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VERBAL EXTENSIONS IN META'.

A Dissertation Submitted in Partial Fulfillment of the Requirements for
the Award of the Postgraduate Diploma "Maîtrise" in Linguistics

By

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DEDICATION

TO:

The Glory of God.

The memory of my Parents, Dorothy Lem Che, and Peter Ambe Che who did not live long enough to reap the fruit of their countless efforts.

My sisters and brother for the financial and moral support rendered to bring me up and encourage me.

My husband, Ngwache Joseph, who has never stopped encouraging and praising me for my hard work.

My two children, Ryian and Noelrickson, for their understanding and cooperation.

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A work of this nature could not have been accomplished single handedly. As such, I owe profound gratitude to:

- God, who in His love and mercy has kept me alive and has given me the wisdom and knowledge to come out with a work of this nature.

- My Supervisor, Prof. Mutaka Ngessimo who, despite his other commitments, could read my work, advise and encourage me. I hereby use this opportunity to apologise for the unpunctuality in the course of this work. I really thank him for understanding. Words of appreciation also go especially to Dr. Tamanji Pius who greatly inspired me with words of encouragement. Also to the entire staff of the Linguistic Department, especially Dr. Mba Gabriel who proofread this work.

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-Dr. Spreda Klaus, who did not only provide me with the data for this work but also introduced me to the informants with whom I worked,

-My informants: (appendix 1).

-Those who corrected this work: Mr. Ndifor Simon, Miss. Rosemary and Mrs. Kong Frida.

-Miss Gladys Numfor for her patience in typing and correcting this work.

May the entire above persons share in the pride of whatever is successful in this work and let me alone shoulder the responsibility for the flaws.

LIST OF ABBREVIATIONS AND SYMBOLS

a) Rules.

Dissim.	Dissimilation
Vd.Del.	Voiced Deletion
N-Del.	Nasal Deletion
Spr. Sol	Spreda's solution
Trun.	Truncation
Nal. assim	Nasal assimilation
Son. dissim	Sonorant dissimilation
V. length	Vowel lengthening.
Syn.	Syncope

b) Tones

/	==	High tone
\	==	Low tone
—	==	Mid tone
v	==	Rising tone
^	==	Falling tone

c) Stress

[']

OTHERS

C	Consonant
V	Vowel
e.o	Each other
s.o.	Someone.
k.o.	Kind of
s.times	Several times
i.e	that is
#	Word boundary
(...)	parentheses
+	Morpheme boundary
~	alternates with
[...]	phonetic data
/.../	phonemic data
Ed(s)	Editor(s)
Ext(s)	Extension(s)
Fv	Final vowel
OCP	Obligatory Contour Principle.
Pfx	Prefix.
Redup	Reduplication
Rt	Root
TM(s)	Tense marker(s)
UR.	Underlying representation
PR.	Phonetic representation
α place	Place of articulation α
→	Becomes or is realised as
caus	causative
bk	back
hi	high

Son.	sonorant
nas.	Nasal
p.	page
No.	Number
s.th.	something
Dir.	Direction
Am.	Aspect marker
(eds)	edited
o.s	one's self
s.b	somebody
—	the same reference name
Prof	Professor
VL	voiceless
Vd	voiced
!	Exclamation mark
S.P.E	Sound patterns of English

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CHAPTER ONE

BACKGROUND STUDY OF META'

INTRODUCTION:

Language as a whole and the Meta' language in particular is one of the most important aspects of the Meta' society. It reveals its culture which is its societal identity. The word 'Meta' designates the name of the ethnic group and at the same time the name of the language.

This chapter which serves as an introduction to this work is divided into four sections. Section one presents the Meta' people and their language. Section two deals with the previous studies done on this language. Section three gives the aim of this study and section four presents the theoretical framework and Methodology.

1.1. THE META' PEOPLE AND THEIR LANGUAGE

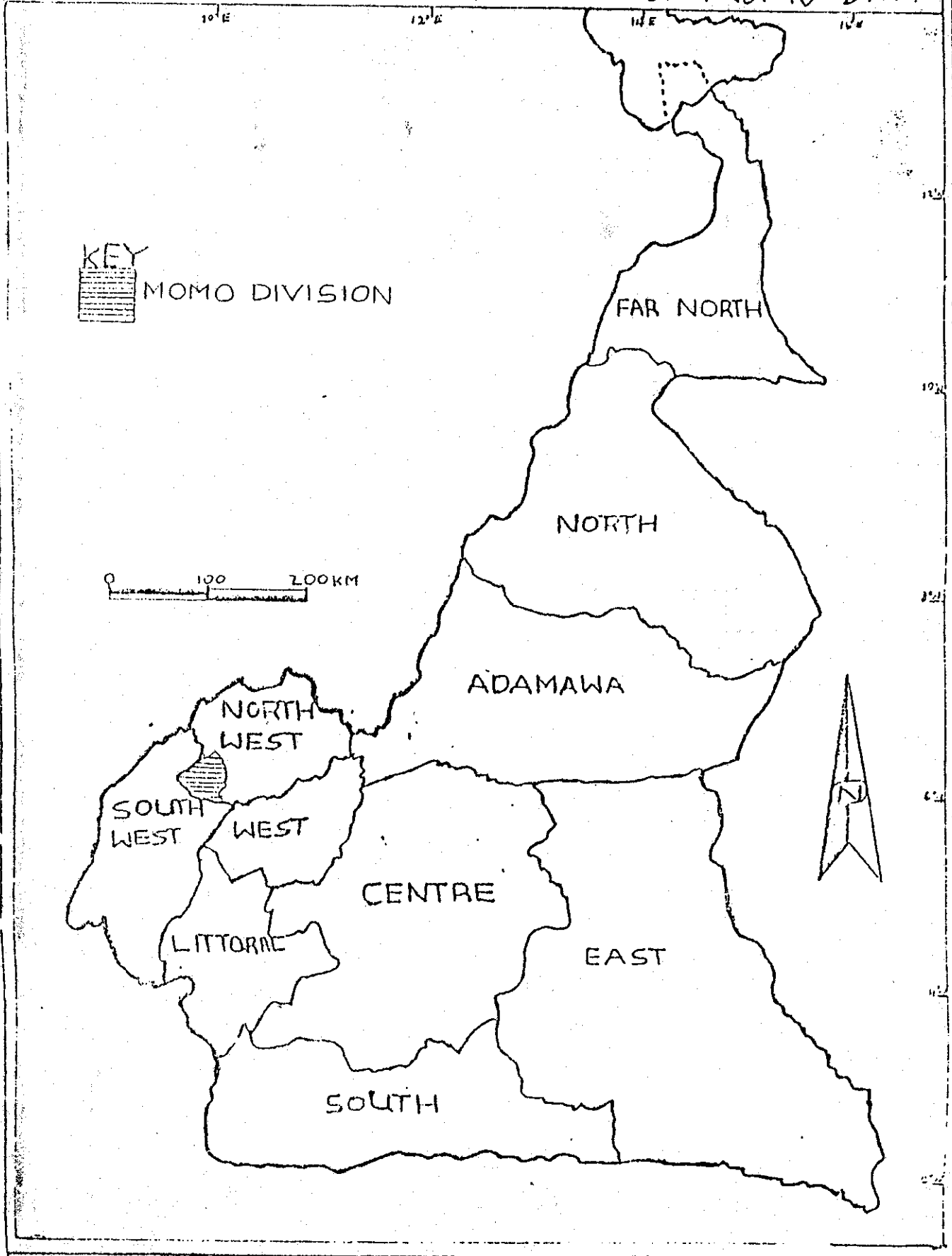
1.1.1. GEOGRAPHICAL LOCATION :

The Meta' people are today found in Momo Division in the North West Province of the Republic of Cameroon. ^{as shown in map 1} The neighbouring divisions are Menchum Division in the North, Mezam Division in the East and Manyu Division in the South and West, as can be seen in the map of Momo Division. (map 2) These different divisions interact in trade, farming, education, health and other services. Their interactions are facilitated by the use of a language. Since they speak different languages, there is bound to be Linguistic interference. This interference accounts for the varieties of the Meta' language. For instance the Ngyen-mbo people in Meta' speak a variety of the Meta' language. They share a common boundary with the Mankon people. A number of words are cognates in these languages

(Meta', Mankon, and Ngyen-mbo) as shown in this example:

MAP 1

SKETCH MAP OF CAMEROUN SHOWING THE LOCATION OF MOMO DIV.



SOURCE: Adapted from, Atlas of the United Republic Cameroon (Paris: Edition Jeune Afrique, 1980), pp. 32-33.

Meta'	Mankon	Ngyen-mbo	gloss
tindi	tidzim	tindzi	'shift a bit'

/dz/ is not a sound in Meta'. It does exist in Ngyen-mbo because of the linguistic interference with the Mankon people. Another case is Njindom which shares a common boundary with Bafut. They also have a variety of Meta'. A comparative study has not been done in this work. This is because the work deals with the Meta' language only and a descriptive study of verbs in particular. Thus, it is not a comparative study of the Meta' dialects.

Furthermore, the Meta' people have a lot of touristic sites like the ABBI Fall, undulating topography for tourists. They equally have fertile soils, moderate temperatures, social amenities and development associations like MECUDA (The Meta' Cultural and Development Association) and the Meta' annual festival that have caused the influx of people who settled and acquired this language but who do not speak as indigenes. Thus, generating varieties through linguistic interference.

Considering the fact that this language varies from tribe to tribe, village to village, home to home and individual to individual, we are bound to have variations in structure and in form.

1.1.2 HISTORICAL BACKGROUND:

Meta' is one of the five clans that make up the Widikum ethnic group. The others include: Moghamo, Ngemba or Mezam, Ngwaw, and Ngie. Each clan has its own local tradition which explains how the group dispersed, moved and finally settled in its present site. It has therefore given rise to varieties so as to match with their local traditions. Some of the Meta' clans include: NYEN, MBEMI, BESSI, ACHA, TUDIG, FUNAM, TONEKU, and others as seen on the map of Meta' Clan. (Map 3).

The Meta' people also fought many wars in order to conquer the original occupants of their present land. They ousted them and occupied this area. Some were won over to become Meta' people. That is why some villages in Meta' land up till date still bear certain foreign names like 'Njindom' which can be literally translated as 'Nji' (over there) 'Ndom' stands for the name of the original occupants. We equally have 'Njinibi' meaning (over there) where the 'nibi' people were.

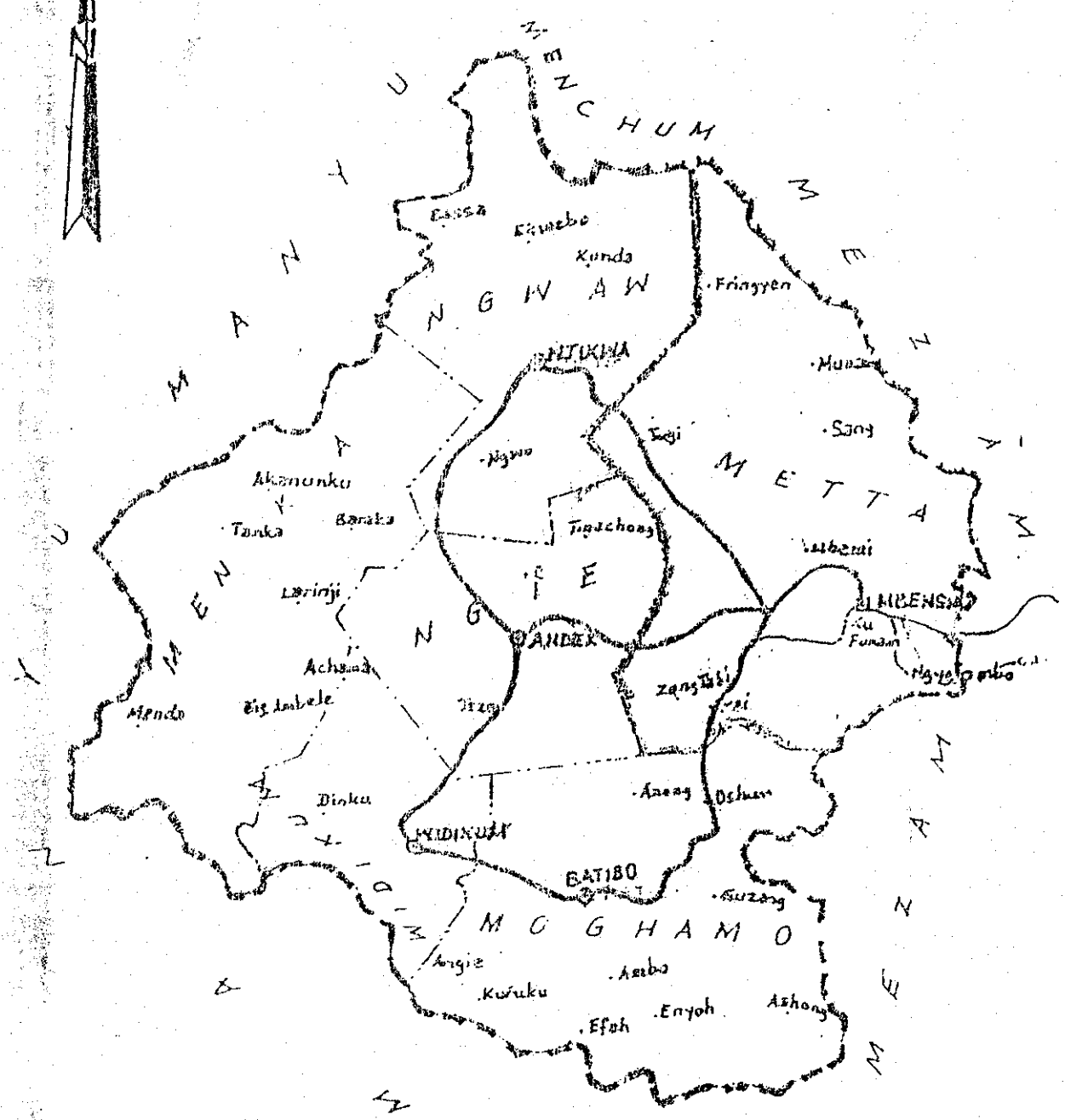
The warlike nature of the Meta' people forced upon the original occupants their language and culture. The original language influenced the acquisition of the Meta' language as the second language, thus, creating it varieties. This therefore explains why there are so many free variations in Meta'.

Modernity has not failed to play a role on this language. The invention of new items have not been left without a name in the Meta' language. Recent creations which are without names in the Meta' language have simply been described. An example includes an aeroplane which has simply been called 'mutunikaa' translated 'motor in the sky' thus enabling the evolution of the Meta' language. Bij

MAP 2.

