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THE PROTO-RECONSTRUCTIONS OF THE NYANG LANGUAGES

A DISSERTATION SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DIPLOMA OF ADVANCED STUDIES (D.E.A) IN LINGUISTICS

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DEDICATION

TO

MY daughter

MESSINA NKONGHO Marion Shirley

and

All my informants

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This work has seen the light of day thanks to many who contributed in one way or the other.

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Abbreviations and Symbols used in this Study

C	:	Consonant
V	:	Vowel
ø	:	Zero
/	:	Context / environment
≈	:	Equal to
[ ]	:	Phonetic transcription
/ /	:	Phonemic transcription
H / ´	:	Hight tone
L / `	:	Low tone
→	:	becomes / is realised as
__ #	:	Word final position
# __	:	Word initial position
#	:	Word boundary
N	:	Syllabic Nasal
C_1	:	Initial consonant
C_2	:	Final consonant
α	:	Alpha (place of articulation)
Vd	:	Voiced
Vl	:	Voiceless
*	:	diachronic mark for proto-phoneme / hypothetical reconstruction
ART	:	Advanced Tongue Root
PN	:	Proto Nyang
PB	:	Proto Bantu
SIL	:	Summer Institute for Linguistics
ALCAM	:	Atlas Linguistique du Cameroun
ed (s)	:	editors

Transcription and Glossing

I have used the International Phonetic Alphabet for transcription, with the following notable adaptations to the Nyang languages

Symbol used	IPA	
C	tʃ	(Voiceless Palatal – alveolar africate)
š	ʃ	(Vl Palatal alveolar fricative)
j	dʒ	(Vd Palatal alveolar affricate)
ɲ	ny	(Palatal nasal)
ʔ		(Glottal stop)

Dialect Names

Abbreviation	Dialect	Village	(from which the data was collected)
BAJ	Bajwa	Ntakwo	
BAS	Basho	Makwe	
BIT	Bitieuku	Bakumba	
CK	Central Kenyang	Bakebe	
KƐN	Kendem	Kendem	
KIF	Kifu	Ayong	
KIT	Kitwii	Manyemen	
LK	Lower Kenyang	Egbekaw	
NUM	Numba	Numba	
TAK	Takamanda	Bache	
UK	Upper Kenyang	Tali II	

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CHAPTER I

GENERAL INTRODUCTION

Languages are not static, but are constantly changing. The latest slang comes and goes. Our own language is subtly but noticeably different from that of our grandparents and the further back we go in time, the more remote and incomprehensible the language seems to be. Shakespeare's language is difficult for us; Chaucer's is even more so.

Fox (1951) makes the following remarks: "should we be bold enough to peruse the writings of King Alfred who lived in the 19th century, we will barely understand a word, even though he wrote in 'English.'"

Over the course of time, languages have diverged to the point where they are mutually incomprehensible. How and why did these changes come about and what means can we use to find out? Some of these languages and / or dialects that are affected by change are related. The 'family tree' theory suggests that a common ancestor developed differences in sound and grammatical structure and that a careful comparison of existing languages may show that they came from one same source. Hall (1950:20) thinks: "Obviously related but different forms are to be considered as developed from a common source, unless evidence to the contrary can be adduced."

The Nyang languages are greatly affected by these two phenomena. That is to say they are related and constantly affected by change. In this study, therefore, we shall make an inspection of the dialects and languages assumed to be related, reconstruct the early stage, give explanations and

justifications to the changes that have occurred from what we consider to be the old form. In that case this work will be partitioned as follows.

Chapter one gives a general introduction to the work beginning with the location, the term Nyang, the people, languages and dialects, linguistic classification, aim of the study, methodology, and previous research.

Chapter two treats a brief phonology and noun class system of the Nyang languages.

Chapter three reconstructs proto-Nyang both consonant and vowel sounds.

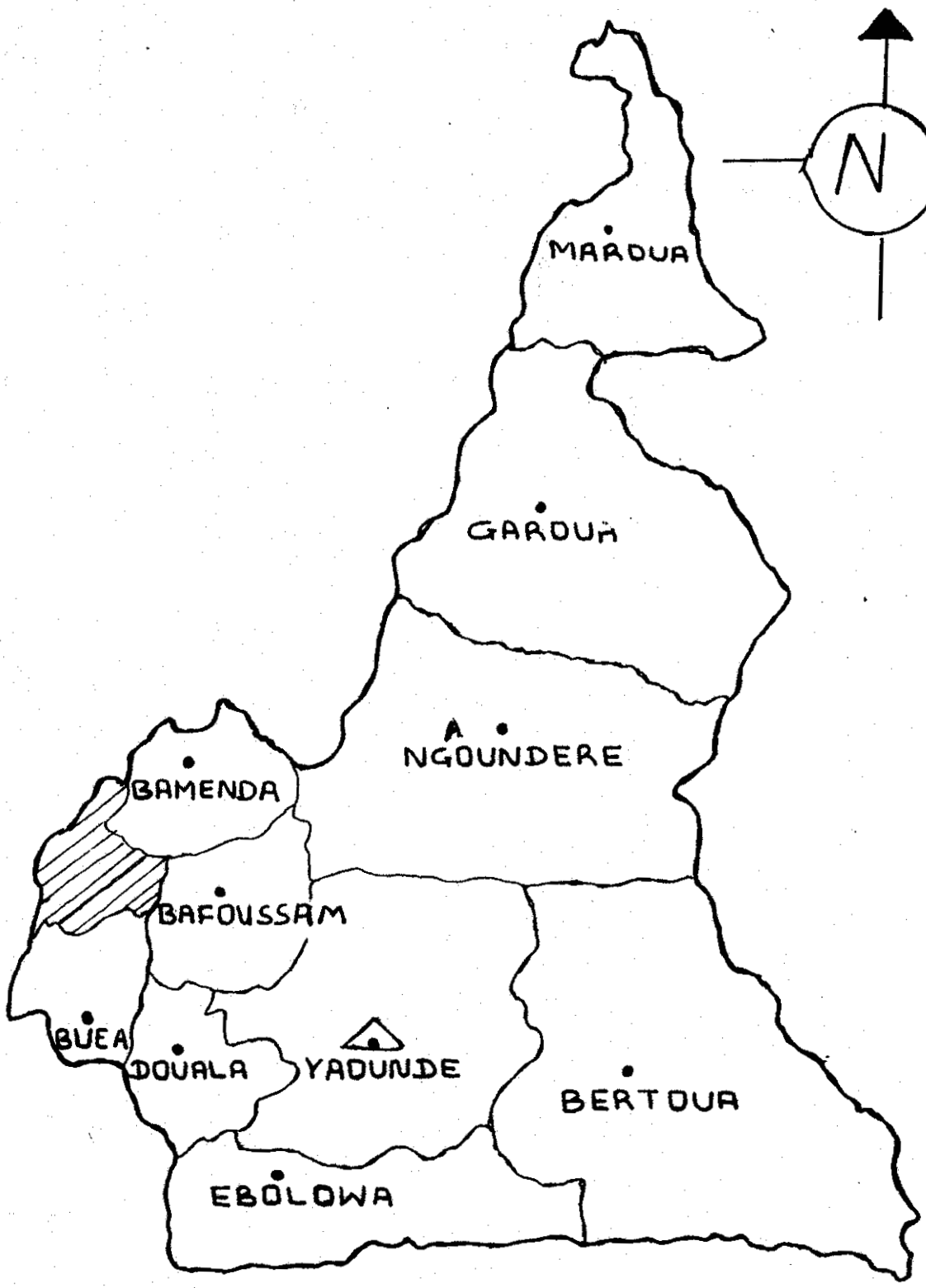
Chapter four examines the sound changes and reflexes of P.N.

Chapter five deals with the reconstruction of the noun class and concord system followed by a general conclusion.

1.1. THE LOCATION

The languages under study are spoken in the Manyu Division, South West Province of the Republic of Cameroon. The total polulation of the speakers of these languages is estimated to be above 160,000. The Nyang language area share boundries with speakers of other languages; such as, the Nigerians (Efik) to the East, Ejagham to the South East, Kupe-manenguba to the South, and Mogamo to the West.

LOCATION OF MANYU DIVISION IN CAMEROON



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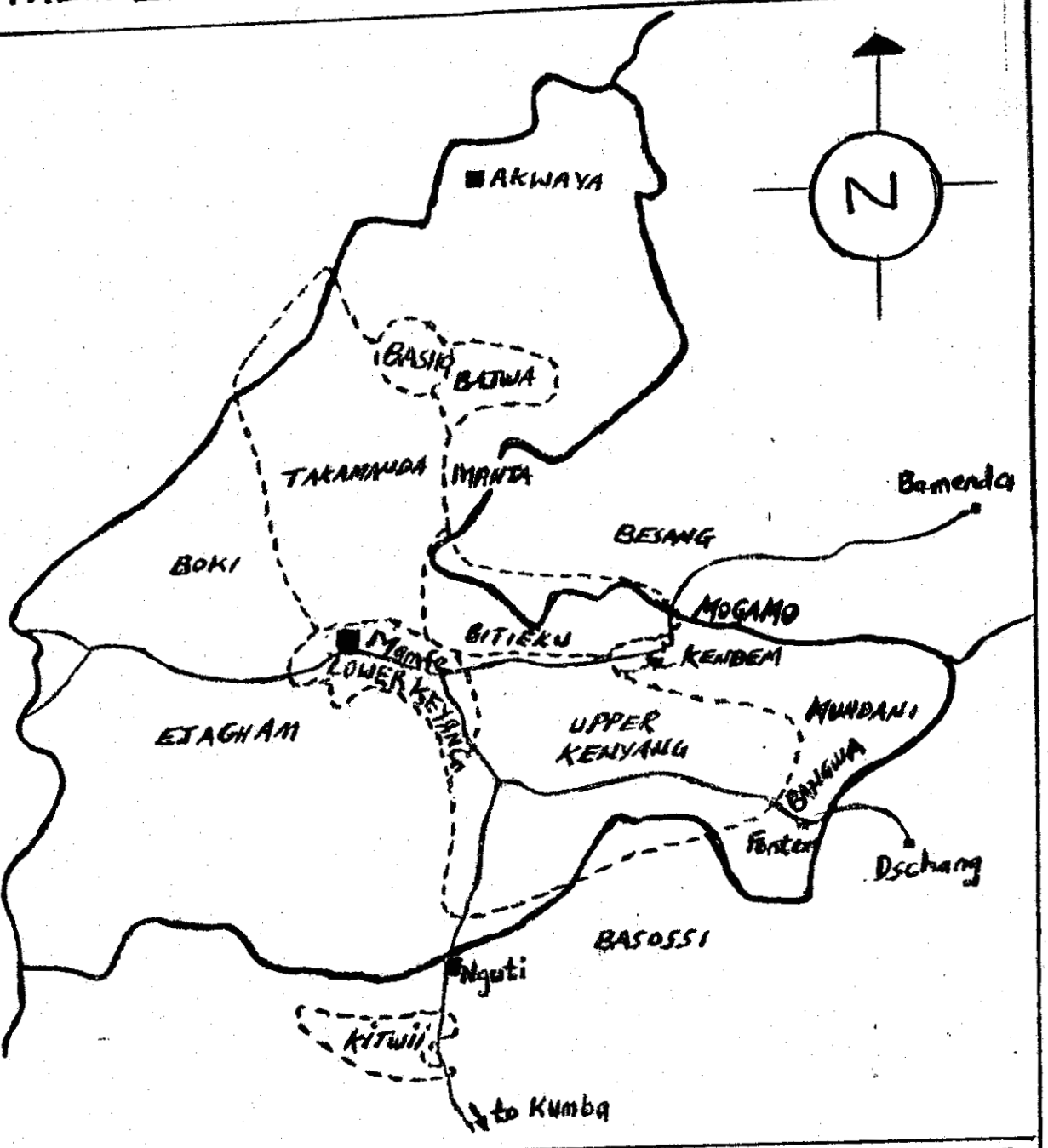
KEY

▨ Manyu Division

Source SIL YAOUNDE

LOCATION OF THE NYANG LANGUAGES AND OTHER LANGUAGES IN MANYU DIVISION



Scale 0 5 15 35 km

KEY

- Divisional boundary
- Sub-divisional boundary
- Nyang Language and dialect boundary
- ■ Sub-division

SOURCE : 1991 © ALCAM ISH. CREA R. BRETON (adapted)

1.2. THE PEOPLE

The speakers of the Nyang languages call themselves 'Manyang'(the people of Anyang). Other tribes in Manyu Division, e.g. the Ejaghams call them 'Anyang', while other tribes, mostly out of Manyu, refer to them as 'Bayangi'. They occupy a good portion of the Manyu Division and are, in the main, peasant farmers, hunters, and fishermen. With the vast still virgin equatorial forest which is transversed by numerous large rivers, the Anyang people earn their living from the forest and rivers. They grow cash crop such as coffee, cocoa as well as other food stuffs such as cocoyams, yams, plantains, beans, cassava, melon, and a variety of vegetable such as Eru, green vegetable, water leaf, pumpkin leaves, etc. Big quantities of palm oil, vegetables, pineapples, garri water fufu, 'bush mango' are exported to Nigeria via the numerous rivers and bush tracks. Some are also exported to other provinces of Cameroon.

A vast majority speak both their language and some other languages as a result of a close contact between the languages through trade and inter-marriage. In fact 'multilingualism' is the appropriate term since the Anyang people speak Kenyang, Ejagham, Pidgin English, etc. The spread of these languages among the Anyang people stems from the lack of motorable roads. These people treck long distances from their villages to Mamfe town for business, medical services and administrative reasons. Government schools and Mission schools teach in English and French.

Culturally, the Ejaghams and Anyang people are related. They generally call themselves the Mamfe people. A lot of their tradition and cultural dances are borrowed from the Efiks from Nigeria

1.3. THE TERM NYANG

Despite the fact that the languages around the area of study have a considerable variation of names at the lower level, there is generally a name for this particular group of language. The term 'Nyang' refers to a group of closely related languages spoken in the Manyu Division, South West Province of Cameroon. These languages are spoken by the Bayang people. The Bayang people call their language Kenyang. Previous linguistic studies have sometimes referred to it as 'Nyang' (Breton and Fohtung 1991: 125, Grimes 1992), while other ethnic groups call it 'Bayangi.' Other authors refer to it as 'Manyang.' But this term is used by the natives to refer to a single Kenyang speaker. In any case –Nyang stands as the root word. The Nyang languages include: Kenyang, Denya, and Kendem. In this study, we will present the language varieties and dialects that make up the Nyang languages.

1.4. LANGUAGES AND DIALECTS

A research topic such as this requires us to know whether each different clan speaks a separate language or whether they are only dialects of one single language. If mutual intelligibility is taken as the main criterion, then, not every form of speech dealt with in this study is a separate language. Several are mutually intelligible and therefore can be considered dialects of one language. This study has to do with eleven dialects that represent three languages.

'Kenyang' is spoken by the Bayang people and is referred to as 'Nyang'or 'Bayangi'. It is primarily spoken South of the Manyu River in Mamfe Central Sub-division. There are approximately 42,000 Kenyang

speakers living in 53 villages (Tyhurst 1983) There are three dialects of Kenyang: Upper Kenyang, Lower Kenyang, and Kitwii. The distinction is made based on pronunciation and lexical differences. Speakers of these dialects understand one another and they all speak 'Kenyang.' Some cultural practices differ between the three groups but they cling to their ethnic unity as Bayang people. The speakers of Kitwee refer to themselves as Batwii. The Bayang and Batwii people claim to speak two different languages because they are two separate ethnic groups. They acknowledge however that speakers of these two 'languages' can understand each other. There is however linguistic evidence (Tyhurst 1983) to show that the three dialects are similar enough to be considered a single language.

Denya is the term used by the Anya people for their language. It is spoken North of the Manyu River in the Akwaya Sub-division. There are 47 Anya villages containing approximately 10,000 people (Abangma 1981: 14) The various dialects are Bitieku, Takamanda, Basho, and Bajwa. Most people agree that these are all part of the same language although they admit that comprehension is difficult between some of the groups. Numba has also been included because, first of all, it is linguistically close, secondly, it is part of Denya speaking region.

Kendem, a speech variety ALCAM classifies as the Language 'Kendem' [833] is spoken in the two villages of Kendem and Bokwa. The Kendem Villages are located along the Bamenda-Mamfe road in the South West province of Cameroon. The area is surrounded by three different language groups. Two of these are the other two Nyang languages: Kenyang to the South and Denya to the North West. Moghamo, a grassfield language, is the neighbour on the North East (Dieu and Renaud 1983: 119). The language Kendem has no dialect. There are 1000 speakers of Kendem as specified in *Ethnologue* (Grimes 1992).

1.5. THE AIM OF THIS STUDY

The Nyang Languages are assumed to be related. This assumption can only be proven right by reconstructing the proto forms. The aim of this study is to reconstruct the phonology, noun class and concord system of the Proto Language (Proto-forms) from which the present day languages / dialects (cognates) are derived. We believe that the more we can reconstruct, i.e. the more we can account for similarities which cannot be due to chance, the more successful our demonstration of the genetic relationship of the Nyang Languages will be.

We also aim to study aspects of the languages and dialects that express relationship between them and their development from the proto-language.

Lastly, this study is intended to make a contribution to the knowledge of the Nyang languages.

1.6. METHODOLOGY

To achieve the above aim, the comparative method will be used. This methodology has been used by several renown linguists amongst such as Joseph Greenberg who postulates that the comparative method is limited to the use of mass comparisons, a lexical inspection method used by the earliest classifiers of languages. His method is however opposed to that of the Indo-europeanists for whom only the establishment of sound correspondences could be considered a proof of genetic relationship.

Our methodology will be a blend of these two ideas. That is, we will compare words with similar forms and meaning, and then establish sound correspondences. Following the recommendations in *Language*

Files (edited by Jannedy, Poletto and Weldon 1994), more specifically, in File 10.4, the major processes involved in the comparative method are the following:

1 Gather and organize data from the languages in question, forming cognate sets while making sure 'suspicious-looking'forms are eliminated.

2 Determine sound correspondences which exist between sounds in the same positions of each set of cognate words in the languages.

3 Determine the earlier form from which the cognates have descended, using two rules of thumb

a) The majority rule

b) Most natural development.

4 Determine for each set of cognates the older stage of the word in the parent languages and the sound changes which have affected the sounds in each daughter language.

Data collection and Organisation

In this study, the above method will be applied to three languages (several dialects). A word list of 260 items (made up of nouns, verbs, adjectives, pronouns, numerals, excluding loanwords) specially compiled to form the basis for the comparative reconstruction of proto-Nyang phonology, vocabulary and noun class system will be used.

The data is organized such that the three languages are interspersed with the dialects. Words which appear to be groups of cognates for the various languages / dialects by general inspection of materials, were lined up. Slight differences of meaning from language to language or dialect to dialect were ignored because our overall impression was that they are all related. Further data or materials from dialects such as Kitwii, Kifui and Numba were added to either confirm the reconstruction or provide evidence to the contrary.

1.7. CLASSIFICATION

One of the reasons for the reconstruction of the Nyang Nouns Class System is that the system has figured significantly in the debate over how to classify the languages along the North-West border of Guthrie's Bantu. Early linguistic sources show that it has been very difficult to attach the Nyang Languages to any linguistic group. These languages and many others which fall outside the borderline of North west Bantu as established by Guthrie (1967:20) were not given full status as Bantu. The noun class systems of these languages are often very strikingly similar to those of Bantu languages. However, there are certain irregularities in the system in terms of the typical Bantu noun class system and unclear sound correspondences. These irregularities were sufficient for linguists to classify the Nyang languages as Semi-Bantu (Johnston 1919) Sub-Bantu (Guthrie 1967) or Bantoid[1].

It should be noted that in reading Guthrie's various writings that touch on the languages which border the North West boundary of Zone A, it is not always clear whether he is thinking of genetic relationships, typological relationships or lexical and grammatical 'contamination'

In contrast to Guthrie who focused on the dissimilarities of the 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 of not only Tiv within Bantu, but also, by the nature of his list of Benue-Congo languages, the Nyang languages within Bantu.

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[1] The investigators of the Linguistic Survey of the Northen Bantu Borderland (1956: 14) applied the term Bantoid to languages in which Guthrie' s secon criterion of Bantu language' a vocabulary part of which can be related by fixed rules to a set of hypothetical *common roots*' does not hold good. Also these languages have an elaborate system of class prefixes and agreement showing no regular relationship to the Bantu classes.

Talbot (1926) cited by Westermann (1952:114) in turn cited by Abangma (1987) considered Anyang to be a subsection of 'Bayangi.' Bayangi refers to Kenyang which is referred to as 'Nyang' by the Linguistic Survey.

Other earlier classifications made by some linguists include the following.

Jacquot and Richardson 1956 remarked that since the Nyang Languages adhere to Guthrie's (1948:11-12) classification, they should be regarded as a Bantoid language since it has both Bantu and non-Bantu features.

Williamson (1971) classified the Nyang languages as Bantu because, at this period, it was proved that both the noun prefixes and concord system are those of Bantu. She further argued that Guthrie's classification is based on typological and not genetic considerations since languages change over time.

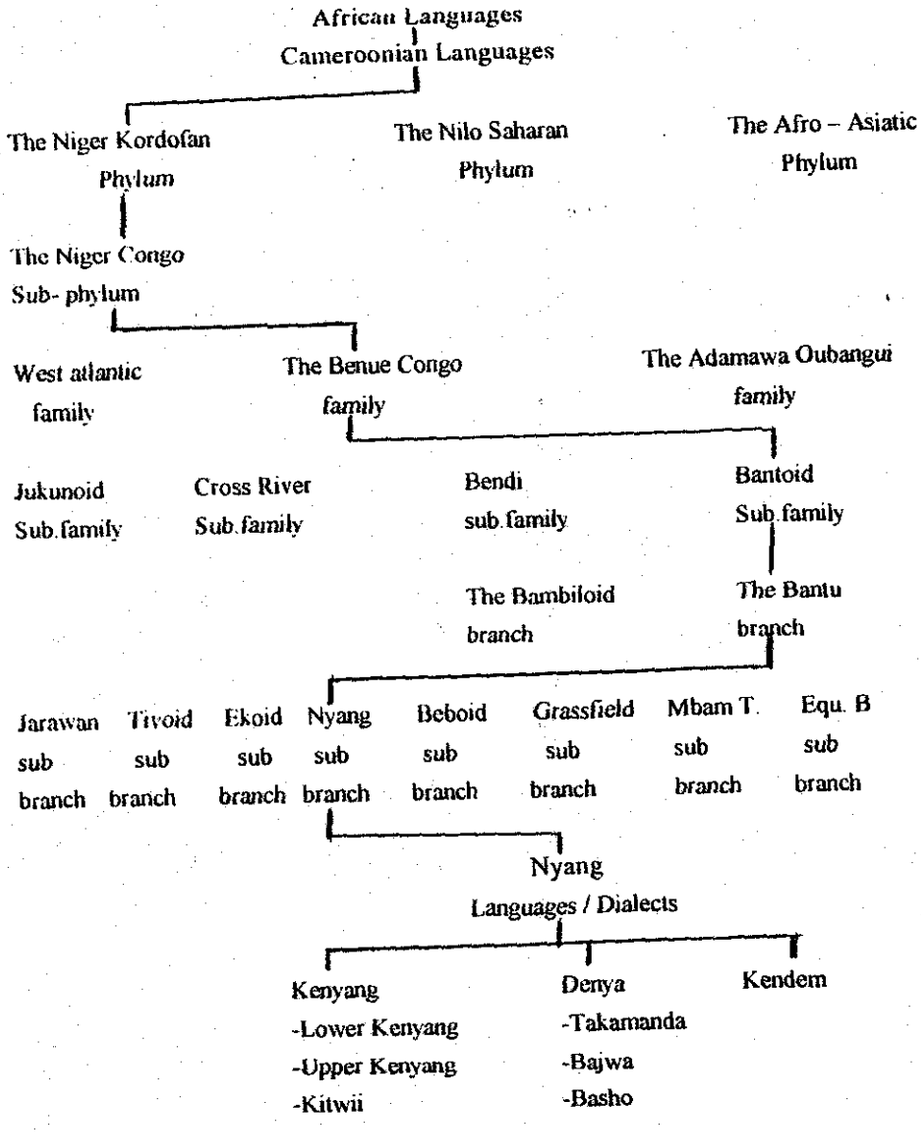
Voorhoeve (1980) also showed in detail the noun class and concord system as it relates to a more general problem of establishing criteria for classifying a language as Bantu or non-Bantu. According to him the Nyang languages are an intermediate stage between Proto-Benue-Congo and Proto-Bantu. In any case, one can see why the noun class system should be of interest for a comparative study like this.

Many of these classifications however show that the Nyang languages fall within the Wide Bantu of Greenberg's classification, while they are excluded from the narrow Bantu of Guthrie's classification.

Ethnologue (Grimes 1992:193) classifies the Nyang languages as Niger-Congo, Benue-Congo, Bantoid, Southern, Broad Bantu, Mamfe. This classification is confirmed by Bendor-Samuel (1981:433). Breton and Fohtung (1991:121) classify these languages as those belonging to the Sub-branch of wide Bantu (Bantou au sens large).

The sketch that follows is a genealogical tree of Greenberg's classification adapted from ALCAM (1983)

The Genealogical Tree of the Nyang Languages following Greenberg' s Classification of African Languages



Source : Adapted from ALCAM (pages 69,360)

1.8. PREVIOUS RESEARCH

Prior to this study, just one document had been written on the Nyang languages as a whole. The research was carried out on the linguistic survey of the Nyang languages.

