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DEPARTMENT OF AFRICAN LANGUAGES AND LINGUISTICS

PHONOLOGY OF ESIMBI

by

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DEDICATION

To my father, FONTEIN James and my
mother, BI Ngoin Amina whose constant
prayers have enabled me to overcome
all stumbling blocks on the path
of learning.

ACKNOWLEDGEMENTS.

It is customary that at the end of any research work one has to thank all those who contributed in one way or the other to its realization. I wish to express my gratitude to my supervisors, Dr. Robert HEDINGER and Dr. Emmanuel CHIA for their constant guidance throughout the writing of this "Memoire".

I am also very grateful to the Ngong Kum family for their moral and material support. I must say thank you to Mr. Jacob IHIMS, Mr. Lawrence AZI and Mr. John UNJI not forgetting Mr. Paul AZI for providing me with the required data and necessary information.

Mr. Jacob YONGHABI is not forgotten for the time he devoted to help me in drawing maps.

I must not forget to say thank you to my fiancé, Mr. Jesse NGUM for his moral and financial help.

List of Abbreviations and Symbols.

C	Consonant
N	Nasal
Sg.	Singular
Pl.	Plural
V	Vowel
N	Noun
Vb	Verb
S	Semi-vowel
[....]	Phonetic data
/..../	Phonemic data
'....'	English gloss
———	Becomes, is realized as

Tone symbols

/	or H	high tone
\	or L	low tone
—	or M	mid tone
∧	or HL	high-low falling tone
∨	or LH	low-high rising tone.

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CHAPTER ONE.

INTRODUCTION.

This "memoire" sets out to attempt a phonological description of Esimbi, a language spoken in the North West Province of the Republic of Cameroon by people of the same name. Because the language and its speakers are little known both in Cameroon and in the Scientific world, the first task here, in the guise of an introduction, will consist in situating first, the people geographically and historically and then the language in relation to its neighbours. Finally the methodoly and organization of this work will be sketched.

1.1 Geographical Situation

Esimbi is situated in Menchum Division of the North West Province. It lies West of Wum, the capital of Menchum Division. It is a forest region with heavy rainfall between the months of april and september. Due to the heavy rains, the only motorable road which links Esimbi to Befang is seasonal. Befang is further linked to Wum by part of the ring road which is motorable throughout the year. The seasonal road which leads to Esimbi terminates at Benakuma, the capital. The climate of the region is relatively hot when compared with the rest of the Division.

Benakuma, the capital, constitutes the seat of the Esimbi people. Settlement is along the Menchum River, which rises from the Fundong highlands and flows through the region into Nigeria. Lake Benakuma is one of the inte-resting geographical features to be found there. In gene-ral, Esimbi is found at the Western borders of Cameroon touching on Nigeria. The accompanying map locates Esimbi in the North West Province.

NIGERIA

DONGA/MANTUNG

Nkambe

MENCHUM

Ala.
R. Katsina
Esu
Benakuma & Kum Weh
Wum
Fundong
R. Menchua

Esimbi
Benakuma
Mukuru

MOMO

Mbengwi

MEZAM

Bambui

BAMENDA

KEY
International Boundaries
Provincial Boundaries
Divisional Boundaries
Major Roads (ring road)
Miner Roads

Scale: 1:600.000
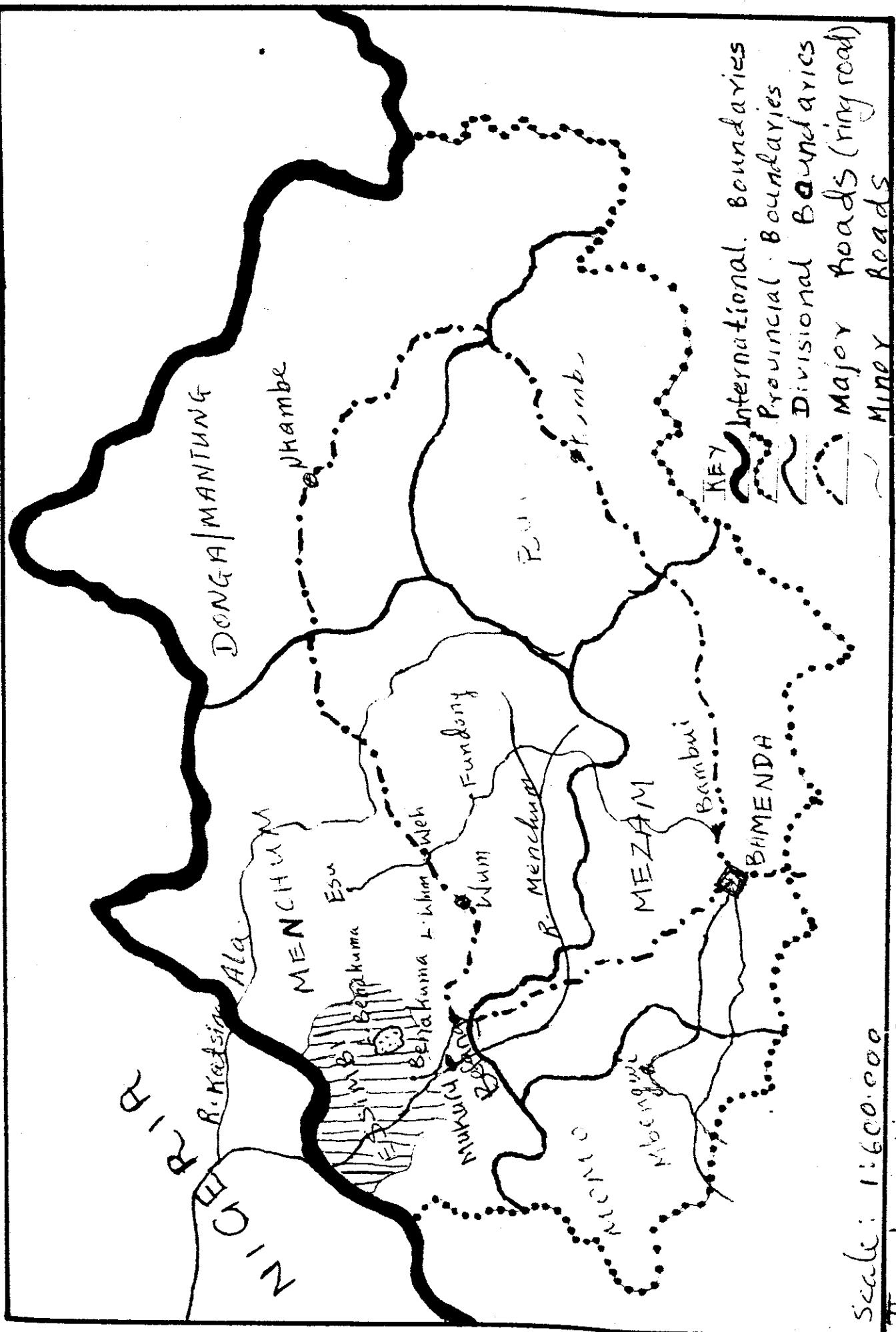
The Location of Esimbi in the North West Province.
Source: Adapted from Gwellem Publications LIMBE

1.2 Historical Background of Esimbi

The historical background of the Esimbi people presented here is based mainly on interviews with some of the natives. Mention has to be made of Mr. Ihims Jacob, a native of Esimbi and one who has been particularly intested in the history of his people. Some of the information found here was taken from an unpublished article which he wrote after a period of research. Nkwi and Warnier (1982) was also consulted.

Following the views of those consulted the historical origin of the Esimbi people is somehow vague and controversial. Even the elders display a short memory span through oral tradition. The present clan head is able to name only four generations of chiefs that have ruled the clan. Some of the people hold that they have always lived at their present site from time immemorial. However there exists a scanty story with strong evidence that the Esimbi people might have formed one of the earliest widikum groups that moved towards the grassfields of Bamenda Plateau, but stopped short of reaching the open grassland.

The historical link between the Esimbi and Widikum people is not very overt as far as language is concerned. Studies so far carried out on the two languages show that they are not closely related. Socially, the link between the two groups is evident in the similarities in

their music and styles of dancing, the drumming of messa-
ges and certain marks on the faces of women.

During the first half of the nineteenth Century
when the Aghem (Wum) people settled at their present site,
moving south from the Benue lands, they sought to consoli-
date their position in the Menchum area. The Esimbi people
were one of the earliest people to suffer harassement from
the Aghem due to this policy of consolidation of power.
Around 1850 they were harassed and brought under the con-
trol of some Aghem chiefs otherwise knwon as "batum".
Peace treaties after wars granted the Aghem chiefs the
right to exact compulsory palm oil tribute from the Esimbi
people.

In the nineteenth Century the Esimbi people tra-
ded with Esu, exchanging oil for hoes and matchets. As good
craftsmen the Esimbi people produced fishing nets which
were bought by Ide people in exchange for women captured
from other groups.

Although Cameroon formally came under German con-
trol in 1884 most of the country remained under the control
of local chiefs until the beginning of the twentieth centu-
ry. The first contact of the Esimbi with Europeans was in
1907. Their resistance to the foreigners led to several
expeditions against them d uring the period of German

colonization of Cameroon. The first expedition was
carried out under the leadership of the German army
Commander Glauning.

During the German war, they again faced
three expeditions, under the instigation of the Wum
people. The last and most destructive of the expedi-
tions took place when the people killed a German Ser-
geant and a whole detachment. This expedition was so
severe that they decided to disperse from the origi-
nal three main villages, Benakuma, Benahundu and
Benagudi to a wider area. They had realized that it
was risky living together. This led to the establish-
ment of the hamlet pattern of settlement and the
increase of villages from three to ten.

Main Occupation

Basically the Esimbi people are peasant
farmers. Farming here, is however subsistent. Crops
which are grown include cocoyams, maize, cassavas,
groundnuts and rice. Only surpluses are sold to neigh-
bouring towns like Wum and Bamenda.

Fishing is done on a local scale in the Menchum
river. Like fishing, hunting of wild animals occupy
some of the Esimbi people especially during the dry sea-

son. Palm oil is produced for consumption and surpluses are marketed. So far no cash crops are produced there.

1.4 Esimbi and her Neighbours

The population of Esimbi is estimated at about twenty five thousand. This figure is actually only an estimate due to the fact that the tradition forbids head counts. For this reason accurate information about the number of people residing in this region has not always been gotten during censuses. Some of her closest neighbours include Mudele, Mukumu, Befang, Esu and Wum. It is however surprising to note that Esimbi has no linguistic links with these people. Rather, she has more lexical affinities with Asumbo, one of the languages of Akwaya.

1.5 The Language

1.5.1. Classification

Stallcup (1980a) classifies Esimbi as one of the languages that make up the Tivoid branch which falls under the Bantoid Sub, group of Benue-Congo languages. There has however been a lot of uncertainty as far as the classification of Bantoid languages is concerned.

Earlier studies on Bantoid languages classi-
fied, Tivoid languages as Non-Bantu Bantoid whereas
more recent studies classify them either under Narrow
Bantu or Bantu languages.Greenberg (1953) proposed
the following hypothesis.

```
                        Bantoid
                           |
                           |
   _____|_____
   |        |        |        |          |        |        |
   |        |        |        |          |        |        |
  Tiv     Bitare   Batu     Ndoro     Mambila   Bute    Bantu
```
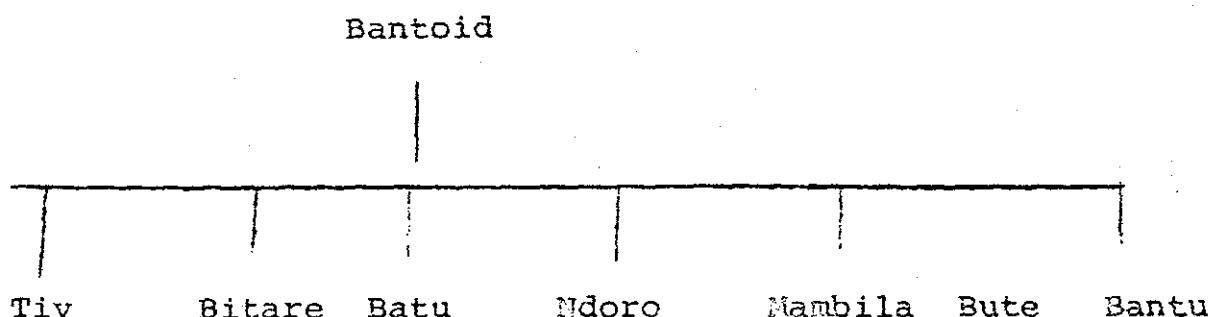
The significant point of this proposal is that Bantu
is a cordinate branch with Tiv and other branches
within Bantoid.