MAP OF MOMO DIVISION

SCALE 1 400000



EY

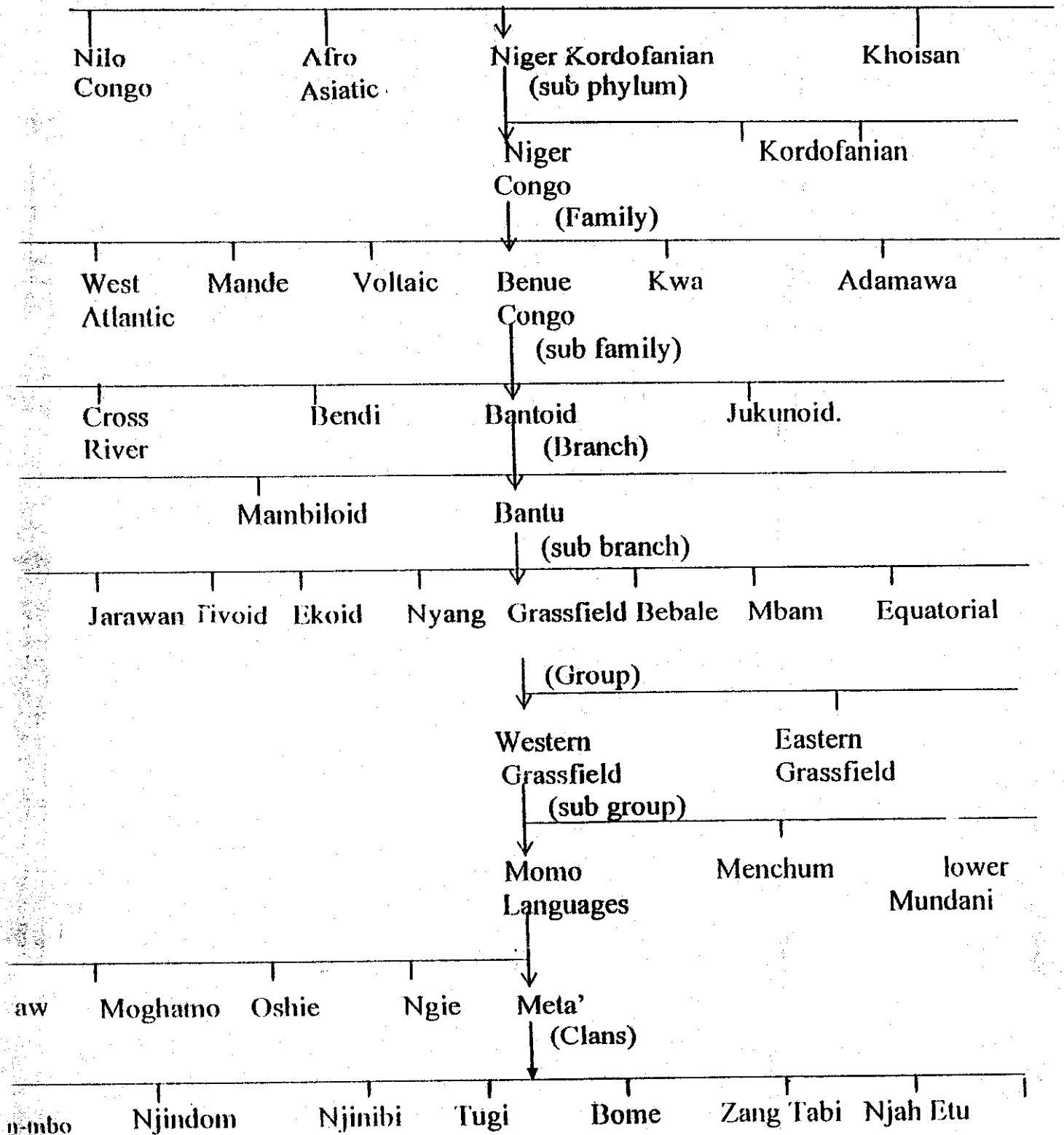
- Divisional Boundary
- Divisional/Clan Boundaries
- Metta Clan Boundary
- Divisional Headquarter (□)
- Administrative Headquarters (○)
- Notable Roads (---)

1.1.3. CLASSIFICATION OF META'

In the classification of the Meta' language by ALCAM, (Alas^t Linguistique du Cameroun) (1980) Meta' falls under zone 8 which is in the North and West of North West province. It consists of the Bantu languages that are either Narrow Bantu (zone A of Guthrie (1967) or North East Grassfields (former Mbam-Nkam (1971). It includes Grassfield languages of Momo, Menchum and Ring groups. Although Williamson (1971:278) lists Meta' among the unclassified languages of the Mamfe Bantu group of Bantoid, Stallcup (1980) classifies Meta' as one of the Momo languages of Western Grassfields. In order to show the Phylum, the Family and the Branch to which this language belongs, Greenberg's (1966) genealogical classification of African Languages have been adapted and used with that of Stallcup (1980) to classify Meta'.

THE GENEALOGICAL CLASSIFICATION OF META'

AFRICAN LANGUAGES (Phylum)

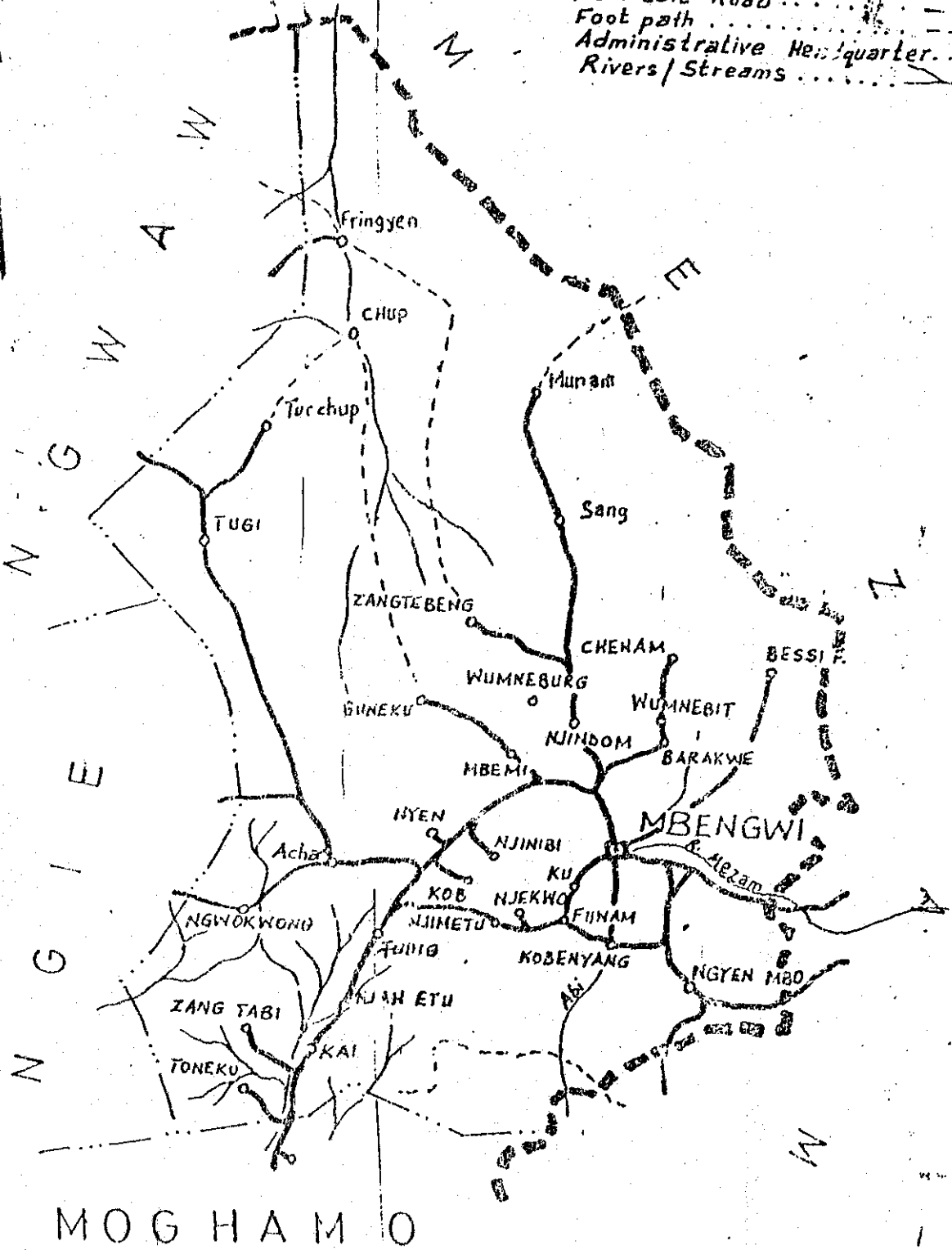


MAP OF METTA CLAN

SCALE 1 200000

KEY

- Divisional Boundary ...
- Clan Boundary
- Village
- Motorable Road
- Foot path
- Administrative Headquarter
- Rivers/Streams



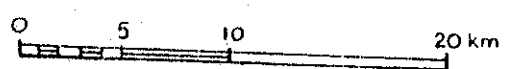
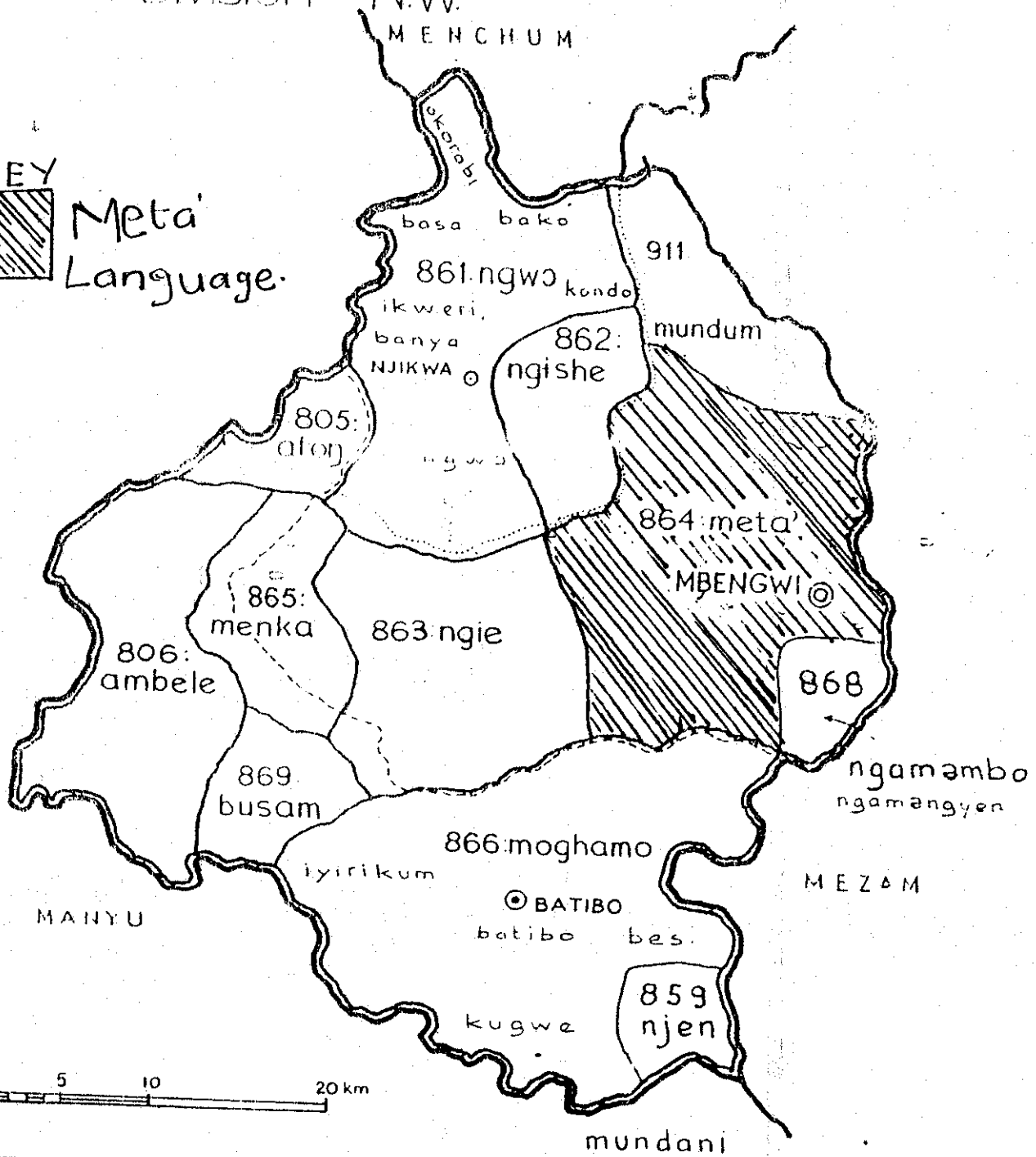
MAP 4.

MAP OF MOMO LANGUAGES SHOWING THE META' LANGUAGE.

Langués nationales: Département de la TOMBU
 DIVISION N.W.



Meta' Language.



	département	arrondissement	district
limites	—	- - - - -
chef-lieu	⊙	⊙	⊙

	langués	dialectes
limites	—	
désignation	meta' 864	ngwo

Bikia.

©ALCAM
 CREA-ISH
 R. BRETON
 1987.

1.2. LITERATURE REVIEW

Most of the work done on the Meta' language is by Spreda Klaus. He brought out *The Meta' English - Lexicon* in (1991) where he wrote words and sentences in the Meta' language and translated them. He also wrote *The Alphabet and orthography statement of Meta'* (1991). In it, he included rhymes and jokes for the Meta' people. He equally brought out the alphabet of the Meta' language which has been used in this work. He has an article "Notes on Markers of Parallelism in Meta'" (1994). In this article, he uses three particles of repetition to mark parallelism. These include 'yi, wuri, and bə'. He did not forget the preliminary stage of learning and wrote *Learning how to Read and Write Meta'* in several volumes. Most of these works are based on nouns and he does classify the nouns. Spreda Klaus (1991) wrote *The Phonology of Meta' (Menemo)* (using a structural approach). In it, he contrasts sounds bringing out those in complementary distribution that is, allophones of the same phoneme and also those of separate phonemes. He equally collected a few verbs and extensions where he noticed variations within the sounds. He attempted a solution that has been criticised in chapter three of this work.

Furthermore, he worked on *The Tonology of Meta'* (1986). It is written in German as is his thesis. He brought out the various tones of Meta'. Using tonological rules, he analysed the tones.

Again, Janice O, Spreda (1995) wrote *The Initial and Final Adverbial Constituents in Meta'*. It is a narrative text. The above people immensely contributed to the translation of the Bible into the Meta' language.

Finally, there is also *The Meta' Rules and Universal Constraints in Phonological Theory* by Chen Mathew (1975) that Spreda (1991) used on phonology. The above works did not present to us a descriptive analysis of verbs and their extensions using the generative approach, as in chapter three and the semantic approach in chapter four. This implies that verbs were not combined with different extensions in Meta'.

They did not also combine verbs with different extensions in Meta' to describe and give their various meanings which has been done in this work.

1.3. AIM OF THE WORK

The purpose of this study is to present how verbs and their extensions in the Meta' language have attained a reasonable degree of definability with respect to its phonology. The work is therefore intended to be a contribution to the search for evidence on the existence of phonemic and phonetic contrast in the phonology of the Meta' language. The verbs and their extensions constitute the major area of alternation.

The present investigation on these verbs hopes to offer a comprehensive and more principled analysis, based on the generative approach.

This work is also aimed at presenting a solution different from the one proposed in Spreda Klaus (1991) in that, it contains phonological rules of the Meta' language, systematically arranged to give the phonetic representation.

Furthermore, the work aims at segmenting verbs and their extensions, taking into consideration the structure, forms, and the semantic aspects.

The work also condenses verbal extensions and reduplication into a single meaning. That is, a reduplicated form and an extended form give the same meaning.

This work also shows us that verbal extensions in the Meta' language affect verb valence.

Finally, it aims at contributing immensely to the works done on this language and African languages as a whole. It seeks to provide data which can help in drawing conclusions on functions of African languages (Universal grammar).