In 1983 the Tyhursts conducted linguistic and sociolinguistic surveys of the Manyu Division in the South West Province of Cameroon. They determined the existence of three distinct languages: Kenyang, Denya, and Kendem. Their findings are reported in Tyhurst and Tyhurst 1983, Tyhurst 1983 and Tyhurst 1984. Tyhurst includes an extensive phonemic and lexical analysis in his reports. He also includes an analysis of certain morphological features that give interesting insights into the relationship between the languages he surveyed.

Tyhurst (1984) titled "Cutural Identity Perceived as Linguistic Identity" presents the result of sociolinguistic questionnaires in the language surveys among the Nyang languages of Western Cameroon. He claims that the speakers' attitudes about dialect and language distinctions did not always agree with the language data obtained from the word lists. The different results obtained from linguistic and sociolinguistic questionnaires have important consequences for the language identification surveys and for a proposed language development program in the Nyang languages. In this same year, he wrote a report on the phonology of Kenyang. This report presents the result of the research carried out in Lower Kenyang dialect during 1982 and 1983, the structure of syllables in Kenyang, the interpretation of ambiguous segments, contrasts between the phonemes and factors which condition the occurrence of allophones for each phoneme and an analysis of suprasegmental features of stress, length, and tone.

In 2001 Heidi Anderson and Susan Kuger made another report on a Rapid Appraisal (RA) Survey of Kendem, one of the Nyang languages. This report which describes a preliminary sociolinguistic survey was carried out in order to assess the speech variety which the Atlas Linguistique du Cameroun (ALCAM) classifies as the language of 'Kendem' [883]. I have not come across any previous work on Kendem.

Abangma's "Modes in Denya discourse" (1981) appears to be the first major piece of research providing an in-depth analysis of a significant aspect of the grammar of Denya (one of the Nyang languages). The intent of his work is to account for the function of lower-level grammatical units, namely verb forms, in the context of Denya discourse structure. His work provides an insight into specific and unique use of Denya modes in Grammatical Structures above the sentence level.
Accounting for how languages function at the discourse level is gaining recognition for the contribution it can make to language development work.

Mbuagbaw has also produced a Denya alphabet and orthography statement (1994) and a description of Denya tone orthography (1995).

A similar research to this was carried out on the Manenguba languages by Robert Hedinger (1984) for his Ph.D. thesis titled 'A comparative historical study of the Manenguba languages.' Hedinger reconstructs the phonology, aspects of the noun class morphology and part of the lexicon of the proto-language from which the present day Manenguba languages are derived. The work equally throws more light on what constitutes the Manenguba languages as well as producing a classification which shows both relationships internal to the Manenguba and their relationship to some adjacent languages. He uses both the comparative method and the lexico-statistical method in his work.

DEFINITION OF SOME KEY WORDS

1) COGNATE: This refers to forms (or languages) which are genetically equivalent. In other words a set of morphemes from different languages that are derived from a single parent morpheme is a set of cognates. Consider the following examples from 4 hypothetical languages.

ku:laŋ kura kuraŋ hùraŋ ' to beat'

The above examples form a set of cognates

2) CORRESPONDENCE SET: The items that are to be compared for the purpose of comparative reconstruction correspond to one another in some sense; the set of such corresponding items as a whole therefore constitutes a correspondence set.

Example, taking from the hypothetical languages above [l], [r], [r] and [r] form a correspondence set.

3) REFLEXES: Correspondence sets which form a relationship are described as reflexes of the earlier form.

Example: L and r are reflexes of * l

4) RECONSTRUCTED FORM: By working with dialects or languages of one period, the linguist may set up a series of formulas to indicate the various correspondences noted. A linguistic symbol so symbolized is a reconstructed form. The form kulaŋ above is a reconstructed form that symbolizes the following correspondences

*k *u *l *a *ŋ

k: k: k: h u: u: u: u l: r: r: r: a: a: a: a ŋ: ŋ: ŋ: ŋ

Reconstructed form * kulaŋ

CHAPTER II

A BRIEF PHONOLOGY AND NOUN CLASS SYSTEM OF THE NYANG LANGUAGES

2.0. INTRODUCTION

In a linguistic study like this, an account of the sound system and noun class system of the languages cannot be underestimated. The present chapter deals with the phonology of the three main Nyang languages: Kenyang, Denya, and Kendem, which are to be reconstructed in chapter three and four. The aim of this presentation is to make a definite statement about the total number of phonemes in the languages. The tone system and the syllable patterns are also treated. Finally, the noun class system of the languages will follow the phonological presentation.

Since these languages (but for Kendem) have reference dialects, the sounds on the following tables are recorded as those representing the reference dialects.

2.1. Kenyang Phonology

In this section, a quick look will be taken at the segmental phonemes. The transcription adopted is purely phonemic, i.e. it represents meaningful contrastive forms of the sounds.

2.1.1. Consonant Phonemes

	Labial	Alveolar	Palatal	Velar	Lab-Velar
Stops	p	t	c	k	kp
	b	d	j	g	gb
Fricatives	f	s			
Nasals	m	n	ɲ	ŋ	
Trill		r			
Semi-Vowel			y	w	

The above table shows that there are 19 consonant phonemes in Kenyang.

2.1.2. Vowel Phonemes

Vowel phonemes in Kenyang are seven as shown in the following table

	Front	mid	Back
High	i	ɨ	u
Mid	e		o
Low		a	ɔ

2.1.3. Syllable patterns

There are both closed and open syllables in the Kenyang language syllable structure. Consonant clusters have the form C_s where C represents any consonant and S represents one of the semi-vowels /w/ or /y/. Vowels and syllabic nasals occur as syllable peaks. Syllables have the following possible forms

Syllable pattern	Example	Gloss	Syllable Pattern of this example
V	[àtá]	jaw	V.CV
N	[ǹtí]	head	N.CV
CV	[fá]	where?	CV
CSV	[pwɔ̀]	lend	CSV
CVC	[d ɔ́k]	go	CVC
CSVC	[èfwét]	wound	V.CSVC

Affixes (e.g., noun class markers, pronominal prefixes and verb affixes are limited to the forms V.N. and CV. Roots always begin with a consonant and are usually one or two syllables long.

For Kenyang and the other Nyang languages, the affricates [tʃ] and [dʒ] will be treated as the single segments /c / and / j / for the following reasons. First, there are no free occurrences of [ʃ] and [ʒ]. They are always limited to the sequence [tʃ] and [dʒ]. These consonants never occur in reverse position that is [ʃt] and [ʒd]. Secondly, in considering all the other consonants, we find that the only consonant clusters in a syllable are of the form Cw or Cy. If we consider [tʃ] and [dʒ] as phonemic sequences, this pattern will be violated, since it would lead to sequences of CCw and CCy.

e.g /ácwí / [a-tʃwí] ' canoe.'

2.1.4. Tones

Kenyang has two phonetic tones, viz: The High (´) and the low (`) tones. Other surface forms such as the rising (ˇ) and falling(ˆ) tones are derived. The following examples serve as evidence for the phonetic distinction

Low (`)		High (´)	
[m̀bòk]	' hole'	[bárí]	' tongues'
[bàbè]	' births'	[bàtú]	' ears'
[bèbà]	' bags'	[bàbé]	' medicine'
[ǹtà]	' hat'	[ŋgó :]	' tail'
[ètè]	' pot'	[tén]	' ride

2.2. Denya Phonology

The following section presents the phonology of the Takamanda dialect of Denya. There are 20 consonant phonemes involved.

2.2.1. Consonant Phonemes

	Labial	Alveolar	Palatal	Velar	Labio -velar
Stops	p	t	c	k	kp
	b	d	j	g	gb
Fricatives	f	s			
Nasals	m	n	ɲ	ŋ	ŋm
Lateral		L			
Semi- Vow	w		y		

2.2.2. Vowel Phonemes

	Front	mid	Back
High	i		u
mid	e		o
Low	ɛ	a	ɔ

2.2.3. Syllable Pattern

Denya exhibits both close and open syllables. Only nasals occur as syllable final consonants and they are homorganic with the initial consonant of the following syllable. There are no consonants in word final position. The only consonant clusters to occur within a syllable are of the form Cw. There are no examples of the cluster Cw occurring in a closed syllable.

Syllable Pattern	Example	Syllable Pattern of this example	Gloss
V	[è.tú]	V.CV	' ear'
N	[ŋ̀.gá]	N.CV	' knife'
CV	[fa]	CV	' here'
CwV	[má.kwè]	CV.CwV	' hills'
CVN	[némbè]	CVN.CV	' breast'
	[gin.tw´mè]	CVN.CVCV	' hunting'
	[măŋ.ka]	CVN.CV	' to know'

2.2.4. Tones

The Denya language has two tones underlyingly: the High (´) and Low (`) tones. All the other forms are derived just like Kenyang. The following examples provide lexical evidence for tones in Denya

Low (`)		High (´)	
[tì]	' wipe'	[tí]	' pierce'
[gèbà]	' a bag'	[gébá]	' a spot'
[à nò]	' husbands'	[gèwá]	' a dry'
[mbò]	' short'	[kó]	' small'
[émè]	' eye'	[ètá]	' five'

2.3. Kendem Phonology

It is important to note that the language of Kendem is still virgin in so far as linguistic research is concerned. Hence the information presented in this study is based mostly on what we have on the data. Tyhurst (1983) (which is the only linguistic work on Kendem) presents sketchy information about the language.

Kendem shows evidence of seventeen consonant phonemes. They are presented in the following table:

	Labial	Alveolar	Palatal	Velar
Stops	p	t	c	k
	b	d	j	g
Fricatives	f	s		
Nasals	m	n	ɲ	ŋ
Lateral				
Semi- Vow	w		y	

In Kendem, the voiced fricatives and the flap are intervocallic allophones of the voiced stops.

Example	b	-->	β / V -V
	d	-->	r / V-V
	g	-->	ɣ / V-V

2.3.2. Phonemic Vowels

There are only six phonemic vowels in Kendem

	Front	mid	Back
High	i		u
mid	e	ɔ	o
Low		a	

2.3.3. Syllable Patterns

The following syllable types are attested in Kendem

Syllable Pattern	Example	Syllable pattern of this example	Gloss
V	[èné]	V.CV	' bird'
N	[m̀bù]	N.CV	' hole'
CV	[lí]	CV	' he / she'
CVC	[tóŋ]	CVC	' show'
CSV	[gyé]	CSV	' see'
CSVC	[kwan]	CSVC	' sing'

In Kendem syllable final consonants are restricted to

- Voiceless stops [p] [t] [k] which are unreleased in word final position.

-The nasals [m] [n] and [ŋ]. [ɲ] does not occur

-The fricative [h] and the glottal stop [ʔ]

2.3.4. Tones

Like the other Nyang languages, Kendem has several surface realizations but principally there are two underlying tones: High (´) and Low (`)

Low		High	
[ǹyè]	' year'	[ǹyé]	' eye'
[òkwò?]	' old'	[òkwó?]	' bed'
[òkwò]	' leopard'	[ondí]	' woman'
[lèbèn]	' rock'	[nóm]	' bite'
[ǹcì]	' corn'	[ásáŋ]	' livers'

Labialisation and Palatalisation; a common feature in the Nyang languages.

The feature of palatalisation and labialisation are wide spread in the Nyang languages. They are considered here as features of syllables. One of the advantages gained by such treatment is economy in terms of total number of phonemes set up for each of the languages. Palat / Lab is realized phonetically as [CyV], [CwV] or [CiV] sequence depending on the consonant in the onset slot of the syllable. The table below shows

which consonant phonemes can occur with labialisation / palatalisation in the Nyang languages.

A consonant is marked ' + ' if it can occur with Lab / Palat. ' - ' if it cannot occur

		P	b	f	m	t	d	r	s	n	L	c	j	y	k	g	ŋ	w	kp	gb
Ken.	L	+	+	+	+	+	+	-	-	+	-	+	+	-	+	+	+	-	-	+
	p	+	+	+	+	+	-	-	+	+	-	+	-	-	+	+	+	-	-	-
Den.	L	+	+	+	+	+	-	-	+	-	+	+	+	-	+	-	+	-	-	-
	p	+	+	+	+	+	+	-	-	-	-	+	+	-	+	+	-	-	-	-
Kend.	L	+	+	-	+	+	-	-	+	-	+	+	-	-	+	+	+	-	-	-
	p	-	-	-	+	-	-	-	-	+	-	-	-	-	+	+	-	-	-	-

Examples of Palat / Lab in the Nyang languages

Kenyang		Denya		Kendem	
kwó kwɔt	' near'	cwí	' slice'	twánè	' leave'
ŋwàt	' scratch'	pwì	' wrap'	swɛ́né	' wash'
nyú	' drink'	cyɛɛ́	' give'	gyé	' find'
kyɛ́p	' shell'	kyé	' pluck'	nyé	' eat'

2.4. THE NOUN CLASS SYSTEM OF THE NYANG LANGUAGES

The Nyang languages are noun class languages. It might seem unnecessary to illustrate a feature such as this that is well known already given that authors such as Voorhoeve (1980), Tyhurst (1984), Ittman (1935) have treated the noun class system of Kenyang most especially. But since very little work has been done on Kendem and to an extent

Denya, and most of these languages show innovations in the Noun Class prefixes and above all the noun classes are to be reconstructed later in this study, it will not be out of place to treat briefly this phenomenon. In the present section we will give examples of different classes and concord system. This will ease the understanding of what will be treated in chapter four.

2.5. The Kenyang Noun Classes

So far, eleven noun classes have been established in the Kenyang language. They have been numbered to correspond to the PB noun class numbers as adopted by Meeussen (1962). The classes are grouped in pairs representing the Singular / Plural contrasts. These pairs are termed genders.

Class	PB	Kenyang prefix	Example	Gloss
1	*mu-	Ǹ-	m̀ – fɔ̀	‘ chief’
		ta-	ǹ - ném	‘ husband’
			tá – bìnì	‘ house’
2	*ba-	ba-	bà – fɔ̀	‘ chiefs’
3	*mu	Ǹ-	m̀ – bàŋ	‘ horn’
		a-	á – cwî	‘ canoe’
5	*le-	nè-	nè – pém	‘ life’
		N-	ǹ - tay	‘ stone’
6	*ma-	bà	bà – tày	‘ stones’
		a-	mà – nà	‘ thighs’
			à – mó	‘ hands’
6a	*ma-	bà-	bá – yá	‘ pepper’
			mà nùŋ	‘ blood’
7	*ki-	c-	è –tɔ̀g	‘ village’
			c – nɔg	‘ tree’
8	*bi	be-	be – tɔg	‘ villages’
			mè – nɔg	‘ trees’
9	*N-	Ǹ-	ǹ –sɔ̀g	‘ elephant’
10	*N-	Ǹ-	ǹ – sɔ̀g	‘ elephants’
19	*P_i	sè-	sé – ncéb	‘ lump’
13	*tu	kè-	ke – ncéb	‘ lumps’

As exemplified in the table, the nasal prefix N- is homorganic with the initial consonant of the root. In Lower Kenyang (the reference dialect) the prefixes /ba-/ and /be-/ for classes 2, 6, 6a, and 8 have the morphological variants /ma-/ and /me-/ when the noun root begins with a nasal consonant. This assimilation does not occur in the upper Kenyang and Kitwii dialects.

For class 5, ne- has been chosen as a class five noun because it resembles PB class 5 *le- as reconstructed by Welmers (1973: 165). More will be said about the noun classes in chapter 5.

2.6. The Denya Noun Classes

The language has been analysed as having eleven noun classes which function to mark number of noun and its gender. Abangma (1981)

Class	PB	Denya prefix	Example	Gloss
1	*mu-	N- me-	m –aá me – fwé	' child' ' slave'
2	*ba-	a- ba-	a – fwé baá	'slaves' ' children'
3	*mu-	ɛ- mè-	e- tú mɛ –kwé	' ear' ' hill'
5	*le-	nè- N-	nɛ – nómè n - ta	' tongue' ' stone'
6	*ma-	ma- a -	mà – tá á – mè	' stones' ' eyes'
6a	*ma-	ma-	ma – ná	' water'
7	*ki-	ge-	ge –bá	' a bag'
8	*bi-	u-	u – bà	' bags'
9	*N-	N- me-	ŋm – ŋmè mɛ – wè	' goat' ' tortoise'
10	*N-	N- me-	ŋm – ŋmè mɛ – wè	' goats' ' tortoises'
19	pi-	fi-	fi - sô	' hip'
13	*tu-	d ɛ-	dɛ –sò	' hips'

2.7. The Kendem Noun Classes

Basing our arguments on the data we have, there are eleven noun classes in Kendem. The numbering system is based on Voorhoeve's (1980) and Tyhurst's (1985) anaylysis of Kenyang. These classes are exemplified below.

Class	PB	Kendem prefix	Example	Gloss
1	*mu-	N-	m̀ – má	' mother'
		o-	ò – ndí	' woman'
2	*ba-	á-	á – ndí	' women'
3		o-	ò – lì ŋ	' village'
	*mu-	ɛ-	ɛ – tù	' ear'
		N-	m – mbù	' hole'
5	*le-	lɛ̀ –	lɛ̀ – bèn	' rock'
		N-	ǹ – sáŋ	' liver'
6	*ma-	a-	a – sáŋ	' livers'
6a	*ma-	a-	a-fòm	' fat'
7	*ki-	kɛ-	kɛ – gôh	' bone'
8	*bi-	o-	o-gôh	' bones'
9	*N-	N-	n – jû	' panther'
		o-	ò – nyâ	' animal'
10	*N-	N-	n – jû	' panthers'
		o-	ò – nyâ	' animals'
19	*Pi-	ɛ̀-	ɛ̀ – só ŋ	' hip'
13	*tu-	lɛ-	lɛ – sóŋ	' hips'

2.8. NOUN CLASSES FOR THE DIALECTS

NOUN CLASSES FOR BITIɛKU AND NUMBÀ

Class	PB	Bitiɛuku Prefix	Example	Gloss
1	*mu-	mè- N-	mɛ-nd í m – mǽ	‘ woman’ ‘ child’
2	*ba-	a- wò-	à – ndí wò – nté	‘ women’ ‘ fathers’
3	*mu-	ɛ- mɛ- N-	è – tù mɛ – kwé m̀ – bíɔ̀	‘ ear’ ‘ hill’ ‘ horn’
5	*le-	lè- N-	lè – kò ǹ tá	‘ spear’ ‘ stone’
6	*ma-	ma- a-	mà – tá a – mô	‘ stones’ ‘ hands
6a	*ma-	ma-	mà – nǽ :	‘ water
7	*ki-	kɛ-	kè – gó	‘ bone
8	bi-	o-	o – gó	‘bones
9	N-	mu- N-	mù - ʃù ŋm̀– ŋmè	‘ elephant’ ‘ goat’
10	N-	N- mu-	mù - ʃù ŋm̀ – ŋmè	‘ elephants’ ‘ goats’
19	Pi-	ɛ-	è – sɔ̀ lè – sɔ̀	‘ hip’
13	tu-	lɛ-		‘ hips’

NOUN CLASSES FOR NUMBA

Class	PB	Numba Prefix	Example	Gloss
1	*mu-	o- N-	ò – ndí m̀ mæ̌	‘ woman’ ‘ child’
2	*ba-	a- a-	à-nd í à – tá	‘ women’ ‘ fathers’
3	*mu-	ɛ- o- N-	è-tù ò-kwè m-bíà	‘ ear’ ‘ hill’ ‘ horn’
5	*le-	lɛ- N-	lè kó ǹ – tá	‘ spear’ ‘ stone’
6	*ma-	a- a-	à – tá à – mó	‘ stones’ ‘ hands’
6a	*ma-	a-	a – nă	‘ water’
7	*ki-	kɛ-	kè – gŏ	‘ bone’
8	*bi-	o-	o – gŏ	‘ bones’
9	*N-	N- o-	ŋm̀ –ŋmè o – sú	‘ goat’ ‘ elephant’
10	*N-	N- o-	ŋm̀ – ŋmè ò – sú	‘ goats’ ‘ elephants’
19	*Pi-	ɛ-	ɛ-sô:	‘ hip’
13	*tu-	dɛ-	dɛ – sô	‘ hips’

CHAPTER III

RECONSTRUCTION OF PROTO –NYANG

3.1. INTRODUCTION

This chapter may be viewed as a projection backward in time based on the languages spoken today. It deals with the reconstruction of consonants and vowels of the Nyang languages. It will focus on the present day sound from which we can project back into the past to establish what the original Proto–Nyang sounds probably must have been. The reconstruction of the PN sounds was done using the following method.

To begin with, a data was collected in the field using a wordlist of 260 words. These words were transcribed, then for each gloss, the words given by the speakers of the different languages were collated. This served as sets of cognate items from which recurrent sound correspondences could be abstracted. The set of sound correspondences were then examined to determine which proto-phoneme they probably represent, and each correspondence set given a label in the form of a starred symbol.

3.2. CONSONANT RECONSTRUCTIONS

In this section, we will present the consonants. The reconstructions are based mostly on the noun and verb roots, a majority of which have the structure CV, CVV, CVC and CVCV. The range of consonant sounds occurring at root final position is generally more restricted compared to root initial position. For this reason, a distinction is made between the first consonant (labeled C_1) and second consonant (labeled C_2)

Each set of consonant phonemes shall be followed by examples from cognate sets which will serve as basis for the establishment of a proto-phoneme

3.2.1. CONSONANTS IN C_1 POSITION

Voiceless stops p, t, and k

(301)	/p/	'Two'	'plant'	'White'
	LK	bé pày	pì	pépép
	CK	bɛ páy	pî	pép' pèp
	UK	bɛ pày	pì	pépèp
	KIT	bì pây	pî	bìréì
	KIF	bì pá	pí	pèrèrí
	KƐN	ó pá	pê	pàp^{h} pàp
	NUM	ò pá	pè	pù
	BIT	ò pa	pɛ	púpú
	TAK	ɛ́ pá	pe	pòpò
	BAJ	-	pè?	-
	BAS	opà	pè	pùpù

(302)	/ t /	'stone'	'father'	'ear'
	LK	ǹ' táy	é' tá	àtú
	CK	ǹ' táy	é tá	àtú
	UK	ǹ' táy	ta	àtú
	KIT	ǹ' táy	táy / tsi	atú
	KIF	ǹ' tá	tsi	àtù
	KEN	ǹ' tá	átá	ètù

NUM	ǹ' tá	àtá	ètù	
BIT	ǹ' tá	ǹté	ètù	
TAK	ǹ' tá	ǹtɛ́	ètú	
BAJ	ǹ' tǎʔ	nté	ètù	
BAS	ǹ' tà	nté	ètù	

(303) /k /	'root'	'new'	'walk'	' fall'	'sing'
LK	ŋ̀ kàŋ	è' kôkò	kɔ̀	kwén	kwáy
CK	ŋ̀ káŋ	è' ko	kô	kwén	kwây
UK	ŋ̀ káŋ	è' kô ɛkô	kó	kwén	kwáy
KIT	ŋ̀ kàŋ	è' kò	kàû	kwén	kwáy
KIF	ŋ káŋ	è' kíŋ	kî	kwèn	kwɔ́
KƐN	a káŋ	ké kíɛ̀	kíɛ̀	kwén	kwáŋ
NUM	o ka	okíè	kénè	kwé	kwá
BIT	mɛ'tɔ̀	e' kíè	kíè	kwé	kwà
TAK	mɛ kà	o' ké	kɛ	kwé	kwá
BAJ	—	—	tʃè	kwé	—
BAS	mɛ'ká	mèkíè	kíyè	kwè	kwá

The above cognate examples allow us to do our reconstruction in the following manner.

In the following chart, the top row labeled PN represents the phonemes reconstructed for Proto-Nyang. Below each starred proto–phoneme are listed the set of sounds corresponding from language to language and on which the reconstruction at the top is based.

(304)	PN	*p	*t	*k
	LK	p	t	k / kw
	CK	p	t	k / kw
	UK	p	t	k / kw
	KIT	p	t	k / kw
	KIF	p	t	k / kw
	K ƐN	p	t	k / kw
	NUM	p	t	k / kw
	BIT	p	t	k / kw
	TAK	p	t	k / kw
	BAJ	p	t	(tʃ) / kw
	BAS	p	t	k / kw

From the above tables the reconstruction of voiceless stops *p *t *k is clear, except that *k has the correspondence set k / kw in all the languages. We noticed that in all instances where we find kw it is followed by a vowel. This seems to suggest that the earlier sound for this set is /k/ which has become labialised due to the environment. That is to say, underlyingly the root is –kuɛn- but because of the vowel clusters, the vowel u has been labialised to the segment kw.

As for the BAJ set which rather presents ts and kw in place of k, there was just one example for each case and as such not convincing. This is the reason why the form is in brackets.