Williamson (1971) considered Tiv as part of
the Non-Bantu group in her classification. She divi-
ded the Bantoid languages into Non-Bantu and wide
Bantu.

```
                        Bantoid
                           |
   _____|_____
   |                                                |
  Non-Bantu--                                   Wide-Bantu
   |
  Mambila-vate      Tiv-Batu
                       |
                _____|_____
                |       |          |          |       |         |
            Nigerian  Mamfe    Grassland    Misage   Tikar    Narrow
            Bantu     Bantu    Bantu                          Bantu
```
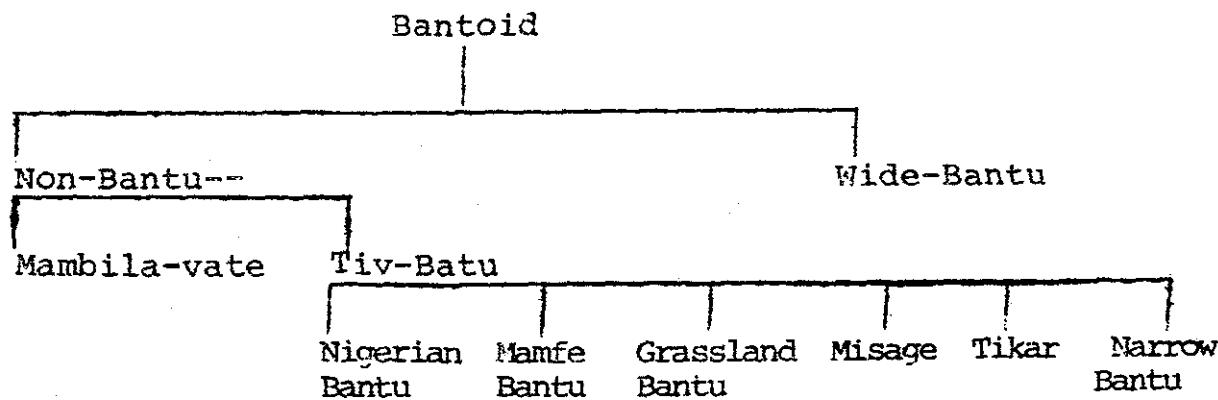
Stallcup (1980a) shares the view that Tivoid languages are Non-Bantu.

The other group which has carried out a more recent study on Bantoid languages classify Tivoid under Narrow Bantu and Bantu languages. Bastin, Coupez and de Halleux (1983) made the following classification.

```
Bantoid
    |
    |
  Bantu
  |      |
Mbam Nkam   Narrow Bantu
              |
              |
          |        |
       Tivoid    Equatorial
```
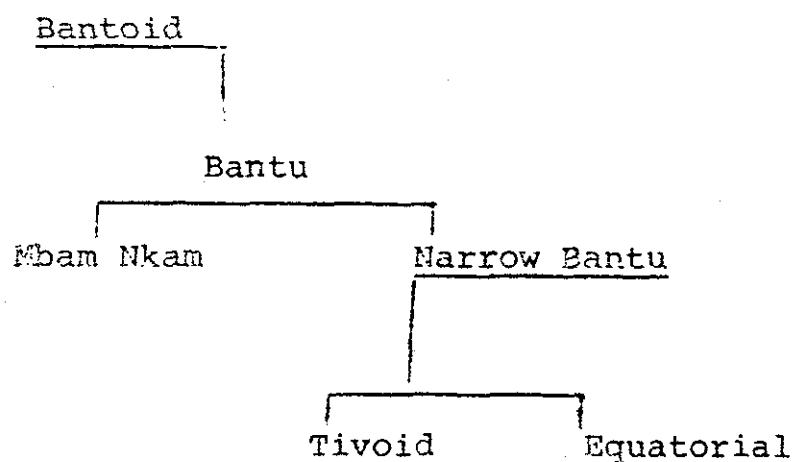
The most recent classification is that of ALCAM (P 360)

```
               Bantoid
  |                              |
Mambiloid                       Bantu
  |        |       |      |         |         |        |
Jarawan  Tivoid  Ekoid  Nyang  Grassfield  Mbam   Ndemeli
```
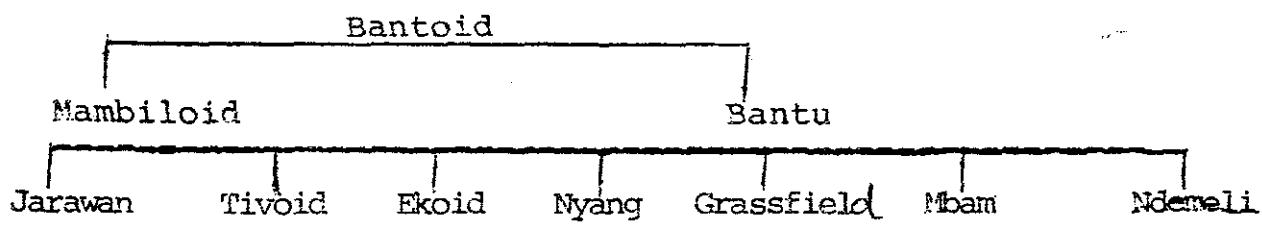
According to ALCAM Esimbi will be classified as follows.

BENUE - CONGO
|
BANTOID
|
BANTU
|
TIVOID
|
ESIMBI
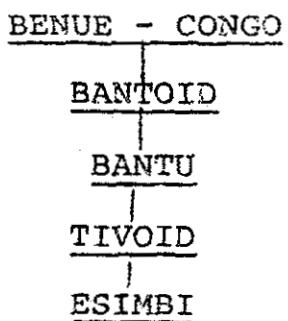
Esimbi falls under Tivoid languages which are spoken both at the Western borders of Cameroon and by some one million people in Nigeria. The Tivoid area as indicated on the following maps extends from the Western borders of Cameroon into the Nigerian region ajacent to it.
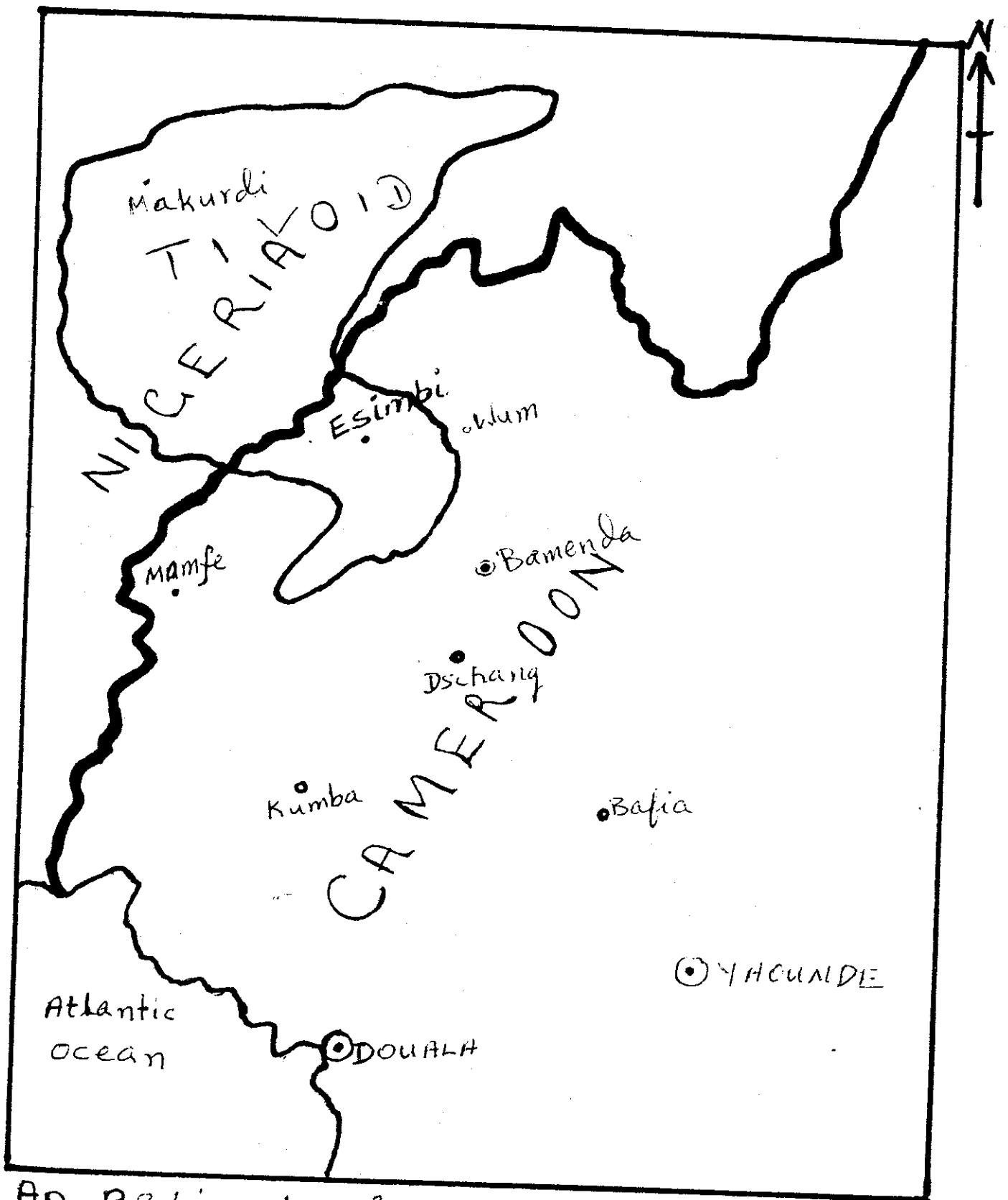
An Estimate of the area covered by Tivoid Languages
Adopted from Robert Hedinger 1984 "Northern Bantoid"

NIGERIA

TIVOID

Yiv
Tiv
Ugao
Iceve
Ipulo
Gati
Evand
Mantum
Enrin?
Batome
Esu
Esimbi

Modele
MENCHUM
Mundum
Bfanj
Befang
Aghem
Bum
Mmen
RING
Ncon
Nooni
Kuk
kom
Veng
Bubanki
Biafi
Bamunkingkushi
Lamss?

Bafut
NGEMBA
Mankon
Bambili
Szimba
Kanseu

East
Grassfield

Amwi
Szimba
Mezaku

Ngumba
Njimaka
Aghin
Ngwo
Mengaka
Menka
Mundam
Ngie
Meta
MOMO
Atong
Umoyi
Manyk
Bisoa
Ambele
Munta
Mundani
Manbile
Mambila

West Province

South West Province

Scale: 1:650,000

Esimbi and Neighbouring Languages

The following are Tivoid languages spoken in Nigeria :

- Munshi
- Otank
- Emane
- Icheve
- Evant
- Bitane
- Abon
- Batu.

According to krause (1985) in John R. Watters' article "Bantoid Overview" Bantoid languages are langua- ges which display certain relationships in vocabulary with Bantu but which grammatically represent a Pre-Bantu stage both typologically and historically.

