by which **ki*>*a* was considered to be an unlikely explanation when considering the whole of the Grassfields data. Data from the Beboid languages suggest a more likely explanation.

Out of the eight Beboid languages investigated, five of them (Bu, Missong, Koshin, Nchanti and Akweto) have *ki-* (or *kə-*) as the singular prefix paired with class 8 *bi-*, one language (Mekaf) has *a-*, and two languages (Noni and Bebe-Jatto) have *two* different singular prefixes paired with plural class 8, as shown in Table 7.

TABLE 7. *Singular prefixes paired with class 8*

Misong	<i>ki-</i>	<i>bi-</i>
Bu	<i>kə-</i>	<i>bə-</i>
Koshin	<i>kə-</i>	<i>bə-</i>
Akweto	<i>ki-</i>	<i>bi-</i>
Nchanti	<i>ki-</i>	<i>bi-</i>
Mekaf	<i>a-</i>	<i>bi-</i>
Noni	<i>ke-</i> , <i>ε-(<i>ε</i>a)</i>	<i>bi-</i>
Bebe-Jatto	<i>kə-</i> , <i>∅-(<i>ε</i>a)</i>	<i>bi-</i>

The fact that Noni and Bebe-Jatto have both singular prefixes suggests that *a-* does not come from *ki-*. We propose that *a-* comes from *ka-* which has been reconstructed both for PBC and for PB (class 12). At the PB stage classes 12 and 19 (*ka-* and *pj-*, respectively) had a diminutive function. In the Grassfields area this diminutive function was taken over by class 19 exclusively. We can easily imagine that when class 12 ceased to be used as a diminutive class some items retained this prefix (*ka-*) in some languages, but since class 12 did not have a clear class content, the prefix *ka-* got frozen on different lexical items in different languages. This explains why we do not find the same lexical items in the *ε-/bi-* gender in Noni as we do in the *∅-/bi-* gender in Bebe-Jatto. Items which retained the *ka-* prefix after class 12 lost its diminutive function formed their plural with class 8 *bi-* on the basis of identical concords between *ki-* and *ka-*. On phonetic grounds it is surprising that a later development changed **ka-* to [a], and that **ki-* did not change. It is expected that a velar consonant followed by a front vowel is more subject to change than before the low vowel *a*. Note that the loss of this initial *k* did not lead to any confusion since there is no *a-* singular class. On the other hand, a loss of *k-* before *i* would have led to a confusion with the prefixes of class 5 and class 9.

7. CONCLUSION

The Beboid languages have noun class systems similar to the Bantu languages. Nasal prefixes are not found in classes 1, 3, 4, 6, 9 and 10 (as they are found in Bantu), but rather they are restricted to classes 6a, 25 and 26. These last two classes seem to be relatively recent developments probably based on class 6a. However, it should be emphasized that nasal *concords* are found in some of

the Beboid languages (in class 6 in Mekaf and in classes 1, 6 and 9 in Bebe-Jatto). the origin of these nasals appears to be the copying of a final stem nasal onto a following vowel- or glide-initial concord. This copying could represent an attempt to preserve consonant initial syllable structure and thus provides a more canonical CV syllabification. It was also mentioned that although plural classes to- and ki- (or k|-) could have a single origin, we did not have enough evidence here to make a decision and consequently posited separate classes 13 and 27. Finally, it was suggested that the a- singular prefix corresponds to PB class 12 ka-.

NOTES

¹The data presented here were collected during the summer and fall of 1979. I would like to thank Larry Hyman for providing me with his data and analysis of the Noni noun classes and for discussions on the data presented here. Special thanks are made to Harriet Jisa, George Bwei of Mekaf and Mark Bintum of Nkor for their help during the fieldwork period. This research was supported by a National Science Foundation Grant. No. BNS76-81261.

²A number of the villages presented in this paper are known by several names:

Kwej = Kwe = Kikwo	Mundabli = Mundabili = Ndabile = Njam
Bebe-Jatto = Bega	Lebo = Lebe
Bebe-Kitte = Bebe-Ketti = Binbua	Nkungi = Mashi overside
Munken = Bensan	Mbelego = Tosso II
Mufu = Mumfu = Memfu = Nnsa	Furuawa = Furukankang
Missong = Bijong	Luta = Lutu
Aba = Belo	Biando = Yukube
Mekaf = Menkaf = Menkap = Bunaki	Akum Shibung = Mufong
Mashi = Bukpang	Kpep = Lissang
Dumbo = Kimanjong = Kumaju	

³North of the western Beboid languages a number of Jukunoid speaking villages are found:

Furu villages: Furuawa, Furubana, Furuturuwa, Furusambari, Furuangwa
 Kutep villages: Lubu, Jamayiking, Baji, Akwa
 Ehum villages: Luta, Biando
 Akum Shibung
 Munka
 Kpep

⁴West of the western Beboid languages the villages of Munkep, Munka and Gayama are Isu speaking (i.e. belong to Ring group of Western Grassfields). Ring languages are also spoken in the neighboring villages of Zoa, Weh, Aghem, Kumfutu, Cha?, Nyos, Bafmeng, Mbuk, Kung and Kuk.

⁵This group is called the Kinabe group.

⁶Chilver and Kaberry (1968) mention that the villages of Ngong, Fio, Mungom, Ketambo, Ngunokimbin belong to the same group. However, according to our informants, nowadays these villages are Bum speaking villages.

⁷North of this group but still on the Cameroonian side of the border with Nigeria, there are five Jukun speaking villages: Gidan-Jikum, Take, Sonkuru,

Mpetaba and Ndaka. In Ndaka the plural is formed by adding the suffix -ha to the singular form. The Ndaka people claim that they came from the Nupe area in Nigeria, settling first in Wukari and then moving to their present location. Ndaka people say that they can understand Mbembe. At least five chiefs are buried in Ndaka.

⁸ Several village names in this group were given by their Limbum neighbors:

<i>Limbum names</i> (usually used on maps)	<i>Noni names</i>
Nkor	Nko
Lassin	Laan
Mbinon	Tfu
Dom	Bvugoi
Njottin	Djottin

⁹ The following tone marks are used in this paper:

[à] Low tone (slightly falling)	[˘]
[à°] Low level tone	[˘˘]
[á] Lowered mid tone	[-]
[ā] Mid tone	[-]
[á] High tone	[ˉ]

¹⁰ Tone alternations between the singular and the plural forms in this gender will not be accounted for in this paper.

¹¹ The fact that nasalization is associated with class 9 but not class 10 in Bebe-Jatto may have something to do with the systematically lower tone found in class 9 (as opposed to class 10). We have for example ʃʃ̃ 'sheep' (sg.), but ʃʃ 'sheep' (pl.) without nasalization.

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THE EJAGAM NOUN CLASS SYSTEM: EKOID BANTU REVISITED*

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ABSTRACT

In this study the Ejagam noun class system is presented within the context of Proto-Ekoid and the relation of the Ekoid languages to Bantu. It is argued here that even though on the surface there may appear to be a high degree of irregularity in the Ejagam and other Ekoid noun class systems in relation to a typical Bantu noun class system, there is much more regularity at the level of Proto-Ekoid. It is also argued that certain tonal and morphological correspondences between Ejagam (and Proto-Ekoid) on the one hand and Proto-Bantu on the other make a theory of borrowing on the part of the Ekoid languages highly unlikely. It is also shown that Ejagam has relics of the locative classes 16 and 17 in the form of locative pronouns (which were originally demonstratives for these classes) and one interrogative pronoun. In addition, relics of a mystery class are also presented whose present day function in the language is that of manner adverbials which have a deictic function within discourse. The fact that they have a deictic function in addition to their shape indicate that they too derive from an earlier set of demonstratives of some earlier noun class. They remain a mystery in that the noun class in Bantu to which they correspond is not identifiable with any certainty.

1. INTRODUCTION

In Cameroon and Nigeria, one finds a number of languages which lie to the northwest of Guthrie's (1967) zone A and whose genetic relationship to Bantu has been a matter of debate for a number of years. These languages have been referred to as "Semi-Bantu" (Johnston 1919) and "Bantoid" (Guthrie 1962). These labels were attempts to capture two of the more salient features of these languages. First, they demonstrate certain Bantu-like characteristics such as cognate roots and noun class systems with similar morphology. But secondly, they also present certain anomalies such as unclear sound correspondences and noun class irregularities which could seem to undermine any claim for a genetic relationship in Bantu.

Generally two positions have been taken as to the origin of the Bantu-like characteristics in these languages. Johnston (1919) and Guthrie (1962) have argued for a theory of massive borrowing from the Bantu languages, while Westermann (1952) and Greenberg (1963) have argued for a theory of common genetic descent. In more recent years, studies of various units among these languages

have supported the theory of a genetic relationship. Crabb (1965) studied a number of Ekoid languages and concluded that they were definitely Bantu languages. In separate studies, Voorhoeve (1971) and Hyman (1972) emphasized the genetic relationship to Bantu of the Mbam-Nkam languages which are spoken about eighty miles due east of the Ekoid languages in Cameroon. Finally, the Grassfields Bantu Working Group (Hyman and Voorhoeve 1980) has provided substantial evidence from the noun class systems of languages spoken in the grassfields of western Cameroon (which include the Mbam-Nkam languages) to support a theory of a common genetic link with the Bantu languages.

Today the theory of a common genetic origin has gained fairly wide acceptance. A basic question now is at what historical depth and in what form does one assign this relationship. Examples of attempts to answer this question are found in the exchange between Greenberg and Meeussen (1974), and in a recent article by Bennett and Sterk (1977) in which a complex relationship is argued for between Guthrie's Bantu and language groups such as Ekoid and Mbam-Nkam.

2. MOTIVATIONS FOR THE STUDY

2.1. *To contribute to the comparative debate.* A primary reason for looking at the noun class system of Ejagam, an Ekoid language, is that such a system has figured significantly in the debate over how to classify the languages along the northwest border of Guthrie's Bantu. The noun class systems of these borderland languages are often strikingly similar to those of the Bantu languages. However, in many of these languages--including Ejagam--there are certain irregularities in the system in terms of the typical Bantu system. These irregularities were sufficient for Guthrie to classify Ejagam as non-Bantu or "Bantoid".

In his early work on Bantu classification, Guthrie (1948, 1953) drew the northwest boundary of his zone A along the southern edge of the Ejagam language. In his later work on Bantu origins, he suggested that one of these border languages, namely Tiv, which is about sixty miles north of Ejagam, should be regarded as "a partly Bantu language of a special type," or as an "overshoot" (Guthrie 1962:20). In this same work, he mentioned two Ekoid languages along the Cross River: Nkim and Crabb's Ekoid F, an Ejagam dialect. He noted that these two languages seemed to parallel Tiv in their Bantu-like characteristics, but to a much smaller extent. He concluded that the similarity was misleading in that "the elements that make up their Bantu-like concord system are false reflexes of the Proto-Bantu prefixes, whereas those in Tiv have all the characteristics of true reflexes" (Guthrie 1962:20, footnotes 1 and 3). He pointed to the special problem of singular/plural pairings in the noun class system of Nkim as an example of "false reflexes". In the course of this study, however, it is argued that the Ekoid languages and Ejagam in particular do not have "false reflexes" of the Proto-Bantu noun classes but "true reflexes".

It should be noted that in reading Guthrie's various writings that touch on the languages which border the northwest boundary of his zone A, it is not always clear whether he was thinking of genetic relationships, typological relationships, or lexical and grammatical "contamination". Welmers (1973) has pointed out that the "contamination" theory has not been given a credible explanation, and Winston (1966) has noted that a major contribution of Greenberg (in contrast to Guthrie?) to African language classification was to keep genetic classification distinct from typological classification.

It should also be noted that in this study it is not claimed that regular sound correspondences have been established between the Ekoid languages and Bantu. Such correspondences are undoubtedly obscured by the time depth involved which is probably greater than 2000 years (Phillipson 1977). It is assumed, however, that as our knowledge of these borderland languages increases, the sound correspondences will become more evident. By focusing on the noun class system of Ejagam, we are focusing on perhaps the least obscured area of correspondence between Bantu and the borderland languages. It is true that ultimately genetic classification must rest on regular sound correspondences, but as Anttila (1972) points out, such a genetic classification is more convincing when grammatical elements are involved in the sound correspondences. In this study it will be seen that the correspondence of Proto-Bantu *p to Ejagam f is true both for lexical items and for the grammatical elements of the noun class system.

In contrast to Guthrie whose focus was on the dissimilarities of languages bordering on the Bantu area, others like Greenberg and Crabb have focused on the similarities. In his classification of African languages, Greenberg (1963) argued for the inclusion not only of Tiv within Bantu, but also--by the nature of his list of Benue-Congo languages--of the Ekoid languages. Along the same line, Crabb (1962:15) claimed that from the evidence the genetic relationship between Bantu and the Ekoid languages could be "taken as proved". The evidence which he considered were the "high degree of common vocabulary with the better known Bantu languages," and certain suppletive forms which bear a relationship to Bantu roots and noun class prefixes and would be resistant to borrowing. Crabb's evidence will be considered in more detail below.

By 1971 the above positions were further modified. Williamson (1971) made a clear distinction between various types of Bantu, leading to the present day distinction between "narrow" Bantu (i.e. Guthrie's Bantu) and "wider" Bantu of which the Ekoid languages are claimed to be a part.

Also at this time, Guthrie slightly modified his claim that the Ekoid languages were clearly outside of Bantu. His modification, however, was put in the most tentative, non-committal terms possible: "It may therefore be tentatively inferred that the Ekoid languages may to some extent share an origin with some of the zone A languages [namely Bòbè and Yambasa], but that they seem to have undergone considerable perturbations" (1971, vol. 2:15). This statement indicates that Guthrie was never able to shake himself free from his Narrow Bantu viewpoint and see that probably the relationship between Ekoid and Narrow Bantu is deeper in time depth than that between Ekoid and a couple languages of zone A. In any case, one can see why the Ejagam noun class system should be of interest in the comparative debate.

2.2. *To augment Crabb's evidence.* The first volume of Crabb's *Ekoid Bantu Languages of Ogoja* (1965) presented phonologies and a comparative word list for most of the Ekoid languages. In a second volume he was apparently to present a comparative morphology of the Ekoid languages, especially of their noun class systems. Unfortunately, this second volume has never been published. Only part of Crabb's material was made available in mimeographed form in 1967 and 1968. This material will be used as the basis for the Ekoid languages as a unit. Evidence from Ejagam will support the inclusion of Proto-Bantu noun classes 16 and 17, at least in relic form, within Ekoid along with those classes which Crabb established.

2.3. *To supplement the information given by de Wolf.* De Wolf's (1971) study of the noun class system of Proto-Benue-Congo (PBC) included one of the

Ejagam dialects, Crabb's Ekoid F. This happens to be the only Ejagam dialect which is limited to seven noun classes. All other Ejagam dialects have nine. De Wolf suggests that the data concerning the Ekoid languages, such as Ejagam, is satisfactory, but it is clear from what he presents that he had incomplete information, especially in the type of concord which is found in the Ejagam noun class system.

3. THE EJAGAM LANGUAGE

The Ejagam language has been referred to as the "Ekoi dialect cluster" (Westermann and Bryan 1952; Williamson 1971) and "Keaka" (Richardson 1957) in past classifications. The actual breakdown of the dialects in these classifications is given in (1).

(1)

Ejagam Dialect Classifications

<u>EJAGAM</u>		<u>EKOI</u>	<u>KEAKA</u>	<u>EKOI</u>
WESTERN EJAGAM [éjáyám]	Bendeghe Etung	} Ekwe	} Cameroon Ekoi	Bendeghe F
	Northern Etung			Northern Etung G
	Southern Etung			Southern Etung H
	Akamkpa	} Ejagham		} Ejagham
	Oban			
Ndebaya- Eyumojok				
transition dialect?	Babong- Mbakem			
EASTERN EJAGAM [éjáyá]	Keaka	} Keaka	} Ejagham	} Ed jagam
	Obang	} Obang	} Obang	} Obang
KWA [èkín]	??			} Kwa
	??			
		} Nkum		

My own breakdown of the dialects, which is provisional, is given on the left in the boxes. I base these divisions on phonological, grammatical, and lexical differences that I found in a short three week survey, and also on a study done

by Edmondson and Edmondson (1971). The study of the Ejagam dialects is not yet complete so that the status of the transition dialect is not certain, the number of sub-dialects in Western Ejagam is not clear, and whether or not Kwa actually consists of sub-dialects is not known. But in any case, the divisions on the left approach the real dialect situation better than any previous classification.

It can be seen that Westermann and Bryan included Nkum among the Ejagam dialects, but it is actually a different language. Both Westermann and Bryan, and Richardson overlooked the Kwa dialect. Richardson came closest to the actual situation when he posited a major two way division, but his division was based more on political boundaries than linguistic isogloss bundles so that he misplaced the most likely location of the division. Finally, Williamson uses the capitals F, G and H in her classification in order to refer to Crabb's Ekoid dialects F, G and H, respectively.

The Ejagam people occupy approximately 145 villages in the Cross River Basin in a continuous territory roughly within the triangle formed by the towns of Calabar and Ikom in Nigeria and Mamfe in Cameroon. They number approximately 60,000 to 70,000 people: 30,000 in Cameroon and perhaps 40,000 in Nigeria. Thus, the international border between Nigeria and Cameroon divides the Ejagam people almost in half. The Kwa and most of the Western Ejagam dialect are spoken in Nigeria, while the Eastern Ejagam dialect is spoken entirely in Cameroon.

The core of this study is based on the Ndebaya-Eyumojok sub-dialect of Western Ejagam, spoken around the villages of Ndebaya and Eyumojok in Cameroon. This sub-dialect is about thirty miles west of Mamfe and is just to the east of Crabb's Ekoid G and H, being most closely related linguistically to Ekoid G. Where helpful or necessary, reference will be made to other dialects or sub-dialects of Ejagam, but no attempt is made here to present a Proto-Ejagam noun class system.

4. THE (WESTERN) EJAGAM NOUN CLASS SYSTEM: NDEBAYA-EYUMOJOK SUB-DIALECT

The consonants, vowels and tones of the Ndebaya-Eyumojok sub-dialect are present in (2), (3) and (4), respectively.

- (2) *Consonants:* p, t, k, kp, b, d, g, gb, m, n, ñ, ŋ,
f, s, ʃ, β, j, r, y, w.
- (3) *Vowels:* i, e, ə, a, u, u, o.
- (4) *Tones:* /^h/ high tone, /^l/ low tone, /^f/ falling tone,
/^r/ rising tone, and /^d/ downstep.

4.1. *The noun class markers.* The Ndebaya-Eyumojok noun class markers are provided in Table I, where the following abbreviations are used:

- PB Class: the Proto-Bantu noun class number with which the given
Ejagam noun class best corresponds;
NP: the noun prefix;
SP: the subject prefix marked on the verb;
2-5: the numeral prefix on the numbers 'two' through 'five';
Poss: the possessive pronoun prefix;
Dem/Rel: the demonstrative and relative pronoun suffix;

Table 1

Ndebaya-Eyumojok Noun Class Markers

PB Class	NP	Concord										
		SP/'2-5'*			Poss	Dem/Rel	'one'/'	OP			/IP	AM (=V)
		I	II	III				I	II	III		
1.	N-	Ñ-	ò-	à-	òw-	-ño	yo-	/êm	wâ	yê	/ño	'
2.	a-	è-	ò-	á-	àβ-	-βa		éd	ên	áβò/βa	'	
3.	N-			Ñ-	ím-	-mi ¹				mè	'	
5.	e-			é-	èj-	-ji				jè	'	
6.	a-			á-	àm-	-ma				ma	'	
8.	bi-			í-	ìβ-	-βi				βè	'	
9.	N-			à-/é-	èy-	-fi	yè-/			fiè	'	
14.	o-			ó-	òβ-	-βi				βè	'	
19.	i-			í-	ìf-	-fi				fè	'	

Noun Genders:

Double Class Genders: 1/2, 3/6, 3/14, 5/6, 5/8, 5/9,
9/6, 9/14, 14/6, 14/9, 19/3, 19/6.

Single Class Genders: 3, 5, 6, 8, 9, 14, 19.

- one: the numeral prefix on the number 'one';
 OP: the object pronoun concord morpheme;
 IP: the interrogative pronoun concord morpheme;
 AM: the associative or genitive marker.

For the subject prefix and the object pronoun concord morpheme the following persons are indicated by the appropriate Roman numeral: I 'first person', II 'second person' and III 'third person'. The first and second persons are only relevant with noun classes 1 and 2. In the column SP/'2-5'*, the numeral prefix is indicated by an asterisk * in the appropriate classes. In most classes it is identical to the subject prefix, but in class 9 the subject prefix and numeral prefix differ as indicated: à- SP and é- '2-5' prefix.

Finally, in the columns 'one'/OP/IP the concord morpheme is indicated in the 'one' and OP columns only if they differ from the concord morpheme used with the interrogative pronoun (IP). Thus, only in noun classes 1, 2 and 9 does one find any differentiation between these concord elements. In noun class 1 all columns are differentiated. In noun class 2 all columns are also differentiated, but no concord morpheme is necessary for the numeral 'one' since this class is used exclusively for plurals. In noun class 9, the numeral prefix for 'one', yè-, differs from the concord element of the object pronoun (OP) and interrogative pronoun (IP) which are identical.

4.1.1. *The noun prefixes.* The noun prefixes are generally either a vowel V- or a homorganic nasal N-. Only the class 8 prefix bĩ- has the typical Bantu CV- noun prefix shape. This is one type of non-correspondence with Proto-Bantu. The variant forms of these noun prefixes are few, being limited to: 1) the homorganic nasal, and 2) the harmonized phonetic shape of the class 5 prefix e- and the class 14 prefix o-.

The homorganic nasal² assimilates to the relevant features of the following consonant as stated in rule (5). The relevant features include anterior, coronal, high, back and distributed.

(5) [+nasal] → [aF] / ___ [+consonantal]
a F

Examples are given in (6) where a capital marks an unreleased stop and the numeral in the gloss indicates the noun class.

(6) N-béd [mbÉT] 'law' 9 N-jô [ñjÓ] 'dog' 9
 N-féb [ɱfÉP] 'wind' 9 N-káé [ħkʰáÉ] 'wife' 1
 N-tf [h̥tʰf] 'money' 3 N-gbè [ŋmgbÈ] 'leopard' 9

The noun class prefix e- and the class 14 prefix o- each have two phonetic variants. These variants are due to the harmonizing of the vowel prefixes with the initial vowel of the root. If the root vowel is [+high], the prefixes will take the tense forms [e-] and [o-], respectively. If the root vowel is [-high], the prefixes will take the lax forms [ɛ-] and [ɔ-]. The high vowels are i, u, and u, while the non-high vowels are e, ə, a, and o.

(7) class 5 e- è-yù [èyù] 'yam' è-yâ [èyâ] 'year'
 class 14 o- ò-βf [òβf] 'palm oil tree' ò-βó [òβó] 'hand'

The tone of the noun prefix is usually low tone. However, for approximately a sixth of the nouns the tone is high. There are also three nouns with a falling tone on the prefix. This use of high and falling tones on noun prefixes contrasts with the common Bantu noun prefix which is marked only with low tone.

(8) è-kúf 'camwood body paint' 5 é-kúf 'forest' 5 ê-kâ 'owl' 5

4.1.2. *The subject prefixes.* Except for noun class 3 which has the homorganic nasal N- for its subject prefix, all subject prefixes have the shape V-. For classes 1 and 9 which have homorganic nasals for noun prefixes, the subject prefix is à-. In all other noun classes the subject prefix is identical to the noun prefix except for noun class 8 which has the subject prefix f- rather than bĩ-. First person singular takes the subject prefix N- while second person singular, and first and second person plural all take a subject prefix with the shape V-. The verbal prefixes N-, e- and o- demonstrate the same alternations as the noun prefixes of the same shape. Examples of subject prefixes which mark verb agreement are given in (9).

- (9) class 1 ñ-tèm à-gbô 'a friend fell'
 friend he-fell
- class 2 à-tèm á-gbô 'some friends fell'
 friends they-fell
- class 3 ñ-dfg ñ-gbô 'a rope fell'
 rope it-fell

The impersonal verbal prefix is that of noun class 5.

- (10) class 5 é-nôb 'it is good' é-βîb 'it is bad'

The indefinite personal verbal prefix is that of class 2.

- (11) class 2 á-yâm é-dí 'they cooked some food' (= 'someone cooked
 they-cook food food/someone was cooked food')³

An important feature of these prefixes, especially for comparative studies, is the tone they take. The subject prefixes for classes 1 and 9 take low tone, while all other classes take high tone. Greenberg (1963:35) claimed that Proto-Bantu was marked by this same tonal distinction between classes 1 and 9 on the one hand, and all other classes on the other. This tonal distinction will be seen to hold elsewhere in the noun class system, providing further evidence that Ejagam bears a genetic relationship to Bantu since such a feature would be highly resistant to borrowing. On the same basis, Greenberg argued for Tiv's genetic relationship to Bantu. In fact, this tonal characteristic of the noun classes is probably much more general than just Bantu. De Wolf (1971) has argued that it marks the Proto-Benue-Congo noun class system also.

4.1.3. *The numerals '2-5'*. From Table I it can be seen that for classes 2, 3, 5, 6 and 8 the numeral prefixes for the numbers 'two' through 'five' is identical to the subject prefixes for those classes. These prefixes are also used for the quantifying interrogative 'how many?'.

The numeral 'one' has a different concord morpheme from the numbers 'two' through 'five', while the numbers 'ten' and above do not take class concord. The numbers 'six' through 'nine' take the same numeral prefix as 'two' through 'five' but the tone is low rather than high for 'six' through 'eight'. The numbers 'six' through 'nine' are not considered here because they are derived from the basic terms 'two' through 'five'.

The noun classes 2, 3, 6 and 8 are those used for plural nouns. Their concord is exemplified with classes 2 and 8 in (12).

- (12) class 2 à-nè á-βá'é 'two people'
 people two
- à-nè á-βfg 'how many people?'
 people how-many
- class 8 b\-yù f-βá'é 'two yams'
 yams two
- b\-yù f-βfg 'how many yams?'
 yams how-many

Noun class 5 is not used to mark plural nouns, but it is used for the simple enumerative as in (13).

(13)	é-βá'é	'two'	é-ní	'four'
	é-sá	'three'	é-rôn	'five'

Noun class 9 is also marked for concord with the numerals, but this is a special case. First, the numeral prefix differs from the subject prefix in both segmental shape and tone. This is the only case to have such a difference between the numeral and subject prefixes. Secondly, the nouns belonging to the gender 9/14, taking class 9 for their singular form and class 14 for their plural form, behave differently than other nouns when counted. Count nouns in the other genders always take their singular form when there is only one and their plural form when there are two or more. An example of this is given in (14) below for nouns in the gender 5/8. This gender is compared with the gender 9/14 in (14). Nouns of gender 9/14, by contrast, remain in class 9 whenever their plural number is specified. They take class 14 only when their plural number is unspecified or indefinite.

(14)	<u>Gender 5/8</u>		<u>Gender 9/14</u>	
	è-yù	jé-d 'one yam'	Ñ-jô	yé-d 'one dog'
	5-yam	one	9-dog	one
	<u>NOUN CLASS SWITCH 5 → 8</u>			
	bi-yù	í-βáé 'two yams'	Ñ-jô	é-βáé 'two dogs'
	8-yam	two	9-dog	two
	bi-yù	í-sá 'three yams'	Ñ-jô	é-sá 'three dogs'
	8-yam	three	9-dog	three
	<u>NOUN CLASS SWITCH 9 → 14</u>			
	bi-yù	'yams'	ò-jô	'dogs'
	8-yam		14-dog	

Note that for gender 5/8 the root -yù 'yam' takes the class 5 prefix è- in its singular form, but the class 8 prefix bi- in its plural form whether or not the plural number is specified as 'two', 'three' or more, or it is simply specified as 'yams'. Count nouns in gender 5/8 are typical for all count nouns in Ejagam (and in Bantu for that matter), while those in gender 9/14 are atypical. For gender 9/14 the root -jô 'dog' takes the class 9 prefix Ñ- as long as the number of 'dogs' is specified whether as 'two', 'three' or more. Only when their number is unspecified do they take their plural class prefix o-. This irregular use of the singular and plural classes for gender 9/14 is undoubtedly due to the fact that the é- numeral prefix is a relic of Proto-Bantu noun class 10. For comparative reasons, therefore, this gender may be referred to as gender 9/10/14.

4.1.4. *The possessive pronoun reflexes.* All possessive concord prefixes have the shape VC-. It is with this class of concord elements that all nine

Ejagam noun classes are segmentally distinct. For each concord element (cf. Table I) two tones are indicated. The first tone occurs over the vowel of the concord prefix, while the second tone occurs over the first or only vowel of the person morpheme.

(15) class 1:	òw-	N-tèm	òw-ǎ	'your friend'
		friend	your	
		h-tèm	ò(w)-òré ⁴	'our friend'
		friend	our	
class 2:	àβ ⁴	à-tèm	àβ-á	'your friends'
		friends	your	
		à-tèm	àβ-é ⁴	'our friends'
		friends	our	

As shown in (15), if the person morpheme is disyllabic, e.g. -Vré 'our', then the second tone of the concord morpheme will be a level tone. If the person morpheme is monosyllabic, e.g. -a 'your (sg.)', then this tone combines with its reciprocal level tone--low with high, or high with low--to form a glide. The important point to note is that the second tone is low for classes 1 and 9, but high for all other classes. This is the same distinction made by the verbal prefixes.

It is worth noting here that this tonal distinction coupled with the fact that other dialects suggest that the initial vowel of the person morpheme was historically *a support the internal reconstruction of the possessive pronoun as consisting of a concord prefix, an associative *a with low tone in classes 1 and 9 and high tone with other classes, and finally a person morpheme: *VC-a-'PERSON'.

4.1.5. *The demonstrative and relative pronouns.* The demonstrative and relative pronouns consist of a demonstrative or relative morpheme plus a concord suffix. These suffixes have the shape -CV which contrasts with the VC-shape of the possessive concord morpheme, but parallels the CV- shape of the class 8 noun prefix bi- and also parallels the Proto-Bantu concord morphemes. Each class has a segmentally unique concord morpheme except for classes 8 and 14 which have merged at this point.

Although there seems to be some evidence for a three way demonstrative contrast in the Bendeghe Etung sub-dialect of Western Ejagam, there are only two productive demonstratives in most of Ejagam--'this' and 'that'. The third distinction--'that distal'--is specified most commonly with a locative construction as in (16).

(16)	N-ñám	N-ñí	ǎgò	'the animal way over there'
	animal	which	there-distal	

The demonstrative 'that' is also used for anaphoric purposes.

There is no tonal distinction in the demonstrative paradigm between class 1 and 9 and the other classes as with the verbal and possessive pronoun concord morphemes. Compare class 1 with class 2 in (17).

(17) class 1:	N-tèm	N-ñó	'this friend'	N-tèm	á-ñò	'that friend'
	friend	this		friend	that	

class 2: à-tèm Ì-bá 'these friends' à-tèm á-pà 'those friends'
 friends these friends those

What is referred to here as the "relative pronoun" includes what Meeussen (1967) calls the "connective": a form which links a noun with some non-verbal form. There are three types of relative pronouns in Ejagam:

1) that which associates a noun with a locative pronouns:

- (18) Ì-nè Ì-ńò ìfá 'the person here'
 1-person who here
 à-nè Ì-bá ìfá 'the people here'
 2-people who here

2) that which associates a noun with a clause or another noun:

(19) a. association with a clause

- Ì-nè Ì-ńò à-βá-'é 'the person who came'
 1-person who he-come-SFX
 à-nè Ì-bá á-βá-'é 'the people who came'
 2-people who they-come-SFX

b. association with a noun

- Ì-nè Ì-ńò Ì-nèŋkáé 'the person who (is) a woman'
 1-person who woman
 à-nè Ì-bá á-nàkáé 'the people who (are) women'
 2-person who women

(In (19a) "SFX" signifies a dependent suffix and in (19b) the noun 'woman' is a compound meaning literally 'female-person'.)

3) that which associates a noun with an infinitival stem (the class 5 prefix e- being absent), or a small class of "adjectival" roots:

(20) a. association with an infinitival stem

- Ì-ńám Ì-ńì gùr-úm 'animal/meat to sell'
 9-animal which sell-INF.SFX.
 ò-ńám Ì-bì gùr-úm 'animals/meats to sell'
 14-animals which sell-INF.SFX.

b. association with an "adjectival" root

- Ì-nè Ì-ńò tǎd 'another person'
 1-person who other
 à-nè Ì-bà tǎd 'other people'
 2-people who other

In (20), the "adjective" and infinitival stem have the class prefix deleted when they follow the relative pronoun (i.e. the connective):

- (21) 'other' è-tǎd → tǎd
 'to sell' è-gùr-úm → gùr-úm

As indicated in (18) - (20), the relative pronoun morpheme is a homorganic nasal with low tone: \grave{N} -. The three types of relative pronouns are distinguished by the tone on the concord morpheme. In (18) the concord morpheme always has a rising tone and in (20) it always has a low tone. In (19), however, the concord morpheme of class 1 and 9 have low tone (exemplified by class 1 \grave{N} -nò 'who' in (19)) while all other classes have a rising tone on the concord morpheme (exemplified by class 2 \grave{N} -bá 'who' in (19)). This again points to the tonal distinction between classes 1 and 9 with low tone and all of the other noun classes with high (or rising) tone.

