

## **Chapter One**

### **Introduction**

#### **1.0 Introduction**

This chapter introduces an investigation on *Syntactic Tones of Nouns in Bemba*. It starts with a brief background to the study. It also presents information on the geographical and historical position of Bemba in Zambia. The chapter also includes a brief discussion on morphology, phonology and syntax of Bemba language in Zambia in Africa in reference to the classifications of African languages by Joseph Greenberg and Malcom Guthrie. It introduces us to the problem under study, the rationale and goes on to give a brief discussion on the theoretical and conceptual framework under the methodology. The methodology helps to analyse the data while the literature review, gives more information on what has been studied and may be recommended to be studied. The second chapter, the data; captures all the data collected and has been presented in tabular form for easy reference. The third chapter presents the analysis and the findings of the study while the last chapter gives the conclusion and recommendations of the present study.

#### **1.1 Geographical Background**

Bemba is one of the seven regional official languages spoken in Zambia. Others include; Kaonde, Lunda, Luvale, Lozi, Nyanja and Tonga. Bemba is spoken widely; in the Northern Province, Muchinga Province, Luapula Province, the Copperbelt Province and most of the urban areas of Zambia. The native speakers of Bemba are commonly found in the Muchinga, Northern and Luapula Provinces. This study based its investigations on a variety of the Bemba language spoken in Kasama District, known as “Central Bemba” (Kashoki, 1968) also referred to as Standard Bemba. It is a language that is surrounded by other related languages whose influence could be felt in most areas. It also includes several regional

varieties of the language and hence establishing the definite tonal pattern variations on a particular variety of linguistic criteria is a big challenge.

### **1.1.0. Historical Background**

The languages of Africa are a diverse set of languages and may bear very little relation to one another. Also due to the history of colonialism, there is a great deal of influence from European languages. Nonetheless, there are estimated 2000 African languages in Africa which also include; unclassified languages, sign languages and Indo-European or Austronesian languages despite the closest linguistic features being non-African. In the 1950s, Joseph H. Greenberg classified the African languages using a genealogical method and a language were classified by putting them together into families, branches, groups and sub-groups those that were thought to have a common ancestor language. He used morphosemantic similarity, mass comparison as against isolated comparisons between pairs of languages and lastly, he used the linguistic evidence available.

The African languages were classified in four language families as; Afro-Asiatic, Congo-Kordofanian, Nilo-Saharan, and Khoi San. These language families are the ones indigenous to Africa. Congo-Kordofanian was subdivided into its branches, groups and sub-groups. The two main groups were Niger-Congo and Kordofanian as 1A and 1B respectively. According to Miti (2006; 34) Niger-Congo branch is the branch that Greenberg placed the Bantu languages. Greenberg further subdivided Niger-Congo branch into six groups as; West Atlantic (1 A1), Mande (1 A2), Voltaic (1 A3), Kwa (1 A4), Benue-Congo (1 A5) and Adamawa-Eastern (1 A6). He placed the Bantu within the Bantoid subgroup of Benue-Congo after he subdivided Bantoid into seven as: Tiv, Bitare, Batu, Ndoro, Mambila, Bute and Bantu.

As pointed out by Greenberg (1963), the Bantu family comprises a major branch of the Niger-Congo family. One of the salient features or common property still shared by most of the Niger-Congo languages is the noun class system and the vast majority of these languages are tonal. To add on, a British linguist Malcolm Guthrie (1948) classified Bantu languages in the book entitled '*The classification of the Bantu Languages*', and this was after Wilhelm Heinrich Immanuel Bleek, who earlier coined the word '*bantu*' to refer to one of the world's largest language group. Bleek classified these languages using what he called a practical method where he classified languages into zones (Bemba: M42). A large portion of these languages are tone languages except of a fracture i.e. Swahili. Tonelanguages according to Katamba (1989) can be said; "In tone languages pitch can be used to distinguish word meaning or to convey grammatical distinctions ..... in some tone languages tone has a predominantly lexical function. It is used almost exclusively to distinguish word meaning.....in some other languages the function of tone is primarily grammatical. It is used mainly or exclusively for the signalling of grammatical distinctions. This is the case in many African languages."

## **1.2.Statement of the Problem**

Bemba is a tone language and it is a language that exhibits syntactic tones in nominals. Syntactic tones are a linguistic phenomenon also known as syntax-phonology interface (McHugh, Brian: Master's thesis, UCLA) that describes tonal pattern variations due to syntactic environments or the use of tone for syntactic purposes. The implication being that phonology provides a reliable source of information about syntax. According to Kashoki (ed.) (1999) Bemba 'nouns, locatives and adjectives have tonal pattern variations according to the immediate grammatical environments in which they appear' even though the author describes these facts as tentative. The existence of the relationship between syntax and phonology in the Bemba tonal system is thus not clearly stated. This study is a follow-up on these conclusions to

achieve a high degree of generalization and simplification to establish the existence of this relationship and specifically, how tone is used for syntactic purposes in Bemba Nouns.

### **1.3 Rationale**

The investigation is a significant one because, apart from being used for grammatical reasons, tone is used in language acquisition especially for adultswhonon-tone first language speakers learning to speak a tone language. Secondly; this investigation adds to the Bemba linguistic literature especially that it is to be one of the first studies on this particular topic. Thirdly; establishing these tonal variations, the study is viable particularly in areas such as lexicology, where the studies seem to have inconsistencies in tone marking and pronunciation. And lastly; despite this investigation being on phonology other linguistic branches of the Bemba language such as morphology and syntax have been discussed and have contributed greatly to this study.

### **1.4 The Objectives of the Study**

The following are the objectives of this study;

#### **1.4.1 General objectives.**

This study has the following general objectives.

1.4.1.1 to establish tonal patterns and syntactic environments accounting for syntactic tones of Nouns.

#### **1.4.2. Specific objectives**

The specific objectives are as follows;

1.4.2.1. to identify tonal patterns in citation forms.

1.4.2.2. to establish whether tonal patterns change according to the immediate grammatical or syntactic context.

1.4.2.3. to find out whether there is a correlation between nominal classes.

1.4.2.4. to formulate rules to account for tonal patterns in Nouns.

## **1.5 Research Questions**

To achieve these objectives, the study tries to answer the following questions;

1.5.1. How many tonal patterns are there in the Bemba noun system?

1.5.2. Is there any relationship between lexical tone patterns and the syntactic environment?

1.5.3. What role does the syntactic environment play in lexical tonal pattern variations?

1.5.4. What is the relationship between the tonal patterns of nominal forms in citation form and the syllabic structure of their radicals?

1.5.5. Is there a relationship between the tonal pattern and the nominal class?

## 1.6 Operational Definitions of Concepts

This section presents operational definitions of some key concepts used in this study.

- i. **Augment:** segment that appears before a prefix in a word/ initial vowel.
- ii. **Accent:** phonological unit realized by auditory prominence.
- iii. **Accent syllable:** syllable that carries the accent.
- iv. **Assimilation:** process whereby tone of a syllable or morpheme changes to match that of another that precedes or follows.
- v. **Basic tone pattern:** the only tone pattern found in one-syllable word.
- vi. **Citation form:** form used to refer to the lexical unit outside context.
- vii. **Configurational language:** one in which syntactic units stand in a fixed order.
- viii. **Contour tones:** rising and falling tones.
- ix. **Derivation:** any change in a form or structure.
- x. **Downdrift:** automatic lowering induced by the presence of a low tone immediately before a high tone in the phonetic representation (Katamba, 1989:199).
- xi. **Downstep:** process whereby a high tone is lowered in the absence of any preceding low tone in the phonetic representation (Katamba, 1989:199).
- xii. **Pitch accent:** accent which is primarily realized by differences of pitch between accented and unaccented syllables.
- xiii. **Pitch accent system:** one that generates tonal patterns through different placement of a marked tone on a syllable in an underlying domain, which is independent of both the syllable and the word.
- xiv. **Pitch-accent language:** a language that uses phonemic tone, where only one or two syllables in a word can be phonemically marked for tone while the rest are not marked for tone at all.

- xv. **Syntactic environment:** phrases or sentences.
- xvi. **Syntactic frame:** refers to the order in which syntactic units stand in a sentence.
- xvii. **Syntactic tones:** refers to a linguistic phenomenon also known as syntax-phonology interface that describes tonal pattern variations due to syntactic environments or the use of tone for syntactic purposes. It is a phenomenon also referred to as phrasal tone by McHugh, B. Masters thesis, UCLA.
- xviii. **Tone:** according to Kashoki (1978:70) defines tone as “a (voice) pitch (a kind of musical note) on the individual syllable.”
- xix. **TBU:** tone bearing unit, i.e. vowel or syllable.
- xx. **Tone de-linking:** the association line between a tone and a tone bearing unit can be severed (formalised broken association line).
- xxi. **Tone group:** consists of different tonal patterns.
- xxii. **Tone languages:** languages which use the feature of tone to distinguish between lexical items and to express grammatical distinctions.
- xxiii. **Tone-mapping:** association of vowels with tones in a one-to-one fashion.
- xxiv. **Tonal patterns:** particular sequence of tone that is heard on different kinds of words.
- xxv. **Tone sandhi:** phonetic modification of tones e.g. in Chinese, in the context of those preceding or following syllables.
- xxvi. **Tone slip:** change from high tone to middle tone without a low tone in between.
- xxvii. **Tone stability:** when an underlying tone-bearing segment (normally a vowel) is either deleted or becomes nonsyllabic and loses its ability to bear tone, the tone still survives and surfaces on an adjacent syllable.

- xxviii. **Tone terracing:** a type of phonetic downdrift where the high or mid tones, but not the low tone, shift down ward in pitch downstep after certain other tones.
- xxix. **Tone trapping:** case where mapping algorithm operating between the melodic and skeletal tiers leave members of either tier unassociated.
- xxx. **Zone:** set of groups which have a certain geographical contiguity and which also display a number of common linguistic features.

## 1.7 Abbreviations

This section presents some abbreviations used in this study.

- i.  $HL^n$ : where H refers to high tone, L refers to low tone and  $n$  refers to number of tones e.g, number of low tones in a particular word.
- ii. 1<sup>st</sup> ps: refers to first person singular
- iii. 2<sup>nd</sup> ps: refers to second person singular
- iv. 3<sup>rd</sup> ps: refers to third person singular
- v. TBUs: tone bearing units
- vi. ASP: Autosegmental phonology
- vii. SPE: Sound Patterns of English
- viii.  $Cl_1$  : noun class 1
- ix.  $Cl_2$  : noun class 2

## **1.8 Literature Review**

Evidently, it has been studied that 99% of Bantu languages are tonal languages. Bantu languages have therefore contributed extensively in recent studies to Generative Phonology in studies known as Autosegmental Phonology (ASP). ASP is an approach of studying suprasegmental features: pitch, length, and tone. In this theory there is a rejection of phonological representation. Therefore, suprasegmental phonemes such as tone and stress are represented as consisting of separate tiers but connected by association lines. According to Miti (1988), the representation of the underlying tone of Bantu tonal languages may be divided into three types as (a) fully tonal, (b) non-tonal and (c) pitch-accent or intermediate of which the intermediate is the most widespread among the Bantu languages. It should be mentioned, however, that there is little linguistic literature on syntactic tones in Bemba. Autosegmental phonology is a theory that has been adopted in this study to explain how tone affects other tones or changes in a linguistic environment. This section examines briefly the concept of ASP, some studies done on syntactic tones on Non-Bantu and Bantu languages.

### **1.8.1 Brief Presentation of Autosegmental Phonology**

In the 1970s, in studies also known as non linear phonology by Goldsmith, there is a rejection of the SPE model (Chomsky and Halle, 1968) of phonological representation. In nonlinear phonology, utterances are made up of several kinds of simultaneous levels, with each level related to but ordered independently of any other level. Auto segmental phonology is used in the analysis of tone, accent and vowel harmony by abstracting out shared properties of possibly non-contiguous elements in an utterance. This abstractness is mediated by a notation of simplex branching trees, with the prosodic features of tone appearing on separate levels called tiers. According to Goldsmith (1976) 'Auto segmental phonology explored the consequences for generative theory of phonological structures

consisting of multiple, parallel tiers of segments, organized by association lines indicating registration in time.’ Many productive phonological rules would be re-interpreted not as feature changing rules, but as rules that reorganize the representation through shifts in association lines.

Autosegmental phonology (ASP) was proposed as an answer to such arguments, and a high or falling tone should be represented as a distinction between a segmental tier vs. a tonal tier, but semi-autonomous in the sense that they are separate, but linked by association lines. Goldsmith made three familiar arguments for two tiers, segmental vs. tonal; which are referred to as Well-Formedness Condition (Goldsmith, 1976).

### **1.8.2 Syntactic Tones on Some African Languages**

Using ASP as the theoretical framework, Hyman (1975) studied tone in African languages. Hyman considers tone to be central to the Auto segmental revolution in Generative Phonology and calls it as the basis of this ‘revolution’. Earlier in the 1920s-1960, Structuralism and earlier linguistic Phonology, the dominant view was that, phonological strings could be subdivided into a succession of discrete segments. Each segment consisted of a matrix of simultaneous ‘distinctive features’ generally claimed to be binary, in Jakobson and Halle tradition. These features had both the classificatory and phonetic function being designed to capture the phonological opposition found in languages as well as their output realizations. From this, despite not so popular, the assumption during this period was that, tone could be characterized with additional features on vowels.

Quoting Pike, Hyman (ibid) had observed that contour tones in African tonal languages are to be secondary where primary opposition is between level tones especially that African languages seemed to

have only two level tones, high and low when compared to the Chinese dialects which have an abundance of contour tones or Tone Sandhi.

Hyman (ibid) established that, tonal representations in African languages run into a number of problems or show edge effects, that is, it appears that H tone from the point of what precedes it, and a L tone from the point of view of what word follows. Thus, if L tone is raised to mid M tone before H tone, we expect also that it would be raised before HL falling tone. Thus, this process is also referred to as tone raising.

Hyman (ibid) discussed how African Languages have contributed to the linguistic study in the area of phonology, with particular interest in floating tones. He discussed the element of 'stability effects' in African Languages. This is the situation where the TBU is deleted without deleting the tone or tones linked to it. While in the reverse case, a tone may be deleted without deleting the TBU, to which it is linked. This normally happens when the independent alterability of tones and by allowing rules to target one tier without affecting the other. Therefore, using such an approach, one would establish how many tone melodies there are in a language that map onto words or radicals, independent of the number of TBUs. In addition, assimilatory tone spreading rules are appropriately captured by extending the association lines of tones rather than by tone-copying.

Meeussen (1966), studied syntactic tones of nouns in Ganda (classified by Guthrie as E15<sup>a</sup>), identifying the tonal patterns by isolating nouns with an augment and nouns without an augment. He identified the different accents or pitch variations in different contexts by classifying and subdividing pitch variations taking as a basis the citation form without an augment and the variety with an augment, with a simple

CV structure to a complex word form. Thus, the present study, adopted a lot from this article despite Meeussen discussing Syntactic tones of nouns in Ganda a language from Uganda.

### **1.8.3 Syntactic Tones on Some Zambian Languages**

Referring to Hyman's 'edge effects' and 'stability effects'; Mwape (1994) discussed tonal variations. He identified different types of tone units and rules, i.e, tone spreading, tone insertion, tone deletion, contour tones, falling tones, downdrift, and tone stability of verbal forms in Lamba. He analyzed his data using Autosegmental Phonology (ASP) framework. He established tonal variations in underlying forms (UR) and the surface (SR) forms of the Lamba verbal forms.

Similarly, Miti (1988), concerned himself with three language varieties; CiCewa, CiNsenga and CiNgoni, which are also referred to as Zambian Nyanja. He was particularly interested in establishing how close or how different these varieties are, placing emphasis on tonal relationships. He too adopted the ASP as a model of analysis originated by Goldsmith, with particular relevance for Bantu Tonology, developed in Clements and Goldsmith (1984). He distinguished synchrony and diachrony in terms of the alternation condition (Kiparsky, 1968). He then included lexicostatistical analysis.

Miti (ibid) noted that there are some nouns with a low tone (L), a group with a high tone (H) and underlyingly contour tones and that L tone is not marked by conversion hence underlyingly toneless. He also established that tone is restricted to three places, the penultimate syllable, antepenultimate syllable and ultimate syllable. Contour tones, on one hand, always occur in the penultimate syllable, that is, where High tones may occur in the antepenultimate, the penultimate or ultimate syllable. In other

words, wherever there is an ultimate syllable H tone, there is always a penultimate L tone hence forming a contour tone.

Miti (ibid), equally noted that in Bantu languages the representation of underlying tone depends on the type of a Bantu tone language; fully tonal, the non-tonal and intermediate. He was interested in establishing whether there would be a relationship between the Tonal classes and Nominal classes. According to him, 'a singular noun has one TBU less than its plural form; the two forms would still belong to the same tone class.' This is to say that even when nouns of any given tone take on a secondary prefix, the tone class of the basic noun is retained. This confirms with the hypothesis that prefixes in Bantu languages in general are toneless (Guthrie, 1970).

Miti (2002) discussed the behaviour of tone in CiNsenga nouns. He noted that CiNsenga nouns show three contrastive surface tones; High, Low and Falling, in which contrastive tone is used to indicate lexical meaning, e.g. (a) lino 'this one here', (b) lino 'tooth'.

Kashoki (1968), much closer to this study, not only because he has studied and written on the particular variety of Bemba that this study investigated, but also because in his article, Kashoki, discussed the Bemba syllable structure, the phonemic contrasts, allotones, phonemic status of tone glides and the tonal typology of Bemba. He established the Bemba inventory of phonemes upon contrasts arrived at in terms of citation forms and simple phrases or clauses and not in terms of longer or complex sentences. Seventeen phonemes were identified. He sought to establish the kinds of levels of phonemic pitch, i.e., tones. However, he did not agree to whether in Bemba, words uttered in isolation could be assorted into phonological tone patterns or classes. This is because he said 'Nouns would be found to exhibit a L –H –

H sequence pattern, e.g. /umúsi/ [ùmúʃ] ‘village’, others a L –L –L sequence pattern , for instance, /bààkàfi/ [bà:kàfi] ‘(spitting) cobras’. He believed that such tone classes in the case of nouns would cut across the grammatical system of classification. Despite this type of classification not being the best method, the immediate advantage to it is that, it is already in rudimentary setting for the comparison of levels of pitch and it provides one with categories amenable to testing in a rigidly controlled frame.

Kashoki (ibid) established that there are two way tonal contrasts in Bemba, high / /and low / ? /, unmarked. Usually, it constitutes very frequently the only difference between otherwise identical citation forms. He established that the H tone has phonetic variants which are contextually conditioned by the tonal context (allotones), that is, the manner in which one pitch phoneme is affected, consequently affects the phonetic realization of another pitch phoneme. While, in certain contexts a L tone causes a preceding H tone to be realized phonetically at a slightly lower pitch level (High Mid tone). Consequently, it also appears that Bemba has both level and contour or glide tones. For instance, Kashoki (ibid) says that ‘long vocoids and also contiguous but dissimilar vocoids occur both with level pitch and with dissimilar juxtaposed pitches, for instance, [HL] or [LH]’. This is because some of the [HL] occurrences are regularly heard as H to L short down-glide while others are phonetically lower sequence of high plus low pitches. Where there is no perceptible glide the appropriate H and L tone marks are used.

In Bemba, level tones can act as the minimum structured contrastive feature of the composition of syllables in that the nucleus of a non-suspect phonetic syllable is always a short vocoid bearing only one level tone. Bemba therefore may be conventionally classified as a ‘register –tone’ or ‘discrete –level’ type of language since it evinces tone on the phonemic level. Three relative phonetic levels of pitch, all

ultimately analyzable into two tonemes, have been identified in this study [H], [HM] and [L] marked as [´], [˘] and [ ] (that is, unmarked), respectively. [H] and [LM] are assigned to one phoneme, namely high. Intermediate levels appear to be the result of a combination of phonological features variously labelled as ‘tone slip’, ‘down step’ or ‘down drift’. However, this article despite it being a phonological study and standing as a model to this study, it did not discuss syntactic tones in the Bemba Nominal system exhaustively.

Kamwengo (2008) observed that: firstly, the type of sentence does affect the tone groups of words. Secondly, the number of syllables do affect the tone groups of words in sentences especially verb forms. Thirdly, the position of tones in a word affects the tone groups of other words in different syntactic frames. Lastly, some word classes do not change when put in certain contexts while in others they do.

## **1.9 The Morphological Structure of the Bemba Noun**

Noun class

The structure of a Bemba noun in general comprises; Augument + Prefix + Stem .e.g, u-mú-shí. Where, u- = augument, -mu- = prefix, -shi = stem, although there are some exceptions. An augument is a morpheme *u-* which precedes the prefix in a word and there are three types in Bemba, e.g, *a-*, *i-*, and *u-* as shown in the Table below.

On the other hand, a prefix is a morpheme at the beginning of a word. The type and shape of a prefix depends on the noun to which it is attached. In the Bemba nominal system, the 18 noun classes are identified by the class prefixes. The Table below illustrates the noun classes in Bemba as according to Mann (1999:17).

## Noun Classes in Bemba

Ser No.	Prefix	Example	Gloss
1	mu	<b>umúshá</b>	slave
1a	∅	kolwé	monkey
2	ba	<b>abáshá</b>	slaves
2a	baa	<b>baakolwé</b>	monkeys
3	mu	<b>úmuti</b>	tree
4	mi	<b>ímiti</b>	trees
5	i/li	<b>isáko /liinso</b>	feather/eye
5a	lii	<b>líicakolwa</b>	drunkard
6	ma	<b>ámasáko</b>	feathers
7	ci	<b>icííbi(i-ci-ibi)</b>	door
7a	cii	<b>ciikolwé</b>	big monkey
8	fi	<b>ifííbi(i-fi-ibi)</b>	doors
8a	fii	<b>fiikolwé</b>	big monkeys
9	n	<b>ímbwa(i-n-bwa)</b>	dog
9a	∅	káápu	cup
10	n	<b>ímbwa(i-n-bwa)</b>	dogs
11	lu	<b>ulúpwá</b>	family
12	ka	<b>akántú</b>	thing
12a	kaa	<b>kaakolwé</b>	small monkey
13	tu	<b>utúntú</b>	things
13a	tuu	<b>tuukolwé</b>	Small monkeys

14	bu	ú <b>bu</b> uci	honey
14a	buu	<b>buu</b> kafúndisha	teaching profession
15	ku	ú <b>ku</b> bókó	hand
16	pa/pali	<b>pa</b> múshí <b>páli</b> kafúndisha	at the village at the teacher's
17	ku/kuli	<b>ku</b> múshí <b>kúli</b> kafúndisha	to the village to the teacher's
18	mu/muli	<b>mu</b> múshí <b>múli</b> kafúndisha	in the village in the teacher's

Studying the Table above carefully, the classes can be paired categorically to express grammatical number, diminutives, and pejoratives. Classes: 16,17 and 18 are locative classes hence refer to 'on','to', 'at', 'in'and 'into'respectively. Classes 1/2,1a/2a,3/4,5/6,7/8,9/10, 10/11, 12/13 and 15/6 express grammatical number. Classes 7a and 8a express pejorative construction while classes 12a and 13a express diminutive constructions. Consequently, there is some similarity with some class prefixes as in the case of class 1, 3 and 18. These classes share the same type of prefix *mu-* but carry different meanings; Cl.1 carries nouns referring to 'person', Cl.3 carries nouns referring to things and some parts of the body and Cl.18 is a locative class hence expressing 'the location' respectively.

### 1.10 Bemba Phonology

Phonology is the study of sound systems of individual languages and of the nature of such systems generally. It is divided into segmental phonology; dealing with segments and suprasegmental phonology which is concerned with features such as pitch, length and stress. Here, the basic unit is

known as a phoneme. A phoneme is an abstract sound devoid of any suprasegment, i.e. tone, stress and pitch.

### 1.10.1 The inventory of vowels

An inventory of vowel sounds [i, e, a, o, u] are presented in a chart below according to Kashoki (1968:8);

#### A Phonemic chart

	FRONT	BACK
High	i	u
Mid	e	o
Low		a

The phonemic status of a segment or suprasegment is mainly established by using minimal pairs. Minimal pairs on the other hand, are two words distinguished by a single phoneme. For example,

- i) ukúlilá ‘to cry’
- ii) ukúlelá ‘to nurse’
- iii) ukúlalá ‘to break’
- iv) ukúlolá ‘to be awake’
- v) ukúlulá ‘to be bitter’

### 1.10.2 Consonants and Semi-Vowels

Consonant Chart (in IPA- international phonetic alphabet)

#### Phonetic chart

	Bilabial		Labiodental		Alveolar		Postalveolar		Palatal		Velar		
	-	+	-	+	-	+	-	+	-	+	-	+	
Nasal		m			n					ʃ		ŋ	
Stop	p	*b			t	*d						k	*g

Fricative	β	f	s	ʔ		
Affricate				tʔ      *ʔ		
Lateral			l			

Phonemic Chart

	Bilabial		Labiodental		Alveolar		Postalveolar		Palatal		Velar	
	-	+	-	+	-	+	-	+	-	+	-	+
Nasal		m				n				ʔ		ʔ
Stop	p				t						k	*g
Fricative		β	f		s		ʔ					
Affricate							tʔ	*ʔ				
Lateral						l						

Semi-Vowel Chart

Palatal	Velar
j	w

In the charts above the International Phonetic Alphabet (IPA) symbols have been used. The phoneme preceded by \* means that it only occurs after a nasal or it is prenasalized. On the other hand, there are only two semi-vowels [j, w].