3.2.2. Voiced Stops b d g

(305)	/b/	'dance'	'horn'	'sky'	'give birth'
	LK	bèn	m' bàŋ	nè bù	bé
	CK	bèn	m báŋ	dɛ bû	bê
	UK	bén	m báŋ	dɛ bú	bê
	KIT	bén	m baŋ	dì bû	bě
	KIF	bèn	m báŋ	dì bù	bî
	KƐN	bén	m bìáŋ	lɛ bú	bíèn
	NUM	bé	m̀ bíà	mfáy nèbú	bíè
	BIT	bí	m bíɔ̀	lè bú	bíè
	TAT	bè	èm' bíà	nfánè bŭ	bíè
	BAJ		m̀ bíà	nfá nóù	víè?
	BAS	bié	m̀bíà		víè

(306)	/d /	'clothes'	'what'
	LK	ǹ'dèn	yî
	CK	ǹ'dèn	yî
	UK	n'dén	dʒì
	KIT	n'dén	dʒì
	KIF	n'dèn	dʒì
	KƐN	n'dèn	n'dí
	NUM	n'dě	n'dì
	BIT	n'dě:	n'dé
	TAK	n'dê	n'dé
	BAJ	n'dě ?	n'dí
	BAS	n'dé	n'dí

(307)	/ g /	'knife'	'salt'	' hear'	'vomit'
	LK	ŋgàk	ŋgáŋ	ɣók	gwɔ́
	CK	ŋgák	ŋgáŋ	ɣok	gwà
	UK	ŋgák	ŋgáŋ	wók	gwɔ̀
	KIT	ŋgáh	ŋgáŋ	wùk	gwɔ̀
	KIF	monsô	ŋ'gáŋ	wók	gwɔ̀
	KƐN	ŋgá	oɣaŋ	gú?	gwô
	NUM	ŋgá	ɣá	gù	gwɔ̂
	BIT	ŋgá	mò' à	gù	wɔ̂
	TAT	ŋgá	mɛ̀' gá	ù	wô
	BAJ	ŋgá?			wô
	BAS	ŋgá?	mèɤâ:	fítì	wô

(308)	PN	*b	*d	*g
	LK	b	d / y	g / gw / ɤ
	CK	b	d / y	g / gw / ɤ
	UK	b	d / dʒ	g / gw / ɤ
	KIT	b	d / dʒ	g / gw
	KIF	b	d / dʒ	g / gw
	KƐN	b	d	g / gw / ɤ
	NUM	b	d	g / gw / ɤ
	BIT	b	d	g / w
	TAK	b	d	g / w
	BAJ	b / v	d	g / w
	BAS	b / v	d	g / w / ɣ

The voiced stops in most cases do not pose any major problem of reconstruction. The sounds ɓ, ɗ, g have been reconstructed as *ɓ *ɗ *g in all the languages. However, most of the reflexes show evidence of having become either fricativised or labialised. For instance V has been reconstructed as *b in BAJ and BAS. Also *d in some cognates is realized as dʒ in CK, UK, KIT, KEN and NUM. While g / gw / w / ɣ is reconstructed as *g in almost all the languages.

The above reflexes and their sound correspondences are phonetically plausible, so the possibility that the old sound could be ɓ, ɗ, g cannot be ruled out. In Kenyang and Kendem languages, /g/ has a fricative allophone when it occurs intervocallically

e. g g -- > [ɣ] / V-V

The cognate set for ' salt' illustrates:

LK: ŋgáŋ

KƐN: o ɣaŋ

LK: ŋ̀ gɛ́p ' thief' bà ɣɛ́p ' thieves'

3.2.3. Fricatives: s, f and Affricates c, j

(309)

/ s /	'Elephant'	'Twenty'	'Fish'
LK	n sòk	è' sá	n sì
CK	n sók	ɛ sâ	n sî
UK	n sòk	ɛ sâ	n sì
KIT	n sùk	ɛ sáù	n sì
KIF	n sùk	ɛ' sâ	n sì
KƐN	ó sùk	ɛ' sàm	ò sŭ
NUM	o su	ɛ' sà	ò sû
BIT	mèʃù?	ɛ' sɔ̂	mùʃŭ:
TAK	mèʃù	ɛ' sâ	meʃŭ
BAJ	mèʃù	__	mɛʃŭ
BAS	mèʃù:	è' sâ	kɛʃwâ

(310)	/ f /	'blow'	'fat'	'pour'
	LK	f ép	bàfó	fiɛ́
	CK	f ép	bàfô	fiɛ
	UK	f ép	bàfò	ko
	KIT	f ép	bafóù	fíè
	KIF	f ép	bàfô	fíè
	KƐN	fɛ̀n é	áfom	fíè
	NUM	finé	àfò	fánè
	BIT	fínè	màfá	fánè
	TAK	fɔ̀ʔ	mafà	fíè
	BAJ	àfúnùŋgú	—	fié
	BAS	fúnù	mafwâ:	fié

(311)	/ c /	'give'	'egg'	'red'
	LK	ʧíé	nɛtʃì	ʧù
	CK	ʧé:	nɛtʃî	ʧù
	UK	ʧíè	dɛtʃì	ʧù
	KIT	ʧè	dìtʃì	ʧù
	KIF	ʧè	dìki	ʧù
	KƐN	kò	lékwatʃî	ʧù
	NUM	ʧê	ɛkwatʃî	ʧùʧù
	BIT	ʧê	lɛkwatʃì	kìgélè
	TAK	ʧíɛ̀	nɛkwatʃì	mɛgélè
	BAJ	ʧê:	—	—
	BAS	kìé	nukwútʃù	égòlẃ

(312)	/ j /	'feather'	'pull'	'foot / sole'
	LK	è' yɔ̀k	yà	nè'yàt
	CK	ɛ dʒók	yă	dè dʒát
	UK	ɛ dʒwák	dʒò	dè dʒát
	KIT	ɛ dʒôh	dʒáò	dì dʒâ:
	KIF	ɛ dʒos	dʒá : m	dì dʒát
	KƐN	dʒòh	dʒam	le gâ'ʔ
	NUM	dʒó	dʒá	lè dʒát
	BIT	gì' á	tigɛtɔ̂	kè kìá
	TAT	dʒágè	dʒá	né dʒánè
	BAJ	yà: ko	—	nè yà
	BAS	fíntwɔ̀	gia	nè ánòkò

Given the above cognate sets, the phonemes /s/ f/ c/ and /k/ will be reconstructed as follows

(313)	PN	*s	*f	*c	*j
	LK	s	f	tʃ	y
	CK	s	f	tʃ	dʒ / y
	UK	s	f	tʃ	dʒ
	KIT	s	f	tʃ	dʒ
	KIF	s	f	tʃ	dʒ
	KƐN	s	f	tʃ	dʒ
	NUM	s	f	tʃ	dʒ
	BIT	s / ʃ	f	tʃ	g / k
	TAK	s / ʃ	f	tʃ	dʒ
	BAJ	s / ʃ	f	tʃ	dʒ
	BAS	s / ʃ	f	tʃ	dʒ

Some of the languages have the palato–alveolar ʃ in some roots. Hence s/ʃ has been reconstructed as *s because the main reflex is an alveolars. The phonemic status of ʃ is not very clear. The uncertainty here might be explained if one takes into consideration the corresponding PB reconstruction which is the palatal stop *c. The development from a palatal stop to S was probably through intermediate steps including a palatal or palato-alveolar affricate and fricative. The possibility that in Proto Nyang, *s might still have been palato alveolar or that [s] and [ʃ] were in free variation in some contexts cannot be ruled out. Meanwhile, y for Lk has been reconstructed as *j because y in Lk corresponds to j in UK and KƐN. Other cognate examples include

(3.14)	LK	Uk	KIT	GLOSS
	èyé	ɛjé	ɛjí:	leaf
	yí	jí	ɛ' yí	he / she

3.2.4. NASALS m, n, ŋ, ɲ and w, r

The following congnate sets justify the occurrence of m in C_1 position

(3.14)	/ m /	'mother'	'child'	'I (me)'
	LK	má	mɔ̀	mê
	CK	má	mô	mê
	UK	má	mɔ̀	mê
	KIT	ma / níɛ̀	mɔ̀ú	mì
	KIF	níɛ̀	mɔ̀	mì
	KƐN	ma	ŋmŋmá	mɔ̂
	NUM	nâé	mɛ̆ :	mə̂
	BIT	mɔ̂	mɛ́:	mì
:	TAK	má	mɛ̂:	me
	BAJ	má	mɛ́	mù
	BAS	má	mâ	mɛ̀

(3.15)	/ n /	'bite'	'husband'	'dry season'
	LK	n ém	n ém	è'nèm
	CK	n ém	n èm	ɛ nèm
	UK	n ém	n ém	ɛ nèm
	KIT	n èm	n ém	ɛ nèm
	KIF	n ɛm	n ém	ɛ ném
	KƐN	nom	'ò'nô	kénòm
	NUM	nɔ̀	o'nò	kènómə̀
	BIT	nɔ̀	mə'nŏ	kènómì
	TAT	nɔ́	mé'nò	gènómè
	BAJ	nɔ́	m è'nò	kìnomû
	BAS	nwɔ̂	m è'nó	kùnùmó

(3.16)	/ ŋ /	'squeeze'	'scratch'
	LK	ŋă	ŋwăt
	CL	ŋâ	ŋwát
	UK	ŋô	ŋwâ:
	KIT	ŋáù	ŋwâ
	KIF	'ŋámé	ŋwát
	KƐ'N	'ŋámà	ŋwá
	NUM	ŋamɔ̀	ŋálè
	BIT	ŋ ɔ́mɔ̀	ŋálè
	TAK	ŋámè	ʃù
	BAJ	ŋámù	ŋá
	BAS	ŋámè	--

(3.17)	/ ɲ /	'eat'	'drink'	'eye'
	LK	ɲé	ɲú	ɲ ésɛ
	CK	ɲê	ɲû	ɲ és
	UK	ɲé	ɲú	n ɛt
	KIT	ɲé	ɲú	ɲè
	KIT	ɲé	ɲù	ɲès
	KƐN	ɲé	ɲù	ɲé
	NUM	ɲé	ɲù	tàmbónyì
	BIT	ɲé	ɲú	ɲí
	TAK	ɲíɛ̀?	nù?	émè
	BAJ	ɲí	ɲú	ɛ'ɲe
	BAS	ɲé	ɲú	ɲì

(3.18)	/ w /	'you'	'oil'	'tortoise'
	LK	wɔ̀	bà' wèt	nè' wèn
	CK	wɔ̀	bà' wɔ̀t	dè' wèn
	UK	wò	bà' wét	nè' wèn
	KIT	wɔ̀	bà' wɛt	dì wɛn
	KIF	wò	ba wɔ́t	di wèn
	KƐN	wô	a' wí ʔ	ogwén
	NUM	wò	a wé	ò' wé
	BIT	wù	mà wí	mò' wî
	TAK	wɔ̀	mà wê	mè wè
	BAJ	wù	—	mè gwê
	BAS	wò	mà wê :	me gwê

(3.19)	/ r /	'three'	'good character)'	'fly'
	LK	bé' rát	ɛ' rẁ	rě
	CK	bɛ' rat	ɛ rẁ	ré
	UK	bɛ' raʔ	ɛ rẃ	rí
	KIT	bi' râ :	ɛ réntì	fî:
	KIT	bì' râ:	è rí	fwérə̀
	KƐN	ólé	ké lìém	lèné
	NUM	òlé	kɛ̀lɔ̀	lénè
	BIT	òlé	kìlí ʔ	lèné
	TAK	èlé	gèlɔ̀mé	lì éné
	BAJ	—	—	lení
	BAS	òlé	—	kòfùnú

(3.20)	PN	*m	*n	*ŋ	*ɲ	*w	*r
	LK	m	n	ŋ	ɲ	w	r
	CK	m	n	ŋ	ɲ	w	r
	UK	m	n	ŋ	ɲ / n	w	r
	KIT	m	n	ŋ	ɲ	w	r
	KIF	m	n	ŋ	ɲ	w	r / L
	KEN	m	n	ŋ	ɲ	w	L
	NUM	m	n	ŋ	ɲ	w	L
	BIT	m	n	ŋ	ɲ	w	L
	TAT	m	n	ŋ	ɲ / m	w	L
	BAJ	m	n	ŋ	ɲ	w	L
	BAS	m	n	ŋ	ɲ	w	L

The evidence for nasals as well as w is straightforward. The set with r / l has been reconstructed as *r because the sound change from **r** -- > L is phonetically more plausible than L -- >r . Also, there is a proto – Nyang *d which suggests that there was an alveolar stop in the ancestor language which developed into l through r. Hence we are insinuating that d -- > r and r later became l.

Example (3.21)	LK	TAK	KEN	Gloss
	pùrí	p élè	pùrì	' push'
	bé'rát	òlé	olɛ	' three'
	ɛrẁ	kèlɔ̀	èrí	' good'
	ɤábɔ̀ri	gèpwélì	gẁŋɔliŋ	' round'

3.3. CONSONANTS IN C_2 POSITION

The consonants found in C_2 position are common in roots with the shape CVC and rarely CVCV__. The cognate set examples that follow will give evidence for the reconstruction of the following consonants in C_2 position:

3.3.1. Stops p t k and y

(3.22)	/ p /	'steal'	'blow'	'bone'
	LK	ɣɛ̀p	ʃɛ́p	è'ɣɛ́p
	CK	ɣɛ́p	ʃɛ́p	è'ɣɛ́p
	UK	ɣɛ́p	ʃɛ́p	è'ɣɛ́p
	KIT	gɛ́p	ʃɛ́p	è'gɛ́p
	KIF	gɛp	fɛ́p	è'gɛp
	KƐN	èdʒèp	fɛ̀né	kègôh
	NUM	adʒĭ	fĭné	kɛgŏ
	BIT	dʒì	fínè	kègó
	TAK	èdʒò	fɔ?	gègŏ
	BAJ	ègé	àfunuŋ'gu	kè' ŭfó
	BAS	yó	fúnù	kùnfúɔ̀

(3.23)	/ t /	'foot / sole'	'nine'	'house'
	LK	nè' yàt	nènènámot	è'kèt
	CK	dè' dʒát	nènámòt	è két
	UK	dè' dʒát	nɛnɛnamôt	è két
	KIT	dì' dʒâ:	dinɛnamot	è kèt
	KIF	dì' dʒát	nènámô	nyúp
	KƐN	le gâ?	onénàmŋá	kètá
	NUM	lè dʒát	o' nénàmâ	kɛpú
	BIT	kɛkìá	o' ninámà?	kɛpú
	TAK	né dʒánè	onênámà	gèpú
	BAJ	nèyà	___	kòpù
	BAS	nè ánòkò	o' nɛnámà	kètá

(3.24)	/ k /	'tree'	'elephant'	'hole'	'knife'
	LK	è' nɔ̀k	ǹ sòk	m' bòk	ŋgàk
	CK	è' nók	n sòk	m' bók	ŋgák
	UK	è' nók	n sòk	m' bòk	ŋgák
	KIT	è' nɔ́k	n sùk	m' bók	ŋgáh
	KIF	è' nok	ǹ sùk	m̀' bòk	mònsô
	KƐN	kɛnò ?	o sùk	m' bù	ŋ' gá
	NUM	kɛnò ?	o'su	mbú	ŋ' gá
	BIT	kɛnô:	m èʃù?	mbù	ŋ' gá
	TAK	gɛ' nõ	m èʃù	ɛm'bù	ŋ' gá'
	BAJ	___	mèʃù	mbù	ŋ' gá ?
	BAS	kɛ nwɔ̀:	mèʃù:	mbò	ŋ' gá ?

(3.25)	/ y /	'hunger'	'stone'	'kill'
	LK	ǹ sày	n táy	wây
	CK	n sây	n táy	wây
	UK	n sày	n táy	wáy
	KIT	n sây	n táy	gwáy
	KIF	n sà	n tá	gwâ
	KƐN	nòsâ	ntá	gwá
	NUM	òsâ:	ntá	wá
	BIT	mèsá	ntá	wá
	TAK	mèsá	ntá	wá
	BAJ	—	ntă ʔ	àpíènèmì
	BAS	—	ǹtà	wa

Reconstruction of p, t, k and semi-vowel y

(3.25)	PN	*p	*t	*k	*y
	LK	p	t	k	y
	CK	p	t	k	y
	UK	p	t	k	y
	KIT	p	t	k / h	y
	KIF	p	t	k	ø
	KƐN	p / ʔ	ʔ	k(ʔ)	ø
	NUM	ø	t	(ʔ)	ø
	BIT	ø	(ʔ)	(ʔ)	ø
	TAK	(ʔ)	ø	ø	ø
	BAJ	ø	ø	(ʔ)	ø
	BAS	ø	ø	(ʔ)	ø

It is clear evidence from the cognate sets and the above table that the consonants p, t, k and y occur in C_2 position in LK, CK, UK, KIT and KIF without any problem. To be on a safe bet, in KIT, the set k / h has been reconstructed as *k because the change from a stop to a fricative of approximately the same point of articulation is much less common. For

NUM, BIT, TAK BAS and BAJ, there is no C_2 consonant apart from the glottal stop which occurs in very few words. The KEN set shows a glottal stop (ʔ)) in all the reflexes except for *y. In the reconstruction of consonants, h and ʔ have proved to be a problem.

As for the glottal stop [ʔ], it is not clear if it should be considered a phoneme. We could not find any contrasts between [ʔ] and other voiceless stops in word final position, which is the only position where [ʔ] occurs.

By examining Kenyang and Denya, which are closely related to Kendem, we find some historical evidence that clarifies this problem. The examples below show the relationship between word final stops in some cognate words of Kenyang, Denya, and Kendem.

(3.26)	[p]	Lower Kenyang	Kendem	Denya	Gloss
		è' Báp	kɛbá ʔ	gèbagèlé	' wing'
		núop	ɲo ʔ	bî	' day'
		ŋkwòp	òkò ʔ	mɛn' yamíɛ̀	' slain'
		ntop	otò ʔ	usógè	' soil'
	[t]	bà' w ɛt	awi ʔ	màwê	' oil'
		ne yat	lega ʔ	n ɛdʒánɛ̀	' foot'
	[k]	ɛnòk	kɛno ʔ	gɛ nŏ	' tree'
		ʏok	gú ʔ	ù	' hear'
		bɛkok	okwò ʔ	òkŏ	' old'

The above examples show the weakening of word final consonants in Kendem. Kenyang (LK CK UK, and KIT) has many examples of voiceless and word final stops. Kendem (KEN) has much fewer and Denya (BIT, TAK, BAJ, BAS) has none at all. Therefore we can say that Kendem appears to be at the transition point where the contrast between word final stops is being neutralized in many words by the coalescence of those contrasts to [ʔ]. Although some examples of word final p, t, k still exist, in Denya, this consonant weakening in word final position has been completed such that there are no word final consonants.

The [h] segment poses problems similar to those encountered for [ʔ]. Our data yields only a few examples of [h]. Just like [ʔ], [h] is historically derived from stops at least in word final position. There appears to be some variation between speakers for [h], [ʔ], and loss of final consonant.

Example

(3.27) Kenyang	Kendem		Denya	Gloss
	speaker I	Speaker II		
á m èk	amé	àmeh	àmè	' eyes'
ŋgak	ŋgá	ŋgah	ŋgá	' knife'
ɛgép	kɛgoh	—	gegŏ	' bone'
nsòk	ósùk	osù ʔ	mèsù	' elephant'
ŋkɔk	okwô	o' kwó ʔ	—	' chicken'
eyɔk	jôh	—	dʒágè	' feather'

3.3.2. NASALS in C_2 position. m, n and ŋ

(3.28) / m / 'right'

LK	a wɔ̂: nɛm
CK	a wón ém
UK	a wonɛm
KIT	a bonɛm
KIF	a bonɛm
KƐN	e nóm
NUM	e wônò
BIT	ewôńò
TAK	ɛbwɔ́nyè
BAJ	ɛwonyè
BAS	wònyé

For more examples of C_2 nasal / m / see C_1 nasal / n /

(3.29) / n / 'clothes' 'name' 'eight'

LK	ndèn	ɲén	mɛnèn
CK	ndèn	ɲén	bɛ̌nèn
UK	ndèn	ɲén	bɛnèn
KIT	ndèn	ɲén	bí inɛn
KIF	ndèn	ɲén	mɛ̌:nɛn
KƐN	ndèn	ɲɛn	onɛn
NUM	ndɛ̌	ɲé	onê:
BIT	ndè:	ɲì	onî
TAK	ndê	mábò	onê
BAJ	ndɛ̌ ʔ	maβó	—
BAS	ndé	màvô	onê

(3.30)	/ ŋ /	'spear'	'hip'	'love'
	LK	nɛkòŋ	sèsòŋ	kòŋ
	CK	nɛkòŋ	sɛsoŋ	kòŋ
	UK	dɛkòŋ	dèsòŋ	kóŋ
	KIT	dìkóŋ	sìsóŋ	kóŋ
	KIF	dìkoŋ	sisòŋ	kóŋ
	KƐN	lé'koŋ	ɛsóŋ	kòŋ
	NUM	lèkó	ɛsô:	kó
	BIT	lɛkò	èsò	kò
	TAK	nɛkò	ɛsò	gidʒĭ:
	BAJ	nɛkwô	fìsô	—
	BAS	nɛkwô:	fùʃùò	lómè

(3.31)	PN	*m	*n	*ŋ
	LK	m	n	ŋ
	CK	m	n	ŋ
	UK	m	n	ŋ
	KIT	m	n	ŋ
	KIF	m	n	ŋ
	KƐN	m	n	ŋ
	NUM	ø	ø	ø
	BIT	ø	ø	ø
	TAK	ø	ø	ø
	BAJ	ø	ø	ø
	BAS	ø	ø	ø

The evidence for nasals is absolutely straightforward. The table also confirms the fact that nasals (final consonants) have been lost in NUM, BIT, TAK BAJ, and BAS (Denya dialects). The following examples show the loss of word final nasals in Denya.

(3.32)	Kenyang	Kendem	Denya	Gloss
[m]	nèm	nóm	nó	' bite'
	a mém	mém	mò	' inside'
	ansɛm	ósèm	mɛsò	' behind'
[n]	nù én	ɲôn	nùé	' nose'
	ndɛn	ndèn	ndê	' clothes'
	kwɛn	kwɛn	kwé	' fall'
[ŋ]	sesoŋ	ɛsoŋ	ɛsò	' hip'
	mbaŋ	mbiaŋ	ɛmbíà	' horn'
	ŋgaŋ	oɤáŋ	mɛgá	' salt'

3.4. CONSONANTS IN C_2 NON-FINAL POSITION

In some languages, C_2 is followed by a vowel. That is to say the root has the structure CVCV. The problem of reconstruction of sounds in non-final position C_2 position is that such roots are relatively few due to the loss of earlier final vowel. Some consonants occur in this position due to reduplication of the root. However, despite the fact that C_2 non-final consonants are few in number, they are not very different from the consonants of C_2 root final. The phonemes posited as C_2 non-final are on the basis of the data we have.

3.5. PROTO-NYANG CONSONANT PHONEMES

The consonants reconstructed for PN can be rearranged as follows:

(3.34)	Labial	Alveolar	Palatal	Velar	Lab Vel
Stops:	*p	*t	*c	*k	*kp
	*b	*d	*j	*g	*gb
Fricatives:	*f	*s			
Nasals:	*m	*n	*ɲ	*ŋ	
Trill:		*r			
Semi. Vowel:		*y		*w	

The table above reveals that there are 19 consonant phonemes for PN. The reconstructed consonants show five points of articulation, viz: labial, alveolar, palatal, velar, and labio-velar. There are equally five manners of articulation classified as stops (Vd, VL), fricatives, nasals, trill and semi-vowels. There are five voiceless (VL) as well as five voiced (Vd) stops, thus making the sound system asymmetrical. There are two voiceless fricatives, four nasals, one trill and two semi vowels. If we take into consideration the different positions of consonants in the root, we discover that there are several restrictions in the distribution of these reconstructed consonants. The sound distribution below shows the different positions of the consonant in roots.

Distribution of Consonant phonemes in Roots

(3.35)

C_1	Position			
*p	*t	*c	*k	*kp
*b	*d	*j	*g	*gb
*f	*s			
*m	*n	*ɲ	*ŋ	
	*r		*w	

C_2	Root final		C_2	non – final	
*p	*t	*k		*t	*k
*m	*n	*ŋ	*m	*n	*ŋ
	*y			*r	

The largest range of consonants is found to occur root initially while the smallest is found in C_2 non–final position. The limited number of consonants in C_2 root final position is due to the fact that many consonants are being lost in the present day dialects. In some dialects the final consonant in monosyllabic roots are softened and become disyllabic while in others the vowels become lengthened or diphthongs to compensate for the final consonant loss.

All continuants *f *s *r *w occur in C_1 position while none is found root finally. The nasals are found everywhere except the palatal nasal ɲ which occurs only in C_1. The voicing distinction for stops in C_1 position is fully retained. The semi–vowel *w only occurs root initially; on the other hand, the semi–vowel *y only occurs root finally.

The phonemes kp and gb have not been reconstructed, but have been included in the reconstructed phonemes in these tables because our data had just two roots with such sounds. However, we found reliable documents (Tyhurst 1984: 24) wich show proof of these sounds as phonemes in the Kenyang and Denya languages (Kendem being an exception). It is on the basis of this that we included them in the reconstructed sounds. Kp and gb occur in C_1 position only.

Examples

(3.36)

Kenyang		Denya	
ɛkpérè	' calabash'	má; kpò	' heads'
ŋkpè	' ringworm'	mě: kpò	' heads'
ŋm – gbè	' Ekpe'	magbô	' cry'
ɛgbe	' a proper name'	négbò	' death'

3.6. VOWEL RECONSTRUCTIONS

There are both short and long vowels in the Nyang languages, but this study will dwell mostly on the reconstruction of short vowels. The reason is that the long vowels are scarcely seen in the data. When a given cognate set happens to have a long vowel, it may be just one in the set, hence, making reconstruction of long vowels difficult.

The short vowels reconstructed for Proto–Nyang are mainly found in roots of type V_1 position, with the structure CVCV, CVC, and CV. It should be noted that V_2 of CVCV roots have in many cases undergone a variety of changes such as assimilation, lowering, raising, thus making the reconstruction of their quality impossible. We have not also taken the vowels of affixes into consideration because affixes present considerable difficulties.