4.1.6. *The numeral 'one' and the object and interrogative pronouns.* For each of these categories, the same concord morpheme is used with the exception of classes 1, 2 and 9. Thus, class 3 has the concord morpheme $m\grave{e}$ in the numeral 'one' $m\grave{e}$ -d, the object pronoun \grave{N} - $m\grave{e}$ -nè and the interrogative pronouns \grave{N} - $m\grave{e}$ -nè 'where?' and \grave{N} - $m\grave{e}$ -n 'which one?'.

Apart from the unique forms for the object pronouns in classes 1 and 2, the concord morpheme always has high tone in these forms. Also, classes 8 and 14 have fused phonologically with this concord morpheme. The following exemplify how these concord morphemes are used.

- (22) Numeral 'one': \grave{N} -nè $y\acute{o}$ -d 'one person'
 1-person one
 \grave{N} -d \acute{f} g $m\grave{e}$ -d 'one rope'
 3-rope one

- (23) Object pronoun:
 \grave{a} -kárè $\grave{a}m$ \acute{e} -d \acute{f} 'he gave me some food'
 he-gave me food
 \grave{a} -yên \grave{N} - $m\grave{e}$ -nè 'he saw it' (e.g. the rope)
 he-saw it (cl.3)

- (24) Interrogative pronouns:

- a. 'where?' \acute{a} -nòd \grave{N} -nè η káé; \grave{N} -nè η káé \grave{N} - $\grave{n}\acute{o}$ -nè
 they-searched woman woman where-class 1
 'they searched for the woman; where was the woman?'
- b. 'which?' \grave{N} -nè kpè \grave{N} - $\grave{n}\acute{o}$ -n \acute{a} -jǎ-g \acute{e} -tùm ò-yím...
 person even which-cl. 1 they-go-HAB work to do
 '(there is no) person whatever (who) goes to do work...'
 \grave{e} - $\beta\grave{a}n$ nǒ η \grave{N} -jǎ-n 'a dance like
 dance like which one-cl. 5 which one?'

4.1.7. *The associative marker.* Except for a few compound nouns, all noun + noun sequences in an associative relationship (Welmers 1963) are indicated with an associative marker (AM) which occurs between the two nouns:

- (25) noun + AM + noun

The AM in Ejagam consists of a phonologically determined segment but of a morphologically determined tone. There are two variants for the segmental realization of the AM. The first variant takes the following form:

$$\begin{array}{l}
 (26) \text{ AM} \rightarrow i / \begin{array}{l} V \\ [+high] \end{array} C (V) + \text{---} + \left\{ \begin{array}{l} N- \\ C- \end{array} \right\} \\
 e / \begin{array}{l} V \\ [-high] \end{array} (C) (V) + \text{---} + \left\{ \begin{array}{l} N- \\ C- \end{array} \right\} \\
 \emptyset / \left\{ \begin{array}{l} \text{---} + V \\ V + \text{---} \\ [+high] \end{array} \right\}
 \end{array}$$

This variant is the most common in the Ndebaya-Eyumojok subdialect and involves vowel harmony between the root vowel of the first noun and the AM. The second variant which is also found in this sub-dialect but which is more characteristic of the Bendeghe and Northern Etung sub-dialects has the form in (27).

$$\begin{array}{l}
 (27) \text{ AM} \rightarrow i / \text{---} + \left\{ \begin{array}{l} N- \\ C- \end{array} \right\} \\
 \emptyset / \text{---} + V-
 \end{array}$$

In relation to the concord system, however, the important feature of the AM is the tone it carries. If the first noun of the noun-noun sequence is a member of class 1 or 9, the AM tone must be low. If the first noun belongs to any other class, the tone of the AM must be high. In this way, the AM is another example of a pervasive distinction between classes 1 and 9 on the one hand, and all the other classes on the other. This distinction is phonological and in every case is marked by tone.

It should be noted that in some cases the AM has only a tonal realization. In some cases like (28b) and (28e) the tone is merged with the noun tones, while in others like (28a) and (28c) it is only indicated by the downstep before the high tone of the second noun.

(28) a.	ń-sé	AM	ń-sé	→	ń-sé	ń-sé	'father's father'
b.	ǎ-sé	AM	ń-sé	→	ǎ-sé	ń-sé	'father's fathers'
c.	ń-sí	AM	ń-sé	→	ń-sí	ń-sé	'father's ground'
d.	è-βì	AM	ń-tèm	→	è-βì	ń-tèm	'a friend's mongoose'
e.	ń-gbè	AM	ń-tèm	→	ń-gbè	ń-tèm	'a friend's leopard'
f.	ò-kà	AM	ń-tèm	→	ò-kà	ń-tèm	'a friend's skill'

4.2. *The noun genders and their semantics.* Most nouns are members of two classes, one to mark singular and the other to mark plural. Some nouns, however, belong only to one class. Many of these are mass nouns, collective nouns or abstract nouns. Pairings of two classes are here referred to as "double class

genders" while the others are referred to as "single class genders".

Some noun roots cannot be so easily categorized as members of double or single class genders. In the first case, there is a derivational process which applies to a small class of nouns which are members of the gender 1/2. The derivational process transfers these roots in gender 1/2 to the single class gender as in (29). In the process, the quality or activity associated with count nouns in gender 1/2 is semantically derived.

- (29) a. ñ-čf/à-čf 'dumb (speechless) person' → ò-čf 'dumbness'
 b. ñ-tèm/à-tèm 'friend' → ò-tèm 'friendship'
 c. ñ-túì/à-túì 'elder, chief' → ò-túì 'government, kingdom'

There are also isolated noun roots which appear to reflect a time when other productive derivational processes were at work in the language. For example, the root -tf 'wood' may belong to the double class gender 5/6 in which case it means 'tree', or it may belong to the gender 19/3 in which case it means 'stick'. This points to an earlier period when the gender 19/3 was a productive diminutive class.

Even though there are these few noun roots such as -tèm 'friend' and -tf 'wood' which could be considered to belong to multiple (i.e. more than two) class genders, the semantic content of the genders will be presented as though Ejagam has only double and single class genders. Furthermore, only the more significant semantic content of the genders will be presented here. A more complete semantic breakdown along with illustrative examples are available in Appendix I.

4.2.1. *The semantics of double class genders.*

- 1/2: - all and only human noun roots.
 3/6: - long, thin objects.
 3/14: - only members are 'mouth' and 'nose'.
 5/6: - body parts, some of them paired;
 - household and structural house items;
 - animate, non-human life (some animals, fish, birds and insects);
 - plant life and its parts.
 5/8: - nouns (mostly abstract) derived from verb roots;
 - plant life;
 - body parts;
 - animate, non-human life (animals, birds and insects);
 - man-made structures and instruments.
 5/9: - work and farm related items;
 - nouns derived from verb roots.
 9/6: - plant life.
 9/10/14: - the majority of animals, including those of special cultural significance;
 - most insects and small animate life;
 - body parts;
 - plant life.
 14/6: - body parts, most being paired body parts;
 - plant life;
 - utensils and instruments.
 14/9: - only 'day', 'firewood', and 'sheanut'.

- 19/3: - body parts;
 - plant life;
 - man-made items;
 - birds and animals.
 19/6: - body parts and plant life.

Many nouns which take class 19 for their singular form have the feature of being long and often narrow items. For two nouns which have roots in other genders than 19/3, their membership in 19/3 clearly has a diminutive aspect. Class 19, however, is not a productive diminutive class, but this fact does strengthen the correlation with Proto-Bantu class 19 which is also diminutive in nature (Welmers 1973:167).

The noun roots in 14/6 which are body parts like 'arm', 'ear' and 'armpit' point to an earlier 15/6 gender (cf. Meeussen 1967:102).

4.2.2. *The semantics of single class genders.*⁵

- 3: - only 'earth' and 'money'.
 5: - infinitives;
 - abstract nouns derived from verb roots;
 - meteorological and natural phenomena.
 6: - liquids;
 - body related items.
 8: - only 'body' and 'war'.
 9: - abstract nouns;
 - plant life;
 - meteorological and natural phenomena;
 - nouns, mostly activities, derived from verb roots;
 - items related to the body.
 14: - nouns derived from verb roots, mostly abstract nouns;
 - nouns derived from human (1/2) nouns, generally the quality characterizing that person;
 - plant life.
 19: - abstracts and small plant life.

4.2.3. *Borrowing.* For most nouns borrowed from other African languages the phonological shape of the noun permits the easy assimilation of the noun into the Ejagam noun class and gender system. For nouns borrowed from English the assimilation is often not as easy. A few nouns have been given prefixes. For example, -mâg 'mug drinking cup' has been given the prefixes ñ-/â- and -kên 'tin can' the prefix ñ-, and they have been placed in the genders 9/6 and 9, respectively.

Most present day borrowings from English, however, are placed in the gender 1/2 if they are human, or in the unusual gender 9/2 if they are non-human. In either case, the singular form does not have the typical homorganic nasal prefix of classes 1 and 9, but instead has a zero Ø- prefix. Similarly, the plural prefix is not the typical a- of class 2, but is surprisingly identical to the Proto-Bantu *ba- of class 2.⁶ At present, there does not seem to be any evidence to indicate that this pattern for borrowing has been itself borrowed from elsewhere. Thus we find:

- (30) 1/2 Ø-tfçà/bà-tfçà 'teacher' 9/2 Ø-mótò/bà-mótò 'automobile'
 Ø-prfçà/bà-prfçà 'preacher' Ø-pókìd/bà-pókìd 'bucket'

5. COMPARATIVE QUESTIONS

In this section, the Ejagam noun class system is related to previous comparative studies which have touched on it. First, the information which de Wolf had on the Ejagam noun classes can now be made more complete. Secondly, it can be pointed out how the Ejagam system is irregular in terms of Proto-Bantu and therefore how it was suspect to Guthrie in its genetic relationship to Bantu. It is suggested on the basis of some internal reconstruction and comparison with other Ekoid languages, that the so-called irregularities actually mask a high degree of regularity. Thirdly, evidence will be given to show that there is support for more Proto-Bantu noun classes in Ejagam than Crabb found. Specifically, evidence for at least a relic status of noun classes 16 and 17 will be given for Ejagam and Proto-Ekoid.

5.1. *De Wolf and Ejagam concord.* In his study of the Proto-Benue-Congo noun class system, de Wolf (1971) specifies that Ejagam (represented in his study by Crabb's Ekoid F, the Bendeghe Etung sub-dialect of Western Ejagam) has the following types of concord (1971:183-184):

- (31) verbal subject concord
interrogative concord
numeral and enumerative concord

However, it has been shown in this study (cf. 4.1) that the range of concord in Ejagam is much greater than de Wolf specified. Besides the three types of concord which he specifies, the following are also found in Ejagam:

- (32) demonstrative or deictic concord
possessive pronoun concord
relative pronoun or marker concord
object pronoun concord
associative concord

5.2. *Proto-Bantu and irregularities of the Ejagam system.* When the Ejagam system is compared to that of Proto-Bantu, irregularities show up in at least two areas: that of genders and that of the shape of the noun class affixes. If the genders reconstructed for Proto-Bantu by Meeussen (1967) are compared to those found in Ejagam, the differences become clear. First, compare the double class genders.

(33)	<i>Proto-Bantu</i>	<i>Ejagam</i>	<i>Proto-Bantu</i>	<i>Ejagam</i>	<i>Ejagam</i>
	1/2	1/2	11/10		3/14
	3/4	3/6	12/13		5/9 (=11/10?)
	5/6	5/6	14/6	14/6	9/6
	7/8	5/8	15/6		14/9 (=11/10?)
	9/10	9/14	19/13	19/3	19/6

In the first place, Ejagam has apparently merged a number of classes such as 4 with 6, 5 with 7 and 9 with 10 so that even though a gender in Ejagam may correspond to a gender in Proto-Bantu, the actual classes composing that gender may differ.

In the second place, Ejagam has a number of double class genders in (33) which do not have a corresponding double class gender in Proto-Bantu. Further-

more, Ejagam does not really have a productive set of derivational classes for diminutives or augmentatives such as are found in Bantu languages and are re-constructed for Proto-Bantu: e.g. classes 12 and 13 along with 19 having a diminutive meaning, and genders 5/6 or 7/8 having an augmentative meaning.

A comparison of the single class genders show the same irregularity between the Ejagam and Bantu systems.

(34) <i>Proto-Bantu:</i>		6			14	15	
<i>Ejagam:</i>	3	5	6	8	9	14	19

In this case Ejagam has essentially the same single class genders as Proto-Bantu since it does not have anything which corresponds to Proto-Bantu class 15 in terms of phonological shape. But Ejagam does have a number of other single class genders which do not occur in Proto-Bantu.

In addition to these comparisons, Ejagam and other Ekoid languages demonstrate another irregularity: they do not have any of the so-called locative classes 16, 17 and 18.

The second area of irregularity is that of noun class affixes. First, Ejagam does not have the typical Proto-Bantu shape for its nominal prefixes. Typically in Bantu a nominal prefix is either CV- or N-. In Ejagam, however, most nominal prefixes have the shape V-, though there are three classes with the prefix N- and one with a CV- prefix.

Secondly, Ejagam does not have the typical Proto-Bantu shape for its secondary affixes, those affixes occurring in the concord elements. Proto-Bantu does not show nearly the same range of variation that Ejagam shows. Generally, secondary concord affixes are CV or V in shape in Proto-Bantu. In Ejagam, however, the concord affixes may be CV, VC, V, N or simply tone.

Because of such irregularities in the genders and affixes of Ejagam in relation to Proto-Bantu, one might conclude that it is impossible to establish the correspondences between the Bantu and Ejagam noun class systems. However, one should not overlook the possibility that Ejagam might be better compared to Bantu via the entire set of Ekoid languages. Fortunately, Crabb (1968) has given us some idea of what Proto-Ekoid noun classes and genders might have been. So a look at Proto-Ekoid might be helpful. Also, a look at certain internal reconstructions might bring more regularity to the shapes of the nominal prefixes and the secondary concord affixes, and to the gender system as a whole.

The noun class correspondences between Proto-Ekoid (from now on PEk) and Proto-Bantu (from now on PB) have been worked out to some extent by Crabb (1968), but the reconstruction of PEk nominal prefixes and secondary concord affixes is sometimes problematic. In the table below, the affixes in brackets are my own suggested reconstructions or alternative reconstructions to those of Crabb, while those not in brackets are those proposed by Crabb. (In Appendix II the evidence is given upon which these reconstructions are based.) In the first column of the table the nominal prefix (NP) is given for the specified noun class, and in the second column both a generalized form for the concord morpheme and the characteristic tone for the class are given. Following the reconstructed affixes, the double class genders and single class genders of PEk are specified. Again, the reconstructed genders are those of Crabb's unless they are in brackets, in which case they are my own suggested reconstructions.

(35) *Proto-Ekoid Noun Classes*

Class	NP	Secondary concord
1	mVN-	'yo
2	ba-	'ba
3	mVN-	'wi/['wu]
4	[mVN-]	['ma~'bu]
5	IV-	'(I)I/['IVI]
6	(m)a-	'ya
6a	(m)a-	'ma
7	[V]	['kvi~ji]
8	[bi-]	['bi]
9	[N-]	['yi]
10	[N-]	['yi]
14	[bo~bo-]	['bu]
15	[o~o-]	['wu]
19	[i-]	['pi]

The double class genders:

1/2	14/6
3/6	15/6
5/6	19/4
7/8	5/10
9/14	9/6

The single class genders:

- 5 for 'indefinite' nouns like infinitives
- 6 for mass nouns
- 6a for liquids
- [8 for 'war' and 'body'?)
- 9 for non-count nouns like 'profit'
- 10 for items like 'hair' and 'beard'
- 14 for abstract nouns
- 15 for the "gerund"

In one sense, the PEK noun class system still seems irregular by comparison to PB, but it does bring us closer than Ejagam. By looking at other Ekoid languages, it becomes clear that Ejagam has merged classes 3 and 4, 5 and 7, 9 and 10, and 14 and 15. (The Bendeghe-Etung dialect has further merged 2 and 6, 8 and 19.) Therefore, the gender 5/8 in Ejagam is a reflex of gender 7/8 in PEK, and the "gerunds" found in class 14 use to be members of PEK class 15. The fact that classes 3 and 4, and 9 and 10 merged only changes the identification of the plural classes in two genders, namely, 19/3 is a reflex of 19/4,⁷ and 5/9 is a reflex of 5/10. Even within Ekoid there does not seem to be evidence for genders 3/4 or 9/10, at least within the noun class affixal system.

Crabb suggests that in PEK the homorganic nasal prefixes could not alternate as singular and plural prefixes for a given gender. Thus, class 6 took over the plural function of class 4, and class 14 the plural function of class

10. This meant that class 4 only functioned as the plural of class 19 and class 10 as the plural of class 5, since neither 19 nor 5 had a homorganic nasal prefix.

Furthermore, it seems that as the above shift from 4 to 6 and 10 to 14 took place, there was less need to maintain the phonological distinctions between classes 3, 4, 9 and 10, all of which had a homorganic nasal. Thus, Ekoid III (Crabb's Ekoid dialects M-U) merged class 4 and 10, while Ejagam (Ekoid II) merged 3 with 4 and 9 with 10. In fact, the reconstruction of class 4 in PEK in (35) is problematic since the second concord of the class in PEK seems to have merged phonologically with other classes from PEK dialect to PEK dialect. Thus today the secondary concord of class 4 in Ekoid III is identical to that in class 10, in Ekoid II it is identical to class 3, in dialect A of Ekoid I it is identical to that of class 6, and in dialect B of Ekoid I it is identical to that of class 14. Exactly what its pre-PEK shape was is hidden by this process of merging. In any case, assuming that the above argument is generally correct, then genders 3/6 and 9/14 may be said to be reflexes of genders 3/4 and 9/10, respectively.

But if one looks closer at the Ejagam noun class system, there does seem to be evidence for the older, pre-PEK gender 9/10. Such evidence would support Crabb's argument above, and the inference that 9/14 is a reflex of 9/10 of PB.

In section 4.1.3 it was pointed out that the enumeration of nouns in the gender 9/14 differs from the enumeration of nouns in any other double class gender. Typically, when counting an item the noun takes its singular form when only 'one' is specified, but its plural form if 'two' or more are specified. Thus, one would expect that when counting items represented by a noun in gender 9/14 that the nouns would shift from class 9 to 14 once 'two' or more were specified. But this is not the case. Instead, as long as one counts, the noun remains in its singular form and takes singular concord. It has been seen that the phonological difference between classes 9 and 10 is minimal in PEK. This is also true of PB (Meeussen 1967). It would seem, therefore, that as long as one counts or specifies the quantity of a given noun in gender 9/14 that one actually has a gender 9/10. In other words, there is a relic of gender 9/10 in PB in Ejagam in the case of enumerating nouns. Only when one specifies an indefinite plurality does the noun shift to class 14. So Ejagam has an unusual, inherent triple class gender 9/10/14 which supports Crabb's argument that 14 has generally replaced 10 as a plural of class 9, and that 9/14 in PEK is a reflex of pre-PEK gender 9/10, or at least 9/10/14.

Another point regarding genders is that the PEK gender 5/10 and its Ejagam reflex 5/9 are possible reflexes of the PB gender 11/10. Both classes 11 and 5 in PB are reconstructed with the consonant *d* which could have provided the basis for identity and merging. Another possibility is that the Ejagam gender 14/9 which Crabb does not discuss for PEK or even list for Ejagam dialects (Ekoid F, G, H) is actually a reflex of 11/10. The plural use of 9 suggests class 10 since in this case the same numeral prefix is used for numbers 'two' and above as is the case for nouns of gender 9/10/14. The identity of class 11 with class 14 would have occurred if the initial consonant had first been lost, a common process in Ekoid languages. Then the back, rounded vowels could easily have provided a basis for identity and consequent merging. One noun which supports this possibility is 'firewood' which is in the Ejagam gender 14/9 and identified by Meeussen (1967:102) for gender 11/10 in PB.

Finally, it seems clear that on the basis of Crabb's information classes 12 and 13, and probably 16, 17 and 18 (we will return to these) were lost or fused before PEk. Where one would look for the next stage back, however, is uncertain.

Leaving the problems posed by the "irregularities" in the Ejagam gender system, we may now turn to the question of the difference between the shape of the noun class affixes in PB and those in Ejagam. These are contrasted in (36) along with those from PEk.

(36)	<i>Nominal Prefix</i>			<i>Concord</i>		
	<i>PB</i>	<i>PEk</i>	<i>Ejagam</i>	<i>PB</i>	<i>PEk</i>	<i>Ejagam</i>
	CV-	CV-	CV-	CV	CV	CV
	V-	V-	V-	V	{V?}	V
	N-	N-	N-		{N?}	N
		mVN-				VC

In the case of nominal prefixes, it appears that many of the CV- prefixes in PB (Meeuseen 1967) have simply become V- in PEk and Ejagam. That certainly seems to be one source of affix "irregularity". A second is that in classes 1 and 3 the *mu- (Meeussen 1967:97) prefix has become simply N- in Ejagam, but this N- apparently derives from the PEk mVN-. It is possible that the mV of the PEk form is directly related to the PB *mu-, but this is not clear. In any case, the fact that both PEk and Ejagam have a nasal in these noun classes should be enough to indicate that they are definitely cognate with PB classes 1 and 3, only we have insufficient evidence to understand in exactly what way they are related in terms of sound change.

In the case of the concord affixes, one relationship between PB, PEk and Ejagam seems to hold as in the case of nominal prefixes: many CV concord affixes have become simply V. This is non-problematic. However, in the case of verbal prefixes there are two cases not covered by the simplification of CV to V. First, in class 3 where PB has *gu- (Meeussen 1967:97), Ejagam has a homorganic nasal N-. This could only be understood in terms of a copying of the nominal prefix onto the verb. In fact, it is generally the case in Ejagam that the verbal prefix is identical to the nominal prefix, except in classes 1 and 9. The presence of a nasal prefix N- on the verb in class 3, therefore, is simply due to the process of treating noun class 3 analogously to the other classes.

Secondly, in class 9 of PB, the verbal prefix is *ji- but in Ejagam it is a-. This difference cannot be attributable to either a loss of a consonant or to a process of analogy with the dominant pattern found in noun classes. However, it could be accounted for by a process of analogy involving noun class 1 and noun class 9. In this case, both classes have nasal prefixes, and by analogy to noun class 1 which retains the PB a- verbal prefix, noun class 9 has also taken on a- as its verbal prefix.

If these cases of possible analogy are correct, then the differences between PB and Ejagam become insignificant. It still leaves, however, the case of concord affixes with the shape VC in Ejagam. PB has CV affixes in these cases. It is argued here that the VC affixes are due to the metathesis of the vowel and consonant. This argument ties into an argument used by Crabb (1965) regarding suppletive noun forms. Crabb was arguing for the inclusion of the Ekoid languages within Bantu and against the argument that the Ekoid languages gained their noun class systems through extensive borrowing or contamination. He

pointed out that even though the Ekoid class markers and their semantic content generally matched the PB classes, one might still argue for borrowing. But if the class markers could be shown to be involved in certain irregular forms, borrowing would be unlikely, since it be unusual for a language to borrow a lexical item and then change it without any systematic process inherent in the language for implementing the change.

Take Ejagam, for example. All noun roots in Ejagam have the same initial consonant and overall shape in both their singular and plural forms, disregarding certain morphophonemic alternations. However, there are three exceptions. In each of these morphophonemic processes are not involved. They are clearly suppletive forms.

- | | | | | | | |
|---------|-------|---------|---|-------|------------|---|
| (37) a. | ṅ-mōn | 'child' | 1 | à-βōn | 'children' | 2 |
| b. | è-yâd | 'eye' | 5 | à-mâd | 'eyes' | 6 |
| c. | è-yîŋ | 'tooth' | 5 | à-mêŋ | 'teeth' | 6 |

Significantly, the initial consonant in each of the above forms appears to be a reflex of the noun prefix consonant for the given class in PEK and PB. Thus, the m of 'child' is identical to the consonant in PEK and the PB noun prefix for class 1: mVN- and mu-, respectively. The β of 'children' is nearly identical to the PEK and PB noun prefix ba-. In the case of 'eye' and 'tooth', the y is a reflex of the PEK l and so also a reflex of the PEK class 5 noun prefix lV-. Note that some, such as Welmers (1973:165), reconstruction a prefix le- or li- for PB class 5. If this is correct, then the y in 'eye' and 'tooth' are reflexes of the PB class prefix also. In the case of the plural forms 'eyes' and 'teeth', there is an m which is identical to the consonant ma- of class 6 in both PEK and PB.

Interestingly, these are also three nouns which can be reconstructed as having either a root initial vowel or palatal glide in PB. If these roots began with either l or y, then m₁ metathesis or a process of fusion must have occurred at some point in the history of Ejagam, and probably PEK, to forms with the structure: CV-VCV or CV-yVCV to render VC-VCV or VC-(y)VCV in the case of metathesis, or -CVCV in the case of a process of fusion. The metathesized forms would then have been reanalyzed as V-CVCV or V-C(y)VCV, a reanalysis which would have been aided by the loss of the prefix consonant on non-metathesized forms, leaving only a V- prefix. If the process were one of fusion, then the fused form -CVCV would have had to acquire a vowel prefix by analogy to the other members of the noun class.

The hypothesis of these suppletive forms being due to metathesis in the original prefix is supported by the shape of the prefix for class 5 in dialects T and U of Ekoid III (Crabb's M-U). In these dialects Crabb (1968) indicates that the prefixes are εC- and εl-, respectively. The process of fusion does not however have any such support.

However, it would seem strange if such metathesis occurred only in three nouns. One would expect to find it elsewhere. And that is exactly what is argued here: that metathesis of a consonant and vowel has also occurred in the possessive pronouns. In Table I of 4.1 it was indicated that the concord affix for possessive pronouns has the shape VC. This shape is the one exception so far unexplained in Ejagam to the PEK and PB CV shape for concord affixes. The explanation is that the consonant and vowel of the original CV have metathesized. But what were the conditions for metathesis in the possessive pronoun?

Meeussen (1967:107) suggests that the PB possessive consisted of a pronominal prefix, a "link vowel -a-" and a final person or class form. Thus, the prefix would be followed by a vowel, which is just the condition under which metathesis occurred in the nouns. A possessive pronoun such as 'ours' for class 6 àm-âré probably comes from an earlier *mà-f-rV or *mà-âré. In this way, the possessive pronouns in Ejagam and perhaps Ekoid (information for other Ekoid languages and dialects is not available) could be reconstructed as consisting of a CV- concord prefix, a linking vowel -V- as an associative marker with the appropriate tone of the class, and a person marker. Compare the form for 'ours' in class 6 and class 9.

- (38) a. class 6: àm-âré < *mà-f-rV 'ours'
 b. class 9: è(y)-àré < *yè-l-rV 'ours'

Consequently, the process of metathesizing a consonant and a vowel in a class affix was more pervasive than might first appear. The process not only suggests that the Ekoid noun classes are not borrowed from a pre-PB language, but also suggests that another apparent irregularity in the Ejagam noun class system is actually quite regular: VC concord affixes are related by a well known phonological process to CV concord affixes.

In conclusion, the so-called irregularities of the noun class system in a language like Ejagam actually mask a high degree of regularity in their correspondences with PB. First, Ejagam and PEk classes and genders demonstrate numerous correspondences with the PB classes and genders. Apparently, only classes 12, 13, 16, 17 and 18 (see below about the three locative classes) do not occur in either Ejagam or PEk. This means that only gender 12/13 is not present in PEk. Of course, there still remain four small genders which do not seem to be reflexes of any PB genders.⁸

5.3. *The locative classes and Ejagam.* It has been noted that PEk demonstrates reflexes for all PB classes except 12, 13 and the locative classes 16, 17 and 18. This claim seems to be true for the noun class system per se of PEk and any of its daughter languages. In Ejagam, however, there is evidence for classes 16 and 17 in the form of locative pronouns, and for a mystery class (perhaps 11?) in the form of a set of manner adverbials. In addition, the locative pronouns provide evidence for a three way distinction among the demonstrative pronouns in Ejagam or PEk. It was noted earlier that present day Ejagam speakers generally cannot reproduce a three way distinction, although a few people have tried to impress upon the author that there is indeed such a three way distinction in the synchronic system.

For the Eyumojok-Ndebaya sub-dialect used in this study, one finds the following locative pronouns, interrogatives and manner adverbials.

- (39) a. m̄f̄á 'here in this place' c. ñ̄n̄á 'in this way, thus'
 áf̄ò 'there in that place' ñ̄n̄ò 'in that way, thus'
 --- /no distal form/ --- /no distal form/
 f̄án 'where?' n̄án 'how?'
- b. ñ̄q̄á 'in this direction, here in general'
 áq̄ò 'in that direction, there in general'
 áq̄ò 'way over there in general'
 --- /no interrogative form/

(39a) should be compared with PB *pa, (39b) with PB *ku and (39c) perhaps with *du. The first is PB class 16, the second class 17, and the third class 11.

First, note that there is almost perfect identity in both phonology and meaning between the PB class 16 and the Ejagam forms in (39a). The *f* in Ejagam is clearly a reflex of **p* in PB. The following words demonstrate this reflex.

(40) <i>Proto-Bantu</i>	<i>Ejagam</i>
pí class 19 concord	fi class 19 concord
-pépè 'wind'	-fêb 'wind'
-pácà 'twin'	-fâd 'twin'
-píà 'burnt grass'	-fé 'dried leaf'
-píúp- 'become hot'	-fúb 'be hot'
-pútá 'wound'	-fú 'wound'
-píágíd- 'to sweep'	-fág 'to sweep'

It seems clear that the locative pronouns in (39a) derive from an older set of demonstratives. This is supported first by their tonal similarity to demonstratives in Ejagam.

(41) a. <i>class 19</i>	b. <i>locative pronouns</i>
m-fí 'this'	m-fá 'here'
á-fí 'that'	á-fò 'there'

It is also supported by a study done by Grégoire (1975:118) on locatives in Bantu. She notes that the use of demonstratives of classes 16 and 17 in relic form for adverbial locatives is widespread throughout zone A of Guthrie's Bantu. Ejagam only demonstrates that this use of class 16 and 17 demonstratives goes beyond Guthrie's zone A.

Secondly, in the case of the forms in (39b), the establishment of *g* in Ejagam as a reflex of **k* in PB is not possible. Generally in the consonant one position in roots, PB **k* has remained *k* in Ejagam. In any case, the consonant in Ejagam is at least a velar. Its voiced quality might be explained by the fact that in two cases it is preceded by a homorganic nasal. The presence of such a nasal in a form whose internal morphology has been lost in Ejagam could lead to the assimilation of the PB **k* to the nasal. In any case, the semantic similarities of these locatives with class 17 in PB suggest that they are relics of that class.

Interestingly, the Ejagam relics of class 17 show a three way contrast. Since the first two forms have the identical tone to present day demonstratives, it is likely that the third form reflects the tone pattern of the problematic third demonstrative. In fact, one speaker who tried to convince the author that indeed there was a third demonstrative gave the same tonal contour and a homorganic nasal for the third form, such as for class 19: m-fí 'that way over there'. Thus, the locative pronouns probably reflect an earlier stage of PEk or pre-PEk in which there were classes 16 and 17, and in which there was a three way distinction for demonstratives.

It might be asked what happened to class 18. In present day Ejagam there is a morpheme ká 'in, on, at' which has nearly the same meaning as class 18 but bears no phonological similarities to it. What seems to have happened is that a preposition gained precedence over a locative pronoun. It is possible that this preposition derived from a nominal construction like 'inside of ___', where

'inside' in PB is *-kàdí. Normally, such a form in Ejagam would have the shape -kàé, but because of its frequent use both the prefix and the final segment were lost, leaving only the form kǎ. In any case, evidence for class 18 has not been found.

Finally, turning to the forms in (39c), note that the distribution of forms is identical to those in (39a). There is both a near and distal form plus an interrogative pronoun. The difference between the forms in (39c) and those in (39a,b) has to do with the fact that in (39c) the forms are manner adverbials rather than locative adverbials. The difficulty in relating these to PB is that it is not at all clear what class in PB the *n* could be a reflex of. One possibility is class 11 which has a *d* in PB, and if this class can be associated with gerund forms, then it might be possible to establish both a phonological and semantic link. It would seem that demonstratives which have an adverbial-of-manner meaning would be those used in relation to gerund forms. At this point, however, the class to which these forms relate remain a mystery.

In conclusion, it seems that with the evidence now available that the only classes for which there are no reflexes or relics in Ejagam and PEk are classes 12, 13 and 18. Once we know what the larger grouping is for PEk, that is, the parent of PEk, we may very well find evidence for these other three classes. It should now be clear that even though a casual comparison of Ejagam with PB will indicate numerous "irregularities", a careful analysis of the data indicates that these "irregularities" are due to the passage of time and non-unusual processes of sound and morphological change rather than to massive borrowing.

APPENDIX I

In this appendix are listed the various double and single class genders found in Ejagam. For each gender a breakdown of the semantic content is given along with examples. It should be noted that very few genders are today typified by one semantic feature. This is especially true of those genders which have a significant number of members. If we assume that at some point in the past each gender was associated with a dominant or even a single semantic feature, we have to say that those features have undergone diffusion throughout the noun class system. This diffusion is no doubt due in part to the fusion of various noun classes.

Thus, following Givón (1971), we might say that plants were associated with 3/4 and paired body parts with 15/6. Today in Ejagam plants are scattered throughout the genders: 5/6, 5/8, 5/9, 9/6, 9/14, 14/6, 19/3, 19/6, 9 and 14. Plants are not even found in the gender 3/6 which probably corresponds to the PB gender 3/4. Paired body parts are not as diffused as plants, but are found in 5/6 and 14/6 (the older 15/6 in PEk). However, it is still true that the feature 'human' is only associated with gender 1/2, except in the case of certain compounds. In these latter cases, there is variation among speakers as to whether they belong to class 5 or class 1 in the singular. It is also true that the features 'animate, non-human' is mostly associated with gender 9/14 (the older 9/10 in pre-PEk), even though nouns with such features are also found in genders 5/8 and 19/3. Lastly, liquids are mostly in gender 6, and infinitival nominalizations in gender 14 (PEk 15).