1.4. THEORETICAL FRAMEWORK AND METHODOLOGY

1.4.1 THEORETICAL FRAMEWORK

The approaches used in this work are the generative and semantic approaches unlike the structural approach on comparing and contrasting sounds by Klaus Spreda (1991).

The generative approach deals with the process of describing the verbs, analysing verb structures, alternating variables, generating phonological rules and systematically arranging these rules to give the phonetic representation of the verbs and their extensions. To prove the rules correct, the derivational method has been used to check them. Wrongly presented rules will therefore not lead us to the phonetic representation.

Lastly, we isolate the extensions to get their intrinsic meaning. After that, extensions are matched with verb roots to give their semantic functions. Verb roots are equally reduplicated to have a comparative study with extensions and finally the extensions are analysed to see their effects on verb valence.

1.4.2. METHODOLOGY

This project started with the collection of data. Spreda Klaus who has been working on this language for more than 25 years gave part of the data and the rest of it was got from informants: Pa Kwati, a primary school teacher of the Meta' language, Mr. Takod, and Pa Ngwa. They are residents in the Meta' land and have been there for the past 20 years. Their mastery of the language is unquestionable. These studies were undertaken for a five-month period of actually living in the Meta' land and specifically at Njembeng. The English language was the main medium of communication. The informants gave direct translation from Meta' to English for the verbs and their extensions.

After collecting the data, the researcher then sat down to examine the verbs, segmenting them, identifying the verb root and their extensions, to note the variations. Particular attention was paid to verb roots when more than one extension is added to them. This then enabled the researcher to determine the underlying forms of verbs and to fully explain the phonological alternations involved in them, through rules using the generative approach.

The researcher further discovered that, the same extensions on different verbs give different meanings, thus the semantic function was introduced for the meanings. Reduplication was further seen to replace extensions in some cases and in others, extensions affected verb valences. The verbs were left at this level and not conjugated.

1.5. OUTLINE OF WORK

This work is divided into four chapters. Chapter one deals with the background study of Meta' which introduces the geo-historical situation as well as the linguistic classification of the Meta' language. It also reviews the previous works done on the language, the theoretical framework and methodology used and an outline of the entire work.

Chapter two and three treat the phonology of the verbs and their extensions. Chapter two presents the phonology of sound positions in Meta' taking into consideration the phonemic and prosodic sub-systems. Chapter three analyses the phonological rules on verb extensions giving the constituents of the verb structure. It further analyses the alternations underlying the verbs and the extensions using phonological rules. A derivation is given at the end to prove that the rules are correct.

Chapter four is reserved for the semantic functions of the verbs and their extensions. A comparative study of reduplication and verbal extensions was condensed to the same meaning. It also deals with the effects of these extensions on verb valence that is, changing the verb to transitive or intransitive with the addition of an extension.

The work closes with a general conclusion which presents a summary of the results of this project. It also gives information on the sections not yet treated in Meta' and what further researchers on this language could dwell on.

Finally, it provides the benefits of this work both to the Meta' people, to linguists, and to the world of African languages. 9

CHAPTER TWO

THE PHONOLOGY OF SOUND POSITIONS IN META'

11. INTRODUCTION

This chapter focuses on the consonants, vowels, tones, and stress of the Meta' language. It analyses the various positions occupied by the sounds of this language. The analysis starts from the phonemic sub-systems which include consonants and vowels to the prosodic sub-system which includes tones and stress. This work is basically concerned with the phonemic sub-system.

11.1. THE PHONEMIC SUB-SYSTEM.

The phonemic sub-system of the Meta' language comprises 28 sounds: twenty consonants and eight vowels.

The twenty consonants of the Meta' language are found in the phonetic consonant chart of Meta'. They are arranged according to the manner and place of articulation, voiced and voiceless characteristics as seen below:

11.1.1. CONSONANTS

11.1.1. 1. PHONETIC CONSONANT CHART OF META'

Spreda Klaus (1991)

		Place of Articulation: Bilabials		Labio dentals	Dental alveolar	Palatal	velar	glottal	
Manner of Articulation:									
Plosives	VL	P			t		k	ʔ	
	Vd	b			d		g		
Affricates	VL					c			
	Vd					j		gh	
Fricatives	VL			f	s				
	Vd			v	z				
Nasals	Vd	m			n		ŋ		
Approximant	Vd						y	w	
Trill	Vd				r				

note use IPA for k w-n

11.1.2. SAMPLE WORDS OF CONSONANT POSITIONS

The position of Consonants can only be known by comparing and contrasting them. Sounds that are suspicious are contrasted and compared to know whether they are separate phonemes or allophones of the same phoneme.

11.1.2.1. WORD INITIAL POSITION.

11.1.2.1.1. PLOSIVES.

Plosives contrast word initially.

Examples:

(1) a) p/b

pèŋ 'remove s.th from the grip of s.th'

bèŋ 'turn s.th around'.

b) t/d

dèn 'step over'

tèn 'remain'

c) k/g

kwèm 'smooth'

gwèm 'lift up with a lifter and let it turn over'

Plosives, word initially are in contrastive distribution. They are therefore separate phonemes represented as /p/ /b/ /t/ /d/ /k/ /g/.

The glottal sound is the only plosive that does not occur word initially. The reason is explained under the glottal stop. (11.1.3)

11.1.2.1.2. AFFRICATES

Affricates do not contrast word initially.

Examples:

[tʃ]

(2) jwini 'crowded'

jū 'honey bee'

jɛg 'eat'

jè 'feed'

From the data collected /j/ is not highly used in the Meta' language. Only the words above have been seen with the /j/ sound. It occurs before the /w/ sound as the only affricate before a consonant.

/c/ is a voiceless affricate, and it occurs only word initially with root verbs.

It is pronounced like the sound /tʃ/ as in Church as seen in Oxford Advanced Learners Dictionary of Current English. By A.S. Hornby (1980). It is represented as /c/ in the Meta' language.

Examples:

[c]

(3) càb 'abuse'

cèd 'cut'

cōb 'donate'

cōb 'fight'

cù-ri 'steam food'

cà? 'search'

cōbri 'donate to'

cèb 'pinch'

có? 'pull out'

có?ri 'pull out a bit'

The two sounds /c/ and /j/ do not have a contrastive pair. They all occur word initially with root verbs. The difference comes in with /j/ which is seen before the consonant /w/ /j/ therefore occurs in an environment where /c/ does not occur.

This can be explained using this rule:

$$(a) \left[c \right] \rightarrow \left[j \right] / _ \left[w \right]$$

or

$$(b) \left[j \right] \rightarrow \left[c \right] / _ \left[\begin{array}{c} v \\ -high \end{array} \right]$$

We could have concluded this as a rule and could have chosen a preferred rule but there are no alternations. This implies that the forms seen in the verbs are just the orthography of the language.

11.1.2.1.3 FRICATIVES

Examples:

f/v

(4) fɪ 'wind around'

vɪ 'escape'

s/z

sàm 'divide'

zàm 'light'

Fricatives are contrastive word initially. They are separate phonemes represented as /f/ /v/ /s/ /z/.

The two sounds are therefore allophones of the same phoneme at word initial position represented as :

$$(i) \left[n \right] \rightarrow \left[\eta \right] / _ \left[w \right]$$

or

$$(ii) \left[\eta \right] \rightarrow \left[n \right] / _ \left[y \right]$$

Rule (i) is preferred because /n/ precedes both vowels and consonants. It equally occurs in root verbs and extensions. It is therefore highly used.

11.1.2.1.5 APPROXIMANTS

Approximants contrast word initially

Examples:

y/w

- (6) wèèrì ' help each other'
yèèrì ' wonder at'

They are separate phonemes represented as /y/ /w/.

11.1.2.1.6. GLOTTALS

ʔ/gh

The glottal stop does not occur word initially while the glottal affricate does occur at word initial position.

They are therefore allophones of the
same phoneme represented as:

$${}^v \left[gh \right] \rightarrow \left[\text{ʔ} \right] / \left[\# \right] \text{---} \quad (i)$$

/gh/ becomes /ʔ/ word finally. Or

$$\left[/ʔ/ \right] \rightarrow \left[gh \right] / \left[\# \right] \quad (ii)$$

The glottal stop becomes an affricate word initially.

Rule (ii) is preferred because the glottal stop occurs both word medially and finally. Rule (i) is limited only to the initial position. Thus, the glottal stop occurs in more positions than the glottal affricate.

11.1.2.1.7. TRILL.

/r/

It does not occur word initially with root verbs except as a free variant with /l/ (see chapter III). It does occur with extensions both as a prefix and a suffix as below:

a) $\frac{/r/}{/r/}$ As a prefix

ri- prefix

Examples:

verb	gloss	extension	gloss
(7) bònɲ	'good'	ribònɲ	'bad'
ɪ	'black'	'rifi	'white'
ká	'indicate'	riká	'do not indicate'

b) /ri/ As a Suffix

Examples:

verb	gloss	extension	gloss
nwàg	'swallow'	nwàg-ri	'swallow a bit'
mīg	'measure'	mīg-ri	'measure comparatively'
		wèè-ri	'help each other'
		yèè-ri	'wonder at'

/r/ does not alternate as a prefix. It has highly been used in this work as a suffix (see chapter III and IV).

11.1.2.2.2. Word Medial and Word Final Positions.

Consonants alternate word medially as will be seen in chapter III. Only voiced sounds occur word finally in the Meta' language.

There is an exception of voiceless plosive word finally. This is the glottal voiceless stop.

11.1.3. THE VOICELESS GLOTTAL STOP

In the Meta' language, the glottal voiceless stop behaves differently from the other voiceless sounds. This is because it is found word medially and word finally. Its word medial position is not as a result of a phonological rule as the other voiceless stops. It behaves like a voiced sound.

Examples:

a) Glottal Stop Before Vowels

Verb	gloss
(8) swɨʔii	'descend'
béʔé	'cut off'

b) Glottal Stop Before Consonants

Verb	gloss
b) còʔri	'pull out a bit'
cíʔri	'cover to shade from'

When the glottal sound occurs before a consonant word medially, it is mostly an extension. These extensions are those with the cv form

Secondly the glottal stop is found word finally, as the only voiceless stop in this position.

c) Glottal Stop Word Finally.

Examples:

Verb	gloss
tàʔ	'open'
cóʔ	'pull out'
bùʔ	'hit'
bìʔ	'calm'
cīʔ	'churn'

Above all, the glottal stop occurs before a nasal extension. This is equally exceptional because in this language nasals that begin extensions occur only after a nasal or vowel sound(s)

d) Nasal Extension After Glottal Sound

Examples:

verb	gloss
kùʔni	'join hands'
bàʔni	'clear off'
bùʔni	'break into smaller pieces'

e) Nasal Extension After Nasals

Verb	gloss
kúmni	'chase'
màŋni	'grip several objects'
sèrni	'misshaped'

f) Nasal Extension After Vowels

Verb	gloss
nyààni	'very harsh'
mèèni	'learn'
wààni	'a bit rough'

However, there are attempted explanations to why the glottal stop behaves differently.

Firstly, its lonely nature. The glottal stop does not have a voiced counterpart like the other stops. In Meta', only voiced sounds are found word finally. Since there is no voiced counterpart, it therefore has a dual function. It takes the place of the voiced sound and occurs word finally.

The glottal stop deletes vowels that occur after it when receiving an extension. This can be explained using the evolutionary aspect of the language, that is, from a diachronic point of view. Most of the pronunciations with the vowel after the glottal sound are still used by the ageing population. This implies that the last vowel has just been erased by modernity. The eventual erasure of the last vowel leaves the glottal sound word finally.

Handwritten note:
 don't
 have
 a
 voiced
 counterpart

g) **Examples:**

Verb	gloss
zwĩ?i	'fumigate'
zwi?	'fumigate'
bú?u	'break'
bú?	'break'

Though the language accepts both forms, the last vowel obligatorily deletes when an extension is added to it.

h) **Examples:**

Verb	gloss
swĩ?i	'descend'
swĩ?ri	'descend a bit'
bú?u	'break'
bú?ri	'break into pieces'

11.1.4. VOWELS

Meta' has eight vowels. The description of these vowels is based on the position of the tongue, the shape of the lips and the relative tension of the vowels.

The vowels may be high, low, or back depending on the position of the tongue. It may be round or unrounded depending on the shape of the lips.

1.1.4.1 THE VOWEL CHART OF META'

BY SPREDA KLAUS (1991)

	- Rounded	- Rounded	+ Rounded
High	i	ɨ	u
	e		o
mid		ə	ɔ
low		ɑ	

11.1.5. SAMPLE WORDS OF VOWEL POSITIONS

11.1.5.1. Word Medial and Final Positions .

Examples:

	verbs	gloss
(9)	a) i/e	
	fi	'pledge'
	té	'stand s-th on s-th.'
	b) i/ə	
	kĩm	'choke'
	kəm	'cook'
	c) a/ə	
	càb	'funnel'
	cèb	'pinch off s.th with the fingernails'
d)	u/o	
	kùn	'touch'
	kòd	'tie'

e)	o/ɔ	cōb	'donate'
		cōb	'quarrel'
f)	i/ɪ	zwí	'die'
		zwí	'dirty'
g)	e/ə	zèŋ	'clean'
		zèŋ	'turn'
h)	i/e	fé	'fan a fire'
		fi	'wind around'
i)	i/a	cĩ?	'stir'
		cà?	'search'
j)	u/i	zù	'hear'
		zĩ	'put'
k)	u/a	wùd	'shake'
		wàd	'cut'

All the vowels of the Meta' language are contrastive. This implies that they are all separate phonemes. They do not occur word initially. They are evenly distributed word medially and word finally. Vowels that begin verbs act as prefixes, that is, with an additional meaning.

11.1.5.2. WORD INITIALLY

Vowels word initially are always prefixes.

11.1.5.2.1. /i/ AS A PREFIX

/i/ as a prefix, adds the infinitive function of the verb.

Examples:

(10)	infinitive	gloss	verb	gloss
a)	i - jīg	'to eat'	jīg	'eat'
	i - fà?	'to work'	fà?	'work'
	i - cū	'to pound'	cū	'pound'
	i - zéb	'to peel plantains'	zéb	'peel plantains'
	i - tú	'to be blunt'	tú	'blunt'
	i - bō	'to fear'	bō	'fear'
	i - sà	'to split'	sà	'split'

Another highly used vowel is the mid central vowel. When it precedes a verb, it changes the verb to a noun. Below are some infinitive verbs that become nouns with the presence of /ə/ sound.

11.1.5.2.2. /ə/ AS A PREFIX.

Examples:

	Verb	gloss
b)	i - jè	'to feed'
	ə - jè	'feeder'
	i - cà?	'to search'
	ə - cà?	'researcher'

ì- dàn 'to train'

ə- dàn 'trainer'

The above central vowel /ə/ is also a tense marker. It marks the continuous tense when it occurs word finally after the root verb. It also marks an exclamation in the same position. The differences will only be known contextually.

11.1.5.2.3. /ə/ AS TENSE MARKER.

C = suffix, not a prefix

Examples:

c)	verb	gloss	cont. tense	gloss
	jīg	'eat'	jìkə	'eating'
	búʔ	'break down'	búʔə	'breaking down'
	sùŋ	'pull'	sùŋə	'pulling'
	sàn	'split'	sàné	'splitting'
	bèd	'beat'	bèré	'striking'

11.1.5.2.4. /ə/ BEFORE AN EXCLAMATION MARKER

(d)	verb	gloss	exclamation
	tùm	'shoot'	tùmə!
	búʔ	'break down'	búʔə!
	jīg	'eat'	jìgə!
	cəb	'pinch'	cəbə!
	kòndi	'serve out'	kòndə!

