

**A COMPARATIVE STUDY OF STANDARD BEMBA AND UNGA
DIALECT**

BY

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**A dissertation submitted to the University of Zambia in partial fulfilment of
the requirements for the degree of Master of Arts in Linguistic Science**

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DECLARATION

I, Bwipwa Chilambe, do hereby declare that this dissertation is my own work, and that it has not been submitted for a degree at this university or any other, and that it does not include any published work or material from another dissertation or thesis without acknowledgement.

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APPROVAL

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ABSTRACT

While Unga is known to be a dialect of Bemba, some of its linguistic features tend to diverge from Standard Bemba. The extent of this divergence had not been investigated on. There had been no study undertaken to corroborate the proposition of linguistic divergence at phonological, morphological, semantic and lexical levels. Through a comparative approach, this study was therefore designed to investigate and establish the divergence of Unga dialect at phonological, morphological, semantic and lexical levels with reference to Standard Bemba. With a view to realising the practicality of the study, the following objectives were designed: To examine the phonology of Unga in relation to Bemba; To identify the morphological features of Unga in relation to Bemba; To compare and contrast the semantics of Unga and Bemba lexemes; and To describe the salient lexical features of Unga in relation to Bemba.

The study was informed by the descriptive and comparative methods to language study. For sampling, data collection and analysis, the study employed the qualitative method which was supported by the descriptive design. The exercise of data collection on Unga dialect was carried out in Nsamba area of Lunga District while data on Standard Bemba was obtained from some individuals in Kawambwa and Mansa Districts. Being a native speaker of Bemba, the researcher also used introspection to collect data on Bemba. Data on Unga was collected from twelve informants subjectively until the point of saturation. Books, journals and articles were used to collect secondary data. Central Statistics Office in Mansa helped to provide the map of Unga which was further modified to realise the linguistic map of Unga as presented on page three.

The findings of the study revealed that some linguistic features in Unga were at variance with those in Bemba at all the four levels of linguistic analysis that include lexical, morphology, semantics and phonology. The presence of a **trill /r/** in the consonant inventory of Unga provides a variation between Unga and Bemba. The morphology of Unga differs greatly from that of Bemba in terms of root morphemes, suffixes and prefixes. Being a dialect of the swamps, Unga is characterised by water vocabulary with nasal sounds **/m/ and /n/** more prominent as linguistic features. Meanings attached to some words in Unga are in variance to the Bemba counter parts. Despite some words taking the same lexical forms in the two dialects, they however exhibit some variations in terms of meaning. Nevertheless, similarities were also noted as attested by the same vowel inventory, similar phonological and morphophonological rules and related noun class system in the two languages. Based on the above findings, it should be concluded that there are idiosyncratic features inherent in Unga that set it off from Standard Bemba. Generally, the variations that Unga exhibit at all the four levels of linguistics are attributed to divergence. The **geographical continuum** of Unga has prevented it from contacts with other varieties thereby setting it free from linguistic contamination.

Key words: Divergence, variation, Unga, Standard Bemba, Town Bemba, Typical Bemba

DEDICATION

To my beloved wife and children: Mwape Fridah Bwipwa (wife), Mambepa, Chilambe Jr, Chola, Mumba, Chomba, Bwipwa Jr. and Mwape Jr. Thank you for your support.

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ABBREVIATIONS AND SYMBOLS

Agr Agreement

Aug Augment

B Bemba

CL Class

CV Consonant-Vowel

CCV Consonant-Consonant-Vowel

CCCV Consonant-Consonant-Consonant-Vowel

DO Direct Object

Dem Demonstrative

FV Final Vowel

IO Indirect Object

Interr Interrogative

Loc Locative

Neg Negative particle

Obj Object

OM Object Marker

OP Object Pronoun

Perf Perfective/Perfect

Pl Plural

Pre Prefix

Pre-pref	Pre-prefix
Pre-end	Pre-ending
Pst-pref	Post-prefix
Pst-end	Post-ending
Pst-tm	Post-tense marker
Poss	Possessive
Rad	Radical
S	Subject
SM	Subject Marker
SP	Subject Pronoun
Sg	Singular
TM 1	Tense marker 1
TM 2	Tense marker 2
TM pre	Tense marker present tense
TM pro	Tense marker progressive
TM T past	Tense marker today past
TM rem past	Tense marker past remote
TM rec past	Tense marker past recent
TM fut td	Tense marker future today
TM fut ntd	Tense marker future not today
TM hab	Tense marker habitual

1 SM	1 st person
2SM	2 nd person
3 SM	3 rd person
U	Unga
V	Verb
VR	Verb Root

DEFINITIONS OF TERMS

- i. **Convergence:** A term used in dialectology to refer to a situation where a dialect becomes more like each other.
- ii. **Close variant:** A linguistic form which is close to the original form. For instance, Luapula Bemba is a close variant of Northern and Muchinga Bemba.
- iii. **Divergence:** A term used in dialectology to denote a process of dialect change in which the dialects become less like each other.
- iv. **English-glossed Bemba words:** Bemba words that have been glossed in English.
- v. **Ethnic group:** This refers to a group of people who share a common nation, rules, norms and holistically cultural traditions.
- vi. **Juxtaposition:** A term used in comparative linguistics to mean a process of bringing two or more languages together for the purpose of comparing.
- vii. **Linguistic features:** Distinctive parts which are linguistically analysable at all levels of linguistics.
- viii. **Saturation:** A moment when the researcher cannot continue with data collection because informants are providing the same information.
- ix. **Standard Bemba:** The standardized variety which has been adopted for use in official domain. This may include borrowed words as reflected in the revised curriculum.
- x. **Typical Bemba:** A variety of Bemba spoken by the native speakers especially in Northern and Muchinga provinces. This does not include borrowed words.
- xi. **Town Bemba:** A variety of Bemba spoken in towns especially on the Copperbelt.

CHAPTER ONE: INTRODUCTION

1.1 Overview

This chapter presents the background information on the study. The chapter begins with the general conception about Standard Bemba and Unga Dialect. This is followed by detailed background to Standard Bemba and Unga Dialect. It further brings out some historical background to the study of Dialectology. The chapter finally ends with the problem statement, study objectives and questions and significance of the study.

1.2 Background to the Study

Despite being a dialect of Bemba language, Unga is believed to be in partial linguistic divergence from Bemba, an arrangement which appears to be unique. Question of why some lexical items should be in antithesis and others in acute homographic variation has for a long time remained unattended to. Mutual intelligibility between or among dialects is a bedrock of dialectal recognition. However this aspect is also questionable between Standard Bemba and Unga dialect. Through a comparative approach, this study endeavoured to compare the linguistic features of Standard Bemba and Unga Dialect in order to establish the linguistic divergence of Unga at phonological, morphological, semantic and lexical levels.

1.3 Background to Standard Bemba

Bemba is one of the seven standard languages spoken in Zambia. It has approximately five million speakers which constitute 33.5% of the total Zambian population (ZCSO, 2010:64). Typical Bemba is spoken in Northern and Muchinga provinces while its close variant is spoken in Luapula Province which is more proximal to the typical variety of Northern Province. Bemba is also spoken on the Copperbelt, in Central and Lusaka Provinces as an innovated variety popularly known as Town Bemba. According to The Online Version of the New Updated Guthrie List, a Referential Classification compiled by Maho (2009:97), typical Bemba is coded 'M42' while Town Bemba is 'M40A'. Outside Zambia, Bemba is traceable in countries such as Democratic Republic of Congo, Tanzania and Botswana. Notable among the dialects of Bemba are Ushi, njumbo, Luunda, Unga, Bisa, Tabwa, Lala, Lamba, Chishinga and Swaka. As one of the Bantu languages, Bemba belongs to the Languages that are linguistically analysable at phonological, morphological, semantic, syntactic and lexical levels. It has a five vowel system with eighteen noun class prefixes. Some studies have been conducted to establish the linguistic nature of Bemba at phonological, morphological, syntactic, semantic and lexical levels (Kashoki, 2006, Kamfuli 2009 and Lumwanga 2015).

1.4 Background to Unga Dialect

As a dialect of Bemba, Unga is associated with the Unga people, an ethnic group found on the swamps of Lake Bangweulu in Lunga District of Luapula Province. It is a variety which is widely spread across the swamps popularly known as Ulunga. Lunga District shares its borders with Samfya District in Luapula, Chilubi in Northern, Mpika in Muchinga and Serenje district in Central Province. Lunga District is shared among four chiefs. These are chief Nsamba, Kasoma Lunga, Bwalya Mponda and Kalima Nkonde who is their senior chief. Notable among the Unga sub-chiefs are: Mweshi, Kambala, Ponga and Milambo. Akanshima and Twa are the two varieties of Unga. Akanshima is mainly spoken in Nsamba Chiefdom while Twa is associated with the Twa people of Bwalya Mponda. Being the main dialect of the Unga people, Unga cuts across all the four chiefdoms although it is typically spoken in Kasoma Lunga Chiefdom.

Historically, the Unga people are believed to have migrated from the Democratic Republic of Congo (DRC) just like the Bembas. Led by courageous female leaders, Mwenya Luba and Bulumbi Mpande, they first settled at Chulu Ngoma in Puta area in Chiengi District. Even today Puta area has some traces of Unga dialect. Ungas are *ngoma* (symbolising drums) by clan. While on their hunting expedition, the Unga people came to settle in what today is known as Kalima Nkonde and they later moved to Kasoma Lunga. It is interesting that even the name Unga originates from the activity of hunting (*ukulunga*). Annually, at the monthend of June, the Unga people celebrate their famous traditional ceremony known as *Musubilwa Mpemba* in Nsamba Chiefdom. They do this in order to honour the ancestral spirits of the powerful Unga warriors who conquered and defeated the Bemba and in praise they were smeared with the white stuff called *impemba*. This includes the story of *Mwelwa Chenda* the first fearless chief who conquered the Bembas and was killed in the war. However, his head miraculously detached itself from the entire body and came back to Nsamba area. The title of the ceremony therefore comes from *ukusuba impemba* 'to smear white stuff'. This symbolizes happiness. **Figure 1** below shows the linguistic map of Lunga District as adapted from Central Statistics Office in Mansa District of Luapula Province.

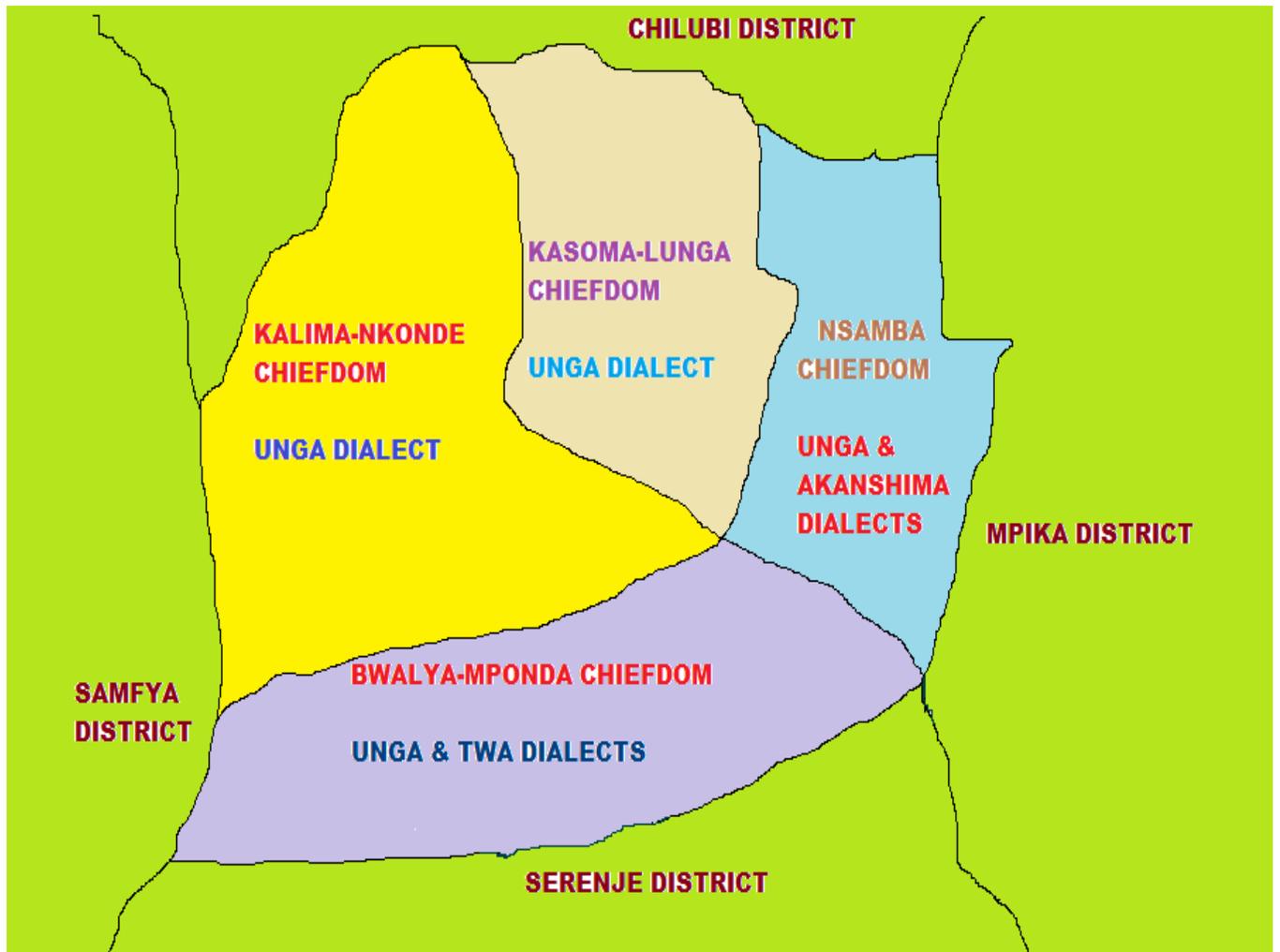


Fig 1: Linguistic map of Lunga District (Improved from Central Statistics Office-Luapula Province – see appendix B)

Being a swampy area, Lunga is an area of a low-lying land which is mostly flooded in wet season. As a result of this climatic condition, Lunga is water-logged all the times. However, people inhabit the stretch of elevated lands that are mostly not flooded throughout the year. The adverse conditions to which the Unga people are subjected have made them innovative and highly adaptive in their ways of survival. The geographical location as well as the nature of the environment has made agricultural activities in Lunga not a reality. Due to scarcity of arable land, Unga people have adopted agricultural methods to suit their environment. They grow crops like cassava twice in a year. The first farming is done in the cold season and this is called Mupepo while the second farming is called Mainsa and it comes in the rain season. These

methods are different from those practiced on the main lands. Their major crop is cassava although maize and sorghum are grown in small quantities.

Fishing is the main occupation as well as the main source of income of the Unga people. Lunga is among the major fishing camps in Zambia. The swamps of Lunga are the major habitats for various animal and bird species in Luapula Province. To prove their allegiance to their chiefs, the subjects pay tributes in form of fish and such kind of homage has helped to strengthen ties between the chiefs and their subjects. Unga people have a rich culture as reflected in their daily practices of which Language in itself is an integral part.

Studies on Lunga people have been conducted in other fields, but there is no known study undertaken to focus specifically on the linguistic status of Unga despite perceived widespread assertions that Unga dialect has some unique linguistic features which diverge from Standard Bemba. With this claim in mind, the current study has been designed to compare Bemba and Unga in order to corroborate the perceived assertions.

1.5 Dialect and Dialectology

1.5.1. Dialect

Despite many attempts to define language and dialect by linguists and non-linguists, no conclusive definitions have yet been provided. In as much as some people find it difficult to know what language they speak, it is as well a difficult experience for them to decide whether what they speak is a language proper or merely a dialect of some language (Wardlaugh2006:27).

Haugen (1966a, cited in Wardlaugh 2006:28) points out that language and dialect are ambiguous terms. While language is regarded as the linguistic warehouse of mutually related varieties, a dialect on the other hand is that product of a language in provenance. Some linguists attribute the concept language to a prestigious variety to which minority varieties known as affiliate dialects.Naima (2012:21) says “a language is a collection of mutually intelligible dialects.” In a comparative mode, Hudson (1996) submits that a language is larger than a dialect.

Another important point to consider when defining the two concepts is the aspect of written records. While a language is identified by the existence of its written work as the case for Standard Bemba in this study, a dialect like Unga on the other hand is known to exist without any form of writing unless otherwise. It is therefore this scenario which creates a challenge in the

study of dialects. Lack of orthography entails that a dialect cannot be easily presented in writing. For this reason, dialect users mainly rely on oral communication.

1.5.1.1. Types of Dialect Continua

For a long time now, dialectologists have used the term dialect continua to indicate minimally how dialects of a particular language differ and resemble each other in terms of grammar, lexis and sound system with regard to their geographical location in distance. Naima (2012: 11) acknowledges that “dialects of a language are different from each other in terms of grammar, lexis and pronunciation and they can be divided into two kinds, regional and social.” Chambers and Trudgill (1980) confirm that there are two types of dialect continua, namely the geographical dialect continuum and the social dialect continuum.” Each continuum is characterised with its own social or geographical peculiarities as highlighted below.

1.5.1.1.1. Geographical Dialect Continuum

It is prudent to indicate that whereas language exists in a social context, it as well exists in a geographical context. Giving a serious look at a linear spreading of language will reveal that linguistic differences are in most cases associated with geographical spreading of people with the common source of language. Travelling from village to village, in a particular direction, one notices the cascading effect of linguistic differences. These differences are sometimes larger and in other instances smaller but they will be cumulative. However, linguistic parameter holds that the cumulative effect of the linguistic differences will be such that the greater the geographical separation, the greater the difficulty of comprehension and there will be no point where geographically adjacent dialects will be completely mutually unintelligible (Chambers & Trudgill 1998).

To illustrate the effect of a geographical dialect continuum, Heeringa (2004:1) presents a set of 27 dialects found on a straight line from the north east to the south west in the Dutch language area. From the examples given on pronunciation, it is observed that the word ‘protein’ is differently pronounced with respect to geographic location. Thus, in the north east, it is pronounced as [pɔtn], in the middle it is pronounced as [pɔtə] while in the south west, it is pronounced as [pɔtn]. From this illustration, it can be assumed that dialect speakers mostly consider linguistic borders while travellers find a continuum with gradual transition which varies in size. However, it is the border as well as the continuum which help to define the dialect landscape of a particular area. Of course, this is what prompts Bloomfield (1933:51) to define a

dialect area as a “geographic area of gradual transition” while on the other hand Chambers and Trudgill (1998:7) call such an area a “geographical dialect continuum.” It is indeed in line with the foregoing revelations that the current study brings Unga dialect in the perspective of a geographical continuum with facets of both mutually intelligible and mutually unintelligible linguistic elements at various linguistic levels.

1.5.1.1.2. Social Dialect Continuum

Against the facets of a geographical dialect continuum, social dialect continuum is based on the social distribution of language. The focus of this form of dialect is to bring into perspective the effects of such social factors such as sex, age, status, social class and gender on the language. These social dialects or sociolects are known as non-regional differences. It is through social dialect where one can identify people who belong to the same age group as well as those who affiliate to the same social class. Because of the social factors, a speaker may show more similarity in speech to people in the same social group in a different area than to people from a different social group in the same area. In one of his study, Labov (1966) showed that the type of /r/ pronunciation depended on the social stratification of the speakers (in three different department stores, catering to different layers of society). In the context of sociolects, such words as rice and fish are pronounced differently according to the social class and status of an individual in Luapula Province. For example it is common among the uneducated to pronounce the two words as /lais/ and /fis/ as opposed to acceptable pronunciation of /rais/ and /fi/ exhibited among the educated. Although not the main focus of the current study, social dialect continuum is considerably used to justify why some words in Unga tend to diverge from Standard Bemba. Partly, one such justification borders on the premise that Unga dialect is spoken by people whose social life is mainly restricted to marine activities as opposed to those on the main land, whose life pattern is so diverse.

1.5.2. Dialectology

Dialectology is a blend of two terms, dialect and -logy. It is clear that the term dialect is mainly used to describe the variation aspect of language with regard to its social or geographical manifestation while the suffix ‘-logy’ simply means study. Defined as a linguistic entity, dialectology means the study of how dialects or language varieties relate to each other in a geographical or social set up. Dialectology in this respect may refer to language relatedness. However, a number of scholars and linguists have pushed in different definitions of the term

dialectology. Hagen (1987: 408) defines dialectology as “the traditional way of studying the dialect of a particular place” or “the comparative study of several language varieties or language variants in a single place.” Focusing on the contemporary aspect of dialectology, Mambwe (2008:6) argues that although the term focuses on the nature or form and distribution of different accents and dialects, recently it has taken a new dimension of investigating social factors such as age, gender and position in society.” Against Mambwe’s view, the current study however, endeavours to establish the linguistic features of Unga and Standard Bemba that vary on the basis of geographical locations. This is in line with an observation that dialectologists generally have characterised variation by identifying a small set of varying linguistic features in connection with their geographical location (Martijn 2012).

1.6 Statement of the Problem

While Unga is known to be a dialect of Bemba, some of its linguistic features tend to diverge from Standard Bemba and its dialects. Mutual intelligibility between or among dialects is a bedrock of dialectal recognition. However, this aspect is as well questionable between Standard Bemba and Unga dialect. Therefore, this study intended to investigate the nature of linguistic divergence at phonological, morphological, semantic and lexical level which Unga seems to exhibit in relation to Standard Bemba.

1.7 Aim of the Study

This study is aimed at investigating and establishing the linguistic divergence of Unga dialect at phonological, morphological, lexical and semantic level in relation to Standard Bemba.

1.8 Research Objectives

The study intends to achieve the following objectives:

- i. To examine the phonology of Unga in relation to Bemba.
- ii. To identify the morphological features of Unga in relation to Bemba.
- iii. To compare and contrast the semantics of Unga and Bemba lexemes.
- iv. To describe some lexical features that make Unga differ from Bemba.

1.9 Research Questions

- (i) What is the phonology of Unga in relation to Bemba?
- (ii) What morphological features make Unga different from Bemba?
- (iii) What are the semantic similarities and differences of Unga and Bemba?
- (iv) What lexical features make Unga different from Bemba?

1.10 Significance of the Study

As this study focuses on establishing the linguistic divergence of Unga, one of the dialects of Bemba, it should be stated here that, the findings of the study will be of great value to the native speakers, the general public and curriculum developers. The knowledge and mastery of the dialect will help both the native speakers and the general public to develop the conscious application of the language. Wide dissemination of information will attract the recognition of the dialect for standardisation by the Curriculum Development Centre. The new body of knowledge from the study will serve as a guide to future researchers who intend to study dialects, more especially Unga dialect.

1.11 Limitation of the Study

During the research process, such hindrances as financial and limited sources of literature review might have slowed the research process. Secondary data on Unga seemed difficult to access because of scanty literature on this dialect. Delayed response from the respondents delayed the timely collection of data thereby slowing the research process. Some Informants were reluctant or hesitant to share data.

1.12 Structure of the Dissertation

The whole volume of this research study is divided into eight chapters. The first chapter introduces the study and the methodology used to conduct this study while chapter two is concerned with the literature review. Chapter three describes the structure of Bemba language at phonological, morphological and semantic levels. The fourth chapter compares Unga dialect to Bemba Language with a view to bringing forth the variation aspect of Unga at phonological level. Chapter five addresses the second objective which is intended to identify the morphological features of Unga in relation to Bemba. Chapter six is concerned with semantics while chapter seven was designed to address the fourth objective. Chapter eight being the final chapter presents the general conclusion of the study and the recommendation.

1.13 Ethical Considerations

Designed to deal with the innermost human matters, this research inevitably considered the application of the required ethical issues during and after data collection. Punch (2005: 276) encourages serious consideration of ethical issues in all researches but more acutely in qualitative research because this is the type which intrudes more in people's lives. With this

therefore in mind, the researcher clearly explained the purpose of the research to all the participants. All the participants' rights and privacy were respected to that effect.

1.14 Summary

This chapter has introduced the study by presenting the concise account of the background to Standard Bemba and Unga Dialect. It has also discussed the meaning of dialectology and its related concepts. The chapter has further presented the statement of the problem, the aim, the research objectives and questions, the significance of the study. The chapter ends by showing the structure of the dissertation. The next chapter has focused its attention on the literature review.

CHAPTER TWO: LITERATURE REVIEW

2.1. Overview

This chapter presents a review of the literature related to the present study. The chapter begins by outlining notable dialectal studies conducted in Zambia. This is followed by some review of related literature conducted by other scholars outside Zambia. The chapter finally ends with a summary of what has been reviewed.

2.2. Studies on Language Variation in Zambia

The present work situates itself within the scope of Zambian dialectology. As much as necessary appreciation is made about some scholars' contribution towards this subject, it is prudent to indicate here that not much has been done on dialectology especially on the Bemba dialects. However, some studies have been conducted on Standard Languages such as Bemba, Nyanja, Tonga, Kaonde and only a few on dialects as reviewed in the work that follows. These studies which usually aim at analysing the linguistic features at phonological, syntactic, morphological, semantic and partially at lexical levels tend to present an overall picture of the linguistic landscape of particular languages and some of the findings indicate that these dialects submit to the principle of dialectal relatedness such as mutual intelligibility, convergence and divergence, language change, lexical dialect mixing and the levelling of variation between dialects. However, despite a number of studies on local dialects that include, Bemba, ĩumbo, Luunda, Kaonde, Solwezi-lubango, Luyana, Plateau and Valley Tonga, no study has been undertaken to prove the claim that Unga dialect exhibits some diverse linguistic features at lexical, semantic, phonological and morphological level in relation to Standard Bemba. In view of the above, this study is therefore designed to corroborate the proposition by way of a comparative study. By indicating these lacunae in the previous studies, the current review aims to set a foundation for the present research.

To start with, a comparative study of the current nature was conducted by (Lisimba 1982). The aim of this study was to describe Luyana as a member of the Bantu family generally, and as a unique group particularly. It focuses on the Luyana dialect spoken in some districts of Western province such as Kalabo, Senanga, Sesheke, Mongu and minor parts of Kaoma and Lukulu Districts. The study reveals that internally, Luyana is a continuum which is divided into two major dialects which are the Eastern and the Western, distinguished mostly at the lexical and phonological levels. The study further indicates that, to the Eastern part, such dialects as

Kwangwa, Kwandi, Luyi and Mbumi are spoken while the Western part embraces dialects such as Mashi, Mbukushi, Mulonga, Mwenyi, Nyengo, Liuwa and Makoma. What the study focuses on is the dialectal variations with respect to morphophonemic, grammar, tone and lexis. The study on one hand, investigates the synchronic phonology focusing on the rules that differentiate Luyana dialects while on the other hand, a morphological analysis is conducted (Lisimba 1982). Despite its wider coverage on Luyana dialects, the study fails to put into perspective the nature of each dialect regarding the semantic categories. Comparing the Eastern and the Western dialects in terms of linguistic features at all levels reveals that the two are mutually intelligible. Although the aspect of linguistic divergence is not stressed as in the current study, Luyana and Unga are both in dialect continua. The current study uses the interview guide while Lisimba's study employs the questionnaire. Despite notable similarities such as comparative approach, dialectal features such as continuum and focus of linguistic study such as phonology, morphology and lexis, the current study however bridges the gap on semantics, data collection instrument, study topic, study area and its emphasis on divergence.

Apart from Lisimba's study, an investigative study aimed at establishing the closeness and the differences among the varieties of Chinyanja within the ambit of auto segmental phonology was conducted (Miti, 1988). The study reveals that Chinyanja constitutes three varieties namely: Chinsenga, Chingoni and Chicewa. Taking auto segmental phonology model of 1976 by Goldsmith as a referential tool, the researcher aims at establishing the convergence and divergence of these varieties from each other especially in their tonal relationship. This is against the current study which employs descriptive and comparative method to language study with the view to establishing the divergence of Unga at phonological, morphological, semantic and lexical levels in relation to Bemba. With regard to phonology and morphology of nouns and verbs, the study established that Nsenga and Ngoni have the morphological structures in common while Chewa is different. Phonologically, the findings reveals that, the Chewa phonemic inventory embraces all the three sounds including, the pre-stopped fricative /dz/, the affricated stop /dʒ/ and the fricative /z/ while Nsenga and Ngoni inventory lack the pre-stopped fricative /dz/. In departure from Lisimba and Miti's studies which apply questionnaires for data collection, this study uses a semi structured interview guide. However, like Miti's study, the current study is also supplemented by an improved Swadesh list for data collection. Although it is noted in Miti's study that tonal marking plays an important role in putting a distinction

between two languages, the current study is however transversely designed to establish the linguistic divergence of Unga dialect at phonological, morphological, semantic and lexical levels. Nevertheless, Miti's study is significant to the current study because tone which is also part of the current study is a cross-linguistic feature which mostly interfaces with phonology and syntax in most African languages. Above all, the information from the study by Miti is beneficial as it is aimed at provoking the insight in understanding the nature of comparative studies and how linguistic data is packaged for further interpretation and analysis.

Though not a dialectological study, a similar study was undertaken to analyse the phonology, morphology, syntax and semantics of applied, causative and passive verb extension in Plateau Tonga in relation to Valley Tonga focusing on the characteristic changes of linguistic features at all the four levels of linguistic analysis (Nkolola 1997). Against the current study, Nkolola's study situates itself in the context of Government Binding Theory, Underspecification Theory and Feature Geometry. Presenting the findings on phonology, the study reveals that in Tonga palatalisation occurs whenever the nasal /n/ is followed by /y/ as in the following example

a) *ku- bon-a /xu-βon-a/* → *[xuβona]*

b) *ku-bon-i-a /xu-βon-i-a/* → *[xuβoŋa]* 'to cause to see'

Further revelation contends that /i/ changes to the semi vowel /j/ while /s/ becomes /h/ and /z/ changes to /fi/ in the environment before /y/ in the Plateau Tonga. The study further reveals how some derived and non-derived phones such as /z/ and /s/ in the context of /zj/ and /sj/ as used in the valley Tonga correspond to [fj] and [hj] in plateau Tonga respectively (Nkolola 1997:217). Although not very much related to the current study, Nkolola's study is beneficial to the current study because it also takes some aspect of comparison and it is equally based on the analysis of some linguistic features at phonological, morphological and semantic levels. While Nkolola's study compares the varieties of Tonga namely Plateau Tonga and Valley Tonga, the current study attempts to compare Standard Bemba and Unga dialects. Moreover, the two studies differ in terms of lexis since Nkolola did not stress the linguistic features at lexical level as evidenced in the current study.

The study on the similarities and differences between Bemba and Luunda in terms of their vocabulary correspondences is yet another important literature related to the current study,

Kashoki (2006). Against the current study, the main aim of Kashoki's study however was to establish the basic vocabulary correspondence between Bemba and Luunda and make a notable yardstick on any subsequent changes that may have taken place in the two dialects in terms of vocabulary. What is salient in this study is the interrelatedness of some words in these two dialects. It is noted that the borrowing of French and Swahili words from Congo contributed greatly to the stocking of vocabulary in Luunda. Findings in Kashoki's study reveal a geographical separation of Luunda from Bemba where two dialects, Mukulu and Chishinga provide the dialectal boundaries in divergence. It is observed that the influence of Swahili spoken along Zambia-Congo boarder linguistically impacts on the Luunda dialect. To the larger extent, the study was intended to highlight the extent to which the two dialects had gone in terms of borrowing from other languages. Even though Kashoki's study is distinct from the current one, it is probable that the comparative nature of the study and the linguistic information provided on Bemba will be beneficial to the current study. Above all, the paramount purpose of the two studies is to establish the differences and similarities at some levels of linguistics such as phonology, morphology and lexical. On the contrary, the current study brings into context the semantic aspect which lacks in Kashoki's study. Moreover, while Kashoki compares Bemba with Luunda dialect, in the current study, Bemba is compared with Unga dialect.

Similar to the current study, a comparative study was conducted to establish some linguistic variations of Kaonde dialects (Mambwe 2008). This comparative study focuses on three Kaonde varieties which are, Standard dialect which is coded (A), Mumbwa dialect, coded (B) and Solwezi-lubango coded (C). Against the current study which is informed by the descriptive and comparative methods to language study, Mambwe's study employs a combination of Traditional dialectology and general linguistic approach for data analysis (Mambwe 2008:13). Despite focusing on Kaonde, Mambwe's study provides adequate information to support the current study especially that it is a comparative study based on dialectology and both studies apply qualitative approach to data collection and analysis. The study reveals that dialects share more similarities than languages of the same family regarding any linguistic make ups such as morphology, phonology and syntax. It is observed that, all the three dialects share the same noun structure and that all nouns obligatorily take a noun prefix as illustrated below.

Dialect A and B ---- *mu-chi* 'medicine'

Dialect C-----*mu-ti* ‘medicine’

The similarity in the nominal prefix among the three dialects as illustrated above is due to the homogeneity in the noun class system of the Bantu languages. The study further reveals that the morphology of nominal stems tends to differ between Standard dialect and Mumbwa dialect on one hand and Kaonde-lubango and Mumbwa dialect on the other hand (Mambwe 2008:51). For example, dialects A and C, takes ‘*-kyengya*’ for ‘name of a wild tree’ while dialect B takes ‘*-chenja*’ with the same meaning. On the other hand, the study reveals that Mumbwa variety which mainly shares its linguistic elements with Ila tends to diverge from the common practice of standard Kaonde and Solwezi-Lubango in terms of morphology which is however said to be phonological in nature. As opposed to dialects (A) and (C) where the sound [k] is realised as [ʃ], in dialect (B) the same sound [ʃ] is realised as [t] while [gy] mutates to [dʒ] as illustrated below;

DIALECT A (class 7 prefix)	DIALECT B (class 7 prefix)	DIALECT C (class 7 prefix)
<i>Ki- (cl 7) kiswa</i> ‘bush’	<i>Chi- (cl 7) chiswa</i> ‘bush’	<i>Ki- (cl 7) kiswa</i> ‘bush’
<i>Ki-zhilo</i> ‘door’	<i>Chi-nzhilo</i> ‘door’	<i>Ki-zhilo</i> ‘door’
<i>Ki-pona</i> ‘chair’	<i>Chi-pona</i> ‘chair’	<i>Ki-pona</i> ‘chair’

The study further discloses that the three dialects share the same inventory of phonemes and both the segmental phonology and the phonological rules are similar. The only difference indicated on phonology is in the area of supra-segmental phonological features based on tone and length as observed in the Kaonde language. Although the study does not focus much on the linguistic aspect of divergence, the information it provides is quite significant to the current study. Against Mambwe’s study, the current study attempts to bridge the gap on the aspects of semantics, nature of dialects under study, study area, focus on divergence, and the linguistic methods used for data analysis.

Unlike the study conducted by Nkolola in 1997, which intended to analyse the applicative, causative and passive extensions in Tonga, a different study entitled “A Dialectological study of Tonga” was undertaken in the same area which aimed at investigating some linguistic differences between dialects of the Tonga language spoken in Zambia (Sibajene 2013). The study was conducted with a view to establishing variations at phonetic, morphological, syntactic

and lexical levels of linguistic analysis between valley and plateau Tonga. Like the current study, the study under review applies qualitative approach to data collection and analysis. The use of a Swadesh list in this study claims for the similarity in data collection instruments with the current study. Sibajene's study was not a comparative based but it was intended to identify and point out the linguistic features which are found in each dialect. As opposed to the current study, Sibajene's study was informed by descriptive linguistics using the approaches of generative dialectology, structuralist dialectology and traditional dialectology. The findings however, reveal that there are more variations at lexical and phonological levels than at morphological and syntactic levels between Plateau Tonga and Valley Tonga. Nevertheless, the study reveals that the two dialects share the same inventory of vowels and both dialects have the same glides (semi-vowels); the labio-velar approximant [w] and the palatal approximant [j]. However, the researcher observes that there are some variations in the consonant inventory between Valley Tonga and Plateau Tonga. To bridge the gap on Nkolola's study, Sibajene argues that in Valley Tonga what are realised as labio-dental fricatives [f] and [v] as in *kufwa* [kufwa] 'to die' and *kuvumba* [kuvumba] 'to cover/thatch' are manifested as glottal fricative [h] and [ʔ] in Plateau Tonga, as in *kufwa* [ʔuhwa] 'to die' and *kuvumba* [ʔuʔumba] to cover/thatch (Sibajene 2013:60). With the use of appropriate phonological rules, the researcher describes how glottalisation affects the phonemes [f], [v], [s] [ʃ] and [z]. Generally, the linguistic variations between Valley Tonga and Plateau Tonga are attributed to the concept of divergence. At morphological level, the study reveals the difference in the noun prefix between Valley Tonga and Plateau Tonga. While Plateau Tonga uses class 3 singular prefix 'mu-' and class 4 plural prefix 'mi-', Valley Tonga on the other hand uses class 7 singular prefix ci- and class 8 plural prefix 'zi-' in the stem *-ni* 'liver' (Sibajene 2013). The study provides a good platform for the current study especially that it analyses the three linguistic levels as the current study which are morphology, phonology and lexis and it is comparative in nature. Similarly, both studies employ qualitative method to data collection and analysis. However, these are two distinct studies based on Tonga dialects and Bemba dialects respectively. Above all, the current study involves semantics and there is a departure in terms of study areas and methods of linguistic analysis.

