THE PHONOLOGY AND MORPHOLOGY OF ICIBEMBA LOANWORDS FROM ENGLISH

BY

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A Thesis Submitted to the University of Zambia in Fulfilment of the Requirements for the Award of the Degree of Doctor of Philosophy in Linguistic Science

THE UNIVERSITY OF ZAMBIA

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ABSTRACT

This PhD thesis involved conducting a phonological and morphological analysis of loanwords from English into Icibemba, a major language spoken in the Northern, Copperbelt and Luapula provinces of Zambia as well as parts of Muchinga and Central provinces. The main aim of this research was to analyse the phonological and morphological changes that take place to those English words that are incorporated into Icibemba as a result of borrowing. This study was guided by four research objectives: To transcribe, gloss and allocate the loanwords into Icibemba nominal classes by assembling a representative corpus; to describe and compare the segmental phonology and syllable structure of English and Icibemba; to analyze the various phonological processes involved in the adaptation of English loanwords into Icibemba and; to analyze the various morphological processes involved in the adaptation of English loanwords into Icibemba. Data for this research was collected mostly from Kashoki's books. These books put together with Kangwa's (2007) study supplied this research with a robust list of loanwords in the Icibemba grammar. The other portion of data was generated by the researcher, a native and competent speaker who has been exposed to the standard variety of Icibemba, spoken in Kasama, Northern Province of Zambia. In analyzing the findings of this study, for phonology, the research used CV Phonology and Lexical Phonology and Morphology (LPM) was used in analysing morphology. The study essentially used a qualitative method supplemented by quantitative data. It was discovered that in phonology, the repair strategies that apply to these foreign words, among others, included vowel epenthesis, deletion and substitution. Among these strategies, vowel epenthesis was discovered to be one that was usually applied. The high vowels (i and u) played a major role in insertion. Most of the Icibemba loanwords from English were nouns. Adapted words from English are assigned tone when they are incorporated into Icibemba. There are no diphthongs in Icibemba. The English diphthongs coming into the language through loanwords all show a pattern of adaptation similar to the one exhibited by the monophthongs. Like Icibemba nouns, borrowed English nouns were affected by the Bantu class system. Adapted nouns from English acquire augments and prefixes when they are taken over to Icibemba. The class prefix was assigned to adapted nouns in Icibemba on the basis of the initial syllable resemblance to a class prefix, the semantic content of the adapted word and on the basis of the zero prefix in some classes. Another point worth mentioning was that there were no regularities in the patterns of loanword allocation into Icibemba noun classes except that most loans were allocated to class 1a/2a regardless of their meanings. The study also revealed that verb extensions, reduplication, gliding, vowel fusion and resyllabification (a phenomenon that typically characterise Bantu languages) were applied to Icibemba loanwords from English. It was also concluded that usually when a loanword from English contains the environment for a phonological or morphological rule in Icibemba, that rule would apply to the loanword. It is hoped that this study will stimulate further research in the Icibemba loanwords from English in areas of semantics and syntax so as to deepen a phonological and morphological understanding of adaptation. The research has only concentrated on the adaptation of loanwords from English. Icibemba has also borrowed lexical items from other African languages like Kiswahili and Nyanja. It is recommended that further research on how Icibemba adapts words from other languages should be carried out.

Key words: Icibemba, loanwords, English, phonological, morphological, analysis

DEDICATION

This thesis is dedicated to my beloved wife Brenda and the children Chella, Eneya Mutinta and Chipego.

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A Cibemba proverb that says ‘Umunwe umo, tausala inda’ (unity is strength) means that one cannot do anything without the help of other people. Different individuals have assisted me in different ways to make this study a reality. I, therefore, would like to register my heartfelt gratitude to the following people:

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SYMBOLS AND ABBREVIATIONS

[ ]	Phonetic Transcription
//	Phonemic Transcription
σ	Syllable
→	Is Realized as/Changes to
ˈ	Main Stress
ˌ	Secondary Stress
#	A Word Boundary
:	A Vowel or a Consonant Length
>	A Diachronic Change
{ }	Morphemic Boundary
O	Onset
Nu	Nucleis
Cd	Coda
C	Consonant
V	Vowel
NP	Noun Phrase
NS	Noun Stem
LPM	Lexical Phonology and Morphology
ATR	Advanced Tongue Root

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CHAPTER ONE

INTRODUCTION

1.1 Overview

Any existing language is subject to continuous change. This change can influence phonetics, phonology, morphology, syntax and semantics of a given language. These changes usually take place over a period of time, which can be detected by analysing literary records of a language. One of the reasons why languages change is mainly a result of contact with other languages, where words get borrowed from a source language into a target language (Akidah, 2013). The borrowed items, also known as "loanwords" (Swann et al, 2004), have a high tendency to undergo several degrees of integration into the host language.

Factors such as trade, colonisation and religion have contributed significantly to the contact between Icibemba and English. One of the linguistic implications of this contact is the borrowing of a multitude of lexical items from English, a language of European origin. Once integrated into the Icibemba lexicon, the borrowed items undergo many modifications especially at the level of phonology and morphology. The present study sets out to describe the linguistic processes (phonology and morphology) that Icibemba loanwords go through to become part of Icibemba words.

According to Kachru (1994), there are essentially two hypotheses about the motivations for lexical borrowing in languages. One is termed the "deficit hypotheses" and the other one is the "dominance hypothesis." Kachru (1994: 139) says, "The deficit hypothesis presupposes that borrowing entails linguistic gaps in a language and the prime motivation for borrowing is to remedy the linguistic "deficit", especially in the lexical resources of a language." This means that many words are borrowed from other languages because there are no equivalents in a particular borrowing language. For instance, one will need to borrow words when they need to refer to objects, people or creatures which are peculiar to certain places, which do not exist in their own environment and therefore there are no names to refer to those things. Examples of such words are kookaburra (a kind of animal) that English has borrowed from a native

Australian language, Wiradhuri, and chipmunk, from Alqonquian, an Amerindian language. Lexical borrowing also applies to cultural terms relating to food, dress, music, and so on, peculiar to certain groups of people (Mohideen, 2006). English has borrowed musical terms from Italian such as soprano and tempo; culinary terms from French include casserole, fricassée, au gratin, purée and sauté (Jackson, 2002).

Conversely, many other languages have borrowed English words relating to entertainment, sports and words relating to Western culture. Words are also borrowed for new concepts and ideas for which there are no equivalents in the borrowing language. This especially happens when a particular concept is introduced in a particular culture. For example, some mathematical concepts such as algebra and algorithm were originated by the Arabs. This type of borrowing is seen in education and specialized areas as well, (Trask, 1996). In Higa's (1979:378) view, "The ''dominance hypothesis' presupposes that when two cultures meet, the direction of culture learning and subsequent word-borrowing is not mutual, but from the dominant to the subordinate. There is lop-sidedness such that more words go from one side to the other. The borrowing is not essentially done to fill lexical gaps. In this case the source language community has some advantage of power, prestige a nd/or wealth that makes the objects and ideas it brings attractive and useful to the borrowing language community. This is the case in a long-standing socio-cultural interaction between the ruling countries and the countries governed. An example of the dominance hypothesis is when in the past, the English used to borrow manywords from the languages of their colonizers, mainly from French. Later on, when the English became very powerful, they colonized many other countries around the world. The people from these countries borrowed English words into their languages. At present, because the English speaking countries have become advanced, and the English language is one of the most influential languages of the world, English lends words to other languages more than it borrows. This contact between a language and English is termed "Englishization," (Kachru, 1994).

1.2 Background to the Icibemba Language

Bemba, called by its native speakers as Icibemba, is a Bantu language which Guthrie (1948) codes as M42. It is a Central Bantu language. The Bantu language family is a

branch of the Benue-Congo family, which is in turn a branch of the Niger-Congo family, which is also a branch of Niger-Kordofanian (Kashoki and Spitulnik, 1998). It is spoken in the Northern, Copperbelt, Luapula, parts of Muchinga and Central provinces of Zambia. It is also spoken in Southern Democratic Republic of Congo (DRC) and Southern Tanzania.

According to Central Statistics Office of Zambia (2010), Icibemba is a widely used language of communication spoken by 33.5 percent of 13,092,666 people. It is spoken by a higher proportion of the population in five provinces, namely, Central (31.8 percent), Copperbelt (83.9 percent), Luapula (71.3 percent), Muchinga (46.9 percent) and Northern (69.2 percent). Icibemba is the largest ethnic group in Zambia at 21.0 percent.

Icibemba is most closely related to the Bantu languages like Kaonde (in Zambia and DRC), Luba (in DRC), Nsenga and Tonga (in Zambia), and Nyanja/Chewa (in Zambia and Malawi). The principal dialects are, Aushi, Bisa, Chishinga, Kunda, Lala, Lamba, Luunda, Ng'umbo, Swaka, Tabwa, and Unga, (Kashoki and Spitulnik, 1998).

Each of these dialects is distinguished by its association with a distinct ethnic group, culture, and territory of the same name. Each dialect exhibits minor differences of pronunciation and phonology, and very minor differences in morphology and vocabulary. Because Icibemba is such a widely used *lingua franca*, varieties of the language exist in urban areas. Urban varieties exhibit large lexical input from English and have several names, including: chiKopabeeluti [chiCopperbelt], chiTauni [chiTown], and Town Bemba (Kashoki and Spitulnik, 1998).

Historically, the Ababemba people of Zambia came from the Kola region in the Democratic Republic of Congo (DRC, formerly Zaire) and are an offshoot of the ancient Luba Empire. Oral historical accounts vary slightly, but there is general agreement that the Luba immigrants arrived in the high plateau area of north-eastern Zambia (extending from Lake Bangweulu to the Malawi border) during the mid 17th century. Although this area was already settled by agriculturalists, by the end of the 18th century, the Ababemba people had established a powerful kingdom under the central authority of Chitimukulu, the paramount chief. Ababemba reign continued to expand widely throughout north-eastern Zambia up to the end of the 19th century,

when the first European missionaries and entrepreneurs started to vie for power in the area (Kashoki and Spitulnik, 1998).

In present-day Zambia, the word "Icibemba" actually has several meanings. It may designate people of Ababemba origin, regardless of where they live, for instance, whether they live in urban areas or in the original rural Icibemba area. On the other hand, it may encompass a much larger population which includes some eighteen different ethnic groups, who together with the Ababemba form a closely related ethnolinguistic cluster of matrilineal-matrifocal agriculturalists known as the Ababemba-speaking peoples of Zambia (Kashoki and Spitulnik, 1998).

According to Kashoki and Spitulnik (1998), Icibemba was targeted as a major language for the production of religious and educational materials in the early 1900s because of the political importance of the Icibemba kingdom and the extensive reach of the Icibemba language. The missionaries (White Fathers) published the earliest written texts on and in Icibemba, including the first Icibemba grammar in 1907 and the first Icibemba translation of the New Testament in 1923. Icibemba was also selected by the colonial administration as one of the four main indigenous languages (along with Lozi, Nyanja, and Tonga) to be used in education and mass media. With the widespread migration of Ababemba-speaking peoples to the mining areas of the Copperbelt from late 1920s onward, the language's range expanded further. By the late 1940s, Icibemba - and specifically an urban variety called Town Bemba - had become well-established as the lingua franca of the Copperbelt region. Extensive rural-urban migration, inter-ethnic marriage, and the high degree of multilingualism in the country have resulted in a situation where over a quarter of the national population currently speaks Icibemba. Even if Nyanja is still the primary lingua franca of Lusaka, the capital city, Icibemba is spoken widely there as well (Kashoki and Spitulnik, 1998).

The Portuguese and Arab traders were quite active in Ababemba-speaking regions in the early 1800, and because of this, contemporary Icibemba has a number of loanwords from these languages. The past two centuries have seen many Swahili words enter into Icibemba through direct contact with Swahili-speaking peoples and also through Arab and missionary contact. Besides, words originally deriving from Portuguese and Arabic have entered into Icibemba via loans from Swahili. Contact with English-speaking people began to intensify in the late 1880s, and since that time a very large number of

loanwords from English have entered Icibemba. Christian evangelizations and specifically Icibemba Bible translations have also resulted in the incorporation of some Latin words into Icibemba. In addition, Icibemba has incorporated numerous loanwords from Afrikaans and Zulu, via mine workers' pidgins known as Kabanga (Kashoki and Spitulnik, 1998).

Urban varieties of Icibemba reflect the very dynamic language situation in Zambia, where multilingualism is high and where Icibemba exists side-by-side with several other languages, most prominently English and Nyanja. Town Bemba exhibits an extremely high number of linguistic innovations and adoptions from varieties of British English and American English, which enter the Zambian arena primarily through international business and imported media such as television programs and recorded music and cinema.

1.3 Brief History of English Words Borrowed from other Languages

The English language has gone through many periods in which large numbers of words from different languages were borrowed. These periods coincide with times of major cultural contact between English speakers and those speaking other languages. It adopted a vast number of words from various languages during different periods of time which Shen (2009) views as follows:

I. Germanic period (AD200-400): in this period, words were mainly borrowed from Latin.

II. Old English Period (AD600-1100): Latin and Celtic were major sources of borrowed words in this period and thousands of place and river names were given at that time.

III. Middle English Period (AD1100-1500): Scandinavian became one of the major sources of borrowed words in the early period and later French influenced significantly in many aspects of English society, including politics, economy and religion.

IV. Early Modern English Period (AD1500-1650): The effects of the renaissance began to be seriously felt in England. There is a huge influx of Latin and Greek words, but many are borrowings from other languages, such as Arabic.

V. Modern English (AD1650-present): great changes occur in the world. During this period, major colonial expansion, industrial and technological revolution, immigration, cultural contact and exchange, etc occurred.. Major borrowed words in English vocabulary come from French, Spanish, Italian, Dutch, Flemish German…and, Chinese.

1.4 English as a Global Language

The English language has in the past been an enthusiastic borrower of foreign words. Words have often been borrowed into English from more 'prestigious' languages like French and German. Kurath cited in Hill (1968:82) had noted that, "During three hundred years of socially graded bilingualism, vast numbers of French words came to be incorporated into the English vocabulary, not only terms for political, social, and cultural matters – country, city, royal, value, money, society – but also 'homely' words, such as change, move, use, cover, very."

Trask (1996: 18), too, stresses that, 'Well over half the words' in the English language have been borrowed from other languages". However, nowadays, English, and especially the United States' varieties of English, has become more of a lender than a borrower (Nicholls, 2003). Trask (1996:20), too, argues that "English itself has become the most prestigious language on earth, and today English is primarily a donor language." Hoffmann (1994) also stresses that English today is the most prolific 'donor', giving words to most languages in Europe and beyond.

The influence of English has continued through the years with the United States' economic and political power, together with the spread of American pop culture and technology. As Fromkin et al (2003:514) also note, "English is also a lender of copious numbers of words to other languages, especially in the areas of technology, sports, and entertainment". Nicholls (2003) also stressses that, "Nowadays, English words enter the languages of countries worldwide through pop and youth culture, technology (in particular, computers and the internet), the media and advertising, amongst other channels.

1.5 Statement of the Problem

All languages have borrowed and continue to borrow lexical items from other languages (Boen, 2014). These borrowed lexical items have to be integrated into the recipient language through various loanword adaptation processes. Languages have specific phonotactic constraints which control the syllable structures of their words. In this context of borrowing, the Icibemba language often dictates the structure of English loanwords to conform to its syllable structures (Icibemba strucures). To the best of my knowledge, not much detailed analysis has been written on the phonology and morphology of Icibemba loanwords from English. This study then seeks to find out how loanwords from English are phonologically and morphologically integrated into Icibemba language using the tools of CV Phonology and Lexical Phonology and Morphology (LPM) theories.

1.6 Aim of the Study

The main aim of this research is to analyse the phonological and morphological changes that take place to those English words that are incorporated into Icibemba as a result of borrowing. English has phonological inventories and morphological patterns that are different from those of the Icibemba language. Since these two languages are different, the research accounts for how English words are then integrated into Icibemba so that they become recognized in the Icibemba linguistic environment.

1.7 Objectives

This study was guided by the following research objectives:

a. To transcribe, gloss and allocate the loanwords from English into Icibemba nominal classes by assembling a representative corpus;
b. To describe and compare the segmental phonology and syllable structure of English and Icibemba;
c. To analyze the various phonological processes involved in the adaptation of loanwords from English into Icibemba and;

d. d. To analyze the various morphological processes involved in the adaptation of loanwords from English into Icibemba.

1.8 Research Questions

This study has the following research questions:

a. How are loanwords from English transcribed, glossed and allocated into Icibemba nominal classes?

b. What is the difference between the segmental phonology and syllable structure of English and Icibemba?
c. What are the various phonological processes involved in the adaptation of loanwords from English into Icibemba?
d. What are the various morphological processes involved in the adaptation of loanwords from English into Icibemba?

1.9 Significance of the Study

As earlier alluded to, Icibemba has had contact with European, Arabic, and other African languages mainly due to migration, colonial experiences, trade and technological advancements. The effect of languages in contact has raised a lot interest among African as well as non-African linguists as they endeavour to discover how the indigenous languages adapt the new words. Therefore, this study is significant as it will add knowledge to the continuing research on the loanword phenomena in African languages and, in particular, Bantu languages. It is expected that this study on adaptation of Icibemba loanwords from English will be an important source of information on African linguistic studies and will add to scholarly knowledge.

Because borrowing continues to be an important source of new words in Icibemba, it is anticipated that this study will provide valuable information to those who would like to improve on the available Icibemba dictionaries and other books or materials dealing with Icibemba vocabulary. Curriculum developers and teachers of Icibemba may also find the findings of this research valuable as the research has addressed the issue of the ever increasing vocabulary and sound change as a result of borrowing. The study will

also provide useful information to scholars and researchers interested in the phonology of neologisms in Icibemba.

1.10 Scope of the Study

This study examines the phonology and morphology of Icibemba loanwords from English. Although Icibemba has borrowed loanwords from languages like Swahili, Kabanga, Nyanja and many other languages, it is true to say more loanwords have been borrowed from English. Because English is a major donor language to Icibemba, only loanwords from English have been considered in this thesis.

Even though the process of adaptation involves phonology, morphology, semantics, syntax and some aspects of sociolinguistics, this study has limited itself to the phonological and morphological analysis of Icibemba loanwords from English.

Changes in morphology may involve inflections for number and tenses as well as assignment to various word class systems of the recipient language. However, in this study, only morphological changes involving inflections for number and assignment of loanwords to various word class systems were discussed. On the prosodic level, only stress and tone were discussed.

1.11 Theoretical Framework

This section discusses the theoretical framework that guides the researcher in the discussion of findings for this particular thesis, which is the pre-occupation of the proceeding chapters (chapters seven and eight). As Brown (2004:13) says, "Linguistics data can only be analysed logically and orderly by employing a guiding theoretical framework." This means that theoretical framework informs decisions during interrogation of data and above that, it provides with a notation, which guides data presentation. In addition, John (2000:06) says:

> *"Data can be analysed and presented using theories, so as to account for certain language behaviour, using particular notations depending on the nature of the research, since not every theory applies to particular research questions. Sometimes this is determined by what the researcher wants to achieve."*

In analyzing the findings of this study, for phonology, the current research uses CV Phonology and Lexical Phonology and Morphology is used for morphology.

At this point it is important to discuss the term “theory”, for there is no one agreed definition of the term (theory) in the field of linguistics. According to Hadebe (2002:17), “A theory in general can be defined or described as a “body” of fundamental principles underlying a science or the application of scientific ideas that guide processes during data interrogation, allowing repetition in exactly the same way, yielding similar results.”

1.11.1 CV Phonology

CV phonology introduces a new approach to syllable representation minimally extending the hierarchical approach developed by D.Kahn in his MIT dissertation. The theory derives from two earlier studies by G.N. Clements and Samual Jay Keyser: "A Three-tiered Theory of the Syllable, "published in 1981 as Occasional Paper No.19 of the Center for Cognitive Science at MIT, and "The Hierarchical Nature of the Klamath Syllable, "privately circulated in1980.

Amongst the existing theories of syllable structure, the generative CV phonology model of syllable structure, Clements & Keyser (1983) appears to be the most appropriate for this study, because it is the approach that was developed exclusively to deal with the syllable and syllable related processes (Katamba, 1989). What this study proposes to analyze is the operations that English vocabulary items undergo once they enter Icibemba so that there is preservation of Icibemba canonical syllable structure in the new words coming into the language. Therefore, the syllable is the focus of the study. As Clements and Keyser (1983) observed, syllable was an end product component of generative phonology that cannot be simply ignored, since the formulation of many phonological rules is based on the syllable.

CV phonology theory has well-formed expressions. It states that a syllable is a hierarchical unit made up of a three-tiered structure. The first tier consists of a syllable node, the second tier known as the C V tier is made up of C and V elements, and the third tier referred to as the segmental tier consists of consonants and vowels. The CV

tier is also known as the ‘skeletal’ tier or timing ‘tier’ because it determines the timing of the segmental organization and also takes over the role of the syllabic feature in which the syllabic organization is shown by a tree structure which is dominated by the CV tier. This means that elements of the CV-tier are interpreted as corresponding to the timing units of speech production at the sub-syllabic level (Clements & Keyser 1983). Thus, a single unit C represents a single timing unit while a sequence CC represents a double timing unit etc. The relationship between the elements in the three different tiers is specified through the association lines. For instance, in the three- tier presentation, the Icibemba word ‘umutwe’ (head) can be presented as follows:

Figure 1: Three Tier Presentation

Syllable -tier	σ	σ	σ
CV-tier	**C V C**	**C V**	**C V**
Segmental tier	ø o ø	m u	tw e

The Icibemba word ‘umutwe’ can be represented as a three syllable word as illustrated above. In the above presentation, a single syllable node ‘σ’ dominates the C and V units which constitute a syllable. The well-formed strings on each tier consist of concatenations of members of the alphabet defined on that tier. From the above example, the consonants and vowels are mapped to the C and V slots respectively on the segmental tier.

According to Clark and Yallop (1995) a syllable always consists of a vocalic peak which may be accompanied by a consonantal onset or coda. In Icibemba, every syllabic peak is made up of a vowel. However, English syllable peak can either constitute a vowel or a syllabic consonant in words which end in an unstressed syllable containing a nasal or a lateral consonant (Clark and Yallop, 1995).

In CV Phonology, the CV-tier defines the functional positions of peak and non-peak within the syllable. Elements in the CV-tier are grouped into the core syllables corresponding to the core syllable inventory selected by the language in question. Clements and Keyser (1983) tried to solve the syllable boundary ambiguity by formulating the following two principles.

The Onset First Principle states that syllable initial and final consonants are maximized to the extent consistent with the syllable structure conditions of the language in question. This means that in case of ambiguity in the initial consonant cluster of a syllable, the onset must always take the permissible syllable-initial consonant clusters of the language in question. For instance, in English, the word 'extravagant' has ambiguity in the onset of the second syllable. This ambiguity is resolved by syllabifying this word as [ek.stra.va.gant] because the second syllable onset consonant cluster is a permissible cluster in English. They also posit that syllable cluster irregularity should be on the coda rather than on the onset because when assigning consonants to the syllable node we begin with the onset rather than the coda.

CV phonology also captures the special nature of complex segments such as a diphthong which is shown as two vowel qualities functioning as a single vowel spreading over two V positions. It also captures the special nature of a lengthened or geminate consonant which can be presented as a single segment spreading over two C positions. For example, the English word 'brake' pronounced as [breik], the diphthong can be mapped as follows on the CV-tier:

Figure 2: Mapping of Diphthong

C C V C

b r e i k

CV Phonology also characterizes the rules of a particular language which modify the underlying syllable representations and the secondary articulations derived from the underlying adjacent segments are captured by the reallocation of the association lines (Clark and Yallop, 1995). For example, the Icibemba word:

umwana 'baby'

The above word is derived from the underlying form:

umuana

Icibemba phonotactics does not tolerate the vowel sequence [ua]. Therefore, the vowel sequence is modified by insertion of semi vowels [w] between the vowels through glide formation process. This is because Icibemba re-syllabifies some of its vowel sequences

through vowel coalescence which involves collapsing two vowels into a single vowel, deleting vowels or applying glide formation. Thus:

Figure 3: Glide Formation

V C V V C V

u m u a n a u m w a n a

CV Phonology is therefore a universal syllable theory that can be used to analyze and present components of syllable structures of English and Icibemba. This theory will help us understand the re-syllabification processes which loanwords from English undergo in order to fit into the Icibemba syllable structure. The re-syllabification processes will then help us to describe the phonological processes which English loanwords undergo when they are being adapted in Icibemba. Finally, the phonological processes will guide us in the formulation of the phonotactic rules governing the adaptation of Icibemba loanwords from English.

It should be mentioned that other phonological theories could have been employed in this study like the Optimality Theory, Feature Geometry, and Prosodic Morphology. The researcher opted for the CV phonology because it accounts for the phonological structure in a language which is the scope of this research. The CV-tier, an aspect of CV phonology, defines the syllabicity of the onset and marginal elements; hence it captures insightfully the complexities of distinctive features and syllable patterns of words; an important component of this study. Apart from that, CV phonology provides a structural interpretation of phonological changes between the English and Icibemba environments, as it regulates the combination of segments, considering 'prominence factor'. It is enlightening and useful for describing syllable behavior; the major concern of this study. Data presentation is also easy when using the CV rule notation, showing inputs and outputs. It examines various patterns of consonant-vowel combinations, universal principles governing syllable structure or the syllable structure typology. The current researcher focuses on adaptation of Icibemba loanwords from English, mainly at the level of sound, syllable and morpheme, thus the CV-Phonology model was chosen to be the guiding principles in this study.

1.11.2 Lexical Phonology and Morphology (LPM)

Lexical Phonology and Morphology (LPM) grew out of The Sound Pattern of English - SPE hereafter; Chomsky and Halle (1968) as a refinement of the structure of the phonological and the morphological components of the grammar. The roots of Lexical Phonology go back to Kiparsky (1973), Mascaró (1976), Halle (1978), and Rubach (1981). The opening paper for the theory was Kiparsky's (1982) 'From Cyclic to Lexical Phonology'. The lexical framework inspired the research of the 1980s and 1990s.

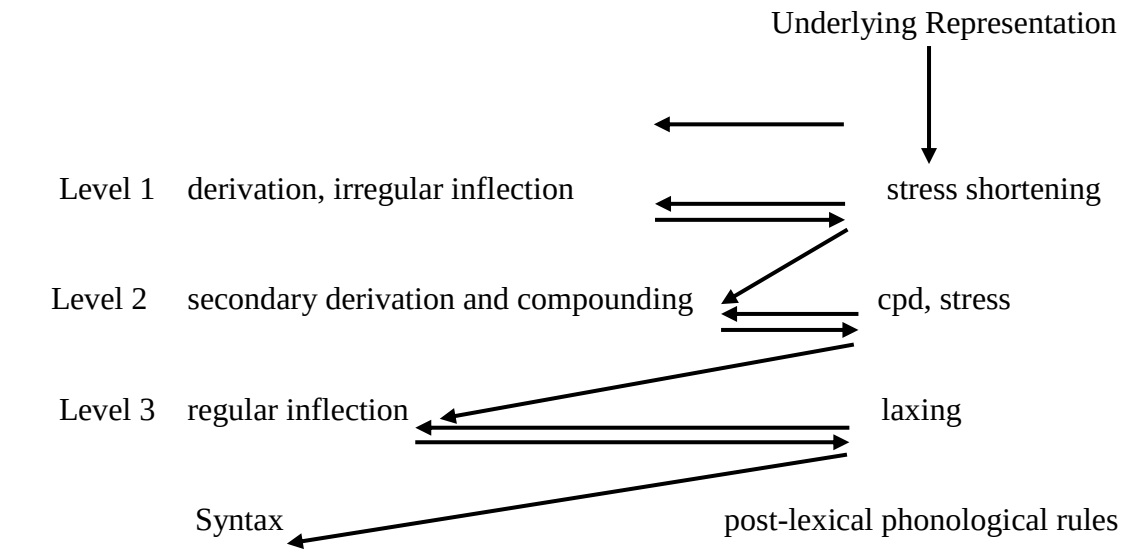
Lexical Phonology is a theory of rules and derivations. It is a theory of rules, because it claims that rules are universally of three types: cyclic rules, postcyclic rules, and postlexical rules. It is a theory of derivations, because it claims that the way in which the derivation is organized is crucial to phonological analysis. In particular, some derivations proceed in steps, called cycles, while others do not. Non-cyclic derivations are of two types: word level derivations and postsyntactic derivations. Lexical Phonology is an extreme embodiment of Chomsky's (1970) lexicalist hypothesis. It is extreme because it claims that all word formation, including inflection, takes place in the lexicon. Furthermore, word formation rules (WFR hereafter) interact with a subset of phonological rules called cyclic rules. This interaction is possible, because cyclic rules, like WFRs, are placed in the lexicon, so they are called lexical rules.

An important feature of this model is that other than the morpheme, it is the word that is regarded as the key unit of morphological analysis. Proponents of this theory claim that there is a symbiotic relationship between the rules that build the morphological structure of a word and phonological rules responsible for the way a word is pronounced. These rules are found in the lexicon where they are organised in blocks called strata which are arranged hierarchically one below the other (Katamba, 1989).

Lexical Phonology and Morphology (LPM) Theory is adopted because it is a general theory that guides word formation. Since the study examines English words in Icibemba, it follows that word formation principles are insightful to account for the various word patterns. It should be mentioned that there are many word-formation theories that could have been adopted to guide this research but the LPM was chosen

because it is explicit on handling phonological and morphological word-building processes. Such a theory can blend very well with the CV theory since they are both generative in approach, and so are empirically adequate for this study. It is also important to mention that during lexical adaptation involving any language, phonological and morphological processes interact, particularly derivatives, Plag (2003). The phonology and morphology interaction is to a certain extent responsible for the deletion and insertion of certain segments on derived words. During adaptation, such behaviours should be accounted for. Morphological adaptation can be best conceptualized in an overall phonology-morphology interaction paradigm (Plag, 2003). This is because word structures are interpreted according to rules of phonology and morphology; thus LPM is insightful in accounting for how word structures in English are changed in the Icibemba linguistic environment. What this means is that phonological rules are triggered only by affixation of particular base words, which applies in a cyclic fashion as shown in Figure 2 below:

Figure 4: Organisation of LPM Model



Adapted from Kiparsky, (2006 p.8)

Each level is associated with a class of phonological rules for which it defines the domain of application. Within the lexicon, the output of a word formation rule is submitted to the phonological rules of that level. In this respect, the rules of lexical phonology are intrinsically cyclic, because they re-apply after each step of word

formation at their level. The rules of postlexical phonology, on the other hand, are intrinsically noncyclic, since they apply after all word formation and syntactic processes. Since the appearance of Kiparsky's paper a number of different models of Lexical Morphology/Phonology have been proposed, making (slightly) different assumptions about the nature of phonological rules or morphological processes or the interaction between the two (e.g. Pulleyblank (1986), Mohanan (1986)). One aspect of the theory which is particularly prone to variation is level ordering e.g. Kiparsky (1985), Halle & Mohanan (1985), Booij & Rubach (1987).

The theory suggests that words are formed following a hierarchical structure and each of these structures is understood by analysing its phonological and morphological constituents. This makes this theory very much relevant in accounting for the morphological changes of Icibemba loanwords from English.

1.12 Definitions of Some Concepts

Overview

In this section, the key concepts used in this study are defined and different approaches to loanwords are briefly sketched in order to situate this study within a broader perspective.

1.12.1 Adaptation

It is a process in which a borrowed linguistic item adjusts to conform to the pattern of the recipient language.

1.12.2 Adoption

It is a process in which a borrowed linguistic item enters into the recipient language with the pattern of the source language. The loanword does not conform to the pattern of the recipient language.

1.12.3 Borrowing

This is a process in which one language takes words from another language and makes them part of its own vocabulary.

1.12.4 Recipient Language/Target Language

It is a language which borrows.

1.12.5 Donor Language/Source Language

This is a language which is borrowed from.

1.12.6 Loanword

It is a lexical item that has been acquired into a language through the borrowing process. A loanword is a word that is used in the receiving language, either with the structure of the lending language or with a modified structure.

1.12.7 Syllable

It is a phonological unit of utterance that constitutes an onset, nucleus and coda. The most important part of the syllable is the nucleus. Every syllable must have a nucleus which can be occupied by either a vowel or a syllabic consonant. The onset and the coda are optional and they are occupied by consonant(s). A syllable does not have any grammatical or semantic function, but it breaks a word into units of utterance of time.

1.12.8 Tier

It is a level of phonological representation in non-linear phonology. It is a plane that displays phonological description in a language, be it tone, syllable structure, stress or segments.

1.12.9 Phonotactic Rules

Phonotactics refers to the sequential arrangements of phonological units which occur in a language. Phonotactic rules are the conditions that permit the formation of well-formed speakers‟ knowledge of what combination of sounds are allowed within a syllable in their language.

1.12.10 Prosthesis

This is a type of epenthesis (an intrusion) where an extra sound is inserted initially in a word.

1.12.11 Anaptyxis

Anaptyxis is a type of epenthesis (an intrusion) where an extra sound is inserted between two consonants.

1.12.12 Paragoge

This is a phonological process where a vowel is added at the end of a word.

1.12.13 Aphaeresis

Aphaeresis is the deletion of an initial segment.

1.12.14 Syncope

This is formative-internal deletion.

1.12.15 Apocope

Apocope is loss of a final element.

1.13 Organisation of the Thesis

This thesis consists of nine chapters.

Chapter one serves as an introduction to the study. It gives a background study of Icibemba language. A brief history of English words borrowed from other languages is discussed. The research problem, aim, objectives and questions are stated. The significance of the study is also outlined. Further, this chapter discusses the theoretical frameworks adopted for this study. For phonology, the adopted theory is CV

Phonology adopted by Clements and Keyser (1983). For morphology, the research adopts Lexical Phonology and Morphology (LPM) theory whose founder is Kiparsky (1973).

Chapter Two presents information on some of the major sociolinguistic concepts and processes.

Chapter Three discusses some related literature on loanwords in different languages, in and outside Africa. The literature shows that loanword adaptation strategies differ from language to language but widely known processes include: vowel epenthesis, segmental substitutions, and deletions.

Chapter Four discusses the methods used in this study.

Chapter Five presents the collected data - one thousand loanwords from the field and secondary sources. Out of these 933 are nouns, 41 are verbs, 21 are adjectives, 4 are interjections, 3are adverbs, 1 particle and 1 is a preposition. Entries for Icibemba are written in the singular form first followed by their plural forms in brackets. The numbers after the brackets shows what type of Icibemba class pair system the loanwords belong to. Next to the numbers are the phonetic forms. For English, the entries are represented in the singular form followed by their phonetic forms. Verbs are written in the infinitive positive with no augment.

Chapter Six presents segmental inventories of the languages under study – English and Icibemba. It outlines the syllable structure patterns available or permitted per language. English syllable structures are rather complex as compared to Icibemba which operates a simple CV syllable pattern. The chapter also discusses tone and stress.

Chapter Seven discusses the phonological adaptation of Icibemba loanwords from English. The main phonological processes used in the adaptation of Icibemba loanwords from English are identified and described in the light of CV phonological theory. In each of the strategies, examples are given to illustrate the patterns observed and generalizations are also be made to describe the processes observed. The analysis of the data reviews the most common strategy used in loanword adaptation in Icibemba.

Chapter Eight discusses the morphological adaptation processes that take place when Icibemba borrows words from English. It undertakes an analysis of some borrowed vocabulary which has been morphologically adapted into Icibemba. In other words, this chapter explores how Icibemba loanwords from English are adapted morphologically into Icibemba language. The main focus is on examining how loanwords are fitted into Icibemba nominal classes through affixation process to enhance communication. Other morphological adaptation processes which are discussed are reclassification, reduplication and verb extensions.

In Chapter Nine, a summary of the findings, conclusions and recommendations are given. The chapter also gives suggestions for areas of further research.

1.14 Chapter Summary

This chapter has given an introduction to the study by giving a background study of Icibemba language. A brief history of English words borrowed from other languages has been discussed. The research problem, aim, objectives and questions have been stated. This study also aims to identify, describe and analyze syllable structure requirements revealing language specific constraints that apply in Icibemba. The significance of the study has also been outlined. Further, this chapter has discussed the theoretical frameworks adopted for this study. For phonology, the adopted theory is CV Phonology adopted by Clements and Keyser (1983). For morphology, the research adopted Lexical Phonology and Morphology (LPM) theory whose founder is Kiparsky (1973). Finally, this chapter has presented the organization of this study.

CHAPTER TWO

CONCEPTUAL FRAMEWORK

2.1 Overview

This chapter presents information on some of the major sociolinguistic concepts and processes in order to provide the contextual framework within which there has been interaction between English and Icibemba.

2.2 Language Contact

This is a term used in sociolinguistics to refer to a situation of geographical continuity or close social proximity (and thus of mutual influence) between languages or dialects. The product of contact situations can be seen linguistically, in the growth of loanwords, patterns of phonological and grammatical change, mixed forms of language (such as creoles and pidgins), and a general increase in bilingualism of various kinds. "In a restricted sense, languages are said to be 'in contact' if they are used alternatively by the same persons, i.e. bilinguals," (Crystal, 2006: 102). In other words, it can be said that any definition of language contact consists of three basic elements, that is: two or more languages, the speakers of these languages, and a socio-cultural setting in which contact takes place.

According to Schendl (2001: 55), "One of the main reasons why languages change is that they come into contact with other languages." This type of linguistic contact normally occurs as a result of social and cultural development between two nations. The degree of mutual influence is given by factors such as the length of the language contact, the extent of the communication between different speech communities and the number and status of the bilingual speakers (Schendl, 2001). Different historical circumstances and the reasons languages come into contact may influence the social aspects of the relationship between two languages and also affect linguistic aspects of a language that are being adopted like syntax, pronunciation, grammar and lexis. This section defines the different types of contact between two languages, focusing on the

influence that such an interaction may have. It further deals with one of the major influences of the language contact – lexical borrowing and adoption of loanwords.

2.3 The Language Contact Patterns

According to Görlach (1997), there are several patterns of language contact. The first pattern is defined by two co-existent spoken languages. This type of contact is mainly of mixed-speech communities and border region areas. Here, transferred words are usually integrated into the donor language. This type of language contact affects common daily life – however, its impact may be restricted only to certain domains.

Distant contact scheme is the second scheme that Görlach mentions. This pattern applies mainly to business relations in which transfer may happen over long distances like importation of foreign goods. In this case, the impact of the language contact is restricted to changes in lexis. It often occurs mainly in written form and does not require bilinguals.

The third type of contact between two languages happens when the contact is restricted to borrowings from book languages. "The transfer is typically based on written forms; words are not well integrated and only a possible later contact with the spoken medium can lead to corrections, especially in pronunciation," (Görlach, 1997: 138).

2.4 Analogy

According to Murray (ND), analogy reflects the speakers' preference for regular patterns over irregular ones. Typically analogy involves the extension or generalization of regularity on the basis of the inference that if elements are alike in some respects, they should be alike in others as well. Both phonological and semantic characteristics can serve as a basis for analogy. For example, on the basis of its phonological similarity with verbs such as *sting/stung* and *swing/swung* , in some dialects *bring* has developed a form *brung* , as in *I brung it into the house* . The effects of analogy can also be observed in the speech of children, who often generalize the regular *-ed* past tense form to produce forms such as *goed* and *knowed*, Murray (ND).

2.5 Reanalysis

Reanalysis is mainly common in morphological change. Morphological reanalysis usually involves an attempt to attribute a compound or root + affix structure to a word that formerly was not broken down into component morphemes, Murray (ND). A typical example in English is the word *hamburger*, which originally referred to a type of meat partly deriving its name from the city of Hamburg in Germany. This word has been reanalyzed as consisting of two components, *ham* + *burger*. The latter morpheme has since appeared in many new forms including *fishburger, chickenburger*, and even as the free morpheme *burger*.