1.10.3 Suprasegmental features

Suprasegmental features or prosodic units include length and pitch in the Bemba language. Pitch and length are distinctive, that is, can distinguish words. In Bemba language, tone plays a lexical role in distinguishing lexical units or a grammatical role. Thus, it should be noted that some words use length or

pitch to distinguish themselves from the other or both length and pitch can be at play. Both level (H,M,L) and contour tones (HL, LH) are common in Bemba language.

#### a) Pitch

The unit of pitch is known as tone. Tone refers to a phonetic/ phonological unit belonging to a set distinguished by changes in pitch. A unit of pitch is referred to as a toneme and variants of a tone are allotones. Tone plays a lexical and grammatical role in distinguishing lexical units and grammatical units such as relativisation in some languages, e.g. in Cinyanja (Miti, 2002).

A sound segment capable of bearing a tone is known as a Tone Bearing Unit (TBU). TBUs are vowels in Bemba exceptionally prenasalized consonants such as; mb, mp, nd ... at word initial. For example:

1. ?káshí 'sister'
2. ?dúmé 'brother'

There are two types of tone in Bemba;

- i) Level tones, that is, high tone (H) e.g. á, low tone (L) e.g. à, and a mid tone (M) e.g. a.
- ii) Contour or compound tones e.g. high-low (HL) is also referred to as falling tone e.g. áà, and low-high (LH) is also referred to as rising tone e.g. àá.

In this study no distinction is made between high tone and mid tone. Contour tones are equally treated as mere combinations of level tones and thus, phonemically long vowels are symbolised as (rising tone) áá and (falling tone) áà respectively. They are phonetically represented as HL → â and LH → a.

#### b) Length

Length is distinctive and thus is used to distinguish words in Bemba. e.g.

- i. úkukúlá ‘to grow’
- ii. ukúkúúlá ‘to build’
- iii. úkupépa ‘to pray’
- iv. ukúpéépa ‘to smoke’

However, it should be noted that it is not only vowel length that distinguishes the words in each of the two pairs but also tone- i.e. the augment or preprefix vowel is H-toned in the first item but L-toned in the second.

### **1.11 The Syntax of Bemba Noun**

Syntax is defined as ‘a study of the rules governing the way words are combined to form sentences( or phrases or clauses) in a language’ Crystal (1991). The word order in a simple Bemba sentence is SV(extension of a simple sentences), that is, subject, verb and extension of a simple sentence e.g.

- i) Bwalyá taalyá ímpwa ‘Bwalya does not eat eggplants’
- ii) Ímbwa shilébósa kú lukúngu yá ?anda ‘The dogs are barking at the backyard’

However, there are exceptions, as in Bemba a word may translate into a complete sentence in English;thus, a word may be a complete thought (sentence) in Bemba e.g

- iii) Náábábwela ‘they have come back’.
- iv) Tátulyá ‘we do not eat’.

Sometimes words are not in a fixed order, e.g.

- v) Umúntú naísá ‘the person has come’.
- vi) Naísá umúntú ‘the person has come’.

It should be noted however that this study is mainly on tonology and it will thus not go in detail on this.

NB: It should also be noted in this study that only simple phrases are used for analysis when discussing words in context.

## **1.12 Methodology**

The methodology of study is divided into two parts. The first component discussed the data collection, i.e. the study area, sampling techniques, data collection instruments and procedures. The second component is; data analysis processes or procedures and the theoretical framework of the study. This section does not consider earlier models such as SPE model of 1968 by Chomsky and Halle as they were not suitable to analyze tone. Instead, ASP has been adopted as model of description.

### **1.12.1 Research Design**

The study is a qualitative research. Therefore, the data was descriptively collected and analyzed. The researcher and two participants were used in the research. However, the bulk of the primary data were collected through introspection since the language involved is well known to the researcher. The secondary data were collected especially from the native speakers of the language in Kasama as well as from the literature written on the subject from the website and a number of different libraries.

#### **1.12.1.1 Data collection**

The study sample was drawn from Kasama in the Northern Province of Zambia. This is to establish unbiased tonal pattern variations of nouns in Bemba. Two informants Mr. M. Bwalya and Mr. L. Kalinda who are native speakers of the language were engaged of between 30-45 years of age. Structured interviews; both tape recording and note-taking interviews were adopted as a technique for the research. The researcher talked to the respondents and obtained direct information while recording. Therefore the research was in three parts; (i) at least 10 nouns were picked from each noun class, (ii)

marked tones for all collected nouns in citation form, and then (iii) used each noun in each possible grammatical context (short noun phrases).

The data collection was undertaken over a period of six months. This was by drawing up 10 nouns of each class recording at the same time both on tape and dairy. Then, the same nouns were used in different contexts i.e, short phrases and this was so, that the researcher would be able to countercheck other interesting data that might arise and that which might have been overlooked.

#### **1.12.1.2 Data analysis**

Data analysis started during the data collection period. This was by arranging the field work according to the themes and the objectives. This was by identification, description, explanation and interpretation of the objectives or themes in the context in which they occurred. Each word was hence grouped in respective word classes, marked tone and was then put in tone groups before they were placed in grammatical contexts (short phrases). Sentences were marked for tone to show how a particular word changed its tone pattern.

##### **1.12.1.2.1 Syntactic Frames**

To show how tonal patterns could change in different grammatical contexts, syntactic frames were interchanged to give more conclusive findings. Especially, for the words which the linear word order is not fixed, e.g. Adj+ N or N+ Adj: meaning; a phrase would consist of an adjective and a noun or a noun followed by an adjective. Consequently, rules were formulated and applied to account for syntactic changes.

##### **1.12.1.2.2 Ethical Considerations**

Due to the nature of the study, the participants who were involved in this study as informants were volunteers and were randomly selected. To respect their wishes, they will remain anonymous and

pseudo- names have been used instead. More importantly, it should be stated that the informants only participated in the second stage, i.e. pronunciation

### **1.12.2. The Scope and Limitations of Study**

The data collected in this study was restricted to native speakers of standard Bemba. A journey to Kasama as the research site was short and brief due to some financial inadequacies. To assist with this task two respondents were selected and a sizeable data were collected. Only two-three word phrases and clauses in different syntactic frames were used as complex sentences would have called for another in-depth study.

### **1.12.3 Theoretical framework**

The data were descriptively presented within the framework of Autosegmental Phonology (ASP). ASP is a non-linear approach to phonology inaugurated in the mid-seventies by Goldsmith (1976). It was developed by Goldsmith and Clements (1984). It was developed out of the frustrations in the linear approach i.e. segment representations. It identifies two levels of phonological representation; the tonal and segmental tier as two independent levels. Each tier consists of a linear arrangement of segments and the tones are linked to the TBUs by association lines which indicate how they are co-articulated. The distinction between segmental tier and tonal tier is semi-autonomous, in the sense that they are separate but linked by association lines. The association lines are essential to specify how tiers are linked and are subject to the well-formedness condition (WFC). Clements and Goldsmith (1984) proposed the well-formedness condition (WFC) as restrictions or principles determining the linking of the association lines between the segmental tier and the tonal tier. This convention however exists in a number of slightly different versions. Below is the version based on Goldsmith (1976);

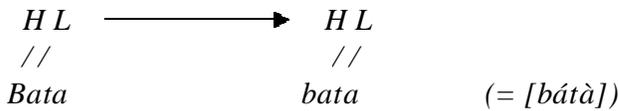
Well-formedness Conditions (WFC);

- (i) Each vowel must be associated with at least one tone.
- (ii) Each tone must be associated with at least one vowel.
- (iii) No association lines may cross.

This convention has been described in Katamba (1989:203) as ‘lying at the heart of Autosegmental phonology...has the effect of adding and deleting association lines as appropriate at any point during a derivation’.

Durand, (1990:249) proposed what he called ‘Principles of association of tones with segments’

a) *Mapping; associate vowels with tones in a one-to-one fashion left to right until we run out of tones or vowels. Examples;*

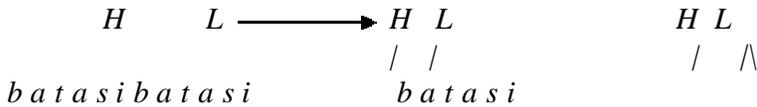


b) *Dumping; if after applying (a) some tones are still free (that is, unassociated) link them to the last vowel to the right. Example;*



c) *Spreading; if after applying (a) some vowels are still free (that is unassociated) links them to the last tone to the right.*

*Example;*



d) *Association lines are not allowed to cross. Example;*



The above principles of association are known as the Universal Association Convention (UAC), as some associations are language-specific.

#### **1.12.4 Summary**

This chapter gives the details on the methodology to the study. It gives the information on how the research was conducted. This chapter lays out the statement of the problem, the rationale behind the investigation, the research questions to be answered so as to help achieve the set objectives and the techniques that were used to collect the data as presented in the next chapter. It sets ASP as an approach or theoretical framework that this study uses in the analysis of syntactic tones in isolation as well as in grammatical contexts. It does not consider earlier models such as SPE model of 1968 by Chomsky and Halle. Some Bantu tone languages involved more than just an addition and deletion of tones but allowed in some cases tone to be delinked and re-associated at the same time. This argument is not universal but language specific hence it is for this reason that this study went even a step further to discuss some of the few revised WFC from those originally proposed by Clements and Goldsmith (1984).

Further, a brief look on the Bemba morphology, phonology and syntax was undertaken as it seemed to fit for the language under study.

## Chapter Two

### Data

#### 2.0 Introduction

This chapter consists of all the data collected. Generally, these data are attached as an appendix together with maps and diagrams. In this study, however, the data make this chapter for easy reference to examples and other related information. The data are presented in tabular form.

The data include Table 2.1 *words in isolation*; representing a number of word classes. The word classes are presented differently as some words carry a similar prefix as that of the noun in agreement with e.g. adjectives, some cardinal and ordinal numerals. Tone is also not marked on genitive constructions because they too carry the tone of the noun in agreement with. There is also another exception in the cases of ideophones and onomatopoeia because they belong to what are called the abnormal part of the word, hence have marginal word functions. In this section, only infinitives are used as verbs in both the positive and negative form.

Table 2.2 presents *words in isolation in respective tone groups* and Table 2.3 presents *words in different grammatical contexts* (small phrases are used respectively). Finally, the last table, Table 2.4 consists of *verbal forms*. The data hence are tabulated as follows;

## 2.1: Wordsin Isolation

### 1A. NOUNS

<u>Singular</u>	<u>Plural</u>	<u>Gloss</u>
1. Kaafi	baakaafi	‘spitting cobra(s)’
2. umúyashí	abáyashí	‘deceased person(s)’
3. umúntú	abántú	‘person(s)’
4. umúshá	abáshá	‘slave(s)’
5. úmulúmé	ábalúmé	‘husband(s)’
6. umúkote	abákote	‘old person(s)’
7. úmukáshí	ábakáshí	‘wife(s)’
8. úmulúméndo	ábalúméndo	‘Gentleman(gentlemen)’
9. úmukáshána	ábakáshána	‘girl(s)’
10. úmwishíkúlu	ábeeshíkúlu	‘grandchild(grandchildren)’
11. taatá	baataatá	‘father(s)’
12. maayó	baamaayó	‘mother(s)’
13. cuulá	baacuulá	‘frog(s)’
14. noko	baanoko	‘your mother(s)’
15. wishí	baawishí	‘their father(s)’
16. wisó	baawisó	‘your father(s)’
17. ulúkungú	ifilúkungú	‘dust(plenty of dust)’
18. úmwana	ábaana	‘child(children)’
19. shí?ánga	bááshí?ánga	‘medicine man(medicine men)’
20. lufwínyemba	baalufwínyemba	‘chameleon(s)’
21. úmuti	ímiti	‘tree(s)’
22. umúshí	imíshí	‘village(s)’
23. úmwele	ímyele	‘knife(s)’
24. úmwaka	ímyaka	‘year(s)’
25. umufwi	ímifwi	‘arrow(s)’
26. . umúshílá	imíshílá	‘root(s)’
27. umúlómó	imílómó	‘lip(s)’
28. umúnwé	imínwé	‘figure(s)’

29. umúlonga	imílonga	‘river(s)’
30. umúfumbi	imífumbi	‘continuous rains’
31. íloba	ámaloba	‘soil’
32. íbééle	ámabééle	‘breast’
33. íshina	amáshina	‘name’
34. íshiwi	ámashiwi	‘voice’
35. ífupa	amáfupa	‘bone’
36. íkumi	amákumi	‘ten’
37. ílǐbwé	amábǐwé	‘stone’
38. íliino	ámeeno	‘tooth’
39. íliinso	ámeenso	‘eye’
40. ímpanga	ímpanga	‘bush’
41. indúmé	baandúmé	‘brother(s)’
42. nokolúmé	baanokolúmé	‘your uncle(s)’
43. mukáayáma	baamukáayáma	‘uncle’s wife (s)’
44. shíkúlu	baashíkúlu	‘grandfather(s)’
45. ínsupa	ínsupa	‘calabash(s)’
46. ímbwa	ímbwa	‘dog(s)’
47. índa	índa	‘lice(lousy)’
48. ínkoko	ínkoko	‘chicken(s)’
49. káápu	amakáápu	‘cup(s)’
50. ísukúlu	amásukúlu	‘school(s)’
51. ulubáfú	imbáfú	‘rib(s)’
52. ulúpwá	indúpwá	‘family(s)’
53. úlulími	índími	‘tongue(s)’
54. úlukúni	ínkúni	‘fire wood’
55. úlupi	índupi	‘palm(s) of hand’
56. ulúpílí	impílí	‘hill(s)’
57. úlutánda	íntánda	‘star(s)’
58. ulúpé	indúpé	‘reed tray(s)’
59. ulwéndó	inyéndó	‘journey(s)’

60. akáciipu	utúfiipu	‘small bed bug(s)’
61. akáshíbá	utúshíbá	‘small pool(s)’
62. akálóndá	utúlóndá	‘small sore(s)’
63. akásóté	utúsóté	‘small hat(s)’
64. ákalóoto	útulóoto	‘small dream(s)’
65. icísánsá	ifísánsá	‘back part(s) of the hand’
66. ícilémá	ífilémá	‘lame person(lame people)’
67. icípóbé	ifípóbé	‘horse fly(horse flies)’
68. icítábó	ifítábó	‘book(s)’
69. ícishíma	ífishíma	‘well(s)’
70. úbushíkú	ínshíkú	‘the night(s)’
71. ubúloshi	ubúloshi	‘witchcraft’
72. ubúkote	ubúkote	‘old age’
73. úbwato	ámaato	‘canoe(s)’
74. úbwalwa	ámaalwa	‘beer(s)’
75. úbuta	ámaata	‘bow(s)’
76. úbuuci	úbuuci	‘honey’
77. ubóowá	ubóowá	‘mushroom(s)’
78. ímfumu	ímfumu	‘chief(s)’
79. lunshi	baalunshi	‘small fly(s)’
80. ukúúlú	amóólú	‘leg(s)’
81. úkubókó	ámabókó	‘hand(s)’
82. úkwaapa	ámaapa	‘armpit(s)’
83. kacéma	bakacéma	‘shepherd(s)’
84. munyína	bamunyína	‘relative(s)’
85. nabwinga	baanabwinga	‘bride(s)’
86. namááyo	baanamááyo	‘womanhood’
87. úmubómfi	ábabómfi	‘worker(s)’
88. ícungwa	ámácungwa	‘orange(s)’
89. kashímikila	bakashímikila	‘evangelist(s)’
90. úmwaíce	ábaíce	‘child(s)’

91. umúúlú	imyúúlú	‘sky(s)’
92. úmutwe	ímitwe	‘head(s)’
93. íláyá	ámaláyá	‘dress’
94. umúténgó	imíténgó	‘price’
95. kafúndisha	baakafúndisha	‘teacher(s)’
96. umúténgé	imíténgé	‘roof(s)’
97. icóólá	ifyóólá	‘ bag(s)’
98. ulúfungúlo	îfungúlo	‘key(s)’
99. í?anda	áma?anda	‘house(s)’
100. icííbí	ifííbí	‘door(s)’

### **1B. VERBS**

### **Gloss**

1. úkumóná	‘to see’
2. ukwéndá	‘to walk’
3. úkulúká	‘to vomit’
4. úkulémbá	‘to write’
5. úkubómbá	‘to work’
6. ukúlándá	‘to talk’
7. úkupyángá	‘to sweep’
8. ukúpúútá	‘to blow’
9. ukutéétá	‘to cut’
10. úkutámbá	‘to watch’
11. úkwishíbabá	‘to know’
12. ukúkúúlá	‘to build’
13. ukúkúnkúlá	‘to give respect’
14. ukukóólá	‘to cough’
15. úkutóntónkányá	‘to think’
16. ukúléngá	‘to draw’
17. ukúlímá	‘to cultivate’

18. úkulóótá	‘to dream’
19. ukwíkálá	‘to sit/stay’
20. úkutúmá	‘to send’
21. ukúséká	‘to laugh’
22. ukúfwéná	‘to scratch’
23. úkubéléngá	‘to read’
24. úkucémá	‘to herd’
25. úkutúngúlúlá	‘to lead’
26. úkucíngílílá	‘to protect’
27. ukúléshá	‘to stop’
28. úkubómfyá	‘to use’
29. ukwéshá	‘to try’
30. ukúcófá	‘to ride’
31. ukúsáákúlá	‘to comb’
32. ukúpíngúlá	‘to judge’
33. ukwípíká	‘to cook’
34. úkukúpíká	‘to cover’
35. ukútámfyá	‘to chase away’
36. ukwípáyá	‘to kill’
37. ukúsómá	‘to read’
38. úkutómóná	‘to kiss’
39. ukúsápá	‘to shrub’
40. úkutémá	‘to chop’
41. úkwasúká	‘to answer’
42. ukúúpá	‘to marry’
43. úkukópá	‘to copy’
44. ukwíníká	‘to name’

45. úkupátíkíshá	‘to force’
46. ukúbóshá	‘to bribe’
47. ukútóótá	‘to clap’
48. ukúshéétá	‘to chew’
49. ukúmíná	‘to swallow’
50. ukúúmá	‘to beat’
51. úkufwálá	‘to dress up’
52. úkubúúlá	‘to take’
53. úkwikátá	‘to hold’
54. ukúfúúsá	‘to spray’
55. ukúfóóná	‘to fold’
56. úkushípá	‘to spit’
57. úkubúmbá	‘to mould’
58. úkundápá	‘to cure’
59. úkwafwílíshá	‘to assist’
60. ukúbílá	‘to sew’
61. ukúbwekeshapó	‘to repeat’
62. ukúlúfyá	‘to lose’
63. ukubyálá	‘to plant’
64. úkwangálá	‘to play’
65. ukúshíká	‘to bury’
66. ukúúyá	‘to go’
67. úkoó cá	‘to burn’
68. úkukáfyá	‘to warm’
69. úkupángá	‘to make’
70. úkukwélá	‘to climb’
71. úkwingílá	‘to enter’

72. úkupépá	‘to pray’
73. ukúmwéntúlá	‘to smile’
74. úkulómbá	‘to beg for’
75. ukúlípílá	‘to pay’
76. ukútándálá	‘to visit’
77. ukúsálá	‘to choose’
78. ukúcóngá	‘to mark’
79. ukútáná	‘to be stingy’
80. úkucápá	‘to wash’
81. ukúpímá	‘to measure’
82. ukúléléá	‘to baby sit’
83. ukúlílá	‘to cry’
84. úkutápílílá	‘to water’
85. ukúséndá	‘to carry’
86. ukwíbúkíshá	‘to remember’
87. ukúcíná	‘to massage’
88. ukúwámyá	‘to clean\please’
89. ukúlóngá	‘to pack’
90. úkupóshá	‘to greet’
91. ukwíimbá	‘to dig’
92. úkulóóshá	‘to mourn’
93. ukúlóndólólá	‘to explain’
94. úkwípúshá	‘to ask’
95. ukúlúbúlwíshá	‘to interrogate’
96. ukúsámbá	‘to bath/wash’
97. ukúfíká	‘to arrive’
98. úkubéépá	‘to tell a lie’

99. úkusóóká 'to alert'  
 100. úkutémá 'to chop'

### **1 C. ADJECTIVE**

In this table adjectives are written only with their radicals without prefixes, as the prefixes reflect the noun in agreement.

1. -sumá 'goodness/beautiful'  
 2. -ipí 'short'  
 3. -káli 'fierce'  
 4. -táli 'tall'  
 5. -táli 'distant'  
 6. -íce 'young'  
 7. -kalambá 'great/elderly'  
 8. -pyá 'new'  
 9. -kúlú 'great/elderly'  
 10. -íbí 'badness'

### **1D. PERSONAL/INDEFINITE PRONOUNS**

1. íné 1sg. 'me'  
 2. ífwé pl. 'us'  
 3. íwé 2sg. 'you'  
 4. ímwé pl. 'you'  
 5. éená cl. 1 'you'  
 6. béená cl. 2 'them'  
 7. wéená cl. 3 'it'

## **1E.GENITIVE PRONOUNS**

Genitive Pronouns do not carry tone in citation form and henceforth in this table tone has not been marked respectively.

<b><u>Class</u></b>	<b><u>Genitive Form</u></b>
1. waa	
2. baa	
3. waa	
4. yaa	
5. lyaa	
6. yaa	
7. caa	
8. fyaa	
9. yaa	
10. shaa	
11. lwaa	
12. kaa	
13. twaa	
14. bwaa	
15. kwaa	
16. paa	
17. kwaa	
18. mwaa	

## **1G. POSSESSIVE PRONOUNS**

1 <sup>st</sup> psg.wándí	‘my’
uwándí	‘mine’
1 <sup>st</sup> ppl.abándí	‘mine’

bénú	‘yours’
2 <sup>nd</sup> psg.wóbé	‘yours’
2 <sup>nd</sup> ppl.bóbé	‘yours’
3 <sup>rd</sup> psg.wábó	‘their’
3 <sup>rd</sup> ppl.bábó	‘theirs’
bésú	‘ours’
cl. 1. ákwé	

## **1H. DEMONSTRATIVES**

I. abá/icí/uyú	‘near me and possibly near you’
II. abó/icó/uyó	‘near you and far from me’
III. baanó/ciinó/unó	‘near me and far from you’
IV. balyá/cilyá/ulyá	‘far from me and you’

## **1I. CARDINALS (NUMERALS)**

Like adjectives, cardinal and ordinal numerals (1-5) one to five carry prefixes of the noun in agreement with, and thus only their radicals have been presented here.

1. -mó	‘one’
2.-bílí	‘two’
3. -tátú	‘three’
4. -íne	‘four’
5. -sááno	‘five’
6. mutándá	‘six’
7. cíne lubálí	‘seven’
8. cíne kónsé konse	‘eight’
9. páábúlá	‘nine’
10. íkumi	‘ten’
11. íkumi na címó	‘eleven’
12.ámákumí yábílí	‘twenty’
13.sg.umwándá	‘hundred’

pl.imyándá	‘hundreds’
14.sg.ikáná	‘thousand’
pl.ámakáná	‘thousands’

### **1J. ORDINALS**

1. íntánshi/úkubálílápo/pakúbála	‘first’
2.-bílí	‘secondly’
3.-tátú	‘third’
4.-né	‘forth’
5.-sááno	‘fifth’

### **1K. QUESTION WORDS**

1. bushé?	is it
2. ní baani?	who is it?
3. cínshi?	what is it?
4. béesa?	which one?
5. báanga?	how many?
6. pésá?	where?
7. kwíisa?	where?
8. mwíisa?	where?
9. liiláli/líisa?	when?
10. sháani?	how?
11. cílí kwî	where is it?
12. pî	where?
13. cá báni	whose is it?
14. áni/ náani	who?
15. kwî/ mwî	where/ in what?
16. mwáa (question tag)?	
17. áí(question tag)?	
18. batíni (question tag)?	

## **1L. ADVERBS**

1.bwíno	‘well’
2.nómba	‘now’
3.mailo	‘tomorrow’
4.leeló	‘today’
5.pánsé	‘outside’
6.pánó	‘here’
7.úmufúló	‘careless’
8.bónsé	‘everybody’
9.múkati	‘inside’
10.palyá	‘there’
12.apeepí	‘near’
13.apatáli	‘far’
14.lyónsé	‘every time’
15.límó límo	‘at times’
16.límbí	‘sometimes’
17.pánshi	‘underneath’
18. kúmbí	‘somewhere’
19. kúmbí kumbi	‘somewhere else’
20. lyónsé lyonse	‘daily’
21. pá mó pene	‘side by side’
22. kúlyá kwíné	‘right there’
23. cí mó cine	‘similar’
24. kúlyá	‘there’
25. paanóónó paanóónó	‘little by little’
26. libíli libíli	‘’ (frequency)

## **1N. CONJUNCTIVES**

1.na	‘and’
2.nangú	‘or’
3.elyó	‘and then’

4.kábílí	‘in addition’
5.lílalí	‘when’
6.lilyá	‘then’
7.kwatí	‘may be’
8.kánó	‘except’
9.nakábílí	‘again’
10.nga	‘what if’
11.eefyó	‘that’s it’
12.eífyó	‘that’s all’
13.kánshi	‘is that so?’