Another piece of work worth mentioning is *A dialectological study of standard Bemba, Luunda and Dumbo* done by (Lumwanga 2015). The study is aimed at investigating some linguistic variations among three Bemba dialects namely, standard Bemba, Luunda and Dumbo using

qualitative approach although it does not clearly indicate the theoretical framework as Mambwe and the current study does. The study gives clear distinctions between the Lunda language of North Western province and the Luunda of Mwanabombwe of Luapula province. Similar to the current study, Lumwanga’s study equally focuses on the differences and similarities at phonological, morphological, syntactic and lexical levels of linguistic analysis based on the three given dialects. Presenting the findings on phonetics and phonology, the study reveals that all the three dialects share the same inventory of vowels and consonant segments as well as semi-vowels. However, the study reveals some variations in the context of palatalisation between Standard Bemba on one hand and Lunda and ṅumbo on the other hand. Lumwanga argues that while the voiceless alveolar fricative [s] changes to a voiceless postalveolar fricative [ʃ] in the environment before the voiced palatal approximant [j] this change is unattainable in Luunda and ṅumbo as illustrated below.

Gloss	STDB Pronunciation	L and ṅ Pronunciation
Cause something to stop	<i>ukulesia</i> [ukuleʃa]	[ukulesja]
Cause something to fly	<i>ukupupusia</i> [ukupupuʃa]	[ukupupusja]
Cause somebody to vomit	<i>ukulusia</i> [ukuluʃa]	[ukulusja]

While Mambwe’s findings on the inventory of vowels is in tandem with that of Lumwanga, there are however notable variations in these two studies concerning phonological rules, (Mambwe 2008:67). In Mambwe’s study, the three dialects exhibit similar phonological rules while Lumwanga’s study manifests some phonological variations among the three dialects. Lumwanga discloses that, some variations exist that mainly involve palatalisation, postalveolarisation, nasal assimilation, homomorphemic and heteromorphemic phonemes, (Lumwanga 2015:55). Nonetheless, there are few similarities among the three dialects involving phonological rules, morphophonological rules and syllable structure in Lumwanga’s study. Generally, the findings of the study reveal that there are more variations at lexical and phonological levels than there are at morphological and syntactic levels. The study further postulates that the difference between standard Bemba and the two dialects is due to divergence while the similarity between Ḑumbo and Luunda is due to convergence. Despite focusing on

other Bemba dialects, the study by Lumwanga fits well into the current study especially that it focuses on the same linguistic features and moreover it is also comparative in nature.

2.3. Studies on Language Variation outside Zambia

Apart from the studies conducted in Zambia, similar studies on dialects have been undertaken by other scholars in other countries. For example, a study was conducted on ‘The effects of Borders on the Linguistic Production and Perception of Regional Identity in Louisville, Kentucky’ (Cramer 2010). As a case study, this piece of work is aimed at examining how dialect and regional borders in the United States impact speakers’ linguistic acts of identity, especially the production and perception of such identities. From the methodological perspective, the study uses surveys, mental maps, focus group interviews, and production data. It takes a mixed-method approach for data collection and analysis. Against the focus of the current study on linguistic analysis that include phonology, morphology, semantics and lexis, Cramer’s study is prose based analysis which is devoid of linguistic analysis. While the current study concentrates on establishing the divergence of Unga dialect in relation to Standard Bemba, Cramer focuses on the regional identity in Louisville in United States. The findings of the study however reveal that identity alignments in borderlands are neither simple nor straightforward. As a result of complex, dynamic and fluid borders, speakers constantly negotiate and contest their identities. Though similar in some respect, Cramer’s study does not match with the current one in terms of methodology and it is not comparative. The two studies are based on different language groups respectively. Another piece of work worth mentioning is a dialectological study on ‘Perception of Korean Dialect by Gyeongsang Residents (Kang 2015). The purpose of the study was to examine perceptions that Gyeongsang dialect speakers have about the Korean spoken in Korea and their language attitudes toward Gyeongsang dialect and Seoul dialect. Against the current study which is based on qualitative approach, the study by Kang takes a mixed approach of both quantitative and qualitative to data collection and analysis. Data was collected by means of a questionnaire as opposed to the interview guide for the current study. Findings reveal that Gyeongsang dialect speakers perceive their dialect inferior to Seoul dialect and there is a pride assigned to Gyeongsang. This is as a result of some labels such as personality; lexical items; accent; intonation; mutual intelligibility; and emotional reactions. For example, Seoul dialect was associated with the positive personality while Gyeongsang is labelled with negative personality. The comparative nature and the use of maps in the study of dialects is cardinal not

only to the historical studies, but also to the present dialectological studies although that might not be the emphasis of the current study.

However, various studies which were intended to explore more on phonological, morphological and lexical variations among dialects were conducted (Mackenzie 1980), (Joseph 2009) and (Cathcart 2015). These are quite informative studies on dialects which earnestly appeal for linguistic variations at the levels of phonology, morphology and lexical. Foreexample, a dialectological study titled ‘Towards a Dialectology of Cree-Montagnais-Naskapi’ was conducted to describe the linguistic variations among the dialects of the Cree language at the levels of phonology, morphology and lexis (Mackenzie 1980). The emphasis was put on the dialects that undergo velar palatalisation ($k > c$) within Quebec-Labrador. Data was collected by means of village notes and tapes gathered by the author while linguists and anthropologists supplemented on data. Although the study is similar to the current one in terms of linguistic analysis, it fails to situate itself in the area of semantics and the comparative aspect emphasised in the current study is not apparent. The study reveals some variations at all the three levels of linguistic analysis. Arguing against scholars such as (Michelson 1973) and Wolfart (1973) who failed to establish the variational state of Cree, Montagnais and Naskapi, Mackenzie (1980) establishes that Palatalisation in Cree-Montagnais-Naskapi can apply to dental or to velar consonants. The palatalisation of the velar stop /k/ is restricted to the /y/, /n/ and /l/ dialects of Quebec-Labrador and has been seen to constitute a major isogloss between the dialects. There is also a notable mutation of the /n/ sound to /y/ in the Fort Chimo Naskapi. The study by Mackenzie helped in understanding the method of analysing linguistic data from a dialectal perspective.

In another related study on dialects, Joseph (2009) compares a standard language to a dialect in a study entitled, ‘Broad vs Localistic Dialectology, Standard vs Dialect: The Case of the Balkans and Drawing of Linguistic Boundaries. The aim of the study is to examine the influence neighboring Balkan languages have on other dialects focusing on phonology. Against the current study which focuses on the divergence, the study by Joseph concentrates on convergence. The scholar acknowledges the presence of linguistic variations at phonological, morphological and lexical levels in the study. For example, in his study, Joseph argues that while the northern dialects of Macedonian have schwa from the Proto-Slavic ultra-short high jer vowels, east central dialects have schwa from vocalic /l/ and many peripheral dialects have schwa from the Proto-

Slavic back nasalised vowel (Joseph 2009). The study further reveals how early studies on some Albanian dialects such as Arvanitika show variations in terms of nasal insertion. For example, the sound *[mnj]* is evidenced in Arvanitika the Tosk Albanian dialect while the same phone is realised as *[mj]* elsewhere in Tosk. In such a case, two different words with the same meaning are realised as in the words *smnjekre* ‘chin’ and *mjeker* ‘chin’ found in Arvanitika and Tosk dialects respectively. The comparative nature of this dialectal study provides a clear guide to the current study which is also aimed at comparing a dialect to the standard language with a view to establishing the divergence of Unga dialect from Bemba Language.

Additionally, various studies on individual’s perceptions of linguistic variations due to the effect of regional origin have been witnessed in the recent dialectological studies around the globe (Clopper 2004), (Sullivan 2006) and (Sampaio 2013). These studies on perception tend to focus on how particular speakers perceive some dialects in relation to their own or other people’s dialects. For example, Clopper (2004) carried out a study on ‘Linguistic Experience and Perceptual Classification of Dialect Variation’. This study was aimed at establishing the effects of linguistic experience on the perceptual classification of phonological dialect variation. Against the current study which uses the interview guide and the Swadesh list for data collection, in Clopper’s study, a new digital speech corpus was collected which contained audio recordings of five male and five female talkers from six dialect regions. Although Clopper’s study does not use the comparative method, it provides a formidable guide to the study of dialectology. While linguistic divergence is the focus of the current study, Clopper puts the emphasis on perceptual classification. The findings of the study reveal that both geographic mobility and location help to shape the perceived similarity between geographically local dialects. For instance, results show that [æ] and [a] fronting were sounds prominent to the Northern talkers as compared to the New England, Midland and Western talkers. This was attributed to the vowel shift in some places like the Southern (Labov 1998). Similar to the study by Clopper, Sullivan (2006) on the other hand investigated on the naïve intuitive knowledge of dialects from a perceptual perspective in the hopes of scrutinizing their instinctive knowledge about language variations in the United States. Sampaio (2013) conducted a research entitled ‘American Perception of British Regional Dialect’. His aim was to make a novel contribution to the study of language attitudes and gauge perceptions of five British Regional Dialects within the United States. Similar to Clopper, the study by Sampaio reveals that many participants perceive British dialect superior to any other

dialect in United States. While the current study applies qualitative method to data collection and analysis, the studies by Clopper, Sampaio and Sullivan reflect the use of mixed methods. Interestingly, all these studies were meant to fill up the knowledge gaps that were different from the gap in the current study as they were all based on perceptual dialectology rather than on divergence and much focus was at phonology as opposed to morphology and semantics. Additionally, it should be primarily noted that the studies under review like the one by Sullivan were sociolinguistically oriented as opposed to the current one which focuses on geographical dialectology. However, the information provided in all the studies is useful to the current study especially the mode of comparative applied in order to solicit the findings.

Furthermore, several dialectological studies have addressed the issue of contact and identity by examining the systematic patterns of clan contact and immigration found among exogamous clans and even among the settlers who cross over the borders to come and settle in the new places (Belinkov 1914), (Stanford 2007) and (Starzmann 2014). Similar to the current study, Belinkov conducted a comparative study between the Arabic of Ġisir izZarga and the North and Central Transjordanian dialects. The aim of the study was to describe the main linguistic features of the type of Arabic spoken in Ġisir izZarga and position it inside the greater group of Syro-Palestinian dialects. This was a qualitative study which drew primary data from interview recordings made in the village during field work conducted in 2011-2012. Findings of this study reveal that the Arabic dialect of Ġisir izZarga is a rural dialect with significant Bedouin component. Its rural character is evident from the phonological preservation of interdentalals such as *ġim > ġ; inconsistent k > č, morphological gender distinction in plural verbs and pronouns and morphosyntactic features such as (b- prefix for the indicative; (ma-) ... for compound negation. Although not in the context of African Languages, the Study by Belinkov provides an insight on the general study of dialects. Similar to that of Belinkov, a case study of a comparative nature was undertaken to investigate the role of identity in dialect contact and how that identity may be performed linguistically (Stanford 2007). In his study, Stanford reveals that in China, Sui women, men, and children maintain the dialect features of their home clans to a high degree throughout their lives, regardless of any later migration and long-term immersion in other clan dialects (Stanford 2007:ii). Despite its focus on phonology and lexis, the study by Stanford does not consider morphology and semantics which are part of the current study. Similarly, Starzmann conducted 'A Dialectological study of Central Kenyan Bantu: A Quantitative and Qualitative

Analysis (Starzmann 2014). The purpose of this study was to establish the internal and external linguistic affiliation of central Kenyan Bantu. The study applies both quantitative and qualitative approach to data collection and analysis. Linguistically, it focuses its attention on phonology, morphology and lexis. Although similar to the current study, Starzmann’s study creates a gap in the area of semantics, research method and the language of focus. However, the two studies are all comparative in nature. The findings of the study reveal that at the time of initial immigration there was no ethnic identity among the early pioneers. The movements were thereafter spearheaded by small groups at the family level. As a result of continuous engagement in trading and marriage relationships as well as military conflicts, a new contact and identity was established (Ibid 2014). The study therefore established the following phonetic differences between Meru (Imenti-dialect and Embu/Mbeere:

	Meru (Imenti-Dialect	Embu / Mbeere
/c/ realised as	dʃ = voiced aveo-prepalatal affricate	ʃ = voiceless prepalatal fricative
/c-/i, u/ realised as	dʃ = voiced aveo-prepalatal affricate	tʃ = voiceless addental postalveolar affricate

Although the study by Starzmann is not meant to analyse linguistic features at semantic as in the current study, it serves as a reference for the possible comparative study on dialectology.

2.4. Summary

This chapter has reviewed related literature from Zambia and beyond the borders. The chapter has provided information on related studies conducted by various scholars. Though similar in some respect, most of the reviewed studies were not comparative in nature like the current study. Some research methods and theories applied in the reviewed studies provide a necessary gap for the current study. The focus on Linguistic divergence by the current study helps to bridge a gap on some reviewed studies that focused on identity, mutual intelligibility and general variation between or among dialects. Failure to consider some levels of linguistics such as semantics in the study of dialects as observed in some reviewed studies makes it necessary for the current study to be undertaken. Generally the review has established that no study has been undertaken on Unga.

CHAPTER THREE: RESEARCH METHODOLOGY AND DESIGN

3.1. Overview

As the study seeks to establish the linguistic divergence of Unga dialect at phonological, morphological, semantic and lexical levels, the choice of an appropriate research method and design was critical. This chapter therefore presents the overall approach to research process that was applied in the sampling, collection and analysis of data with a view to accomplishing the aim of the study.

3.2. Research Methodology

This study employed qualitative approach in the collection and analysis of data. The adoption of this approach was due to its deemed suitability to gathering of data from a socially constructed speech community. Primary data was collected through interview, focus group discussion participant involvement and introspection. Through these varied methods, the researcher investigated speech sounds, word structures and how meaning is realised in different linguistic contexts in Unga dialect. According to Mack et al (2005:1), qualitative research is specifically effective in obtaining culturally specific information about the values, opinions, behaviours, and social context of particular population.

3.3. Research Design

A research design is a guideline within which the choice of a suitable approach of a study is made. In order to lead the researcher to the formulation of viable research principles which are of great value to eliciting of knowledge and coming up with solutions to the pending problems, this study used a descriptive research design which is part of the qualitative research. Yilmaz (2013:313) acknowledges that, “a qualitative research is explored through an in-depth description of the phenomenon from the perspective of the people involved.” Effective application of the design allowed the researcher to collect accurate data of experiences from the informants that helped to establish the findings of the study according to the set objectives. This method was suitable for the current study because no attempt was made to manipulate the situation under study as is the case with experimental quantitative research (Beverley, 1998:2).

3.4. Study Area

The study was conducted in Luapula province and Lunga District in particular. Purposive sampling was used to select Lunga District as this was one area with typical Unga dialect. In Lunga District, Nsamba Chiefdom was purposively selected as the study location. This is

because, the area has the biggest population and is among the first to be established on the Swamps of Lake Bangweulu.

3.4. Population

A population is a group of individuals, objects or items from which samples are taken for measurement. Population refers to an entire group of persons or elements that have at least one thing in common. The population of the study consisted of all the four chiefdoms of Lunga District which are Nsamba, Kasoma Lunga, Bwalya Mponda and Kalima Nkonde.

3.5. Sampling Technique

Sampling is the procedure a researcher applies with a view to selecting people, places, events or things to study. Mack, et al (2005:5) defines a sample as “a subset of a population selected for any given study”. Sampling is therefore, a process of selecting a number of individuals or objects from a population such that the selected group contains elements representative of the characteristics found in the entire group(Orodho and Kombo 2002).

3.5.1. Study Sample

Through purposive sample, 24 respondents were selected out of which 12 were subjectively interviewed until the point of saturation. Saturation in this context is a moment when the researcher cannot continue with data collection because informants are providing the same information. The researcher targeted informants with years ranging between 20 and 75. Gender was considered in this regard.

3.6. Data Collection Instruments

In order to collect primary data on morphology, semantics and lexis of Unga dialect, semi-structured interview guide was used while the Swadesh list of approximately 400 English-glossed Bemba words was orally administered to the informants for realisation of phonological data. A tape recorder was however used to record some conversations for the purpose of data transposition and analysis. On the other hand, secondary data was collected from journals, reports, articles, books and maps. The following sections bring out more details about the interview guide and the Swadesh list.

3.6.1. Interview Guide

The interview guide was used to collect information through semi-structured interviews. This instrument was adopted in order to allow flexibility and allow informants to provide information on morphology, semantics and lexis for the study. The specification of questions and recording

of responses in the process of interviews allowed the interviewer to control the exercise thereby initiating a systematic and conversational platform for quality data collection. Fraenkel and Wallen (2003: 456) contend that “one of the advantages of the interview guide approach is that the collected information can later be compared and contrasted.” Since this aspect was well managed in this research, the researcher managed to present a comprehensive interpretation of data and that made the study a reality.

3.6.2. Swadesh List

As a potential core lexical device, the Swadesh list was developed by Moriss Swadesh in the fifties for improving the results for quantitative historical linguistics (Prevot et al 2006). The list is used for word translation from one language to another and it deals with universal vocabulary which relates to human direct experiences. In this study, a quite radical reconstructed Swadesh list of approximately 400 English glossed Bemba words was used to collect phonological data on Unga dialect (See appendix A). The innovative adjustment of the Swadesh list was to make it suit the Zambian context in linguistic study since its original structure contains some vocabulary items such as ice, snow and bear which are not culturally applicable in most of our linguistic zones.

3.7. Data Collection Procedure

With permission from His Royal Highness, Chief Nsamba, the researcher conducted semi-structured interviews and focus group discussions for primary data collection as explained below.

Using the Swadesh list of 400 English-glossed Bemba words, the researcher asked the participants to supply equivalents in their respective Unga dialect. For phonetic transcription and tone marking, informants were asked to pronounce Unga words.

3.7.1. Collection of Primary Data

It should be stated here that primary data is information that a researcher gathers because no one has compiled and published in a forum accessible to the public. In view of this, the primary data for this study was therefore obtained by interviewing selected informants. The researcher conducted semi-structured interviews with the participants purposively selected with the point of saturation in mind. This enabled the researcher to collect the required data that was packaged and decoded for analysis with a view to meeting the set objectives. That apart, the researcher also used the focus group discussion to collect primary data.

3.7.2. Collection of Secondary Data

Secondary data was collected from books, journals, articles and magazines on Bemba language while data on Unga dialect was sourced from Central Statistics Office and the Department of Chief's Affairs in Mansa District. Additionally, the chief's archive supplemented some information as part of the secondary data especially on the history of the Unga people. Besides, University of Zambia library became a reliable source for secondary data.

3.8. Data Analysis

The process of data analysis started with the thematic sorting out of collected data in line with the set research objectives. After describing and establishing the possible linguistic features of Unga and Bemba at phonological, morphological semantic and lexical levels, the features were juxtaposed for comparison so as to establish the similarities and differences. Data collected from documents such as books, journals and statistical documents was subjected to content analysis for value judgment in line with the research procedure.

3.9 Descriptive and Comparative Methods to Linguistic Study

The current study was informed by the Descriptive and the comparative methods to language study. Carl (1996, cited in Rubba, 2004) holds that any comparative study involves two stages. The first stage provides for description, when each of the two languages is described on the appropriate level and the second calls for juxtaposition for comparison. Comparative linguistic method is used to address cross-linguistic issues in the absence of a linguistic theory. (Lehmann 2018:3) argues that "in the case of linguistics, comparison of languages is the choice method for the elaboration of an empirical theory of language".

3.9.1 The Descriptive Method

As a method, descriptive approach to language study attempts to explain how a particular language functions (Lehmann 2018:2). It is a language-specific approach applied in research with a view to understanding the structure of an individual language. This approach holds that linguistic forms exist, brings into perspective the differences and similarities between the forms and also describes the uniformity of linguistic phenomena in human languages (Buhari 2011:56). The approach provided a language-wide template for characterizing the specific linguistic features of Unga dialect at phonological, morphological, semantic and lexical level in order to bring out the linguistic divergence of the dialect. From the linguistic data collected, the researcher identified distinctive sounds, noun prefixes and vocabularies of Unga dialect and

Standard Bemba as tapped from the native speakers. Based on the inventory of sounds and the noun class system in both languages, the researcher then analysed the phonology, morphology and semantics in order to establish the purported linguistic divergence in Unga dialect.

3.9.2 The comparative method

A comparative method is a long standing cross-linguistic qualitative method which is used to determine what is and what is not cognate (Campbell 2004). For a long time now, dialectology has been regarded as an outgrowth of the comparative study of language differences and similarities. The practice of collecting, describing and comparing the linguistic features of different regional dialects has evolved across centuries (Kurath 1972). Having described, the linguistic features of Standard Bemba and Unga dialect, a comparison was conducted in order to establish the differences and similarities at phonological, morphological, semantic and lexical levels so as to confirm the perceived linguistic divergence in Unga dialect.

3.10 Scope/Delimitation of the study

The main concern of the study was to describe and analyse the linguistic features of Unga dialect at phonological, morphological, semantic and lexical levels in comparison to Standard Bemba. These processes helped to corroborate the perceived diverse linguistic features of Unga at phonological, morphological, semantic and lexical levels. Since syntax has been widely covered in the previous dialectological studies conducted by Mambwe (2008); Lumwanga (2015), this study was designed to bridge the gap on semantics. In order to bring out the idiosyncrasies in terms of Unga linguistic structure, the study was restricted to Lunga District as taking this study to some other places like Samfya where Unga may be in dilution could have inhibited access to the deserved research data. This idea was in full support of the qualitative method which was applied in this study. It is held that qualitative research method enables the participants to make meanings of their own realities and come to appreciate their own construction of knowledge through practice (Mutch 2005). As a result, researchers who adopt qualitative method immerse themselves in a culture or group by observing its people and their interactions, often participating in activities, interviewing key people, taking life histories, constructing case studies, and analyzing existing documents or other cultural artefacts (Tuli 2010).

3.11. Summary

This chapter has provided the qualitative methodological road map and the linguistic method of data analysis befitting the current study. It has looked at the methodology and the rightful design

for data collection and analysis with a view to obtaining the desirable results. Considering the philosophical aspect of social construction which is mainly supported by qualitative approach to data collection, the study through this chapter has indicated the use of descriptive design, interview guide and graphic materials for both primary and secondary data collection. The chapter further provides for the sampling technique, data collection instrument, procedure of data analysis and the scope of the study. The chapter ends with the linguistic methods that were used to compare the linguistic features between Standard Bemba and Unga Dialect. The following chapter however presents the Linguistic Structure of Standard Bemba at Phonological, Morphological, Semantic and Lexical levels.

CHAPTER FOUR: THE LINGUISTIC STRUCTURE OF STANDARD BEMBA

4.1. Overview

The current chapter presents the basic linguistic structure of Standard Bemba. Based on the focus of the study, the chapter begins with phonology, then morphology and lastly semantics. The aspect of lexicology is however considered under the chapter for analysis to avoid a replication of information. The chapter provides the foreground to the following chapters for enhanced data analysis.

4.2. Phonology

Any language of the world is defined from the lowest level to the highest level of linguistics. In this case, sound system of any language is its lowest linguistic level while the sentence is the highest level. With this linguistic arrangement in mind, this subsection is intended to present an aspect of speech sound and sound patterns of standard Bemba, but, it is prudent for the sake of authentication to provide some general definitions on phonology as presented by some scholars. Crystal (2008:365) defines phonology as “a branch of linguistics which studies the sound systems of languages.” This implies that there are many branches of linguistics out of which phonology is concerned with the sound system of a particular language. Where phonology is well developed in a language, it becomes easier for linguists to determine the functions and the phonetic rules bound by specific languages.

4.2.1. The Phonology of Standard Bemba

The sound system of any language is analysed at two levels; the segmental and the supra-segmental level. Like many Bantu languages, Bemba embraces both segmental and supra-segmental phonology. In segmental phonology, sound segments of a language which include consonants and vowels are analysed. However, supra-segmental phonology tends to take language analysis to a level above sound segments. Language analysis at this level includes the aspect of tone, length, intonation and stress in some languages such as English. This section however looks at the segmental analysis of phonology in Standard Bemba.

4.2.1.1 Segmental phonology

At segmental level, phonology is analysed based on the sound segments of a particular language such as consonants and vowels as discussed below.

4.2.1.1.1 Consonant Inventories

The following inventories provide the descriptions of the phonology of Bemba at consonantal levels. However, the orthographical system of Bemba is a replica of its phonetic system although there are some special cases where a one to one matching does not apply. Table 1 presents an inventory of consonants in standard Bemba.

Table 1: An Inventory of Consonants in Bemba

	bilabial		Labio-dental		alveolar		post alveolar		palatal		velar	
	-	+	-	+	-	+	-	+	-	+	-	+
Plosives	p	b			t	d					k	g
Nasal		m				n			ɲ			ŋ
Fricative	β		f		s		ʃ					
Affricate							tʃ	dʒ				
Lateral						l						

Table 2: An inventory of semi-vowels in Bemba

	Palatal		Labio-velar	
	-	+	-	+
Approximant		j		w

The consonants provided in the above tables are phonemic in nature. They consist of consonants which are presented according to manner and place of articulation. Consonants combine with vowels in the formation of words in Bemba. However, particular attention is paid to individual consonant sounds in their combinatory processes so that grammar is taken care of. In the recent study Kula and Hamann developed a revised inventory of Bemba consonants paying much attention to the strict syllable structure of Bemba where even glides belong to the syllable nucleus (Kula and Hamann, 2015). Refer to **Table 3** and **4** below on the consonant inventory and the phonological presentation of consonants in Bemba.

Table 3: Plain and prenasalised inventory of consonants in Bemba

		bilabial	Labio-dental	alveolar	Palato-alveolar	Palatal	velar	Labio-velar
obstruent	plosive	p b		t d			k g	
	fricative		β f	s	ʃ			
	affricate				tʃ dʒ			
Prenasalised-obstruents	plosive	mp mb		nt nd			ŋk ŋg	
	fricative		mf	ns	nʃ			
	affricate				nʃ ndʒ			
sonorants	nasal	m		n		ɲ	ŋ	
	approximant					j		w
	laterals			l				

Adapted from (Kula and Hamann 2015:62)

Table 4: Phonological presentation of sound segments in Bemba words

S/N	Word	Phonetic segment	Phonetic-transcription	gloss	voice	Place of articulation	Manner of articulation
1	-putula	[p]	[<i>putula</i>]	chop	voiceless	bilabial	plosive
2	-tema	[t]	[<i>tema</i>]	cut	voiceless	alveolar	plosive
3	-koma	[k]	[<i>koma</i>]	chop	voiceless	velar	plosive
4	-buula	[β]	[<i>βu:la</i>]	take	voiced	bilabial	fricative
5	-mushila	[ʃ]	[<i>muʃila</i>]	root	voiceless	Palato-alveolar	fricative
6	-fisa	[f]	[<i>fisa</i>]	hide	voiceless	Labio-dental	fricative
7	-sala	[s]	[<i>sala</i>]	choose	voiceless	alveolar	fricative
8	-caani	[tʃ]	[<i>tʃa:ni</i>]	grass	voiceless	Palate-alveolar	affricate
9	Impanga	[mp]	[<i>impanga</i>]	sheep	voiceless	bilabial	plosive
10	Imbwa	[mb]	[<i>imbwa</i>]	dog	voiced	bilabial	plosive
11	Intulo	[nt]	[<i>intulo</i>]	source	voiceless	alveolar	plosive
12	Inda	[nd]	[<i>inda</i>]	lice	voiced	alveolar	plosive
13	-konka	[ŋk]	[<i>konka</i>]	follow	voiceless	velar	plosive

14	-lunga	[ng]	<i>[luŋga]</i>	hunt	voiced	velar	plosive
15	-umfwa	[mf]	<i>[umfwa]</i>	listen	voiceless	labial-dental	fricative
16	-insaka	[ns]	<i>[insaka]</i>	hut	voiceless	alveolar	fricative
17	-inshita	[nʃ]	<i>[inʃita]</i>	time	voiceless	Palato-alveolar	fricative
18	-incito	[nʃ]	<i>[inʃito]</i>	job	voiceless	Palato-alveolar	affricate
19	-inyanje	[ndʒ]	<i>[inyandʒe]</i>	maize	voiced	Palato-alveolar	affricate
20	-amate	[m]	<i>[amate]</i>	saliva	voiced	bilabial	nasal
21	Umunani	[n]	<i>[umunani]</i>	relish	voiced	alveolar	nasal
22	Utunya	[ɲ]	<i>[utuɲa]</i>	babies	voiced	palatal	nasal
23	Ijanse	[ŋ]	<i>[ijanse]</i>	crab	voiced	velar	nasal
24	Ilaya	[j]	<i>[ilaja]</i>	dress	voiced	palatal	approximant
25	Iwe	[w]	<i>[iwe]</i>	you	voiced	labio-velar	approximant
26	Landa	[l]	<i>[landa]</i>	talk	voiced	alveolar	lateral

It is evident from Table 4 that consonant sounds play an important role in the formation of words in Bemba. The combinatory nature of sound segments is a proof that Bemba language exhibits some complex phonological processes during word formation processes as will be evidenced later. Phonetically, individual sound segments represent particular phonemes which are systematically selected to serve as a differentiating factor for the realization of semantics in the process of word formation. Phonological processes provide for some sounds to shift positions in order to adapt to the required manner or place of articulation for smooth transition during pronunciation. Some sounds are allophonically designed for the purpose of phonetic harmonisation. Nevertheless, consonants are not a standalone phenomenon in languages such as Bemba. They always take vowels as their special counterparts in the process of word formation. The following sub-section therefore focuses on vowels in Bemba and their linguistic characteristics.

4.2.1.1.2 Vowel System of Bemba

Like many Bantu languages, Bemba has a five-vowel system which is the product of the Proto-Bantu vowel system. Kasonde (2002:11) acknowledges that “the vowel system of Icibemba is also typically Bantu, with a five-vowel triangular system which distinguishes short from long vowels.” Like consonants, vowels are equally used as building blocks in the process of word

formation in Bemba. This is what distinguishes Bemba from English. **Table 5** below presents the inventory of Bemba vowel system.

Table 5: An Inventory of Vowels in Bemba

	Front	Back
High	i ii	u uu
Mid	e ee	o oo
low		a aa

Phonemically, vowels play an important role in the creation of meanings. Any change in position for a particular vowel in a word entails a change in the meaning of that word. For example, replacing the sound /i/ by /e/ in the word [*βila*] changes the meaning from ‘sew’ to [*βela*] ‘dodge’. More examples are given in **Table 6** below.

Table 6: Influence of vowel sounds on meaning

s/n	Vowel	word	Gloss	word	Gloss	Transcription	Vowel type
1.	i			- <i>bila</i>	sew	<i>βila</i>	Short
2.	ii	<i>ic-iila</i>	Sketch			<i>itʃ i: la</i>	Long
3.	e			- <i>bela</i>	dodge	<i>βela</i>	Short
4.	ee	<i>ici-ela</i>	metal			<i>itʃ e: la</i>	Long
5.	a			- <i>bala</i>	start	<i>βala</i>	Short
6.	aa	<i>ici-ala</i>	deceased			<i>itʃ a: la</i>	Long
7.	o			- <i>bola</i>	rot	<i>βola</i>	Short
8.	oo	<i>ici-ola</i>	bag			<i>itʃ o: la</i>	Long
9.	u			- <i>bula</i>	Intestine	- <i>βula</i>	Short
10.	uu	<i>Ici-ula</i>	frog			<i>itʃ u: la</i>	Long

From **Table 6**, it should be indicated that two minimal sets have been developed out of which one template has given birth to five different words by simply alternating the vowel segments in

the same position. This is one linguistic mechanism which has made Bemba to stand as a simple but rich language in word formation.

4.2.1.1.3 Some Phonological Rules in Bemba

4.2.1.1.3.1 Spirantisation / Fricativisation or Lenition in Bemba

Fricativisation is a phonological process where plosives or stops are softened to produce fricative sounds. This process is applicable during word derivation process and in causative extension. A bilabial plosive sound such as /p/ or /b/ changes to fricative sound /f/ when it precedes the high front vowels /i/ and /u/.

4.2.1.1.3.1.1 Spirantisation of Nominal Derivation

1. U-ku-bomba - u-mu-bombi -u-mu-bomfi ‘worker’

U-ku-samba - in-sambi - in-samfi ‘swim’

Rule: /b/ → [f] / ~~_____~~ / i /

4.2.1.1.3.1.2 Spirantisation of Causative Extension

2. (a) U-ku-lamba-a – (to be dirty)

u-ku-lamb-i-a – ukulamfya (to cause to be dirty)

(b) u – ku – sapa – (to be untidy)

u – ku – sap – i – a – ukusafya (to cause to be untidy)

Rule: / ~~p~~ / ~~b~~ / → [f] / / i / _____

Spirantisation is also likely to occur in a situation where the alveolar plosive /t/ or /d/ and the velar plosives /k/ or /g/ comes in a phonetic environment before the high front vowel /i/. This is also dealt with under causative extension as illustrated below

3. (a) u-k-u-imita – ‘to be pregnant’

u – ku – imit – i – a ukwimisha /t/ → [ʃ] / / i / – ‘to cause to be pregnant’

(b) ukubonda ‘to be ripe’

u – ku – bond – i-a u-ku-bonsha /d/ → [ʃ] / / i / – ‘to cause to be ripe’

(c) uku – loka – ‘to rain’

uku - lok - i - a **ukulosha** /k/ → [ʃ] / /i/ – ‘to cause to rain’

(d) uku – lung – a ‘to hunt’

uku – lung – i – a ukulunsha /g/ [ʃ] / → /i/ – to cause to hunt.

The phonological processes in(3) are bound to soften the plosive to fricatives or make non-spirant sounds acquire spirant phonetic power. However, there are also instances in Bemba where a fricative /β/ and a lateral /l/ are rendered strength. This process or phonological rule is referred to as fortition or consonant hardening or strengthening of the following consonant.

4.2.1.1.3.2 Consonant hardening or Fortition

In a situation where the stem initial consonant /β/ or /l/ is preceded by a nasal, phonetic transformation of the two sounds is possible (Kula, 1999). In this case, /β/ becomes /b/ while /l/ becomes /d/. The following are the examples

4. (a) - bula – ‘get’ imbula ‘get’

(b) -butuka – ‘run’ mbutuka /’run’

Rule: /β/ → [b] / |n| —

(c) n- lee-lya – ‘ I am eating n-dee-lya ‘ I am eating

n – le – nga - draw’ n-de-nge ‘I draw’

luba– disappear n-du-be ‘I disappear’

Rule: |l| → [d] / |n| –

From the examples in (4) the rules provide that this phonological process is mostly presented in the circumstance where the 1st person singular prefix is applicable. Notable among the rules is the presence of the homorganic realisation in which the initial and the following consonants are all labialised for ease pronunciation.

The presence of nasals in Bemba has given rise to a wide range of phonological rules some of which have been adopted from other languages such as Ganda languages from a study by Carl

Meinhof. In his attempt to establish the influence of nasals on some consonants, Meinhof discovered a phonological rule accounting for nasal compound assimilation and dissimilation (Kamfuli, 2009, Kula, 2015). The rule was later named after the founder, Meinhof and it is known as Meinhof's law. Here is how the rule is applied in Bemba language.

4.2.1.1.3.3 Meinhof's Law

Similar to consonant hardening rule, Meinhof's law provides for the assimilation or dissimilation of some sounds in order to create effortless transition from one sound to another. Within a single rule other rules germinate and this has rendered Meinhof's law a complex rule. The following examples provide for the application of the rule in some Bemba words. What is eminent in this rule is the deletion of a plosive consonant when two consonants of the same place of articulation follow each other. The rule is manifested as follows:

5. (a) n-bon-a 'I see' (subject conjoint)

 mbon-a 'I see' nasal assimilation (fortition or consonant hardening)

mmone 'I see' plosive deletion (Meinhof's law)

(b) n-demb-a 'I write' (subject conjoint)

nnembe 'I write' plosive deletion (Meinhof's law)

In example (5a) there are three steps which the assimilation process undergoes as part of Meinhof's law. In the first step, the 1st person pronoun is adjoined to the radical. After that, the plosive /β/ assimilates with the nasal segment and finally the plosive sound is deleted paving way for the creation of a nasal sound.