2.6 Bilingualism

Bilingualism is a subject that can be viewed from different perspectives. Many linguists have argued over the decades about the exact definition of bilingualism and their basis of debate mainly focuses on the level of language proficiency. There are two fundamental positions regarding bilingualism. According to Edwards (2006: 7) "The first claims that the majority of people are bilinguals, since they have the ability to use words or phrases of a language other than their mother-tongue without the need to be proficient at it." Haugen and Diebold are proponents of this view. For Haugen (1953:7), "Bilingualism is simply the ability of a speaker to produce meaningful utterances in the second language." On the other hand, Diebold (1964) uses the term "incipient bilingualism" to describe the first stages of language contact. At the other side of the spectrum stands Bloomfield (1933:56) who describes bilingualism as the "native-like control of two languages." Myers-Scotton (2006:44) supports a compromise where bilingualism is treated as ..."the ability to use two or more languages sufficiently to carry on a limited casual conversation." Weinreich (1953:1) does not specify the required degree of proficiency and defines bilingualism as ..."the practice of alternately using two languages." Therefore, it is clear throughout the literature that the majority of scholars argue that a bilingual speaker may not be proficient in both languages, but they are still considered a bilingual.

At this point, it is important to stress the difference between bilingualism and multilingualism which may seem clear, but has been interpreted differently by a

number of linguists and sociologists. Bilingualism refers to the use of two and no more than two languages whereas the term multilingualism is employed to describe the use of more than two languages (Tatsioka, 2010).

One of the primary distinctions between the different types of bilingualism is between societal and individual bilingualism. Societal bilingualism is the existence of two languages in a certain society, whilst individual bilingualism is the ability of a person to use two languages (Tatsioka, 2010). Societal bilingualism is a phenomenon experienced in the majority of societies around the world; however it is essential to distinguish between the different degrees or types of societal bilingualism that communities may present.

2.7 Loanwords/Borrowings

Different definitioens have been provided to describe the true meaning of a loanword or a borrowing. However, the majority of linguists tend to agree that loanwords or borrowings are words which are taken from one language and used by another (Haugen (1950), Thomason & Kaufman (1988), Heath in Methrie (2001) and Myers-Scotton (2006). The words which are borrowed (although "it is more like a kind of stealing," (Haugen, 1953: 363); or a kind of copying, (Trask, 1996: 18); since 'borrowed' words are never 'returned' to the donor language) are called 'borrowings'or 'loanwords.' But many prominent scholars have distinguished between the two terms mentioned above by attributing different characteristics to each one. To cite an example, Haugen defines borrowing as 'the attempted reproduction in one language of patterns previously found in another', (Haugen, 1950: 212) and states that loanwords are only one type of borrowing. Heath in Mesthrie (2001) as well believes that the two terms express different notions and suggests that a borrowing is a stem and not a complete lexical item or in other cases it can be more than that, it can even constitute a full phrase, whereas loanwords are always single words (Heath in Mesthrie, 2001: 432). On the other hand, Myers-Scotton states that both loanwords and borrowings describe the same linguistic function, namely words which are loaned by one language, which is the donor language, to another, which acts as the recipient language.

In addition, it is of vital importance to mention the relation between borrowing and interference. Weinreich (1953) distinguishes between the two and defines interference as 'the re-arrangement of patterns that result from the introduction of foreign elements into the more highly structured domains of language. Besides, he attributes a more complicated meaning to interference and argues that borrowing only refers to the transfer of the lexical item. Mackey also supports this distinction and claims that interference is an individual linguistic phenomenon, whereas borrowing is of a systematic nature (Mackey in Romaine, 1995). However, some scholars have argued in favour of a strong connection between interference and borrowing and have described the latter as 'the incorporation of foreign features into a group's native language by speakers of that language: the native language is maintained but is changed by the addition of incorporated features', (Thomason & Kaufman in Myers-Scotton, 2002: 236). Lastly, it should be stated that due to interference's negative connotations, other terms have also been employed. Clyne (1967) used the term 'transference', a term which has been favoured by a number of researchers in the field of second language acquisition (Clyne in Romaine, 1995). Moreover, Sharwood-Smith and Kellerman (1986) have proposed an alternative term to refer to the act of interference, namely 'cross-linguistic influence', (Romaine, 1995).

The process by which a foreign word becomes a loanword is gradual (Bloomfield, 1933). Proper loanwords are typically regarded as phonologically, morphologically, and grammatically integrated into the host language (Bloomfield, 1933); (Haugen, 1953) and (Sankoff et al., 1990). Fantini (1985) recognizes two levels of borrowing: '…pure' borrowing, where the word retains all its native features, and 'adjusted' borrowing, where the word adapts to the structural criteria of the host language. Bloomfield (1933) and Olmsted (1986) distinguish among three levels of linguistic integration: words used but retaining foreign phonology, words partially integrated into the borrowing language, and words fully integrated and indistinguishable (Andrews, 1999); (Hill and Hill, 1986). "Sometimes a borrowing may never become nativized", (Katamba, 1994: 200) and occasionally the loanword will actually affect the borrowing language itself (Bloomfield, 1933).

For the purposes of the present study, the term ‘loanword’ is used, following Haugen (1950), to refer to bringing a form from the source language into the recipient language.

2.8 Functions of Loanwords

The functions of loanwords and the reasons for borrowing new words are directly connected. There are four main functions of loanwords as mentioned by Görlach (1997):

(i) Loanwords serve to designate foreign objects and concepts for which a descriptive paraphrase would be clumsy or ambiguous.

(ii) They serve to fill lexical gaps for concepts not properly named.

(iii) They contribute to a more precise differentiation.

(iv) They facilitate international communication.

Hoffer (2002) gives the following functions when he discusses loanwods in Japanese:
Loanwords serve various functions apart from the ordinary communication of words and ideas. A new object or activity or idea is borrowed together with the word or words which express it. The most essential function of a loanword is communicating the new object/action/idea. A culture may decide to use its own resources (as in 'fire-horse ' for a steam locomotive) for the new item. In other cases the loanword enters the language and becomes part of the ordinary dictionary. 'Kimono,' 'pizza,' 'beret' and all the several thousands of other loans have as their basic function plain communication of the dictionary meaning of the word or phrase. These new words may enter and remain for centuries, or they may enter for a time and then fall into disuse. Generally, a word must be in use for twenty to twenty-five years before it enters a main dictionary.

Loanwords may serve the function of classifying the speaker as fashionable, as up-to-date. For instance, Japan has borrowed an English word which expresses this function well. 'Now,' as in 'the now generation,' has been borrowed as the adjectival form /naui/ and it refers to being up-to-the-minute in terms of fashion, ideas, and so on. The use of loanwords which are no longer 'now' can mark the speaker as old-fashioned, of the older generation, or so on. Japan first borrowed 'BG' for 'Business Girl,' or a female who worked in an office. In the 1960's this term was superceded by 'OL' for 'Office

Lady,' although members of the older generation may still use the out of date loanword. Currently many words in the high technology field are being borrowed. It is a sign of being up-to-date to be current in recognizing the new words and their reduced forms. Over the past decade or so computer-related words are being generated with high frequency.

In Japan there is a function of loanwords which is related to 'Fashionable ' but in some cases have no meaning of being 'recent.' Miura gives the example of the room or area for preparing food in a Japanese house. The native word /daidokoro/ refers to the traditional space, while the loanword /kicchiN/ refers to the Westernized version of the same space. /kicchiN/ functions to identify the style of the room, the probable style of the house and its occupants. Since there has been a great change in the life-style of Japanese since the reopening of the country to outsiders in 1868, there has been a growing dichotomy between traditional Japan and modern Japan. Words such as /kicchiN/ serve to identify a whole complex of values associated with Westernization. A 'Dining-Kitchen' or 'DK' refers to a room which combines the two functions of food preparation and consumption. The form also indicates that the style of table and so on is probably the Western one, with chairs and appropriate table and so on (Hoffer, 2002).

The secondary function of some loanwords may be that of identifying the speaker's set of values in regard to the topic under discussion (Hoffer, 2002). One function of loanwords is that of acting as a euphemism for a native word or phrase that carries negative connotations. In early English language materials, the word 'die' was often avoided and substitutes were used instead: 'fell', 'left', 'went over', 'crossed to the other side', and so on. Languages can use loans as well for the purpose of communicating an idea while avoiding an unwanted connotation. An example is /toire/ or /toiretto/ from the English 'toilet' to substitute for the various native words for the room. There are many other examples in current use. For example, /meido/ ('maid') rather than the native /jochuu/ is the preferred term for those working for foreign families; the native word is seen as one that carries negative connotations. In public transportation and elsewhere, Japan has set aside certain areas and seats for the use of senior citizens, a phrase that is in English a euphemism as well. The phrase that was in use for a number

of years marked the seats is /shirubaa siito/ or 'silver seat,' which identifies perhaps the colour of the hair rather than the advanced age of the person who qualifies to sit in the area.

Another category of the functions of loanwords is that of prestige or elite status. For many centuries in the West, Latin was the language of education and therefore the mark of the learned person. In earlier centuries, for instance, the educated nun was expected to know Latin and French besdes her mother tongue. English still has many examples of the prestige of Latin, especially in written materials, etc. Many Latin or Latin-derived phrases are used in the conversation of learned people, such as inter alia, ex cathedra, and QED In early Japanese history, Chinese was the mark of the educated man or woman and was used in the official documents. The situation of English in Japan is has changed. The use of Icibemba loanwords has come to be a mark of education and prestige. The entrance requirements at many of the top universities require a high level of competence in written English, and so those who are highly educated have a good command of written English. The up-to-date experts use many English words and phrases especially in the high technology fields. In this way, Icibemba loanwords function as prestige markers in terms of education level (Hoffer, 2002).

2.9 The Levels of Language Borrowing

Language influence can be on various levels. Görlach discusses their importance and defines the influence of these levels (Görlach, 1997: 143-6).

In the first level, a language can be modified at a writing system and spelling system. A good example of such modifications is the Latin-English relations. Latin provided Old English with Latin alphabet mainly determining the value of individual graphemes by Latin conventions. Besides, individual words were affected when spelling and pronunciation had separated from those of the etymon, in particular where spellings were made to conform to those of the original Latin or Greek by Renaissance grammarians.

Phonology is the second level of influence. Obviously, the process of phonetic adaptation of loanwords can be quite complex. In addition, this level of influence is sociolinguistically important, because knowledge of the foreign language affects the pronunciation of loanwords in the receiving language.

Another field where one language can bring about changes in another is morphological level. Görlach here speaks about a need to differentiate between open and closed sets of words. The borrowing from open sets (lexemes) is more common than borrowing from closed sets.

Another level that can be affected during the process of borrowing is syntax. For example, unidiomatic translation or deliberate adoption of foreign syntactical patterns can lead to new structures and modifications, like in Renaissance prose, the imitation of Latin structures is particularly apparent and it extends to units far beyond the sentence. Lastly, is the lexical level, which is perharps the most influential and the richest one of all the above mentioned. It is a level which includes adoption of loanwords, loanblends, loanshifts, doublets and calques (Görlach, 1997).

2.10 Loanword Adaptation and Adoption

It is important to make a distinction between the terms adaptation and adoption. Al-Qinai (2001) states that, "The term 'adaptation' as Holden explains, refers to the process in the recipient language of altering the phonological (and at times morphological) make-up of a loanword. 'Adoption' on the other hand, is a term that describes the assimilation into the recipient language of loanwords while preserving their original form and pronunciation as per the donor language.'' It should be mentioned that this thesis deals with adaptation.

2.11 Degree of Adaptation

In his article, Haugen (1950:217) claims that if a loanword is to be incorporated into the new language, it has to fit into its grammatical structure, meaning that "… they must be assigned by the borrower to the various grammatical classes which are distinguished by his own language." The division of loanwords is based on the degree

of their adaptation into the recipient language: unadapted loanwords, partially adapted loanwords and fully adapted loanwords.

2.12 Unadapted Loanwords

Unadapted loanwords maintain their original written form and the pronunciation usually reflects the original as well. However, as Svobodová (1998) says, pronunciation of a single term may differ, either according to the speaker's knowledge of the donor language, or it may be affected by another language known to the speaker. In other words, it can be said that unadapted loanwords are also called adoptives according to the definition above.

2.13 Partially Adapted Loanwords

The study by Rejzek (1993) shows that there is a general tendency to adopt the words in a way that resembles the native words. However, their final forms may show great variability. Variability is generally conditioned by the borrower's knowledge both of the donor and recipient language. Grammatical structures of languages vary and in order to incorporate a word into the structure of the recipient language, certain changes usually need to be done.

2.14 Fully Adapted Loanwords

According to Svobodová (2007:27) "… fully adapted loanwords are a combination of word-forming components of the donor language and components of the recipient language." Their form is indistinguishable from other words in the recipient language and they are no longer felt as foreign, for example in Icibemba, umufoolo "furrow."

2.15 Donor and Recipient Languages

The recipient language is the language that acquires a loanword and donor language is the language that is the source of the loanword. In this case a loanword can be defined as a word that is transferred from a donor language to a recipient language

(Haspelmath, 2003). Thus, in this thesis, English is a donor language and Icibemba is the recipient language.

2.16 What can be Borrowed?

Weinreich (1963) states that a morpheme is more likely to be borrowed because it is less (syntactically) bound. Different studies have shown that content words (nouns, which are the least-bound forms, followed by verbs and adjectives) and interjections are generally borrowed more often than function words, which are in turn borrowed more frequently than inflectional particles (Weinreich, 1963). "Syntax is, generally speaking, the least likely component of language to be borrowed," (Romaine, 1995: 64). "Also, frequently borrowed are brand names, place names, greetings, sayings, slang terms, and expressions," (Fantini, 1985: 152). The types of words that are borrowed tend to be related to the majority culture behind the donor language, because "the less culturally bound an item, the less likely the possibility of a ready synonym in the other language", Fantini (1985: 150). It is important to remember, however, that there are exceptions and counter-examples to all of these generations, and that the motivations for borrowing cannot be wholly generalized (Romaine, 1995).

2.17 Direct and Indirect Borrowing

Katamba (1994) distinguishes between direct and indirect borrowing. Direct borrowing is when the borrowing is transferred directly from A to B. Words borrowed directly undergo less phonological changes from that one transliteration than from the multiple transliterations in indirect borrowing.

Indirect borrowing on the other hand is when language E receives a loan word from language A through language B, C, D, and so on. This distinction of borrowings has been noted by Fromkin et al., (2003: 13) who say "a language may borrow a word directly or indirectly. A direct borrowing means that the borrowed item is a native word in the donor language. For example:

English	Latin
mile	mil

On the other hand, indirect borrowing means that the word is borrowed via another language. For example:

English	Spanish	Arabic
algebra	algbra	algbra

Algebra has been indirectly borrowed from Arabic with Spanish as an intermediary (Hock, 1986).

2.18 Cultural and Core Borrowings

Borrowed elements that fill a lexical gap in the recipient language are called cultural borrowings. In many cases they are introduced along with a new thing and/or a new concept, such as the Icibemba word, fooni “phone” A cultural borrowing is a loanword that is adopted to express a concept which is new to the recipient language speakers' culture. The term is mainly used in Myers-Scotton's work and in work influenced by her. “Cultural borrowings are words that fill gaps in the recipient language's store of words because they stand for objects or concepts new to the language's culture,” (Myers-Scotton, 2006:212).

In contrast, borrowed elements that roughly correspond to elements already existing in the recipient language are called core borrowings or basic vocabulary. In Carol Myers-Scotton's work, a core borrowing is a loanword that was adopted despite the fact that a word for the concept already exists in the recipient language. "Core borrowings are words that duplicate elements that the recipient language already has in its word store. Hock & Joseph (1996:257) had this to say,

> *"From a purely linguistic perspective, the most important fact is that different spheres of the vocabulary are borrowed more easily, others significantly less easily. For instance, the most successful resistance to borrowing is offered by basic vocabulary, words referring to the most essential human activities, needs, etc., such as eat, sleep; moon, rain; do, have, be,..."*

Core borrowings often begin their lives as foreign elements in code-switching, but are gradually felt to be parts of the indigenous language. Cultural borrowings are more common than core borrowings.

2.19 Loan Translation

Loan translation or calques is where the form and meaning of a foreign word, instead of being carried over into the target language, is merely employed as a model for a native creation. Here, the target language substitutes for each of the SL morphemes, the semantically corresponding morphemes in the TL and combining these according to its own native rules of word formation thus in this case, where the choice of the constituent morphs and the constituent elements themselves and the rules governing their combination will be native (Bynon, 1977). As a result, the newly introduced form will be fully motivated for the native speaker as they would make the concepts they introduced very much more accessible to the native speaker than the completely alien forms. Since one of these new words violate the native rules of word formation and they have no formal properties that would distinguish them from genuine native words, it may be difficult to say whether one is dealing with a calque or merely the semantic extension of a pre-existing word. Examples according to Agbedo (2011) include, showgeschaft in German borrowed from English's 'show business', rascal cielos in Spanish from English for the word 'sky scraper.'

2.20 Semantic Extension

Semantic extension or semantic calques is another way in which a foreign concept may be taken into a language by modifying the semantic range of an item of similar meaning in the native vocabulary. Semantic calques may also involve the expanding of the semantic range of a native word to accommodate the new meaning alongside the original one (Asher, 1994), (Bynon, 1997), and (Weinreich, 1963). However, a difficulty may arise here because there is often very little evidence of the exact borrowing meaning of the word in question. An example of semantic extension in Icibemba loanword in Icibemba is *tii* 'tea' (drink made by boiling water on dried leaves of evergreen shrub). In Icibemba, tea has come to mean coffee, cocoa, e.t.c.

2.21 Loan Creations

Loan creation refers to new coinages, which are stimulated not by cultural innovations, but by the need to match designations available in a language of contact (Weinreich,

1963). An example is ‘brandy’ of English which replaces ‘cognac’ of the French origin, (Agbedo, 2011).

2.22 Hybrid Borrowing

Hybrid borrowing is where words borrowed from one source language may be replaced with those borrowed from a successor source language. This occurs especially in third world countries which experienced successive colonial powers. Since the second source language may have many cognates with the previous source language, what results is called hybrid borrowing (Asher and Sympson, 1994).

2.23 Code Switching and Loanwords

The difference between the two linguistic phenomena namely code-switching and loanwords should be made. Before going on to a brief discussion of the most prominent views in the field regarding this subject, it should be mentioned that the terms ‘donor language’ and ‘recipient language’ proposed by Myers-Scotton will be employed. For Myers-Scotton (1993:6), borrowing only refers to lexical items, and she mentions that ‘single occurring … lexemes and single lexical borrowings resemble each other’. Romaine appears uncertain about this distinction and argues that for any word in a bilingual interaction which may be a loanword, it is not certain if it comprises a form of code-switching (Romaine, 1995). Additionally, Poplack, Sankoff and Miller (1988) made a distinction between loanwords that have been established in the recipient language and ‘nonce borrowings’. Nonce borrowings are words that occur singly and that can only be integrated for the time of the conversation (Poplack et al., 1988). The majority of these words belong to the grammatical category of nouns (Myers-Scotton, 2006). Myers-Scotton includes these single-occurring borrowings in the category of code-switching and views them as ‘codeswitched elements in mixed constituents’.

Moreover, she seems to distinguish between established borrowings and code-switching on the grounds that established borrowings are integrated into the word order of the recipient language, whilst code-switching occurrences follow the word order of the donor language (Myers-Scotton, 2006). Poplack (1988: 221) argues in favour of this view and states that, “Apart from the factors of frequency and morphological and

phonological integration, a loanword is distinguished from code-switching because it follows the rules of the recipient language and not of the donor language." However, other linguists claim that code-switching occurrences do not always comply with the word order of the donor language (MacSwan, 2004). Finally, Myers-Scotton argues that cultural borrowings can be introduced into the recipient language through the code-switching occurrences of bilingual speakers. Thus, they are single occurring code-switching forms which can possibly become cultural borrowings (Myers-Scotton, 2002).

Heath (2001) also discusses the distinction between borrowing and code-switching. In the first place, he mentions that the term 'borrowing' does not represent its true sense that is an element which is loaned but then anticipated returning to the donor language. In fact borrowings are not returned to the donor language but become integrated into the recipient language. For Heath the ideal definition of borrowing is 'a historically transferred form, usually a word that has settled comfortably into the target language', whilst code-switching is characterized by spontaneity, complete linguistic influence, internal structure and clear boundaries between the sentences of the two languages. In other words, a word of foreign origin which has been fully integrated into the recipient language and perceived as one of its own is a true borrowing (Heath in Mesthrie, 2001). Nevertheless, Heath too states that the distinction between borrowing and code-switching is difficult. Borrowing and code-switching in some cases resemble each other. Some borrowings have not been fully integrated into the recipient language and are still recognized as foreign. Moreover, some borrowings exist in the form of phrases which strictly follow the structure of the donor language, such as sine qua non.

In contrast, code-switching does not always occur between sentences and can simply consist of foreign words or phrases which are included into a fully unaffected syntactic structure of a language. In order to deal with these overlapping situations some linguistics have suggested the term code-mixing (Heath in Mesthrie, 2001). Finally, Heath suggests that the degree of nativization could be a sufficient factor to make a distinction between borrowings and code-switching, but again the distinction is problematic due to the different linguistic levels that constitute nativization. In the majority of the cases some phonological aspects of the borrowing or the code-switching

phrase can be fully native for the recipient language, but others may still contain elements of the phonology of the donor language (Heath in Mesthrie, 2001: 433).

2.24 Reasons for Borrowing

There are numerous reasons given to explain why languages borrow from one another. Some of these are:-

(i) The prestige motive - Hocket (1958) identifies prestige as one of the reasons for borrowing. His argument is that people are expected to emulate those they admire. The bilingual uses loanwords from a source language as a means of displaying the social status which its knowledge symbolizes. The same motive is advanced by (Weinreich, 1963). On the other hand, the borrower may not really admire the source language but may wish to be identified with them and be treated the same.

(ii) Another variety of prestige is that of wanting to conform to the majority. The source language could be that of the majority, or those in power.

(iii) Pernicious homonymy is another motivation for borrowing. Somehow a word is borrowed from another language to resolve a clash of homonyms (Weinreich ,1963).

(iv) Weinreich also identifies the low frequency for words in a language as another cause for borrowing. He argues that the frequent words come to mind easily and therefore are more stable, while the infrequent words of the vocabulary are, accordingly, less stable and more subject to oblivion and replacement (Weinreich, 1963).

(v) He also identifies the tendency of affective words to lose their expressive force as another reason for borrowing. Weinreich (1963) claims that in some semantic fields like sleeping, talking, beating etc, there is a constant need in many languages for synonyms. Where they are available from another language, they are easily borrowed.

(vi) Weinreich (1963) also identifies another use of lexical borrowing as what he calls "cacophenistic purposes" in slangy speech, because of unfavourable association in the native language.

2.25 Characteristics of Borrowing

It is important to know what happens in the process of borrowing. Aitchison (1991) discusses four characteristics of borrowing. The first is that elements which are easily detached from the donor language and which do not affect the structure of the borrowing language, for instance, vocabulary, are the most easily and commonly taken over. The second characteristic is that adopted words tend to be changed to fit in with the structure of the borrowing language. At the phonological level, Kashoki (1991) calls this process as 'panel beating' foreign sounds in a manner as to be acceptable to speakers of the recipient language. The third characteristic is that a language tends to select, for borrowing, those aspects of the donor language which superficially correspond fairly closely to aspects already in its own. For example, in Icibemba, the voiceless sibilant /s/ is readily borrowed and not the voiced one /z/ because this latter sound is not found in Icibemba. A final characteristic, which is also called ''minimal adjustment'' tendency, is where the borrowing language only makes very small adjustments to the structure of its language at any one time. For example, the /dz/ sound was initially introduced in Town Icibemba and is slowly moving to Rural Icibemba. For example, jaamu "jam", ijaaketi "jacket." In nature, there are no leaps.

2.26 Chapter Summary

This chapter has presented information on some of the major sociolinguistic concepts and processes in order to provide the contextual framework within which there has been interaction between English and Icibemba.

The next chapter discusses a review of some of the available literature which is considered to be of direct relevance to the present study to place the investigation within the context of similar surveys thus enriching it as well as providing a justification for it.

CHAPTER THREE

LITERATURE REVIEW

3.1 Overview

This chapter provides a review of some of the available literature which is considered to be of direct relevance to the present study in order to place the investigation within the context of similar surveys in so doing enriching it in addition to providing a justification for it. A research of this level must relate to existing studies, making reference to literatures and works of notable scholars with similar interests within the same area of study.

3.2 Related Literature

Research on linguistic borrowing and loanword phonology and morphology has continually enjoyed much attention from linguists all over the world. Several studies related to language borrowing have been carried out throughout the last decades. It should, however be noted that most of these studies in the borrowing process present two different trends: Some scholars tend to deal with more sociolinguistic perspective of the process, (Simango, 2000), while, others focus the studies on the phonological processes of the issue, (Gussenhoven & Jacobs, 1998); (Kadenge & Mabugu, 2009). What should be noted nonetheless is that there seems to be an inseparable relation between the two perspectives in regards to the issue of loanword processes, because one can rarely refer to one of the perspectives in isolation without making mention of the other.

In addition, according to Augusto (2012), in relation to those concerned with the phonological view of the borrowing process, scholars tend to address their studies towards two distinct trends as well. Some studies like Gussenhoven and Jacobs (1998) are based on the Optimality Theory, an approach developed by Prince and Smolensky (1993) and McCarthy and Prince (1993), while other researchers such as Kadenge and Mabugu (2009) prefer the generative CV (consonant-vowel) phonology model of

syllable structure, Clements & Keyser (1983); Blevins (1995). The former approach is a constraint based theory, Gussenhoven & Jacobs (1998), whereas the latter is an approach developed to look specifically into syllable related processes, Katamba (1989). In spite of differences between the approaches, researchers using both theories converge in the processes of naturalization of the lexical items in their host languages.

As mentioned earlier in this study, there are different reasons why languages borrow lexical items from others. However, in relation to Bantu languages, language contact mainly between the indigenous Bantu and the colonizers' languages is the main cause of the phenomenon (Simango, 2000); (Kadenge & Mabugu, 2009). In the same way, Icibemba being a Bantu language does not present a different reality. Irrespective of whatever the reasons may be, findings from various researchers reveal that whenever a language borrows words from another language, the loanwords undergo various changes to conform the host language's morphological and phonological structures. Further changes can occur in the use, spelling, as well as meaning, though occasionally, (Gussenhoven & Jacobs, 1998); (Simango, 2000); (Kadenge & Mabugu, 2009).

Language, which is an important tool in human communication and a significant reflection of social development, undergoes changes during the course of their histories. According to Sapir (2001:159), "Languages, like cultures, are rarely sufficient unto themselves. The necessities of intercourse bring the speakers of one language into direct or indirect contact with those of neighboring or culturally dominant languages." Therefore, the result of continuous contact between different speaking communities is that people use each other's words to refer to some particular things, process, or ways of thinking. This kind of using others' languages is called borrowing, which is a natural result of language contact and exerts a profound impact on both vocabulary enrichment and mutual understanding of cultures.

Many scholars have written on loanwords in different languages. These include Mahmood et al., (2011) who investigated the adaptation strategies employed by Punjabi speakers (in Pakistan) in the production of English loanwords. The conclusion in his study is that the process of borrowing is systematic and language-specific. English words are not borrowed simply as they seem to be, the borrowed or loanwords possess

striking phonological features and are simplified according to the phonological and phonotactic constraints of Punjabi. This study is similar to that of Mahmood et al. (2011) in that the focus is on phonology and phonotactic constraints of Icibemba, which is part of the scope of this current study.

The paper by Karũrũ (2013) focuses on the morphological adaptation processes that take place when languages borrow words. It shows that when such processes occur, ease of articulation is achieved by the recipient language and this enables language users to communicate in a manner acceptable to their language. Generally, borrowed words appear as similar as possible to the source words while at the same time adopting the morphology of the recipient language. In all cases however, borrowing denotes language growth which enhances communication and is continuous. His paper argues that although borrowed words are similar to the source words, they morphologically apply strategies that make them have the structure of the recipient language for ease of communication. Such strategies include: prefixation, suffixation, substitution, zero transmorphemisation and substitution of the prefix. To demonstrate this, the paper uses words borrowed from English and Kiswahili into Kikuyu language. This paper is very relevant because the present study also focuses on prefixation, suffixation and substitution as some of the strategies to adapt Icibemba loanwords from English.

Jarrah's (2013) paper investigates Icibemba loanword phonology in Madin Hijazi Arabic (MHA). About two hundred words were analyzed for phonological changes. He argues that adaptation of loanwords runs off the systematic phonetic level of representation of the donor language, taking into account the phonetic cues to phonological categories. He discusess the phonological changes that occur in Icibemba loanwords frequently used by MHD speakers, mostly in syllable structure. MHD speakers rely on those phonological processes like epenthesis, consonant voicing, vowel change and resyllabification in order to maintain the preferred MHD phonological structures. Though Jarrah uses Optimality Theory, his research is very useful because phonological processes such as epenthesis and vowel change have also been discussed in this current research.

Iribemwangi and Karũrũ (2012) explore the various phonological strategies used by the Gĩ-Gĩchũgũ dialect of the Gĩkũyũ language in borrowing words from Kiswahili. To exemplify this, the paper applies the Source-Similarity model. This model exploits loanword specific faithfulness constraints that impose maximal similarity between the perceived source form and its corresponding spoken loanword. Using the same model, their paper shows that Gĩ-Gĩchũgũ uses such strategies as deletion, preservation, substitution as well as importation of consonants. In contrast, the adaptation strategies used for vowels are insertion, preservation, and substitution. These strategies make sure that the borrowed words stay as similar as possible to the source forms. This study is very relevant because deletion, substitution and insertion which have been used have also been used in the current study.

Lai et al (2011) studied the relationship between tone and stress in Cantonese loanwords borrowed from English. They examined tonal patterns of 23 disyllabic and trisyllabic Cantonese loanwords corresponding to English donor words of 20 different stress patterns, and the tonal patterns of 23 unassimilated Cantonese loanwords exhausting the same set of 20 stress patterns. The results reveal that Cantonese loanword syllables corresponding to stressed syllables in the English donor words were assigned high-level tone whereas epenthetic syllables and those corresponding to unstressed syllables were usually assigned low-level or low-falling tone, and high-rising tone for word-final syllables. The relevance of this study is that it discusses the relationship between stress and tone which is also part of the the focus of the current study.

Mwita's paper (2009) analyses Kiswahili loanwords from Arabic using the collection of words in Bosha (1993). He notes that Kiswahili prefers vowel epenthesis to vowel syncope or apocope in the resyllabification of loanwords. His analysis has also shown that Kiswahili has two main epenthetic vowels; /i/ and /u/, which to some extent are contextually predictable. Though Kiswahili is an open syllable language, it has been shown that loanwords have forced it to take up closed syllables so as not to violate the sonority hierarchy within the syllable. It appears that Kiswahili as a borrowing language was at the substratum as compared to the lending languages which were at the superstratum. This made it prestigious to retain the phonotactics of the lending

language. Because of this, although the language has a mechanism of adapting new words, sometimes not all syllables or words are repaired. There is a high level of tolerance. It should also be mentioned that his paper has also shown that Optimality Theory can be effectively used to analyze nativization of loanwords without having to resort to rule based phonology. This has been done by looking at the interplay between faithfulness and markedness in the syllable repair process. This study is relevant because although the current study does not use Optimality Theory, it uses epenthesis as one of the strategies in adapting Icibemba loanwords from English.

Mahlangu's (2007) study on Adoption of loanwords in Ndebele has shown that most of the words adopted from Afrikaans and English have been adapted to the syllable structure of Ndebele. Phonological changes have been made to the syllable structure of adopted words. Words with a syllable structure that is not acceptable in the Ndebele language undergo some form of modification in order to be accepted. Adjustment is made in words which end with a consonant. Words with consonant clusters are often adjusted by means of the insertion of a vowel between the consonants. Except in the case of ideophones, Ndebele does not allow words to end with a consonant. In such cases a vowel is added to the final consonant. Adopted words in Ndebele have also undergone some morphological adjustments. The Afrikaans and English grammatical systems are different from Ndebele. Adopted nouns from these two languages must have prefixes when integrated into the Ndebele grammatical system. With regards to the semantic level, the adopted words from both Afrikaans and English have adapted semantically to Ndebele in different ways. Most of the words have been adapted without any change in meaning. Unlike other sister languages which have borrowed mainly nouns and verbs, Ndebele has gone further to borrow from other word categories including conjunctives, adjectives and adverbs, especially from Afrikaans. The relevance of this study is that, like in Ndebele, consonant clusters and words ending in consonants are not allowed in Icibemba. The adaptation processes applied in both studies are similar.

The study by Kadenge and Mabugu (2009) has demonstrated that the phonological structure of borrowed English words in Shona is adjusted to suit the phonological structure of Shona native phonology. The results of his analysis have shown that Shona

speakers rely on segmental substitution, segmental epenthesis, consonant voicing and resyllabification in order to impose the Shona phonological structure on the borrowed English words. Furthermore, the imposition of phonological adjustments to the English loanwords in Shona results in the creation of the Shona preferred phonological structures such as the minimal disyllabic word, canonical CV syllable structure and acceptable phonotactic constraints. Kadenge's and Mabugu's (2009) study is important in that the phonological structure of Icibemba loanwords from English is adjusted to suit the phonological structure of Icibemba native phonology. Most strategies identified by Kadenge are also used in this study.

Zivenge's (2009) PhD thesis analyzes the phonological and morphological nativisation of English loans in the Tonga language. He opted for the generative phonology (Distinctive Feature and CV phonology) and for morphology he uses (Lexical Phonology and Morphology). The main focus of his study was to try and account for the phonological and morphological behavior and changes that take place in English words that enter into Tonga. Analyzing phonological processes that are employed during nativisation of loanwords means analyzing how Tonga speakers handle aspects of English language such as diphthongs, triphthongs, cluster consonants, CVC syllable structure and sounds in repairing unacceptable sequences in Tonga. The research also accounts for the handling of morphological differences between the two languages. This entails looking at how competence and ordered-rule framework are harmonized by Tonga speakers in repairing conflicting features at the morphological level. The study analyzes the repairing strategies to handle singular and plural noun prefixes, tenses and particles, which are morphological components of words. Zivenge appreciates the fact that the native Tonga speakers have robust intuitions on the proper way to nativise words. His research is relevant to the current one especially in the areas of how Tonga speakers handle aspects of English language such as diphthongs, triphthongs, cluster consonants, CVC syllable structure and sounds in repairing unacceptable sequences.

Owino's (2003) PhD study analyses the Dholuo loanwords derived from English to Swahili. His study examines loanword adaptation at phonemic, phonotactic and prosodic levels. It analyses the strategies that Swahili uses in adopting the foreign phonemes. These include the way foreign consonant and vowel clusters are adapted to

the Dholuo system, how the stress systems in the source language are adapted to the Dholuo tonal pattern is including the Dholuo principles of syllabification. Owino's study is relevant in that he also uses CV phonology and his study employs similar strategies to nativize unnatural, non-canonic syllable structures such as epenthetic vowel insertion, extrasyllabic consonant or vowel deletion, devocalization of unnatural vowel sequences and addition of a final vowel.

Kayigema's (2010) work has discussed and analysed how French and English loanwords have been allocated to key areas of influence and the nominal class system of Kinyarwanda. This study examines how loanwords have been allocated to the noun classes of Kinyarwanda, a Bantu language spoken in Rwanda and beyond its borders. The study mainly focused on morphological and semantic aspects of loanwords from French and English. The study also reveals that most borrowed parts of speech are nouns and verbs, especially because all the languages of the world have the two parts of speech. In addition, they express more concrete realities than adjectives, articles, pronouns, adverbs, prepositions, conjunctions, and interjections. Kayigema observes that as usual, in all language contact situation, words of foreign origin are allocated to the borrowing language system. Loanwords were adapted to fit Kinyarwanda noun class system. The implication is that a loanword may have an augment, a nominal prefix, a stem and suffixes (especially for verbals). Generally, most loanwords take the form of the words of the languages which have hosted them, but with alterations of the original form and meaning of the word. Kayigema'study is relevant when it comes to morphology because the current study has also allocated loanwords to Icibemba noun class system.

Augusto's (2012) paper looks at the rephonologization of Portuguese words in Kimpombo - a variety of Kikongo spoken in Sanza Pombo which is one of the 17 municipalities of the northern Angolan province of Uíge. The main focus the study is on how processes such as vowel and glide epenthesis, as well as vowel deletion conspire to maintain the syllable structure of the receiving language - Kimpombo. The findings of this study reveal that there are four main strategies that Kimpombo utilizes in order to accommodate the new lexical items in the language to its syllable phonological structure. This is done by breaking consonant clusters through epenthetic

vowels, breaking diphthongs and triphthongs and/or vowel sequences either by glide epenthesis or vowel deletion, as well as opening closed syllables by the means of an epenthetic vowel, since the phonological system of the language does not allow complex onsets, codas, and complex syllable nuclei in its phonological structure. These phonological processes are motivated by the fact that the acceptable syllable structure in Kimpombo is of the CV (consonant-vowel) structure. The generative CV phonology model of syllable structure, Clements & Keyser, (1983); Blevins (1995) is applied to analyze the processes. This study is relevant because the four main strategies - breaking consonant clusters through epenthetic vowels, breaking diphthongs and triphthongs and/or vowel sequences either by glide epenthesis or vowel deletion, as well as opening closed syllables by the means of an epenthetic vowel, that Kimpombo utilizes in order to accommodate the new lexical items in the language to its syllable phonological structure are also used in the current study.

The paper by Fossi and Ouafo (2012) discusses cultural and linguistic hybridizations in Cameroon with a focus on Icibemba loanwords in the ngəmba language. The study shows that as a result of contacts between English and ngəmba, many lexical items borrowed from English are transformed so as to suit the linguistic structure in ngəmba. The phonological processes that these loanwords have undergone include cluster simplification, consonant vowel reinterpretation and harmonization of prosody or tones and insertion. As regards morphology, their findings show that the loanwords have undergone the processes of compounding, reduplication, apocopate, syllable elision, derivation and syllable insertion. The results suggest that ngəmba borrows English words from different grammatical classes and modifies the donor words so that they can play the syntactic functions of subject, object and complement in the borrowing language. As for semantic processes, it is found that Icibemba loanwords in ngəmba are affected by narrowing, broadening, semantic shift and loan translations. What makes this study relevant is that cluster simplification, consonant vowel reinterpretation and harmonization of prosody or tones and insertion are also used in the current study.

Boen's (2014) study focuses on the phonological and morphological adaptations of loanwords in Nandi from English and Kiswahili using the theoretical frameworks of Natural Generative Phonology and Generative CV - Phonology. The former has been

used in the explanation of phonological and morphological processes while the latter has been used in the analysis of the syllable structure. In light of this, segmental phonology of Nandi was discussed at length, phonological as well as morphological adaptations of loan words were also examined and finally a summary of the research findings was given. This study found out that various vowel and consonant processes as well as syllable structure adaptation processes were involved in the adaptation of loan words in Nandi from English and Kiswahili. The study found out that Natural Generative Phonology theory was adequate in the analysis and explanation of phonological, as well as morphological processes involved in the adaptation of loan words in Nandi from English and Kiswahili. The relevance of this study is that, like the current study, it has used CV Phonology in the analysis of the syllable structure. In both studies, it was discovered that various vowel and consonant processes and syllable structure adaptation processes were involved in the adaptation of loanwords from English.

Matiki's (2016) study reviews that lexical borrowing is an important aspect of language change. The study of loanwords can give important insights into the cultural and socio-historical circumstances of a language. His paper examines lexical borrowing patterns in Chichewa/Chinyanja. Using data from the Chinyanja monolingual dictionary, the paper attempts to determine the kinds of borrowings that are common, the degree of lexical borrowability, and the common source languages for the loanwords, and how these borrowings compare with borrowing patterns in other languages. The paper also shows that words are borrowed even when native equivalents are available in the target language. This leads to semantic narrowing for some of the words. This study is relevant as the current one has also discussed degree of lexical borrowability and how the borrowings can be compared with borrowing patterns in other languages.