### **10. INTERJECTIVES**

1.iye!	‘is that so’
2.eee!	‘yes’
3.eeyo!	‘expression of hopelessness’
4.iyyo!	‘no’
5.e!he!	‘expressing agreement of an action’
6.yaku!	‘expression of surprise’
7.maayo!	‘expression of pain’
8. taata yee!	‘expressing surprise’
9. owee!	‘expression of disapproval’
10. mmm!	‘expression of disgust’
11. eya!	‘expression of happiness’
12. naafwa ee!	‘expression of fright’
13. aawe!	‘no way!’
14. awii!	‘expression of hopelessness’
15. nakalya!	‘expression of impossibilities’
16. ala!	‘expression of disapproval’
17. léká	‘stop’

## **1P. IDEOPHONES**

1.kúmacá	‘early morning’
2.fítiti	‘complete darkness’
3.túútu	‘very bright’
4.tupifya tupifya	‘small pieces’
5.nduu	‘heavy falling’
6.páfya	‘a plunging in the water’
7.céé	‘completely red’
9.súútú	‘completely similar’
10.utúnini	‘very tinny/few’
11.bwatú bwatú	‘boiling’
12.shílílí	‘quiet’
13.tubya tubya	‘dropping in water’
14.bwa bwa bwa	‘speaking too much’
15.úlululululu	‘ululating’
16.ndundundu	‘beating of the drum’
17.?wii ?wii	‘mosquito sounds’
18.mpó mpó	‘nailing’
19.ta,ta,ta	‘drops’
20.ti,ti,ti	‘movement of the clock arms’

## **1Q. ONOMATOPEIEAS**

1.páá	‘slap’
2.bwaa	‘breaking’
3.bya bya	‘lightening’
4.balakata balakata	‘thundering’
5.shiii	‘stop noise’
6.ndu ndu ndu	‘of foot steps(on the roof)’
7.imínkónóno	‘of snoring’
8. nkaa	‘of axing’
9. nko	‘of walking stick’

10. puu 'blowing up'  
 11. koma 'hoeing someone'

### **1R. INDEFINITE DETERMINERS**

- 1.cilá 'each'  
 2.ónsé 'all'  
 3.baabí 'some'  
 4.abengí 'several/a lot'  
 5.ábaanóono 'few/little'

### **1S. PREPOSITIONS**

- 1.ná 'with'  
 2.waa 'of'  
 3.kú 'to/at'  
 4.mú 'in'  
 5.pá 'on/at'

### **1T. VOCATIVES**

- 1.múúntú 'it is a person'  
 2.mwááná 'it is my child'

### **1U. VERBS**

<b><u>Positive</u></b>	<b><u>Gloss</u></b>	<b><u>Negative</u></b>	<b><u>Gloss</u></b>
1. úkumóná	'to see'	úkushímóná	'to not see'
2. ukwéndá	'to walk'	ukúshéndá	'to not walk'
3. úkulúká	'to vomit'	úkushílúká	'to not vomit'
4. úkulémbá	'to write'	úkushílémbá	'to not write'
5. úkubómbá	'to work'	úkushíbómbá	'to not work'
6. ukúlándá	'to talk'	ukúshílándá	'to not talk'

7. úkupyángá	‘to sweep’	úkushípyángá	‘to not sweep’
8. ukúpúútá	‘to blow’	ukúshípúútá	‘to not blow’
9. ukútéétá	‘to cut’	ukúshítéétá	‘to not cut’
10. úkutámbá	‘to watch’	úkushítámbá	‘to not watch’
11. ukwíshíbá	‘to know’	ukúshíshíbá	‘to not know’
12. ukúkúnkúlá	‘to pay homage’	ukúshíkúnkúlá	‘to not pay homage’
13. ukúkóólá	‘to cough’	ukúshíkóólá	‘to not cough’
14. ukúkúúlá	‘to grow’	ukúshíkúúlá	‘to not grow’
15. úkutóntónkányá	‘to think’	úkushítóntónkányá	‘to not think’
16. ukúléngá	‘to draw’	ukúshíléngá	‘to not draw’
17. ukúlímá	‘to cultivate’	úkushilímá	‘to not cultivate’
18. úkulóótá	‘to dream’	úkushílóótá	‘to not dream’
19. ukwíkálá	‘to sit/stay’	ukúshííkálá	‘to not stay’
20. úkutúmá	‘to send’	úkushítúmá	‘to not send’
21. ukúséká	‘to laugh’	ukúshíséká	‘to not laugh’
22. ukúfwéná	‘to scratch’	ukúshífwéná	‘to not scratch’
23. úkubéléngá	‘to read’	úkushibéléngá	‘to not read’
24. úkucémá	‘to herd’	úkushícémá	‘to not herd’
25. úkutúngúlúlá	‘to lead’	úkushítúngúlúlá	‘to not lead’
26. ukucíngílíla	‘to protect’	úkushícíngílíla	‘to not protect’
27. ukúléshá	‘to stop’	ukúshíléshá	‘to not stop’
28. úkubómfyá	‘to use’	úkushíbómfyá	‘to not use’
29. ukwéshá	‘to try’	ukúshéshá	‘to not try’
30. ukúcóófá	‘to ride’	ukúshícóófá	‘to not ride’
31. ukúsáákúlá	‘to comb’	ukúshísáákúlá	‘to not comb’
32. ukúpíngúlá	‘to judge’	ukúshípíngúlá	‘to not judge’
33. ukwípíká	‘to cook’	ukúshípíká	‘to not cook’

34. úkukúpíká	‘to cover’	úkushíkúpíká	‘to not cover’
35. ukútámfyá	‘to chase’	ukúshítámfyá	‘to not chase’
36. ukwípáyá	‘to kill’	ukúshípáyá	‘to not kill’
37. ukúsómá	‘to pierce’	ukúshísómá	‘to not pierce’
38. úkutómóná	‘to kiss’	úkushítómóná	‘to not kiss’
39. ukúsápá	‘to shrub’	ukúshísápá	‘to not shrub’
40. úkutémá	‘to chop’	úkushítémá	‘to not chop’
41. úkwasúká	‘to answer’	úkushásúká	‘to not answer’
42. ukúúpá	‘to marry’	ukúshúúpá	‘to not marry’
43. úkukópá	‘to photograph’	úkushíkópá	‘to not photograph’
44. ukwíníká	‘to name’	ukúshíníká	‘to not name’
45. úkupátíkíshá	‘to force’	úkushípátíkíshá	‘to not force’
46. úkubóshá	‘to bribe’	úkushíbóshá	‘to not bribe’
47. úkutóótá	‘to clap’	úkushítóótá	‘to not clap’
48. úkushéétá	‘to chew’	úkushíshéétá	‘to not chew’
49. ukúmíná	‘to swallow’	ukúshímíná	‘to not swallow’
50. ukúúmá	‘to dry up’	ukúshúúmá	‘to not dry up’
51. ukúfwálá	‘to dress up’	ukúshífwálá	‘to not dress up’
52. úkubúúlá	‘to get’	úkushíbúúlá	‘to not get’
53. úkwíkátá	‘to catch’	úkushíkátá	‘to not catch’
54. ukúfúúsá	‘to spray’	ukúshífúúsá	‘to not spray’
55. úkufóóná	‘to fold’	úkushífóóná	‘to not fold’
56. úkushípá	‘to spit’	úkushíshípá	‘to not spit’
57. úkubúmbá	‘to mould’	úkushíbúmbá	‘to not mould’
58. úkundápá	‘to heal’	úkushúndápá	‘to not heal’
59. úkwafwílíshá	‘to assist’	úkusháfwílíshá	‘to not assist’
60. úkubílá	‘to sew’	úkushíbílá	‘to not sew’

61. ukúbwekeshapó	‘to repeat’	ukúshíbwekeshapó	‘to not repeat’
62. ukúlúfyá	‘to lose’	ukúshílúfyá	‘to not lose’
63. úkubyálá	‘to plant’	úkushíbyálá	‘to not plant’
64. úkwangálá	‘to play’	úkushángálá	‘to not play’
65. úkutúmá	‘to swell’	úkushítúmá	‘to not swell’
66. úkushíká	‘to bury’	úkushíshíká	‘to not bury’
67. ukúúyá	‘to leave’	ukúshíyá	‘to not leave’
68. ukóó cá	‘to burn’	ukúshóó cá	‘to not burn’
69. úkukáfyá	‘to warm’	úkushíkáfyá	‘to not warm’
70. úkupángá	‘to make’	úkushípángá	‘to not make’
71. úkukwélá	‘to climb’	úkushíkwélá	‘to not climb’
72. úkwíngílá	‘to enter’	úkushíngílá	‘to not enter’
73. úkupépá	‘to pray’	úkushípépá	‘to not pray’
74. ukúbéépá	‘to lie’	ukúshíbéépá	‘to not lie’
75. ukúm wéntúlá	‘to smile’	ukúshím wéntúlá	‘to not smile’
76. úkulómbá	‘to beg’	úkushílómbá	‘to not beg’
77. ukúlípílá	‘to pay’	ukúshílípílá	‘to not pay’
78. úkutándálá	‘to visit’	úkushítándálá	‘to not visit’
79. ukúsálá	‘to choose’	ukúshísálá	‘to not choose’
80. ukúcóngá	‘to mark’	ukúshícóngá	‘to not mark’
81. ukútáná	‘to stingy’	ukúshítáná	‘to not stingy’
82. úkucápá	‘to wash’	úkushícápá	‘to not hold’
83. ukúpímá	‘to measure’	ukúshípímá	‘to not measure’
84. ukúlélá	‘to cradle’	ukúshílélá	‘to not cradle’
85. ukúlílá	‘to cry’	ukúshílílá	‘to not cry’
86. úkutápílílá	‘to water’	úkushítápílílá	‘to not water’
87. ukúséndá	‘to carry’	ukúshíséndá	‘to not carry’

88. ukwíbúkíshá	‘to remember’	ukúshíbúkíshá	‘to not remember’
89. ukúcíná	‘to massage’	ukúshícíná	‘to not massage’
90. ukúwámyá	‘to clean\please’	ukúshíwámyá	‘to not clean’
91. ukúlóngá	‘to pack’	ukúshílóngá	‘to not pack’
92. úkupóshá	‘to greet’	úkushípóshá	‘to not greet’
93. ukwíimbá	‘to dig’	ukúshíimbá	‘to not dig’
94. úkulóóshá	‘to moan’	úkushílóóshá	‘to not moan’
95. ukúlóndólóla	‘to explain’	ukúshílóndólóla	‘to not explain’
96. úkwipúshá	‘to ask’	úkushípúshá	‘to not ask’
97. úkulúbúlwíshá	‘to interrogate’	úkushílúbúlwíshá	‘to not interrogate’
98. ukúsámbá	‘to bath/wash’	ukúshísámbá	‘to not bath’
99. ukúfíká	‘to arrive’	úkushífíká	‘to not arrive’
100. úkutémá	‘to chop’	úkushítémá	‘to not chop’

## 2.2 Tone groups of Word Classes in Citation Form

1. NOUNS							
Tone Group	1 Syllable	2 Syllable	3 Syllable	4 Syllable	5 Syllable	6 Syllable	7 Syllable
1.L <sup>n</sup>		noko	nabwinga				
		lunshi	mu?wi?wi				
			kaafi				
2.LH <sup>n</sup>			ulwendo	icitabo			
			umuntu	icoola			
			umusha	umutengo			
			ilibwe	ukuulu			
			impili	akashi ba			
			indupwa	akalonda			
			umushi	akasote			
				icisansa			
				icipobe			

				umuulu			
				iciibi			
				umutenge			
				uboowa			
3.HL <sup>n</sup>		inda	ifupa	ukwaapa			
		imbwa	iloba	iilaya			
			ishina	ubuuci			
			ishiwi				
			umuti				
			insupa				
			iliino				
			iliinso				
			impanga				
			umutwe				
			imfumu				
			inkoko				
			ulupi				
			ubwato				
			ubuta				
			umwele				
			i?anda				
			ubwalwa				
			umwaka				
			inkuni				
			umufwi				
			ikumi				
			indume				
4.HLH <sup>n</sup>			umwana	umukashi			
				umulume			
				ulutanda			
				icilema			
				ubushiku			
				umwaice			
				ukuboko			
				ulubafu			
5.LHLH				umuyashi			

				ulukungu			
6.L <sup>n</sup> H		wishi	cuula				
		taata					
		wiiso					
		maayo					
7.HLH <sup>n</sup> L				icishima	akalooto		
				ululimi	umwishikulu		
				isukulu	umukashana		
				iilaya	umulumendo		
					iibeele		
8.LH <sup>n</sup> L				munyiina			
9.L HLHL					ulufungulo		
					mukaayama		
10. LHL <sup>n</sup>			kacema	umulonga	kashimikila		
				ubukote	akaciipu		
				umufumbi			
				ubuloshi			
				kafundisha			
				lufwinyemba			
11.HHL		intanda	shi?anga				
		icungwa	shikulu				
			kaapu				

## 2. ADJECTIVES

1.LH <sup>n</sup>			iciibi				
2. LHLL				umutali			
				ukutali			
				umukali			
3. HLH <sup>n</sup>				umwaice			
				umukulu			
4.LHLLH					umukalamba		
5.HLLH				umwiipi			
6.HL <sup>n</sup>			icipya				

## 3. ADVERBS

1.L <sup>n</sup>			mailo		ilingiline		
2.H <sup>n</sup>		pano	mukati				

		panse					
		bonse					
		lyonse					
		kulya					
		kumbi					
		limbi					
3.HL <sup>n</sup>		nomba					
		bwino					
4.L <sup>n</sup> H		palya	leelo	aapepi			
5.HLH <sup>n</sup> L				umufulo			
				limolimo			
6.L <sup>n</sup> HL				apatali			
7.H <sup>n</sup> L <sup>n</sup>				cimo cine	pamo peene		
				lyonse lyonse			
				kumbi kumbi			
				kulya kwine			

#### 4. PERSONAL/ INDEFINITE PRONOUNS

1.H <sup>n</sup>		ine					
		ifwe					
		imwe					
2.HLH		eena cl.1					
		Beena cl.2					
		Mweena cl.3					
		Yeena cl.4					

#### 5. POSSESSIVE PRONOUNS

1.H <sup>n</sup>		wandi					
		bandi					
		wobe					
		bobe					
		wabo					
		babo					
		wesu					
		besu					
		benu					
		wakwe					

		bakwe					
3.LH <sup>n</sup>			uwandi				
			abandi				
6. GENITIVE PRONOUNS							
1.L <sup>n</sup>		baa					
		yaa					
		shaa					
7. DEMONSTRATIVES							
1.LH		aba					
		abo					
		bano					
		balya					
8. PREPOSITIONS							
1.LH	pa						
	ku						
	mu						
2.H <sup>n</sup>	wa	paa					
	na						
3.LH		kuno					
		muno					
		kulya					
		pano					
		mulya					
4.HL		kuli					
9. CONJUNCTIVES							
1.L <sup>n</sup>	na						
2.H <sup>n</sup>	nga						
3.LH <sup>n</sup>		elyo					
		kano					
		lilya	nangula				
		kwati					
		kanshi					
		nangu					

4.LLH			nalilya				
			eifyo				
10. INTERJECTIVES							
1.L <sup>n</sup>			nakalya				
			owee				
2.LH <sup>n</sup>		ala	awii	nafwa ee	taata yee		
		iye					
		yaku					
3.H <sup>n</sup>		awe	atase				
		iyo	eee				
4.L <sup>n</sup> H			maayo				
			eeyo				
			eeya				
11. IDEOPHONES							
1.L <sup>n</sup>		nduu	nto,nto,nto				
			celele				
2.H <sup>n</sup>		cee	kumaca	Poo,poo			
		paa	suutu				
			ta,ta,ta				
			bu,bu,bu				
3.L <sup>n</sup> H			tuutu				
4.LH <sup>n</sup>			fititi				ulululululuu
			shilili				
5.LHLH				kibukibu			
				bwatubwatu			
12. ONOMATOPEIEAS							
1.L <sup>n</sup>			shiii				balakata, balakata
			ndu,ndu,ndu				
2.H <sup>n</sup>		paa					
		bwaa					
		bya,bya					
		nkaa					
		puu					
3.LHLH				citi,citi			

4.LHL <sup>n</sup>					iminkonono			
13. INDEFINITE DETERMINERS								
1.H <sup>n</sup>		onse						
		bambi						
2.LH		cila						
3.HL <sup>n</sup>			abengi					
14. NUMERALS: CARDINALS/ ORDINALS								
1.H <sup>n</sup>		cimo	fibili	paabula				
			fitatu					
2.HLH <sup>n</sup> L <sup>n</sup>						cine konse konse		
3.LH <sup>n</sup>			mutanda					
			umwanda					
			imyanda					
			ikana					
4.H <sup>n</sup> L			fisano					
5.HL <sup>n</sup>		cine	ikumi					
6. HLH <sup>n</sup>			amakumi			Amakumi yabili		
7.HL <sup>n</sup> H <sup>n</sup>					cine lubali			
15. QUESTION WORDS								
1.H <sup>n</sup>	mwi	ani						
	kwi	pii						
		mwaa						
2.LHL			lilali					
3.H <sup>n</sup> L	ai	shani	liisa	caakwani				
		bani	kwiisa					
		kwani	mwiisa					
		besa						
		banga						
		cinshi						
		bushe						
16. PARTICLES/ ENCLITICS								
1.L <sup>n</sup>	e	ni	tee					
17. VERBS								

1.LH <sup>n</sup>			ukwenda	ukwiimba	ukwibukisha	ukusaakula	
			ukweshwa	ukulanda	ukupuuta	ukulondolola	
				ukulenga	ukukuula		
				ukulima	ukukunkula		
				ukuseka	ukupingula		
				ukwikala	ukulipila		
				ukufwena	ukumwentula		
				ukulesha	ukutandala		
				ukucofa	ukubeepa		
				ukwipika	ukuteeta		
				ukutamfya	ukubosha		
				ukwipaya	ukubila		
				kusoma	ukufoona		
				kusapa	ukusheeta		
				ukuupa			
				ukwinika			
				ukumina			
				ukuuma			
				ukufusa			
				ukulufya			
				ukushika			
				ukuuya			
				ukooca			
				kusala			
				ukuconga			
				kutana			
				ukupima			
				kulila			
				kulela			
				kucina			
				kuwamya			
				kulonga			
				kusamba			
2.HLH <sup>n</sup>				kumona	ukutoota	kutontonkanya	
				kuluka	kuloota	kutungulula	
				kulemba	ukupika	kucingilila	

				ukubomba	ukubuula	ukupatikisha	
				ukwishiba	ukubeepa	ukutapilila	
				ukupyanga	ukukoola		
				ukutamba	ukubelenga		
				ukukopa	ukwafwilisha		
				ukusenda	ukutomona		
				ukucema			
				ukubomfya			
				ukubila			
				ukwasuka			
				ukwangala			
				ukutema			
				ukufwala			
				ukwikata			
				ukushipa			
				ukubumba			
				ukundapa			
				ukukwela			
				ukubyala			
				ukupepa			
				ukulomba			
				ukucapa			
				ukwingila			
				ukusooka			
				ukutema			
				ukupanga			
				ukulosha			
				ukwipusha			
				ukukafya			
				ukuposha			
				ukufika			
				ukutuma			
3.LHL <sup>n</sup> H						ukubwekeshapo	

## 2.3 NOUNS IN CONTEXT

### 1.Noun and Demonstrative

Ser. No	Nouns	Class	-uyu this	-uyo that	- uno there	-ulya over there
1	umúntú abántú ‘person/s’	1/2	umúntú úyú abántú ábá	umúntú úyó abántú ábó	umúntú únó abántú bánó	umúntú úlyá abántú bályá
2	umúyashí abayashi deceased’	1/2	umúyashí úyú abáyashí ábá	umúyashí úyó abáyashí ábó	umúyashí únó abáyashí bánó	umúyashí úlyá abáyashí bályá
3	taatá baataatá ‘father’	1a/ 2a	taatá úyú baataatá ábá	taatá úyó baataatá ábó	taatá únó baataatá bánó	taatá úlyá baataatá bályá
4	úmuti ímiti ‘tree/s’	3/4	úmuti uyú ímiti iyí	úmuti uyó ímiti iyó	úmuti unó ímiti yinó	úmuti ulyá ímiti ilyá
5	umúshí imíshí ‘village/s’	3/ 4	umúshí úyú imíshí iyí	umúshí úyó imíshí iyó	umúshíúnó imíshí yínó	umúshí úlyá imíshí ilyá
6	iliino ámeeno tooth/teeth’	5/6	íliino ilí ámeeno ayá	íliino ilyó ámeeno ayó	íliino linó ámeeno yanó	íliino lilyá ámeeno yalyá
7	ífupa amáfupa ‘bone/s’	5/6	ífupa ilí amáfupa ayá	ífupa ilyó amáfupa ayó	ífupa linó amáfupa yanó	ífupa lilyá amáfupa yalyá
8	íibééle ámabééle ‘breast/s’	5/ 6	íibééleiií ámabééleayá	íibééleilyó ámabééleayó	íibééle linó ámabééle yanó	íibééle lilyá ámabééle yalyá
9	íshíwi ámashíwi ‘voice/s’	5/ 6	íshíwiilí ámashíwiayá	íshíwiilyó ámashíwiayó	íshíwí línó ámashíwí yánó	íshíwi lilyá ámashíwi yalyá
10	ícishíma ífíshíma ‘well/s’	7/8	ícishíma icí ífíshíma ifí	ícishíma icó ífíshíma ifyó	ícishíma cinó ífíshíma finó	ícishíma cilyá ífíshíma filyá
11	icítábó ifítábó ‘book/s’	7/8	icítábó ícǐ ifítábó ífǐ	icítábó ícó ifítábó ifyó	icítábó cínó ifítábó finó	icítábó cǐlyá ifítábó fǐlyá
12	ciimu?wi?wi fiimu?wi?wi ‘huge mosquito/s’	7a/ 8a	ciimu?wi?wi icǐ fiimu?wi?wi ifǐ	ciimu?wi?wi icó fiimu?wi?wi ifyó	ciimu?wi?wi cinó fiimu?wi?wi finó	ciimu?wi?wi cǐlyá fiimu?wi?wi fǐlyá
13	ciiwishí fiiwishí ‘huge father’	7a/ 8a	ciiwishí ícǐ fiiwishí ífǐ	ciiwishí ícó fiiwishí ifyó	ciiwishí cínó fiiwishí ícǐ	ciiwishí cǐlyá fiiwishí fǐlyá
14	índa ‘lice’	9	índa iyí	índa iyó	índa yinó	índa yilyá
15	ínkoko ‘chicken/s’	9	ínkoko ishí	ínkoko ishó	ínkoko shinó	ínkoko shilyá
16	káápu amakáápu ‘cup/s’	9a/ 6	káápu iyí amakáápu ayá	káápu iyó amakáápu ayó	káápu yinó amakáápu yanó	káápu yilyá amakáápu yalyá