11.1.6. THE PHONEMIC CONTRAST BETWEEN LONG AND SHORT VOWELS

There is a phonemic contrast between long and short vowels. This implies that a double vowel gives a different meaning from a single vowel. One very important point to note here is that some of these vowels do not occur as long word finally with root verbs. They become long with the addition of a suffix or an extension.

The existence of long vowels in the Meta language is explained with the use of the minimal pairs below. This implies that the long vowel gives a different meaning. When long vowels are contrastive, they occur between consonants in root verbs. An extension added to it will not change the vowel length.

Examples :

(11)	Verb	gloss
	bèn	'open'
	bèèn	'disgrace'
	yèn	'travel'
	yèèn	'increased'
	bèni	'agree'
	bèèni	'follow'

11.1.6.1. WORDS WITH LONG VOWELS BECAUSE OF AN EXTENSION.

a)	verb	gloss
	bà	'carry on the back'
	bù	'confuse'
	dì	'pity'
	fé	'fan a fire'

fi	'twist'
gù	'fall'
kwè	'slip down'
nyà	'hostile'
tò	'sharp'

b)

Extension

gloss

extended verbs

bààni	'cross'
bùùri	'totally confused'
dīiri	'pity for'
fèèri	'fan a fire repeatedly'
fīini	'twist out of shape'
gùùri	'totally fall down'
kwèèri	'slip off from'
nyààri	'harsh'
nyààni	'shower'
tòòri	'very sharp'

In the above examples, these long vowels are equally testified by the fact that a short vowel becomes a long vowel when an extension is added to it. (See chapter III vowel lengthening rule).

11.2. THE PROSODIC SUB-SYSTEM

The prosodic sub-system includes tones and stress markers.

11.2.1. TONES

As a Western Grassfield Bantu language, one expects Meta' to be highly tonal. A purely scientific work of this nature cannot be successfully

analyzed without the use of tone marks. The Meta' language without tones will make most words ambiguous. In fact, phonetically, four different levels of tones and six contour tones are recognized.

Meta' has discrete levels of pitch with corresponding phonetic tones which are variants

The tones in Meta' include:

/	high
\	low
—	mid
v	rising
^	falling

The following words carry the above tones respectively.

jú	'bee (honey)'
tòŋ	'umbilical cord'
tō?	'cup'
t ɪŋgáŋ	'k.o.lizard'
pâ?	'cloud'

The above tones are contrastive in the following words:

Infinitive

13)	verb	gloss
a)	ī-té	'to stand s.th. somewhere'
	ī - tē	'to kick, ship, sting'
	ī - tè	'to slip'
b)	ī - gwé	'to reverse'
	ī - gwē	'to pick'
	ī - gwè	'to fail to give'

The contrasting nature of the above tones makes them separate tonemes.

11.2.2. STRESS

Stress according to Spreda Klaus (1995) is the prominence of one syllable as compared to neighboring syllables by means of higher pressure of the air stream. It is not contrastive in Meta'. It is however useful in distinguishing between stressed and unstressed syllables. Since certain tonal rules can best be formulated by recourse to this distinction. The initial syllable of each root has phonetic stress. All affix syllables and non initial root syllables are unstressed. In the following examples, Stress is marked [I] but will generally be left unmarked outside this section.

Examples:

(14) tã'binə

'prospective dancer'

gha'brɪ

'divide'

need more examples.
is it the end syll. that is stressed
or the first one?

CHAPTER THREE

PHONOLOGICAL RULES ON VERB EXTENSIONS

111. INTRODUCTION

In this chapter, we will analyze the verbs and their extensions using phonological rules. These rules will be applied following the variations that crucially occur with verbs and their extensions. The rules will be systematically arranged, and their derivations analyzed at the end.

111.1. VERB.

A verb according to Voeltz (1977) is an action word that tells what a person or thing does or experiences. But since all verbs are not action words, Webster Dictionary (1987) defines a verb as “a word belonging to that part of speech that characteristically is the grammatical center of a predicate and which expresses an act, occurrences or mood of being...”

From the above definition, the predicate cannot exist without the verb. The verb is the center of the predicate. If the predicate has just one element, it must be the verb. Verbs therefore can exist in isolation as seen below:

In English

1)	The boy	ate
	Subject	predicate

In Meɬa'

	mâ	ĩg
	I	eat
	Subject	predicate

wì è cōb
 He Tm fight
 He fought
 Subject predicate.

A single word in the Meta' language like in the English language, can make a sentence. This is evident in situations of command. The difference is that in the Meta' language, the Central vowel sound /ə/ appears word finally when it is a command.

As a simple verb

2 a) verb

gloss

jīg

'eat'

tùm

'shoot'

wòb

'hook'

*which form is the
not the imperative*

As a Command

b) Verb

gloss

jīgè!

'eat!'

tùmè!

'shoot!'

wòbè!

'hook!'

111.2. META' VERB STRUCTURE

The Meta' language expresses verbs in isolation and in combination with other morphemes. These verbs are canonical in their forms, enabling the description of the structures in this language. The verb root together with

???
S. K. Mistry

met → The verbal extensions make up the verb stem. The verb stem forms the nucleus of the verb and it can take a number of prefixes and suffixes. Verbs of this language can be seen with the following structures:

(3) -C V-

-C V V-

-C V C V-

-C V V C V-

-C C V-

-C C V C-

The above structures shall be used to describe the positions of sounds in the Meta' language.

111.3. TYPES OF ROOTS AND EXTENSIONS

The verb structure of the Meta' language is necessary for a work of this nature because of the phonological patterns that crucially occur within words. Different forms of verbs bring different structural changes. The structural changes brought about by extensions in this language and their semantic implications are the main-point-of focus in this work. ✕

The verbs will be sub-classified on the basis of their final sounds. Through classification, what is idiosyncratic can be distinguished from what is systematic. We will then propose phonological rules to account for the systematic changes.

111.3.1. THE - C V - STRUCTURE.

Verbs that appear in this structure contrast most of the consonants word initially. These include:

	Verb	gloss
(4)	t/d	
	tí	'pledge'
	dí	'cry'
	k/g	
	kù	'be guilty'
	gù	'mend a hole'
	f/v	
	fí	'wind around'
	ví	escape

The other consonants will be contrasted in the -C V G structures of verb roots

111.3.2. THE - C V V - STRUCTURE

This structure is mostly realized with the addition of a vowel as an extended Morpheme.

This vowel is mostly the central vowel /ə/. It is always a tense marker.

Verbs in this structure are exemplified below:

	Verb	gloss	extension	gloss
(5)	bě	'pass through'	běə	'Translucent'
	tō	'carve'	tōə	'carved'

tī	'cook'	tīè	'cooked'
zǔ	'listen'	zùè	'listened'

111.3.3. THE - C V C - STRUCTURE

The CVC structures are the most common verb roots. The final sound is always a voiced sound. They will be sub-classified on the basis of the final consonants as they show different behaviours. The only exception in this environment is the voiceless glottal stop / ʔ / which occurs word finally as has been explained in (11.1.3.).

By comparing and contrasting the sounds, the phonological processes underlying the verbs and their extensions will be deduced and analyzed. Their analysis will stem from their features.

111.3.3.1. PLOSIVES.

They contrast word initially in root verbs as seen in chapter 11.

Examples:

	Verb	Gloss
(6) P/b		
	pèŋ	'remove'
	bèŋ	'sour'
t/d		
	tèn	'remain'
	dèn	'step over.'

k/g

kùd 'chew'

gùd 'wrong'

Plosives contrast word medially with the next structure.

111.3.4. THE - CVCV - STRUCTURE

This structure is always when an extension has been added to the -CVC - or -CV- structures. This implies that the extension can either be a vowel or a CV that might have undergone some phonological changes.

Word Medial Contrast.

Examples:

(7)	Verb	Gloss
	p/b	
	cèbé	'pinching with the fingernails'
	cèpé	'pinching a bit with fingernails'
	t/d	
	kòdé	'tying'
	kòtá	'tying lightly but many times'
	k/g	
	jíkè	'eating a bit'
	jīgè	'eating'

The phonological processes underlying the above verbs will be analyzed later in this chapter.

Word Final Position.

Plosives do not contrast word finally. This is because voiceless sounds do not appear word finally in this language. The extensions that occur after plosives include: - /bɪ/ /dɪ/ /gɪ/ /rɪ/ /ə/.

There is an assimilation process here with the consonants as seen below:

(8) /bɪ/ appears after /b/ _____ word finally.

/dɪ/ appears after /d/ _____ word finally.

/gɪ/ appears after /g/ _____ word finally.

The examples below explain the above process.

CVC+CV → CVCV

Examples:

verb

gloss

(9) cəb + bɪ → cəpɪ 'pinch a bit'

pinch EXT

kəb + bɪ → kəpɪ 'provoke fighting'

tease EXT

bəb + bɪ → bəpɪ 'protect with'

protect EXT

kùd + dɪ → kùtɪ 'sift'

chew EXT

kòd + di → kòtí 'tie lightly but many times'

tie EXT

mèd + di → mètí 'swallow in small quantities'

swallow EXT

jíg + gi → jíkì 'eat a bit'

eat EXT

kòg + gi → kòkì 'tear s.o's throat repeatedly'

tear s.o's EXT

throat

síg + gi → síkì 'cut with'

cut EXT

From the above structures we realize the following alternants

bəb ~ bəp-i

cəb ~ cəp-i

kəb ~ kəp-i

kùd ~ kùt-i

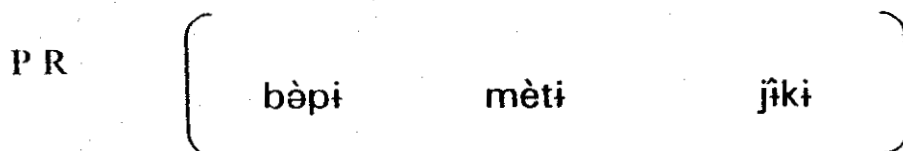
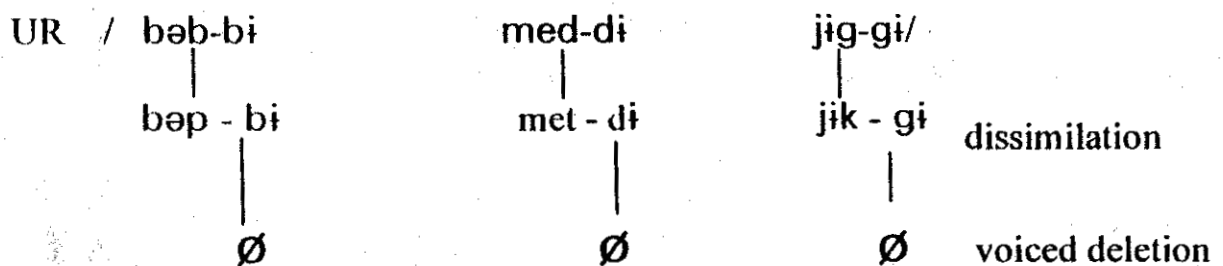
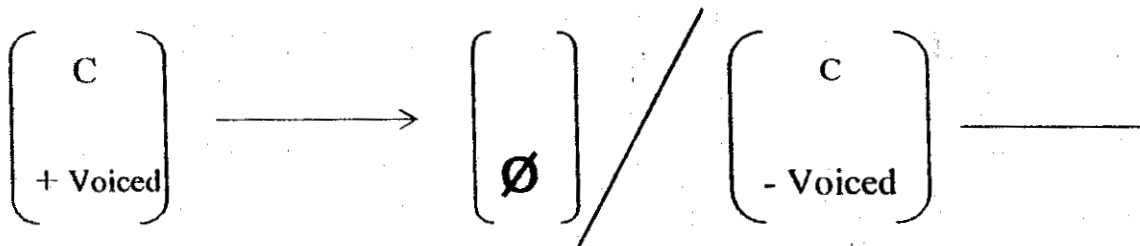
kòd ~ kòt-i

The dissimilation process has not taken us to the phonetic representation. There is still a voiced consonant deletion process.

111.4.2. DELETION.

A consonant becomes deleted when it is preceded by another consonant – voiced.

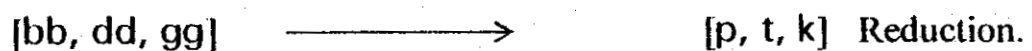
Rule



III.4.2.2 ALTERNATIVE SOLUTION TO THE ABOVE

RULE WHICH IS NOT PREFERRED (REDUCTION)

Another solution to these identical clusters would have been a reduction process as in Kisseberth and Kenstowicz (1979) where identical clusters are reduced to their voiceless counterparts.



The voiceless stops are derived from an underlying cluster of voiced stops. This solution is correct but the dissimilation process is preferable. This is because there is another dissimilation process with the dental nasal as will be seen later.

This therefore binds with the Maximal Application Principle which states that "rules tend to shift into the order which allows their fullest utilization in the grammar." If the reduction process is used in the nasal cluster, it will not apply because, the rule states that identical clusters are reduced to the voiceless counterparts. The nasal has not been reduced to a voiceless nasal. It is therefore a solution but not a preferable one.

11.4.2.2. SPREDA'S SOLUTION THAT COULD NOT WORK.

A different solution to this same problem is given in *Spreda Klaus's* work on structural phonology (1991). He adopted his solution from Kenstowicz (1971) whereby voiceless sounds are the basic sounds while voiced sounds are as a result of phonological processes. *Ref: H. Spreda's*

He came out with four rules to account for the above alternations.

Rule one

Stops are unreleased before a pause.

jĩkĩ ~ jĩg

sòpt̃ ~ sòb

UR	/sop-i	sop	jik	jik - i/
		b	g	
PR	[sɔpɪ	sɔb	jɪg	jɪkɪ]

He took /ti/ as the basic morpheme and considers /t/- /d/ -and /r/ to be in complementary distribution. Phonetically /-ri/ after roots ending in /ʔ/ and vowel - /i/ after roots ending in /p/ /t/ /k/.

He took from The Standard Generative Phonology an elegant solution to treat the root final unreleased stops as underlying representation.

Rule Two

Voiceless consonants except /ʔ/ become voiced word medially.