1. *The double class genders*1.1. *Gender 1/2: only humans*

Ñ-hè/à-	'person'	Ñ-káǎ/à-	'wife'
Ñ-mǎn/à-βǎn	'child'	Ñ-sǎŋ/à-	'slave'
Ñ-tém/à-	'friend'	Ñ-jéné/à-	'stranger'
Ñ-sé/à-	'father'	Ñ-nǎd/à-	'in-law'
Ñ-nyén/à-	'mother'	Ñ-fǎb/à-	'co-wife'
Ñ-dúm/à-rúm	'husband'	Ñ-jàn/à-	'lazy person'

1.2. *Gender 3/6:*a. *long, thin objects*

Ñ-dǎg/à-rǎg	'rope'	Ñ-čǎg/à	'pestle'
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b. *natural objects*

Ñ-gún/à-	'fire'	Ñ-jǎn/à-	'medicine'
Ñ-fúg/à-	'hole'		

1.3. *Gender 3/14: two facial objects*

Ñ-nǎ/ǎ-	'mouth'	Ñ-mì/ǎ-	'nose'
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1.4. *Gender 5/6:*a. *body parts*

è-kǎd/à-	'foot'	è-kég/à-	'molar'
è-yǎŋ/à-mên	'tooth'	è-kǎb/ǎ-	'bone'

è-yâd/à-mâd 'eye'
 é-'réŋ/â- 'knee'

è-βé/à- 'breast'
 è-čif/à- 'head'

b. household objects

è-βf/à- 'pot'
 è-jô/à- 'hearth broom'
 è-βâg/â- 'wooden spatula'
 é-βûnf/â- 'mud bed'

é-βûgf/â- 'wooden container'
 é-kpâg/â- 'grinding board'
 é-tâg/â- 'drying tray'

c. plant life and related objects

é-tf/â- 'tree'
 é-bâmé/â- 'dark forest area'
 é-čûf/â- 'medicinal leaf mixture'

è-jòŋè/â- 'thorn'
 é-kpâg/â- 'fruit skin, bark'
 è-mâŋ/â- 'small tree stump'

d. skin diseases or wounds

é-fí/â- 'boil'
 è-rôg/â- 'sore'

è-gyêm/â- 'slash wound'

e. deep places

è-jîb/â- 'pond'
 è-kîm/â- 'deep water'

é-βfrí/â- 'pit'
 é-βâŋ/â- 'palm fruit washing pit'

f. insects

è-dù/â- 'larvae'
 è-jîg/â- 'maggot'

é-sîní/â- 'cricket'
 é-sfrírf/â- 'type of small cricket'

g. fish

è-kôd/â- 'a small fish'
 é-kúf/â- 'fresh water shrimp'

é-kûn/â- 'a small fish'

h. birds

è-βég/â- 'Fish eagle'
 é-jâg/â- 'White-thighed hornbill'
 è-βûgâβûgâtfkpâ/â- 'woodpecker'

è-gùd/â- 'Grey parrot'
 é-kû/â- 'owl'

i. structural house items

é-βûnf/â- 'mud bed'
 è-kûg/â- 'hearth'

è-gò/â- 'corner post'

j. miscellaneous items

è-gúf/â- 'mountain'
 é-kúf/â- 'forest'

è-jâr/â- 'print, spoor'
 è-jû/â- 'bush 'pear''

1.5. Gender 5/8

a. nouns derived from verbs (abstract and non-abstract)

é-dî/bí- 'food'
 è-jû/bì- 'thefts'
 è-kâm/bì- 'group'
 è-jèn/bì- 'journey'
 è-βû/bì- 'divining ceremony'
 è-βâb/bì- 'question'

è-jâm/bì- 'skewer'
 è-jfg/bì- 'respect'
 è-kûn/bì- 'adultery'
 è-kûmì/bì- 'meeting'
 è-mâŋ/â- 'illness'

b. *plant life*

è-gòmè/bì-	'plantain'	è-yàg/bì-	'rubber tree'
è-gàg/bì-	'cactus'	è-yù/bì-	'yam'
è-kúf/bì-	'camwood tree'		

c. *body parts*

è-rábè/bì-	'tongue'	è-fâŋ/bì-	'stomach'
è-bén/bì-	'spleen'	è-gbà/bì-	'fist'
è-βún/bì-	'waist'		

d. *animals*

è-túg/bì-	'Bay duiker'	è-fè/bì-	'Bosman's potto'
è-βág/bì-	'monitor lizard'	è-jǒ/bì-	'African civet'
è-βì/bì-	'Long-nosed mongoose'		

e. *birds*

è-kúm(támbe)/bì-	'Black kite'
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f. *insects*

è-fém/bí-	'cockroach'	è-kúbì/bì-	'tick'
è-fǎb/bì-	'house ant'		

g. *man-made items*

è-βám/bì-	'fence'	è-nùŋ/bì-	'bed'
è-kú/bì-	'latrine'		

h. *instruments*

è-sómé/bì-	'comb'	è-kpún/bì-	'water gourd'
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i. *miscellaneous*

è-gù/bì-	'evening'	è-júm/l-yfm	'thing'
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1.6. *Gender 5/9: This gender is marked by a cross-classification of certain objects. Most importantly, this gender includes items which are central to the farm life of the Ejagam and also certain items which are central to their expressive culture. Various divisions are possible, but the following is one way to characterize the membership of this class.*

a. *work related, especially farm related*

è-túm/ŋ-	'work'	è-fúg/ŋ-	'axe'
è-βŷn/ŋ-βŷn	'farm'	è-kpán/ŋ-	'headbasket'
è-yóm/ŋ-	'hoe'	è-tám/ŋ-	'farm-shelter'

b. *nouns derived from verb roots*

è-kpán/ŋ-	'planting'	è-kím/ŋ-	'part, section'
è-súm/ŋ-	'clearing brush'	è-kón/ŋ-	'song'
è-cóé/ŋ-	'burden, load'	è-βán/ŋ-βán	'dance'
è-fé/ŋ-	'mirror'	è-kód/ŋ-	'desire'

c. *nouns suggesting a grouping of items*

è-jfŋ/ŋ-	'heap'	è-gàn/ŋ-	'bundle'
è-kúb/ŋ-	'parcel'		

d. *plant life*

è-βǎd/ñ-bǎd	'mamicoco'	è-βî/ñ-bî	'palm kernel cluster'
è-sǎn/ñ-	'tree trunk'		

e. *miscellaneous items*

è-yũm/ñ-(~bì-)	'voice'	è-tég/ñ-	'village'
è-gǎn/ñ-	'story, proverb'	è-kpà/ñ-	'sleeping mat'
è-yâ/ñ-	'year'	è-kpîmí/ñ-	'bottle'
é-fó/ñ-	'cloth'	è-sà/ñ-	'chewing stick'
è-βǎǎé/ñ-βǎǎé	'iron, gen. round items'	è-sènó/ñ-	'iron'
è-βám/ñ-βám	'bag'	è-fúđ/ñ-	'feather'

1.7. *Gender 9/6*a. *plant life*

ñ-kàb/à-	'fruit'	ñ-fé/à-	'a dried leaf'
ñ-mǎgè/à-	'seed'	ñ-sàn/à-	'Iroko tree'
ñ-jé/à-	'grass'	ñ-dáb/à-râb	'branch'
ñ-fñ/à-	'type of thorny vine'		

b. *long instruments*

ñ-témé/à-	'punt pole'	ñ-bâg/à-βâg	'sheath'
ñ-bòm/à-βòm	'arrow'	ñ-kpùn/à-	'club, baton'

c. *body parts*

ñ-fég/ǎ-	'kidney'	ñ-déb/à-râb	'bottom'
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d. *traps*

ñ-tám/à-	'trap'	ñ-déŋ/à-réŋ	'fish trap-net'
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e. *items with joinings*

ñ-gbǎŋ/à-	'forked stick'	ñ-kúg/à-	'corner, joint, buttress root'
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f. *nouns derived from verbs*

ñ-čǎd/à-	'talk, matter'	ñ-jòm/à-	'protective magic'
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g. *miscellaneous items*

ñ-tǎé/à-	'rock'	ñ-sũm/à-	'a classifier'
ñ-kèb/à-	'small enema-giving calabash'	ñ-kpè/à-	'side, edge'

1.8. *Gender 9/14*a. *the majority of animals, including those of special cultural significance (marked "')*

ñ-ñám/ò-	'animal'	"ñ-qbè/ò-	'leopard'
"ñ-jòg/ò-	'elephant'	"ñ-fúŋ/ò-	'African buffalo'
"ñ-bũi/ò-βũi	'goat'	"ñ-kám/ò-	'African python'
ñ-jò/ò-	'dog'	ñ-búg/ò-βúg	'monkey'
ñ-qũmí/ò-	'Giant forest hog'	ñ-kǒg/ò-	'fowl'
ñ-kúf/ò-	'tortoise'	ñ-ñó/ò-	'snake'
ñ-yèb/ò-	'crocodile'	ñ-yǒg/ò-	'gorilla, chimp'
ñ-bàè/ò-βàè	'Two-spotted palm civet'	ñ-sám/ò-	'Genet'

b. most insects and small animal life

Ñ-bám/ò-βám	'mosquito'	Ñ-bĩ/ò-βĩ	'louse'
Ñ-fúḍ/ò-	'Crysops fly'	Ñ-kpáḡ/ò-	'grasshopper'
Ñ-jfḡ/ò-	'fly'	Ñ-kòn/ò-	'bee'

c. body parts

Ñ-bǎḡé/ò-βǎḡé	'heart'	Ñ-búḡ/ò-βúḡ	'forehead'
Ñ-gǎḡ/ò-	'chest'	Ñ-jèm/ò-	'back'
Ñ-túḡ/ò-	'throat'	Ñ-gù/ò-	'skin'
Ñ-tǎḡ/ò-	'navel'	Ñ-tḡḍ/ò-	'vagina'
Ñ-tǎné/ò-	'penis'	Ñ-dǎ/ò-rǎ	'testicle, hernia'

d. nouns derived from verbs

Ñ-bìḡ/ò-βìḡ	'name'	Ñ-kîm/ò-	'circumcision'
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e. plant life

Ñ-síḡ/ò-	'wild mango tree'	Ñ-tàbè/ò-	'okra'
Ñ-číḍ/ò-	'egg plant'	Ñ-yóḡ/ò-	'type of spice'
Ñ-bǎḡ/ò-βǎḡ	'palm kernel'		

f. miscellaneous items

Ñ-bá/ò-βá	'road'	Ñ-jú/ò-	'house'
Ñ-ká/ò-	'thatch'	Ñ-táḡ/ò-	'bag'
Ñ-kám	'large drum'	Ñ-fám/ò-	'village god'
Ñ-dém/ò-rém	'dream'		

1.9. Gender 14/6

a. body parts, mostly being paired parts

ò-čí/à-	'face'	ò-βó/à-	'hand, arm'
ò-kíḡ/à-	'cheek'	ò-gbáb/à-	'armpit'
ò-tá/à-	'thigh'	ò-túḡ/à-	'ear'
ò-yà/à-	'abdomen' (pl. intestines)		

b. plant life

ò-βí/à-	'oil palm'	ò-káḡ/à-	'type of tree'
ò-kém/à-	'Cotton tree'	ò-kém/à-	'prone oil palm'

c. utensils and instruments

ò-kpèrè/à-	'fufu calabash'	ò-tù/à-	'jug'
ò-kpí/à-	'canoe'	ò-tóm/à-	'mortar'
ò-kébè/à-	'funnel gourd'	ò-fón/à-	'mortar'
ò-tùn/à-	'funnel'		

d. miscellaneous

ò-gèm/à-	'market'	ò-kúm/à-	'society, masquerade'
ò-tòb/à-	'mud'		
ò-ráḡ/à-	'fufu'		

1.10. Gender 14/9: only three members

ò-fù/Ñ-fḡ	'day'	ò-kún/Ñ-kún	'firewood'
ò-ñòrè/Ñ-	'sheanut'		

- 1.11. *Gender 19/3: Many nouns in the genders 19/3 and 19/6 have the feature of being long and often narrow items. Such nouns are marked with ". Other nouns have roots in other classes, but in this case they clearly have a diminutive sense. Such nouns are marked with a "D".*

a. *body parts*

"f-βó/ń-bó	'elephant trunk'	"f-čómé/ń-	'calf of leg'
D"i-kêb/ń-	'small arm bond or monkey'	"i-nèré/ń-dèré	'finger'
"i-kí/ń-	'tail'	"i-jěb/ń-	'vein' (or 19/6)
"f-kùní/ń-	'shin'	ì-sòṅ/ń-	'hip'
"i-βǎṅ/ń-bǎṅ	'horn' (or 19/6)		

b. *plant life*

D"f-tí/ń-	'stick'	"i-βúm/ń-búm	'palm shoot'
f-ñàgè-óβǔk/ń-	'Ebony tree'	"f-fúrf/ń-	'cane rope'

c. *man-made items*

"i-kôg/ń-	'bridge, rope bed'	f-fém/ń-	'stool'
"i-fǎgè/ń-	'ladder'	ì-kémé/ń-	'large basket'

d. *birds*

ì-nón/ń-	'bird'	ì-βúf/ń-búf	'Red-billed wood dove'
ì-kpǎé/ń-	'Bush-fowl'		

e. *animals*

ì-ká/ń-	'Black-bellied pangolin'	ì-kú/ń-	'Water chevrotain'
ì-sé/ń-	'Bates' dwarf antelope'	ì-fégé/ń-	'bat'

f. *miscellaneous*

"i-βùmí/ń-bùmí	'strut of the thatch'	ì-tàm/ń-	'hat'
"i-támè/ń-	'machete'		

1.12. *Gender 19/6*

a. *body parts*

"i-βǎṅ/à-	'horn' (or 19/3)	"i-jěd/à-	'vein' (or 19/3)
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b. *plant life*

"i-mǎṅ/à-	'palm frond'	ì-rǎg/à-	'root'
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2. *The single class genders*

2.1. *Gender 3: only two nouns*

ń-gǔn	'dry land, earth'	ń-tí	'money'
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2.2. *Gender 5*

a. *abstract nouns derived from verbs*

è-βàn	'dislike'	è-βín	'decree, announcement'
è-áìrì	'stupidity'	è-fàrè	'dizziness'
è-kùbì	'conversation'	è-kpln	'life, behavior'
è-rìrì	'deceitfulness'		

b. meteorological and natural phenomena

è-βú	'time'	è-čénè	'dry spell in rainy season'
è-fébé	'air'	è-gyàg	'cold'
è-gǔ	'odor'	è-nàè	'rainy season'
è-kǒg	'harmattan'		
è-fín	'daylight'		

c. miscellaneous

è-βáé	'marriage'	è-fámé	'animal spirit transformation'
è-fú	'luck'	è-rǔg	'venom'
è-fín	'sacrifice'	è-tám	'uncultivated land'
è-gbè	'menstruation'	è-čá	'palm fruit chaff'
è-tí	'advise'	è-jòg	'noise'
è-βáb	'dust'		

2.3. Gender 6

a. liquids

à-ám-à-mém	'palm wine, prepared drink'	à-βé	'milk'
à-fǔgè	'urine'	à-βé	'dew'
à-yà	'river'	à-ké	'palm oil, thick liquid'
à-áb-à-yéb	'water'	à-gyǔg	'blood'
à-mì	'nasal mucus'		

b. body related items

à-fóm	'fat'	à-nǒd	'body hair'
à-βéŋ	'feces'	à-rǒn	'brains'
à-sá	'intestinal gas'		

(in addition, note 'urine', 'milk', 'blood' and 'nasal mucus' in (a.) which are all body related items also)

c. nouns derived from verbs

(should include 'urine', 'feces' and 'intestinal gas' from above)

à-mòè	'cheating'	á-fírf	'argument, debate'
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d. miscellaneous items

à-fád	'twins'	à-kán	'salt'
à-kób	'dirt, filth'	á-téb	'rubbish'
à-tǒŋ	'ash'	á-tág	'smoke'
à-kúg	'domestic pig' (possibly borrowed, but it can be counted unlike others in this gender so probably should be considered gender 6/6)		

2.4. Gender 8: bì-jì 'body'

2.5. Gender 9

a. abstract nouns

Ñ-béd	'law' (Efik loan)	Ñ-bòd	'intimate friendship'
Ñ-fú	'lie'	Ñ-jáé	'hunger'
Ñ-díbf	'wickedness'	Ñ-sôn	'shame, sadness'

b. plant life

Ñ-kùì	'corn'	Ñ-fèm	'flower'
Ñ-fáé	'type of vegetable'	Ñ-fǒ	'tree nut with high oil content'
Ñ-kón	'melon seeds "egusi"'		

c. meteorological and natural phenomena

Ñ-fêb	'wind'	Ñ-fí	'foam'
Ñ-gúm	'places, weather'	Ñ-júf	'sun'
Ñ-sân	'thunder'	Ñ-sí	'earth, ground'
Ñ-čén	'afternoon'		

d. nouns derived from verbs, mostly activities

Ñ-tíd	'remembrance, thought'	Ñ-yôg	'swimming'
Ñ-fìbì	'whistling'	Ñ-kpāg	'hoeing'
Ñ-gòm	'fine, debt'	Ñ-kàd	'praise'
Ñ-táŋ	'judgment, refusal'	Ñ-súm	'clearing bush'

e. body related items

Ñ-čëb	'rheumatism'	Ñ-nǎú	'hair'
Ñ-kù	'vomit'	Ñ-yúbf	'sweat'

2.6. Gender 14

a. nouns derived from verbs

ò-βím	'hunting party'	ò-fǎŋ	'width'
ò-kǒd	'love'	ò-kúf	'old age'
ò-yèm	'grave'	ò-kǒè	'cough'
ò-kpóŋè	'quarrel'	ò-kéd	'tiredness'
ò-rà	'height, tallness'	ò-sèŋè	'trouble'

b. nouns derived from 'human' nouns in 1/2

ò-jé	'witchcraft'	ò-čí	'dumbness, mute'
ò-jàn	'laziness'	ò-tèm	'friendship'
ò-túì	'government'	ò-kpàg	'poverty'
ò-nyèn	'motherhood'		

c. plant life

ò-βǒb	'mushroom'	ò-fá	'tree pitch'
ò-čú	'bitter leaf'	ò-ròbé	'bean'
ò-sàn	'type of melon'	ò-(w)òné	'tobacco'

d. miscellaneous

ò-yùm	'dry season'	ò-sí	'measles'
ò-sòn	'saliva'	ò-kà	'skill, cunning'

2.7. Gender 19

a. abstracts

ì-jón	'friendship between females'
ì-kòm	'power, strength'
ì-tá	'war'

b. plant life

ì-fâd	'groundnuts'	ì-sú	'pepper'
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It should be pointed out that a number of nouns have two possible forms in their plural meaning. This type of variation indicates an area of instability within the Ejagam noun class system. This type of variation is most frequent with nouns in genders 5/6 and 5/8. For a given dialect, most nouns clearly belong to a specific gender, but when a list of 170 nouns was compared across dialects, it was found that the size of the membership for each of these genders varied significantly between dialects. Following is a list of eight villages with the number of nouns belonging to these genders from the 170 noun word list.

	<i>gender 5/6</i>	<i>gender 5/8</i>
Assibong (Eastern Ejagam)	12	33
Afap (Eastern Ejagam)	14	25
Ndebaya (Western Ejagam-north)	20	13
Ajasso (Western Ejagam-north)	25	9
Bendeghe Erik (Western Ejagam-north)	17	11
Abijang (Western Ejagam-south)	29	2
Akamkpa (Western Ejagam-south)	24	4
Big Qua (Kwa or Ekin Ejagam)	35	-

In the case of Big Qua, the gender 5/8 does not exist. All nouns which occur in this gender in other dialects are now in the gender 5/6. In the case of the one noun in the single gender 8 in the Eyumojok-Ndebaya sub-dialect, namely b̀-̀j̀ 'body', it now belongs to gender 5 in Big Qua.

Throughout most of Ejagam one finds nine noun classes distinguished: 1, 2, 3, 5, 6, 8, 9, 14 and 19. However, the Bendeghe sub-dialect in the Western dialect has merged 2 with 6 and 19 with 8. The Assibong sub-dialect of Eastern Ejagam has merged 19 with 8. And Big Qua of the Kwa dialect has merged 8 with 6. In addition, the Bendeghe sub-dialect in the Western dialect is merging class 3 with 6, but they are still distinct in their nominal prefixes.

APPENDIX II

In this appendix the evidence for the reconstruction of the Proto-Ekoid noun class affixes is given. Most of the data comes from Crabb 1968. The data provided by the author on Ejagam is given in brackets. Ekoid Bantu is here divided into Ekoid I, II and III. These correspond to Crabb's "major subgroups". If there is no variation within a sub-group (that is an Ekoid language) then the invariant form is given for the entire language or sub-group without specifying each of the dialects and their forms. When there is variation internal to a given language, the variations are listed along with the dialect label, e.g. A, B, F, G, etc. The three dialects included from the author's notes are labeled as F2, I3 and F4. Note that in this appendix no discussion is provided of why a certain reconstruction was made. Although such a discussion would no doubt be of interest, it would essentially entail another study and go beyond the intent of this appendix.

<i>Noun class 1:</i>			
		<u>*mVN-</u>	<u>*`yo</u>
I	A	mIN-	`wu
	B	N-	`wu
II	F-H	N-	`ñɔ
	[F2	N-	`ñɔ] (Afap)
	[I3	N-	`ñu] (Assibong)
	[F4	N-	`ñɔ] (Big Qua)
III	M	N-	`yuo
	N-S	N-	`yo
	T-U	N-	`yo
<i>Noun class 2:</i>			
		<u>*ba-</u>	<u>*`ba</u>
I		ba-	`ba
II	F	a-	`ma (=6)
	G-H	a-	`ba
	[F2-I3	a-/ba-	`ba]
	[F4	a-	`ba]
III	M-U	a-	`ba
<i>Noun class 3:</i>			
		<u>*mVN-</u>	<u>*`wi [`wu]</u>
I	A	mIN-	`wu
	B	N-	`wu
II	F	N-	`ma (concord = 6)
	G-H	N-	`mi
	[F2-F4	N-	`mu]
III	M	N-	`yi (=9)
	N-Q	N-	`bi
	R-U	N-	`mi
<i>Noun class 4:</i>			
		<u>[*mVN-]</u>	<u>[*`ma~`bu]</u>
I	A	mIN-	`ma (concord = 6)
	B	N-	`bu (concord = 14)
II	F	N-	`ma (concord = 6)
	G-H	N-	`mi (=3)
	[F2-F4	N-	`mu (=3)]

III	M-S	N-	*yi (=10)
	T-U	N-	*ñi (=10)
<i>Noun class 5:</i>			
		IV-	<u>^h(l) i [*^hl yi]</u>
I	A	e~ε-	*yi
	B	lε-	*yi
II	F-H	e~ε-	*ji (=7)
	[F2-F4	ε-	*jɪ (=7)]
III	M	e-	*zi (=7)
	N	ne~nε-	*ni
	O-P	nV-	*ni
	Q	li-	*li
	R-S	i-	*ti
	T	εC-	*ni
	U	εl-	*ni
<i>Noun class 6:</i>			
		* ^h (m) a-	<u>*^hya~ma</u>
I	A	ba-	*ma
	B	ba-	*ma
II	(l)	a-	*ma (l)
III	M	a-	*ya
	N	a-	*ya
	O-S	a-	*ya
	T-U	a-	*ña
<i>Noun class 6a:</i>			
		* ^h (m) a-	<u>*^hma</u>
I	A	ba-	*ma (=6)
	B	ba-	*ma (=6)
II		a-	*ma (=6)
III	M	a-	*ya (=6)
	N	a-	*ya (=6)
	O-Q	a-	*ya (=6)
	R-S	a-	*ma
	T-U	a-	*ña (=6)
<i>Noun class 7:</i>			
		[*V-	<u>*k^hyi~ji]</u>
I	A	e~ε-	*yi (=5)
	B	e-	*jɪ
II	F-H	e~ε-	*jɪ
	[F2-F4	e-	*jɪ]
III	M	e-	*zi
	N-P	e~ε-	*jɪ
	O-Q	ε-	*jɪ
	R-S	i-	*jɪ
	T-U	ε-	*jɪ
<i>Noun class 8:</i>			
		[*bi-	<u>*^hbi]</u>
I	A	be~bε-	*bi
	B	bε-	*bi
II	F-H	bi-	*bi

(NB: choice of [k^hyi] based on
lexical correspondences)

	[F2-F4	be-	'bu (concord = 14)
III	M	a-	'ya (=6)
	N	be~be-	'bi
	O-P	bV-	'bi
	Q	bi-	'bi
	R-S	i-	'bi
	T-U	eb-	'bi

Noun class 9: [*N- *'yi]

I	A	N-	'yu
	B	N-	'ji
II		N-	'ñi
III	M-R	N-	'yi
	S	N-	∅yi
	T-U	N-	'ñi

Noun class 10: [*N- *'yi]

I	A	N-	'yi
	B	N-	'ji
II		N-	'ñi (=9)
III	M	N-	'yi
	N	N-	'yi
	O-S	N-	'yi
	T-U	N-	'ñi

Noun class 14: [*bo~bo- *'bu]

I	A	bo~bo-	'bu
	B	bo-	'bu
II	F-H	o~o-	'bɪ (concord = 8)
	[F2-F4	ɔ-	'bu]
III	M	o-	'wi
	N	e~e-	'bi (concord = 8)
	O	e-	'bi (concord = 8)
	P	o~o-	'bi (concord = 8)
	Q	ɔ-	'bi (concord = 8)
	R-S	u-	'bi (concord = 8)
	T-U	e-	'bi (concord = 8)

Noun class 15: [*o~ɔ- *'wu]

I	A	o~ɔ-	'wu	II, III (=class 14)
	B	ɔ-	'wu	

Noun class 19: [*i- *'pi]

I		(=class 8)		
II	F	(=class 8)		
	G-H	i-	'fi	
	[F2	be-	'fu]	
	[I3	(=class 8)	'ft]	
	[F4	i-	'ft]	
III	R	i-	'ji~fi	III M (=class 7)
	S	i-	'ft	III N-Q (=class 8)
				III T-U (=class 8)

NOTES

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¹The vowel of class 3 would actually indicate PB class 4, but this is deceptive in that East Ejagam has /-mu/. It is clear that class 3 here represents the fusion of PB classes 3 and 4, while the vowel /i/ in the West and /u/ in the East are either reflexes of the proto vowels */i/ of class 4 and */u/ of class 3, or originate in either of the cases or both from paradigmatic pressure.

²Also common in this dialect is for the homorganic nasal to become a nasalized vowel ɿ or ʊ before ɣ and w, respectively.

³The use of the passive here should not be taken as meaning that Ejagam has a passive. It does not. It is only an attempt to gloss the construction in its potential impersonal meaning.

⁴The class 1 concord consonant w is deleted in this context in the Ndebaya-Eyumojok sub-dialect.

⁵If a gender with a significantly large number of nouns in its membership were termed a "major gender", one with fewer nouns a "medial gender", and one with few nouns a "minor gender", then the following breakdowns could be made: major genders are 1/2, 5/6 and 9/14; medial genders are 5/8, 5/9, 14/6, 6 and 9; and the remainder are minor genders.

⁶It should be noted that the Eastern Ejagam dialects (i.e. Keaka and Obang) use ba- as the plural prefix for 'father' and 'mother'.

⁷Larry Hyman has suggested in personal communication that 19/3 is perhaps a reflex of pre-Proto-Ekoid 19/"18".

⁸It is very likely that the genders 3/14, 9/6 and 19/6 simply represent irregular changes from the earlier genders 3/4, 9/10 and 19/4, respectively. For example, the fact that both 'mouth' and 'nose' occur in 3/14 definitely links it to earlier 3/4, and as Larry Hyman suggests, indicates an earlier merger of 4 and 10 in Ejagam or PEK.

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NOUN CLASSES IN THE GRASSFIELDS BANTU BORDERLAND
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NOUN CLASSES IN ESIMBI

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Trident Data Systems

0. INTRODUCTION

Esimbi, spoken by some 20,000 people on the Western edge of the Cameroon Grassfields Bantu area, is a non-Bantu Bantoid language with no known close relatives. There are virtually dozens of completely undocumented languages to the south and west of Esimbi, but even these seem unlikely candidates since the people themselves say that their language is "completely different" from any they have ever heard.

Fundamentally, the noun class system is a standard Bantoid type with 15 noun classes and 9 paired genders. It is distinguished from the Western Grassfields systems by the presence of (Bantu) genders 12, 14, and 18. From a narrow Bantu perspective, however, Esimbi noun classes would have to be described as chaotic.

The 'chaos' is found not in the inventory of classes or gender pairing but in three other general areas of the system.

- a) Regular prefix variation: Every prefix has at least three variants which differ from each other in vowel height. Variants are morphologically determined and cannot be predicted phonologically.
- b) Irregular prefix variation: Nominal prefixes in some classes show unpredictable tonal and segmental variation. It appears that there is a great deal of word-by-word analogical change taking place.
- c) Unusual gender content: Except for the 1/2 'human gender', the semantic content of genders is less predictable than in other languages.

1. PHONEMES

With two exceptions, the transcription of Esimbi segments used here is phonemic. The phonemes are:

1. *Consonants*

p	t	ts	k	kp
b	d	dz	g	gb
mb	nd	ndz	ngg	ngb
m	n	ɲ	ŋ	
f	s		h	
v	z		ʎ	
	l r	y	w	

2. *Vowels*

i	u
e	o
ɛ	ɔ
a	

3. *3 Level Tones, 2 Contour Tones*

á	high
a	mid
à	low
â	falling
ǎ	rising

The first exception to a phonemic representation is that the /a/ phoneme is overdifferentiated into [á] and [ǎ]. The former occurs only in prefixes, the latter, only in roots. This is done (a) because there is a striking phonetic difference between the two and (b) to capture the generalization that all root vowels [i, ɨ, u] are high. The only reason to consider them ([á] and [ǎ]) a single phoneme is that they are in morphologically determined complementary distribution.

The second exception is that the morphophonemes //I, E, A, U// are used to represent the vowels of the generalized prefixes. Since each prefix vowel has three or four variants, a cover symbol is necessary:

I	=	{ i e ɛ }
E	=	{ e ɛ a }
A	=	{ o ɔ e a }
U	=	{ u o ɔ }

// E // occurs only in the subject prefix of some verb aspects. The others occur throughout the system.

2. REGULAR PREFIX VARIATION

The variation in prefix vowel height is the historical result of at least two pre-existing vowel harmony conditions followed by the collapse of vowel-height distinctions in the roots. The result was that all vowel-height distinctions, normally manifested in root vowels, were passed to the prefixes giving a current vowel distribution of:

PREFIXES		ROOTS		
ɪ	u	ɪ	ɪ	u
e	o			
ɛ	ɔ			
	a			

(Stallcup 1977.1, 1977.2 and in revision)

Examples:

<i>Class 3 nouns:</i>		U-
u-ku		'death'
ó-ki		'tail'
ɔ-nɪmɪ		'thigh'
<i>Class 5 nouns:</i>		I-
i-biri		'war'
é-gi		'egg'
ɛ-yɪnɪ		'leaf'
<i>Class 6 nouns:</i>		A-
ó-si		'eyes'
ɔ-sɪ		'markets'
ɛ-ii		'names'
a-rúhu		'beans'

The /ɛ-/ form of //A-// is phonologically conditioned by the root vowel. /ɛ/ occurs before /i/. /ɔ/ occurs otherwise. The /ɔ/ variant of //U// is not fronted before /i/.

3. NOMINAL PREFIXES - THE SYSTEM

The 15 noun classes of Esimbi can be distinguished from each other on the basis of their nominal prefixes. All of them may be related either to a proto-Benue-Congo noun class or a proto-Bantu one.

In the following list, the noun classes are numbered according to the generally used Bantu numbering system. Corresponding proto-Benue-Congo (pBC) and proto-Bantu (pB) prefixes are listed for comparison.

Class	Esimbi	pBC	pB
1	(w)Ù-	ù-,ò-	mò-
2	bÀ-	bà-	bà-
3	Ú-	ú-	mò-
5	Í-	í-	lì-
6	Á-	à-	---
6a	bÀ-,m-	mà-,nà-	mà-
7	kI-	ki-,ke-	kè-
8	bI-	bì-,bè-	bì-
9	Ì-	e-,i-	Ñ-
10	Í-	f-	Ñ-
12	kA-	kà-	kà-
13	tA	ti-	tò-
14	bÚ-	bù-	bù-
18	bÛ-	---	mù-
19	sÍ-	bi-	pì-

Esimbi has nine major paired genders:

1/2	3/6	5/6
5/8	7/8	9/10
12/13	14/6a	19/18

All of these genders occur in pBC and pB except 5/8. Also, the plural of class 3 is 10 or 13 in pBC and 4 in pB, and the plural of 19 is 10 or 13 in pBC and 13 in pB. The semantic content of these genders is not at all regular, but (1) nearly all human nouns occur in 1/2, (2) about half of the body parts occur in 3/6, (3) about half of the animal nouns are in 9/10, (4) 12/13 is the diminutive gender, and (5) 19/18 tends to contain things which occur in profusion.