17	ísukúlu amásukúlu ‘school/s’	9a/ 6	ísukúlu ilí amásukúlu ayá	ísukúlu ilyó amásukúlu ayó	ísukúlu linó amásukúlu yanó	ísukúlu lilyá amásukúlu yalyá
18	índúpwá ulúpwá ‘family/ies’	10/ 11	índúpwá íshí ulúpwá úlú	índúpwá íshó ulúpwá úló	índúpwá shínó ulúpwá lúnó	índúpwá shílyá ulúpwá lúlyá
19	índúpé ulúpe ‘reed tray/s’	10/ 11	índúpé íshí ulúpe úlú	índúpé íshó ulúpe úló	índúpé shínó ulúpe lúnó	índúpé shílyá ulúpe lúlyá
20	úlulími índími ‘tongue/s’	11/10	úlulímiulú índími íshí	úlulímiuló índími íshó	úlulími lunó índími shinó	úlulími lulyá índímishilyá
21	úlutánda íntánda ‘star/s’	10/ 11	úlutánda úlú íntánda íshí	úlutánda úló íntánda íshó	úlutánda lúnó íntánda shínó	úlutánda lulyá íntánda shilyá
22	akáciipu utúciipu ‘small bed bag/s’	12/ 13	akáciipuaká utúciipu utú	akáciipuakó utúciipu utó	akáciipu kanó utúciipu tunó	akáciipu kalyá utúciipu tulyá
23	akáshíbá utúshíbá ‘small pool/s’	12/ 13	akáshíbá aká utúshíbá útú	akáshíbá akó utúshíbá utó	akáshíbá kánó utúshíbá túnó	akáshíbá kalyá utúshíbá tulyá
24	kaashí?ánga tuushí?ánga ‘small medicine man/men’	12a/ 13a	kaashí?ánga aká tuushí?ánga utú	kaashí?ánga akó tuushí?ánga utó	kaashí?ánga kanó tuushí?ánga tunó	kaashí?ánga kalyá tuushí?ánga tulyá
25	tuulunshi kaalunshi ‘small flies’	13a/ 12a	tuulunshi utú kaalunshi aká	tuulunshi utó kaalunshi akó	tuulunshi tunó kaalunshi kanó	tuulunshi tulyá kaalunshi kalyá
26	úbuuci ‘honey’	14	úbuuci ubú	úbuuci ubó	úbuuci bunó	úbuuci bulyá
27	ubóówa ‘mushroom’	14	ubóówá úbú	ubóówá úbó	ubóówá búnó	ubóówá búlyá
28	úbwato ‘boat’	14	úbwato ubú	úbwato ubó	úbwato bunó	úbwato bulyá
29	umwéní abéení ‘visitor/s’	1/2	umwéní úyú abéení ábá	umwéní úyó abéení ábó	umwéní únó abéení bánó	umwéní úlyá abéení bályá
30	úmukáshí ábakáshí ‘wife/wives’	1/2	úmukáshí úyú ábakáshí ábá	úmukáshí úyó ábakáshí ábó	úmukáshí únó ábakáshí bánó	úmukáshí úlyá ábakáshí bályá
31	umúlómó ímíflómó ‘lip/s’	3/4	umúlómó úyú ímíflómó íyí	umúlómó úyó ímíflómó íyó	umúlómó únó ímíflómó yínó	umúlómó úlyá ímíflómó yilyá
32	úmwaka ímyaka ‘year/s’	3/ 4	úmwaka uyú ímyaka iyí	úmwaka uyó ímyaka uyó	úmwaka unó ímyaka yinó	úmwaka ulyá ímyaka yilyá
33	ínsupa ‘calabash’	9	ínsupa iyí	ínsupa iyó	ínsupa yinó	ínsupa yilyá
34	ímbwa ‘dog’	9	ímbwa iyí	ímbwa iyó	ímbwa yinó	ímbwa yilyá
35	ubúloshi ‘witchcraft’	14	ubúloshi ubú	ubúloshi ubó	ubúloshi bunó	ubúloshi bulyá
36	ubúkote ‘old age’	14	ubúkote ubú	ubúkote ubó	ubúkote bunó	ubúkote bulyá

37	úbwalwa 'alcohol'	14	úbwalwa ubú	ubwalwaubó	úbwalwa bunó	úbwalwa bulyá
38	ubuta 'bow'	14	úbuta ubú	úbuta ubó	úbuta bunó	úbuta bulyá
39	buukacéma 'shepherd'	14a	buukacéma ubú	buukacéma ubó	buukacéma bunó	buukacéma bulyá
40	buumunyína 'family relations'	14a	buumunyína ubú	buumunyína ubó	buumunyína bunó	buumunyína bulyá
41	buukafúndisha 'teaching profession'	14a	buukafúndisha ubú	buukafúndisha ubó	buukafúndisha bunó	buukafúndisha bulyá
42	pá ?anda kú ?anda mú ?anda 'at /to/in home'	16/ 17/ 18	pá?anda apá kú?anda ukú mú?anda umú	pá?anda apó kú?anda ukó mú?anda umó	pá?anda panó kú?anda kunó mú?anda munó	pá?anda palyá kú?anda kulyá mú?anda mulyá
43	páli Banda kúliBanda múliBanda 'at /to/in Banda's'	16/ 17/ 18	páliBanda apá kúliBanda ukú múliBanda umú	páliBanda apó kúliBanda ukó múliBanda umó	páliBanda panó kúliBanda kunó múliBanda munó	páliBanda palyá kúli Banda kulyá múliBanda mulyá
44	pa cóólá kucóólá mu cóólá at/on/in thebag	16/ 17/ 18	pacóólá ápá kucóólá úkú mucóóláúmú	pacóólá apó kucóólá ukó mucóólá umó	pacóólá pánó kucóólá kúnó mucóólá múnó	pacóólá pályá kucóólá kulyá mucóólá mulyá
45	pa múténgé ku múténgé mumúténgé 'at/on/in the roof'	16/ 17/ 18	pamúténgé ápá kumúténgé úkú mumúténgé umú	pamúténgé apó kumúténgé ukó mumúténgé umó	pamúténgé pánó kumúténgé kúnó mumúténgé múnó	pamúténgé pályá kumúténgé kulyá mumúténgé mulyá
46	mu múshí pa múshí ku múshí'in/ at / to the village'	18/ 16/ 17	mumúshí umú pa múshí apá ku múshí ukú	mu múshí umó pa múshíapó kumúshí ukó	mu múshí múnó pa múshí pánó ku múshí kúnó	mu múshí mulyá pa múshí pályá ku múshí kulyá
47	mumúúlú pamúúlú ku múúlú'in/on/at the sky'	18/ 16/ 17	mumúúlú umú pamúúlú apá kumúúlú ukú	mumúúlú umó pamúúlú apó kumúúlú ukó	mumúúlú múnó pa múúlú pánó ku múúlú kúnó	mumúúlú mulyá pamúúlú pályá kumúúlú kulyá
48	mú mutwe pá mutwe kú mutwe 'in/at/to the head'	18/ 16/ 17	múmutwe umú pámutwe apá kúmutwe ukú	múmutwe umó pámutwe apó kúmutwe ukó	múmutwe munó pámutwe panó kúmutwe kunó	múmutwe mulyá pámutwe palyá kúmutwe kulyá
49	ukúúlú amóólú'leg/s'	15/ 6	ukúúlú ukú amóólú áyá	ukúúlú ukó amóólú áyó	ukúúlú kúnó amóólú yánó	ukúúlú kulyá amóólú yályá

50	úkubókó ámabókó 'arm/s'	15/ 6	úkubókó úkú ámabókó áyá	úkubókó úkó ámabókó áyó	úkubókó kúnó ámabókó yánó	úkubókó kúlyá ámabókó yályá
51	úkwaapa ámaapa 'armpit/s'	15/ 6	úkwaapaúkú ámaapa ayá	úkwaapaúkó ámaapa ayó	úkwaapa kúnó ámaapa yanó	úkwaapa kúlyá ámaapa yalyá
52	kú cishíma pá cishíma mú cishíma 'to/at/in the well'	17/ 16/ 18	kúcishíma ukú pácishíma apá múcishíma umú	kúcishíma ukó pácishíma apó múcishíma umó	kúcishíma kunó pácishíma panó múcishíma munó	kúcishíma kulyá pácishíma palyá múcishíma mulyá
53	kúli kafúndisha páli kafúndisha múlikafúndisha 'to/at/in the teacher'	17/ 16/ 18	kúlikafúndisha ukú pálikafúndisha apá múlikafúndisha umú	kúlikafúndisha ukó pálikafúndisha apó múlikafúndisha umó	kúlikafúndisha kunó pálikafúndisha panó múlikafúndisha munó	kúlikafúndisha kulyá pálikafúndisha palyá múlikafúndisha mulyá
54	liimukâyama 'auntie'	5a	liimukâyáma ilí	liimukâyáma ilyó	liimukâyáma linó	liimukâyáma lilyá
55	liinokolúmé 'your uncle'	5a	liinokolúmé ílí	liinokolúmé ílyó	liinokolúmé línó	liinokolúmé lílyá
56	liishíkúlu 'grandfather'	5a	liishíkúlu ilí	liishíkúlu ilyó	liishíkúlu linó	liishíkúlu lilyá
57	lííndume 'brother'	5a	lííndume ilí	lííndumeilyó	lííndume linó	lííndume lilyá
58	ímpanga 'bush'	9	ímpanga iyí	ímpanga iyó	ímpanga yinó	ímpanga yilyá
59	ínsupa 'calabash'	9	ínsupa iyí	ínsupa iyó	ínsupa yinó	ínsupa yilyá
60	úmulúmé ábalúmé 'husband'	1/2	úmulúmé úyú ábalúmé ábá	úmulúmé úyó ábalúmé ábó	úmulúmé únó ábalúmé bánó	úmulúmé úlyá ábalúmé bályá
61	umúkote abákote 'old person'	1/2	umúkote úyú abákote abá	umúkote uyó abákote abó	umúkote unó abákote banó	umúkote ulyá abákote balyá
62	umúshá abáshí 'slave/s'	1/2	umúshá úyú abáshá ábá	umúshá úyó abáshá ábó	umúshá únó abáshá bánó	umúshá úlyá abáshá bályá
63	maayó baamaayó 'mother'	1a/ 2a	maayó úyú baamaayó ába	maayó úyó baamaayó ábó	maayó únó baamaayó bánó	maayó úlyá baamaayó bályá
64	noko baanoko 'your mother'	1a/ 2a	noko uyú baanoko abá	noko uyó baanoko abó	noko unó baanoko banó	noko ulyá baanoko balyá
65	wiisó baawiisó 'your father'	1a/ 2a	wiisó úyú baawiisó ábá	wiisó úyó baawiisó ábó	wiisó únó baawiisó bánó	wiisó úlyá baawiisó bályá
66	cuulá baacuulá 'frog/s'	1a/ 2a	cuulá úyú baacuulá ábá	cuulá úyó baacuuláábó	cuulá únó baacuulá bánó	cuulá úlyá baacuulá bályá

67	úmufwi ímífwi 'spear/s'	3/4	úmufwi uyú ímífwi ishí	úmufwi uyó ímífwi ishó	úmufwi unó ímífwi yínó	úmufwi ulyá ímífwi shilyá
68	umúlonga ímílonga 'river/s'	3/4	umúlonga uyú ímílonga iyí	umúlonga uyó ímílonga iyó	umúlonga unó ímílonga yínó	umúlonga ulyá ímílonga ilyá
69	úmwele ímyele 'knife/s'	3/4	úmwele uyú ímyeele iyí	úmweleuyó ímyele iyó	úmweleunó ímyele yínó	úmweleulyá ímyeleilyá
70	úmushílá ímishílá 'root/s'	3/4	úmushílá úyú ímishílá íyí	úmushílá úyó ímishílá íyó	úmushílá únó ímishílá yínó	úmushílá úlyá ímishílá ílyá
71	úmúnwe íminwe 'finger/s'	3/4	umúnwé úyú imínwé íyí	umúnwé úyó imínwé íyó	umúnwé únó imínwé yínó	umúnwé úlyá imínwé ílyá
72	íloba amáloba 'soil'	5/6	íloba ilí amáloba ayá	íloba ilyó amáloba ayó	íloba linó amáloba yanó	íloba lilyá amáloba yalyá
73	íshina amáshina 'name/s'	5/6	íshina ilí amáshina ayá	íshina ilyó amáshina ayó	íshina linó amáshina yanó	íshina lilyá amáshina yalyá
74	ílíbwé amábwé 'stone/s'	5/6	ílíbwé ilí amábwé áyá	ílíbwé ílyó amábwé áyó	ílíbwé línó amábwé yánó	ílíbwé lílyá amábwé yályá
75	úlubáfú imbáfú 'rib/s'	11/10	úlubáfú úlú imbáfú ishí	úlubáfú úló imbáfú ishó	úlubáfú lúnó imbáfú shínó	úlubáfú lúlyá imbáfú shílyá
76	úlupílí ímpílí 'hill/s'	11/10	úlupílí útú ímpílí ishí	úlupílí úló ímpílí ishó	úlupílí únó ímpílí shínó	úlupílí lúlyá ímpílí shílyá
77	utúsóté akásóté 'hat/s'	13/12	utúsóté útú akásóté áká	utúsóté útó akásóté ákó	utúsóté túnó akásóté kúnó	utúsóté túlyá akásóté kályá
78	utúlóndá akálóndá 'sore/s'	13/12	utúlóndá útú akálóndá áká	utúlóndá útó akálóndá ákó	utúlóndá túnó akálóndá kánó	utúlóndá túlyá akálóndá kályá
79	icísánsá ífísánsá 'palm/s'	7/8	icísánsá ící ífísánsá ífí	icísánsá ícó ífísánsá ífyó	icísánsá cínó ífísánsá fínó	icísánsá cílyá ífísánsá fílyá
80	icípóbé ífípóbé 'horsefly/s'	7/8	icípóbé ící ífípóbé ífí	icípóbé ícó ífípóbé ífyó	icípóbé cínó ífípóbé fínó	icípóbé cílyá ífípóbé fílyá
82	ífilémá ícilémá 'lame people'	8/7	ífilémá ífí ícilémá úcí	ífilémá ífyó ícilémá ícó	ífilémá fínó ícilémá cínó	ífilémá fílyá ícilémá cílyá
83	íftábó icítábó 'book/s'	8/7	íftábó ífí icítábó ící	íftábó ífyó icítábó ícó	íftábó fínó icítábó cínó	íftábó fílyá icítábó cílyá
84	ínkuni úlukúni 'wood'	10/11	ínkuni ishí úlukúni ulú	ínkuní ishó úlukúni uló	ínkuní shinó úlukúni lunó	ínkuní shilyá úlukúni lulyá
85	lufwínyemba baalufwínyemba 'chameleon'	1a/2a	lufwínyemba uyú baalufwínyemba ábá	lufwínyemba uyó baalufwínyemba abó	lufwínyemba unó baalufwínyemba banó	lufwínyemba ulyá baalufwínyemba balyá

86	shí?ánga baashí?ánga 'medicineman'	1a/ 2a	shí?ánga uyú baashí?ánga abá	shí?ánga uyó baashí?ánga abó	shí?ánga unó baashí?ánga banó	shí?ánga ulyá baashí?ánga balyá
87	úmulúméndo ábalúméndo 'boy/s'	1/ 2	úmulúméndó uyú ábalúméndóábá	úmulúméndó uyó ábalúméndó abó	úmulúméndó únó ábalúméndó bánó	úmulúméndó úlyá ábalúméndó bályá
88	úmukásháána ábakásháána 'girl/s'	1/ 2	úmukáshána úyú ábakáshána abá	úmukáshána áyó ábakáshána abó	úmukáshána únó ábakáshána bánó	úmukáshána úlyá ábakáshána bályá
89	úmwishíkúlu ábeshíkúlu 'grandchild/ren'	1/2	úmwishíkúlú uyú ábeshíkúlú abá	úmwishíkúlú uyó ábeshíkúlú abó	úmwishíkúlú únó ábeshíkúlú bánó	úmwishíkúlú úlyá ábeshíkúlú bályá

## 2. A: Noun and Adjective

Ser. No:	Nouns	Classes	-suma 'good'	-tali 'tall'/ 'distant'	-ipi 'short'	-kalamba 'big'
1.	umúntú abántú 'person'	1/2	umúntú umúsumá abántú abásumá	umúntú úmutáli abántú ábatáli	umúntú úmwiiipí abántú ábeepí	umúntú umúkalambá abántú abákalambá
2.	taatá baataatá 'father'	1a/ 2a	taatá umúsumá baataatá abásumá	taatá úmutáli baataatá ábatáli	taatá úmwiiipí baataatá ábeepí	taatá umúkalambá baataatá abákalambá
3.	umúshí imíshí 'village/s'	3/4	umúshífúwúsumá imíshí íyísumá	umúshí úwutáli imíshí íyítáli	umúshí úwiiipí imíshí íyiipí	umúshí uwúkalambá imíshí íyíkalambá
4.	úmuti ímiti 'tree/s'	3/4	úmuti uwúsumá ímiti iyísumá	úmuti uwutáli ímiti iyítáli	umuti uwiiipí ímitiiyiipí	úmuti uwúkalambá ímiti iyíkalambá
5.	icítábó ifítábó 'book/s'	7/8	icítábó ícísúsumá ifítábó ífísumá	icítábó ícítáli ifítábó ífítáli	icítábó ífiipí ifítábó ífiipí	icítábó icíkalambá ifítábó ifíkalambá
6.	íliino ámeeno 'teeth'	5/6	íliino ilísumá ámeeno ayásúsumá	íliino ilitáli ámeeno ayatáli	íliinó íliipí ámeeno ayeepí	íliino ilíkalambá ámeeno ayákalambá
7.	ífupa amáfupa 'bone/s'	5/6	ífupa ilísumá amáfupa ayásúsumá	ífupa í litáli amáfupa ayatáli	ífupa ayeepí amáfupaaeyeepí	ífupa ilíkalambá amáfupa ayákalambá
8.	íbééle ámabééle 'breast'	5/6	íbééle ilísumá ámabééle ayásúsumá	íbééle ilitáli ámabééle ayatáli	íbééleiliipí ámabééleayeepí	íbééle ilíkalambá ámabééle ayákalambá
9.	íshiwí amáshiwí 'voice/s'	5/6	íshiwí ilísumá amáshiwí ayásúsumá	íshiwí ílítáli amáshiwí ayatáli	íshiwí iliipí amáshiwí ayeepí	íshiwí ilíkalambá amáshiwí ayákalambá
10.	ícishíma ífíshíma 'well/s'	7/8	ícishíma ícísúsumá ífíshíma ífísumá	ícishíma icítáli ífíshíma ifítáli	ícishíma iciipí ífíshíma ifiipí	ícishíma icíkalambá ífíshíma ifíkalambá
11.	ulutánda íntánda 'star/s'	10/ 11	úlutánda ilúsumá íntánda ishísumá	úlutánda ulutáli íntánda ishítáli	úlutánda ulwiiipí íntánda ishiiipí	úlutánda ulúkalambá íntánda ishíkalambá

12.	úlupé indúpé 'reed tray/s'	10/ 11	úlupé úlúsumá indúpé ishísumá	úlupé úlutáli indúpé íshitáli	úlupé úlwiipí indúpé íshiiipí	úlupé lúkalambá indúpé shíkalambá
13.	úlulími índími 'tongue/s'	11	úlulímiulúsumá índími ishísumá	úlulími ulutáli índími íshitáli	úlulími ulwiipí índími íshiiipí	úlulími ulúkalambá índími ishíkalambá
14.	índa 'lice'	9	índa ishísumá	índa íshitáli	índa íshiiipí	índa íshíkalambá
15.	ulúpwá indúpwá 'family/s'	10/ 11	ulúpwá úlúsumá indúpwá íshísumá	ulúpwá úlutáli indúpwá íshitáli	ulúpwá úlwiipí indúpwá íshiiipí	ulúpwá ulúkalambá indúpwá íshíkalambá
16.	ínkoko 'chicken'	9	ínkoko iyísumá	ínkoko iyítáli	ínkoko iyiiipí	ínkoko iyíkalambá
17.	káápu amakáápu 'cup/s'	9a	káápu iyísumá amakáápu ayásumá	káápu iyítáli amakáápu ayatáli	káápu iyiiipí amakáápu ayeepí	káápu iyíkalambá amakáápu ayákalambá
18.	ísukúlu amásukúlu school/s ,	9a/ 6	ísukúlu ilísumá amásukúlu ayásumá	ísukúlu ilitáli amásukúlu ayatáli	ísukúlu iliipí amásukúlu ayeepí	ísukúlu ilíkalambá amásukúlu ayákalambá
19.	akáciipu utúfiipu 'small bed bag/s'	12/ 13	akáciipu akásumá utúfiipu utúsumá	akáciipu akatáli utúfiipu ututáli	akáciipu akeepí utúfiipu utwiipí	akáciipú akákalambá utúfiipu utúkalambá
20.	akáshí bá utúshí bá 'small pool/s'	12/ 13	akáshí bá ákású má utúshí bá útúsumá	akáshí bá ákatáli utúshí bá útutáli	akáshí bá ákeepí utúshí bá útwiipí	akáshí bá ákákalam bá utúshí bá útúkalambá
21.	kaashí?ánga tuushí?ánga 'small medicine man'	12a/ 13a	kaashí?ánga akásumá tuushí?ánga utúsumá	kaashí?ánga akatáli tuushí?ánga ututáli	kaashí?ánga akeepí tuushí?ánga utwiipí	kaashí?ánga akákalambá tuushí?ánga utúkalambá
22.	tuulunshi ' kaalunshi 'small housefly/es'	13a/ 12a	tuulunshi utúsumá kaalunshi akásumá	tuulunshi ututáli kaalunshi akatáli	tuulunshi utwiipí kaalunshi akeepí	tuulunshi utúkalambá kaalunshi akákalambá
23.	úbwato 'boat'	14	úbwato ubúsumá	úbwato ubutáli	úbwato ubwiipí	úbwato ubúkalambá
24.	umwéni abéni 'visitor/s'	1 / 2	umwéni úmúsumá abéni ábásumá	umwéni úmutáli abéni ábatáli	umwéni úmwiiipí abéni ábeepí	umwéni úmúkalambá abéni ábákalambá
25.	úmukáshí ábakáshí 'wife/s'	1/ 2	úmukáshí úmúsumá ábakáshí ábásumá	úmukáshí úmutáli ábakáshí ábatáli	úmukáshí úmwiiipí ábakáshí ábeepí	úmukáshí úmúkalambá ábakáshí ábákalambá
26.	umúlómó imílómó 'lip/s'	3/ 4	umúlómó úwúsumá imílómó íyísumá	umúlómó úwutáli imílómó íyítáli	umúlómó úwiiipí imílómó íyiiipí	umúlómó úwúkalambá imílómó íyíkalambá
27.	úmwaka ímyaka 'years'	3/ 4	úmwaka uwúsumá ímyaka iyísumá	úmwaka uwutáli ímyaka iyítáli	úmwaka uwiipí ímyakaiyiiipí	úmwaka uwúkalambá ímyaka iyíkalambá
28.	ínsupa 'calabash'	5	ínsupa ishísumá	ínsupa íshitáli	ínsupa íshiiipí	ínsupa ishíkalambá

29.	ímbwa 'dog'	9	ímbwa iyísumá	ímbwa íyítáli	ímbwa íyiipí	ímbwa iyíkalambá
30.	úbuta 'bow'	14	úbuta ubúsumá	úbuta úbutáli	úbuta úbwiiipí	úbuta ubúkalambá
31.	pá ?anda ká ?anda mú ?anda 'at/to/in home'	16/ 17/ 18	pá?anda apásumá kú?anda ukúsumá mú?anda umúsumá	pá ?anda ápatáli kú ?anda úkutáli mú ?anda úmutáli	pá?anda ápeepí kú?anda úkwiiipí mú?anda úmwiiipí	pá?anda apákalambá kú?anda ukúkalambá kú?anda umúkalambá
32.	páliBanda kúliBanda múliBanda 'at /to /in Banda's'	16/ 17/ 18	páliBánda pásumá kúliBánda kúsumá múliBánda músumá	páliBánda pátáli kúli Bándá kútáli múli Bándá mútáli	páli Bándá peepí kúli Bándá kwiiipí múliBándamwiiipí	páliBánda apákalambá kúli Bándá ukúkalambá múli Bándá umúkalambá
33.	mu múshí pa múshí ku múshí 'in/at/in the village'	16/ 17/ 18	mu múshí úmúsumá pa múshí ápásumá ku múshí úkúsumá	mu múshí úmutáli pa múshí ápatáli ku múshí kutáli	mu múshí úmwiiipí pa múshí ápeepí ku múshí úkwiiipí	mú múshí úmúkalambá pa múshí ápákalambá ku múshí ukúkalambá
34.	mumúúlú pamúúlú ku múúlú 'in/at/to the sky'	18/ 16/ 17	mumúúlú úmúsumá pamúúlú ápásumá kumúúlú úkúsumá	mumúúlú úmutáli pamúúlú ápatáli kumúúlú úkutáli	mumúúlú úmwiiipí pamúúlú ápeepí kumúúlú úkwiiipí	mumúúlú úmúkalambá pamúúlú ápákalambá kumúúlú ukúkalambá
35.	ukúúlú amóólú 'leg/s'	15/ 6	ukúúlú ukúsumá amóólú ayásumá	ukúúlú úkutáli amóólú áyatáli	ukúúlú úkwiiipí amóólú áyeepí	ukúúlú ukúkalambá amóólú ayákalambá
36.	úkubókó ámabókó 'arm/s'	15/ 6	úkubókó úkúsumá ámabókó ayásumá	úkubókó úkutáli ámabókó áyatáli	úkubókó úkwiiipí ámabókó áyeepí	úkubókó ukúkalambá ámabókó ayákalambá
37	úkwaapa ámaapa 'armpits'	15/6	úkwaapa ukúsumá ámaapa ayásumá	úkwaapa ukutáli ámaapa ayatáli	úkwaapaukwiiipí ámaapa ayeepí	úkwaapa ukúkalambá ámaapa ayákalambá
38.	kú cishíma pá cishíma mú cishíma 'to/at/in the well'	17/ 16/ 18	kú cishíma ukúsumá pá cishíma apásumá mú cishíma umúsumá	kú cishíma ukutáli pá cishíma apatáli mú cishíma umutáli	kú cishíma úkwiiipí pá cishíma ápeepí mú cishíma úmwiiipí	kú cishíma ukúkalambá pá cishíma apákalambá mú cishíma umúkalambá
39.	ímpanga 'bush'	9	ímpanga iyísumá	ímpanga ishitáli	ímpanga ishiipí	ímpanga ishikalambá
40.	liimukáayáma 'auntie'	5a	liimukáayáma ilísumá	liimukáyáma ilitáli	liimukáayáma iliipí	liimukáayáma ilíkalambá
41.	liinokolúmé 'your uncle'	5a	liinokolúmé ílísumá	liinokolúmé ílitáli	liinokolúmé íliipí	liinokolúmé ílíkalambá
42.	liishíkúlu 'grandfather'	5a	liishíkúlu ilísumá	liishíkúlu ilitáli	liishíkúlu iliipí	liishíkúlu ilíkalambá