In Zambia, the most extensive publications on loanwords in Zambian languages are Musonda and Kashoki (1982), Kashoki (1977, 1990, 1999 and 2012). Kashoki`s works include the loanwords in CiIcibemba, Cinyanja, Tonga and Silozi. As earlier stated, a good number of loanwords were taken from these publications. This study is an indepth analysis of how loanwords from English are phonologically and morphologically adapted into Icibemba.

Kangwa's (2007) study: *The study of English-derived Loanwords in Icibemba* is not sufficiently detailed in the sense that when analyzing loanwords, the syllable and the phonemes were not dealt with in detail. This is a comprehensive study that includes the syllable, the consonants and vowels of both English and Icibemba.

There are many factors that have been responsible for the preeminence of English in Zambia. English is an indispensable factor in the market economy and in mainstream society. It is the official language and a compulsory school subject at every level of education. It is the language of both print and electronic media. Colonisation also contributed greatly in the imposition of English on the Icibemba people. The use of English in education and administration became a benchmark for inclusion and exclusion.

The other factor was the missionary activities. In the Icibemba- speaking areas of Northern Province, the Roman Catholic White Fathers undertook manymissionary activities. Some of the mission churches rejected Icibemba names in baptism and compelled converts to adopt English, Biblical or baptismal names, thus condemning the people's indigenous names as "fetish", (Mensah and Mensah, 2014). Through their evangelization, the Icibembas borrowed manychurch vocabulary such as *katoolika* ''catholic'' *ameni* ''amen'' and personal names from the Bible.

3.3 Chapter Summary

This chapter has presented some of the available literature which is considered to be of direct relevance to the present study in order to place the investigation within the context of similar studies thereby enriching it and also providing a justification for it. Literature on loanwords in different languages, in and outside Africa has been discussed. Contributions of loanword phonology and morphology help explain and account for the various phonological and morphological processes employed in remodelling loanwords into native forms suitable and acceptable by receptor languages. The literature reviews that loanword adaptation strategies differ from language to

language but widely known processes include: vowel epenthesis, segmental substitutions, and consonant deletions.

The next chapter (Chapter Four) presents the methodology used to collect and analyse data in order to provide answers to the questions raised in Chapter One of the study. It presents details of research methods, data collection and data analysis.

CHAPTER FOUR

METHODOLOGY

4.1 Overview

The previous chapter presented some of the available literature considered to be of direct relevance to the present study in order to place the investigation within the context of similar studies thereby enriching it and also providing a justification for it. Specifically, it focused on studies on borrowing outside Africa, in Africa and in Zambia.

This chapter presents the research procedures and techniques used in this study in order in order to provide answers to the questions raised in Chapter One. It presents details of research methods, data collection and data analysis. The work discusses and shows that words from English have been borrowed and adapted to Icibemba. The study essentially used a qualitative method supplemented by quantitative data.

4.2 Meaning of Research

In common phraseology, research refers to a search for knowledge. Research can also be defined as a scientific and systematic search for pertinent information on a specific topic. Actually, research is an art of scientific investigation. The Advanced Learner's Dictionary of Current English (1952:1069) lays down the meaning of research as "a careful investigation or inquiry especially through search for new facts in any branch of knowledge." Redman and Mory (1923:10) define research as a "systematized effort to gain new knowledge." Slesinger and Stephenson (1930) in the Encyclopaedia of Social Sciences define research as "the manipulation of things, concepts or symbols for the purpose of generalising to extend, correct or verify knowledge, whether that knowledge aids in construction of theory or in the practice of an art." Some people consider research as a movement, a movement from the known to the unknown. It is actually a voyage of discovery. We all possess the vital instinct of inquisitiveness for, when the unknown confronts us, we wonder and our inquisitiveness make us probe and attain full

and fuller understanding of the unknown (Konthari, 1990). This inquisitiveness is the mother of all knowledge and the method, which man employs for obtaining the knowledge of whatever the unknown, can be termed as research. Thus, research is an original contribution to the existing stock of knowledge making for its advancement. It is the persuit of truth with the help of study, observation, comparison and experiment. In short, the search for knowledge through objective and systematic method of finding solution to a problem is research. The systematic approach concerning generalisation and the formulation of a theory is also research. As such the term 'research' refers to the systematic method consisting of enunciating the problem, formulating a hypothesis, collecting the facts or data, analysing the facts and reaching certain conclusions either in the form of solutions(s) towards the concerned problem or in certain generalisations for some theoretical formulation (Konthari, 1990).

4.3 Objectives of Research

The purpose of research is to discover answers to questions through the application of scientific procedures. The main aim of research is to find out the truth which is hidden and which has not yet been discovered.

4.4 Significance of Research

"All progress is born of inquiry. Doubt is often better than overconfidence, for it leads to inquiry, and inquiry leads to invention" is a famous Hudson Maxim in context of which the significance of research can well be understood (Konthari, 1990). Increased amounts of research make progress possible. Thus, research is the fountain of knowledge for the sake of knowledge and an important source of providing guidelines for solving different business, governmental and social problems. It is a sort of formal training which enables one to understand the new developments in one's field in a better way (Konthari, 1990).

There are varieties of ways through which research is classified into different categories. On the basis of nature of information, research is classified into two types: Qualitative and Quantitative research.

4.5 Qualitative Method

There is no universally agreed definition of qualitative research. In the literature of social sciences and applied professional fields, such terms as interpretive, naturalistic, constructivist, ethnographic, and fieldwork are variously employed to designate the broad collection of approaches that we simply call qualitative research (Locke et al., 2000). It is data that is not in the form of numbers. Qualitative research is an inductive approach, and its goal is to gain a deeper understanding of a person's or group's experience. According to Morrison (1989), qualitative approach is a descriptive research tradition for things that cannot be instrumentally measured, such as feelings, behaviour, speech, thoughts and culture.

This research used a qualitative descriptive method because all of the data that are analyzed in this research are presented in the form of words and sentences not in numbers. Denzin and Lincoln (1998) explain that qualitative research uses a variety of qualitative inquiry in collecting the data (such as observation, documenting, narrating, publishing text, etc). This is what this research mainly uses.

4.6 Quantitative Method

This kind of research is the time honored scientific method. It is about prediction, generalizing a sample to a bigger group of subjects, and using numbers and percentages to prove or disprove a hypothesis. For a typical study using quantitative methods, researchers tend to draw a sample of persons at random from a broader population, if possible (York, 1998). This method uses strict control of variables and the focus is on static reality. The researchers are interested in generating data from a large sample of study subjects so they can generalize the conclusion to others (York, 1998). Quantitative research uses data that are structured in the form of numbers or that can be immediately transported into numbers (Ross, 1999). It is a very controlled, exact approach to research.

This method was used for collection of data. Collected data from various sources were quantified. A corpus of 1000 loanwords was used in this study. This method was also

used to find out which word class borrowed more loanwords than others and which Icibemba class pairing borrowed more than other pairs.

4.7 Data Collection

Data collection or gathering is defined by Chevalky (2001), as the different ways through which research data is derived from society, the people. Data for this research was collected mostly from Kashoki's books. As Ritchie and Lewis (2003) suggest, if literature is available and relevant, researchers should consider using such data, if it can be accessed. 'Town Icibemba: A Sketch of its Main Characteristics' (1977) 'Sources and Patterns of words Adoption in Icibemba' (1990) and Keeping In Step With Modern Times (2012) were used to generate lexical examples of borrowings. These books put together with Kangwa's (2007) study supply this research with a robust list of loanwords in the Icibemba grammar.

The primary source of the data collected through observation and participation was mainly through various natural, everyday conversations. In this study the researcher managed to attend and observe a total of twelve church services on varying dates. The churches included SDA, United Church of Zambia, Catholic and some Pentecostal. The services were conducted in Icibemba or involved English-Icibemba interpretation. Cases of loanwords from English were noted down. The social gatherings that the researcher attended and collected English loanwords included four church weddings and five funerals. A total of four political meetings were attended. The researcher listened to various speakers who used Icibemba and noted down various English loanwords such speakers used. The researcher would join friends and relatives in spontaneous conversations and make mental or discreet note of loanwords used while speaking in Icibemba. Other situations included school and village meetings conducted in Icibemba language.

The media also played a significant role in data collection. Nowadays in Zambia there are many vernacular radio stations that broadcast in standard local languages. Radio Mano in Kasama provided data for this research. The 'Chintobentobe' programme on

Zambia National Broadcasting Corporation also provided valuable data for this research.

Icibemba Bible, Bible literature, school textbooks and commercial posters were also useful in data collection.

Apart from observation and participation, the researcher's intuition was also useful in analysis of such data. It sometimes became necessary in the course of this study for the researcher who is a competent speaker of Bemba to use intuition. This included instances which involved differentiating between native Bemba words and words borrowed from English.

4.8 Data Analysis

Once new vocabulary items enter the language, the host language does not play a passive role by accepting these words entirely as they are in the source language. As Simango (2000) puts it, "The recipient language is not a passive participant in the borrowing processes". The new items entering the language undergo several kinds of operations to fit the morphological and phonological structures in addition to many other requirements of the host language. These changes can lead the borrowed items to undertake different phonological, morphological, and sometimes even semantic and cultural forms (Simango, 2000). Therefore, as a host language, Icibemba adapts the loanwords to its phonological and morphological systems, as a result of the speakers' interpretation "of the pronunciation of the words of the foreign language in terms of the phonological elements of their own", (Gussenhoven & Jacobs, 1998). To maintain its syllable structure, Icibemba uses vowel insertion, vowel deletion, and consonant deletion to suit the segment strings to its structure. In some items, however, more than one strategy is applied.

The collected Icibemba loanwords were transcribed and glossed at the same time. In this study, phonemic transcription was used to capture both the phonological structure of English words in their native phonology and their realization when borrowed into Icibemba. This means slash brackets were used to capture the English pronunciation and the corresponding Icibemba pronunciation.

The CV Phonology theory was used to analyse phonology while Lexical Phonology and Morphology (LPM) theory was used for morphology. All the Icibemba loanwords (nouns) were allocated to Icibemba noun class in order for them to be adapted into Icibemba language. This was done because all the words in Icibemba are assigned to a class. The major focus is on examining how loanwords are fitted into Icibemba nominal classes through the affixation process. The morphological processes discussed are prefixation, substitution and suffixation.

4.9 Chapter Summary

This chapter has discussed the methodology used in this study. It has presented the research procedures and techniques used in this study in order in order to provide answers to the questions raised in Chapter One. It has presented details of research methods, data collection and data analysis. This research has basically used qualitative method supplemented by quantitative method. Primary and secondary data was gathered for this study. Finally, the chapter has outlined that CV-Phonology and Lexical Phonology and Morphology tenets were used to analyse data in Chapter Six and Seven.

The next chapter (Chapter Five) presents the collected data both primary and secondary.

CHAPTER FIVE

DATA PRESENTATION

5.1 Overview

The previous chapter dealt with the methodological aspects of the investigation by focusing on the research procedures and techniques which were adopted in order to provide satisfactory answers to the questions raised in Chapter One of this study. In particular, the chapter discussed the type of research this study is, details of research methods, data collection and data analysis.

This chapter presents the collected data - one thousand (1000) loanwords to provide answers to the questions raised in Chapter One of the study – "How are Icibemba loanwords transcribed, glossed and allocated into Icibemba nominal classes?"

The type of Icibemba referred to here is "Central Icibemba" also called Standard Variety (Kashoki, 1968). It is spoken in the rural areas of Kasama, Luwingu, Chinsali and Mporokoso.

Before the publication of *Zambian Languages: Orthography Approved by the Ministry of Education* (1977), previous attempts at orthographic reform had remained sporadic, uncoordinated, and not officially backed. Among the orthographic rules currently officially approved for Icibemba, the most outstanding include:

(a) the use of Roman characters (as shown in the table below);

(b) the symbolization of long vowels with doubled vowel graphemes;

(c) the non-symbolization of tone, despite its semantic functions; and

(d) the adoption of a conjunctive mode of spelling nouns, verbs, adjectives and other grammatical forms which represents them with their bound affixes (e.g. *ífyakulya* 'foodstuffs', consists of *ifi-a-ku-lya* 'things-of-to-eat').

With respect to consonants, the palatoalveolar voiceless affricate [tʃ] is written as *c*, except in the case of proper nouns where it is represented as *ch*. The voiced bilabial

fricative [ß] is represented as *b*, and the velar nasal /ŋ/ as *ng'*, except before [k] and [g] when n is used, as in *íng'andá* 'house', *nkaya* 'I shall go (near future)' and *íngála* 'finger nails'. [ʃ] is represented orthographically as *s* or *sh*, and [ɲ] is represented as *ny*, (Kashoki and Spitulnik, 1998). It is important to mention that all the loanwords in this thesis have been written in the current orthography because (with a few exceptions) there is very little difference between the current orthography and the International Phonetic Alphabet (IPA) spelling. Entries for Icibemba are written in the singular form first followed by their plural forms in brackets. The numbers after the brackets show what type of Icibemba class pair system the loanwords belong to. Next to the numbers are the phonetic forms. For Engilsh, the entries are mostly represented in the singular form followed by their phonetic forms.Verbs are written in the infinitive positive with no augment and prefix e.g. washa – to wash. Below in Table 1 are the Icibemba loanwords derived from English.

Table 1: The Data

SN	LOANWORD	GLOSS
1	aabatwa (baaaabatwa) 1a/2a /ááβatwa/	abattoir /ˈæb.ə.twɑː r /
2	aaba (baaaaba) 1a/2a /ááβa/	harbour /ˈhɑːbə(r)/
3	abu (baaabu)1a/2a /aβu/	hub /hʌb/
4	Aafilika (Aafilika) 9 /ááfilika/	Africa /ˈæfrikə/
5	aakishitenti(baaaakishitenti)1a/2a /áákiʃitenti/	accident /ˈæk.sɪ.d ə nt/
6	aakishoni(baaaakishoni)1a/2a /áákiʃoni/	action /ˈækʃn/
7	Aala 9 /áála/	Allah /ˈælə/
8	Aalabu (amaaalabu) 9a/6 /áálaβu/	Arab /ˈærəb/
9	aaleluuya (baaaaluuja) 1a/2a /ááleluúja/	halleluia /ˈhælɪˊluːjə/
10	Aalishi(baaalishi) 1a/2a /ááliʃi/	Alice /ˈælis/
11	aalufa (baaaalufa) 1a/2a /ááalufa/	alpha /ˈæl.fə/
12	aambulanshi(baaaambulanshi)1a/2a /ááamβulanʃi/	ambulance /ˈæm.bjʊ.ləns/
13	aame (baaaame) 1a/2a /ááame/	army /ˈɑːmi/
14	aandalaweya(baaaandalaweya)1a/2a /ááandalaweja/	underwear /ˈʌndəweə(r)/
15	aandapanti(baaandapanti) 1a/2a /ááandapanti/	underpants /ˈʌndəpænts/
16	aandeleti (baaaandeleti) 1a/2a /ááandeleti/	hundred /ˈhʌndrəd/
17	aandiba (baaaandiba) 1a/2a /ááandiβa/	handle bar /ˈhændlbɑː(r)
18	aandibo (baaaandibo) 1a/2a /ááandiβo/	hand ball /ˈhændbɔːl/
19	Aangilikani (baaAangilikani) 1a/2a /ááangilikani/	Anglican /ˈæŋglɪkən/
20	aansa (baaaansa) 1a/2a /ááansa/	answer /ˈɑːnsə(r)/
21	aapa (baaaapa) 1a/2a /ááapa/	upper /ˈʌpə(r)/
22	aapi (baaaapi) 1a/2a /ááapi/	Happy /'hæpɪ/
23	epuloni (baaepuloni) 1a/2a /epuloni/	apron /ˈeɪprən/
24	Aasa (baaaasa) 1a/2a /ááasa/	Arthur /‘aːəa/
25	aasha (baaaasha) 1a/2a /ááʃa/	usher /ˈʌʃə(r)/
26	aashima 9 /ááʃima/	asthma /ˈæsmə/
27	ashipilini (baaaashipilini) 1a/2a /ááʃipilini/	aspirin /ˈæsprin/
28	aashiti 9 /ááʃiti/	acid /ˈæsid/

29	Aatamu (baaaatamu) 1a/2a /áátamu/	Adam /ˈædəm/
30	aawa (baaaawa) 1a/2a /ááwa/	hour /ˈaʊə(r)
31	aishi (aishi) 9 /aiʃi/	ice /aɪs/
32	akaampani (utwaampani) 12/13 /akáámpani/	company /ˈkʌmpəni/
33	akaampu (utwaampu) 12/13 /akaampu/	camp /kæmp/
34	akaauntanti (baaakaauntanti) 1a/2a /akááuntanti/	accountant / əˈkaʊntənt/
35	akaaunti (utwaunti) 12/13 /akááunti/	account /əˈkaʊnt/
36	akalabu (utulabu) 12/13 /akalaβu/	club /klʌb/
37	akaneesala (utuneesala) 12/13 /akanéésala/	razor /ˈreɪzə/
38	akeetulo (utweetulo) 12/13 /akéétulo/	kettle /ˈketl/
39	akeyala (utwejala) 12/13 /akejala/	care of /keə əv/
40	akibiishopu (baaakibiishopu) 1a/2a /akiβiíʃopu/	archbishop /ˌɑːtʃˈˈbɪʃəp/
41	akishiileleta (baakishiileleta) 1a/2a /akiʃíileleta/	accelerator /əkˈseləreitə(r)/
42	akwííti (amaakwííti) 9a/6	acquit /əˈkwit/
43	aláámu (βaaaláámu) 1a/2a	alarm /əˈlɑːm/
44	Alekisaanda (baaalekisaanda) 1a/2a /alekisáánda/	Alexander /æligˈzaːnda/
45	aloo /alóó/ int.	hello /həˊləʊ/
46	Alubati (baaalubati) 1a/2a /aluβati/	Albert /ælbt/
47	ambaasata (baaambaasata) 1a/2a /amβáásata/	ambassador /æmˈbæsədə(r)
48	ambuleela (baaaambuleela) 1a/2a /ambulééla/	umbrella /ʌmˈbrelə/
49	Ameelika 9 /améélika/	America /əˈmerikə/
50	aameeni /aamééni/ int	amen /ɑːˈmen/
51	aandibaaki (baaaandibaaki) 1a/2a /aandiβááki/	hand bag /ˈhændbæg/
52	aantineento /aantinéénto/ adj	antenatal /ˌæntiˈneɪtl/
53	apooshito (baaapooshito) 1a/2a /apóóʃito/	apostle /əˈpɒsl/
54	aposhitooliki /apoʃitóóliki/ adj	apostolic /ˌæp.əˈstɒl.ɪk/
55	aseembuli (baaaseembuli) 1a/2a /aséémbuli/	assembly /əˈsembli/
56	asooti 9 /asóóti/	assault /əˈsɒlt/
57	yuukalishitiya 9 /júúkaliʃitija/	eucharist /ˈjuːkərɪst/
58	yuunifomu (baayuunifomu) 1a/2a	uniform /ˈjuːnɪfɔːm/
59	ateleeshi (baaateleeshi) 1a/2a /atelééʃi/	address /əˈdres/
60	baa (baabaa) 1a/2a /βaa/	bar /baː(r)/
61	baashopu (baabaabashopu) 1a/2a /βááβaʃopu/	barbershop /ˈbaːbəʃɒp/
62	baabokamu (baabaabokamu) 1a/2a /βááβokamu/	bubble gum /ˈbʌblgʌm/
63	baabutishiti (baabaabutishiti) 1a/2a /βááβutiʃiti/	baptist /ˈbæptɪst/
64	baaci (baabaaci) 1a/2a /βaatʃi/	badge /bædʒ/
65	lebela /leβela/ v	/ˈlev. ə l/ to make it level
66	baafwa (baabaafwa) 1a/2a /βááfwa/	bathroom /ˈbaːθruːm/
67	baibo (baabaibo) 1a/2a /βaiβo/	Bible /ˈbaɪbl/
68	baaki (baabaaki) 1a/2a /βaaki/	bag /bæg/

69	baalaki (baabaalaki) 1a/2a /βáálaki/	barracks /ˈbærəks/
70	baluβu (baabalubu) 1a/2a /βaluβu/	bulb /bʌlb/
71	yuuniti (baayuuniti) 1a/2a /júúniti/	unit /ˈjuːnɪt/
72	baandeci (baabaandecii) 1a/2a /βáándetʃi/	bandage /ˈbændɪdʒ/
73	baandi (baabaandi) 1a/2a /βaandi/	band /bænd/
74	baandulo (baabaandulo) 1a/2a /βáándulo/	bundle /ˈbʌndl/
75	baango (baabaango) 1a/2a /βáángo/	bangle /ˈbæŋgl/
76	baanjo (baabaanjo) 1a/2a /βáánjo/	banjo /ˈbændʒəʊ/
77	baanki (baabaanki) 1a/2a /βaanki/	bank /bæŋk/
78	baashi (baabaashi) 1a/2a /βaaʃi/	bass /beɪs/
79	bashi (baabaashi) 1a/2a /βʃi/	bus /bʌs/
80	icitesheni (ifitesheni) 7/8 /itʃiteʃeni/	bus station /bʌs'steɪʃn/
81	baashiketi (baabaashiketi) 1a/2a /βááʃiketi/	basket /ˈbaːskɪt/
82	yuunifeeshiti (baayuunifeeshiti) 1a/2a /juunifééʃiti/	university /ˌjuːˑnɪˈvɜːˑsɪˑti/
83	bashishiitopu (baabashishiitopu) 1a/2a /βaʃiʃíítopu/	bus stop /bʌs'stɒp/
84	baashitati (baabaashitati) 1a/2a /βááʃitati/	bastard /ˈbaːstəd/
85	baata 9 /βááta/	butter /ˈbʌtə(r)/
86	baatili (baabaatili) 1a/2a /βáátili/	battery /ˈbætri/
87	baatoni (baabaatoni) 1a/2a /βáátoni/	baton /ˈbætɒn/
88	baayi bayi (baabaayibayi) 1a/2a /βááji βaji/	bye bye /ˈbai bai/
89	baabutiwaaya(baabaabutiwaaya)1a/2a /βaaβutiwáája/	barbedwire /baːbd ˈwaɪə(r)/
90	baluuni (baabaluuni) 1a/2a /βalúúni/	ballon /bəˈluːn/
91	banaana (baabanaana) 1a/2a /βanáána/	banana /bəˈnaːnə/
92	shimabiishineshi (baashimabiishineshi) 1a/2a /ʃíimaβiʃineʃi/	businessman /ˈbɪzˑnɪsˑmən/
93	yuunyoni (baayuunyoni) 1a/2a /júúnjoni/	union /ˈjuːniən/
94	baatisha /βaatíʃa/ (v)	baptise /bæpˈtaɪz/
95	beebi (baabeebi) 1a/2a /βéeβi/	baby /ˈbeɪbi/
96	beekali (baabeekali) 1a/2a /βéékali/	bakery /ˈbeɪkəri/
97	belu (baabelu) 1a/2a /βelu/	bell /bel/
98	benci (baabenci) 1a/2a /βentʃi/	bench/bentʃ/
99	bendi (baabendi) 1a/2a /βendi/	bend /bend/
100	beeshiki (baabeeshiki) 1a/2a /βéeʃiki/	basic /ˈbeɪsɪk/
101	beti (baabeti) 1a/2a /βeti/	bed /bed/
102	beetiluumu (baabeetiluumu) 1a/2a /βéétiluumu/	bed room /ˈbedruːm/
103	Bíílí (baaBíílí) 1a/2a /βíílí/	Billy /ˈbɪlˑi/
104	bilici (baabilici) 1a/2a /βilitʃi/	bridge /brɪdʒ/
105	biluaasha 9 /βiluááʃa/	bilharzia /bɪlˈhɑːtsiə/
106	Bobo (baaBobo) 1a/2a /βoβo/	Bob /bob/
107	boo (baaboo) 1a/2a /βoo/	bowl /bəʊl/

108	booila (βaabooila) 1a/2a /βóóila/	boiler /ˈbɔɪlə(r)/
109	bookishingˈi 9 /βóókiʃingˈi/	boxing /ˈbɒksɪŋ/
110	boola (baaboola) 1a/2a /βóóla/	ball /bɔːl/
111	booneti (baabooneti) 1a/2a /βóóneti/	bonnet /ˈbɒnɪt/
112	boopointi (baaboopointi) 1a/2a /βóópointi/	ballpoint /ˈbɔːl.pɔɪnt/
113	booshi (baabooshi) 1a/2a /βóóʃi/	boss /bɒs/
114	boota (baaboota) 1a/2a /βóóta/	border /ˈbɔːdə(r)/
115	bootikaati (baabootikaati) 1a/2a /βóótikaati/	bodyguard /ˈbɒdigɑːd/
116	boyi (baaboyi) 1a/2a βoji/	boy /bɔɪ/
117	booyifulendi (baabooyifulendi) 1a/2a /βóójifulendi/	boyfriend /ˈbɔɪfrend/
118	boshitoni (baaboshitoni) 1a/2a /βoʃitoni/	Boston /bostn/
119	bootai (baabootai) 1a/2a /βóótai/	bow tie /ˈbəʊˈtaɪ/
120	buukingˈa /βuukingˈa/ (v)	booking /ˈbʊkɪŋ/
121	bulaa (baabulaa) 1a/2a /βulaa/	bra /braː/
122	bulaanci (baabulaanci) 1a/2a /βulaantʃi/	branch /braːntʃ/
123	bulaandi 9 /βulaandi/	brand /brænd/
124	bulaasa (babulaasa) 1a/2a /βuláása/	brother /ˈbrʌθə(r)
125	bulasho (baabulasho) 1a/2a /βulaʃo/	brush /brʌʃ/
126	bulaaki (baabulaaki) 1a/2a /βulaaki/	black /blæk/
127	bulauni 9 /βulauni/	Brown /braʊn/
128	buleeki (amabuleeki) 9a/6 /βuleeki/	brake /breɪk]
129	buleeki (baabuleeki) 1a/2a /βuleeki/	break /breɪk/
130	buleti (baabuleti) 1a/2a /βuleti/	bread /bred/
131	buulu (baaβuulu) 1a/2a /βuulu/	bull /bʊl/
132	buluumu (baabuluumu) 1a/2a /βuluumu/	broom /bruːm/
133	buuca (amabuuca) 9a/6 /βúútʃa/	butchery /ˈbʊtʃəri/
134	buukukeshi (amabuukukeshi) 9a/6 /βúúkukeʃi/	bookcase /ˈbʊkkeɪs/
135	buukushopu (amabuukushopu) 9a/6 /βúúkuʃopu/	bookshop /ˈbʊkʃɒp/
136	bulekifashiti (buleekifashiti) 1a/2a /βuléékifaʃiti/	breakfast /ˈbrekfəst/
137	bulekitauni (baabulekitauni) 1a/2a /βuléékitauni/	breakdown /ˈbreɪkdaʊn/
138	buuleshingi (baabuuleshingi) 1a/2a /βúúlééʃingi/	Blessings /ˈblesɪŋz/
139	inci (baainci) 1a/2a /intʃi/	inch /ɪntʃ/
140	buliikileya (baabuliikileya) 1a/2a /βulíikileja/	bricklayer /ˈbrɪkleɪə(r)
141	buulushiti (baabuulushiti) 1a/2a /βúúluʃiti/	bull shit /ˈbʊlʃɪt/
142	buluuwali [baabuluuwali) 1a/2a /βulúúwali/	brewery /ˈbruːəri/
143	saaca /saaca/ v	Thatcher / θætʃə/
144	buuti (baabuuti) 1a/2a /βuuti/	boot /buːt/
145	biikoni (baabiikoni) 1a/2a /βíikoni/	beacon /ˈbiːkən/
146	biise /βíise/ adj	busy /ˈbɪzi/
147	biishiketi (baabiishiketi) 1a/2a /βíiʃiketi/	biscuit /ˈbɪskɪt/

148	biishineshi (baabishineshi) 1a/2a /βííʃineʃi/	business /ˈbiznəs/
149	biishopu (baabiishopu) 1a/2a /βííʃopu/	bishop /ˈbɪʃəp/
150	iinjini (baaiinjini) 1a/2a /íínjini/	engine /ˈendʒɪn/
151	biyaoolo (baabiyaoolo) 1a/2a /βijaoolo/	beer hall /bɪə hɔ:l/
152	caa (baacaa) 1a/2a /tʃaa/	jar /dʒɑ:(r)
153	caaca (baacaaca) 1a/2a /tʃáátʃa/	charger /ˈtʃɑ:dʒə(r)/
154	caci (baacaci) 1a/2a /tʃatʃi/	judge /dʒʌdʒ/
155	caakipoti (baacaakipoti) 1a/2a /tʃáákipoti/	jackpot /ˈdʒækpɒt/
156	Yaakobo (baaYaakobo) 1a/2a /jáákoβo/	Jacob /ˈdʒækəb/
157	caalici (amacaalici) 9a/6 /tʃaalitʃi/	church /tʃ3:tʃ/
158	Chaaliti (baaChaaliti) 1a/2a /tʃááliti/	Charity /ˈærəti/
159	caampioni (bacaampioni) 1a/2a /tʃáámpjoni/	champion /ˈʃæmpiən/
160	caamu (caamu) 9 /tʃaamu/	jam /dʒæm/
161	caanshi (baacaanshi) 1a/2a /tʃaanʃi/	chance /tʃɑ:ns/
162	Chanyuwale (baacaanyuwale) 1a/2a /tʃáánjuwale/	January /ˈdʒænjuəri/
163	caapelo (baacaapelo) 1a/2a /tʃáápelo/	chapel /ˈtʃæpl/
164	caapita (baacaapita) 1a/2a /tʃáápita/	chapter /ˈtʃæptə(r)/
165	caapuleni (baacaapuleni) 1a/2a /tʃáápuleni/	chaplain /ˈtʃæplɪn/
166	Chaaki (baaChaaki) 1a/2a /tʃááki/	Jack /dʒæk/
167	caki (baacaki) 1a/2a	jug /dʒʌg/
168	ceekapu (baaceekapu) 1a/2a /tʃéékapu/	check up /'chek up/
169	ceke (baaceke) 1a/2a /tʃeke/	jack /dʒæk/
170	ceki (baaceki) 1a/2a /tʃeki/	cheque /tʃek/
171	ceekipointi (baaceekipointi) 1a/2a /tʃéékipointi/	checkpoint /ˈtʃekpɔɪnt/
172	ceeking'a ceetʃéékingˈa (v)	checking /'chekiŋ
173	ceelashi /tʃéélaʃi/ adj	jealousy /ˈdʒeləs/
174	Cheelemani (Cheelemani) 9 /tʃéélemani/	German /ˈdʒɜmən/
175	ceembala (baaceembala) 1a/2a /tʃéémbala/	chamber pot /ˈtʃeɪmbe pot/
176	ceeneleeta (baaceeneleeta) 1a/2a /tʃééneleeta/	generator /ˈdʒenərəɪtə(r)
177	ceeni (baaceeni) 1a/2a /tʃeeni/	chain /tʃeɪn/
178	ceenji (ceenji) 9 /tʃeenji/	change /tʃeɪndʒ/
179	ceentelemani (baaceentelemani) 1a/2a /tʃééntelemani/	gentleman /ˈdʒentlmən/
180	ceesulo (baaceesulo) 1a/2a /tʃéésulo/	chisel /ˈtʃɪzl/
181	ceeyamani (baaceeyamani) 1a/2a /tʃééjamani/	chairman /ˈtʃeəmən/
182	shiteelepa (baashiteelepa) 1a/2a /ʃitéélepa/	stripper /ˈstrɪpə/
183	Chaaneti (baaChaaneti) 1a/2a /tʃaaneti/	Janet /dʒænɪt/
184	Ceoofa 9 /tʃeóófa/	Jehovah /dʒɪˈhəʊvə/
185	shitilaka(baashitilaka) 1a/2a /ʃitilaka/	strike /straɪk/
186	Choo (baaChoo) 1a/2a /tʃoo/	Joe /dʒaʊ/

187	Choosofiini (baaChoosofiini) 1a/2a /tʃóósofiini/	Josephine /ˈdʒəʊzəfiːn/
188	Choyi (baaChoyi) 1a/2a /tʃoji/	Joy /dʒɔ/
189	Chuupita (baaChuupita) 1a/2a /tʃúúpita/	jupiter /ˈdʒuːpita/
190	cini (cini) 9 /tʃini/	gin /dʒɪn/
191	ciinishi (ciinishi) 9 /tʃiiniʃi/	jean /dʒiːn/
192	cinja /tʃĩnja/ (v)	change /tʃeɪndʒ/
193	ciipa /tʃĩípa/ adj	cheap /tʃɪːp/
194	Choci (baaChoci) 1a/2a /tʃotʃi/	George /dʒɔdʒ/
195	coina /tʃoina/ (v)	join /dʒɔɪn/
196	coini (baacoini) 1a/2a /tʃoini/	join /dʒɔɪn/
197	shikweya (baashikweya) 1a/2a	square /skweə/
198	cooko (cooko) 9 /tʃooko/	chalk /tʃɔːk/
199	cookoleti (baacookoleti) 1a/2a /tʃóókoleti/	chocolate /ˈtʃɒklət/
200	Chulaayi (baaChulaayi) 1a/2a /tʃulááji/	July /dʒuˈlaɪ/
201	cuubu (baacuubu) 1a/2a /tʃuuβu/	tube /tjuːb/
202	cuuni (baacuuni) 1a/2a /tʃuuni/	tune /tjuːn/
203	Chuunya (baaChuunya) 1a/2a /tʃúúnja/	Junior /ˈdʒuːniə(r)
204	cuuti (baacuuti) 1a/2a /tʃúúti/	duty /ˈdjuːti/
205	cuuto 9 /tʃúúto/	judo /ˈdʒuːdəʊ/
206	ciiki /tʃĩíki/ adj	cheek /tʃiːk/
207	iciikini (ifiikini) 7/8 /tʃĩíkini/	kitchen /ˈkɪtʃɪn/
208	ciimuni (baaciimuni) 1a/2a /tʃĩímuni/	chimney /ˈtʃɪmni/
209	ciishi 9 /tʃiiʃi/	cheese /tʃiːz/
210	inki 9 /inki/	ink /ɪŋk/
211	Eebele (baaEebele) 1a/2a /éeβele/	Hebrew /ˈhiːbruː/
212	eeka (baaeeka) 1a/2a /éeka/	acre /ˈeikə(r)/
213	iintafyu (baaiintafyu) 1a/2a /íintafju/	interview /ˈɪntəvjuː/
214	Eekita (baeekita) 1a/2a /éekita/	Hector /‘hekta/
215	eekita (baaeekita) 1a/2a /éekita/	hectare /ˈhekteə(r)
216	eelementi (baaeelementi) 1a/2a /éélementi/	helmet /ˈhelmɪt/
217	Eeleeni (baaeeleeni) 1a/2a /éeleeni/	Hellen /ˈheliːn/
218	eelikopita (baaeelikopita) 1a/2a /éélikopita/	helicopter /ˋhelɪkɒptə(r)
219	Eelishi (baaEelishi)1a/2a /éeliʃi/	Ellis /ˈelis/
220	eelya (baaeelya) 1a/2a /éélja/	area /ˈeəriə/
221	eelyo (baaeelyo) 1a/2a /éeljo/	aerial /ˈeərial/
222	eemputi (amaeemputi) 9a/6 /éémputi/	empty /ˈempte/
223	Eeneshiti (baaEeneshiti) 1a/2a /éeneʃiti/	Earnest /ˈɜːˑnɪst/
224	enifuulupu (baaenifuulupu) 1a/2a /enifúúlupu/	envelope /ɪnˈveləp/
225	eeota (baaeeota) 1a/2a /éeota/	elder /ˈel.də r /
226	eepo (amaeepo) 9a/6 /éépo/	apple /ˈæpl/

227	EEpulelo (baaEepulelo) 1a/2a /éépulelo/	April /ˈeɪprəl/
228	Eeselo (baaEeselo) 1a/2a /éése lo/	Hazel / 'heɪzl/
229	Eeteni (Eeten) 9 /ééteni/	Eden /ˈiːdn/
230	eyakani (baaeyakani) 1a/2a /ejakani/	air gun /eə(r) gʌn/
231	ejaloko (ejaloko) 9 /ejaloko/	air lock /ˈeəlɒk/
232	eyapoti (baaeyapoti) 1a/2a /ejapoti/	airport /ˈeəɔ̀pːt/
233	eiti (βaaeiti) 1a/2a /eiti/	eight /eɪt/
234	ekeshi (ekeshi) 9 /ekeʃi/	aids /eidz/
235	ekishipuleeshi (ekishipuleeshi) 9 /ekiʃíípulééʃi/	express /ɪkˈspres/
236	emupii (baaemupii) 1a/2a /emupíí/	mp /ˌemˈpiː/
237	eshiiteti (baaeshiiteti) 1a/2a /eʃííteti/	estate /ɪˈsteɪt/
238	eti (baaeti) 1a/2a /eti/	headmaster /ˈhedˈmɑːstə(r)/
239	faaíleti (baafaaíleti) 1a/2a /fààíleti/	Violet /'vaɪələt/
240	faelo (baafaelo) 1a/2a /faelo	file /faɪl/
241	faakitole (baafaakitole) 1a/2a /fáákitole/	factory /ˈfæktri; təri/
242	faalao (faalao) 9 /fáálao/	Pharaoh /ˈfeərəʊ/
243	faalufu (baafaalufu) 1a/2a /faalufu/	valve /vælv/
244	faani (baafaani) 1a/2a /faani/	fan /fæn/
245	faani (baafaani) 1a/2a /faani/	van /væn/
246	faanishi (faanishi) 9 /fáániʃi/	varnish /ˈvɑːnɪʃ/
247	faasa (baafaasa) 1a/2a /fáása/	Father /ˈfɑːθə(r)
248	faasaliini (faasaliini) 9 /fáásaliini/	vaseline /ˈvæsəliːn/
249	faashoni (baafaashoni) 1a/2a /fááʃoni/	fashion /ˈfæʃn/
250	feebuluwale (baafeebuluwale) 1a/2a /fééβuluwale/	February /ˈfebruəri/
251	fenshi (baafenʃi) 1a/2a /fenʃi/	fence /fens/
252	feeshi (baafeeshi) 1a/2a /feeʃi/	verse /vɜːs/
253	feetulo (feetulo) 9 /féétulo/	federal /ˈfedərəl/
254	fefi (baafefi) 1a/2a /fefi/	faith /feɪθ/
255	feluka /feluka/ (v)	fail /feɪl/
256	feenta /feenta/ (v)	faint /feɪnt/
257	feshiti (baafeshiti) 1a/2a /feʃiti/	vest /vest/
258	Ficiinya (baaFiciinya) 1a/2a /fitʃíínja/	Virginia /vəˈdʒiniə/
259	Fiikita (baaFiikita) 1a/2a /fííkita/	Victor / 'vɪktə/
260	Fioola (baaFioola) 1a/2a /fióóla/	Viola / vɪ'oʊlə/
261	Fikitoolya (baaFikitoolya) 1a/2a /fikitóólja/	Victoria /vɪk'tɔːriə/
262	filici (baafilici) 1a/2a /filitʃi/	fridge /frɪdʒ/
263	folotiiya (baafolotiiya) 1a/2a /folotiija/	volunteer /vɒlən'tɪə/
264	fooka (baafooka) 1a/2a /fooka/	fork /fɔːk/
265	kokokola 9 /kokokola/	coca cola /kəʊk 'kəʊlə/
266	fooloko (baafooloko) 1a/2a /fooloko/	fork /fɔːk/