4.2.1.1.3.4 Nasal Harmony

Nasal harmony is a phonological rule by which nasal consonants in a word are made to share the same place of articulation with the adjacent oral consonant (Kamfuli 2009). This process is also referred to as homorganic nasal assimilation. Bemba language exhibits this rule during the realisation of an applicative verbal extension as illustrated below.

6. a) -Lim-a 'cultivate'

 -Lim-ila

-lim-ina 'cultivate for' nasal harmony

b) -kom-a 'cut'

- koma – ila

-kom – ena'cut for' nasal harmony

c) -kaan-a 'refuse'

-kaan – ila

- kaan – ina 'refuse for' nasal harmony

d) -min – a 'swallow'

- min – ila

- min – ina 'swallow for' 'nasal harmony'

From the examples in (6 a, b, c and d) the rule is that the lateral [l] is deleted to provide for nasal harmony if it immediately follows a radical ending in either /m/ or /n/.

In the like manner, it is prudent to indicate that homorganic assimilation is much pronounced in the phonology of Bemba. Where articulation of successive consonants becomes a challenge, assimilation helps to harmonise the transition of speech mechanism. The following are examples of homorganic nasal assimilation in Bemba.

7. (a) n – pund – a – 'I shout'

mpunde – 'I shout'

(b) n-fwal – e – 'I dress'

mfwale – 'I dress'

(c) -n-bumb – e – 'I mould'

mbumbe – 'I mould'

mmumbe – 'I mould'

(d) n-konk – ‘I follow’

nkonke – ‘I follow’

Homorganic nasal assimilation has occurred in all the four examples. Example (7a) the assimilation of the alveolar nasal sound /n/ to a bilabial /p/ has given rise to a bilabial /m/ which is homorganic to the bilabial plosive sound /p/. In the like manner, in example (b) the alveolar /n/ assimilates to the labial dental /f/ which in turn results into the homorganic labial /m/ and labial-dental /f/. However, in example (d), the assimilation of the alveolar /n/ and the velar /k/ manifest into the appearance of the velar /ŋ/ which is homorganic to the velar /k/.

4.2.1.1.3.5 Consonant harmony in Bemba

Sibilant harmony in Bemba calls for an agreement among all the sibilants within a sentence (Ibid 2009). It is unconditionally given that in a sentence all the sibilants should either belong to the ‘s-like’ sound which are produced in front of the palato- alveolar area or the ‘sh-like’ sounds produced at the back of the palato-alveolar and the two should not be found in the same syntactic environment. The examples below provide for the consonant harmony.

8. (a) Ifishimu fishishi nshifwaya ukumona nga nshilalya inshima. ‘Caterpillars are insects I

do not like to see before I eat nshima.’ *Sh’-like* sibilant sound applied in a Bemba sentence.’

(b) Ifisimu fisisi nsifwaya ukumona nga nsilalya insima. ‘Caterpillars are insect I do not

like to see before I eat nshima.’ *S-like* sibilant sound applied in a dialect of Bemba.

From the given examples it is common among the speakers of Bemba to mix the *s-like* and the *sh-like* sibilants due to the influence of language contact. Such a mixture is eminent for the birth of a new variety of Bemba or a switch to another existing variety as the case for Town Bemba and other Bemba dialects.

4.2.1.1.3.6 Imbrication in Bemba

Imbrication is a phonological process by which some sound segments are reshuffled in a phrase or sentence so as to provide smooth and effortless phonetic uttering by the speakers (Kamfuli 2009:89). From a linguistic point of view, imbrication is a complex phonological process which

involves applicative adjunction, reshuffling of segments, Vowel harmony, nasal harmony, gliding and deletion of the last consonant. The following are examples of imbrication in Bemba.

9. (i) u-ku – lopol-a ‘to whip’

- a) u-ku-lopol-ila ukulopolila ‘to whip for’ applicative
- b) u-ku-lopoi-ella ukulopwella ‘to whip for’ segment reshuffling
- c) u-ku-lopoe –ila ukulopwella ‘to whip for’ vowel harmony on extension
- d) u-ku-lopw –ella ukulopwella ‘to whip for’ gliding of |o| and |e| to |w|
- e) u-ku-lopw-ela ukulopwela ‘to whip for’ deletion of the last segment |l|

(ii) u-ku- sopolol – a ‘to dismantle’

- a) u-ku-sopolol –ila to dismantle for applicative
- b) u-ku-sopolol –illa ukusopoloilla ‘to dismantle for’ ‘segment reshuffling
- c) u-ku-soploe-lla ukusopoloella ‘to dismantle for’ vowel harmony on extension.
- d) U-ku-sopolw-ella ukusopolwella ‘to dismantle for’ gliding of |o|and|e| to |w|
- e) U-ku-sopolw-ella ukusopolwela ‘to dismantle for’ deletion of the last segment |l|

4.2.1.1.3.7 Palatalisation in Bemba

Among the numerous phonological rules in Bemba, there is also palatalisation. This is an assimilation process whereby a non-palatal sound is made palatal. Palatalisation occurs by raising the tongue toward the hard palate thereby causing the production of the palatal sound instead of an alveolar sound. The process is mainly applicable during the derivation of causatives and intensives. The process is governed by the following rule with possible examples.

4.2.1.1.3.7.1 Palatalisation of Causatives

10. (a) u-ku-ful-a ‘to multiply’

u – ku – fu-si –a ‘to cause to multiply.

u-ku-fu-sha ‘to cause to multiply

(b) u-ku-lil-a ‘to cry’

u-ku-li-si-a ‘to cause to cry’

u-ku-li-sha ‘to cause to cry’

Rule: |s| → [ʃ] / |i|—

4.2.1.1.3.7.2 Palatalisation of intensives

11. (a) u-kwend-a ‘to walk fast’

u-kwend-a-i-si-a ‘to intensify the walking’

u-kwende-si-a

u-kwende-sh-a ‘to intensify the walking’

(b) u-kulepul-a ‘to break’

u-kulepu-isi-a ‘to intensify the breaking’

u-kulepw-is-i-a

u-ku-lepw-isha ‘ukulepwisha-to intensify the breaking

In the last two examples on palatalisation of intensives, the process involves other phonological processes such as insertion where the vowel /i/ is inserted and this is followed by vowel harmony as given in (11a) and finally gliding as witnessed in example (b) where /u/ and /i/ glides to /w/.

Palatalisation is also applicable in other processes which do not involve verbal extensions as illustrated below.

12. (a) Insiku inshiku ‘days’

(b) Insimbi inshimbi ‘metal’

(c) Insimu inshimu ‘bees’

4.2.1.1.3.8 Labialisation in Bemba

Where non-labials precede labial sounds, it becomes apparent for speakers to assimilate non labial into labial audible sounds. This process is commonly referred to as labialisation. Labialisation is also applicable where the speaker starts rounding the lips in anticipation of a rounded vowel which is preceded by a non rounded consonant. It is important to indicate that labialisation is a causal effect. The following are examples of libialisation in Bemba.

13. a) Ukutwa – ‘to pound’

b) Ukutukwa – ‘to be insulted’

c) Ukusangulula – ‘to cleanse’

d) Umulwani ‘enemy’

e) Ukutoba – ‘to break’

In order to indicate labialisation as a phonetic realisation when transcribing words, a subscript [l^w] or [t^w] is given to mean that /l/ or /t/ has been labialised or rounded.

4.2.1.1.3.9Vocalic processes in Bemba

Like consonants, vowels are also attached to some phonological rules in Bemba. The adjoining power of consonants and vowels and vowels with other vowels cannot call for some linguistic. The following are therefore rules which cut for vowels in both word and sentence formation in Bemba.

4.2.1.1.3.10Vowel harmony

This is a phonological process whereby a vowel is harmonised to assimilate with the preceding and the following consonants. This process is applicable in the applicative verbal extension as illustrated below.

14. a) –lomb –a ‘write’

-lomb – ila ‘write for’

-lombela ‘write for’ vowel harmony

b) –bomb –a ‘work’

-bomba –il-a ‘work for’

-bombela ‘work for’ vowel harmony

In (example 14), the vowel /i/ has been harmonised to /e/ in order to assimilate with /b/ and /l/.

4.2.1.1.3.11Nasalisation of vowels in Bemba

Nasalization of vowels is a process where vowels acquire nasal sounds due to the acquired influence from the neighbouring nasal segment (Matthew 2005). The following examples provide for nasalisation in Bemba.

15. a) U-ku-nyant-a – ukunyanta ‘to step on’

b) i–ŋaŋga - ‘witchdoctor’

c) in-ongo - 'clay pot'

As given in the above examples, it is observed that the sound /a/ in example (15a) has gained a nasal sound from the nasal sound /ŋ/. In the similar manner the sound /a/ in (b) has also been nasalized by /ŋ/ while the sound segment/o/ in (c) is influenced by /n/.

4.2.1.1.3.12 Glide formation in Bemba

Another phonological process which is realized from the sequential arrangement of vowels in Bemba is glide formation. There are two types of glide formation in Bemba. There is what is known as palatal glide formation and bilabial-velar glide formation. During palatal glide formation, a palatal sound segment [y] is generated while in labial-velar glide formation the labial velar segment [w] is generated. These two processes are illustrated below.

16. a) Imi-eo imyeo 'lives'

b) Imi-ulu imyulu 'skies or heavens'

c) Imi-ona imyona 'noses'

Rules: (a) /i/ → [y] / -/e/

(b) /i/ → [y] / -/u/

(c) /i/ → [y] / -/o/

Palatal glide formation forms /y/ from the high front vowel /i/ before the mid front vowel /e/, the high back vowel /u/ and also the low back vowel /o/.

17. a) umu-ana mwana 'child'

b) u-mu-ele umwele 'knife'

c) u-ku-ipay-a ukwipaya 'to kill'

Rules: (a) /u/ → [w] / /a/ —

(b) /u/ → [w] / /e/ —

(c) /u/ → [w] / /i/ —

As for labial-velar glide formation, the semi-vowel /w/ is produced from the high back vowel /u/, before a back low vowel /a/, the mid front vowel /e/ and the high front vowel /i/.

4.2.1.1.3.13 Coalescence in Bemba

Coalescence is a common phonological process in Bemba. Some linguists perceive coalescence as the general term which is used to describe the fusion of two different vowels. However, for the sake of this study, coalescence will be restricted to the sound mutation due to vowel fusion. Carolyn (1997:69) defines coalescence as “a phonological phenomenon in which two adjacent vowels cause each other to change.” Sambeek (1955:2) observes that “a conspicuous feature of the Bemba language is the coalescence or fusion of neighbouring vowels both between words and within words.” This entails that coalescence can either apply word internally or at inter-word at sentential level.

Below is a devised phonological rule for coalescence and some practical examples of coalesced words.

18.RULE: V + V → V

- (a) *Akatanda aka – akatandaaka* ‘this small mat’
- (b) *Aba-enda – abeenda* ‘those who travel’
- (c) *Umuono – umoono* ‘fishing basket’
- (d) *Balwele aba – balwelyaaba* ‘these are sick’

4.2.1.2 Supra-segmental phonology in Bemba

Supra-segmental phonology is the phonology beyond the segmental one. This kind of phonology analyses a particular language focusing on how some prosodic features affect speech sounds in the articulatory process. Crystal (2008:426) confirms that “supra-segmental or non-segmental phonology analyses those features of speech which extend over more than one segment.” Supra-segmental phonology deals with such prosodic features as tone, stress, intonation and length. In this study, only tone and length has been analysed.

4.2.1.2.1 Bemba Tonology

Tonology is the study of how particular pitch variations render distinctive semantic realizations of certain words in some languages. Miti (2006:103) asserts that “pitch differences are determined by the rate of vibration of the vocal cords.” It is of course these differences in vocal

vibrations which accord tone three different levels. There are high tones which are associated with fast vibration of vocal cords, and low tones which result from slow vocal cord vibrations. A well balanced pitch is said to be in mid tone. However, this study focused on High and Low tones which are the basis of tonology in Bemba. As earlier stated, tone is an important phonetic as well as phonemic linguistic facet of Bemba. The following diacritic are associated with the two types of tones alluded to.

High tone -´

Low tone - `

The following are examples of how tone is applied on Bemba lexemes to indicate a contrast in meaning.

19. a) ìmpàngá [*impaŋga*] ‘sheep’

 ìmpàngà [*impaŋga*] ‘bush or forest’

b) Pélà [*pela*] ‘grind’

 pélá [*pela*] ‘end’

c) ícìsúngù [*ifisunɣu*] ‘virginity’

(d) ícìsúngú [*ifisunɣu*] ‘modernity’

In Bemba, tone is also used to indicate tense and mood. This is an aspect of tone neutralisation as illustrated below.

20. (a) àlééndà [*ale:nda*] ‘he/she was walking’ ‘past continuous.’

 álèéndá [*ale:nda*] ‘he /she is walking’ ‘present continuous’

(b) ìmbá [*imba*] ‘sing’ imperative mood

 wìmbé [*wimbe*] ‘sing / dig’ subjunctive mood.

Apart from its lexical role as displayed in the examples above, tone also plays a grammatical role and this is only attested in the syntactic analysis as illustrated below.

21. a) Bwalya áséndélè ùmúsúngù mu kápàngà.

 ‘Bwalya carried petals to the small bush.’

b) Bwalya àséndèlé ùmùsúngú mukufwaya àkàpángá.

‘Bwalya has taken a white person to search for a rat.’

c) Ba Lungu bálèètééká cino caalo

‘Mr. Lungu is ruling this country.’

d) Ba Lungu baléétèèká cino caalo

‘Mr. Lungu was ruling this country.’

Comparing the two sets of sentences reveals that in sentences (26 (a) and (b)) the words (*umusungu*’ and *kapanga*’ are being contrasted by tone thereby accounting for two different meanings. In sentence (a) Bwalya is dealing with ‘petals’ and a small bush while in sentence (b) Bwalya is dealing with a ‘person’ and a ‘rat’ or an animal.’ Nevertheless sentences (c) and (d) are being contrasted by the tenses expressed through tonal difference. Although the lexical items are the same in both sentences, tone spreading however has affected their meanings, in sentence (c) the tense is in present continuous while in (d) it is in past continuous.

4.2.1.2.2 Length in Bemba

Vowel lengthening is a common phonological process in Bemba. This is an elongation of vowels or doubling of vowels in a word caused by some phonological arrangements. Crystal (2008:273) defines “length in phonetics as the physical duration of a sound, while in phonology it is a relative durations of sounds and syllables when these are linguistically contrastive. Mambwe (2008:47) acknowledges that, “like tone, length equally plays a lexical role in contrasting meaning.” Common among the phonological process involving length in Bemba are the lengthening of vowels before nasal sounds and after the semi-vowels. The following are examples of how length is released based on the said phonological processes.

4.2.1.2.2.1 Length before Nasal Complexes

22. (a) *ba-lee-nd-a* ‘they are walking’ [*Bale:nda*]

(b) *u-ku-seend-a* ‘to carry’ [*ukuse:nda*]

(c) *u-ku-boomb-a* ‘to work’ [*ukubo:mba*]

4.2.1.2.2 Length after Semi Vowels

23.(a) *u-mu-ana umwana* ‘child’ [umwa:na]

(b) *i-mi-uluimyulu* ‘heavens’ [imju:lu]

(c) *i-mi-aka imyaka* ‘years’ [imja:ka]

4.2.1.3 The Syllable Structure in Bemba

Bemba embraces a distinct syllable structure which allows a nucleus to stand on its own as a single syllable as opposed to English syllable structure. Miti (2006:102) approves this fact by observing that “not all syllables are larger than a single sound word either.” This is a reaction to some definitions of a syllable, that it is a unit of pronunciation typically larger than a single sound, and smaller than a word (Crystal, 2008). Rather than defining a syllable as part of a word or simply a word which contains a peak, an onset and a coda, it will be prudent to stress that a syllable is that unit of a language which carries tone or stress. This being the case, a syllable in Bemba is part of tone bearing because in whatever form a syllable is found, it exhibits a nucleus which is a vowel. It is indeed this characteristic of the nucleus which allows a syllable to be defined according to the auditory features of prominence or sonority (Miti 2006:102). Syllables are categorized into open syllable and closed syllable which are further subcategorized into light and heavy syllables. An open or light syllable ends in a vowel while a closed or heavy syllable ends in a consonant. Nevertheless, Bemba embraces the open syllable type.

A syllable structure is represented by (V) for vowel and (C) for consonant. Bemba being part of the Bantu Languages embraces an open syllable which is also known as light syllable. The following is the categorization of syllables in Bemba.

24. **V** – ‘a’ as in the word *aisa* ‘he has come.’ 3rd person pronoun sg

CV – ‘ca’ as in *caisa* – ‘ci – a – isa’ of which ‘ci’ represents class 4 and this provides a

fusion between $|i|$ and $|a|$ ‘it has come’ 3rd person pronoun sg

CCV – ‘nku’ as in *nkupee* ‘should I give you’ as for 2nd person sg and pl

CCCV – ‘imbw’ as in *mbwelelemo* ‘should I go back’ as for 1st person sg

Though not common among Bantu languages, Bemba exhibit a special syllabic arrangement in which a nucleus is a syllabic nasal as illustrated below.

25. a) Finga [fíŋgà] ‘how many.

b) Ubunga [ùβúŋgà] ‘mealie meal

4.3. Some Morphological Aspect of Bemba

4.3.1 Bemba Noun Class System

Typically, nouns in Bemba are product of two different types of noun structures. The first type consists of a nominal structure and a stem while the second type is made up of an augment, prefix and a stem as illustrated below.

26. a) TYPE 1: prefix + radical
 | |
 ba tata

b) TYPE 2: Augment + prefix + radical
 | | + |
 u mu + ana.

As indicated above, an augment is a morpheme which precedes a prefix and in most cases the vowels *a*, *-i*, and *u* – are preferred. It should be pointed out that the type of a prefix depends mostly on the type of a noun it takes. **Table 7** below shows the noun class system according to (Carter 1974:38) and (Mann and Kashoki1999:17).

Table 7: Bemba noun class system

Class	Augment	Prefix	Example	Gloss
1	U -	mu-	u-mu-pabi	slave
1a	-	∅	∅ Kalulu	hare
2	a -	ba-	a-ba-pabi	slaves
2a	-	baa-	baa-kalulu	hares
3	u -	mi-	u-mu-ti	tree/medicine
4	i -	mi-	i-mi-ti	trees
5	i -	i/li-	i-sopo/i-li-ni	soap/egg
5a	-	lii-	lii-kabolala	a bad/big thief

6	a-	ma-	a-ma-bwe	stones
7	i-	ci-	i-ci-pushu	pumpkin
7a	-	cii-	cii-kolwe	big monkey/ancestor
8	i-	fi-	i-fi-pushu	pumpkins
8a	-	fii-	i-fii-kolwe	big ancestors
9	i-	n-	in-bwili	leopard
9a	-	Ø-	ØKapu	cup
10	i-	n-	in-bwili	leopards
11	u-	lu-	u-lu-kuni	firewood
12	a-	ka-	a-ka-ntu	thing
12a	-	kaa-	kaa-ntu	small thing
13	u-	tu-	u-tu-bata	small ducks
13a	-	tuu-	tuu-bata	small ducks
14	u-	bu-	u-buu-mi	health
14a	-	buu-	buu-shinganga	medical profession
15	u-	ku-	u-ku-boko	hand
16	-	pa/pali-	pa sukulu pali mwinemushi	at school at the headman's
17	-	ku/kuli-	ku mushi kuli shikulu	to the village to my grandfather
18	-	mu/muli-	mu mensi muli yama	in the water in the uncle's

Based on **Table 7** above, it will be prudent to pair the classes according to their grammatical and semantic categories. Notable among these categories are prefixes to do with honorifics, pejoratives, derogatory, augmentatives and diminutives. It is important to indicate that the prefix 'mu' which is in class 1, 3 and 18 does not represent the same category of nouns. Class 1 denotes nouns for person while class 3 represents nouns for things. However, class 18 is a locative class. Classes 7a and 8a are meant for pejoratives while classes 12a and 13a are for diminutives.

According to Sambeek (1955: 16) “the diminutive and augmentative prefixes may have a double meaning.” They may stand in for the size of a person or thing or simply to indicate some agreeable or disagreeable characteristics. Nevertheless, classes 1/2, 1a/2a, 3/4, 5/6, 7/8, 9/10, 10/11, 12/13 and 15/6 are inflectional morphemes used to express grammatical number while the last three classes 16, 17 and 18 are used for locatives.

Taking morpho-syntax as another aspect of linguistic analysis, it is important to consider the possible agreement marking that prevail on some parts of speech in Bemba language. For example the following illustrations show how nouns agree with demonstratives and verbs.

27. a) u – mu - ntu u- li-a a - isa ‘Person that has come’

Aug Pre Stm Agr Dem 3rdsg come

b) U - mu - aice u-yu e – keel - e pano ‘child this seated here’

Aug Pre Stm Dem 3rdsg sit Tm Loc

4.3.2 Verbal Structure of Bemba

Verbal morphemes are the linguistic elements which are used in the formation of verb forms. Whereas Sambeek (1955: 49) provides that “verbs are formed by the verbal prefix, the tense particle, the root and the suffix,” Chanda (2004) submits the following as verb morphemes; pre-prefix, prefix, post-prefix, tense marker, post-tense marker, object marker, radical, pre-ending, ending and post-ending. The object marker is also known as an infix while the radical is in some instances referred to as a root. Below are examples of how every verbal segment is applied in practice.

4.3.2.1 Prefix

In Bemba prefixes are used to indicate the subject of the verb as illustrated below:

28). Ba – tebet- a- ‘They have provided the feast’

Pre feast FV

In (28) above, the prefix ba- is from class 2 for human beings.

4.3.2.2 Pre-prefix

This is a morpheme which precedes a prefix. In Bemba, pre-prefix may represent negation and subject markers as shown in example 29 below.

29). a) ta-ba-li-a - They don't eat.

Pre-pre (negation)

b) ba-ba-kak-a

pre-prefix (subject marker)

4.3.2.3 Post-prefix

As opposed to a pre-prefix, post-prefix is a morpheme which comes after a prefix. See the following examples in (30) below.

30). a) a-ba-mu-ma 'who beat him'.

Pst-pref (object marker)

As presented in (30a), a post prefix is in most cases used to represent the object marker.

4.3.2.4 Tense Markers 1 and 2

There are two types of tense markers. The first is referred to as the first tense marker while the second tense marker is in some instances indicated as an ending. The first (1) tense marker is used to indicate time when an action took place. On the other hand, the tense marker 2 is found at the end and does not show any extension. It is used to form a discontinuous morpheme for tense 1. Whereby the two perform similar functions, tense marker 1 however shows time and aspect while tense marker 2 indicates mood, polarity and relativity. Kamfuli (2009:21) acknowledges that "the ending is the element which usually occurs in final position and participates in the forming of tenses, moods, and polarity." Miti (2006; 299) specifies that "the function of the final verbal suffix is to indicate that the verb radical with which it occurs is used in the indicative mood." However, tense marker 2 does not carry a permanent shape as its shape is based on the tense type, mood, polarity and other linguistic characteristics. The following are the examples of how the two tense markers are applied in Bemba.

31). a) a- la-butuk-a- 'he runs'

TM1

b) ba-ka-let-a- 'They will bring'

TM2

4.3.2.5 Post Tense Marker

As the term indicates a post tense marker is an inflectional morpheme which follows the tense marker and it is used for aspect as illustrated below.

32). a) tu-ka-laa-sambilil-a- 'we will be learning'.

Pst TM (future progressive)

4.3.2.6 Object Marker

This is a morpheme which provides reference to the object of the word. It can either be monotransitive or ditransitive as given in examples 33 and 34 below.

4.3.2.6.1 Monotransitive

33). i) Tu-mu-kak-e *Tumukake* 'we tie him'

OM

4.3.2.6.2 Ditransitive

34). i) ci - n - bwesesh-e- *cimbwesesh* 'return it to me' imperative mood

OM OM

DO IO

ii) u-ci-n-bwesheshe- *ucimbwesesh* 'you should return it to me' subjunctive mood

OM OM

DO IO

4.3.2.7 Mood

In examples (33 (i), and 34 (i) (ii)), mood has been expressed as subjunctive and imperative. Oxford Dictionary (2015:958) defines mood as "one of the categories of verb use that expresses

facts, orders, questions, wishes or conditions: the indicative/imperative/ subjunctive mood.” Apart from what is indicated in (33 (i), the simple imperative mood consists of the suffix ‘a’ as in *U-ma* ‘beat!’ although it can change to ‘e’ if an object prefix is used as in *muume!* ‘beat him or her!’. The subjunctive mood, however, is formed with the suffix ‘e’ as in the word ‘*ndime*’let me cultivate’.

4.3.2.8 Radical or verb root

In verbal analysis, a radical is a morpheme that represents the actual verb and does not inflect. There are however some similarities between a radical and a root. It is to this segment where the inflectional affixes are attached to realise tense, mood and aspect. The following are the examples.

35). a) a-butuk-a – ‘he has run’

|
Rad

b) ba-ka-bul-a – ‘they will take’

|
Rad

4.3.2.9 Pre-ending

Coming before the ending is the pre-ending. Reference on ending should be made to (3.2.2.4) where the ending is referred to as tense marker 2. That in mind, this part therefore concentrates on pre-ending which has been illustrated in (36) below.

36). a) sek-lel-a ‘celebrate’

|
Pre-end

b) shimik-il-a ‘tell for someone’

|
Pre-end

4.3.2.10 Post Ending

Post ending in most cases takes the role of an enclitic. This morpheme mainly occurs after the ending which is also the tense marker 2. The following are the examples.

3sm_{pl}TM_{pro} eat FV

(c) ba - lee - ly - a *baleelya* ‘they were eating’ past progressive

3smpl TM_{past-prog} eat FV

(d) tu - aaci - ly - a *twaacilya* ‘we ate’- past today

1sm_{pl} TMT_{past}eat FV

(e) mu - alii - ly - a *mwaliilya* ‘you ate’ - past recent

2sm_{sg/pl}TM_{RecPast} eat FV

(f) a - li - lii - le *aliliile* ‘He ate’ past remote

3 sm_{sg}TM_{RemPast} eat TM

(g) ba - lee - ly - a *baleelya* ‘They will eat’ future (today)

3 sm_{pl}TM_{futTd} eat FV

(h) a lii - ly - a *aliilya* ‘He had eaten’ past perfect remote

3 sm_{sg}TM_{RemPastperf} eat FV

(i) a - ka - ly - a *akalya* ‘He will eat’ future not today

3 sm_{sg}TM_{futNtd} eat FV

4.3.2.13 Verbal Derivation

In Bemba, verbs are derived from other verbs using the process of suffixation. These verbal derivative suffixes include /-iI-/ (applied); /-iu-/ , /-u-/ , /-iku-/ (passive); /-i]i-/ (intensive); /-ik-/ (stative/neuter); /-i]i-/ , /-i-/ (causative); /-ilil-/ (completive); /-ul-/ , /-ulul-/ (reversive active) (reversive neuter/stative); /-uk-/ , /-ukuk-/ (reversive neuter/ stative) and /-an-/ (reciprocal). Cope (1966: 106) observes that, the derivational suffixes combine according to the morphotactical rules. Failure to follow the rules can render the derived words to be in non-conformity with the required forms. Another linguistic aspect which should be taken care of during the derivational

process is the phonological change. It is obvious that in most Bantu languages, combination of two or more sound segments especially vowels results into new sounds which in most cases affect the meaning of the derived word. Miti (2006: 326) proposes that the vowel of the extension in certain languages varies for it is governed by vowel harmony rules. Three kinds of harmony in this regard have been devised as follows. All the rules adapted from Miti (2006).

4.3.2.13.1 Vowel Harmony Type 1 (Applicative)

Where the final radical vowel is mid, the extension vowel is /-e-/. For example,

39). a) – let- -letela ‘bring for’

b) – cem- - cemena ‘shepherd for someone’

Where the final radical vowel is non-mid, the extension vowel is /-i-/

40). a) – cind- - cindila- ‘dance for someone’

b) – kak- - kakila – ‘tie for someone’

4.3.2.13.2 Vowel Harmony Type 2 (Applicative)

Where the final radical vowel is high, the extension vowel is /-i-/

41). a) – lya- -liila ‘eat for’

b) – kut- - kutila ‘call for’

Where the final radical vowel is non-high, the extension vowel is /-e-/

42). a) – tem- - temena ‘cut for’

b) – tob- - tobela ‘break for’

4.3.2.13.3 Nasal Harmony Rule(Applicative)

Where the final radical consonant is a nasal, the extension consonant is /-n-/

43). a) – kan- - kamina – ‘refuse for’

b) – sun- - sunina – ‘cut for’

Where the final radical consonant is a non-nasal the extension consonant is /-l-/ in some languages and /-r-/ in others.

44). a) – citil- - ukucitila – ‘do for’

b) – lombel- -lombela – ‘beg for’

The examples given in (39a, b) (40 a, b), (41 a, b) (42 a,b) (43a,b) and (44a, b) are all applicative extensions. However, there are other forms of derivations which have not been captured under this study.

4.3.3 Adjectives

Adjectives take both augments and prefixes depending on the type of the noun class they are attached to. Like any Bantu language, Bemba has very few adjectives as compared to English. However, it has been taken that the only means to realize the numerous adjectives from English is to translate them and then match them with the possible classes. **Table 8** below presents examples of possible adjectives in Bemba and how they agree with nouns of various classes.

Table 8: The structure of adjectives in Bemba

Class	Noun	ADJECTIVES			Gloss
		AUG	PREF	RAD	
1/2	umwana	u-	-mu-	-tali	A tall child
	abana	a-	-ba-	-tali	Tall children
1a/2a	∅ –kolwe	u-	- wa -	-cenjela	A clever monkey
	baakolwe	a-	- ba -	-cenjela	Clever monkeys
3/4	umutima	u-	- wa -	-kosa	Hardened heart
	imitima	i-	- ya -	-kosa	Hardened hearts
5/6	iliinso	i	- li -	-kulu	-A big eye
	amenso	a-	- ya -	-kulu	-Big eye
5/6	ilaya	i-	-li-a	-buuta	A white dress
	amalaya	a-	ya	-buuta	White dresses
7/8	icitabo	i-	- ca -	-fina	A heavy book
	ifitabo	i-	- fia -	-fina	Heavy books
10/11	ulukuni	u-	- li -	-tali	A long firewood
	inkuni	a-	- shi -	-tali	Long firewoods

4.3.4 Demonstratives

Dealing with demonstratives in Bantu languages, Bemba to be specific requires much understanding among other things of the structural realisation of demonstratives. Of course, this is one instance when words are presented without prefixes. Demonstratives are used to locate human beings and other things in space and time. They are used to indicate objects close to the speaker, those close to the hearer and those far away. In this case, they are used for both anaphoric and cataphoric aspects. **Table 9** below presents the application of demonstratives in Bemba.

Table 9: Structure of Demonstratives in Bemba

Class	Noun	This/these	That/those	here	there	Gloss
1/2	umukashi	u-yu	u-yo	u-no	u-lya	wife
	abakashi	a-ba	a-bo	ba-no	ba-lya	wives
3/2	umuti	u-yu	u-yo	u-no	u-lya	tree
	imiti	i-yi	i-yo	i-no	i-lya	trees
5/6	ilino	i-li	i-lyo	li-no	lii-lya	tooth
	ameeno	a-ya	a-yo	ya-no	yaa-lya	teeth
7/8	i-ci-ola	i-ci	i-co	ci-no	ci-lia	bag
	i-fi-ola	i-fi	i-fyo	fi-no	fi-lya	bags
10/11	ulukuni	u-li	u-lo	lu-no	li-lya	firewood
	inkuni	i-shi	i-sho	Shi-no	shi-lya	firewoods

Apart from the external or adjectival usage as illustrated in **Table 9** above, demonstratives can be used as a reference to what has already been mentioned in the sentence. This strategy is mainly used in story writing. See the examples below.

45. a) *Mulandeko no mwana wenu, ulya.* ‘Talk to your child, that one.’

b) *Fyalecitika kunuma, lilya line.* ‘It used to happen in the past, that time.’

4.3.5 Personal Pronouns

Personal pronouns are words that are used to represent nouns. In Bantu languages like Bemba, this aspect is a bit complex. For the purpose of linguistic analysis, personal pronouns are

representing class 1 and 3 ‘mu’ while (*ci-a*) ‘ca’ is part of class 7 prefix ‘ci’. **Table 10** below exemplifies the possible genitive pronouns in Bemba according to the classes.

Table 10: Genitives and the possible agreements

Class	Genitives	Examples in Bemba	Gloss
1	Waa	mwaice waa	A young child of
2	baa	abana baa	Children of
3	waa	umunani wa	Relish of
4	yaa	amalata yaa	Iron sheets of
5	caa	icoola caa	Bag of
6	yaa	amayanda yaa	Houses of

On the other hand, some possessive pronouns are morphologically made of genitive pronouns plus non-possessive personal pronouns. **Table 11** below provides examples of possessives in Bemba.

Table 11: Possessives and the aspect of person in Bemba

1 ST PERSON		2 ND PERSON		3 RD PERSON	
SNG	PL	SNG	PL	SNG	PL
u-wa-ndi	a-ba-ndi	wo-be	bo-be	wa-bo	ba-bo
mine	mine	yours	Yours	their	their

Morphophonologically, the given stems and their prefixes are illustrated as follows: *u-andi*, *u-obe* and *u-abo*.

4.4 Some Aspects of the Semantics of Bemba

According to Merrindah (2016:12) “Semantics is a sub discipline of linguistics whose focus is the study of meaning which can either be meaning of words, phrases or sentences.” As stressed in this definition, the role of semantics is to explain how meanings are attached to certain objects and phenomena for the purpose of communication. Merrindah points out words and phrases or sentences as vehicles through which any form of meaning could be carried. At word level, the

study of semantics is referred to as lexical semantics while at phrase or sentential level, it is regarded as syntactic semantics.

Although Merrindah's definition is restricted to the dichotomical study of lexical semantics and syntactic semantics, other scholars have however looked at the issues of semantics from a broader perspective. In view of the above, Chitoran (1973:3) argues that "the study of semantics focuses on the relationship that exists between thought and the outside world of objects and phenomena."

On the other hand, Heasley and Hurford (1983), cited in Phakula (2011:8) attribute semantics to the study of meaning in language. Taking Phakula's perspective on semantics, it should be indicated that the aspect of meaning in language cuts across almost all levels of linguistics. Most studies undertaken by linguists especially on Bantu languages reveal that even noun class systems are known to distinguish their inflectional classes according to semantic categories (Lobben 2012).

Focusing on the current study, it will suffice to indicate that Bemba is an agglutinating language which contains several morphemes that are distinguished from each other through their individual grammatical meaning. This means that morphology and semantics interface and the result is the morpho-semantics as has been presented in the following sections. Based on what has been so far discussed in the above sections, the following sub-sections explore further on the semantics of noun class system, the morpho-semantics, the lexical semantics, the syntactic semantics and other types of semantic relations.

4.4.1 The Semantics of the Bemba Noun Class System

The Bemba nominal class is divided into eighteen noun classes which are represented by morphemes which are linguistically referred to as noun class prefixes. Although these prefixes are restricted to noun classes, in other African languages, they represent both noun classes and gender and they are used for agreement in both morphology and syntax (Mark 2006).

Apart from noun prefixes, there are also augments which precede the noun prefixes and they are either represented by vowels or pre-prefixes except in the locatives. However, augments are not obligatory among the noun classes in Bemba. There are, of course, some classes which take zero augment, for example in class 1a, 2a, 5a, 7a, 8a, 9a, 13a, 14a and all the locatives. The lack of augments in some classes is a grammatical matter. In some cases, absence of augments provide

for stabilization as may be justified in such constructions as: *baantu* ‘they are people *ciipatala* (cl 7a) ‘it is a hospital’ and *maaluba* (cl 6a) ‘they are flowers’.