Where both the singular and plural prefixes have only I- and/or U-, the vowel heights of both prefixes are always identical. For example, in gender 7/8:

sg	p ^l	
k _I -ku	b _I -ku	'bone'
k _e -h†	b _e -h†	'bundle'
k _è -s†	b _è -s†	'comb'

and also in gender 12/13 where the vowels are both A-:

k _o -gunù	t _o -gunù	'feather'
k _ò -f†††	t _ò -f†††	'shield'
k _à -dàri	t _à -dàri	'scorpion'

In those genders where the prefix vowel in the singular is I- or U- and in the plural is A-, the plural vowel is one degree lower than the plural vowel as in gender 3/6.

ú-ku	ó-ku	'death'
o-gúru	o-gúru	'foot'
ó-k†	á-k†	'island'

There are no cases in which the plural prefix vowel is one degree higher than the singular vowel, although this 'should' be the case in two instances. The first of these is gender 12/13, kA-/tA-. In pBC and in pB, this gender would have been *ka-/*ti-, and *ka-/*tu- respectively. The regular Esimbi reflex from PBC should be kA-/tI-. In fact, the concord, as opposed to the prefix, for class 13 in Esimbi is tI- and not tA-. It would appear, then, that the vowel of the class 13 plural lowered by analogy to the class 12 singular vowel.

The second case in which the vowel of the plural 'should' be higher than the singular vowel is in the minor gender 6a/10. Several 6a mass nouns can be 'pluralized' by putting them into class 10 with various meanings such as 'a great deal of ____', 'the ____ of many people' etc. When this is done, the class 10 vowel prefix is the same height as the 6a singular prefix:

bèyùngu	eyungu	'blood'
bèrìngi	eringi	'soup'
bèjìndi	ejíndi	'urine'

Within any paired gender, then, the relationship of singular to plural prefix vowels is that EITHER (a) they are both the same height, OR (b) the plural vowel is one degree lower than the singular. These relationships are rigidly adhered to in every gender except gender 1/2 where BOTH relationships occur in the same gender.

4. IRREGULAR PREFIX VARIATION

Class 1 has three main types of prefix, wV-, V-, and Ø. The latter occurs with loan words and a few other items. When the class 1 prefix is Ø-, class 2 prefix always has a low vowel:

busù	bà-busù	'cat'
du†	bò-du†	'doctor'
tìvì	bè-tìvì	'mother'

/e/ in the class 2 prefix here follows the regular fronting rule, but it is not clear how the choice between /a/ and /o/ is made elsewhere.

In nouns with the wV- class 1 prefix, singular and plural vowels are usually the same height:

wuùzì	buùzì	'thief'
wòraan†	bòraan†	'butcher'

	wàkírí	bàkírí	'Englishman'
	wémbu	bémbu	'owner'
BUT	wòkpí+mí	bàkpí+mí	'chief'
	wòkpí+naantí	bòkpí+naantí	'dead man'

Some of the nouns with the wV- prefix are derived by a regular process from verbs to mean 'doer of action'. 'Butcher' and 'dead man' above are derived from /òòrí/ 'to butcher' and /òkpí/ respectively. It is probable that the wV- as opposed to the V- prefix is the adjectival prefix wV- (the prefix by which class 1 nouns are derived from verb roots) which has been extended to some non-derived nouns.

Nouns with a simple vocalic prefix also show both vowel height relationships:

	ùhumbù	bòhumbù	'god'
	òfí	bàfí	'kite'
BUT	ùkúmu	bùkúmu	'cassava'
	òfu	bòfu	'bushcow'

as well as a few items with u-/ba-

	ùngbàcì	bàngbàcì	'spider'
	ùtí+nangbísí	bàtí+nangbísí	'worm'

Some gender 1/2 nouns have front vowels in their prefixes:

	etìhí	betìhí	'old man'
	èzi	bèzi	'mother'

These nouns, especially ones with high tone prefixes may belong to a small group of nouns which were formerly in other genders, but now, for one reason or another, take gender 1/2 concord:

	kòòtsíngí	bòòtsíngí	'crab'
	kànyekùru	bànyekùru	'tiger'

These nouns maintain gender 7/8 consonants in their prefixes but have back vowels, unlike 7/8 nouns. This 'mixed prefix' situation led to a confusion as to which gender they were in and, as a consequence, they fell into 1/2, the gender which accepts loan words--and the only gender in which a variety of nominal prefixes is tolerated.

Finally, in gender 1/2 are a small group of nouns, some of which vary only in their initial tone:

	wùnu	wunu	'child'
	òndùtù	bòndùtù	'person'
	bòsondulù	bosondulù	'man/male'
	bòndúlu	bóndúlu	'woman'
	wémbu	bémbu	'owner'

In these nouns, the tone of the prefix is the same as the respective concords of the genders (low for 1 and high for 2) which is the general rule for gender 9/10 (low for 9 and high for 10). In 1/2, however, the nominal prefixes are both low in the vast majority of cases.

In summary, there are five ways in which the prefixes of gender 1/2 may vary:

- 1) Presence versus absence of class 1 prefix. Most nouns without class 1 prefixes are loan words.
- 2) Presence versus absence of w in class 1 prefix. The wV- prefix is probably an extension of the 'adjectival' derivative prefix. (All 1/2 nouns derived from verbs have the wV- prefix, and some others do too.)
- 3) Same vowel height in singular and plural versus different vowel heights, e.g. o-/bo- versus o-/bɔ-. De Wolf reconstructs a variable vowel height for the class 1 proto-Benue-Congo prefix, *u-, *o-; this may be the source of variation in Esimbi.
- 4) Low tone prefixes in both 1 and 2 versus a low tone in 1 and a high tone in 2. The latter are few and follow the tone difference in the concord of the two classes.
- 5) "Normal" 1/2 prefixes (any of the above) versus other prefixes, e.g. kã-/ba-. Nouns of other genders have shifted into 1/2 without changing their prefixes. These nouns are (a) nouns denoting human beings, and (b) nouns with unusual prefixes, some with vowel initial roots.

The only other gender in which there are variations other than the regular vowel variation is gender 19/18, sI-/bU-. Of the ten items in our wordlist in this gender, six follow the normal pattern: (e.g.)

sìmuràmu	bùmuràmu	'star'
seki	bòkì	'scabies'

In all items except for 'star' (above) the singular prefix has a high tone and the plural has a low tone.

The other four items in this gender are:

sinijingiri	bìníjìngiri	'bladder'
sìneyingiri	bìníyìngìrì	'ring'
sevuru	bìnívùru	'hawk'
segtrì	or bìnígìtrì bògìtrì	'squirrel'

In these items, the nV element which follows the 'normal' prefix in all plural forms and in the first two singular forms must be considered to be part of the prefix.

The origin of the bìní (and corresponding sìníV-) prefix is unknown. It may be related to the prefix which occurs in most Esimbi village names: b̀nìk̀m̀t̀, b̀nìd̀t̀, b̀nìng̀g̀è, etc. which is also of unknown origin. It may be that these deviant nouns in 19/18 are relatively recent in that gender since ALL of the other six regular items are things which occur in profusion: 'ant, bead, star, finger, pepper, scabies', and the other four: 'bladder, ring, hawk, squirrel', are not.

Finally, the tone of the various prefixes needs some comment. In general, the tone of the nominal prefix is the same as that of the concord. Classes 1, 9 (singular classes) and 6a, 18 (plural classes) have low tone concord while the rest have high tone concord. In the genders which have one class with a low tone and one with a high tone, isolated nouns show a tonal difference between singular and plural:

1/2	wùnu	wunu	'child'
9/10	èbù	ébu	'dog'
14/6a	bosì	bèsì	'farm'
19/18	sínù	bùnù	'finger'

Nouns which alternate in tone in gender 1/2 are very few in number. In the other three genders, however, all nouns in our wordlist (with three exceptions, 'dance, lice, star') show a sg/pl tonal difference. In EVERY case, however, even in gender 1/2, the prefixes of classes 1, 9, 6a, 18 are low; that is, where there is no tonal distinction, it is because the high-concord member of the gender has a low prefix.

In those classes which have high tone concords, virtually all nouns of genders 3/6 and 5/6 have high tone prefixes, all but a very small number of class 2 (i.e. gender 1/2) nouns have low tone prefixes in both singular and plural. The other classes tend to have high tone prefixes but have some low prefixes as well. A survey of the nouns in our sample gives the following percentages of low tone prefixes:

12/13.....40%	5/818%
7/825%	14/6a.....14%

As a historical note, De Wolf has reconstructed pBC prefixes 2, 6, 8, 12, 14 with low tone (along with 1, 9, 6a which also have low tone concord). This means that most genders would show tonal differences between the isolated singular and plural nouns. For those genders in Esimbi with the PBC tones we would have:

1/2	ù-/bà-	3/6	ú-/à-	5/6	ì-/à-
5/8	ì-/bì-	7/8	kì-/bì-	9/10	ì-/ì-
12/13	kà-/tì-	14/6a	bù-/mà-	19/18	(none)

(Unspecified tones here were either variable or high. De Wolf does not say.)

At some point in the history of Esimbi the genders with two high-tone concord classes leveled their nominal prefix tones. Before the tones were leveled in the line leading to Esimbi, the prefix of class 6 became high universally, leveling all nouns in 3/6 and 5/6 to high-tone-prefix nouns. Other genders seem to have leveled their prefixes on a word-by-word basis. While all nouns were leveled, some ended up with high prefixes and others with low prefixes. No conditioning factor is evident, but the root tones and perhaps semantic influences (e.g. whether the singular or plural form of a given noun was most frequent) might have had an impact.

Class 14 prefix seems to have become high in most cases perhaps by analogy

to its concord, and also perhaps because it is more often a single class gender than a singular in the production of abstract nouns from verbs.

So, a possible historical sequence of events in the tonal development of Esimbi nominal prefixes is:

- 1) Class 6 prefixes became high
- 2) Class 14 single class prefix became high (by analogy with its concord)
- 3) Paired genders leveled sg/pl tones, sometimes with high prefixes, sometimes with low ones.

This sequence is supported by the observations that 1) the gender with the greatest number of low tone prefixes is the one which had a low tone prefix in the singular rather than in the plural (12/13), and 2) class 5 prefixes may be low tone if the plural of those nouns is class 8, but not if it is class 6, and 3) the single class 14 prefix had to be raised first because in 14/6a the tones of the sg/pl alternation differentiated rather than leveled. Class 2 prefix remained low because 1) it was the marked member of a gender in which the singular unmarked member had a low tone prefix and a low tone concord, and 2) the raising of the class 2 prefix tone would mean a differentiation rather than a leveling, just as with 14/6a, but 3) class 2 is not a single class gender in Esimbi and so is always linked to class 1.

5. THE CONCORD SYSTEM

Virtually every lexical morpheme--noun, verb, numeral, demonstrative--associated with a given noun has a prefix of agreement with that noun. There are five different non-pronoun prefixes: the nominal prefix (NP), the adjectival prefix (AP), the associative particle (Assoc), the numerical prefix (EP), and the demonstrative prefix (Dem.).

The verbal prefix has merged with various aspect affixes into single verbal inflections. Thus classes with CU- prefixes are sometimes CU-, sometimes CA-, those with CI- prefixes are sometimes CI-, sometimes CE-. Those with CA- prefixes are always CA-. Class 2 is always b+.

The five prefixes listed above are, for each class:

Class	NP	AP	Assoc	EP	Dem	VP
1	(w)ù-	wù-	wù	ù-	ɔvù-	ù-/Á-
2	bÁ-	bÁ-	bɛ	bÁ-	ɔbɛ-	bɛ-
3	ú-	wú-	wú	ú-	ɔvù-	ú-/Á-
5	í-	kí-	kɛ	kí-	ekì-	kí-/kÉ-
6	Á-	yÁ-	yí	Á-	ezì-	Á-
7	kI-	kí-	kɛ	kí-	ekì-	kí-/kÉ-
8	bI-	bí-	bɛ	bí-	abì-	bí-/bÉ-
9	ì-	yí-	yì	ì-	ezì-	ì-/É-
10	í-	yí-	yí	í-	ezì-	í-/É-
12	kA-	kÁ-	kɛ	kÁ-	ɔkɛ-	kÁ-

cont'd

Class	NP	AP	Assoc	EP	Dem	VP
13	tA-	tÁ-	tɛ	tÍ-	atì-	tÁ-
14	bU-	bÁ-	bɛ	bÁ-	ɔbɛ-	bÚ-/bÁ-
18	bÙ-	bÀ-	bɛ	bÀ-	ɔbɛ-	bÙ/bÀ-
19	sI-	sÍ-	sé	sÍ-	esì-	sÍ-/sÉ-
6a	bÀ-,m-	bÀ-	bɛ	bÀ-	ɔbɛ-	bÀ-

Except for the nominal prefix, some noun classes are identical to each other. This applies to classes 5 and 7, 2 and 14, and 6a and 18. Four pairs of classes are differentiated only by tone, 1 and 3, 6a and 2, 9 and 10, and 18 and 14; the first member of each of these pairs has low tone concord, the second member, high tone concord. Some of these similarities are due to analogical simplification of the system.

The most extensive concord merger has taken place in all of the classes with a /b/ consonant. In these, the U of classes 14 and 18 merged with the A of classes 2 and 6a. In classes 5 and 7, it was not the vowels which merged but the consonants. The pBC concord consonant for class 5 is /l/. This seems not to be a case of phonological merger but one in which the original class 5 concord was replaced by that of class 7.

Grassfields Bantu languages may provide a clue as to why this happened. In several of these languages, the concord consonant for class 5 is /y/ or /z/, the same as the concord consonant of class 6. This has created a large gender of nouns in which the singular and the plural concords are identical. Esimbi may have corrected a similar situation by substituting the concord of class 7 for that of class 5. Since, in Esimbi, class 5 pairs with both class 6 and class 8 (the normal plural of 7), and class 7 concord replaced that of class 5, perhaps first in gender 5/8 and then in 5/6.

The concord affixes are summarized in the following chart (C in each case is the concord consonant.):

	NP/AP/EP	Assoc	Dem
I	(C)I-	Cɛ	εCì-
A	(C)A-	Cɛ	ɔCɛ-
U	(C)U-	Cu	ɔCù-

The exceptions to this summary are:

(1) Class 13 has tA- for its NP and AP but otherwise behaves as tI-. The vowel of NP and AP but not the other concords lowered by analogy to the singular class 12 kA-.

(2) Class 19 associative particle is se rather than the expected sɛ.

(3) Classes 14 and 18 have bU- for their NP but all of the concord affixes are the same as those for bA-.

(4) Classes 8 and 13 have aCì- instead of ɔCì- for Dem.

The vowels of the associative particle do not follow the regular pattern in that the vowel is ɨ for the I classes when i would be expected. Where the concord consonant is y, the vowel following it is i rather than ɨ due to a general assimilation rule which fronts ɨ to i after y.

The demonstrative prefix is, except for its tone, the same as the possessive pronoun prefix (next page). Demonstrative prefixes are all the same tone whereas the possessive pronoun prefixes have the concord tone of the given class (low for 1, 9, 18, 6a, high for the rest) on the first vowel of the prefix.

All first person singular possessive pronouns except those for classes 1 and 3 have a full form and a reduced form. The full form is $V_1C_1V_2mV_3$ and the reduced form is V_1mV_3 . For example, the reduced form of class 9 $\dot{e}y\dot{i}m\dot{i}$ is $\dot{e}m\dot{i}$, and the reduced form of class 2 $\text{ɔb}\dot{i}m\dot{i}$ is $\text{ɔm}\dot{i}$ etc. Classes 1 and 3 have only the reduced form.

Possessive Pronouns

Class	1-sg	2-sg	3-sg	1-pl	2-pl	3-pl
1	ɔ̀mù	ɔ̀vù	ɨ̀vì	ɔ̀wùsù	ɔ̀wùnù	ɨ̀wùnì
2	ɔb <i>ɨ</i> m <i>ɨ</i>	ɔb <i>ɨ</i>	ɨb <i>ɨ</i> ɨ	ɔb <i>ɨ</i> s <i>ɨ</i>	ɔb <i>ɨ</i> n <i>ɨ</i>	ɨb <i>ɨ</i> nì
3	ɔmù	ɔvù	ɨvì	ɔwusù	ɔwunù	ɨwùnì
5	ɛhimì	ekí	ikí	ɛhisì	ɛhinì	ihíni
6	eyimì	ezí	izí	eyisì	eyinì	iyíni
7	(same as 5)					
8	ebimì	ebí	ibí	ebisì	ebinì	ibíni
9	èyìmì	èzì	ìzì	èyìsì	èyìnì	ìyìnì
10	(same as 6)					
12	ɔh <i>ɨ</i> m <i>ɨ</i>	ɔk <i>ɨ</i>	ikí	ɔh <i>ɨ</i> s <i>ɨ</i>	ɔh <i>ɨ</i> n <i>ɨ</i>	ihíni
13	etimì	etí	ití	etisì	etinì	itíni
14	(same as 2)					
18	ɔ̀b <i>ɨ</i> m <i>ɨ</i>	ɔ̀b <i>ɨ</i>	ɨ̀bì	ɔ̀b <i>ɨ</i> s <i>ɨ</i>	ɔ̀b <i>ɨ</i> n <i>ɨ</i>	ɨ̀bìnì
19	esími	esí	isí	esisì	esinì	isíni
6a	(same as 18)					

There are two 'grades' of concord consonants in some classes. v alternates with w in 1 and 3, k with h in 5, 7 and 12, and z with y in 6, 9 and 10. The first member of each pair, the "strong" grade, is used in the 2- and 3-sg, and the second member is used in all other forms. The only other concord element in the language which uses the strong grade of v/w and z/y is the demonstrative which, as was pointed out above, is essentially the same prefix.

For v/w and z/y there is also a 'zero grade' condition in that the NP and EP have no consonants in the prefixes of those classes which have them. The k/h/φ concord differs from the v/w/φ and z/y/φ concrets in that the k is the underlying form in all cases. That is, every concord prefix for classes 5, 7 and 12 has an underlying k. In most instances that k can be, usually is,

reduced to h and often disappears completely.

Class 12	kànyî kent+ or kànyî hen+	'one chameleon'
Class 7	/kìtundu kt òbì/ kìtundu kîbî or kìtundu hîbî or kìtundu ibî	'the village of the goat'

This type of alternation takes place in other classes of the associative construction:

Class 1	/wòkpîmî wù ózîmî/ wòkpîmî wòzîmî or wòkpîmî òzîmî	'the chief of the bats'
Class 6	/atu yi ózîmî/ atu yòzîmî or atu ózîmî	'the rivers of bats'
Class 2	/wunu bî bàkpîmî/ wunu bî bàkpîmî or wunu bààkpîmî or wunu ààkpîmî	'the children of the chiefs'

The last example demonstrates that not only the concord consonant can be lost but also the nominal prefix consonant of the subordinate noun. Another example is:

Class 12	èbù yî kàdàrî or èbù yààdàrî	'the dog of the scorpion'
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The only concord consonants which cannot be elided in the associative construction either in the associative particle or in the subordinate nominal prefix are the s, class 19 and the t, class 13.

The concord consonants and their alternants for the whole system may be summarized as:

v/w/φ	Classes 1, 3	
z/y/φ	Classes 6, 9, 10	
k/h/φ	Classes 5, 7, 12	
b/φ	Classes 2, 14, 18, 6a	
t	Class 13	(<u>t</u> and <u>s</u> are dropped only in the
s	Class 19	1-sg poss pronoun reduction: etimì---emì)

In the 2-sg and 3-sg possessive pronouns, the ones with no root consonant, no reduction can take place. The 'strong' consonant must be there. In the plural pronouns, the 'weak' form occurs, the only exception being that those with *h* may rarely be heard with *k*: *ɛkisi* rather than the usual *ɛhisi*, but never **ɔ̀vùsù* for *ɔ̀wùsù*.

6. DERIVATION

Two derivational processes contribute to the formation of nouns in Esimbi. One of the processes is relatively sporadic and unproductive. The other, which derives nouns from verbs, is almost completely productive. That is, most verbs can be nominalized into most noun classes.

The first process is hardly a process at all. It is more a recognition that some nouns have the same root as semantically related nouns in other classes or semantically related verbs. The forms of the words in any given set differ from each other only in their nominal prefixes and the tones associated with the prefixes:

<i>Infinitive</i> (cl. 12)	<i>Verb -</i> <i>citation form</i> (cl. 3)				
kôrî	uri	'eat'	wòrî/bârî	(1/2)	'eater(s)'
kômû	omu	'drink'	wòmû/bâmû	(1/2)	'drinker(s)'
kârinî	orini	'be poor'	erini	(6)	'extreme poverty'
kâft	ɔft	'work'	wâft/bâft	(1/2)	'worker'
			âft/bâft	(1/2)	'occupation'
			ɛft	(5)	'labor'
	okpî	'die'	ékpt/ó-	(5/6)	'death celebration'
			kókpt/tó-	(12/13)	'small or bad death celebration'
			kekpt/be-	(7/8)	'a kind of magic that can kill'
kêdzîîî	odzîîî	travel	odzîîî/ɔ-	(3/6)	'journey'
			kêdzîîî ɔ̀gùru/bè	(7/8)	'footprint'

In some cases, there is no currently used related verb:

<i>Verb</i>			
-	wèsî/bè-	(1/2)	'farmer'
	bosî/bè-	(14/6a)	'farm'
-	eyîmbi/e-	(5/6)	'breast'
	bèyîmbî	(6a)	'milk'

Except for gender 1/2 (wV-/bA-) which denotes "doer of an action" there is no consistency in the assignment of nouns to various genders, and the number of nouns formed in this way are comparatively few.

It is interesting to note that those derived nouns in gender 1/2 and the example in 6a follow the class 12 infinitive form in that they have a final low tone. This may be a vestige of a final historical suffix, usually high but low in nouns with low tone concord.

The second derivational process is highly productive. Nouns derived in this way have a nominal prefix followed by a root followed by a suffix -anɪ or -nanɪ. Monosyllabic roots may take either suffix variant, but polysyllabic roots must take -anɪ.

Virtually all action verbs have derived nouns in gender 1/2 signifying agent and class 14 signifying the "act of ___":

<i>citation form</i>		<i>derived nouns</i>	
ɔfɪ	'work'	wɔfɪnanɪ/bà-	(1/2) 'worker'
		bɔfɪnanɪ	(14) 'act of working'
okpɪ	'die'	wɔkpɪnani/bò-	(1/2) 'dead person'
		bokpɪnanɪ	(14) 'act of dying'

This form, however, functions as a subordinate nominal, taking the class of whatever it is modifying:

	ohìndi	'cook'
<i>Class</i>		
1	ùngurìngì (w)òhíndianɪ	'cooked groundnuts'
3	ozɪmɪ (w)òhíndianɪ	'a cooked bat'
5	éǵì (k)èhíndianɪ	'a cooked egg'
6	éǵì (y)èhíndianɪ	'cooked eggs'
7	kekumu (k)èhíndianɪ	'a cooked lizard'
8	bekumu (b)èhíndianɪ	'cooked lizards'
9	ìbì (y)èhíndianɪ	'a cooked goat'
10	íbi (y)èhíndianɪ	'cooked goats'
12	kònàrúhu (k)èhíndianɪ	'a cooked mushroom'
13	tònàrúhu (t)èhíndianɪ	'cooked mushrooms'

The nominalizing prefix is CI-, CU-, or CA- according to the noun class and the vowel height is determined by the verb root. The consonant of the prefix is optional in subordinate position in a noun phrase. There are no tonal differences between classes.

All of these forms can be used as independent nouns in situations where the head noun has been previously mentioned or is known to the hearer, e.g. kèhíndianɪ 'the cooked kA-thing'.

When two different types of derived noun occur in the same class, there is usually a difference in meaning:

uri 'eat'	wòrɪ 'someone who is eating, eater'	wòrinanɪ 'professional eater, one who was chosen to eat'
ɔfɪ 'work'	wàfɪ 'someone working, worker'	wòfɪnanɪ 'laborer, paid worker'

The derivation with the suffix has a habitual or repetitive meaning whereas the one without the suffix is simply someone who does the action.

Finally, the suffixed variation may have a complex stem which includes an object as well as a verb. The object precedes the verb. The consonant of its prefix is dropped:

bàmbɪ 'palmwine'	ɔkɪmɪ 'tap'	wàmbòòkɪmanɪ 'tapper'
ìtùmbu 'house'	ópi 'build'	wìtùmbòòpínanɪ 'builder'
akɪsɪ 'baskets'	onũ 'weave'	wăkɪsòònúnanɪ 'weaver'

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THE NOUN CLASS SYSTEM OF AMO

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1. INTRODUCTION

The Amo language has been classified by Greenberg as belonging to the Plateau 1b branch of the Benue-Congo language family¹. Most of the speakers of this language reside on the Jos Plateau in North-Central Nigeria. The most recent census of this group was taken in 1964 when 3,547 speakers were counted².

A preliminary sketch of the Amo language was recently put forth by Aldo di Luzio³. His paper was based upon field recordings and field notes made by Lucas in 1958⁴. Within his paper, di Luzio presents an analysis of the noun class system based upon a corpus of 169 nouns. Of this total, fully 63 nouns (or 37% of the corpus) are presented with only a singular or plural form. Referring to this, di Luzio states that for the roots with only one prefix, "it is uncertain when this fact is due only to a lack of information and when it is due to a lack of opposition sing./pl."⁵.

The first purpose of this present paper is to present an expanded corpus of nouns which have been carefully checked with an Amo speaker. Our corpus has been expanded to 218 nouns of which only 21 (or less than 10%) occur with only a singular or plural prefix. The lack of singular/plural opposition for these remaining 21 nouns can therefore be attributed to semantic causes (such as being "mass nouns"), and not to a lack of information.

The second and more important purpose of the present paper is to examine in depth the Amo concord system. We will therefore expand upon di Luzio's findings by placing emphasis on the occurrence of fused and non-fused concord markers with special attention given to the important matter of the associated tonal phenomena in a variety of grammatical contexts. The present paper also relates the noun class system and the singular/plural gender pairings to other Benue-Congo systems and, finally, posits a grouping of the twelve different classes into three main "clusters". All of this work has been carried out with the able assistance of our language consultant, Stephen Mato. It is hoped that his patience and insight will be reflected in the pages which follow.

2. NOUN CLASSES OF AMO

The noun class prefixes and their associated concord markers are shown for each of the twelve Amo noun classes in the following chart:

Class	Noun Prefix	Examples	Full Concord	Possible P-B Cognate
1	ù-	ù-là "fire"	u	1, 3
2	à-	à-fà "leaves"	a	2, 6
3	kù-	kù-fà "leaf"	ku	15
4	tè-	tè-là "fires"	te	13
5	lè-	lè-kpì "rat"	le	5
6	ṅ-	ṅ-féṗ "breath"	mī	6a
7	kì-	kì-té "place"	ki	7
8	nì-	nì-té "places"	ni	?
9	fè-	fè-šù "bee"	fe	19
10	ì-	ì-šù "bees"	i	10
11	kà-	kà-yín "goat"	ka	12
12	mà-	mà-vín "big goats"	ma	?

The following observations relate to the preceding chart:

- It will be noticed from the above chart that the noun class system of Amo is extremely regular, with the full concord element differing from the noun class prefix only in class 6. The noun class prefixes have been marked with low tone as this is almost always the case. The only examples of high tone prefixes in the present corpus are the following:

ká-bèrè/ní-bèrè	"sorcerer/sorcerers"
kú-bògólòk/á-bògólòk	"white locust/white locusts"
á-dùqá	"cotton (Hausa loan word)"
- The "Possible Proto-Bantu Cognates" listed in the last column were worked out with the assistance of Larry Hyman as very tentative correlates with other noun class numbering systems. It is hoped that further study will someday relate the Amo numbering system to Proto-Benue-Congo forms in a principled way.
- In order to parallel other Benue-Congo language descriptions, the odd-numbered classes refer to singular forms and the even-numbered classes to plural forms. Since most nouns can appear in both singular and plural forms, each noun root will normally belong to two classes, one even-numbered and one odd-numbered. These pairings of classes are referred to as "genders". The reader is referred to section 3. below for a discussion of the Amo genders as well as the gender of each noun in our corpus.
- Noun classes 1 to 11 are in one sense more "basic" in that they carry the unmodified meaning of a noun. In addition, any noun from any one of these 11 classes can be assigned to gender 11/8 for a diminutive meaning or to gender 3/12 for an augmentative meaning, as below:

- | | | |
|----|--------|---------|
| 1. | ù-wánè | "woman" |
| 2. | à-wánè | "women" |

11.	kà-wánè	"small woman"
8.	nè-wánè	"small women"
3.	kù-wánè	"big woman"
12.	mà-wánè	"big women"

Although there are basic 11/8 nouns, there are apparently no basic 3/12 nouns. Thus, this means that the plural class 12 is used exclusively for a "modified" meaning. This provides for some neutralization as, for example, when a root belongs inherently to gender 11/8, one cannot be sure whether "basic" or "diminutive" meanings are intended; or when a root belongs inherently to class 3, whether "basic" or "augmentative" meanings are intended. When one of these ambiguous words is put into context, however, its meaning is disambiguated.

5. The non-low vowels in both the noun prefixes and the full concord markers are not phonetically stable. They seem to vary between [u] and [o] for "u" and between [i] and [e] for both "i" and "e". There seems to be a tendency for the prefix vowel to harmonize with the first vowel of the root, as below:

fè-ná	"cow"
fì-kúrfún	"money"
fì-yí'f	"snake"
fè-náwà	"animal"
fì-cìkápá	"rice"

with high [i] when the root vowel is "i" or "u" and non-high [e] when the root vowel is non-high. Though this vowel harmony may provide a phonetic "target", considerable variation still exists even on individual words. This variation is probably due to the peripheral function of a prefix. In any case, any variation in these prefix vowels in the examples cited in this paper is not significant.

2.1. NONFUSED CONCORD

Nonfused concord is found when the concord marker occurs in its full form (as listed under "Full Concord" in the preceding chart). These full forms consist of a vowel for classes 1, 2 and 10 and a vowel preceded by a consonant for the remaining classes. Tone has been left off the concord markers as it varies with the context and is conditioned by a variety of phonological and grammatical features. The concord markers have not been given a morpheme boundary as their status varies between prefix, infix and full word. The segmental units of the concord marker do not vary for anaphoric pronouns, interrogatives, adjectives, numerals and most quantifiers. These full segmentally-invariant units are referred to as nonfused concord and will be examined one at a time.

2.1.1. *Anaphoric Pronouns*. In Amo, there is always a separate set of anaphoric pronouns for use with human referents, as with the subject pronouns listed below:

SUBJECT PRONOUNS (*human*)

n	"I"	t i	"we"
u	"you(sg)"	i	"you(pl)"
a	"he, she"	i	"they"

In subject position, the normal contrast between "they" and "you (pl)" is neutralized, both forms being an identical "i". Tone has been left off the subject pronouns as it appears to be a function of the grammatical construction and not an inherent property of the pronoun (though further analysis might indicate the need for an underlying "morphophonemic" tone). The following examples show these pronouns in a typical environment:

ń dèó	"I fell"
ú dèó	"you(sg) fell"
á dèó	"he, she fell"
tí dèó	"we fell"
í dèó	"you(pl) fell"
í dèó	"they fell"

Whereas the above human subject pronouns do not show any kind of noun class agreement, there exists a separate set of subject pronouns consisting of the "full concord" markers listed in column 4 of the chart at the beginning of section 2. above. Though these classes would usually be translated with an "it" or "they" in English, they can be used with either human or non-human referents in Amo. What is important is that the pronoun refers back to an element from a specific noun class already mentioned in the discourse. This full concord agreement can be seen in the following examples where the item in parentheses is the noun referred back to:

1.	ú dèó	"it fell"	(ù-láŋ "branch - class 1)
2.	á dèó	"they fell"	(à-péé "mats" - class 2)
3.	kú dèó	"it fell"	(kù-péé "mat" - class 3)
4.	té dèó	"they fell"	(tè-láŋ "branches" - class 4)
5.	lé dèó	"it fell"	(lè-kpáy "egg" - class 5)
6.	mí dèó	"they fell"	(h-tóŋ "ashes" - class 6)
7.	kí dèó	"it fell"	(k)-dówò "axe" - class 7)
8.	ní dèó	"they fell"	(n)-dówò "axes" - class 8)
9.	fé dèó	"it fell"	(fè-róó "elephant" - class 9)
10.	í dèó	"they fell"	(i)-róó "elephants" - class 10)
11.	ká dèó	"it fell"	(kà-yín "goat" - class 11)
12.	má dèó	"they fell"	(mà-fà "big leaves" - class 12)

It is interesting that these markers occur in the same environment and with the same tone as the human pronouns mentioned above. There is therefore a neutralization of contrast between singular "class 1" and "you(sg)"; between plural "class 2" and "he, she"; and between plural "class 10" with both "you(pl)" and "they". In spite of these cases of neutralization, the above pronouns constitute a very powerful method of picking out exactly which person or thing already present in the context has been selected as the subject of the new sentence.