267	foomu (baafoomu) 1a/2a /foomu/	form /fɔːrm/
268	fooni (baafooni) 1a/2a /fooni/	phone /fəʊn/
269	foonikishi (foonikishi) 9 /fóónikiʃi/	phoenix /ˈfiːnɪks/
270	Fooʃita (baaFooshita) 1a/2a /fóóʃita/	Foster /'fɒs.tə/
271	foosholo (baafoosholo) 1a/2a /fóósholo/	shovel /ˈʃʌvl/
272	fota /fota/ (v)	vote /vəʊt/
273	foote (baafoote) 1a/2a /fóóte/	forty /ˈfɔːti/
274	fulaaki (baafulaaki) 1a/2a /fulaaki/	flag /flæg/
275	fulááwa (fulááwa) 9 /fulááwa/	flour /ˈflaʊə(r)/
276	Fulaanki (baaFulaanki) 1a/2a /fulaanki/	Frank /fræŋk/
277	fulaashiki (baafulaashiki) 1a/2a /fulaaʃiki/	flask /flɑːsk/
278	fuleemu (baafuleemu) 1a/2a /fuleemu/	frame /freɪm/
279	fuleshi (fuleshi) 9 /fuleʃi/	fresh /freʃ/
280	fuloola (baafuloola) 1a/2a /fulóóla/	Flora /‘floːra/
281	fusééki /fusééki/ (v)	forsake /fə´səɪk/
282	fulaaite (baafulaaite) 1a/2a /fulááite/	Friday /ˈfraɪdeɪ/
283	fuloolenshi (βaafuloolenshi) 1a/2a /fulóólenʃi/	Florence /‘florans/
284	fuulu /fuulu/ adj	full /fʊl/
285	fwaamu (baafwaamu) 1a/2a /fwaamu/	farm /faːm/
286	(fa)fwaifi (baa(fa)fwaifi) 1a/2a /fwaifi/	five /faɪv/
287	(fa)fwaundeeshoni 1a/2a (baa(fa)fwaundééshoni	foundation /faʊnˈdeɪʃn/
288	fyeeta (βaafyeeta) 1a/2a /fjééta/	theatre /ˈθɪətə(r)/
289	ibampu (amabampu) 5/6 /iβampu/	bump /bʌmp/
290	ibanshi (amabanshi) 5/6 /iβamʃi/	bun /bʌn/
291	ibaatani (amabaatani) 5/6 /iβáátani/	button /ˈbʌtn/
292	ibeeseni (amabeeseni) 5/6 /iβééseni/	basin /ˈbeɪsn/
293	ibomba (amabomba) 5/6 /iβomba/	bomb /bɒm/
294	iboti (amaboti) 5/6 /iβoti/	boat /bəʊt/
295	ibootolo (amabootolo) 5/6 /iβóótolo/	bottle /ˈbɒtl/
296	ibulaushi (amabulaushi) 5/6 /iβulauʃi/	blouse /blaʊz/
297	ibuliki (amabuliki) 5/6 /iβuliki/	brick /brɪk/
298	ibuku (amabuku) 5/6 /iβuku/	book /bʊk/
299	iceeketi (amaceeketi) 5/6 /itʃééketi/	jacket /ˈdʒækɪt/
300	iceele (ifyeele) 7/8 /itʃeele/	jail /dʒeɪl/
301	cuushi (βaacuushi) 1a/2a /tʃuuʃi/	jersey /ˈdʒɜː.zi/
302	wiilubaala (baawiilubaala) 1a/2a wíílubaala	wheelbarrow /'wiːˈbærəʊ/
303	icintini (ifintini) 7/8 /itʃintini/	tin /tɪn/
304	icisaandulo (ifisaandulo) 7/8 /itʃisáándulo/	saddle /ˈsædl/
305	icitakishi (ifitakishi) 7/8 /itʃitakiʃi/	duck /dʌk/
306	iciteesheni (ifiteesheni) 7/8 /itʃitééʃeni/	station /ˈsteɪʃn/

307	ifiika (amafiika) 5/6 /ifííka/	figure /ˈfɪgə(r)/
308	ifilimu (amafilimu) 5/6 /ifilimu/	film /fɪlm/
309	ikaatani (amakaatani) 5/6 /ikáátani/	curtain /ˈkɜː.t ə n/
310	ik alaashi (amakalaashi) 5/6 /ikalaaʃi/	glass /glɑːs/
311	ikoti (amakoti) 5/6 /ikoti/	coat /kəʊt/
312	ikuluupu (amakuluupu) 5/6 /ikuluupu/	group /gruːp/
313	ilaabishi (amalaabishi) 5/6 /ilááβiʃi/	rubbish /ˈrʌbɪʃ/
314	ilaampi (amalaampi) 5/6 /ilaampi/	lamp /læmp/
315	ilaiti (amalaiti) 5/6 /ilaiti/	light /laɪt/
316	ileekoti (amaleekoti) 5/6 /iléékoti/	record /ˈrekərd/
317	ileemoni (amaleemoni) 5/6 /iléémoni/	lemon /ˈlemən/
318	ilifiti (amalifiti) 5/6 /ilifiti/	lift /lɪft/
319	iloboti (amaloboti) 5/6 /iloβoti/	robot /ˈrəʊbɒt/
320	iloofwa (amaloofwa) 5/6 /ilóófwa/	loafer /ˈləʊfə(r)/
321	imbeeketi 9 /imbééketi/	bucket /ˈbʌkɪt/
322	imbokoshi 9 /imbokoʃi/	box /bɒks/
323	imfeeshi 9 /imfeeʃi/	face /feɪs/
324	imfooma (baaimfooma) 1a/2a /imfóóma/	informer /ɪnˈfɔːmə(r)
325	iminsa 9 /iminsa/	mass /mæs/
326	impaipi 9 /impaipi/	pipe /paɪp/
327	impoto 9 /impoto/	pot /pɒt/
328	imu (baaimu) 1a/2a /imu/	hymn /hɪm/
329	indeleshi 9 /indeleʃi/	dress /dres/
330	indipeendenshi (baaindipeendenshi) 1a/2a /indipééndenʃi/	independence /ɪndɪˈpendəns/
331	indooti 9 /indóóti/	dirt /dɜːt/
332	inkoloko 9 /inkoloko/	clock /klɒk/
333	inshipeekita (baainshipeekita) 1a/2a /inʃíípéékita/	inspector /ɪnˈspektə(r)
334	insokoshi 9 /insokoʃi/	sock /sɒk/
335	iintashiiti (baaiintashiiti) 1a/2a /ííntaʃííti/	intercity /ˈɪntəˈsɪti/
336	inyuunshi 9 /injúúnʃi/	newspaper /ˈnjuːzpeɪpə(r)
337	iooshi (amaooshi) 5/6 /iooʃi/	horse /hɔːs/
338	ioteela (amaoteela) 5/6 /iotééla/	hotel /həʊˈtel/
339	ipaaso (amapaaso) 5/6 /ipaaso/	pass /pɑːs/
340	ipainti (amaipainti) 5/6 /ipainti/	pint /paɪnt/
341	ipeepala (amapeepala) 5/6 /ipéépala/	paper /ˈpeɪpə(r)
342	ipekishi (amapekishi) 5/6 /ipekiʃi/	peg /peg/
343	ipointi (amapointi) 5/6 /ipointi/	point /pɔɪnt/
344	ipooketi (amapooketi) 5/6 /ipóóketi/	pocket /ˈpɒkɪt/
345	ipooso 9 /ipóóso/	portion /ˈpɔːʃn/

346	ipulaanga (amapulaanga) 5/6 /ipulaanga/	plank /plæŋk/
347	ipiimpo (amapiimpo) 5/6 /ipíímpo/	pimple /ˈpɪmpl/
348	isaabata (amasaabata) 5/6 /isááβata/	Sabbath /ˈsæbəθ/
349	isaaka (amasaaka) 5/6 /isaaka/	sack /sæk/
350	iseleeti (amaseleeti) 5/6 /iseleeti/	slate /sleɪt/
351	ishaati (amashaati) 5/6 /iʃaati/	shirt /ʃɜ:t/
352	ishikono (amashikono) 5/6 /iʃîkono/	scone /skɒn/
353	ishipoko (amashipoko) 5/6 /iʃîpoko/	spoke /spəʊk/
354	ishiteya (amashiteya) 5/6 /iʃîteja/	stair /steə(r)/
355	isopo (amasopo) 5/6 /isopo/	soap /səʊp/
356	isukuulu (amasukuulu) 5/6 /isukuulu/	school /sku:l/
357	itaambula (amataambula) 5/6 /itáámbula/	tumbler /ˈtʌmblə(r)/
358	itaanki (amataanki) 5/6 /itaanki/	tank /tæŋk/
359	itaaulo (amataaulo) 5/6 /itaaulo/	towel /ˈtaʊəl/
360	itaayala (amataayala) 5/6 /itáájala/	tyre /ˈtaɪə(r)/
361	itauni (amatauni) 5/6 /itauni/	town /taʊn/
362	iteebulo (amateebulo) 5/6 /itéébulo/	table /ˈteɪbl/
363	iteempele (amateempele) 5/6 /itéémpele/	temple /ˈtempl/
364	itenti (amatenti) 5/6 /itenti/	tent /tent/
365	iteshiki (amateshiki) 9a/6 /iteʃîki/	desk /desk/
366	itolooshi (amatolooshi) 5/6 /itolóóʃi/	trousers /ˈtraʊzəz/
367	itiiketi (amatiiketi) 5/6 /itííketi/	ticket /ˈtɪkɪt/
368	itiimu (amatiimu) 5/6 /itiimu/	team /ti:m/
369	itiipoti (amatiipoti) 5/6 /itíípoti/	teapot /ˈti:pɒt/
370	itishi (amatishi) 5/6 /itiʃi/	dish /dɪʃ/
371	iule (amaule) 5/6 /iule/	whore /hɔ:(r)/
372	iwiindo (amawiindo) 5/6 /iwííndo/	window /ˈwɪndəʊ/
373	iyoko (amayoko) 5/6 /ijoko/	yoke /jəʊk/
374	kaa (baakaa) 1a/2a /kaa/	car /kɑ:(r)/
375	shaawelo (baashaawelo) 1a/2a /shaawelo/	shawl /ʃɔ:l/
376	kaabeci 9 /kááβetʃi/	cabbage /ˈkæbɪdʒ/
377	kaabi (baakaabi) 1a/2a /kááβi/	Gabby /'gæbi/
378	kaabini (baakaabini) 1a/2a /kááβini/	cabin /ˈkæbɪn/
379	kaafana (baakaafana) 1a/2a /kááfana/	governor /ˈgʌvənə(r)/
380	kaaki 9 /kááki/	khaki /ˈkɑ:ki/
381	kaala (baakaala) 1a/2a /káála/	colour /ˈkʌlə(r)
382	kaalaci (baakaalaci) 1a/2a /káálatʃi/	garage /ˈgærɑ:ʒ/
383	kaalakaca (baakaalakaca) 1a/2a /káálakatʃa/	agriculture /ˈægrɪkʌltʃə(r)
384	kaalateni (baakaalateni) 1a/2a /káálateni/	garden /ˈgɑ:dn/
385	umukaalati (abakaalati) 1/2 /umukáálati/	coloured /ˈkʌləd/

386	kaale 9 /káále/	curry /ˈkʌri/
387	kaalenda (baakalenda) 1a/2a /káálenda/	calendar /ˈkælɪndə(r)
388	kaaliki 9 /kááliki/	garlic /ˈgɑːlɪk/
389	kaaloni (baakaaloni) 1a/2a /kááloni/	gallon /ˈgælən/
390	kaaloti (baakaaloti) 1a/2a /kááloti/	carrot /ˈkærət/
391	kaamela (baakaamela) 1a/2a /káámela/	camera /ˈkæmərə/
392	kaamfulumende (baakaamfulumende) 1a/2a /káámfulumende/	government /ˈgʌvənmənt/
393	kaandulo (baakaandulo) 1a/2a /káándulo/	candle /ˈkændl/
394	kaanifa (baakaanifa) 1a/2a /káánifa/	canvas (shoes) /ˈkænvəs/
395	kaansa (baakaansa) 1a/2a /káánsa/	cancer /ˈkænsə(r)/
396	kaansela (baakaansela) 1a/2a /káánsela/	councillor /ˈkaʊnsələ(r)
397	kaansela (baakaansela) 1a/2a /káánsela/	counsellor /ˈkaʊnsələ(r)
398	kaanso (baakaanso) 1a/2a /káánso/	council /ˈkaʊnsl/
399	kaansula /káánsula/ (v)	cancel /ˈkænsl/
400	kaapaaki (baakaapaaki) 1a/2a /kaapaaki/	car park /kɑːr pɑːk/
401	kaapenta (baakaapenta) 1a/2a /káápenta/	carpenter /ˈkɑːpəntə(r)
402	kaapeti (baakaapeti) 1a/2a /káápeti/	carpet /ˈkɑːpɪt/
403	kaapiso (baakaapiso) 1a/2a /káápiso/	capsule /ˈkæpsjuːl/
404	kaapiteni (baakaapiteni) 1a/2a /káápiteni/	captain /ˈkæptɪn/
405	kaapito 9 /káápito/	capital (money) /ˈkæpɪtl/
406	kaashitati 9 /kááʃitati/	custard /ˈkʌstəd/
407	kaashitoma (baakaashitoma) 1a/2a /kááʃitoma/	customer /ˈkʌstəmə(r)/
408	kaashitomu /kááʃitomu/ adj	custom /ˈkʌstəm/
409	kaashitoti (amakaashitoti) 9a/6 /kááʃitoti/	custody /ˈkʌstədi/
410	kaaso (kaakaaso) 1a/2a /kááso/	castle /ˈkɑːsl/
411	kááti (baakaati) 1a/2a /kaati/	guard /gɑːd/
412	kaati (baakaati) 1a/2a /kaati/	card /kɑːd/
413	kaatolika (baakaatolika) 1a/2a /káátolika/	catholic /ˈkæθlik/
414	káátoni (baakaatoni) 1a/2a	carton /ˈkɑːtn/
415	kaatukumene (baakaatukumene) 1a/2a /káátukumene/	catechism /ˈkætəkɪzəm/
416	kaaunta (baakaaunta) 1a/2a /kááunta/	counter /ˈkaʊntə(r)
417	kaabyuleeta (baakaabyuleeta) 1a/2a /kááβjulééta/	carburettor /ˈkɑːbəˈretə(r)
418	kafabeeti (baakaafabeeti) 1a/2a /kaafaβééti/	bed cover /ˈbedkʌvə(r)
419	kafeetulo (baafeetulo) 1a/2a /kaféétulo/	cathedral /kə'θiːdrəl/
420	kaiti (baakaiti) 1a/2a /kaiti/	kite /kaɪt/
421	kalaaliki (baakalaaliki) 1a/2a /kalaaliki/	clerk /klɑːk/
422	kalaampa (baakalaampa) 1a/2a /kalaampa/	clamp /klæmp/
423	kalaanka(baakalaanka) 1a/2a /kalaanka/	crank /kræŋk/
424	kalaankashafuti (baakalaankashaafuti) 1a/2a	crank shaft /kræŋkʃɑːft/

	/kalaankaʃaafuti/	
425	ikalaashi (amakalaashi) 5/6 ikalaaʃi	class /klɑːs/
426	kalaashiluumu (amakalááʃilúúmu) 9a/6 /kalaaʃiluumu/	classroom /klɑːsruːm/
427	kalaci (baakalaci) 1a/2a /kalatʃi/	clutch /klʌtʃ/
428	kaleeti (kaleeti) 9 /kalééti/	karate /kəˈrɑːti/
429	kamoni /kamoni/ phrasal verb	come on /kʌm ɒn/
430	kampeeni (baakampeeni) 1a/2a /kampééni/	campaign /kæmˈpein/
431	kapu (baakapu) 1a/2a /kapu/	cup /kʌp/
432	kaseeti (baakaseeti) 1a/2a /kasééti/	cassette /kəˈset/
433	kashiiya (baakashiiya) 1a/2a /kaʃíija/	cashier /kæˈʃɪə(r)
434	kateeti (baakateeti) 1a/2a /katééti/	cadet /kəˈdet/
435	keebo (amakeebo) 9a/6 /kéeβo/	cable /ˈkeɪbl/
436	keefyu (baakeefyu) 1a/2a /kéefju/	curfew /ˈkɜːˌfjuː/
437	keeke (baakeeke) 1a/2a /kéeke/	cake /keɪk/
438	keleefa (baakeleefa) 1a/2a /keléefa/	Clever /'klevə/
439	Keelementiina (baaKeelementiina) 1a/2a /kéélementiina/	Clementine /'klemən̩tiːn/
440	keelementi (baakeelementi) 1a/2a /kéélementi/	Clement /'klemənt/
441	peenta /peenta/ (v)	paint /peɪnt/
442	Keeleshashi (baaKeeleshashi) 1a/2a /kéeleʃaʃi/	Gracious /'greɪʃəs/
443	keelufulendi (baakeelufulendi) 1a/2a /kéélufulendi/	girlfriend /ˈgɜːlfrend/
444	keelya (baakeelya) 1a/2a /kéélja/	carrier /ˈkæriə(r)
445	keemu (baake̩emu) 1a/2a /kéému/	game /geɪm/
446	Keni (baaKeni) 1a/2a /keni/	Ken /ken/
447	Keeneti (baakeeneti) 1a/2a /kééneti/	Kennedy /‘kenadi/
448	Keeofini (baaKeeofini) 1a/2a /kéófini/	Kelvin /ˈkelvɪn/
449	keeshi (baakeeshi) 1a/2a /keeʃi/	case /keɪs/
450	keeti (baakeeti) 1a/2a /keeti/	gate /geɪt/
451	keleeti (baakeleeti) 1a/2a /keleeti/	grade /greɪd/
452	keleeyoni (baakeleeyoni) 1a/2a /kelééjoni/	crayon /ˈkreɪən/
453	Keli (baaKeli) 1a/2a /keli/	Kelly /keli/
454	Kiifeni (baaKiifeni) 1a/2a /kíífeni/	Given /'gɪvn/
455	umwinakilishitu (abenakilishitu) 1/2 /umwinakil ííʃitu/	christian /ˈkristʃən/
456	kilee 9 /kiléé/	gray /greɪ/
457	Kileeshi (baaKileeshi) 1a/2a /kileeʃi/	Grace /greɪs/
458	umukiliiki (abakiliiki) 1/2 /umukilííki/	Greek /gri:k/
459	kiliinapu (baakiliinapu) 1a/2a /kilíínapu/	clean up /kli:n ʌp/
460	Kilubati (baaKilubati) 1a/2a /kiluβati/	Gilbert /gilbət/
461	kiliimu (kiliimu) 9 /kiliimu/	cream /kri:m/

462	kiliina (baakiliina) 1a/2a /kilíína/	cleaner /ˈkliːnə(r)
463	Kiliini (baaKiliini) 1a/2a /kiliini/	Green /gri:n/
464	kiliiniki (baakiliiniki) 1a/2a /kilííniki/	clinic /ˈklɪnɪk/
465	kiliishi 9 /kilííʃi/	grease /ˈgriːs/
466	kishi (baakishi) 1a/2a /kiʃi/	kiss /kɪs/
467	kitaa (baakitaa) 1a/2a /kitáá/	guitar /gɪˈtɑː(r)/
468	kofu 9 /kofu/	golf /gɑlf/
469	kontalaaki 1a/2a (baakontalááki)	contract /kənˈtrækt/
470	kolaapushoni 9 /koláápuʃoni/	corruption /kəˈrʌpʃn/
471	kolauti (baakolauti) 1a/2a /kolauti/	call out /kɔːl aʊt/
472	umwinaKoliinto 1/2 (abenaKolíínto)	corinthian /kaˈrinθan/
473	kolite 9 /kolite/	gold /gəʊld/
474	kolo (baakolo) 1a/2a /kolo/	goal /gəʊl/
475	koloona (baakoloona) 1a/2a /kolóóna/	corona /kəˈrəʊnə/
476	koloonyo /kolóónjo/ adj	colonial /kəˈləʊniəl/
477	kolyaati (baakolyaati) 1a/2a /koljááti/	Goliath /gəˈlaɪəθ/
478	komaanda (baakomaanda) 1a/2a /komáánda/	commander /kəˈmaːndə(r)
479	komaando (baakomaando) 1a/2a /komáándo/	commando /kəˈmaːndəʊ/
480	komfeensboni (baakomfeenshoni) 1a/2a /komféénʃoni/	convention /kənˈvenʃn/
481	komfiina (baakomfiina) 1a/2a /komfíína/	convener /kənˈviːnə(r)
482	komoola (baakomoola) 1a/2a /komóóla/	gomorrah /gaˈmora/
483	kompyuuta (baakompyuuta) 1a/2a /kompjúúta/	computer /kəmˈpjuːtə(r)
484	komiiti (baakomiiti) 1a/2a /komííti/	committee /kəˈmɪti/
485	kondaakita (baakondaakita) 1a/2a /kondáákita/	conductor /kənˈdʌktə(r)
486	kontaalakita (baakontaalakita) 1a/2a kontáálakita/	contractor /kənˈtræktə(r)
487	konteena (baakonteena) 1a/2a /kontééna/	container /kənˈteɪnə(r)
488	kontoloola /kontolóóla/ (v)	control /kənˈtrəʊl/
489	koo 9 /koo/	coal /kəʊl/
490	koobula 9 /kóóβula/	cobra /ˈkəʊbrə/
491	kooci (baakooci) 1a/2a /kootʃi/	coach /kəʊtʃ/
492	koofi 9 /kóófi/	coffee /ˈkɒfi/
493	kooko 9 /kóóko/	cocoa /ˈkəʊkəʊ/
494	koola (baakoola) 1a/2a /kóóla/	collar /ˈkɒlə(r)
495	koolashi (baakoolashi)1a/2a /kóólaʃi/	chorus /ˈkɔːrəs/
496	kooleci (baakooleci) 1a/2a /kóóletʃi/	college /ˈkɒlɪdʒ/
497	koolela 9 /kóólela/	cholera /ˈkɒlərə/
498	koole (baakoole) 1a/2a /kóóle/	goalie /'goʊlɪ/
499	koolito (baakoolito) 1a/2a /kóólito/	corridor /ˈkɒrɪdɔːr/
500	koolokiipa (baakoolokiipa) 1a/2a /kóólokiipa/	goalkeeper /ˈgəʊlkiːpə(r)

501	kooloko /kóóloko/ adverb	oˈ clock /əˈklɒk/
502	koolokotailo (baakoolokotailo) 1a/2a /kóólokotailo/	crocodile /ˈkrɒkədaɪl/
503	koololiini 9 /kóóloliini/	chlorine /ˈklɔːriːn/
504	koompaundi (baakoompaundi) 1a/2a /kóómpaundi/	compound /ˈkɒmpaʊnd/
505	koomposhiti 9 /kóómpoʃìti/	compost /ˈkɒmpɒst/
506	koona (baakoona) 1a/2a /kóóna/	corner /ˈkɔːnə(r)/
507	koondomu (baakoondomu) 1a/2a /kóóndomu/	condom /ˈkɒndɒm/
508	pulaashita /pulááʃìta/ V	plaster /ˈplɑːstə(r)/
509	koongoleshi (baakoongoleshi) 1a/2a /kóóngoleʃì/	congress /ˈkɒŋ.gres/
510	koonifenti (baakoonifenti) 1a/2a /kóónifenti/	convent /ˈkɒnvənt/
511	koonkili 9 /kóónkili/	concrete /ˈkɒŋkriːt/
512	koonsati (baakoonsati) 1a/2a /kóónsati/	concert /ˈkɒnsət/
513	koontalaki (baakoontalaki) 1a/2a koontalaki	contract /ˈkɒntrækt/
514	koopa 9 /kóópa/	copper /ˈkɒpə(r)
515	koopolo (baakoopolo) 1a/2a /kóópolo/	corporal /ˈkɔːpərəl/
516	kooci (baakooci) 1a/2a /kooʃì/	course /kɔːs/
517	koota (baakoota) 1a/2a /kóóta/	quarter /ˈkwɔːtə(r)/
518	kooti (amakooti) 9a/6 /kooti/	court /kɔːt/
519	kootoni 9 /kóótoni/	cotton /ˈkɒtn/
520	kopa /kopa/ v	copy /ˈkɒpi/
521	beca /βetʃa/ v	bet / bet/
522	kuluu 9 /kuluu/	glue /gluː/
523	kuluku /kuluku/ adj	crook /krʊk/
524	kuuka (baakuuka) 1a/2a /kúúka/	cooker /ˈkʊkə(r)
525	kuki (baakuki) 1a/2a /kuki/	cook /kʊk/
526	kuula (baakuula) 1a/2a /kúúla/	cooler /ˈkuːlə(r)
527	kuuponi (baakuuponi) 1a/2a /kúúponi/	coupon /ˈkuːpɒn/
528	ikwaafa (amakwaafa) 5/6 /kwááfa/	guava /ˈgwaːvə/
529	kwaaya (baakwaaya) 1a/2a /kwáája/	choir /ˈkwaɪə(r)
530	kwaayamashita (baakwaayamashita) 1a/2a /kwáájamaʃìta/	choir master /ˈkwaɪəmɑːstə(r)
531	kwiniini 9 /kwnííni/	quinine /kwɪˈniːn/
532	kwiini (baakwiini) 1a/2a /kwiini/	queen /kwiːn/
533	kuushoni (baakuushoni) 1a/2a /kúúshoni/	cushion /ˈkʊʃn/
534	kii (βaakii) 1a/2a /kii/	key /kiː/
535	kiibooti (baakiibooti) 1a/2a /kííβooti/	keyboard /ˈkiːbɔːd/
536	kifuti (baakifuti) 1a/2a /kifuti/	Gift /gɪft/
537	kiilisaliini 9 /kíílisaliini/	glycerine /ˈglɪsəriːn/
538	kiilishimashi (baakiilishimashi) 1a/2a /kííliʃimaʃì/	christmas /ˈkrɪsməs/
539	kilishitu 9 /kiliʃìtu/	christ /kraɪst/

540	kiilo (baakiilo) 1a/2a /kíílo/	kilo /ˈkɪləʊ/
541	kiya (baakiya) 1a/2a /kija/	gear /gəɪ(r)
542	laaba (baalaaba) 1a/2a /lááβa/	rubber /ˈrʌbə(r)/
543	laaibulale (baalaaibulale) 1a/2a /lááiβulale/	library /ˈlaɪbrəri/
544	laaifibo (baalaaifibo) 1a/2a /lááifiβo/	lifebuoy /ˈlaɪfbɔɪ/
545	laaifo (baalaaifo) 1a/2a /lááifo/	riffle /ˈrɪfl/
546	laaisenshi (baalaaisenshi) 1a/2a /lááisenʃi/	licence /ˈlaɪsns/
547	iityoti (baaiityoti) 1a/2a /íítjoti/	idiot /ˈɪdiət/
548	laale (baalaale) 1a/2a /láále/	rally /ˈræli/
549	laalwe (baalaalwe) 1a/2a /láálwe/	railway /ˈreɪlweɪ/
550	laanci 9 /lantʃi/	lunch /lʌntʃ/
551	Laasalo (baaLaasalo) 1a/2a /Laasalo/	lazarus /læzaras/
552	laashitiki (baalaashitiki) 1a/2a /lááʃitiki/	elastic /ɪˈlæstɪk/
553	laashoni (baalaashoni) 1a/2a /lááʃoni/	ration /ˈræʃn/
554	laayoti (baalaayoti) 1a/2a /láájoti/	riot /ˈraɪət/
555	Lafu (baaLafu) 1a/2a /lafu/	Love /lʌv/
556	laimu 9 /laimu/	lime /laɪm/
557	laishi 9 /laiʃi/	rice /raɪs/
558	lautishipiika (baalautishipiika) 1a/2a /lautiʃipíika/	loudspeaker /ˈlaʊdˈspiːkə(r)/
559	Leciina (baaLecíina) 1a/2a /leʧíina/	Regina /rɪˈdʒaɪnə/
560	leebala (baaleebala) 1a/2a /lééβala/	labourer /ˈleɪbərə(r)
561	leebayi (baaleebayi) 1a/2a /lééβaji/	lay-by /ˈleɪbaɪ/
562	Leefi (baaLeefi) 1a/2a /léefi/	Levy /ˈlevi/
563	leefo (baaleefo) 1a/2a /léefo/	level /ˈlevl/
564	leeki (baaleeki) 1a/2a /léeki/	rake /reɪk/
565	leenikoti (baaleenikoti) 1a/2a /léénikoti/	raincoat /ˈreɪnkəʊt/
566	leepoloshi 9 /léépoloʃi/	leprosy /ˈleprəsi/
567	leepu 9 /léépu/	rape /reɪp/
568	leeshitilanti (baaleeshitilanti) 1a/2a /léeʃitilanti/	restaurant /ˈrestrɒnt/
569	leetiyo (baaleetiyo) 1a/2a /léétijo/	radio /ˈreɪdiəʊ/
570	lenti (baalenti) 1a/2a /lenti/	rent /rent/
571	lentingˈa /lentingˈa/ (v)	renting /'rentiŋ/
572	lifalii (baalifalii) 1a/2a /lifalíí/	referee /ˌ refəˊriː/
573	lifeeshi (baalifeeshi) 1a/2a /lifééʃi/	reverse /rɪˊvɜːs/
574	lifoofa (baalifoofa) 1a/2a /lifóófa/	revolver /rɪˈvɒlvə(r)
575	lifyuu (baalifyuu) 1a/2a /lifjúú/	review /rɪˊvjuː/
576	likuluuti (baalikuluuti) 1a/2a /likulúúti/	recruit /rɪ 'kruːt/
577	limaandi 9 /limáándi/	remand /rɪ 'mɑːnd/
578	limooti (baalimooti) 1a/2a /limóóti/	remote /rɪ'məʊt/
579	lipeeya (baalipeeya) 1a/2a /lipééja/	repair /rɪ 'peə(r)/

580	lipooti (baalipooti) 1a/2a /lipóóti/	report /rɪ'pɔ:t/
581	lipoota (baalipooti) 1a/2a /lipóóta/	reporter /rɪ'pɔ:tə/
582	lisabeeti (baalisabeeti) 1a/2a /lisaβééti/	Elizabeth /ɪ̣lɪzəˈbi:θ/
583	liseefu (baaliseefu) 1a/2a /lisééfu/	reserve /rɪ'zɜ:v/
584	litaaya /litáája/ (v)	retire /rɪ'taɪə(r)/
585	liteleenci /litelééntʃi/ (v)	retrench /rɪ'trentʃ/
586	liti (baaliti) 1a/2a /liti/	lid /lɪd/
587	litiiliti (baalitiiliti) 1a/2a /litííliti/	retreat /rɪt'ri:t/
588	lingˈi (baalingˈi) 1a/2a /lingˈi/	ring /rɪŋ/
589	Locashi (baaLocashi) 1a/2a /lotʃaʃi/	Rodgers /ọrodʒaz/
590	lokeeshoni (baalokeeshoni) 1a/2a /lokéétʃoni/	location / ləʊ'keɪʃn/
591	Lomu 9 /lomu/	Rome /raʊm/
592	loko (baaloko) 1a/2a /loko/	lock /lɒk/
593	loole (baaloole) 1a/2a /lóóle/	lorry /ˈlɒri/
594	umwinalooma (abenaLooma) 1/2 /umwinalóóma/	Roman /'raʊmən/
595	loondili (baaloondili) 1a/2a /lóóndili/	laundry /ˈlɔ:ndri/
596	looni (baalooni) 1a/2a /lóóni/	lawn /lɔ:n/
597	loni (baaloni) 1a/2a /loni/	loan /ləʊn/
598	lootibuloko (baalootibuloko) 1a/2a /lóótiβuloko/	roadblock /ˈrəʊdblɒk/
599	loowa /lóówa/ adj	lower /ˈləʊə(r)/
600	looya (baalooya) 1a/2a /lóója/	lawyer /ˈlɔ:jə(r)/
601	loshi (baaloshi) 1a/2a /loʃi/	Rose /roʊz/
602	umuyuuta (abaayuuta) 1/2 /umujúúta/	Jew /dʒu:/
603	luula (baaluula) 1a/2a /lúúla/	ruler /ˈru:lə(r)/
604	luumu (baaluumu) 1a/2a /luumu/	room /ru:m/
605	luusa /luusa/ (v)	lose /lu:z/
606	luushifa 9 /lúúʃifa/	lucifer /ˈlu:sifa/
607	liifi 9 /liifi/	leave /li:v/
608	limu (baalimu) 1a/2a /limu/	rim /rɪm/
609	liita (baaliita) 1a/2a /lííta/	litre /ˈli:tə(r)
610	Maaci (baaMaaci) 1a/2a /maatʃi/	March /mɑ:tʃ/
611	maaciki 9 /máátʃiki/	magic /ˈmædʒɪk/
612	Iilali (baaIilali) 1a/2a /íílali/	Hilary /ˈhilərɪ/
613	Maaiko (baaMaaiko) 1a/2a /mááiko/	Micheal /ˈmaikl/
614	maakineti (baamaakineti) 1a/2a /máákineti/	magnet /ˈmægnət/
615	Maako (baaMaako) 1a/2a /maako/	Mark /mɑ:k/
616	mááliketi (baamááliketi) 1a/2a /mááliketi/	market /ˈmɑ:kɪt/
617	maami (baamaami) 1a/2a /máámi/	mummy /ˈmʌmi/
618	maana 9 /maana/	manna /mæna/
619	Maande (baaMaande) 1a/2a /máánde/	Monday /ˈmʌndeɪ/

620	maaneca (baamaaneca) 1a/2a /máánetʃa/	manager /ˈmænɪdʒə(r)
621	maatamu (baamaatamu) 1a/2a /máátamu/	madam /ˈmædəm/
622	maati (baamaati) 1a/2a /maati/	mat /mæt/
623	Maatini (baaMaatini) 1a/2a /máátini/	Martin /ˈmɑːtɪn/
624	maatuloni (baamaatuloni) 1a/2a /máátuloni/	matron /ˈmeɪtrən/
625	macaliini 9 /matʃalííni/	margarine /ˈmɑːdʒəˈriːn/
626	mailoshi (baamailoshi) 1a/2a /mailoʃi/	mile /maɪl/
627	maini (baamaini) 1a/2a /maini/	mine /maɪn/
628	makaanika (baamakaanika) 1a/2a /makáánika/	mechanic /məˈkænɪk/
629	maleelya 9 /maleelya/	malaria /məˈleəriə/
630	manyuuwa 9 /manjúúwa/	manure /məˈnjʊə(r)/
631	mashiini (baamashiini) 1a/2a /maʃíini/	machine /məˈʃiːn/
632	maateleshi (baamaateleshi) 1a/2a /mááteleʃi/	mattress /ˈmætrəs/
633	Mee (baaMee) 1a/2a /mee/	May /meɪ/
634	meetcashitiliti (baameecashitiliti) 1a/2a /méétʃaʃitiliti/	magistrate /ˈmædʒɪstreɪt/
635	meloni (baameloni) 1a/2a /meloni/	water melon /ˈwɔːtəmelən/
636	Meeloti (baaMeeloti) 1a/2a /mééloti/	Melody 'meləd ɪ ˈ
637	meembala (baameembala) 1a/2a /méémbala/	member /ˈmembə(r)
638	meeya (baameeya) 1a/2a /meeja/	mayor /meə(r)
639	menda /menda/ (v)	mend /mend/
640	mesaaya 9 /mesáája/	messiah /məˈsaɪə/
641	Milaanda (baaMilaanda) 1a/2a /miláánda/	Miranda /mirˈænda/
642	mikeeleshoni (baamikeeleshoni) 1a/2a /mikééleʃoni/	immigration /ˈɪmɪˊgreɪʃn/
643	mishishi (baamishishi) 1a/2a /miʃiʃi/	miss /mɪs/
644	moocali (baamoocali) 1a/2a /móótʃali/	mortuary /ˈmɔːtʃəri/
645	Moose (baaMoose) 1a/2a /móóse/	Moses /ˈmaʊziz/
646	mooshilemu (baamooshilemu) 1a/2a /móóʃilemu/	moslem /ˈmɒzləm/
647	mootoka (baamootoka) 1a/2a /móótoka/	motor car /'məʊtə kaː/
648	moshikiito (baamoshikiito) 1a/2a /moʃikíito/	mosquito /məˈskiːtəʊ/
649	myuku 9 /mjuku/	milk /mɪlk/
650	miila (baamiila) 1a/2a /míila/	mirror /ˈmɪrə(r)/
651	miini (baamiini) 1a/2a /míini/	mini /ˈmɪni/
652	miinibashi (baamiinibashi) 1a/2a /míiniβaʃi/	mini bus /ˈmɪnibʌs/
653	miinishita (baamiinishita) 1a/2a /míiniʃita/	minister /ˈmɪnɪstə(r)
654	miinshoni (baamiinshoni) 1a/2a /míinʃoni/	missionary /ˈmɪʃənri/
655	miishitileshi (baamiishitileshi) 1a/2a /mííʃitileʃi/	mistress /ˈmɪstrəs/
656	miita (baamiita) 1a/2a /míita/	metre /ˈmiːtə(r)/
657	miitingˈi (baamiitingˈi) 1a/2a /míitiŋi/	meeting /ˈmiːtɪŋ/
658	naambala (baanaambala) 1a/2a /náámbala/	number /ˈnʌmbə(r)/

659	Naanshi (baaNaanshi) 1a/2a /nàànʃi/	Nancy /ˈnænsi/
660	naasali (baanaasali) 1a/2a /náásali/	nursery /ˈnɜːsəri/
661	naashi (baanaashi) 1a/2a /nááʃi/	nurse /nɜːs/
662	naeni (baanaeni) 1a/2a /naeni/	nine /naɪn/
663	naifi (baanaifi) 1a/2a /naifi/	knife /naɪf/
664	napiini (baanapiini) 1a/2a /napííni/	pin /pɪn/
665	ndokotala (baandokotala) 1a/2a /ndokotala/	doctor /dɒktə(r)/
666	neeba (baaneeba) 1a/2a /néeβa/	neighbour /ˈneɪbə(r)
667	Noelo (baaNoelo) 1a/2a /noelo/	Noel /nəʊˈel/
668	Nofeemba (baaNofeemba) 1a/2a /nofeémba/	November /nəʊˈvembə(r)/
669	Noobo (baaNoobo) 1a/2a /nóóβo/	Noble /'nobl/
670	Noomani (baaNoomani) 1a/2a /nóómani/	Norman /'nɔːmən/
671	nyuu /njúú/ adj	new /nju:/
672	nyuyee (baanyuyee) 1a/2a /njujéé/	new year /nju: 'yir/
673	niika (baaniika) 1a/2a /níika/	knickers /ˈnɪkəz/
674	oofyashi (baaofyashi) 1a/2a /óófjaʃi/	Obvious /'obvias/
675	Ooshika (baaOoshika) 1a/2a /óóʃika/	Oscar /'oska/
676	ofu /ofu/ (adverb)	off duty /ɒf/
677	ofolooshi (baaofolooshi) 1a/2a /ofolóóʃi/	overall /ˈəʊvərɔ':l/
678	oilo 9 /oilo/	oil /ɔɪl/
679	oilopenti 9 /oilopenti/	oil paint /ɔɪl peɪnt/
680	Okaashiti (baaOkaashiti) 1a/2a /okááʃiti/	August /ˈɔːgəst/
681	okee /okéé/ (adj)	okay /ˈəʊˈkeɪ/
682	Okotooba (baaOkotooba) 1a/2a /okotóóβa/	October /ɒkˈtəʊbə(r)
683	oolaiti /oolaiti/ inter	all right / ɔːl raɪt /
684	oocati (baaoocati) 1a/2a /óótʃati/	orchard /ˈɔːtʃəd/
685	oofataimu (baaofataimu) 1a/2a /óófataimu/	overtime /ˈəʊvətaɪm/
686	ióófeʃi (amaofeshi) 5/6 /ióófeʃi/	office /ˈɒfɪs/
687	oolite (baaolite) 1a/2a /óólite/	holiday /ˈhɒlədeɪ/
688	Ooneshiti (baaooneshiti) 1a/2a /óóneʃiti/	Honest /ˈɒnɪst/
689	oopena (baaopena) 1a/2a /óópena/	opener /ˈəʊpnə(r)/
690	ooshipito (baaooshipito) 1a/2a /óóʃipito/	hospital /ˈhɒspɪtl/
691	oota /óóta/ (v)	order /ˈɔːdə(r)/
692	Iinosenti (baaIinosenti) 1a/2a /íínosenti/	innocent /ˈɪnəsnt/
693	ooto (baaooto) 1a/2a /óóto/	alto /ˈæltəʊ/
694	oopaleeshoni (baaoopaleeshoni) 1a/2a /óópalééʃoni/	operation /ˈɒpəˈreɪʃn/
695	ootomáátiki /ootomáátiki/ adj	automatic /ˌɔːtəˈmætɪk/
696	paaketi (baapaaketi) 1a/2a /pááketi/	packet /ˈpækɪt/
697	paalafini 9 /páálafini/	paraffin /ˈpærəfɪn/
698	paalataise 9 /páálataise/	paradise /ˈpærədaɪs/