43.	íloba 'soil' amáloba	5/ 6	íloba ilísumá amáloba ayásumá	íloba ilitáli amálobaayatáli	íloba iliipí amálobaayeepí	íloba ilíkalambá amáloba ayákalambá
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## 2. B: Nouns and Adjectives

Ser. No	Noun	Class	-fita 'black'	-noono 'small'	-ibi 'bad'
1.	umúntú abántú 'person'	1/ 2	umúntú úwafíta abántú ábafíta	umúntú úmunóóno abántú ábanóóno	umúntú úmubí abántú ábabí
2.	úmuti ímiti 'trees'	3/ 4	úmuti uwafíta ímiti iyafíta	úmuti úwunóóno ímiti íyinóóno	úmuti úwubí ímiti íyibí
3.	íçítábó ífitábó 'book'	7/ 8	íçítábó íçafíta ífitábó ífyafíta	íçítábó íçinóóno ífitábó ífinóóno	íçítábó íçibí ífitábó ífibí
4.	íliino 'tooth' ámeeno 'teeth'	5/ 6	íliino ilyafíta ámeeno ayafíta	íliinoilinóóno ámeenoayanóóno	íliinoilibí ámeenoábabí
5.	ífupa amáfupa 'bone/s'	5/ 6	ífupa ilyafíta amáfupa ayafíta	ífupailinóóno amáfupaayanóóno	ífupailibí amáfupaábabí
6.	íibééle ámabééle 'breast/s'	5/6	íibééle ilyafíta ámabééleayafíta	íibééleilinóóno ámabééleayanóóno	íibéélelibí ámabééleáyabí
7.	índúpé úlupé 'reed tray/s'	10/11	índúpé íshafíta úlupé úlwafíta	índúpé íshinóóno úlupé úlunóóno	índúpé íshibí úlupé úlubí
8.	índími úlulími 'tongue/s'	11	índími ishafíta úlulími ulwafíta	índímiishinóóno úlulími ulúnoono	índímiishibí úlulímíúlubí
9.	índa 'lousy'	9	índa iyafíta	índa iyinóóno	índa iyibí
10.	ínkoko 'chicken'	9	ínkoko iyafíta	ínkoko iyinóóno	ínkoko íyibí
11.	káápu amakáápu 'cup/s'	9a/ 6	káápu iyafíta amakáápu ayafíta	káápu iyinóóno amakáápu ayanóóno	káápu íyibí amakáápu áyabí
12.	akáciipu utúfiipu 'small bed bag/s'	12/ 13	akáfiipu akafíta utúfiipu utwafíta	akáfiipuakanóóno utúfiipu utunóóno	akáfiipuákabí utúfiipu útubí
13.	kaashí?ánga tuushí?ánga 'small medicine man'	12a/ 13a	kaashí?ánga akafíta tuushí?ánga utwafíta	kaashí?ánga akanóóno tuushí?ánga utunóóno	kaashí?ánga ábabí tuushí?ánga útubí
14.	tuulunshi kaalunshi 'small fl/ies'	12a/ 13a	tuulunshiutwafíta kaalunshiakafíta	tuulunshi utunóóno kaalunshiakanóóno	tuulunshiútubí kaalunshiákabí
15.	úbwato 'boat'	14	úbwato ubwafíta	úbwatoubunóóno	úbwatóububí
16.	umwéní	1/ 2	umwéní úwafíta	umwéní úmunóóno	umwéní úmubí

	abéní‘visitor/s’		abéní ábafíta	abéní ábanóóno	abéní ábabí
17.	úmukáshí ábakáshí‘wife/s’	1/ 2	úmukáshí úwafíta ábakáshí ábafíta	úmukáshí úmunóóno ábakáshí ábanóóno	úmukáshí úmubí ábakáshí ábabí
18.	úmulómó ímilómó‘lip/s’	3 /4	úmulómó úwafíta ímilómó íyafíta	úmulómó úwunóóno ímilómó íyinóóno	úmulómó úwubí ímilómó íyibí
19.	ínsupa ‘calabash’	5	ínsupa iyafíta	ínsupa iyinóóno	ínsupa íyibí
20.	ímbwa ‘dog’	9	ímbwa iyafíta	ímbwa iyinóóno	ímbwa íyibí
21.	úbuta ‘bow’	14	úbuta ubwafíta	úbuta ubunóóno	úbuta úbubí
22.	pá?anda kú?anda mú?anda‘at/to/in home’	16/ 17/ 18	pá?anda apafíta kú?anda ukwafíta mú?anda umwafíta	pá?anda apanóóno kú?anda ukunóóno mú?anda umunóóno	pá?anda ápabí kú?anda úkubí mú?anda úmubí
23.	ukúúlú amóólú‘leg/s’	15/ 6	ukúúlú úkwafíta amóólú áyafíta	ukúúlú úkunóóno amóólú áyanóóno	ukúúlú úkubí amóólú áyabí
24.	úkubókó ámabókó‘arm/s’	15/6	úkubókó úkwafíta ámabókó áyafíta	úkubókó úkunóóno ámabókó áyanóóno	úkubókó úkubí ámabókó ákubí
25.	úkwaapa ‘armpit’ ámaapa	15/ 6	úkwaapa ukwafíta ámaapa ayafíta	úkwaapa ukunóóno ámaapa ayanóóno	úkwaapaíkubí ámaapaáyabí
26.	ímpanga ‘bush’	5	ímpanga iyafíta ímpanga ishafíta	ímpanga iyinóóno ímpanga ishinóóno	ímpanga íyibí ímpanga íshibí
27.	liimukáayáma ‘auntie’	5a	liimukáayáma ilyafíta	liimukáayáma ilinóóno	liimukáayáma ilibí
28.	liinokolúmé ‘your uncle’	5a	liinokolúmé ilyafíta	liinokolúmé flinóóno	liinokolúmé flibí
29.	liishíkúlu ‘grandfather’	5a	liishíkúlu ilyafíta	liishíkúlu ilinóóno	liishíkúluilibí
30.	íloba amáloba ‘soil’	5/ 6	íloba ilyafíta amálobaáyafíta	íloba ilinóóno amáloba ayanóóno	íloba ilibí amáloba áyabí

### 3 A: Noun and Numeral

Ser. No:	Nouns	Class	-mo ‘one’	-bili ‘two’	-tatu ‘three’	-ne ‘four’	-no ‘five’
1	umúntú ‘person’	1/ 2	umúntú úmó abántú bámó	abántú bábílí	abántú bátátú	abántú báne	abántú basáno
2	úmuti ‘tree’	3/4	úmuti úmó	ímiti yíbilí	ímiti yítátú	ímiti yíne	ímiti yisáno
3	umúshí ‘village’	3/ 4	umúshí úmó	imíshí yíbilí	imíshí yítátú	imíshí yíne	imshí yisáno
4	ícishíma ‘well’	7/8	ícishíma címó	ífishíma fíbilí	ífishíma fítátú	ífishíma fíne	ífishíma fisáno

5	icítábó 'book'	7/8	icítábó címó	ifítábó fíbílí	ifítábó fítátú	ifítábó fíne	ifítábó fisáno
6	íliino 'tooth'	5/6	íliino límó	ámeeno yábílí	ámeeno yátátú	ámeeno yáne	ámeeno yasáno
7	ífupa 'bone'	5/6	ífupa límó	amáfupa yábílí	amáfupa yátátú	amáfupa yáne	amáfupa yasáno
8	íibééle 'breast'	5/6	íibééle límó	ámabééle yábílí	ámabééle yátátú	ámabééle yáne	ámabééle yasáno
9	íshíwi 'voice'	5/6	íshíwi límó	amáshíwi yábílí	amáshíwi yátátú	amáshíwi yáne	amáshíwi yasáno
10	úmukásháána 'girl'	1 / 2	úmukásháána úmó	ábakásháána bábílí	ábakásháána bátátú	ábakásháána báne	ábakásháána basáno
11	úmwishíkúlu grandchild	1/ 2	úmwishíkúlu úmó	ábeshíkúlu bábílí	ábeshíkúlu bátátú	ábeshíkúlu báne	ábeshíkúlu basáno
12	ciimu?wi?wi 'huge mosquito'	7a/ 8a	ciimu?wi?wi címó	fiiimu?wi?wi fíbílí	fiiimu?wi?wi fítátú	fiiimu?wi?wi fíne	fiiimu?wi?wi fisáno
13	ciiwishí 'huge father'	7a/ 8a	ciiwishí címó	fiiwishí fíbílí	fiiwishí fítátú	fiiwishí fíne	fiiwishí fisáno
14	índa 'lice'	9	índa yímó	índa shíbílí	índa shítátú	índa shíne	índa shisáno
15	ínkoko 'chicken'	9	ínkoko yímó	ínkoko shíbílí	ínkoko shítátú	ínkoko shíne	ínkoko shisáno
16	káápu 'cup'	9a	káápu yímó	amakáápu yábílí	amakáápu yátátú	amakáápu yáne	amakáápu yasáno
17	ísukúlu 'school'	9a	ísukúlu yímó	amásukúlu yábílí	amásukúlu yátátú	amásukúlu yáne	amásukúlu yasáno
18	ulúpwá 'family'	11/ 10	ulúpwá lúmó	indúpwá shíbílí	indúpwá shítátú	indúpwá shíne	indúpwá shisáno
19	ulúpé 'reed tray'	11/10	ulúpé lúmó	indúpé shíbílí	indúpé shítátú	indúpé shíne	indúpé shisáno
20	úmulúméndo 'boy'	1/2	úmulúméndo úmó	ábalúméndo bábílí	ábalúméndo bátátú	ábalúméndo báne	ábalúméndo basáno
21	úlulími 'tongue'	11	úlulími lúmó	índími shíbílí	índími shítátú	índími shíne	índími shisáno
22	íntánda 'star'	10/11	úlutándá lúmó	íntánda shíbílí	íntánda shítátú	íntánda shíne	íntánda shisáno
23	akaciipu 'small bed bag'	12/ 13	akaciipu kámó	utúfiipu túbílí	utúfiipu tútátú	utúfiipu túne	utúfiipu tusáno
24.	akáshíbá 'small pool'	12/ 13	akáshíbá kámó	utúshíbá túbílí	utúshíbá tútátú	utúshíbá túne	utúshíbá tusáno

25.	kaashí?ánga 'small medicine man'	12a/ 13a	kaashí?ánga kámó	tuushí?ánga túbílí	tuushí?ánga tútátú	tuushí?ánga túne	tuushí?ánga tusáno
26.	icítábó 'books'	7/ 8	icítábó címó	ifítábó fíbílí	ifítábó fítátú	ifítábó fine	ifítábó fisáno
27.	ícilémá 'lame person'	7/ 8	íciléma címó	ífiléma fíbílí	ífiléma fítátú	ífiléma fine	ífiléma fisáno
28.	ubóówá 'mushroom'	14	ubóówá búmó	ubóówá búbílí	ubóówá bútátú	ubóówá búne	ubóówá busáno
29.	ímbwa	9	ímbwa yímó	ímbwa shíbílí	ímbwa shítátú	ímbwa shíne	ímbwa shisáno
30.	umwéní 'visitor'	1/ 2	umwéní úmó	abéní bábílí	abéní bátátú	abéní báne	abéní basáno
31.	úmukáshí 'wife'	1/ 2	úmukáshí úmó	ábakáshí bábílí	ábakáshí bátátú	ábakáshí báne	ábakáshí basáno
32.	úmulómó 'lip'	3/ 4	umúlómó úmó	imílómó yíbílí	imílómó yítátú	imílómó yíne	imílómó yisáno
33.	úmwaka 'year'	3/ 4	úmwaka úmó	ímyaka yíbílí	ímyaka yítátú	ímyaka yíne	ímyaka yisáno
34.	ínsupa	9	ínsupa yímó	ínsupa shíbílí	ínsupa shítátú	ínsupa shine	ínsupa shisáno
35.	icípóbé 'horse fly'	7/8	icípóbé címó	ifípóbé fíbílí	ifípóbé fítátú	ifípóbé fine	ifípóbé fisáno
36.	icísánsá 'palm'	7/8	icísánsá címó	ifísánsá fíbílí	ifísánsá fítátú	ifísánsá fine	ifísánsá fisáno
37.	úlupílí 'hill'	10/11	ulúpílí lúmó	ímpílí shíbílí	ímpílí shítátú	ímpílí shíne	ímpílí shisáno
39.	utúsóté 'hats'	12/13	utúsóté tímó	ifísóté fíbílí	ifísóté fítátú	ifísóté fine	ifísóté fisáno
40.	utúlóndá 'sores'	12/13	akálóndá kámó	utúlóndá túbílí	utúlóndá tútátú	utúlóndá túne	utúlóndá tusáno
41.	ilíbwé 'stone'	5/ 6	ilíbwé límó	amábwe yábílí	amábwe yátátú	amábwe yáne	amábwe yasáno
42.	úlubáfú 'rib'	10/11	úlubáfú lúmó	imbáfú shíbílí	imbáfú shítátú	imbáfú shíne	imbáfú
43.	ukúúlú 'leg'	14/ 6	ukúúlú kúmó	amóólú yábílí	amóólú yátátú	amóólú yáne	amóólú yasáno
44.	úkubókó 'arm'	14/ 6	úkubókó kúmó	ámabókó yábílí	ámabókó yátátú	ámabókó yáne	ámabókó yasáno
45.	úkwaapa 'armpit'	14/ 6	úkwaapa kúmó	ámaapa yábílí	ámaapa yátátú	ámaapa yáne	ámaapa yasáno
46.	íshina 'name'	5/ 6	íshina límó	amáshina yábílí	amáshina yátátú	amáshina yáne	amáshina yasáno
47.	úmulúmé 'husband'	1/ 2	umúlúmé úmó	ábalúmé bábílí	ábalúmé bátátú	ábalúmé báne	ábalúmé basáno
48.	úmukóté 'old person'	1/ 2	úmukóté úmó	ábakóté bábílí	ábakóté bátátú	ábakóté bane	ábakóté basáno
49.	umúshá 'slave'	1/2	umúshá úmó	abáshá bábílí	abáshá bátátú	abáshá báne	abáshá basáno
50.	cuulá 'frog'	1a/ 2a	cuulá úmó	baacuulá bábílí	baacuulá bátátú	baacuulá báne	baacuulá basáno

51.	úmufwi 'spear'	3/4	úmufwi úmó	ímifwi yíbilí	ímifwi yítátú	ímifwi yíne	ímifwi yisáno
52.	úmwele 'knife'	3/4	úmwele úmó	ímyele yíbilí	ímyele yítátú	ímyele yíne	ímyele yisáno
53.	umúshílá 'root'	3/4	umúshílá úmó	imíshílá yíbilí	imíshílá yítátú	imíshílá yíne	imíshílá yisáno
54.	umúnwé 'finger'	3/4	umúnwé úmó	imínwé yíbilí	imínwé yítátú	imínwé yíne	imínwé yisáno

### 3. B: Noun and Numeral

Ser No	Nouns	Class	mutanda 'six'	cine lubali 'seven'	cine konse konse 'eight'	pabula 'nine'
1	umúntú 'person'	1/2	abántú mutándá	abántú cine lubálí	abántú cine kónsé konse	abántú páábúlá
2	úmuti 'tree'	3/4	ímiti mutándá	ímiticine lubálí	ímiti cine kónsé konse	ímiti páábúlá
3	umúshí 'village'	3/4	imíshí mutándá	imíshícine lubálí	imíshí cine kónsé konse	imíshípáábúlá
4	ícishíma 'well'	7/8	ífishíma mutándá	ífishíma cine lubálí	ífishíma cine kónsé konse	ífishíma páábúlá
5	icitábó 'book'	7/8	ifítábó mutándá	ifítábó cine lubálí	ifítábó cine kónsé konse	ifítábó páábúlá
6	íliino 'tooth'	5/6	ámeeno mutándá	ámeenocine lubálí	ámeeno cine kónsé konse	ámeeno páábúlá
7	ífupa 'bone'	5/6	amáfupa mutándá	amáfupacine lubálí	amáfupa cine kónsé konse	amáfupa páábúlá
8	íbééle 'breast'	5/6	ámabééle mutándá	ámabééle cine lubálí	ámabééle cine kónsé konse	ámabééle páábúlá
9	íshíwi 'voice'	5/6	ámashíwi mutándá	ámashíwi cine lubálí	ámashíwi cine kónsé konse	ámashíwi páábúlá
10	úmukásháána 'girl'	1/2	ábakásháána mutándá	ábakásháána cine lubálí	ábakásháána cine kónsé konse	ábakásháána páábúlá
11	úmwishíkúlu 'grandchild'	1/2	ábeshíkúlu mutándá	ábeshíkúlu cine lubálí	ábeshíkúlu cine kónsé konse	ábeshíkúlu páábúlá
12	ciimu?wi?wi 'huge mosquito'	7a/8a	fiiimu?wi?wi mutándá	fiiimu?wi?wi cine lubálí	fiiimu?wi?wi cine kónsé konse	fiiimu?wi?wi páábúlá
13	ciiwishí 'huge father'	7a/8a	fiiwishí mutándá	fiiwishí cine lubálí	fiiwishí cine kónsé konse	fiiwishí páábúlá
14	índa 'lice'	9	índa mutándá	índa cine lubálí	índa cine kónsé konse	índa páábúlá
15	ínkoko 'chicken'	9	ínkoko mutándá	ínkoko cine lubálí	ínkoko cine kónsé konse	ínkoko páábúlá
16.	káápu 'cup'	9a	amakáápu	amakáápu cine	amakáápu cine kónsékonse	amakáápu páábúlá

			mutándá	lubálí		
17.	ísukúlu 'school'	9	amásukúlu mutándá	amásukúlu cíne lubálí	amásukúlu cíne kónsé konse	amásukúlu páábúlá
18.	ulúpwá 'family'	10/11	indúpwá mutándá	indúpwá cíne lubálí	indúpwá cíne kónsé konse	indúpwá páábúlá
19.	úlupé 'reed tray'	10/11	indúpé mutándá	indúpé cíne lubálí	indúpé cíne kónsé konse	indúpé páábúlá
20.	úmulúméndo 'boy'	1/ 2	ábalúméndo mutándá	ábalúméndo cíne lubálí	ábalúméndo cíne kónsé konse	ábalúméndo páábúlá
21.	úlulími 'tongue'	10/11	índími mutándá	índími cíne lubálí	índími cíne kónsé konse	índími páábúlá
22.	úlutánda 'star'	10/11	íntánda mutándá	íntánda cíne lubálí	íntánda cíne kónsé konse	íntánda páábúlá
23.	akáciipu 'small bed bag'	12/13	utúfiipu mutándá	utúfiipu cíne lubálí	utúfiipu cíne kónsé konse	utúfiipu páábúlá
24.	akáshí'ánga 'small pool'	12/ 13	utúshí'ánga mutándá	utúshí'ánga cíne lubálí	utúshí'ánga cíne kónsé konse	utúshí'ánga páábúlá
25.	kaashí'ánga 'small medicine man'	12a/ 13a	tuushí'ánga mutándá	tuushí'ánga cíne lubálí	tuushí'ánga cíne kónsé konse	tuushí'ánga páábúlá
26.	icítábó 'books'	7/ 8	ifítábó mutándá	ifítábó cíne lubálí	ifítábó cíne kónsé konse	ifítábó páábúlá
27.	ífiléma 'lame person'	7/ 8	ífiléma mutándá	ífiléma cíne lubálí	ífiléma cíne kónsé konse	ífiléma páábúlá
28.	ubóowá 'mushroom'	14	ubóowá mutándá	ubóowá cíne lubálí	ubóowá cíne kónsé konse	ubóowá páábúlá
29.	ímbwa	9	ímbwa mutándá	ímbwa cíne lubálí	ímbwa cíne kónsé konse	ímbwa páábúlá
30.	umwéní 'visitor'	1/ 2	abéní mutándá	abéní cíne lubálí	abéní cíne kónsé konse	abéní páábúlá
31.	úmukáshí 'wife'	1/ 2	ábakáshí mutándá	ábakáshí cíne lubálí	ábakáshí cíne kónsé konse	ábakáshí páábúlá
32.	úmulómó 'lip'	3/ 4	imílómó mutándá	imílómó cíne lubálí	imílómó cíne kónsé konse	imílómó páábúlá
33.	úmwaka 'year'	3/ 4	ímyaka mutándá	ímyaka cíne lubálí	ímyaka cíne kónsé konse	ímyakapáábúlá
34.	ínsupa	9	ínsupa mutándá	ínsupa cíne lubálí	ínsupa cíne kónsé konse	ínsupa páábúlá
35.	icípóbé 'horse fly'	7/ 8	ifípóbé mutándá	ifípóbé cíne lubálí	ifípóbé cíne kónsé konse	ifípóbé páábúlá
36.	ícisánsá 'palm'	7/ 8	ifísánsá mutándá	ifísánsá cíne lubálí	ifísánsá cíne kónsé konse	ifísánsá páábúlá
37.	úlupílí 'hill'	10/11	impílí mutándá	impílí cíne lubálí	impílí cíne kónsé konse	impílí páábúlá
38.	icísóté 'hats'	7/ 8	ifísóté mutándá	ifísóté cíne lubálí	ifísóté cíne kónsé konse	ifísóté páábúlá
39.	utúlóndá 'sores'	12/13	utúlóndá mutándá	utúlóndá cíne lubálí	utúlóndá cíne kónsé konse	utúlóndá páábúlá
40.	ilíbwé 'stone'	5/ 6	amábwé mutándá	amábwé cíne lubálí	amábwé cíne kónsé konse	amábwé páábúlá
41.	ulúbáfú 'rib'	10/11	imbáfú mutándá	imbáfú cíne lubálí	imbáfú cíne kónsé konse	imbáfú páábúlá
42.	ukúúlú 'leg'	15/ 6	amóólú mutándá	amóólú	amóólú cíne kónsé konse	amóólú páábúlá

43.	úkubókó 'arm'	15/ 6	ámabókó mutándá	ámabókó cíne lubálí	ámabókó cíne kónsé konse	ámabókó páábúlá
44.	úkwaapa 'armpit'	15/ 6	ámaapa mutándá	ámaapacíne lubálí	ámaapa cíne kónsé konse	ámaapapáábúlá
45.	íshina 'name'	5/ 6	amáshina mutándá	amáshina cíne lubálí	amáshina cíne kónsé konse	amáshina páábúlá
46.	úmulúmé 'husband'	1/ 2	ábalúmé mutándá	ábalúmé cíne lubálí	ábalúmé cíne kónsé konse	ábalúmé páábúlá
47.	umúkote 'old person'	1/ 2	abákote mutándá	abákote cíne lubálí	abákote cíne kónsé konse	abákote páábúlá
48.	umúshá 'slave'	1/ 2	abáshá mutándá	abáshá cíne lubálí	abáshá cíne kónsé konse	abáshá páábúlá
49.	cuulá 'frog'	1a/ 2a	baacuulá mutándá	baacuulá cíne lubálí	baacuulá cíne kónsé konse	baacuulá páábúlá
50.	úmufwi 'spear'	3/ 4	ímifwi mutándá	ímifwi cíne lubálí	ímifwi cíne kónsé konse	ímifwi páábúlá
51.	úmwele 'knife'	3/ 4	ímyele mutándá	ímyele cíne lubálí	ímyele cíne kónsé konse	ímyele páábúlá
52.	umúshílá 'root'	3/ 4	imíshílá mutándá	imíshílá cíne lubálí	imíshílá cíne kónsé konse	imíshílá páábúlá
53.	umúnwé 'finger'	3/ 4	imínwé mutándá	imínwé cíne lubálí	imínwé cíne kónsé konse	imínwé páábúlá

### 3. C: Noun and Numeral

Ser No:	Nouns	Class	íkumi 'ten'	íkana '100'	umwanda '1000'
1	umúntú 'person'	1/ 2	abántú íkumi	abántú ikáná	abántú umwándá
2	úmuti 'tree'	3/ 4	ímití íkumi	ímitiikáná	ímitiumwándá
3	umúshí 'village'	3/ 4	imíshí íkumi	imíshíikáná	imíshí umwándá
4	ícishíma 'well'	7/ 8	ífishímá íkumi	ífishíma ikáná	ífishíma umwándá
5	icítábó 'book'	7/ 8	ifítábó íkumi	ifítábó ikáná	ifítábó umwándá
6	íliino 'tooth'	5/ 6	ámeenó íkumi	ámeenoikáná	ámeeno umwándá
7	ífupa 'bone'	5/ 6	amáfupá íkumi	amáfupaikáná	amáfupa umwándá
8	íibééle 'breast'	5/ 6	ámabééle íkumi	ámabééleikáná	ámabééle umwándá
9	íshiwí 'voice'	5/ 6	ámashiwí íkumi	ámashiwí ikáná	ámashiwí umwándá
10	úmukásháána 'girl'	1/ 2	ábakásháána íkumi	ábakásháána ikáná	ábakásháána umwándá
11	úmwishíkúlu 'grandchild'	1/ 2	ábeshíkúlu íkumi	ábeshíkúlu ikáná	ábeshíkúlu umwándá