3.6.1. FRONT VOWELS i, e, ɛ and a

The following table will provide evidence for the reconstruction of / i / in the Nyang languages

(3.37)	'he / she'	'what'	' four'	'excrement'
LK	yi	yî	mé' nwì	kɛ̀bí
CK	yĭ	yî	mé' nwí	kɛbí
UK	ʤí	ʤì	bin' wî	kɛbì
KIT	ɛ'yì	ʤì	bì nywì	kìbí
KIF	à'yĭ	ʤì	bì' nî	kìbì
KƐN	li	ǹdí	ónî	lɛ̀' bî
NUM	ʤì	ndì	òní	—
BIT	ʤì	ndé	oní	lèbí
TAK	ʤì	ndé	ɛ' nî	dìbì
BAJ	yî	ndí	—	—
BAS	yì	ndí	ù'ní	—

Evidence for / e /

(3.38)	'hill'	'year'	'star'	'eat'
LK	ǹ' ʤè	mí'é	nɛ̀m' bè	nyé
CK	n ʤê :	mì'é	nɛ̀m' bê	nyê
UK	n ʤê	mì'è	nɛm bé	nyé
KIT	n ʤê	'míè	dìm beì :	nyé
KIF	n ʤè	m̀íè	dìm bê	nyé

KƐN	o' kwé	ǹyè	om' bî	nyé
NUM	o' kwè	ŋmé	om bì	nye
BIT	mɛ'kwé	ŋmé	mèm bé	nyê
TAK	mɛ̌ kwé	ŋmé	mɛm' bé	nyí è ʔ
BAJ	mè' kwè	ŋm' ŋmé	mɛm' bì ʔ	nyí
BAS	—	ŋmé	ǹ' bím ə̀wè	nyé

Evidence for / a /

(3.39)	' five'	' sing'	' count'	' scratch'
LK	bɛ́' tày	kwáy	pày	ŋwát^{h}
CK	bɛ' táy	kwây	pây	ŋwat
UK	bɛ̀' táy	kwáy	pây	ŋwâ :
KIT	bì táy	kway	pây	ŋwâ
KIF	bì ta	kwɔ́	pà	ŋwát
K ƐN	ói tà	kwáŋ	pá	ŋwá
NUM	o tá	kwá	pá	ŋálè
BIT	o tà	kwà	pà	ŋálè
TAK	ɛ' ta	kwá	pa	ʃù
BAJ	—	—	—	ŋá
BAS	òtáy	kwá	pà	—

Given the evidence from the above table, the phonemes / i / e / and / a / can be reconstructed as follows.

(3.40) PN	*i	*e	*a	*ɛ
Lk	i	e	a	ɛ
CK	i	e	a	ɛ
UK	i	e	a /o/ɔ	ɛ
KIT	i	e /ei	a	ɛ
KIF	i	e /o	a /o	ɛ
KƐN	i	e /i /o	a	ɛ
NUM	i	e /i /o	a /ɔ	ɛ/e /ɔ / u
BIT	i /e	e /o	a /ɔ	ɛ /i /ɔ /u /o
TAK	i /e	e /i /o	a	ɛ/e /ɔ / u /o
BAJ	i	e /i /o	a /o	ɛ/e /ɔ
BAS	i	e /o	a /ɔ	

3.6.2. BACK VOWELS u, o, ɔ

The high back vowel / u / can be seen in the following cognates

(3.41)	' drink'	' ear'	' sky'	' person'
LK	nyú	à' tú	nèbù	mù
CK	nyû	à' tú	dèbû	mù
UK	nyú	à' tú	dèbú	kwáŋwà
KIT	nyú	à' tú	dìbû	mém
KIF	nyù	à' tù	dibù	məm
KƐN	ɲù	è' tù	lèbú	mŭ
NUM	nyù	è' tù	mfáy nèbú	míè mù
BIT	ɲù	è' tù	lɛbú	mu
TAK	nù?	é' tú	ǹfánèbŭ	mu:
BAJ	nyú	è' tù	ǹfá nou	mu
BAS	nyú	è' tù	—	mìémù:

The phoneme / o / can be found in the following cognates.

(3.42)	' hip'	' soil'	' spear'
Lk	sɛ'sòŋ	ntòp	nɛ kòŋ
CK	sɛ sòŋ	ntóp	nɛ koŋ
UK	dɛ sòŋ	ntóp	dɛ koŋ
KIT	sì sóŋ	nto:	di kóŋ
KIF	s' sòŋ	nto: p	di kòŋ
K ƐN	ɛ' soŋ	òtó ʔ	le koŋ
NUM	ɛ sô:	otó ʔ	le kó
BIT	ɛ sɔ̀	mɛtó	le kò
TAK	ɛ sò	usógè	ne kò
BAJ	fì sô	mɛtava ʔ	nɛ kô
BAS	fuʃùò	mètá	nɛ kwô :

The phoneme / ɔ /

(3.43)	'you'	'vomit'	'take'
LK	wɔ̀	gwɔ́	sɔ́t
CK	wɔ̀	gwá	bwóp
UK	wò	gwɔ̀	sâ
KIT	wɔ̀	gwɔ̀	bùɔ́
KIF	wò	gwɔ̀	sɔ̂t
KƐN	wô	gwô	Bŏ
NUM	wò	gwɔ̀	bɔ́
BIT	wù	wɔ̂	sè
TAK	wɔ̀	wô	bɔ̀
BAJ	wù	wô	vɔ́
BAS	wò	gwô	vɔ́

The above cognate set examples allow us to reconstruct the back vowels as follows.

(3.44)

PN	*u	*o	*ɔ
LK	u	o	ɔ / ɛ
CK	u	o	ɔ /ɛ/a/o
UK	u	o /u	ɔ /ɛ/a/o
KIT	u /ɛ	o /u	ɔ /ɛ
KIF	u /ə	o /u	ɔ /ɛ/o
KƐN	u /i	o /u	o
NUM	u /i	o /u	ɔ /o
BIT	u /i	o /ɔ/u	ɔ /ɛ/u
TAK	u	o /ɔ/u	ɔ /o
BAJ	u	o /a/u	ɔ /o/u
BAS	u	o /a/u	ɔ /o

Amongst the back vowels, the proto *ɔ presents numerous reflexes in almost all the dialects. The ɔ sound is not attested in KƐN at all. The PN *O is also realized as u in some cognates.

3.6.3. PN Vowel Phonemes

A seven vowel system has been reconstructed for the PN vowels.

(3.45)

*i	*u
*e	*o
*ɛ	*ɔ
*a	

The vowel system for PN is made up of three front vowels, three back vowels, and one central low vowel. This gives a complete asymmetrical system for the PN vowels.

CHAPTER IV

SOUND CHANGES AND REFLEXES OF PROTO – NYANG

4.1 INTRODUCTION

The aim of this chapter is to account for all the reconstructed sounds, the sound changes and reflexes. It is true that a good number of the sounds have not changed, i.e. the proto-sounds are the same like the reflexes in some cases. Nevertheless, between PN and the present day languages, a considerable number of changes have taken place both in consonants and in vowels. Some of the sound changes have taken place in a specific phonetic context. Others cannot be attributed to context and so such sounds have to be considered as changes which have taken place independently of the context. Note that some changes are shared by two or more present day dialects and this may therefore indicate the extent to which they are related genetically.

In order to account for these changes we will use a set of distinctive features to characterize the PN sounds and the changes that must have occurred. The reconstructed sounds are placed at the top of the chart with a starred symbol. The sound changes which we are going to discuss are already implicit in the charts of reconstructed sounds in chapter three.

4.2. Distinctive feature matrix for PN consonants

Distinctive feature matrix for Obstruent.

(401)

	*p	*b	*t	*d	*k	*g	*c	*j	*kp	*gb	*f	*s
Voice:	-	+	-	+	-	+	-	+	-	+	-	-
Continuant:	-	-	-	-	-	-	-	-	-	-	+	+
Sonorant:	-	-	-	-	-	-	-	-	-	-	-	-
Strident:	-	-	-	-	-	-	+	+	-	-	+	+
Anterior:	+	+	+	+	-	-	+	+	-	-	+	+
Labial:	+	+	+	-	-	-	-	-	+	+	+	-
Coronal:	-	-	-	+	-	-	+	-	-	-	-	+
High:	-	-	-	-	+	+	+	+	+	+	-	-
Back:	-	-	-	-	+	+	-	-	+	+	-	-
Del Rel:	-	-	-	-	-	-	+	+	-	-	-	-

Distinctive feature matrix for sonorants

(402)

	*m	*n	*ɲ	*ŋ	*r	*y	*w
Consonant:	+	+	+	+	+	-	-
Continuant :	-	-	-	-	+	+	+
Labial :	+	-	-	-	-	+	+
Nasal:	+	+	+	+	-	-	-
Anterior :	+	+	-	-	+	+	-
Coronal:	-	+	-	-	+	+	-
High:	-	-	+	+	-	+	+
Back:	-	-	-	+	-	-	+

4.3. CONSONANT CHANGES BETWEEN PN AND PRESENT DAY LANGUAGES

In the discussion of the sound changes, frequent reference will be made to morpheme boundaries, both morpheme initial and morpheme final. The classification of consonants as C_1 and C_2 is based on their position in roots, with C_1 being equivalent to C after morpheme initial boundary (/ #-) and C_2 in the majority cases being equivalent to C before morpheme final boundary (/ - #). Most of these rules are morphologically conditioned i.e they apply to particular words or dialects. And so, it seems easiest to state some of the phonological process with reference to morpheme structure rather than in purely phonological terms, i.e. morphological and phonological contexts coincide. Each sound change discussed below will be followed by a few examples and a rule.

4.3.1. Sound Changes involving stops

In C_1 position, voiceless stops *p, *t, *k have not changed. Their voiced counterparts have changed in some languages

b --- > v d --- > y g --- > w

' give birth'	' what'	' hear'
LK: bé	LK: yî	LK: ɤók
KƐN: biɛn	CK: yî	CK: ɤok
TAK: bíɛ̀	UK: dʒì	UK: wok
BAJ: víè	KIT: dʒi	KIT. wuk
BAS: víè	KƐN : ndi	KƐN: gú ʔ
	TAK : n-dé	NUM: gù
		BIT: gu

*b --- > v / #-

*d --- > y / #-

*g --- > w / #-

In terms of features, these changes can be captured by the following rule

a) $$\begin{bmatrix} C \\ -son \\ -cont \\ +vd \end{bmatrix} \quad C \quad \text{--- > } [+cont] \quad / \#-$$

A voiced stop becomes a continuant at root initial position.

In C_2 position, the following changes have occurred in some languages

k --- > h

'knife'

LK: ŋgàk

CK: ŋgák

UK: ŋgàk

KIT: ŋgah

BAJ: ŋgá ʔ

BAS : ŋgá ʔ

*k --- > h / - #

b) $$\begin{bmatrix} C \\ -cont \end{bmatrix} \text{ --- > } [+cont] \quad / \ - \#$$

A stop becomes a continuant at word final position.

Still in C_2 position, stops become the glottalised stop ʔ. This phenomenon is robust in the Kendem language. The motivation behind this as well as the examples is found in section 3.3 (example set 3.26). There we find

*p --- > ʔ / - #

*t --- > ʔ / - #

*k --- > ʔ / - #

c) $\begin{bmatrix} C \\ -son \\ -cont \\ -constr \end{bmatrix}$ --- > [+constr] / - #

A plosive consonant that is non–constrictive becomes constrictive at word final position.

Another change observed in C_2 has to do with the complete deletion of stops. This stands as a major rule as far as the Denya language and dialects are concerned.

i.e *p *t *k --- > ø / - #

Example

p --- > ø	t --- > ø	k ---> ø
' bone'	' nine'	' elephant'
LK: ɛ- ɣɛp	LK: nɛ-nɛnamot	KL: n-sòk
CK: ɛ-ɣ̃ɛp	CK: di-nɛnamot	UK: n-sók
KƐN: kɛ-gô^{h}	KIF: nénámô	KƐN: o-suk
TAK: gɛ-go	KƐN: o-nɛnamŋá	NUM: o-su
	TAK: o-nɛnama	BIT: mɛ-ʃù
	BAS: o-nɛnáma	TAK: mɛ-ʃù
		BAJ: mɛ-ʃù:

*p --- > σ / - #

*t --- > σ / - #

*k --- > σ / - #

The above changes can be summarized as

d) $\begin{bmatrix} C \\ -son \\ -cont \\ -vd \end{bmatrix}$ --- > σ / - #

A voiceless stop becomes deleted at root final

4.3.2. Changes involving Fricatives

With fricatives, the dental alveolar fricative *s has become the palato – alveolar ʃ in C_1 position

*s ---> ʃ / # - (see the examples for elephant above)

Put differently,

e) $\begin{bmatrix} C \\ +ant \\ -High \end{bmatrix}$ --- > $\begin{bmatrix} C \\ -ant \\ +High \end{bmatrix}$ / #-

A dental alveolar consonant becomes a palato - alveolar consonant at root initial position.

4.3.3. Changes involving Nasals

In C_1 position not much has changed just like their oral counterparts.

Example ɲ --- > n

'Mouth'

LK: ɲ̀-ɲù

UK: ɲú

KIF: ɲu

KƐN: o-nɛm

BIT: mò-nú

TAK : mɛ-nô

BAJ: mɛ-nɛ

BAS: mɛ-no

*ɲ --- > n / V-V

f) C C V V

$\begin{bmatrix} +\text{nas} \\ -\text{ant} \end{bmatrix}$ --- > [+ant] / [+syllab] - [+syllab]

A nasal consonant that is non-anterior becomes anterior at intervocallic position.

In C_2 position, nasals are deleted in some languages (Denya especially deletes all consonants in C_2). Clear examples of nasal deletion in C_2 are found in section 3.3.2

*m, *n, *ŋ --- > ø / - #

g) C

[+nasal] ---> ø / - #

A nasal sound becomes deleted at root final position.

4.3.4. Changes involving Trills

The dental alveolar trill has become a lateral sound in some languages

Example r --- > l

'fly'

LK: rĕ

CK: ré

UK: ri

KƐN: lɛné

NUM: lénè

TAK: lìéne

BAJ: lene

*r --- > l / # -

h) C C

[-lat] --- > [+lat] / # -

A trill becomes a lateral at root initial position.

4.3.5. Changes involving Affricates and Semi-Vowels

Affricates occur only in C_1 position and the following changes have been noted

J	--->	y
' pull'		' foot / sole'

LK:	yà	nɛ - yàt
CK:	yă	dɛ - jat
UK:	jò	dɛ - jat
TΛK:	ja	nɛ - jánɛ̀
KIF:	jam	di - jat
KƐN:	jam	lɛ - gaʔ

*j --- > y / #-

i) C C

⌈ +cons ⌉ ⌈ -cons ⌉

⌊ - syll ⌋ --- > ⌊ +syll ⌋ / #-

A consonant becomes a semi – consonant at root initial position

*j --- > g / #-- (as in foot / sole)

j) C C

⌈ -cor ⌉

⌊ +cor ⌋ ---> +High --- > / # -

⌊ +bk ⌋

An affricative becomes a velar stop at root initial position.

Lastly, the semi vowel is deleted at root final position. This is still a major rule as far as the Kendem and Deŋya languages are concerned.

y --- > ø

	'hunger'	'stone'	'kill'
Lk:	n-sày	n – táy	wáy
uk:	n-say	n – táy	wáy
ck:	n-sây	n – tay	way
ken:	no - sa´	n- tá	gwa
Num:	o - sâ	n- tá	wa
Bit:	mɛ - sá	n- ta	wa
Tak:	mɛ – sá	n- ta	wa

*y --- > o / - #

k) C
[-cons]
-syll ---> o / - #
[+hi]

The semi – vowel / y / becomes deleted at root final position.

4.4. CONSONANT SYSTEM AS A RESULT OF SOUND CHANGES

In the sections that follow, the PN phonemes and sound changes in the different languages will be presented. The PN consonant system chart (3.35) on chapter three has been repeated here as (403) for convenience. The chart with lines shows a comparison between PN and the present day languages. The thick lines indicate changes in root initial position while the broken lines indicate changes at root final position. To avoid complications, consonants in C_2 non-final position have been left out in this section.

(403)

C_1 Position					C_2 Root final		
*p	*t	*c	*k	*kp	*p	*t	*k
*b	*d	*j	*g	*gb	*m	*n	*ŋ
*f	*s					*y	
*m	*n	*ɲ	*ŋ				
	*r		*w				

4.4.1. Proto-Nyang and Lower Kenyang

(404)

PN	LK	PN	LK
*p	p	*m	m
*b	b	*n	n
*t	t	*ɲ	ɲ
*d	d	*ŋ	ŋ
*j	j	*y	y
	y	*w	w
*c	c	*r	r
*k	k		
*g	g		
	ɣ		
*kp	kp		
*gb	gb		
*f	f		
*s	s		

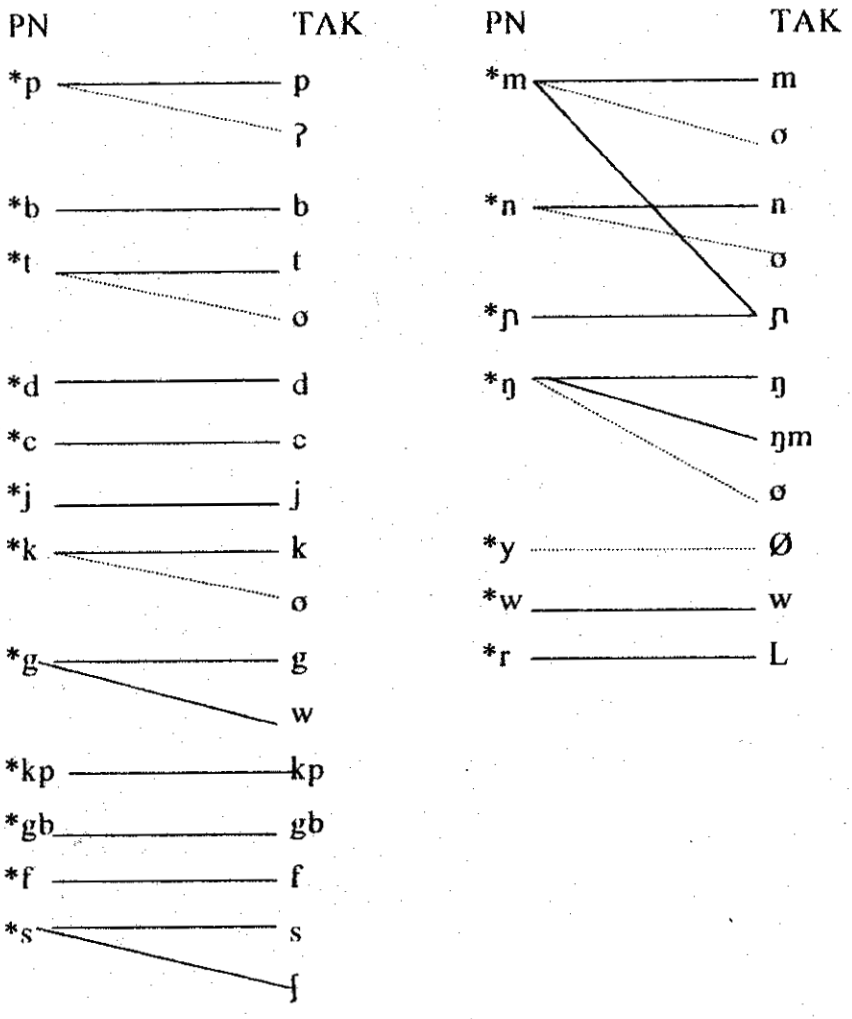
The preceding comparative chart shows that PN *d has split into / d / and / j / while *j has split into / j / and / y /. *g has equally split into / g / and / ɣ/. The comparative chart for PN and LK leaves us with the following system for Root initial and Root final consonants for LK.

(405)

Root initial					Root final		
p	t	c	k	kp	p	t	k
b	d	j	g	gb	m	n	ŋ
f	s					y	
m	n	ɲ	ŋ				
	r		w				

4.4.2. Proto-Nyang and Takamanda

(406)



The comparative table for the TAK and PN consonants reveals that *r has become / l /; *g is also realized as / w /, and *ŋ and ŋm.

Some consonants have been lost in C_2. There is no proto – stop that has ø as the sole reflex. The ø here is used to indicate the fact that these consonants become ø in C_2 final position in TAK. Also the status of a glottal stop as a phoneme in some languages is not well established, but it also has to be recognized that it is unstable in the sense that it is easily deleted in C_2. As indicated in chapter three, it is a mark of transition for stops in C_2 position.

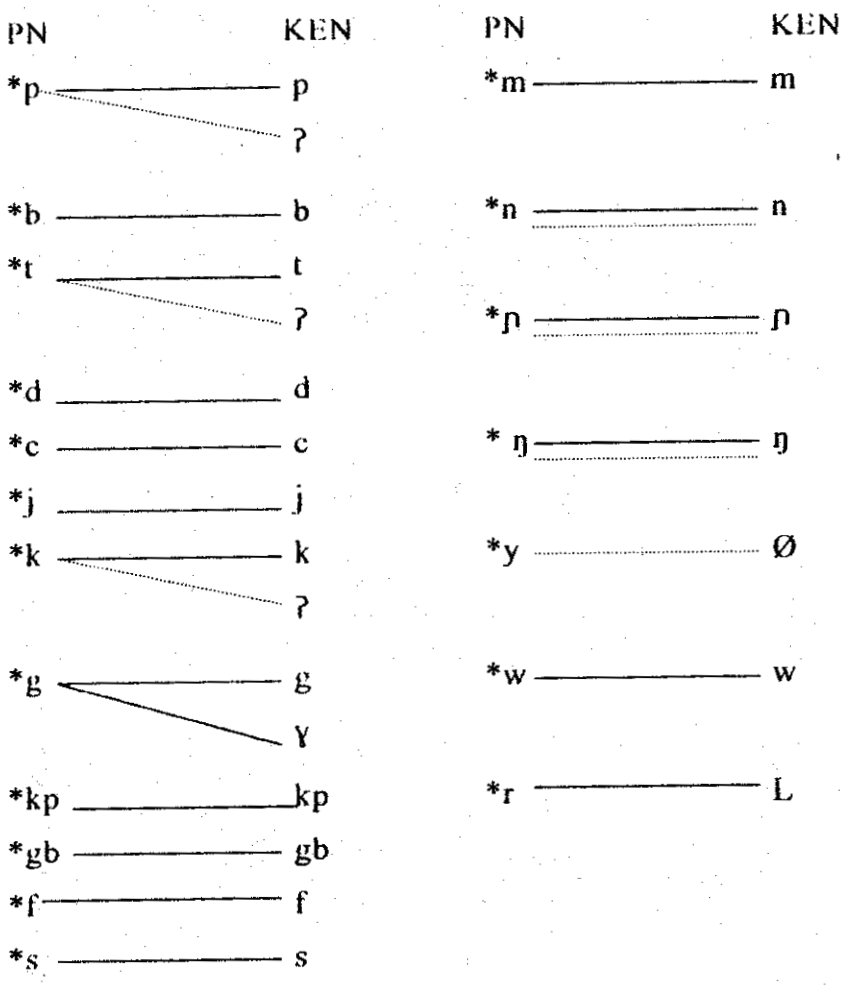
Consonant system for Takamanda

(407)

Root initial					Root final
p	t	c	k	kp	ʔ
b	d	j	g	gb	
f	s	ʃ			
m	n	ɲ		ŋm	
w		y			

4.4.3. Proto-Nyang and Kendem

(408)



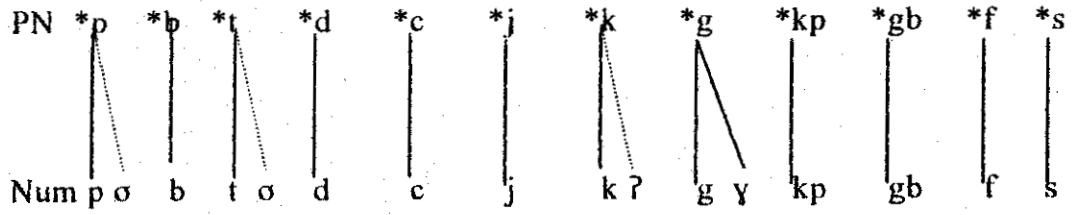
The above chart indicates that voiceless stops *p *t *k have become ʔ. The Proto – sound *g is realized as / g / and as ɣ. The proto phoneme *r has become / l /, while *y is deleted in C_2 position. These changes leave us with the following sounds for Kendem

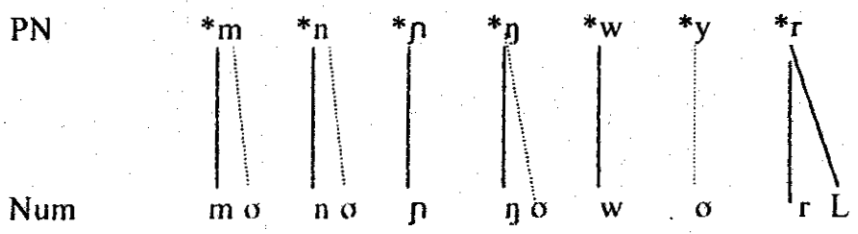
(409)

Root initially					Root finally
p	t	c	k	kp	
b	d	j	g	gb	ʔ
f	s				ɣ
m	n	ɲ			m n ŋ

4.4.4. Proto-Nyang and Numba

(410)





There is equally a difference between PN and NUM sounds as we can observe. *r is realized both as / r / and / l /.
*g as / g / and / ɣ / . In root final position, voiceless stops *p, *t, and *k become either deleted or realized as / ʔ / like the case for *k. Nasals *m, *n, and *ŋ also become deleted in C_2 root finally. Hence NUM consonant system resulting from sound changes can be tabulated in the following manner

(411)

Root initial					Root final
p	t	c	k	kp	
b	d	j	g	gb	ʔ
f	s				
m	n	ɲ	ŋ		
w	l				
	r				

4.5 Vowel changes between PN and Present day Languages.

This section seeks to examine the changes that have occurred in vowels. Some of the changes are motivated by the environment. In many other changes, no influence by the environment can be detected. In other words they have occurred randomly and so have been ignored while the ones that are clearly attested will be presented. It is important to note that in LK, CK, and UK few changes have taken place unlike the other languages.