699	poontʃa /póóntʃa/ (v)	puncture /ˈpʌŋktʃə(r)
700	paani (baapaani) 1a/2a /paani/	pan /pæn/
701	paanika /páánika/ (v)	punish /ˈpʌnɪʃ/
702	paanishimenti (baapaanishimenti) 1a/2a /páániʃimenti/	punishment /ˈpʌnɪʃmənt/
703	paantili (baapaantili) 1a/2a /páántili/	pantry /ˈpæntri/
704	Paapa 9 /paapa/	Pope /pəʊp/
705	paasa /paasa/ (v)	pass /pɑːs/
706	paaselo (baapaaselo) 1a/2a /pááselo/	parcel /ˈpɑːsl/
707	paashipooti (baapaashipooti) 1a/2a /pááʃipóóti/	passport /ˈpɑːspɔːt/
708	paashita (baapaashita) 1a/2a /pááʃita/	pastor /ˈpɑːstə(r)/
709	paate (baapaate) 1a/2a /pááte/	party /ˈpɑːrti/
710	paauta 9 /pááuta/	powder /ˈpaʊdə(r)
711	pai (baapai) 1a/2a /pai/	pie /paɪ/
712	paakingˈa /páákingˈa/ (v)	packing /ˈpækɪŋ/
713	pakingˈa /pakingˈa/ (v)	parking /ˈpɑːkɪŋ/
714	paalamiilitali (baapaalamiilitali) 1a/2a /páálamíílitali/	paramilitary /ˈpærə´mɪlətri/
715	papuliika 9 /papulííka/	paprika /pə´priːkə/
716	paashiti /paaʃìti/ (prep)	past /pɑːst/
717	peci (baapeci) 1a/2a /petʃì/	page /peɪdʒ/
718	peefyuumu 9 /pééfjuumu/	perfume /ˈpɜːfjuːm/
719	peemaashita (baapeemaashita) 1a/2a /péémaaʃita/	paymaster /ˈpeɪmɑːstə(r)/
720	peemu (baapeemu) 1a/2a /peemu/	perm /pɜːm/
721	peeni (baapeeni) 1a/2a /pééni/	penny /ˈpeni/
722	peni (baapeni) 1a/2a /peni/	pen /pen/
723	peenoti (baapeenoti) 1a/2a /péénoti/	penalty /ˈpenəlti/
724	peenshoni (baapeenshoni) 1a/2a /péénʃoni/	pension /ˈpenʃn/
725	peensulo (baapeensulo) 1a/2a /péénsulo/	pencil /ˈpensl/
726	peenta (baapeenta) 1a/2a /péénta/	painter /ˈpeɪntə(r)
727	peenti 9 /peenti/	paint /peɪnt/
728	peepa 9 /péépa/	pepper /ˈpepə(r)
729	peeshi (baapeeshi) 1a/2a /peeʃi/	purse /pɜːs/
730	peetulo 9 /péétulo/	petrol /ˈpetrəl/
731	pelééti (βaapelééti) 1a/2a	parade /pəˈreɪd/
732	penishiilini 9 /peniʃíílini/	penicillin /ˈpenɪ´sɪlɪn/
733	piaano (baapiaano) 1a/2a /piááno/	piano /piˈænəʊ/
734	piki (baapiki) 1a/2a /piki/	pick /pɪk/
735	piitiee (baapiitiee) 1a/2a /píítiee/	P.T.A. /ˈpiːti´eɪ/
736	piu (baapiu) 1a/2a /piu/	pill /pɪl/
737	polomooshoni (baapolomooshoni) 1a/2a /polomóóʃoni/	promotion /prəˈməʊʃn/

738	polomoota /polomóóta/ (v)	promote /prəˈməʊt/
739	polopeela (baapolopeela) 1a/2a /polopéél a/	propeller /prəˈpelə(r)/
740	poliishi (baapoliishi) 1a/2a /polííʃi/	police /pəˈli:s/
741	pompa /pompa/ (v)	pump /pʌmp/
742	pompi (baapompi) 1a/2a /pompi/	pump /pʌmp/
743	pontuuni (baapontuuni) 1a/2a /pontúúni/	pontoon /pɒnˈtu:n/
744	pooisoni 9 /póóisoni/	poison /ˈpɔɪzn/
745	pooleci 9 /póóletʃi/	porridge /ˈpɒrɪdʒ/
746	poolishi 9 /póóliʃi/	polish /ˈpɒlɪʃ/
747	poolobulemu (baapoolobulemu) 1a/2a /póóloβulemu/	problem /ˈprobləm/
748	poolofiti (baapoolofiti) 1a/2a /póólofiti/	profit /ˈprɒfɪt/
749	poolokalaamu (baapoolokalaamu) 1a/2a /póólokalaamu/	programme /ˈprəʊgræm/
750	pooloshipa (baapooloshipa) 1a/2a /póóloʃipa/	prosper /ˈprospa/
751	poolyo 9 /póóljo/	polio /ˈpəʊliəʊ/
752	poopoo (baapoopoo) 1a/2a /póópoo/	pawpaw /ˈpɔ:pɔ:/
753	poopokooni 9 /póópokooni/	popcorn /ˈpɒpkɔ:n/
754	poshita /poʃita/ (v)	post /pəʊst/
755	pulaani (baapulaani) 1a/2a /pulaani/	plan /pleɪn/
756	pulawu (baapulawu 1a/2a /pulawu/	plough /plaʊ/
757	pulashi (baapulashi) 1a/2a /pulaʃi/	plus /plʌs/
758	puleena /puleena/ (v)	plane /pleɪn/
759	Pulinshi (baaPulinshi) 1a/2a /pulinʃi/	Prince /prɪns/
760	puulinta /púúlinta/ (v)	print /'print/
761	puulinta (baapuulinta) 1a/2a /púúlinta/	printer /ˈprɪntə(r)/
762	puloti (baapuloti) 1a/2a /puloti/	plot /plɒt/
763	puu (baapuu) 1a/2a puu	pool /pu:l/
764	puulaifeti /púúlaifeti/ adj	private /ˈpraɪvət/
765	puulaimale (baapuulaimale) 1a/2a /púúlaimale/	primary (pupils) /ˈpraɪməri/
766	puulakatishi (baapuulakatishi) 1a/2a /púúlakatiʃi/	practice /ˈpræktɪs/
767	pulaashita 9 /pulááʃita/	plaster /ˈplɑ:stə(r)/
768	puulashitiki (baapuulashitiki) 1a/2a /púúlaʃitiki/	plastic /ˈplæstɪk/
769	puulatifoomu (baapuulatifoomu) 1a/2a /púúlatifoomu/	platform /ˈplætfɔ:m/
770	púúlajaʃi (baapuulayashi) 1a/2a /púúlajaʃi/	pliers /ˈplaɪəz/
771	Puleeshashi (baaPuleeshashi) 1a/2a /púúlééʃaʃi/	Precious /'preʃəs/
772	puleeshitenti (baapuleeshitenti) 1a/2a /pulééʃitenti/	president /ˈprezidənt/
773	puliinshipo (baapuliinshipo) 1a/2a /pulíínʃipo/	principal /ˈprɪnsəpl/
774	puliisoni (baapuliisoni) 1a/2a /pulíísoni/	prison /ˈprɪzn/
775	Puliiti (baaPuliiti) 1a/2a /pulííti/	Pretty /ˈpriti/

776	puushi (baapuushi) 1a/2a /puuʃi/	pussy /puʊsi/
777	Pyuuliti (baaPyuuliti) 1a/2a /pjúúliti/	Purity /'pjʊrɪtɪ/
778	piikapu (baapiikapu) 1a/2a /píikapu/	pick up /ˈpɪkʌp/
779	piikica (baapiikica) 1a/2a /píikitʃa/	picture /ˈpɪktʃə(r)/
780	piila (baapiila) 1a/2a /píila/	pillar /ˈpɪlə(r)/
781	piilo (baapiilo) 1a/2a /píilo/	pillow /ˈpɪləʊ/
782	piilokeshi (baapiilokeshi) 1a/2a /píilokeʃi/	pillowcase /ˈpɪləʊkeɪs/
783	piishito (baapiishito) 1a/2a /pííʃito/	pistol /ˈpɪstl/
784	piishitoni (baapiishitoni) 1a/2a /pííʃitoni/	piston /ˈpɪstən/
785	piishiweeki (baapiishiweeki) 1a/2a /pííʃiweeki/	piecework /ˈpiːswɜːk/
786	piitikooti (baapiitikooti) 1a/2a /píítikooti/	petticoat /ˈpetɪkəʊt/
787	saa (baasaa) 1a/2a /saa/	sir /sɜː(r)
788	saafu 9 /saafu/	surf /sɜːf/
789	saailini (baasaailini) 1a/2a /sááilini/	siren /ˈsaɪrən/
790	saaimoni (baasaaimoni) 1a/2a /sááimoni/	summon /ˈsʌmən/
791	saalale (baasalale) 1a/2a /sáálale/	salary /ˈsæləri/
792	saalati 9 /sáálati/	salad /ˈsæləd/
793	saaluni (baasaaluni) 1a/2a /sááluni/	salon /ˈsælɒn/
794	saanda (baasaanda) 1a/2a /sáánda/	sandal /ˈsændl/
795	Saande (baaSaande) 1a/2a /sáánde/	Sunday /ˈsʌndeɪ/
796	saandipepa 9 /sáándipepa/	sandpaper /ˈsændpeɪpə(r)/
797	saanifulawa 9 /sáánifulawa/	sunflower /ˈsʌnflaʊə(r)/
798	sáátana 9 /sáátana/	satan /ˈseɪtn/
799	saate (baasaate) 1a/2a /sááte/	thirty /ˊθɜːti/
800	saini /saini/ (v)	sign /saɪn/
801	saishi (baasaishi) 1a/2a /saiʃi/	size /saɪz/
802	saleenda /saléénda/ (v)	surrender /səˊrendə(r)
803	salyuuta /saljúúta/ (v)	salute /səˈluːt/
804	Samu (baaSamu) 1a/2a /samu/	Sam /sæm/
805	samuusa (baasamuusa) 1a/2a /samúúsa/	samosa /saˈmaʊsa/
806	sapoota /sapóóta/ (v)	support /səˊpɔːt/
807	sapoota (baasapoota) 1a/2a /sapóóta/	supporter /səˊpɔːtə(r)/
808	sapulaano (baasapulaano) 1a/2a /sapulááno/	soprano /səˊprɑːnəʊ/
809	sapulaaya (baasapulaaya) 1a/2a /sapuláája/	supplier /səˈplaɪə(r)/
810	sateefiketi (baasateefiketi) 1a/2a /satééfiketi/	certificate /səˈtɪfɪkət/
811	sauti 9 /sauti/	salt /sɔːlt/
812	seeca (baaseeca) 1a/2a /seetʃa/	searcher /sɜːtʃa/
813	seeca /séétʃa/ (v)	search /sɜːtʃ/
814	saacenti (baasaacenti) 1a/2a /sáátʃenti/	sergant /ˈsɑːdʒənt/
815	sefa /sefa/ (v)	sieve /sɪv/

816	seefu (baaseefu) 1a/2a /seefu/	safe /seɪf/
817	Seefya (baaSeefya) 1a/2a /sééfja/	Saviour /ˈseɪ.vjə r /
818	seekilitale (baaseekilitale) 1a/2a /séékilitale/	secretary /ˈsekrətri/
819	seekishoni (baaseekishoni) 1a/2a /séékiʃoni/	section /ˈsekʃn/
820	seekondale (baaseekondale) 1a/2a /séékondale/	secondary (pupils) /ˈsekəndri/
821	saaca (baasaaca) 1a/2a /saaca/	Thatcher / θætʃə/
822	seemina (baaseemina) 1a/2a /séémina/	seminar /ˈsemɪnɑ:(r)/
823	seeminali (baaseeminali) 1a/2a /sééminali/	seminary /ˈsemɪnəri/
824	seenta (baaseenta) 1a/2a /séénta/	centre /ˈsentə(r)
825	shiibiti (baashiibiti) 1a/2a /shííbiti/	exhibit /ɪgˈzɪbɪt/
826	selu 9 /selu/	sale /seɪl/
827	semeenti 9 /seméénti/	cement /sɪˈment/
828	Sepeteemba (baaSepeteemba) 1a/2a /sepetéémba/	September /sepˈtem.bə r /
829	setii (baasetii) 1a/2a /setíí/	settee /seˈti:/
830	shaanti /ʃáánti/ adj	shanty /ˈʃænti/
831	shabiini (amashabiini) 9a/6 /ʃaβíini/	shebeen /ʃiˈbi:n/
832	shaina /ʃaina/ (v)	shine /ʃaɪn/
833	shaloomu /ʃaloomu/ int	shalom /ʃəˈlɒm/
834	shampoo (shampoo) 9 /ʃampóó/	shampoo /ʃæmˈpu:/
835	shiifoni 9 /ʃíífoni/	chiffon /ˈʃɪfɒn/
836	shifuti (baashifuti) 1a/2a /ʃifuti/	shift /ʃɪft/
837	shíkaafoti (baashíkaafoti) 1a/2a /ʃikááfoti/	scaffold /ˈskæfaʊld/
838	shíímukaati (baashíímukaati) 1a/2a /ʃíímukaati/	sim card /ˈsɪm.kɑ:d/
839	Shitiifini (baaShitifini) 1a/2a /ʃitíífini/	Stephen /ˈsti:vn/
840	shikaa (baashikáá) 1a/2a /ʃikáá/	cigar /sɪˈgɑ:(r)/
841	shikeeti (baashikeeti) 1a/2a /ʃikeeti/	skirt /skɜ:t/
842	shiki /ʃiki/ adj	sick /sɪk/
843	shikishi (baashikishi) 1a/2a /ʃikiʃi/	six /sɪks/
844	shikweeya (baashikweeya) 1a/2a /ʃikweeja/	square /skweə(r)/
845	shilaabu 9 /ʃilaaβu/	slab /slæb/
846	shiilingˈi 9 /ʃíilingˈi/	ceiling /ˈsi:lɪŋ/
847	shiliti (baashiliti) 1a/2a /ʃiliti/	slit /slɪt/
848	Shimaati (baaShimaati) 1a/2a /ʃimaati/	Smart /sma:t/
849	shimeota (baashimeota) 1a/2a /ʃimééota/	smelter /ˈsmelta/
850	shinki (baashinki) 1a/2a /ʃinki/	sink /sɪŋk/
851	shipeeya /ʃipeeja/ adj	spare /speə(r)/
852	shipulingˈi (baashipulingˈi) 1a/2a /ʃipulingˈi/	spring /sprɪŋ/
853	shipu (baashipu) 1a/2a /ʃipu/	zip /zɪp/
854	shipiiti 9 /ʃipiiti/	speed /spi:d/
855	shitaaci 9 /ʃitaatʃi/	starch /stɑ:tʃ/

856	shitaelo (baashitaelo) 1a/2a /ʃitaelo/	style /staɪl/
857	shitaafu (baashitaafu) 1a/2a /ʃitaafu/	staff /stɑːf/
858	shitaampa (baashitaampa) 1a/2a /ʃitaampa/	stamp /stæmp/
859	shitaandi (baashitaandi) 1a/2a /ʃitaandi/	stand /stænd/
860	shiteeki 9 /ʃiteeki/	steak /steɪk/
861	shitepu (baashitepu) 1a/2a /ʃitepu/	step /step/
862	shiteetimenti (baashiteetimenti) 1a/2a /ʃitéétimenti/	statement /ˈsteɪtmənt/
863	shiteleti /ʃiteleti/ adj	straight /streɪt/
864	shiti (baashiti) 1a/2a /ʃiti/	shit /ʃɪt/
865	shitalaaka (baashitalaaka) 1a/2a /ʃitalaaka/	strike /straɪk/
866	Shitini (baaShitini) 1a/2a /ʃitini/	Sydney /ˌsidni/
867	sho (baasho) 1a/2a /ʃo/	show /ʃəʊ/
868	shoko (baashoko) 1a/2a /ʃoko/	shock /ʃɒk/
869	shopu (baashopu) 1a/2a /ʃopu/	shop /ʃɒp/
870	shooti (baashooti) 1a/2a /ʃooti/	shorty /ʃɔːti/
871	nati (baanati) 1a/2a /nati/	nut /nʌt/
872	fili (baafili) 1a/2a /fíílii	three /ˈθriː/
873	shootikani (baashootikani) 1a/2a /ʃóótikani/	shot gun /ˈʃɒtgʌn/
874	shuuka 9 /ʃúúka/	sugar /ˈʃʊgə(r)/
875	shiiayitii (baashiiayitii) 1a/2a /ʃíiajitíí/	cid /ˈsiːaɪˈdiː/
876	shiicupiti (baashiicupiti) 1a/2a /ʃíítʃupiti/	stupid /ˈstjuːpɪd/
877	shiilinda (baashiilinda) 1a/2a /ʃíílinda/	cylinder /ˈsɪlində(r)
878	shiilo (baashiilo) 1a/2a /ʃíílo/	zero /ˈzɪərəʊ/
879	shiinema (baashiinema) 1a/2a /ʃíínema/	cinema /ˈsɪnəmə/
880	shiinoti (baashiinoti) 1a/2a /ʃíínoti/	synod /ˈsɪnəd/
881	shiipana (baashiipana) 1a/2a /ʃíípana/	spanner /ˈspænə(r)/
882	shipiika (baashipiika) 1a/2a /ʃipíika/	speaker /ˈspiːkə(r)/
883	shipiiliti 9 /ʃipííliti/	spirit /ˈspɪrɪt/
884	shiisala (baashiisala) 1a/2a /ʃíísala/	scissors /ˈsɪzəz/
885	shishita (baashiishita) 1a/2a /ʃííʃita/	sister /ˈsɪs.tə r /
886	shitaandati (baashitaandati) 1a/2a /ʃítáándati/	standard /ˈstændəd/
887	shitaata (baashitaata) 1a/2a /ʃítááta/	starter /ˈstɑːtə(r)/
888	shituutyo (baashituutyo) 1a/2a /ʃitúútjo/	studio /ˈstjuːdiəʊ/
889	shiiufa 9 /ʃííufa/	silver /ˈsɪlvə(r)/
890	so /so/ (adv)	so /səʊ/
891	soofa (baasoofa) 1a/2a /soofa/	sofa /ˈsəʊfə/
892	poshiti (baaposhiti) 1a/2a /poʃíti/	post office /pəʊst ˈɒf.ɪs/
893	soola (βaasóóla) 1a/2a /sóóla/	solar /ˈsəʊlə(r)/
894	Soolomoni (baaSoolomoni) 1a/2a /sóólomoni/	solomon /ˈsɒl.ə.mən/
895	sooni (baasooni) 1a/2a /sooni/	zone /zəʊn/

896	soota 9 /sóóta/	soda /ˈsəʊdə/
897	soseci (baasoseci) 1a/2a /sóósetʃi/	sausage /ˈsɒsɪdʒ/
898	Sotoma 9 /sotoma/	Sodom /ˈsɒd.ə.m/
899	supuuni (baasupuuni) 1a/2a /supuuni/	spoon /spu:n/
900	sukuluutalaifa (baasukuluutalaifa) 1a/2a /sukulúútalaifa/	screw driver /ˈskru:draɪvə(r)/
901	suuti (baasuuti) 1a/2a /suuti/	suit /su:t/
902	suutikeeshi (baasuutikeeshi) 1a/2a /súútikeeʃi/	suit case /ˈsu:tkeɪs/
903	filiiwilo (baafiliiwilo) 1a/2a /filíiwlo/	freewheel /ˌfri:ˈwilˌ/
904	sweeta (baasweeta) 1a/2a /swééta/	sweater /ˈswetə(r)/
905	swiici (baaswiishi) 1a/2a /switʃi/	switch /swɪtʃ/
906	swiiti (baaswiiti) 1a/2a /swiiti/	sweet /swi:t/
907	taabuleti (baataabuleti) 1a/2a /tááβuleti/	tablet /ˈtæblət/
908	taafeni (baataafeni) 1a/2a /tááfeni/	tarven /ˈtævən/
909	taaimondi 9 /tááimondi/	diamond /ˈdaɪəmənd/
910	taainamo (taainamo) 1a/2a /tááinamo/	dynamo /ˈdaɪnəməʊ/
911	taakishi (baataakishi) 1a/2a /táákiʃi/	taxi /ˈtæksi/
912	taala 9 /taala/	tar /tɑ:(r)
913	talaafiki (baatalaafiki) 1a/2a /talááfiki/	traffic /ˈtræfɪk/
914	talaakita (baatalaakita) 1a/2a /taláákita/	tractor /ˈtræktə(r)/
915	taameci (baataameci) 1a/2a /táámetʃi/	damage /ˈdæmɪdʒ/
916	taamu (baataamu) 1a/2a /taamu/	dam /dæm/
917	taanka (baataanka) 1a/2a /táánka/	tanker /ˈtæŋkə(r)/
918	taapu (baataapu) 1a/2a /taapu/	tap /tæp/
919	taaseni (baataaseni) 1a/2a /tááseni/	dozen /ˈdʌzn/
920	taati (baataati) 1a/2a /tááti/	daddy /ˈdædi/
921	tai (baatai) 1a/2a /tai/	tie /taɪ/
922	taileekita (baataileekita) 1a/2a /tailéékita/	director /dəˈrektə(r)/
923	taailiya 9 /tááilija/	diarrhoea /ˈdaɪəˈrɪə/
924	taipa /taipa/ (v)	type /taɪp/
925	talaaifa (baatalaaifa) 1a/2a /talááifa/	driver /ˈdraɪvə(r)/
926	talaki (baatalaki) 1a/2a /talaki/	truck /trʌk/
927	talaamu (baatalaamu) 1a/2a /taláámu/	drum /drʌm/
928	talanshifaa (baatalanshifaa) 1a/2a /talanʃifáá/	transfer /trænsˈfɜ:(r)
929	tamaashikashi 9 /tamááʃikaʃi/	Damascus /daˈmæskas/
930	taanshi (baataanshi) 1a/2a /taanʃi/	dance /da:ns/
931	teelala (baateelala) 1a/2a /téélala/	tailor /ˈteɪlə(r)/
932	teelefishoni (baateelefishoni) 1a/2a /téélefiʃoni/	television /ˈtelɪviʒn/
933	teelefoni (baateelefoni) 1a/2a /téélefoni/	telephone /ˈtelɪfəʊn/
934	teelekalamu (baateelekalamu) 1a/2a /téélekalamu/	telegram /ˈtelɪgræm/

935	teleela (baateleela) 1a/2a /teléél̪a/	trailer /ˈtreɪlə(r)/
936	teleeshala (baateleeshala) 1a/2a /teléél̪ʃala/	treasurer /ˈtreʒərə(r)/
937	Tilaiti (baaTilaiti) 1a/2a /tilaiti/	Delight /dɪˈlaɪt/
938	teelalini (teelalini) 1a/2a /téélalini/	terylene /ˈter.ə.liːn/
939	teemu (baateemu) 1a/2a /teemu/	term /tɜːm/
940	teenja (baateenja) 1a/2a /téénja/	danger /'deɪndʒə/
941	teepoti (baateepoti) 1a/2a /téépoti/	depot /ˈdepəʊ/
942	teepu (baateepu) 1a/2a /teepu/	tape /teɪp/
943	Tefeti (baaTefeti) 1a/2a /tefeti/	david /deivid/
944	telee (baatelee) 1a/2a /telee/	tray /treɪ/
945	teleeni (baateleeni) 1a/2a /teleeni/	train /treɪn/
946	tibii 9 /tíiβíi/	tb /ˈtiːˈbiː/
947	tifii (baatifii) 1a/2a /tíifíi/	tv /ˈtiː ˈviː/
948	tifitiifi (baatifitiifi) 1a/2a /tifitíifi/	detective /dɪ'tektɪv/
949	tiilulmu (baatiiluumu) 1a/2a /tííluumu/	tea room /'tiːruːm/
950	tilipu (baatilipu) 1a/2a /tilipu/	drip /drɪp/
951	timu 9 /timu/	dim /dɪm/
952	Tiseemba (baatiseemba) 1a/2a /tiseemba/	December /dɪsembə(r)
953	tiya /tija/ adj	dear /dɪə(r)
954	tomaato (baatomaato) 1a/2a /tomato/	tomato /təˊmɑːtəʊ/
955	Tomu (baaTomu) 1a/2a /tomu/	Tom /tɒm/
956	tooci (baatooci) 1a/2a /tootʃi/	torch /tɔːtʃ/
957	tooileti (baatooileti) 1a/2a /tóóileti/	toilet /ˈtɔɪlət/
958	tolooli (baatolooli) 1a/2a /tolóóli/	trolley /ˈtrɒli/
959	toonki (baatoonki) 1a/2a /tóónki/	donkey /ˈdɒŋki/
960	tuufee (baatuufee) 1a/2a /túúfee/	duvet /ˈduːveɪ/
961	tuumu 9 /tuumu/	doom /duːm/
962	tiica (baatiica) 1a/2a /tíítʃa/	teacher /ˈtiːtʃə(r)/
963	tiikoni (baatiikoni) 1a/2a /tííkoni/	deacon /ˈdiːkən/
964	tiimba (baatiimba) 1a/2a /tíímba/	timber /ˈtɪm.bə r /
965	tiini (baatiini) 1a/2a /tiini/	dean /diːn/
966	tiiselo 9 /tíiselo/	diesel /ˈdiːzl/
967	tiisentili 9 /tíisentili/	dysentry /ˈdɪsəntri/
968	tiishiko (baatiishiko) 1a/2a /tííʃiko/	disco /ˈdɪskəʊ/
969	tiishii (baatiishii) 1a/2a /tííʃii/	dc /ˈdiːsiː/
970	tiiyakashi (βaatiiyakaʃi) 1a/2a /tííjakaʃi/	teargas /ˈtɪəgæs/
971	ubulaangeti (amalaangeti) 14/6 /uβuláángeti/	blanket /ˈblæŋkɪt/
972	ulubaatisho 9 /uluβáátisho/	baptism /ˈbæptɪzəm/
973	ulusamushi (insamushi) 11/10 /ulusamuʃi/	sum /sʌm/
974	umuβunu (amaβunu) 1/6 /umuβunu/	boer /bɔ:(r)/

975	umufááliʃì (abafaalishi) 1/2 /umufááliʃì/	pharisee /ˈfærɪsi/
976	umufoolo (imifoolo) 3 /4 /umufóólo/	furrow /ˈfʌr.əʊ/
977	umulaini (imilaini) 3 /4 /umulaini/	line /laɪn/
978	umupaipi (imipaipi) 3 /4 /umupaipi/	pipe /paɪp/
979	umupoo (imipoo) 3 /4 /umupóó/	pole /pəʊl/
980	umusooca (amasooca) 3/6 /umusóótʃa/	soldier /ˈsəʊldʒə(r)/
981	uufuni (baauufuni) 1a/2a /úúfuni/	oven /ˈʌvn/
982	uuta (baauuta) 1a/2a /úúta/	hooter /ˈhuːtə(r)/
983	waati (baawaati) 1a/2a /wááti/	ward /wɔːd/
984	waaya (baawaaya) 1a/2a /wáája/	wire /ˈwaɪə(r)/
985	wanu (baawanu) 1a/2a /wanu/	one /wʌn/
986	washa /waʃa/ (v)	wash /wɒʃ/
987	weekishopu (baaweekishopu) 1a/2a /wéékiʃopu/	workshop /ˈwɜːkʃɒp/
988	weeteleshi (baaweeteleshi) 1a/2a /wéételeʃì/	waitress /ˈweɪtrəs/
989	citawala (baacitawala) 1a/2a /tʃìtawala/	watchtower /ˈwɒtʃtaʊə(r)/
990	wiiki (baawiiki) 1a/2a /wiki/	wig /wɪg/
991	wina /wina/ (v)	win /wɪn/
992	wiindoshikiliini (baawiindoshikiliini) 1a/2a /wííndoshikiliini/	wind screen /ˈwɪndskriːn/
993	wiisulo (baawiisulo) 1a/2a /wíísulo/	whistle /ˈwɪsl/
994	wiitineshi (baawiitineshi) 1a/2a /wíítineʃì/	witness /ˈwɪtnəs/
995	yaati (baayaati) 1a/2a /jaati/	yard /jɑːd/
996	Yeesu 9 /jéésu/	Jesus /ˈdʒiːzəs/
997	foo (baafoo) 1a/2a /foo/	four /fɔː/
998	Yobo (baaYobo) 1a/2a /joβo/	job /dʒɒb/
999	Yoona (baaYoona) 1a/2a /jóóna/	Jonah /ˈdʒaʊna/
1000	Yootani 9 /jóótani/	Jordan /ˈdʒɔːrdn/

(English entries sourced from Cambridge Advanced Learner's Dictionary – 3rd Editions)

5.2 Loanwords Borrowed in Plural Form

It should be noted that the normal trend for borrowing of loanwords (nouns) is that they are borrowed in the singular form. However, there are some very few loanwords that have been borrowed in their plural form. In Icibemba, they either function as plural forms as well, or function as a singular form. In the latter case, when forming a plural form in Icibemba, plural beginnings of Icibemba are attached to them.

(1)

Icibemba	**English**
ibilikishi	"one bricks"
amabilikishi	"many bricks"
itakishi	"one ducks"
amatakishi	"many ducks"

Grammatically, all the above phrases are wrong. The prefix *i* denotes that the following word is singular in form while the suffix *–s* indicates that the word is in a plural form. Similarly, the prefix –ama denotes that the word is in plural while the suffix *–s* also indicates that the word is in a plural form. In other words, such words have what might be termed 'double plural forms.'

5.3 The Effects of Loanwords on the Icibemba Lexicon

Studies on loanwords, e.g.Weinreich (1953) have shown that loanwords can affect a language in various ways. The influence of loanwords on a language can be either negative or positive. With regard to the latter, loanwords may result in the enlargement of the lexicon of a language, enriching the language with synonyms and other words that have more expressive meanings. On the other hand loanwords may cause the obsolescence of native words, and the problem of homonymy in a language. This study will briefly discuss the enlargement of the lexicon of a language and the obsolescence of native words.

5.3.1 The Enlargement of the Lexicon of Icibemba Language

When a new object, activity or idea enters a culture, the word or words which express it may be adopted (Hoffer, 1980). The introduction of these new lexical items enlarges the lexicon of the language. With time, some of these words become completely assimilated into the receipient language. As can be seen from the collected data, hundreds of new words have been added to Icibemba through this process of loanwords.

5.3.2 Enriching the Language with Synonyms

The borrowing of English words into Icibemba has resulted in many synonyms in the language. The term synonymy here is used to refer to the phenomenon whereby words are believed to have the same meaning. The table below shows some Bemba synonyms that have come about as a result of borrowing words from English.

Table 2: Icibemba Synonyms

Native word	**Loanword**	**English**
umwele	naifi	knife
icitabo	ibuku	book
icilembelo	pensulo	pencil
icimbusu	Toilet	toilet
icola	Baki	bag

Source: Field Data (2017)

5.3.3 Loss of Icibemba Native Words

Although the loanwords of foreign words enrich a language, it may also lead to the loss of some native words. This loss of words in a language is commonly known as obsolescence. According to Arlotta (1972:169) obsolescence

> *"takes place when the speech community ceases to use the item in question and as a result the word falls out of everyday usage ... For all practical purposes, these words have left the language, and their current usage is essentially restricted to antiquarians or historians of science".*

Even though there are various factors which lead to the obsolescence of native words, loanwords seem to play a very vital role in this regard. The native words become obsolete because of the introduction of better words into the speech community through loanwords. Sometimes words become obsolete because the object or action they used to refer to has ceased to be of use to the speech community and has been replaced by a new one. Nkabinde (1968:19) has this to say in this regard (with reference to the Zulu language):

> *The borrowings found in the language are a record or register of concrete objects or abstract ideas that have been incorporated into Zulu life due to contact with foreign cultures".*

Below are some examples of obsolete words in Icibemba:

Table 3: Some Examples of Obsolete Words in Icibemba

Loanwords	**Native words**
motoka 'motor car'	icimbayambaya
itoloshi 'trousers'	amantangasa
iule 'whore'	cilalelale/umucende
nkungulume 'conglomerate'	umushimbe

Source: Field Data (2017)

The fact that there are many foreign objects that have been incorporated into Icibemba society at the expense of native ones explains why many native words have become obsolete in the language. If we take food, for example, we note that most of the food products used in the olden days have been replaced by modern ones. The replacement of these food products also leads to the replacement of words which designate these products. Lastly, a word may become obsolete because of its unfavorable connotations. Taboo words may also be replaced by adopted words. This may lead to their permanent loss (Madiba, 1994).

The prestige factor may play a role in the loss of native words. Speakers of a language, particularly the educated ones, prefer the adopted words to the native ones and this causes the corresponding native word to lose frequent use. As a result of this, the native word becomes obsolete (Madiba, 1994).

5.4 Chapter Summary

This chapter has presented the collected one thousand (1000) loanwords to provide answers to the questions raised in Chapter One of the study – "How are Icibemba loanwords transcribed, glossed and allocated into Icibemba nominal classes?" Out of these 1000 loanwords, 933 are nouns, 41 are verbs, 21 are adjectives, 4 are

interjections, 3are adverbs, 1 particle and 1 is a preposition. Entries for Icibemba have been written in the singular form first followed by their plural forms in brackets. The numbers after the brackets have shown what type of Icibemba class pair system the loanwords belong to. Next to the numbers are the phonetic forms. For English, the entries have been mostly represented in the singular form followed by their phonetic forms.Verbs have been written in the infinitive positive with no augment. The chapter has also briefly discussed how some loanwords have been borrowed in plural forms. Finally, the chapter has discussed the effects of loanwords on the Icibemba lexicon.

The next chapter discusses the phonology of English and Icibemba. This has been necessitated by the fact that English and Icibemba are languages of two different language families; having different phonetic, phonological and morphological systems.

CHAPTER SIX

THE PHONOLOGY OF ENGLISH AND ICIBEMBA

6.1 Overview

This chapter presents the phonology of English and Icibemba in order to provide answers to the question raised in Chapter One – "What is the difference between the segmental phonology and syllable structure of English and Icibemba?"

English originates from the Germanic subgroup of the Indo-European language family, Campbell (2004). It is widely spoken across Europe, the Americas, Africa and other parts of the world. Nonetheless, English has many variants or types spoken across these aforementioned areas. Basically, these variants can be considered dialects. Sister languages found to belong to this same subgroup include German, Italian, French, Swedish and Dutch among others, Campbell & Poser (2008). A few examples showing cognates of sister languages with English are shown in Table (4) below:

Table 4: Cognates of English and Sister Languages

English	**Italian**	**French**
beat /biːt/	battere /battere/	battre /batr/
valley /væli/	valle /valle/	val /val/
ball /bɔːl/	bolla /bolla/	balle /bul/

Source: Campbell (2004 p. 124)

As already stated above, Icibemba, on the other hand is a Central Bantu language. The Bantu language family is a branch of the Benue-Congo family, which is in turn a branch of the Niger-Congo family, which is also a branch of Niger-Kordofanian (Kashoki and Spitulnik, 1998).

Because English and Icibemba are languages of two different language families, they have different phonetic, phonological and morphological systems. Icibemba, like most Bantu languages has a strict basic open syllable structure (CV). What this means is that those foreign Icibemba loanwords with consonant clusters being adapted into the

Icibemba language have to go through some repair strategies to conform to the structural well-formedness requirement in the native grammar of Icibemba.

For one to understand the various phonological processes involved in the process of borrowing English words into Icibemba, it is important to give a brief outline of the phonetic systems of both languages before going into the various changes that take place.

6.2 English Segmental Inventory

Every language takes a limited number of sounds from the central pool of human speech sounds to form its phonetic inventory (Massamba, 1991). A phonological study of the language examines the structure and the function of the inventory - the sounds that are expected to occur, their possible combinations and any restrictions to the combinations. The following is a brief description of the English sound system.

English has a more complex phonetic inventory as compared to Icibemba and many other African languages (Katamba, 1989; Kadenge, 2012).

6.3 English Consonants

According to Roach (1983), English has 24 consonants, 6 plosives /p, b, t, d, k, g/, 9 fricatives /f, v, θ, ð, s, z, ʃ, ʒ, h/, 2 affricates /ʤ, ʧ/, 3 nasals /m, n, ŋ/, 1 lateral /l/ and 3 approximants /w, j, r/. Below is Table 5 showing English consonants:

Table 5: English Consonants

	Bilabial	**Labiodental**	**Dental**	**Alveolar**	**Palato-alveolar**	**Palatal**	**Velar**	**Glottal**
Plosive	p b			t d			k g	
Fricative		f v	θ ð	s z	ʃ ʒ			h
Affricate					tʃ dʒ			
Nasal	m			n			ŋ	
Lateral				l				
Approximant	w				r	j		

Source: Roach, (1983 p. 52)

6.4 Vowels

Vowels are a class of speech which is essential to the buiding up of words in all languages. According to Ladefoged (2000), a vowel is a segment which is articulated without any constriction or obstruction of the airstream in the oral cavity. The phonological parameters used to categorize vowels are: tongue height, tongue position and lip shape, (Abercrombie, 1967) and (Ladefoged, 2000). The tongue height parameter is concerned with raising part of the tongue involved when producing a vowel sound. Therefore, in terms of tongue height, a vowel can be [+ high], [+ low] or [- high, - low]. The tongue position parameter shows the point along the tongue that is involved in the articulation of the vowel sound.

With regard to this parameter, there are three points: the front part of the tongue including the tip, the middle of the tongue which normally involves the larger part of the tongue blade and, the back of the tongue which involves the back part and the root of the tongue in articulating a vowel sound. For that reason, in terms of tongue position, a vowel can be [+back], [-back] or [-back,-front]. The third parameter is the shape of lips when producing a vowel sound. There are just two shapes that can be realized in the articulation of vowels. These are lip rounding and lip spreading. When a vowel is produced with the rounding of lips it is said to be [+round] and when there is spreading of lips the vowel is said to be [-round]. All vowels are syllabic since they function as

syllable nuclei. This means that in the syllable, vowels do not occupy the onset and coda because they are the most sonorous of all segments.