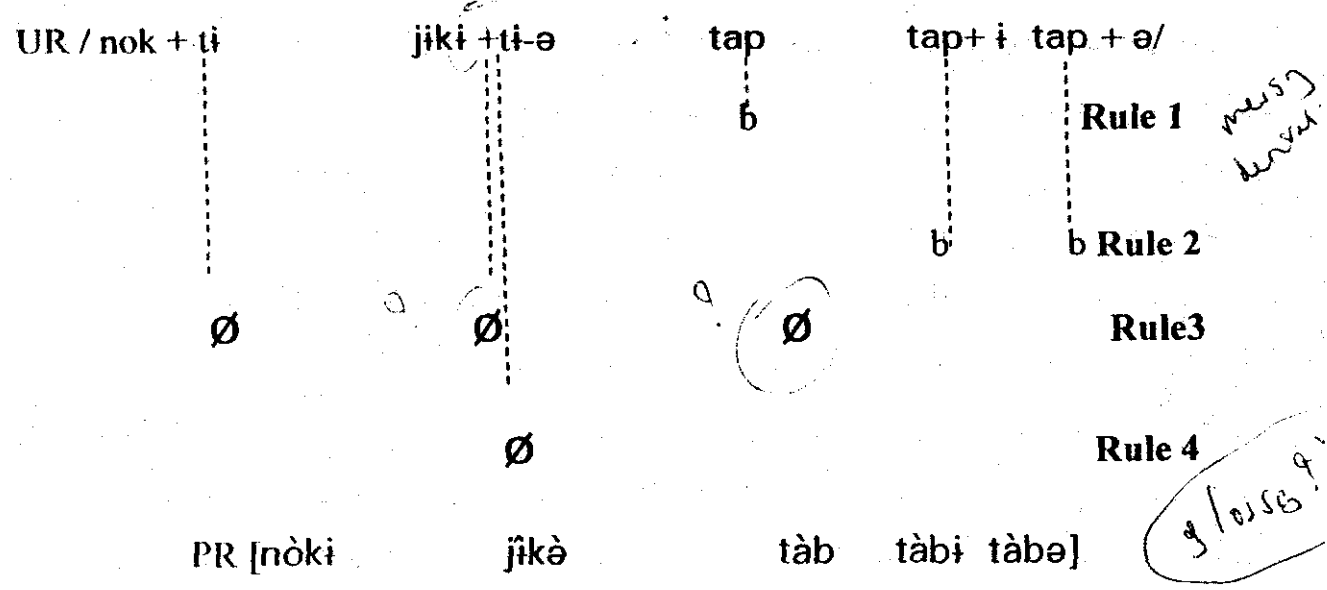
Rule Three

Voiceless stops (except) /ʔ/ are deleted following a consonant.

her deletion - s or /s/
not in UK

Rule Four

/i/ preceding /ə/ is deleted.



how? explain.

The derivation from the rules above proves to us that rule two blocks the functioning of rule three and vice versa. This is because words like /tàbə/ and /tàpə/ contrast and the rules above cannot explain why.

Spreda (1991) saw this and called it a bleeding rule as proposed in Kiparsky (1971). Arguments which counteracted this point on bleeding were raised and in S.P.E, it was proposed that the Simultaneous Application Principle governs how rules apply given that the rules' Structural description is satisfied at more than one point in the input string.

To apply a rule, the entire string is first scanned for segments that satisfy the environmental constraints of the rule. After all such segments have been identified in the string the changes required by the rule are applied simultaneously. Following the Simultaneous Application Principle, Kisseberth (1973), draws the conclusion that the solution of one of these problems if correct will be a solution for the other. Thus Spreda's solution is not correct because one solution has not given the solution to the other.

Plosives word finally also precede the extension /ri/ and /ə/. In this case, there is a double consonant but not identical. Thus the dissimilation

process is ruled out. No other phonological process occurs in this environment when /r/ is preceded by a plosive. The only difference comes in with the /d/ sound that cannot precede the /r/ sound. This is because /r/ is a free variant to /l/ as will be explained under free variation. Only /b/ and /g/ sounds realise the /r/ phonetically as seen below:

/r/ after the plosive /b/

Examples:

	Verb	gloss	extension	gloss
(10)	fib	'twist'	fib-ri	'lie'
	kòb	'knock'	kòb-ri	'knock down'
	bùb	'swell'	bùb-ri	'cause to swell'

/r/ after the plosive /g/

Examples:

	verb	gloss	extension	gloss
(11)	nwàg	'swallow'	nwàg-ri	'only swallow'
	mīg	'measure'	mīg-ri	'measure comparatively'
			tīg-ri	'stumble'

11.4.3. TRUNCATION

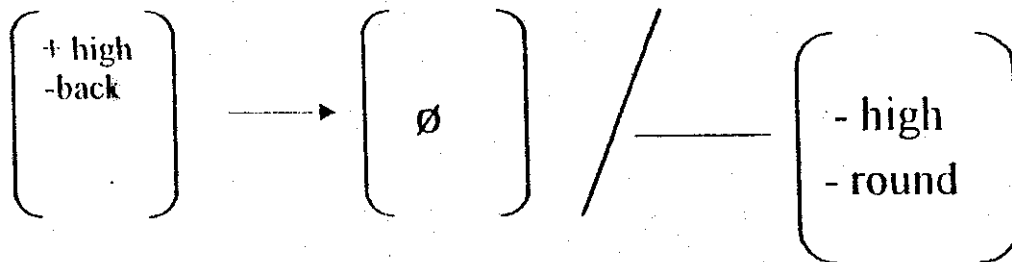
There are some alternations with vowels which can be explained using a phonological rule which is truncation. This is when the extension /ə/ is preceded by the vowel /i/ at morpheme boundary as part of an extension.

We notice the deletion of the /i/ sound and this form of deletion is termed Truncation. It is the deletion of a vowel that precedes another vowel at Morpheme boundary as an extended morpheme

THEREFORE

A high vowel becomes deleted when it precedes a mid central vowel.

[i] → [∅] /- [ə] (Truncation)



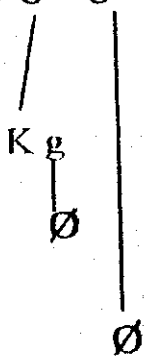
ALTERNANTS

jīki - ə - jīkə

cèp-i -ə - cèpé

sòp - i- ə - sòpé

UR / jīg - gī - ə jīg-ə/



PR (jīkə jīgə)

-cvccv- structures.

After the -CVC- and -CVCV- structures, we have the -CVCCV- which is equally as a result of an extension. This is mostly with the

/rɪ/ and /nɪ/ extensions

CVC + CV → CVCCV

PLOSIVES

Examples:

	Verb	gloss	extension	gloss
(12)	fib	'twist'	fib-rɪ	'lie' → why?
	kòb	'serve'	kòb -rɪ	'serve out'
	bùb	'swell'	bùb - rɪ	'cause to swell'
	bèg	'turn'	bèg -rɪ	'evade'

The /rɪ/ extension is preceded by plosives and vowels while the /nɪ/ extension is preceded by nasals and vowels.

11.4.4 NASALS

They are mostly in the CVC forms. They equally precede the extensions /bɪ/, /dɪ/ and /gɪ/ with the nasals /m/, /n/ and /ŋ/ respectively. ^{UK} (11)

11.4.4.1. NASAL ASSIMILATION

/m/	ghàm + bɪ → ghàmbɪ	'talk secretly'
(13)	talk + Ext	
	kòm + bɪ → kòmɪ	'scratch with'
	'scratch + Ext	
	zùm + bɪ → zùmɪ	'pierce several times'
	pierce + Ext	

The above examples end with the bilabial nasal /m/ and precede the extension /bɪ/.

/n/

(14) tìn + di → tìndi 'shift a bit'

push Ext

kòn + di → kòndi 'serve out'

serve + Ext

kòn + di → kòndi 'think very well'

think + Ext

The dental nasal precedes the extension that begins with a dental Plosive

/ŋ/

(15) sùŋ + gi → sùŋgi 'pull from a point'

pull Ext

tòŋ + gi → tòŋgi 'call a bit'

call Ext

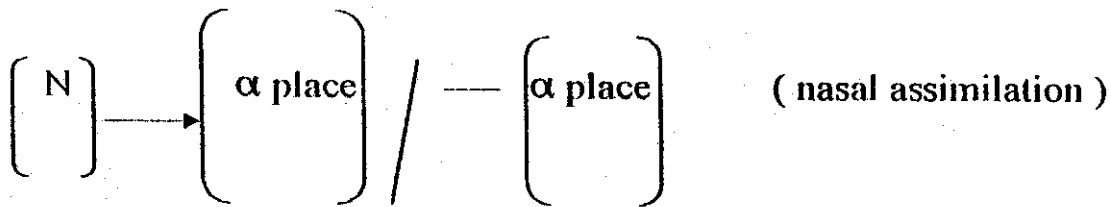
zèŋ + gi → zèŋgi 'clean a bit'

clean Ext

The above extensions /bi/

/di/

and /gi/, exhibit the same assimilation process with their nasal sounds. This assimilation process is idiosyncratic and is explained in Kisseberth (1971) as "the initial consonant of a suffix assimilates the point of articulation of the preceding nasal sound"; thus the sounds /mb/ /nd/ /ŋg/.



The Extension /ni/

The extension /ni/ is preceded by nasals and vowels. It is also preceded by the exceptional glottal stop. This implies that Nasals assimilate Nasal extensions as seen below:

/m/

- (16) kòm + ni → kòmni 'peel s. th. carelessly'
 peel + Ext
- tòm + ni → tòmni 'jump randomly'
 jump + Ext
- ghàm + ni → ghàmni 'talk at random
 (like a mad man)'

/ŋ/

- (17) sùŋ + ni → sùŋni 'struggle over s.th.'
 pull + Ext
- bèŋ + ni → bèŋni 'turn each other over and over'
 turn + ext
- kyèŋ + ni → kyèŋni 'shoot randomly'
 shoot + Ext

The behaviour of the /ni/ extension when it meets the dental nasal word finally is different. This is because the verb and the extension result to

a consonant cluster which does not exist in this language. Phonetically a single nasal is realized as seen below:

/n/	bèn + ni	→	bèni	'admit'
(17)	agree + Ext			
	bìn + ni	→	bìni	'dance a bit'
	dance + Ext			
	fin + ni	→	fini	'blacken'
	black + Ext			

11.4.5. SONORANT DISSIMILATION

Since nasals are sonorants, we notice a sonorant cluster which warrants a phonological rule. It is therefore another dissimilation process. The rule is a sonorant dissimilation rule represented as follows:

$$\left[\begin{array}{c} n, n \end{array} \right] \rightarrow \left[\begin{array}{c} n \end{array} \right] \quad (\text{Sonorant Dissimilation.})$$

A sonorant cluster is dissimilated into a single sonorant.

Deletion

An alternative solution is n-deletion. This implies that;

$$\left[\begin{array}{c} n \end{array} \right] \rightarrow \left[\begin{array}{c} \emptyset \end{array} \right] / \text{---} \left[\begin{array}{c} n \end{array} \right]$$

This is a solution but not a preferred one because we already have a dissimilation process with plosives. Scanning through the language and viewing the identical clusters as before we still consider it dissimilation.

Alternants

bèn - nì - bènì

fìn - nì - fìnì

bìn - nì - bìnì

UR/ bèn

bèn - nì

fìn - nì/

(Sonorant Dissimilation)

PR [bèn

bènì

fìnì]

111.4.6. VOWEL LENGTHENING

Verbs with vowels word finally receive the extensions /rì/ and /nì/ as -CV- extension and /è/ as a -V - extension.

Examples:

- (19) CV+CV \longrightarrow CVVCV.
 fù + nì \longrightarrow fùùnì 'resemble each other'
- resemble + EXT
 fè + rì \longrightarrow fèèrì 'fan a fire repeatedly'
- fan a fire + EXT
 bù + rì \longrightarrow bùùrì 'totally confused'
- confuse + EXT
 kwé + rì \longrightarrow kwéèrì 'slip down from'
- slip down + EXT
 nyà + nì \longrightarrow nyààni 'very hostile'
- hostile + EXT.

There is a lengthening process in the vowels with the addition of the extension. A short vowel becomes a long vowel before an extension which is CV.

Kisseberth (1973) explains a similar process as lengthening and gives a rule as follows:

$$\left[v \right] \rightarrow \left[+ \text{long} \right] / \text{---} \left[c v \right] \quad (\text{Vowel Lengthening.})$$

UR / fu - ni u u	fe - ri e e	nya - ri / a a	(Vowel Lengthening.)
PR [fùùri	fèèri	nyààri]	n. or r

The lengthened vowel carries the tone of the preceding vowel and thus lengthens with the tone.

11.4.7. SYNCOPE

Still on vowels, verb roots that have a glottal stop before the last vowel do not realize the vowel when an extension is added to it.

Examples:

Verb	gloss	extension	gloss
(20) swĩ?i	'descend'	swĩ?-ri	'descend a bit'
zwè?è	'breathe'	zwè?-ri	'breathe a bit'
kù?ù	'fit'	kù?-ni	'fit the same'
cà?à	'greet'	cà?-ni	'greet each other'

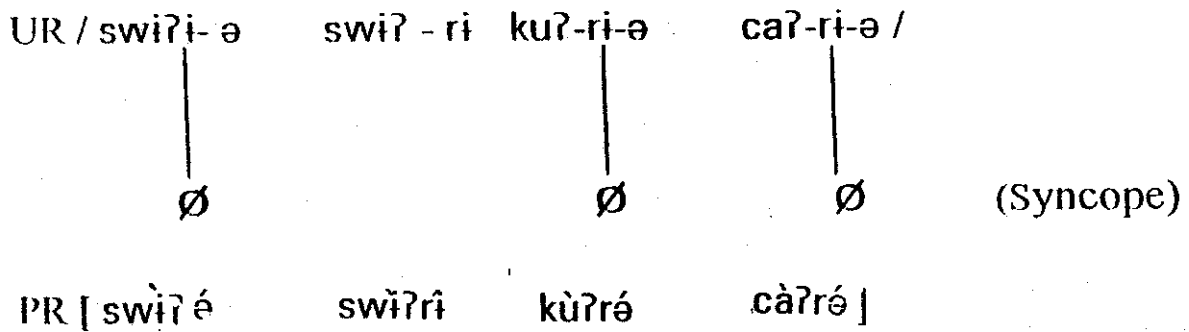
The above process can be explained using the syncope rule.

$$\left[\begin{array}{c} \text{v} \\ \text{ } \end{array} \right] \longrightarrow \left[\begin{array}{c} \emptyset \\ \text{ } \end{array} \right] / \text{---} \left[\begin{array}{c} \text{(C)V} \\ \text{ } \end{array} \right] \quad (\text{Syncope})$$

A vowel becomes deleted after a consonant at the morpheme boundary before an extension. The extension can either be a CV or V structure.

Alternants

swĩ?í	~	swĩ?-ri
zwè?-rí	~	zwè?- rǎ
kù?ú	~	kú? - rǐ
cà?a	~	cà?-rí



The reduplicated word might also have an idiosyncratic meaning. It is therefore a morphophonological process where words are formed by doubling part or an entire word. Thus, it is both partial and complete.

111.4.8.1. PARTIAL REDUPLICATION

a) Single Syllable Reduplication.

Examples:

- (21) ì- tòn 'to delay'
 ì-sù? 'to stammer'
 ì-tò? 'to distinguish'
 ì- sò 'to leave the house early in the morning'

Reduplicated Form.

- ì-tàn tòn 'to over delay'.
 ì-sùsù? 'to be a stammerer'.
 ì-tòtò? 'to distinguish very well'.
 ì-sòsò 'greeting in the morning'.

A single syllable Reduplication ^{occurs} is when only one syllable of the verb is reduplicated. At times the reduplication may only add more meaning to a verb or change the class of the verb. The above - sùsù? stands for 'stammerer' as a noun. When / ì / is added as a prefix, it gives the verb form and / ə / as a prefix makes it a noun.

Stem Reduplication

Examples:

- (22) ì- nwàgrì 'to shine'.
 ì- sòpì 'to cut'.

Reduplicated Forms

inwàgrì nwàgrì 'to shine a lot'.

isòpì sòpì 'to cut short'.

11.4.9. FREE VARIATIONS

This is when two sounds contrast positionally without a corresponding change in meaning. Their environments must be identical and only the sounds make a difference in the word without a corresponding difference in meaning. The Meta' language has free variations both with consonants and vowels as will be seen below:

d → t (rule)

t → r (free variation)

Examples:

t/r

kwèhì ~ kwèrì

(23) kwèd → kwètì → kwèrì 'Pluck grains several times'.

Pluck grains

njwàd → njwàtì → njwàré 'soft and watery'.