Guthrie (1948), Jacquot and Richardson (1956) following him the term to refer to languages that have noun classes like those of Bantu languages but whose noun prefixes, concordial elements and vocabulary, pre- sumably do not show any regular relationship to the Bantu languages.

Another attempt at differentiating Bantoid and Bantu languages was done by Johnston (1919 ⨍ 1922). He saw Bantoid languages as mixed languages resulting

from the contact between Bantu languages and Sudanic
non-class languages and therefore as not sharing a
true genetic relationship with Bantu languages. If
Esimbi is considered as a Non-Bantu Bantoid language
it is just logical because of its uniqueness among
neighbouring Bantu languages.

1.5.2 Dialects

Distinction is often made between the dialect
spoken around Benakuma otherwise known as upper Esimbi
and the dialect spoken nearer the borders known as lo-
wer Esimbi. This distinction has been brought about by
differences in a few lexical items that differ in the
two sections as follows.

Upper Esimbi	Lower Esimbi	English
[èni´]	[èrí]	'what'
[nênî:]	[rέrí]	'how'
[akòßò]	[àkànè]	'cocoyam'
[óyí-ákárá]	[óyí-ákírí]	'scissors'
[èwà-kárá]	[εwàkírí]	'sugar cane'

These differences do not actually impede intelligibi-
lity between the two sections.

1.5.3 Previous Linguistic Works

So far known existing linguistic works on Esimbi are few.

Stallcup K.L. (1980a, 1980b) is the only person who has carried out linguistic studies on Esimbi. His articles, "Noun classes in Esimbi" and "A brief account of nominal prefixes and vowel harmony in Esimbi" both published in 1980 are the only available works on Esimbi.

1.6 Purpose and Method of Study

1.6.1 Purpose Phonology is an important part of linguistics which deals with the sound systems of languages. It is only through a phonological study that the structure of any given language can be obtained. It is a well established fact that not all sounds found in a language are distinctive or pertinent. It is only through a detailed phonological study that the pertinent sounds of any language can be brought out. Although some work has already been done on Esimbi noun classes, nominal prefixes and vowel harmony, it is still necessary to study the phonology because it constitutes the basis for most structural linguistic studies.

A description of the language will provide a wider area for more studies on the language like the morphology and syntax. The phonology is also a pre-requisite for the development of the writing system of this language. This has been the desire of the Esimbi elite who have seen the increasing need for the development of National languages in Cameroon.

1.6.2. Methodology

This study will focus on the sound system of the language, the segmental and pitch phonemes and the possible combination of sounds into syllables and words. The structure of syllables, morphemes and words will also be dealt with.

The structuralist approach to the analysis of phonemes will be taken . Phonemes are defined by their contrast with other phonemes. Some phonemes might consist of allophones with realization rules dictating the choice of a particular allophone for a given environment.

The unit of description in this study is the word, defined by Websters New World Dictionary as

a speech sound, or a series of them ser-
ving to communicate meaning and consisting
of at least one base morpheme with or
whithout prefixes or suffixes...

This is particularly important because Esimbi is a
language with unusually lengthy words and irregular
prefixes.

1.7   The Data - Sources.

The study is based on a corpus of about
950 words collected through the help of 3 informants
namely :

Unji John, a native of Esimbi resident in Yaounde.

Azi Paul, a University Student, native of Esimbi and
resident in Yaounde.

Azi Lawrence, a nurse, native of Esimbi resident in
Nwa, Donga Mantung Division. These informants were re-
quired to translate verbally, words from English to
Esimbi. Some information about the history of Esimbi
was acquired from Mr. Ihims Jacob, Principal of
Government High School Mbengwi.

1.8 Organisation of the Work

This work has been organized in the follo-
wing manner.

- In chapter 2 the syllable structure and interpreta-
tion problems will be treated.

- Chaper 3 which is the core of the work shall be dea-
ling with segmental phonology.

- Chapter 4 shall be concerned with the morpheme and
word structure.

The last chapter (chapter 5) shall be treating supraseg-
mental phonology. There after will come the conclusion.

CHAPTER TWO.

SYLLABLE STRUCTURE AND INTERPRETATION PROBLEMS.

The phonetic transcription used in this work has been adopted from the General Alphabet of Cameroon Languages.

2.1 Syllable Structure.

There are basically five syllables patterns in Esimbi. The following words illustrate the various patterns.

Syllable pattern	Example	Gloss	Word pattern
V	/òpi'/	'Cocoyam flower'	V.CV
CV	/kéti'/	'mountain'	CV.CV
CCV	/ŋglɔ́/	'lick'	CCV
CVN	/pìŋni'/	'greet'	CVN.CV
CSV	/mbwàlə̀ŋ/	'potatoes'	CSV.CVN

The final consonant in a closed syllable can only be the velar nasal [ŋ] or the alveolar nasal [n]. The fifth pattern, CSV results from labialization that is not predictable. In other words it is due to the presence of the Semi-vowel [w] after [mb] and [g]. The following word illustrates a case of non-predictable and

predictable labialisation respectively.

[gʷɔ̀gwù] /gwɔ̀gú/ 'duck' CSV.CV. In this example
the second syllable pattern is CV instead of CSV. [w] is follo-
wed by [u] being a case of predictable labialization.

It should be noted that the most predominant syllable
pattern in this language is the CV pattern. The absence of syl-
labic nasals is also worthy of note.

2.2 Interpretation Problems

2.2.1 Diphthongs.

Diphthongs can hardly be said to exist in Esimbi. Even-
though one finds cases of two vowels occurring together it is
easy to deduce the reason for their occurrence. One instance whe-
re vowels occur together is in compound words, for example.
/kíhǔɔ̀mù/ 'chimpanzee'

This word can be broken down into [kíhǔ] and [ɔ̀mù], Although it
is not easy to assign any individual meaning to the two parts it
is possible to judge that this is a case of two different morphe-
mes that have been brought together.

In another instance two vowels occurring together is the result of the reduplication of morphemes in certain words, for example.

/kìfíáfi´/   'a type of bird'

/èyìèyì/   'new'

/ɛ̀nìɛ́ni`/   'new'

It is also possible to have two vowels occur-ring together due to the presence of suffixes in words. The suffix is an individual morpheme/ending with a vowel, and when it is brought together with another morpheme two vowels are bound to occur together. Example.

/βùtìíɔ́nɔ̄/ 'blunt'

The morpheme [ɔ́nɔ̄] is a suffix used in the formation of adjectives, probably from nouns or verbs.

There are yet situations of two vowels accurring together which dont fit into the above illustrations, for example.

/βìɔ́/ 'build'

/kēgìɔ̀/ 'a head'

/ìpìɔ̀/ 'pit'

Each of the two vowels bear tone. This gives us the fee-ling that each of them belongs to a different syllables. It is therefore not far from the point if one concludes that there exists a consonant on the second syllable that has been ommitted probably, in rapid speech. The consonant which is most likely to fit in at this position is the semi-vowel [y] . In this case the words can be represented as follows.

/Pìyə́/ 'build'

/ēgíyə̀/ 'ahead'

/ípíyə̀/ 'pit'

This goes further to confirm the predominant occurrence of the CV syllables pattern in the language.

2.2.2 Labialization

Labialization in Esimbi is a non-distinctive feature. Labialized consonants are in complementary distribution with their non-labialized counterparts. The following consonants are labialized in final syllables of words when followed especially by the back high vowel [u]. They are [ŋg] [k] [p].   The distribution is as follows:

/ŋg/ ⟶ [ŋgw]   / ___u #

[ŋg]   / elsewhere

Examples

[sùŋgwú]   /sùŋgú/ 'whistle'

[bìŋgwú]   /bìŋgú/ 'lie'

[húŋgwú]   /húŋgú/ 'handle'

[ŋgə̀rə́]   /ŋgə̀rə́/ 'kiss'

[nèŋgə́]   /nèŋgə́/ 'frighten'

/k/ ⟶ [kw]   ___u #

[k]   elsewhere

- 23 -

Examples

    [sɛkwû]   /sɛkû/ 'mouse'

    [ɔ́kwú]   /ɔ́kú/ 'money'

    [kíkwú]   /kíkú/ 'bone'

    [ìkùmù]   /ìkùmù/ 'goitre'

    [kúrú]   /kúrú/ 'tie'

    [kógyí]   /kógí/ 'fishing line'

$$/p/ \longrightarrow [pw] / \_\_u \#$$
$$[p] \quad \text{elsewhere}$$

Examples

    [kùpwú]   /kùpú/ 'musical instrument'

    [ópwǔ]   /ópǔ/ 'pain'

    [púlú]   /púlú/ 'spend' (money)

    [púrú]   /púrú/ 'open' (door)

The rule is only applicable to [ŋg] [k] and [p]. A general rule could be established to include the three sounds.

$$/ŋg, k, p/ \longrightarrow [ŋgw, kw, pw] \_\_u \#$$
$$[ŋg, k, p] \quad \text{elsewhere}$$

There is a case of labialization that is not predictable as is the case here. This has already been discussed under syllable structure as CSV pattern.

Palatalization

Like labialization, palatalization has a phonetic status in the language. The conditioning factor for all the palatalized consonants is the high front vowel [i]. Palatalized consonants are in complementary distribution with their non-palatalized counterparts. Consonants that undergo this conditioning are [k] [g] [ŋg] [t] [d] and [l].

The distribution can be represented as follows.

$$/k/ \longrightarrow [ky]/\_\_i$$
$$[k]/ \text{ 'elsewhere'}$$

Examples

[sékyí]	/sékí/	'scabby'
[òkyì]	/òkì/	'tail'
[kyílyí]	/kílí/	'remain'
[kázú]	/kázú/	'camwood'
[kúrú]	/kúrú/	'tie'
[kòyù]	/kòyù/	'cough'

$$/g/ \longrightarrow [gy]/\_\_i$$
$$[g] \text{ elsewhere}$$

Examples

[kógyí]	/kógí/	'fishing line'
[égyí]	/égí/	'egg'

[ígyí]   /ígí/   'fly'

[ògə́]   /ògə́/   'calabash dish'

[wògè]   /wògè/   'whiteman'

[gùmú]   /gùmú/   'pay'

/ŋg/ ⟶ [ŋgy]/__i

   [ŋg]   elsewhere

Examples

[šìŋgyí]   /sìŋgí/   'wipe'

[ŋgyìší]   /ŋgìsí/   'help'

[nèŋgə́]   /nèŋgə́/   'deceive'

[húŋgwú]   /húŋgú/   'handle' (v)

/t̪/ ⟶ [ty]/__i

   [t] / elsewhere

Examples

[pìtyí]   /pìtí/   'widen' (area)

[kàtyì]   /kàtì/   'type of bag'

[tyímí]   /tímí/   'dig'

[ɔ́tū]   /ɔ́tū/   'stream'

[túmú]   /túmú/   'send'

[kétə́]   /kétə́/   'tree'

/d/ ⟶ [dy]/__i

   [d] / elsewhere

Examples

[jìndyí]	/jìndí/	'urinate'
[gédyí]	/gédí/	'watch cunningly'
[bòdyì]	/bòdì/	'tears'
[túndú]	/túndú/	'pour'
[édū]	/édū/	'some type of war'
[dádə́]	/dádə́/	'good'

$$/l/ \longrightarrow [ly]/\_\_i$$

$$[l]/ \text{ elsewhere}$$

Examples

[élyí]	élí	'name'
[kyílyí]	kílí	'remain'
[gyílyí]	gílí	'wring'
[hə́lə́]	hə́lə́	'scrape'
[dzùlú]	dzùlú	'sigh'
[kúlú]	/kúlú/	'take'

In order to make it mone general the rule can be written as follows.

$$/k, g, \eta g, t, d, l/ \longrightarrow [k\textbf{y}, gy, \eta gy, ty, dy, ly]/ y$$
$$\_\_i$$
$$[k, g, \eta g, t, d, l]$$
'elsewhere'

These sounds are palatalized when followed by [i] and remain same elsewhere.