English has 20 vowel phonemes: 12 single vowels and 8 diphthongs (Roach, 1983). According to Skandera and Burleigh (2005), numerous different sets of phonetic vowel symbols have been supplied by many scholars, which have made it complicated to realise a commonly acclaimed representation for the English vowel system. It should be noted however that this is not only peculiar to English, as authors design and represent language segments drawn from pronunciation in diverse forms. Even though there could be many charts and representations for English vowels, because of extensive research, representations have slowly become indistinguishable overtime hence widely accepted literatures such as Roach (1983), Skandera and Burleigh (2005), and Fromkin, et al (2011) can be adopted and made reference to in a study of this nature. A figure of English vowels is shown below:

Figure 5: English Vowels

Source: Field data (2017)

7 Short Monophthongs

[i] /fiʃ/ ‘fish’ /sit/ ‘sit’

[e] /eg/ ‘egg’ /ten/ ‘ten’

[æ] /æpl/ ‘apple’ /kæt/ ‘cat’

[ʌ] /bʌtər/ ‘butter’ /kʌp/ ‘cup’

[ɒ] /ɒl.ɪv/ ‘olive’ /gɒt/ ‘got’

[ʊ] /pʊdɪŋ/ ‘pudding’ /pʊt/ ‘put’

[ə] /spəgeti/ ‘spaghetti’ /mʌðər/ ‘mother’

5 Long Monophthongs

[iː] /biː/ ‘bee’ /iːgl/ ‘eagle’

[ɜː] /bɜːd/ ‘bird’ /ɜːli/ ‘early’

[aː] /stɑːt/ ‘start’ /fɑːðər/ ‘father’

[ɔː] /hɔːs/ ‘horse’ /sɔː/ ‘saw’

[uː] /guːs/ ‘goose’ /tuː/ ‘too’

Source: Skandera & Burleigh (2005 p.24)

6.4.1 Front Vowels

The following are the front vowels in English:

/iː/ - cream, seen (long high front spread vowel)

/ɪ/ - bit, silly (short high front spread vowel)

/ɛ/ - bet, head (short mid front spread vowel); this may also be shown by the symbol /e/

/æ/ - cat, dad (short low front spread vowel); this may also be shown by /a/

6.4.2 Central Vowels

English has the following central vowels:

/ɜː/- burn, firm (long mid central spread vowel); this may also be shown by the symbol /əː/.

/ə/ - about, clever (short mid central spread vowel); this is sometimes known as schwa, or the neutral vowel sound - it never occurs in a stressed position.

/ʌ/ - cut, nut (short low front spread vowel); this vowel is quite uncommon among speakers in the Midlands and further north in Britain.

6.4.3 Back Vowels

These are the back vowels:

/uː/ - boob, glue (long high back rounded vowel)

/ʊ/ - put, soot (short high back rounded vowel); also shown by /u/

/ɔː/ - corn, faun (long mid back rounded vowel) also shown by /oː/

/ɒ/- dog, rotten (short low back rounded vowel) also shown by /o/

/ɑ:/ - hard, far (long low back spread vowel) 6.5 Diphthongs

Diphthongs are vowels which end differently from the way in which they begin. For instance, in the English word *buy,* the vowel begins with an [a] and ends with an [I]; in other words, it has two articulatory qualities (Batibo, 2000). They are not like vowels which remain constant. Diphthongs have the same length as the long vowels. The first part (sound) is much longer and stronger than the second part.

English has eight diphthongs.

(i) **Centering Diphthong**:

There are three ending in 'ə' : ɪə, eə, ʊə

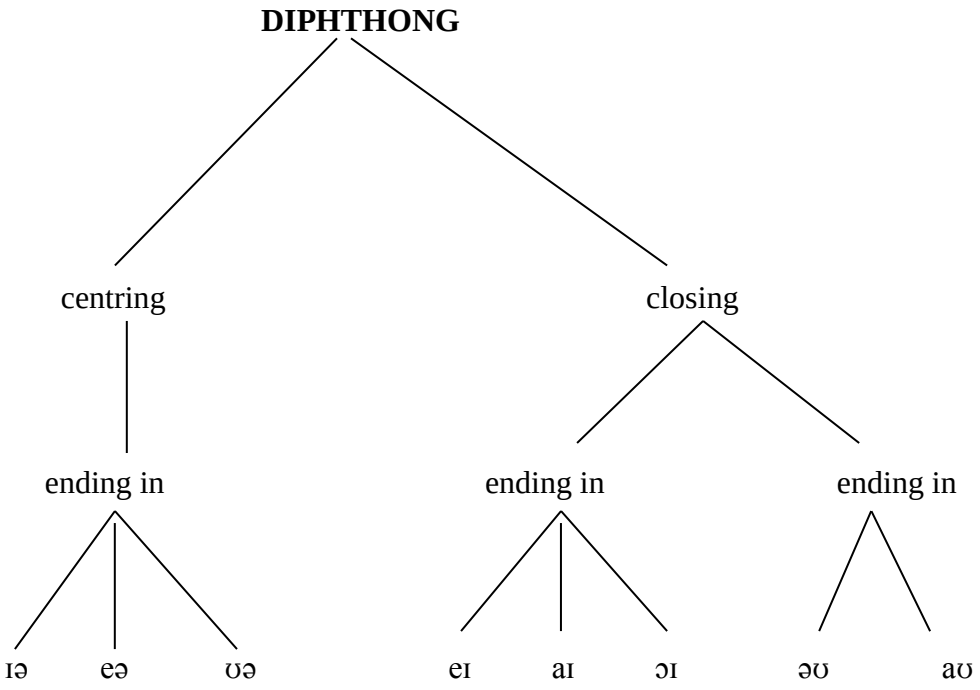
(ii) **Closing Diphthong**

There are also three ending in 'ɪ': eɪ, aɪ, ɔɪ

(iii) The two **ending** in 'ʊ': əʊ, aʊ

The easiest way to remember diphthongs is in terms of three groups divided as in the following diagram:

Figure 6: English Diphthongs



Adapted from Roach, (1983 p.19)

The following are examples of diphthongs:

• ɪə: beard, weird, fierce, ear, beer, tear

• eə: aired, cairn, scarce, bear, hair,

• ʊə: moored,tour, lure, sure, pure

• eɪ: paid, pain, face, shade, age, wait, taste, paper

• aɪ: tide, time, nice, buy, bike, pie, eye, kite, fine

• ɔɪ: void, loin, voice, oil, boil, coin, toy, Roy

• əʊ: load, home, most, bone, phone, boat, bowl

• aʊ: loud, gown, house, cow, bow, brow, grouse

6.5 Triphthongs

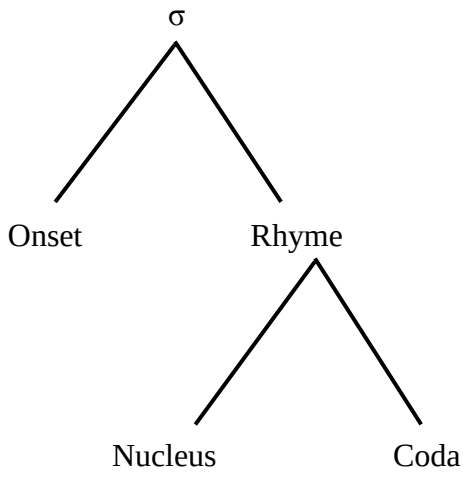
A triphthong is a glide from one vowel to another and then to a third, all produced quickly and without interruption (Roach, 1983). For example, a careful pronunciation of the word 'hour' begins with a vowel quality similar to 'ɑ', goes on to 'ʊ' then ends in 'ə'. It is pronounced as /aʊə/. There are five closing diphthongs with 'ə' added on the end:

- eɪ + ə = eɪə, as in layer, player
- aɪ + ə = aɪə, as in liar, fire
- ɔɪ + ə = ɔɪə, as in loyal, royal
- əʊ + ə = əuə, as in lower, mower
- aʊ + ə = auə, as in power, hour

6.6 English Syllable Structure and Syllable Templates

According to Yule (2004), a syllable must contain a vowel (or vowel like) sound. The most common type of syllable in a language also has a consonant before the vowel, represented as a CV. The syllable structure carries an obligatory nucleus preceded and followed by an optional consonantal onset and consonantal coda respectively (Kenstowicz, 1994). The nucleus plus coda then onset plus nucleus make the tight bond. The rhyme, an additional sub-constituent is juxtaposed with nucleus and coda. Figure 7 shows syllable structure in general:

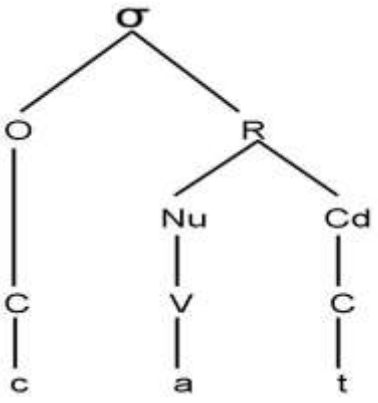
Figure 7: English Syllable Structure in General



Source: Abbasi and Hussain, (2012 p.6)

Figure 8 below shows CVC syllable structure:

Figure 8: CVC Syllable Structure



Source: Mwaliwa (2014 p.40)

English has quite a complex syllable structure as compared to many African languages (Kadenge & Mudzingwa, 2012). It can consist of multiple outcomes of V, VC, CV, CVC, CCC, CCVC, CCCVCC, CCCVVC, CCCVCCCC and many more, ranging from simple to complex onsets, nucleus and codas. This phenomenon poses problems for Icibemba which operates a fairly simple CV structure. English permits consonant clustered words in all positions: word initial, medial and final stages (Silverman, 1992). A few examples of such words include; 'school', 'apt', 'plank', 'corridor', 'break', 'gloss', etc. This pattern essentially exhibits many syllable structures which are

permissible in English grammar. The following table shows examples of English syllable shapes:

Table 6: Examples of English Syllable Shapes

Lexical Item	Transcription	Syllable Shape
I	/aɪ/	V
me	/mi:/	CV
at	/æt/	VC
ban	/bæn/	CVC
sky	/skaɪ/	CCV
spats	/spæts/	CCVCC
school	/sku:l/	CCVC

Adapted from: Mannell et, al (2014 p.5)

The syllable structures shown in Table 6 above confirm English's compounding word forms and presents a definite reason cause for phonological adaptation. This study is mainly concerned with how complex English syllable structures are simplified in Icibemba because as Kenstowicz (1994) explains, the syllable is a very important concept for understanding the phonological structure of any language.

6.7 Assimilation

One common type of phonological rule is assimilation. This is a rule that makes two or more neighboring segments more similar by making the segments share some feature (Zia, 2002). When two consonants occur in a sequence one may be assimilated to the other. That is, one may adopt certain features of the other. In other words it assimilates one segment to another by "copying" or "spreading" a feature of a sequential phoneme on to its neighboring segment, thus making the two phones more similar. It should be mentioned that assimilation occurs in both English and Icibemba.

Now that some insight about the phonology of English has been provided, the following section presents a brief description of Icibemba phonological system. This helps in demonstrating the differences between English and Icibemba phonologies.

This is done at this point of the study so as to develop a neat and usable theoretical framework.

6.8 Icibemba Phonology

This section surveys the main phonological phenomena found in Icibemba, a Niger-Congo language. It is a Bantu member of the Benue-Congo family of languages.

6.8.1 Consonants

Icibemba has a simple consonantal system consisting of 14 consonants including two glides. Below is a chart showing Icibemba consonantal Inventory:

Figure 9: Icibemba Consonant Chart

stops:	p	t		k
fricatives:	b	f		ʃ
affricates:	ʧ			
nasals:	m	n	ɲ	ŋ
liquid:	l			
glides:	w	y		

Adapted from: Kula (2002 p.48)

Notes on the chart:
(i). /1/ is realised l in general and d after a nasal.
e.g. [u k u la:nl a] /ukulanda/ ‘to speak’
(ii). /b/ is realized [ß] in general and [b] after a nasal.
e.g. / [u k u B ɔ mb a] /ukubomba/ ‘to work’
(iii) /s/ is realized s in general and ʃ before i or y.
(iv) /k/ is realized [k] in general and [ʧ] before /i/ or /e/ or /y/ except within a word befoe a morpheme boundary.

e.g. u-mu-kila	umucila	“tail”
u-mu-kele	umuchele	“salt”
u-ku-kyap-a	ukucapa	“to wash” (clothes)

but u-ku-kak-il-a ukukakila and not ukukacila) “to tie for …”
However in loanwords /k/ is realized k before /i/ or /e/ even where there is no morpheme boundary. E.g. kiliiniki (and not kiliinici).
(v) /ɲ/ is written as ny in Icibemba

Generally, consonants operate at the margins of syllables either singly or in clusters (Mohammed, 2001). All consonants in Icibemba can function as onsets. It is important to note that codas do not exist in Icibemba and as a result, consonants appear only at the beginning of a syllable.

6.8.1.1 Complex Consonants

6.8.1.1.1. Prenasalised Consonants

Prenasalised consonants are one of the features of some Bantu languages. According to Boen (2014) a pre-nasalized consonant is a type of a consonant cluster which consists of a sequence that begins with a nasal articulation and ends with an oral articulation. Pre-nasalized consonants behave in many respects like single segments in a word. The following are the prenasalised consonants in Icibemba:

(2)

mb as in imbale	‘plate’
mp as in mpele	‘should I give?’
mf as in mfule	‘should I undress?’
nd as in ndaye	‘should I say bye?’
nn as in nnombe	‘should I beg?’
nt as in ntole	‘should I pick?’
ns as in nsambe	‘should I bath?’
nsh as in nshite	‘should I buy?’
nk as in nkame	‘should I milk?’
nc as in nconge	‘should I mark?
ng as in ngowe	‘should I have a bath?’
nj as in njeshe	‘should I try?’

6.8.1.1.2 Consonant plus Glide

A combination of a consonant and a glide occurs in Icibemba. Fromkin and Rodman (1988) point out that glides are transitional sounds and are sometimes referred to as semi-vowels. Glides are [-consonantal] [+sonorant]. They are different from vowels in that they do not form the peak of a syllable. Examples of co-articulated consonants (articulated as single phonemes in Icibemba) include:

(3)

/m/ + /w/ as in mwana /mw ana/ 'child'
/k/ + /w/ as in kwapa /kwa pa/ 'wing'
/t/ + /w/ as in mutwe /mu twe/ 'head'
/p/ + /y/ as in pyana /pya na/ 'inherit'

6.8.2 Vowels

According to Kenstowicz (1994:17), 'Vowels are distinguished from consonants primarily by a less radical degree of constriction imposed by the lips and tongue on the flow of air through the mouth.' In most cases, the nucleus (peak) of a syllable is a vowel.

Icibemba has a five vowel system, historically reduced from a seven vowel system by loss of two of the high vowels, Kula (2002). This is shown below:

(4)

Proto-Bantu vowel system: í i e a o u ú
Icibemba vowel system: i e a o u

It should be noted that there is also a contrastive semantic distinction between long and short vowels. Long vowels are symbolized orthographically by doubling the vowel to indicate length. Figure 10 below illustrates this:

Figure 10: Long and Short Vowels in Icibemba

	Front (unrounded)	Central (unrounded)	Back (rounded)
High	i ii		u uu
Mid	e ee		o oo
Low		a aa	

Source: Kashoki (2012 p.7)

The semantic distinction between short and long vowels is exemplified below

(5)

ukupapa	'to be surprised'	ukupaapa	'to give birth'
ukushika	'to be deep'	ukushiika	'to bury'

The vowels in Icibemba can be described as follows:

(6)

/a/ open front unround as in apa /a pa/	'here'
/e/ close-mid front unround as in enda /e nda/	'walk'
/i/ close front unround as in ima /i ma/	'stand up'
/o/ close-mid back round as in onse /o nse/	'everybody'
/u/ close back round as in uma /u ma/	'beat'

As can be seen above, Icibemba has a simple five-vowel system. The five vowels occur as 'peaks' in CV-syllable pattern. However, the vowels can also occur in V-syllables as the only segment. Thus the V-syllable typology is permissible in Icibemba.

6.8.2.1 Vowel [a]

[a] is a low, central vowel, which is in total contrast with any of the four [e, i, o, u]. It regularly occurs with onsets in CV-patterns. However, it sometimes occurs without onsets in V-syllable typology, as shown below, especially in demonstratives, for example [apa] 'here'

(7)

[mayo]	'mother'

[tata]	‘father’
[apo]	‘there’
[abaume]	‘men’
[pata]	‘hate’
[umwanakashi]	‘woman’

6.8.2.2 Vowel [e]

This is a mid, front vowel. Like [a], it is also in contrast with the other four vowels [a, i, o, u]. It is an unrounded and voiced vowel, which occurs with or without onsets as follows;

(8)

[endesha]	‘walk very fast’
[pela]	‘give’
[leta]	‘bring’
[umukate]	‘bread’
[icele]	‘prison’
[eico]	‘therefore’

6.8.2.3 Vowel [i]

This vowel also is in contrast with the other four [a, e, o, u]. It is phonetically described as a front, high and unrounded vowel. It occurs after any consonant onset in any CV structure. It also becomes a consistent segment in a V-syllable structure. Examples of syllables where [i] exist are as follows:

(9)

[ima]	‘stand up’
[bika]	‘put’
[fibili]	‘two’
[impumi]	‘forehead’
[filya]	‘thosel’
[impilipili]	‘chilli’

6.8.2.4 Vowel [o]

This is a mid and rounded vowel which is in contrast with the other four vowels. It occurs with or without onsets as follows:

(10)

[onse]	'everybody'
[onka]	'suck'
[mona]	'see'
[ipepo]	'prayer'
[itʃipo:ndo]	'criminal'
[ulwe:ndo]	'journey'

6.8.2.5 Vowel [u]

This is the only high, rounded and back vowel. It is also found in the CV positions as follows:

(11)

[mulungu]	'God'
[umulumendo]	'boy'
[umusungu]	'white person'
[lukungu]	'dust'
[ulukasu]	'hoe'

The trapezium below shows the Icibemba vowels as presented by Kashoki (1968).

Figure 11: A Trapezium of Icibemba Vowels

	Front	Central	Back
High	i		u
Mid	e		o
Low		a	

Source: Kashoki and Spitulnik (1998 p.3)

6.8.2.6 Long Vowels

Vowel lengthening refers to the change in which a vowel is made to be longer in some contexts. In Icibemba, vowels can be short or long. A colony (:) or doubling of the vowel is used to indicate vowel length (Ministry of Education, 1977).

(12)

Short		**Long**	
ukushika	'to be deep'	ukushiika	'to bury'
ukupala	'to remove the bulk of a root'	ukupaala	'to bless'
ukupela	'to grind millet'	ukupeela	'to give'

6.8.2.6.1 Long Vowels before Nasal Compounds

According to Ministry of Education (1977), in Icibemba, the vowel before a nasal compound is always long. It should be noted that the second consonant in a compound should not be a semi-vowel e.g.

(13)

inkoonto 'walking stick'
inkaanda 'skin'
inkoondo 'war'
poomba 'wrap'

6.8.2.6.2 Long Vowels after Semi-Vowel *w*

The vowel after the semi-vowel [w] is always long in Icibemba, Ministry of Education (1977). It should be noted that this includes cases where the **w** is the result of fusion e.g.

(14)

ukuwaama	'to be good'
umwiipwa	'nephew' from umu-+-ipwa
ukuwaama	'to be beautiful'
ukweenda	'to walk'
umweela	'air'

6.8.2.6.3 Long Vowels after Consonant plus Semi Vowel

(15)

ukupyaana	'to succeed'
pwiisha	'finish'
fyoona	'blow the nose'
ukupyuunga	'to preach'

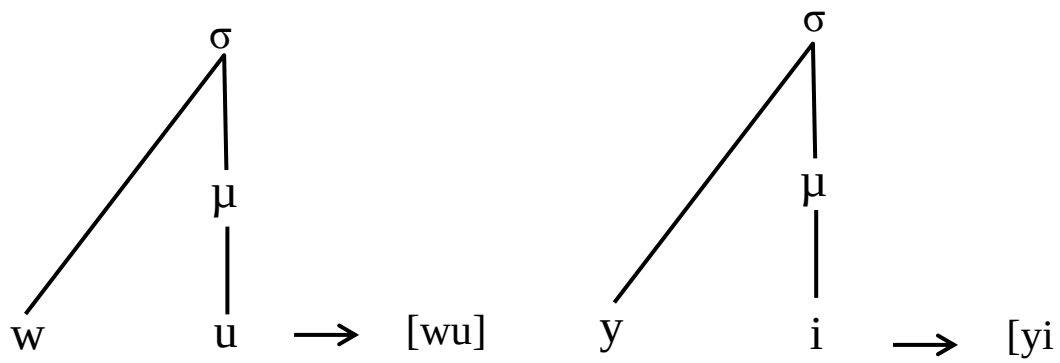
6.9 Icibemba Hiatus Contexts and Hiatus Resolution Strategies

Generally, Icibemba, like many Bantu languages, does not tolerate sequences of vowels (hiatus) in their phonologies (Casali, 1996). In other words, a Vowel + Vowel (VV) sequence occurring within a single phonological word is unacceptable in Icibemba. However, hiatus arises due to morphosyntactic concatenation. The ill-formed sequence has to be repaired through at least one of the two main vowel processes: coalescence, and gliding (consonantalization).

6.9.1 Glide Formation

Glide formation is one of the most common repair strategies for resolving vocalic hiatus in Icibemba. It occurs when V1 is a high vowel, and this high vowel loses its moraicity by being turned into a glide which serves as an onset for V2. A non-high V1 is deleted without compensatory lengthening. If V1 is /i/, it is turned into the palatal glide [j]; however if V1 is /u/, it is turned into the labio-velar glide [w]. Thus, the resultant [j] and [w] are derived glides because they are surface or positional variants of underlying vowels (Rosenthall, 1994). This complementary distribution is not surprising as high vowels and glides share the same feature content except that the former are moraic and the latter are not. As shown in Figure 12 below adapted from Rosenthall (1994), a glide is a high vocoid linked directly to the syllable node and a vowel is a high vocoid linked to a mora.

Figure 12: High Glide/Vowel Distinction



Adapted from Kadenge and Simango (2014 p.6)

Figure 12 is an illustration of the glide formation process, which involves a high vowel losing its mora or gliding before another vowel. This process whereby a vowel becomes a semi-vowel is often referred to as consonantalization (Doke, 1997). Below are some examples of glide formation in Icibemba:

(16)

Prefix + Stem	**Surface Representation**	
/umu + ana/	[umwaana]	'child'
/umu + ando/	[umwaando]	'rope'
/ulu + endo/	[ulweendo]	'journey'
/umu +eshi/	[umweeshi]	'month'
/umu + anda/	[umwaanda]	'nine'
/umu + eni/	[umweeni]	'visitor'
/umu + aka/	[umwaaka]	'year'
/ulu + ala/	[ulwaala]	'nail'
/ulu +ambo/	[ulwaambo]	'gossip'
/utu + ela/	[utweela]	'small metals'
/imi + ando/	[imyaando]	'ropes'
/imi +eshi/	[imyeeshi]	'months'
/imi + anda/	[imyaanda]	'nines'
/imi + aka/	[imyaaka]	'years'
/imi + ona/	[imyoona]	'noses'
/imi + ele/	[imyele]	'knives'

/imi + ela/	[imyeela]	‘winds’
/imi + ono/	[imyoono]	‘fish traps’

The above examples show that in Icibemba, there are two types of glide formation, namely, [w] and [y] formation. [w] is formed when the prefix has /u/ and [y] is formed when it has /i/. The glide formation processes deal with the hiatus that is a result of prefixation. It should be mentioned that the glide formation processes only turn the vowel of the prefix to a glide and not the vowel belonging to the stem. The vowel of the stem is lengthened as can be seen above. In addition, these processes deal with word-medial onsetless syllables because after the glide formation process the stem-initial vowel becomes the nucleus of the word-initial syllable. It is also important to mention that the glide formation processes help in maintaining the canonical Icibemba CV syllable structure.

6.9.2 Coalescence or Vowel Fusion

Coalescence refers to the coming together of linguistic units which were originally distinguishable (Crystal, 1997). In this process, two adjacent segments influence one another and may be replaced by a new segment. According to Webb and Sure (2000), coalescence involves the merging of two sounds, usually vowels to form one unit with intermediate quality. Here the prefix runs together with the stem. The vowels that are produced are long:

(17)

a + a = aa

e.g. ama + ala = amaala ‘nails’

a + e = ee

e.g. aba + enda = abeenda ‘travellers’

a + i = ee

e.g. ama + inso = ameeno ‘teeth’

a + o = oo

e.g. fya + onse = fyoonse ‘everything’

a + u = oo

e.g. aka + uni = akooni ‘a small bird’

i + a = yaa

e.g. ifi + ani = ifyaani ‘grass’

i + e = yee

e.g. ifi + ela = ifyeela ‘metals’

i + i = ii

e.g. ici + inso = iciinso ‘face’

u + o = oo

e.g. umu + ona = umoona ‘nose’

u + u = uu

e.g. umu + ungu = umuungu ‘a pumpukin like crop’

6.9.2.1 Vowel Fusion between Words in Icibemba

In Icibemba, every word ends in a vowel. Many words also begin with a vowel. In a good number of cases, when two vowels come together one after the other, they are not pronounced as individual sounds (Mann, 1977). Instead, they run together to make a single sound:

(18)

a + u = oo

e.g. umulanda uyu = umulandooyu ‘this poor person’

e + a = yaa

e.g. abalume aba = abalumyaaba ‘the husband is this one’

e + i = ee

e.g. icikolwe ici = icikolweeci ‘this great grandparent’

e + u = yoo

e.g. umucele uyu = umucelyooyu ‘this salt’

i + a = yaa

e.g. akamuti aka = akamutyaaka ‘this small tree’

i + i = ii

e.g. icani ici = icaniici ‘this grass’

i + u = yuu

e,g. umupatili uyu = umupatilyuuyu ‘this Father’ (priest of Catholic Church)

o + a = wa

e.g. bakapaaso aba = bakapaaswaba ‘these messengers’

o + i = we

e.g. icipaaso ici = icipaasweci ‘this grasshopper’

o + u = oo

e.g. umulomo uyu = umulomooyu ‘this mouth’

u + a = wa abalungu aba = abalungwaba ‘these Lungus’ (ethnic group)

u + i = wi

e.g. inshimu ishi = inshimwishi ‘these bees’

u + u = uu

e.g. umunofu uyu = umunofuuyu ‘this piece of meat’

The following table is a summary of the outcomes of vowel fusion.

Table 7: Summary of Vowel Fusion in Icibemba

	Followed by	**i**	**e**	**a**	**o**	**u**
i		ii	yee	yaa	yoo	yuu
e		ee	ee	yaa	yoo	yoo
a		ee	ee	aa	oo	oo
o		wee	wee	waa	oo	oo
u		wii	wee	waa	oo	uu

Source: Kashoki and Spitulnik (1998 p.3)

6.9.2.2 Vowel Fusion after Syllables Starting with w and y

It is worth noting that Icibemba does not have *w* and *y* together. Because of this, if the first word has *y* or *w* before the last vowel, the sound pronounced when the vowels run together may be a little different (Mann, 1977):

(19)

wa + a = wa

e.g. ukupwa + amenshi = ukupwamenshi ‘to finish water’

wa + i = we

e.g. imbwa iyi = imbweyi ‘this dog’

wa + u = wo

e.g. ulupwa ulu = ulupwolu ‘this family’

we + a = wa

e.g. akatwe aka = akatwaka ‘this small head’

we + i = we

e.g. imitwe iyi = imitweyi ‘these heads’

we + u = wo

e.g. umutwe uyu = umutwoyu ‘this head’

wi + a = wa

e.g. amatwi aya = amatwaya ‘these ears’

wi + i = wi

e.g. imfwi ishi = imfwishi ‘these white hairs’

wi + u = uu

e.g. ulufwi ulu = ulufuulu ‘this white hair’

ya + a = yaa

e.g. teya amatwi = teyaamatwi ‘listen’

ya + i = yee

e.g. teya imyoono = teyeemyoono ‘set the traps’

ya + u = yoo

e.g. teya umupila = teyoomupila ‘play the ball’

ye + a = yaa

e.g. akatyetye + aka = akatyetyaaka ‘name of a bird’

ye + i = yee

e.g. aipeye + inama = aipeyeenama ‘he/she killed an animal’

ye + u = yoo

e.g. epaye + umuntu = epayoomuntu ‘let him/her kill a person’

yo + a = yaa

e.g. bamayo + aba = bamayaaba ‘this is my mother’

yo + i = yee interjection

yo + u = yoo

e.g. mayo + uyu = mayooyu ‘this is my mother’

It should be noted that there are some unusual cases when the normal rules of fusion are not realized in actual speech as expected:

(20)

wi + u becomes *yuu* instead of wyuu

ukutwi uku becomes ukutwuuku

yu + i becomes *wi* instead of ywii

icipyu ico becomes icipwico

6.10 The Icibemba Syllable Structure

According to Katamba (1989), the syllable is a unit in terms of which phonological systems are organized. A syllable therefore is a purely phonological entity. In dealing with the syllable, one looks at the level of organization of the consonants and vowels in a word in a given language since each language has a specific syllable structure. A syllable's structure consists of two segments, that is, a consonant and a vowel. There are two types of syllable systems, the open syllable and the closed syllable system. In the open syllable system, words end in a vowel while in a closed syllable system, words end in a consonant sound.

Icibemba has open syllables; that is, there are no codas in Icibemba syllables. The nucleus is an obligatory element whereas the onset is optional.

There are three types of syllables in Icibemba:

(a) V-Syllable

A vowel only can be a syllable in Icibemba. This occurs usually if the vowel is the initial vowel – pre prefixes in nouns; concords in verbs. This type of syllable is found in word-initial position and in medial position.

(i) Word-initially

(21)

e - enda	'walk'
o – onka	'suck'

a – anga	‘celebrate’
u – upa	‘marry’
i – ika	‘disembark’

(ii) Word-medially

It should be noted that Icibemba vowels are monophthongs, i.e. they are spoken with the tongue still. Therefore, when two vowels come together in Icibemba speech, they belong to different syllables

(22)

a – eaba	‘these are the ones’
e – euyu	‘this is the one’
u – naupa	‘I have married’
o – aonda	‘He/She has grown thin’
i – soimbe	‘come and sing’

(b) CV-Syllable

Normally a syllable is made up of a consonant and a vowel combination in Icibemba. The consonant in the CV combination serves as an onset - the beginning of the syllable - while the vowel is the core as it can stand alone as a syllable. In this thesis, the sequence homorganic nasal plus consonant is treated as a single sound unit and this is why they are grouped here. This CV-syllable type occurs word-initially, word-medially and word-finally.

(i) Word-initially

(23)

cimbwi	‘hyena’
candi	‘it is mine’
bonse	‘all’
bula	‘take’
mpela	‘give me’

(ii) Word-medially

(24)

inkama	‘secret’

ubupe	‘gift’
icela	‘metal’
ipika	‘cook’
inkoto	‘walking stick’

(ii) Word-finally

(25)

imba	‘sing’
impumi	‘forehead’
iciloto	‘dream’
insele	‘insults’
ukulu	‘leg’

(c) Csv-Syllable

This syllable type consists of a consonant followed by a semi-vowel and a vowel:

(26)

pyaana	‘inherit’
umweeni	‘visitor’
ukwaapa	‘shoulder’
ifyuni	‘birds’

(d) CCsV

This syllable type consists of a consonant plus another consonant followed by a semi-vowel and a vowel:

(27)

icitendwe	‘boredom’

6.11 Vowel Harmony

Vowel harmony is an assimilatory process that is common in Bantu and Nilotic languages. Vowel harmony can be defined as a system in which all the vowels of a language are divided into two subsets or more with the condition that all vowels in a

given word (or domain), must come from a single subset (Goldsmith, 1990). Katamba (1984: 257) comments that:

> *In some languages, vowels occurring in some specified domain, which is usually the word, must share some phonetic property or properties. Such languages are said to have vowel harmony.*

The phonological feature of vowel harmony ensures that vowels in a given domain in this case, vowels within a word or a morpheme belong to or have the same feature. The vowels of a given language harmonize in terms of features such as, backness, roundness, frontness and [ATR] (advanced tongue root), as vowels that exhibit opposite values cannot co- occur within the same domain. A language which has a rounding harmony has rounded vowels such as /o/ or /u/ cannot co- occur in the same word with an unrounded vowel like /e/ (Casali, 1996). In a given word, all the vowels must generally be drawn from the same set. The [ATR] feature is a phenomenon of vowel harmony and Icibemba has its harmony based on it. Casali (1996) defines vowel harmony as a phenomenon in which all the vowels in a word must agree or harmonize for their value of [+ATR]. This feature divides the vowels of a language into two sets, the [+ATR] and the [-ATR] as shown below:

(28)

[+ATR] Vowels	[-ATR] Vowels
/i u, o, e, a /	/ɪ , ʊ , ɛ , ɔ, ɑ /

Hooper (1976:25) says that an inserted or a deleted vowel in a purely phonetic environment is predictable on the basis of the following principles:

(a) That the epenthetic vowel must be the minimal vowel.

(b) That the vowel should be that vowel whose features are copied from a nearby segment.

The above principles in (a) and (b) above, imply that the epenthetic vowel in a word should have the same features as the other vowels. For instance, if the vowel in a word has a [+ back] feature, then the epenthetic vowel also should have a [+ back] feature as well.

6.12 Tone

In the discipline of linguistics, tone takes on a completely different meaning. In the technical, physical aspect, tone is the rising and lowering of pitches (Frazier, 2014). These distinct pitches are not only composed of different frequencies and resound at different levels of hertz, but they can, in some languages, carry a different lexical meaning. In her book Tone, Yip (2002) describes a language as tonal 'if the pitch of the word can change the meaning of the word. Not just its nuances, but its core meaning.'

6.13 Tonal Realization

Icibemba is a tonal language, with two basic tones, high (H) and low (L) (Kashoki, 2012). H is marked with an acute accent whereas L is unmarked. Like most other Bantu languages, tone (a kind of musical note on an individual syllable) can be phonemic and is an important functional marker in Icibemba, signalling semantic distinctions between words.

(29)

Imbá	'sing!'	Ímba	'dig!'
Ulúpwá	'family'	Úlupwá	'eggplant'

Tonal contrasts also exist at the grammatical level, e.g. in signaling different tenses:

(30)

Bááfíkílé	'they arrived (yesterday)'
Bááfikílé	'they (had) arrived (a long time ago)'

Tonal patterns are more complex than these examples suggest in actual speech as they interact with other morpho-syntactic, morpho-phonological, and prosodic processes. For instance, consider these two sentences:

(31)

Tuléélyá buléétí	'We are eating bread'
Tuléelyá nshi?	'What shall we eat?'

In the first sentence, the tense/aspect marker *-lee-* carries a high tone, and in the second sentence it has a falling tone (H followed by L). Moreover, a high tone can become a low tone at the end of a declarative sentence.

6.14 Chapter Summary

This chapter has outlined the segmental phonologies of English and Icibemba, that is, their consonants and vowels and syllables in order to answer the question raised in Chapter One – "What is the difference between the segmental phonology and syllable structure of English and Icibemba?" It has outlines the syllable structure patterns available or permitted per language. English syllable structures are rather complex as compared to Icibemba. Icibemba is an open-syllable language. The Icibemba syllable structure consists of onset and nucleus. Icibemba syllable carries vowel as a nucleus while consonants do not make syllables. Vowel alone can stand as a syllable. The syllable structure has been analyzed using the CV phonology model that envisages the syllable as a three tier consisting of the syllable node, the CV node and the segmental node.

This chapter has also revealed that assimilation occurs in both English and Icibemba. Icibemba uses morphophonemic processes such as glide formation and vowel coalescence to resolve hiatus. Vowel fusion or coalescence has also been discussed. Vowel harmony in Icibemba has been discussed and it has been observed that the phonological feature of vowel harmony ensures that vowels in a given domain belong to or have the same feature. Finally, the chapter has also discussed tone and that Icibemba is a tonal language while English is a stressed language.

The next chapter looks at phonological adaptation of Icibemba loanwords from English.

CHAPTER SEVEN

PHONOLOGICAL ADAPTATION OF ICIBEMBA LOANWORDS FROM ENGLISH

7.1 Overview

This chapter discusses phonological processes that Icibemba loanwords undergo in order to be adapted in the Icibemba language. The chapter is answering the question raised in Chapter One – "What are the various phonological processes involved in the adaptation of Icibemba loanwords into Icibemba?" Both consonant and vowel processes are discussed since these processes are used in the loanword adaptation processes. As earlier mentioned, an adaptation process is a method that a language uses to adapt a loanword from its original native phonology to a secondary language phonological system (Beel and Felder, 2013). In this case, adaptation process is a method Icibemba uses to adapt Icibemba loanwords in its phonological system.

This chapter deals with Icibemba loanword adaptation patterning; the main focus being on the discussion and making generalization about the main strategies used in repairing illegalities in loanword adaptation in Icibemba. All the data used are from the Icibemba dataset. The major repair strategies to be discussed in this chapter include vowel epenthesis and substitution. Much of this chapter will be devoted to the discussion of these two repair strategies. These two strategies are the major ones observed in the adaptation process. It should also be mentioned that in most cases, more than one adaptation process occur within a phonological segment that requires more than one phonological change.

It should be noted that these processes are discussed within the framework of CV phonology.

7.2 Adaptation of Monolinguals versus Bilinguals

In the Icibemba loanword adaptation situation, people with very little or no formal education (mainly older people) constitute the monolingual group, while those with formal education (those who have gone through the basic form of education up to the secondary school or tertiary level), on the other hand, form the bilingual group. Myers-Scotton (2006) says bilingualism is regarded as the ability to use two or more languages sufficiently to carry on a limited casual conversation. The monolinguals strictly subject the foreign sources to strict native syllable structure well-formedness, as opposed to the way the bilingual speakers whose main focus is usually on avoiding illegal word-final obstruents in adapting foreign words (Adomako, 2008). For instance, the following are examples of some borrowed words in Icibemba included in the list of words collected in the fieldwork for the analysis in this thesis and how the two groups adapt them.

(32)

Monolinguals	**Bilinguals**	
i. fwaamu	faamu	'farm'
ii. Fulaite	Fraide	'Friday'
iii. talanshipoti	transipoti	'transport'
iv. tekishi	desiki	'desk'

From the data above, one can conclude that the bilingual form is comparatively more faithful to the source word but less faithful to the native grammar because it maintains clusters. The monolingual form, on the other hand, is strictly faithful to the native syllable structure by repairing all illicit clusters and word-final obstruents at the expense of being largely unfaithful to the source. While for the monolingual speakers consonant clusters are reduced by the insertion of a vowel, the bilinguals keep the clusters the same way they are in the input (Mtenje, 2010).

It should however be noted that both monolingual and bilingual speakers strict maintain open syllables. If the loanword has a coda, an epenthetic vowel is inserted in order to correct it as can be seen in the examples below.

(33)

Loanword by Monolingual	Loanword by Bilingual	English
paani	paani	pan
baki	bagi	bag
sukulu	sukulu	school
ibuuku	ibuuku	book
kaaloti	kaaloti	carrot
kooti	kooti	court

From the data above, it can be concluded that where a syllable ends in a coda, a vowel is inserted to simplify it. It should be stated here that this thesis mainly deals with monolinguals.

7.3 Adaptation of Consonants and Vowels

Words are made up of consonants and vowels. In the process of borrowing words from English into Icibemba, consonants and vowels are not borrowed in the same way. According to Cohen (2013), when integrating foreign words into a language, non-native segments in the donor language (English in this case), may go through adaptation in order to conform to some (or all) native (receipient language or Icibemba in the present case) phonological restrictions. Consonants are almost always borrowed uniformly (one-to-one), showing little or no variation during the adaptation process, i.e. a single input has a single output (Cohen, 2013). Below are some examples:

(34)

English	Icibemba
/v/	/f/
/z/	/s/
/g/	/k/
/d/	/t/

In contrast, vowels do not exhibit such systematic adaptation. A single input can have different outputs and different inputs can have the same outputs (Cohen, 2013). This is to be expected because English and Icibemba vowels differ greatly. Icibemba speakers

borrowing English vowels have to map a 12 vowel system into Icibemba's 5 vowel system.

(35)

English **Icibemba**

a) /iː, ɪ/ are realized as /i/

b) /uː, ʊ/ are realized as /u/

c) /e, ɜ, æ/ are realized as /e/

d) /ɔː , ɒ/ are realized as /o/

e) /ʌ, a, æ, ə/ are realized as /a/

7.4 Phonological Processes

There are various phonological processes in Icibemba which can be grouped into two broad groups, namely, the vowel processes and consonant processes (Boen, 2014). As earlier stated, when a word is borrowed into another language, it undergoes certain changes to fit into the phonological system of the recipient language. These changes may result in either 'adaptation' (where the phonological composition of the loanword is modified) or 'adoption' (where loanwords get assimilated into the recipient language while preserving their original form and pronunciation in the donor language). According to Davidson and Rolf (1996), Kenstowicz (2003a,b, 2005, 2006), La Charite (2005) and Adler (2006), the adaptation of loanwords involves the resolution of often conflicting demands to preserve as much information from the source word as possible while still satisfying the constraints that make the lexical item sound like a word of the recipient language. The process of borrowing words from English into Icibemba is accompanied by adaptation of the English words into the Icibemba phonological system. This section explains the various adaptation processes involved in the process of borrowing loanwords from English into Icibemba.