In the chart below, the vowels of PN are presented with their distinctive feature matrix.

4.5.1. DISTINCTIVE FEATURE MATRIX FOR PN VOWELS

(4.12)

PN	*I	*e	*ɛ	*u	*o	*ɔ	*a
High:	+	-	-	+	-	-	-
Low:	-	-	-	-	-	-	+
Back:	-	-	-	+	+	+	+
Round:	-	-	-	+	+	+	-
ATR:	+	+	-	+	+	-	-

4.5.2. Changes involving Front Vowels

All through the data, the front vowel / i / has proved to be constant in almost all the languages. There is however the reflex / e / which has been presented. But we do not find any motivation for it.

i --- > e

‘ what’

LK	yî
CK	yî
UK	dʒi
KEN	ndí
BIT	ndé
BIT	ndé
TAK	ndé
BAJ	ndí

*i --- > e / - #

L) V V

⌈ +hi ⌉

⌊ - bk ⌋ --- > [-hi] / - #

A front high vowel becomes non–high at root final position

ɛ --- > ɔ ɛ --- > o

	‘ bite’	‘ husband’
LK	ném	nɛ́m
CK	nɛ́m	nɛ̀m
KEN	nom	ném
NUM	nɔ̀	ò- nò
TAK	nɔ́	mɛ́ - nò
BAJ	nɔ́	mɛ- nò
BAS	nwɔ̂	mɛ – nó

* ɛ --- > ɔ / - #

m)
$$\begin{bmatrix} V \\ -bk \\ -Hi \\ -Lo \end{bmatrix} \text{---> } [\ +bk\ ] \ / - \#$$

A front mid vowel becomes a back vowel at root final position

*ɛ --- > o / - #

n)
$$\begin{bmatrix} V \\ -bk \\ -ART \end{bmatrix} \text{ --- > } \begin{bmatrix} V \\ +bk \\ +ATR \end{bmatrix} \ / - \#$$

A front vowel that is tense becomes a back lax vowel at word final position.

ɛ --- > e

'goat'

LK: mén
CK: mén
KEN: mén
BIT: ŋmè
TAK: ŋ̀m-ŋmè
BAJ: ŋ̀m-ŋmè
BAS: mà-mwé

*ɛ ---> e / - #

o)
$$\begin{bmatrix} V \\ -Hi \\ -Lo \\ -BK \\ -ATR \end{bmatrix} \text{---> [+ATR] / - \#}$$

A front mid vowel that is lax becomes tense at root final position

e --- > i

' Star'

LK: nɛm – bè
CK: nɛm – bê
KIT dim – béì
KEN: om – bî
TAK: mɛm – bè
NUM: om – bì
BAJ: mɛ – bì ?

*e --- > i / -#

p)
$$\begin{bmatrix} V \\ -Hi \\ -Lo \\ -BK \end{bmatrix} \text{---> [+Hi] / - \#}$$

The front mid vowel becomes high at word final position.

/ ɛ --- > u

‘ inside’

LK:	à – mém
UK:	a- mèm
KEN:	mém
NUM:	mù
BIT:	mu
TAK:	mo
BAJ:	imo

*ɛ --- > u / - #

q) V

$$\begin{bmatrix} -\text{rd} \\ -\text{Hi} \\ -\text{Lo} \end{bmatrix} \text{---} > \begin{bmatrix} +\text{rd} \\ +\text{Hi} \end{bmatrix} / \text{-\#}$$

A mid unround vowel becomes a high round at word final position.
Still from the cognate set examples for ‘ inside’,

*ɛ --- > o / - #

R) V V

$$\begin{bmatrix} -\text{rd} \\ -\text{ATR} \end{bmatrix} \text{---} > \begin{bmatrix} +\text{rd} \\ +\text{ATR} \end{bmatrix} / \text{-\#}$$

An unround vowel that is lax becomes round and tense at root final position.

One major observation is that the front mid vowel / ɛ / is very prominent. This vowel becomes / e / ɔ / u / o / at word final position. The motivation for it becoming either of the vowels is not known. Hence, we formulate a major rule for this change as

$$*\varepsilon \quad \text{---} > \quad \alpha\, V \;/\; - \#$$

s)
$$\begin{bmatrix} -Hi \\ -Low \\ -BK \end{bmatrix} \quad V \quad \text{---} > \quad [\alpha] \quad / - \#$$

A front mid vowel becomes any vowel at word final position.

4.5.3. Changes involving Back Vowels

A few back vowels are realized differently in some dialects

Example u --- > i

'die'

LK:	gú
CK:	gû
KIF:	gwu
KEN:	gi
NUM:	gí
BAJ:	gbu
TAK:	nɛ́gbò

*u --- > i / - #

t) V V

$$\begin{bmatrix} +Hi \\ +BK \end{bmatrix} \text{ --- > } [-BK] \text{ / - #}$$

A high back vowel becomes front at word final position.

o --- > u ' hear'

LK: ɣók
CK: ɣok
UK: wók
NUM: gù
BIT: gù
TAK: ù

*o --- > u / - #

u) V V

$$\begin{bmatrix} -Hi \\ -Lo \\ +bk \end{bmatrix} \text{ ---> } [+Hi] \text{ / - #}$$

A mid back vowel becomes high at word final position

o --- > ɔ ' Love'

LK	kɔ̀ŋ
CK	kòŋ
KƐN	koŋ
NUM	kɔ́
BIT	kɔ́

*o --- > ɔ / - #

V)

V V

[+ATR] --- > [-ATR] /- #

A tense vowel becomes lax at word final position.

The Proto PN *ɔ has several surface realizations in some cognates. What triggers the changes is not easy to determine.

Example: ' come'

LK.	twâ
UK.	twɔ
KIT.	tò
NUM.	twɔ̀
TAK.	twɔ̂
BAJ.	tó
BAS.	twò

In the above cognate set ɔ --- > a, o and even u in others.

4.5.4. The Low Back Vowel / a /

The low back vowel has equally proven to be resistant to change just like the front high vowel / i /. There are few instances in the data where this sound has become something else

Example: a --- > ɔ
' sing'

LK. kwáy
CK. kwây
KIF. kwɔ́
KEN. kwáŋ
TAK. kwá

*a --- > ɔ / - #

w) V → [- Hi ; - Lo ; + rd] / - #
[+ Lo]

A low vowel becomes a mid round vowel at word final position.

4.6. Vowel System as a result of Vowel Changes.

Prior to this, we illustrated the various changes that have taken place in relation to the individual proto-phoneme through a series of rules. Attention is now focused on how these changes modified the original vowel system. There are differences between the languages in relation to how they

have been affected by the changes. Some of the vowel changes resulted in new phonemes; e.g., Kendem has an additional / ɔ /.

On the sketches below, the PN vowels are given, then the arrows pointing the different proto-phonemes are indicating the changes that occurred. Note that it is what is obtained following the rules.

PN --- > LK

*i *u

*e *o

*ɛ *ɔ

*a

PN --- > CK

*i *u

*e *o

*ɛ *ɔ

*a

PN --- > UK

*i *u

*e *o

*ɛ *ɔ

*a

PN --- > KIT

*i *u

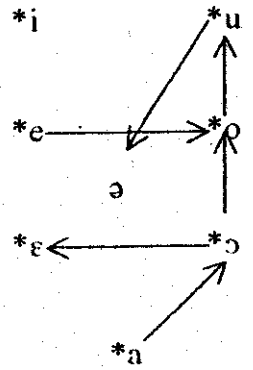
*e *o

*ɛ *ɔ

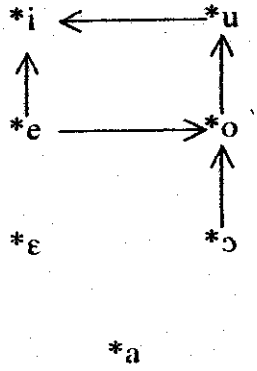
*a

PN --- > KIF

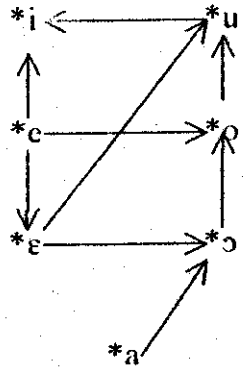
PN --- > KƐN



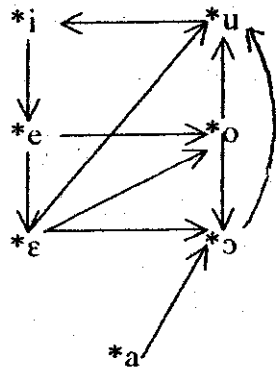
PN --- > NUM



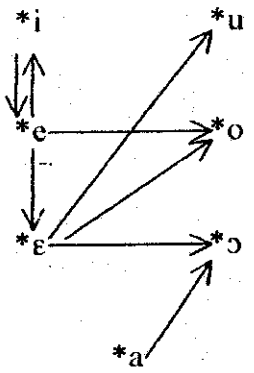
PN --- >BIT

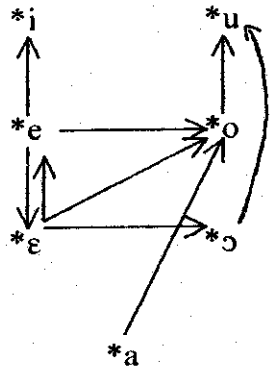


PN --- > TAK

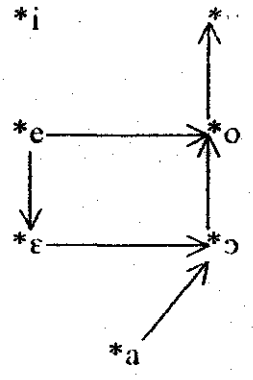


PN --- >BAJ





PN --- > BAS



At this level, the illustration of sound changes from the sketches speak for themselves. UK, CK, and especially LK have retained the original vowel system virtually unchanged, while KIT and KEN have undergone a few vowel changes. KIF, NUM, BIT, TAK, BAJ, and BAS have registered a considerable number of changes. The front high vowel / i / and the back low vowel / a / have proved to be resistant to change.

CHAPTER V

RECONSTRUCTION OF NOUN CLASS AND CONCORD SYSTEM

5.0. INTRODUCTION

Some aspects raise issues for the reconstruction of morpheme initial consonant of the languages under consideration. While it is difficult to know the original shape of some prefixes due to some irregularities, at the same time reconstruction for others is virtually impossible due to what appears to be analogical development and irregular sound changes. In chapter two, the noun classes of all the languages and dialects under study were presented as a sort of introduction to what has to be discussed in the present chapter. At the moment we will characterize the system and an attempt will be made in reconstructing the noun class and concord prefixes.

5.1. THE NOUN CLASSES

A class is defined by:

a) The set of concord prefixes required by the noun

b) The form of the noun prefix, and

c) The association of one class with another as singular/plural pair (Kadima 1969:83, Hedinger 1980.2).

Put differently, a class is characterized by a certain noun prefix which in turn

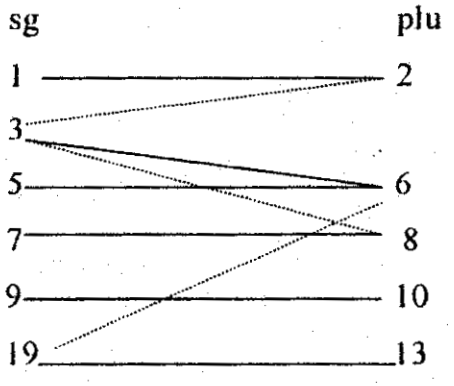
requires the appropriate 'concord' prefixes on such word classes as the verb, numeral, demonstrative, possessive, relative pronoun, etc. (Hedinger 1984).

Consider the following examples in the Takamanda dialect

(1)	m̀ - fwà	à - kwé	' The chief has fallen'
	1 - chief	3s - fall	
(2)	a- fwà	á- kwé	' The chiefs have fallen'
	2 chief	3pl fall	
(3)	me ŋ̀- kwé		' I have fallen'
	1 1sg fall		

Identification of noun class in any given language as class 1, 2, 3... etc. is based on whether the class and concord prefixes are cognate with the P.B. reconstructions. The pairs which can be reconstructed are: 1-2, 3-4, 5-6, 7-8, 9-10, 11-10, 12-13, 14-6, 15-6, probably also 19-13. Meeussen (1969). For the Nyang languages, this can be schematized as follows:

Noun class pairings in the Nyang languages



The above schema shows singular and plural noun class pairings in the Nyang languages. The dotted lines show that there are some nouns which pair

up in that manner. In addition to the above classes, there is the class 6a which is the single class for liquids and mass nouns.

5.2. THE CONCORDS

A more precise way of determining the class number of a given prefix is by the use of the concordial affixes (Mutaka and Tamaji 1994). In the languages under study, many elements can be used to illustrate the distribution of concordial morphemes such as the noun prefix, the possessive pronoun, the numerals, the adjectival prefixes, the object and subject, the relative pronouns, the determiners, associative markers and pronouns, the determiners, associative markers and tones. If one may make a general statement about the above elements, it would be that they are all governed by the noun. What is common to all the governed elements is the fact that a particular stem occurs with a particular prefix from every class the choice of which is determined by the governing noun. The concords in these languages should be taken cumulatively, i.e. any difference in any one of the concords constitutes a class difference.

In this study, we will not consider all the concord elements partly due to insufficient data. The first five of the elements mentioned above will be used in attempting to reconstruct the noun class and concord affixes. A brief discussion is given below about the concordial affixes in question

5.2.1. The Noun Prefixes

The noun prefixes are generally either the typical Bantu noun prefix shape CV or V, or a hormoganic nasal N-. The hormoganic nasal assimilates to the relevant features of the following consonant as stated in (2)

$$N \rightarrow \begin{bmatrix} \alpha \text{ cor} \\ \alpha \text{ ant} \end{bmatrix} \; / \; - \; \begin{bmatrix} \alpha \text{ cor} \\ \alpha \text{ ant} \end{bmatrix}$$

A nasal adopts the qualities of place of articulation of the consonant that follows.

(3) Examples from Lower Kenyang

N - fɔ	[m - fɔ̀]	cl 1	' chief'
N - bà ŋ	[m - bàŋ]	cl 3	' horn'
N - gbar	[ŋ - gbar]	cl 9	' belt'

5.2.2. Numerals

Numerals have the shape V except for classes 5, 2, 8, 19 and 13 where some languages, especially Denya, show CV. The numeral prefixes vary according to the noun classes; i.e. numeral 'one' has a different concord prefix from 'two', 'three' and so on.

Examples

(4)	n - sòkò	à - mɔ̀t	(cl 9)	' one elephant'
	n - sòkò	é - páì	(cl 10)	' two elephants'
	bà - sàm	bá - rát	(cl 3)	' three slaves'
	bè - bàb	bɛ́ - táì	(cl 8)	' five feathers'
	ba - tạ́b	á - nwî	(cl 6)	' four branches'

5.2.3. *Adjectival concord*

Most often the adjectival concord is a mere copy of the noun prefix in the Nyang languages. We will give an example of what can be translated as ' a tall tree' in some of the languages.

(5) LK: ɛ - nɔ̀k ɛ - sáp

KƐN: kɛ - nɔ̀ ʔ kɛ - sá

TAK: gɛ - nǒ gɛ - tìɛ́

5.2.4. The Object Pronoun

The Object Pronoun has the shape CV, with the V segment being consistently a back vowel or the front high vowel [i] for Denya and its dialects.

Examples (6)

LK: Tambi yì a - ɲú màɲèp ' Tambi (particularly)

lTambi l him 3s - drink 6a - water drank water'

(o.Pro)

bɔ Tambi bɔ̀ bá ɲú màɲèp ' Tambi and others

3 they tambì them 3pl drink 6a- water drank water'

(ob.pro)

TAK: Tambi dʒì à - ɲú mana ' Tambi (particularly)

lTambi him 3s - drink 6a - water drank water'

(ob.pro)

5.2.5. Possessive Pronoun

All the possessive concord prefixes have the shape CV. The only exception is on the NUM and Bitieuku dialects for noun class two, which are simply V-. The possessives follow the noun they modify. To clearly: illustrate how the possessive and the various noun classes work, the noun class prefixes for each language are listed along with examples. The examples show the prefix, followed by the noun root, and the suffix -CV is the concord element for the first person singular possessive pronoun ' my.' The possessive pronoun suffix is a bound morpheme and changes according to the noun class.

(7)

	Lower Kenyang	Kendem	Takamanda	Gloss
1	N: m̀-mù ǹ: nɛ́m – wà	N: m̀- mŭ ò: ò-nò-wô	N: m̀-mù : mɛ: mɛ̀-nò-wà	Person my husband
2	ba: mà-nɛ́m-bâ	à: a-nò-bâ	à: à-nò-bâ	my husbands
3	N: ŋ̀-gò wâ m-báŋ-wâ a : a-tu-wâ	ò: ò-wè-wô N: m̀-bíáŋ-wô ɛ: ɛ̀-tù-wô	mɛ: mɛ-wé-wâ ɛ: ɛ-mbíà-wâ ɛ-tú-wâ	my fire my horn my ear
5	nè: nɛ-kóŋ-nâ N: n – tay-nâ	lɛ: lè-koŋ-nâ N: ǹ-tá-nâ	nè: nè-koŋ-nà N: ǹ-tá-nà	my spear my stone
6	bà: bà-ò-yâ á: á-mí -yâ	a: a-wè-yâ a-mé-yâ	ma: mà-wé-yâ a: á-mè-yâ	my fires my eyes
6a	bà: wèt-mà	a: à-wí ʔ-mâ	mà: mɑ-wê-mà	my oil
7	è: è-ɣép-yâ	kè: kè-gôh yâ	gè: gè-gŏ-yà	my bone
8	bɛ: bɛ ɣɛp-bâ	O: o-gôh-Bà	Ò: ò-gŏ-bà	my bones
9	N: ŋ-gàk-yà n-sòk-yà	N: ŋ-gá-wô O: o-suk-wô	N: ŋ-gá-wa mɛ: mɛʃù-ya	my knife my elephants
10	N: ŋ-gàk-yâ n-sok-yà	N: ŋ̀-gá-yâ O: o-sùk-yâ	N: ŋ̀-gá-yâ mɛ̀: mɛ-ʃù-yâ	my knife my elephants
19	sè: sè-soŋ-sâ	ɛ: ɛ-sóŋ-fá	—	my hip
13	kè: kă-sòŋ-kâ	lɛ: lè-sóŋ-tâ	dè: dè-sò-tá	my hips

In the following sections we will present the various noun classes one after the other, each on a separate chart. The noun classes are displayed alongside their concord elements. The form posited as the reconstructed element for each noun class and concord is put at the top of the chart with a starred symbol. In order to avoid repetition, the full forms of the morphemes

in all the dialects are implicit on the tables for noun classes in chapter two.

On the tables that follow, each concord element is labeled as below.

N.cl	=	Noun Class
1st pos. pro	=	First Person Possessive Pronoun
Num	=	Numeral
Aj. con	=	Adjectival concord
O. Pro	=	Object Pronoun.

5.3. Noun Class 1 and Concord Elements

P_{B} *m- N-cl	1st Pos.Pro.	Num	Adj. Con.	O.Pro
PN *N-	*-wà	*a	*N-	yi
LK n-	-wà	a	n-	yi
CK n-	wà	a	n-	yi
UK n-	wà	a	n-	dʒi
KIT n-	wà	a	n-	yi
KIF n-	wà	a	n-	yi
KƐN n-,o-	wô	a,o	n-	yi
NUM n-,o-	wô	a,o	mɛ-	dʒi
BIT n-,mɛ-	wa	a	mɛ-	dʒi
TAK n-,mɛ-	wà	a	mɛ-	dʒi
BAJ n- mɛ-	wà	a	mɛ-	yi
BAS n- mɛ-	wà	a	mɛ-	yi

Noun class one has been reconstructed as *N-. The variants that are found in KEN, NUM BIT, TAK, BAJ, and BAS do not warrant a second noun class because they take the same concord as the prefix N

5.4. Noun Class 2 and Concord Elements

$P_{B:}$ *ba –NP		1st Pos. Pro.	Num.	Adj. Con	O.Pro.
PN	*ba-	*-ba	*ba	*ba	*bɔ
LK	bà	-bâ	bá	bà-	bɔ́
CK	bà-	-ba	bá	bà-	bɔ
UK	bà-	-ba	bá	ba-	bɔ
KIT	bà-	-ba	bá	ba-	bɔ
KIF	bà	-ba	bá	ba-	bɔ
KEN	wà-à-	-βâ	bá	ba-	bɔ
NUM	à-	-ba	-	-	ɔ
BIT	wɔ̀- à-	-ba	-	-	ɔ
TAK	à-	-bà	á	a-	bwɔ́
BAJ	à-	-bâ	á	a-	bɔ
BAS	à-,ɔ̀-	-bà	á	a-	bwɔ́

Noun class two which is the plural form for class 1, has been reconstructed as *ba- The form wa- which is found in KEN and BIT can be attributed to the process of labialization. In some other dialects (NUM TAK BAJ BAS), the initial consonant has been lost completely leaving just a- as prefix. The traces of the deleted consonant can only be found in the concordial elements.

The numeral for noun class one is distinguished from that of N. cl 2 by a change of tone. Cl 1 has a Low Tone while cl 2 has a High Tone.

5.5. Noun Class Three and Concord Elements

PB. *mu –NP		1st Pos. Pro.	Num.	Adj. Con	O.Pro.
PN	*N	*-wa	*a	*a	*wɔ
LK	n-, a-	-wâ	a-	a-	wú
CK	n-, a-	-wa	a-	a-	wú
UK	n-,	-wa	a-	a-	wú
KIT	n-, a-	-wa	a-	a-	wú
KIF	n-, a-	-wa	a-	a-	wú
KEN	n-, o-,ɛ-	-wô	o-	a-	wó
NUM	n-, o-,ɛ-	-wa	o-	a-	wó
BIT	n-,mɛ-,ɛ-	-wâ	e	a-	wú
TAK	mɛ-,ɛ-	-wa	e-	mɛ-	wú
BAJ	mɛ-,ɛ-	-wa	e-	mɛ-	wu
BAS	mɛ-,ɛ-	-wa	e-	mɛ-	wú

This class has been reconstructed as N-. In classes such as three, where there is more than one prefix. e.g. the hormoganic nasal N-, a-, ɛ-, O-, and mɛ-, the choice of the prefix is lexically determined. The difference in

noun prefix in class three nouns is also not sufficient to set up two different classes because all nouns have the same concords and form their plural in class 6

Example: (8)

a)	n - táp	wâ	' my branch'
	cl 3 branch	my	
	ba – táp	yâ	' my branches'
	cl 6 branch	my	

b)	a –	tú	wa	' my ear'
	cl3	ear	my	
	ba -	tú	yâ	' my ears'
	cl 6	ear	my	

5.6. Noun Class five and Concord Elements

PB di –NC		1st Pos. Pro.	Num.	Aj. Con	O.Pro.
PN	*nɛ	*-na	*nɛ	*nɛ-	*nɔ
LK	nɛ-,n-	-nâ	nɛ-	nɛ-	nɔ́
CK	nɛ-	-nâ	nɛ-	nɛ-	nɔ
UK	dɛ-,n-	-nâ	nɛ-	nɛ-	nɔ
KIT	di-,n-	-nà	ni-	nɛ-	nɔ
KIF	di-,n-	-nà	ni-	di-	nɔ
KEN	lɛ-,n-	-nâ	li-	nɛ-	nɔ
NUM	lɛ-,n-	-nà	li-	nɛ-	nɔ
BIT	lɛ-,n-	-nà	nɛ-	nɛ-	nɔ
TAK	nɛ-,n-	-nà	à-	nɛ-	ɲì
BAJ	nɛ-,n-	-nà	à-	nɛ-	ni
BAS	nɛ-,n-	-nà	à-	nɛ-	ni

Looking at the noun class prefixes of class five, one notices that they all have the shape CV- on the one hand and a nasal one the other hand. We have posited *nɛ- as the old form. The first argument put forward for reconstructing this class as such is that, all the reflexes in this class have a common point of articulation, viz the dental alveolar, followed by a vowel. The choice of a dental alveolar therefore as initial consonant is not a wrong one.

Secondly, we assume that these reflexes dɛ-, di-, and lɛ-, must have been denasalised in the noun prefix. But since the nasal quality is so strong in these languages, it is still felt in the concords.

What is important to note about KEN, NUM, and even BIT in noun class 5, and 6, 6a is that they merge de Wolf' s (1971) PBC classes. In PBC de Wolf reconstructed gender *li- / *a-, on the one hand which corresponds to PB 5 / 6 and a single liquid / mass gender *ma- which corresponds also to 6, in the same Narrow Bantu languages. KEN, NUM, BIT show lɛ- and a- for noun classes 5/6,6a.