2.2.4 Pre-Nasalized Consonants.

A pre-nasalized consonant is a sequence of a nasal plus another consonant. It is necessary to determine whether these constitute one sound or two different sounds. In some languages pre-nasalized consonants make up two distinctive sounds but in Esimbi they form a single sound. This conclusion has been arrived at after certain considerations.

First of all, it can be noticed that Esimbi words usually begin either with a vowel or a single consonant sound. Some of the pre-nasalized consonants like [mb] and [ŋg] appear word initially. Following the general distribution of consonants, these sounds occur word initially and intervocalically which are basically the two positions that consonants occupy in words of the language.

Due to the fact that the nasals in question are non-syllabic, it provides more evidence for considering the pre-nasalized consonants as single sounds.

The following pre-nasalized consonants [mb] [ŋg] [nd] [ndz] [ŋgb] and [nj] are considered single sounds and will be treated as such under segmental phonology.

2.2.5 Affricates

There are four affricate sounds namely [ts],
[dz], [c], [j]. They make up two phonemes because
[c] and [j] are allophones of /ts/ and /dz/ respectively.
[ts] and [dz] are interpreted as single units because
no unambiguous CC sequence exist in Esimbi.
[ts] and [dz] can only be single sounds to have [c] and
[j] as allophones.

[c] and [j] is a combination of alveolar stops [t] and [d]
and the pre-palatal fricatives [š] and [ž]. Since [š]
and [ž] do not occur as separate segments but rather as
allophones of /S/ and /Z/ it is right to conclude that [c]
and [j] are single units. Since [c] and [j] are only
allophones of /ts/ and /dz/ consequently they are single
units.

CHAPTER THREE.

SEGMENTAL PHONOLOGY

3.1 Consonants.

The Esimbi language presents an inventory of thirty five consonant sounds including two glides.

3.1.1 Phonetic Realization

The following chart indicates all the consonant sounds found in Esimbi. It will be realized that some of the sounds constitute distinctive units in the language whereas others are simply allophones of other phonemes, in other words environmental variants of the same phonemes. It will be proved in the next section on phonemic contrasts that the following consonant sounds, [c], [j], [š], [ž], [nj] and [ɣ] are all environmental variants. In the chart that follows sounds are classified according to the place and manner of articulations.

Phonetic Consonant Chart.

PLACE OF ARTICULATION / MANNER OF ARTICULATION	BILABIALS	LABIO-DENTALS	ALVEOLARS	PRE-PALATALS	PALATALS	VELARS	GLOTTALS	LABIO-VELARS
STOPS Voiceless	p		t.			k		kp
Voiced	b		d			g		gb
AFFRICATES Voiceless			ts	c				
Voiced			dz	j				
FRICATIVES Voiceless		f	s	š			h	
Voiced	β	v	z	ž		ɤ		
PRE-NASALIZED Stops affricates	mb		nd ndz	nj		ŋg		ŋgb
NASALS	m		n		ɲ	ŋ		
LATERALS			l					
VIBRANTS			r					
GLIDES					y			w

Table 1.

3.1.2 Phonemic contrasts

There are 29 consonant phonemes grouped into stops, affricates, fricatives, nasals, laterals, vibrants and glides. Consonant contrast in Esimbi functions mainly at word initial position and intervocalically. It is very uncommon to find consonants at word final position. Since Esimbi is basically a multi-syllabic language, obtaining minimal pairs, which are usually clear indicators of phoneme contrasts is difficult in some cases. However the few minimal pairs which can be obtained will still serve the purpose. Where it is not easy to get minimal pairs, near minimal pairs and other arguments will be used. The following chart indicates the consonant phonemes in the language.

Phonemic Consonant Chart.

PLACE OF ARTICULATION / MANNER OF ARTICULATION	BILABIALS	LABIO-DENTALS	ALVEOLARS	PALATALS	VELARS	GLOTTALS	LABIO-VELARS
STOPS Voiceless	p		t		k		kp
Voiced	b		d		g		gb
AFFRICATES Voiceless			ts				
Voiced			dz				
FRICATIVES Voiceless		f	s			h	
Voiced	β	v	z				
PRE-NASALIZED Stops affricates	mb		nd ndz		ŋg		ŋgb
NASALS	m		n	ɲ	ŋ		
LATERALS			l				
VIBRANTS			r				
GLIDES				y			w

Table 2 .

The consonant phonemes which appear on the chart above have been obtained through a careful analysies of all the consonant sounds found in the language. The procedure requires that sounds which constitute suspicious pairs (sounds which are liable to be allphones) be contrasted. Each sound is established as a phoneme on the basis of its contrast with other sounds.

The phoneme /P/.

/P/ is always realized as the voiceless bilabial stop in any environment. Its phonemic status is acquired through the following contrasts.

P/b

/pə̌/ [pə̌] 'untie' /bə́/ [bə́] 'come'

/pírí/ [pírí] 'add' /bírí/ [bírí] 'call'

P/β

/pə̀té/ [pə̀té] 'mix' /βə́té/ [βə́té] 'spoil'

P/m

/Pə̌/ [Pə̌] 'untie' /mə̌/ [mə̌] 'mould'

/Púrú/ [púrú] 'open' (door) /mùrú/ [mùrú] 'swell'

/Pìsí/ [pìší] 'bend'/'tilt' /misí/ [mǐší] 'plant' (beans)

/Pìŋní/ [pìŋní] 'ask' /miŋní/ [miŋní] 'rest'

P/KP

/Pírí/ [pírí] 'add' /kpírí/ [kpírí] 'burn'

/pìsí/ [pìší] 'bend'/'tilt' /kpísí/ [kpíší] 'sweep'

<u>P/mb</u>

Althrough there are no minimal pairs to illustrate the contrast, the distribution of vowels in the environment of these sounds makes one conclude that they contrast.

/òpí/ [òpí] 'cocoyam flower' /èèmbí/ [èèmbí] 'storm'

/kùpú/ [kùpwú] 'musical instrument'/úmbú/'fufu 'stick'

<u>The phoneme /b/</u>

/b/ is realized as the voiced bilabial stop in all environments of occurrence. It contrasts with other bilabial sounds as well as with stops with which it forms suspicious pairs.

<u>b/P</u>   see   <u>P/b</u>

<u>b/β</u>

/ɔ́bə̄/ [ɔ́bə̄] 'broom' /ɔ́βə́/ [ɔ́βə́] 'palm tree'

/èbə́/ [èbə́] 'cutting grass' /èβə̀/ [èβə̀] 'hut meant for wood'

/bɔ́húlú/ [bɔ́húlú] 'mushroom found, decayed wood' /βɔ́hémbə́/ 'on thatching grass'

<u>b/m</u>

/bú/ [bú] 'take'   /mú/ [mú] 'sit'

/bə́/ [bə́] 'come'   /mə̆́/ [mə̆́] 'mould'

/gə̀bə́/ [gə̀bə́] 'divide' /gə̀mə́/ [gə̀mə́] 'separate fighters'

<u>b/mb</u>

/bàyù/ [bàyù] 'corn mousse' /mbàyì/ 'type of dance'

/kúbú/ [kúbú] 'hunt' /pùmbú/ [pùmbú] 'fan'

/èbə́/ [èbə́] 'cutting grass' /ɔ́mbə́/ [ɔ́mbə́] 'twin'

b/gb

/bírí/ [bírí] 'call' /gbírí/ [gbírí] 'whip'

/bèré/ [bèré] 'cover' /gbèré/ [gbèré] 'sew'

The phoneme /β/

/β/ is realized as the voiced bilabial fricative in where ver it appears. It contrasts with other bilabial sounds. as follows.

β./P   see   P/β

β/b   see   b/β.

β/m

/tsìβí/ [cìβí] 'cross'   /tímí/ [tímí] 'dig'

/βètè/ [βètè] 'spoil'   /mè̌/ [mè̌] 'mould'

β./mb

/óβé/ [óβé] 'palm tree'   /ómbé/ 'twin'

/èβè/ [èβè] 'hut for wood'   /hèmbé/ 'drive away'

The phoneme /mb/

/mb/ is realized as the voiced pre-nasalized bilabial stop. It is a single unit and is considered as a phoneme by its contrasts with other bilabial sounds.

mb/P   see   P/mb

mb/b   see   b/mb

mb/β   see   β/mb

mb/m

Due to the lack of minimal pairs the vowels that follow
the sounds shall be taken into consideration.

/númbú/ [númbú] 'drag' /zúmú/ 'bear'

/bɛ̀sùmbù/ 'life plant' /ìkùmù/ 'goitre'

/yúmbə́/ [yímbə́] /gə̀mə́/ 'separate' (fighters)

The phoneme /m/

/m/ remains the bilabial nasal in all environments of
occurrence. It is always voiced. It contrasts with bila-
bial sounds as well as nasal sounds.

m/b   see   b/m

m/P   see   p/m

m/β   see   β/m

m/mb see   mb/m

m/n

/mú/ [mú] 'sit' /nǔ/ [nǔ] 'weave'

/tímí/ [tímí] 'dig' /tíní/ [tíní] 'dry'

m/ɲ

/mìŋní/ [mìŋní] 'rest' /ɲínə́/ [ɲínə́] 'mend'

/mìsí/ [mìší] 'plant' (beans) /ɲìmí/ 'extinguish'

m/ŋ

/ɔ́-tə̀mə̄/ [ɔ́-tə̄mə̄] 'jaw' /tə́ŋə́/ 'count'

/də̀mə́/ [də̀mə́] 'groan' (animal) /ké-də́ŋə́/ 'hamlet'

The phoneme /f/

/f/ is relized as the voiceless labio-dental fricative in all environments. . .

f/v

When the suspicious pair f/v is considered one might be tempted to conclude that they are allophones because [f] is almost always followed by the back vowel [u] and central vowels [ɨ] and [ə] for example:

/fúfú/ [fúfú] 'blow' (fire)

/ɛfúmbə/ [ɛfɨmbə] 'rat mole'

/fə́nə/ [fə́nə] 'imitate'

[v] on the other hand is almost always followed by the front vowel [i] as follows:

/vǐ/ [vǐ] 'fly'

/ví/ [ví] 'wife'

/tìvì/ [tìvì] 'mother'

/víjìmì/ 'behind'

There are however, some words that make an exception to this assertion. Here [f] is followed by [i] and [v] by [u].

/būfírī/ [būfírī] 'white little mushrooms'

/kɛ̄fírī / [kɛ̄fírī] 'an animal of the cat family'

/úvū/ 'you' (sg)

The only near minimal pair that can be obtained is

/fúfú/ 'blow' (fine) /úvū/ 'you' (sg)

The phoneme /V/

/V/ remains the voiced labio-dental fricative in all envi-
ronments. Its contrast with [f], [β] and [w] gives it
its phonemic status.

V/f   see   f/v

V/β

The contrast between these two sounds is also not very
clear because [v] has the tendency of preceding front
vowels whereas [β] also tends to precede non-front vowels.
There are a few cases of words in which B is followed by
the front vowel [i]. In this case the only possible near
minimal pair will be:

/tìvì/ [tìvì] 'mother'   /èkìβì/ 'antelope'

V/w

At first sight [v] and [w] seem to be allophones of the
same phonemes with [v] being followed by the front vowel
[i] and [w] by the back vowels [u] and [ɔ]. as follows.

/èwù/ 'elephant grass'

/kòwú/ 'needle'

/wɔmú/ 'remain'

In the case of [v] see examples under the phoneme /f/.
With the presence of the word /úvù/ 'you' (sg) the two
sounds can be said to contrast.