The above method of referring anaphorically to the noun class of something is not restricted to subject position. In the object position, the full concord marker is prefixed onto the root /-nín/ which refers to its function as object. The following examples are characteristic of this kind of construction:

- | | | |
|-----|----------------|---|
| 1. | n̄ yènḗ ùnín | "I saw it" ("the bridge" - class 1) |
| | "I" "saw" "it" | |
| 6. | n̄ yènḗ mìnín | "I saw them" ("the ashes" - class 6) |
| 12. | n̄ yènḗ mànín | "I saw them" ("the big goats" - class 12) |

The same form (concord marker plus /-nín/) is also used for possessive pronouns which are described in section 2.3.2. below. One final use of this same form is after the word /n̄n̄/ meaning "with", as in the examples below:

- | | | |
|-----|-------------|---------------------------------------|
| 3. | n̄n̄ kúnín | "with it" ("the bird" - class 3) |
| | "with" "it" | |
| 5. | n̄n̄ lénín | "with it" ("the bone" - class 5) |
| 10. | n̄n̄ 'ínín | "with them" (the animals" - class 10) |

In summary, human nouns may take either "human" or "non-human" pronouns in various grammatical environments, but non-human nouns are limited to "non-human" pronouns. The full range of "human" pronouns are discussed in di Luzio's paper⁶. It is only the "non-human" pronouns, however, which display full noun class agreement.

2.1.2. *Interrogatives.* As seen below, the interrogative morpheme /-máʃín/ "how many" resembles the concord in the preceding section in that the tonal pattern remains the same. The full concord marker (with a high tone) occurs as a prefix representing the following plural classes:

- | | | |
|-----|---------------|------------------------|
| 2. | àfà áamáʃín | "how many leaves?" |
| 4. | tètó témáʃín | "how many necks?" |
| 6. | ñfép mémáʃín | "how many breaths?" |
| 8. | nònbò némáʃín | "how many children?" |
| 10. | ìná 'ímáʃín | "how many cows?" |
| 12. | màfà mámáʃín | "how many big leaves?" |

The tonal regularity of the above interrogative marker contrasts with that of the morpheme /-yémé/ "which", where the tone on the concord marker may be either high or low, as below:

1.	ùjà	úyémé	"which fire?"
2.	àtóf	àyémé	"which ears?"
3.	kùtóf	kùyémé	"which ear?"
4.	tèlà	tíyémé	"which fires?"
5.	lèkót	ìyémé	"which year?"
6.	h̀tóŋ	m̀yémé	"which ashes?"
7.	k̀sèk	k̀íyémé	"which grave?"
8.	ǹsèk	ǹíyémé	"which graves?"
9.	fènáŋ	f̀yémé	"which scorpion?"
10.	ìnáŋ	ìyémé	"which scorpions?"
11.	kàyín	kàyémé	"which goat?"
12.	màyín	màyémé	"which big goats?"

The simplest description of the preceding tone changes is that the concord element receives a polar tone, where a polar tone is defined as the tone opposite to that of the preceding syllable. When the polar tone is a low tone, the root "-yémé" is realized on high tone, whereas with a high polar tone on the prefix, the root is a downstepped high tone. This argues for an underlying low tone on the prefix. When the polar tone is also low, no change is noticed. When the polar tone is high, however, the underlying low tone is realized as a downstep between prefix and root. This seems to be a more explanatory analysis. It will be noted that these polar tones are not limited to interrogatives, but also occur with adjectives, demonstrative pronouns and the numerals five and above.

2.1.3. *Adjectives.* Adjectives take a full concord prefix with a polar tone similar to that in the preceding section, as below:

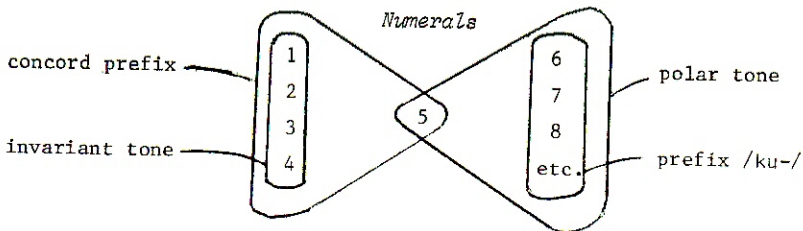
1.	ùdù	úbíbfít	"black tail"
2.	àcà	ábíbfít	"black trees"
3.	kùcà	kúbíbfít	"black tree"
4.	tèdù	tébfíbfít	"black tails"
5.	lèkpáy	l̀bfíbfít	"black egg"
6.	h̀ká	m̀bfíbfít	"black bag"
7.	k̀sùm	k̀íbfíbfít	"black hare"
8.	ǹsùm	ǹíbfíbfít	"black hares"
9.	fèná	f̀bfíbfít	"black cow"
10.	ìná	ìbfíbfít	"black cows"
11.	kàyín	kàbfíbfít	"black goat"
12.	màká	màbfíbfít	"big black bags"

This kind of non-fused concord with a polar tone is characteristic of adjectives like the following:

a.	kùzì	kúbóó	"white hawk"
	hàká	mèbóó	"white bag"
b.	kùzì	kúḡmàḡ	"yellow hawk"
	hàká	mèḡmàḡ	"yellow bag"
c.	kùzì	kúšíné	"red hawk"
	hàká	mìšíné	"red bag"
d.	kùzì	kúsírné	"black hawk"
	hàká	mìsírné	"black bag"
e.	kùzì	kúdyà	"big hawk"
	hàká	mìdyà	"big bag"
f.	kùzì	kúčínglín	"small hawk"
	hàká	mìčínglín	"small bag"
g.	kùzì	kújàkàkà	"long hawk"
	hàká	mèjàkàkà	"long bag"
h.	kùzì	kúkàf	"short hawk"
	hàká	mèkàf	"short bag"

2.1.4. *Numerals*. Di Luzio presents a chart which summarizes the cardinal numbers of Amo from one to two hundred⁷. He also presents a short summary of numeral adjectives where the numeral agrees with the noun modified⁸. This section will provide an expanded and revised analysis of this concord with special attention to the different kinds of tonal phenomena.

The numerals one through five in Amo take a full concord prefix while the numerals six and above take an invariant prefix /ku-/. At the same time, the numeral prefixes one through four have an invariant tone of some sort while the prefix tone on the numerals five and above is polar in nature (as seen in preceding sections). Thus, though most concord prefixes have invariant tone and all invariant /ku-/ prefixes have polar tone, we find overlap with the numeral five where a concord prefix occurs with a polar tone, as shown in the following diagram:



The actual numerical roots which are combined with the various markers and tones according to the preceding diagram are as below:

Numerical Roots

1. ' --rúm	6. -tòcìn
2. ' -bá	7. -zǒr
3. ' -tát	8. -lír
4. ' -nâws	9. -tírí
5. -táwn	10. -rídìn

Special attention should be given to the invariant floating tones preceding the numerals one through four. These tones are high for numerals 1, 3 and 4 and downstepped high for the numeral 2. These tones are attached to the concord prefix as will become clear in the following examples. The absence of such a floating tone in the above chart indicates that the prefix takes a polar tone (opposite to the final tone of the preceding word).

The concord prefix for the numeral "one" carries an invariant high tone as seen in its usage with the odd-numbered singular classes in the following examples:

1.	ùdòndòṅ	úrúm	"one friend"
	ùkúlòk	úrúm	"one bachelor"
3.	kùbòròṅ	kúrúm	"one quiver"
	kùméléṅ	kúrúm	"one pot"
5.	lèséiléṅ	lérúm	"one bowstring"
	lètàlà	lérúm	"one stone"
7.	kìmùrúṅ	kírúm	"one hyena"
	kìgàwà	kírúm	"one stream"
9.	fìcíná	férúm	"one louse"
	fènáwà	férúm	"one animal"
11.	kàgbírí	kárúm	"one village"
	kábèrè	kárúm	"one sorcerer"

In a parallel manner, the concord prefixes for the numerals "two" through "four" also carry invariant tone on their concord prefix (downstepped high for numeral "two" and high for the other two). These co-occur only with the plural classes as below:

2.	àtóf	ábá	"two ears"
	àfà	ábá	"two leaves"
4.	tètá	tébá	"two bows"
	tèjì	tébá	"two ligaments"

6.	ńfép	métát	"three breaths"
	ńmòrò	métát	"three sleeps"
8.	nèté	nétát	"three places"
	nònò	nétát	"three children"
10.	ìná	ínâs	"four cows"
	ìšù	ínâs	"four bees"
12.	màná	mánâs	"four big cows"
	màfà	mánâs	"four big leaves"

The invariant tones on the concord prefixes for numerals "one" through "four" above can be seen to contrast with the polar tones on the same prefixes when the number is "five", as below:

2.	àtóf	àtáwn	"five ears"
	àfà	átáwn	"five leaves"
4.	tètá	tètáwn	"five bows"
	tèjì	tètáwn	"five ligaments"
6.	ńfép	mètáwn	"five breaths"
	ńmòrò	mètáwn	"five sleeps"
8.	nèté	nètáwn	"five places"
	nònò	nètáwn	"five children"
10.	ìná	ìtáwn	"five cows"
	ìšù	ìtáwn	"five bees"
12.	màná	màtáwn	"five big cows"
	màfà	màtáwn	"five big leaves"

The same polar tone found in the previous examples is characteristic of numerals "six" and above, even though the concord prefix is dropped in favor of the invariant /ku-/. This /ku-/ may be the class 3 concord marker, in which case one would speak of neutralization of the concord contrasts for numerals above five. A few representative examples are given below:

2.	àtóf	kùtòcìn	"six ears"
	àfà	kùtòcìn	"six leaves"
4.	tètá	kùzòr	"seven bows"
	tèjì	kùzòr	"seven ligaments"
8.	nèté	kùlír	"eight places"
	nònò	kùlír	"eight children"
10.	ìná	kùtírí	"nine cows"
	ìšù	kùtírí	"nine bees"

- | | | |
|-----|--------------|------------------|
| 12. | màná kùrídìn | "ten big cows" |
| | màfà kùrídìn | "ten big leaves" |

2.1.5. *Quantifiers*. The greatest variety in the Amo concord system is found with quantifiers which modify nouns. The quantifiers in question take either no concord, nonfused concord or fused concord depending upon the exact morpheme involved. The two morphemes /vǵát/ (with a super-high tone) "all" or "the whole", and /gbàrdàn/ "many", "more" or "a lot of" are actually invariant words in that they show no concord with their preceding noun, as in the examples below:

- | | | |
|-----|------------|----------------------|
| 1. | ùlán vǵát | "the whole branch" |
| 3. | kùcà vǵát | "the whole tree" |
| 6. | h̄tón vǵát | "all the ashes" |
| 12. | màyòp vǵát | "all the big spears" |

While /vǵát/ can co-occur with all twelve noun classes (singular and plural included), /gbàrdàn/ is only possible with the even-numbered (plural) classes, as below:

- | | | |
|-----|----------------|-----------------|
| 2. | àcɪf gbàrdàn | "many fathers" |
| 4. | tètènè gbàrdàn | "many bushes" |
| 6. | h̄cín gbàrdàn | "much smoke" |
| 8. | nìgàwà gbàrdàn | "many rivers" |
| 10. | ìbárí gbàrdàn | "many twins" |
| 12. | màbós gbàrdàn | "many big fish" |

In contrast to the above two morphemes, which are exceptional in that they show no agreement with the noun they modify, the quantifier meaning "any", "each" or "every" has full concord. The form of this quantifier is unusual, however, in that the full concord syllable occurs as an infix instead of the usual prefix. The resulting word can be symbolized as /kó-CV-yémé/ where the CV-infix is the full concord element (which is only a single vowel for classes 1, 2 and 10). The full forms of this construction are illustrated below:

- | | | |
|-----|------------------|-------------------|
| 1. | kóuyémé ùkúìòk | "any bachelor" |
| 2. | kóayémé àbúrá | "any young women" |
| 3. | kókuyémé kùbúrá | "any young woman" |
| 4. | kótèyémé tèkúìòk | "any bachelors" |
| 5. | kóìyémé lètàlà | "any stone" |
| 6. | kómìyémé ìmòrò | "any sleep" |
| 7. | kókìyémé kìpènù | "any yam" |
| 8. | kónìyémé nìpènù | "any yams" |
| 9. | kófèyémé fèyíní | "any star" |
| 10. | kóìyémé ìyíní | "any stars" |

- | | | |
|-----|------------------|--------------------|
| 11. | kókàyéme kádúrá | "any message" |
| 12. | kómàyéme màgbírí | "any big villages" |

It is noteworthy that we get no polar tones with this construction. This fact probably results from the noun always following the modifier and the modifier thus coming into contact with the typical low tone prefix on the noun.

In addition, the above construction is liable to elision under certain conditions. The "yé" of /kó-CV-yémé/ may drop out whenever the concord marker is a complete CV syllable. Elision is not allowed when the concord marker is only a vowel (classes 1, 2 and 10). The following are elided variants of previous examples:

- | | | |
|-----|------------------|--------------------|
| 3. | kókùmé kùbúrá | "any young woman" |
| 4. | kótémé təkúìḍk | "any bachelors" |
| 5. | kólémé lètàlà | "any stone" |
| 6. | kómimé m̀m̀r̀r̀ | "any sleep" |
| 7. | kókìmé kìp̀è̀ǹù | "any yam" |
| 8. | kónimé nìp̀è̀ǹù | "any yams" |
| 9. | kófémé f̀ỳí̀ǹí | "any star" |
| 11. | kókámé kádúrá | "any message" |
| 12. | kómámé màgbírí | "any big villages" |

The variety of concord found with quantifiers includes one form where the concord is "fused". This one remaining example of a quantifier is discussed in 2.2.1. below. (N.B. kó- is probably borrowed from Hausa kóó 'any').

2.2. FUSED CONCORD

Fused concord is found when the full concord marker (see 2.0. above) occurs in a modified or reduced form on the surface. The reduction of the marker is different for each separate grammatical construction and these differences will be examined one at a time.

2.2.1. *Quantifier*. The one remaining quantifier not mentioned in 2.1.5. above is our first example of concord reduction. For reasons which will be detailed below, the underlying form of this morpheme is -m̀s̀s̀ "several", "some" or "few". This morpheme interacts with the full concord markers to give the following forms:

- | | | |
|----|-------------------|------------------|
| 1. | úm̀s̀s̀ ùtá | "some bow" |
| 2. | ám̀s̀s̀ àwàlé | "some old women" |
| 3. | k̀s̀s̀ k̀wàlé | "some old woman" |
| 4. | t̀s̀s̀ t̀tá | "some bows" |
| 5. | l̀s̀s̀ l̀cíně | "some coal" |
| 6. | m̀s̀s̀ ògb̀l̀gb̀k | "some brains" |
| 7. | kááń kílárě | "some house" |

8.	nááŋ nìláré	"some houses"
9.	fóóŋ fènáwà	"some animal"
10.	ímóóŋ ìnáwà	"some animals"
11.	kááŋ kàgbírí	"some village"
12.	mááŋ màgbírí	"some big villages"

Once again, we find the tone invariant on the modifier when the modifier precedes the noun (with its normal low tone prefix). It should be noted that we can see above the first instance of neutralization of concord elements. Noun classes 7 and 11, which have ki and ka as their respective full concords are here neutralized when fused with a following morpheme. The resulting fused form is kááŋ for both classes. This is the first example where one could not know the exact noun class by knowing only the concord marker. In fact, the neutralization of the contrast between the concord markers of classes 7 and 11 is general for all fused forms (see also 2.2.2. below).

The above examples may now be simplified into the following charts which show the variation of this quantifier (the noun classes have been regrouped in order to allow further generalizations):

Noun Class	Full Conc.	Quantifier	C	V-	m	óó	ŋ
1.	u	umóóŋ		u-			
2.	a	amóóŋ		a-	m		
10.	i	imóóŋ		i-			
3.	ku	kóóŋ	k			óó	
4.	te	tóóŋ	t				
5.	le	lóóŋ	l				ŋ
6.	mi	móóŋ	m				
9.	fe	fóóŋ	f				
7.	ki	kaáŋ	k				
8.	ni	naáŋ	n			aa	
11.	ka	kaáŋ	k				
12.	ma	maáŋ	m				

The box on the right above is a more abstract analysis of the same quantifiers found in the box on the left. It is only by examining the box on the right that the following observations about this quantifier can be made:

1. The final ŋ is the only element which remains invariant across all three "classes" of noun classes (with the understandable variation to n in class 8 where it always precedes the n of nì-).
2. The more frequent long back rounded vowel óó is delabialized to aa for classes 7, 8, 11 and 12.

3. An *m* seems to be present for classes 1, 2 and 10 for which there is no parallel in the remaining classes.
4. The vowel of the concord marker is missing in just those cases where an initial consonant is present.
5. The *m* of the stem has dropped out in just those cases where the vowel of the prefix has also dropped.

Based on these observations, it seems logical to start with fully specified segments in the underlying level and derive our surface forms with a few simple morphophonemic rules. Our underlying forms would thus consist of full concord markers attached to the root $-m\acute{o}o\eta$ "some". Those concord markers which consist of only a vowel would not undergo any rules and their underlying and surface forms would be identical. One could then posit a rule as below:

SD: C V - m o o η
 1 2 3 4 5 6
 SC: 1 T ∅ 4 5 6

where "T" can only be defined in a rather ad hoc fashion as a grammatically-conditioned "Theme Vowel". On the basis of the above data, we can only designate a theme vowel "a" for noun classes 7, 8, 11 and 12. In order to keep to the rule stated above, and on the basis of strong evidence in section 2.2.2., we can additionally specify a theme vowel "o" for classes 3, 4, 5, 6 and 9. Thus:

T \longrightarrow a / classes 7, 8, 11 and 12
 \longrightarrow o / classes 3, 4, 5, 6 and 9

where the theme vowel "o" remains without consequence in the present data because it is the same as the vowel of the root. It should be noted that no surface evidence of a theme vowel has yet been found for classes 1, 2 and 10.

One final assimilation rule is needed to assimilate the oo of the root to the vowel quality of the theme vowel, as below:

Too \longrightarrow TT

One could modify the initial rule to include this rule, as below:

SD: C V - m o o η
 1 2 3 4 5 6
 SC: 1 ∅ ∅ T T 6

This rule, though more complex, has the advantage of not claiming any more generality for the vowel assimilation than has actually been observed.

2.2.2. *Demonstrative Pronouns.* The demonstrative pronouns of Amo are slightly more complicated than the quantifier of the preceding section. Nevertheless, the variation is patterned and can be explained. In addition, the variation resembles that of the previous section in several important ways. Examples are given below for each of the four possible forms which can occur in each of the three major "classes" of noun classes:

2.	àfà	àl'élé	"these leaves"	(like classes 1 and 10)
	àfà	áné	"those leaves"	
	àwót	àl'élé	"these clouds"	
	àwót	ánéé	"those clouds"	
6.	h̄tè	m̄d̄óné	"this scalp"	(like classes 3, 4, 5 and 9)
	h̄tè	m̄óné	"that scalp"	
	h̄tón̄	m̄d̄óné	"these ashes"	
	h̄tón̄	m̄ónéé	"those ashes"	
7.	kìsèk	kááné	"this grave"	(like classes 8, 11 and 12)
	kìsèk	káné	"that grave"	
	kìté	kááné	"this place"	
	kìté	kánéé	"that place"	

The tone in the above examples is quite predictable, being LH'H after H and H'H(H) after L. We shall look more closely at these tone patterns once we have examined the segmental units. Each of the twelve classes patterns similarly to one of the above groups, as can be seen in the following tables:

Noun Class *Full Conc.*

"this" "that"

Conc. [-DISTANCE] *Root*
CV- 1 ε- ne

1.	u	u ε ε	une(ε)
2.	a	a ε ε	ane(ε)
10.	i	i ε ε	ine(ε)
3.	ku	kɔɔne	kɔne(ε)
4.	te	tɔɔne	tɔne(ε)
5.	le	lɔɔle	lɔle(ε)
6.	mi	mɔɔne	mɔne(ε)
9.	fe	fɔɔne	fɔne(ε)
7.	ki	kaane	kane(ε)
8.	ni	naane	nane(ε)
11.	ka	kaane	kane(ε)
12.	ma	maane	mane(ε)

u-	1	ε-	ne
a-			
i-			
kɔ-	ɔ-		
tɔ-			
lɔ-			
mɔ-			
fɔ-	a-		
ka-			
na-			
ma-			

Once again, the box on the right is a more abstract analysis of the same demonstrative pronouns found in the box on the left. Though slightly different, the box on the right correlates quite closely with its respective counterpart in the preceding section. The following observations are based on the above boxes:

1. A process of lateralization changes an "n" to an "l" when preceded by an "l" in the same word. The ordering of this rule must be that it follows the rule which deletes the "l" from the [-distance] morpheme when the word has an initial consonant. If not ordered in this way, all demonstrative pronouns meaning "this" or "these" would contain an "l". As it is, this rule accounts for the demonstratives a|ε|ε and lɔɔ|ε|ε, for example, while

ruling out *a|εnε and *|ɔɔnε.

2. Once again, classes 1, 2 and 10 (which have a single vowel in their full concord marker) realize the underlying form on the surface with the sole exception of the lateralization process mentioned just above. This is to say that the underlying morphemes are -|εnε "this" and -nε "that", or alternatively, that |ε- is a prefix meaning "[distance]" which can be attached to the more general morpheme -nε which stands for a demonstrative pronoun in general.
3. The underlying "|" in the morpheme |ε- "[distance]" is only realized on the surface in classes 1, 2 and 10.
4. The vowel of the concord marker has been "reduced" to a "theme vowel" (see 2.2.1. above) in just those cases where this "|" has been dropped.
5. The vowel "ε" of the morpheme |ε- "[distance]" has assimilated to the "theme vowel" in just those cases where "|" is dropped.

As in the preceding section (2.2.1.), all of these observations converge to motivate the following morphophonemic rule:

SD:	C	V	-		ε	-	n	ε
	1	2		3	4		5	6
				∅			T	5 6
SC:	1	T		∅	T		5	6

where "T" is the "theme vowel". The above data convincingly motivates the specification of the theme vowel from 2.2.1., namely:

T	→	a	/	classes 7, 8, 11 and 12
	→	ɔ	/	classes 3, 4, 5, 6 and 9

The specification of the theme vowel on grammatical criteria is the only possibility as phonological reasons are not convincing. The class six concord *ni* which takes a theme vowel "ɔ" is hard to explain phonologically when the concords *ni* and *ma* take "a". The "theme vowel" can therefore not be conditioned by either the consonant or the vowel of the concord marker.

The tonal phenomena associated with the demonstrative pronouns are more complicated than the straightforward polar tones encountered in previous sections. In the sub-sections of 2.1. dealing with various instances of non-fused (full) concord, the concord syllable was assigned either an invariant tone or a polar tone (opposite the tone of the preceding syllable). It appears that demonstrative pronouns involve both of the above.

That the concord syllable receives a polar tone is easily observed in the examples cited at the beginning of this section. There are four possible surface tone patterns defined by the two following parameters: "this" vs. "that" and whether the preceding syllable is a low or high tone, as below:

<i>Preceding Tone</i>	<i>"this"</i>	<i>"that"</i>
Low	(C)ṽ(C)ṽCṽ	(C)ṽCṽ
High	(C)ṽ(C)ṽCṽ	(C)ṽCṽṽ

On the basis of these surface patterns, it is possible to argue for the

following underlying pattern:

(C) \hat{V} - l \acute{e} - n \acute{e}

where the downstep feature is associated with the preceding high tone and the presence or absence of l \acute{e} - is determined by which pronoun is intended. In addition to the above underlying form, the pronoun also receives a polar tone on the prefix which is probably best represented by putting it before the prefix. When the polar tone is a high tone, it causes no perturbation, but is absorbed by the underlying tone on the concord prefix, as below:

' a'-l \acute{e} -l \acute{e} \longrightarrow a'l \acute{e} l \acute{e}
' a'-n \acute{e} \longrightarrow a'n \acute{e}

When the polar tone is a low tone, however, it cannot be absorbed by the concord prefix. Instead, it triggers horizontal shifting where the tone of each syllable is shifted to the syllable on its right, resulting in two tones on the final syllable, as below:

` a'-l \acute{e} -l \acute{e} \longrightarrow à| \acute{e} l \acute{e} '
' a'-n \acute{e} \longrightarrow àn \acute{e} "

The forms on the right above are additionally modified by two different processes before being realized on the surface. The first example is a straightforward case of tone absorption where two similar tones combine to one. This absorption is somehow blocked in the second example apparently as a result of the intervening downstep feature. The result of this downstep is to trigger vowel lengthening in order for the effect of the downstep to be phonetically realized on the surface. These two very different processes are summarized below:

à| \acute{e} l \acute{e} ' \longrightarrow à| \acute{e} l \acute{e}
àn \acute{e} " \longrightarrow àn \acute{e} "

These results are the actual surface forms. The vowel lengthening in the second example appears to be conditioned on tonal criteria alone. It is not yet clear if this vowel lengthening is a more general process in Amo or if it is limited to the demonstrative pronoun alone. In any case, it can be seen that demonstrative pronouns and their concord elements trigger various tone perturbations which in turn influence the actual segments themselves.

Before proceeding on to the next section, we need to notice one final demonstrative pronoun whose form contains an ideophone. The demonstrative root in this case is -n \acute{i} l \acute{i} l \acute{i} where the vowel i may vary in length from a long vowel to a vowel "infinitely" long (probably limited by the length of one's breath group). The tone of this vowel starts high and tails off downward as one runs out of breath. It does take a fused concord prefix with a polar tone, as seen in the following representative examples:

- | | | | |
|----|------|---|-----------------------------------|
| 2. | àfà | án \acute{i} l \acute{i} l \acute{i} | "those leaves waaaaay over there" |
| | àwót | àn \acute{i} l \acute{i} l \acute{i} | "those clouds waaaaay over there" |
| 6. | àtè | món \acute{i} l \acute{i} l \acute{i} | "that scalp waaaaay over there" |
| | àtón | mòn \acute{i} l \acute{i} l \acute{i} | "those ashes waaaaay over there" |

7. k\̀s̀èk kániiii "that grave waaaaay over there"
 k\̀t́é kàniiii "that place waaaaay over there"

2.3. NO CONCORD

In Amo, it is not only important to note where fused and non-fused concord occurs, but also to note where there is no concord at all. In many languages of sub-Saharan Africa, some kind of class agreement occurs with all noun modifiers. It is therefore significant that in Amo we find no concord at all in the associative (noun-noun) construction nor with possessive pronouns. This lack of concord where it is normally expected is detailed below.

2.3.1. *Associative Construction.* Though the associative (noun-noun) construction often demonstrates concord agreement in Benue-Congo languages, it does not in Amo. The underlying associative marker is *ń-* with invariant high tone (not with low tone for classes 1 and 9 as in other Benue-Congo languages). This associative marker fuses with the noun class prefix (not concord prefix) of the second noun in a variety of ways, as shown below:

1.	u-	àfà	ńc\̀f	"leaves of a father"
2.	a-	àfà	nác\̀f	"leaves of fathers"
3.	ku-	àfà	kúzi	"leaves of a hawk"
4.	te-	àfà	tékú\̀òk	"leaves of bachelors"
5.	le-	àfà	lékp\̀i	"leaves of a rat"
6.	n-	àfà	ńká	"leaves of a bag"
7.	ki-	àfà	kísù\̀m	"leaves of a hare"
8.	ni-	àfà	nísù\̀m	"leaves of hares"
9.	fe-	àfà	féná	"leaves of a cow"
10.	i-	àfà	níná	"leaves of cows"
11.	ka-	àfà	káy\̀ín	"leaves of a goat"
12.	ma-	àfà	máy\̀ín	"leaves of large goats"

The following observations relate to the fusion which takes place when the associative marker *ń-* is prefixed onto the noun class prefix of the possessor noun:

1. The consonant *n-* of the associative marker drops before a consonant, as in the following rule:

$$n- \longrightarrow \emptyset / _c\grave{v}-$$

2. The high tone of the associative marker supplants the normal low tone of the noun class prefix. This is a case of complete horizontal assimilation which leaves on the noun class prefix no trace of its underlying low tone.
3. The *u-* noun class prefix of class 1 drops out when it is preceded by *ń-*, as in the following rule:

$$u- \longrightarrow \emptyset / _ń-_c$$

Thus the following chart summarizes the changes found with the three noun

classes with lone vowels for prefixes:

- | | | | |
|-----|----------|---|-----|
| 1. | n̄ - ù - | → | n̄- |
| 2. | n̄ - à - | → | ná- |
| 10. | n̄ - } - | → | ní- |

It should be here noted that this neutralizes the difference in prefixes between classes 1 and 6 when the noun is second in an associative construction.

It can therefore be seen that high tone is the primary indicator of the underlying associative marker (it being present on the surface in all 12 classes) while the nasal consonant is only of secondary importance (being found only with classes 1, 2 and 10). An interesting exception to this pattern occurs when the noun has an underlying high tone prefix (very rare in Amo), as below:

kábèrè "sorcerer"

If "sorcerer" is the second noun in an associative construction, the high tone of the prefix would not signal the associative marker as the high tone is already present in isolation. Amo has an interesting way of attacking this problem, as below:

- | | | |
|-----|--------------|------------------------|
| 11. | àfà n̄kábèrè | "leaves of a sorcerer" |
| 8. | àfà n̄n̄bèrè | "leaves of sorcerers" |

As can be seen, Amo retains the n̄- even before a consonant just when the noun class prefix is inherently high tone. If this n̄- was deleted, as is normally the case, there would be no overt marker of the associative morpheme. It is thus clear that Amo likes to have some reflex (tonal or segmental) of its associative marker. Though this marker is realized on the surface in a predictable manner, it fuses with the noun class prefix and not the concord marker. There is no concord involved.

2.3.2. *Possessive Pronouns.* There is no concord involved with possessive pronouns. The pronouns designating a human possessor are:

Possessive Pronouns (human)

néŋ	"my"	bít	"our"
féé	"your (sg)"	míné	"your (pl)"
méé	"his, her"	míné	"their"

These pronouns are not only invariant with respect to their segmental elements, but also with respect to their tones, as can be seen in the typical examples below:

- | | | | |
|----|--------|-----|--------------------|
| 9. | fècíná | néŋ | "my louse" |
| | fènáwà | néŋ | "my animal" |
| | fècíná | féé | "your (sg) louse" |
| | fènáwà | féé | "your (sg) animal" |

fècíná	měě	"his, her louse"
fènáwà	měě	"his, her animal"
fècíná	bít	"our louse"
fènáwà	bít	"our animal"
fècíná	míné	"your (pl) louse"
fènáwà	míné	"your (pl) animal"
fècíná	míné	"their louse"
fènáwà	míné	"their animal"

Whereas the above pronouns can only be used to refer to previously mentioned humans, a second set of pronouns which corresponds segmentally to the object pronouns CV-nin (see 2.1.1. above) is used for both humans and non-humans. The fact that the prefix becomes high tone and that one finds a segmental n- with classes 1, 2 and 10 indicates that this construction exactly parallels the associative construction outlined in the preceding section. In fact, the following examples show that the presence of the associative marker *n̄-* (with high tone) and its related rules when the possessor is a pronoun are the same as when the possessor is a full noun:

- | | | | |
|-----|-------|--------|--|
| 1. | àbùnù | n̄nín | "its legs" (the bachelor's - class 1) |
| 2. | àbùnù | n̄ánín | "its legs" (the birds' - class 2) |
| 3. | àbùnù | kúnín | "its legs" (the bird's - class 3) |
| 4. | àbùnù | ténín | "its legs" (the bed's - class 4) |
| 5. | àbùnù | lénín | "its legs" (the rat's - class 5) |
| 6. | àbùnù | mínín | "its legs" (the smoke's - class 6) |
| 7. | àbùnù | kínín | "its legs" (the child's - class 7) |
| 8. | àbùnù | n̄nín | "its legs" (the children's - class 8) |
| 9. | àbùnù | fénín | "its legs" (the elephant's - class 9) |
| 10. | àbùnù | n̄nín | "its legs" (the elephants' - class 10) |
| 11. | àbùnù | kánín | "its legs" (the dog's - class 11) |
| 12. | àbùnù | mánín | "its legs" (the big dogs' - class 12) |

The important point is that the concord prefixes in the above examples are not due to concord agreement with the preceding noun, but are the anaphoric pronouns which express agreement with a referent already established in the discourse. The rest of the variation results from the presence of the associative *n̄-* and the rules for its deletion.

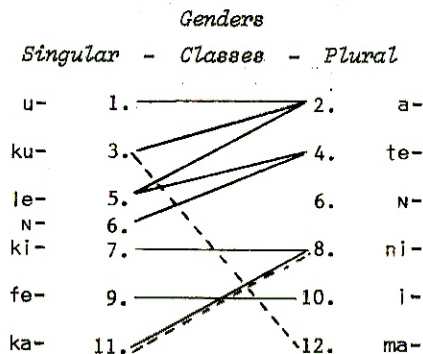
It is significant that when the first member of an "associative" construction is a pronoun, the *n̄-* is always present and does not elide according to the rules in 2.3.1. above. A few representative examples:

- | | | | |
|----|---|----------|--|
| 2. | á | n̄-kúzi | "those of class 2 belonging to a hawk" |
| | á | n̄-fèè | "those of class 2 belonging to you (sg)" |
| | á | n̄-kúnín | "those of class 2 belonging to class 3" |

All of these constructions are predictable in terms of an associative marker \acute{n} - which does not vary from one class to the next. We are thus dealing exclusively with anaphoric pronouns (see 2.1.1. above), and not concord agreement within a noun-noun, noun-pronoun, pronoun-noun or even pronoun-pronoun associative construction.

3. THE NOUN GENDERS

Since most objects in the real world can occur in singular and plural, and since Amo noun classes refer to either singular or plural, almost all nouns belong to one of the following double-class genders: 1/2; 1/4; 3/2; 5/2; 5/4; 6/4; 7/8; 9/10 and 11/8. These nine basic genders are composed of one even-numbered singular class and one odd-numbered plural class, except for gender 6/4 where a few nouns treat class 6 as a singular class. These double-class genders are represented by solid lines in the following chart. The special genders, 11/8 for diminutive meaning and 3/12 for augmentative meaning are represented by broken lines, as below:



In addition, for semantic reasons, we have the following four single-class genders: 1a, 2a, 4a, and 6a of which 6a is the most productive. Each of the basic double- and single-class genders will now be examined in turn. In the following charts, an "H" after the English gloss means the word is a Hausa loan word and an "E" means it is an English loan word.