Example (9) (cl 5)

KEN:	lɛ-bɛn	' rock'
NUM:	lɛ-kó	' spear'
BIT :	lɛ-ko	' spear'

(Cl 6)

KEN:	a-sáŋ	' livers'
NUM:	a-tá	' stones'
BIT:	a-mó	' hands'

Hopefully, the discussion under noun class 6 ahead will help to sustain the argument for denasalisation in noun class five.

5.7. Noun Class six, six(a) and Concord Elements

PB.	*ma. Ncl	1st Pos. Pro.	Num.	Aj. Con	O.Pro
PN	*ma-	*ya-	*a-	*a-	*jɔ
LK	bà-	-yâ	á-	a-	yɔ́
CK	ba-	-yâ	á-	a-	yɔ
UK	ba-	-yâ	á-	a-	yɔ
KIT	ba-	-yâ	á-	a-	yɔ
KIF	ba-	-yâ	á-	a-	yɔ
KEN	a-	-yâ	á-	a-	yɔ
NUM	a-	-yâ	á-	a-	yɔ
BIT	ma-,á-	-yâ	á-	a-	yɔ
TAK	ma-,á-	-yâ	á-	ma-	dʒi
BAJ	ma-,á-	-yâ	á-	a-	dʒi
BAS	ma-,á-	-yâ	á-	a-	dʒi

Noun Class 6a

PB:	* ma –Ncl	1st Pos. Pro.	Num.	Adj. Con	O.Pro.
PN	*ma-	*-ma	*a-	*ma-	*mɔ
LK	bà-	-mâ	a-	ba-	mɔ́
CK	bà-	-ma	a-	ba-	mɔ́
UK	bà-	-ma	a-	ba-	mɔ
KIT	ba-	-ma	a-	ba-	mɔ
KIF	ba-	-ma	a-	ba-	mɔ
KEN	a-	-mâ	a-	a-	mɔ
NUM	a-	-ma	a-	a-	mɔ
BIT	ma-	-ma	a-	ma-	mɔ
TAK	ma-	-mà	a-	ma-	mami
BAJ	*ma-*	*-ma*	*a-*	*ma-*	*mi*
BAS	ma-	-ma	a-	ma-	mi

Noun class 6 and 6a also show three variants; ba-, ma- and a-. We prefer to posit ma- as the old form for the following reason.

The bV- and mV- prefixes are in complementory distribution: before a nasal initial stem of classes 2, 6 and 6a ma- is found, and before nasal initial stem of class 8 mɛ-. Before non-nasal initial stems one finds ba- and bɛ- respectively. This observation is true for LK, CK, UK, KIT, and KIF. Consider the following examples from LK. (Voorhoeve 1977)

(10)	mà-nòŋ	' blood'	(cl 6a)
	bà – fɔ́	' fat'	(cl 6a)
	m-fɔ	' chief	(cl 1)
	ba-fɔ	' chiefs'	(cl 2)
	à- nà	' thigh'	(cl 3)
	mà-nà	' thighs'	(cl 6)
	nɛ̀-cí / ba-cí	' egg'	(cl 5/6)
	mɛ̀-nɛ̀	' belly'	(cl 8)
	bɛ̀-kɔ́k	' bed'	(cl 8)

The merger between formerly distinct mV- and bV- prefixes makes it difficult to know the original shape of the noun prefix of class 6. Vowel initial stems show, however, irregularities that strongly suggest a nasal noun prefix in class 6

Examples (11)

àwɔ́ / àmɔ́	' hand, arm'	(cl 3/6)
nenɛ́í / ámáí	' nail'	(cl5/6)
nébí / ám í	' breast'	(cl5/6)

This indicates that ma- as a noun prefix of class 6 has been an early development.

It may also be possible that the ba- forms must have come through denasalisation. Kadima (1969), talking about denasalisation, cites Kenyang as one of those languages affected by this phenomenon, and that the result of denasalisation is forms such as ba- for class 6a. Class 6 and 6a are distinguished still by their concords. i.e. cl. 6 ya, yɔ versus cl.6a ma and mɔ respectively.

5.8. Noun Class Seven and Concord Elements

PB. -*ki –Ncl		1st Pos. Pro.	Num.	Aj. Con	O.Pro.
PN	*kɛ-	*-ya	* ɛ-	* ɛ-	*jɔ
LK	ɛ-	-yâ	ɛ-	ɛ-	yɔ́
CK	ɛ-	-yâ	ɛ-	ɛ-	yɔ́
UK	ɛ-	-yâ	ɛ-	ɛ-	yɔ́
KIT	ɛ-	-yà	ɛ-	ɛ-	yɔ́
KIF	ɛ-	-yà	ɛ-	ɛ-	yɔ́
KEN	kɛ-	-yâ	ɛ-	ɛ-	yɔ́
NUM	kɛ-	-yà	ɛ-	ɛ-	yɔ́
BIT	kɛ-	-yà	ɛ-	ɛ-	yɔ́
TAK	gɛ-	-yà	gɛ-	gɛ-	gèdʒi
BAJ	ki-	-yà	gɛ-	gɛ-	gèdʒi
BAS	ku-	-yà	gɛ-	gɛ-	gèdʒi

In class seven, kɛ- symbolizes a great variety of prefixes like ɛ-, kɛ-, gɛ-, ki-, ku-. To reconstruct kɛ- for noun class seven seems to be the

best course of action. I assume that a phonetic development kɛ --- > ɛ is more plausible than the other way round.

Guthrie (1967) adopts Bleek's reconstruction for PB class 7 ki-. The V- form for LK, CK, UK, KIT, KIF would then be explained by a morphologically conditioned consonant deletion rule

C --- > ø / #-

The Nyang languages have proven (chapter 3) to easily delete consonants rather than to insert them. Consequently we assume the old form had been de- which has undergone consonant deletion in the noun prefixes for this class in these dialects.

5.9. Noun Class eight and Concord Elements

PB. -*bi –Ncl		1st Pos. Pro.	Num.	Aj. Con	O.Pro.
PN	* bɛ-	*-bâ	bɛ-	bɛ-	*bɔ́
LK	bɛ-	-bâ	bɛ-	bɛ-	bɔ́
CK	bɛ-	-bâ	bɛ-	bɛ-	bɔ́
UK	bi-	-bâ	bi-	bi-	bɔ
KIT	bi-	-bà	bi-	bi-	bɔ
KIF	o-	-Bâ	o-	o-	ɔ
KEN	o-	-bà	o-	o-	ɔ
NUM	o-	-bà	o-	o-	ɔ
BIT	o-	-ba	-	o-	ɔ:
TAK	o-	-bà	ù-	u-	ubi
BAJ	o-	-bà	u-	o-	-
BAS	o-	-bà	u-	o-	-

Noun class eight is the plural form for class seven. The reflexes bɛ-, bi-, o-, present a problem. The presence of o- in KƐN, KIF, NUM, BIT, TAK, BAJ, and BAS cannot be easily accounted for. The reconstructed form for PB cl 8 is bi-, and it appears that for classs 8 for PN, we need a reconstruction like bɛ-. The Front Vowel being either ɛ or i. A phonetic explanation for the o- would be that the front vowel became rounded and backed in the labial environment and be- was lost. This means that two phonological rules would apply here successively

V V C

(12) a) [-bk] --- > [+bk] /- [+cons]–
[+lab]

C

b) [+cons] --- > o / #–
[+lab]

Another argument could still lead to say that the U- prefix found in class 8 nouns in so many G.B. languages may derive as readily from PBC *bu-. Since the Nyang languages in some cases have the typical Bantu noun prefix, U which results from bu- has become O- via the rounding process. We can see this from TAK concord elements.

5.10. Noun Class nine, ten and Concord Elements.

Noun Class Nine

PB. -*ny –Ncl		1st Pos. Pro.	Num.	Aj. Con	O.Pro.
PN	*N-	*-ya	*a-	*ǹ-	*jɔ
LK	n-	-yà	à-	n-	yɔ́
CK	n-	-yà	à-	n-	yɔ
UK	n-	-yà	à-	n-	yɔ
KIT	n-	-ya	à-	n-	yɔ
KIF	n-	-ya	à-	n-	yɔ
KEN	n-,o-	-wô	à-	n-	wɔ
NUM	n-,o-	-wo	à-	n-	wɔ
BIT	n-,mu-	-wu	à-	n-	wɔ
TAK	n-,mɛ-	-wà	à-	me-	dʒi
BAJ	n-,mɛ-	-wa	à-	me-	dʒi
BAS	n-,mɛ-	-wa	à-	me-	dʒi

Noun Class Ten

PB. -*du –Ncl		1st Pos. Pro.	Num.	Aj. Con	O.Pro.
PN	*N-	*-yâ	*ɛ-	*ɛ-	*yɔ́
LK	n-	-yâ	ɛ-	ɛ-	yɔ́
CK	n-	-yâ	ɛ-	ɛ-	yɔ́
UK	n-	-yâ	ɛ-	ɛ-	yɔ́
KIT	n-	-yâ	ɛ-	ɛ-	yɔ́
KIF	n-	-yâ	ɛ-	ɛ-	yɔ́
KEN	n-, o-	-yâ	ɛ-	ɛ-	yɔ́
NUM	n-, o-	-yâ	ɛ-	ɛ-	yɔ́
BIT	n-, mù-	-yâ	ɛ-	ɛ-	yɔ́
TAK	n-, mɛ-	-yâ	ɛ-	ɛ-	yɔ́
BAJ	n-, mɛ-	-yâ	ɛ-	ɛ-	yɔ́
BAS	n-, mɛ-	-yâ	ɛ-	ɛ-	yɔ́

The class nine and ten noun prefixes are identical and the singular / plural distinction is signalled only by the concording elements.
Both of these classes have been reconstructed as *N- because they regularly show a Ǹ- prefix in the languages.

The adjectival concord shows the expected nasal in classes 1 and 9, but, surprisingly different for class Ten. Like the other noun class prefixes, one would expect the adjectival concord to be identical with the noun prefix. At this stage, we do not have a solution to that. A more detailed study of the grammatical system of these languages may provide an explanation.

5.11. Noun Class ninetteen, thirteen and Concord Elements

Noun Class Nineteen

PB: N.cl	1st Pos. Pro.	Num.	Aj. Con	O.Pro.
PN *sɛ-	*-sâ	*sɛ-	*sɛ-	*sɔ́
LK sɛ-	-sâ	sɛ-	sɛ-	sɔ́
CK sɛ-	-sâ	sɛ-	sɛ-	sɔ́
UK -	-	-	-	-
KIT si	-sâ	si-	si-	sɔ
KIF si	-sâ	si-	si-	sɔ
KƐN ɛ	-fâ	ɛ-	ɛ-	-
NUM ɛ	-	ɛ-	ɛ-	-
BIT ɛ	-	ɛ-	ɛ-	-
TAK -	-	ɛ-	mɛ̀-	ɛwu
BAJ fi-	-fa-	fi-	ɛ-	u
BAS fi-	-fa-	fi-	ɛ-	u

Noun Class Thirteen

PB: -*ka –Ncl		1st Pos. Pro.	Num.	Aj. Con	O.Pro.
PN	*kɛ-	-kâ	*kɛ-	*kɛ	*kɔ
LK	kɛ-	-kâ	kɛ	kɛ̀	kɔ
CK	kɛ-	-ka	kɛ	kɛ	kɔ
UK	ki-	-ka	kɛ	ki	kɔ
KIT	ki-	-ka	ki	ki	kɔ
KIF	ki-	-ka	ki	ki	kɔ
KEN	lɛ-	-ta	lɛ	lɛ	kɔ
NUM	dɛ-	-ta	dɛ	dɛ	kɔ
BIT	lɛ-	-ta	lɛ	lɛ	kɔ
TAK	dɛ-	-ta	dɛ̀-	dɛ	dɛti
BAJ	tu-	-ta	-	tu	-
BAS	tu-	-ta	-	tu	-

These noun classes form an exceptional noun class pair when comparing them with the Bantu languages.[1] They have been arbitrarily baptised 19 / 13 with nominal prefixes sɛ- / kɛ-. This is however typical for Kenyang. The other Nyang languages present variants for this class such as ɛ- and fi-

Example (13)

Kenyang	Takamanda	Kenden	Gloss
sɛ̀- sòŋ	fi-sô	ɛ̀-sóŋ (cl 19)	' hip'
kɛ-sòŋ	dɛ̀ -- sò	lɛ̀ –sóŋ (cl 13)	' hips'

[1] Kenyang has all the appearances of a narrow Bantu language. But as stated in the Linguistic Survey of the Northern Bantu Borderland (Vol 1.39) ' in many points of grammar, there is an evidence of an un -Bantu behavior.' Class 19 / 13 gives this evidence.

The change * sɛ -- > ɛ- can be explained by an earlier consonant deletion rule C --- > ø / #-. But the change *sɛ --- > fi is somehow complicated.

Based on our word list, UK has no class 19. The LK words for this class belong to class 5 in UK. However, they take their plural in cl 13 for all the three dealects.

(14)	LK (19 / 13)	UK (5 / 13)	CK (19 / 13)	Gloss
	sè –sòn / kɛ-soŋ	dɛ-sòŋ / ki-sòŋ	sɛ-soŋ / kɛ-	' hip (s)'
	sɛ-bè / kè-bè	dɛ-dʒwì / ki-dʒwì	sɛ-bɛ / kɛ-	'firewood(s)
	sɛ-pɛm / kɛ-pɛm	dɛm-pɛm / ki-	sɛ-pɛm	' seed(s)

5.12. CONCLUSION

Throughout this work, efforts have been made to reconstruct elements of the phonology and the noun class system of Proto- Nyang, and to give an account for certain changes in segments in relation to what we have assumed to be the proto forms. In the course of this, several things were noticed which can be grouped under two main categories: phonological changes and morphological changes.

a) Phonological changes

We begin with phonology to say that 19 consonants have been reconstructed for the Nyang languages. All have a contrastive series of voiced and voiceless stops and fricatives including the affricates /c/ and /j/ at the alveo palatal point of articulation. Labio velar stops /kp/, /gb/ were also reconstructed. No examples of such sounds were found in Kendem. However, this would appear to be due to lack of sufficient data. The

interesting aspect about the nasal series is that there is a contrast between the palatal and velar points of articulation /ɲ/ vs /ŋ/. The following nasal sounds have been reconstructed *m *n *ŋ *ɲ

A major innovation which is however very clear and which differentiates Kenyang from Denya is that of consonant deletion at word final position of words. Hence the rule

C --- > o / -- #

The above rule is true for Denya and more or less true for Kendem. Kendem most often presents a glottal stop ? in place of p, t, k at word final position, thus confirming the fact that it is a transitional point between Kenyang and Denya. Put differently, Kendem lies somewhere between the two languages.

Another significant change has to do with the front mid vowel / ɛ / in Kenyang, which is persistently changing in Denya and some other dialects when found at word final position. That is to say ɛ ---> V / -- #
One thing remains unaccountable here: the motivation for the changed vowel.

The majority of the vowels and consonant changes represent a split followed by a merger within an existing phoneme leaving the overall system unchanged. For example the phoneme *r has become two phonemes /r/ and /l/. Some of the vowel changes however resulted in new phonemes; e.g., Kenyang has an additional / i / phoneme, Kendem has an additional / ə /, Denya has an additional / ŋm / for consonants.

b) Morphological changes

Using Voorhoeve' s (1980) analysis of Kenyang as the starting point, we noticed that Denya and Kendem have parallel noun class systems. Some of these noun classes have more than one class prefix. But we have decided to label roots as belonging to the same class on the basis of the following criteria:

1) The concord elements that are checked were the same; and

2) They take their plurals in the same class.

For example, class three in Denya has some roots that take the è – prefix and some that take mè-. But we have labeled all these roots as belonging to class three because they take the same concord elements and they have their plurals in class 6.

Example

ɛ-tu – wâ	' my ear' (cl3)	ma – tu –yà ' my ears' (cl 6)
mɛ – w ɛ – wâ	' my fire' (cl3)	ma – we – ya 'my fires' (cl 6)

A comparison of noun class prefixes and the first person possessive pronoun is listed in chapter 4 in the three languages. For example, the first person singular possessive pronouns are nearly identical for all the classes except 9, 13, and 19. We also see that each language distinguishes between classes 6 and 6a. This is one feature that Voorhoeve (1981: 5-6) says marks Kenyang as an example of an intermediary stage between the progressions from Proto Benue–Congo to Proto–Bantu.

Curiously, in Denya there is a collapsing of and shifting of PB classes. PB concordial consonant segments have been lost over time in many of the Denya prefixes. A careful look at the noun classes shows that some are different. Some of them continue to exist on some noun prefixes. The following noun classes have been reconstructed. They are eleven in number.

Noun class	1	2	3	5	6	6a	7	8	9	10	19	13
Proto-Bantu	*mu-	*ba-	*mu-	*di -	*ma-	*ma-	*ki-	*bi-	*ny-	*du-		*ka-
Proto-Nyang	*N-	*ba-	*N-	*nɛ-	*ma-	*ma-	*kɛ-	*bɛ-	*N-	*N-	*sɛ-	*kɛ-

Finally, in terms of dialect relationships, Kendem has proven to be closer to Kenyang than to Denya. Judging simply by the resemblance of roots, one is tempted to say that Kendem is part of the continuum of Denya

dialects. The dialects for each cognate set have been arranged such that the further we move away from Lower Kenyang, the lesser the similarity. In the schema below, each adjoining pair of dialects is relatively close and perhaps mutually intelligible. But as we compare two non-adjoining points on the line, intercomprehension is more difficult or even impossible.

Lower Kenyang – Kendem – Bitieuku - Takamanda – Bajwa – Basho

The Kenyang language all along has proven to be resistant to changes. This is a suggestion that it is the language that is closest to the proto-language if not the proto language itself. Very few changes have been noticed both phonologically and morphologically. On the other hand Denya has been affected most by these changes in the course of time.

We want to aknowledge the fact that throughout this study, very little has been said about tones in the Nyang languages, i.e. that they have two tones underlying, viz. the High and Low tones. Nothing has been said so far about the reconstruction of these tones. In order to reconstruct tones and come out with any firm conclusion, more work would need to be carried out on the tonal analysis of these languages. We think that this constitutes another major part of research as we intend to further research on this study.

The pages that follow will be made up of appendices. Appendix (A) is a list of some cognate set examples used in this work. For each set the gloss as well as the reconstructed form is placed at the top with a starred symbol. Appendix (B) is a list of reconstructed roots with the gloss, arranged in alphabetical order to ease reference. Appendix (c) is made up of reconstructed noun prefixes.

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Appendix b

INDEX OF PROTO – NYANG ROOTS

I	*mɛ	plant (V)	*pi
You	*wɔ	bury	*bɛmɛ / ɲi
he / she	*ji	cook	*na
you (pl)	*bɛka / ɲi	burn	*sɔŋ
we	*sɛ	eat	*ɲe
they	*Bɔ	drink	*ɲu
who	*ya	vomit	*gwɔ
what	*ji	spit	*pa
when	*ti	blow	*fɛp
how	*na	swell	*mwot
where	*fa	give birth	*Be
there	*u	sit	*cok
in	* mɛm	stand up	*tɛ
behind	*sɛm	lie down	*bire
right (adj.)	*nɛm	die	*gu
left (adj.)	*wo	kill	*way
one	*mot / ma	throw	*fɛm
two	*pai	push	*puri
three	*rat	pull	*ja
four	*nwi	sing	*kway
five	*tay	dance	*Bɛn
six	*tandat	play	*sa
eight	*nɛn	laugh	*way
ten	*bio	cry	*di
twenty	*sa	suffer	*ŋɛri
come	*twɔ	fear	*cay
send	*to	want	*yaŋ
walk	*kɔ	love	*koŋ
fall	*kwɛn	say	*rɛm

leave	*re roŋ	think	*kayensi
pour	*fiɛ	see	*go
fight	*nu / me	show	*tɔŋ
hit	*dɛp	hear	*gok
bite	*nɛm	smell	*koti / nɛm
scratch	* ŋwat	know	*riŋ
rub	*wat	count	*pay
wash	*so	mouth	*Nu
cut off	*kim / s (V)	eye	*Nɛt
split	*gat	head	*ti
tie up	*gwot	hair	*mɛnɛ
take	*sɔt	tooth	*ɲɛn
give	*cɛ	tongue	*nɛri (NVNV)
search	*yaŋ	nose	*Nuɛn
find	*go	ear	*tu
steal	*gɛp	neck	*mi
squeze	* ŋa (CV)	breast	*Be
braid	*tiŋ	arm	*wo
fingernail	*ɲay	house	*kɛt
leg	*kak	village	*tɔk / L(V)
thigh	*na	fire	*go
hip	*sɔŋ	firewood	*we
foot / sole	*jat	ash	*twop
penis	*dɛm	garbage	*ɲiŋ
vulva	*kwɛt	hole	*bok
buttocks	*nɛt	calabash	*ti / swo
stomach	*ne	knife	*gak
nostrille	*nuen	string	*nik
liver	*cɛn	spear	*koŋ
intestine	*tɛp	arrow	*kɛt
blood	*noŋ	war	*nu / bi
urine	*ce	clothes	*dɛn

excrement	*bi
bone	*gɛp
skin	*kwo
wound	*fwɛt
wing	*Bap
feather	*jɔk
horn	*baŋ
tail	*gɔ
person	*mu
woman(wife)	*gore / dí
man (husband)	*nɛm / no
father	*ta
mother	*ma
child	*mɔ
brother	*Nɔ
name	*ɲɛn
sky	*bu
night	*ti
moon	*taŋ
star	*be
day	*ɲop
sun	*Nok
wind	*bwɛp
cloud	*baŋ
rainy season	*so
dry season	*nɛm
year	*Ne
soil	*top
sand	*siɛp
stone	*tay
hill	*je
road	*bi / ti
net	*si / sa
animal	*ɲa
dog	*mu / mie
elephant	*suk
leopard	*kwɔ
goat	*Nɛn
bird	*nɛn
tortoise	*wɛn
snake	*ɲo
fish	*si
lice	*bini
egg	*ci
tree	*nɔk
leaf	*je
seed	*pɛm
root	*kaŋ
grass	*tako
salt	*gaŋ
fat	*fo
oil	*wɛt
old	*kok
new	*ko / kie
big	*cik
tall / long	*sap
short	*biŋ
heavy	*ɲuop
full	*jwi
dry	*gwo
rotten	*pɔ
good (taste)	*ri
bad	*bɛp
cold	*kwɛn

river / stream	*ŋɛn
water	*ɲɛp
back	*pio
white	*pɛp
red	*cu
hot	*soŋ
hunger	*say
fly	*re

Appendix c

INDEX OF PROTO – NYANG- NOUN CLASS PREFIXES.