/úvù/ 'you' (sg)   /èwù/ 'elephant grass'

The phoneme /t/

/t/ is realized as the voiceless alveolar stop in all environments. It is because of its contrast with other alveolar sounds that it is considered a phoneme.

t/d

/tǐ/[tyǐ]	'feed'		/dǐ/ [dyǐ]	'look'	
/ɛ́tū/ [ɛ́tū]	'fireplace'		/ɛ́dū/	'an element like a candle'	
/ótə̄/ [ótə̄]	'spear'				
			/ódə̄/ [ódə̄]	'length'/depth'	

t/ts

/tú/ [tú]	'abuse'		/tsú/ [tsú]	'pound'
/tǐ/ [tyǐ]	'feed'		/tsǐ/ [cǐ]	'touch'
/tə́/ [tə́]	'abandon'		/tsə́/ [tsə́]	'again'

t/dz

/tə́/ [tə́]	'abandon		/dzə́/ [dzə́]	'steal'
/túnú/ [túnú]	'deny'		/dzùsú/	'itch'

The Phoneme /d/

/d/ is the voiced alveolar stop. Its phonemic status is established through the following contrasts:

d/t   see   t/d

d/dz

/dùmbǔ/ [dùmbǔ]	'burst'		/dzùlú/	'sigh'
/də̀mə́/ [də̀mə́]	'groan' animal		/dzə̀rə́/	'travel'

d/l

/dí/ [dyí] 'look'   /lí/ [lyí] 'split'

d/r

/dí/ [dyí] 'look'   /rí/ [ri] 'eat'

d/nd

/dzə̀dí/ [dzə̀dí] 'spy'   /hùndí/ [hɨ̀ndyi] 'cook'

/dí/ [dyí] 'look'   /hùndí/ [hɨ̀ndyi] 'run'

The Phoneme /ts/

/ts/ is realized as the voiceless pre-palatal africate when fol-
ʻs followed by the central vowels [ɨ]
lowed by the front vowel [i]. When [ts] and [ə], and the back vowel
[u] it is realized as the voiceless alveolar affricate. This distribu-
tion can be represented as follows:

/ts/ ⟶ [c] / -v [+ front]

        [ts] /-v [- front]

Examples:

[cìβí] /tsìβí/   'cross'

[cíɣírí] /tsíwírí/   'tickle'

[tsùsú] /tsùsú/   'uproot'

[tsá̂] /tsá̂/   'sift'

[tsɨ̀bá̂] /tsùbá̂/   'set up a scare crow

ts/dz

tsùsú/ [tsùsú] 'uproot'   /dzùsú/   'itch'

/tsɨ̂tsí [cící] 'heavy'   /dzîdzí/ [jîjí] 'careful

ts/t see t/ts

The Phoneme /dz/

   /dz/ is realized as [j] in certain environments and as [dz] in others. [dz] becomes [j] when it precedes the front vowel [i] and [dz] when it precedes non-front vowels. This distribution can be represented thus:

/dz/ ⟶ [j] /~v [+ front]

      [dz] /~v [- front]

The following words illustrate this distribution.

[jímbíri]	/dzímbírí/	'stand'
[jìndyí]	/dzìndí/	'urinate'
[íjî]	/ídzî/	'aerial yam'
[dzɨŋgɔ́]	/dzùŋgɔ́/	'write'
[kédzɔ̀]	/kédzɔ̀/	'elephant'
[dzùlú]	/dzùlú/	'sigh'

dz/d see d/dz

dz/ts see ts/dz

dz/ndz

/dzɔ̀rɔ́/ [dzɔ̀rɔ́]	'travel'		/è-ndzɔ̀rɔ̀/	'sheep'
/ὲ-dzɔ̀ndɔ̀/	'spear grass'		/ὲndzɔ̀rɔ̀/	'sheep'
/ɔ́dzū/ [ɔ́dzū]	'mouth'		/ìndzùrù/	'relative'

The Phoneme /s/

   /s/ is realized as the voiceless alveolar fricative [s] in

some environments and as a voiceless pre-palatal fricative [š] in
others. /s/ becomes [š] when it precedes front vowels and it remains
[s] when it precedes non-front vowels. The distribution is represented
as follows:

/s/ ———→ [š̌] /-v [+ front]

       [s] /-v [- front]

Examples.

[ší]	/sí/	'scratch' / 'look after'
[sú]	/sú/	'descend'
[éšT]	/ésT/	'bridge'
[òsú]	/òsù/	'hoe'
[sɔ́]	/sɔ́/	'ring'

s/z

/sú/	[sú]	'descend'
/zú/	[zú]	'kill'
/èsù/	[èsù]	'hoe'
/èzù/	[èzù]	'snake'

The Phoneme /z/

/z/ is realized as the voiced alveolar fricative [z] in some
environments and as a voiced pre-palatal fricative in others. /z/ be-
comes [ž] when it is followed by front vowels whereas it becomes [z]
when it is followed by non-front vowels. The distribution is as follows:

/z/ ———→ [ž] /-v [+ front]

       [z] /-v [- front]

Examples

[ží]	/zì/	'winnow'
[zú]	/zú/	'kill'
[òží]	/èzí/	'nail' (finger)
[èzù]	/èzù/	'snake'

z/s   see   s/z

The Phoneme /nd/.

/nd/ is an alveolar pre-nasalized stop realized as such in all environments of occurrence. It is a single unit which contrasts with other sounds.

nd/d   see   d/nd

nd/n

/ndó/ [ndó]	'go'	/ná/ [ná]	'swim'
/súndú/ [súndú]	'hang'	/wúnú/ [wúnú]	'where'

nd/ndz

/ìndú/ [ìndú]	'type of tree'	/ìndzùrù/	'relative'
/èdzàndà/	'spear grass'	/bòndzòrò/	'spit'

The Phoneme /ndz/

/ndz/ is the voiced pre-nasalized alveolar affricate which becomes the pre-palatal pre-nasalized affricate when followed by the front vowel [i] and remains [ndz] whne followed by non-front vowels.

The following formular represents the distribution.

/ndz/ ⟶ [nj] /-v [+ front]

[ndz] /-v [- front]

The following examples illustrate this distribution.

[ìnjì] /ìndzì/   'a type of juju'

[kònjírí] /kòndzírí/   'a type of juju'

[èndzòrò] /èndzòrò/   'sheep'

[ìndzùrù] /ìndzùrù/   'relative'

ndz/nd   see   nd/ndz

ndz/n

/ìndzùrù/ [ìndzùrù]   'relative'   /ìnù/   'message'

/bòndòrò/   'spit'   /ónòmò/   'tongue'

The Phoneme /n/

/n/ is realized as the voiced alveolar nasal. It is established as a phoneme on the basis of its contrast with other nasal sounds.

n/m   see   m/n

n/ɲ

/yíní/ [yíní]   'when'   /bíɲí/ [bíɲí]   'four

/èní/ [èní]   'what'   /èɲìmì/   'animal'

n/ŋ

/tánò [tánò]   'circumcise'   /téŋó/   'count'

/ìtìní/ [ìtìní]   'base' (of tree)   [ócíŋí]   'fear'

The Phoneme /ɲ/

/ɲ/ is realized as the voiced palatal nasal. It is known to contrast with other nasals even though no minimal pairs emerge.

ɲ/n   see   n/ɲ

ɲ/y

/kàɲī/ [kàɲī]	'cameleon'		/mbàyì/	'type of dance'
/ɲíná/ [ɲíná]	'mend'		/yímbí/	'sing'

ɲ/ŋ

/ɛ̀ɲúmbū/	'plum'		/kɔ̀ŋú/ [kɔ̀ŋù]	'book'
/kɔ̀kèɲɔ̀/	'horse'		kádóŋá/	'hamlet'
/kàɲī/ [kàɲī]	'cameleon'		[óċíŋí]	'fear'

The Phoneme /l/

/l/ is realized as the voiced alveolar lateral in all environments. It is known to contrast with other sounds.

l/d   see   d/l

l/r

/húlú/ [húlú]	'pack'		/húrú/ [húrú]	'divert'
/ɛ̀ŋgúlú/	'clay'		/ɛ̄ŋgúrú/	'chin'
/kílí/ [kyílyí]	'remain'		/kírí/ [kyírí]	'swear'
/kúlú/ [kúlú]	'meet'		/kúrú/	'tie'

l/y

/lí/ [lyí] 'hide'   /yɤ/ [yɤ] 'plant' (corn)

/lú/ [lú] 'go out'   /yǔ/ [yǔ] 'roast'

The Phoneme /r/

/r/ is the alveolar vibrant realized as such in all environments. It is voiced.

r/l   see   l/r

r/y

/rúhú/ [rúhú] 'poison'   (vb) /yúhú/ 'weed'

/rí/ [rí]   'eat'   /yɤ/ [yɤ]   'plant' (corn)

r/d

/rí/   'eat'   /di/ [dyí]   'look'

The Phoneme /y/

/Y/ is realized as the voiced palatal glide or semi-vowel. It contrasts with alveolar sounds.

y/r   see   r/y
y/n   see   /y
y/l   see   l/y

y/z

/yǔ/   'roast'   /zú/   'kill'

/yɤ/ [yɤ] 'plant' (corn)   /zí/ [ží] 'winnow'

The Phoneme /k/

/k/ is realized as the voiceless velar stop in all environments. It contrasts with its voiced counterpart and the voiceless labio-velar stop.

k/g

/kǒ/ [kǒ]	'wait'		/gǎ/ [gǎ]	'cut'	
/kùmú/ [kùmú]	'nail' (vb)		(vb) /gùmú/	'pay'	
/kílí/ [kyílyí]	'end' (vb)		(vb) [gyílyí]	'wing'	
/ɔ̀kɔ̀rɔ̀/ [ɔ̀kɔ̀rɔ̀]	'wheel'		/ègɔ̀rɔ̀/	'flute'	

k/kp

/kírí/ [kyírí]	'swear'	/kpírí/ [kpírí]	'burn'
/kìkìsì/ [kìkìší]	'hoof'	/kìkpísī/ [kìkpíší]	'maggot'

The Phoneme /g/

/g/ is always realized as the voiced velar stop. It contrast with other velar as well as labio-velar sounds.

g/k   see k/g

g/w

/ɔ́gā/ [ɔ́ŋā] 'thing' (concrete)		/ɔ̀wɔ̀/ [ɔ̀ɣɔ̀]	'tadpole
/gùmú/ [gùmú] 'pay'		/wúsú/ [wúsú]	'germinate'

g/gb

/gílí/ [ŋyílyí] 'wring'		/gbírí/ [gbírí]	'whip'
/gàmá/ [gàmá] 'separate'(fighters)	/gbɔ̀rɔ́/		'sew'

g/ŋg

      /ɡə́/ [ɡə́]   'cut'   /ŋɡə́/ [ŋɡə́] 'imitate'

The Phoneme /ŋɡ/

/ŋɡ/ is considered a single unit and is realized as the pre-nasalized velar stop. It is always voiced.

ŋɡ/ɡ   see   ɡ/ŋɡ

ŋg/ŋ

      /nàŋɡə́/ [nàŋɡə́]   'deceive'   /tə́ŋə́/ [tə́ŋə́]   'count'

      /sìŋɡí/ [šìŋɡyí]   'wipe'   /ótsíŋí/ [ócíŋí] 'fear'

ŋg/ŋgb

      /ɔ́ŋɡə́/ [ɔ́ŋɡə́]   'honey'   /ɔ̀ŋɡbà/ [ɔ̀ŋɡbà] 'bow'

      /ɔ́βə́ŋɡə̀/ [ɔ́βə́ŋɡə̀] 'sky'   /bɔ̀ŋɡbà/   'flour'

      /yìŋɡírí/   'forget'   /kâŋɡbìì/   'weak'

The Phoneme /ŋ/

/ŋ/ is realized as the voiced velar nasal in all environments. It contrasts with other velars as well as pre-nasalized sounds.