Noun Gender 1/2 (ù-/à-) (16 nouns; mostly human)

-gó "chief"	-dù "blind person"	-nà "mother"
-lès "husband"	-lěε "stranger"	-kúlòk "bachelor"
-cìf "father"	-lùm "friend"	-dòndón "friend"
-sàwn "son"	-nít "man"	-càrà "arm, hand"
-wánè "woman"	-kìrì "thief"	

Noun Gender 1/4 (ù-/tè-) (26 nouns)

-pòì	"moon"	-dù	"tail"	-kàsá	"market - H"
-bòrkòńó	"pepper - H"	-šín	"shade"	-kúdu	"south"
-fúnù	"wind"	-cìlák	"arrow"	-kúì	"death"
-wùrù	"rain"	-là	"fire"	-kúìòk	"cough"
-wé	"sun"	-lán	"branch"	-kómí	"bed"
-mùró	"face"	-lái	"life - H"	-kónú	"sickness"
-tá	"bow"	-yì	"world"	-gádà	"bridge - H"
-tós	"neck"	-nùu	"mouth"	-górò	"kolanut - H"
-tènè	"bush country"	-kàn	"medicine"		

Noun Gender 3/2 (kù-/à-) (55 nouns)

-pée	"mat"	-téllé	"God"	-jímí	"baboon"
-pára	"mountain"	-tóf	"ear"	-rèŋ	"brown locust"
-bándàŋ	"shoulder"	-dífǎŋ	"he-goat"	-yítík	"(lizard)"
-búrá	"young woman"	-dèt	"guineafowl"	-nèn	"farm"
-bòńó	"foot, leg"	-dàngà	"hut"	-ńín	"bird"
-bòròŋ	"quiver"	-dàndájér	"green locust"	-ńàná	"young man"
-bògólòk	"white locust"	-dòdó	"(god) - H"	-kàm	"sheep"
-fà	"leaf"	-dò	"nest"	-kǎrfáran	"crab"
-vèràń	"hoe"	-sánà	"dry season"	-kúìèt	"nail"
-wáw	"cheek"	-súkùbú	"sloth"	-kúìòk	"rooster"
-wàlé	"old woman"	-zì	"hawk"	-kóró	"hen"
-wót	"cloud"	-zàràń	"ram"	-gíìt	"wing"
-mìrìmìrì	"brown lizard"	-šǎŋmîn	"urine"	-gùzó	"gorilla"
-méìéŋ	"pot"	-šàlàt	"scar"	-kpè	"leopard"
-màp	"Amo person"	-šóìšók	"throat"	-kpà	"skin"
-márá	"visitor"	-cín	"permanent locust"	-kpòŋ	"hunger"
-mòn	"thing"	-cèn	"slave"	-gbùlúk	"vulture"
-týì	"room"	-cà	"firewood, tree"	-hàrdá	"machet - H"
-tínò	"waist"				

Noun Gender 5/2 (lè-/à-) (26 nouns) (many body parts)

-bwì	"groundnut"	-týrfǎŋ	"heel"	-ńím	"nose"
-bè	"corpse"	-cáìǎŋ	"charcoal"	-kùu	"bone"
-bùlì	"belly"	-cìcìń	"sand"	-kót	"year"

Noun Gender 5/2 continued

-bòò	"anthill"	-já kù m	"jaw"	-kólò n	"elbow"
-wùlù	"horn, thorn"	-lún	"knee"	-gànù	"buttock"
-mélá	"throat"	-yíní	"tooth"	-kpì	"rat"
-múrí	"buttock/female"	-yízí	"eye"	-kpèkpèt	"eyebrow"
-tè	"head"	-yèré	"day"	-kpáí	"egg"
-tàlà	"stone"	-yázín	"breast"		

Noun Gender 5/4 (lè-/tè-) (18 nouns)

-bàrdá	"trap"	-íí n	"root"	-gòrò n	"feather"
-tè	"hair"	-lém	"tongue"	-kpòò	"bamboo"
-tán	"knife"	-cíně	"coal"	-kpók	"navel"
-dó	"dust"	-jì	"ligament"	-ì	"rope"
-sélé n	"bowstring"	-yòp	"spear"	-écín	"finger"
-sá	"name"	-kòm	"war"	-érín	"daytime"

Noun Gender 6/4 (h-/tè-) (7 nouns)

-bòrò	"mud"	-tòrò	"wine"	-sò nò	"soup"
-máí	"oil"	-dég n	"liver"	-ká	"bag"
-tòò	"salt"				

Noun Gender 7/8 (kì-/nì-) (19 nouns)

-pìn	"country"	-dédět	"(ant)"	-jífí	"red monkey"
-pènù	"yam"	-dówò	"axe"	-jìjì	"red ant"
-mál	"back"	-dówò	"body"	-jǎkí	"donkey - H"
-mùrún	"hyena"	-sèk	"grave"	-láré	"house"
-tín	"forehead"	-sángèlì	"sword"	-gàwà	"river"
-té	"place"	-sòm	"hare"	-ìtìk	"night"
-téné	"top"				

Noun Gender 9/10 (fè-/ì-) (23 nouns)

-bárf	"twin"	-cíná	"louse"	-ná	"cow"
-búrí	"fruit"	-cín cín	"fly"	-nán	"scorpion"
-bó	"fish"	-cìkápá	"rice"	-nàwà	"animal"
-mésèrè	"maize"	-lárúm	"guineacorn"	-kálé	"purple monkey"
-màrt	"thorn"	-ròò	"elephant"	-kúrfún	"money"
-sùu	"bee"	-yíí	"snake"	-kòrò	"iron"

Noun Gender 9/10 continued

-šúm	"bean"	-yín	"mosquito"	-kǔǔ	"bedbug"
-cín	"seasonal locusts"	-yíní	"star"		

Noun Gender 11/8 (kà-/nì-) (7 nouns)

-bèrè	"sorcerer"	-dúrá	"message"	-kâw	"dog"
-bârk	"horse"	-yín	"goat"	-gbírí	"village"
-twá	"work - E 'try'?"				

Noun Gender 1a (ù-) (3 nouns)

-wé	"sun"	-jérú	"loud cry"	-kpé	"grass"
-----	-------	-------	------------	------	---------

Noun Gender 2a (à-) (6 nouns)

-fíŋ	"feces"	-mòrò	"dream"	'-dùgá	"cotton - H"
-vù	"play"	-táf	"saliva"	-yì	"heart"

Noun Gender 4a (tè-) (3 nouns)

-mún	"poison"	-wín	"building mud"	-díp	"fat"
------	----------	------	----------------	------	-------

Noun Gender 6a (ń-) (9 nouns)

-fép	"breath"	-mòrò	"sleep"	-cín	"smoke"
-m̀yèn	"water"	-tè	"scalp"	-gbólgbók	"brain"
-mádará	"milk - H"	-tón	"ashes"	-nmíí	"blood"

4. CONCLUSION

The twelve noun classes of Amo seem to group themselves into three main clusters, as below:

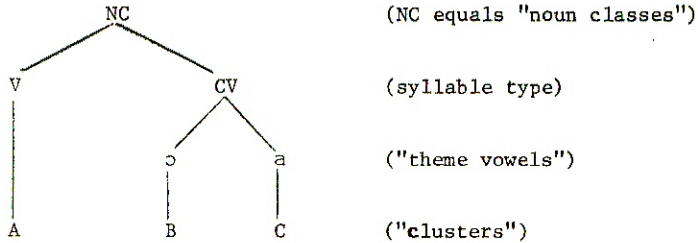
Cluster A:	classes 1, 2, 10.
Cluster B:	classes 3, 4, 5, 6, 9.
Cluster C:	classes 7, 8, 11, 12.

The motivation for these clusters comes mostly from their behavior when fusing with a root. The following observations summarize the differences between these three clusters:

1. Cluster A has single vowel (V-) noun class prefixes and concord markers while clusters B and C have consonant plus vowel (CV-).
2. Cluster A concord remains virtually unchanged in environments where clusters B and C become "weakened" or "fused".
3. Cluster B concord vowels can "weaken" to "ɔ" where cluster C vowels become

"a". These "theme vowels" provide the only motivation for separating clusters B and C.

It therefore appears possible to suggest that clusters B and C differ less between them than each of them differs with Cluster A. The following diagram is a suggestive summary:



FOOTNOTES:

1. Greenberg, p. 8.
2. Voegelin, p. 176.
3. di Luzio, pp. 1-61
4. di Luzio, p. 4.
5. di Luzio, p. 18.
6. di Luzio, p. 24-27.
7. di Luzio, pp. 27-30.
8. di Luzio, p. 23.

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- di Luzio, Aldo, *Preliminary Description of the Amo Language*, Africa und Übersee (December, 1972), pp. 1-61.
- Greenberg, J.H., *The Languages of Africa*, Bloomington (1963), p. 8.
- Voegelin, C.F. and F.M., *Languages of the World: African Fascicle One*, Anthropological Linguistics VI, no. 5 (1964), p. 176.

REFLECTIONS ON THE NASAL CLASSES IN BANTU

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0. INTRODUCTION

One of the most intriguing and central issues in the study of noun classes in the Grassfields Bantu Borderland concerns the presence vs. absence of a nasal consonant in certain noun class affixes. For no clear reason, some languages in the area have such a nasal, while others do not. Since Greenberg (1963) and Crabb (1965), it has generally been assumed that these nasals are a Bantu innovation and that they therefore can be taken as criterial for Bantu status. The relevant noun classes are indicated in (1) along with their expected exponents.

(1)	<i>class</i>	<i>Bantu noun prefix</i>	<i>non-Bantu noun prefix</i>
	1	m̀-	ù-
	3	m̀-	ú-
	4	m̀-	ɨ-
	6	m̀-	ǎ-
	9	̀-	ì-
	10	̀-	ɨ-

As seen in (1), classes 1, 3, 4 and 6 are characterized by an initial /m/ in Bantu languages, while this /m-/ is not found outside Bantu. Classes 9 and 10 have a homorganic nasal prefix within Bantu, but a prefix /i-/ in non-Bantu languages. As also can be observed, the Bantu prefixes are reconstructible with low tone, while the corresponding prefixes outside Bantu show a clear tonal differentiation (low tone for classes 1 and 9, high tone for the remaining nasal and non-nasal classes).

The considerable attention paid to this phenomenon by various members of the Grassfields Bantu Working Group has, in my opinion, not led to any satisfactory explanation of this important difference in noun class marking. The discovery of new and varied data from the Grassfields Bantu region does not provide an easy explanation for the presence of nasals in the Bantu noun

classes, but it does at least allow us to understand the full complexity of the issue and to formulate possible hypotheses.

In the present paper I will thus not be able to resolve the issue of nasals in classes 1, 3, 4, 6, 9 and 10, but only to provide a current statement as to our present understanding of the problem. On the positive side, it will be argued that the innovation of nasals in these classes occurred at a time in history when the present day Bantu subgroups were in part already differentiated. Thus, the illusion of a single Bantu type as opposed to a single non-Bantu type is dispelled. In section 1 we shall begin by outlining the situation outside of Narrow Bantu (NB); i.e. in Bantu languages other than those in Guthrie's zones A through S. In section 2 we shall compare this situation with that obtaining within NB (especially northwest Bantu). Possible explanations for the origins of these nasals will be provided in section 3. A brief summary concludes this work in section 4.

1. NASAL CLASSES OUTSIDE NARROW BANTU

As indicated in the preceding section, nasals are not expected outside Narrow Bantu in the classes indicated above in (1). By and large, non-Bantu languages falling within the Niger-Kordofanian family--to the extent that they show noun classes or remnants of such classes--meet this expectation. (In fact, we can establish two consistent, ideal types: (a) a Bantu-like noun class system, and (b) a non-Bantu or Benue-Congo (BC)-like system. The Bantu system has the appropriate nasals and noun class prefixes bearing low tone. The BC system has few nasals in its prefixes, which are often high toned, and shows evidences of noun class suffixes in many cases.) Exceptions are sporadic and rare outside Bantoid (the group which includes Narrow Bantu and Wide Bantu (WB) and, presumably, certain non-Bantu languages). The only nasal noun class marker found in most such languages involves the liquid class which has the reflex *ma-* in Bantu. This marker regularly shows up nasal in most branches of Niger-Kordofanian, even in languages where the noun classes have ceased to exist as such. The situation in NB is that **ma-* has merged with class 6 **a-* (but see below), the result being a nasal prefix. We shall follow the practice of marking the Proto-Benue-Congo (PBC) liquid/mass class **ma-* as 6a, and the PBC **a-* class (which is the plural of class 5 **li-*) as 6. We shall refer to the one merged class in NB as class 6(a). Thus, except for (unmerged) class 6a, nasals are not normally characteristic of noun class affixes outside Bantu. De Wolf (1971) has surveyed the presence of nasals in BC languages outside Wide Bantu. His results are presented in (2), where the indicated languages show a nasal for the respective noun class marker.

(2)	<i>class 1</i>	<i>class 3</i>	<i>class 4/10</i>	<i>class 9</i>
	Boki	Alege	Irigwe	Irigwe
	Mbembe	Tiv	Rukuba	Bekwarra
	Humono		SW Kambari	Okoyong
	Okoyong		Mbembe	Ikome
	Ikome		Kö	Olulumo
	Olulumo		Nkukoli	
	Ukele		Ikome	
			Olulumo	

Except for Tiv, which is Bantoid, and Irigwe, Rukuba and SW Kambari, which

are Plateau, all of the languages in (2) belong to the Cross-River (CR) subgroup of Benue-Congo. Classes 4 and 10 are indicated together, since de Wolf reconstructs them identically as *ɪ- and does not indicate any difference between the two in PBC. (No particular importance is hereby assigned to the reality of a PBC language. We accept the vagueness of the distinction between Benue-Congo and Kwa, but will not address this point here. The Kwa languages show essentially the same noun class characteristics as non-Bantu Benue-Congo languages.) De Wolf argues that these nasals are not traceable back to the PBC stage, and we assume with him that they are either independent innovations or result from contact with neighboring Bantu languages. This is, admittedly, not very satisfactory, but since CR (where most of these instances occur) falls outside the scope of our current project, we shall not attempt to further illuminate this problem. In the following subsections I shall discuss the nasal question in languages in the Grassfields Bantu (GB) borderland area, beginning first with Grassfields Bantu itself.

1.1. *Grassfields Bantu*

The investigations and reconstruction efforts of the Grassfields Bantu Working Group (GBWG) have clearly demonstrated that there is a viable linguistic unit which we refer to as Grassfields Bantu. As reported in Stallcup (1977), GB is divided into Western Grassfields Bantu (WGB) and Eastern Grassfields Bantu (EGB), the latter formerly referred to as Mbam-Nkam (Voorhoeve 1971). The position currently taken by our group is that EGB remains intact as in Stallcup (with four subgroups), while WGB contains only two subgroups, as seen in (3).

(3) a. Eastern Grassfields Bantu (formerly, Mbam-Nkam)

1. Nkambe (Limbum, Adere, etc.)
2. Nun (Bamoun, Bali, etc.)
3. Ngemba (Mankon, Mbui, etc.)
4. Bamileke (Fe'fe', Dschang, etc.)

b. Western Grassfields Bantu

1. Ring (Kom, Aghem, etc.)
2. Momo (Ngie, Moghamo, etc.)

Formerly included in (3b) were the Menchum languages as well as a group referred to as Lower-Mundani/Njen. The latter group is now regarded as part of Momo (3b.2); the former group is considered separate, as is another group of small languages, which we refer to, for lack of a better term, as Northern Momo, e.g. Assumbo, Assaka. What is clear is that the reconstructions originally proposed by Hyman for EGB, and slightly modified by members of the GBWG, are applicable as well and without adjustment to the two groups in WGB. While the question has not been studied in great depth, it would appear on the surface that some changes would be needed in order to accommodate the proto languages of Menchum, Northern Momo and Bebid; i.e. the languages most closely related, genetically, to GB.

The reason for this discussion is that, as pointed out by Stallcup (1977), the EGB languages show all of the Bantu nasal prefixes, while the WGB languages lack these nasals. For the purpose of comparison, the reconstructed PEG and PWG noun class affixes (nominal and concord) are given in the table in (4).

(4)	Proto-Eastern-Grassfields		Proto-Western Grassfields	
	nom. prefix	concord	nom. prefix	concord
1	ṅ-	ù-	ù(N)-	ù-
1a	∅-	(=1)	-----	-----
2	bè-	bé-	bé-	bé-
3	ṅ-	ú-	ú-	ú-
3a	ì-	(=3)	-----	-----
4	-----	-----	f-	f-
5	lì-	lí-	f-	f-
6	(=6a)	(=6a)	á-	gá-
6a	mè-	mé-	mə-	mè-
7	à-	f-	kí-	kí-
8	bì-	bí-	bí-	bí-
9	ṅ-	ì-	ì(N)-	ì-
10	ṅ-	í-	í(N)-	Cí-
13	-----	-----	tí-	tí-
19	fè-	fé-	fí-	fí-

In the above table, concords which are indicated as consisting solely of a vowel could have once had a glide onset (or even a velar *g- or *ɣ-). The initial consonant, if any, of class 10 in WGB is not clear: Momo and many Ring languages show a t-, in which case there is no distinction between 10 and 13; other Ring languages show a s- in class 10 which contrasts with the t- found in class 13. (It has occurred to me that the [ti] of class 13 might trace back to an earlier *tu-, while the [si] of class 10 may be a reflex of earlier *t|-.) There are a number of points which could be noted in conjunction with these reconstructions. Since it is not the purpose of the present paper to justify these (still tentative) forms, a task which is undertaken in Hyman (in preparation), we shall restrict ourselves to the nasal classes, i.e. 1, 3, 4, 6, 6a, 9 and 10.

1.1.1. *Class 1.* Two separate classes are recognized in PEG: class 1 (with nasal) and class 1a (without any prefix). Examples are *ṅ-g(w)é' 'woman' vs. *∅-s'ŋ' 'bird'. Nasals tend to occur on class 1 humans and fail to appear on class 1a nouns, which are non-human. There is some evidence that class 1a nouns, for which not even a floating tone prefix can be reconstructed, derive from verbs or are borrowings or neologisms. It should be noted that the nouns 'person' and 'child' are reconstructed with a vowel-initial stem. The noun 'person' has undergone irregular changes from language to language. However, 'child', which is reconstructed *-án, appeared as *mú-án' in PEGB, but as *ù-án' in PWGB (cf. Mundum I mónè vs. Oku wān). This demonstrates that the *ṅ- of class 1 in PEGB probably traces back to *mù-. Perhaps the sometimes present [w] in *ṅ-g(w)é' 'woman' can be attributed to the prefixal vowel u- (either as mu- or un-).

1.1.2. *Class 3.* Again, two separate classes are indicated in PEG and only one in PWG. In PWG the proto noun prefix is *ú-, i.e. non-nasal. This

conforms with the pattern found outside Bantu in general. In PEG most nouns in class 3 have a prefix *N-. The few exceptional nouns that I have labeled "3a" show a vocalic prefix *i-, which has reflexes such as [i] [ə] and [e] in present day EGB languages. Since these nouns are almost all semantically elongated items ('ladder', 'bed', 'belt' etc.), I suspect that class 3a is cognate with PB class 11 *lù-, which is often used as a derived class in NB to designate long, thin objects. A merger between classes 3 and 11 is found in other subbranches of Bantu as well. When 3 and 11 merged in the WGB languages, the two could no longer be distinguished, since they both involved a ũ- prefix. (PEG 3a *i- probably represents a development from *ù-.) Finally, the multitude of plural possibilities for the resulting class 3 in WGB can perhaps be attributed in part to this merger (cf. 3/4, 3/6, 3/6a and 3/13, all of which are attested in WGB languages). As indicated in Stallcup (1977), the one vowel-initial stem *-[t] 'fire' is a class 3 noun in PGB. Since it shows an initial bilabial nasal [m] in EGB languages, e.g. Ngwe ñmók, Limbum mór, etc., the EGB class 3 prefix *N- may, like class 1, be a reflex of an earlier *mù- prefix. As expected, 'fire' occurs without a nasal in WGB languages, e.g. Ngie ũwét, Kom əwēs, etc.

1.1.3. *Class 4.* Class 4 is found only in WGB, and even here not in every language. Where it occurs, it is always indistinguishable formally from class 5, although the two classes obviously differ in number and class pairings. True to the pattern, class 4 has a prefix ɛ- in PWG, i.e. no nasal. As demonstrated by Hyman (1972), the corresponding plural of class 3 in PEG is class 6(a) *mè- followed by class 3 N- and the stem, e.g. *N-kèn 'message', pl. *mè-N-kèn. Where the singular belongs to class 3a, and therefore has a vocalic rather than nasal prefix, the plural is indistinguishable from class 6. The resulting EGB gender is 3/6(a), e.g. *i-kún 'bed', pl. mè-kún. It should be noted that relatively few nouns belong to 3/4 in the WGB languages having this gender.

1.1.4. *Classes 6 and 6a.* The situation in this case is somewhat different from the preceding ones. We shall define class 6 as the plural of class 5 *l/-/f-. Class 6a, on the other hand, is regarded as a liquid class containing such items as 'water', 'milk' and 'oil'. What is important, as noted as part of the "Greenberg-Crabb" hypothesis concerning the Bantu nasals, is that NB languages typically merge de Wolf's (1971) PBC classes *mā- and *a-. In PBC de Wolf reconstructed a gender *li-/*a-, on the one hand, which corresponds to PB 5/6, and a single liquid/mass gender *mā-, which corresponds also to 6 in the same NB languages. The GB classes in (4) show that EGB has undergone the same merger of *a- and *mā- as in NB, while WGB retains the earlier distinction. The merger of these classes is a complex issue which has been somewhat oversimplified, as we shall see below. However, with only few exceptions, languages which have acquired nasals do not distinguish between 6 and 6a. We shall henceforth refer to the resulting merger of these two classes as 6(a). (It will be noted in (4) that EGB has a prefix à- in class 7. Although for a while I believed this prefix to be related to that of PBC *a-, especially since 6 and 7 become confused in Ring languages [cf. Hyman 1977a], I now believe it to be the reflex of PBC *ka-. Adere class 6 concord gə- would seem to point in this same direction (Voorhoeve 1980). The u-, i- or i- prefix found on class 8 nouns in so many GB languages may derive as readily from PBC *bu- (the plural of *ka-) as it does from *bi-; cf. Hombert 1980 for a comparable statement on Bebid.)

1.1.5. *Classes 9 and 10.* Both of these classes regularly show a N- prefix in EGB, as they do in NB as a whole. Languages which show an addi-

tional affix in class 10 have innovated this means of differentiating the plural from the singular (e.g. the -sɿ suffix of many Ring languages, which probably derives from an earlier demonstrative with class 10 concord). A different picture is seen in WGB. In each Ring or Momo language a sizeable number of 9/10 nouns show an initial NC cluster, while another group of nouns lack the nasal. Examples are given from the Ring language Babanki in (5).

(5) a.	∅:	ñám	'animal'	pl.	ñám-'sɿ
		ʒú	'snake'		ʒú-'sɿ
		dzèm°	'back'		dzèm-'sɿ
	b.	ñ:	ñdzám°	'axe'	pl. ñdzám-sɿ
			mbò?	'cloud'	mbò?-sɿ
			ñkwàŋ	'hole'	ñkwàŋ-sɿ

The identity of the nouns falling in one vs. the other category is relatively stable from language to language within WGB. Thus, 'dog', 'goat' and almost all other animals occur without a nasal, while non-animal 9/10 nouns such as 'axe', 'horn' and 'message' usually take a nasal. (Note that a homorganic nasal is sometimes found on a few nouns sporadically in other classes, but nowhere near the frequency with which it is found on 9/10 nouns; the same is true in Noni (Hyman 1977b; in preparation).) The exact interpretation of these facts escapes us for the moment. However, it is consistent at least that it is WGB that sometimes lacks a nasal, while EGB always has the nasal in 9/10. The Ring languages justify the reconstruction of *|-/f| as the singular/plural prefixes, and these same forms have been reconstructed for PBC as well (de Wolf 1971). The tonal changes noted in (5a) between singular and plural are accounted for if we posit a floating low tone before the singular and a floating high tone before the plural forms. When there is a nasal, however, the high tone of the plural prefix is lowered (Hyman 1979a), as has been demonstrated independently for Aghem (Hyman 1979b).

From the preceding survey of the nasal classes we see a consistent pattern: nasals in EGB [as in NB] vs. no nasals (or fewer in 9/10) in WGB [as in non-Bantu]. It would be curious indeed if we used the Greenberg-Crabb criterion to establish that EGB belongs to the Bantu family, while WGB does not. Thus, a more complicated analysis is required (see section 3). For the moment, let us note another interesting point or two concerning the forms in (4). First, there are serious tonal differences between the noun prefixes (and in class 6a, the concord prefixes) in the two branches of GB. In PEG all noun prefixes bear low tone--exactly as is the case in NB. In PWG, however, only noun classes 1 and 9 bore low tone--the remaining prefixes showing high tone. (The one problematic prefix is class 6a *mɛ-, which either bore low tone, or had a high tone which was lowered because of the nasal environment (perhaps with intermediate mɛn- in some cases).) This difference of prefix tone is again parallel to the opposition between NB with its all low prefixes and non-Bantu, where most prefixes can be comfortably reconstructed with high tone (later reducing to low tone independently in individual languages and subgroups). I suspect a relationship between the acquiring of nasals and the ubiquitous low tones found on noun class prefixes. The concords show mostly high tones in both subgroups. It appears that the prefixes in WGB and non-Bantu are identical to their corresponding concords, while they are not identical in EGB and NB. Classes 1 and 9 have low tone concords. Class 6a curiously shows a low tone concord in WGB (but not in EGB or NB). This same low tone 6a concord is found in Ekoid A, Esimbi, Kenyang, Numand (A.40?) and apparently in Menchum (Boum 1980). Except

for Numand (data for which was made available to me by Daniel Barreteau from the project on the Atlas Linguistique du Cameroun), these languages are contiguous with WGB and one another. Thus, we may have an areal feature not necessarily reconstructable for any bona fide genetic family.

A second interesting note in addition to the tone of these markers is that the concords show fewer nasals than the noun prefixes. In EGB it is class 6(a) alone which shows a nasal concord. Classes 1, 3, 9 and 10 all have a V- (perhaps GV-) concord, as they frequently do in NB (but cf. section 2.2). This point is an important one for the following reason. If EGB (and NB) invariably had nasal prefixes *and* concords, and if WGB (and non-Bantu) invariably lacked nasals in their prefixes and concords, it would be harder to establish that the nasals were an innovation. The non-nasal concords found in EGB and NB are thus *remnants* of an earlier stage when the only nasal found in noun affixes was in class 6a. As we shall see below, this situation is considerably obscured in northwest Bantu--and is complicated by the presence of a mysterious and as yet unidentified plural class *mu-.

The nasal dichotomy splitting EGB and WGB along genetic lines is thus very important for our understanding of both the nasal phenomenon itself and the exact subgrouping of languages in the area. Since there is one PGB, which includes both consistent nasal and consistent non-nasal noun class systems, it cannot be the case that the nasal innovation took place at one time and in one genetic group only. Rather, it probably took place in waves and spread from language to language. In order to justify this claim, it will be necessary at this point to study these classes in the remaining Bantu and Bantoid subgroups. We shall first cover subgroups outside NB, starting with those believed to be closest to GB (e.g. Northern Momo, Menchum and Beboid). Then we shall turn to Narrow Bantu itself.

1.2. *Western Momo, Menchum and Beboid*

The three closest relatives of GB are Northern Momo, Menchum and Beboid (see Hombert, in preparation). With little or no variation, Western Momo and Menchum parrot the non-nasal variants of WGB. For this reason they were for some time considered to be part of WGB (Stallcup 1977). Hombert's lexicostatic studies coupled with my own efforts at reconstructing PGB roots have confirmed the unity of Mbam-Nkam (=EGB), Ring and Momo. These same studies reveal fewer common roots between this more limited GB and either Western Momo or Menchum--also the necessity to slightly modify the reconstructions for PGB roots in order to accommodate the additional groups. The adjustments are somewhat greater in the case of Beboid (which includes Noni and related languages and dialects; see Hombert 1980). Beboid was considered to be "marginally" GB in our earlier studies--or at least the closest relative of GB as we understood it in 1977.

It is instructive to consider the facts in Beboid. Hombert (1980) has discovered a velar nasal suffix -ŋ in certain Beboid languages in classes 4 and 6 (which are apparently not distinguished from one another). (Cf. the one exceptional 3/4 noun in Noni: wé 'field', pl. ŋŋé.) This discovery may or may not relate to the problem at hand, but it at least reflects an important difference between Beboid and its Grassfields relatives, namely the preponderance of remnant suffixes on nouns. I say "remnant" because they are limited usually to a few classes, and in some cases, to only a few nouns within these classes. Consider the Noni noun class system in (6).

(6)	Noun affixes	CV-concord	Example	
1	∅(N)-	wvù	kwɔ̀ɔ̀	'woman'
2	bɔ(N)-	bɔ́	bɔ̀kɛ̀nɛ̀	'women'
3	w-	wvú	kwɛ̀n	'firewood'
4	∅	yí	kɛ̀n	'firewoods'
5	-e	jí	lɔ̀w-é	'bean'
6	ɛ-	yɔ́	é-lɔ̀w	'beans'
6a	mɔN- -m	mɔ́	mɔ̀n-dvúu-m	'places'
7	ke-	ké	kɛ̀-té/é-té	'tree'
8	bi-	bí	bí-té	'trees'
9	`(N)-	yì	bìe	'fish' (sg.)
10	^(N)-	yí	bíe	'fish' (pl.)
13	ji-	jí	jí-wácí	'markets'
14	bvu-	bvú	bvú-dvúu	'place'
16	fɔ-	fɔ́	fɔ̀-wǎy	'at the market'
"18"	mɔN- -m	mɔ́	mɔ̀n-tɛ̀né-m	'squirrels'
19	fe~fi-	fé	fɛ̀-ɛ̀né	'squirrel'

The examples have been chosen so as to illustrate interesting points--e.g. remnant suffixes, labialization of the initial consonant in classes 1 and 3, etc. Class 5 is generally characterized by a -e suffix; in addition, the *two* nasal classes, 6a and "18" (=the plural of 19) show not only mVN- prefixes, but also an -m suffix. It will not be possible to elaborate fully on all of the suffixes in Noni. Let us, however, illustrate a recurrent pattern in the language by means of the following forms for the third person singular possessive pronoun 'his/her':

(7)	1	wè	---	8	byêw	byên
	2	bêw	bêŋ	9	yè	---
	3	wé	---	10	yé	---
	4	yé	---	13	dyêw	dyên
	5	dyêw	dyên	14	bwêw	bwên
	6	ɛyé	---	16	fɔ́ wvù	
	6a	mêw	mêŋ	18	mwêw	mwên
	7	kêw	kêŋ	19	fyêw	fyên

The underlying pronominal element is /e/ 'his/her'. What precedes this stem vowel is a noun class concord marker; the following -w or -ŋ is found on this pronoun when modifying a noun of class 2, 5, 6a, 7, 8, 13, 14, 18 or 19. The forms in the left column refer to a non-coreferential 'his/her', while those on the right are used when the possessor *is* coreferential; i.e. 'his/her₂' vs. 'his/her₁'. The classes which do not take a final consonant, and which therefore do not have distinct coreferential and non-coreferential variants, are exactly those which acquire nasals in EGB and NB: classes 1, 3, 4, 6, 9 and 10. Curiously enough, the same distribution characterizes other parts of the Noni noun class system (Hyman 1977b; in preparation). Noni thus makes a crucial

distinction between "glide" classes (i.e. those marked by *y-* or *w-*) vs. CV classes (those marked by a true consonant: *b-*, *d-*, *k-*, *f-*, *m-*). (In the *Benue-Congo Noun Class Systems* volume (henceforth, BCNCS), the same distinction seems to underlie the presence of suffixes on the form 'my' in Tiv (Voorhoeve and de Wolf 1969:52).)

Two further issues are important in Noni. The first is gender 9/10, which as seen below, has the same \emptyset vs. N- difference noted for WGB.

(8) a.	\emptyset :	jòm	'antelope'	pl.	jòm̄
		bìē	'goat'		bTē
		bwé	'dog'		bwé
	b. N:	nñàm	'animal'	pl.	nñàm̄
		njèè	'sheep'		njèè
		ndvū	'cloth'		ndvū

(Note that I have not found a distinction between \emptyset - and N- before a stem-initial nasal; thus, 'animal' could also be written nñàm.) In (8) the nasal prefixed nouns undergo the same alternations as the \emptyset prefixed nouns with respect to their singular and plural tones. This stands in marked contrast to the Babanki situation seen in (5), indicating that the tone depressing effect of nasals in WGB is not in effect in Noni. This is borne out by the fact that class 6a has a high tone concord in Noni rather than the low tone concord found in WGB (as noted above).