Soft and watery

mèd → mètì → mèrì 'swallow in small quantities'

swallow

rìfì → tìfì 'white'

bèrì → bètì 'own'

fèrì → fètì 'gather together'

} is this a verb?

k/g

kyèpá → gyèpá 'stingy'

e/i

yè → yî 'wonder'

ee/ii

yèèri → yîiri 'wonder at'

Because of the free variant nature between /t/ and /r/ Spreda Klaus in his work of phonology (1991) places them as in complementary distribution taking /r/ to be underlying, /d/ as a free variant.

Spreda's conclusion is suspicious because there are rules enabling /dd/ → /td/ → /t/ not as a result of a free variant

Also /r/ occurs in the environment where /t/ also occurs and not in the environment where /d/ occurs.

Again /r/ occurs in the environment where /d/ has already become /t/. It does not occur word finally as /d/ does. /r/ does not occur word initially except when it is replacing /t/ or as an extension as a prefix, suffix or as a preposition. The /r/ does not occur as a free variant with /d/, neither in complementary distribution with /d/. *we giving examples to show this !!!*

111.4.10. GLIDING

111.4.10.1. THE -CCVC- AND -CCV- STRUCTURES

Finally the CCVC and CCV verb roots occur as a glide which is unpredictable. This is because they do not alternate with other forms

a) -CCVC-STRUCTURE.

Examples:

Verb	gloss
(24) kwèm	'smooth'

Kyèm	'slaughter'
ḡwēb	'chew'
twàn	'shorten'
zwèm'	'raise'

The reason for naming it a glide is because no other two consonants occur in this environment. Therefore /w/ and /y/ have been considered glides which are not underlying.

b) -CCV- STRUCTURE .

Verb	gloss	extension	gloss
swí	'poke'	swíirí	'poke repeatedly'
ḡwí	'swing'	ḡwíirí	'swing in a wavy manner'
kwè	'slip down'	kwèèrí	'slip down from'
kyí	'carry'	kyíirí	'carry in the arms'
nyà	'hostile'	nyààni	'very hostile'

The -CCV- forms behave just like the -CV- forms. They precede extensions and lengthen the vowel before the extension. Since two different vowels do not occur in root verbs, the verbs are forced to have a glide.

CHAPTER FOUR

THE SEMANTIC FUNCTIONS OF VERBAL EXTENSIONS

V.0. INTRODUCTION

Verbal extensions according to Hedinger (1997) are non-category changing derivational suffixes attached directly to verb roots. The resultant forms are still verbs though sometimes with an apparently unrelated or only vaguely related meaning. Longacre (1976) adds that extensions are not only derivational suffixes but also inflectional suffixes. Another linguist, David Odden (1993), defines a verb extension as a term used by Bantuists to refer to a morpheme attached to a Bantu verb stem, thereby modifying the meaning of the verb. In the case of Meta', it does not only modify the meaning, but it equally maintains it in some verbs. Verb extensions in Meta' are made up of prefixes and suffixes. There are no infixes. In general the verbs include a verb root and an affix. Some affixes serve to differentiate the paradigm forms of variable words containing a common root, others recur in the formation of a large number of different root morphemes.

All words contain a root morpheme. Monomorphemic words comprise a root. Affixes generally tend to be shorter than roots. The verb root together with the verbal extensions in this language fall under two groups, those which have contextual variants with a clearly definable meaning and those without contextual variants.

V.1. SEGMENTATION OF ROOTS AND SUFFIXES

Segmentation of roots and suffixes is indeed straightforward as there are both the root occurring without a suffix and the suffix which has a typical meaning when added. At times the meaning cannot be separated though the suffix is always very clear as with other verbs. The extension, its forms and functions will be analysed as follows:

The extensions that exist in the Meta' language include /bi/ /di/ /gi/ /ri/ /ni/ /i/ and /ə/

V.2. EXTENSIONS AND THEIR MEANINGS.

In Isolation these extensions have the following meanings:

/bi/ 'with' (instrumental)

/di/ 'repeated action'

/gi/ 'reciprocal'

/ni/ 'at random'

/ri/ 'from' (separative)

/i/ 'infinitive marker'

/ə/ 'class marker'

V.3. FUNCTIONS OF EXTENSIONS

The functions of extensions vary from verb to verb. A single verb can carry more than one extension and a single extension can equally carry more than one meaning as will be seen below:

V.3.1. THE EXTENSION /bi/

The morpheme /bi/ expresses an involvement in the Meta' language. It can be literally translated as 'with'; it gives an impression that some other thing has to be used. This main usage of /bi/ morpheme is termed instrumental

V.3.1.1. INSTRUMENTAL FUNCTION

The instrumental suffix generally modifies the meaning of a verb so as to imply that the action is done with an instrument of some kind. This function in Grassfields Bantu languages is expressed by a preposition. When

added to a verb, the instrumental suffix necessitates the introduction of an instrumental object.

Longacre (1976) defines Instrument as an inanimate entity or body part which an animate agent intentionally uses to accomplish an action or to instigate a process.

Examples:

(1)	Verb	gloss	extension	gloss
	bòm	'cover'	bòm-bî	'cover with'
	tòb	'mix'	tòp-î	'mix with'
	ɲwèm	'smile'	ɲwèm-bi	'smile with'
	kàm	'carry'	kàm-bî	'carry with care'

Apart from /bi/ being an instrumental function, other functions are derived from it when combined with different verb roots. These include: Causative, Reciprocal, repetition, diminutivisation, separative, applicative, prolongation of action, and formal functions as follows:

V.3.1.2. CAUSATIVE

The causative form of extensions by George Cardona (1978) refers to the goal object of the act; and another referring to the agent of this act. Mutaka and Tamanji (1995) use causative as having the effect of changing monovalent verbs (verbs that take a single argument) to bivalent verbs. Thus causative is to cause or to make somebody to do something to become something different.

Examples:

(2)	Verb	gloss	extension	gloss
	pàm	'flatten'	pàm-bi	'make s.th. flat.'
	kwèm	'smooth'	kwèm-bi	'make s.th. smooth.'
	wùm	'feel sick'	wùm-bi	'cause to be sick.'

V.3.1.3. SEPARATIVE

It implies a state whereby one thing or person leaves a place or another thing. It indicates that it was previously together and then moves apart thus leaving from one area to another. By Mutaka and Tamanji (1995) a separative verbal suffix expresses the meaning of an object coming from a certain source, being separated from another with which it formally had a relationship.

Examples:

(3)	verb	gloss	extension	gloss
	kòm	'clean'	kòm-bi	'clean off (plantain)'
	nèm	'hide'	nèm-bi	'hide s.o. from'
	wàb	'cut'	wàp-i	'cut from'

V.3.1.4. APPLICATIVE OR BENEFACTIVE OR DATIVE.

The applicative indicates that the action or the state described is for the benefit or on behalf of somebody else. The notion of applicative is expressed through the use of a preposition in this language as the gloss shows.

Examples:

(4)	verb	gloss	extension	gloss
	sòb	'cut'	sòp-î	'cut to pieces'
	wùb	'crave'	wup-î	'craving for'
	ghàb	'divide'	ghàp-î	'divide to'

V.3.1.5. RECIPROCAL FUNCTION

This indicates that there is more than one agent, with each being also the goal of the action of the other agent(s). Reciprocal in this work is known by Longacre (1976) as "experiencer" and by MBA (1999) in his article 'Verbal Extensions in Kom' as reflective. Longacre defines it as one reaching to his environment, the one thus affected by someone else's activities. The physical state or location is not necessarily changed but in which he experiences someone else's violence, affection.

Examples:

(5)	Verbs	gloss	extensions	gloss
	ghàm	'talk'	ghàm-bî	'gossip'
	tàm	'deceive'	tàm-bî	'deceive each other'
	kōb	'tease'	kòp-î	'provoke fighting'

V.3.1.6. PROLONGATION OF ACTION.

This is when an action is done over and over. The normal time for this action to be done once must be repeated. This repetition is done in Meta' with the following words:-

Examples:

(6)	Verb	gloss	extension	gloss.
	sìm	'frighten'	sìm-bî	'frightened over and over'
	ɲwəb	'chew'	ɲwəp-î	'chew with gums over and over'

V.3.1.7. REPETITION

It is doing something more than one time .It should be the same thing that is done several times or in several places or by several people. These verbs are mostly action verbs. The repetitive aspect has the effect of modifying the meaning of the relevant verb by indicating that the action inherent in the verb can be repeated or done by several people at the same time .This suffix thus has the meanings 'several times', time and again , 'one after the other'

Examples:

(7)	Verb	gloss	extension	gloss.
	tùm	'shoot'	tùm-bî	'shoot several times'
	sòm	'hit'	sòm bî	'hit s.times on the ground'
	sìm	'pin'	sìm-bî	'pin several sticks several times'

V.3.1.8. FORMAL

The last type to be treated are the formal suffixes.

These include those suffixes which do not exist in base verb. They exist only in their extended forms.

Examples:

Extension	gloss.
bēp-î	'dodge'
cēp-î	'communicate by the talking drum'.

The above definitions will be used with the following examples. Any additional information of the following extensions will be included below:

V.3.2. THE EXTENSION /di/

The extension /di/ in isolation represent repetition but when combined with different verbs it has several functions as will be seen below:

V.3.2.1. REPETITION .

The morpheme /di/ in the Meta' language represents the word 'again' in English; as an isolated morpheme it actually indicates a repeated action as the repetition function as has been explained above.

Examples:

(9)	Verb	gloss	extension	gloss.
	wùd	'shake'	wùt-î	'shake repeatedly'
	kùn	'touch'	kùn-dî	'touch again'
	kōn	'reason'	kōn-dî	'reason again'
	sàn	'split'	sàn-dî	'split repeatedly'

Apart from this main function, it exhibits different functions when combined with different verbs. These functions include:

'Verbal Extensions in Kom'. He refers to this situation as diminutivisation. This is actually showing smallness or remarkably small quantity.

Examples:

(10)	verb	gloss	extension	gloss
	kòn	'serve'	kòn-dì	'serve a bit'
	kàn	'tired'	kàn-dì	'a bit tired'
	kòd	'tie'	kòt-ì	'tie a bit'
	gād	'move'	gāt-ì	'move part of the body'
	ghād	'pour'	ghāt-ì	'pour out a bit'

V.3.2.3. CAUSATIVE FUNCTION.

Examples:

(11)	verb	gloss	extension	gloss
	nèd	'smooth'	nèt-ì	'make smooth'
	tàn	'late'	tàn-dì	'cause lateness'
	bèd	'beat'	bèt-ì	'cause to beat'

V.3.2.4. SEPARATING FUNCTION.

Examples:

(12)	verb	gloss	extension	gloss
	cèd	'remove'	cèt-ì	'remove from'
	bèn	'open'	bèn-dì	'open from'

V.3.2.5. INSTRUMENTAL FUNCTION

Examples:

(13)	verb	gloss	extension	gloss
	bīn	'tremble'	bīn-dī	'tremble with'
	bèn	'agree'	bèn-dī	'agree with'

V.3.2.6. ABSENCE OF SEMANTIC RELATIONSHIP.

Examples:

(14)	verb	gloss	extension	gloss
	bòd	'young'	bòt-i	'calm'
	cèd	'cut'	cèt-i	'proclaim'

V.3.2.7. NEUTRALISATION.

Examples:

(15)	verb	gloss	extension	gloss
	gwèn	'ridicule'	gwèn- dī	'ridicule'
	ghán	'stroll'	ghán- dī	'stroll'
	dèn	'step over'	dèn-dī	'step over'
	gùn	'bend'	gùn-dī	'bend'

V3.3. EXTENSION /gi/.

This extension in isolation gives the impression of a reciprocal action. It tries to explain an action done by two or more people in almost the same way.

V.3.3.1. RECIPROCAL.

Examples:

(16)	Verb	gloss	extension	gloss
	sùŋ	'pull'	sùŋ-gî	'pull from both ends'
	bèŋ	'help'	bèŋ-gî	'helping each other'
	zòŋ	'fight'	zòŋ-gî	'fighting with each other'
	kēŋ	'turn'	kēŋ-gî	'turning each other over and over'

V.3.3.2. DIMINUTIVISATION.

Examples:

(17)	verb	gloss	extension	gloss
	fàŋ	'fat'	fàŋ-gî	'a bit fat'
	bàŋ	'red'	bàŋ-gî	'a bit red'
	jīg	'eat'	jīk-î	'eat a bit'

V.3.3.3. CAUSATIVE.

Examples:

(18)	Verb	gloss	extension	gloss
	bīŋ	'round'	bīŋ-gî	'make balls'
	sàŋ	'dry'	sàŋ-gî	'make dry'
	zèŋ	'clean'	zèŋ-gî	'make clean'

V.3.3.5. ABSENCE OF SEMANTIC RELATIONSHIP.

Examples:

(20)	Verb	gloss	extension	gloss
	fàŋ	'fat'	fàŋ-gî	'file'
	bàŋ	'red'	bàŋ-gî	'mend'

V.3.3.4. NEUTRALISATION.

Examples;

(19)	Verb	gloss	extension	gloss
	tāŋ	'count'	tāŋgî	'count'

V.3.4. THE EXTENSION /nî/

This extension is basically for the random function. It modifies a verb by adding three different meanings to it. These meanings are "on several parts", "randomly", and "roughly". When the suffix denotes randomness, it shows that the action is done irregularly. When it denotes several parts it implies involvement of more than one, and when it denotes 'roughly' it shows that the action is done without much care.

V.3.4.1. RANDOM.

Examples:

(21)	Verb	gloss	extension	gloss
	fàŋ	'fat'	fàŋ-nî	'fat at random'
	tòŋ	'shout'	tòŋ-nî	'shout at random'
	cèŋ	'urinate'	cèŋ -nî	'urinate on several places'
	ghàm	'talk'	ghàm-nî	'talk at random'

dèŋ 'dribble' dèŋ-ní 'dribble roughly'

V.3.4.2. RECIPROCAL

Examples:

(22)	Verb	gloss	extension	gloss
	fù	'resemble'	fù-ŋí	'resemble each other'
	bàn	'hate'	bàn-í	'hate each other'
	bēŋ	'turn'	bēŋ-ní	'turn each other'

V.3.4.3. ASSOCIATIVE.

The associative function by Longacre (1976) implies doing together or in company. This involves more than one thing. One must be coming or must come to meet the other one. In Meta' it includes associating to help someone.

Examples:

(23)	Verb	gloss	Extension	gloss
	kúʔ	'join'	kúʔ-ní	'join hands together'
	kām	'lead'	kām-ní	'lead some one'

V.3.4.4. INSTRUMENTAL.

Examples:

(24)	verb	gloss	extension	gloss
	bèn	'admit'	bèn-í	'admit with'
	zèŋ	'clean'	zèŋ-ní	'clean with'
	búʔ	'break'	búʔní	'break with'
	sōŋ	'copulate'	sōŋ-ní	'copulate with'

V.3.4.5. SEPARATIVE.

Examples:

(25)	verb	gloss	extension	gloss
	zwèm	'raise'	zwèm-ní	'raise from'
	cō?	'borrow'	cō?-ní	'borrow from'

V.3.4.6. CAUSATIVE.

Examples :

(26)	Verb	gloss	extension	gloss
	zîŋ	'clean'	zîŋ -ní	'make clean'
	wùm	'feel sick'	wùm-ní	'cause to feel sick'
	kwèn	'die'	kwèn-í	'cause to die'

V.3.4.7. ABSENCE OF SEMANTIC RELATIONSHIP.