ŋ/n   see   n/ŋ

ŋ/ŋɡ   see   ŋɡ/ŋ

ŋ/ɲ   see   ɲ/ŋ

ŋ/ŋgb

      /kə́də́ŋə́/ [kə́də́ŋə́] 'hamlet'   /bɔ̀ŋɡbà/   'flour'

      /ótsíŋí/ [ócíŋí]   'fear'   /kâŋɡbìì/ 'weak'

The Phoneme /kp/

/kp/ is realized as the voiceless labio-velar stop. It is recognized as a phoneme on the basis of its contrast with other sounds, with which it forms suspicious pairs.

kp/k   see   k/kp

kp/ɲ   see   p/kp

kp/gb

       /kpírí/ [kpírí] 'burn'   /gbírí/ [gbírí] 'whip'

       /ɔ́kpɔ̄/ [ɔ́kpɔ̄] 'to die'   /ɔ́gbɔ̄/ [ɔ́gbɔ̄] 'to faint'

The Phoneme /gb/

/gb/ is realized as the voiced labio-velar stop.

gb/kp   see   kp/gb

gb/b   see   b/gb

gb/g   see   g/gb

gb/ŋgb

       /ɔ́gbɔ̄/ [ɔ́gbɔ̄] 'to faint'   /ɔ̂ŋgbɔ̀/ [ɔ̂ŋgbɔ̀] 'bow'

       /gbírí/ [gbírí] 'whip'   /kâŋgbìì/ 'weak'

The Phoneme /ŋgb/

/ŋgb/ is considered as a single unit. It is realized as the pre-nasalized labio-velar stop. It is voiced.

ŋgb/ŋ   see   ŋ/ŋgb

ŋgb/gb   see   gb/ŋgb

ŋgb/ŋg   see   ŋg/ŋgb

The Phoneme /w/

/w/ is realized as the voiced labio-velar glide [w] in some environments and in others it is realized as the voiced velar fricative [ɣ]. [w] precedes only back vowels. [w] might be found to precede the central vowel [a] in a few words. This situation is caused by the occurrence of [u] and [a] together most probably in a compound word. The [u] in this case is suppressed and what remains is [a]. This is the case with a word like [èwù-akárá] 'sugar cane' which is realized as [èwà-kárá]. [ɣ] precedes non-back vowels. The distribution is as follows.

/w/ ⟶ [ɣ] /-v [- back]

      [w] / -v [+ back]

The follwoing words are illustrations of this distribution.

[sàɣá]	/sèwá/	'start' (vehicle)
[ɔ̀ɣà]	/ɔ̀wà/	'tadpole'
[cìɣìrí]	/tsìwìrí/	'tickle'
[èwù] /èwù] /èwù/		'elephant grass'
[wɔ̀mú]	/wɔ̀mú/	'remain'

w/g   see g/w

w/y

/wǔ/ [wǔ] 'grind'   /yǔ/ [yǔ] 'roast'

3.2. Vowels

3.2.1. Phonetic Realization

Esimbi has nine vowels, three front vowels, three central and three back vowels. Out of the nine vowels only eight of them are pertinent or distinctive. The central unrounded high vowel [ɨ] is only an allophone of the high back rounded vowel /u/. Table 3 below shows all the vowel sounds in the language.

PHONETIC VOWEL CHART

POSITION OF TONGUE TONGUE HEIGHT OF TONGUE	FRONT UNROUNDED	CENTRAL UNROUNDED	BACK ROUNDED
HIGH	i	ɨ	u
MID	e	ə	o
LOW	ɛ	a	ɔ

Table 3

The vowels have a somewhat restricted distribution in words of the language with more of the vowels occurring in prefixes and a limited number occurring in roots. The root vowels are /i/, /u/, [u], [ɨ] and /ə/. These vowels can also be found in prefixes with the exception of [ɨ] which occurs only in roots.

3.2.2. Phonemic contrasts.

There are eight vowel phonemes classified according to the position of tongue and lips and also the height of the tongue. Table 4 indicates the vowel phonemes in the language.

PHONEMIC VOWEL CHART

POSITION OF TONGUE AND LIPS / HEIGHT OF TONGUE	FRONT UNROUNDED	CENTRAL UNROUNDED	BACK ROUNDED
HIGH	i		u
MID	e	ə	o
LOW	ɛ	a	ɔ

Table 4

The problem of obtaining minimal pairs in the case of vowels is reduced. There are still a few cases where it is difficult to get minimal pairs. In this case the environment of occurrence of the vowels will be examined and near minimal pairs will be used. The evidence for considering the vowels on table 4 as phonemes is based on the following contrasts.

The Phoneme /i/

/i/ is realized as the high front unrounded vowel in all

environments. It contrasts with /e/, /ə/ and /u/.

i/e

/íɡí/ [íŋyí]	'fly' (n)		/éɡí/ [éɡyí]	'egg'
/ísí/ [íšī]	'eye'		/ə̀sì/ [ə̀šì]	'monkey'
/kíhúrú/ [kíhúrú]	'shell'		/kéhúrú/	'crocodile'
/íbírí/ [íbírí]	'war'		/ébírí/ [ébírí]	'valley'

i/ə

/mǐ/ [mǐ]	'swallow'		/mə̌/ [mə̌]	'mould'
/kírí/ [kyírí]	'swear'		/kə̀rə́/ [kə̀rə́]	'report'
/kétí/ [kétyí]	'mountain'		/kétə́/	'tree'
/óbírí/ [óbírí]	'rain'		/óbə́rə́/	'wall'

i/u

/zí/ [ží]	'winnow'		/zú/ [zú]	'kill'
/tsǐ/ [cǐ]	'touch'		/tsǔ/ [tsǔ]	'rotten'
/sí/ [ší]	'look after'		/sú/ [sú]	'descend'
/kírí/ [kyírí]	'swear'		/kúrú/ [kúrú]	'tie
/mǐ/ [mǐ]	'swallow'		/mú/ [mú]	'drink'/'smoke'

The Phoneme /e/

/e/ is always realized as the mid front unrounded vowel. It is a phoneme on the basis of its contrast with other vowel sounds with which it constitutes suspicious pairs. Such sounds are [i] [ɛ] and [ə].

eli   see   ile

e/ɛ

/étí/ [étyí] 'stone'   /ɛ̀tí/ [ɛ̌tyí] 'stones'

/lésə̄/ [ésə̄] 'market'   /ɛ́sə̄/ [ɛ́sə̄] 'markets'

/ézī/ [óžī] 'finger nail'   /ɛ́zī/ [ɛ́žī] 'soil'

/ésī/ [éšī] 'bridge'   /ɛ́sī/ [ɛ́šī] 'bridges'

/ə̀pə̀nə̀/ [ə̀pə̀nə̀] 'story'   /ɛ̀pə̀nə̀/ 'argument with elders'

e/ə

/ə̀rə̀/ [érə́] 'resemblance'   /ə́rə́/ 'resemble'

/kédzə̀/ [kédzə̀] 'elephant'   /ə́də́ŋə́/ 'hamle'   çè

ThePhoneme /ɛ/

/ɛ/ is realized as the mid front unrounded vowel. It contrasts with other vowels as follows.

ɛ/e   see e/ɛ

ɛ/a

/ɛ́tə̄/ [ɛ́tə̄] 'buttock'   /átə̄/ [átə̄] 'buttocks'

/kɛ́kpə́/ [kɛ́kpə́] 'scar'   /kákpə́/ [kákpə́] 'hut'

/ɛ̀ɲúmbu/ [ɛ̀ɲm̂bū] 'plum'   /àɲúmbū/ 'plums'

ɛ/ə

/kɛ́nə́/ [kɛ́nə́] 'one'   /kə́mə́/ [kə́mə́] 'squeeze'

/kɛ́tí/ [kɛ́tyí] 'mountains!'   /kə́bə́/ 'pinch'

The Phoneme /a/

/a/ is realized as the low, central unrounded vowel. It contrasts with other vowels as follows.

a/ε   see   ε/a

a/ɔ

/ámbə́/ [ámbə́] 'twins'   /ɔ́mbə́/ [ɔmbə] 'twin'

/báкú/ [bákwú] 'ladders'   /bɔ́kú/ [bɔ́kwú] 'ladder'

/ádzū/ [ádzū] 'mouths'   /ɔ́dzū/ [ɔ́dzū] 'mouth'

/āwúmū/ [āwúmū] 'animal   /ɔ̄wúmū/ 'animal track'
          tracks'

a/ɔ

/bànù/ [bànù] 'salt'   /bə́nə́/ [bə́nə́] 'type of
                                                cane'
/kàrə́ndə́/ 'type of bag'   /kàrɔ̀mbɔ̀/ 'type of
                                         mushroom'

The Phoneme /ɔ/

/ɔ/ is realized as the low, back rounded vowel. It
is considered a phoneme on the basis of the following
contrasts.

ɔ/a   see   a/ɔ

ɔ/o

/ɔ́tu/ [ɔ́tu] 'river'   /ótu/ [ótu] 'ear'

/ɔ́gə/ [ɔ́gə] 'thing'(concrete) /ògə́/ 'calabash dish'

/ɔ̄tə̄mə̄/ [ɔ̄tə̄mə̄] 'jaw'   /ōtə̄mə̄/ 'chest'

/ɔ̄nə̄mə̄/ [ɔ̄nə̄mə̄] 'tongues'   /ōnə̄mə̄/ 'tongue'

ɔ/ə

/bɔ̀rə̀/ [bɔ̀rə̀] 'soot'(ceiling) /bə́rə́/ 'cover' (n)

/bɔ̀mbə̀/ [bɔ̀mbə̀] 'wine'   /bə́nə́/'type of cane'

The Phoneme /o/

/o/ is realized as the mid, back rounded vowel, in all environments of occurrence. It contrasts with other vowels as follows.

o/ɔ   see   ɔ/o

o/u

/ógúrú/ [ógúrú] 'foot'   /úgùrú/ [úgùrú] 'test'(n)
/kòwú/ [kòwú]   'needle'   /kùkùn/ [kùkùn] 'canoe'

o/ə

/kòwú/ [kòwú]   'needle'   /kònísi/ [kònísi] 'sweat'
/bòdì/ [bòdyì] 'tears'   /bə́nə́/ [bə́nə́] 'type of
                                              cane'

The Phoneme /u/

The phoneme /u/ is realized as the high, back, rounded vowel [u], in some contexts and as the high, central, un-round vowel. [ɨ], in others. /u/ is realized as [ɨ] only in disyllabic roots. When [u] is followed by a non-back vowel in the second syllable of the root it is realized as [ɨ]. If [u] is followed by a back vowel it remains [u] and when it occurs in the prefix it remains [u]. The distribu-tion can be represented as follows.

/u/ —— [ɨ] /-cv [- back]

        [u] /-cv [+ back]

Examples:

    [hɨndyí] /húndí/   'run'

    [kɨší] /kúsí/   'cough'.

    [tsɨbə́] /tsùbə́/   'set up scarecrow'

    [húlú] /húlú/   'pack'

    [kùsú] /kùsú/   'buy'

    [ú-jí] /ú-dzí/   'distance'

The last word is an example of a word in which /u/ remains [u] because it occurs in the prefix. The only word which is a counter example is [bɔ́fɨŋgú] 'marrow'. This is very likely to be a compound word.

u/i   see   i/u

u/o   see   o/u

u/ə

    /tú/ [tú] 'abuse'   /tə́/ [tə́] 'abandon'

    /ótu/ [ótu] 'ear'   /ótə/ [ótə] 'spear'

    /èkùrù/ [èkùrù] 'stump on   /èkə̀rə̀/ 'wheel'
                     the face'

The Phoneme /ə/

The sound [ə] is considered as a phoneme because it contrasts with the sounds [ɨ] and [u] in the same position, that is, one easily finds minimal pairs to contrast them. When put together with [o] and [e] the contrast is not very clear, because of the lack of minimal pairs. Perhaps more

studies on the noun classes could establish [ə] as an allo-
phone of [e]. In this case the distribution will be mor-
phologically conditioned. The following contrasts accounts
for the phonological status of [ə].