Noun class	PB	PN
1	*mu-	*N-
2	*ba-	*ba-
3	*mu-	*N-
5	*di-	*de-
6	*ma-	*ma-
6a	*ma	*ma-
7	*ki-	*kɛ-
8	*bi-	*bɛ-
9	*ny-	*N-
10	*du-	*N-
19		*sɛ-
13	*ka-	*kɛ-

Appendix A Cognate Set examples used this work

	(1) I *mɛ	(2) you *wɔ	(3)he / she *ji
LK	mê	wɔ̀	yí
CK	mê	wɔ̀	yĭ
UK	mê	wò	dʒí
KIT	mì	wɔ̀	ɛ̀'yì
KIF	mì	wò	à'yĭ
KƐN	mə̂	wô	lì
NUM	mə̂	wò	dʒì
BIT	mì	wù	dʒì
TAK	mè	wɔ̀	dʒì
BAJ	mù	wù	yî
BAS	mê	wò	yì

	(4) you (pl) *bɛka	(5) we *sɛ	(6) they *bɔ
LK	bê: ká	bɛ̀'sé	bó
CK	béi'ka	bɛ̀'sé	bò
UK	bɛ̂ká	bɛ̀'rɛ̀	wó
KIT	béì	sì	bɔ́
KIF	bí	bɛ́s	bó
KƐN	nyí	ɛ̀'sí	bó
NUM	—	ɛ̀'sí	wo
BIT	nyi	si	wà
TAK	ɛ̀'ɲú	ɛ̀'sé ?	wɔ̀
BAJ	ǹ'nyí	ɛ́'sì	ɛ̀'bwɔ́ ?
BAS	ɛ̀'nyé	ɛ̀'sé	ò'wô

	(7 who ? *ya	(8) what ? *ji	(9) when ? *ti
LK	à'yá	yî	ǹ'tígm̀'pók
CK	á'yà	yî	ǹ'tígm̀'pòk
UK	'áyà	dʒì	ǹ'tígm̀'pòk
KIT	bò'ágà	dʒì	è'ní
KIF	à'yà	dʒì	tíkm̀'pókà
KƐN	'élì é	ǹ'dì	ǹ'díkàbì
NUM	dʒì é'mù	ǹ'dì	ǹ'dígè'bì
BIT	gwɔ̌	ǹ'dé	ǹ'dígàbí
TAK	wâ	n'dé	ǹ'dégàbé
BAJ	'élúwà	n'dí	kì'víènè
BAS	wă	n'dí	ǹ'dí gèbé

	(10) how ? *na	(11) where ? *fa	(12) there *u
LK	ná	ſá	á'ù
CK	ná	fay	á'wù
UK	ná	ſá	à'yá
KIT	nây	fáy	'fáí
KIF	na	wén	'wénè
KƐN	ɲúò	'éfúò	'féné
NUM	—	à'lè	fínè
BIT	ò'píè	fì	'wínè
TAK	nò	ǹ'fó	'óù
BAJ	ò'lúnò	à'lé	'fíní
BAS	ǹ'di	—	mà'nê

	in	(13) in *mɛm	(14) behind *sɛm
LK		à'mém	àn 'sém
CK		á'màm	án 'sèm
UK		à'mèm	àn 'sèm
KIT		à'mèm	àn 'sèm
KIF		à'mém	'ansɛm
KƐN		mém	ósèm
NUM		mù	òsì
BIT		mù	mæ'sâ
TAK		mò	mè'sò
BAJ		í 'mò	mì'sí
BAS		—	mè'sò

	(15) near	(16) far	(17) right *n ɛm
LK	kwó 'kwàt	nèkô: né 'síè	à 'wô: ném
CK	kwú 'kwɔt	è'sáp	à 'wóném
UK	kwó 'kwàt	wè'né	à 'wonɛm
KIT	kwókùó	dʒém	a 'bonɛm
KIF	pà'pát	dʒém	à 'bóném
KƐN	sísí	lékèrèsíyè	e 'nóm
NUM	sìsì	tè'wáne	è'wónò
BIT	ʃì'ʃì	à'sò	è'wônò
TAK	kwó'kw àlì	'têtè	è'bwányè
BAJ	fè'né	fì'ni	èwònyè
BAS	kálegba	'kásà	wònyé

	(18) left *wo	(19) one *mot	(20) two *pay
LK	à'wô :	é'mòt	bé'pày
CK	a'wókwàp	è'mot	bè'páy
UK	à'wókwâ	è'mwà	bè'pày
KIT	à'bógô	è'mô	bì'pây
KIF	à'bógɛ́	è'mô	bì'pá
KƐN	è'bé	kèm'yá ?	'ópá
NUM	ɛ'wóbè	gɛ'má	ò'pá
BIT	e'wôbé	kà'mâ ?	òpá
TAK	è'bwɔ́bè	à 'má ?	'ɛ́pá
BAJ	è'wobè	—	—
BAS	wòbé	kè'mwá	ò'pà

	(21)three*rat	(22) four *nwi	(23) five *tay
LK	bé 'rát	mé'nwì	bé 'tày
CK	bè 'rát	mèn'wí	bè 'táy
UK	bè 'rá ?	bìn'wî	bè 'táy
KIT	bì 'râ:	bì'nywì	bì 'táy
KIF	bì 'râ:	bì'nî	bì 'tá
KƐN	'ólé	ó'nî	ó'tà
NUM	ò'lé	ò'ní	ò'tá
BIT	ò'lé	o'ní	ò'tà
TAK	è'lé ?	è'nî	è'tá
BAJ	—	—	—
BAS	ò'lé	ù'ní	ò'táy

	(24) six *tandat	(25) seven	(26) eight *nɛn
LK	bɛ̀ 'tándàt	tán'dràmòt	mɛ̂'nèn
CK	bɛ̀ 'tándàt	tándrá'mòt	bɛ̌'nèn
UK	bɛ̀ 'tándàt	'tàndámô	bénèn
KIT	bì 'tánda̰	tán'dâ:mò	bí'ìnèn
KIF	bì 'tánda̰	tàndrámô	mɛ̌:nèn
KƐN	ó'kéné	ó'kénéàmŋá	'ònɛn
NUM	'òkènè	ò'kènàmâ	ò'nê:
BIT	ò'kínè	ò'kínàmâ:ʔ	ò'nî
TAK	'òkíní	òké'námà	ò'nê
BAJ	—	—	—
BAS	ó'kénè	'kênámà	ò'nê

	(27)nine	(28) ten *bio	(29) twelve
LK	nɛ̀ 'nɛ̀námòt	'bíò	'bíò nɛ̀ bɛ pây
CK	'nɛ̀ná 'mòt	bi'o	bí'ò nɛ̀ bɛ̀ 'páy
UK	nɛ̀ 'nɛ́nà 'môt	bíò	'bíò nɛ̀ bɛ̀ 'páy
KIT	dí 'nɛnàmôt	bì'óŋ	bì 'óŋ nɛ̀ bì 'pây
KIF	'nɛ̀námô	bíò	'bíò nɛ̀ bì 'pá
KƐN	'ònénàmŋá	bíòm	'bíòm 'nópà
NUM	ònénàmâ	ò'fíà	ò' fíà nò'pá
BIT	ò'ninámà ʔ	ò'fíà	o' fíà nɛ̀'pá
TAK	'ònê 'námà	ò'fíà ʔ	ò'fíà 'nòpâ
BAJ	—	—	—
BAS	ò'nénámà	ò'fíà	ò'fíà'nópà

	(30) twenty *sa	(31) one hundred (comp)	(32) come *twɔ
LK	è ˈsá	bè ˈsá ˈbètâỳ	twâ
CK	è ˈsâ	bè ˈsâ bèˈtáy	twá
UK	è ˈsà	bè ˈsá bèˈtáy	twɔ́
KIT	è ˈsáù	bè ˈsáù bìˈtáy	tò
KIF	è ˈsâ	bì ˈsâ bìˈtá	tó
KƐN	é ˈsàm	ˈòsàm ˈòtâ	twô
NUM	é ˈsà	ò ˈsà àˈtá	twɔ̀
BIT	è ˈsɔ̂	ò ˈsɔ̂ otá	twɔ̀
TAK	è ˈsâ	ò ˈsâ òˈtá	tʃwɔ̂
BAJ	—	—	tó
BAS	è ˈsâ	òˈsá òˈtá	twɔ̀

	(33) send * to	(34) walk *kɔ	(35) run
LK	tó	kɔ̀	dʒɛt ǹˈtìét
CK	tó	kô	ǹ ˈtiɛt
UK	toŋ	kàû	èˈgbə
KIT	túŋ	kî	bwé
KIF	túm	kíè	tì
KƐN	tòm	kénè	té
NUM	tɔ́	kíè	ˈlùmô
BIT	tɔ́	kɛ	ˈlúmú
TAK	tɔ̀	tʃè	bo
BAJ	—	ˈkíyè	dù ˈmú
BAS	tɔ́		kà ˈtélê

	(36)fall *kwɛn	(37)leave *roŋ	(38) arrive
LK	kwɛ́n	róŋ	twâ
CK	kwɛ́n	ró	twâ
UK	kwɛ́n	róŋ	twɔ̀
KIT	kwɛ́n	róŋ	tʃùô
KIF	kwɛ̀n	róŋ	tò
KƐN	kwɛ́n	ˈtwánè	yá
NUM	kwé	fé	twɔ́
BIT	kwí	ˈkwílì	tô
TAK	kwé	líà	tʃwɔ̂
BAJ	kwé	sú	tó
BAS	kwè	ˈtúrò ˈkùrú	—

	(39) fly *re	(40) pour *fiɛ	(41) fight *nu / mie
LK	rĕ	ˈfìé	nù
CK	ré	fìé	nù
UK	rí	kò	nù
KIT	fì :	fíè	nù
KIF	ˈfwérə̀	ˈfíè	nù
KƐN	ˈlènɛ́	fíè	òˈmíè
NUM	ˈlénè	ˈfánè	wàˈmíè
BIT	ˈlène	ˈfánè	àˈmíè
TAK	ˈlìénɛ́	ˈfíˈè	óˈmíè
BAJ	ˈlénɪ́	fìˈé	òˈmyìé
BAS	kòˈfùnú	fì’é	òˈmíè

	(42) hit *d ɛp	(43) bite *nɛm	(44) scratch * ŋwat
LK	dèp	ném	ŋwàtʰ
CK	tém	ném	ŋwát
UK	dép / tém	ném	ŋwâ :
KIT	dèp / tú	nèm	ŋwâ
KIF	dɛp / tèm	nèm	ŋwát
KƐN	dèp	nom	ŋwá
NUM	gó	nɔ̀	ŋálè
BIT	gɔ	nɔ̀	ˈŋálè
TAK	dò	nó	ʃù
BAJ	dé ʔ	nó	ŋá
BAS	ŋ̀ ˈkwé	nwɔ̂	—

	(45) rub *wat	(46) wash *so	(47) cut off *kim / s(v)
LK	ˈwátì	sô	kí
CK	ˈwátì	sô	kót
UK	ˈwátì	sò	kî
KIT	gwătì	sû	kí
KIF	dìrígətí	sò	kím
KƐN	gô	ˈswɛ́né	kəmpwˋ
NUM	ɤ́ó	ŋ̀ˈgwá	sə́
BIT	ɤʷɔ̀	gwɔ̀ ʔ	sə̀
TAK	wá	ˈʃwɔ̀né	sɔ̀
BAJ	wá	wó	sɔ́
BAS	ŋ̀ˈgwá	ǹˈsúˈùnù	ŋ̀ˈkíè

	(48) slice	(49) split *gat	50 tie up *gwɔt	(51) take *sɔt
LK	kpótì	ˈɤat / dát	gwɔ́t	sɔ́t
CK	fí ˈé	gát	gwét	bwóp
UK	tʃé	dák	gwɔ̂	sâ
KIT	ˈsíè	gâ :	ˈgùɔ́	ˈbùɔ́
KIF	kím	gá	gwùt	sɔ̂t
KƐN	ˈgétì	ˈgyætì	gwɛ́	bɔ̌
NUM	gérè	gì ˈá	gwé	bɔ́
BIT	sə	gʸǽ	wé	sɛ̀
TAK	ˈtʃénè	gìˈá	wè	bɔ̀
BAJ	yě : ˈtì	yá	wé	vɔ́
BAS	gá	gá	we	vɔ́

	(52)give *cɛ	(53)search *yaŋ	(54)find *go	(55) steal *gɛp
LK	tʃìé	yáŋ	ɤó	ɤ èp
CK	tʃé:	yáŋ	ɤò	ɤ ép
UK	tʃíè	ˈdʒí ŋɔ̀	yáŋ	ɤ ép
KIT	tʃè	yáŋ	gó	gép
KIF	tʃè	yàŋ	bóŋ	gɛp
KƐN	kò	bàm	gyé	èdʒèp
NUM	tʃê	bú	ˈgíè	adʒi
BIT	tʃʸê	bɔ̀	to	dʒì
TAK	tʃíè	ˈkálè	gé	èˈdʒɔ̀
BAJ	tʃê:	yèˈlí	kɔ̀ˈlɔ́	èˈgé
BAS	kìˈé	ˈdʒwˊlwˋ	ˈkólókò	yó

	(52) squeeze * ŋa	(57)braid *tiŋ	(58) hunting	(59)plant *pi
LK	ŋă	nép	kèn'tèmé	pì
CK	ɲâ	tòŋ	kèn'tèmè	pî
UK	ŋô	nép	tèm (shoot)	pì
KIT	ŋáù	tóŋ	ŋ̀'súŋô	pî
KIF	'ŋámé	tìŋ	'sòŋgô	pí
K ƐN	'ŋámà	tìŋ	kén'témà	pê
NUM	ŋámə̀	àmɛ́'dì	kèn'túmò	pè
BIT	ŋómɔ̀	ní	kèn'túmò	p è
TAK	'ŋámè	tɔ̀	gìn'tẃmè	pè
BAJ	ŋá'mù	tò ?	k èn'túmò	pè ?
BAS	ŋámè	tɔ́	mwá	pè

	(60)bury *bɛmɛ	(61) cook *na	(62) burn *sɔŋ	(63) eat *ɲe
LK	'bémè	ná	sóŋ	nyé
CK	'bémè	nâ	sóŋ	nyê
UK	'bémè	nò	gwɔ̀	nyé
KIT	'bémè	'náù	sóŋ	nyé
KIF	'bémè	ná	sóŋ	nyé
K ƐN	'nìhí	ɛ̀'tʃípì	kpâ	nyé
NUM	nyí	píònyè	sɔ́	nyé
BIT	nyì	té	sɔ́	nyé
TAK	ni	'tíɛ̀	sò ?	'nyíɛ̀ ?
BAJ	'nyìsé	tʃì	sɔ́	nyí
BAS	nyísíè	ŋ̀'kí	kɛ̀'vé	nyé

	(64)drink *ɲu	(65)vomit *gwɔ	(66) suck	(67)spit *pa
LK	nyú	gwɔ́	nyú	pá
CK	nyû	gwà	nyû	pá
UK	nyú	gwɔ̀	nyú	ˈtíè
KIT	nyú	gwɔ̀	nyú	ˈpàó
KIF	nyù	gwɔ̀	nyù	pám
K ƐN	ɲù	gwô	ɲù	pám
NUM	nyù	gwɔ̀	nyù	kì
BIT	ɲú	wô	ɲú	p ì
TAK	nù ʔ	wô	nù ʔ	kpò
BAJ	nyú	wô	nyú	té
BAS	nyú	gwô	nyú	kpẁ

	(68)blow *fɛp	(69)swell *mot	(70)give birth *Be	(71) sit *cɔk
LK	fép	ˈmùɔ̀t	bé	ˈʧɔ́kɔ̀
CK	fép	mwàt	Bê	ˈʧɔ́kə̀
UK	fép	mwɔ̀	bê	ˈʧɔ́kə̀
KIT	fép	ˈmúɔ̀	bě	ˈʧɔ̋gɔ̀
KIF	fép	môt	bî	ˈʧɔ́kɔ̀
KƐN	fɛ̀né	ˈ éŋmɔ̀	ˈbíɛ̀n	ˈlwə̌mé
NUM	fiˈné	èŋmwé	ˈbí ˈè	lú ˈò
BIT	ˈfínè	kì ˈmwé	ˈbíè	lúɛ̀lɛ̀’ mê
TAK	fɔ̀ ʔ	gɛmˈwéʔ	ˈbíè	ʤù’élɛ́kà
BAJ	àˈfúnù ŋˈgú	à ˈmwǽ	ˈvíè ʔ	lò’lú
BAS	fúnù	kè ˈmwâ	ˈvíè	ˈdólò

	(72) stand up * te	(73)lie down *bire	(74) sleep	(75) die *gu
LK	bè'té	bírè á mìk	'bírèké 'nò	gú
CK	fà'tě	bwŕà á mìk	'bwŕà kè 'nó	gû
UK	bè'té	Bí	Bí	gú
KIT	dì'téî	bi̱ à 'mi̱k	bi̱	bù
KIF	dì'tènέ	bìrà à mìs	bírà	gwù
KƐN	kúlímê	Bâmé	Bâ'mănò	gì
NUM	'ténè	væ̂: 'mè	vǽ	gí
BIT	'kwúì	tʃù 'válé	'válè	gbí
TAK	'ténè	'bélè	'bélè	nég'bò
BAJ	'ténè	—	'vólò	gbú
BAS	'ténê	—	'Bèlá	æ̀ŋ 'bẃ

	(76) kill *way	(77) toss	(78)throw*fem	(79)push*puri
LK	wây	fémérì	tém	'pùrí
CK	wây	gèp	gèp	'púrì
UK	wáy	gì	gì	'púrì
KIT	gwáy	gi̱à	tém	'pírì
KIF	gwâ	fém	fém	'pérà
K ƐN	'gwá	gà	fàmà	'pùrì
NUM	wá	gbédè	fú'mò	té
BIT	wá	fúmù	fúmù	té
TAK	wá	ŋmè	to	'pélè
BAJ	à'píè 'nèmì	—	ŋmè ?	—
BAS	wá	mwé	mwé	té

	(80) pull *ja	(81)sing *kway	(82)dance *Bɛn	(83) play *sa
LK	yà	kwáy	Bèn	ǹ'tòk
CK	yă	kwây	Bèn	n'tók
UK	dʒò	kwáy	Bén	ká'sáɤà
KIT	'dʒáò	kwáy	bén	kè'sáhà
KIF	dʒá : m	kwɔ́	bèn	ntuk
K ƐN	dʒam	kwáŋ	bén	kèsè 'há
NUM	dʒá	kwá	bé	gèsá
BIT	tígètɔ̂	kwà	bí	kè'sà
TAK	dʒá	kwá	bè	mè'tù
BAJ	—	—	—	—
BAS	'gìá	kwá	'bié	àm'bòsá

	(84)laugh *way	(85) cry *di	(86)suffer * ŋeri	(87)fear *cay
LK	wày	dì	bè 'yúŋòrì	tʃây
CK	wáy	dí	è 'sòŋérì	tʃăy
UK	wày	dì'dì	è 'sóŋérì	tʃá
KIT	gwây	dì'dì	è 'tígèrí	tʃáy
KIF	gwɔ̂	dì'dì	è 'tígèrì	tʃá
KƐN	dʒòán	mènà'gí	'kéfəɤá	'tʃánè
NUM	dʒù'à	né	gè 'fwálè	bímà
BIT	dʒâ	nê	kè 'fwálè	bi̯ :
TAK	'dʒùá	'màgbô	è' fwíàlè	è 'fɔ̂
BAJ	—	—	—	—
BAS	dʒùwá	dẁ	kà 'válákè	—

	(88)want *yaŋ	(89) love * koŋ	(90)say *rɛm	(91)think *kayɛn
LK	yáŋ	kɔ̀ŋ	rɛ̀m	ˈkáyɛ̀sí
CK	yáŋ	kòŋ	dɛ̀m	ˈkáyɛ̀nsî
UK	yáŋ	kóŋ	dém	ˈkáyɛ̀nsì
KIT	yáŋ	kóŋ	dém	ˈkáyɛ̀nsì
KIF	yáŋ	kóŋ	ˈpwɛ́mɛ̀	ˈká'ɛ̀nsì
KƐN	bàm	kòŋ	dʒẁ	ˈkyíhá
NUM	bò ˈmò	kɔ́	kâ	ˈkíâ
BIT	ˈbùmù	kɔ̀	kâ:	ˈkíà
TAK	ˈkélègè	gìdʒĭ :	ˈkéyà	ˈfɛ̂rè
BAJ	—	—	—	—
BAS	ˈkólòkò	ˈlómè	ˈkéà	gwɔ́sɛ̀kɛ̀

	(92) see *go	(93)show * tɔŋ	(94) hear *gok	(95) smell *koti / nɛm
LK	ɤɔ́	tɔ́ŋ	ɤɔ́k	ˈɔ́kɔ̀tì
CK	ɤó	tɔ̀ŋ	ɤɔk	ɤɔ́k ɛ́ ˈnɛ̀m
UK	ɤó	tóŋ	wɔ́k	ˈwɔ́kɔ̀tì
KIT	gó	tóŋ	wùk	wùkɛ̀ ˈrí ə̀
KIF	gá	tóŋ	wɔ́k	nɛ̀m
KƐN	gyé	tóŋ	gú ʔ	ˈfúɔ̀tí
NUM	gí'è	lérè	gù	ˈnúmù
BIT	ˈgíè	ˈlédè	gù	nùmù
TAK	gé	ˈlèrè	ù	gé'bè
BAJ	—	—	—	—
BAS	dʒé	sì	ˈfítì	ˈnùmó

	(96)know *riŋ	(97)count *pay	(98)mouth*Nu	(99) eye *nɛt
LK	rí ŋə̀	pày	ɲ̀ˈɲù	ˈɲésɛ
CK	dɛ̀ ˈríŋə̀	pây	ɲû	ɲés
UK	bɛ̀ ˈriŋə	pây	ɲ̀ˈnyù	nét
KIT	dì ˈríŋə̀	pây	ɲ̀ˈɲyù	nyɛ̀
KIF	dì ˈdíŋə̀	pà	ɲ̀ˈyù	nyès
KƐN	ká	pá	ˈònèm	ɲ̀yé
NUM	ká	pá	òˈnò	tàmbónˈyì
BIT	kɔ̀	pa	mòˈnú	ɲ̀ˈyí
TAK	ká	pa	mɛ̀ˈnô	ˈémè
BAJ	—	—	mɛ̀ˈnɛ̀	ɛ̀nˈyé
BAS	ká	pà	mɛ̀ˈnó	ɲì

	(100) head * ti	(101) hair *mɛnɛ	(102) tooth * ɲɛn	(103) tongue *nɛri
LK	ɲ̀ˈtí	ɛ̀ˈménè	ˈnéɲén	ˈnérí
CK	ɲ̀ˈtí	ɛ̀ ˈménè	dɛˈnyén	dɛ̀ˈrẃ
UK	ɲ̀ˈtí	ɛ̀ ˈménèʔ	dɛnyɛ̀n	dɛ̀ˈrẃ
KIT	ɲ̀ˈtí	ɛ̀ ˈménè	dinyén	dìˈrı̰
KIF	ɲ̀ˈtí	ɛ̀ ˈménè	dinyén	dìˈrı̰m
K ƐN	ˈokî	ɛ̀ ˈdʒíè	ˈlényéné	ˈoliŋ
NUM	òˈkì	ô ˈdzíè	nènyénè	tèn'ámɔ̀
BIT	mɔ̀kˈpì	mɛ̀ˈdʒê	línyènè	léˈnámə̀
TAK	mê: kˈpò	mɛ̀nˈdʒúè	ˈniŋàné	ˈnènámè
BAJ	ˈmɔ̀kpó	mɪ̀ˈé	ˈnényénè	néˈnɔ̀mù
BAS	mɛ̀ˈkpẁ	mɛ̀ˈyé	ŋmá	nɛ̀ˈnẃmẁ

	(104)nose *Nuɛn	(105)ear *tu	(106)neck *mi	(107)breast *Be
LK	nú'én	à'tú	è'mì	né'bî
CK	ɲù'én	à'tú	èmì	dè'bẁ
UK	ǹ'yúèn	à'tú	è'ŋmì	dè'bi
KIT	ɲù'én	à'tú	èmi̱	dè'bi̱
KIF	ɲù'én	à'tù	è'ŋmíè	dìbíə
KƐN	ɲôn	è'tù	kémê	lè'bé
NUM	nyŏ:	è'tù	kì'mɛ	lè'bé
BIT	nyé	è'tù	kè'mɛ	nè'bé
TAK	ɲùé	è'tú	'gémè	ném'bè
BAJ	ì'nyúè	è'tù	ké'mê	kì'tó?
BAS	ɲù'é	è'tù	mé'mòlò	kètè'té

	(108) arm * wo	(109) finger nail *ɲay	(110) leg *kak	(111) thigh *na
LK	à'wó	'nényây	è'kàk	à'nǎkàk^{h}
CK	à'wó	nèn'yáy	è'kák	à'nâ:'kák
UK	à'wô	dényâ	è'kák	à'nò
KIT	à'bò	dìn'yáy	è'kàh	à'náò
KIF	a'bó	din'ya	à'kù	ànâ:mà'kù
K ƐN	è'mwô	'lényàné	'ékú	'enámè'kû
NUM	è'wò	nèn'yénè	è'kù	è'ná a'kù
BIT	èwô	lèn'yénè	è'nó	ènó à'kú
TAK	'èbwô	'níŋánânè	gè'ká	è'nágẁká
BAJ	è'wô	nèn'yánè	è'kû / kè'ká	è'nà
BAS	wò	nèn'yánè	kè'ká	ná'àkù

	(112) hip *soŋ	(113) foot / sole *jat	(114)penis *dɛm	(115) vulva *kwɛt
LK	sɛ̀ˈsòŋ	nèˈyàt	ǹˈdèm	nèˈkwét
CK	sɛ̀ˈsòŋ	dèˈdʒát	ǹˈdèm	dèkwét
UK	dɛ̀ˈsóŋ	dèˈdʒát	ǹˈdèm	ǹtʃèn
KIT	siˈsóŋ	diˈdʒâ:	ǹˈdèm	dèˈkwɛt
KIF	siˈsòŋ	diˈdʒát	—	—
KƐN	ˈèsóŋ	ˈlegâʔ	—	—
NUM	èˈsô:	lèˈdʒát	—	—
BIT	èˈsɔ̀	kèˈkìá	kèˈnì	mèˈnôʔ
TAK	ˈésò	nèˈdʒánè	ˈdámpê	mèˈnɔ̂
BAJ	fiˈsô	nèˈyà	—	—
BAS	fùˈsùò	nèˈánòkò	—	—

	(116) buttocks *nɛt	(117) stomach *Ne	(118) nostrill *nuen	(119) liver *cɛn
LK	éˈràkánèt	mèˈɲè	m̀ˈbòkˈɲùén	bèˈtʃèn
CK	ɛˈbákèˈnét	mèˈnyé	m̀ˈbókoˈɲùén	bɛˈtʃénè
UK	nɛt	bɛˈnyê:	m̀ˈbókànyúèn	bèˈtʃén
KIT	nɛt	biˈníè	m̀ˈbókòˈnyúèn	biˈtʃènè
KIF	—	bìníè	m̀ˈbòkànyùèn	bìsígə̀
KƐN	—	ˈòníè	mbuʔɲùòn	ǹsáŋ
NUM	—	òˈníè	m̀ˈbú nyúò	òˈkê
BIT	mèˈnôʔ	oˈné	m̀bú nye	òˈkì
TAK	mèˈnɔ̂	ˈòné	ɛmˈbú nùé	úˈkì
BAJ	—	òˈnè	—	otʃè
BAS	—	úˈnè	m̀búˈnùé	òˈkyé

	(120) intestine * tɛp	(121) blood *noŋ	(122)urine *ce	(123) excrement *bi
LK	nèn'tép	mà'nòŋ	bà'tʃê	kɛ̀'bí
CK	nèn'tép	bà'nô	bà'tʃê	kɛ̀'bí
UK	tàn'tép	bà'nò	bà'tʃè	kɛ̀'bì
KIT	dèn'tèp	bá'nû ŋ	bà'tʃî	kì'bí
KIF	din'tép	bà'nù	bà'tʃê	kì'bì
KƐN	'léntép	á'nôŋ	átʃên	lɛ̀'bî
NUM	m̀'bŭ: nyè	a'nò:	—	—
BIT	m'bî: nè	mà'nò	mé	lè'Bí
TAK	m̀'bùné	má'nŏ	mê	dì' bì
BAJ	—	mànŭ:	—	—
BAS	—	mɛ̀'nú	—	—