As can be seen from the previous chapter, the type and number of phonemes in a phonetic inventory of Icibemba differ from that of English. Because of this, borrowing requires that Icibemba should use a plan to deal with foreign (English) phonemes that are not present in its phonemic inventory. In this case, Icibemba replaces the English phonemes with one of its own that are phonetically similar. It should be noted that the

loanword is usually completely nativised so that the speakers of Icibemba may not even be aware that the word is borrowed from English. Furthermore, it can be said that all these rules apply in almost all environments.

It should be stressed that the rules discussed in this chapter represent regularities. The existence of exceptions has been accounted for. It is noteworthy to state that a number of borrowings have not been made straight forward from English. However, the phonological rules are represented as if all the loanwords have been taken straight-forward from English. In this section, we explain the various adaptation processes involved in the process of borrowing loanwords from English into Icibemba. Below are some of the phonological processes involved. Major rules presented here are of three types: (a) epenthesis, (b) feature change or sound substitution and (c) deletion.

7.5 Sound Substitution

When words are borrowed from one language to another certain sounds may be substituted by others. There are different factors which lead to the substitution of sound segments in borrowed words. Among these factors is lack of the equivalent sound segments in the recipient language. The sounds and forms which are incompatible with the sound segments of the recipient language are replaced by native ones. This type of substitution seems to be triggered by the native segment inventory constraint (Madiba, 1994). In terms of this constraint foreign sounds which do not occur in the recipient language sound inventory are barred from occurring and are therefore substituted by native ones.

7.5.1 Substitution of Consonants

In an attempt to facilitate our analysis of loanword adaptation in Icibemba, it is important to look at English and Icibemba phonological systems discussed in chapter five.

As already alluded to above, Icibemba lacks some phonemes that are found in English. These facts are key concerns when an English word is borrowed into Icibemba.

Practically, these missing sounds are substituted by the closest sounds that exist in Icibemba.

Substitution is a general tendency to preserve sounds from deletion and it tries to reshape the word closer to the input form, but at the same time because some sound combinations are not allowed in the recipient language they undergo certain adaptations (Hussain et al, 2011). In substitution, an item is replaced to the phonetically-close phonemes in the recipient language, (Hock, 1991). This is a process that takes place during borrowing and involves substituting consonants in the source language with others in the target language. It is usually attributed to the absence of equivalents in the target language. Absent segments will always be assigned the closest bundle in L1 (Antila, 1972). This therefore implies that if a segment is absent in Icibemba then a bundle that is close to it in Icibemba will be used to substitute it. Sometimes a sound segment from English may be perceived differently by the Icibemba people leading to substitution.

Since target and source languages most often do not have the same inventory of sounds, one obvious way in which loanwords are modified is by sound substitutions. That is, for any source language sound which the borrowing language lacks, the phonetically closest sound is substituted.

In this regard, English consonants which are not found in the Icibemba consonantal inventory are substituted by those that are found in Icibemba. English sounds which are not found in Icibemba are substituted by the Icibemba sounds that are phonetically close to them. This observation is illustrated in the following examples.

7.5.1.1 Devoicing

According to Collins English Dictionary (2016), in phonetics, devoicing is the process by which a consonant that is usually voiced becomes devoiced. It was discovered that devoicing phonemes was common in the process of adaptation of lexical borrowings from English to the Icibemba phonological system. It should however be mentioned that Town Icibemba maintains the existence of the voiced phonemes in Icibemba loanwords.

(i) d – Devoicing: This rule states that English /d/ which is not preceded by a nasal is realised as / t / in Icibemba:

d→t

(36)

English	**Icibemba**
Adam	[Ataamu]
damage	[taameci]
dance	[taansi]
deacon	[tiikoni]
dear	[tiiya]
DC	[tiishi]
desk	[teshiki]
dam	[tamu]

Note that there are a few exceptions where /d/ is preceded by a nasal:

(37)

English	**Icibemba**
doctor	[ndokotala]
Diana	[Ndaina]

(ii) **g – Devoicing:** This rule states that English /g/ is realised as /k/ in Icibemba:

g → k

(38)

English	**Icibemba**
garage	[kaalaci]
garden	[kaalateni]
garlic	[kaaliki]
gate	[keeti]
gear	[kiiya]
gift	[kiifuti]
bag	[baaki]
gold	[kolite]

(iii) **v – Devoicing:** This rule states that English /v/ is realised as /f/ in Icibemba:

$$v \rightarrow f$$

(39)

English	**Icibemba**
valve	[faalufu]
vest	[feshiti]
vaseline	[fashilini]
varnish	[fanishi]
vote	[foota]
five	[faifi]
November	[Nofemba]

(iv) dʒ - **Devoicing:** This rule states that English /dʒ/ is realised as /c/:

$$dʒ \rightarrow tʃ$$

(40)

English		**Icibemba**
charger	/`tʃɑ:dʒə(r)/	[caaca]
judge	/dʒʌdʒ/	[caaci]
jackpot	/`dʒækpɒt/	[cakipoti]
George	/dʒɔdʒ/	[Cooci]
join	/dʒɔɪn/	[coini]
jar	/dʒɑ:(r)	[caa]
July	/dʒu`laɪ/	[Culai]
Junior	/`dʒu:niə(r)	[Cuunya]

(v) **/θ/** and **/ð/ Devoicing:** This rule states that English /θ/ and /ð/ are realised as /t/, /f/ or /s/ in Icibemba:

Figure 13: /θ/ and /ð/ Devoicing

$$\theta / ð \rightarrow \begin{pmatrix} t \\ f \\ s \end{pmatrix}$$

(41)

English		**Icibemba**
father	/ˋfɑ:ðə/	[fáása]
bathroom	/ˋba:θru:m/	[baafwa]
Arthur	/‘a:θa/	[aasa]
theatre	/ˋθɪətə(r)/	[fyééta]
catholic	/ˋkæθlik/	[kaatolika]
Corinthian	/ka’rinθan/	[koliinto]
Goliath	/ga’laiaθ/	[Kolyaati]
three	/ˈθri:/	[fili]

(vi) **z – Devoicing:** This rule states that English /z/ is realiesd as /s/ in Icibemba:

z → s

(42)

English	**Icibemba**
zero	[shiilo]
zone	[sooni]
zip	[shiipu]
size	[saishi]
dozen	[taseni]

7.5.1.2 s + i/c Insertion: This rule states that English /s/ followed by /i/ or any other consonant is realised as /sh/ in Icibemba:

s + i/c→ sh

(43)

English	**Icibemba**
scone	[ishikoono]
spanner	[shipaana]
spare	[shipeeya]
basket	[bashikeeti]
steak	[shiteeki]
pastor	[pashita]
sink	[shiinki]

7.5.1.3 r – Lateralisation: This rule states that English /r/ is realised as /l/ in Icibemba:

r → l

(44)

English	**Icibemba**
radio	[leetiyo]
rape	[leepu]
rake	[leeki]
lorry	[loole]
room	[luumu]
ruler	[luula]

7.5.1.4 b–Fricatisation

This rule states that English plosive /b/ is realised as fricative /β/ in Icibemba except before a nasal compound.

b → β

(45)

English	**Icibemba**
bag	[βaaki]
ball	[βoola]
band	[βaandi]
bar	[βaa]
club	[akalaaβu]
hub	[aaβu]

The above information on substitution can be summarised in table 8 as follows:

Table 8: Substition of Consonants

Rules
d→t
g→k
z →s
v→f
r→l
s→sh
b→β
θ and ð→ t, f, s
dʒ→tʃ

Source: (Field Data 2017)

7.6 General Remarks on the Adaptation of Consonants in Icibemba

In the preceding discussion, consonant substitutions in Icibemba loanwords have been discussed. The discussion was based on the substitution of English consonants which do not have equivalents in Icibemba. These sounds are restrained from occurring in the Icibemba language by the native segment inventory constraint Therefore they are replaced by sounds which are phonetically closest to them.

The substitutions in these consonants have been motivated by phonetic factors. There are close similarities between the English sound and the one that replaces it in Icibemba. The replacement of consonants which are part of the sound inventory of the source language with different ones may be explained with reference to the enviroment in which that sound occurs. For instance, certain sounds were replaced because of the influence of other preceding sounds. Most of the stop sounds which occur in clusters were retained unchanged in Icibemba loanwords.

7.7 Metathesis or Permutation of Segments

According to Batibo (2000), metathesis is the process in which two adjacent sounds exchange positions. This is usually done to facilitate ease of articulation. The order of English sounds is changed when the word is borrowed in Icibemba as can be seen in the following few examples:

(46)

English	**Icibemba**
kitchen	[cikini]
shovel	[fosholo]
desk	[tekishi]

This feature is not common to bilingual speakers (those that speak Icibemba and English fluently) because bilingual speakers have the knowledge of English phonology and they do not rely on just the perception of English words, but Icibemba monolingual speakers, most often, misperceive these words and because some consonant combinations are not identical to their L1, thus, make the words easy to pronounce with the reversal of sounds.

7.8 Vowel Adaptation Processes

Vowel adaptation processes refer to how various vowels in loanwords are treated once they enter a recipient language (Boen, 2014). They are systematic sound changes that affect vowels. These vowel adaptation processes include vowel substitution and vowel preservation. Both vowel substitution and vowel preservation processes are discussed below.

7.8.1 Vowel Substitution

As indicated earlier Icibemba has five vowels while English has twelve. This implies that Icibemba lacks some vowels and as a result the vowels missing in the Icibemba phonemic inventory can be substituted with those present in English, which are perceived to be closer to the substituted vowels.

According to Hussain, Mahmood and Mahmood (2011), substitution is a general tendency to preserve sounds from deletion and it tries to reshape the word closer to the input form, but at the same time because some sound combinations are not allowed in the recipient language, they undergo certain adaptations. In substitution, an item is replaced to the phonetically-close phonemes in the recipient language (Hock, 1991).

Substitution is an unmarked process of sound change which is the characteristics of the majority of the languages of the world (Hussain, Mahmood and Mahmood, 2011). The examples of vowel substitution are discussed below.

7.8.1.1 Adaptation of the Schwa /ə/

This vowel is often referred to as schwa. "Schwa is, in terms of its articulation, neither high nor low, neither front nor back. It is a vowel produced with a neutral setting of the articulators and is in this respect a 'minimal' vowel, involving, as it does, no displacement of the articulators from the neutral position" (Giegerich, 1992:68). This vowel does not occur in Icibemba and is realised in Icibemba as /a/, /e/, /i/, /o/ and /u/. This can be seen from the following examples:

(i) **/ə/ adapted as /a**

(47)

English		**Icibemba**
/`bʌtə(r)/	butter	[baata]
/`kæmərə/	camera	[kaamela]
/'kænsə(r)/	cancer	[kaansa]
/`sentə(r)	centre	[seenta]
/`tʃæptə(r)/	chapter	[caapita]
/`kɔ:rəs/	chorus	[koolashi]
/`tʃɑ:dʒə(r)	charger	[caaca]
/`tʃæptə(r)/	chapter	[capita]
/`kɒlərə/	cholera	[kolele]
/`kɔ:rəs/	chorus	[kolashi]

(ii) **The schwa is also realised in Icibemba as /i/** e.g.

(48)

English		**Icibemba**
/`ærəti/	Charity	Chaliti
/`bætəri/	battery	ibatili

(iii) /ə/ adapted as /u/

Only one item was discovered:

(49)

English	**Icibemba**
/ˌkɑ:bə`retə(r)	'carburettor'

(iv) /ə/ adapted as /e/

(50)

English		**Icibemba**
/`æksidənt/	'accident'	akishitenti
/`eɪprəl/	'April'	Epulelo
/`biznəs/	'business'	biishineshi
/`kæmərə/	'camera'	kaamela
/`kɑ:pəntə(r)	'carpenter'	kaapenta
/`kɒlərə/	'cholera'	kolela
/`sɪnəmə/	'cinema'	shinema
/`kɒnvənt/	'convent'	konifenti
/`kaʊnsələ(r)	'councillor'	kansela
/`dɪsəntri/	'dysentry'	tisentili

(v) /ə/ adapted as /o/

(51)

English		**Icibemba**
/ˌɔ:tə`mætɪk/	'automatic'	otomatiki
/ˌæpə´stɒlɪk/	'apostolic'	aposhito
/`bi:kən/	'beacon'	bikoni

/`bɪʃəp/	‘bishop’	bishopu
/kə`ləʊniəl/	‘colonial’	koloonyo
/kə`ma:ndə(r)	‘commander’	komaanda
/kə`ma:ndəʊ/	‘commando’	komaando
/kə`mɪti/	‘committee’	komiiti
/kən`dʌktə(r)	‘conductor’	kondaakita
/`kærət/	‘carrot’	kaaloti

In the examples above it is interesting to note the various substitutions of the English vowel /ə/. Its realisation is complex because it is realised by all five Icibemba vowels. The question here is why is this vowel realised by all the Icibemba vowels? To answer this question, the phonetic qualities of this vowel and its position in the vowel chart need to be taken into consideration.

As mentioned above, this vowel is a neutral vowel; therefore its substitution by all the Icibemba vowels may be explained with reference to phonetic approximation. The /ə/ vowel occupies the most central position in the vowel chart. Because of its central position and its neutrality it can share phonetic characteristics with any peripheral vowel in Icibemba.

Nevertheless, this account still does not explain what determines the realisation of a specific vowel phoneme instead of another. This problem can also be explained by looking at the influence of other vowels within the word in which this sound occurs. The above examples in (48) may throw some light in this regard.

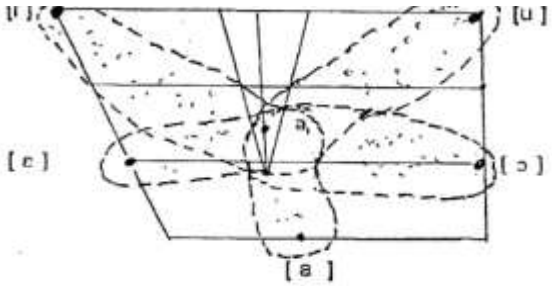
The replacement of the vowel /ə/ by vowel [i] in the above examples seems to be due to assimilation (i.e the schwa vowel has assimilated to the vowels of the preceding syllables).

Still, it should be noted that in some cases, it is the consonant that is a factor rather than the vowel. The sound [b] as in example (49) seems to have influenced the central vowel /ə/ to be realised as a rounded back vowel in Icibemba. The common factor here is the

bilabial characteristic in both the consonant and the vowel. Vowel [u] is [+round] and involve the lips in their production. /ə/ also becomes /a/ mostly in final positions.

The central position which the schwa vowel occupies could be seen from Figure 10 below:

Figure 14: Position of Schwa Vowel



Adapted from (Madiba, 1994 p.162)

7.8.1.2 Adaptation of the Central Vowel /ʌ/

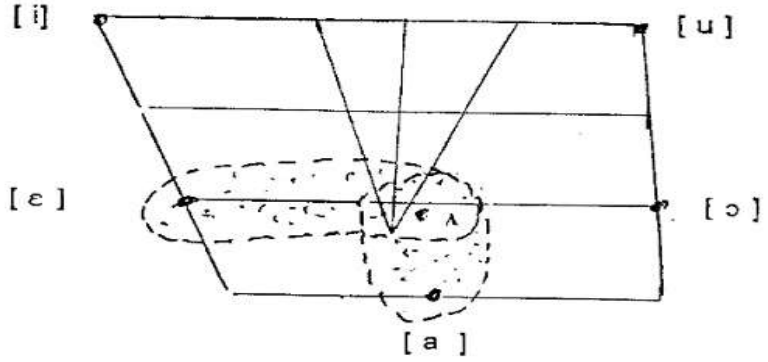
Giegerich (1992) describes this vowel as being unrounded and slightly more back than front. It is fully low in English dialects like RP. This vowel is replaced by /a/ in Icibemba. Consider the following examples:

(52)

English		**Icibemba**
/`kʌmpəni/	'company'	akaampani
/klʌtʃ/	'clutch'	kalaaci
/bʌs/	'bus'	baashi
/bʌn/	'bun'	ibaanshi
/lʌntʃ/	'lunch'	laanci
/`mʌndeɪ/	'Monday'	Maande
/`ægrɪkʌltʃə(r)	'agriculture'	kalakaca
/dʌk/	'duck'	icitakishi
/`ʌpə(r)/	'upper'	aapa
/ʌm`brelə/	'umburella'	ambulela

The realisation of the English vowel /ʌ/ as /a/ in the examples above seems to be due to phonetic approximation. Even though the English vowel is produced at a slightly higher level, both are low vowels. In the articulation of both vowels there is no rounding of lips. Therefore, the choice of the vowel /a/ as a substitute for the English vowel A seems to be determined by phonetic approximation. The substitution of the vowel /ʌ/ is illustrated in the following figure:

Figure 15: Position of Vowel /ʌ/



Adapted from (Madiba, 1994 p.163)

7.8.1.3 The Back, Centralised High Vowel /ʊ/

The English vowel /ʊ/ is also adapted in the language as /u/, with no exceptions. Once more, these vowels share all phonetic features, except that /ʊ/ is more centralised. This derivation is therefore plausible. The following examples were found in the data:

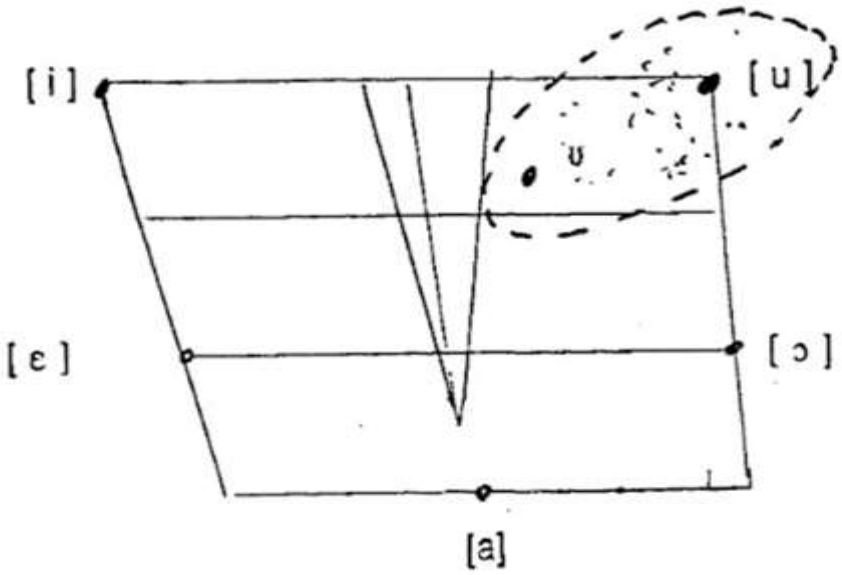
(53)

English		**Icibemba**
/bʊk/	'book'	buku
/ˋbʊlɪt/	'bullet'	buuleti
/bʊlʃɪt/	'bull shit'	buulushiti
/ˋbʊtʃəri/	'butchery'	buucali
/bʊl/	'bull'	buulu
/kʊk/	'cook'	kuuki
/taʊn/	'town'	tauni
/ˋʃʊgə(r)/	'sugar'	shuka

/fʊl/	‘full’	fuulu
/krʊk/	‘crook’	kuluuku

In all the examples above 'the English vowel /ʊ/ is replaced by /u/. This substitution may be explained with reference to phonetic similarities between the two vowels. Both of these vowels are produced with the back part of the tongue and they also share the features [high] and [round], though to different degrees. It should be noted that when /ʊ/ is integrated in Icibemba, in most cases, it is lengthened. The back position of these vowels and their height in the mouth is illustrated in the following figure:

Figure 16: Position of Vowel /u/



Adapted from (Madiba, 1994 p.166)

7.8.1.4 Adaptation of /u:/

(54)

English		**Icibemba**
/ˋba:θru:m/	‘bathroom’	bafwa
/ˋbedru:m/	‘bedroom’	betiluumu
/bu:m/	‘boom’	buumu
/bu:t/	‘boot’	buuti

/bru:m/	‘broom’	bulumu
/`su:tkeɪs/	‘suitcase’	sutikeshi
/klɑ:sru:m/	‘classroom’	kalashiluumu
/kəm`pju:tə(r)	‘computer’	kompyuta
/`ku:lə(r)	‘cooler’	kuula
/`ku:pɒn/	‘coupon’	kuponi

7.8.1.5 The Front, Mid Vowel /e/

In a majority of the loanwords, the English vowel /e/ is fully adapted in Icibemba as /e/, with some cases of partial adaptation. Examples of full nativization of the vowel are given below:

(55)

English		**Icibemba**
/desk/	‘desk’	[teshiki]
/hotelʊ/	‘hotel’	[otela]
/ə`dres/	‘address’	[ateleshi]
/`sekʃn/	‘section’	[sekisheni]
/ɑ:`men/	‘amen’	[aameni]
/bed/	‘bed’	[beeti]
/keɪs/	‘case’	[keshi]
/`sɪnəmə/	‘cinema’	[shinema]
/tʃek/	‘cheque’	[ceki]
/sɪ`ment/	‘cement’	[sementi]

7.8.1.6 /e/ adapted as /i/

There was only one example in the data where /e/ is realised as /i/. This was found in the word ‘engine’ and its derivative ‘engineer’. Examples:

(56)

English		**Icibemba**
/endʒɪn/	‘engine’	[injini]
/endʒɪnəɪ/	‘engineer’	[injiniya]

7.8.1.7 Adaptation of /æ/

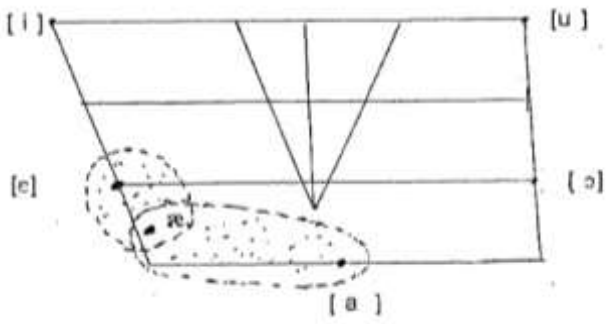
The front, open-mid English vowel /æ/ is invariably adapted in Icibemba as /a/. This vowel, which can occur in both initial and medial positions within the English word, is rendered as /a/ in all such environments. Examples are as follows:

(57)

English		**Icibemba**
/spænə(r)/	'spanner'	[shipaana]
/kæmp/	'camp'	[kampu]
/`kæmərə/	'camera'	[kaamela]
/ʃænti/	'shanty'	[shanti]
/sæləri/	'salary'	[salale]
/sæk/	'sack'	[isaaka]
/`tʃæptə(r)/	'chapter'	[capita]
/`tʃæpl/	'chapel'	[capeo]
/kæ`ʃɪə(r)	'cashier'	[kashiya]
/`kærət/	'carrot'	[kalooti]

Because the vowel /æ/ does not occur in Icibemba it is realised as /a/ in Icibemba adoptives. This substitution is not accidental. The Icibemba vowel /a/ is the one which is the closest to the English vowel /æ/. The Icibemba vowel /a/ shares the feature [low] with that of the English vowel. Thus the substitution in this case is made on the basis of phonetic approximation. This can be seen from the position of these vowels in the following vowel chart:

Figure 17: Position of Vowel /æ/



Adapted from (Madiba, 1994 p.157)

7.8.1.8 Adaptation of /ɜ:/

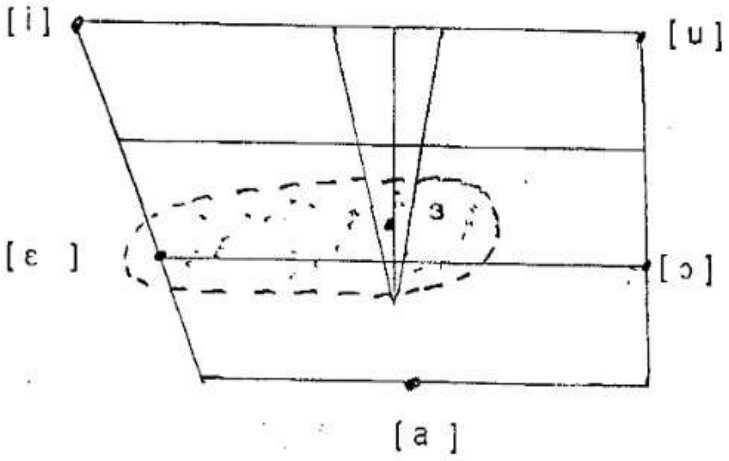
This English central vowel /ɜ:/ is mostly realised in Icibemba loanwords as /e/. This can be seen in the following examples:

(58)

English		**Icibemba**
/skɜ:t/	'skirt	[shikeeti]
/rɪ´zɜ:v/	'reserve'	[liseefu]
/tɜ:m/	'term	[teemu]
/pɜ:m/	'perm'	[peemu]
/k3: fju:/	'curfew'	[kefyu]

The examples given above show that the English vowel /ɜ:/ is replaced by /e/ in Icibemba loanwords. This substitution is due to the fact that the two sounds are phonetically close to each other. They are both mid-vowels and are produced without the lip-rounding. The closeness between these two vowels can be seen from the following figure:

Figure 18: Position of Vowel /ɜ:/



Adapted from (Madiba, 1994 p.159)

7.8.1.9 Adaptation of [ɔ:]

The English long, open mid, back vowel [ɔ:] is realised in a majority of Icibemba loanwords as [o:], with a few cases where it is rendered as [o]. The examples are as follows:

(59)

English		**Icibemba**
/kɔ:nə(r)/	'corner'	koona
/kɔ:pərəl/	'corporal'	kopolo
/kɔ:t/	'court'	kooti
/kɔ:s/	'course'	kooshi
/fɔ:k/	'fork'	foka
/fɔ:k/	'fooloko'	foloko
/`fɔ:ti/	'forty'	foote
/hɔ:s/	'horse'	ioshi
/ɪn`fɔ:mə(r)	'informer'	infoma
/`ki:bɔ:d/	'key board'	kibooti

7.8.1.10 Adaptation of /ɒ/

The back, low vowel /ɒ/, in its fully adapted form, is realized in Icibemba loanwords as /o/. This is the sound to which this vowel is closest in the language, both articulatorily and perceptually. Below are examples of its adaptation:

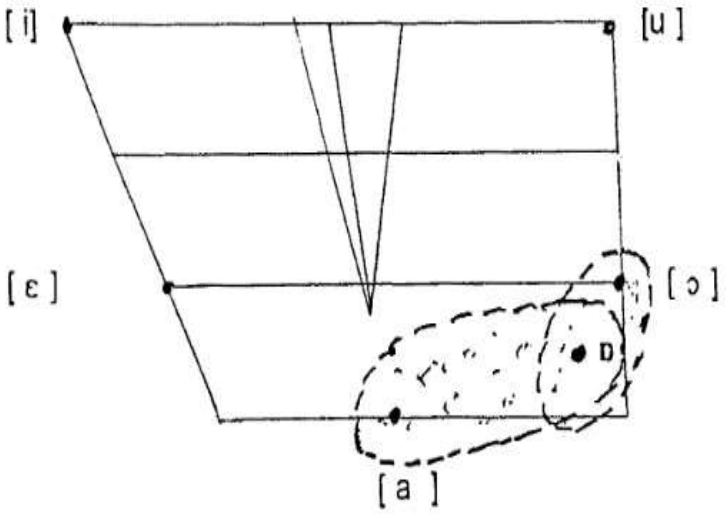
(60)

English		**Icibemba**
/bɒm/	'bomb'	ibomba
/`bɒnɪt/	'bonnet'	boneti
/bɒs/	'boss'	boshi
/`bɒtl/	'bottle'	ibotolo
/bɒks/	'box'	imbokoshi
/`kɒmpaʊnd/	'compound'	kompaundi
/`kɒnsət/	'concert'	konsati
/`kɒndɒm/	'condom'	kondomu
/dʒɒb/	'Job'	Yobo

/lɒk/ ‘lock’ loko

Consider the following figure for its substitution:

Figure 19: Position of Vowel /ɒ/



Adapted from (Madiba, 1994 p.134)

7.8.1.11 Adaptation of /a:/

This open English vowel is realised in Icibemba loanwords as /a/ in all its occurrences. Examples are as follows:

(61)

English		**Icibemba**
/da:ns/	‘dance’	tanshi
/`æbətwa:(r)/	‘abbatoir’	abatwa
/ə`lɑ:m/	‘alarm’	alamu
/ɑ:`men/	‘amen’	ameni
/`ɑ:nsə(r)/	‘answer’	ansa
/`ɑ:mi/	‘army’	ame
/bə`na:nə/	‘banana’	banana
/ba:(r)/	‘bar’	baa
/`ba:mən/	‘barman’	baamani

/`ba:skɪt/ ‘basket’ bashiketi

7.8.1.12 Adaptation of /ɪ/

The high, front English vowel is mainly realised in Icibemba loanwords as /i/, with a few exceptions, as shown below:

(62)

English		**Icibemba**
/tɪn/	‘tin’	icintini
/swɪtʃ/	‘switch’	swici
/`spɪrɪt/	‘spirit’	shipiliti
/`bɪʃəp/	‘bishop’	bishopu
/brɪdʒ/	‘bridge’	bilici
/brɪk/	‘brick’	buliki
/`kæpɪtl/	‘capital’	kapito
/`tʃɪmni/	‘chimney’	cimuni
/sɪ`gɑ:(r)/	‘cigar’	shikaa
/dɪsembə(r)	‘December’	Tisemba

There are some cases of partial nativization for this vowel in the data. These include the following examples:

7.8.1.13 /ɪ/ Adapted as /e/

(63)

English		**Icibemba**
/`kælɪndə(r)	‘calendar’	kalenda
/ˌhælɪˊlu:jə/	‘halleluia’	aaleluya
/ˈbɪskɪt/	‘biscuit’	bishiketi
/ˈbændɪdʒ/	‘bandage’	bandeci
/ˈba:skɪt/	‘basket’	bashiketi

7.8.1.14 Adaptation of /i/

The high, front vowel /i/ is realised in Icibemba as /i/, with no exceptions to this rule. This is shown in examples below:

(64)

English		**Icibemba**
/`trɒli/	'trolly'	tololi
/ˌti: ˊvi:/	'TV'	tiivi
/li:v/	'leave'	lifi
/`æsid/	'acid'	ashiti
/ænti`neɪtl/	'antenatal'	antinento
/ə`kwit/	'acquit'	akwiti
/`beɪkəri/	'bakery'	bekali
/`bætri/	'battery'	batili
/`bi:kən/	'beacon'	bikoni
`biznəs/	'business'	bishineshi

7.8.1.15 /i/ Adapted as /e/

(65)

English		**Icibemba**
/`bɪzi/	'busy'	biise
/`ɑ:mi/	'army'	aame

7.8.2 Vowel Preservation

It should be mentioned that not all English vowels are substituted when English words are borrowed into Icibemba. In vowel preservation, some vowels within the loanwords do not change once they enter the recipient language (Boen, 2014). The following are the examples:

(66)

English		**Icibemba**	**Vowel Preserved**
/biskit/	'biscuit'	bishikeeti	/i/
/`ɑ:mi/	'army'	aame	/a/

/dɪsembə /	'December'	Tisemba	/e/
/sodam/	'Sodom'	Sotooma	/o/

7.9 General Remarks on the Substitution of Vowels in Icibemba

Icibemba has adapted a large number of words from English. Some of the loanwords from this language contain vowels which are not found in the Icibemba vowel inventory. As was shown in the previous discussion, these vowels are replaced by vowels that are found in the language. The replacement of these foreign vowels by native ones seems to be triggered by the native segment inventory constraint. Studies of other languages (Kaye and Nykiel 1979; Holden 1976; Yavas 1982; Steinbergs 1984; Silverman 1992) have identified different constraints which operate in different languages. In Icibemba, the native segment inventory constraint prevents the occurrence of any vowel which does not belong to the language sound inventory. Various Icibemba vowels have therefore been used to replace the foreign vowels. These replacements do not, however, occur in an ad hoc manner. The substitution in these cases appears to be mainly due to phonetic approximation. In other words, foreign vowels are replaced by vowels which are closest to them in the recipient language. The substitution of the different simple vowels from English can be summarised in Table 9 as follows:

Table 9: Summary of Adaptation of English Vowels into Icibemba

English Vowels	Realisation in Icibemba
/ə/	a, e, i, o, u
/ʌ /	a
/ʊ/	u
/uː/	u
/e/	e, i
/æ/	a
/ɜː/	e
/ɔː/	o
/ɒ/	o
/aː/	a
/ɪ/	i, e
/i/	i, e

Source: (Field Data, 2017)

7.10 Adaptation of English Diphthongs

Earlier, in defining the diphthong, it was indicated that it is a two-part vowel sound and that these sounds should be pronounced as a single syllable. The phonetic symbols used for each diphthong represent the beginning and the end of the vowel glide. According to Crystal (1992:105) "one element in the diphthong is always more sonorous than the other, if this is the first element the diphthong is said to be 'falling' or 'descending', if the second, it is 'rising' or 'ascending''.

He goes on to describe sonority as "the overall loudness of a sound, relative to others of the same pitch, stress and duration. Sounds are said to have an inherent sonority, which accounts for the impression of a sound carrying further" (1992:320).

There are no diphthongs in Icibemba. The English diphthongs coming into the language through loanwords all show a pattern of adaptation similar to the one exhibited by the monophthongs. In most cases, there is either vowel coalescence or deletion of the

second element of the diphthong, the resultant adapted form then being a single vowel. In the latter strategy, what is the deleted is the less prominent vowel in the combination. According to Augusto (2012), elision is a process under which a speech segment, an oral vowel in this case, undergoes zero realization. Consequently, in its strategies to avoid diphthongs, Icibemba elides the less prominent vowel, generally, when the combination of vowels falls onto a less or the least prominent syllable of the word in question. It should be mentioned that in cases where one vowel is deleted, the remaining vowel is lengthened.

7.10.1 Adaptation of /əʊ/

The English diphthong **/əʊ/** is adapted into Icibemba through a process of vowel coalescence, producing the back, open mid vowel [o] and then lengthening it. Examples are shown below:

(67)

English		**Icibemba**
/kəʊtʃ/	'coach'	kooci
/kəʊl/	'coal'	koo
/kəʊt/	'coat'	ikooti
/ˋkəʊbrə/	'cobra'	koobula

7.10.2 Adaptation of /eɪ/

The English diphthong **/eɪ/** is adapted in Icibemba by elimination of the second element of the diphthong, leaving only [e] (which is then lengthened) as the nativisized form in the language. Examples are shown below:

(68)

English		**Icibemba**
/greɪd/	'grade'	keleeti
/greɪ/	'gray'	kilee
/ˋɪndɪkeɪtə(r)	'indicator'	indikeeta
/dʒeɪl/	'jail'	ceele

7.10.3 Adaptation of /aʊ/

(69)

English		**Icibemba**
/blaʊz/	'blouse'	bilaushi
/taʊn/	'town'	tauni
/ˋkɒmpaʊnd/	'compound'	kompaundi

7.10.4 Adaptation of /aɪ/

The examples of this integration are shown below.

(70)

English		**Icibemba**
/laɪn/	'line'	laini
/swaɪn/	'swine'	swaini
/naɪlɒn/	'nylon'	nailoni
/faɪl/	'file'	faelo
/staɪl/	'style'	shitaelo

From the examples given above the English diphthong ai is realised with the sequence of vowels /a+i/ in Icibemba, where, the /a/ vowel in Icibemba is a central vowel and the English /i/ is the same as that of Icibemba. What this means is that diphthongs get realized as two distinct vowels belonging to two successive syllables instead of forming the nucleus of a single syllable as is the case in English.

7.10.5 Adaptation of /ɔɪ/

(71)

English	**Icibemba**
/bɔɪlə/	'boiler' boila

In some cases, a glide is inserted between the diphthongs:

(72)

English		**Icibemba**
/bɔɪ/	'boy'	boyi

In the case of 'boy', the loanword is resyllabified by adding [i] at the end, thus forming the preferred CVCV syllable structure in the language.

7.10.6 Adaptation of /iə/

Examples:

(73)

English		**Icibemba**
/ˋkæriə(r)	'carrier'	keelya
/eəriə/	'area'	eelya

7.10.7 Adaptation of /ʊə/

(74)

English		**Icibemba**
/məˋnjʊə(r)/	'manure'	manyuuwa

7.10.8 Adaptation of /eə/

(75)

English		**Icibemba**
/ˋeəlɒk/	'airlock'	eyaloko
/ˋeəɔp:t/	'airport'	eyapooti
/eə(r) gʌn/	'airgun'	eyakani

Again here, a glide is inserted between the diphthongs.

7.10.9 Adaptation of /əɪ/

/əɪ/ can either be adapted as /e/ or as /a/ as can be seen in the following examples:

/əɪ/ adapted as /e/

(76)

English	**Icibemba**
/fə´səɪk/ 'forsake'	fuuseki

/əɪ/ adapted as **/a/**

(77)

English	**Icibemba**
/gəɪ(r) 'gear'	kiiya

7.10.10 Adaptation of /əʊ/

(78)

English	**Icibemba**
/bəʊl/ bowl'	boo
/`bændʒəʊ/ 'banjo'	banjo
/bəʊ`taɪ/ 'bow tie'	botai
/dʒɪ`həʊvə/ 'Jehovah'	Ceofa

7.11 General Remarks on the Adaptation of Diphthongs in Icibemba

It can be said that the occurrence of diphthongs in Icibemba, as has already been mentioned, is still a matter of controversy. In some cases, as was shown above, diphthongs are replaced by single vowels. The problem that arises concerns the choice of the substituting vowel. From the analysis of the various diphthongs different explanations were given. In some cases the first vowel of the diphthong is chosen. If this vowel does not occur in Icibemba, it is replaced by another vowel which then becomes a substitute for the diphthong. The choice of the substituting vowel seems to be triggered mainly by phonetic similarity, i.e. a foreign vowel is replaced by one which is phonetically close to it. This can be seen in the English diphthong *cake* ('keik) for example. This word is adapted as keeke [keeke] in Icibemba. The diphthong in this word has been replaced by the single vowel [e] which is then lengthened. The choice of this vowel may be explained by factors like stress and duration. The stress in this syllable falls mainly on this first vowel and the fact that it has a longer duration in its pronunciation than the second one might have influenced its perception by the speakers

of the Icibemba. Sometimes the vowel which replaces the diphthong is the result of coalescence between the two elements of the diphthong. This can be seen in the loanword pilo < Eng. pillow /ˈpɪləʊ/.The vowels have influenced each other, resulting in the vowel [o] in Icibemba.

In other cases, diphthongs are realised as vowel sequences in Icibemba. In these sequences vowels which do not occur in Icibemba are replaced by others closest to them. The question here is whether or not such sequences constitute diphthongs. The issue of the occurrence or non-occurrence of diphthongs in Icibemba has been discussed, briefly, at the beginning of this section. There it was indicated that diphthongs do not occur Icibemba. In this regard, English diphthongs can be regarded as the 'importation' of new foreign sounds into the language. According to Kruger (1965); Nkabinde (1968) and Batibo (1993), there are two views with regard to these sounds. The first view discards the notion that diphthongs occur in African languages. According to this view, the English diphthong /ai/ would merely be regarded as a sequence of separate vowels, i.e. /a+i/ rather than a diphthong. The other view maintains that such sequences of vowels constitute diphthongs since their articulation is exactly the same as that of the diphthongs in the source language. Although this view may be applicable to some languages, it does not seem to apply to Icibemba for several reasons. Vowels in Icibemba are tone bearing units. Some vowel sequences have different tones, e.g tai (HL). The vowel sequence in this example is regarded as separate syllables rather than diphthong. Nevertheless, in cases where the vowels of a diphthong have the same tones, this principle doesn't apply.