Semantically, class prefixes represent objects and phenomena that exist in the outside world. The truth of the matter is that the human mind being the engine of conception is linguistically designed to connect the linguistic symbols to the objects in the real world. However, this psychological activity is not easily undertaken in all semantic applications like when one is trying to assign meaning to noun classes. In this respect, some studies have revealed that in the study of semantics of noun classes, the allocation of classes is arbitrary, (Richardson, 1967). Nevertheless, Richardson emphasizes that there are other factors to consider in class allocation in such languages as Bemba apart from arbitrariness. On the other hand, Merrindah (2016:4) argues that “classes also have a regular association in pairs through which the binarity or dichotomy – singular and plural – is indicated.” Following this observation, it will suffice to stress the point that the dichotomical relationship does not always follow the order of the noun classes, but pairing is dependent on the concord. While it is agreeable for class 1 to be paired with class 2, it is however inappropriate to pair class 11 with class 12 because the two do not overlap grammatically. However, it is interesting to disclose that class 11 (lu) is pairable with either class 6 (ama), class 10 (in) such as *in-kuni* ‘firewoods’ plural; *ulu-fumo* (Cl 11) ‘belly, ‘singular *ama-fumo* (Cl 6) ‘bellies’ plural.

Moreover, the following details explore the semantics of Bemba noun class system.

- Classes 1/2 are used to denote human beings. While class (1) is for singular, class (2) is for plural. For example, *umu – ntu* (Cl 1 sg), *aba-ntu* (Cl 2 pl).
- However, the sub classes of 1 and 2 are Classes 1a and 2a. These classes also represent human beings while on the other part denote non-humans such as monkey (s), ‘wild pigs’ *kapoli and kalulu* ‘rabbit / hare. On the part of human beings, class (1a) deals mainly with proper nouns which do not require prefixation. The class is also used for honorification such *Shimwansa* ‘father to Mwansa.’”
- Class 3 which is mainly paired with class 4 is used to represent names of trees, medicines and villages. It also covers words which denote mass nouns such as *umucanga* ‘sand’ *umucele* ‘salt’ *umu-ela* ‘air’ and *umu-pu* ‘breath,’ As already

indicated the plural counterpart of class 3 is class 4 in the examples *umu-ti* ‘tree’ /’medicine’ (Cl 3 sg), *imi-ti* ‘tress/medicines’ (Cl 4 pl).

- The noun prefixes i/li (Cl 5 sg) and ma – (Cl 6 pl) are a pair representing parts of the body in pairs such as *ilino* ‘tooth’ (Cl .5sg) and *ama-eno* ‘teeth’ (Cl 6 pl). It also includes such objects as fish and the types of fish such as *isabi* ‘fish’ *insanga* ‘tiger fish’ and *ituku* ‘small bream.’ It also represents such words as *ibuumba* ‘group of people’ and *iloba* ‘soil’ *ibuumba* ‘clay soil.’ Fruits are also part of this class, for example *isuku* ‘musuku fruit and *icungwa* ‘orange.’
- Class 7 (ci-) and 8 (fi-) are used for things such as *icintamba* ‘podium’ nouns of quality such as *icisuma* ‘good thing’ *icibi* ‘bad thing’ names of languages such as *Icibemba* ‘Bemba language’; *Icinyanja* ‘Nyanja language’ and *Icitonga* ‘Tonga language’. These pairs of classes are used to indicate augmentative and pejorative that show how certain objects are derogated in terms of size and ugliness. When used in these contexts, these classes take the position of pre-prefix as in the word *ici-mu-kashana* bad/ugly/huge girl whereby the following segments are represented; *Ici*(pre-prefix), *mu* (prefix) and *kashana* (root).
- The prefixes in classes 9 and 10 are in singular and plural respectively. Class 9 (in) singular and class 10 (in) plural represent such objects as domesticated birds like *inkoko* ‘chickens’ and *inkunda* ‘doves.’ It is also a pair for domesticated animals such as *imbwa* ‘dog’ *imbushi* ‘goat’ and *impanga* ‘sheep’. The classes include names for wild birds and animals such as *impeele* ‘doves’ *inkalamo* ‘lion’ *insoka* ‘snakes’ *indyabuluba* ‘giraffe.’ Additionally, this pair may represent the types of insects such as *inswa* ‘antflies’ and *inshimu* ‘bees.’
- Although it is given that the plural for class 9 (in) is class 10(in) it is however evidenced from the whole nominal class that some words from class 9(in) take class 6(ma-) prefix in plurals such as *inganda* ‘house’ *ama-yanda* ‘houses’ (Cl 6 pl). It is also observed that certain constructions from (class 11sg bu-) do correlate with class 10 (in) in plural form as could be noticed from *ulushimu* (Cl - 11sg) ‘bee’ *inshimu* (Cl,10pl) ‘bees.’

- Class 11(lu-) is well taken as an inclusive class which embraces a variety of constructions. In other words, it is a miscellaneous class which includes assorted names of objects and other materials such as body parts as in the words *sulu-bafu* ‘rib’ *ulusafu* ‘leg muscle’ *ulufumo* ‘stomach’ *ulukasa* ‘foot’ which take class 6 (ma-) as its plural while the other given examples are paired with class 10 (in-) for their plurals such as *imbafu* ‘ribs’ *insafu* ‘leg muscles.’ The class is also used for farming implements such as *ulukasu* ‘hoe’ which collocate with either class 10 (in) or class 6 (ma-) as with *inkasa* ‘feet’ or *amakasa* ‘feet’ The class is inclusive of such words *asulubuuto* ‘light’ *ulubuli* ‘fight’ *ulufyengo* ‘false’ accusation and *ulupaka* ‘undue authority.’
- Class 12 and 13 is a dichotomy for diminutive and augmentatives. While the prefix for class 12 is (ka -) singular, its counterpart is class 13 (tu-) which is the plural form. As already indicated this pair cater for such words as *aka-sabi* ‘small fish’ *utusabi* ‘small fish’ plural and *akatabo* ‘small book’ singular, *ututabo*, small ‘books’ plural. The classes also include pejoratives which are meant to indicate undesirable characteristics such as *aka-kashana* ‘small undesirable girl, *utukashana* ‘small undesirable girls.’ The pair is equally used to name certain diseases such as *akasele* ‘gonorrhoea’ and *utu-sele* ‘gonorrhoea.’
- As for class 14 which is another independent class, the class prefix (bu-) is well understood for its abstraction function as in the examples *ubuteeko* ‘government’ *ubupiina* ‘poverty’ and *ubuyantanshi* ‘development’. Other words in this class are *ubwato* ‘canoe, which takes class 6 for plural *amato* ‘canoes’ and *ubu-alwa* ‘beer’ which does not change the class in plural unless one is looking at the variety of ‘beers’. Nevertheless, caution must be taken when dealing with such words as *buuleeti* ‘bread’ which instead of falling under class 14, it falls under class 1a.
- The semantic aspect of class 15 (ku-) accounts for the infinitives such as *ukupenda* ‘to count; *ukuseka* ‘to laugh’ and *ukubutuka* ‘to run! Apart from that, this class prefix also represents human body parts such as *uku-boko* ‘arm’ and

uku-ulu ‘leg’ which are paired with class 6 (ma-) for the realisation of plural forms as in *ama-boko* ‘arms’ and *ama-olu*, *amoolu* ‘legs’.

- Classes 16 (pa-), 17(ku-) and 18 (mu-) are applied as locatives. They are used to indicate the location of an object or thing in space and time such as *pa-musebo* ‘on/at the road,’ *ku-musebo* ‘to the road’ and *mu-musebo* ‘in/by the road’. These linguistic elements alternate with their semantic counterparts referred to as allomorphs such as *pa/pali*, *ku/kuli* and *mu/muli*. However, these allomorphs can function as verbs when their structures change from just a prefix to a subject marker and a root as in *muli ulubuli mu nganda* ‘there is a fight in the house’ (Merrindah 2016:54).

4.4.2 Morphosemantic Analysis of Bemba

The purpose of this part of the study is to develop a clear understanding on how morphology interfaces with semantics or how affixal materials affect meaning in Bemba. But before the study is contextualised in this line, it is prudent to elucidate what it means by morpho-semantics. In an attempt to justify what it means by morpho-semantics, Bostoen (2005:118) says, “morpho-semantics is any variation of noun prefixes that systematically correspond to a change in meaning”. Simply put, morphosemantics in this regard studies how variations in prefixes determine the choice of meaning in particular languages. On the contrary, Phakula (2011:9) argues that “the relationship between semantics and morphology can be seen when morphemes are attached to a word and the broader sense is understood as compositional perspective of combining morphemes or words to form larger meanings”. Taking Phakula’s view, morpho-semantics does not only depend on prefixes but also on other morphemes such as roots and suffixes. For example, when a particular prefix is attached to two different roots, two different meanings are realised. What have been presented here above are universal regularities which will henceforth act as the basis for the following morphosemantic analysis of Bemba language.

4.4.2.1 Morphosemantics of the Prefix

Crystal (2008:387) defines prefix as ‘a term used in morphology to refer to an affix which is added initially to a root or stem.’ Additionally, Trask (1993:214) establishes that ‘a prefix is an affix which precedes the root, stem or base to which it is bound’. It should be indicated here that prefixes are morphemes that carry particular meanings which affect the word semantically

whenever they come into contact with a new root or stem. Any change in the prefix will mean a change in the meaning of the new word. Similar to other languages, prefixation in Bemba is more inflectional than derivational. Mostly, prefixal variation culminates in the change in number, tense or polarity of a particular word. **Tables 12, 13 and 14** below demonstrate how variations in prefixation affect meaning in Bemba.

Table 12: Morphosemantics of prefixation involving nouns

class	prefix	word	gloss	inflectional caterogy
1	u-mu	u-mu-lumendo	boy	Number/singular
2	a-ba	a-ba-lumendo	boys	Number/plural
7	i-ci	i-ci-lumendo	Bad/ugly boy	Number/singular
8	i-fi	i-fi-lumendo	Bad/ugly boys	Number /plural
12	a-ka	a-ka-lumendo	Small boy	Number /plural
13	u-tu	u-tu-lumendo	Small boys	Number /plural
14	u-bu	u-bu-lumendo	boyhood	Abstraction

As provided in **Table 12** above, the sequence of change in the prefix has given rise to a varied number of meanings. Despite maintaining the root of the word the seven words in the table have however seven different semantic meanings.

Table 13: Morphosemantics of prefixation involving verbs

prefix	Word	gloss	inflectional caterogy
-le-	Ba-le-bomba	They are working	Present progressive
-lee-	Ba-lee-bomba	They were working	Past progressive
-la-	Ba-la-bomba	They work	Habitual
-ka-	Ba-ka-bomba	They will work	Future simple
Ta-	Ta-ba-ka-bomb-e	They will not work	Polarity (negation)

In **Table 13** above, the four affixes, -le- , -lee- , -la- and -ka-, represent tense and aspect. The prefix -le- carries the present progressive tense and aspect while -lee- is a representative of past progressive tense and aspect. Further, -la- is the present simple with the habitual aspect and -ka- stands for the future simple tense. As for –ta- in the word *ta-ba-ka-bomb-e* ‘they will not work’, it is a morpheme for negation which is covered under polarity.

Table 14: Morphosemantics of prefixation involving locatives

prefix	Word	gloss	inflectional category
-pa	<i>Paṅanda</i>	‘at home’	Place
-ku	<i>kuṅanda</i>	‘to the home’	Movement
-mu	<i>muṅanda</i>	‘in the home’	Place
Pali	<i>Palibayama</i>	‘at my uncle’s’	Place
Kuli	<i>Kuli bayama</i>	‘to my uncle’	Movement
Muli	<i>Mulibayama</i>	‘in my uncle’s’	place

From **Table 14** above, it should be indicated that the three locatives and their allomorphs provide semantic variation whenever they are attached to the same root. For example, the locative *-pa* ‘on/at’ and its allomorph *-pali* ‘at’ help to indicate the place while *ku-* and *kuli* function as locatives for movements.

4.4.2.2 Morphosemantics of the Root

A root is another important affixal material used in word formation in Bemba. According to Katamba (1993:41) “a root is the irreducible core of a word, with absolutely nothing else attached to it.” In the same context, Crystal (2008:419) make mention that, a root is the base form of a word which cannot be further analysed without total loss of identity.” Put in a more clear language, a root maybe understood as the only form of a morpheme which remains intact when all the affixes are removed. Nevertheless, in the study of semantics any variation in the root is likely to alter the meaning of the initial word. This is what we observe in the following examples.

49. (a) ba – ntu ‘people’
 b) ba – tata ‘father ‘

c) ba-yama ‘uncle’

d) ba-shikulu ‘grandfather’

Despite having the same prefix ‘ba’ for either plural or honorific in the four words, it is however noted that variations in the root has resulted into four different meanings. A different approach can also be applied to study semantics in line with root variation. This approach involves inflection and derivation where various prefixes and suffixes are attached to the root to realize different words respectively as illustrated below.

50). (a) Umu – suma - good person (CL 1 sg)

(b) Ubu-suma – beauty (CL 14 abstract)

(c) Ifi-suma – good things (CL 8 pl)

(d) Ici – suma – good thing (CL 7 sg)

(e) Uku-suma – to bite (CL 15 infinitive)

From what has been exemplified above, the root-*suma* ‘good’ has given birth to five different words with different semantic meanings. As such, *u-mu*, *u-bu*, *i-ci*, *i-fi*, *u-ku*, are five different inflectional affixes attached to the root-*suma* to influence meaning thereby shaping five different semantic elements. Considerably, change in meaning due to variation in the root is evidenced among the possessives in Bemba. Whenever there is an alteration in the root, a different possessive pronoun is realised as illustrated below.

51. (a) I – ne ‘I’

(b) I-fu-e ‘we’

(c) I-mu-e ‘you’

(d) I-u-e ‘you’

(e) Be-ne’ they’

When the root *-ne* 'I', is changed to *-fwe* a different pronoun 'we' is realised. Likewise, the root *mwe* 'you' is the plural of the second person pronoun which is contrasted with the root *-we* 'you' representing the second person pronoun singular.

4.4.2.3 Morphosemantics of the Suffix

Crystal (2008:464) defines suffix as “a term used in morphology referring to an affix which is added following a root or stem.” In Bemba, suffixation is a morphological process which accounts for word formation through derivation. Suffixing of morphemes to lexical items may also help to express mood and to indicate verbal extensions. In the process of suffixation, new words are created which carry new meanings. Whereas the root carries the basic meaning of the lexical item, the suffix on the other hand helps to communicate the grammatical meaning of the new construction. This is how morphology interfaces with semantics through the process of suffixation as illustrated in **Tables 15** and **16** below.

Table 15: Morphosemantics derivation through suffixation for the root *-punk-* 'hit'

S/N	SUFFIX	ROOT /WORD	GLOSS	DERIVATIONAL CATEGORY
1	-a	-punk -a	'hit'	Imperative mood
2	-ila	-punk-ila	'hit for'	Applicative extension
3	-isha	-punk-isha	'cause to hit'	Causative extension
4	u-a (wa-)	-punk -wa	'has been hit'	Passive extension
5	-isha	-punk -isha	'hit hard'	Intensive extension
6	-ilila	-punk-ilila	'hit completely'	Completive extension

Table 16: Morphosemantics of derivation through suffixation for the root *-shink* – 'seal'

S/N	SUFFIX	ROOT /WORD	GLOSS	DERIVATIONAL CATEGORY
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1	-a	-shink-a	‘seal’	Imperative mood
2	-ila	-shink-ila	‘seal for’	Applicative extension
3	-isha	-shink-isha	‘intensify sealing	Intensive extension
4	u-a (-wa)	-shink -wa	‘has been sealed’	Passive extension
5	-isha	-shink-ula	‘unseal	Reversive extension
6	-ilila	-shink-ilila	‘seal completely	Completive extension

Based on **Table 15 and 16** above, different words with varied meanings have been realised through suffix alteration. This same arrangement is feasible in (table 18), where different morphemes that perform the function of suffixes are alternatively attached to the single root for the sake of semantic variation. For example when the derivational suffix *-ila* is attached to the root *-shink*-‘seal’ the meaning changes to *shinkila*, ‘seal for’ which is however realised differently when *-shink*- ‘seal’ and the suffix *-ula* come in contact by which *shinkula* ‘unseal’ is semantically realised.

To conclude the discussion on morphosemantic analysis of Bemba, it should be stressed that, morphology being part of grammar, plays a very important role in the shaping of semantics. Despite being isolated in form, morphemes have a combining power whereby each morphemic pairing or grouping is liable to a new meaning in such languages as Bemba. However, strict interactive principles between and among affixes are always put in place so that wellformedness is key in the process of word formation. By and large, it should be emphasised that knowledge of the functionality of prefixes, roots and suffixes is the basis of morpho-semantic analysis in almost all African languages including Bemba as it has been displayed in this section. Therefore, good linguistic application of morphosemantic categories always builds up to varied word families in languages.

4.4.3 Lexicosemantic Analysis of Bemba

Unlike morphosemantic analysis, lexicosemantics is a linguistic study which focuses on how lexical items and semantics relate to each other in a language. This is a subcategory in the study of meaning when serious attention is put on establishing how certain lexical items affect meaning

when applied together with other lexical items. Obwoye (2014:35) indicates that “lexicosemantic studies the meaning of words including the way in which some word meanings are related to others.” While lexicosemantics focuses on the specific study of lexical items, morpho-semantics on the other hand concerns itself with the study of grammatical aspect of word meaning. This sub-section concerns itself with the analysis of meaning of lexical items from two dimensions. The first dimension looks at how meanings are attached to lexical items from the perspective of various domains which include farming related domain, fishing related domain, body parts related terms, kinship related domain, and birds related terms and finally on animal and bird related terms. Further, the study focuses on developing an understanding on how semantic properties such as synonymy, antonymy, polysemy, homonymy, homophony and hyperonymy shape meaning from some lexical items.

4.4.3.1 The Lexicosemantics of Agriculture Related Terms in Bemba

In this subsection, a lexicosemantic analysis was done based on the lexical items in Bemba; the focus was on agriculture related terms as presented in **Table 17** below.

Table 17: The Lexicosemantics of the Agriculture Related Terms in Bemba

	lexical item	phonetic transcription	gloss
1.	Kalembula	[kalembula]	‘potato leaves’
2.	Umunangani	[umunangani]	‘lazy person’
3.	Ukubyala	[ukuβjala]	‘to plant’
4.	Ukubyalilula	[ukuβjalulula]	‘to replant’
5.	Ifyumbu	[ifjumbu]	‘sweet potatoes’

All the lexical items in **Table 17** are given the denotative meanings. However, these items may be allocated with other meanings especially when they are applied in different contexts. For instance, despite the denotative meaning of ‘planting’ the word *ukubyala* may connotatively refer to ‘investment.’ People can invest in education, in business and to some extent in marriage. In the similar manner, when one is applying the word ‘laziness; in speech, care should be taken on the semantic application of this word. This is because the meaning of the word ‘lazy’ can vary according to context.

4.4.3.2 The Lexicosemantic Analysis of some Fishing Related Terms in Bemba

Fishing related terms are also given meanings based on contextual application and the people who are in use of those terms. It is common among the Bemba speakers to vary words to suit the time, environment and place of use. Some fishing related terms are rarely used in the mainland where most people do not involve themselves in fishing related activities. However, in this study, the lexical items which are fishing related are given the general perspective to cater for both fishing prone and non fishing prone areas. Refer to **Table 18** below.

Table 18: Some of the fishing related terms in Bemba and their meanings

	lexical item	phonetic transcription	gloss
1.	Ubwato	[uβwato]	‘canoes’
2.	Icobelo	[uitfobelo]	‘puddling stick
3.	Isabi	[isaβi]	‘fish
4.	Abashila	[aβaβila]	‘fishermen’
5.	Icaabu	[ifa: βu]	‘shore’

From **Table 18**, it is evident that all the lexical items are assigned meaning according to the agreed semantic attributions. In Bemba, when people say *ubwato*, they literally mean ‘canoe’ and nothing else. On the contrary, to other people, especially those who reside in urban areas, *ubwato* may mean Patriotic Front, a political party in Zambia. This is a metaphorical way of using words beyond their primary sense. Some lexical items share their meanings with two or more lexical items a linguistic arrangement which we refer to as synonymy. This is the same scenario with the word *abashila* ‘fishermen’ which is sometimes replaced by the word *abalondo*, ‘fishermen.’ A detailed discussion on synonymy will be covered in the following subsection.

4.4.3.3 The Lexicosemantic Analysis of some Body parts Related Terms in Bemba

Lexical items related to body parts are also categorised in the same semantic domain. It is common that most of these body parts take either *i-* or *li-* for singular while their plurals manifest the prefix *ma-* or *in-* as for the mass nouns such as *inkopyo* ‘eyebrows.’ **Table 19** below presents some body parts related terms with their semantic attachments.

Table 19: Some body parts related terms and their meanings in Bemba.

	lexical item	phonetic transcription	gloss
1.	Umutwe	<i>[umu-twe]</i>	‘head’
2.	Ukuboko	<i>[ukuβoko]</i>	‘arm’
3.	Ilinso	<i>[ilinso]</i>	‘eye’
4.	Ilino	<i>[ilino]</i>	‘tooth’
5.	Ulukasa	<i>[ulukasa]</i>	‘foot’

4.4.3.4 The Lexicosemantic Analysis of Kinship Related Terms in Bemba

Some lexical items carry meanings that are designed to communicate the relationship that exist among family members. These lexical items are semantically referred to as kinship related terms. They try to convey how affective one individual is to the other within the family circle. Some of these terms vary in meaning according to culture, situations and social contexts. Make reference to **Table 20** below.

Table 20: Some kinship related term and their meaning in Bemba

	LEXICAL ITEM	PHONETIC TRANSCRIPTION	GLOSS
1.	Lupwa	<i>[lupwa]</i>	‘relative’
2.	Tata	<i>[tata]</i>	‘father’
3.	Mayo	<i>[majo]</i>	‘mother’
4.	Indume	<i>[ndume]</i>	‘brother’
5.	Nkashi	<i>[nka]i]</i>	‘sister’
6.	Yama	<i>[jama]</i>	‘uncle’

From **Table 20** above, it will suffice to indicate that with respect to the family relationships, all the lexical items are in the same semantic field of family domain. *Tata* ‘father’, *mayo* ‘mother’, and *yama* ‘uncle’ are representatives of adult human beings while *ndume* ‘brother’ and *nkashi* ‘sister’ are used in neutral to represent male and female relations regardless of their age.

4.4.3.5 The Lexicosemantic Analysis of House hold Related Terms in Bemba

Concerning the semantics of the lexical items that relate to house-hold objects, it is generally understood that meaning is conceptual in most cases although additional meaning may ensue as a

result of other linguistic circumstances such as context and environment. For instance, while the word *ibende* ‘mortar’ refers to a hollow object which is used for pounding cassava, maize and other materials, the same word is applied in a context where the grinding component of a hammer mill is called *ibende* ‘mortar’. However, the word *itanda* ‘small house occupied by unmarried men’ will only be on its conceptual meaning. **Table 21** below shows, some household-related terms as applied semantically in Bemba

Table 21: Some house hold related terms and their meaning in Bemba

S/N	lexical item	phonetic transcription	gloss
1.	Iciibi	[iʃi: bi]	‘door’
2.	Icipuna	[iʃipuna]	‘stool’
3.	Umupando	[umupando]	‘chair’
4.	Icipyango	[iʃipjango]	‘broom’
5.	Icitini	[iʃitini]	‘bucket’
6.	Icisakulo	[iʃisakulo]	‘comb’

4.4.3.6 Bemba lexicosemantic relations

In the lexicosemantic study of any language, the lexicon of that particular language is given an utmost consideration. This is because meaning is always taken as a relational aspect. The lexicon can be understood based on various types of semantic relations. These relations include polysemy, homonymy, synonymy, hyponymy and antonym, (Obwoye, 2014; Merrindah 2016; Wood, 2011). This subsection elucidate on how the said semantic relations are applied in Bemba.

4.4.3.6.1 Polysemy

There are some words in Bemba which communicate multiple meanings. All the derived meanings are therefore related to the first meaning which is based on conventional reference rather than on context. Meanings in coexistence are metaphorically presented as illustrated below.

52. (a) Ukusendama ‘to sleep’ / ‘to die’
- (b) Mulungu ‘God / Sunday’ week’
- (c) Ulushishi ‘fibre’/ ‘cobra snake’ belt

4.4.3.6.2 Homonymy

Finnegan (2004:187) as cited in Obwoye (2014:37) observes that “Homonyms have the same spellings but different meaning (and pronunciations)”. Unlike polysemy where derived meanings are related to the initial meaning homonymy on the contrary has a single form of a word, with the same pronunciation but the meanings are not related at all. Merrindah (2016:15) confirms that “homonyms are naturally ambiguous and only get to be distinguished on the basis of context. The following are examples of homonyms in Bemba.

- 53. (a) Umusungu - ‘white person / petals’
- (b) Ulupwa – ‘family / egg plant’
- (c) Akapanga – ‘small rodent’ / skull / small bush

4.4.3.6.3 Synonymy

This is a semantic arrangement where two or more words manifest similar meaning. At synonymic level, words tend to diverge from each other in terms of spelling and pronunciation but merge in the semantic domain. This is one important relation which supports variation in the use of language. Since the choice of words become so wide, people tend to enjoy language manipulation both in speech and in writing. The following are examples of synonyms in Bemba.

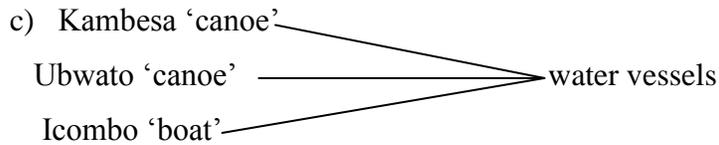
- 54. a) Ukusamba and ukoowa ‘to bath and to swim’
- b) Enda and sela ‘walk and move’

4.4.3.6.4 Hyponymy

This is a semantic relation whereby specific terms are linked to the general ones. Hyponymy is the opposite of hyperonymy which is a relationship linking the general term to the specific ones. The following are examples of hyponyms in Bemba.

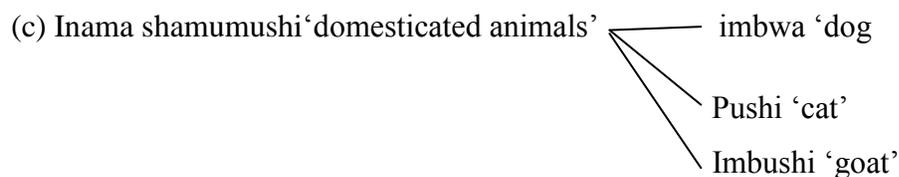
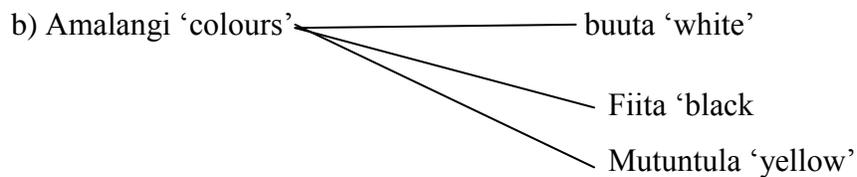
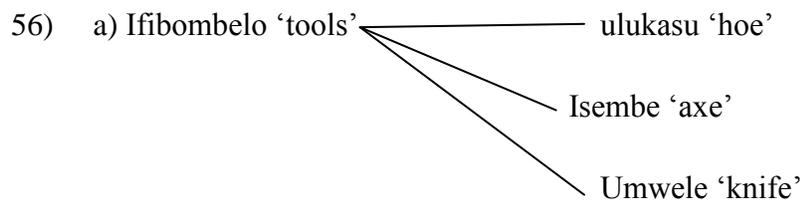
- 55. a) Cinkamba ‘bean leaves’
Cibwabwa ‘pumpkin leaves’
Katapa ‘cassava leaves’
Traditional vegetables
- b) Amacungwa ‘oranges’
Mango ‘mangoes’
fruits

Amapeela 'quavas'



4.4.3.6.5 Hyperonymy

As already alluded to, hyperonymy is the opposite of hyponymy. This is a relationship linking the general term to the specific ones. In other language, hyperonymy is the superordinate to the specific ones. This scenario is illustrated below.



4.4.3.6.6. Antonymy

When two words are in opposition in terms of meaning they are said to be antonymous. In Bemba antonyms are sometimes presented in form of derivatives involving reversive verbal extensions such as *isala* 'close' and *isula* 'open.' However, on average, antonyms are lexical items based on conventional reference rather than on context as illustrated below.

57. a) Patama 'board' and ikila alight'

b) Senda ‘carry’ and bwesha ‘bring’

c) ku menshi ‘wet land’ and ku mulundu ‘mainland’

4.4.4.3 Semantic variations by tone

Tonal variation also account to semantic change between or among sentences in Bemba. Tone is a clear cut predicative element in semantics. Whenever tone is in effect, semantics become apparent. The following examples present the aspect of sentence variation in Bemba through tonal formalization.

58) (a)(i) Twá-lì-boóómbá bónsé.

S Past-cont V adv

‘We all worked.’

(ii) Twá –lí-boóómbá bónsé

S Past-spl V adv

‘We were all soaked.’

b) (i) inóngó yá-láliká

S V-pres perf

‘The clay pot has broken.’

ii) Á- láliká inóngó

S V-pres perf obj

‘He/she has laid the clay pot.’

c) (i) Bìiká ifúmó pánshì

V obj adv

‘put the spear down.’

(ii) Bìiká ifúmó pánshì

V obj adv

'Put the belly down.'

d) (i) Pángá ìcélá ìcákósá

V Obj adj

'Make a strong metal.'

(ii) Pángá cǎlá ìcákósá.

V obj adj

'A machete is a strong metal.'

From the given examples, it is evident that tone plays an important role in shaping semantics in Bemba. For example, in (a (i) and a (ii)), the word *waliboomba* representing 'work /soak' are in semantic difference only through tone differentiation. In the similar manner, *lalika* 'break' as realised in (b i) as different in meaning from *lalika* 'lay' in (b ii) despite the two words bearing the same spelling. What is in play generally is the variation in tonal realisation.

4.4.5 Summary

This chapter has briefly discussed the basic structure of Bemba focusing on phonology, morphology and semantics. In terms of phonology, the chapter has established some salient phonological elements such as segmental and suprasegmental phonology. At segmental, issues to do with consonants, vowels and semi-vowels, syllable structure, allophonic rules and morphophonological rules have been addressed while at suprasegmental attention has been focused on tone and length. Under morphology, attention has been put on the rudiments of noun and verbal structure, demonstratives, pronouns and partly the possessives. Finally, the chapter has dealt with the basics of semantics focusing on the noun class system, the morpho-semantics, the lexical semantics and semantics at suprasegmental level. Based on chapter three, the next chapter examines the phonology of Unga in relation to Bemba so as to establish the aspect of divergence.

CHAPTER FIVE:PHONOLOGICAL VARIATIONS OF STANDARD BEMBA AND UNGA DIALECT

5.1. Overview

The preceding chapter has discussed the linguistic state of Bemba language at three levels of linguistic analysis which include phonology, morphology and semantics. Using chapter three as a referential parameter, the current chapter is designed to address the first objective which is set to examine the phonology of Unga in relation to Bemba with a view to establishing the similarities and differences between the two dialects. The chapter closes with a summary of what has been presented.

5.2. Segmental Phonology

5.2.1 Similarities in the Vowel and Consonant Inventories between Unga and Bemba

Based on the findings in the previous chapter on the phonology of Bemba, it should be indicated that Bemba and Unga share the same vowel inventory which has both short and long vowels as provided in **Table 22** below.

Table 22: Vowel inventory for both Bemba and Unga

	front	back
HIGH	i ii	u uu
MID	e ee	o oo
LOW		a aa

The vowels are used for word formation in both Unga and Bemba. The inventory is of distinctive phonemes. For example, in Bemba when the sound /i/ is replaced by /e/ in the word [βila] it facilitates the change in meaning from ‘saw’ to [βela] ‘dodge’. Likewise, in Unga, when the long vowel sound /ii/ is swapped with /uu/ in the word piita ‘take’ the meaning changes to puuta ‘blow’.

5.2.2 Consonant Inventory of Unga

The findings revealed that there are no much differences between Bemba and Unga in the aspect of consonant inventory. Almost all the consonant sounds are similar except for the trill consonant /r/ which is only associated with Unga dialect and does not apply in Standard

Bemba. **Table 23** below presents an inventory of Unga consonants, and for Bemba consonant inventory refer to **Table 1** on **page 29**.

Table 23: An Inventory of Consonants in Unga

	bilabial		Labio-dental		alveolar		post alveolar		palatal		velar	
	-	+	-	+	-	+	-	+	-	+	-	+
Plosives	p	b			t	d					k	g
Nasal		m				n			ɲ			ŋ
Fricative	β		f		s		ʃ					
Affricate							tʃ	dʒ				
Lateral						l						
Trill						r						

Consonants like vowels are homogeneity in terms of word formation. Like vowels, repositioning of consonants has an effect on the creation of new words and their meanings. For example, replacing the consonant sound /b/ by /m/ changes the Bemba word *ubusungu* ‘venom’ to *umusungu* ‘white person’. Similarly, when the consonant /p/ is replaced by /f/ in the Unga word *ukupiita* ‘to carry’, the meaning changes to *ukufiita* ‘to be dark’. This word formation process supports derivation and productivity in both Unga and Bemba.

5.2.3 Prenasalisation in Bemba and Unga

5.2.3.1 Similarities in the Context of Prenasalisation in Bemba and Unga

Further revelations from the findings established that prenasalisation is a feature common to both Unga and Bemba. Only obstruents which include plosives, fricatives and affricates are prenasalised in both dialects as illustrated in **Table 24** below.

Table 24: Prenasalisation in Bemba and Unga

Bemba			Unga		
Word	phonetic	gloss	word	phonetic	gloss

<i>nshakese</i>	[n]akese]	‘I won’t come’	<i>ntakese</i>	[ntakese]	‘I won’t come’
<i>ndeeya</i>	[nde:ja]	I will go	<i>nkooya</i>	[nko:ja]	‘I will go’
<i>imbwa</i>	[imbwa]	dog	<i>imbwara</i>	[imbwara]	‘potatoes’

5.2.3.2 Some Variations on Prenasalisation

Despite prenasalisation being a common feature in the two dialects, it is more prominent in Unga than it was in Bemba. The prevalence of prenasalisation of words in Unga makes Unga a nasal prone dialect. The findings demonstrated that most of the words in Bemba which are void of prenasalisation are prenasalised in Unga. For example, the Bemba demonstrative words *ico* ‘that’ and *ici* ‘this’ are realised as *nco* ‘that’ and *nci* ‘this’ in Unga. Similarly, the locatives *palya* ‘there’ and *kuno* ‘here’ are realised as *mpalya* ‘there’ and *nkuno* ‘here’ in Unga respectively. Additionally, all titles for male parents are prenasalised in Unga as opposed to Bemba. For example, words such as *Shimutale* ‘father to *Mutale*’ is realised as *Nshimutale* ‘father to *Mutale* in Unga’.

5.2.4 Some Allophonic Rules in both Dialects

5.2.4.1 Allophonic Parallelism between Unga and Bemba

Depending on the phonological condition of some words, the findings revealed that the phoneme /b/, has two allophone [β] and [b] in both Bemba and Unga. The sound /b/ is realised as a fricative sound [β] in any phonetic environment, except when it is preceded by the nasal sound /m/, as in the words *sabaswa* [aβaswa] ‘helpers’ and *ababomfi* [aβaβomfi] workers in Unga and Bemba respectively. However, when /b/ occurs before the nasal sound /m/ it changes to a plosive [b] as in the words *imbwa* [imbwa] ‘dog’ and *imbwara* [imbwara] ‘sweet potatoes’ for Bemba and Unga respectively. Focusing on the allophonic state of /b/, Lumwanga (2015:31) argues that “the consonant [b] occurs only when preceded by the homorganic nasal /m/ as in *-mbwele* ‘should I return?’ derived from N- (1st person singular) *-bwel-* (verb root) ‘come’, -e represents

subjunctive mood”. This is of course the same with Unga where words such as *mbombe* ‘should I work?’, are realised with the same phonological rules whereby /N/ represents (1st person singular) –*bomb* –represents (verb – root) ‘work’ and –*e* represents (subjunctive mood).

Though not always, the alveolar sound /s/ changes to the palato-alveolar sound [ʃ] before the nasal sound /n/ in both dialects as evidenced in the words *sinshita* ‘time’ for Bemba and *Nshimwansa* ‘father to Mwansa’ for Unga. Nevertheless, where the sound /s/ is followed by the semi-vowel /w/ as in the formation of the applicative verbal extension as in the word *n-swi-la-ko* ‘pluck for me’ in Unga no allophonic change is noticed.

Furthermore, the findings revealed that in both Bemba and Unga, the nasal /n/ becomes [ŋ] if it is followed by either the velar sound /k/ or /g/ as in the words *itonge* [itonge] ‘cotton’ and *ubwange* [uβwange] ‘canoe’ for Bemba and Unga respectively. More examples are illustrated in Table 25 below.