The second point is the unusual *mu-* class which functions as the plural of class 19 and thus is a plural diminutive. This class is labeled "18", since it is identical in form to PB **mu-*, which is a locative class. (Noni is exceptional in the area in having three locative classes: class 16 **pa-* and two classes having no PB correlates; see Hyman, in preparation.) I do not mean to suggest that the two are cognate in any way, since the locative **mu-* is not found anywhere in the GB region. Plural class 18 is not found within GB, unless the 6a found as the plural of 19 in the Ring languages represents the merger of 18 and 6a. Plural 18 is found elsewhere, however, including A.60 (e.g. Tuki (Hyman 1980), Yambasa (Paulian 1980), Kiboum and Nigi [from Barreteau and ALCAM]) and Esimbi. (Boum 1980 points to the probable existence of plural 18 in Menchum.) Also, I would like to propose, the 19/3 gender set up for Ejagam by Watters (1980) traces back to earlier 19/18. Since Ejagam (Ekoid) has nasal classes, class 3 would have been **mu-*, or exactly like the **mu-* reconstructed for the plural of 19. (Could this [mu] have been an earlier *u-* from PB **tu-* from loss of *t-* and then acquisition of *m-* as in classes 1, 3 and 4?) Most of the languages of the area continue to exhibit class 13 as the plural of 19, as expected in PB. It may be significant, however, that the [u] of PB **tu-* is found nowhere outside of NB (cf. de Wolf, who shows [tí] and its variants attested widely in BC). Thus, one additional problem we are faced with is explaining the very existence of class 18 **mu-*.

1.3. *Esimbi and Tivoid*

In his earliest studies on the language, Stallcup hypothesized that Esimbi might be related to Tiv. Although this still remains an open question, we shall treat Esimbi along with Tivoid. As can be seen from Stallcup (1980), Esimbi falls easily within the BC type of noun class system. It shows no nasals except in class 6a, where *m-* is a remnant of **ma-* occurring before bi-

labial consonants. All other instances of *ma- have been denasalized to [ba], thereby merging with class 2. (Cf. the noun prefix bə- of classes 2 and 6(a) in Ngwe (EGB) studied by Dunstan (1966), where there are also remnant m- prefixes remaining before bilabials.) This denasalization process will be further discussed below.

In Tiv, representing Tivoid, there also is a typical BC noun class system: classes 9/10 are ɿ-/ʃ- and 6 ≠ 6a. The nasals which occur in the form of prenasalized voiced consonants (mb- and ng-) seem to be derived and of little interest directly. This NC- structure characterizes all classes except 6a (which begins with m-) and 7 and 15, both of which begin with voiceless k-, as seen in the summary below (BCNCS, p.52, based on Arnott):

(9)	noun affixes	adj. concord	SM (pr. cont.)	SM (past)	'my'
1	∅-	ù-	ngù	a	wàñ
2	ù-, mbà-, -v	mbà- -v̂	mbá'	ve	á'v̂
3	(ú)-	ú-	ngú'	u	wáñ
4/5/10	ʃ-	ʃ-	ngʃ'	i	yáñ
6	á-	á-	ngá'	a	áñ
6a	m̄- -m̄	mà- -m̄	má'	ma	á'm̄
7	ʃ- -v̂	kɿ- -v̂	kʃ'	kɿ	yá'v̂
8	ʃ- -v̂	mbɿ- -v̂	mbʃ'	mbɿ	yá'v̂
9	ɿ-	ɿ-	ngɿ	ɿ	yáñ
14	-v̂	mbù- -v̂	mbú'	mbu	á'v̂
15	-v̂	kù- -v̂	kú'	ku	á'v̂

As in Noni, Tiv shows suffixes in classes other than 1, 3, 4, 6, 9 and 10 (those acquiring nasals in other languages). Since the distinction may boil down in both languages to one of ∅ vs. a consonant in the concord marker, it would serve us well to remember this grouping while considering possible hypotheses for the origin of the nasals in Bantu (section 3).

The most intriguing fact about Tiv noun class affixes is that there is a derivational process whereby verbs become class 3 nouns 'referring to a single specific act' (BCNCS, p.54). While class 3 normally has a ú- or ∅ prefix, this deverbal class 3 prefix is m-. In Esimbi, although we have said that there are no nasals in the relevant noun classes, the subject and object pronouns for classes 1 and 3 are mù and mú, respectively (and the independent pronoun for class 1 is úmù). It is a mystery how these nasals got into the pronominal system. The presence of pronominal mu is all the more confusing as classes 6a *m̄a- and 18 *mu- have become denasalized to [ba] and [bu]; the class 1 and 3 pronouns are not affected by this process.

1.4. Kenyang, Ekoid and Mbe

It was indicated in the preceding section that Esimbi has undergone denasalization of *ma-/mu- to *ba-/bu- (with vowel harmony variants; see Stallcup 1980). A similar phenomenon characterizes Kenyang. As in the case of Esimbi (WGB, Tiv, etc.), classes 6 and 6a are distinct. However, in Kenyang, their prefixes are identical: ba- before stems beginning with an oral consonant; ma- before stems beginning with a nasal consonant (Voorhoeve 1977). Class 8 has the similar variants be- vs. me-. Classes 6 and 6a are distinguished still by their concords: class 6 y' vs. class 6a m'. (Note again the low tone concord in 6a.) Thus, compare the 6a nouns mà-nòŋ 'blood' vs. bà-fɔ́ 'fat'. The concords would suggest that class 6 was originally a non-nasal class. This suggestion is complicated by the fact that vowel-initial

stems in class 6 show a phonetic bilabial nasal reminiscent of the proto *ma-prefix. Examples from Voorhoeve (1977) are $\dot{a}w\dot{s}/\dot{a}m\dot{s}$ 'hand(s), arm(s)' 3/6, $\dot{n}\dot{e}s\dot{e}/\dot{a}m\dot{t}k$ 'eye(s)' 5/6, $n\dot{e}\dot{n}\dot{e}\dot{t}/\dot{a}m\dot{a}i$ 'nail(s)' 5/6, $n\dot{e}\dot{n}\dot{e}n/\dot{a}m\dot{e}n$ 'tooth/teeth' 5/6, and $n\dot{e}b\dot{t}/\dot{a}m\dot{t}$ 'breast(s)' 5/6. The ma- or ama- prefix spread from class 6a to class 6 would therefore have characterized all vowel-initial stems, which in turn were exempt from the denasalization process. The m- in the above forms is thus treated as if it were the stem-initial consonant itself.

Voorhoeve (1977) indicates that Crabb et al had erred in believing that the merger of classes 6 and 6a was an "all or nothing" thing. Kenyang shows, as does some Ekoid--that the prefixes can merge without the concords merging. What this says about Kenyang's status as either Bantu or non-Bantu is not resolved. In the other classes (1, 3, 9 and 10), Kenyang shows nasals and therefore would qualify as Bantu (if the Greenberg/Crabb criterion is valid).

So would Ekoid Bantu satisfy the criterion--and it was Ekoid which led Crabb (1965) to place so much emphasis on the nasal prefixes in the first place. In most Ekoid languages there are nasals in the appropriate classes; however, Ekoid R and S show, once again, the merger of the prefixes in classes 6 and 6a, but distinct concords: $y\dot{a}$ vs. $m\dot{a}$, respectively (Watters 1980). Since I will take an areal view of most or all of these noun class changes in section 4, it is consistent with this view that Kenyang and Ekoid are contiguous.

The final language under consideration in this section is Mbe (BCNCS, based on Bamgboṣe 1965). The full noun class prefixes and concords are given in (10).

(10)	<i>noun prefix</i>	<i>subject prefix</i>	<i>poss. concord</i>
1	bu-/N-	ε-	o-
2=6a	bε-/b-/N-	bε-	εb-
3=14	bu-/b-	bu-	ob-
4=8	be-	be-	εb-
5	le-/l-	le-	el-
?8	ε-	ε-	ε-
7	e-/N-/ñ-/y-	e-	e-
9	be-	ε-	o-
11=15	o-/N-	o-	o-
12	kε-	kε-	εk-
?13	ke-	ke-	ek-

If we assume that the initial b- of classes 1, 3, 4, 6a and 9 derive from the denasalization of [m], we see that Mbe should be classified as a true Bantu language. There are, however, a few troubling aspects to the system. The nasal prefix found before vowel-initial stems in classes 1 and 6a (=2) makes sense, but where does the nasal in classes 7 and 11 come from? Also, what is this class 6 ε- which does not serve as the plural, for instance, of class 5, as per our definition? Should we see this somehow as a realization of 4 (10?, which is missing). Perhaps the most interesting point is that animals occur both in 1/2 and 9/14, where class 9 inexplicably begins with a denasalized *m- (see section 2).

2. NASAL CLASSES WITHIN NARROW BANTU

Despite the fact that NB is frequently referred to monolithically, this label obscures the considerable variation found within its ranks. The term

refers, of course, to the unit represented by Guthrie (1948, 1967-1971) and whose proto system was reconstructed, among others, by Meinhof (1932) and Meeussen (1967). In the following sections we shall examine first nasal class prefixes on nouns and then nasal concord markers in the different Guthrie zones of Narrow Bantu.

2.1. *Nasal noun prefixes*

With few--if any--exceptions, the forms given for the nasal noun prefixes in NB in (1) are either directly identifiable, or are reconstructable, for each language within this unit. Most NB languages are in fact remarkably conservative in this regard. Modifications include, among others, the change from *mu- to syllabic [m̩] in classes 1 and 3, and the loss of the homorganic *N- prefix of 9/10 (perhaps restricted according to the nature of the initial stem consonant). Both of these tendencies are found, for example, in Swahili.

More general and interesting are two other tendencies: (a) the denasalization of [m] in classes 1, 3, 4, and 6(a); and (b) the development of VN- prefixes in these same classes. The result of denasalization is forms such as [bu~bo] for classes 1 and 3, [bi~be] for class 4, and [ba] for class 6(a) (cf. Kadima 1969). Besides Mbe, which falls outside of NB, this denasalization is found in Bubi (A.31), Lomongo (C.61) (and related languages) and Kela (C.75). In a few cases only class 6(a) has denasalized (e.g. Mbesa C.75 and Wide Bantu languages Kenyang and Esimbi, the latter denasalizing plural class *mu- as well). Within NB denasalization tends to be complete, leaving behind few or no remnants. (The realization of classes 1 and 3 as w- before a vowel in Lomongo (Hulstaert 1965) is intriguing, however, since the sequence bw- is allowed elsewhere in the language; a similar phenomenon is noted in the possessive forms in Bubi in class 3, where we obtain w- instead of the expected bw-. Class 4 is always by- (Guarisma 1980).) The WB cases, on the other hand, show remnants. In Esimbi, the 6a noun prefix is ba- before a consonant, but m- before a vowel. In Kenyang, the same 6a prefix is ba- before an oral stem-initial consonant, but ma- before a nasal one.

The very fact that denasalization is so complete poses interesting questions. It will be seen in the following subsection that denasalizing languages do not show significant distinctions between the noun prefixes and the concords. In some cases there is a difference between pre-consonantal and pre-vocalic forms, but the same variations is found on noun prefixes *and* concords. While denasalization seems to be a straightforward phonetic process, is there any chance that the initial b- of these classes is a direct reflex of the pre-nasal (G)V- stage? It would be interesting to know if this alleged denasalization process affects other parts of the grammar (e.g. in languages where *mu becomes [bu], is there evidence for a similar denasalization of the subject marker *mu- 'you pl.?').

The second development, that of *NV- to [VN-], is characteristic of Tunen (A.44), Yambasa (A.62) and Tuki (A.64). In each of these languages there is variation in the realization of the respective nasal classes. In Tuki (Hyman 1980), classes 1 and 3 will be realized uN- before one of the voiced noncontinuant /b,d,j,q/, but u- before any other consonant; a similar alternation occurs between iN- and i- in class 4 and between aN- and a- in class 6. Before vowel-initial stems, the expected mV- is obtained, e.g. mw-àṅā 'child'. (There are irregularities in class 1 even with the above rule; classes 3, 4 and 6 are much more straightforward.) It is possible that all nouns in classes 1, 3, 4, and 6 at one point had VN- prefixes, but that the nasal has fallen out

before consonants other than the above four (Tuki, thus, allows only the following nasal-consonant sequences in general: mb, nd, nj and ng). Classes 9 and 10 have ñ- before these four consonants, otherwise no prefix. Finally, 6a is realized ma- and is distinct from class 6 əN-, while plural class 18 is realized mu-.

There are two possible explanations for the development of VN- prefixes. First, these VN- sequences may be simplifications of earlier VNV- prefixes, where the first V- is the preprefix reconstructable for PB. As initial evidence, note that the prefixes in Bubi (A.31) are VCV- in nature (Guarisma 1980), as seen in (11).

(11)	1	òbò-	5	ǀ-/rǀ-	9	è-/ø-
	2	àbà-	6	àbà-	10	ǀ-
	3	òbò-	7	è-/ø-	11	òǀò-
	4	èbè-	8	èbǀ-	19	sǀ-
					13	òtò-

Since Bubi is a relatively distant zone A language, it is likely that the pre-prefix recognized for central Bantu languages once extended to the northwest extreme as well (cf. de Blois 1970). Stallcup (in preparation) justifies an underlying preprefix in Bakweri (A.22)--in my opinion, discussions of preprefixes in GB have not been convincing thus far--at least as regards their identity with the initial vowel of PB. In any case, these data from zone A languages suggest that earlier prefixes such as umu-, imǀ-, and amə- may have existed and could have developed into VN-.

An additional bit of evidence for this view comes from Mpongwe (B.11a), as presented in Guthrie (1953):

(12)	<i>noun prefix (-C)</i>	<i>noun prefix (-V)</i>	<i>noun prefix (-b)</i>	
	1	o-	oŋw-	
	3	o-	oŋw-	om-
	4	ǀ-	[m]-	[m]-
	6(a)	a-	am-	am-

Mpongwe has vocalic prefixes preconsonantly for classes 1-7, 11 and 19. As seen in (12), however, the nasal classes have a VN(G/V)- structure when the stem begins with a vowel, and a Vm- structure when the stem begins with a bilabial consonant. These all, including the last environment, can be derived assuming *VmV-. (Cf. the realization of class 6(a) *mə- in many Western Bamileke and Ngemba languages as [mə-] before all consonants except b-, where we instead obtain [m], e.g. Mbui mə-sǒŋ° 'teeth' vs. ñ-bǒŋ 'breasts'.)

A second possible solution should be considered, however. In this case we reconstruct mV- prefixes as in (1) and introduce a metathesis rule which changes *mu- to uN-, *mi- to iN- and *mə- to əN-. In just the case that the resulting nC cluster is unacceptable (as in Tuki), the nasal drops out. (Alternatively it can drop out without metathesizing, although this variation is harder to motivate perhaps.) This solution has a precedent in Aghem (Hyman 1979b), where the following rule exists synchronically:

(13) mǀ- → əN- / ___ C

The class 6a prefix mǀ- is metathesized to əN- in case it is followed by a

consonant. If followed by a vowel we obtain mə-. In either case, the schwa may be subject to deletion by a later rule. This solution would work well for Tuki nouns such as mwānā 'child', where the noun stem begins with a vowel, and metathesis therefore does not take place. (We would be hard put to explain, however, the VNw- of ɔŋwāna 'child' in Mpongwe, where we *do* obtain an initial vowel. Perhaps one could maintain the preprefix solution for Mpongwe, but the metathesis solution for Tuki. It would be unfortunate if we needed two separate routes for deriving similar outputs.)

The most telling argument against the metathesis solution comes from the realization of classes 6a and 18. As stated above, the prefixes of these classes are mə- and mu-, respectively. It would be quite messy and ad hoc if the metathesis process were to have affected classes 1, 3, 4 and 6 (whose inputs would have been mu-, mi- and ma-), but not classes 6a and 18. In this analysis we would postulate that classes 6 and 6a were both ma- and that metathesis chose to operate on 6 (to derive an-) but not on 6a. This seems arbitrary. Metathesis is a phonetic process and should not be subject to the consideration of whether ma- is the plural of class 5 or simply a liquid/mass class. (Note that in Tuki, where there is a 14/6a gender, the plural class would also not undergo the putative metathesis process.) It would be much more reasonable to suppose that classes 1, 3, 4, 6 and possibly others acquired a preprefix, and for some *morphological* or *semantic* reason 6a and 18 did not acquire one; or, if a phonetic solution can be maintained, perhaps 6a and 18 acquired a *nasal* preprefix (since they alone have nasal concord), which later simplified; e.g. ma-/mu- became mma- and mmu- (or some variant). It could even have been the case that 6a and 18 added a *suffix* to perform the function of the preprefix in 1, 3, 4 and 6, which suffix has since dropped. Whatever the ultimate explanation, it must be able to explain the stability of 6a *ma- and 18 *mu-.

The final NB prefix system we shall consider in this section is that of Tunen (A.44). This system, described by Dugast (1971), has nasal classes with the following prefix shapes:

(14)	1	mù- ~ mò-
	3	mù- ~ mò-; ùN- ~ òN-
	4	mì- ~ mè-; ìN- ~ èN-
	6(a)	mà- ~ mʷà-;
	9/10	mì- mè-; ìN- ~ èN-

Forms separated by the mark ~ are vowel harmony variants. What is of interest is the presence of both mV- and VN- prefixes in classes 3, 4, 9 and 10. We might again attempt a solution involving metathesis which would change mu- and mi- into un- and in-, but as in Tuki, we would run into the problem of accounting for the failure of one nasal class to undergo the process; here, class 1 mu-, which is identical to the class 3 prefix, historically. The exempting of class 6(a) ma- could be done phonologically (i.e. on the basis of the vowel /a/). It is particularly interesting to point out, however, the following "collective" forms in the third column of (15).

(15)	singular	plural	collective	gloss
	nìbfi	mʷàbfi	àmfi	'palm tree'
	nèbàt	màbàt	àmàt	'cloth'
	nèfè	màfè	àmè	'melon'
	nèhàs	màhàs	àmàs	'twin child'
	nèkòkòl	màkòkòl	àmòkòl	'bitter kola'

For certain nouns belonging to 5/6(a), Dugast (1971:72) points out that there is a phonetic difference between the 6(a) plural and the 6(a) collective. As noted in (15), the latter involves the change of *mà- to àm-, with a concomitant change of the stem-initial consonant to b-. The collective in all other genders is the normal mà- form. Dugast suggests that àm- comes from àmà-, and hypothesizes that the initial vowel is a preprefix. If this is so, then Tunen would have acquired a prepreprefix in 6(a) only when its function was to signal a collective of a 5/6(a) noun.

It should be noted that the difference between mV- and VN- can be predicted in the relevant classes on the basis of the stem-initial consonant: if the stem-initial consonant is /b,d,j,g/ or a nasal, the prefix will be VN- (with simplification of VN-N to V-N); if the stem begins with any other consonant--or if it begins with a vowel--the prefix will be mV-. A quick glance through the many examples given by Dugast verifies this complementary distribution of the two prefixes.

That there should be such variants in 9/10 as well comes as a surprise. The same distribution based on the stem-initial consonant is in effect here. In fact, classes 4 and 10 are identical in both noun prefix and concord in Tunen. While it might be plausible to derive class 4 IN- from either *i-mi- or *mi- (by metathesis), it would be hard to maintain either approach for 9/10. The initial m- in 9/10 is an innovation in Tunen (cf. the unusual be- prefix in class 9 in Mbe). We thus propose 9/10 *iN-, which is more in line with the comparative evidence. The nasal falls except before /b d j g/ and nasals, and whenever it falls, the noun acquires an initial m-, much as NB languages must be supposed to do in 1, 3 and 4. That is, whatever caused NB to acquire m- in these other classes has caused the m- in Tunen 9/10. Mbe presents a curious parallel to this development, as noted, because it has initial b- not only in classes 1, 3, 4 and 6a, but also in class 9. (Class 10 does not exist in the language.) Since this b- is the result of denasalization of m-, class 9 in Mbe appears to have undergone the same acquisition of m- as in Tunen. (As queried earlier as a sidenote, one might ask whether plural class 18 isn't simply PB class 13 *tu-, which becomes u- and then also acquires an m-.)

Whatever the ultimate explanation for m- in 9/10 in Tunen and the prefix shape VN-, it is likely that GB, Ekoid, Kenyang, Bakossi (A.15b), Bafia (A.53) and other northwest Bantu languages having N- as their class 1 or 3 prefix traversed an intermediate VN- stage (cf. Watters (1980), who proposes a metathesis analysis of prefixes followed by vowel-initial stems in Ekoid).

2.2. Nasal concord prefixes

In the preceding section we saw that most, if not all, NB languages have or had nasal noun prefixes in the appropriate classes. The subject of this section is the presence vs. absence of nasal consonants in the corresponding *concord*s of these classes. It is often assumed that PB had non-nasal (pronominal) concords only--the so-called "secondary concords" found in Eastern Bantu languages. Thus, the concords of the nasal classes are expected to be *jù- (class 1), *gù- (class 3), *gǫ- (class 4), *gǫ- (class 6(a)), *jì- (class 9) and *jǫ- (class 10) (Meeussen 1967). In other words, the secondary concords are identical to the noun prefixes found outside NB (cf. (1) above). This fact alone provides strong evidence that NB has innovated the nasals. In developing mV- and N- prefixes, the process hit noun prefixes, but not concord prefixes.

However, this last statement concerning the concord prefixes is too general for two reasons. First, even the more conservative Eastern Bantu languages such as Luganda have agreement processes which "copy" the *nasal* variant of the appropriate noun class onto the agreeing element. Adjectives frequently have this property of "primary concord" as in Luganda δ -mú-ntú δ -mú-nénè 'a big person'. This fact has caused some (e.g. Heny 1972) to argue that adjectives are nouns in Bantu. The second reason why the above statement is oversimplified is that many northwest Bantu languages show nasals in the pronominal concords where central Bantu languages show secondary concord. This might be explained by hypothesizing that there is an on-going process of replacement of secondary concord by primary concord. That is, the form on the noun is creeping into the agreeing elements: the possessives, demonstratives, subject and object markers, etc. which are expected to have non-nasal reflexes. In some languages (e.g. Bakossi (A.15b; Hedinger 1980), the process is nearly complete for nasal classes other than 9/10. The process seems to take place by class and in an orderly fashion. We shall study this process in this section. We are lucky to have at our disposal an excellent comparative study on the noun classes in Bantu (Kadima 1969). Most of the information in this section comes from Kadima, although we have supplemented and/or verified his findings through other sources in the literature. Our main purpose is to demonstrate that the incomplete concord nasalization process is of potential bearing in understanding the nasal classes themselves. Because they work somewhat differently, we shall first consider classes 3, 4 and 6(a), and then turn to classes 1 and 9/10.

2.2.1. *Classes 3, 4 and 6(a)*. As indicated in (1), Central Bantu languages are expected to have the respective noun class prefixes mu-, mi- and ma-. The expected pronominal concords are gu-, gi- and ga-. The chart in (16) shows that languages primarily in Guthrie's zones A, B and C do not follow this pattern [see next page]. For the purposes of this chart I have considered prefixes such as bu-, bi- and ba- to be *nasal*, while prefixes of the shape Gu-, Gi- and Ga- (with or without the G-) were considered non-nasal. (Languages such as Tuki, which have a distinction between 6 and 6a have been left out; in any case, their concords are generally non-nasal--see below.) It will be observed that *all* of the 52 languages listed in (16), most of which are northwest Bantu, have a nasal concord in 6(a). Moving from right to left in the chart, we observe that 38 out of the 52 languages have a nasal concord in class 4, while only 20 have a nasal concord in class 3. (By concord we refer of course to *pronominal* concord.) Thus, there is no Bantu language which has a nasal concord: (a) in class 3 only; (b) in class 4 only; (c) in classes 3 and 4 only; and (d) in classes 3 and 6(a) only. Stated as an implicature, a nasal concord in class 3 implies a nasal concord in class 4 which in turn implies a nasal concord in class 6(a). Once outside of the northwest zones A, B and C, the vast majority of Bantu languages lack a nasal pronominal concord in any of these classes.

The interpretation of these data is not obvious. We assume that the m-found in the concord of class 6(a) is the result of the merger of 6 and 6a: when the two classes merged in *these* NB languages, the result apparently was that class 6(a) nouns took on both the prefix and concord shape of class 6a. This does not, of course, account for Tuki 6 an- vs. 6a ma-, nor the mysterious collective 6(a) am- in Tunen. While an- and am- could conceivably have derived from earlier a-ma- (in which case 6 and 6a would have had nearly identical *nasal* prefixes), this does not explain the difference in concords in Tuki (oral for class 6, nasal for class 6a). It should be noted that some of

(16)	Zone	Language	class 3	class 4	class 6(a)	
	A.11	Lundu	x	x	x	
	A.15b	Bakossi	x	x	x	
	A.22	Bakweri	x	x	x	
	A.24	Duala	x	x	x	
	A.31	Bubi	x	x	x	
	A.34	Benga	x?	x	x	
	A.44	Tunen	o	o	x	
	A.53	Bafia	o	(x)	x	(4=6)
	A.72a	Ewondo	o	x	x	
	A.74a	Bulu	o	x	x	
	A.75	Fang	o	x	x	
	A.83	Makaa	o	x	x	
	A.91	Kwakum	o	(x)	x	(4=6)
	B.11	Mpongwe	o?	x	x	
	B.31	Tsogo	o	x	x	
	B.43	Punu (=H.43)	o	x	x	
	B.52	Nzebi	o	x	x	
	B.70	Tio	o	x	x	
	B.74	Boma	x	x	x	
	B.77a	Kukuya	o	x	x	
	B.81	Tiini	x	x	x	
	B.86	Dzing	o	o	x	
	C.30	Iboko	x	x	x	
	C.31	Mabale	x	x	x	
	C.32	Bobangi	x	x	x	
	C.34	Sakata	x	x	x	
	C.35	Ntomba-N	x	x	x	
	C.37	Buja	x	x	x	
	C.41	Ngombe	x	x	x	
	C.45	Beo	o	x	x	
	C.51	Mbesa	x	x	x	
	C.61	Mongo	x	x	x	
	C.75	Kela	x	x	x	
	C.83	Bushong	x	x	x	
	D.21	Bembe	o	o	x	
	D.22	Buyu	o	o	x	
	D.25	Lega/D.25a (Sile)	o	o	x	
	D.26	Binja-S	o	o	x	
	E.51	Gikuyu	o	o	x	
	E.54	Tharaka	o	o	x	
	F.31	Nilamba	o	o	x	
	H.16	Kongo/H.16c Yombe	o	x	x	
	H.31	Yaka	o	x	x	
	H.32	Suku	o	o	x	
	H.33	Hungu	o	x	x	
	J.51	Hunde	o	o	x	
	K.21	Salampasu (=L.21)	o	o	x	
	K.23	Ruund (=L.23)	o	o	x	
	K.51	Mbala	o	x	x	
	L.22	Mbagani	o	x	x	
	L.31b	Lwalu (=Lulwa?)	x	x	x	
	L.32	Kanyoka	o	o	x	
			<u>20</u>	<u>38</u>	<u>52</u>	

the NB languages which have class 6(a) m- are located in East Africa (e.g. Gikuyu) and are thus far from the northwest Bantu zones A-C. Finally, the same nasal reflex of class 6(a) concord is found in WB languages where 6 and 6a have merged--e.g. PEG and some Ekoid. Some Ekoid languages keep 6 and 6a distinct, while still others merge them with an oral concord (Watters 1980).

That class 4 should, more than class 3, pattern with class 6(a) may seem to have to do with its plural status, which in turn may be responsible for the occasional merging of 4 and 6(a) in both WB and some northwest NB. In PEG, for instance, class 4 was replaced by class 6a (Hyman 1972), as has also happened in Bafia (A.53; Guarisma 1973), much of Ekoid (Watters 1980), and Kenyang (Voorhoeve 1977). Thus, the plural of a class 3 noun is derived in these languages by adding (or substituting) a class 6(a) prefix to the singular--e.g. Mbui (EGB) ñ-t⁵⁵ 'leg', pl. m^h-ñ-t⁵⁵. The languages in (16) which have nasal 6(a) concord but oral 4 concord are primarily in zones D, E, F and the one J language cited, Hunde. It is interesting to note in this connection that Tuki, always a problem language, has a class 4 with prefix i(N)- and demonstrative concord -je, but at least two nouns with a prefix mi- and concord -mi. Hyman (1980) recognizes these nouns as a special 4a plural designation and regrets not having been able to study this unusual noun class more in depth.

Of the three classes in (16), class 3 shows by far the fewest cases of nasal concord. Except for Boma (B.74), Tiini (B.81) and Lwalu (=Lulwa L.31b?), languages having a class 3 nasal concord all fall within zones A and C. Perhaps in this case we are dealing with an analogical process--i.e. the nasalization of the concord based on the nasal consonant found in the noun prefix. This would be m- in most cases, although most of the zone C languages in this category have denasalized all prefixal m's to [b]. (As we noted earlier, there is a strong tendency in both WB and NB for all prefixes and concords to involve b-where denasalization has taken place.) There are several additional indices of the relative resistance of class 3 to have a nasal concord reflex. In both Bubi (A.31) and Mongo (C.61), the concord of class 3 is bo- when followed by a consonant. However, in both languages the class 3 concord is w- when followed by a vowel. The former concord derives from mo- by denasalization. Since mw- is expected to develop into bw- (acceptable as a sequence in at least Mongo), the latter concord appears to be a reflex of go- which develops into gw- and then loses its initial g-. Similarly, in Kele (=Ngom; B.22) in (17), the class 3 noun prefix is ð- with consonant-initial stems, but gw- (!) with vowel-initial stems (Guthrie 1953):

(17)	<i>class</i>	<i>noun prefix (-C)</i>	<i>noun prefix (-V)</i>
	1	ð-	mw-
	3	ð-	gw-
	4	mɛ-	m -
	6(a)	ma-	ma-

Although classes 1, 4 and 6 have a nasal prefix before vowel-initial stems, class 3 does not. Finally, way over in Haya (J.22), the following adjectival concords are found (Byarushengo 1977):

(18)	<i>class</i>	<i>noun prefix</i>	<i>adjective prefix ("primary concord")</i>
	1	mu-	mu-
	3	mu-	gu-
	4	mí-	mí-
	6(a)	ma-	ga-

It is seen that 1 and 4 use a *mv-* prefix on adjectives (=primary concord), while 3 and 6 inexplicably use secondary concord with a *g^v-* prefix. There are two possible explanations: either the nasal variants are spreading and class 3 is the last to be affected, or the oral variants are spreading and 3 and 6 are the *first* to be affected. Givón (1973) reports that Bemba (M.42) has primary concord in adjectives only in class 1, hypothesizing that secondary concord is spreading into the adjectives and has still but to affect the human singular class. Whichever hypothesis one accepts the problem remains of explaining why classes 1 and 3 do not work identically, since they start, presumably, with the same prefix. Unless there is to be semantic conditioning, the further possibility comes to mind that class 3 represents the *merger* of a nasal and non-nasal class--and that in many Bantu languages it is the non-nasal form which takes precedence in class 3 concord. (The assumption here is that mergers occur in such a way that the noun prefix can be from one class and the concords from the other class. It is even possible that the concords can be mixed, a situation which obtains in certain Ring languages where class 7 **ki-* has merged with class 12 **ka-*.)

It is perhaps appropriate at this point to mention the classes 20 *gu-*, 21 *gɪ-* and 22 *ga-*. These classes, which are found only in certain Eastern Bantu languages, bear resemblance to the concords of class 3, class 5 (?), and class 6(a). Meeussen (1967) refrains from attributing these classes to PB, due to their limited distribution in the present day languages, although it is interesting to speculate that these represent derived variants of the classes whose concords they resemble. The pairing *gu-/ga-*, for instance, corresponds to a common 3/6 gender found in zone A and in WB. Could this be the missing class which merges with class 3 in most languages and causes resistance to nasalization?

2.2.2. *Classes 1 and 9/10.* We have seen in the preceding section how nasal variants have developed in the concords of classes 3, 4 and 6(a) in some languages. In the remaining nasal classes, i.e. 1, 9 and 10, there are far fewer nasal (pronominal) concords.

First of all, according to Kadima's survey (1969), there are no Bantu languages which have a class 1 concord *mu-* in pronominal forms (possessive, associative, demonstrative concords etc.). Class 1 thus parts company with class 3 on this score. There *are* some languages which have demonstrative forms beginning with *n-* in class 1 (and also class 9), extending even as far east as Safwa (M.25), e.g. *umwana ũnu* 'this child' (Voorhoeve, n.d.). The same *n-* or *ny-* is found in Ejagam interrogatives and demonstratives, in zone A (Duala, Ewondo etc.) and even outside Bantoid, e.g. Amo (Plateau; Anderson 1980). However, historically, this consonant most certainly belonged to the demonstrative (interrogative) itself.

Classes 9 and 10 also lack the nasal concord characteristic of classes 3, 4 and 6(a) in the languages in (16). Except in adjectives in primary concord, we expect glide reflexes for the concords of these classes.

This does not mean that we lack nasal concords entirely. First, we have noted the occurrence of primary concord on adjectives in many Bantu languages, where adjectives take all of the noun class characteristics of nouns. Second, there is the important class 1 object marker (OM) *mu-* which is found in all NB zones (through rarely outside NB--see next section). Here class 1 is alone in having a nasal reflex just as it is alone in placing primary (nasal) concord on adjectives in Bemba (Givón 1972). If adjectives are nouns, then class 1 is the most likely to have nasal adjective prefixes, but still the least

likely to have a nasal in pronominal concords (other than the exception OM mu-).

3. TOWARDS A SOLUTION

As stated at the outset of this paper, I am not in the position to resolve the entire issue of nasal noun classes in Bantu/Bantoid. What I hope I can do, however, is outline a series of possible solutions--or hypotheses--which can then be scrutinized and judged for their relative merits. I do not think any of the hypotheses to be considered in this section satisfactorily and completely answers the question of how Bantu got its nasals in its noun classes, but it would be hard to believe that at least one of these explanations does not have at least the basis for the ultimate solution. These hypotheses should of course be tested against available information and against the more and more data that are now becoming available from the GB borderland.