12	ciimu?wi?wi 'huge mosquito'	7a/ 8a	fiimu?wi?wí íkumi	fiimu?wi?wi ikáná	fiimu?wi?wi umwándá
13	ciiwishí 'huge father'	7a/ 8a	fiiwishí íkumi	fiiwishí ikáná	fiiwishí umwándá
14	índa 'lice'	9	índá íkumi	índa ikáná	índa umwándá
15	ínkoko 'chicken'	9	ínkokó íkumi	ínkoko ikáná	ínkoko umwándá
16	káápu 'cup'	9a	amakáápu íkumi	amakáápu ikáná	amakáápu umwándá
17	ísukúlu 'school'	9/ 6	amásukúlú íkumi	amásukúlu ikáná	amásukúlu umwándá
18	ulúpwá 'family'	10/ 11	índúpwá íkumi	índúpwá ikáná	índúpwá umwándá
19	úlupé 'reed tray'	10/ 11	índúpé íkumi	índúpé ikáná	índúpé umwándá
20	úmulúméndo 'boy'	1/ 2	ábalúméndó íkumi	ábalúméndo ikáná	ábalúméndo umwándá
21	úlulími 'tongue'	11	índími íkumi	índími ikáná	índími umwándá
22	úlutánda 'star'	10	íntánda íkumi	íntánda ikáná	íntánda umwándá
23	akáciipu 'small bed bag'	12/ 13	utúfiipú íkumi	utúfiipu ikáná	utúfiipu umwándá
24	akáshíba 'small pool'	12/ 13	utúshíba íkumi	utúshíba ikáná	utúshíba umwándá
25	kaashí?ánga 'small medicine man'	12a/ 13a	tuushí?ángá íkumi	tuushí?ánga ikáná	tuushí?ánga umwándá
26	icítábó 'books'	7/ 8	ifítábó íkumi	ifítábó ikáná	ifítábó umwándá
27	ífiléma 'lame person'	7/ 8	ífilémé íkumi	ífiléma ikáná	ífiléma umwándá
28	ubóowá 'mushroom'	14	ubówá íkumi	ubówá ikáná	ubówá umwándá
29	ímbwa 'dog'	9	ímbwá íkumi	ímbwa ikáná	ímbwa umwándá
30	umwéní 'visitor'	1/ 2	abéní íkumi	abéní ikáná	abéní umwándá
31	úmukáshí 'wife'	1/ 2	ábakáshí íkumi	ábakáshí ikáná	ábakáshí umwándá
32	úmulómó 'lip'	3/ 4	imílómó íkumi	imílómó ikáná	imílómó umwándá
33	úmwaka 'year'	3/ 4	ímyaká íkumi	ímyaká ikáná	ímyaká umwándá
34	ínsupa	9	ínsupá íkumi	ínsupa ikáná	ínsupa umwándá
35	icípóbé 'horse fly'	7/ 8	ifípóbé íkumi	ifípóbé ikáná	ifípóbé umwándá
36	icísánsá 'palm'	7/ 8	ifísánsá íkumi	ifísánsá ikáná	ifísánsá umwándá
37	úlupílí 'hill'	10/ 11	impílí íkumi	impílí ikáná	impílí umwándá
38	icísóté 'hats'	7/ 8	ifísóté íkumi	ifísóté ikáná	ifísóté umwándá
39	utúlóndá 'sores'	13	utúlóndá íkumi	utúlóndá ikáná	utúlóndá umwándá
40	ilíbwé 'stone'	5/ 6	amábwé íkumi	amábwé ikáná	amábwé umwándá
41	úlubáfú 'rib'	10/ 11	imbáfú íkumi	imbáfú ikáná	imbáfú umwándá
42	ukúúlú 'leg'	15/ 6	amóólú íkumi	amóólú ikáná	amóólú umwándá
43	úkubókó 'arm'	15/ 6	ámabókó íkumi	ámabókó ikáná	ámabókó umwándá

44.	úkwaapa 'armpit'	15/ 6	ámaapá íkumi	ámaapa ikáná	ámaapa umwándá
45.	íshina 'name'	5/ 6	amáshiná íkumi	ámashiná ikáná	ámashiná umwándá
46.	úmúlúmé 'husband'	1/ 2	ábalúmé íkumi	ábalúmé ikáná	ábalúmé umwándá
47.	úmukóté 'old person'	1/ 2	ábakóté íkumi	ábakóté ikáná	ábakóté umwándá
48.	umúshá 'slave'	1/ 2	abáshá íkumi	abáshá ikáná	abáshá umwándá
49.	cuulá 'frog'	1a/ 2a	baacuulá íkumi	baacuulá ikáná	baacuulá umwándá
50.	úmufwi 'spear'	3/ 4	ímifwí íkumi	ímifwi ikáná	ímifwi umwándá
51.	úmweele 'knife'	3/ 4	ímyeele íkumi	ímyeele ikáná	ímyeele umwándá
52.	úmushílá 'root'	3/ 4	ímíshílá íkumi	ímíshílá ikáná	ímíshílá umwándá
53.	umúnwé 'finger'	3/ 4	imínwé íkumi	imínwé ikáná	imínwé umwándá

#### 4 Noun and Possessive and Pronoun

Class	Possesives	Examples	Personal Pronouns	Genitive Pronouns	Examples
1 <sup>st</sup> psg.	wándí	umúshí wándí 'my village'	íné 'me'		
1 <sup>st</sup> ppl.	bándí	abántú bándí 'my people'	ífwé 'us'		
	bésú	abántú bésú 'our people'			
2 <sup>nd</sup> psg.	wóbé	umúshí wóbé 'your village'	íwé 'you'		
2 <sup>nd</sup> ppl.	bóbé	abántú bóbé 'your people'	ímwé 'you'		
	bénú	abántú bénú 'your people'			
3 <sup>rd</sup> psg.	wábó	umúshí wábó 'their village'			
3 <sup>rd</sup> ppl.	bábó	abántú bábó 'their people'			
1.mu-	wa-ákwé	umwáná wákwé 'his child'	e-ená	waa	umwááná wáámfumu 'child of a chief'
1a.∅	wa-ákwé	taatá 'father'	é-ená	waa	wishí waamwáná 'father of the child'
2.ba-	ba-ábó	abántú 'people'	bé-ená	baa	abántú báámfumu 'chief's people'

2a.baa-	ba-ábó	baataatá 'father'	bé-ená	baa	baataatá
3.mu-	wa-kwé	umúshí 'village'	mwé-ená	waa	umúshí wáábufúmú
4.mi-	ya-kwé	imíshí 'villages'	yé-ená	yaa	imíshí yábáBemba
5.i/li-	lya-kwé	íliinó 'tooth'	lyé-ená	lyaa	íliino lyáámbwa
5a.ii	lya-kwé	íibééle 'breast'	lyé-ená	lyaa	íibééle lyaamúntú
6.ma-	ya-kwé	ámeeno	yé-ená	yaa	ámeeno yáámbwa
7.ci-	ca-kwé	ícishíma 'well'	cé-ená	caa	ícishíma cáámenshí
7a.cii-	caa-kwé	ciimu?wi?wi 'huge mosquito'	cé-ená	caa	ciimu?wi?wi cáámúmpanga
8.fi-	fya-kwé	ífishíma 'wells'	fyé-ená	fyaa	ífishíma fyátúúte
8a.fii-	fyaa-kwé	fiimu?wi?wi 'huge mosquitoes'	fyé-ená	fyaa	fiimu?wi?wi fyáápámúshí
9.n-	ya-kwé	índa 'lousy'	shé-ená	yaa	índa yaamumutwé
9a.ø	ya-kwé	káápu 'cup'	yé-ená	yaa	káápu yáámenshí
10.n-	sha-kwé	indúpe 'reed tray'	shé-ená	shaa	indúpe sháámukásháána
11.lu-	lwa-kwé	ulúpe	lwé-ená	lwaa	ulúpe lwáámukásháána
12.ka-	ka-kwé	akáshíba	ké-ená	kaa	akáshíba kéésabi
12a.kaa-	kaa-kwé	kaashí?ánga 'small medicine men'	ké-ená	kaa	kaashí?ánga kaamfúmú
13.tu-	twa-kwé	utúshíba	twé-ená	twaa	utúshíba twéésabi
13a.tuu-	twaa-kwé	tuushí?ánga 'small medicine men'	twé-ená	twaa	tuushí?ánga twamfúmú
14.bu-	bwa-kwé	ubówá 'mushroom'	bwé-ená	bwaa	ubówá bwámucíkópó
14a.buu -	bwa-kwé	buukafúndisha 'teaching profession'	bwé-ena	bwaa	buukafúndisha bwámulúméndo
15.ku-	kwa-kwé	úkubókó 'leg'	kwé-ená	kwaa	úkubókó kwámbwa
16.pa/pa li-	pa-kwé	pámúténgé	pé-ená	paa	pamúshí páBánda
17.ku/k uli-	kwa-kwé	ku múshí	kwe- ená	kwaa	ku múshí kwábánda
18.mu/ muli-	mwa-kwé	mu múshí	mwe- ená	mwaa	mu múshí mwábánda

## 5. Verbal Forms

### i. INDICATIVE MOOD

To include; PREPREFIX, POST SUBJECT MARKER, TENSE MARKER, ENDING, and APPLIED EXTENSION.

ABSOLUTE				RELATIVE			
Tense	Aspect	Positive	Negative	Subjective		Objective	
				Positive	Negative	Positive	Negative
<i>Present</i>	<b>habitual</b>	1 -la- -a/-a	2 ta- -a	3 -la- -a	4 ta- -a	5 a- -la- -a	6 ta- -a
	<b>Progressive</b>	7 -lee- -a	8 ta- -lee--a	9 -lee- -a	10 ta- -lee--a	11 -lee- -a	12 ta- -lee--a
	<b>Perfect</b>	13 -a- -a/ -ali- -a	14 ta- -a- -a	15 naa- -a	16 ta- -ile	17 naa- -a	18 ta- -ile
<i>Hodiern- alpast</i>	<b>habitual</b>	19 -aci- -a	20 ta- -aci- -a	21 -aci- -a	22 ta- -aci--a	23 -aci- -a	24 ta- -aci- -a
	<b>progressive</b>	25 -acilaa- -a	26 ta--acilaa--a	27 -acilaa- -a	28 ta--acilaa--a	29 -acilaa- -a	30 ta--acilaa--a
	<b>perfect</b>	31 -a- -aci--a	32 ta- -aci- -a	33 -a- -aci- -a	34 -a- -aci- -a	35 -a- -aci- -a	36 -a- -aci- -a
<i>recent prehodi- ernal past</i>	<b>habitual</b>	37 -a- -ile	38 ta- -a- -ile	39 -a- -ile	40 ta- -a- -le	41 -a- -ile	42 ta- -a- -le
	<b>progressive</b>	43 -alee- -a	44 ta- -alee- -a	45 -alee- -a	46 ta- -alee- -a	47 -alee- -a	48 ta- -lee- -a
	<b>perfect</b>	49 -a- -ile	50 ta- -ile	51 -a- -ile	52 ta- -ile	53 -a- -ile	54 ta- -ile
<i>remote prehodi- ernal past</i>	<b>habitual</b>	55 -a- -ile	56 ta- -a- -ile	57 -a- -ile	58 ta- -a- -ile	59 -a- -ile	60 ta- -a- -ile
	<b>progressive</b>	61 -alee- -a	62 ta--alee--a	63 -alee- -a	64 ta--alee--a	65 -alee- -a	66 ta--alee--a
	<b>perfect</b>	67 -a- -ile	68 ta- -ile	69 -a- -ile	70 ta- -ile	71 -a- -ile	72 ta- -ile
<i>Hodiern- al future</i>	<b>habitual</b>	73 -alaa- -a	74 ta- -a- -e	75 -alaa- -a	76 ta- -a- -e	77 -alaa- -a	78 ta- -a- -e
	<b>progressive</b>	79	80	81	82	83	84

		-alaa- -a	ta--alee--a	-alaa- -a	ta--alee--a	-alaa- -a	ta--alee--a
<i>Post</i>	<b>habitual</b>	85	86	87	89	90	91
<i>Hordier- nal</i>		-ka- -a	ta- -aka--e	-ka- -a	ta- -aka--e	-ka- -a	ta- -aka--e
<i>Future</i>	<b>progressive</b>	92	93	94	95	96	97
		-kalaa- -a	ta--akalee--a	-kalaa- -a	ta--akalee- -a	-kalaa- -a	ta--akalee- -a

## EXAMPLES.

ABSOLUTE			RELATIVE			
Tense & Aspect	Positive	Negative	Subjective		Objective	
			Positive	Negative	Positive	Negative
<i>Present</i>	1	2	3	4	5	6
<b>Habitual</b>	bálalyá	tabályá	ndalyá	nshilyá	cílalyá	tacílyá
úkulyá 'to eat'			bálalyá	tábalýá	fílalyá	tafílyá
			álalyá	talyá	kálalyá	takályá
			túlalyá	tatulyá	tulalyá	tatúlyá
			múlalyá	tamulyá		
ukúpéepá 'to smoke'	bálápeepá	tabápeepá	ndápeepá	nshípeepá	cílápeepá	tacípeepá
			bálápeepá	tabápeepá	fílápeepá	tafípeepá
			álápeepá	taápeepá	kálápeepá	takápeepá
			túlápeepá	tatúpeepá	túlápeepá	tatúpeepá
			múlápeepá	tamúpeepá		
<b>Progressive</b>	7	8	9	10	11	12
ukúfiká 'to arrive'	túlééfika	tatúleefika	ndééfika	nshílééfika	cílééfika	tacílééfika
			bálééfika	tabálééfika	fílééfika	tafílééfika
			álééfikaí	taálééfika	kálééfika	takálééfika
			tulééfika	tatúlééfika	túlééfika	tatúlééfika
			múlééfika	tamúlééfika		
úkulúká 'to vomit'	túléelúká	tatúleelúká	ndéelúká	nshíléelúká	cíléelúká	tacíléelúká
			báléelúká	tabáléelúká	fíléelúká	tafíléelúká
			áléelúká	taáléelúká	káléelúká	takáléelúká
			túléelúká	tatúléelúká	túléelúká	tatúléelúká
			múléeká	tamúléelúká		

<b>Perfective</b> úkumóná 'to see'  ukúúyá 'to go'	13 báámoná  bááyá	14 tabáámoná  tabááyá	15 moná báámoná twáámoná mwáámoná nááúmoná ndááyá bááyá ááyá túúyá múúyá	16 nshímoná tabáámoná taatúmoná tamúmoná taúmoná nshilyá tabááyá tááyá tatúúyátamúúyá	17 cámoná kámoná fímoná túmoná cíyá fíyá kááyá túúyá	18 tacmoná takámoná tafímoná tatúmoná tacíyá tafíyá takááyá tatúúyá
<b>Past</b> <b>hodierna</b> <b>H</b> <b>abitual</b> úkulembá 'to write'  ukúfíká 'to arrive'	19 báácílémbá  báácífíka	20 tabáácílémbá  tabáácífíka	21 náácílémbá báácílémbá áácílémbá twáácílémbá mwáácílémbá náácífíka báácífíka áácífíka twáácífíka mwáácífíka	22 nsháácílémbá tabáácílémbá taácílémbá tatwáácílémbá tamwáácílémbá nsháácífíka tabáácífíka taácífíka tatwáácífíka tamwáácífíka	23 cáácílémbá fyáácílémbá káácílémbá twáácílémbá cáácífíka fyáácífíka káácífíka twáácífíka	24 tacáácílémbá tafyáácílémbá takáácílémbá tatwáácílémbá tacáácífíka tafyáácífíka takáácífíka tatwáácífíka
<b>Progressive</b> úkubómbá 'to work'  ukúlímá 'to cultivate'	25 báácíláabómbá  báácíláálíma	26 tabáácíláabómbá  tabáácíláálíma	27 náácíláabómbá báácíláabómbá áácíláabómbá twáácíláabómbá mwáácíláabómbá náácíláálíma báácíláálíma áácíláálíma twáácíláálíma mwáácíláálíma	28 nsháácíláabómbá tabáácíláabómbá taácíláabómbá tatwáácíláabómbá tamwáácíláabómbá nsháácíláálíma tabáácíláálíma táácíláálíma tatwáácíláálíma tamwáácíláálíma	29 cáácíláabómbá fyáácíláabómbá káácíláabómbá twáácíláabómbá cáácíláálíma fyáácíláálíma káácíláálíma twáácíláálíma	30 tacáácíláabómbá tafyáácíláabómbá takáácíláabómbá tatwáácíláabómbá tacáácíláálíma tafyáácíláálíma takáácíláálíma tatwáácíláálíma
<b>Perfective</b> ukúséká 'to laugh'	31 naacíséká	32 nshaacíséká	33 naacíséká baacíséká aacíséká	34 nshaacíséká tabacíséká taacíséká	35 caacíséká fyaacíséká kaacíséká	36 tacaacíséká tafyaacíséká takaacísékátatw

úkwimbá 'to sing'	báácimba	tabáácimba	twaacíséká mwaacíséká náácimba báácimba áácimba twáácimba mwáácimba	tatwaacíséká tamwaaséká nsháácimba tabáácimba taácimba tatwáácimba tamwáácimba	twaacíséká cáácimba fyáácimba káácimba twáácimba	aaciséká tacáácimba tafyáácimba takáácimba tatwáácimba
<b>Recent</b> <b>Prehodiernal</b> <b>past</b> <b>habitual</b> ukúséndá 'to carry' úkucápá 'to wash'	37 báásénde báácápíle	38 tabáásénde tabáácápíle	39 náásénde báásénde áásénde twáásénde mwáásénde náácápíle báácápíle báácápíleáácápí letwáácápíle mwáácápíle	40 nsháásénde tabáásénde tasénde tatwáásénde tamwáásénde nsháácápíle tabáácápíle tabáácápíle táácápíle tatwáácápíle tamwáácápíle	41 cáásénde fyáásénde káásénde twáásénde cáácápíle fyáácápíle káácápíle áácápíle twáácápíle	42 tacáásénde tafyáásénde takáásénde tatwáásénde tacáácápíle tafyáácápíle takáácápíle táácápíle tatwáácápíle
<b>Progressive</b> úkútúmá 'to send'  ukúúyá 'to go'	43 bááléétúmá báálééya	44 tabááléétúmá tabáálééya	45 nááléétúmá bááléétúmá ááléétúmá mwááléétúmá twááléétúmá náálééya báálééya áálééya mwáálééya twáálééya	46 nshááléétúmá tabááléétúmá tááléétúmá tamwááléétúmá tatwááléétúmá nsháálééya tabáálééya táálééya tamwáálééya tatwáálééya	47 cááléétúmá fyááléétúmá kááléétúmá twááléétúmá cáálééya fyáálééya káálééya twáálééya t	49 tacááléétúmá tafyááléétúmá takááléétúmá tatwááléétúmá tacáálééya tafyáálééya takáálééya tatwáálééya
<b>Perfective</b> ukwíkálá 'to stay'	50 twáíkélé	51 tatwáíkélé	52 náíkélé báíkélé áíkélé mwáíkélé twáíkélé	53 nsháíkélé tabáíkélé táíkélé mwáíkélé twáíkélé	54 cáíkélé fyáíkélé káíkélé twáíkélé	55 tacáíkélé tafyáíkélé takáíkélé tatwáíkélé

úkulyá 'to eat'	báálíle	tabáálíle	náálíle báálíle áálíle mwáálíle twáálíle	nsháálíle tabáálíle táálíle tamwáálíle tatwáálíle	cáálíle fyáálíle káálíle twáálíle	tacáálíle tafyáálíle takáálíle tatwáálíle
<b>Remote present Habitual</b> ukútéetá 'to cut' úkulúká 'to vomit'	56 bááteetélé  báalúkíle	57 nshááteetélé  nsháalúkíle	58 nááteetélé báááteetélé ááteetélé mwááteetélé twááteetélé náalúkíle báalúkíle áalúkíle twáalúkíle mwáalúkíle	59 nshááteetélé tabáááteetélé tááteetélé tamwááteetélé tatwááteetélé nsháalúkíle tabáalúkíle táalúkíle tatwáalúkíle tamwáalúkíle	60 cááteetélé fyáááteetélé kááteetélé twááteetélé cáalúkíle fyáalúkíle kaalúkíle twaalúkíle	61 tacááteetélé tafyáááteetélé takááteetélé tatwááteetélé tacáalúkíle tafyáalúkíle takálúkíle tatwáalúkíle
<b>Progressive</b> ukúlílá 'to cry'  úkukúlá 'to grow'	62 báaléélila  báaléekúlá	63 tabáaléélila  tabáaléekúlá	64 náaléélila báaléélila áaléélila twáaléélila mwáaléélila náaléekúlá báaléekúlá áaléekúlá mwáaléekúlá twáaléekúlá	65 nsháaléélila tabáaléélila táaléélila tatwáaléélila tamwáaléélila nsháaléekúlátabáa léekúlá táaléekúlá tamwáaléekúlá tatwáaléekúlá	66 cáaléélila fyáaléélila káaléélila twáaléélila cáaléekúlá fyáaléekúlá káaléekúlá twáaléekúlá	67 tacáaléélila tafyáaléélila takáaléélila tatwáaléélila tacáaléekúlá tafyáaléekúlá takáaléekúlá tatwáaléekúlá
<b>Perfective</b> ukúkóshá 'to harden'  úkutémá 'to chop'	68 bákoséshé  bátéméné	69 tabáakóseshé  tabátéméné	70 nákoséshé bákoséshé ákoséshé twákoséshé mwákoséshé náátéméné báátéméné átéméné mwáátéméné	71 nshákoséshé tabákoséshé taákoséshé tatwákoséshé tamwákoséshé nshatéméné tabátéméné tatéméné tamwátéméné	72 cákoséshé fyákoséshé kákoséshé twákoséshé cátéméné fyátéméné kátéméné twátéméné	73 tacákoséshé tafyákoséshé takákoséshé tatwákoséshé tacátéméné tafyátéméné takátéméné tatwátéméné

			twáátéméné	tatwátéméné		
<b>Hodiernal</b> <b>future</b> <b>habitual</b> úkwasúká 'to answer'  ukúlímá 'to cultivate'	72 bááláasúká  báláálíma	75 tabaasúké  tabáálimé	76 nááláasúká bááláasúká ááláasúká mwááláasúká twáákáasúká nááláálíma bááláálíma ááláálíma twááláálíma mwááláálíma	77 nshaasúké tabaasúké taasúké tamwaasúké tatwaasúké nsháálimé tabáálimé takáálimé tatwáálimé tamwáálimé	78 cááláasúká fyááláasúká kááláasúká twááláasúká  cááláálíma fyááláálíma ááláálíma twááláálíma	79 tacaasúké tafyaasúké takaasúké tatwaasúké  tacáálimé tafyáálimé tááléimé tatwáálimé
<b>Progressive</b> úkúsámbá 'to swim'  ukúlílá 'to cry'	80 bááláasámbá  bááláálíla	81 tabaaléésámbá  tabaaléélíla	82 nááláasámbá bááláasámbá ááláasámbá mwááláasámbá twááláasámbá nááláálíla bááláálíla ááláálíla mwááláálíla twááláálíla	83 nshaaléésámbá tabaaléésámbá taaléésámbá tamwaaléésámbá tatwaaléésámbá nshaaléélíla tabaaléélíla taaléélíla tamwaaléélíla tatwaaléélíla	84 caaléésámbá fyaaléésámbá kaaléésámbá twaaléésámbá  cááláálíla fyááláálíla kááláálíla twááláálíla	85 tacaaléésámbá tafyaaléésámbá takaaléésámbá tatwaaléésámbá  tacaaléélíla tafyaaléélíla takaaléélíla tatwaaléélíla
<b>post</b> <b>hodiernal</b> <b>future</b> <b>Habitual</b> ukwíínká 'to name' úkushípá 'to spit'	86 bákénika  bákáshipa	87 tabaakeniké  tabakashipé	88 nkénika bákénikaákénik a múkénika túkénika nkáshipa bákáshipaákáshi pa múkáshipa túkáshipa	89 nshaakeniké tabaakeniké taakeniké tamwaakeniké tatwaakeniké nshakashipé tabakashipé taakashipé tamwakashipé tatwakashipé	90 cíkénika fíkénika kákénika túkénika  cíkáshipa fíkáshipa kákáshipa túkáshipa	91 tacaakeniké tafyaakeniké takaakeniké tatwaakeniké  tacakashipé tafyaashipé takakashipé tatwakashipé
<b>Progressive</b> ukúléngá 'to draw'	92 bákaláálénga	93 tabaakaléélénga a	94 nkáláálénga bákaláálénga	95 nshakaléélénga tabakaléélénga	96 cíkaláálénga fíkalááléngé	97 tacakaléélénga tafyakaléélénga

úkúlémbá 'to write'	bákáláalémbá	tabaakaleelem ba	ákaláálenga múkaláálenga túkaláálenge nkáláalémbá bákáláalémbáák aláalémbámúkal áalémbá túkaláalémbá	takakaléélenga tamwakaléélenga tatwakaléélenga nshakaleelemba tabakaleelemba takakaleelemba tamwakaleelemba tatwakaleelemba	kákaláálengatúka láalenga cíkaláalémbáfíka láalémbá kákaláalémbá túkaláalémbá	takakaléélenga tatwakaléélenga tacakaleelemba tafyakaleelemba takakaleelemba tatwakaleelemb a
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## ii. SUBJUNCTIVE MOOD

Tense	Aspect	Positive	Negative
<i>Present</i>	<b>habitual</b>	1 -e	2 -i- -a
	<b>progressive</b>	3 -lee- -a	4 -laa- -a
<i>hodiernal future</i>	<b>habitual</b>	5 -ka- -e	6 -ika- -a
	<b>progressive</b>	7 -kalee- -a	8 -ikalaa- -a

## EXAMPLES

Tense	Aspect	Positive	Negative
<i>Present</i>	<b>habitual</b>	1	2
	úkúlímá 'to cultivate'	ndímé tulímé baalímé ulímé mulímé	nshilímá twilímá beelímá wilímá mwilímá
	úkupépá 'to pray'	pépé ápépé bápépé túpépé	nshípepa épepa béépepa twípepa

		múpépé	mwípepa
	<b>progressive</b>	3	4
	úkulyá 'to eat'	ndeelyá tuleelyá baleelyá uleelyá muleelyá	nshiláályá twiláályá beeláályá wiiláályá mwiiláályá
	ukúséká 'to laugh'	ndeeséká baleeséká tuleeséká uleeséká muleeséká	nshiilaaséká beelaaséká twiilaaséká wiilaaséká mwiiilaaséká
<i><b>hodiernal future</b></i>	<b>habitual</b>	5	6
	ukúúyá 'to go'	nkaayé bakáyé akáyé mukáyé tukáyé	nshiikayá beekayá ekayá mwiikayá twiikayá
	úkulémbá 'to write'	nkalémbé bákalémbé ákalémbé múkalémbé túkalémbé	nshíkalémbá béékalémbá ékalémbá mwíikalémbá twííkalémbá
	<b>progressive</b>	7	8
	úkubómbá 'to work'	nkáaleebómbá bákaleebómbá ákaleebómbá múkaleebómbá túkaleebómbá	nshiikaléébómbá beekaléébómbá ekaléébómbá mwiikaléébómbá twiikaléébómbá

## **2.4 Summary**

In this chapter, all the data collected were presented in the tabular form, and 8 tables were presented each giving specific data. The tables given throughout are for easy reference to the information in the analysis in coming chapters. Words were initially presented in citation form according to their respective word classes and then were presented in different grammatical contexts. The different tables include tables with words in citation form, tonal groups of words in isolation and word classes in different grammatical contexts inclusive of verbal forms.