Table 25: The allophonic effect of /n/ on /g/ and /k/ in both Bemba and Unga

Bemba			Unga		
word	phonetic	Gloss	word	phonetic	gloss
<i>ijanga</i>	[iɲaŋga]	Witchdoctor	<i>ingalande</i>	[iŋgalande]	‘gravel ‘
<i>inkoko</i>	[iŋkoko]	‘chicken’	<i>ikonko</i>	[ikoŋko]	‘knee’
<i>sonka</i>	[soŋka]	‘contribute’	<i>nkulya</i>	[ŋkulya]	‘there’
<i>inungo</i>	[inuŋgo]	Traditional soda	<i>ningo</i>	[niŋgo]	‘that’
<i>inkuni</i>	[iŋkuni]	Firewood	<i>inkanshi</i>	[iŋkanshi]	‘cassava grown in

					April
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Table 25 has revealed the possible phonetic changes that take place whenever the alveolar nasal sound /n/ assimilates with either a velar sound /k/ or /g/. For example the words *siɲanga* and *ingarande* are phonetically realised as [iɲanga] and [ingarande] in Bemba and Unga respectively. In the similar manner, the words *inkoko* ‘chicken’ and *ikonko* ‘knee’ undergo the phonetic change of [iɲkoko] ‘chicken’ and [ikonko] ‘knee’ in the two dialects respectively.

5.2.4.2 Some Allophonic Variations between Bemba and Unga

The findings revealed some variations that pertain to the allophonic arrangements between Bemba and Unga. It was observed that in Bemba the phoneme /l/ has two allophones, [l] which occurs elsewhere and [d] which occurs in the environment before the nasal sound as in the words *ulu-kasu* [ulukasu] ‘hoe’ and *n-le-is-a* [ndeisa] ‘I will come’. On the contrary, Unga embraces three allophones of the phoneme /l/. There is [r] and [l] which occur in any environment as in the words *seruka* [seruka] ‘board’ and *umulomfi* [umulomfi] ‘snake catfish’. Besides, /l/ is realised as [d] if preceded by a nasal /n/ as in the word *n-li-kee-n-e* [ndike:ne] ‘I have refused’.

In Unga, the phoneme /tʃ/ is in some contexts realised as /k/ when preceded by the morpheme /ni/ as in the word *umwanike* [umwanike] ‘small child’ as opposed to *umwaice* [umwaiʃe] ‘small child’ which takes the phoneme [tʃ] in Bemba.

The following rule applies: [tʃ] → [k]/ ni —

5.2.5 Similarities in other Phonological Processes

Apart from the similarities discussed above, the findings also revealed that there are other phonological processes which are similar in both dialects. This is what is discussed in the subsequent subsections.

5.2.5.1 Spirantisation

According to the findings spirantisation occurs in both Bemba and Unga during the process of verbal derivation of causatives and nominal derivation as provided in **Table 26** below.

Table 26: Spirantisation in Bemba and Unga

gloss	word derived from	derived word	derivation process	dialect
‘worker’	<i>[ukuβomba]</i>	<i>[Umuβomfi]</i>	Nominal derivation	Bemba
Bubble fish	<i>[Ukulamba]</i>	<i>[Umulomb-i]</i> <i>umulomfi</i>	Nominal derivation	Unga
To cause to rain	<i>[ukuloka]</i>	<i>Ukulok-i-a</i> <i>[ukulo]a</i>	Causative extension	Bemba
To cause someone to fail	<i>[feruka]</i>	<i>Feruk-i-a</i> <i>[feru]a</i>	Causative	Unga

As given in **Table 26** above, fricativisation of /f/ results when the bilabial plosive sound /b/ occurs in the environment before the high front vowel /i/ whereas the presence of the velar plosive /k/ in the phonetic environment before the high front vowel /i/ motivates the creation of the spirant sound /ʃ/ as in the words *feruka* from *ferusha* ‘cause someone to fail’. The following rules are therefore applicable in this regard.

59.(a) /b/[f] → /+i/

(b) /k/[ʃ] → /i/

5.2.5.2 Consonant Hardening or Fortition

The study revealed that fortition or consonant hardening is present in both Unga and Bemba as part of the homorganic process. This is where some consonant segments are prenasalised while those that follow are given the status of plosives in order to render them uniform place of articulation and also strengthen the weak sounds. For example, the lateral alveolar sound /l/ and the trill alveolar sound /r/ change to plosive alveolar sound /d/ as in the words *-lee- lemb-a* (n-

dee-lemb-a) ‘I am writing’ and *n-ri-ken-e* (*n-di-ken-e*) ‘I have refused’ in Bemba and Unga respectively as a result of assimilation with the nasal alveolar sound /n/.

Check the possible rules on consonant hardening below that caters for both Bemba and Unga.

60. (a) /β/ → [b] / — / n /

(b) /ɱ/ → [d] / — / n /

5.2.5.3 Nasal Harmony

Concerning nasal harmony, it was disclosed from the findings that both Bemba and Unga embrace this phonological process. In both dialects, this phonological rule is used when deriving words from other words through applicative verbal extensions as demonstrated in Examples 61 and 62 below.

Nasal harmony in Bemba

61. (a) *-kom-a*

-kom-ila

-kom-ena ‘chop for someone’ nasal harmony

(b) *-kan-a*

-kan-ila

-kan-ina ‘refuse for someone’ nasal harmony

(c) *-pem-a*

-pem-ela

-pem-ena ‘breath for someone’ nasal harmony

Nasal harmony in unga

62. (a) *-ram-a*

-ram-ira

-ram-ina – ‘keep for someone’ nasal harmony

(b) *-man-a*

-man-ira

-man-ina – ‘seal for someone’ nasal harmony

(c) *-shan-a*

-shan-ira

-man-ina – ‘dance for someone’ nasal harmony

In all aspects, the rule provides for the deletion of /l/ and /r/ in Bemba and Unga respectively for nasal harmony.

5.2.5.4 Labialisation

The assimilation of non-labials into labial sounds during the articulation process was common in both Bemba and Unga. It was revealed that when the sounds /s/, /k/, /t/ are followed by the labio-velar sound /w/ they acquire the labial place of articulation. In the same manner, the assimilation of the sounds /l/ and /t/ with either the high back vowel /u/ or middle back vowel /o/ is likely to cause the labial assimilation in both dialects as exemplified below.

Labialisation in Bemba

63. (a) *Uku-twa* – ‘to pound’

(b) *Ukutuka* – ‘to insult’

(c) *Ukulunga* – ‘to hunt’

(d) *Ukutoba* – ‘to break’

Labialisation in Unga

64. (a) *n-swir-a – ko* ‘pluck for me’

(b) *umu-kwasu* ‘relative’

(c) *inswi* – ‘fish’

5.2.6 Some Salient Phonological Variations between Unga and Bemba

5.2.6.1 Velarisation in Unga

The study findings have revealed that while the voiced lateral sound /l/ is realised as an alveolar plosive sound /d/ in Bemba, it is however realised as a voiceless velar plosive /k/ in the environment before the mid back vowel /o/ in Unga. This process in Unga is called velarisation.

Velarisation in this case is a phonological process applicable in Unga where a non-velar acquires a velar sound especially during the formation of tenses which is also grammatically supported. The following examples illustrate velarisation in Unga.

65. (a) *n-dee-shitish-a* (**Bemba**)

(b) *n-koo-shitish-a* ‘I am selling’ (**Unga.**)

RULES: $\left. \begin{matrix} d \\ t \end{matrix} \right\} \rightarrow [k] \ /o/ \text{---}$

The process represented by the rule above is also referred to as devoicing

5.2.6.2 Deletion and Insertion of Nasals in Bemba and Unga.

The findings revealed that in some phonological contexts nasal sounds were syncopically deleted in some Bemba words while they were epenthetically retained in Unga as demonstrated in the following examples. This is against Lumwanga (2015:61), whose emphasis is on the deletion and insertion of vowels as opposed to nasals.

For example, in Unga, some contexts provides that, when the vowel sound / i / precedes the alveolar plosive /t/ or the velar plosive /k/, nasal insertion is observed as in the words; *ici-ntini* from *icitini* ‘bucket’ and *umu-inko* from *umu-iko* ‘cooking stick’. However, allomorphic locatives promote prenasalisation as in the words *mpalya* [*mpalja*] ‘there’ and *mpano* [*mpano*] ‘there’ as opposed to *topalya* [*palja*] ‘there’ and *pano* [*pano*] ‘here’ in Bemba.

5.2.6.3 Palatalisation through Denominalisation

It was also noticed from the findings that the phonological process of palatalisation is realised differently at some level in the two dialects. For example in Bemba palatalisation is a product of derivation process of causatives and intensives while in Unga the process of palatalisation is somehow associated with denominalisation as illustrated in **Table 27** below.

Table 27: Palatalisation through denominalisation in unga

Bemba		Unga	
causative/intensive extension		denominalisation	
<i>word</i>	gloss	Word	gloss

[Ukufu]a]	‘cause to multiply’ ‘multiply in great number’	Uku-tipuk-a [katipu]a]	‘Cassava Vegetable Cooked with soda’
[Ukuipai]a]	‘cause to kill’	Uku-swet-a [ifiswe]a]	‘dawn’

From **Table 27** above, it has been revealed that the phonological process of palatalisation in Unga is circumstantially linked with the derivational process of denominalisation whereby the velar sound /k/ or the alveolar sound /t/ becomes a palatal alveolar [tʃ] when it precedes the low back vowel /a/ as in the word *uku-tipuk-a* ‘to be over cooked’ which is derived as a noun *katipusha* [katipu]a] ‘cassava leaves cooked with soda’. This phonological process is not common in Bemba.

5.2.6.4 Alveolarisation through Negation in Unga

It emerged from the findings that palatalisation is the vehicle through which negation is carried in Bemba. However, a different scenario in Unga was observed where alveolarisation is used to realising negation. Through the process of alveolarisation, the fricative post-alveolar sound /ʃ/ becomes an alveolar sound /t/ when preceded by a nasal sound /n/ as in the words *n-ta-is-e* [ntaise] ‘I will not come’ which is however realised as *n-sha-is-e* [n]aise] in Bemba. The rule is provided below.

Rule: /ʃ/ → [t] /n/

5.2.6.5 Alveolarisation through Interrogation in Unga

It was established from the study that, in Unga, when forming interrogative particles, the phoneme /ʃ/ which is typical of Bemba is replaced by the alveolar sound /d/ as in the word *nindo* [nindo] ‘what’ which is realised as *ninshi* [nin]i] ‘what’ in Bemba.

A rule can be formulated as; /ʃ/ → [d] /n/

5.2.6.6 Backing of /e/ to /o/ in Unga

The findings have revealed that Unga dialect manifests the morphological process of backing where the mid front vowel /e/ is swapped with the mid back vowel /o/ in some words in the phonetic environment after the velar sound /k/. This phonological make up is absent in Bemba where fronting is the phonological product in this regard. However, both fronting and backing is accompanied by the three personal pronouns that include 1st person singular *n* ‘I’, 2nd person

singular *u* ‘you’, and 3rd person singular and plural *a* ‘he or she’ or *ba* ‘they’. **Table 28** illustrates how fronting in Bemba is presented as backing in Unga.

Table 28: Variations in terms of backing in Unga

Bemba			Unga		
fronting of /e./			backing of /e/ to /o/		
gloss	word	phonetic transcription	gloss	word	phonetic transcription
‘I am eating’	<i>n-dee-ly-a</i>	[nde:lja]	<i>n-koo-ri-a</i>	<i>n-koo-ria</i>	[nko:ria]
‘I will come’	<i>n-de-is-a</i>	[ndeisa]	<i>n-ko-is-a</i>	<i>n-ko-is-a</i>	[nkoisa]
‘they will remain’	<i>ba-le-sha-l-a</i>	[bale:fala]	<i>ba-ko-sha-r-a</i>	<i>ba-koo-sha-r-a</i>	[bako:fara]

From what has been presented in the table above, it is evident that backing is more prominent in verbs, although few cases of backing were noted in nouns such as *icishinshili* ‘heel’ in Bemba which changes to *icishishilo* ‘heel’ in Unga where the front vowel /i/ is replaced by the back vowel /o/.

5.2.7 Some Variations in Morphophonological Processes

It was established from the findings that there are some similarities in morphophonological rules between Bemba and Unga. Generally, both palatal and velar glide formation processes were manifested in both dialects. It was also noticed that coalescence was also applicable in the two dialects at both word medially and word boundary as it has been presented below.

5.2.7.1 Palato-Glide Formation

The findings showed that the palato-glide /y/ is formed when the high front vowel /i/ fuses with either /e, o, a or u/ in both dialects. The presence of this process in both dialects is attributed to the homogeneity of the vowel inventories in the two dialects. Additionally, the two dialects manifest similar word formation processes as exhibited in (table 1). The following are examples of words involving palato-glide formation in both Bemba and Unga.

Bemba

Unga

66. (a) *imi-eo – imyeo* – ‘lives’(a) *ifi – oni – ifyoni* – ‘birds’

(b) *imi-ulu – imyulu* ‘heaven’ (b) *li-ani – lyani* – ‘grass’

RULES: /i/ → [y] /— /e, u, a or o/.

It was however observed that, in Unga when the sound /i/ is preceded by the trill /r/ fusion does not take place, as in the word, *ria* ‘eat’ which is realised as *lya* ‘eat’ in Bemba. This is due to the rolling nature of a trill which fails to assimilate with the sound /i/ so that the consecutive vowels can fuse. It was also discovered that some words change their phonological structures in Unga in relation to Bemba which consequentially affect the entire word structure as in the word *ifyoni* ‘birds’ in Unga instead of *ifyuni* birds in Bemba.

5.2.7.2 Velar Glide Formation

The findings further revealed that whenever the high back vowel /u/ glides towards /i, e, a or o/ a bilabial velar sound /w/ is created as in the words *umu-ando* (*umwando*) ‘rope’ for Bemba and *mu-ebo* (*mwebo*) ‘you’ for Unga. More examples are however presented below.

Bemba Unga

67. (a) *umu-ana* – *umwana* ‘child’ (a) *umu – anike – mwanike* ‘child’

(b) *ubu-ato* *ubwato* ‘canoe’ (b) *ubu-ange* - *ubwange* ‘canoe’

(c) *umu-alo* *umwalo* ‘poll’ (c) *umu-ipika* – *umwipika* ‘pot

RULE: /u/ → [w] /— /a, u, e or i/

Both Bemba and Unga embrace the rule for velar glide formation which asserts that the semi-vowel /w/ is formed from the back high vowel /u/ and any other vowel apart from the mid back vowel /o/. Despite sharing the same rules, velar gliding in Unga proves to be impossible in situations where the vowel sound /u/ is preceded by a trill /r/ as in the word *u-ru-afyo* (*uruafyo*) ‘difficulty’.

5.2.7.3 Coalescence

While coalescence is notable in Bemba, it is as well present in Unga where two consecutively arranged vowels are fused in a word. Coalescence can either be at word internally or word

boundary. Coalescence at word boundary is usually manifested in phrases and sentences as demonstrated below.

5.2.7.3.1 Coalescence at Word Internally

Bemba

Unga

68.(a) *ama-eno – ameenno* – ‘teeth’(a) *ici-eswa iceeswa* ‘broom’

(b) *umu-ono – umoono* – ‘fishing trap’ (b) *aka-usu akoosu* ‘mosquito’

5.2.7.3.2 Coalescence at Word Boundary

(i) Bemba

69. (a) *Ici-o uleliila imbalala ishabola ifi cinshi?*

- *Ico leliile mbalale shabolefi cinshi?* – ‘coalesced sounds in a sentence

‘Why are you eating such rotten groundnuts like this?’

(ii) Unga

70. (a) *Nkooria ubwari na inswi.*

Nkorio bwari nenswi – ‘I am eating nshima with fish’

5.2.7.4 Some Variations Involving Coalescence

From the findings, it was noticed that Unga exhibit some words which do not coalesce as in the word *ukoenda* ‘you are walking’ which is realised as *uleenda* ‘you are walking’ in Bemba.

5.2.8 The Syllable Structure

5.2.8.1 Similarities in the Syllable Structure

With regard to syllable structure, the findings revealed that both Bemba and Unga exhibit an open syllable structure which has no coda as can be attested in the words *peepa* ‘smoke’ for Bemba and *eemfiria* ‘a bit fine’ for Unga. The Bemba word *peepa* ‘smoke’ has two syllables *pee/pa* while the Unga word *eemfiria* ‘a bit fine’ has four syllables *ee/mfi/ri/a*.

5.2.8.2 Some Variations in the Syllable Structure

The findings however established that there were some words in Unga with salient morphological arrangement that exhibited some syllabic arrangements that are language specific.

For example, Unga dialect has certain words with long vowels in the initial and final position a characteristic which is not found in Bemba. In this case, some words are identified with the following syllables; *vv/ccv/cv/v* as in the word *ee/mfi/ri/a eemfiria* ‘a bit fine’ and *ccvvas* in the word *pwee* ‘straight’. Bemba however has words with long vowels only in the word internally as in the word *ccvv/ccv ndee/lya ndeelya* ‘I am eating’.

5.3. Suprasegmental Phonology

5.3.1 Some Similarities Involving Tone in Unga and Bemba

Unga, just like Bemba embraces suprasegmental features. Significant revelations from the study contend that both tone and length are applicable in both dialects. As one of the notable features of semantic realisation, tone is given a considerable recognition as a means through which lexical items are highly contrasted for the purpose of meaning attachment as in the words *pélá* [*pélá*] ‘grind’ and *pélà* [*pélà*] ‘end’ for Bemba and *ámákóndè* [*ámákóndè*] ‘fishing nets’ and *ámákóndé* [*ámákóndé*] ‘bananas’ for Unga.

Similarly, the findings revealed that tone can affect the semantics of sentences in the two dialects as in *àlébòmbà* ‘she/he will be soaked’ and *àlébòmbá* ‘s/he is working’ for Bemba and *nkóshííká* ‘I am burying’ and *nkóshììká* ‘I am paddling’ for Unga.

What is important in the lexical and syntactic constructions above is the linguistic influence of tone on meaning in both dialects.

5.3.2 Variations by Tone

The findings however disclosed that there are some words which vary in meaning between Bemba and Unga by the virtue of tonal effect. These are words which exhibit the same spellings but their meanings tend to diverge. This tonal variation is illustrated in **Table 29** below.

Table 29 Variations by tone

Bemba		Unga	
<i>Toneme</i>	<i>Gloss</i>	<i>Toneme</i>	<i>Gloss</i>
<i>inkumba</i>	pig	<i>inkumba</i>	water channel
<i>icisasu</i>	tantrum	<i>icisasu</i>	a leaking canoe
<i>ukumana</i>	take some’s share	<i>ukumana</i>	to seal a leaking canoe

<i>icipanga</i>	a skull	<i>icipanga</i>	a back shoulder
<i>uluse</i>	mercy	<i>uluse</i>	hoe
<i>inika</i>	bend someone	<i>inika</i>	river

What has been presented in **Table 29** is a clear manifestation that Bemba is at variance with Unga in terms of tonal realisation in such words as *i-nika* ‘bend someone’ for Bemba and *i-nika* ‘river’ for Unga. Such variations are a catalyst for quick conclusions that Unga has some unique linguistic features that make to fall-off in its status as a dialect Bemba.

5.3.3 Some Similarities Involving Length in Bemba and Unga

The findings also revealed that, vowel lengthening is another linguistic aspect which openly confirms the presence of some similarities between Bemba and Unga. Vowel lengthening is represented phonemically as well as phonetically in Bemba and Unga as given in **Tables 30** and **31** below.

Table 30: Phonemic realisation of length in both Bemba and Unga

Bemba		Unga	
gloss	word	gloss	word
To smoke	<i>ukupeepa</i>	‘to carry’	<i>Ukupiita</i>
To nail it	<i>ukupoopo</i>	‘it is so’	<i>Iina</i>
Together	<i>ukubeeka</i>	Straight	<i>Pwee</i>

Table 31: Phonetic distribution of length in Bemba and Unga

Bemba			Unga		
gloss	phonemic	phonetic	Gloss	phonemic	phonetic
Child	<i>Umu-ana</i>	[umwa:na]	fishing camp	<i>icitaanda</i>	[itʃta:nda]
heavens	<i>Imi-ulu</i>	[imju:lu]	‘fishing spear’	<i>Imi-ela</i>	[imye:la]
Years	<i>Imi-aka</i>	[imja:ka]	‘grass’	<i>li-ani</i>	[ija:ni]

5.3.4 Some Variations by Vowel Length

It has been disclosed from the findings that Unga manifest itself with a unique arrangement of long vowels that are distinct to Bemba. In Bemba, long vowels are located solely at word

internally while in Unga they can appear at both, word initial, word internally as well as word final. **Table 32** and **33** of how long vowels are realised Unga in relation to Bemba.

Table 32: Realisation of vowel length in Unga

gloss	Word	phonetic transcription	length placement
I am eating	<i>Nkoolya</i>	<i>[ŋko:lja]</i>	Word internally
Straight	<i>Pwee</i>	<i>[pwe:]</i>	Word final
That is so!	<i>Iina</i>	<i>[i:na]</i>	Word initially
A bit okey	<i>Eemfilya</i>	<i>[e:mfilja]</i>	Word initially

Table 33: Realisation of vowel length in Bemba

gloss	Word	phonetic transcription	length placement
Smoke	<i>Peepa</i>	<i>[pe:pa]</i>	Word internally
I am eating	<i>n-lee-ly-a</i>	<i>[nde''lja]</i>	Word internally
To be wet	<i>boomba</i>	<i>[βo:mba]</i>	Word internally

Although vowel length is mainly analysed from contrastive point of view, the current analysis was specially designed to identify the location of long vowels in words in both dialects so that salient variations are established. Contrasting long vowels from short vowels was taken to semantics in chapter six.

5.4 Summary

This chapter has analysed the variational aspect of the two dialects taking into consideration some phonological features that tend to converge and those that diverge from each other. From what has been established it should be clearly stated that there are more differences than similarities between Bemba language and Unga dialect at phonological level. This is due to the salient nature of the Unga lexicon. The presence of the trill /r/ in Unga has also demonstrated the presence of some phonological variation between Bemba and Unga. The prevalence of nasal sounds in most Unga words as opposed to Bemba entails that the two dialects are somehow at phonological variance. However, some similarities were noted in the area of phonology regarding some allophonic rules and morphophonological processes.

CHAPTER SIX: MORPHOLOGICAL VARIATIONS OF STANDARD BEMBA AND UNGA DIALECT

6.1. Overview

Similar to the analysis in the previous chapter, the current chapter presents what has been revealed from the finding in chapter three in terms of similarities and variations at morphological level in the two dialects by way of comparing. This chapter was intended to address the second objective which is aimed at identifying the morphological features of Unga in relation to Bemba. Since morphology is grammatically designed, the study through this chapter focuses on the integrative relationships of nominals, verbs, pronouns, demonstratives, interrogatives and compounds with regard to inflection and derivation. Nominal class system being the benchmark for any language has been used to create a logical comparative analysis.

6.2. The Nominal Morphology

Nominal morphology concerns itself with the study of how different parts of a noun carry meaningful information which blend in other linguistic elements and provide a single meaning in an individual word. This process is rule governed being the stand point for word formation. In view of the above, the current study has revealed that Bemba and Unga have some common features with regard to nominal morphology.

According to the findings on this study, it should be indicated that both Unga dialect and Bemba language share almost a similar class system of nouns which constitute eighteen noun class prefixes. This similarity can be attributed to the universality of certain linguistic features especially in Bantu languages. However, this does not mean that there are no variations between Unga and Bemba at morphological level. According to the findings, nominal variations were manifested at different affixal locations which included prefixes and stems.

Except for Class 1a which takes the affix *nsh* for male parental titles such as *Nshimwila* ‘father to *Mwila*’, Class 5 which embraces the prefix *iri-*, Class 5a which is represented by the prefix *-rii* and Class 11 which takes the prefix *uru-* and the prenasalised allophonic locatives such as *mpalya* ‘there’ and *nkulya* ‘there’ the rest of the classes in Unga are the same with that of Bemba. For example, class 1 (*-mu-*) is in all aspect for humans in singular form while class 2 (*-ba-*) is the plural form for class 1. Some similarities for class 1 and 2 between Unga and Bemba are given in **Table 34** below.

Table 34: Similarities involving classes 1 and 2 prefixes in Bemba and Unga

Gloss	Unga	Bemba	Class
Person	<i>Umu-ntu</i>	<i>u-mu-tu</i>	1
People	<i>a-ba-ntu</i>	<i>a-ba-ntu</i>	2
In-law	<i>u-mu-pongoshi</i>	<i>u-mu-pongoshi</i>	1
In-laws	<i>a-ba-pongoshi</i>	<i>a-ba-pongoshi</i>	2
Cousin	<i>u-mu-fyala</i>	<i>u-mu-fyala</i>	1
Cousins	<i>a-aba-fyala</i>	<i>a-ba-fyala</i>	2

Based on the data in **Table 34** above, it can be deduced that Bemba and Unga share a great deal of prefixes from the kinship related terms in class 1 and 2. However, this is not the case for Class 3 and 4 where notable differences as the word *ici-ti* 'tree' instead of *umu-ti* 'tree' became prevalent.

Some similarities in the noun prefixes of class 3 (*mu*) and 4 (*mi*) were observed as in the noun *umu-ima* 'weep' singular and *imi-ima* 'weeps' plural in Unga whereas the noun *umu-pila* 'ball' singular and *imi-pila* 'balls' is manifested in Bemba. More similarities are presented in **Table 35** below for further comparison.

Table 35: Similarities in classes 3 (mu) and 4 (mi)

Gloss	Unga	Bemba	Class
fire	<i>u-mu-lilo</i>	<i>u-mu-lilo</i>	3
vegetables	<i>u-mu-saru</i>	<i>u-mu-salu</i>	3
nail	<i>Umu-somari</i>	<i>u-mu-sumali</i>	3
Sand	<i>u-mu-senga</i>	<i>u-mu-canga</i>	3
'river channel'	<i>u-mu-ronga</i>	<i>u-mu-longa</i>	3
'river channels'	<i>i-mi-ronga</i>	<i>i-mi-longa</i>	4

Variations were noted within the stems of some nouns in the table as in the noun *umu-senga* 'sand' singular and *umu-canga* 'sand' singular for Unga and Bemba respectively.

Additionally, likeliness in class 9(in) and 10(in) were discovered where some prefixes for some nouns that represent domesticated and wild animals and birds were shared by Bemba and Unga as in the word *inkoko* ‘chicken’ and *inswi* ‘fish’ respectively. More similarities in Class 9 and 10 are provided in **Table 36** below.

Table 36: Similarities in class 9 and 10

Gloss	Unga	Bemba	Class
Lion(s)	<i>In-kalamo</i>	<i>In-kalamo</i>	9/10
Elephant(s)	<i>In-sofu</i>	<i>In-sofu</i>	9/10
Snake(s)	<i>In-soka</i>	<i>insoka</i>	9/10
Fishing hook(s)	<i>Indobani</i>	<i>Indobo</i>	9/10

With an exception of the word *indobo* for Bemba and *indobani* ‘fishing hook/s’ for Unga which vary in terms of root morpheme, all the words in **Table 36** have the same prefixes and roots in both dialects.

Similarities were exhibited in classes 12, 13, 14 and 15 whereby in both dialects the prefix for class 12 represents diminutives in singular while its pair (13) stands for plural diminutives. Class 14 is the class for abstraction while class (15) represents some verbal infinitives. Table 37 below demonstrates some similarities between Unga and Bemba for the marked classes 12, 13, 14 and 15.

Table 37: Similarities in classes 12 (a-ka), 13(u-tu), 14(u-bu) and 15(u-ku)

Class	Unga	Bemba	Gloss	Category
12(ka)	<i>a-ka-se</i>	<i>a-ka-kasu</i>	small hoe	singular diminutive
12(ka)	<i>a-ka-fwiri</i>	<i>a-ka-pasa</i>	small mat	singular diminutive
13(tu)	<i>u-tu-se</i>	<i>u-tu-kasu</i>	small hoes	plural diminutive
13(tu)	<i>Utu-fwiri</i>	<i>u-tu-pasa</i>	small mats	plural

				diminutive
14(bu)	<i>u-bu-fira</i>	<i>u-bu-naṅani</i>	laziness	abstract
14(bu)	<i>u-bu-kwa</i>	<i>u-bu-fuba</i>	jealous	abstract
15(ku)	<i>u-kuria</i>	<i>u-ku-lya</i>	to eat	infinitive
15(ku)	<i>u-ku-bona</i>	<i>u-ku-mona</i>	‘to see’	infinitive

Despite taking the same prefixes some words do not agree in terms of their stems in the two dialects. There are some words which vary morphologically while others are in phonological variations within their stems as in the words *uku-bona* ‘to see’ and *uku-mona* where a bilabial plosive sound /b/ changes to an alveolar nasal sound /n/ for nasal assimilation in Bemba. Morphologically, some stem morphemes in some Unga words have been replaced by other morphemes as in the word *aka-fwiri* ‘small mat’ as opposed to *aka-pasa* in Bemba.

6.2.1 Some Variations in the Noun class System

It was revealed from the findings that some areas of the noun class system of Unga dialect do not agree with Bemba language. There are some features which diverge from Bemba regarding the noun prefixes and root or stem morphemes. Whereby the previous section has managed to establish the aspect of similarities, the current section however has been designed to present some affixes in Unga that tend to diverge from Bemba using the morphological parsing.

6.2.1.1 The Prefix

The findings established that Bemba and Unga exhibit the same meaning in some words but these words vary in terms of prefixation. Some variations are influenced by morphology as in the word *ici-ti* ‘tree’ for Unga and *Umu-ti* ‘tree’ for Bemba while others are phonologically modified as in the word *Nshimutale* ‘father to Mutale’ for Unga and *Shimutale* ‘father to Mutale’ for Bemba where the sound /n/ is the only distinctive feature in the two dialects. More examples on the variations are given in **Table 38** below.

Table 38: Variation in the prefix

Gloss	Unga	Bemba	Class
9/9a	<i>In-kalata</i>	<i>kalata</i>	letter
9/3	<i>Im-pila</i>	<i>u-mu-pila</i>	ball/soccer

7/3	<i>Ici-ti</i>	<i>umu-ti</i>	tree
6/7	<i>a-ma-lilo</i>	<i>i-ci-lilo</i>	funeral
9/12	<i>Im-boyo</i>	<i>a-ka-boyo</i>	elbow
5/7	<i>Lyani</i>	<i>i-ci-ani</i>	grass
1a	<i>Nshimutale</i>	<i>Shimutale</i>	Father to Mutale

In **Table 38** above, variations have been displayed where all the paired words have the same roots but different prefixes. For example, in Unga the word *inkalata* ‘letter’ differs with the Bemba version *kalata* ‘letter’ by the prefix (in) of class 9. While the Unga word situates itself in class 9, the Bemba word however falls in class 9a. In the similar manner, where Unga takes on class 9 for the word *impila* ‘ball’ Bemba on the other hand embraces class 3(*umu*) for the same word. It is also revealed that the prefix for the Bemba word *umuti* ‘tree’ is *umu* while the same word in Unga uses class 7 *ici* as in *iciti* ‘tree.’

Further analysis revealed that the word *icililo* ‘funeral’ in Bemba is presented by class 7 (*ici*) for singular while in Unga the same word takes on (class 6) *amalilo* ‘funeral’ in both singular and plural. The same scenario is noted in the word *imboyo* ‘elbow’ where Unga uses the prefix for class 9 (*in*) and Bemba realises the prefix for class 12(*aka*) for the same word.

6.2.1.2 The Stem Morpheme

Bemba and Unga do not only vary in terms of prefixation but also in the root morphemes. Some roots in Unga are not compatible with those prefixes for the same words presented in Bemba. This is why the current section of the study is designed to present what has been established to be the variational aspect regarding stem positioning in the two dialects. For example, the two dialects exhibit the same prefix (*u-bu-*) in the word ‘canoe’ but they vary in the stem whereby Unga takes the stem *-ange* while Bemba embraces the stem *-ato* respectively. **Table 39** below presents more examples on the variations in the stem between the two dialects.

Table 39: Variation involving the stem morpheme in Unga and Bemba

Gloss	Unga	Bemba	Class
14	<i>ubu-ange</i>	<i>ubu-ato</i>	canoe
1	<i>umu-kwasu</i>	<i>umu-nensu</i>	friend

1	<i>umu-fira</i>	<i>umu-nanani</i>	lazy person
7	<i>uci-ibi</i>	<i>ici-seko</i>	door
12	<i>aka-se</i>	<i>aka-kasu</i>	small hoe
7	<i>ici-satu</i>	<i>ici-sakulo</i>	comb
5	<i>i-konko</i>	<i>i-kufu</i>	knee

According to what has been presented in **Table 39** above, it is evident that there are several words in Unga which take roots that are distinct from those in Bemba despite exhibiting the same meaning. For instance, in Unga *ubwange* ‘canoe’ has the root *-ange* ‘canoe’ while the root for the Bemba word is ‘*to*’ canoe. Further revelations are that some words in the process of root alteration in Unga dialect undergo some phonological process as in the word *icintini* ‘bucket’ where the nasal /n/ is inserted for the purpose of nasal harmony. This is different from the Bemba word *icitini* ‘bucket’ which lacks the nasal sound between the prefix and the root.

6.2.2 Multi-variation Involving Nominal Morphology between Unga and Bemba

Findings revealed that some nouns in Unga vary in both the prefix and the stem whereby taking a morphological outlook distinct to that of Bemba, though similar in meaning. It is this kind of morphological shift which some people attribute Unga to an independent language which lacks the dialectal features of mutual intelligibility. For instance, whereby the word ‘fish’ is realised as *i-sabi*, composing of the prefix *i-* of class 5 and the stem *-sabi* in Bemba, the same word is realised as *in-swi* consisting of the prefix *in-* of class 10 and the stem *-swi* in Unga. **Table 40** below illustrate the multi-variational aspect of Unga in relation to Bemba.

Table 40: Multi-variation involving nominal morphology

Class	Unga	Bemba	Gloss
9/8	<i>imbwara</i>	<i>ifyumbu</i>	sweet potaoes
9/5	<i>inswi</i>	<i>Isabi</i>	fish
9/7	<i>intibi</i>	<i>icifuba</i>	chest
9/3	<i>inderu</i>	<i>umuputule</i>	room
5/3	<i>inika</i>	<i>umumana</i>	river
9a/9	<i>kabwasa</i>	<i>imbwa</i>	dog

7/5	<i>icirumbu</i>	<i>ifumo</i>	spear
14/3	<i>ubukome</i>	<i>umusana</i>	waist
3/4	<i>umutoi</i>	<i>imito</i>	ash

From **Table 40** above, it has been noticed that the paired words for Unga and Bemba have all acquired new prefixes and stems such that it is not easy to trace the origin of the words in Unga. For example, in Unga, the word in *-bwara* ‘sweet potatoes’ is composed of the prefix (*in*) of class 9/10 which has assimilated phonologically to (*im*) because of the voiced labial plosive sound */b/* that follows whereof the root of this word is *bwara* – ‘sweet potato’. However, the Bemba word is a blend of the prefix *ifi-* of class 8 plural and the root *-umbu* ‘sweet potato’. Coalescence however is visible in the Bemba word where */i/* and */u/* fuse to form the glide */y/* as attested in the word *‘ifyumbu’*. To this effect, it is important to conclude that in the process of morphological variation, some phonological processes also take place in both Bemba and Unga.

6.3. The Verbal Morphology

6.3.1 Some Similarities in the Verbal Morphology

While the morphological structure of a noun is determined by the prefix and the stem that it takes, the verbal morphology on the other hand is composed of the tense, aspect, subject and object marker, derivational suffix and the suffix indicating the mood. Any variation in these verbal elements between Unga and Bemba justify the aspect of divergence. However, the following preliminary analysis was aimed at establishing the similarities that exist between Unga and Bemba with regard to verbal morphology.

6.3.1.1-The Verb Form

Findings have revealed that in both Bemba and Unga, the verb is formed by the stem and various inflectional morphemes. The following examples illustrate the findings.