Examples:

(27)	Verb	gloss	extension	gloss
	fàŋ	'fat'	fàŋ-ní	'frighten'
	bà?	'weave'	bà?-ní	'block'

V.3.4.8. NEUTRALISATION.

Examples:

(28)	Verb	gloss	extension	gloss
	mà	'finish'	mààní	'finish'

V.3.5. THE EXTENSION /rɪ/

The morpheme /rɪ/ in the Meta' language stands for the preposition "from" It therefore plays the role of separation when added to some verb roots and other functions on different verb roots.

V.3.5.1. SEPARATIVE

Examples:

(29)	Verb	gloss	extension	gloss
	vɪ	'escape'	vɪ-rɪ	'escape from'
	tɪ	'select'	tɪ-rɪ	'select from'
	kwè	'slip down'	kwè-rɪ	'slip down from'
	cɪʔ	'shade'	cɪʔ-rɪ	'shade from'
	tòʔ	'translate'	tòʔ-rɪ	'translate from'

The lengthening of the vowel is as a result of the extension added to it. This binds with the vowel lengthening rule as seen in chapter three.

V.3.5.2. INSTRUMENTAL.

Examples:

(30)	verb	gloss	extension	gloss
	kyé	'scratch'	kyé-rɪ	'scratch with'
	fúʔ	'cover'	fúʔ-rɪ	'cover with'
	mèʔ	'delay'	mèʔ-rɪ	'delay with'
	wɪ	'beat'	wɪ-rɪ	'beat with'

V.3.5.3. REPETITION

Examples:

(31)	Verb	gloss	extension	gloss
	swí	'poke'	swĩ-rí	'poke repeatedly'
	té	'sting'	téé-rí	'sting repeatedly'
	fé	'fan a fire'	féé-rí	'fan a fire repeatedly'
	tè?	'smash'	tè?-rí	'smash repeatedly'

V.3.5.4. RECIPROCAL.

Examples:

(32)	Verb	gloss	extension	gloss
	wé	'help'	wéé-rí	'help each other'
	ghà?	'love'	ghà?-rí	'love each other'
	cōb	'quarrel'	cōb-rí	'quarrel with each other'
	có?	'resemble'	có?-rí	'resemble each other'

IV.3.5.5. DIMINUTIVISATION.

Examples:

(33)	Verb	gloss	extension	gloss
	cè?	'laugh'	cè? rí	'laugh a bit'
	có?	'pull out'	có?-rí	'pull out a bit'
	kó?	'climb'	kó?rí	'climb a bit'
	swí??	'descend'	swí?rí	'descend a bit'
	kwí	'grow'	kwĩ-rí	'grow a bit'

IV.3.5.6. APPLICATIVE.

Examples:

(34)	Verb	gloss	Extension	gloss
	dí	'cry'	díi-ri	'cry for'
	bí	'ask'	bíi-ri	'ask for'

IV.3.5.7. ASSOCIATIVE

Examples:

(35)	verb	gloss	extension	gloss
	fè	gather	fèè-ri	'gather together'

IV.3.5.8. CAUSATIVE.

Examples:

(36)	verb	gloss	extension	gloss
	zwí	'kill'	zwíi-rí	'cause to kill'
	tù	'blunt'	tùù-ri	'make blunt'
	bùb	'swell'	bùb-ri	'cause to swell'
	bàʔ	'clear'	bàʔ-rí	'make clear'

IV.3.6. THE EXTENSION/i/.

This extension is a prefix. It occurs before all the verbs to mark the infinitive form of the verb. It marks both monosyllabic and disyllabic verbs.

IV.3.6.1. MONOSYLLABIC VERBS

Examples:

	infinitive	verb	gloss
(37)	î -	ĵig	'to eat'
	ï -	tùm	'to shoot'
	ï -	dàn	'to train'
	ï -	jè	'to feed'
	ī -	tò	'to carve'
	î -	bîn	'to dance'
	ī -	tē	'to kick'
	ī -	cà?	'to search'
	ī -	zòn	'to buy'
	ī -	bà?	'to clear'

IV.3.6.2. DISYLLABIC VERBS.

Examples:

	infinitive	verb	gloss
(38)	î -	v`iirï	'provoke'
	î -	zéhè	'tilted'
	î -	swîrî	'poke repeatedly'

IV.3.6.3. PREPOSITION

/ī / is also a preposition. There are two forms differentiated by tones /ī/ with a level tone meaning 'to' directional and /î/ with a high tone meaning 'at' non directional.

Directional is when there is movement to the location denoted by the prepositional phrase below:

ĩ	ĩngā	ĩ	ĩfèti	wô	(into this meeting)
Dir	inside	Am	meeting	this	
into	this	meeting			

Non Directional form is used when there is no movement

ĩ	ĩngā	ĩ	ĩfèti	wô	in this meeting
Dir	inside	Am	meeting	this	
Into	this	meeting			

It actually has many functions which have not been exploited in this work.

This is because most of the functions are dealing with nouns and this work is basically on verbs.

IV.3.7. THE EXTENSION /ə/.

The last extension to be analysed in this work is the mid central vowel extension which is mostly an aspect marker. It expresses the manner in which the action inherent in the relevant verb is experienced. It can occupy the initial and final position. When it occupies the initial position it marks the class of the word, generally the noun class. When it occupies the final position, it marks either the continuous tense of the verb or an exclamation in the use of the vowel.

IV.3.7.1. AS A CLASS MARKER.

Examples:

	Verb	gloss	Noun	gloss
(39)	ĩ + dān	'to train'	ə + dān-ə	'trainer'

ḥ + jē	'to feed'	è + jē-è	'feeder'
ḥ + tō	'to carve'	è + tō-è	'carver'

In the above examples the extensions act as a class marker

As ḥ stands for verbs, /è/ stands for nouns

IV.3.7.2. /è/ AS A TENSE MARKER.

Examples:

	verb	gloss	extension	gloss
(40)	jīg	'eat'	jīg-è	'eating'
	tòb	'pollute'	tòb-è	'polluting'
	tàd	'stir'	tàd-è	'stirring'
	tùm	'shoot'	tùm-è	'shooting'
	tàŋ	'count'	tàŋ-è	'counting'

In this case, it marks the continuous tense of the verbs. It can also mark the past tense. It now depends on the context in which it is found.

IV.3.7.3. /è/ AS AN IMPERATIVE MARKER

Examples:

(41)	verb	gloss	extension	gloss
	jīg	'eat'	jīg-è!	'eat'!
	jē	'feed'	jē!	'feed'!
	tàŋ	'count'	tàŋ-è!	'count'!
	tùm	'shoot'	tùm-è!	'shoot'

The above verb extensions are those the researcher could discover with the verbs . This implies that extensions can also be found with Nouns or other parts of speech which have not been treated.

IV.3.8. VERB EXTENSIONS AND CHANGE IN VERB VALENCE

Verb extensions in Meta' do affect verb valence in sentence (i) and (ii) below. An original transitive verb when extended becomes an intransitive verb. The transitive verbs 'cò?' becomes intransitive when the extension /ri/ is added to it, and 'tu' as an intransitive becomes transitive when the same extension is added to it.

Examples:

THE TRANSITIVE VERB 'cò?' IN A SENTENCE.

IV.3.8.1. TRANSITIVE.

- 42) (i) kwati è cò? ŋgywi zè.
 kwati TM pullout dress the
 Kwati pulled out the dress.

THE INTRANSITIVE VERB 'tu' IN A SENTENCE .

- (ii) fibi fé ètù
 knife the TM blunt
 The knife is blunt.

IV.3.8.2. INTRANSITIVE.

In (i) the transitive verb becomes intransitive with the addition of an extension while intransitive becomes transitive in (ii) with the presence of an extension as seen below:

(i) *ngywi zè è cò?ri*
 dress the TM pull out a bit

The dress was pulled out a bit.

(ii) *wi è tùri fibi fé*

He TM make blunt knife the

He blunted the knife.

The above examples prove that verbal extensions in Meta' do affect the valence of the verb, that is, enabling an original transitive verb to become intransitive and vice versa. This can be done with the use of a morphological modification (suffix). The extensions are both analysed in a sentence and in isolation. There is a large number of transitive verbs morphologically related to intransitive "adjectival" verbs. These include:

Transitive

Examples:

(43)	Verb	gloss
	<i>kwèm</i>	'smooth'
	<i>zwí</i>	'die'

Intransitive

(44)	Verb	gloss
	<i>kwèmni</i>	'make smooth or smooth'
	<i>zwíiri</i>	'kill or cause to die'

Most of these morphological patterns of formation by suffixation are productive in Meta'. These morphological causatives fall between the extremes of 'lexicalisation'. Extensions therefore change verb valence.

IV.3.9. REDUPLICATION AND VERBAL EXTENSIONS.

Reduplication as analysed in chapter III at times plays the same function as a Verbal Extension. This implies that some reduplicated verbs have the same meaning on a verb as the extended form of the verb.

Examples:

(45)

Verb	gloss
tàn	'delay'
tò	'sharp'

Extension	gloss
(46) tàndì	'over delay'
tòòrì	'very sharp'

Reduplicated form.

(47) Verb	gloss
tàntàn	'over delay'
tòtò	'very sharp'

The above examples imply that reduplication at times represents extensions. Instead of reduplicating a verb, it can be extended to give the same meaning.

Extensions then are a major aspect in the Meta' language which could not be left unexploited given the important roles they play.

GENERAL CONCLUSION.

Throughout this work it has been seen that extensions affect verbs in Meta' phonologically, morphologically, and semantically.

Phonologically, phonemes are deduced and words are scanned for rules confirming certain systematic principles of combination operating on the constituent phonemes.

Morphologically, the internal structures of the verbs have been given. Morphemes are segmented into morphs making up the grammar of the language. These morphs have been analyzed with their corresponding verbs.

Semantically, the morphs have been explicitly given their meanings and functions.

To explicitly deal with the phonology of the Meta' language, the other parts of speech like the adjectives, nouns, adverbs could be treated. Verbs have only been analyzed in their extended forms. They have not been conjugated. Other aspects like valence and reduplication have just been treated in relation to verb extension. The phonology of reduplication has not been done. Morphology has been restricted only to the internal structure. Nothing has been done in the field of syntax.

Work has been done on the Tonology of this language but in German which cannot be read by the Meta' people and so it brings no help to them.

An improvement on the phonological and Tonological data already existing will help to show how the lexical phonology model works in Meta', this can be done with recur to the other parts of speech not yet analyzed.

It is our hope that this work will be of great value to linguists who want to work on the Meta' language. We cannot, however, say the work is exhaustive; as such, loopholes in it can be used as bases for further linguistic research.

REFERENCES

- Ano. (1987) Webster's New Collegiate Dictionary. A Merriam-Webster. Mass. 1563p.
- Browne, W. (1972) How to Apply Phonological Rules. QPR April 15
- Cardona, George. (1978) "Relation Between Causative and Passives in Indo-Iranian" IN Studies in the Linguistic Sciences. University of Illinois at Urbana-Champaign. 40P
- Chen, Mathew. (1975) The Meta' Rules and Universal constraints in Phonological Theory. SIL Yaounde.
- Dieu, Michel et P. Renaud, (eds.) (1983) Atlas Linguistique d'Afrique Centrale ALAC Situation Linguistique en Afrique Centrale
Atlas Linguistique de Cameroun (ALCAM), Inventaire
 Préliminaire : Yaoundé / Paris ACCT, CERDOTOLA, DGRST
- Greenberg, Joseph H. (1966) The Languages of Africa. Indiana University Research Centre, The Hague: Mouton. 171p.
- Gretchen, Harro. (1989) « Les Extension Verbales en Yemba ». (Bamileké - Dschang) . Dans Daniel Barreteau et Robert Hedinger, R. (eds), Descriptions de Langues Camerounaises, Paris: ACCT, ORSTOM. P: 239 -269.
- Goldsmith, John A. (eds). (1995) The Handbook of Phonological Theory Blackwell-Oxford.376p
- Hornby ,A.S. (1980) Oxford Advanced Learners Dictionary of Current English. A. C. GIMSON. University College London.
- Kenstowicz, M. and C. Kisseberth. (1979) Generative Phonology: (Description and Theory) New York: Academic Press.
- Kong, Frida L. (2000) The Lexical Phonology of Bâlòŋ. Maîtrise Dissertation, University of Yaounde I.

- Kelly, John and John Local (1989) *Doing Phonology*. Manchester University Press
- Kisseberth Charles, W. (1973) *Studies in Generative Phonology*. Linguistic Research, Carbondale and Edmonton U.S.A. Canada.
- Leroy, Jacqueline. (1982) *Extensions en Mankon, Bantou*, Paris: SELAF (Oralité document 4-P :125-138).
- Longacre, R.E. (1976) *An Anatomy of Speech Notions*. Belgium N.I.C.I., Ghent PdR. Press in Tagmemics
- Lyons, John, (1979) *Semantics*. University Press, Cambridge, Great Britain.
- (1989) *Introduction to theoretical linguistics*. Cambridge, University Press.
- Malcolm, Guthrie. (1967) *The Classification of Bantu Languages*, Ph.D. B.SC. London: Dawsons.
- Meeussen, A.E. (1967) "Bantu Grammatical Reconstructions", *Africana Linguistica* p : 81-121 *Annales du Musée Royal de l'Afrique Centrale* N° 121 Tervuren, 154p.
- Mba, Gabriel. (1999) "Verbal Extensions in Kom" Paper Presented at the University of Yaounde I.
- (1996/1997) « Les Extensions Verbales en Ghomálá » in *JWAL* Vol. xxvi P: 77-101.
- McCarthy, John.(1986) *O.C.P. Effects: Germination and Antigermination*. *Linguistic Inquiry* 17,207-263.
- Mulaka, N. and Pius, Tamanji. (1995) *An Introduction to African Linguistics* Université Catholique de l'Afrique Centrale, CY and University of Yaounde I, Published by LINCOM Europa, (2000) München.
- Odden, David (1993) "Verb Extension Renewal in Kisi" IN *Current Approaches to African Linguistics*. Vol.4 p493 ed Publication in African Languages and Linguistics.

- Orwig, Carol. (1989) « Les Extension Verbales en Nugunu ». IN
D. Barreteau and R. Hedinger (ed) Descriptions de Langues
Camerounaises P. 283-314 Paris ORSTOM, ACCT.
- Robins, R.H. (1992) Verbal Extensions in Akɔɔse: their form, Meaning and
Valence Changes. Paper presented at the 19th West African
Languages Conference. Berlin.
- Rosenthal, S. (1989) The Phonology of Nasal-Obstruent Sequences" M.A
Thesis, McGill University, Montreal
- Spreda Janice, O. (1995) The Initial and Final Adverbial Constituents in
Meta'. SIL. Yaounde.
- Spreda Klaus, W. (1991) A Meta'- English Lexicon. Work Report. SIL
Yaounde
- _____ (1983) Meta' Field Notes. SIL Yaounde
- _____ (1995) Draft and Notes Towards a Sketch Grammar of Meta'
SIL, Yaounde.
- _____ (1994) "Notes on Markers of Parallelism in Meta" IN
Discourse Features of Ten Languages of West Central Africa.
SIL, Yaounde.
- _____ (1991) Alphabet and Orthography Statement for Meta'.
SIL, Yaounde.
- _____ (1986) Tonologie Des Metta. (Western Grassfield) Eine Auto
segmentale Beschrei SIL, Yaounde.
- _____ (1991) The Phonology of Meta'. (Menemo) . SIL, Yaounde.
- Stallcup, Keith. (1980) "La Géographie Linguistique des Grassfields" Dans
Le Bantou des Grassfields : Paris : SELAF p : 43-57
- Stephen, R. Anderson. (1974) The Organisation of Phonology. New York:
Academic Press,
- Tucker Childs (1993) "Verb Extension Renewal in Kisi*" IN Current
Approaches to African Linguistics vol. 4 .493.7 P ed Publication
in African Languages and linguistics.