	(124) bone * gɛp	(125) skin *kwo	(126) wound *fwɛt	(127) wing *Bap
LK	è'ɣép	ŋ̀'kwòp	è'fwèt	è'Bàp
CK	è'ɣép	ŋ̀'kwómwét	è'fwét	è Báp
UK	è'ɣép	ŋ̀'kwo'ŋmé?	è'fwɤé?	èBá?
KIT	è'gép	ŋ̀'kúô:	è'fuɤè	è'bô:
KIF	è'gɛp	ŋ̀'kupɛmi̧	è'fûàt	è'báp
KƐN	kè'gôh	'òkò?'míè	'kèpáŋ	kɛ'bá?
NUM	kè'gŏ	ò'kó?	kè'pá	kè'bá
BIT	kè'gó	mè'kómìé	kè'pò	kè'Bò
TAK	kè'gŏ	mèn'yámìé	gé'pà	gè'bágèlé
BAJ	kè'ŭfó	mèn'yámìé	kí'pà	kí'vâ
BAS	kùn'fúɔ	mó'kwômìn' yámè	kò'pwǽ	kàbáfɛ̂nê

	(128) feather * jɔk	(129) horn *baŋ	(130) tail *gɔ	(131) person *mu
LK	è'yɔ̀k	m̀'bàŋ	ŋ̀'gɔ́:	mù
CK	è'dʒɔ́k	m̀'báŋ	ŋ̀'gɔ́	mù
UK	è'dʒwák	m̀'báŋ	ŋ̀'gɔ́	ˈkwáŋwà
KIT	ɛ'dʒɔ̂h	m̀'báŋ	ŋ̀'gɔ̌:	mém
KIF	ɛ'dʒɔs	m̀'báŋ	ŋ̀'gíŋ	məm
KƐN	dʒɔ̀h	ˈm'bìáŋ	ˈògyê	mŭ
NUM	dʒɔ́	m̀'bíà	odʒí'è	míè'mù
BIT	gì'á	m̀ˈbíɔ̀	mè'dʒé	mù
TAK	dʒágè	èm'bíà	mè'gìé	mù:
BAJ	yà:ˈko	m̀'bíà	mè'yè	mu
BAS	ˈfíntwɔ̀	m̀'bíà	mè'yé	mìémù:

	(132) man	(133) woman *gore	(134) wife	(135) husband *nɛm
LK	m̀'bákàném	ŋ̀'gòré	ŋ̀'górè	ném
CK	m̀'bákànèm	ǹ'górè	ǹ'górɛ	nèm
UK	mù	ŋ̀'gŏ	ŋ̀'gó	ném
KIT	mém	ŋ̀'gŏ	ŋ̀'gŏ:	ném
KIF	mém	ŋ̀'gírá	ǹ'gírá	ném
KƐN	ˈòndî	ˈòndí	ˈòndí	ˈònô
NUM	òn'dî	òn'dí	òn'dí	ò'nò
BIT	mən'dí	màn'dì	màn'dì	mə'nŏ
TAK	mén'dè	mêndé	mên'dé	mé'nò
BAJ	mèn'dì	mèn'dí	mèn'dí	mè'nò
BAS	mèn'dẁ	mèn'dẃ	mèn'dẃ	mè'nó

	(136) father * ta	(137)mother *ma	(138) child * mɔ	(139) brother * Nɔ
LK	é'tá	má	mɔ̀	má'nɔ̀
CK	è'tá	má	mô	mà'nɔ́
UK	ta	má	mò	mà'nɔ́
KIT	táy / tʃî	ma / níè	mòú	mò'níè
KIF	tʃî	ˈníè	mò	mà'ní
KƐN	ˈátá	ma	ŋm' ŋmá	ˈòní
NUM	à'tá	nǽ	mǽ:	ò'ní
BIT	ǹ'té	mɔ̂	mǽ	mè'mì
TAK	ǹ'té	ma	mǽ:	mè'mò
BAJ	ǹ'té	má	mǽ	ŋmàŋ'mù
BAS	ǹ'té	má	mâ	mè'mó
	(140) name * ɲɛn	(141) sky * bu	(142) night *ti	(143) moon * tɛŋ
LK	nyén	nè'bù	bè'tí	ǹ'tàŋ
CK	nyén	dɛ'bû	bè'tì	ǹ'táŋ
UK	nyén	dè'bú	bè'tî	ǹ'táŋ
KIT	nyén	dì'bû	bì'tì	ǹ'táŋ
KIF	nyén	dì'bù	bì'tì	ǹ'tàŋ
KƐN	nyèn	lè'bú	o'tŭ	è'múkíè
NUM	nyé	m̀'fáy nèˈbú	òtû:	mù'kíè
BIT	ǹ'yì	lè'bú	ótŭ	ˈmùkíə̀
TAK	ˈmábò	ǹfánè'bŭ	ò'tŭ	ǹ'fâ
BAJ	màBó	ǹ'fá nóù	kè'má?	ǹ'fá?
BAS	mà'vô	—	kò'mwæ	ˈmùmètíè

	(144) star * be	(145) day *ɲop	(146) sun *Nok	(147) wind *bwɛp
LK	nèm'bè	nú'òp	mók	m̀'bwɛ́p
CK	nèm'bê	nyòp	mòk	m̀'gbɛ́p
UK	nèm'bé	n'nyô:	m̀'mòk	m̀'gbɛ́?
KIT	dìm'béì:	—	moh	m̀'bᵊɤ ĭ
KIF	dìmbê	núòp	mû:s	m̀'bᵊɤ ɛ́p
KƐN	óm'bî	ɲò?	mẁh	'kèfɛ̂nê
NUM	om'bì	ɛ'wâ:	ŋmĕ:	dɛ'fínè
BIT	mèm'bé	bĭ	ŋmĕ:	dɛ̀'fwńì
TAK	mem'bè	bî	ŋm̀'ŋmĕ	gì'dʒùlí ?
BAJ	mem'bì ?	ìnyénè	'ŋ'mé?	kà'fùnó
BAS	m̀'bímàwè	ù'vî	mwè	kùfù'nú
	(148)cloud * baŋ	(149) dew	(150) rain	(151) rainy season *so
I.K	nè' Báŋ	bè bùrí	mà' ɲɛ̀p	è'sò
CK	nè' Báŋ	nè'Báŋ	màn'yɛ́p	è'sô
UK	—	dè'Báŋ	bañ yæ̂ :	è'sô
KIT	—	bìbìrí	bà'níŋə̂	è'sû
KIF	dìbá ŋ	dì'báŋ	ban'yip	è'sô
KƐN	kɛ'kw̃	'lèmbúlì	à'ná?	ǹsônɛ́
NUM	kìkì	èm'bɛ́lè	à'nâ :	ǹ'swánè
BIT	gè' kẃ	lìm'bílì	má'nâ :	ǹswánè
TAK	gè'kó	nè' bá	má'nâ	n'swônɛ́
BAJ	nèbá?	—	mà'nâ?	n'sònó?
BAS	'kẃŋkẁ	—	mà'nâ :	màsò'nó
–				

	(152)dry season *nɛm	(153) year *Ne	(154) soil *top	(155) sand *siɛp
LK	è'nèm	mí'é	ǹ'tòp	è'síèp
CK	è'nèm	mì'é	ǹ'tóp	ɛ'ʃí èp
UK	è'nèm	mí'è	ǹ'tóp	bì'síè?
KIT	è'nèm	mì'é	ǹ'tô:	ǹ'tʃí:?
KIF	è'ném	'míè	nto:p	ŋ̀'kê:ŋ
KƐN	kénòm	ǹyè	òtó?	ké'séswʉ̀?
NUM	kè'nómə̀	ŋmé	ò'tó?	kè'sə̀
BIT	kè'nómì	ŋmé	mɛ̀'tó	kè'sə̀
TAK	gè'nómè	ŋmé	ù'sógè	ù'sógè
BAJ	kì'nòmû	ŋm'ŋmé	mè'tává ?	ò'sává ?
BAS	kùnù'mó	ŋmé	mè'tá	kè'tá
	(156)stone *tay	(157)hill *je	(158) road *bi / ti	(159) water *ɲɛp
LK	ǹ'táy	ǹ'dʒè	m̀'bì	mà'ɲèp
CK	ǹ'táy	ǹ'dʒê:	m̀'bì	mànyép
UK	ǹ'táy	ǹ'dʒê	m̀'bì	banyæ:
KIT	ǹ'táy	ǹ'dʒê	m̀'bì	bà'níŋə̀
KIF	ǹ'tá	ǹ'dʒè	m̀'bì ?	banyip
KƐN	ǹ'tá	ò'kwé	o'tî	à'ná?
NUM	ǹ'tá	o'kwè	otĭ	à'nă
BIT	ǹ'tá	mɛ̀'kwé	mè'tí	mà'nɛ̂:
TAK	ǹ'tá	mɛ̆'kwé	mè'tʃî	mà'ná
BAJ	ǹ'tă?	mɛ̀'kwè	mè'tî	mà'nă?
BAS	ǹ'tà	—	mè'tî	mà'nâ:

	(160) river *ɲɛn	(161) stream	(162) house *kɛt	(163) village *tɔk / lɔ
LK	mà'ɲù	nyén	è'kèt	è'tɔ̀k
CK	nyén	mònyén	è'két	è'tòk
UK	nyén	mò'nyén	è'két	è'tok
KIT	nyén dégû:	nyén	è'kèt	è'tɔk/bì /dʒìá
KIF	nyén dì'gû	mò'nyén	nyúp	bì dʒâ
KƐN	nyèn	m̀yá nyèn	'kètá	òlìŋ
NUM	ǹ'nyè	m̀'bìálè	kè'pú	òlâ
BIT	nyì	m̀'bíàlé	kè'pú	màlì
TAK	è'bê	nyì	gè'pú	mè'lɔ̀
BAJ	ɛ'bĕ ʔ	èmbì'álì	kò'pù	mè'lì
BAS	è'bé	bì'álè	kè'tá	mè'lẃ

	(164) fire *go	(165) fire wood *we	(166) smoke	(167) ash * twop
LK	ŋ̀'gó	sè'Bè	móŋ'gò	bà'twóp
CK	ŋ̀'gò	sè'dʒwì	mòŋ'gô	bà'twɔ́p
UK	ŋ̀'gó	dè'dʒwê	mòŋ'gô	bà'twɔ̀ ŋ̀'gò
KIT	ŋ̀'gû:	sì'dʒwì	mòŋ'gû:	bà'tŏ
KIF	ŋ̀'gŏ	sì'gwin	mò'ŋgŏ	bà'tò
KƐN	'òwè	léwèn	à' mô:wè	'átwô:
NUM	ò'wè	lɛ̀'wê	à' mówè	à'twɔ́
BIT	mə̀'wé	lɛ'wɛ̆:	à' máwê	mâ'twɔ
TAK	mè'wé	dè'wê	à' máwê	mâ'twɔ̀
BAJ	mèy'wè	tèy'wê	à' mówê	mà'tò
BAS	mó'wè	tè'wé	à' mẁáwè	mé'twò

	(168) garbage *ɲiŋ	(169) hole *bok	(170) calabash *ti / swo	(171) knife *gak
LK	ményìŋɔ́	m̀'bòk	è'tî	ŋ̀'gàk
CK	mèn'yíŋɔ́	m̀'bók	è'tí	ŋ̀gák
UK	bà'nyáyntwɔ̀	m̀'bòk	n'tók	ŋ̀gák
KIT	bìn'yíŋà	m̀bók	è'tútúk	ŋ̀'gáh
KIF	bìnyíŋà	m̀bòk	ŋ̀'kúmé	mòn'sô
KƐN	ódʒǒ	m̀'bù	'lebwô	ŋ̀'gá
NUM	—	m̀'bú	kè'ʃúò	ŋ̀'gá
BIT	ò'yɔ̌:	m̀'bù	kèʃwô:	ŋ̀'gá
TAK	ò'dʒùá	èm'bù	gè'ʃwɔ̂	ŋ̀'gá
BAJ	—	m'bù	kùʃô	ŋ̀'gá ʔ
BAS	—	m̀'bò	kè'ʃwô:	ŋ̀'gá ʔ
	(172)string *nik	(173) spear *-koŋ	(174) arrow *kɛt	(175) war *-Nu / bi
LK	nìk	nè'kòŋ	ŋ̀'kèt	nɛ'nù
CK	ník	nèkòŋ	ŋ̀'két	dè'nù
UK	nìk	dè'kòŋ	ŋ̀'kát	dɛ'nyû
KIT	ŋ̀'kwét	dì'kóŋ	ŋ̀'kát	è'dʒâ
KIF	nyik	dì'kòŋ	—	dì'nù
KƐN	ò'ní	lé'koŋ	ŋ̀'kèt	bì ʔ
NUM	ò'nĭ ʔ	lè'kó	ò'wérákò	bì
BIT	ŋ'kwí ʔ	lè'kò	—	bì
TAK	mè'nĭ	nè'kò	—	bè
BAJ	mè'ní	nè'kwô	fìmbî	bè
BAS	mè'nì	nè'kwɔ̂:	fìm'bí	—

	(176) clothes *dɛn	(177) casting net	(178) net *si /sà	(179) animal *ɲa
LK	ǹ'dèn	m̀'bùndʒá	á'sî	ɲ'ɲà
CK	ǹ'dèn	m̀búndʒà	á'sì	nyâ
UK	ǹ'dén	m̀'búndʒà	á'sì	nyà
KIT	ǹ'dén	tà'sǎ:	á'sî	nyáù
KIF	ǹ'dén	m̀'búndʒà	dì'wù	nyà
KƐN	ǹ'dèn	m̀búndʒà	—	ò'nyâ
NUM	ǹ'dě	m̀búndʒá	làn'sǎ:	ò'nyà
BIT	ndě:	m̀búndʒá	ɑ̀n'sá	mènyô
TAK	ǹ'dê	ǹ'tófô	dán'sà	mɛnyá
BAJ	ǹ'dě ʔ	ǹ'tífú	kà'sá	mànyá
BAS	ǹ'dé	bùn'dʒá	à'twà	mènyà

	(180) dog *mu / mie	(181) elephant *suk	(181) leopard *kwɔ	(183) goat *Nɛn
LK	mú	ǹ'sòk	ŋ̀'kwɔ̀	mén
CK	mú	ǹ'sók	ŋ̀'kwô	mén
UK	mû	ǹ'sòk	ŋ̀'kwɔ̀	mén
KIT	mú	ǹ'sùk	ŋ'kwɔ́	mén
KIF	mú	ǹ'sùk	ŋ'kwə̀	mén
KƐN	'ámíè	ó'sùk	ò' kwò	mén
NUM	'amíè	o'suk	òkwà'ú	ŋmè
BIT	'mámíè	mè'ʃù ʔ	mò'kwólàyô	ŋmè
TAK	'mámìè	mè'ʃù	nɛ'swv̌	ŋm̀'ŋmè
BAJ	'mɑ̀mìè	mè'ʃù	nɛ'swv̌	ŋm̀'ŋme
BAS	mæ'me	mè'ʃù:	mèk'pémé	ma'mwé

	(184) bird *nɛn	(185) tortoise *wɛn	(186) snake *ɲo	(187) fish *si
LK	sè'nèn	nè'wèn	`ɲ'ŋɔ̂	n'sì
CK	sè'nèn	dè'wèn	ǹ'yó	n'sî
UK	dè'nèn	nè'wèn	ǹ'nyô	n'sì
KIT	sì'nénè	dì'wén	nyó	n'sì
KIF	sì'nénè	dì'wèn	nyò	n'sì
KɛN	è'né	'ógwèn	nyó	ò'sŭ
NUM	è'né	ò'wé	ǹ'yúò	ò'sû
BIT	è'né	mò'wî	'míò	mùʃŭ:
TAK	è'ɲùónè	mɛ'wè	míò	me'ʃŭ
BAJ	fì'né	mè'gwê	míò	mɛ'ʃŭ
BAS	fè'nè	mè'gwê	míò	kè'ʃwâ

	(188) lice *bini	(189) egg *ci	(190) tree * nɔk	(191) bark
LK	bì'nì	nè'tʃì	è'nɔ̀k	ǹ'sèm è'nòk
CK	bí'nì	nè'tʃî	è'nók	ŋ'kwúp è'nók
UK	bí'nì	dè'tʃì	è'nók	ŋ'kwô è'nók
KIT	bì'nî	dì'tʃî	è'nók	ŋ'kúò è'nók
KIF	bè'nè	dì'ki	è'nok	ŋ'kwúp è'nók
KɛN	bìn	'lékwatʃî	ké'nò?	ókò? ké' nó?
NUM	bè	è' kwatʃî	kɛ'nô?	ò'kò?
BIT	bì	lè' kwatʃî	kè'nô:	mò'kò ɤè'nò?
TAK	bè	nè' kwatʃî	gɛ'nŏ	gè'kwô gɛ̈nô
BAJ	bè			
BAS	ò'víè	nù'kwútʃù	kè'nwɔ̀:	kò'kwô kènwô

	(192) leaf *je	(193) seed *pɛm	(194) root *kaŋ	(195) grass *tako
LK	è'yé	sè'pèm	ŋ̀'kàŋ	'tákò
CK	è'dʒé:	sè'pəm	ŋ̀'káŋ	tá'kò
UK	è'dʒe	dè'pèm	ŋ̀'káŋ	'tákò
KIT	è'dʒí :	sè'pém	ŋ̀'kàŋ	à'káŋm̀pé
KIF	è'dʒě	si' pém	ŋ̀'káŋ	àŋ'káŋàmpê
KƐN	'gíà	ŋm̀'gbè	ŋ̀'káŋ	'lámbíà
NUM	gì'à	èm'pó	o'ka	bí'à
BIT	'gíà	m̀'bì:	mè'tò	'àmbíà gíà
TAK	'dʒìà	m̀'bě	mè'kà	dàm' bíàndʒá
BAJ	—	—	—	—
BAS	ì'yà	kòm'pô:	mè'ká	'támbì'áyà

	(196) salt *gaŋ	(197) fat * fo	(198) oil *wɛt	(199) old *kok
LK	ŋ̀'gáŋ	bà'fó	bà'wɛ̀t	bɛ'kòk^{h}
CK	ŋ̀'gáŋ	bà'fô	bà'wɔ̀t	bɛ̀kòk
UK	ŋ̀'gáŋ	bà'fò	bà'wét	è'sì
KIT	ŋ̀'gáŋ	bà'fóù	bà'wɛt	bì'kɔ́k
KIF	ŋ̀'gaŋ	bà'fô	bà'wɔ́t	è'kók
KƐN	ò'ɤaŋ	á'fòm	à' wí ?	'òkwò
NUM	ò'ɤá	à' fò	a'wé	ò'kò
BIT	mò'à	mà'fá	mà'wí	mè'kŭ
TAK	mè'gá	mà'fā	mà'wê	ò'kŏ
BAJ	—	—	—	—
BAS	mè'ɤâ:	mà'fwâ:	mà'wê:	ù'kwò

	(200) new *ko / kie	(201) deep	(202) big *cik	(203) tall *sap
LK	è'kôkò	nè'pî	bè'tʃík	bè'sáp
CK	è'kò	è'sà	è'tʃík	á'sàp
UK	è'kô ɛ'k ô	è'tʃémè	ɛ'tʃík	è'sáp
KIT	è'kò	dʒêm	è'gû:	bì'síè
KIF	è'kíŋ	à'sâp	à'tʃík	à'sâp
KƐN	'kékíè	—	kéŋá?á	kèsá
NUM	ò'kíè	è'gúmù	kɛŋâ:	ò'sà :
BIT	è'kíè	à'gúmò	àŋ'ŋɔ̌	æ'sɔ́
TAK	ò'ké	'gégòmé	kpă	gé'tìé
BAJ	—	—	—	—
BAS	mè'kíè	nə'nû:	kɛk' pá	à'sà

	(204) small	(205) wide	(206) narrow	(207) long
LK	mán'dù	à'néné mwɛt	'níŋə níŋə	bè'sáp
CK	m̀'bẁŋ	à'tʃík	à'gípsì	è'sàp
UK	è'gísì	è'tʃík	è'gípsì	è'sáp
KIT	m̀'bíŋ	à'gû:	à'tʃí ɾ	bì'síè
KIF	'níŋə' níŋə	à'tʃík	a' níŋərí	à'sâp
KƐN	némè' némè / ké'tʃò	kètʃık	kètʃó	kèsá
NUM	kè'tʃò	kɛ'sà	klí'klí	kè'sà
BIT	kè'tʃɔ́	kì'nàlé	à'tʃɔ́?	è'sɔ̌
TAK	'ŋẃnèŋẃnè/kɔ́	ò'nálì	má'málè	gè'tíè
BAJ	—	—	—	—
BAS	à'lémbẁ	—	—	—

	(208) short *biŋ	(205)round	(206) heavy *ɲuop	(207) full *jwi
LK	kèm'béŋ	ˈɤábərì	mé' ɲwəp	é'dʒwì
CK	m̀'bíŋ	è'ɤábèrì	è'núòp	è'dʒwĭ :
UK	m̀'bíŋ	è'ɤábèrɨ	è'nyû:	è'dʒwî
KIT	m̀'bíŋ	gíŋè'diŋ	bì'núɔ̀	dʒwì
KIF	m̀'biŋ	gábèrì	è'nup	à'gwí
KƐN	m̀'bwŋ	ˈgwŋ̀əliŋ	'kɛ́lúnɔ̀	'kɛ́dʒî
NUM	kè'gú	gíŋə'lé	kɛ'nɔ̂:	è'gbé
BIT	m̀'bĭ	—	kè'nɔ:	kìg'bî
TAK	m̀'bɔ̀	gè'pwɛ́lì	gè'nɔ̂	gég'bê
BAJ	—	—	—	—
BAS	—	kɛ́'nɔ̀	'kɛ́lìlè	—

	(212) dry *gwɔ	(213) rotten *pɔ	(214) good (taste) *ri	(215) good (character)
LK	ɛ́'wɔ̀	ɛ́'pɔ̀	è'rẁ	è'rẁ
CK	è'gwɔ̂	è'pɔ̂	ɛ'rẁ	é'rẁ
UK	è'gwɔ̀	è'pɔ̀	è'rẃ	é'rẃ
KIT	à'gwáɔ̀	dɛ̀'páɔ̂:	è'r ɻ́	è'rénkì
KIF	è'gwám	è'pɔ̀	è'r ɾ́	è'rí
KƐN	'kégòm	'képwà	'kégẁ	'kélìɛ́m
NUM	kè'ɤɔ́	képwúà	kè'lɔ̀	kè'lɔ̀
BIT	'kìɔ́	kì'pwé	kì'gíà	kì'lí ʔ
TAK	gè'wá	gẃ'pìánè	gẁ'gɔ̂	gè'lɔ̀mé
BAJ	—	—	—	—
BAS	—	—	—	—

	(216) bad (taste) *bɛp	(217) bad (character)	(218) cold *kwɛn	(219) hot *soŋ
LK	è'bép	m̀'bím'bí	è'kwén	è'sóŋ
CK	è'bígə é'rẁ	à'bèp	ɛ'kwèn	é'sòŋ
UK	è'bígə è'rẃ	è'bép	ɛ'kwén	ɛ'sóŋ
KIT	è'bép	è'bép	kwèn	sòŋ
KIF	ɛ'bɛp	è'bép	m̀'gbwép	è'sóŋ
KƐN	ké'bẁ	ké'bẁ	kèkwèn	'kétʃùŋ
NUM	kè'bì	kè'bì	kè'fìné	òsóŋ'gò
BIT	kì'bí	à'bí / kè' tʃĩ	kì'kwínè	kì' tʃuŋò
TAK	gè'lòmê	'ălòmê	gè'fẃnì	gè'sô
BAJ	—	—	—	—
BAS	—	—	—	—

	(220) hunger *say	(221) sharp	(222) sad	(223) black *pio
LK	ǹ'sày	é'tʃàp	bè'bĕn'tì	'píò
CK	ǹ'sây	è'tʃáp	à'pú bà'nák	pí'ò
UK	ǹ'sày	é'tʃa	bà'sèmè	'píò
KIT	ǹ'sây	tʃɔ̃:	dè'bî	'pía
KIF	ǹ'sá	é'tʃă:p	ǹ'tín'sô	è'gérè
KƐN	nò'sá	ké'tʃâ	'ásèné	'píòm
NUM	'ò'sâ:	à'tsâ	mí'ègì	ò'gàrí
BIT	mɛ̀'sá	kì'tʃɔ̃:	ag'bê	à'glí
TAK	mè'sá	è'tía	mè'sùé	mè'gí lí
BAJ	—	—	—	—
BAS	—	—	—	ógẁ'lẃ

	(224) white	(225) red		
	* pɐp	*cu		
LK	'pépép	tʃù		
CK	pép'pèp	tʃù		
UK	pé'pɐp	tʃù		
KIT	bìrɛ́ì	tʃù		
KIF	pèrɛ̀'rí	tʃù		
KɛN	'pàp^{h}pàp	tʃù		
NUM	pù	tʃù'tʃù		
BIT	'púpú	kì'gɛ́lɛ̀		
TAK	'pòpò	mɛ̀'gɛ́lɛ̀		
BAJ				
BAS	'pùpù	ɛ́gò'lẃ		