ə/i	see	i/ə
ə/u	see	u/ə
ə/o	see	e/ə
ə/ɛ	see	ɛ/ə
ə/ɔ	see	o/ə
ə/a	see	a/ə

There are therefore eight distinctive vowel phonemes
in Esimbi.

3.3. Phoneme Distribution in Syllables.

There are five syllable structures, as has already
been discussed in chapter 2. They are:

    V

    CV

    CVN   where N = ŋ, n.

    CCV

    CSV

From the structures listed above, it can be observed that
there is a maximum of two consonant positions in the syllable.
It can also be observed that, but for the CVN structure

which is closed all the syllables are open.

The V syllable constitutes prefixes and the only vowels that can stand alone as syllables are the following /i, e, ε, a, ɔ, o, u/. The central vowels [ɨ] ^{which} is an allophone of /u/, and [ə] which is a phoneme on its own do not occupy this position.

The CV syllable structure is the most predominant, occurring in prefixes as well as in roots.

The following tables show the possible combinations of single consonants in syllable onset and vowels in syllable peak.

Table 5.

'+' indicates an attested combination.

'-' indicates lack of such a combination.

Table 6 indicates attested combinations which are prefixes.

Roots

	i	e	ɛ	a	ə	ɔ	o	u
p	+	−	−	−	+	−	−	+
b	+	+	+	+	+	+	+	+
t	+	+	+	+	+	+	+	+
d	+	−	−	+	+	−	−	+
k	+	+	+	+	+	+	+	+
g	+	+	−	−	+	+	−	+
kp	+	−	−	−	+	−	−	+
gb	+	−	−	−	+	−	−	−
ts	+	−	−	+	+	−	−	+
dz	+	−	−	−	+	−	−	+
B	+	−	−	+	+	+·	+	−
f	+	−	−	−	+	−	−	+
v	+	−	−	−	−	−	−	+
s	+	+	+	−	+	+	+	+
z	+	−	−	−	−	−	−	+
h	−	−	−	−	+	−	−	+
mb	+	−	−	+	+	−	−	+
nd	+	−	−	+	+	−	−	+
ndz	+	−	−	−	+	−	−	+
ŋg	+	−	−	−	+	−	−	+
ŋgb	+	−	−	−	+	−	−	−
m	+	−	−	+	+	−	−	+
n	+	−	−	−	+	−	−	+
ny	+	−	−	+	+	−	−	+
ŋ	+	−	−	−	+	−	−	+
l	+	−	−	+	+	−	−	+
r	+	−	−	−	+	−	−	+
y	+	−	−	+	+	+	−	+
w	+	−	−	−	+	+	−	+

vowels in syllable peak

Consonants in syllable onset

Table 5

Prefixes   vowels in syllable peak.

		i	e	ɛ	a	ə	ɔ	o	u
	b	+	+	+	+	+	+	+	+
	l	+	+	+	+	−	−	−	−
Consonants in syllable onset	k	+	+	+	+	+	+	+	+
	β	−	−	−	−	+	+	+	−
	s	−	+	+	−	−	+	+	−
	y	−	−	−	−	+	+	−	−
	w	−	−	−	−	−	+	−	+

Table   6

Table 5 shows that the most regular vowels which follow almost all the consonants are /i, u, e/. We can deduce from table 6 that the consonants which can combine with vowels to form CV prefixes are somehow restricted. The following seven consonants are capable of forming prefixes /b, t, k, s, β, w, y/. Again certain correspondences between table 5 and 6 show that some combinations are attested in roots as well as in prefixes. These combinations are /ki, ka, kə, ku, bi, bə, bu, βə, wu/.

It has already been seen that the only closed syllable structure is CVN. It should be noted that this structure can only be found at morpheme final position and where there is a consonant cluster comprising a velar nasal which is not homorganic with the following consonant.

The following are examples.

/pìŋní/ 'greet' pìŋ.ní CVN.CV

/mbwàlə̀ŋ/ 'potatoes' mbwà.lə̀ŋ CSV.CVN

/nàtsə́n/ 'with' nà.tsə́n CV.CVN

The CCV syllable pattern is one with a restricted distributional pattern. C_1 position can only be occupied by the following two consonants /ŋg/ and /k/. On the other hand C_2 can only be /l/. So far the only vowels which have been found to occupy the vowel peak position are /ə/ and /a/. This can be a result of limited data.

Examples of this distribution are as follows.

C_1 C_2 V

ŋg. l. ə   ŋglə́ 'lick' CCV

ɛ- k. l. ə   ɛ̀.klə̀ 'place' V.CCV

i- ŋg. l. a   í.ŋglə̀kə 'charcoal' V.CCV.CV

The CSV pattern *is* / quite limited in occurrence. The position of the semi-vowel can only be occupied by /w/. There could potentially be a wide range of consonants that fit in at C_1 position with a larger corpus, but with the corpus at hand only /mb/ and /g/ occupy this position. There are indications that vowels following the semi-vowel could only be the central vowel. /a/ or the back vowels/o/ and /ɔ/ as evident in the following words.

/mbwàlə̀ŋ/   'potatoes'

/gwɔ̀gú/   'duck'

/gwògwòtú/   'swan'

CHAPTER FOUR.

MORPHEME AND WORD STRUCTURE.

4.1. Morpheme Structure.

In dealing with the morpheme attention will only be paid to roots and prefixes. No attention has been paid to suffixes and derivations in this study. Morpheme patterns which have been attested in the language are as follows:

> V
>
> CV
>
> CCV
>
> CV.CV
>
> CV.CVN
>
> CV.CV.CV

The V morpheme structure is essentially made up of prefix vowels. The CV structure is found in prefixes as well as in roots. The following are CV prefix morphemes:

Word		Prefix root
kɛ̄-yinə̄	'medicine'	CV-CV.CV
kɔ́-túmú	'jigger'	CV-CV.CV
kʌ̀-wù	'gorilla'	CV-CV

Here are examples of CV root morphemes:

CV

/tsú/ 'pound'

/ʃɔ́/ 'ring'

The rest of the structures are roots:

CCV

/ŋglə́/ 'lick'

CV.CV

/kúrú/ 'tie'

/rìhí/ 'sink'

CV.CVN

/nàtsə́n/ 'with'

CV.CV.CV

/súhúrú/ 'tilt'

/píwírí/ [píɣírí] 'fold'

The most predominant structures are:

V, CV, CV.CV and CV.CV.CV.

4.2. Word Structure.

Words differ from morphemes in that they consist
of roots, affixes and other morphological units, whereas
morphemes can be made up of only one of these word com-
ponents. Generally words are larger than morphemes. The
following patterns emerge from non-compound Esimbi words:

CV

V.CV

CV.CV

V.CCV

V.CCV

CV.CCV

V.CCV.CV

CV.CV.CV .

V.CV.CV

CSV.CV

CSV.CVN

The following examples substantiate the various patterns.
A hyphen is used to differentiate the prefix from the
root.

<u>CV</u>

/ŋgə́/   'imitate'

/bú/   'take'

<u>CCV</u>

/ŋglə́/   'lick'

<u>CV.CV</u>

/bɔ̀-rə̀/   'scot' (on pot)

<u>V̄CV̄</u>

/ɔ̀-yù/   'sun'

/ɛ́-tí/   'stone'

<u>CV.CCV</u> .

/bɛ́klə́/   'three'

<u>V.CCV</u>

/ɛ̀-klə̀/   'place'

<u>V.CCV.CV</u> .

/i-ŋglɑkə̄/   'charcoal'

<u>CV.CV.CV</u>

/kí-pùrū/   'blister'

/sə́mbə́rə́/   'scatter'

<u>V.CV.CV</u>

/ɛ̀-ɲimì/ 'animal'

/ó-húrú/ 'change' (n)

<u>CSV.CVN</u>

/mbwàlə̀ŋ/ 'potatoes'

<u>CSV.CV</u>

/gwɔ̀gú/ 'duck'

The most predominant patterns are the CV, V.CV, CV.CV,

V.C ⎯ ⎯ n⎯ CV.CV.CV.   The rest of them are

restricted in occurrence.

4.3. <u>Phoneme Distribution in root morphemes</u>.

4.3.1. <u>Vowels</u>.

In monosyllabic roots of the form CV there

is a wide range of consonants occupying the C position

but there is restriction on the vowels that follow.

With the exception of /ndz/ all the consonants can

occupy this position. The vowels which occupy the vowel

position are /i, ə, u/.

In the case of disyllabic roots of the form

CV_1 CV_2, V_2 is usually a reduplication of V_1. In the

same way as with monosyllabic roots the vowels that

occupy these positions are restricted to /i, ə, u/.

There are however a few exceptional cases where V_1 could

be a different vowel like /a/ or [ɨ̀] followed by

/ə/ or /i/. These are some of the exceptions:

/ì-kàké/ 'grass used for mats'

/kì-yàanə̄/ 'plantains'

[tsɪ̀bə́] /tsùbə́/ 'set up scarecrow'

[kɪ̌sí] /kúsí/ 'cough'

The following table indicates the co-occurrence of vowels in $CV_1.CV_2$ roots.

V2

	l	e	ɛ	a	ə	ɔ	o	u	
i	+	-	-	-	+	-	-	-	/ucə/ = [tcə]
e	-	-	-	-	-	-	-	-	/uci/ = [tci]
ɛ	-	-	-	-	-	-	-	-	
a	-	-	-	-	+	-	-	-	
ə	+	-	-	-	+	-	-	-	
ɔ	-	-	-	-	-	-	-	-	
o	-	-	-	-	-	-	-	-	
u	+	-	-	-	+	-	-	+	

V_1 (row labels), V2 (column labels)

Table 7.

'+' = attested combination

'-' = unattested combination.

4.3.2. Consonant Distribution

Table 8 below deals with the distribution of consonants in root morphemes. The first column deals with consonants at morpheme initial position.

- Column two indicates consonants that could follow a prefix which ends with a vowel.

- Column three deals with consonants appearing inter-vocalically.

- The last column deals with consonants that appear at final position of morphemes.

Consonant Distribution

	# -	V#-	V-V	-#
p	+	+	+	-
b	+	+	+	-
t	+	+	+	-
d	+	+	+	-
k	+	+	+	-
g	+	+	+	-
kp	+	+	-	-
gb	+	+	-	-
ts	+	+	-	-
dz	+	+	-	-
6	+	+	+	-
f	+	+	+	-
v	+	+	-	-
s	+	+	+	-
z	+	+	-	-
h	+	+	+	-
mb	-	+	+	-

nd	+	+	+	−
ndz	−	+	−	−
ŋg	+	+	+	−
ŋgb	−	+	−	−
m	+	+	+	−
n	+	+	+	+
ny	+	+	+	−
ŋ	−	−	+	+
l	+	−	+	−
r	+	+	+	−
y	+	+	+	−
w	+	+	+	−

Table 8.

From the table one can draw the following conclusions about the distribution of consonants in root morphemes.

- /ndz/ and /ŋgb/ have the most restricted position of occurrence, that is only morpheme initial position when preceded by a vowel prefix.

- Almost all the other consonants can appear morpheme initially, inter-vocalically and morpheme initially preceded by a vowel prefix.

- /n/ and /ŋ/ are the only consonants that end words or morphemes in the language.

4.4. Verb roots.

Most verb roots are of the form CV, CCV, CVCV and CVCVCV. The only form which is limited in occurrence is the CCV with only one example in the corpus available.