## Chapter Three

### Findings

#### 3.0 Introduction

This chapter presents the findings of the study based on the data collected and presented in the previous chapters. These findings have come about using the techniques and procedures discussed in section 1.11.

Bemba has distinctive tones which function as a pitch-accent system. One syllable in each word described carries an accent syllable and thus must have its tone properties specified. Once the accented syllable and its tone type have been specified, the tone properties of the remaining syllables in the word are assigned in a rule-governed way. Tone may be carried on the antepenultimate, the penultimate or ultimate syllable.

The Bemba language is a non-configurational language and as such syntactic units are generally not in a fixed order. Furthermore, Bemba is also described as a language where word structures of nouns and verbs consist of; augment + prefix + stem/radical/root. As a general rule, an augment bears a high tone, e.g

a)  $\acute{u}$ -mu-ntú ? u-mú-ntú ‘person’      b)  $\acute{i}$ -mpá-nga ?  $\acute{i}$ -mpá-ngá ‘sheep’

UR                      SR                                      UR                      SR

In this word  $\acute{u}$  *mu* *ntú* the augment is high toned in the underlying structure (UR) while in the surface structure (SR) the augment has low tone *u mú ntú*. This rule is known as flip-flop. While in words like  $\acute{i}$ -mpá-ngá (*sheep*) and  $\acute{i}$ -mpá-nga (*bush*), other than the augment not only being high toned in the deep structure, the stem is high toned too. So the stem does not only keep the high tone but also automatically the ultimate syllable has a high tone and this rule is known as *tonal polarity*.

(c) í-m-pá-nga ? ímpánga ‘sheep’

UR            SR

(d) í-m-pá- ngá ? ímpanga ‘bush’

UR            SR

The most important question however, addressed here is why phonology should be a reliable source of information about syntax. The implication henceforth being that phonology can provide a reliable source of information about syntax once we understand how to interpret it. In this study we used the nonlinear approach that allowed the phonology to access an arbitrary range of information about the linear order.

This chapter is organised as follows; after showing the tonal patterns in the Bemba nominal system from words in citation form in the first section, the second section shows how the pitch-accent properties of Bemba nominal forms can be described in terms of Autosegmental theory. This chapter deals with tone terracing and other related tonal rules which apply when words are combined into larger syntactic units.

### **3.1 Words in citation form**

#### **3.1.1 Nouns**

100 words were randomly picked up from all the 18 noun classes as classified by Van Sambeek (*A Bemba Grammar*). These nouns were placed in tone groups and 11 tone groups were identified. It should be noted that words are said to belong to the same tone group when they show the same tone pattern. Therefore tone groups are the same as the tone pattern heard on the stem of the word. These words ranged from two syllabic forms to seven syllabic forms. There are few low toned nouns in Bemba as only five words were identified as having a low tone as shown in Table 3.1.1: below.

**TABLE 3.1.1:** Tone groups of nouns in citation form

Tone Group	1 syll	2 syll	3 syll	4 syll	5 syll	6 syll	7 syll
1.L <sup>n</sup>		2	3				
2.LH <sup>n</sup>			8	13			
3.HL <sup>n</sup>		2	23	3			
4.HLH <sup>n</sup>			1	8			
5.LHLH				2			
6.L <sup>n</sup> H		4	1				
7.HLH <sup>n</sup> L				4	5		
8.LHHL				1			
9.LHLHL					2		
10.LHL <sup>n</sup>			1	6	2		
11.H <sup>n</sup> L		2	3				

Bemba, like most Bantu languages, has a simple two-one tone system leading to four disyllabic tonal patterns identified in a noun system as; H (high), L(low), LH(rising), HL(falling) (Philippon, 1992). The four patterns will be indicated by a diacritic over the vowel of the tone-bearing unit (TBU); zero (low), u (falling), ?(rising), and <sup>ˀ</sup>(high). At times there is a tendency for the HL to peak at a relatively lower pitch compared with the other tones. However, rather than introducing a mid pitch level for a ML (mid tone) contour, it is simpler to recognise only H and L at a phonological level and attribute the relatively lower realisation of H in the disyllabic HL environment to a rule of phonetic detail. This illustrates the general strategy we will adopt throughout our analysis, in terms of only H and L. The four tone patterns are exemplified by the forms in (1);

(1) Disyllabic tone pattern:

1	2	3	4
H H	LH	HL	L L
ndúmé	wishíínda	noko	
‘brother’	‘his/herfather’	‘lice’	‘your mother’

Here, with dysyllabic forms, we find that the majority of forms fall into one of the three or four basic tone melodies. Once again, the phonetic facts can be represented phonologically by sequences of H and L:

(2) HH LL-H HH-L LL

The patterns LL-H and HH-L suggest quite natural assimilation rules as in 3, below. These assimilation processes create rising and falling contours on syllables.

(3) Assimilation:

LH LL-H R \_\_\_\_  
 HL HH-L R \_\_\_\_

It will be shown in the derivations in (7) below, that L does not spread onto a syllable already associated with the complex tone H-L. As the general condition; that a tone does not spread onto a syllable already associated with more than one tone.

Accepting these assimilation rules, the H and L sequences found with dysyllabic words are now identical to the four tonal patterns established in 2 above: namely; high, low, rising and falling. We use the same diacritics as above in 1, then, to indicate the tone class of the two-syllable forms, with the diacritic marked on the vowel of second syllable. There are 2 tone classes associated with the two-syllabic words as shown in Table: 2 in the previous chapter. Examples of dysyllabic words are as given in (4):

(4) Dysyllable-word tone patterns:

HH	LH	HL	LL
ndúmé	'name' wishí	'his/her father'	índa 'louse' noko 'your mother'

At this point it is convenient to introduce Goldsmith's (1976) autosegmental theory. The Bemba facts discussed so far lend themselves to description in terms of autosegmental theory, since the four tonal melodies can be seen as existing in their own right, independent of the length of the words to which they attach. Bemba resembles Mende (a language of Sierra Leone), a case used by Goldsmith in support of the autosegmental analysis. The relevant facts about Mende can be traced in Leben (1978:186-187) and Kenstowicz and Kisseberth (1979:274-275). In this language there are four basic tonal melodies which occur in words, regardless of number of syllables in the word. The association of a single tonal melody HL to the three Mende words in (5) comes about by application of conventions introduced by Goldsmith which spread the tones across segments in a well-formed way. For instance, the basic pattern HL, can be associated with one-, two-, or three-syllabic words, resulting in the associations shown in (5):

(5) H-L	HL	HLL
Mbu 'owl'	ngila 'dog'	felama 'junction'

We adopt then, the approach of autosegmental phonology which accounts for the facts of Mende and, as we shall see, Bemba. The theory now exists in various versions, built on the original key idea that phonological representation separates a "tonal tier" in which the remaining segmental information about words is displayed. The various versions of the theory differ with respect to the way in which these two

tiers come to be associated. Since the original proposals of Goldsmith account satisfactorily of tone mapping:

(6) Tone mapping:

- a. Associate the first tone with the first syllable, the second tone with the second syllable, and so on, until all tones and syllables are exhausted.
- b. Tones and syllables not associated as a result of (a) are subject to the well-formedness conditions:
  - i. Every tone is associated with some syllable.
  - ii. Every syllable is associated with some tone.
  - iii. Association lines may not cross.

Tone mapping, together with assimilation, give the desired results for two-syllable words without any modifications to the theory. The derivation of the observed tones from the basic tonal patterns is shown in (7):

(7) Derivation of tonal patterns:

Basic tonal pattern HHLH   HL   LL  
 Segmental Tier ndúmé wisóínda noko

Tone Mapping H L H HH-L L  
 || | |/\  
 ndúméwisoin danoko

Assimilation - L L-H H H-L -  
 | \ | \ F  
 wiso inda

Tri-syllable words will usually have one of the following four tonal patterns:

H H H      L L L-H      H H H-L      L L L

Once again, the tones involved in each case are exactly the tonal sequences of the four disyllabic tonal patterns and we would like to see these derived from the four basic tone patterns. The rules introduced so far give the correct results for the HHH but not for the other three patterns LL-HH, HH-LL, and LLL-L, as shown below:

(8) Incorrect derivations:

Tone mapping	L	H	HL	LHL
		\	\	
	X X X	X X X	X X X	X X X
Assimilation	L L-H	H H-L	L L-HH-L	
	\	\	\ \	
	X X X	X X X	X X X	

(incorrect!) (incorrect!) (incorrect!)

In these cases it is necessary to associate the second tone of the basic tonal pattern with the final syllable, rather than the second syllable. Once that association is made, the rest follows from the rules given above. We now begin to see more clearly the pitch–accent nature of the Bemba tonal system, that is, there are words where one of the syllables in the word must be associated with a particular tone while the other tone-bearing units in the word receive their tones in a predictable way. The syllable which must be so designated is the accented syllable of the word. In terms of ASP, the tone and the syllable which must be associated in this way are shown with an association line between them and an accent association rule pairs the two associated elements as the first step in the derivation. The correct derivations of these patterns proceed then as follows:

(9) Correct derivations of tone patterns:

Accent association	L H	H L	LHL	
		\ \	\	
	X X X	X X X	X X X	
Tone Mapping	L H	H L L	HL	
	\ \	\ \	\ \ \	
	X X X	X X X	X X X	
Assimilation	-	L L-H	H H-L	-
		\ \	\ \	
	X X X	X X X		

Note that at this point, tone mapping in these two cases spreads the first “floating” or “unlinked” tone rather than the second “linked” or “associated” tone. However this is not to say that there is anything in Goldsmith’s theory which prevents the spreading of a linked tone, but a prohibition on the spreading of a linked tone is proposed in Halle and Vergnaud(1982:73) in their analysis of Tonga accents and we adopt this prohibition here too. Therefore, the Tone Mapping rule applies only to unlinked tones.

This is to say that the tonal patterns of tri-syllabic words are reduced to the four basic tonal patterns and using the same diacritics, now shown on the last syllable of three-syllable words. Examples of three-syllabic words are given in (10):

(10) Tri-syllabic-word tone patterns:

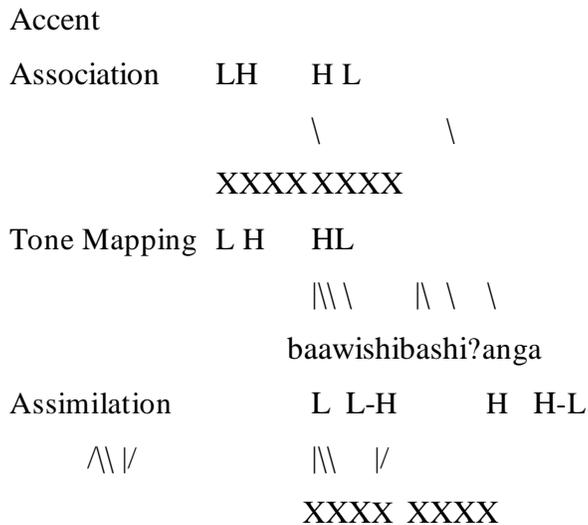
L	LH	HL
mu?wi?wi ‘mosquito’	maayó ‘mother’	káápu ‘cup’ (loanword)
kaafi ‘spitting cobra’	taatá ‘father’	shíkúlu ‘grandfather’

Quadri-syllabic words show the basic tone patterns:

L L L L	LLLL-H	HHHH-L
---------	--------	--------

To account for the correct placement of contours in four-syllabic words, one must again recognise certain syllables as accented, as done in the previous sections. Schematic derivations are shown in (11):

(11) Derivations:



The tone patterns of such words are reduced therefore to the basic tone patterns. An example of each of these categories is given in (12):

(12) quadric-syllabic word tonal patterns:

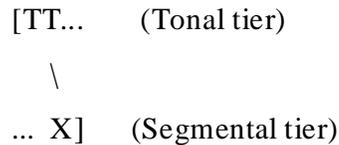
LH	HL	LL
ciiwishí	báshíkúlu	kaanoko
’his/her huge father’	’grandfather’	’your small mother’
	(honorific)	

The quinquic-syllabic words show the three tonal patterns as shown, similarly the six-syllabic and the seven-syllabic words. Six-syllabic and seven-syllabic words are rare as shown in Table 2.2 in the previous chapter.

In the foregoing discussion, we have made use of the association line device arbitrarily in accounting for the facts of Bemba, although a thorough inspection of the positions in which the association line appears

will show that it is by no means arbitrary. On the segmental tier, the association line only occurs on the last syllable; it only occurs over the second tone of the basic tonal pattern. Schematically, the accent association rule works as follows:

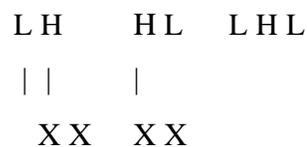
(13) For accented words:



The use of the association line in our account is thus governed by simple principles. However, as it is, it is not entirely satisfying because the use of an association line does not correspond exactly to what would be taken as the “accented syllable” of a pitch-accent language. Rather, the accented syllable would normally be associated with a change in pitch and in the case of Bemba this means the last syllable in most nouns discussed so far, except those which may have H tone throughout, as exemplified in 14 below and other exceptions to be discussed below in 3.1.1.1.

(14)

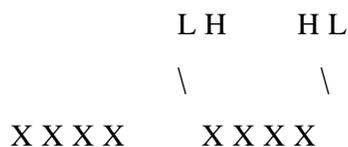
(a) Two-syllable words:



(b) Three-syllable words:



(c) Four-syllable words:





Some of the words exhibiting this pattern are listed in (15b) below. They include some tri-syllabic and four-syllabic forms, and the number of such forms is relatively high. In a count of all the four-syllabic forms (as most nouns used in the study are trisyllabic or disyllabic) in the corpus (100), it was found that approximately 40– 50percent, exhibited the exceptional LH and HL pattern. In the case of five-syllabic forms, there appears to be only a handful showing antepenultimate accent, although there are numbers of trisyllabic words, and so even smaller percentage for disyllabic words. The antepenultimate-accent words include those listed below, in 15b:

(15b)	UR	SR	Gloss
	(a) ímpánga	împánga	‘sheep’
	(b) í?supa	ínsupa	‘calabash’
	(c) îláya	îláya	‘dress’
	(d) í?dimi	índimi	‘tongues’
	(e) îbééle	îbééle	‘breast’

Note that the only exceptional feature of these words is the antepenultimate position of the accent. Once this is specified, along with the appropriate basic tone pattern, then the spreading of the tones proceeds in exactly the same way as described for the “regular” cases, as illustrated in (16):

(16)	Derivation of antepenultimate-accent words:	
		ínsupa ‘calabash’    îláya ‘dress/ cloth’
	Accent Association	HL                    HLHL
		/                        /
insupa	ilaya	
	Tone Mapping HL	HLH L
		insupai la ya

Assimilation H-L L H-L H L  
 | | | |

insupa i la ya

Apart from these words listed below being cases of antepenultimate accent, these forms are exceptional in that the first syllable is associated with an H-L pattern, while the rest of the word appears to have its own separate pattern.

- (a) insupa ‘calabash’
- (b) impángá ‘sheep’
- (c) íbééle ‘breast’
- (d) îláya ‘dress’

The sequences in (a), (b), (c) and (d) exhibit another contour tone and the patterns can be accounted for within the autosegmental approach by positing an accent on the first syllable as well as the last, with the other rules applying as before. This can be sketched as in (17):

(17) Derivation of two-accented words:

insupa ‘calabash’ impángá ‘ship’ îláya ‘dress’ indími ‘tongues’

Accent Association HLLL HL H H HL H L HLH L  
 / | | / | | | | | |

insu pa i mpa nga i i la ya indimi

Tone Mapping H L LHL HHLHH-LHLH L  
 V ^V ^ | |VV | |

i nsu pa impanga i layai ndimi

Notice that the accent association line is in exactly the same way as was done for words with ultimate syllable accent, that is, the second tone on the tonal tier is linked with the antepenultimate syllable on the segmental tier. Moreover, apart from these cases of ultimate-accent and antepenultimate syllable accent,

there is also another exception. Here the penultimate syllable has a rising tone, in accordance with the schema (18).

(18) Derivation íkungwa ‘orange’ ábaíce ‘young ones’

Accent Association H L-H L HLH H

/ ||

íkungwa ábaíce

Tone Mapping HL-H LH LHH

| \ | | | |

íkungwaaba i ce

In this case an antepenultimate-accent is evident. Therefore, we would have to recognize no more than a small class of antepenultimate-accent words but also a very large class of ultimate-accent words. Secondly, the derivation requires the spreading of the linked L tone to the right, violating the convention we have adopted throughout, whereby only unlinked tones spread by the rule of Tone Mapping. Rather than introduce a complication into our analyses, we propose an alternative solution. Where, we analyse these words as consisting of two basic tonal patterns. The first syllable associated with the first tonal pattern and the rest of the word with the second tonal pattern (unaccented).

(19) Derivation from two basic tonal patterns:

împángá ‘sheep’

Accent Association L H

/

impanga

Tone Mapping LH

^

impanga

Downstep L-H !H !H

\ | |

impanga

A phonetic downstep occurs between any two adjacent H tones as well. In fact a high tone is defined as any tone that is at the same pitch as a preceding high tone. However, it has been studied that a high tone will always be lower in pitch than a preceding high tone. The result is that every instance of L tone shifts the upper end of the pitch range downward until all pitches are reset at the end of the prosodic melody. Further, phonemic downstep may occur when a low tone is elided or occurs as a floating tone and leaves a following tone at a lower level than it would otherwise be.

### **3.2 Nouns and Tones in Context.**

When morphemes or words combine to form constructions in Bemba, the basic tonal patterns associated with individual syllables and words may be modified, that is, nouns in different grammatical contexts establish tonal pattern variations. In this section, we will examine these modifications and the syntactic domains relevant to their application. Since our main interest here is to elucidate the way in which tonal phonology and syntax interface, we will ignore certain tonal changes which are restricted to particular inflectional categories e.g the verb paradigm. For instance, the imperative form in some verb classes requires a change in the basic tonal pattern of the verb root from H to LH when the imperative suffix is added. Thus, allotonic changes of this kind, restricted as they are to verb morphology will not be discussed in detail in this study. Another area that will be discussed below in this study is the relative pronoun, also discussed in reference to relative clauses and in relation to the Cleft, Pseudo-Cleft and WH-questions.

#### **(1) Noun and Demonstrative**

Demonstratives in Bemba are used to locate in space and in time as anaphoric and cataphoric words. These fall into 4 categories meaning; near me, near me and far from you, near you and far from me and, far from both you and me. Their morphological structure is usually prefix + stem. For example;

Prefix + stem	Gloss
a) a –bá	‘near me’
b) u –yú	‘near me and far from you’
c) u –yó	‘near you and far from me’
d) a –bó	‘far from both you and me’

Demonstratives normally carry LH tonal pattern in the citation forms shown above and moreso, in Table 2.3.1 in the previous chapter. In context the demonstrative does not change if the noun preceded is low toned.

Rule 1: LH + L<sup>n</sup> ---> LH + L<sup>n</sup>

e) L H L L? L H L L

| | | | | | | |

uyó noko uyó noko ‘there your mother’

f) L H L L? L H L L

| | | | | | | |

ulyá lunshi ulyá lunshi ‘that over there is a housefly’

Rule 2: L<sup>n</sup> + LH ---> L<sup>n</sup> + LH

(g) LLL L LH? LLL L LH

|| | | | | | | | |

baanoko abó =baanoko abó ‘there is your mother’

(h) L LLH? L LLH

| | | |? | | | |

lunshiulyá =lunshi ulyá ‘that over there is a fly’

The tonal pattern of the demonstrative will not change unless the noun preceding has a high tone in the last or ultimate syllable. The H tone on the ultimate syllable of the noun will spread on the initial syllable of the demonstrative. Thus, the tonal pattern of the demonstrative becomes HH due to a process known as Tone spreading.

Rule 3: ...H + LH ---> LH<sup>n</sup> + HH

L H H LH? L H H H H

| | | | | | | |

(i) umúntú uyó = umúntú úyó 'that person'

But if the tone of the noun is low in the last syllable, there is no tone change in the tonal pattern of the demonstrative or noun.

Rule 4: HL + LH ---> HL + LH

(j) H L LH? H L LH

| | | | | | | |

ímbwailiyá = ímbwa ilyá 'that dog over there'

Sometimes the tonal pattern of a noun changes if it is preceded by a demonstrative in a construction. The augment (TBU) is usually deleted while the high tone (if present) is delinked (but not deleted) hence spreads onto the following syllable. For example;

Rule 5: LH + LH<sup>n</sup> ---> LH + H<sup>n</sup>

LHLHH? L H H H

| | | | | | | |

uyó umúntú = uyó múntú 'that person'

Rule 6: LH + HLH<sup>n</sup>L ---> LH + H<sup>n</sup>L

L H H L H H L ---> L H H H L

| | | | | | | | | |

ulyá úmwishíkúlu = ulyá mwishíkúlu ‘that grandchild over there’

Demonstratives also change in a grammatical context for emphatic reasons. However, in this study we are concentrating on the non-emphatic demonstratives as shown in Table 3. Moreover the emphatic type has a different morphological structure as; preprefix +prefix +stem. For example:

e -ba -lyá ‘that is her /him’

Preprefix +prefix +stem

It will be observed that the syntactic frame between a noun and a demonstrative changes in a sentential construction. However, the general rule states that: if the tone of the stem is high underlyingly, in the citation form, the tone of the demonstrative following the noun is not changed. But if the tone of the stem is low, the tone of the root changes together with the tonal pattern of the noun preceding it.

## (2) Noun and Adjective

Adjectives behave like nouns in Bemba, i.e. they carry the same prefix as the nouns they are modifying. They fit into the same tone-sets as nouns. Adjectives may either precede or follow a noun in a sentence. Thus, the syntactic frame is not fixed i.e. may interchange. If the adjective is preceded by the noun in a sentence, the tonal pattern of the word it modifies does not change. But the high tone of the ultimate syllable of the noun spreads on the augment of the adjective following it and otherwise if the tone of the noun in the ultimate syllable is low as shown in Table 2.3.2A.

Rule 1: LHH + LHL<sup>n</sup> ---> LHH + LHL<sup>n</sup> or HLHHL + LHLH ---> HLHHL +

LHLH

(a) LHH + LH L L ? LHH + LH L L

| | | | | | | | | | | | |

Umúntúumúsuma= umúntú umúsuma ‘good person’

(b) H L HHL + H LH L ? H LHH L + H LHL

| | | | | | || | | | | | | |

úmwishíkúluúmutáli=úmwishíkúlu úmutáli ‘tall grandchild’

However, if the noun precedes the adjective, the tonal pattern of the noun would not change only the shape of the adjective in agreement would change. In some cases there are some exceptions as in the case of a noun with a variant stem tonal pattern LH<sup>n</sup>.