71. (i) Bemba

(a) *ba -lee -ly-a baleelya* ‘They are eating’

3SM_{pl} TM_{prog} eat FV

(b) *N- shi-lee -fway -a nshileefwaya* ‘I do not want’

1SM_{Neg} TM per want FV

(ii) Unga

(a) ba – koo – ri-*abakooria* ‘They are eating’

3SM_{p1} TM prog eat FV

(b) N – ta – ko – fway – a *ntakoofwaya* ‘I do not want’

1SM_{sg} Neg p TM per want FV

Although the verbs in the two dialects differ in various morphological aspects, such as tense aspect as for –lee- and -koo, verb root as for –ly- and –ri- and negative particle as for –nshi- and –nta- in Bemba and Unga respectively, the two dialects however constitute the same verbal elements which are; subject marker (SM), tense marker (TM) verb root (VR), and final vowel (FV) in slot (a) and subject marker (SM), negative particle (Neg), Tense marker (TM) verb root (VR) and final vowel (FV) in slot (b) respectively. It has also been revealed that the two dialects share the same structure of the verb as given below.

6.3.2 Structure of the Verb in Unga and Bemba

Inflectional prefixes + verb root /stem + inflectional suffixes

The findings further revealed that, the two dialects share the above verbal structure and have the tense aspect in common. The aspectual linguistic elements blend with the three types of tenses that include past, present and future. Tenses are however marked according to their proximity in time which include; today past, recent past, present, today future and later future. The following examples show the presence of tense and its aspect with time proximity in both Bemba and Unga.

72. (i) Bemba

(a) a – la – bomb – a *alabomba* ‘He/she works’ Habitual

3 SM_{sg} TM_{pre} work FV

(b) ba – lee – bomb – a *baleebomba* ‘They are working’ present progressive

3 $SM_{sg}TM_{pre}$ prog workFV

(c) tu - alee-bomb- a *twaleebomba* 'we were working' past prog.

1 $smpl$ TM past-prog work FV

(d) tu – aci – bomb – a *twacibomba* 'we worked' past today.

1 $SM_{pl} TM_{past}$ workFV

(e) Mu - alii – bomb- a *mwaliibomba* 'you worked' past recent.

2 $SM_{pl} TM_{past}$ work FV

(f) a – li – bomb – ele *alibomba* 'He worked' past remote'

3 $SM_{pl}TM_{RM\ past}$ workTM

(g) na – laa – bomb - a *balaabomba* 'I will work' future today

3 $SM_{pl} TM_{fut\ td}$ workFV

(h) a - lii –bomb – a *aliibomba* 'He/she had worked' past perfect remote

3 $SM_{sg}TM_{rem\ past\ perf}$ work FV

(i) a – ka – bomb – a *akabomba* 'He /she will work' future not today.

3 $SM_{pl} TM_{fut\ ntd}$ work FV

(ii)Unga

(a) a - ra – bomb– a *arabomba* 'He/she works' Habitual

3 $SM_{sg}TM_{pre}$ work FV

(b) ba – koo –bomb – a *bakoobomba* 'They are working' present progressive

3 $SM_{pl}TM_{prog}$ work FV

(c)tu - ariku - bomb - a *twarikubomba* 'we were working' past progr.

1smpl TM_{past-prog} work FV

(d) tu – aci – bomb – a *twacibomba* ‘we worked’ past today.

1 $SM_{pl}TM_{past}$ workFV

(e) mu – arii – bomb– a *mwariibomba* ‘You worked’ past recent.

2 $SM_{pl} TM_{Rec\ past}$ work FV

(f) a – rii –bomb-e -re *ariibombere* ‘He/She worked’ past remote

2 $SM_{pl}TM_{Rem\ past}$ workTM

(g) n – a – ku – bomb – a *nakubomba* ‘I will work’ future day

1sm sgE mph $TM_{fut\ td}$ work FV

(h) a – rii – bomb- a *ariibomba* ‘He/she had worked’ past perfect remote

3 $SM_{pl} TM_{Rem\ pst\ pref}$ work FV

(i) a – ka – bomba- a *akabomba* ‘I will work’ future not today.

1sm_{sg} $TM_{fut\ ntd}$ workFV

6.3.2.1 Variations in the Tense Marker/Aspect

From example 72 above, it is evident that what pertain to Bemba in terms of tense and aspect also applies to Unga.

However, some variations have been observed as verbs inflect in terms of tense and aspect between the two dialects. From the findings there are notable differences in the realisation of tense and aspect than there are in other areas in verbal morphology. The variations range from morphological to phonological as these two are ever interfacing during word formation processes. For example, in Unga, the present progressive aspect is realised as *-koo-* as in the word *ba-koo-ri-a* ‘they are eating’ while in Bemba it is marked with the morpheme *-lee-* as in the word *ba-lee-ly-a* ‘they are eating’. More on the variational aspect of tense markers and their aspects in Unga in comparison to Bemba are given in **Table 41** below.

Table 41: Tense markers/aspects in Unga and Bemba

Tense marker /aspect	Unga	Tense marker /aspect	Bemba	Gloss	Type
-ko-	<i>n-ko-kuma</i>	-de-	<i>n-de-kuma</i>	I will beat you	Future tense
-koo-	<i>Ba-koo-ria</i>	-lee-	<i>ba-lee-lya</i>	They are eating	progressive
-di-	<i>n-di-keen-e</i>	-∅-	<i>ni-n-kaan-a</i>	I have refused	Perfective
-koo-	<i>ba-koo-ya</i>	-lee-	<i>ba-lee-ya</i>	They will go	Future
-rii-	<i>mu-arri-ria</i>	-lii-	<i>mu-alii-lya</i>	You ate	Past remote
-ri-	<i>ba-ri-bom-ere</i>	-li-	<i>ba-li-bomb-ele</i>	They had worked	Perfective
-de-	<i>n-de-tera</i>	-lee-	<i>∅-lee-ta</i>	bring	Future perfect
-ra-	<i>a-ra-ri-a</i>	-la-	<i>a-la-ly-a</i>	He /she eats	Habitual

With reference to **Table 41**, it has been noticed that tense is somehow distinctively presented in Unga in relation to Bemba. As evidenced, both tense markers (TM) and their aspects have some morphemes that do not match with those presented in Bemba. For example, the presence of the morpheme -ko- as a tense marker as well as an aspect in Unga was a clear manifestation of notable variations in verbal morphology between the two dialects. As displayed above, the first –ko- is used to construct the future tense (future today) as in the word *n-ko-is-a* (*nkoisa*) ‘I will come’ while the second –koo- represents the progressive aspect as in the word *n-koo-ri-a* (*nkooria*) ‘I am eating’. However, in Bemba these two morphemes are realised as -le – which changes to –de-when preceded by the nasal /n/, as in the word *n-de-is-a* (*ndeisa*) ‘I will come’ for future simple (future today) and –lee- for progressive aspect as in the word *n-dee-ly-a* *ndeelya* ‘I am eating’ taking *n-* ‘I’ as a representation of the first person in both dialects.

6.3.2.2 Mood in Unga and Bemba

In addition to what has been so far discussed, it is necessary to elucidate that the two dialects are also similar in the expression of mood. All the dialects under study are associated with three types of mood namely; indicative, imperative and subjunctive. The examples are provided in **Table 42** below.

Table 42: Mood in Unga and Bemba

dialects	indicative	imperative	subjunctive
Bemba	<i>a-ly-a alya</i>	<i>ly-a lya</i>	<i>u-ly-e ulye</i>
Unga	<i>a-ri-a aria</i>	<i>ri-a ria</i>	<i>u-ri-e urie</i>
Gloss	‘He/she has eaten’	‘eat!’	‘you should eat’

6.3.3 Variations in Other Areas of Verbal Morphology

Base on the findings in chapter three, the current section draws its attention to the manner in which some morphemes such as subject markers (SM) object markers (OM), verb roots (VR) or stem morphemes, negative particles (Neg), post tense markers (Pst tm) and final vowels (FV) in Unga vary with their counterparts in Bemba.

6.3.3.1 Subject Markers (sm)

The findings revealed that in some verbal constructions, some subject markers change their positions as illustrated below.

73. (i) Bemba

Ni -n - kan - a ‘I have refused’ *perfective aspect*

Neg ISMsg refuse FV

(ii) Unga

N - di-keen-e ‘I have refused’ *perfective aspect*

ISM TMperf refuse TM

The kind of perfective displayed in examples 73 above has its subject marker(SM)followed by the negative particle *niin* Bemba as in the word *nimona* ‘I have seen’while in Unga the subject marker (SM) is in the initial position as in the word *ndibwene* ‘I have seen’.

6.3.3.2The Verb Root (VR)

The findings also revealed that in some verbs, the entire verb root underwent total transformation thereby giving the Unga verb a new morphological shape that is different from Bemba. Refer to **Table 43** below.

Table 43: Variations in the verb root in Unga and Bemba

Verb root	Bemba	Verb root	Unga	Gloss
<i>-fuluk-</i>	<i>a-lee-fuluk-a</i>	<i>-funsh-</i>	<i>a-koo-funsh-a</i>	‘He/she is missing’
<i>-lolel-</i>	<i>ba-la-lolel-a</i>	<i>-rind-</i>	<i>Ba-ra-rind-a</i>	They wait
<i>-fungulul-a</i>	<i>Ba-fungulul-a</i>	<i>-tamburur-a</i>	<i>Ba-tamburur-a</i>	‘They have stretched’
<i>-send-a</i>	<i>a-send-a</i>	<i>-piit-</i>	<i>a-piit-a</i>	He/she has takes

From the data given above, it was disclosed that the verb root for the verb ‘long for’ is *-fuluk-* in Bemba, while the same verb has the root *-funsh-* in Unga. In the second example, the verb root for the Bemba verb *-lolela* ‘wait’ is *-lolel-* while that of Unga is *-rind-* from the stem *-rinda* ‘wait.’

6.3.4 Negation in Bemba and Unga

With regard to the aspect of negation, it has been established that Unga and Bemba do not always agree in the structuring of negative verbs. While Bemba verbs embrace the morpheme *-sh-* in the formation of negative verbs of 1st person singular such as *nshaise* ‘I will not come’; *nshaipike* ‘I will not cook’; *nshaimbile* ‘I did not sing’; the scenario is different in Unga where the particle *-sh-* is replaced by *-ta-* as in the verbs *ntaise* ‘I will not come’; *ntaipike* ‘I will not cook’; *ntaimbire* ‘I did not sing’. However, when dealing with 1st person plural, 2nd person singular and plural and 3rd person singular and plural in both Bemba and Unga, the same particle

–ta- is applied. Nevertheless, the expression of negative verbs with 3rd person singular in both dialects is covert as opposed to the other persons. See examples on negation in **Table 44** below.

Table 44: Negation in Bemba and Unga

Gloss	Bemba	Unga	person
‘I will not come’	<i>n-sha-is-e</i>	<i>n-ta-is-e</i>	1 st person sg
‘I did not eat’	<i>n-sha-lii-le</i>	<i>n-ta-rii-re</i>	1 st person sg
‘We were not walking’	<i>Ta-tu-a-le-end-a</i>	<i>Ta-tu-a-ri-ku-end-a</i>	1 st person pl
‘You are not coming’	<i>ta-mu-le-is-a</i>	<i>ta-mu-ko-is-a</i>	2 nd person sg and pl
‘He/she doesn’t want’	<i>Ta-le-fway-a</i>	<i>Ta-ko-fway-a</i>	3 rd person sg
‘They were not singing’	<i>Ta-ba-le-imb-a</i>	<i>Ta-ba-ri-ku-imb-a</i>	3 rd person pl

As displayed in **Table 44** above, in Unga, the verb structure for the 1st and 3rd person plural is complex. These two verbs constitute the morphemes –ri- and the infinitive -ku-that follow each other and they are preceded by the subject marker.

6.4. Variations in Other Morphological Areas

According to the findings, variations at morphological level are not only concerned with nominals and verbs but also with other facets of morphology such as pronouns, possessives and demonstratives as the following revelations provide.

6.4.1 Personal Pronouns

The findings revealed that personal pronouns are realised differently in Unga as compared to Bemba. Whereas prefixes are located in initial positions in the formation of personal pronouns in Bemba, these morphological features become suffixes in Unga and they are realised differently. In Bemba the 1st and 2nd personal pronouns use *i-* as the prefix while *-ne*, ‘I’ *fwe* ‘we’ *mwe* – ‘you’ and *we-* ‘you’ are the respective stem morphemes. However, in Unga, the suffix *-bo* replaces the Bemba prefix *i-* while the stems remain the same. As for third personal pronouns, ‘he,’ ‘she’ and ‘them’ Unga realises *ni-* as the stem morphemes while the following suffixes’ *-bo*

‘them’ *-o-* ‘he/she’ and *-co* ‘it’ are used in place of the Bemba prefixes *be-* ‘them’ *e-* ‘he/she’ and *ce-* ‘it’. The following table illustrates the variations in personal pronouns between Bemba and Unga. The structure for Unga personal pronouns is *Stem + Suffix* while that of Bemba is *Prefix + Stem*. On personal pronouns in Bemba and Unga refer to **Table 45** below.

Table 45: Variations in the realisation of personal pronouns in Bemba and Unga

Person	Unga	Bemba	Gloss
1 st sg	<i>ni-e-bo(nebo)</i>	<i>i-n-e(ine)</i>	‘I’
1 st pl	<i>fu-e-bo(fwebo)</i>	<i>i-fu-e(ifwe)</i>	‘we’
2 nd sg	<i>u-e-bo(webo)</i>	<i>i-u-e(iwe)</i>	‘you’
2 nd pl	<i>mu-e-bo(mwebo)</i>	<i>i-mu-e(imwe)</i>	‘you’
3 rd pl	<i>n-i-o(nibo)</i>	<i>e-ne or u-e -ne(ene/wene)</i>	‘he/she’
3 rd sg	<i>n-i-co(nico)</i>	<i>ci-e-ne(cene)</i>	‘it’
3 rd pl	<i>n-i-bo(nibo)</i>	<i>ba-e-ne(bene)</i>	‘them’

It should be indicated that the same structure for personal pronouns is adopted in the construction of compound personal pronouns or reflexive pronouns. With the same structures of personal pronouns, reflexives are attached to these words to form compound personal or reflexive pronouns as demonstrated in **Table 46** below.

Table 46: Reflexive pronouns in Bemba and Unga

Gloss	Unga	Bemba
myself	<i>ne-bo-mu-ine(nebomwine)</i>	<i>i-ne-u-ine(inewine)</i>
ourselves	<i>Fu-e-bo-ba-ene(fwebobene)</i>	<i>i-Fu-e-ba-ene(ifwebene)</i>
yourselves	<i>u-e-bo-mu-ine(webomwine)</i>	<i>u-e-mu-ine(wemwine)</i>

yourselves	<i>mu-e-bo-ba-ene(mwebobene)</i>	<i>i-mu-e-ba-ene (imwebene)</i>
Him/herself	<i>e-o-u-ine(eowine)</i>	<i>u-mu-ine (umwine)</i>
Themselves	<i>ni-bo-ba-ene(nibobene)</i>	<i>a-ba-ene (abene)</i>

It is observed that the structure for the Unga reflexive pronoun is complex as compared to the one for Bemba. In Bemba, some sounds are deleted in the process of compounding while in Unga there is no deletion of any sound. For example instead of realizing the word *iwewine* ‘Yourself’ [i] has been deleted leaving the word with the initial consonant [w] as *wemwine* ‘yourself’. This is the same arrangement with the word *ifwebene* ‘ourselves’ where [i] as well is deleted from *ifwebene*. This process accounts for phonology in the realization of reflexive pronouns in Bemba as opposed to Unga.

6.4.2 Demonstratives

With regard to demonstratives, Unga has a unique pattern of realising demonstratives as opposed to Bemba. Almost all the demonstratives in Unga are prenalised. The nasal sound /n/ is attached to particular class prefixes and locatives to form either demonstrative pronouns or determiners. The following is the structure of demonstratives in Unga

NASAL + PRONOMINAL PREFIX + STEM

Table 47 below presents the variational aspect of demonstratives in Unga and Bemba taking the morphological structure of Unga as the yardstick.

Table 47: Demonstratives in Unga and Bemba

Gloss	Unga	Bemba	Deictic proximity
This (singular)	<i>n-ci</i>	<i>i-ci</i>	Near me and far from you
That (Singular)	<i>n-co</i>	<i>i-co</i>	Near you and far from me
That thing (Singular)	<i>n-ci-lya</i>	<i>ci-lya</i>	Far from us
This thing here	<i>n-ci-no</i>	<i>ci-no</i>	This near me and far from you

Here (singular/plural)	<i>m-pa-no</i>	<i>pano</i>	Near both of us
There (singular/plural)	<i>n-ku-lya</i>	<i>ku-lya</i>	Near me and far from you
Those (Plural)	<i>ni-ngo</i>	<i>a-yo</i>	Far from us
This (singular)	<i>n-gu</i>	<i>u-yu</i>	Near me and far from you
These (plural)	<i>m-ba</i>	<i>a-ba</i>	Near me and far from you
Those (plural)	<i>m-bo</i>	<i>a-bo</i>	Far from us

Apart from the word *ngu* ‘this’ and *ningo* ‘those’ which undergo total mutation, the rest of the stems do not vary from those in Bemba. The findings have however revealed some aspect of homorganicity where the nasal sound /m/ is made to assimilate with the sounds /p/ in *mpano* ‘here’ and *mpalya* ‘there’ and /b/ in *mba* ‘these’ and *mbo* ‘those.’

6.4.3 Interrogation

The study has established that the realisation of interrogatives in Unga is different from what is established in Bemba. The presence of such morphemes as *-ndo-* and *-ko-* makes Unga unique in this area. It is also noticed that Unga has a different structure of interrogatives from the one in Bemba. Where some Bemba interrogatives end in prenasalised palatal sounds, Unga on the other hand embraces the prenasalised voiced alveolar plosive /nd/ with the mid back vowel /o/ in the final position. Variations in terms of interrogation are shown in **Table 48** below.

Table 48: Variation in terms of interrogatives

Gloss	Unga	Bemba	person
What?	<i>Fi-ndo?</i>	<i>Fi-nshi?</i>	1 st person sg
What?	<i>Ni-ndo?</i>	<i>Ni-nshi?</i>	1 st person sg
What?	<i>Ci-ndo?</i>	<i>Ci-nshi?</i>	1 st person sg
Where?	<i>Ni-kwisa?</i>	<i>Ni-kwi?</i>	
What time?	<i>Ni-nshita-ndo?</i>	<i>Ni-nshita-nshi?</i>	

What type?	<i>Mu-sango-ndo?</i>	<i>Mu-sango-nshi?</i>	
I am asking	<i>N-ko-ipusha-ko?</i>	<i>N-de-ipusha-ko?</i>	1 st person sg

Based on **Table 48** above, it is necessary to indicate that the interrogative operator ‘what’ in both dialects is expressed by either a class 7 prefix (Ci) or class 8 prefix (Fi) as illustrated below.

74. (i) Bemba

(a) *Ci-nshi* - ‘What’ Class 7 (Ci)

(b) *Fi-nshi* - ‘what’ Class 8 (Fi)

(ii) Unga

(a) *ci-ndo* - ‘what’ Class 7 (Ci)

(b) *fi-ndo* - ‘what’ Class 8 (Fi)

On the other hand the syntax of interrogatives in the two dialects is not restrictive. Both Bemba and Unga allow the swapping of the question operators. This entails that question operators can occupy the sentence initial or sentence final as demonstrated in the following examples.

75. (i) Bemba

(a) *Finshi mulenjitila?* ‘What are you calling me for?’

(b) *Mulenjitila nshi?* ‘You are calling me for what?’

Unga

(a) *Findo mwasosa?* ‘What have you said?’

(b) *Mwasosa findo?* ‘You have said what?’

Sentences (a) in examples 74 and 75 in both dialects have the question operators in the initial position while those in slot (b) have their question operators in their final positions.

6.5.Summary

This chapter has compared the morphology of Unga and Bemba. The focus has been to bring out the morphological features that vary in the two dialects while considering some similarities. It has been established from the analysis that the two dialects have more in divergence than in convergence at morphological level. While similarities are noticed in nominal and verbal morphology, the findings have however revealed that the two dialects exhibit immense variations in every aspect of morphology. Moreover, other variations have been noticed in pronouns, demonstratives and interrogatives. Of course these are simply a few areas under analysis and some have been left out due to space and time. The following section presents an analysis which is designed to address the third objective on semantics.

CHAPTER SEVEN: SEMANTIC VARIATIONS OF STANDARD BEMBA AND UNGA DIALECT

7.1. Overview

The analysis provided in this chapter is also based on the findings in chapter three. The current chapter is aimed at addressing the third objective which was intended to compare and contrast the semantics of Unga and Bemba in order to establish possible similarities and variations of Unga and Bemba. Generally, this section is concerned with corroborating what has been assumed in terms of semantic divergence and what has been discovered from the finding in chapter three. The analysis was restricted to establishing similarities and variations in the noun class system, the morpho-semantic relations, the lexico-semantic and partly the semantics at supra-segmental phonology that include tone and length.

7.1 Semantics of the Noun Class System

7.1.1 Some Semantic Similarities in the Noun Class System

The findings have revealed that there are some features in the area of semantics which exhibit regular correspondences between the two dialects within the noun class system. It was evident that in both dialects, the prefixes represent nouns. In every aspect, the noun class prefixes are a representative of the objects and phenomena that exist in the outside world. As such, all the noun prefixes carry specific meanings which help speakers and listeners to make an associative judgment of what is being referred to. For example, in both dialects, when the speaker selects the word that begins with the prefix (*mu*), the listeners will definitely associate it to either class 1 (*mu*) for humans or class 3 (*mu*) for non-humans as in *umu-lunshi* ‘hunter’ for class 1 or *umu-nani* ‘relish’ for class 3. The following classifications represent the semantics of noun class system in Unga and Bemba.

- Class 1/2 are used for human beings in singular and plural in both dialects as illustrated below;

Bemba

umu-lumendo ‘small boy’

umu-fyala ‘cousin’

aba-nesu ‘friends’

Unga

umu-rumbwana ‘small boy’

umu-fyara ‘cousin’

aba-kwasu ‘friends’

- Class 3/4 represent non-humans such as forest materials, some parts of the body and house hold materials in both Bemba and Unga as in the words

Bemba*Umi-to* – ‘ash’*Umu – canga* ‘sand’*Umu-pika* – ‘pot’**Unga***umu-toi*–‘ash’*umu-senga*–‘sand’*umu-ipika (umwipika)*–‘pot’

- Class 5 / 6 generally represent parts of the body in pairs such as *ilinso* ‘eye’ and *amenso* ‘eyes’ *itanta* ‘thigh’ and *amatanta* ‘thigh.’ The pair is also used for other things such as fish type like *ibanga* ‘silver catfish’ and some soil type such as *ibumba* ‘clay.’
- The noun prefixes for class 7 (ci) and class 8 (fi) are used to express augmentative and pejorative. The following are examples.

Bemba*Ici-twe* – ‘big head’*Ifi-peya* – ‘big shoulders’*Ifi-menso* – ‘big eye’*Ici-yanda* – ‘big house’**Unga***ici-twi* – ‘big head’*ifi-piye* – ‘big shoulder’*ifi-menso* – ‘big eye’*ici-yanda* – ‘big house’

However, the same classes are used to form adjectives in both dialects. For example;

Bemba*Ici-suma**Ifi-suma***Unga***ica-bune**ifi-abune*

- Classes 9 and 10 are mainly used to represent such objects as domesticated birds and animals, some wild animals and fish related terms as shown below.

Bemba*Im-bata* ‘ducks’*In-koko* ‘chicken’*Im-bwa* ‘dog’*In-sanga* ‘tiger fish’**Unga***im-bata* ‘ducks’*in-koko* ‘chickens’*in-kalamo* ‘lion’*in-swi* ‘inwi’

- Class 11 (*lu*) and (*ru*) in Bemba and Unga respectively represent miscellaneous objects. In this case, the class is used to construct words for various objects. It can represent body parts such as *ulufumo* ‘stomach’ *ulubafu* ‘rib’. The class is also used to denote some farm implements such as *ulukasu* ‘hoe.’ Since Unga mostly employs the sound /r/ in place of /l/, the examples given above would be *urufumo* ‘stomach,’ *urubafu* ‘rib.’ However, the word *ulukasu* ‘hoe’ changes to *uruse* ‘hoe’ in Unga.
- Classes 12(*aka*) and 13(*utu*) are semantic representation of diminutives in singular and plural. See the examples below.

Bemba

Unga

Aka-kasu ‘small hoe’

aka-se ‘small hoe’

Utu-kasu ‘small hoes’

utu-se ‘small hoes’

Aka-fuba ‘small chest’

aka-tibi ‘small chest’

Utu-fuba ‘small chests’

utu-tibi ‘small chests’

- The noun prefix for class 14 (*bu*) is an independent class which is used to create abstractions in both dialects as illustrated below.

Bemba

Unga

Ubunani ‘laziness’

Ubufira ‘laziness’

Ubufi ‘lies’

ubukwempe ‘lies’

Ubupingushi ‘judgement’

ubukwa ‘jealous’

- The class is also used to represent other things such as *ubu-alwa ubwalwa* ‘beer’ in Bemba and *ubu-ange ubwange* ‘canoe’ in Unga.
- In all the dialects, class 15 (*ku*) is used to represent verbs in infinitive form. The following are possible examples;

Bemba

Unga

Ukusunga ‘to keep’

ukurama ‘to keep’

Ukusenda ‘to carry’

ukupiita ‘to carry’

Ukutema ‘to cut’ *ukuputura* ‘to cut’

On the other hand, Class 15 is used to represent some body parts such as *ukuboko* ‘arm’, *ukuulu* ‘leg’, *ukutwi* ‘ear’ in both Bemba and Unga.

- As for class 16, 17, and 18, the two dialects share the same semantic functions for these classes. They are all used to represent locatives as in the words *mpari* ‘at’, *nkuri.*, ‘to’ *muri*, ‘in’ for class 16, 17, and 18 in Unga respectively.

7.1.2 Some Variations Involving the Semantics of the Noun Class System

Contrary to what has been presented in Section (6.1.1), findings have however revealed some differences in the semantics of the noun class system between Unga and Bemba. According to the findings, almost all the noun classes in Unga are semantically represented by water related objects and phenomena a scenario which is not common in Bemba. This arrangement could be attributed to the physical location of the place where this dialect is spoken. Geographically, Unga is a wetland which is completely surrounded by water and fishing is the main activity. As the main activity of the Unga people, fishing has become a serious cultural phenomenon of this society and language is of course the only means through which this culture has to be transmitted, as Obwoye (2014:6) postulates that “one critical property of language is cultural transmission. Table 49 illustrates the influence of water related objects on the semantics of the noun class system in Unga.

Table 49: Water-related semantics of the noun class system in Unga

class	prefix	word	gloss	semantic representation
1	<i>mu-</i>	<i>umusuru</i>	fish monger	Water related
2	<i>ba-</i>	<i>abasuru</i>	fishmongers	Water related
3	<i>Mu-</i>	<i>umukondo</i>	Heavy canoe	Water related
4	<i>mi-</i>	<i>imilomfi</i>	Bubble fish	Water related
5	<i>i/ri-</i>	<i>Iribwe</i>	sinker	Water related

	<i>li-</i>	<i>ilibwe</i>		
6	<i>Ma-</i>	<i>amayungi</i>	Water lilies	Water related
7	<i>ci-</i>	<i>icisasu</i>	a leaking canoe	Water related
8	<i>fi-</i>	<i>ifyoboro</i>	Puddling stick	Water related
9	<i>in-</i>	<i>inswi</i>	fish	Water related
10	<i>in-</i>	<i>intampi</i>	fishing line	Water related
11	<i>uru –</i> <i>ulu-</i>	<i>Iruki/uluki</i>	smell of fresh fish	Water related
12	<i>aka-</i>	<i>akature</i>	fish searcher	Water related
13	<i>utu-</i>	<i>utushipu</i>	fishing hook	Water related
14	<i>ubu-</i>	<i>ubukonde</i>	fishing net	Water related
15	<i>uku-</i>	<i>ukushika</i>	to puddle	Water related
16	<i>pa/mpali</i>	<i>pa cabiko</i>	fermentation point	Water related
17	<i>ku/kuli</i>	<i>kwiswe</i>	to the river	Water related
18	<i>mu/muli</i>	<i>Mu musasula</i>	in a light canoe	Water related

Most of the words given in the table above are at variance with those in Bemba in terms of prefixes and root morphemes. For example, in Unga the word, *inswa* ‘fish’ takes class 9 (*in-*) while the same word in Bemba takes class 5(*i-*) *isabi* ‘fish.’ This is also witnessed in the word *ubukonde* ‘fishing net’ which takes class 14 (*ubu-*) while in Bemba it is represented by class 5 (*i*) as in the word *isumbu* ‘fishing net’.

The findings also revealed that, some Unga classes such as 9 and 10 rarely represent domesticated birds and animals as they were reflected in Bemba because culturally the Unga people are not so much in pastoral farming as it is with the Bemba who are mainly found on the mainland. This semantic variation is equally reflected in other classes such as class 3 (*mu-*) and class 4(*mi-*) which appear to be miscellaneous in Unga while in Bemba they represent objects such as trees, body parts and other forest materials such as *umushitu* ‘forest’ *imishitu* ‘forests’.

It was further revealed from the findings that words which take class 5 (*ri-*) and class 11 (*ru-*) undergo a phonological change where the lateral /l/ changes to a trill /r/. The change in the shape of these class prefixes has an effect on the semantics of certain words with different roots in Unga. For example, in Bemba the word *amaka* ‘power’ takes class 6 while in Unga the same word takes class 11 (*ru-*) *urupiki* ‘power.’

7.2 The Morphosemantics

7.2.1 Some Similarities Involving Morphosemantics

It has been revealed from the findings that there are similarities in the area of morpho-semantics. These similarities were noticed in the linguistic behaviour of prefix, root and suffix morphemes as they interact with other morphemes. The following findings were established in this respect.

7.2.1.1 The Prefix

The findings revealed that any change in the prefix, which is a matter of inflection will affect the semantic meaning of words in both dialects. For instance, the words in example 76 below acquire new meaning whenever there is an inflection in the prefix. This semantic change is either in number (singular or plural) or quality (diminutive, augmentative or pejorative) as presented below.

7.2.1.1.1 Nouns

76.	Bemba	Unga
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(a) *U-bu-ato* ‘canoe’ (Cl 14) *u-bu-ange* ‘canoe’ (Cl 14)

(b) *A-ma-to* ‘canoes’ (Cl 6) *a-ma-nge* ‘canoes’ (Cl 6)

(c) *I-ci-bwato* or *icaato* ‘big/bad canoe’ (Cl 7) *i-ci-bwange* or *icaange* ‘big/bad canoe’ (Cl 7)

(d) *I-fi-mato* ‘big/bad canoes’ (Cl 8) *i-fi-mange* ‘big/bad canoes’ (Cl 8)

(e) *A-ka-bwato* or *aka-nge* ‘small canoe’ (Cl 12) *a-ka-bwange* or *akange* ‘small canoe’ (Cl 12)

(f) *U-tu-bwato* or *utu-ato* ‘small canoes’ (Cl 13) *u-tu-bwange* or *utwange* ‘small canoes’ (Cl 13)

In the examples above, it has been established in both dialects that whenever a prefix of a particular word is altered a new meaning is realised.

7.2.1.1.2 Verbs

77.

Bemba

Unga

(a) *Ba-lee-lya* ‘They were eating’

Ba-rii-kuria ‘They were eating’

(b) *Ba-lee-lya* ‘They are eating’

Ba-koo-ria ‘They are eating.’

(c) *Ba-ka-lya* ‘They will eat’

Ba-ka-ria ‘They will eat.’

The change in the tense marker morpheme results in the semantic change of the entire word in the examples above. Despite having the same root, the variation in the prefix has necessitated for the creation of new meanings.

7.2.1.2 The Root

In the similar manner whenever there is a change in the root of a word, a new meaning is realised. These are actually the finding from this study. See the examples below.

78.

Bemba

Unga

(a) *ba-tata* ‘father’

umu-kwasu ‘friend’

(b) *ba-yama* ‘uncle’

umu-lomfi ‘bubble fish’

(c) *ba-shikulu* ‘grandfather’

umu-shipi ‘belt’

In Bemba, the prefix *ba-* has been attached to three different roots to realise three different meanings while in Unga the variation of roots with the prefix *mu-* results in creating three different words with varying meanings. This confirms the fact that meaning realisation is similar in the two dialects.

7.2.1.3 The Suffix

The change in the suffix also helps to initiate a new meaning in the two dialects. This fact is illustrated below.

79. **Bemba**

Unga

(a) *imini-na* ‘stop walking’

talam-a ‘stop walking’

(b) *imini-ka* ‘stop someone from walking’

talam-i-ka ‘stop someone from walking’

(c) *imi-ki-la* ‘stop for someone’

talam-i-ki-la ‘stop for someone’

The change in the suffix has helped to realise three different meanings through derivation of the verbal extensions such as applicative and causative as given above.

7.2.2 Some Variations Involving Morphosemantics

Revelation of the findings showed that there were more differences in morphosemantics than there were in nominal classes between the dialects under investigation. These variations were manifested in the prefix, root morpheme and suffix as shown in the following examples.

7.2.2.1 The Prefix

It has been established in the study that the two dialects use different prefixes with the same roots to realise the same meanings. This draws the attention to the fact that, despite exhibiting the same meaning, some Unga roots collocate with prefixes which are different from those in Bemba. For example, the noun *u-mu-ti* ‘tree’ takes Class 3 (-*mu*) in Bemba while the same noun is attached to Class 7 prefix (-*ci*) to realise the word *i-ci-ti* ‘tree’ in Unga. In the similar manner, some verbs in Unga are realised differently due to the change in the tense morpheme such as – *koo-* for –*lee-* in the words *n-ko-shitisha* [nk:o]iti[a] and *n-lee-shitisha* [nde:]iti[a] for Unga and Bemba respectively. **Table 50** and **51** below illustrate semantic variations involving the prefix.

Table 50: Morphosemantic variation of the prefix involving the noun

class	Unga	Class	Bemba	gloss
7	<i>Ici ti</i>	3	<i>umuti</i>	Tree
8	<i>Ifi ti</i>	4	<i>imiti</i>	Tree
5	<i>inika</i>	3	<i>umumana</i>	River
6	<i>amanika</i>	4	<i>imimana</i>	Rivers

Table 51: Morphosemantic variations of the prefix involving the verb

prefix	Unga	Prefix	Bemba	gloss

-ko-	<i>n-koo-shitisha</i>	-de-	<i>n-dee-shitisha</i>	I am selling
-koo-	<i>a-koo-muma</i>	-lee-	<i>a-lee-muma</i>	He/she is beating him/her or He/She will beat him/her.
-ndi-	<i>n-di-mumiine</i>	-ni-	<i>ni-muma</i>	I have beaten him
-ra-	<i>Ba-ra-muma</i>	-la-	<i>Ba-la-muma</i>	They beat him/her

According to the examples in **Table 50**, it was evident that the singular and plural forms for the word ‘tree’ are realised differently in the two dialects. In Unga the singular form takes the prefix (*ici-*) of class 7 while the Bemba word takes (*umu-*) of class 3. On the other hand, the plural form for the word ‘trees’ in Unga is (*ifi-*) of class 8 while the Bemba form is (*imi-*) of class 4.

As for the examples involving the verb in **Table 51**, it was noticed that Unga takes *-ko-* for future simple tense while the same verb is realised with *-de-* which is a phonological product of *-le-* as in *n-le-kuma* which become *n-de-kuma* ‘I will beat you,’ in Bemba.

7.2.2.2 The Root Morpheme

Regarding the root morpheme, it has been established from the findings that there are some aspects of variations whereby some root morphemes are realised differently despite the words carrying the same meanings in the two dialects as in the word *u-bu-konde* which takes the root *-konde* in Unga as opposed *i-sumbu* ‘fishing net’ embracing the root *-sumbu* in Bemba. More examples are given in **Table 52** and **53** below.

Table 52: Morphosemantic variations of the root morpheme involving nouns

Root	Unga	Root	Bemba	gloss
<i>-konde</i>	<i>U-bu-konde</i>	<i>-sumbu</i>	<i>i-sumbu</i>	Fishing net

<i>-ntini</i>	<i>I-ci-ntini</i>	<i>-tini</i>	<i>I-ci-tini</i>	bucket
<i>-ange</i>	<i>U-bu-ange</i>	<i>-ato</i>	<i>U-bu-ato</i>	Canoe
<i>-obolo</i>	<i>I-ci-obolo</i>	<i>-obelo</i>	<i>I-ci-obelo</i>	Puddling stick
<i>-swi</i>	<i>In-swi</i>	<i>-sabi</i>	<i>i-sabi</i>	fish

Table 53: Morphosemantic variations of the root involving personal pronouns

root	Unga	Root	Bemba	gloss
ne-	<i>ne-bo</i>	-ne	<i>i-ne</i>	I
fu-e-	<i>fu-e-bo</i>	-fu-e	<i>i-fu-e</i>	We
mu-e-	<i>mu-e-bo</i>	-mu-e	<i>i-mu-e</i>	You plural
u-e-	<i>u-e-bo</i>	-u-e	<i>i-u-e</i>	You singular
ni-	<i>ni-bo</i>	-ne	<i>be-ne</i>	They

In **Tables 52** and **53** above, it is evident that the words in Bemba and Unga have different roots which take the same prefixes in some cases to realise different meanings. What is significant in this regard is the semantic change due to variations in root morphemes between the two dialects. For example, the root for *ubwange* ‘canoe’ in Unga is *-ange* while in Bemba the same word takes the root *-ato* as in the word *ubwato* ‘canoe’.