CCV
/ŋglə́/ 'lick'

CV

/kə̀/ 'wait'

/hǜ/ 'shave'

/té/ 'abandon'

/mú/ 'drink'/'smoke'

CVCV
/pìsí/ [pìśí] 'tilt'

/túnú/ 'deny'

/kə́bə́/ 'pinch'

/dzùŋgə́/ [dzt̀ŋgə] 'write'

CVCVCV
/mímbírí/ 'twist'

/yə̀bə́rə/ 'yawn'

/dúwúrú/ 'pick'

The verb roots are in the imperative form.

4.5. Noun Roots.

Noun roots have the same forms as the verb roots. The only exception is the CVCVCV verb form which is not present in noun roots. The following noun roots

occur CV, CCV, CVCV, and CCVCV. These forms will be
presented together with their prefixes in order to faci-
litate comprehension.

CV
/ɛ́-dù/ 'an element like candle'

/è-wù/ 'elephant grass'

/kì-kpì/ 'time'

/ká-zú/ 'camwood'

CCV
/ɛ̀-klè/ 'place'

CVCV
/ó-kúrù/ 'cluster of bananas'

/kì-hùrù/ 'type of shrim'

/lè-pènè/ 'story'

/é-bírí/ 'valley'

CCVCV
/ì-ŋglàkə/ 'charcoal'

The last syllable in this word is likely to be a suffix.

This is because in the rest of the words with the CCV
there is no following syllable. In other words the CCV syllable
syllable/ends the word or morpheme. If the last syllable

is thus considered as a suffix this form is then reduced

to CCV noun root. Lack of more examples has called for

this proposition. It is possible that lack of examples

is a result of limited data, or that this form does not

exist at all.

4.6. Vowel Harmony

According to Stallcup (1980: b) vowel harmony once existed in Esimbi. He claims that if the vowel of the root is high the vowel of the prefix is also high, if mid, the vowel of the prefix is mid and if low the vowel of the prefix is also low. The vowels are thus classified as follows:

High - /i/, [ɨ], /u/

Mid - /e/, /ə/, /o/

Low - /ɛ/, /a/, /ɔ/.

This means that it is not possible to get a mixture of vowels from any of the three groups in one word, precisely root vowel from one group and prefix vowel from another.

Due to some historical changes this situation has changed. The prefixes of nouns are no longer separable from the roots because of the transfer of vowel height information from the root to the prefix. In the present state of the language the vowel harmony situation has been eliminated. That is why one easily finds words in the language with a combination of both high and low vowels in roots and prefixes. Examples:

/ɔ́-búrú/ 'tiredness'

/bɛ̀-rìŋgí/ 'soup'

/kɔ̀-fə̀ŋə́/ 'shield'

Vowel harmony in root morphemes has already been discussed in section 4.3.1. where V_2 is usually a reduplication of V_1 in $CV_1 CV_2$ structures.

CHAPTER FIVE.

SUPRASEGMENTAL PHONOLOGY.

This chapter will examine some important features like vowel length and tone. Esimbi like many other African languages is a tone language, that is, a language in which both segmental and pitch phonemes, otherwise known as tones, go into the composition of words. In tone languages words can be distinguished on the basis of segments as well as on the basis of tones.

5.1. Vowel Length

Vowel length in Esimbi has both a phonological and phonetic status. An examination of some of the words with long vowels shows contrast with short ones, but in some cases there is no contrast. The only vowels that show contrast between long and short vowels are /u/, /ɔ/ and /ə/. The following words indicate the contrast.

/mú/ 'sit'   /múú/ 'think'/'remember'

/tú/ 'abuse'/'sell'   /túú/ 'draw water'

/mə́/ 'mould'   /məə́/ 'put'

/ɔ́tú/ 'river'   /ɔ́ɔtú/ 'spoon'

The following long vowels [ee] [ɛɛ] [aa] can also be found in the language but they do not contrast with their short counterparts. These sounds are found in the following words.

[eèmbi] 'storm'

[èènü] 'container made from barks of trees'

[kiyàànə] 'plantain'

There are relatively few words in the language with long

vowels. It becomes difficult to define the status of

long vowels as pertinent or not.

Tones.

        There are basically five tones in Esimbi with

three register and two contour tones. These tones are

pertinent in the language and the evidence for considering

them as such will be given under the section 'Phonemic

tone Contrast'.

5.2.1. Phonemic Tone Contrast.

        John Walters (1984) assets that for Bantoid

languages in general most lexical items cannot be dis-

tinguished only by tone from segmentally identical items.

This is particularly true as far as Esimbi is concerned

because of the scarcity of words that are distinguishable

by tone alone. However few words can still be found with

contrast only at the level of tones. One possible expla-

nation to this lack of contrast is the multi-syllabic

nature of the words.

        The following tones exist in Esimbi, / high,

\ low, — mid, ∧ falling and ∨ rising. These tones can

be justified by the following contrasts.

High/Low Contrast

     /húndí/   [híndyi]   /hìndí/   [hìndyi] 'cook'

     /èkùrú/   'snail'   /èkùrù/   'cow horn'

Low/M id Contrast

     /ínù/   'message'   /inū/   'knee'

High/Rising Contrast

     /tsú/   'pound'   /tsǔ/   'rotten'

     /sú/   'descend'   /sǔ/   'wash'

Rising/Falling Contrast

     /kǎkpə̄/   'insect'   /kâkpə̄/   'equal'

Apart from these contrasts at one position only, there
are other words in which tones contrast at two different
positions in the same words. The following words are
examples:

     /èzí/ [èží] 'grand mother' /ézì/ [éžì] 'soil'

     /kákpə́/ 'hut' /kǎkpə̄/ 'insect'

     /kìtù/ 'assembly' /kītú/ 'iron metal'

     /ísú/ 'fish'   /ìsù/ 'calabash'

These few tonal contrasts however give evidence for con-
sidering the five tones in the language as pertinent.

5.2.2. Lexical Tone.

     Lexical tone is tone found on single lexical
items, that is, words out of context. All the five tones
appear on lexical items. Verbs which are all imperative

carry either high or rising tones on monosyllabic verbs,
a sequence of high-high or low-high on dissyllabic verbs,
and a sequence of high-high-high or low-low-high or low-
high-high on trisyllabic verbs. Examples:

/tú/ 'abuse'   /tsǔ/ 'rotten'

/kílí / [kyílyí] 'end' (v) /gùmú/ 'pay'

/fíwírí/ [fíɣírí] 'swing'

/tsìwìrí/ [cìɣìrí] 'tickle'

/yìmbírí/ 'sharpen'_

Lexical tone can also be defined in terms of difference
between lexical tone and grammatical tone. Much has not
been done in this paper on grammatical tone, therefore
the few examples given below are meant just to indicate
how lexical tone differs from grammatical tone.

/bónímbí/ 'net' /bònìmbì/ 'nets'

The low tones on the plural form of 'nets' /bònìmbì/ are
not   lexical tones but   grammatical tones. This is
because the plural form of the word is obtained only by
replacing the high tones by low ones. Change of tone
in the following words also changes the words from singular
to plural. In a sense the lexical tone is changed to a
grammatical tone.

/èwù/ 'elephant grass stem'

/éwú/ 'elephant grass stems'

/ìsù/ 'calabash'   /īsú/ calabashes.

This phenomenon could be quite widespread in the language but this study didn't allow for a more indepth investigation in view of the time constraints.

5.2.3. <u>Monosyllabic Noun Roots</u>.

<u>Tone Combinations</u>.

The possible combinations of tones on prefixes and roots of monosyllabic nouns is quite restricted. Not all the possible combinations can occur. With a low tone prefix the following combinations can be found.

<u>Low tone Prefix</u>

- Low tone root

- High tone root

- Mid tone root.

With a high tone prefix we can have the following root tones:

<u>High tone Prefix</u>

- Low tone root

- High tone root

- Falling tone root

- Mid tone root.

The following words are illustrations of the above mentioned combinations.

<u>Prefix-root</u>

L-L   /tà-fù/ 'junction'

         /ɛ̀-sù/ 'hoe'

è-wù 'elephant grass'

L-H

/ò-pí/   'cocoyam flour'

/ò-gə́/   'calabash dish'

/è-zú/   'bee'

L-M

/kì-kū/   [kikwu]   'cap'

/kà-gū/   'hawk'

/bɔ̀-nū̃/   'fight'

Monosyllabic noun roots with high tone prefixes have more
possible combinations than the low tone prefix nouns.

Prefix-root

H-L

/bú-sù/   'cat'

/í-nù/   'message'

/gó-rù/   'kolanut'

H-H

/é-sə́/   'market'

/ɔ́-mbə́/   'twin'

/ká-zú/   'camwood'

H-HL

/ké-bə̂/   'pot'

/ó-rû/   'type of raffia palm'

/í-dzî/   [íjî]   'aerial yam'

H-M

/í-pī/   'hole'

/ɔ́-tū/   'river'

/í-nū/   'knee'

There are no H-M contours or other contours with a M. tone.

Most noun prefixes carry either a low tone or a high tone. In some exceptional cases noun prefixes can be found to carry a mid tone or the falling and rising tones as follows:

/kī-tú/   'iron metal'

/ɔ̄-sə́/   'right to do something'

/sǒ-rú/   'type of fruit'

/kɔ̂-yǔ/   'smell' (n)

5.2.4. Verb Tones.

The distribution of tones on verbs is more regular and systematic than on nouns. It should be noted that the verbs used in this essay are in the imperative form. It will be found that only two tones occur on verbs namely: the high and low.

On monosyllabic verbs only the high and rising tone occur.

/tú/   'abuse'   /nǔ/   'weave'

/tə́/   'abandon'   /mɔ́/   'mould'

/zí/   [ží] 'winnow' /sǔ/   'wash'

It is possible to argue that monosyllabic verbs
have a low tone in the infinitive form and in the
imperative a high tone is added to it such that it becomes
a rising tone.

Infinitive   Imperative

/nù/   +   /   .. / --→ /nú/ 'weave'

/mè/   +   /   ..   /mə̃/ 'mould'

On the other hand verbs with high tones in the infinitive
maintain the high tone in the imperative form.

Infinitive   Imperative

/mú/   +   /   --→ /mú/ 'sit'

/tsú/   +   /   --→ /tsú/ 'pound'

Tones on disyllabic verbs follow the same pattern as on
monosyllabic verbs. There are only two sequences of
either HH or LH.

/húndí/ [híndyí] 'run' /gùmú/ 'pay'

/kílí/   [kyílyí] 'end' /ŋgə̀rə́/ 'kiss'

Trisyllabic verbs still show much regularity on their
tonal patterns. Basically three tone patterns emerge on
trisyllabic verbs. HHH, LLH, LHH.

/mímbírí/ 'twist'

/tsìwìrí/ [ciɣiri] 'tickle'

/yìmbírí/ 'sharpen' (stick)

Having trisyllabic verbs is an indication of the multi-
syllabic nature of the language.

CONCLUSION.

By way of its contribution to scholarship, this study has helped to open up more areas for studies in Esimbi. In this study an attempt has been made to describe the Esimbi language, a language which is quite unique among neighbouring languages. In the description attention has been paid to sound analysis, sound distribution, sound combination and to prosody or suprasegmental phonology. It has been established that there are 21 consonant phonemes and 8 vowel phonemes in the language. It has also been seen that there are 5 suprasegmental phonemes or tones, 3 of which are level and the other 2 are contour.

This study has dealt strictly with phonology. There are still various areas of the language like morphology and syntax which still need to be studied. However this present study constitutes a stepping stone to these aspects of the language yet to be studied. After this study establishing an alphabet would not be a problem.

So far no agreement has been reached on the classification of Esimbi. Various researchers have brought up various points on this issue. This therefore constitutes an area for further research. Because of the restricted nature of this research, nothing has been done on suffixes which have been attested in the language. This might well fit within the scope of morphology.

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