The major questions are, I believe, the following: (a) Where does the *m-* in classes 1, 3 and 4 come from? (It can be safely assumed that the *m-* of class 6(a) is from 6a **ma-*.) (b) Where does the *N-* in classes 9 and 10 come from? (c) Is there a relationship between (1) and (2)? (d) Why are nasal reflexes more prevalent in some class concords than in others? (e) Given the complications in Tuki, Tunen, Kenyang, Ekoid etc., what did the Proto Wide Bantu noun class system look like?

With respect to the last question, there are at least three possible hypotheses concerning the presence of nasal prefixes: (a) only nasal prefixes existed in PB; (b) only non-nasal prefixes existed in PB (except 6a); and (c) both nasal and non-nasal prefixes existed. Hypothesis (a) can be ruled out since the concords of these classes are clearly cognate with the noun prefixes in non-Bantu languages. To assume that everyone but Bantu lost its nasals in these classes would be difficult to maintain in terms of time depth: the Bantu subgroup represents a much more tight unit than the non-Bantu "subgroup". Thus, although "loss" is more easy to explain than "gain" (because we need to find the *source* of the *m-* if it were present but lost), we must reject any explanation which assumes that Proto Niger-Congo/Kordofanian had nasals in these classes. (This does not even mention the problem of how we could restrict the so-called nasal-loss process so that class 6a would not lose its *m-*, but the other classes (presumably including class 6) would.)

The hypothesis in (b) that only non-nasal classes existed in PB is the generally accepted one. Class 6a is the exception, since this liquid/mass class definitely had the shape **ma-*. We do not know at present whether to reconstruct another class **mu-*, plural of class 19, and more attention will have to be paid to this class in the future.

The third hypothesis (c) suggests that there may have been both nasal and non-nasal prefixes in PB, as perhaps represented in some present day languages. This has never been proposed, as far as I know, but it is logically possible. One element is determining the time depth again: was there a PB stage where nasal and non-nasal elements stood side by side with perhaps different functions? If so, how do we account for the northwest Bantu languages with so many nasal concords? Have these languages extended the nasals into the concords by "analogy"? Finally, the possibility always exists that the nasal forms are related to earlier suffixes; or that the nasal forms are related to preprefixed prefixes, and the oral forms lack the preprefix. On this subject, cf. Meeussen (1973:13): "A correct view of the augment [preprefix] 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". As can be seen, the ultimate explanation is deeply rooted in Bantu morphology, and the nasals may be related to the resolution of other outstanding problems (tone on affixes, earlier suffixes, function of the preprefix etc.).

In the following two subsections we shall consider possible phonetic/phonological explanations and then possible morphological/semantic explanations. A brief summary and conclusion then follows.

3.1. *Possible phonetic and phonological solutions*

The simplest phonetic explanation, given the innovative nature of the nasals, is that nasals spontaneously appeared whenever a noun (and adjective?) began with a (low tone?) *GV-* or *V-* prefix. Thus, *u-* would acquire *m-* in classes 1 and 3; *i-* would acquire *m-* in class 4; and, of course, *a-* would acquire *m-* in class 6. In the last case, the acquiring of *m-* would cause the merger of classes 6 and 6a. Indeed, in marginal Bantu languages where 6 and 6a remain distinct, e.g. Kenyang, Ekoid R-S, and Tuki, class 6 shows evidence of having (or having had) a nasal in its prefix. Somehow, classes 9 and 10 would have to acquire *N-* rather than a *m-*. If 9/10 previously had *no* prefix, then we could simply add the *m-* and make it homorganic later; or we could specify that a homorganic nasal came into being directly. This might explain the schism between two groups of 9/10 nouns in WGB: those with *N-* are the ones which somehow lost or never had an *i-* prefix; those without *N-* today can be reconstructed with *}-/}-*. We would have to slightly amend the statement to predict the *mi-* of class 9/10 in Tunen (or the *be-* in class 9 in Mbe), but presumably the initial *i-* of this class existing at the appropriate time would have undergone the same process as class 4. It is interesting that so many fringe Bantu languages have no distinction between classes 4 and 10, and that so many NB languages have nearly identical properties for classes 4 and 9. Since class 4 is so frequently missing from languages in the GB borderland, this seriously raises doubts on its status in the proto language.

Of course, what is objectionable in all of the above speculation is that there is no natural reason why a *m-* should arise out of the blue. Let us therefore try to modify this stance slightly to provide a motivation. Let us assume still that *m-*'s are not proto. (We shall ignore the question of *N-* for the moment, recognizing that we can derive *N-*'s similarly if need be.) Let us also assume that there was an element "G" present before the vowel of the class 1, 3, 4 and 6 prefixes. Now we ask what kind of "G" could have developed into [m] in some environments, but [g/w/y] in others? A possible candidate is an implosive (or perhaps a "lenis" consonant, in Stewart's terminology). We can try either *b'* or *g'*. I will not attempt to relate this speculative venture to recent efforts to reconstruct four series of consonants in PB (Stewart and van Leynsdeele for Tunen; Stewart for Proto-Volta-Comoe; Mukarovsky for Proto-"Nigrític"). It might be that we need implosives in addition to a fortis-lenis distinction, in any case. All I wish to show is that phonetic developments of the kind I shall now discuss would make phonetic sense. Let us first consider **b'*, i.e. an implosive bilabial stop. Greenberg (1970), in his study of glottalic consonants, indicates the naturalness by which implosives become their corresponding nasal. Thus, **b'* can easily change into [m]. At the same time, it is natural for **b'* to become velar. Thus, compare the following forms from Gwari and Nupe, two closely related Kwa languages, in (19).

(19)	<i>Gwari</i>	<i>Nupe</i>	<i>Proto</i>	
	ēb'f	ēgT	*b'f	'child'
	ēb'wá	ēgwā	*b'ḡ(k)	'hand'

While Gwari has implosive [b'] for 'child' and 'hand', Nupe has a velar [g]. The proto forms to the right are for Proto-Niger-Kaduna [a subgroup of Kwa], but can be extrapolated back probably to Proto-Kwa or Proto-Niger-Congo itself. The same natural development of a velar from an earlier implosive b' is seen in the Ring languages within GB:

(20)	<i>Munkon</i>	<i>Bafmeng</i>	<i>Proto-GB</i>	
	àbô	āyô'	*-b'ô'	'hand'
	nɔ̀bòmé	Tyúm	*-b'ùm'	'egg'
	bɔ̀	yô	*-b'á	'they' (SM, class 2)

As in Niger-Kaduna, these correspondences are limited to only a few lexical items, suggesting that implosive b' was relatively restricted in the proto language.

The fact that these correspondences are so restricted need not necessarily discourage us from this kind of phonological explanation per se. The alternation between G- and m- in Bantu is of course also restricted to only a few forms (in this case, to noun class affixes only). Perhaps these affixes acquired some phonetic feature not found elsewhere in the grammar or lexicon of PB. Otherwise a morphological solution would be required. Even this somewhat pushed phonological solution would not explain why hypothetical *b' would have gone to m- on nouns (and adjectives), but to G- elsewhere. Note, finally, that I have avoided positing *g', i.e. a velar implosive. Velar implosives are rare in language, and it is not known to me whether they could easily convert to a labial nasal (m-). A *b' could become velar, as we have seen. A most challenging question is whether the [b] found in the noun class markers in Mbe, Bubi and certain zone C languages can be related directly to *b' through a separate development.

3.2. Possible morphological and semantic solutions

From the above speculations we surmise that some element of morphology (or semantics) will be necessary in order to explain why only noun class markers are subject to this unusual development of nasality. A number of approaches are possible. I will consider the following: (a) merger of nasal and oral classes; (b) analogy from existing lexemes and/or grammatical morphemes; and (c) false segmentation.

3.2.1. *Merger of nasal and oral classes.* It is accepted beyond dispute that class 6 *a- merged with class 6a *ma-. This has been documented in preceding sections. Might there have been more classes in PB than we currently believe? In this case there would have been class 1 *u-, 1a *mu-; class 3 *u-, 3a *mu-; class 4 *i-, 4a *mi-, and perhaps variants in 9/10 of i- vs. n- (although here I am inclined to believe we had i- and in- and a different explanation is called for). The evidence is far from persuasive, and yet bits and pieces here and there are suggestive. To wit:

In class 1, Ukele (Cross-River) shows a number of different noun prefixes: m-, n-, ñ-, ŋ-, w-, a-, o-, ɔ-, u-. In addition, there are two different pro-

nominal suffixes $-m\epsilon$ and $-b\epsilon$; i.e. one nasalized, one not. The $-b\epsilon$ variant occurs only with nouns whose prefix is $u-$, e.g. $\dot{u}-w\dot{a}n$ 'child'; nasal prefixed nouns such as $m-f\dot{o}ŋ$ 'cow' take $-m\epsilon$. Nouns such as 'cow', 'leopard' and 'elephant' should theoretically be in class 9/10 rather than Ukele 1/10, although there is some variation even in the EGB languages--and perhaps a historical link at some level (cf. Givón 1971). Class 9 has the prefix variants $e-$ and $\epsilon-$ in Ukele. The genders illustrated in the BCNCS (p.67) are as follows:

(21) <i>sg. cl.</i>	<i>pl. cl.</i>	<i>sg. con. pfx.</i>	<i>sg. con. sfx.</i>	<i>content</i>
$u_{m\epsilon}-$	$\dot{t}-$	$u-$	$-m\epsilon$	cow, leopard, elephant, pig
$u_{m\epsilon}-$	$ba-$	$u-$	$-m\epsilon$	person
$u_{b\epsilon}-$	$ba-$	$u-$	$-b\epsilon$	child, female
$e-$	$i-$	$\epsilon-$	$-y\epsilon$	elephant, animal, buffalo, crocodile, leopard, snake, tortoise, skin/hide, road/path, bean

Since the BCNCS gives eight different reflexes for the $u_{m\epsilon}-$ class prefix, it can be assumed that there are more examples available for at least the first two genders (if not also the third). It is clear that the $e-/i-$ gender contains many animals and thus on phonetic and semantic grounds can be recognized as the corresponding reflex to Bantu 9/10. This would mean that the first gender is 1/10. Since 'elephant' and 'leopard' appear under both 1/10 and 9/10, it is conceivable that the singulars of these nouns have shifted from class 9 to the $-m\epsilon$ variant of class 1. However, the difference in singular concord suffixes cannot be explained by relating the nasal variants to earlier class 9 affiliations. As seen in (21), the class 9 concord suffix is distinct from both class 1 suffixes. In the absence of a more satisfactory explanation, we are forced to recognize two different class 1's. (It may be relevant that the $-b\epsilon$ suffix for the non-nasal class 1 is identical to that found in class 2. Could the plural suffix have spread into the singular?)

In class 3/4 we have already noted the unusual Tuki data (Hyman 1980). The normal 3/4 prefixes are $\dot{o}(N)-/\dot{i}(N)-$ (with the nasal predictably appearing whenever the stem-initial consonant is a voiced stop or affricate). The corresponding demonstrative concord is $-jo/-je$. On the other hand, I have found two nouns whose prefixes are $\dot{n}-$ in the singular; one has the prefix $m\dot{i}-$ and the other has $m\dot{n}-$ in the plural: $\dot{n}-k\dot{u}ŋk\dot{u}m\dot{e}/m\dot{i}-k\dot{u}ŋk\dot{u}m\dot{e}$ 'chief(s)', $\dot{n}-k\dot{u}t\dot{e}/m\dot{i}-\dot{n}-k\dot{u}t\dot{e}$ 'cloud(s)'. The plural demonstrative concord is $-m\dot{i}$; i.e. the nasal variant of class 4! (Unfortunately I don't have any data on the demonstrative concord of the singulars of these two exceptional nouns.) The noun prefix $m\dot{i}-$ differs from the more regular prefix $\dot{n}-$ exactly as class 6a $m\dot{a}-$ differs from class 6 $\dot{a}n-$ in Tuki. Thus, one might try to say that $\dot{n}-$ is from $i-m\dot{i}-$, while $m\dot{i}-$ simply lacks the preprefix. This would not explain, however, why the *concord*s are different, any more than it would explain the difference between class 6 $-i-$ vs. class 6a $-m\dot{a}$ in the demonstrative concords. (Note that by saying that class 4 = class 9 the problem would still remain: we would have a gender 3/9 and another gender 3a/4a. While the exact relationship between classes 4, 9 and 10 is also not known, it seems probable at this point that there were three distinct classes in the proto language, which could either be distinct or sometimes merged in individual languages.)

As for 9/10 we have first the familiar WGB situation where some nouns in this gender have a nasal prefix and others do not. All may have had the $\dot{i}-/\dot{i}-$

prefixes of PBC. It may also be of interest that 9/10 nouns are divided in Mbe--similar to the way some 9/10 animals are in 1/10 in Ukele. Thus, according to the BCNCS (p.48), Mbe 1/2 animals include 'dog', 'bushcow', 'buffalo', 'tortoise', and 'leopard', while 9/10 animals include 'animal', 'lion', 'elephant', and 'rabbit'. (I have been unable to consult the original source (Bambogoše 1965).) There seem to be two possibilities: either there was a *third* class/gender, or there is simply confusion between 1/2 and 9/10. (In Mbe, class 2=class 6a, a fact which may have played some role, since there is no class 10 in the language; instead, the plural of 9 is bu-, which may be class 14 [as in Ejagam 9/14 and Kiboum 9/14] and probably not a denasalized form of plural class 18.) The three classes would have had the following prefixes: \dot{u} -, \dot{n} -, \dot{l} -. The \dot{u} - prefix is subject to "nasalization" to become $m\dot{u}$ -. The \dot{n} - prefixed nouns either merge with class 1 (as in Ukele and Mbe?) or class 9 \dot{l} - (as in most of Bantu). The ubiquitous \dot{n} - prefix of 9/10 in Narrow Bantu would be the result of this merger, according to this hypothesis.

While I think the possibility of more proto classes needs always to be kept alive, I think that the mere reconstruction of two different class 1's, 3's, 4's, 9's and 10's does not really solve the problem. First, in the case of Noni, as seen in the examples in (8) above, we have to reconstruct \dot{l} - \emptyset -/ \dot{l} - \emptyset - vs. \dot{l} -N-/ \dot{l} -N- in order to account for the tonal changes from singular to plural (cf. Hyman 1980; in preparation). Thus, a single 9/10 gender would have been \dot{l} -/ \dot{l} - as in PBC, with the introduction of some N's for unknown reasons (see the following sections for other ideas on the subject). The real problem with this proliferation of classes is the following: even if there were coexisting nasal and nonnasal classes, where did Bantu get the nasal classes? Why are these would-be nasal classes not represented--or only very slightly represented (cf. Cross-River in (2)) outside of Bantu? Thus, rather than really solving the problem with such an analysis, we have simply redefined it.

3.2.2. *Analogy from existing lexemes and/or grammatical morphemes.* An alternative idea one sometimes hears expressed is that some or all of the nasals may be the result of analogy on the basis of the initial nasal consonant of some existing morpheme (either lexical or grammatical) in the proto language. Such lexical items might include 'person' and 'child' from class 1 and 'animal' from class 9. Let us consider these in turn and then consider appropriate grammatical morphemes.

The word for 'person' is reconstructed *-ntu for Bantu (Meeussen 1967), *neto for PBC (de Wolf 1971), and *ni(n)tu for "Proto-Nigrític" (Mukarovskiy 1977). Greenberg (1974) suggested two separate roots *-ntu for NB and *-ne for Wide Bantu (or perhaps a larger unit, even BC, in which case -ntu [or -tu, if the initial n- is a reflex of -ne] would be a NB innovation. Meeussen (1974) countered by pointing out evidence of a final -t̄ in Plateau. Thus, on the basis of comparative evidence, a reconstruction involving two syllables and a -tu ending would seem in order. It is conceivable that the ne- part is related to the homorganic nasal found in many class 1 nouns outside NB (and even within; cf. Givón 1971). This might especially be the case for deverbal agentive nouns which frequently require a homorganic nasal prefix to indicate class 1 affiliation. According to the argument, ne- would have developed into n- and then spread to other nouns (and perhaps also to 9/10 where agentives may have belonged).

Perhaps at about the same time, another root, PB *-yánà 'child' would, in class 1, have developed from \dot{u} -yánà to \dot{u} -wánà by either glide assimilation to the preceding rounded vowel, or by glide deletion. (De Wolf reconstructs this root as *ngwana, although as we shall see there is no reason to reconstruct an

initial nasal.) Now, because of the medial nasal consonant -n-, nasalization would have spread regressively to develop eventually into ù-mwǎnà (ù-ŋwǎnà in other languages?). According to the argument, the resulting mw- (/mu/) would have then been analogized onto other class 1 nouns. It is not hard to show that some cases of an initial nasal on 'child' arose in just such a way. Thus, the Momo languages (WGB) should not have an initial nasal on 'child', but they usually do, e.g. Moghamo ŋwǎn (cf. wǎn in dialectal Ngamambo). Even outside Bantu, Gokana (Cross-River) [mʌn] 'child' is phonologically /vʌn/ (reconstructed as *wʌn. However, this kind of proposal--besides being difficult to support with confidence--seems implausible.

Perhaps a more satisfying attempt can be made concerning the root for 'animal'. This root is reconstructed *-yámà for PB, *nàma for PBC, and both *jam and *nam for Proto-Nigritic. There clearly is a problem here, one which may have relevance. First, even though the PB root was perhaps *-yámà, the fact that it is in class 9 with a Ñ- prefix guarantees that it will always begin with ñV or nV. Outside Bantu there are both nasal and non-nasal reflexes. Thus, Mukarovsky lists instances of 'animal' or 'meat' with a palatal consonant (y- or j-) in 10 languages (two West Atlantic, three Gur, three Togo-Remnant, 1 Western Kwa and 1 Eastern Kwa). [His Eastern Kwa example, Nupe, is a compound 'something to eat' and therefore a false cognate.] He lists 43 languages where this root begins with either n-, l- or r- (including representatives from Gur, Togo-Remnant, Western Kwa and Eastern Kwa). Since de Wolf has reconstructed *nàma for PBC, we can assume that there is considerable evidence for an initial alveolar consonant in Benue-Congo. (Cf. PWG *l-nàm/*r-nàm.) In fact, it would appear that the palatal nasal is restricted to Bantu (Narrow and Wide). What does this all mean? First, it would seem hard to explain the presence of a liquid in this root with either reconstruction: Ewe (Western Kwa) e-lǎ, Buli (Gur) lam, Yoruba (Eastern Kwa) e-rǎ (from Mukarovsky). It does not seem likely that *n- would have denasalized before a vowel which in turn either was followed by a nasal consonant -m, or was itself nasalized. I don't know if it has ever been proposed, but it would seem wiser to reconstruct *dama (perhaps *d'ama), and to assume that both the nasalization and/or palatalization of the initial had to do with the nature of the prefix (and also the nasalizing effect of the upcoming -m). Of course, the n- found in many West African languages cannot with certainty be attributed to *n- anyway, since so many Kwa languages have a complete complementary distribution between a liquid (before oral vowels) and [n] (before nasalized vowels). If Stewart's attempts to reconstruct four series of consonants (plus implosives?) for PB are shown to be correct, 'animal' would be a good candidate for initial *d'. This consonant would have become n-, because it occurs in a nasal environment. That *y- cannot be the original consonant is seen from a comparison of the PB roots for 'snake' *-yókì (and variants, according to Guthrie 1967-71) and 'bee' *-yókà. These occur in WGB (and elsewhere in BC) with non-nasal initials, while 'animal' appears with a nasal one. Thus, consider the Esimbi reflexes of the three roots in (22):

(22) è-nìm / é-ñìm 'animal(s)' vs. è-zú / é-zú 'bee'
 è-zú / é-zū 'snake'

(In the examples to the right, [z] is the regular reflex for *y- in Esimbi and contiguous languages.) We thus reconstruct an alveolar for 'animal', but a palatal for 'bee' and 'snake'.

The argument being considered here is that the nasal developed in 'animal' spread onto other animal nouns and eventually throughout 9/10 in NB, EGB and

Ekoid (among others). The reason why this would be possible is that 9/10 is the animal gender and nouns in it might therefore conform to the prototypical member 'animal'. There are, however, at least two problems associated with this hypothesis. First, in WGB most 9/10 animals fall into the non-nasal group, e.g. in Babanki (Hyman 1977a). Thus, mostly non-animals would have had to acquire a nasal from 'animal', while animals would not have. Second, in these same languages, the stem 'animal' itself belongs to the *non-nasal* group. Unless it can be demonstrated that all 9/10 nouns had a homorganic nasal prefix in PWG at one time, 'animal' could not have served as a model for analogy in this way.

Thus, as attractive as such lexical analogies might be as a possible source of nasals in some classes, this approach runs into unresolvable difficulties and is not likely to have provided the source of the nasal prefixes in Bantu.

We might, however, consider a related attempt, which is the analogy of nasals not from a lexical item such as 'animal', but from a grammatical element. The strongest candidate for such an analogy concerns the third person singular human (object) pronoun 'him/her' which reconstructs as *mu- in PB. Although the object pronouns take a nonnasal form in classes 3, 4, 6(a), 9 and 10 in most NB languages, the class 1 object marker (OM) is mu-. (The OM's are usually prefixes appearing before the verb stem. In most Central Bantu languages they are in turn preceded by other prefixes. In the northwest area they frequently occur as the *only* verb prefixes; i.e. they occur as the initial element on the verbal form. Since there is little evidence that they were preceded by other prefixes in PB, their initial status on verbs would be parallel to the initial status of class prefixes on nouns. Analogy would therefore be possible.) Thus, if the class 1 noun prefix was *ù-, this OM mu- would have provided a V/mV alternation that could have served as the basis for analogy in this class (and in other classes by extension). First, let us firmly establish the existence of *mu- in the proto language.

Besides existing in NB, *mu- has a direct reflex in the class 1 and 3 pronouns in Esimbi (K. Stallcup, personal communication), which are in fact pronounced [mu]. (Perhaps this mu provides the source for the -me suffix in Ukele; it can also be noted in this connection that Boki, another Cross-River language, has an associative and copula morpheme mu for just this class.) The most striking evidence that *mu- goes beyond NB comes from Fula, a West Atlantic language originating somewhere in the extreme west coast of the continent. Arnott (1970) indicates that the concord for the human singular class varies between -o, -jo and -d'o. However, the form of the human subject and object pronoun is [mo], which also appears on interrogatives. It may not be too wild to speculate that *mu was a human pronoun 'him/her' in Proto-Niger-Congo and was independent of the noun class system. It may, in addition, have been a "fourth person" form, i.e. used when a referent is not coreferential with another third person referent in the same clause. (The coreferential form would have been -e, which is used in the form of *eé- as a reflexive in Central Bantu. The postposed -e is the normal third person singular human object pronoun in most non-Narrow Bantu. In subject position I expect the forms *ù- (coreferential) vs. *à- (non-coreferential).) Perhaps mu- even derives ultimately from *moC 'one, other', in which case its non-coreferential use would be explained.

The one reservation about postulating the development of a noun prefix mu- on analogy with the OM mu- is that class 1 has been seen to have fewer nasal concords in Bantu than classes 3, 4 and 6. Of course, we may have a difference in time depth: the OM mu- produces a noun prefixes mu-. This spreads somehow.

Then the nasal prefixes in classes 1, 3, 4 and 6(a) start spreading independently into the concords, this time not affecting class 1 (since its pronominal concords are never *mu-* except for the OM itself).

Far-fetched perhaps? While the class 1 OM *mu-* provides a natural source for a bilabial nasal prefix which can be reconstructed beyond PB, the process by which it would have spread to other classes--and especially have not affected the remaining concords of class 1--leaves us unconvinced. The only other grammatical morpheme which might have served as the model for analogy is suggested by the *m-* prefix of deverbal nouns in Tiv. Perhaps there was a nasal prefix functioning as a nominalizer which was distinct from the noun class system. If the form of this nominalizer was *m-*, then derived nouns would have had the form *m-prefix-stem*. (In other cases one wonders whether a homorganic nasal might have been a nominalizer, in which case we would instead have the word structure *prefix-N-stem*.) This *m-* would have been dropped before all prefixes except classes 1, 3, 4 and 6(a)--and possibly 9/10, where its presence before a stem-initial consonant would have caused its development into *N-*. The motivation for this distribution would be that classes 1, 3, 4 and 6(a) had vowel prefixes and the syllabified onto this vowels to produce *mu-*, *mi-* and *ma-*. This kind of "false segmentation" is treated in the following section.

3.3. *False segmentation.* Rather than postulating an analogical process by which existing nasals would have spread onto all relevant prefixes, it is possible that the initial *m-* historically derived from some element which was preposed to the noun. Assuming that classes 1, 3, 4 and 6(a) had *V-* prefixes at this stage, a process of "false segmentation" can be schematized as follows:

$$(23) \quad Vm \# V\text{-stem} \Big|_{\text{noun}} \rightarrow V \# mV\text{-stem} \Big|_{\text{noun}}$$

Let us imagine first the simplest solution: an additional prefix was added to nouns with perhaps the function of definitizing them. Let us say that this additional prefix, or "preprefix", had the structure (C)V*m-*, where (C)V stands for the appropriate noun class concord; e.g. the class 7 preprefix would have been *kim-*, while the class 1 preprefix might have been *um-*. (The final *m* would thus represent the 'definite article' which must take a noun class agreement marker, as seen.) This reconstruction of the preprefix yields forms as in (24a).

(24) a.	<i>kim-ki-stem</i>	(7)	b.	<i>ki-ki-stem</i>	(7)
	<i>um-u-stem</i>	(1)		<i>um-u-stem</i>	(1)

Now, imagine that a process is introduced whereby the [m] of the preprefix is deleted before consonant-initial noun prefixes. This yields the forms in (24b). The sequence *kim-ki-* becomes *ki-ki-*, while the sequence *um-um-* becomes *um-u-*. However, note first that [m] alternations now with zero and, second, that the unchanged sequence *um-u-* is in any case syllabified [u.mu.]. Because of this, it is entirely possible that speakers having the system represented by (24b) reanalyzed the [m] as part of the noun prefix, rather than as a part of the preprefix. (The argument can be made with respect to preposed elements other than the preprefix--see below.) Then, this [m] would have spread to noun forms which may have even lacked the historical preprefix. (The homorganic nasal prefix of 9/10 would either represent the assimilation of this **m* or is a separate development. The latter is more likely, I believe.)

Before further speculating on the source of the [m] in this process of false segmentation, let us first consider two languages where similar events have taken place: Amo and Aghem. In Amo, a Plateau language, Anderson (1980)

has noted the following alternations in the second noun of a 'N₁ of N₂' associative construction:

(25) a.	kù-zì	'hawk' 3	→	àfà kù-zì	'leaves of a hawk'
	lè-kpì	'rat' 5	→	àfà lé-kpì	'leaves of a rat'
	kì-sùm	'hare' 7	→	àfà kf-sùm	'leaves of a hare'
b.	ù-clf	'father' 1	→	àfà ñ-clf	'leaves of a father'
	à-clf	'fathers' 2	→	àfà ná-clf	'leaves of fathers'
	ì-ná	'cows' 10	→	àfà nf-ná	'leaves of cows'

In (25a) it is observed that the N₂ noun undergoes a process of tone raising (from low to high) on its CV- prefix. In (25b), where the noun prefix underlyingly consists solely of a low tone vowel, a /n/ appears on the N₂ noun: ù- becomes ñ-, à- becomes ná- and ì- becomes nf-. Anderson thus postulates an underlying associative morpheme /ñ-/ which is deleted when the following conditions are met: (i) the prefix of the N₂ is CV-; (ii) the prefix of the N₂ carries low tone; and (iii) the N₁ is expressed. A comparison of the forms in (25a) and (25b) verifies condition (i). Condition (ii) will be the general rule, since very few nouns begin with a high tone prefix. When they do, however, the nasal is expressed, e.g. ká-bèrè 'sorcerer', àfà ñ-ká-bèrè 'leaves of a sorcerer'. Condition (iii) is needed because of forms such as á ñ-kù-zì 'those of a hawk'. In this form, where the pronominal element á 'those' (cl. 2) has replaced the noun à-fà 'leaves', the nasal must occur. As seen in the form for 'leaves of a father', the expected associative prefix nú- is simplified to ñ-. The reason why the /n/ has remained in the forms in (25b) is that the N₂ nouns in question have V- prefixes. Thus, the /n/ syllabifies onto this vocalic prefix and is retained. While not exactly parallel to the preprefix hypothesis, the nasal forms in (25b) could spread to positions other than N₂ and thus represent a possible mechanism for change.

The second language is Aghem, a WGB language much closer to the Bantu languages where nasal prefixes are found. As reported by Hyman (1979b), the locative/instrumental preposition has the following allomorphs in Aghem:

(26) a.	fù	'hoe' 9	→	áñ fù	'with a hoe'
b.	fɛ-nɛ	'knife' 19	→	á fɛ'nɛ	'with a knife'
c.	ó-tɔ	'intelligence' 3	→	á ó-tɔ	'with intelligence'

In (26a) 'with' is realized [áñ-] before a prefixless noun. In (26b), the preposition is realized [á-], since the noun begins with a CV- prefix. Finally, in (26c), the form of the preposition is [á-] when the noun begins with a V- prefix. (The [ɛ] is derived by a process of denasalization of non-stem-initial intervocal /n/, e.g. à-tsɛn 'heels', tsɛtɛ á wé 'heels of the child'. Nouns take a low tone prefix underlyingly after the locative/instrumental preposition.) We thus have a situation very much like that in Amó: the underlying form for this preposition is /áñ-/, and the /n/ will drop before a CV- prefix. It will not drop before a V- prefix, because it syllabifies onto this prefix. Again we see the naturalness of consonant loss before a CV- prefix, but not before a V- prefix. Could this concept be useful in explaining the Bantu nasals?

In order for a false segmentation to have occurred in classes 1, 3, 4 and 6(a) in Bantu, thereby producing mV- prefixes, it is necessary to find an appropriate pronominal element ending in -m. We have considered the preprefix, although there is no evidence that the preprefix ever ended in -m. From Greenberg's

(1978). study on how languages acquire gender markers we would expect to find a PB demonstrative to provide this source. However, there is no demonstrative reconstructed with -m in PB. This leaves only very questionable sources--e.g. the possessive pronoun -m 'my' (appearing with associative vowel as -am) or perhaps the morpheme *-mó 'one', whose final vowel would have dropped out. If we are considering lexical items which might have developed a grammatical function, the noun *-yómà 'thing' should be considered. This noun might, for example, have been used as an associative linker between nouns, e.g. 'stick thing-of child', much as it is used in certain West African languages. One notes a mysterious ma sometimes occurring in associative constructions in Bakweri (Stallcup, in preparation), and in Boki (Cross-River) the associative concord and copula for some reason take the form mu in class 1. (Schuh 1981 discusses the origin of a ma associative marker in certain Chadic languages, e.g. Kanakuru bil-i ma lowo-i 'the boy's horn' [alienable possessive marker]. While the Chadic languages are not related to Bantu, they are or were in close geographic proximity and have borrowed from Bantu. Schuh argues that Kanakuru ma is related to the masculine demonstrative, getting us back to the source Greenberg's model would predict.) Finally, a copula or focus morpheme ('it's a/the' + NP) would conceivably have provided a possibility, if a -m were only reconstructable. Thus, the concept of false segmentation provides the most attractive potential source for mV- prefixes, but cannot be substantiated at this time.

4. SUMMARY AND CONCLUSION

In the preceding sections we have presented the problem at hand and its multiple facets. We have seen that although much can be said about nasals in the Bantu noun class system, very little can be resolved. We can neither explain the enormous variation within Bantu (e.g. as regards primary vs. secondary concord) nor provide an unambiguous source for the first nasal prefixes. What we can do is reject certain previously held views. Thus, the notion that nasal prefixes can define a genetic unit termed Bantu is false. The GB languages represent a closely knit genetic group half of which has nasals, half of which does not. We can probably dismiss the idea that Bantu languages acquired nasals at the time they were one undifferentiated unit. Rather, the changes which have caused such variation in noun class marking took place at different times and spread from language to language. In other words, nasal prefixes can be borrowed and are subject to contact phenomena much the same way as purely phonetic changes (cf. Hyman 1977a for further examples concerning the realization of class 7 as *ki- or *a- in GB). Despite the tremendous efforts of the GBWG and others, a satisfactory answer to the nasal riddle is not available. Although we have gathered much important new information on the Bantu and Bantoid languages of Cameroon, many of the noun class systems have still not been analyzed fully (I am thinking particularly of the languages in A.40 and A.60). Perhaps there is a still uncovered noun class system which can help us understand the origin and spread of the nasal prefixes. Until such a system is discovered, we shall have to rework the masses of data already available and use our imagination.

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POSTSCRIPT

After completing this chapter I received a personal communication from Marie Anne Boum, who provides the following data on noun class prefixes and concords in Basaa (A.43):

class	noun prefix	possessive concord	adjective concord
1	mù-, Ì-	w' -	Ì-
3	Ì-	w -	ù-
4	mì-	ŋw' -	mí-
6(a)	mà-	m -	má-
9	ø-N-	y' -	ì-
10	ø-N-	y -	í-

The possessive concord shows nasals in 4 and 6(a) only, while adjectival concord shows nasals in 1, 4 and 6(a). It may be that class 1 is the most likely to have a nasal on adjectives, as Givón (1972) has shown for Bemba.