On the other hand, the morphosemantic variation witnessed in Table 53 involving personal nouns shows how the movement of roots to the initial position contrast with the structure of the Bemba proper nouns which allow root morphemes to appear in the final position of the word. However, what is so important in the two dialects is the semantic effect caused by the change of the root in both dialects. When *we* ‘I’ changes to *fwe* the new pronouns ‘we’ is created.

7.3 The Lexicosemantics

7.3.1 Some Similarities Involving the Lexicosemantics

The findings revealed that there are some similarities in the semantics of some lexical items in the two dialects. Based on chapter three, the analysis in this subsection takes into account the similarities in meaning manifested in some semantic categories such as agriculture, fishing, human body parts, kinship and household related terms in Bemba and Unga.

7.3.1.1 Agriculture Related Terms

Bemba and Unga share the same meaning with the following agriculture related terms.

80.	Bemba	Unga
	(a) <i>Ukubyala</i> ‘to plant’	<i>ukubyara</i> ‘to plant’
	(b) <i>Amataba</i> ‘maize’	<i>amataba</i> ‘maize’

7.3.1.2 Fishing Related Terms

81.	Bemba	Unga
	(a) <i>Amenshi</i> ‘water’	<i>amenshi</i> ‘water’
	(b) <i>Umulonga</i> ‘water channel’	<i>umulonga</i> ‘water channel’

7.3.1.3 Body Parts Related Terms

82.	Bemba	Unga
	(a) <i>Ameenso</i> ‘eyes’	<i>ameenso</i> ‘eyes’
	(b) <i>Umutwe</i> ‘head’	<i>umutwe</i> ‘head’

7.3.1.4 Kinship Related Terms

83.	Bemba	Unga
	(a) <i>tata</i> ‘father’	<i>tata</i> ‘father’
	(b) <i>mayo</i> ‘mother’	<i>mayo</i> ‘mother’
	(c) <i>shikulu</i> ‘grandfather’	<i>shikulu</i> ‘grandfather’

7.3.1.5 Household Related Terms

84.	Bemba	Unga
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- | | |
|----------------------------------|------------------------------|
| (a) <i>Umwele</i> ‘knife’ | <i>umwele</i> ‘knife’ |
| (b) <i>Icitini</i> ‘bucket’ | <i>icintini</i> ‘bucket’ |
| (c) <i>Ulwembe</i> ‘razor blade’ | <i>uruembe</i> ‘razor blade’ |

The similarities in some semantic fields such as kinship, house-hold, agriculture and body-parts related terms is due to borrowing since Unga is a dialect of Bemba which in linguistic principle is expected to be mutually intelligible to Bemba and its dialects.

7.3.2 Variations Involving the Lexicosemantics

6.3.2.1 The Typical Lexicosemantic Variations between Unga and Bemba

Unga diverges from Bemba in terms of word meanings. Some lexical items are realised differently in the two dialects while sharing almost the same meaning. Others despite sharing the same word features do not carry the same meaning. These differences have been demonstrated in the examples below.

In Bemba *inika* is a verb stem which means ‘bend’. It can take class 15(*uku*) to form an infinitive verb *ukwinika* ‘to bend’. However, in Unga *inika* means ‘river’. The only difference is in the tone aspect where the Bemba word has the high tone on /i/ while the Unga variant has the low tone on the same sound.

The word *ukulola* in Bemba means ‘to be with your eyes open’ while the same word in Unga means ‘to check on the fishing net you left in water.’ In Unga this word is used in relation to fishing.

The other difference is observed in the word *ukutesha* ‘to listen to someone’ while in Unga the same word means ‘to move something’. This word is also used by fishermen when they are moving fishing nets to other places of fishing.

The findings also revealed that in Bemba the word *ukushika* means ‘to burry’ while the same word in Unga means ‘to puddle.’ However, tone is applied in the process of speech.

Accordingly, when the word *inkonde* is applied in Bemba, the meaning fetched is ‘bananas.’ Nevertheless, the same word *inkonde* in Unga can either mean ‘bananas’ or ‘weeping.’ It

depends on the context in which the word is used. The word *inkonde* is alternatively used with the word *umwima* to mean ‘weeping’. The word *umwima* does not apply in Bemba.

The findings further revealed that there are some Bemba words which are applied in reverse in Unga. For example, in Bemba the word *ikila* means ‘alight’ while this word in Unga means ‘board.’ This is the same with the word *patama* which means board’ in Bemba while in Unga it means to ‘alight’.

These are acute variations which tend to qualify the assertion that Unga is in linguistic divergence at semantic level. This divergence could be attributed to the proximity of Unga dialect with Bemba. Being an enclosed dialect, Unga is rarely influenced by other dialects. Against this fact, Mambwe (2008:83) argues that, “if two or more languages or dialects interact, they are bound to influence each other not only socially and culturally but also linguistically”. However, the findings disclosed that Unga interacts with Bisa dialect through the Unga people of Nsamba area. This interaction has resulted in the introduction of Akanshima one of the Unga dialects. This is one case of convergence according to the data provided to the researcher by the informants.

7.3.2.2 Variations in other Semantic Fields

The study also revealed that some lexical items vary in terms of word forms while their meanings are the same. **Tables 54, 55, 56 and 57** below illustrate this point.

Table 54: Lexicosemantic variation of agriculture related terms

gloss	Unga	Bemba
Sweet potaoes	<i>Imbwara</i>	<i>Ifyumbu</i>
Pumpkin seeds	<i>Injeli</i>	<i>impupu</i>
Cassava stem	<i>Ulutoto</i>	<i>icikonkolo</i>
To plant	<i>Ukurimbika</i>	<i>ukubyala</i>

Table 55: Lexicosemantic variation of fishing related terms

gloss	Unga	Bemba
Place where boats and canoes are landed	<i>Kwiswe</i>	<i>Kucabu</i>
fish	<i>Inswi</i>	<i>Isabi</i>
canoes	<i>ubwange</i>	<i>ubwato</i>

Table 56: Lexicosemantic variation of human body parts related terms

gloss	Unga	Bemba
‘knee’	<i>Ikonko</i>	<i>ikufi</i>
‘chest’	<i>Intibi</i>	<i>icifuba</i>
‘shoulder’	<i>Icipiye</i>	<i>icipeya</i>

Table 57: Lexicosemantic variation of house-hold related terms

gloss	Unga	Bemba
Comb	<i>Icisatu</i>	<i>icisakulo</i>
broom	<i>Iceswa</i>	<i>Icipyango</i>
pot	<i>Umwipika</i>	<i>Umupika</i>
Cup	<i>Inkapu</i>	<i>ulunweno</i>

As observed in the examples above, variation in lexicosemantics is not only a matter of disparities in meaning relations but also in the distribution of word forms. Any form of inflection in a lexical item affects either the morphological or the phonological structure hence the effect on meaning since phonology and morphology always interface with semantics.

7.4 Lexicosemantic Variations Involving Tone

Findings revealed that, tone in both Bemba and Unga is used to discriminate meaning. The same word spoken at varied pitches can render different meaning. For such, some inter-lingual variations were noted in which some words were realised differently in terms of meaning despite bearing the same spellings. For example, with tonal effect, the word *u-lu-se* means ‘mercy’ in Bemba while the same word will mean ‘hoe’ in Unga. More examples on tonal variations are given in **Table 58** below.

Table 58: Lexicosemantic variation involving tone

gloss	Unga	Gloss	Bemba
‘water channel’	<i>inkumba</i>	‘Pig’	<i>inkumba</i>
‘a leaking canoe’	<i>Icisasu</i>	‘Flared tempers’	<i>icisasu</i>
‘a hoe’	<i>uluse</i>	‘mercy’	<i>uluse</i>
‘river’	<i>inika</i>	‘Bend something or someone’	<i>inika</i>

However, similarities were observed on the influence of tone on meaning in both dialects. With the agglutinating nature of Unga and Bemba as Bantu languages, a single word can stand as a single sentence. When two of the same words exist intra-lingual or inter-lingual, meaning has to be discriminated in terms of tone. The following examples illustrate some similarities between the two dialects in terms of tone at sentential level.

85. Bemba

(a) *Twàbómbàbonse.*

‘We have all been soaked.’

(b) *Twáàbòmbá bonse.*

‘We have all worked.’

Unga

(a) *Nkòìmbáulwimbo.*

‘I am singing a song’

(b) *Nkòìmbà ubwendo.*

‘I am digging a hoe’

From the examples above, it is evident that tone plays a bigger role in the shaping of semantics in both dialects at lexical and sentential level.

7.5 Summary

This chapter has analysed data by comparing the semantics of Unga and Bemba focusing on the semantics of the noun class system, the morphosemantics regarding prefixes, stems/roots and suffixes, the lexicosemantics of agriculture, fishing, house-hold and body parts related terms and the semantics at suprasegmental level with the focus on tone. Generally, the findings have revealed that there are more variations than similarities regarding semantics in the two dialects for the reason of geographical continuum and this confirms the aspect of divergence in Unga.

CHAPTER EIGHT: LEXICAL VARIATIONS OF STANDARD BEMBA AND UNGA DIALECT

8.1. Overview

The current chapter addresses the last objective which was designed to describe the salient lexical features of Unga in relation to Bemba. The analysis in this regard was aimed at establishing the similarities and differences between Unga and Bemba in terms of lexical arrangement as revealed from the findings in chapter three. The findings evidently revealed that Unga and Bemba share a lot of differences than similarities at lexical level. As a proof of this fact, the study applied four hundred lexical items representing six different fields of semantics collected from the informants. The semantic fields considered in this particular analysis included agriculture, fishing, human body parts, house-hold, kinship and miscellaneous terms. Below is a description of lexical items of Bemba and Unga intended to present some similarities and differences between the two dialects.

8.2. Some Features that Unga shares with Bemba at Lexical Level

As already stated, Unga and Bemba share some lexical items. Tables 59, 60, 61, 62, 63 and 64 contextualise the findings on some similarities at lexical level.

Table 59: Examples of some agriculture related terms that dialects U and B share

gloss	dialect U	dialect B
groundnuts	<i>Imbarara</i>	<i>imbalala</i>
maize	<i>Amataba</i>	<i>amataba</i>
fertilizer	<i>Umufundo</i>	<i>umufundo</i>
field	<i>Ibara</i>	<i>ibala</i>
rice	<i>Umupunga</i>	<i>umupunga</i>
cultivate	<i>Rima</i>	<i>lima</i>

It is well evidenced from the findings that Bemba and Unga share some lexical items which manifest similar word forms and meaning. For example, the words *umufundo* ‘fertiliser’ and *umupunga* ‘rice’ have the same spellings and meaning in both Bemba and Unga. However, there are some words which tend to vary by a single phonological element like in the words *lima*

‘cultivate’ and *rima* ‘cultivate’ for Bemba and Unga respectively, where the lateral /l/ and the trill /r/ are the only distinctive features.

Table 60: Examples of some fishing related terms shared by dialect U and B

gloss	dialect U	dialect B
water	<i>Amenshi</i>	<i>amenshi</i>
Fishing net sinkers	<i>Amabwe</i>	<i>amabwe</i>
Flat puddling stick	<i>Inkafi</i>	<i>inkafi</i>
Fishing trap	<i>Umoonoo</i>	<i>umoonoo</i>
Cat fish	<i>Umuta</i>	<i>umuta</i>
bream	<i>Impende</i>	<i>impende</i>

Table 61: Some human-body parts related terms shared by dialect U and B

gloss	dialect U	dialect B
arm	<i>Ukuboko</i>	<i>Ukuboko</i>
head	<i>Umutwi</i>	<i>Umutwe</i>
body	<i>Umubili</i>	<i>Umubiri</i>
ear	<i>Ukutwi</i>	<i>Ukutwi</i>
neck	<i>Umukoshi</i>	<i>Umukoshi</i>
cheek	<i>Itobo</i>	<i>itobo</i>
intestines	<i>Amara</i>	<i>amala</i>
toes	<i>Utukondo</i>	<i>utukondo</i>

Table 62: Some house-hold related terms shared by dialect U and B

Gloss	dialect U	dialect B
bicycle	<i>Incinga</i>	<i>incinga</i>
knife	<i>Umuere</i>	<i>umuele</i>
brazier	<i>Imbabura</i>	<i>Imbabula</i>
Traditional field basket	<i>Umutonga</i>	<i>umutonga</i>

Mealie meal	<i>Ubunga</i>	<i>ubunga</i>
shelter	<i>Insaka</i>	<i>insaka</i>
bottle	<i>Ibotoro</i>	<i>ibotolo</i>
chair	<i>Icipuna</i>	<i>icipuna</i>
axe	<i>Isembe</i>	<i>isembe</i>
trimming axe	<i>Imbesa</i>	<i>imbesa</i>
Cooking stick	<i>Umwiko</i>	<i>umwiko</i>
mortar	<i>Ibende</i>	<i>ibende</i>
Wooden stool	<i>Icitebe</i>	<i>icitebe</i>

Table 63: Some Kinship related terms shared by dialect U and B

gloss	dialect U	dialect B
In-laws	<i>amapongoshi</i>	<i>amapongoshi</i>
Son in law	<i>umuko</i>	<i>umuko</i>
nephew	<i>umuipwa</i>	<i>umuipwa</i>
father	<i>Tata</i>	<i>taata</i>
mother	<i>Mayo</i>	<i>mayo</i>
child	<i>Umuana</i>	<i>Umuana</i>

Table 64: Some miscellaneous terms shared by dialect U and B

Gloss	dialect U	dialect B
relish	<i>Umunani</i>	<i>Umunani</i>
roof	<i>Umutenge</i>	<i>umutenge</i>
firewood	<i>Inkuni</i>	<i>inkuni</i>
light	<i>Ulubuuto</i>	<i>ulubuuto</i>
rabbit	<i>Kalulu</i>	<i>kalulu</i>
elephant	<i>Insofu</i>	<i>insofu</i>
waterbuck	<i>Insobe</i>	<i>insobe</i>
hippo	<i>Imfubu</i>	<i>imfubu</i>

forest	<i>Impanga</i>	<i>impanga</i>
root	<i>Umushila</i>	<i>umushila</i>
smoke	<i>Icushi</i>	<i>icushi</i>

Generally, the findings revealed that Bemba and Unga share some lexical items in all the semantic fields which were considered in this study. Nevertheless, more similarities were witnessed in house-hold related terms. This is because most of the house-hold materials are inter-cultural while others are acquired from the shops where they are allocated with specific names. Notwithstanding the principles of dialectal relatedness, the study however revealed immense variations in the other semantic fields. Nevertheless, issues of lexical variations are widely dealt with in the following section.

8.3. Variations at Lexical Level

The findings have shown that Unga has so much in variation at lexical level. Although some of these variations have been presented under morphology and semantics, this subsection strictly focuses on the aspect of vocabulary. This analysis was equally based on six semantic fields as applied in the foregoing subsection. **Tables 65, 66, 67, 68, 69** and **70** present some Unga lexical items that diverge from Bemba.

Table 65: Some agriculture related terms in variation

gloss	dialect U	dialect B
Potato vegetable	<i>Karebwe</i>	<i>kalembula</i>
Cassava harvested late	<i>Cilaala</i>	<i>cilaalu</i>
To harvest maize	<i>Ukukobola</i>	<i>ukusombola</i>
Lazy person	<i>Umufira</i>	<i>umunajani</i>
Potatoes	<i>Imbwara</i>	<i>ifyumbu</i>
Bark of a tree	<i>Icipaapa</i>	<i>icipande</i>
To plant	<i>Ukurimbika</i>	<i>ukubyala</i>
To replant	<i>Ukurimburura</i>	<i>ukubyalulula</i>
Round ridge	<i>Urutumba</i>	<i>uluputa</i>
Cassava stem	<i>Ulutoto</i>	<i>Icimuti ca tuute</i>

mangoes	<i>Yembe</i>	<i>imyembe</i>
Pumpkin seeds	<i>Injeli</i>	<i>impupu</i>

Table 66: Some fishing related terms in variation

gloss	dialect U	dialect B
canoe	<i>Ubwange</i>	<i>ubwato</i>
fish	<i>Inswi</i>	<i>isabi</i>
To seal the leaking canoe	<i>Ukumana</i>	<i>ukushinka</i>
Heavy canoe	<i>Umukondo</i>	<i>icato</i>
To paddle	<i>Ukushiika</i>	<i>ukooba</i>
shore	<i>Kwiswe</i>	<i>icaabu</i>
Puddling stick	<i>Icobolo</i>	<i>Inkafi/umubale</i>
Fishing hook	<i>Indobani</i>	<i>indobo</i>
Fishing line	<i>Ubunyimba</i>	<i>ingoshi</i>
Fishing net	<i>Ubukonde</i>	<i>isumbu</i>
Water channel	<i>Inkumba</i>	<i>umulonga</i>
Bubble fish	<i>Umulomfi</i>	<i>umulonge</i>
Open dry fish	<i>Amakumba</i>	<i>capatwa</i>
river	<i>Inika</i>	<i>umumana</i>
Fishing rope	<i>Intampi</i>	<i>Umwando wa ngoshi</i>
helpers	<i>Abaswa</i>	<i>ababomfi</i>
Poison from fish	<i>Ifilembe</i>	<i>ubusungu</i>
Hoes for fish	<i>Imilindi</i>	<i>Amendo ya isabi</i>
Breeding period	<i>Akapalwe</i>	<i>Inshita ya kupaala</i>
Cornish jack	<i>Intongo</i>	<i>umulobe</i>

Table 67: Examples of Human body parts related terms in variation

Gloss	dialect U	dialect B
Bone-marrow	<i>Ifuta</i>	<i>Umutoto</i>
nose	<i>Impunu</i>	<i>umoona</i>
shoulder	<i>Icipiye/ukubeya</i>	<i>icipeya</i>
Knee	<i>Ikonko</i>	<i>ikufi</i>
Pubic area	<i>Ibinda</i>	<i>icinena</i>
heel	<i>Icishinshili</i>	<i>icishishilo</i>
finger	<i>Umunwi</i>	<i>umunwe</i>
chest	<i>Intibi</i>	<i>icifuba</i>
toe	<i>Akakumo</i>	<i>akakondo</i>
waist	<i>Ubukome</i>	<i>umusana</i>

Table 68: Examples of House-hold related terms in variation

gloss	dialect U	dialect B
broom	<i>Iceswa</i>	<i>Icipyango</i>
Hoe	<i>Uluse</i>	<i>Ulukasu</i>
matchet	<i>Kakwampa</i>	<i>panga</i>
plate	<i>Insani</i>	<i>Imbale</i>
bucket	<i>Icintini</i>	<i>icitini</i>
Small mortar	<i>Akaondo</i>	<i>akabende</i>
bathroom	<i>Uluba</i>	<i>icoowa</i>
Small mat	<i>Akafwiri</i>	<i>akapasa</i>
soap	<i>Sabuni</i>	<i>isopo</i>
nail	<i>Umusomari</i>	<i>umusumali</i>
door	<i>Iciseko</i>	<i>iciibi</i>
pot	<i>Umwipika</i>	<i>umupika</i>
comb	<i>Icisatu</i>	<i>icisakulo</i>
house	<i>Inanda</i>	<i>ijanda</i>

Table 69: Examples of Kinship related terms in variation

gloss	dialect U	dialect B
relative	<i>Bururu</i>	<i>lupwa</i>
friend	<i>Bawesu</i>	<i>cibusa</i>
Young boy	<i>Umurumbwana</i>	<i>umulumendo</i>
The father to Mulenga	<i>NshiMulenga</i>	<i>ShiMulenga</i>

Table 70: Examples of some miscellaneous terms in variation

Gloss	dialect U	dialect B
To carry	<i>Ukupiita</i>	<i>Ukusenda</i>
To squeeze	<i>Ukupanika</i>	<i>Ukutinika</i>
To move	<i>Ukutesha</i>	<i>Uku-sesha</i>
birds	<i>ifyoni</i>	<i>ifyuni</i>
I will go	<i>Nakuya</i>	<i>nkaya</i>
what	<i>Nindo</i>	<i>ninshi</i>
Just like this	<i>Emfimba</i>	<i>eififine</i>
To keep	<i>Ukurama</i>	<i>Ukusunga</i>
those	<i>Ningo</i>	<i>ayo</i>
dog	<i>Kabwasa</i>	<i>imbwa</i>
Cassava vegetables	<i>Katapa</i>	<i>saasa</i>
just	<i>Fe</i>	<i>fye</i>
Cry	<i>Umwima</i>	<i>imisowa</i>
To seal the leaking canoe	<i>Ukumana</i>	<i>ukushinka</i>
heat	<i>Icipuki</i>	<i>icibe</i>
board	<i>Ukwicila</i>	<i>ukunina</i>
Good person	<i>Wabune</i>	<i>umusuma</i>
Citenge material	<i>Icikwembe</i>	<i>icitenge</i>
stand	<i>Talama</i>	<i>iminina</i>
alight	<i>Ciluka</i>	<i>patuka</i>

What type	<i>Musangondo</i>	<i>musangonshi</i>
I did not arrive	<i>Ntafikile</i>	<i>nshafikile</i>
plait	<i>-pomba</i>	<i>-luka</i>
beetle	<i>Teeka</i>	<i>mukunkunya</i>
Flying rain insect	<i>Cunika</i>	<i>inswa</i>
An idiot	<i>Icipuka</i>	<i>icipuba</i>
fog	<i>Umwinga</i>	<i>fubefube</i>
tiny	<i>Akantinti</i>	<i>akanono</i>
good	<i>Muweme</i>	<i>musuma</i>
liar	<i>Incesa</i>	<i>uwabuŋi</i>
heel	<i>Icishinshilo</i>	<i>icitende</i>
may be	<i>Angu</i>	<i>nalimo</i>
Our place	<i>Kwesu</i>	<i>kumwesu</i>
To carry	<i>Ukupiita</i>	<i>ukuseenda</i>
sand	<i>Umucanga</i>	<i>umusenga</i>
To wander	<i>Ukupumbula</i>	<i>ukupitana</i>
rodent	<i>Iseshi/ingali</i>	<i>Ipanga/ifutu</i>
python	<i>Ulushishi</i>	<i>ulusato</i>

From **Table 69**, it is evident that Unga has so much lexical items in divergence. The lexical items differ in three dimensions. Some lexical items vary by a single morpheme such as *umusenga* ‘sand’ and *umucanga* ‘sand’ for Bemba and Unga respectively while others vary phonologically whereby a difference in a single phoneme slightly alters the word form as in the word *wordifyoni* ‘birds’ for Unga and *ifyuni* ‘birds’ for Bemba where the phonemes /o/ and /u/ provide for lexical variation. Besides these two variational characteristics, it has also been noticed that some lexical items exhibit what should be referred to as complete lexical mutation where the entire word is transformed morphologically and phonologically as in the word *ningo* ‘those’ and *ayo* ‘those’ for Unga and Bemba respectively.

8.4. Summary

The findings have revealed that Unga and Bemba share some lexical items which exhibit similar word forms and meanings. This aspect of lexical parallelism has been illustratively presented in

Tables 58, 59, 60, 61, 62 and 63 respectively. Similarities could be attributed to borrowing as Unga to some extent shares its linguistic borders with Bemba and other dialects such as Bisa and Lala. The matter of convergence to a larger extent is a proof of mutual intelligibility which is the bedrock of dialectal recognition.

On the other hand, the findings have established the larger part of lexical variations between Unga and Bemba. Examples of Unga words that diverge from Bemba have been presented in **Tables 64, 65, 66, 67, 68 and 69** representing various semantic fields. A maximal representation of variation is associated with lexical items for fishing semantic category presented in **Table 65**, followed by house hold related terms in **Table 67**. Some lexical items with acute lexical mismatch have been displayed in table 69 of miscellaneous items. Variation between Bemba and Unga is a matter of divergence since Unga is the most isolated and furthest dialect among the dialects of Bemba. The dialect operates on a restricted geographical continuum whereby dialectal contamination is not so prevalent.

CHAPTER NINE: CONCLUSION AND RECOMMENDATION

9.1. Overview

This chapter concludes the study by presenting in summary the findings and analysis as revealed in chapters three, four, five, six and seven by considering the four levels of linguistics which include phonology, morphology, semantics and lexis. The recommendation follows hereunder.

9.2. Phonological variations

It should be indicated that Unga dialect and Bemba language share some similarities and differences phonologically. It was however revealed that the two dialects exhibit cases of similarities in the vowel inventory and partly in the consonant inventory. Findings further reveal that prenasalisation is common among the obstruent plosives, fricatives and affricates such as [β], [p], [f], [tʃ] and [dʒ].

Similarities were noted involving both allophonic and morphophonological rules where /β/ and /s/ phonologically change to [b] and [ʃ] respectively in some environments while /l/ changes to [d] in the environment before a nasal sound /n/. Morphophonological rules involving coalescence and glide formation were noted in both dialects. Tone and vowel lengthening are possible supra-segmental processes applicable in both dialects.

Despite all these similarities, variations were however observed in these dialects. While Bemba consonant inventory embraces only a lateral /l/, Unga on the other hand takes a trill /r/ and a lateral /l/. The presence of a trill in Unga necessitates for rolling where /l/ is replaced by the trill /r/ in some phonetic environments. In Bemba the consonant sound /l/ is hardened to /d/ while in Unga this sound is softened to /k/ in the environment before the mid back vowel /o/, a process referred to as velarisation.

It has been disclosed that in Unga denominalisation accounts for palatalisation in some linguistic contexts while negation also calls for alveolarisation, the phonological processes not evidenced in Bemba. The findings further reveals that long vowels are at both words initially, medially and finally in Unga while in Bemba it is only at word medially.

The presence of hiatus in some phonological constructions and the realisation of backing of /e/ to /o/ confirm the divergence of Unga from Bemba in this regard. Tone and the vowel structure are at variance in the two dialects. The findings on phonology are a clear indication that Unga diverges from Bemba, and this is a matter of both geographical and social continuum. Unga is

one of the dialects of Bemba which is in a serious geographical continuum as its proximity from Bemba and other dialects tend to widen. The place is completely surrounded by water, an arrangement which restricts any form of linguistic interference.

9.3. Morphological variations

At the morphological level, the study revealed that the two dialects differ with reference to certain morphological features although some similarities were noted. It has been established that both dialects share almost the same features of the noun class system. Nouns are represented by noun prefixes.

However, variations have been noticed whereby Unga takes (i-ri) and (u-ru) while Bemba manifests (i-li) and (u-lu) in class 5 and 11 respectively. There are also some differences in the manifestation of noun prefixes and root morphemes in the two dialects. Where Bemba takes the prefix (u-mu) for *umuti* ‘tree’, Unga variantly embraces the prefix (i-ci) for the same word *iciti* ‘tree’.

There are more differences in terms of prefix assignment to words in these dialects. For example, Bemba uses class 3 for *umu-pila* ‘ball/soccer’ while Unga applies class 9 *im-pila* ‘ball/soccer’. In some findings, variation is at the root morpheme as in the word *ubu-ato* (*ubwato*) ‘canoe’ in Bemba and *ubu-ange* (*ubwange*) ‘canoe’.

Findings also revealed that in some morphological arrangements the multi-variation exists. This is a situation where both the prefix and the stem are transformed and they appear totally different as in the words *imbwara* (Cl 9 sg) ‘sweet potato’ in Unga as opposed to *icumbu* (Cl 7 sg) ‘sweet potato’.

With regard to verbal morphology, the two dialects share the same structure. However, there are serious differences in this area in terms of morpheme realisation. Some morphemes for tense and aspect undergo both phonological and morphological change when they appear in Unga. For example the Bemba tense/aspect marker *-le-* and *-lee-* become *-ko-*, and *-koo-* in Unga. It has also been observed that some verbal roots are realised differently in Unga. For example, the verbal root *-fuluk-* in the word *uku-fuluka* ‘to miss someone’ is realised as *-funsh-* for the word *uku-funsha* ‘to miss someone’.

The morphology of negation is also in variation in the two dialects. For example, the negative particle *-sha-* as in the word *n-sha-ly-e* ‘I will not eat’ for Bemba is realised as *-ta-* as in the word *n-ta-ly-e* ‘I will not eat’ in Unga. Evidence is also provided on the variation in the realisation of pronouns, demonstratives and interrogatives. For instance, in Unga almost all demonstratives take the nasal /n/ or /m/ in the initial position as in the words *nci* ‘this’ and *mpalya* ‘there’ which are realised in Bemba as *ici* ‘this’ and *dpalya* ‘there’ respectively.

These morphological variations are also attributed the aspect of geographical continuum since morphology builds from phonology.

9.4. Semantic Variations

With regard to semantics, the study reveals that there are some semantic features that exhibit regular correspondence between the two dialects. Semantically, all noun prefixes represent objects and phenomena in the outside world. For example, in both dialects, the paired classes 1/2 represent human beings in singular and plural respectively. In the same regard, paired classes 12/13 represent diminutives such as *asaka-muntu* ‘small person’, *utu-bantu* ‘small or tiny looking in people’.

However, variations in the semantics of noun class system have been noticed whereby according to the findings almost all the noun classes in Unga are semantically represented by water related objects and phenomena an arrangement not common in the Bemba noun class system. It has also been noticed that a number of objects that embrace certain class prefixes in Bemba have acquired different noun prefixes in Unga. For instance, while the word ‘fish’ takes class 5 (i) for *i-sabi* in Bemba, the same word however takes class 9 (in) for *in-swi* ‘fish’.

Findings have also revealed that there are similarities and differences between the two dialects in the semantics of morphemes here referred to as morpho-semantics. With regard to some similarities, it has been revealed in both dialects that any form of alteration in the prefix, the root morpheme or suffix has a bearing on the meaning of words. For example, the root *-ntu*, ‘person’ can be attached to different prefixes to create different meanings such as *umu-ntu* ‘person’, *aba-ntu* ‘people’, *ici-mu-ntu* ‘bad looking person’, *ifi-ba-ntu* ‘bad looking people’, *aka-mu-ntu* ‘small person’, *utu-ba-ntu* ‘small people’ in both dialects.

Contrariwise, it should be indicated that the two dialects share more differences than similarities in terms of morpho-semantics. Despite exhibiting the same meaning, some root morphemes in

Unga collocates with different prefixes to provide varied semantic meanings. For example, in Bemba the word *umu-ti* ‘tree’ takes class 3 (mu) for singular and class 4 (imi) for plural *imi-ti* ‘tree’ while in Unga the same meaning juxtaposes with class 7 (ici) as in the word *ici-ti* ‘tree’ singular and class 8 (ifi) for *ifi-ti* ‘trees’ plural. This is the same scenario with the verbs. With the root *-uma*, ‘beat’ three different meanings are realised by alternating the prefixes such as *asn-ko-kuma* ‘I will beat you’, *a-koo-muma* ‘s/he is beating him/her’, *n-di-mum-ine* ‘I have beaten him/her’.

Further similarities and differences in semantics are indicated by the interface between lexical items and semantics. As for lexico-semantics the study holds that Bemba and Unga share the same meanings of some lexical items. For example, both dialects have the same meaning for the words *uku-byala* ‘to plant’ and *umu-ntu* ‘person’. Simply put, it has been revealed that the meaning of any word in these dialects is determined by the grammatical organisation of morphemes.

However, there are a few lexico-semantic features in Unga which diverge from Bemba. According to the findings, some lexical items are realised differently in the two dialects despite sharing the same meaning. Others, despite sharing the same word features, do not exhibit the same meaning. For example, the word *inika* is a noun in Unga which means ‘river’ while the same word in Bemba *inika* is a verb which means ‘bend someone’. There are also some words in Unga with the opposite semantic meaning from the ones in Bemba. For instance, in Unga, the word *patama* means ‘alight’ while in Bemba the same word means ‘board’. The possible semantic variations between the two dialects could be the matter of geographical location of Unga from Bemba and arbitrariness.

9.5. Lexical Variations

It has been established from the findings that Unga exhibits more variations at lexical level than at any other levels of linguistics. Among the semantic fields considered in the analysis, the fishing category had more differences and this was followed by the category for human body parts. Other differences were categorised under the miscellaneous terms as reflected in table (94). Cases of word forms with complete distinct morphological shapes from the Bemba counterparts such as, *imbwara* ‘sweet potatoes’ for *ifyumbu* ‘sweet potatoes’ were observed. Some findings also revealed word forms with simple phonological shifts where the nasal sound /n/ is deleted such as, *icitini* ‘bucket’ for *icintini* ‘bucket’ for Bemba and Unga respectively. Divergence was

attributed to the dialect continuum with which Unga has been associated. Being one of the furthest dialect from Bemba and having been completely surrounded by water, the linguistic boundary of Unga has been secured from any form of contamination. The study has however established that variations between Unga and Bemba at lexical level are a matter of divergence.

On the other hand, the findings disclosed that Unga and Bemba exhibited cases of similarities whereby some lexical items are shared by the two dialects especially those that are not in the cultural domain of the Unga people. These are lexical items which have been adopted on the basis of mutual intelligibility. The study also revealed that in the recent past the creation of Lunga as a district and the movements of people in and out of the district have greatly influenced this linguistic convergence. Some new Bemba lexical items have been imposed on the Unga people.

9.6 Recommendation

Since this study was designed to corroborate the claim on the divergence of Unga dialect at phonological, morphological, semantic and lexical level in relation to Bemba, it is recommended that similar comparative studies be conducted between Unga and its dialects such as Akanshima and Twa which are spoken on the swamps of Bangweulu as this would yield more convincing results on the status of Unga. This would help to establish the dialectal variations at different levels of linguistics among the three dialects. Besides, since there are serious controversies on the mutual intelligibility of Unga and other Bemba dialects, further studies are recommended focusing on comparing Unga and Ushi or Unga and Numbo in relation to Bemba as this would help to establish the linguistic status of Unga against other Bemba dialects.

However, the current study has established that there are some linguistic variations between Unga and Bemba at phonological, morphological, semantic and lexical levels. In theory these variations are attributed to the geographical continuum of Unga from Bemba.

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APPENDICES

APPENDIX A: SWADESH LIST

This is part of the Swadesh list the researcher used to collect phonological data. Informants were asked to translate words verbally with particular emphasis on pronunciation and thereafter words were analysed morphologically and meanings were attached to each. This process helped to identify the sound system, the word forms, the lexicon and the semantics of Unga dialect. Part of the interview sessions were recorded for efficient transcription and analysis.