- Tamanji, Pius N. and Gabriel Mba. (2003) "A Morphophonemic Study of Verbal Extensions in Bafut" in *Voice Through Verbal Extensions in Nine Bantu Languages From Cameroon, Rwanda, DRC and Gabon*. München: LINCOM Europa African Linguistics Series N^o 57.
- Tadadjeu, Maurice et E. Sadembouo (eds). (1984) *Alphabet Général des Langues Camerounaises*. Collection Propelca N^o1, Edition Bilingue, SIL, ISII, CREA-DLL, Université de Yaoundé I, FALSII, DLAL. 34p.
- Umenjoh, A.F. (1997) *Reduplication in Ngie*. M.A Dissertation, University of Yaounde I
- Voeltz (1977) *Proto-Niger Congo Verb Extensions*. Ph.D Dissertation U.C.L.A
- Voorhoeve, J. (1971). *The Linguistic Unit of Mbam – Nkam. (Bamileke, Bamum and Related Languages.)* –JALAL 10 (2)-pp.1-12.
- Williamson, Kay. (1971) *The Benue Congo Languages and IJO*. CTL 7, T. Scheek (ed), The Hague: Mouton, p: 245-306
- Welmers, William. (1973) *African Language Structures*. Berkeley: University of California

APPENDIX 1

Names of informants	Profession	Information given	Place of birth Address
Klaus spreda	Researcher on Meta'	Part of the data and most of his works	German (PTTC) Mbengwi
Paa Kwati	Retired Teacher now Teaching Meta language	Data on Redupli cation and some verbs	Meta' (Bome)
Paa Ngwa	Primary school Teacher	Most of the verb extensions	Meta' (Njinibi)
Mr. Takod	Secretary for Meta' language committee	Most of the free variants and some verbs	Meta'(Njindom)
Nche Patience	Business woman	Verbs on Mankon	Mankon
Paa Neba	Retired cook	Verbs on Ngyen-mbo	Bafut (Ngyen-mob)
Dr. Ndasi	Teacher	History of Meta' and maps	Meta'(Ngyen-mbo)
Mrs Ndam	Housewife (old)	Pronunciation of verbs	Meta'(Ngyen-mbo)
Miss Lilian Tangang	Student (young)	Pronunciation of verbs	Meta' (Mbon)

Appendix II

The following is the data used in this work. It is arranged alphabetically. Most of the extensions and their respective meanings are in brackets. The main verb and its own meaning is not in bracket

b Verb	gloss		
bà	'carry on the back'	bòm (bi)	'cover with'
bàani	'cross'	bèd (i)	'beat' (cause to beat)
bāb	'trim with cutlass or scissors'	bìn (di)	'tremble (with)'
bām	'join, bind, mate (of animal)'	bòp (i)	'young (calm)'
béte	'cut off'	bàŋ (gi)	'red (a bit) mend'
bèŋ	'turn s.th around, turn sour'	bíŋ (gi)	'round (make balls)'
bōŋ	'good'	bàn(i)	'hate (e.o.)'
búʔ(ni)	'hit; break (with)'	bēŋ(ni)	'turn (e.o.)'
bìʔ	'calm'	bíí (ri)	'ask (for)'
baʔ(ni)	'clear off (make)'	c)	
búʔ(ni)	'break (into smaller pieces)'	càb	'funnel, abuse, shame'
búʔ(ri)	'break (into pieces)'	càb(ri)	'feed (chicken their first meal)'
bùʔə	'collapse, fall down'	cèd	'cut, remove wine from bush by stealing'
bō	'fear'	cèt(i)	'remove (from), proclaim'
bèd	'beat'	cèp (i)	'rush, pinch off s.th; (with fingernails)'
bùù(ri)	'confuse (totally) disturb'	cēpi	'communicate by talking drum, signal, shouting'
bèn(di)	'open (from)'	cōb	'fight, quarrel'
bèèn	'disgrace'	cōb (ri)	'celebrate, (beginning of harvest)'
bèn (i) (di)	'agree (with) (admit)'		
bèèni	'follow'		
bê	'pass through'		
bêb	'protect'		
bêp (i)	'protect' (with)		
bēp-i	'dodge'		
bùb (ri)	'swell (make)'		
bèk (i)	'turn (e.o. over and over.)'		
bèg (ri)	'evade'		
bīn (i)	'dance' (a bit)		

cōb (rì)	'donate, contribute (for)'	fib	'twist'
cùri	'steam food'	fini	'blacken'
cà?à (rì)	'search, great (e.o)'	fū	'resemble'
có? (rì)	'pull out a bit'	fùni	'resemble each other'
có? (rì)	'pull out, resemble (e.o)'	fùm	'suffocate'
cì?ri	'cover to shade from'	fùmni	'suffocated'
cì?	'churn'	fà?	'work'
cū	'pound'	fū(nì)	'resemble (e.o)'
cəb(ə)	'pinch(ing)'	fàng(ɡì)	'fat (a bit), file'
cəp(ə)	'pinching (a bit)'	fan(ɡì)	'fat (at random)'
cəpi	'pinch a bit'	frighten'	
cəŋ(nì)	'urinate (on several parts)'	fù?ri	'cover with'
còŋ(nì)	'sex (with)'	g)	
cō? (nì)	'borrow (from)'	gād	'move, stir'
cè? (rì)	'laugh (a bit)'	gàti	'move one's self'
d)		ɡù	'fall, guilty; mend a
dèn (dì)	'step (over)'	hole'	
dàn (dì)	'train (trainer)'	ɡùni	'fall down, fail totally'
dii (rì)	'pity, mercy cry (for)'	ɡùn(dì)	'bend'
dèni	'send'	ɡwé	'reverse'
dəŋ(nì)	'dribble(roughly)'	ɡwē	'pick'
dəŋɡi	'peep'	ɡwè	'fail to give'
dí	'cry, weep, mourn'	ɡwèm	'lift up with a lever and let it turn over'
f)		ɡwèn(dì)	'ridicule'
fèè(rì)	'fan a fire (repeatedly)'	ɡwem(nì)	'topple over and over'
fè(rì)	'gather (together)'	ɡwèn(i)	'sleep, climb (over)'
fə	'whistle!'	ɡhán(dì)	'stroll'
fǎ(rì)	'blow (repeatedly)'	ghəd	'pour'
fí	'wind around'	ghàti	'pour out a bit'
fii(nì)	'twist out of shape'	ghàb(rì)	'divide, share (to)'
fí	'twist, bruise'	ghàb	'divide'
ffb(rì)	'lie'	ghà?	'love, rejoice'
fìn	'black'	ghà?ri	'love each other'

ghàm(ni)	'talk (at random)'	kùn(di)	'touch (again)'
gham(bi)	'talk (secretly) gossip'	kǔn(di)	'consider, think,
ghapi	'share to each other'	reason	(v.ery well)'
J)		kùd	'chew'
jwini	'crowded'	kòg	'tear s.o's throat'
jíg	'eat'	kòki	'tear a bit'
jè	'feed'	kōb	'tease'
jū	'honey'	kòpi	'provoke fighting'
jíki	'eat a bit'	kùmni	'chase'
jíkè	'eating a bit'	kù	'be guilty'
jígè	'eating'	kòm	'peel, clean'
k)		kòm	'peel with, clean off'
kà	'indicate, magnify,	kāŋ	'help'
	glorify, salute'	kāŋgi	'help each other'
kàà(ri)	'salute(each other)'	kwè(ri)	'slip down from'
kām	'fence'	kwèn(i)	'die (cause to die)'
kāmni	'lead s.o in a fence	kwèm(ni)	'smooth (make)'
	(e.g prison)'	kwí(ri)	'grow (a bit)'
kàn	'tired, weary'	kyé(ri)	'scratch (with)'
kàn(di)	'uneasy tired (a bit)'	kyèm	'slaughter'
kòm	'carry, cook'	kyèn(ni)	'shout (at random)'
kèmbi	'carry with care'	kyèpə	'stingy'
kèn	'cover, shelter, block'	kòŋgi	'appease'
kèn(di)	'drive (away)'	kò(ri)	'meet (up)'
kim	'choke'	kyíí(ri)	'carry a baby in the arms'
kimni	'clotted'	kə? (ri)	'climb (a bit)'
kòd	'tie, bind'	kyòki	'click with the tongue'
kòti	'tie lightly but many		
	rounds'	m)	
kòn	'serve'	mā	'exhaust, finish'
kòndi	'serve out a bit'	māāni	'the last of s.thing,
kòb	'knock down'	finish'	
kòbri	'signal'	màn	'seize, grip'
kù? (ni)	'join hands, fit (the same)'	mànŋni	'grip several objects'

mèd	'sip, swallow'	nyèmbi	'push down gently'
mèri	'swallow in small quantities'	nyi	'shake'
mè	'describe'	nyìrì	'shake perfect'
mèèni	'learn'	ŋ	
mèd	'tame, train'	ŋwèm (bì)	smile (with closed lips)
mìg	'measure, compare'	(repeatedly)	
mìgrì	'measure with, comparatively'	ŋwəb	'chew'
mè?	'delay'	ŋwəpi	'chew with the gums bit by bit over and over'
mè?ri	'delay with'	ŋwí	'swing'
nàm	'stir corn fufu'	ŋwíirì	'swing wavyly'
nambi	'chew'	nwàg-rì	'swallow a bit'
n)		p	
nèb	'carry a bag on one's body, forget'	pàm (bì)	'flatten (make)'
nèbá	'forgot'	pèŋ	'remove'
nèpi	'kindle'	pèŋgi	'remove s.th from the grip of s.th'
nèri	'lick'	pùti	'file a lawsuit against s.b, summon'
nèbá	'grind, to find paste'	pòmniì	'confuse'
nèèri	'amuse a baby'	pòmno	'confused'
nèm	'hide, sweet'	s	
nèmbi	'hide s.o from. Shelter from'	sán	'miss out'
nèti	'make smooth'	sàmnì	'loosen, melt'
nèd	'smooth'	sàn	'split, saw, divide'
nyà	'hostile, harsh'	sàn (dì)	'divide into pieces (repeatedly)'
nyàà(nì)	'harsh, rain lightly (very)'	sàŋ (gì)	'dry out, spread out, (make) dry'
nyààrì	'shower'	sèè(rì)	'tear off (to pieces)'
nyèm	'push down	sèm	'desire, thirst, crave'
		sèm bì	'gobble or eat hastily'
		sèmni	'mis.haped'
		síŋ	'shiver, press clothes'
		sìm (bì)	'frighten, pin' (several times)

sìŋ gi	'erase'	tèri	'sting many times,
sí'g(i)	'cut with (into) incise'	setup,	lay out'
sòb (ri)	'cut (small) reduce'	tébine	'prospective dancer'
sòm (bi)	'cut (with) (into) incise'	tèri	'smarch repeatedly'
sòpi	'cut short, short'	tèn	'remain, alive, survive'
sō	'suck, leave the house early morning'	tí'	'pledge, give a daughter in marriage'
sōōri	'thrust'	tíiri	'select form'
sù?	'stammer'	tìn	'push'
sùŋ(gi)	'pull (from) both ends'	tìn(di)	'shift a bit'
sùŋ(ni)	'pull over and over'	tìn	'tie'
swé	'fill, wrap'	tíŋgen	'k.o.lizard'
swéri	'wrap up'	tì	'cook'
swíi(ri)	'poke, unload (repeatedly)'	tígri	'stumble, stagger'
swiri	'provoke to anger'	tòmni	'send, jump (at random)'
swi?(ri)	'descend (a bit)'	tòn	'refuse'
t		tò	'sharp'
tàd	'stir'	tòtò	'very sharp'
tàti	'stir a bit'	tòb	'pollute, mix'
tàki	'struggle, try, keep on'	tòm	'support, prop up'
tàm	'deceive'	tòn	'burn roast'
tàmbi	'deceive s.o or e.o'	tòŋ	'turn, sweet, crow of cock, call, umbilical cord'
tàn	'tilt, delay, late'	tòŋni	'call shout (at random)'
tàndi	'delay a bit, cause lateness'	tòŋ(gi)	'call a bit'
tāŋ	'count, dispute'	tòpi	'dilute, mix (with), liquids'
tāŋpi	'greedy'	tú	'blunt, make'
tà?	'open, scatter'	tú(ri)	'blunt a bit (make to swell)'
tà?ri	'dig out'	tùm	'shoot, crush, mangle'
tàntàn	'delay too much'	twànè	'shortened'
té	'stand s.th on s.th, sting,	twànì	'shorten a bit'
tē, tè	kick, 'slip'	tò? (ri)	'translate from'
tèni	'shine, spared'		

tùmbi	'dash gift, shoot several times'	wùd	'tremble shake'
tùmá	'shortened'	wùti	'tremble many times'
tùmni	'shorten abit'	y	
twàngá	'soured'	yě, yì	'large'
twèŋ	'sting bury'	yèèni	'enlarge'
twèŋá	'buried'	yèn	'more, travel'
v		yèndi	'stroll'
ví	'escape, harvest onrush rooms build, cure heal'	yèèri, yìri	'wonder, praise(ət) (tə)
vírí	'provocative stubborn'	z	
wà	'rough, woaves'	zā	'yawn, induce, loosen, force'
wàb(i)	'cut (from)'	zāāni	'separate'
wàāni	'a bit rough'	zàm	'light'
wād	'cut, '	zàm bí	'be very light'
wè	'take turns, wise, help'	za'	'probate, hunt'
wèè(ri)	'help (e.o)'	zépí	'peel plantains several times warm up, very
wèm(ni)	'tie (loosely)'	lightly'	
wèni	'clever'	zéb	'peel plantains, warm up'
wí	'refund'	zèn	'strip bark of a tree'
wíiri	'answer, reply, refund (to)'	zèŋ	'clean, bright, vaunt'
wíri	'whip, beat with'	zèŋgi	'peel off, clean a bit'
wì(ri)	'he beat (with)'	zèŋni	'make clean, make bright'
wòb	'hook'	zèŋ	'turn'
wòb(ri)	'hook (together) link'	zè?	'shout, cry, complain'
wùpá	'fastened'	zè?ri	'lean s.th. against s.th.'
wùb	'close, shut, crave'	zin	'cork'
wùpi	'crave for'	zì	'put'
wùm	'feel sick'	zù	'hear, understand'
wùm (bi)	'(cause to) feel sick'	zù	'listen'
wùn (di)	'shake'		
wùndé	'shaky, wobbly, unstable'		
wùpá	'craving for long for'		

zòʔ	'paint'
zùùni	'obey'
zwèmə	'raised'
zwèmni	'raise from the dead'
zwèŋi	'twine, string'
zwiʔi	'fumigate'
zwi(rɪ)	'die, kill (cause to die)'
zwí	'dirty'
zùm(bi)	'pierce (several times)'
zwèʔè(rɪ)	'breath (a bit)'
zòŋ (gɪ)	'fight (with e.o)'
zìŋ (ni)	'clean (make)'
zòn	'buy'
zèŋé	'tilted'