RULE 2: LHHH + HHHH ---> LHLL + HHHH

(a) LHH H+HHHH H ---> LHLL + HHHHH

| | | | || | | | | | | | | || | | |

umúpíkawáámúténgó ---> umúpikawáámúténgó ‘expensive pot’

In the Bemba language, there are similar words which are recognised lexically different using tones or grammatical context such as:

(a) úlukúngú lwá?anda ‘verandah’

(b) ulúkungú lwáísa ‘the dust season has come’

(c) icíntú íciibi ‘bad thing’

(d) icííbí ícisúma ‘good door’

It was observed too, that in these sequences shown above, tone is not the only distinguishing factor but what follows the minimal pair also changes.

### (3) Noun and Numeral

Numerals from one to five (5) are adjectives in Bemba and follow the words they are in agreement with. Other numbers over five also can be preceded by the noun but these are really nouns and do not agree with what precedes hence behave as nouns. Thus, in this study other numerals over five will be treated as nouns. The common tonal pattern among the five numerals is a high tone. It should also be noted that only numerals 1-10, 100, 1000 and 1000s have been discussed in this study. The general rule states that the tone pattern of the numeral does not change as much as they agree with the noun they modify in a sentence. For example as also shown in Table 2.3.3A:

#### (1) Noun + H numeral (a numeral with high tone)

Rule 1:  $HLL + \underline{HH} \rightarrow HLL + \underline{HH}$

(a)  $H LL+HH \rightarrow HLL+ HH$

| | | | | | | |

ínkokoímó = ínkoko ímó ‘one chicken’

#### (2) Noun + HL numeral

Rule 2:  $LHH + \underline{HL} \rightarrow LHH + \underline{HL}$

(b)  $LHH + HL \rightarrow LHH + HL$

| | | | | | | |

Imíshíshíne = imíshí shíne ‘four villages’

#### (3) Low noun + high numeral

Rule 3:  $\underline{L}^n + H^n \rightarrow \underline{L}^n + H^n$

(c)  $LLLL+H HH \rightarrow LL L L+HHH$

|| | | | | | | | |

Baalunshibábílí = baalunshi bábílí ‘two flies’

(4) Low noun + HLL numeral

Rule 4:  $\underline{L}^n + HL \rightarrow \underline{L}^n + HL$

(d) LL L L + H L ---> LL L L + HL

| | | | | | | | | | | |

baalunshibáne = baalunshi báne ‘four flies’

However, there is an exception to the rule as in Table 2.3.3C e.g

(5) noun +HL numeral

Rule 5:  $\underline{HL}^n + HL \rightarrow HLH^nL$

(e) HLL + HLL ---> HLH L L

| | | | | | | |

ímitííkumi = ímitíkumi

(f) HLL + HL L ---> H LH L L

| | | | | | | |

úmwakaíkumi = úmwakékumi ‘tenth year’

In this situation, the tone of the first syllable of the numeral following does not only inflect change in the ultimate syllable of the noun but instead the TBU has been deleted while the high tone remains. Consequently, like in (f) there is also vowel coalescence, where vowel *a* before *i* becomes *e* (*a/ i? e*).

**(6) Noun and Possessive and Genitive Pronoun**

Possessives and genitive pronouns show a kind of prefix which is often translated in English by possessive ‘s’ and ‘of’. Like an adjective there is a separate pre-prefix (augment) for every class and the pre-prefix has to agree with the word it is modifying, for instance;

(a) Likean adjective, a possessive and a genitive pronoun can be used without any particular noun to agree with, e.g

ábaá-kalé ‘(people) of the past’

(b) Often used with an infinitive, e.g

ámenshí úkukába ‘hot water’

(c) To indicate a quality e.g

umúshí wáábúsáká ‘a tidy village’

(d) Or contents e.g

ulú pé lwámpwa ‘a reed tray of eggplants’

From the four situations illustrated above (a)-(d) it will be observe that the tonal pattern of the possessive or genitive pronoun changes. In citation form the tonal pattern of the possessive and the genitive pronoun is high. In these contexts shown above in 6 (a), (b), (c) and (d) the tone pattern does not only agree with the nominalit precedes but carry the tone of the prefix. Thus,

(a) possessive + adjective

Rule 1:  $\underline{HL}^n + LH^n \rightarrow \underline{HL} + LH^n$

$HL + L\ H\ H\ H \rightarrow HL + L\ H\ H\ H$

| | | | | | | | | |

ímbwa yaabúsáká=ímbwa yaabúsáká ‘a clean dog’

(b) possessive + noun

Rule 2:  $LH^n + L + \underline{HL} \rightarrow LH^n + \underline{HL} / HLH + \underline{L} + HL \rightarrow HLH + \underline{LHL}$

$LHH + L + HL \rightarrow LHH + HL$

| | | | | | | | | |

ulú pé lwa ímpwa = ulú pé lwámpwa

HL H+L HL ---> HLH+LHL

| | | | | | | | | |

ámenshí yakúnwa = ámenshí yakúnwa ‘drinking water’

Possessive pronouns can precede or follow the nominal in the sentence, check Table 2.3.4. If the possessive pronoun precedes the nominal in the sentence the tonal pattern of the preceded nominal is not affected nor that of the possessive.

(c) ímbwa yándí ‘my dog’

Possessive pre-prefix has both full and short unstable forms as well as stable forms beginning with *e-* and *tee-*. *E-* and *tee-* can be added to the short form of any nominal, except that before a noun with no prefix in dictating a particular person or animal, *-kwa-* is put in between e.g

(d) úbukáshána bwakwáBwalya ‘Bwalya’s womanhood’

(e) úbwalwa bwámulúméndo ‘the boy’s beer’

(The second example has no *-kwa-* inserted inbetween because *úmulúméndo* has a prefix and *Bwalya* has not.)

### (7) Personal pronoun + Noun

The 1<sup>st</sup> psg (first person singular) and 2<sup>nd</sup> psg (second person singular) as well as plural personal pronouns in Bemba are (H<sup>n</sup>) high toned. The other personal pronouns from cl<sub>1</sub> – cl<sub>2</sub> are referred to as 3<sup>rd</sup> personal pronouns and are translated as *-éná* and *ená* as shown in Table 2.3.4. They have a different structure as well as the tonal pattern HLH for cl<sub>1</sub>. It is observed that if the high toned personal pronoun is used in context with a noun the pronoun does not lose its tonal pattern but the noun if preceded; its last syllable becomes high. The tone of the prefix of the noun equally becomes high.

(1) Noun + High tone personal pronouns

Rule 1: HLHHL + H<sup>n</sup> ---> H<sup>n</sup> + H<sup>n</sup>

(a) HLHHL + HH ----> H HH H + HH

| | | | | | | | | | | |

úmulúméndo íwé = múlúméndó íwé ‘you boy’

Rule 2: H<sup>n</sup> + HLHHL ----> H<sup>n</sup> + H<sup>n</sup> L

(b) H H + HLHHL ----> HH + H H HL

| | | | | | | | | | | |

íwéúmulúméndo = íwé múlúméndo ‘you boy’

Rule 3: HLH + LH ---->HLH + LH

(c) HLH + LH ----> HLH + LH

| | | | | | | | | |

úmwanáená =úmwaná ená ‘child it’

Rule 4: LHL<sup>n</sup> + HLH ----> LHL<sup>n</sup>H+ HLH

(d) LHLLL + HLH ----> LHLLH+ HLH

| | | | | | | | | | | |

akáciipukéená = akáciipú kéená ‘bedbag it’

### (8) Noun and Indefinite Pronoun and Determiner

Indefinite determiners are words which lack the definiteness element which is found in the personal, reflexive, possessive, demonstrative pronouns and determiners. In Bemba, these are words which translate as ‘all’, ‘each’, ‘few’, ‘much/many’ or ‘every’ in English. The word structure for indefinite determiners is; prefix + stem. The syntactic frames in noun+ indefinite determiners changes.

#### 1. All/ every

The forms for ‘all/every’ in Bemba agree with the headnoun in a sentence. The tone-pattern of the determiner does not affect the tone-pattern of the noun.

Rule 1: LH<sup>n</sup> + H<sup>n</sup> ----> LH<sup>n</sup> + H

(a) L H H + H H ----> L H H + H H

| | | | | | | |

abántúbónsé abántú bónsé 'all people/ everybody'

Rule 2:  $H^n + LH^n \rightarrow H^n + LH^n$

(b) H H + L H H ----> H L + L H H

| | | | | | | |

bónséabántú bónseabántú 'all people/ everybody'

Alternatively: in (a) abovetone has been lowered because of the low tone preceding a high tone in the construction. Hence, the following tonal rules;

Rule 1;  $LH \rightarrow L!H / \text{---}H$

Or Rule 2;  $HL + H \rightarrow HL !H$

Generally, downstep applies to H tones in successive syllables, bringing about a lowering of pitch level. It applies within phrases (NP, PP, VP and so on) and so may affect longer strings than just two-tone sequences, in which case downstep applies successively to all tonal patterns of the phrase, creating a gradual lowering effect (tone terracing). A sequence of H! H indicates a downstep H will have the perceptual effect of a H Mid (or L); a sequence of H !H !H will be heard as H Mid L, and so forth.

### 1. Each

The forms for 'each' are either *cílá* or reduplication for 'one' *címócimo*. These forms are high toned in citation as well as in context. However, if this determiner precedes the noun in a sentence, the noun loses its pre-prefix.

Rule 3:  $H^n + \underline{LH}^n \rightarrow H^n + \underline{H}^n$

(c) HH + LH H---> HH + HH

| | | | | | | |

cílaumúntú=cíla múntú ‘each person’

Here there is augment deletion of the noun preceded.

infinitive + Determiner

Rule 3: H<sup>n</sup> + H<sup>n</sup> ---> H<sup>n</sup> + H<sup>n</sup>

(e) HHHH + HHHHH ---> HHHH + HHHHH

| | | | | | | | | | | | | |

múbúúlécímóócimo --->múbúúlé címóócimo ‘you should get one each’

## 2. Few

The form that translates ‘few’ in Bemba is the same with that which means, ‘little/small’.

Rule 4: HLH<sup>n</sup> + HLH<sup>n</sup> L ---> HLH<sup>n</sup> + HLH<sup>n</sup> L

(f) HLHH + HLHH L ---> HLHH + HLHH L

| | | | | | | | | | | | | |

ábaicéábanóono báálíshile --->ábaicé ábanóono ‘a few young ones came’

Rule 5: HL<sup>n</sup> + L<sup>n</sup>H<sup>n</sup> L ---> HL<sup>n</sup> + H<sup>n</sup> L

(g) HL + LLHH L ---> HL + LLHH L

| | | | | | | | | |

Ímbwayiinóono --->ímbwayiinóono ‘the dog is too small’

## 3. Much/many

This expression is equal to that of an adjective. The word that translates ‘much/many’ in Bemba is *-ngá*.

However, *-nga* in this case, as a determiner, comes at word ending and not at word initially. Like other

determiners discussed so far in this study *-ngá* is no different tonologically. For example:

(a) bungá ubóowá? ‘how many mushrooms?’

(b) fingá ifípobé? ‘how many horse flies?’

(c) shingá ínkoko? ‘how much chicken?’

(d) *tungá tuucuulá?* 'how many toads?'

## 2. Noun + Particle

Particles in Bemba include words meaning 'it is' and 'it is not' in English. e.g. *ni-*, *e-* and *tee-*. They are used word initially and are used in a word formation process called stabilisation. Here, a word formed is capable of standing as a complete sentence on its own. In citation form the particles are low toned. The particles carry the tonal pattern of the prefix of the noun in agreement. Therefore, if the tonal pattern of the prefix is high the tonal pattern of the particle will be high and otherwise in the situation of a low toned prefix of the noun.

(1) Stabilised noun + possessive pronoun

a) *umúshí* 'village' / *múúshíwándí* 'it is my village'

/ *teemúshíwándí* 'it is not my village'

(2) Stabilised noun + adjective

b) *ámenshí* 'water' / *méénshiyákába* 'it is hot water'

/ *téémenshíyakábá* 'it is not hot water'

(3) Stabilised noun + possessive pronoun

(c) *ínkoko* 'chicken' / *nínkoko yenú* 'it is your chicken'

/ *téénkoko yenú* 'it is not your chicken'

## 3. Noun and Locative

There are three locative classes in the Bemba nominal system 16 'pa', 17 'ku' and 18 'mu'. There are either short or long locative prefixes. It was also observed that a word with an augment and the one without it will carry the same tonal pattern. The locatives which usually take a place of an augment do not change the tonal pattern of the stem of the word. But, locative prefixes; (short ones) vary

depending on the tone of what follows it. Therefore, locative prefixes will be high if the tone of the prefix is high and low if the prefix of the word is low.

(a) Locative + noun

Rule 1:  $\underline{L} + HL^n \rightarrow \underline{HL}^n$

$L + HL \rightarrow HL$

| | | | |

(a) pa ímbwa = pámbwa ‘on dog’

(b) ku úmuti = kúmuti ‘to tree’

(c) mu úmwaka = múmwaka ‘in a year’

Rule 2:  $L + \underline{LH}^n \rightarrow \underline{LH}^n$

$L + LHH H \rightarrow LHH H$

| | | | | | | |

(d) pa utúsóté = patúsóté ‘on small hats’

(e) mu impílí = mumpílí ‘in hills’

But longer pre-prefixes carry a HL tonal pattern. Additionally, HL tonal pattern do not change and do not affect the tonal pattern of the noun preceded.

Rule 3:  $HL + \underline{HHL} \rightarrow HL + \underline{HHL}$

$HL + HHL \rightarrow HL + HHL$

| | | | | | | |

(f) múli shí?ánga = múlishí?ánga

(g) kúli shí?ánga = kúlishí?ánga

(h) páli shíkúlu = pálishíkúlu

Rule 4: HL + LHHL ---> HL+LHHL

HL + LHHL ---> HL+LH H L

| | | | | | | | | |

(i) páli kafúndisha = pálikafúndisha

Alternatively, locative pre-prefixes often refer to time or to various other special ideas and in this case, they carry tone of the noun preceded. For instance,

(j) múbushíkú ‘at night time’

(k) pámweshí ‘monthly’

There are also two special forms of the locative pre-prefix and these include; kúnó, pánó, múnó (here in) and kwá, páá, mwá meaning ‘in . . .’s’, see also on *Noun and Pronoun*).

Lastly, there are some personal terms that are used only with locative pre-prefixes, e.g,

(l) múmwandí ‘in my village’

(m) kúmwandí ‘here at my house’

Even in this case, the locative pre-prefix carries the same tone of the noun.

#### 4. Relative Pronoun

In this study, relative pronouns are discussed in reference to relative clauses. Relative clauses as it were are co-referential in a sentence. A relative pronoun replaces the NP of the co-referential NPs in a pair of sentences and as a result retains the grammatical function. For instance in the English language, we have three types of relative pronouns, subject, object and oblique (plays neither subjective nor objective roles in a construction).

Subject; ‘who’

Object (DO); ‘whom’ or possessor ‘whose’ and

Adverbial; ‘which’

In a number of Bantu languages, there are no relative pronouns at least in certain types of relative clauses especially subject relative clauses and object relative clauses. Hence, relative pronouns are identified by the context or tones and special segmental morphemes in the verb of the relative clause. For instance;

(a) Bamaayó abáílé ku múshí nabábwela

‘(My) mother who went to the village has come back’

(b) Úmwaíce úo baikete kú?wena mailo, aalífye nómwaka úmó

‘The young person that was caught by a crocodile yesterday was only a year old’

In Bemba as shown in the examples (c), (d) and (e) below, the subject-agreement morpheme appears in the object relative clause and the object relative pronoun is bound as prefix to the verbal word.

(c) abántú ábó abó naámwéné ‘there are the people that i saw’

(d) icítábó icó úmwaná aámwéné ‘the book that the child saw’

(e) úmwaná aámwéné icítábó ‘the child saw the book’

### **(11.1) Cleft, Psuedo-Cleft and WH-question**

Cleft, Psuedo-Cleft and WH- questions in Bemba all involve the presence of a relative clause.

Cleft construction; no overt relative pronoun appears. For example:

(a) Múpandó uó Mwámbá ashítílé mailo

‘It’s a chair (seat) that Mwamba bought yesterday.’

In a Pseudo-Cleft construction, an overt object relative pronoun does appear and is bound to the verb.

(b) (icíntú) icó Mutale ashítúle mailo múpandó

‘(The thing) what Mutale bought yesterday is a chair.’

In WH-questions the underlying object relative pronoun may optionally appear.

(c) Nináni Mutale áamwéné? ‘Who did mutale see?’

(d) Nibáni Mutale áamwéné? ‘Whom did mutale see?’

### (10) Noun and Verb

The verb form is the most complex word class in Bemba. It may be simplex or a compound. Simplex verb forms are dealt with here. The shape of the verb form is determined by;

(10.1)

- (a) Whether it is an infinitive or a finite verb form.
- (b) Mood: indicative (state the fact), subjunctive (to want) or imperative (to command).
- (c) Whether the main verb in a relative clause is a relativized verb form or absolutive verb form.
- (d) Whether it is followed by something or not.

However, only nomino-verbal forms or infinitives are dealt with here in this analysis as discussing verb class would require a complete study on its own. Infinitives all begin with the prefix *uku-* which is like a noun prefix in class 15. 100 positive and their negative infinitive verbs were sampled. The words were ranging from 3 to 6 syllabic forms. 5 tonal groups were identified from both the positive and negative infinitives as shown in Table 2.1.1U and Table 2.2.17.

**Table 10.2**

Tone group	1 syll	2 syll	3 syll	4 syll	5 syll	6 syll
1.LH <sup>n</sup>			2	33	14	2
2.HLH <sup>n</sup>				35	9	5

3.LHL <sup>n</sup> H						1
----------------------	--	--	--	--	--	---

An infinitive verb behaves as a noun e.g.

(a)naábákúúlá ‘they have grown big’

(b)náabákuula ‘they have built’

(a) and (b) are two different words with different meanings. *Naábákúúlá* ‘they have grown big’ has a tonal pattern like that of nouns with high stem-tone, while *náabákuula* ‘they have built’ has a tonal pattern like nouns with variable stem-tone. Here are other words where the tonal pattern changes because of the tone-set of the verb-root (10.3)

(a) úkwimbáínyimbo ‘to sing songs’

(b) ukwímbáicílíndí ‘to dig a hole’

(c) úkulúká umúshíshí ‘to plait hair’

(d)ukúlúká ámenshí ‘to vomit water’

Secondly, tone helps in identifying the difference between the subject and an object in a relative clause.

For instance(10.4):

(a)tuléémukópá ícikópé ‘we are snapping her’

(b)tuléémúkópá ícikópé ‘we are snapping you’

(c)útubántú túléémukópá ‘small people are snapping her’

(d)útubántú túléémúkópá ‘small people are snapping you’

The tone tells the difference between ‘you’ and ‘her’ and the difference between ‘we’ and ‘tu-’ class 13 prefix. Thirdly, tone helps to distinguish tenses that are otherwise identical. For instance (10.5):

(a)tw-a- lílékale ‘we ate (some time ago)’ (remote prehodiernal past)

(b) tw- a- líle mailo ‘we ate yesterday’(recent prehodiernal past)

(c) tu- léé-lyá ‘we are eating’ (present continuous)

(d) tú-lee-lyá ‘should we eat?’ (Subjunctive)

Negative tenses usually start with *ta-*: but relative tenses and participles have *-shi-* instead put immediately after the subject pronoun. The morpheme expressing negative *-shi-* or *-ta-* added to an infinitive verb carries the same tone as that of the prefix. Thus, the tonal pattern of the stem is similar in both the positive and negative infinitives (10.6).

(a) ukúlímá ‘to cultivate’    ukúshílima ‘to not cultivate’

(b) ukúlímá ‘to cultivate’    ukútálima ‘to not cultivate’

(c) ukúlúká ‘to plait’        ukúshíluka ‘to not plait’

(d) ukúlúká ‘to plait’        ukútáluka ‘to not plait’

Indicative mood in Bemba has more tenses. Generally, the lexical tonal pattern of the radical determines the overall shape of the word. The tone also helps to highlight the difference that exists between the relativized and absolute tenses that indicative tenses sometimes have; e.g (10.7)

(a) tulímá imbalala ‘we cultivate the groundnuts’ restricted tense

(b) tualímá ‘we cultivate’ unrestricted tense

The absolute tenses sometimes have different tense-signs of tone as they display diatony e.g (9.8)

(a) bákáluka umúséké ‘they will wave the basket’

(b) bákálúká ‘they will wave’

There is also a relative tense for each pair of restricted and unrestricted tenses e.g (10.9)

ábalúká imíséké báánakashi nábaaúmé ímisángó yónsé.

‘those who wave baskets are women and men of all ages’.

The tonal pattern in the relative tenses the first and last tones are normally raised, even though the last syllable may be a high heard low, as in *túlíma*.

### 3.3 Summary

Every noun belongs to a class and can be identified with a class prefix and the word in agreement with hasa similar form. Thus, singular and plural nouns belong to different noun classes, but belong to the same tone-group. This is to say that a noun in singular form may have one TBU less than its plural form; but the two forms would still belong to the same tone class, alternatively, other word classes change their form in agreement with the noun in the sentence. For instance, nouns with subsidiary prefixes as in 10 above do not carry different tone-patterns with the one without it.

Clearly the data were placed in tables for easy reference. This was in order to identify and establish the different tonal patterns of the language that was used as shown in the qualitative data in table 1. Words in citation form were placed into respective tonal groups and then latter placed in different grammatical contexts. From Table 1, it should be noted that nouns and verbs are the largest number, that is, word classes used in comparison with other word classes. Other word classes are either closed or their phonological structure is similar to that of a noun or verb. Other than this study focussing mainly on the noun class as the main interest lies, a discussion of other word classes was inevitable.

This chapter also went a step further to discuss the possibility of tone terrancing (downstep) in the Bemba language on both words in citation form, in different contexts; on short and longer syntactic domains. Downstep; is a general phonetic tendency in tone languages, which brings about a gradual lowering of pitch in sequences of tones such that the basic tone patterns are more or less preserved but with an altered pitch range. For example, as in many languages, an L tone starts out and remains at the bottom of the speaker's range. After an L tone, a subsequent H tone is downstepped. However a temporary exception occurs when a single L tone is found between two H tones. In this case the L tone

is raised from its base value but the two H tones are still downstepped, and subsequent L tones return to the base pitch. It should be noted that Downstep does not include a LH rising tone as the right member of a pair. This is because a rising tone on the right-hand side of a phrase is always subject to specific phonetic changes.

## **ChapterFour**

### **Conclusion**

This chapter comprises of the summary and recommendations to this study. It encompasses the summaries of the previous three chapters including discussions on what has been done or what intends to be done on the subject in near studies.

#### **4.1 Conclusion**

This is a complete study in that objectives and research question set were answered.

There are eleven (11) tonal groups in the Bemba noun system but there are four (4) common basic tonal patterns; the falling, rising, high and the low or variable stem. In most cases as it has been illustrated in the previous chapter, nouns in both the singular and plural forms carry the similar tonal pattern even if the noun would change its form or even carry different TBUs. But, there are exceptions for nouns in classes 5a and 6 where the noun would not only change its form and shape but carry a different tonal pattern as from its singular form.

In other cases, for instance, for words without an augment or subsidiary classes: 1a, 2a, 5a, 7a, 8a, and so on whose plural form carries a double or longer vowel (TBUs), there tonal patterns will not be different but slightly longer than its plural form.

There is also evidence of a relationship between the lexical pattern and the syntactic environment. This is because there were certain cases when a word in citation form carried a different tonal pattern from the

tonal pattern when in a different syntactic environment. This is also because different word classes carry different tonal patterns e.g, demonstratives, question words, adjectives, verbs and nouns. It is also because the tone may either be deleted or moved or delinked to the other syllable.

There is a relationship between the tonal pattern of the noun form in citation form and the syllabic structure of its stem. This is only true in that the syllabic structure only determines the length of the tonal pattern of the word in isolation and that noun forms without an augment will carry a similar tonal pattern with the word without an augment.

Finally, trying to answer the research questions, it can be concluded that the syntactic environment determines the lexical tonal pattern of the noun, especially, if one were talking about the question words.

#### 4.2. Recommendations

This section includes recommendations that should be taken up for more study in order to learn more about Bantu and Zambian Languages in particular.

- It is important to test the claims of ASP model against a wide variety of language.
- A detailed study should be undertaken on the syntactic tones on the verbal system in Bemba.
- A study on morphology in Bantu languages.
- A study should also be undertaken on augmentation in Bemba: especially the relationship between an augment and tone.
- The syllable *shi*: when it is in penultimate, ultimate and antepenultimate position.

- A dialectology study on the varieties Bemba.
- A detailed study in syntactic tones should be undertaken on other Zambian regional languages so that it may help pedagogically in schools.

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