ENGLISH	BEMBA	UNGA	SEMANTIC CATEGORY
1. then	<i>kabili</i>	kambimba	conjunction
2. it is full	<i>lyakosa</i>	riripa	verb
3. it is so	<i>eififine</i>	emfimba	verb
4. what	<i>ninshi</i>	nindo	interrogative
5. pluck for me	<i>nsabilako</i>	nswirako	verb
6. hold	<i>ikata/sunga</i>	rama	verb
7. keep it for me	<i>nsungilako</i>	nsungirako	verb
8. wait	<i>lolela</i>	rinda	verb
9. eat!	<i>akulya</i>	kororia	verb
10. cleverness	<i>ubucenjeshi</i>	umucengereko	abstract noun
11. don't be angry	<i>wifulwa</i>	wifurwa	verb
12. to share	<i>ukwakanya</i>	ukwabanya	verb (infinitive)
13. server	<i>uulepekanya</i>	inkankakwaba	noun (human related term)
14. fatty foods	<i>ifyanonesha</i>	impuramuminwe	noun(food related term)
15. they are eating	<i>balelya</i>	bakoria	verb
16. plate/s	<i>imbale</i>	insani	noun (house-hold related term)
17. serve (relish)	<i>pungula</i>	aburura	verb
18. serve (nsima)	<i>ukupungula</i>	ukusesura	verb
19. stir	<i>pishamo umwiko</i>	pikuramo	verb
20. nsima	<i>ubwali</i>	ubwari	noun (food related term)
21. paddle	<i>umubale</i>	icobolo	noun (fishing related term)
22. to move	<i>ukusela</i>	ukusera	verb (infinitive)

23. In-laws	<i>amapongoshi</i>	amako	noun
24. move fast	<i>angufyanya</i>	senserako	verb
25. move out	<i>fuma</i>	ciruka	verb
26. friend	<i>cibusa</i>	bawesu	noun
27. I have refused	<i>nakana</i>	ndikeene	verb
28. those	<i>ayo</i>	ningo	demonstrative
29. go and sleep	<i>kasendame</i>	karare	verb
30. cut for me	<i>nsuninako</i>	mokwerako	verb
31. sieve	<i>yunga</i>	susurura/sefurura	verb
32. calm down	<i>sulako</i>	sunsuruka	verb
33. weeping	<i>imisowa</i>	imiima/inkonde	noun
34. dog	<i>imbwa</i>	kabwasa	noun(animal related term)
35. cat	<i>pushi</i>	coona/nyau	noun(animal related term)
36. Cassava vegetables	<i>katapa</i>	saasa/suro	noun(food related term)
37. okra	<i>umulembwe</i>	umurembwe	noun(food related term)
38. traditional soda	<i>inungo</i>	inambwa	noun (chemical related term)
39. small traditional pot	<i>akapoto</i>	akaronga	noun (house-hold related term)
40. groundnuts	<i>imbalala</i>	imbarara	noun (agriculture related term)
41. look at you!	<i>yangu imwe</i>	yangu ara	interjection
42. small mortar	<i>akabende</i>	akaondo	noun (house-hold related term)
43. bucket	<i>icitini</i>	icintini	noun (house-hold related term)
44. friend	<i>umunensu</i>	umukwasu	noun (kinship related term)
45. grass	<i>icaani</i>	isani/ilyani	noun
46. Small mat	<i>impasa</i>	akafwiri	noun(house-hold related term)
47. To breath (for fish)	<i>ukupeema</i>	ukubwa	verb
48. just	<i>fye</i>	fe	adverb
49. tasteless	<i>umutalalila</i>	umunkamwa	adjective
50. to seal (canoe)	<i>ukushinka</i>	ukumana	verb (fishing related term)
51. on Sunday	<i>pamulungu</i>	pasondo	locative
52. door	<i>iciibi</i>	iciseko	noun (house-hold related term)
53. fishig hook	<i>indobo</i>	indobani	noun (fishing related term)
54. fishing basket	<i>ulwanga</i>	urwanga	noun (fishing related term)

55. black lechew (male)	<i>mumembe</i>	mumembe	noun (animal related term)
56. black lechew (female)	<i>mumembe</i>	injakashi	noun (animal related term)
57. bottle (borrowed)	<i>ibotolo</i>	ibotoro	noun (house-hold related term)
58. Fishing drum	<i>akaoma</i>	akature	noun (fishing related term)
59. fishing line	<i>ingoshi</i>	ubunyimba	noun (fishing related term)
60. to threaten	<i>ukutinya</i>	ukupikimisha	verb
61. eeh!	<i>iyē (ukupapa)</i>	arare	interjection
62. that is fine	<i>nifyofine</i>	emfyofine	adverb
63. Sweet potato vegetables	<i>kalembula</i>	karebwe/karembura	noun (agriculture related term)
64. spit	<i>fwisa</i>	fubura	verb
65. give me a lift	<i>nsendeniko</i>	njikisheniko	verb
66. to ask for transport	<i>ukulombako</i>	ukwicililakofye	verb
67. matches	<i>maceshi</i>	macisa	noun (house hold related term)
68. dawn	<i>muntungulya</i>	iciswasha	noun/adverb
69. rays of the morning sun	<i>icibutubutu</i>	icitungira ca kasuba	noun/adverb
70. leaking canoe	<i>ubwato ubuleswa</i>	icisasu	noun (fishing related term)
71. wait for me	<i>ndolela</i>	ndorwera	verb
72. to guard	<i>ukulonda</i>	ukuronda	verb
73. it is so/it is fine	<i>nifyofine</i>	iina	interjection
74. it's not me	<i>teine</i>	mbanine	adverb
75. to chase	<i>ukumutamfyaukumusokora</i>		verb
76. fail (exams)	<i>ukupona</i>	ukuferuka	verb
77. canoe	<i>ubwato</i>	ubwange	noun (fishing related term)
78. soap	<i>isopo</i>	sabuni	noun (house-hold related)
79. battery/sinker	<i>liibwe</i>	riibwe	noun (fishing related term)
80. bag	<i>icoola</i>	icacora	noun
81. short	<i>akaputula</i>	akaputura	noun
82. knife	<i>umwele</i>	umwere	noun (house-hold related)
83. nail	<i>umusumali</i>	umusomari	noun
84. mosquitonet	<i>icandaluwa</i>	moshikito	noun
85. blanket	<i>ubulangeti</i>	uburangeti	noun (house-hold related)
86. mosquito	<i>muḡwiḡwi</i>	akosu/akatusu	noun

87. lamp	<i>ilaiti</i>	ilampi	noun
88. bone marrow	<i>umutooto</i>	ifuta	noun (body part related)
89. a kick	<i>umunshela</i>	icipaka	noun
90. small boy	<i>umulumendo</i>	umurumbwana	noun (kinship related)
91. friend	<i>umunabo</i>	umukwasu	noun (kinship related term)
92. lazy person	<i>munagani</i>	umufira	adjective (human related)
93. dew	<i>umume</i>	icime	noun
100. hunter	<i>umulunshi</i>	fundi	noun
101. river chanel	<i>umulonga</i>	umuronga	noun (water related term)
102. boil	<i>mumena</i>	munama	noun (human related term)
103. sweetness	<i>umundowendowe</i>	umundowerera	noun
104. blood	<i>umulopa</i>	umuropa	noun
105. chief	<i>mulopwe</i>	muropwe	noun (kinship related)
106. we are humbled	<i>tulekunkula</i>	turekunkura	verb
107. shoulder	<i>icipeya</i>	icipiye/ukubeya	noun (body part related)
108. to gather	<i>ukulonganya</i>	ukulonganika	verb
109. thief	<i>pompwe</i>	kabwarara	noun
111. bundle of fish	<i>icisaku</i>	icisaku	noun (fishing related)
112. reward	<i>icilambu</i>	icirambu	noun
113. fishing net	<i>isumbu</i>	ubukonde	noun (fishing related)
114. we are	<i>tuli turi</i>		verb
115. to turn	<i>ukupilibula</i>	ukupindura	verb
116. shoulder blade	icipanga	noun (body part related term)
117. power	<i>amaka</i>	urupiki	noun

118. he/she wants	<i>alefwaya</i>	arefwaya	verb
119. foundation	<i>umufula</i>	icisha	noun
120. fishing camp	<i>mutanda</i>	citanda	noun (fishing related term)
121. border	<i>umupaka</i>	umuswano	noun
122. journey	<i>ubulendo</i>	urwendo	noun
123. ignore	<i>sulako</i>	sunsuruka	verb
124. it is not fine	<i>takulibwino</i>	kuberekantu	adverb/adjective
125. fight	<i>ulubuli</i>	urubo	noun
126. spear	<i>ifumo</i>	icirumbu	noun
127. hurry up	<i>endesheniko</i>	sakaukeni	verb
128. be submissive	<i>uleumfwila</i>	urekutumika	verb
129. to seal a leakage	<i>ukucilika</i>	ukumana	verb
130. I will go	<i>ndeya</i>	nkooya	verb
131. ball/soccer	<i>umupila</i>	impila	noun
132. razor	<i>ulwembe</i>	urwembe	noun
133. relative	<i>lupwa</i>	bururu	noun (kinship related term)
134. God	<i>Lesa</i>	Lesa	God
135. Is it not so?	<i>teifyofine</i>	temfyofine	interrogative
136. everything	<i>fyonse</i>	fyonsee	adjective
137. to begin	<i>ukutendekako</i>	ukutampako	verb
138. you should behave	<i>uleumfwa</i>	ukoumfwa	verb
139. I am not listening	<i>nshileumfwa</i>	ntakoumfwa	verb (negation)

140. you have gone	<i>nauya</i>	urire	verb
141. I will come	<i>ndeisa</i>	nkoisa	verb
142. to breath (fish)	<i>ukupeema</i>	ukubwa	verb (infinitive)
143. stop	<i>leka</i>	reka	verb
144. broom	<i>icipyango</i>	iceeswa	noun (house-hold related term)
145. hoe	<i>ulukasu</i>	uluse	noun (house-hold related)
146. matchet	<i>panga</i>	kakwampa	noun (house-hold related)
147. letter	<i>kalata</i>	inkalata	noun
148. tortoise	<i>fulwe</i>	kwamba/lwiso	noun
149. take	<i>senda</i>	piita	verb
150. sit down	<i>ikalako</i>	ikarako	verb
151. knee	<i>ikufi</i>	ikonko	noun (body part related term)
152. impact	<i>tinika</i>	panika	verb
153. move	<i>sesha</i>	tesha	verb
154. tomorrow	<i>mailo</i>	mairo	adverb
155. today	<i>leelo</i>	rero	adverb
156. birds	<i>ifyuni</i>	ifyoni	noun
157. I will finish	<i>nkapwisha</i>	nakupwisha	verb
158. I will go	<i>nkaya</i>	nakuya	verb
159. I will not come	<i>nshakese</i>	ntakese	verb
160. you are provoking me	<i>ulentendeka</i>	ukombara	verb
161. you will see	<i>ulemona</i>	ukomona	verb

162. we are fine	<i>tulekosa</i>	tukokosa	verb
163. I am selling	<i>ndeshitisha</i>	nkoshitisha	verb
164. fish	<i>isabi</i>	inswi	noun (fishing related term)
165. sweet potatoes	<i>ifyumbu</i>	imbwara	noun (agriculture related)
166. there	<i>palya</i>	mpalya	locative
167. I have refused	<i>ninkaana</i>	ndikeene	verb
168. those	<i>ifyo</i>	mflyo	demonstrative
169. there	<i>kulya</i>	nkulya	locative
170. to paddle	<i>ukooba</i>	ukushiika	verb (infinitive)
171. cricket	<i>inyense</i>	ingololo	noun
172. winged termite	<i>inswa</i>	cunika	noun
173. to stab	<i>ukulasa</i>	ukucimpika	verb
174. to laugh	<i>ukuseka</i>	ukucensa	verb (infinitive)
175. you will remain	<i>uleshala</i>	ukooshara	verb (infinitive)
176. house	<i>inanda</i>	inanda	noun (house-hold related)
177. to eat	<i>ukulya</i>	ukusheta	verb (infinitive)
178. to bite	<i>ukusuma</i>	ukukankura	verb (infinitive)
179. to discharge	<i>ukupila</i>	ukupasha	verb (infinitive)
180. discharge vessel	<i>icipilo</i>	ulwipo	noun (fishing related)
181. stop walking	<i>ukwiminina</i>	ukutalama	verb (infinitive)
182. I	<i>ine</i>	nebo	personal pronoun
183. you	<i>iwe</i>	webo	personal pronoun

184. you	<i>imwe</i>	mwebo	personal pronoun
185. this	<i>ici</i>	nci	demonstrative
186. that	<i>cilya</i>	nco	demonstrative
187. here	<i>pano/kuno</i>	mpano/nkuno	locative
188. there	<i>kulya/palya</i>	nkulya/mpalya	locative
189. what	<i>cinshi</i>	cando	interrogative
190. where	<i>nikwi</i>	nikwisa	interrogative
191. when	<i>nililali</i>	nilisa	interrogative
192. what time	<i>ninshitanshi</i>	ninshitando	interrogative
193. what kind	<i>musangonshi</i>	musangondo	interrogative
194. red	<i>kashika</i>	sweta	adjective
195. they/them	<i>bene</i>	nibo	personal pronoun
196. our home	<i>kumwesu</i>	kwesu	locative
197. idiot	<i>icipuba</i>	icipuki	noun
198. water lilies	<i>amatuwa</i>	amayungi	noun (fishing related term)
199. shield	<i>inkwela</i>	icisolelo	noun
200. to be cold	<i>ukutalala</i>	ukutarara	verb (infinitive)
201. water	<i>amenshi</i>	amenda	noun
202. fog	<i>fubefube</i>	umwinga	noun
203. sky	<i>umulu</i>	ulwelele	noun
204. ash	<i>imito/itoi</i>	umutoi	noun
205. feeder road	<i>umusebo</i>	inshila	noun

206. big road	<i>umusebo</i>	ingalande	noun
207. to be heavy	<i>ukufina</i>	ukulema	verb (infinitive)
208. dwarf	<i>akepi</i>	inkuuku	adjective
209. small thing/person	<i>akanono</i>	akanini	adjective
210. to over flow	<i>ukwisulisha</i>	umupasa	verb
211. good person	<i>umusuma</i>	umuweme	adjective
212. to rote	<i>ukubola</i>	ukufuka	verb (infinitive)
213. to be dirty	<i>ukulamba</i>	ukufiita	verb (infinitive)
214. straight	<i>ukololoka</i>	pwee	adjective
215. left side	<i>kukusokucipiko</i>		adjective
216. to drink (okra)	<i>ukupapula</i>	ukupwira	verb (infinitive)
217. rain cloud	<i>ikumbi lyamfula</i>	ikubulu	noun
218. spit	<i>fwisa</i>	fubura	verb
219. you will walk	<i>uleenda</i>	ukoenda	verb (infinitive)
220. strong person	<i>impamfu</i>	kapeta	adjective
221. liar	<i>uwabufi</i>	incesa	adjective
222. water cobra	<i>ingoshe</i>	sumbe	noun (animal related term)
223. python	<i>ulusato</i>	ulushishi	noun (animal related term)
224. lion	<i>inkalamo</i>	mundu	noun (animal related)
225. rodent	<i>ifutu</i>	Iseshi	noun (animal related)
226. fishing rod	<i>utufupu</i>	utushipu	noun (fishing related term)
227.	<i>imonde</i>	mafusa	noun (fishing related)

228. squeaker	<i>bongwe</i>	cinyimba	noun (fishing related)
229. trap	<i>indaka</i>	imfwambi	noun (fishing related term)
230. swamp	<i>itafu</i>	umutafu	noun (fishing related)
231. snake catfish	umulomfi	noun (fishing related)
232. tree	<i>umuti</i>	iciti	noun
233. bark/pod	<i>icipande</i>	icipaapa	noun
234. there	<i>apo palya</i>	mpo mpalya	locative
235. chest	<i>icifuba</i>	intibi	noun (body part related)
236. pubic	<i>icinena</i>	ibinda	noun (body part related)
237. heel	<i>icishinshili</i>	icishishilo	noun (body part related)
238. onset cassava farming	<i>tuute (mainsa)</i>	mubwela	noun (farming related)
239. late cassava farming	<i>tuute (mupepo)</i>	inkanshi	noun (farming related)
240. finger	<i>umunwe</i>	umunwi	noun (body part related)
241. jealous	<i>ubufuba</i>	ubukwa	adjective
242. leg	<i>ukuulu</i>	imyendo	noun (body part related)
243. cassava	<i>icimuti ca tuute</i>	ulutoto	noun (agriculture related)
244. waist (for animal)	<i>umusana</i>	ubukome	noun (body part related)
245. groundnuts	<i>imbalala</i>	imbarara	noun (agriculture related)
246. maize	<i>amataba</i>	amataba	noun (agriculture related)
247. plant/grow	<i>byala</i>	rimbika	verb (agriculture related)
248. weed	<i>sekwila</i>	sekwira	verb (agriculture related)
249. beans	<i>cilemba</i>	ciremba	noun (agriculture related)

250. catfish	<i>umulonge</i>	umuta	noun (fishing related term)
251. replant	<i>ukubyalulula</i>	ukurimburura	verb (agriculture related)
252.harvest	<i>sombola</i>	sombora	verb (agriculture related)
253. duck	<i>icibata</i>	imbata	noun (domesticated bird)
254. I am coming	<i>ndeisa</i>	ndimukwisa	verb
255. long ridge	<i>molwa</i>	morwa	noun (agriculture related)
256. birdlime	<i>ubulimbo</i>	uburisa	noun
257. child (very young)	<i>umwaice</i>	umwanike	noun (kinship related)
258.adult	<i>umukalamba</i>	umukulu	noun (kinship related)
259. it is not fine	<i>takuli bwino</i>	kuberekantu	verb
260. chair	<i>umupando</i>	icipuna	noun (house-hold related)
261. door	<i>iciibi</i>	iciseko	noun (house-hold related)
262. pot	<i>umupika (any)</i>	umwipika (big pot)	noun (house-hold related)
263. broom	<i>icipyango</i>	iceswa	noun (house-hold related)
264. mat (big)	<i>impasa</i>	icisani	noun (house-hold related)
265. cup	<i>kapu</i>	inkapu	noun (house-hold related)
266. head	<i>umutwe</i>	umutwi	noun (body part related)
267. shoulder blade	icipanga	noun (body part related)
268. heat	<i>icibe</i>	icipuki	noun
269. small mat	<i>akapasa</i>	akafwiri	noun (house-hold related)
270. potash	<i>inungo</i>	inambwa	noun (house-hold related)
271. goat	<i>imbushi</i>	sene	noun (domesticated animal related)

272. water channel	<i>umulonga</i>	inkumba	noun (fishing related term)
273. hippo	<i>imfubu</i>	coofwe	noun (animal related term)
274. bag	<i>icoola</i>	icacola (Twa)	noun (house-hold related)
275. frog	<i>icuula</i>	bombwe	noun (animal related term)
276. fruit	<i>icitwalo</i>	icisabo	noun (agriculture related)
277. open dry fish	<i>capatwa</i>	amakumba	noun (fishing related term)
278. boat	<i>icombo</i>	icabu	noun (fishing related term)
279. soap	<i>isopo (loaned)</i>	sabuni	noun (house-hold related)
280. spit	<i>fwisa</i>	fubura	verb
281. very cold	<i>tondolo</i>	subwa	adjective (fishing related)
282. river	<i>umamana</i>	inika	noun (fishing related)
283. we are strong	<i>tulekosa</i>	tukokosa	verb
284. fight	<i>ulubuli</i>	urubo	noun
285. I will cut	<i>ndeputula</i>	nkoputula	verb
286. to be wide	<i>ukufuntuka</i>	ukupabuka	verb (infinitive)
287. we will break	<i>tuletoba</i>	tukotoba	verb (infinitive)
288. they are visting	<i>baleetandala</i>	bakootandala	verb
289. full	<i>sululu</i>	paa	adverb
290. disembark	<i>ikila</i>	nina/patama	verb
291. board	<i>patama</i>	ikila	verb
292. nephew	<i>umwipwa</i>	mwipwa	noun (kinship related)
293. chicken	<i>inkoko</i>	inkoko	noun (domesticated term)

294. axe	<i>isembe</i>	isembe	noun (house-hold term)
295. to stretch	<i>ukufungulula</i>	ukutamburura	verb (infinitive)
296. to break the bone	<i>ukufunika</i>	ukukoneka	verb (infinitive)
297. wash	<i>samfya</i>	suka	verb
298. to slip from hands	<i>ukufyombotoka</i>	ukufyompomoka	verb (infinitive)
299. to go and see	<i>ukulengula</i>	ukurengura	verb (infinitive)
300. to move	<i>ukusesha</i>	ukutesha	verb (infinitive)
301. you will remain	<i>uleshala</i>	ukoshara	verb
302. to catch fish	<i>ukutumpula</i>	ukusakila	verb (infinitive)
304. paddler	<i>coba</i>	coba	noun (fishing related)
305. trader	<i>umusulwishi/umusulushi</i>	umusuru	noun
306. what a child	<i>yangu yu mwana</i>	yangu ngu mwana	interjection
307. to dry (fish)	<i>ukukanika</i>	akukanga	verb (infinitive)
308. slap	<i>ukutoba</i>	ukucensa	verb (infinitive)
309. toe	<i>akakondo</i>	akakumo	noun (body part related)
310. potatoes	<i>ifyumbu</i>	imbwara	noun (agricultural)
311. ridge (round)	<i>uluputa</i>	ulutumba	noun (agricultural)
312. ancestors	<i>ifikolwe</i>	inkonkotera	noun (kinship related)
313. crocodile	<i>ingwena</i>	Icibokoro	noun (animal related)
314. firewood	<i>inkuni</i>	inkuni	noun
315. lukeworm	<i>icifule</i>	icisukutira	adjective
316. board	<i>patuka</i>	seruka	verb

317. person	<i>umuntu</i>	umuntu	noun
318. it is difficult	<i>cashupa</i>	cayafya	verb
319. lizard	<i>mulinso</i>	mandyo	noun
320. to be homesick	<i>fuluka</i>	funsha	verb
321. crow	<i>mwankole</i>	makole	noun
322. to wait	<i>ukulolela</i>	ukurinda	verb
323. may be	<i>nalimo</i>	angu	verb
324. bite intensely	<i>ukusumisha</i>	ukukankura	verb (intensive)
325. you are provoking me	<i>ulentendeka</i>	ukombara	verb
326. bedroom	<i>ubusanshi</i>	inderu	noun (house-hold related)
327. habit of staring at anything	<i>icimpwena</i>	icimpwenya	noun
328. I will finish	<i>nkapwisha</i>	nakupwisha	verb
329. tortoise	<i>fulwe</i>	kwamba/lwiso	noun (animal related)
330. lazy person	<i>umunajani</i>	umufira	noun
331. laziness	<i>ubunajani</i>	ubufira	noun (abstract)
332. to carry	<i>ukuseenda</i>	ukupiita	verb (infinitive)
333. sand	<i>umucanga</i>	umusenga	noun
334. smell of fresh fish	<i>uluce</i>	uluki	noun (fishing related)
335. come from this side	<i>ukufumina uku</i>	Ukutuntukiroku	verb
336. to start/begin	<i>ukutendekako</i>	ukwambako	verb
337. difficultness	<i>ubwafya</i>	uruafyo	noun (abstract)
338. to remove paint	<i>ukupala</i>	ukukwesurura	verb (infinitive)

339. trouble	<i>ubwafya</i>	kabombo	noun
340.	<i>nakalya nshipeye (isabi)</i>	ningo/ninkishi	verb
341. butter system	<i>ukukongweshwa ifipe</i>	amafobo	noun
342. thief	<i>kabolala</i>	pompwe	noun
343. to accuse	<i>ukubepesha</i>	ukufyenga	verb (infinitive)
344. to take care	<i>ukusunga</i>	ukurama	verb (infinitive)
345. to finish	<i>ukupwisha</i>	ukupwirwa	verb (infinitive)
346. be fast	<i>endesha</i>	angufyanya	verb
347. to hear	<i>ukumfwa</i>	ukukutika	verb (infinitive)
348. chitenge	<i>icitenge</i>	icikwembe	noun
349. belt	<i>ilamba</i>	umushipi	noun
350. bend	<i>inshoko</i>	icimfuntu	noun
351. funeral	<i>icililo</i>	amalilo	noun
352. dog	<i>imbwa</i>	kabwasa	noun (domesticated term)
353. mosquitoes	<i>mugwigwi</i>	utusu	noun
354. cassava stem	<i>icimuti catuute</i>	ulutoto	noun (agric. related term)
355. comb	<i>icisakulo</i>	icisatu	noun (house-hold term)
356. mangoes	<i>imyembe</i>	yembe	noun (plant related term)
357. match box	<i>icifwambulo</i>	fulapa	noun (house-hold term)
358. broom	<i>icipyango</i>	iceswanoun	(house-hold related)
359. papyrus	<i>uluko</i>	ifishila	noun (plant related term)
360. to save	<i>ukupususha</i>	ukurubura	verb (infinitive)

361. energetic	<i>makamaka</i>	amansukano	noun
362. take/carry	<i>senda</i>	piita	verb
363. beat	<i>uma</i>	puma	verb
364. lies	<i>ubufi</i>	ubukwempe	noun
365. rags	<i>ifisapusha/ifisamu</i>	ifipimpinya	noun (house-hold related term)
367. veranda	<i>ulukungu</i>	ukukoro	noun (house-hold related term)
368. to be talkative	<i>ukulanda landa</i>	ukusosauka/ukusosasosa	verb (infinitive)
369. to chat	<i>ukwisha</i>	ukwambaura	verb (infinitive)
370. to wander	<i>ukupitana</i>	ukupumbura/ukusebela	verb (infinitive)
371. dullness	<i>ukushishita</i>	ubufumfurira	noun (abstract)
372. idiot	<i>icipuba</i>	icipuka	noun
373. brain	<i>tompwe</i>	topolyo	noun (body part related term)
374. to dance	<i>ukucinda</i>	ukushana	verb (infinitive)
375. child	<i>umwana</i>	umwana	noun (kinship related term)
376. mother	<i>bamayo</i>	bamayo	noun (kinship related term)
377. fingers	<i>iminwe</i>	iminwi	noun (body part related term)
378. elbow	<i>uluboyo</i>	imboyo	noun (body part related term)
379. serving spoon	<i>icipamba</i>	icipambalasa	noun (house-hold related term)
380. field	<i>ibala</i>	iconde	noun (agric. related term)
381. old field	<i>icifwani</i>	icilaala	noun (agric. related term)
382. to plant	<i>ukubyala</i>	ukurimba/ukurimbika	verb (infinitive) agric. term
383. pumpkin seeds	<i>impupu</i>	injeli	noun (agric. related term)

384. to cut	<i>ukutema</i>	ukuputura	verb (infinitive)
385. get away (dog)	<i>fuseke</i>	coka/mpeepele tete	interjection
386. fishing basket	<i>ulwanga</i>	musanga	noun (fishing related term)
387. rodent type	<i>ipanga</i>	ingali	noun (animal related term)
388. person	<i>umuntu</i>	umuntu	noun
389. thinness	<i>ukondoloka</i>	imyondo	noun
390. body parts	<i>filundwa</i>	fimamo	noun (body part related term)
391. father to Mutale	<i>Shi Mutale</i>	Nshi Mutale	noun (kinship related term)
392. alight (from tree)	<i>ika</i>	tuuka	verb
393. fermentation point	<i>iciboobo</i>	icabiko	noun
394. quail	<i>akaundu</i>	injundu	noun (animal related term)
395. you have spoken	<i>namusosa</i>	mulyebele	verb
396. bananas	<i>inkonde</i>	maakonde	noun (plant related term)
397. weep	<i>imisowa</i>	inkonde/imiima	noun
398. to plait hair	<i>ukuluka</i>	ukupomba	verb (infinitive)
399. indirection	<i>inshoko</i>	ulubendo	noun (speech related term)
400. grass	<i>icani</i>	lyani	noun (plant related term)
401. good thing	<i>icisuma</i>	cabune	adjective
402. fly	<i>pupuka</i>	pampa	verb
403. to be heavy	<i>ukulema</i>	ukufina	verb (infinitive)
404. to scorch	<i>ukubalisha</i>	ukulula	verb (infinitive)
405. I won't come	<i>nshaiseko</i>	ntaiseko	verb (negation)

406. a light thing	<i>icaanguka</i>	icakwanguka	adjective
407. don't break me	<i>wimfunu</i>	wiisakunkonona	verb
408. hey you	<i>ieye aba</i>	araremba	interjection
409. what then	<i>ninshi kanshi</i>	nindo mba	interrogation
410. I have pleaded with them	<i>mbapapatilefye</i>	mbakonselefyeye	verb
411. bathroom	<i>ulusasa</i>	icowa	noun (house-hold related)
412. spear	<i>ifumo</i>	luso/minkama	noun
413. I will not eat	<i>nshalye</i>	ntakolya/ntalye	verb (negation)
414. I was not eating	<i>nshalelya</i>	ntalikulya	verb (negation)
415. they are not eating	<i>tabaleelya</i>	tabakoolya	verb (negation)
416. those who didn't come	<i>abashaishile</i>	abataishile	verb (negation)
417. those who do not work	<i>abashibomba</i>	abatabomba	verb (negation)
418. those who do not talk	<i>abashilanda</i>	abatalanda	verb (negation)
419. I was not there	<i>nshaliko</i>	ntaliko	verb (negation)
420. I will go	<i>ndeya</i>	nakuya/nkoya	verb
421. myself	<i>inewine</i>	nebowine	reflexive pronoun
422. ourselves	<i>ifwebene</i>	fwebobene	reflexive pronoun
423. yourself	<i>iwewine</i>	webowine	reflexive pronoun
424. yourselves	<i>imwebene</i>	mwebobene	reflexive pronoun
425. themselves	<i>nibene</i>	nibobene	reflexive pronoun
426. him/herself	<i>eowine</i>	niowine	reflexive pronoun
427. itself	<i>ecocine</i>	nicocine	reflexive pronoun

APPENDIX B

INTERVIEW SCHEDULE

Now that you have translated these words from English into Unga dialect, pronounce them for me.

APPENDIX C: LEXIS

AGRICULTURE RELATED TERMS

NO	GLOSS	DIALECT U	DIALECT B
1	Potato vegetable	<i>Karebwe</i>	kalembula
2	Cassava harvested late	<i>Cilaala</i>	cilaalu
3	To harvest maize	<i>Ukukobola</i>	ukusombola
4	Lazy person	<i>Umufira</i>	umunajani
5	Potatoes	<i>Imbwara</i>	ifyumbu
6	Bark of a tree	<i>Icipaapa</i>	icipande
7	To plant	<i>Ukurimbika</i>	ukubyala
8	To replant	<i>Ukurimburura</i>	ukubyalulula
9	Round ridge	<i>Urutumba</i>	uluputa
10	Cassava stem	<i>Ulutoto</i>	Icikonkolo
11	mangoes	<i>Yembe</i>	imyembe
12	Pumpkin seeds	<i>Injeli</i>	impupu

FISHING - RELATED TERMS

NO	GLOSS	DIALECT U	DIALECT B
1	canoe	<i>Ubwange</i>	ubwato
2	fish	<i>Inswi</i>	isabi
3	To seal the leaking canoe	<i>Ukumana</i>	ukushinka
4	Heavy canoe	<i>Umukondo</i>	icato
5	To paddle	<i>Ukushiika</i>	ukooba
6	shore	<i>Kwiswe</i>	icaabu
7	Puddling stick	<i>Icobolo</i>	Inkafi/umubale
8	Fishing hook	<i>Indobani</i>	indobo
9	Fishing line	<i>Ubunyimba</i>	ingoshi
10	Fishing net	<i>Ubukonde</i>	isumbu
11	Water channel	<i>Inkumba</i>	umulonga

12	Bubble fish	<i>Umulomfi</i>	umulonge
13	Open dry fish	<i>Amakumba</i>	capatwa
14	river	<i>Inika</i>	umumana
15	Fishing rope	<i>Intampi</i>	Umwando wa ngoshi
16	helpers	<i>Abaswa</i>	ababomfi
17	Poison from fish	<i>Ifilembe</i>	ubusungu
18	Hoes for fish	<i>Imilindi</i>	Amendo ya isabi
19	Breeding period	<i>Akapalwe</i>	Inshita ya kupaala
20	Cornish jack	<i>Intongo</i>	umulobe

HUMAN BODY PARTS- RELATED TERMS

NO	Gloss	dialect U	dialect B
1	Bone-marrow	<i>Ifuta</i>	Umutoto
2	nose	<i>Impunu</i>	umoonu
3	shoulder	<i>Icipiye/ukubeya</i>	icipeya
4	Knee	<i>Ikonko</i>	ikufi
5	Pubic area	<i>Ibinda</i>	icinena
6	heel	<i>Icishinshili</i>	icishishilo
7	finger	<i>Umunwi</i>	umunwe
8	chest	<i>Intibi</i>	icifuba
9	toe	<i>Akakumo</i>	akakondo
10	waist	<i>Ubukome</i>	umusana

HOUSEHOLD - RELATED TERMS

NO	GLOSS	DIALECT U	DIALECT B
1	broom	<i>Ici-eswa</i>	Ici-pyango
2	Hoe	<i>Ulu-se</i>	Ulu-kasu
3	matchet	<i>Kakwampa</i>	panga
4	plate	<i>In-sani</i>	Im-bale

5	bucket	<i>Icintini</i>	icitini
6	Small mortar	<i>Akaondo</i>	akabende
7	bathroom	<i>Uluba</i>	icoowa
8	Small mat	<i>Akafwiri</i>	akapasa
9	soap	<i>Sabuni</i>	isopo
10	nail	<i>Umusomari</i>	umusumali
11	door	<i>Iciseko</i>	iciibi
12	pot	<i>Umwipika</i>	umupika
13	comb	<i>Icisatu</i>	icisakulo
14	house	<i>Inanda</i>	ijanda
15	bedroom	<i>Indelu</i>	icipinda

KINSHIP - RELATED TERMS

NO	GLOSS	DIALECT U	DIALECT B
1	relative	<i>Bururu</i>	lupwa
2	friend	<i>Bawesu</i>	cibusa
3	Young boy	<i>Umurumbwana</i>	umulumendo
4	The father to Mulenga	<i>NshiMulenga</i>	ShiMulenga

MISCELLANEOUS TERMS

NO	GLOSS	DIALECT U	DIALECT B
1	To carry	<i>Uku-piita</i>	Uku-senda
2	To squeeze	<i>Uku-panika</i>	Uku-tinika
3	To move	<i>Uku-tesha</i>	Uku-sesha
4	birds	<i>i-fyoni</i>	i-fyuni
5	I will go	<i>Na-kuya</i>	n-kaya
6	what	<i>Nindo</i>	ninshi
7	Just like this	<i>Emfimba</i>	eififine
8	To keep	<i>Uku-rama</i>	Uku-sunga

9	those	<i>Ningo</i>	ayo
10	dog	<i>Kabwasa</i>	imbwa
11	Cassava vegetables	<i>Katapa</i>	saasa
12	just	<i>Fe</i>	fye
13	Cry	<i>Umwima</i>	imisowa
14	To seal the leaking canoe	<i>Ukumana</i>	ukushinka
15	heat	<i>Icipuki</i>	icibe
16	board	<i>Ukwicila</i>	ukunina
17	Good person	<i>Wabune</i>	umusuma
18	Citenge material	<i>Icikwembe</i>	icitenge
19	stand	<i>Talama</i>	iminina
20	alight	<i>Ciluka</i>	patuka
21	What type	<i>Musangondo</i>	musangonshi
22	I did not arrive	<i>Ntafikile</i>	nshafikile
23	plait	<i>-pomba</i>	-luka
24	beetle	<i>Teeka</i>	mukunkunya
25	Flying rain insect	<i>Cunika</i>	inswa
26	An idiot	<i>Icipuka</i>	icipuba
27	fog	<i>Umwinga</i>	fubefube
28	tiny	<i>Akantinti</i>	akanono
29	good	<i>Muweme</i>	musuma
30	liar	<i>Incesa</i>	uwabufi
31	heel	<i>Icishinshilo</i>	icitende
32	may be	<i>Angu</i>	nalimo
33	Our place	<i>Kwesu</i>	kumwesu
34	To carry	<i>Ukupiita</i>	ukuseenda
35	sand	<i>Umucanga</i>	umusenga
36	To wander	<i>Ukupumbula</i>	ukupitana
37	rodent	<i>Iseshi/ingali</i>	Ipanga/ifutu
38	python	<i>Ulushishi</i>	ulusato

APPENDIX D

WATER-RELATED SEMANTICS OF UNGA NOUN CLASS SYSTEM

class	prefix	word	gloss	semantic representation
1	mu-	<i>umusuru</i>	fish monger	Water related
2	ba-	<i>abasuru</i>	fishmongers	Water related
3	Mu-	<i>umukondo</i>	Heavy canoe	Water related
4	mi-	<i>imilomfi</i>	Bubble fish	Water related
5	i/ri (i/li)	<i>Iribwe</i> <i>ilibwe</i>	sinker	Water related
6	Ma-	<i>amayungi</i>	Water lilies	Water related
7	ci-	<i>icisasu</i>	a leaking canoe	Water related
8	fi-	<i>ifyoboro</i>	Puddling stick	Water related
9	in-	<i>inswi</i>	fish	Water related
10	in-	<i>intampi</i>	fishing line	Water related
11	uru – ulu-	<i>Iruki/uluki</i>	smell of fresh fish	Water related
12	aka-	<i>akature</i>	fish searcher	Water related
13	utu-	<i>utushipu</i>	fishing hook	Water related
14	ubu-	<i>ubukonde</i>	fishing net	Water related

15	uku-	<i>ukushika</i>	to puddle	Water related
16	pa/mpali	<i>pa cabiko</i>	fermentation point	Water related
17	ku/kuli	<i>kwiswe</i>	to the river	Water related
18	mu/muli	<i>Mu musasula</i>	in a light canoe	Water related

APPENDIX E

MAP OF LUNGA DISTRICT SOURCED FROM CSO