There is also a trend in Icibemba to insert a glide between the vowel sequences e.g. boyi and andalaweya. The nature of the glide depends on the nature of the vowels involved. The insertion of a glide between the vowel sequences may, in a way, demonstrate the language constraint against the occurrence of diphthongs in Icibemba. Rising or falling tone may occur in some of the vowel-glide sequences.

7.12 Adaptation of English Triphthongs

Like diphthongs, triphthongs do not exist in Icibemba. When English triphthongs are borrowed in Icibemba, they are adapted is the same way as monothongs. In most cases, there is either vowel coalescence, or deletion of the second element of the diphthong, the resultant nativized form then being a single long vowel. The examples below illustrate this point:

(79)

English		**Icibemba**
/aʊə/	'hour'	aawa
/ləʊə/	'lower'	loowa

7.13 Vowel Lengthening

As earlier stated above, Icibemba has long vowels which are written by doubling the same vowel. When loanwords from English are borrowed into Icibemba, they have to be adjusted to fit in the phonology of Icibemba. Below are the circumstances where the doubling of vowels takes place.

7.13.1 Primary Stress to Long Vowels

When English words with primary stress are borrowed in Icibemba, the stressed syllables are realized by long vowels.

(80)

English		**Icibemba**
/ˈmɪrə(r)/	'mirror'	miila
/ˈpɒkɪt/	'pocket'	ipooketi
/ˈlɒri/	'lorry'	loole
/ˈlevl/	'level'	leefo
/ˈrɪfl/	'rifle'	laaifo
/ˈbʌtn/	'button'	ibaatani

7.13.2 Long Vowels after Semi-vowel *w*

The vowel after the semi-vowel *w* is always long in Icibemba (Zambia Languages, 1977). Likewise, Icibemba loanwords containing this semi-vowel go through the same process. It should be noted that this includes cases where the *w* is the result of fusion as in the following examples:

(81)

ukuwiina	'to win'
ukuwaasha	'to wash'

7.14 Epenthesis

Epenthesis is a broad term which is used when any vowel or consonant is inserted into the consonant clusters. According to Fleischhacker (2001:1), 'Vowel epenthesis is a widespread and well-known means of resolving consonant clusters.' This is supported by Chimhundu (1983), Chikanza (1986), Katamba (1989), Miti (2001), Zivenge (2005), Kadenge (2007) and Mheta and Zivenge (2008) who say it is worth mentioning that vowel epenthesis is a very common phonological process in loanword adaptation. It is the insertion of a phoneme, in most cases, a vowel, to break the consonant clusters to meet the phonotactic constraints of the recipient language. According to Kadenge (2007), vowels are epenthesized either to satisfy syllable structure requirements or to ban codas or to break up 'impermissible consonant clusters.' This is in line with what Repetti (2011) says that an epenthetic vowel is a vowel inserted into a phonological environment to repair a marked or impermissible structure. The epenthetic vowel in a given language is usually assumed to be a default vowel, defined as the unmarked or perceptually least salient vowel.

Unlike vowel epenthesis, consonant epenthesis is usually inserted between a vowel and consonant and forms a consonant cluster. Sometimes it is inserted between vowels. Icibemba does not allow complex consonant clusters. As a result, the consonant clusters of Icibemba loanwords are made simple in order to meet the needs of Icibemba phonology. Insertion or epenthesis makes a consonant cluster easier to produce for Icibemba speakers. There is plenty of data available regarding insertion.

Icibemba differs from English in terms of phonotactic patterning. Unlike English, Icibemba has a strict CV syllable structure. Because of this, when Icibemba borrows words from English, the loanwords that contain sequences of sounds that are not otherwise attested in Icibemba are modified to fit the phonotactic patterning of Icibemba. Consonant sequence is always realised in Icibemba with an analyptic vowel except in cases of nasal sequences.

7.14.1 Vowel Epenthesis to Create Open Syllables

In this thesis, data has shown that vowels that are epenthesised word finally when English words are borrowed into Icibemba are inserted in order to open English closed syllables. When English words with closed syllables are completely adapted in Icibemba, they are realized with open syllables. The reason is that the borrowed English words are modified to fit the canonical CV structure of Icibemba. Hock (1991) also refers to the same process as paragogic vowel epenthesis. The examples given below demonstrate this.

(82)

English		**Icibemba**
/nʌt/	'nut'	naati
/ʃɒk/	'shock'	shoko
/steɪk/	'steak'	shiteeke
/zɪp/	'zip'	shipu
/skɜ:t/	'skirt'	shikeeti
/ʃɪft/	'shift'	shifuti
/ˋpensl/	'pencil'	pensulo

Example (82) is demonstrating that when English words with closed syllables are borrowed into Icibemba, final vowel epenthesis occurs in order to avoid syllable codas which are considered as stray consonants in native Icibemba phonological structure. Consequently, the vowel epenthesis helps in fitting the borrowed English words with closed syllables into the canonical Icibemba syllable structure, which is typically CV.

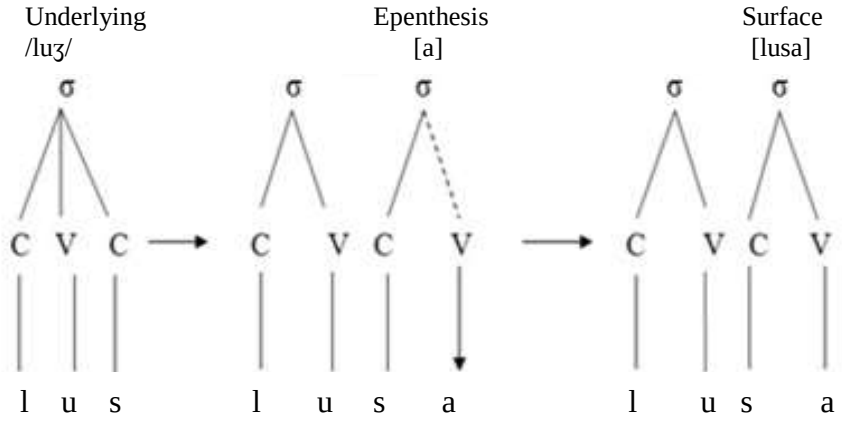
Another remarkable observation coming out from the data given above is that monosyllabic English words become disyllabic when borrowed into Icibemba due to the word final vowel epenthesis. This process enhances the satisfaction of the Icibemba disyllabic word requirement which demands that all Icibemba words (except for locatives and conjunctions) should have at least two syllables (Doke 1931, Fortune 1955, Kadenge 2007). Examples:

(83)

English		**Icibemba**
/fɔːrm/	'form'	foomu
/fʊl/	'full'	fuulu
/geɪt/	'gate'	keti
/hʌb/	'hub'	aabu
/ɪŋk/	'ink'	inki
/dʒɪn/	'gin'	cini
/ɪntʃ/	'inch'	inci
/kɪs/	'kiss'	kishi
/lɔːn/	'lawn'	loni
/dʒɒb/	'Job'	Yobo

On the other hand, it should be noted that in some cases English words retain their closed syllables when borrowed into Icibemba. We refer to these words as 'partially assimilated' words. Their integration into Icibemba is described as 'partial' because they do not fully represent the phonological characteristics of Icibemba native phonology. It should however be emphasized that this happens to bilinguals – those who are fluent in English or it can be said it is common in Town Icibemba which is not our main concern in this study. As mentioned earlier, all Icibemba syllables are open. Below is a figure showing /a/ epenthesis to create an open syllable:

Figure 20: /a/ Epenthesis to Create Open Syllable



Adapted from (Augusto, 2012 p.14)

7.14.2 Vowel epenthesis to Break up Consonant Clusters

The data gathered for this study has also shown that when English words that have consonant clusters are borrowed into Icibemba they receive a vowel in order to break up the clusters. The word medial vowel epenthesis is motivated by the fact that Icibemba native phonology does not allow consonantal clusters. In addition, Icibemba allows a maximum of a single consonant to function as an onset in its syllable structure. The data given below shows the phonological environments in which the vowels are epenthesized in order to deal with English consonantal clusters.

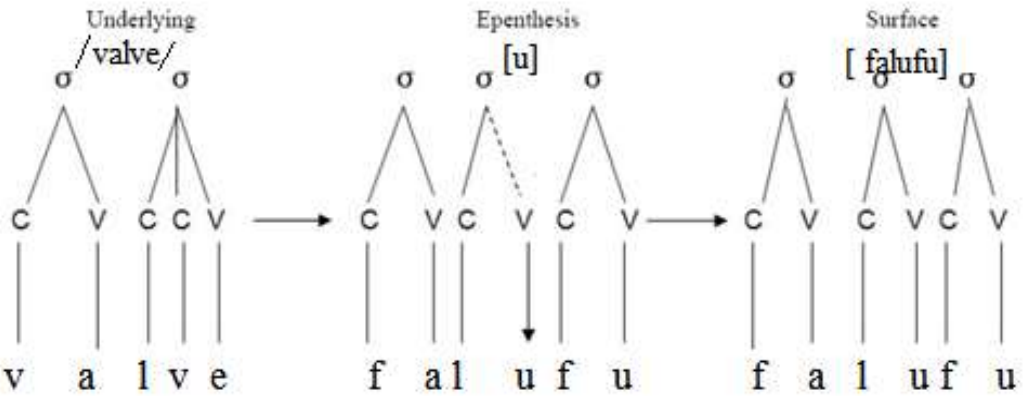
(84)

English		**Icibemba**
/spu:n/	'spoon'	supuuni
/kla:s/	'class'	kalaashi
/klɑ:k/	'clerk'	kalaaliki
/brʌʃ/	'brush'	bulaasho
/klɪnɪk/	'clinic'	kiliniki
/flɑ:sk/	'flask'	fulashiki

The examples above show that English words with consonantal clusters such as / sp/, /kl/, /br/, and /fl/ are not acceptable in Icibemba. When these words are adapted in Icibemba, the clusters are broken up through vowel epenthesis. The major motivation

for breaking up the clusters is because they violate the phonotactic requirements of Icibemba native phonology which do not allow consonantal clusters. It is also important to note that the breaking up of the clusters resyllabifies the words. Consequently, the number of syllables of the borrowed words increases due to vowel epenthesis in Icibemba. In this way, English words such as /kla:s/ 'class' and /spu:n./ 'spoon' which are monosyllabic become trisyllabic [ka.la.shi.] [su.pu.ni.] when borrowed into Icibemba. Once more, this process helps in achieving the Icibemba phonological requirement that all Icibemba words (apart from locatives and conjunctions) should have at least two syllables. As a result, it can be concluded that vowel epenthesis is mainly a phonotactic and prosodic process. This observation is based on the fact that vowel epenthesis helps in achieving the preferred Icibemba CV syllable structure and the minimal disyllabic word requirement. Figure 17 below gives an example of /u/ epenthesis to break up consonant cluster.

Figure 21: /u/ Epenthesis to Break up Consonant Cluster



Adapted from (Augusto, 2012 p.13)

7.15 Types of Epenthesis

Vowel epenthesis to repair illegal phonotactics in source words in Icibemba loan adaptation can occur in three main positions in the word. These are word-initial (against initial consonant clusters), word-medial (against medial consonant clusters) and word-final (to avoid final consonants and also final consonant clusters).

7.15.1 Word-initial/Prosthesis

Prosthesis is a type of epenthesis (an intrusion), where an extra sound is inserted initially in a word. The phenomenon is common both in historical change and in connected speech. (e.g. Latin spiritus-French esprit) (Crystal, 1997). Although some linguists attribute this to morphological motivation, in this section, prothesis is looked at as the insertion of an initial segment (a vowel) with a phonotactic motivation. It should be mentioned that many words in Icibemba begin with a vowel:

(85)

English	**Icibemba**
company	akaampani
cupboard	akaabati
jail	iceele
slate	iseleeti
book	ibuuku
talent	italaanta
sums	insaamushi

7.15.2 Word-medial/Anaptyxis

Anaptyxis is a type of epenthesis (an intrusion), where an extra sound is inserted between two consonants (Crystal, 1997).

(86)

English	**Icibemba**
brake	buleki
captain	kapiteni
kettle	akeetulo
lift	iliifiti
flag	fulaaki
chlorine	koloolini
saddle	icisaandulo

7.15.3 Word-final/Paragoge

The third type of insertion is paragoge. This is a phonological process where a vowel is added at the end of a word (Mwaliwa, 2014). All words in Icibemba end with a vowel. Examples:

(87)

English	**Icibemba**
ball	boola
cup	kaapu
paper	ipepala
spoon	supuuni
pan	paani
bank	baanki
farm	fwaamu

In a rule for insertion, the null symbol appears to the left of the arrow and the segment to be inserted appears to the right.

Since all epenthesis can be interpreted as replacement of zero by something, the formula can be standardised as:

$$Ø \rightarrow v/c$$

7.16 Generalisations of Repair of Consonant Clusters from Icibemba Loanwords

It has already been discussed that consonant clusters except for the nasal compounds are not characteristics of Icibemba. For this reason, when consonant clusters from English are borrowed into Icibemba, they are modified in one way or another. Here what will be discussed are the strategies which are used by Icibemba to modify consonant clusters from English. The first to be discussed are the clusters that occur in the word initial position (onset clusters).

The following English consonant clusters occur in the initial position of a word:
/pr/, /br/, /pl/, /tr/, /dr/, /gr/, /kl/, /kr/, /gl/, /bl/, /fl/, /fr/, /s+C/, e.t.c.

7.16.1 English Consonant Cluster /pr/

The consonant cluster /pr/ is broken up by inserting a vowel which is either [o] or [u]. The following examples illustrate this:

(88)

English	**Icibemba**
profit	polofiti
promote	polomota
programme	polokalamu
president	puleshitenti
principal	pulinshipo
Progress	Polekeleshi
project	polecekiti
printer	pulinta
prefect	pulifekiti

From the above examples, two things were noticed. First, all the /pr/ clusters are broken up by an epenthetic vowel. Secondly, the choice of the epenthetic vowel is determined by the process of assimilation. Assimilation in this case can be seen as occurring in two ways. First, the epenthetic vowel assimilates to the preceding consonant. In most of the examples given above, the realisation of the epenthetic vowels u and o is due to the influence of the preceding bilabial consonants. The influence of bilabial consonants on the realisation of back epenthetic vowels has been noticed in other languages such as Northern Sotho (Kruger, 1965) Shona (Chimhundu, 1982). Back vowels, like bilabial consonants, involve lips in their production. This may be the reason for a back vowel, particularly **u** to be inserted after the bilabial consonants.

Vowel assimilation can also be seen in an example below:

(89)

English	**Icibemba**
/pli:z/ ‘please’	pilishi
/brɪdʒ/ ‘bridge’	bilici

The epenthetic vowel **[i]** in this example is due to assimilation to the succeeding vowel.

7.16.2 English Consonant Cluster /br/

(90)

English	**Icibemba**
break	buleeki
brush	bulasho
bread	buleeti
brick	ibuliki
broom	buluumu

The epenthetic vowel [u] in the above examples has simplified the consonant cluster /br/. The influencing factor here is the bilabial consonant [b].

7.16.3 English Consonant Cluster/pl/

The consonant cluster is simplified by inserting the vowel [u]. As has already been mentioned, this epenthetic vowel is determined by the preceding bilabial consonant [p] and also by vowel assimilation.

(91)

English	**Icibemba**
plastic	pulashitiki
plot	pulooti
plumber	pulaamba
plank	ipulanga
plan	pulani

7.16.4 English Consonant Cluster /dr/

The consonant cluster /dr/ is separated by inserting the vowel [u].

(92)

English	**Icibemba**
driver	tulaifa
drum	tulamu
drawer	tulowa

7.16.5 English Consonant Cluster /gr/

The vowel [i] is inserted between the consonant cluster /gr/ as can be seen in the following examples:

(93)

English	**Icibemba**
grease	kilishi
grade	kiledi
Grace	Kileshi

7.16.6 English Consonant Cluster /kl/

The consonant cluster /kl/ is simplified by the epenthetic vowel [a]

(94)

English	**Icibemba**
club	akalabu
class	ikalashi
clutch	kalaci
clerk	kalaliki
clamp	kalampa

Exceptions:

(95)

English	**Icibemba**
clinic	kiliniki
clock	inkolooko

7.16.7 English Consonant Cluster /bl/

The consonant cluster /bl/ is broken up by inserting the back vowel [u] as can be seen in the following examples:

(96)

English	**Icibemba**
block	ibulooko
blouse	ibulaushi

blanket	ubulangeti

7.16.8 English Consonant Cluster /fl/

This cluster is broken up by the back vowel [u]:

(97)

English	**Icibemba**
flour	fulaulo/fulawa
flat	fulati
flag	fulaki
flask	fulashiki

7.16.9 English Consonant Cluster /fr/

English consonant cluster /fr/ is simplified by inserting the vowel [u] as can be seen below:

(98)

English	**Icibemba**
fridge	fulici
Frank	Fulanki
frame	fulemu
fresh	fuleshi
Friday	Fulaite

7.16.10 Final Vowel Epenthesis

As already mentioned above, when an English word ends in a consonant in Icibemba a vowel is always suffixed because no word ends in a consonant in Icibemba.

(i) i – Epenthesis (after *n*): This rule states that after *n* in word final position, normally *i* is inserted.

Examples:

(99)

English	**Icibemba**
button	ibataani

garden	kalateen<u>i</u>
pan	paan<u>i</u>
pin	napiin<u>i</u>
paraffin	palafin<u>i</u>
action	aakishon<u>i</u>
queen	kwiin<u>i</u>

(ii) u – Epenthesis (after *m*): This rule states that after *m* in word final position normally *u* is inserted:

(100)

English	**Icibemba**
room	luum<u>u</u>
boom	buum<u>u</u>
condom	kondoom<u>u</u>
cream	kiliim<u>u</u>
dam	taam<u>u</u>
farm	fwaam<u>u</u>
drum	talaam<u>u</u>

(iii) u – Epenthesis (after *f* and *v*): This rule states that after *f* or *v* in word final position normally *u* is inserted.

Examples:

(101)

English		**Icibemba**
/ɒf/	'off'	oof<u>u</u>
/twelve/	'twelve'	twelu<u>fu</u>
/vælv/	'valve'	faalu<u>fu</u>

(iv) i – Epenthesis (after *t, d, nd* or *affricate)*: This rule states that after *t*, *nd*, or *d* or *affricate* in word final position, normally *i* is inserted.

(102)

English	**Icibemba**
pound	paund<u>i</u>

slate	iseleeti
pint	ipainti
coat	ikooti
church	icalici
clutch	kalaaci
salad	salaati
switch	swiici

It can be concluded that the vowels that break up these consonant clusters in English are in many cases [u] in the environment of a labial consonant and [i] when the environment is non-labial. Batibo (1996) formulates a rule accounting for this process as follows:

Vowel insertion Rule (Batibo (1996)

C1 {C2} C1 V {C2}
{#} {#}

In the phonological rule presented above, a two consonant cluster is broken up by inserting a vowel between the two consonants. This rule further states that such a vowel may occur after a syllable-final consonant as indicated by the syllable boundary symbol # below C2.

(v) Insertion **after l**

After l in word final position, the situation is rather chaotic:

(103)

English	**Icibemba**
handball	andibo
ball	boola
bloody fool	bulalifuulu
table	iteebulo
wheel	wiilo
wool	wuulu

Vowel insertion (VI) rules induce resyllabification, i.e. the syllable structure of the source word is changed. Resyllabification occurs when a vowel is inserted so that the loanwords conform, at least partially to the structure of the host language.

7.17 Consonant Epenthesis (Nasal Insertion)

Nasal consonant insertion is the process of putting a nasal consonant into a word (Mwaliwa, 2014) Consonant epenthesis is not a common feature in Icibemba loanwords from English. In the process of the adaptation of English words in Icibemba, homographic nasals such as [m] and [n] are inserted before certain consonants. It should be noted that there are very few examples and in each case, a nasal is inserted before a consonant, usually a plosive or a velar. This is so because these homographic nasals are found in Icibemba:

(104)

English	**Icibemba**
antenatal	antineento
clock	inkolooko
dress	indeleeshi
pot	impooto
bucket	imbeeketi
October	Okotomba
carbon	kamboni
doctor	ndokotala

7.18 Genealisation of Epenthetic Vowel

The choice of the epenthetic vowel is determined by the process of assimilation. The epenthetic vowel assimilates to the preceding consonant. It can be observed that in case the initial consonant in a cluster is a labial (that is, bilabial and labio-dental), the epenthetic vowel is the back close vowel /u/. In most cases [u] follows labial consonants but in some cases it is [i] and other vowels.

This phenomenon of assimilation of the quality of the vowel inserted by the preceding consonant does not apply to word-initial and word medial positions only, but also in

word final position. In this case a round vowel /u/ or /o/ is attached after a word-final labial consonant in syllable-final position. The vowel /i/ or /e/ occurs after non-labial consonants (that is, dentals, alveolars, alveolar-palatals and velars).

7.19 Deletion

In many studies done so far, the commonest strategy employed to ensure that source words (inputs) conform to the syllable structure(s) of the recipient language is usually vowel epenthesis (Adomako, 2008). Nevertheless, in some cases, the recipient language may also resort to deletion of segments, in addition to vowel epenthesis, as a repair strategy. Icibemba also employs deletion in its loanword adaptation process as one of the repair strategies. Deletion of consonants and vowels usually occur in two main positions, mostly in the word-final and onset positions. Deletion is indicated by the null symbol, Ø. The segment that undergoes deletion appears to the left of the arrow and the Ø on the right. The standard format for deletion is:

$$x \longrightarrow \varnothing$$

Like epenthesis, deletion can be categorised into three types: aphaeresis, syncope and apocope.

7.19.1 Types of Deletion

Just like in insertion, there are three types of deletion.

7.19.1.1 Aphaeresis

This is the deletion of an initial segment (Mogara, 2014). Examples:

(105)

English	**Icibemba**
ocklock	kolooko
eleven	lefeni
Emmanuel	manweli
elastic	lashitiki

It should be noted that in all instances in Icibemba language, the voiceless glottal fricative /h/ is deleted in loanwords that have this sound. This consonant is deleted in all word positions in loanwords that have this sound. The main reason for the deletion is that this consonant is not part of Icibemba consonant inventory system. The examples below illustrate how this process of deletion takes place in loanwords.

(106)

English	**Icibemba**
hotel	iotela
honda	onda
horse	ioshi
hand ball	andibo
hundred	andeleti

7.19.1.2 Syncope

Syncope is formative-internal deletion. It should be noted that in most cases, even in this thesis, the term is used for vowel loss. Examples:

(107)

English	**Icibemba**
trousers	itolooshi

7.19.1.3 Apocope

This is loss of a final element (Mogara, 2014). It should be noted that apocope is not as common as paragoge.

(108)

English		**Icibemba**
contract	/ˈkɒntrækt/	koontalaki
butchery	/ˈbʊtʃ. ə r.i/	buuca
treasurer	/ˈtrɛʒ. ə r.ə r/	teleesha

7.20 Tolerated Clusters

Clusters in which nasals precede a voiceless obstruent are tolerated as thes are found in Icibemba;

(109)

English	**Icibemba**
zink	shinki
camp	kampu
bank	banki
tank	itanki
lamp	ilampi
pump	pompi
bump	ibampu
ink	inki

7.21 Omission

Another process of loanword adaptation is omission. According to Smeaton (1973), some loanwords undergo syllabic omission, either to facilitate pronunciation or in the direction of the Icibemba consonantal root structure, 'trimming away consonants and syllables but a representative portion of the original term is left' as in a loan like:

(110)

English	**Icibemba**
ocklock	koloko

It can be concluded that because of the above rules, vowels and consonants are inserted into loanword structure during re-syllabification which is next to be discussed. This procedure can be termed as morphophonological because it involves syllable changes that occur as a word is introduced into another language. Re-syllabification is mainly motivated by the need for phonological conformation and ease in pronunciation. There is no proof from this study that re-syllabification can be used to add semantic value to the borrowed word apart from the meaning it conveyed in the source language.

7.22 Resyllabification

CV- Phonology Theory is used in this study to analyze the syllable structure of both the sourmce language (English) and the recipient language (Icibemba). This theory is attributed to Clements and Keyser (1983) and is specifically used in the analysis of the syllable. According to Clements and Keyser, this theory has three functions: to state universal principles governing syllable structure, to state syllable structure typology that is, to define the range within which syllable structure may vary from one language to another and to state language - specific rules governing syllable structure. The CV-Phonology theory envisages a syllable as having a three- tiered structure consisting of a syllable node, a CV- tier whose C and V elements dominate and a segmental tier which consists of bundles of distinctive feature matrices which represent consonant and vowel segments.

According to Kenstowicz (1994), a syllable is a minimal pronounceable phonological unit. It can be used as a linguistic unit for studying distributional restrictions in a language. This section analyses how words borrowed from English, are re- syllabified in order to match with the Icibemba language patterns. This occurs because the syllable structure of English language differs from that of Icibemba.

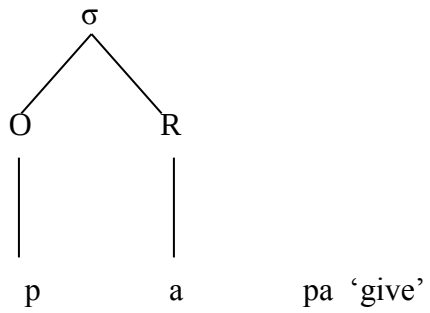
This study established that there are two possible phonetic relations that occur as a result of phonological borrowing from English to Icibemba. Firstly, there are unmarked and marked relations. Unmarked phonetic relations produce syllable structures that are usual in Icibemba languages in the sense that they are acceptable in its phonological system. The marked associations are those that have to be re-syllabified or reconfigured so as to fit into the recipient language. As a result, this section gives an overview of the English and Icibemba syllable structures because their rules are responsible for the re-syllabification process. It consists of both open and closed syllable structures as shown below:

7.22.1 Open Syllable Structure

Icibemba has open syllable structures which are made up of individual vowels or a combination of vowels and consonants. An open syllable is made up of either a vowel

only or ends with a vowel. An open syllable structure is shown in the following example:

Figure 22: Open Syllable Structure



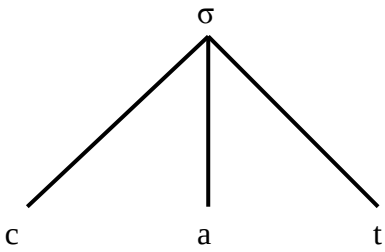
Adapted from (Kandagor and Sawe, 2014 p.2)

From the above examples it can be seen that Icibemba has an open syllable structure which can be represented as V, CCV and CCCV. The bottom line is that they constitute a single vowel or must end with a vowel.

7.22.2 Closed Syllable Structure

Most English words have a closed syllable structure. The closed syllable structure may consist of a consonant ending with other constituent phonemes. According to Lehiste (1992) and Kadurenge (2000) closed syllables always end with consonants. The following figure is an illustration of a closed syllable.

Figure 23: Closed Syllable Structure



Adapted from (Kandagor and Sawe, 2014p.2)

In the above illustration, it is evident that English has a closed syllable structure which can be represented as VC, CVVC, CVC and CCVC. This is the reason why re-syllabification is effected on English borrowed words in Icibemba.

7.23 Resyllabification of Icibemba Loanwords from English

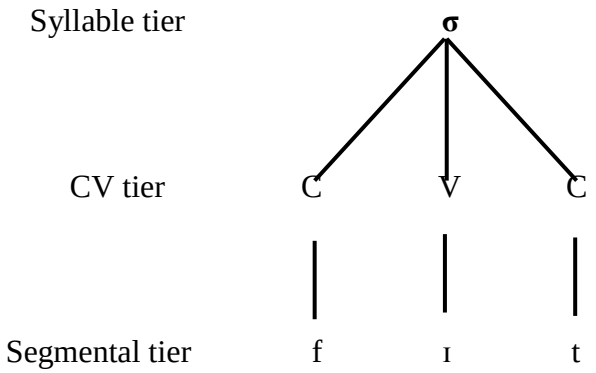
Re-syllabification is prompted by the requirement to remove the phonological associations to the donor language forms that are not acceptable in the recipient language (Lehiste, 1992). The main purpose of re-syllabification lies in the unmarking of a word for ease in pronunciation and acceptance. The main unmarking strategy used in re-syllabification of Icibemba loanwords from English is vowel epenthesis.

Words are re-syllabified with the insertion of vowels in the previously closed syllable translating it to an open syllable in the recipient language. This process unmarks the consonant clusters which were in the English words by inserting a vowel so as to conform to Icibemba syllabification rules which prohibit most consonant clusters in the their words.

There are two major differences between English and Icibemba. Firstly, while English has codas, Icibemba does not. Secondly, while Icibemba allows only co-articulated consonants in the onset position within syllables, English allows poly-consonantal clusters either in the onset or coda position as can be seen in the following examples:
(a) trap /træp/ (CCVC)
(b) strap /stræp/ (CCCVC)
(c) pots /pɒts/ (CVCC)
(d) gasps /gæsps/ (CVCCC)
(e) prompts /prɒmpts/ (CCVCCCC)

Because the syllable structure of Icibemba is more restricted than that of English, when English words are borrowed into Icibemba, the modification of syllables becomes necessary.
Resyllabification will be dealt with within a framework of CV Phonology in which syllable structure comprises three ‘tiers’, namely syllable tier, CV tier (C= constant, V= vowel) and segmental tier, as illustrated below:

Figure 24: Constituents of a Syllable



Adapted from: (Mwaliwa, 2014 p.40)

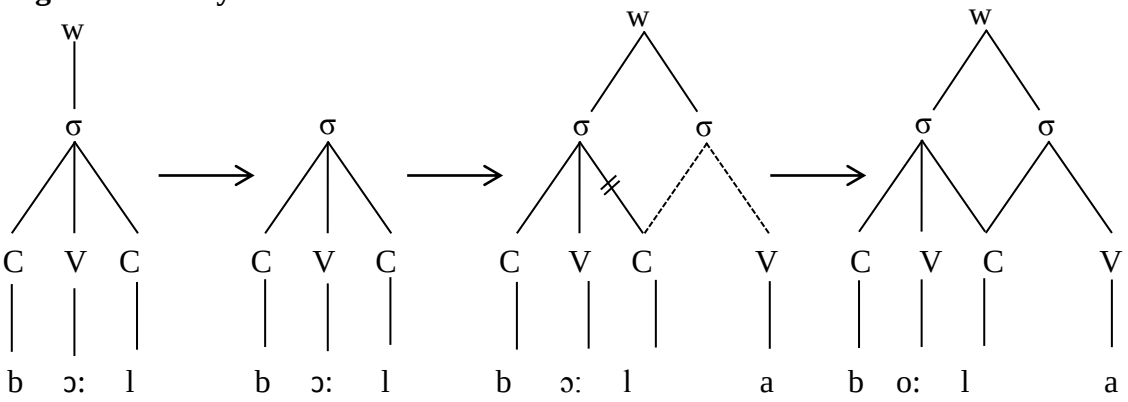
As stated above, resyllabification occurs when a vowel is inserted so that the loanwords conform, at least partially, to the syllable structure of the host language. What happens is as follows:

In most cases V is added to a word-final C and between two consective C's where the first C is non-nasal:

When a V is added, according to (a above), resyllabification takes place as follows:

The preceding C is delinked from its dominating σ; and
A new σ node is created to which the C and the inserted V are linke.
Figure 25 below shows resyllabification of the word *ball.*

Figure 25: Re-syllabification of *ball*



Source: (Field Data, 2017)

Finally a phonological rule will realize the V by a (in Icibemba):

Ø → a /boːl − #

7.24 Conclusion on Resyllabification

This section concludes that re-syllabification is used to break marked syllable patterns in word borrowing. Consequently, re-syllabification is an assimilative linguistic procedure which may introduce new phonological elements of the source language in the borrowed words. Therefore, this process is not purely phonological; rather it is morphophonological in its very nature. It ensures that syllable structures that may create pronunciation challenges and do not conform to the canonical syllable structure rules of Icibemba language are adapted.

7.25 Adaptation of Stress

There are similarities between tone and stress. They can be compared in both phonetic and phonological terms. In phonetic terms, both tone and stress are perceived with pitch, but stress is also perceived with intensity and duration (Lai, et al 2011). Phonologically, the two most important similarities are their autosegmental status and the comparison of tone bearing unit (TBU) and weight bearing unit (WBU) despite stress metricality. Tone is mapped to TBU whereas syllable weight affecting stress in some languages is mapped to WBU. On the other hand, tone and stress are independent of each other in terms of phonological status. Tone placement is specified in the lexicon while stress placement is also sensitive to position. A further difference is that two successive tonal autosegments occupy two consecutive tone bearing slots; whereas two successive stress autosegments may not occupy two consecutive stress bearing slots (Lai, et al, 2011).

7.26 Tone-stress Interaction

According to Lai et al (2011), tone-stress interaction can be seen as mutual, with tone affecting stress and vice versa. In the former case, high tone attracts stress. In the latter,

stress may attract a H tone or affect tone sandhi. The general agreement that syllables originally stressed in English word are assigned high tone in Icibemba loanwords supports the formalisation of the attraction between high tone and stress.

Languages make some syllables of words more prominent than others in three ways – a syllable may be said louder, it may take longer to say or it may be said on a higher note. English uses stress, that is, it makes one syllable in each word especially prominent by saying it louder and a little longer and higher. On the other hand, Icibemba does not use stress but uses tone – using length and musical note. It should be stressed that in tone, it is not just one syllable in each word that may be made long or high, it may be any number or none at all.

When English words are borrowed into Icibemba, the stressed syllables are realised by high tone and lengthened vowel. It should be mentioned that a syllable before a nasal compound is always long; so is a syllable containing semi – vowels y or w (e.g. ukupyaana) 'to succeed' except at the end of the word. There is no need to write the vowel double before a nasal compound or after a *y* or *w* because the syllable is long anyway (Kashoki, 1968).

The majority of English words have only one stress. A few others have two stresses-secondary and main stresses. It should be mentioned that in cases where there are two stresses, only the main stress is realized in Icibemba as high tone.

(i) **Stress → High Tone:** This rule stipulates that a stressed syllable in English is realised as high tone in Icibemba loanwords.

(111)

English		**Icibemba**
bullet	/ˋbʊlɪt/	búúleti
cabbage	/ˋkæbɪdʒ/	kááabeci
cement	/sɪˋment/	seméénti
chimney	/ˋʧɪmni/	cíímuni
chisel	/ˋʧɪzl/	céésulo
chocolate	/ˋʧɒklət/	cóókoleti
cholera	/ˋkɒlərə/	kóólela

(ii) Lengthening: This rule stipulates that stressed syllables in English are realised as long in Icibemba loanwords. See the above examples in (111).

7.27 Concluding Remarks on the Effects of Icibemba Loanwords on Icibemba Phonology

The borrowing of English words in Icibemba seems to have influenced the Icibemba sound system in many ways. Some of the language constraints against foreign forms appear to have been weakened. Certain new sounds like [g], [d], [θ] and [dʒ] seem to be infiltrating the sound inventory of the language. The effect of Icibemba loanwords on the Icibemba sound system is evident from the way consonant clusters are adjusted to the language. Whereas consonant clusters are broken up by an epenthetic vowel in some cases, in others they are retained, especially in Town Icibemba and with bilinguals eg. treni 'train', krimu 'cream', klabu 'club', basi 'bus' and many others. This is a violation of the native phonotactic and syllable structure constraints. In spite of these influences, the Icibemba language appears to still be doing well in modifying other phonological aspects of adapted words. The tonal constraint seems to have applied in most of the cases.

7.28 Chapter Summary

This chapter has presented the phonological adaptation of Icibemba loanwords from English in order to answer the question raised in Chapter One – "What are the various phonological processes involved in the adaptation of Icibemba loanwords into Icibemba?"

The chapter has established that Icibemba loanwords are adapted at phonological level. In this chapter, the data collected has been analyzed. The main phonological processes used in the adaptation of Icibemba loanwords from English have been identified and described in the light of CV phonological theory. The phonological level involved handling consonant, vowels, diphthongs, cluster consonants and sounds not acceptable in Icibemba. The chapter has established that Icibemba does not recognize consonant clusters and as a result, the native speakers of Icibemba insert vowels in between the consonant cluster, thereby creating more syllables at the same time breaking up the

cluster consonants. The result is not only the breaking up of consonant clusters but also opening the English closed syllables to become open syllable acceptable in the Icibemba language. Those English sounds not recognized in Icibemba were also substituted by their equivalents in the Icibemba environment.

In Icibemba, the native segment inventory constraint prevents the occurrence of any vowel which does not belong to the language sound inventory. Various Icibemba vowels have therefore been used to replace the foreign vowels. These replacements do not, however, occur in an ad hoc manner. The substitution in these cases appears to be mainly due to phonetic approximation. In other words, English vowels are replaced by vowels which are closest to Icibemba. In the same way, English consonants are replaced by consonants that are closest to Icibemba.

The analysis of the data has revealed that insertion is the most common strategy used in loanword adaptation in Icibemba. Other strategies used by Icibemba to adapt Icibemba loanwords are metathesis and deletion which are not very common.

The chapter also highlights the processes that account for differences in handling tone. Whilst English uses stress to distinguish words, Icibemba speakers use tone. As a result, the Icibemba native speakers manage to handle loans effectively using internalized phonological rules. This chapter notes that, on the basis of available consonant and vowel substitution and insertion patterns, it is possible to make predictions regarding the upcoming English words where similar substitution and insertion may be observed.

The next chapter discusses the morphological adaptation of Icibemba loanwords from English.

CHAPTER EIGHT

MORPHOLOGICAL ADAPTATION

8.1 Overview

This chapter discusses the morphological adaptation of Icibemba loanwords from English in order to provide answers to the question raised in Chapter One which reads, "What are the various morphological processes involved in the adaptation of Icibemba loanwords from English?" It should be noted that it is not possible for the researcher to attend to all the morphological processes in Icibemba. This is because the scope of the research requires the researcher to discuss precisely adaptation processes that take place when English words enter into the Icibemba language. This therefore, compels the researcher to discuss only the morphological processes that give insight into morphological adaptation of loanwords borrowed into Icibemba. The scope delimitation does not give the researcher much room to discuss morphological processes other than those that account for morphological changes of English words in the Icibemba linguistic environment.

Morphological processes occur to ease articulation by Icibemba language speakers and this allows them to communicate in a manner acceptable in their language. This chapter's main focus is on nouns and verbs since most of the words which have been borrowed into Icibemba are nouns followed by verbs. But before discussing the adaptation of nouns and verbs, the morphology of the Icibemba noun will be briefly outlined. This will help to provide a better understanding of the changes that occur to adapted nouns.

8.2 Morphological Adjustment in the Adaption of Loanwords

Icibemba loanwords from English are subject to various morphological adjustments. Zawawi (1979:61) raises very interesting and thought provoking questions pertaining to the grammatical or morphological adaptation of foreign nominals to a language. Some of the questions he raises have been paraphrased below since they are related to this study:

(i) Which Icibemba loanwords have been incorporated into Icibemba?

(ii) To which of the traditional "Noun Classes" have the nouns of English origin been allocated?

(iii) What criteria have been used in assigning these nouns to these classes?

(iv) Is it possible to predict the morphological patterns of future Icibemba loanwords?

Our discussion in this chapter will address the issues raised by these questions.

8.3 Noun Class Language

Noun class systems are a strong areal feature in Africa. Heine (1982) reports that two thirds of the approximately 600 African languages he surveyed have noun classes. Generally, a noun class language can be defined as a language in which nouns are systematically grouped into a number of semantically based classes, with each of the classes having its own distinct class marker. According to Trauth and Kazzazi (1996), languages with noun classes (such as Bantu, West Atlantic), are often grouped in singular/plural pairs often the classification is more or less semantically motivated, with the distinction between animate and inanimate playing a major role. Icibemba, being a Bantu language has its nouns grouped in singular/plural pairs as will be seen later.

8.4 Noun Class

According to Twala (1992), the concept of ‘noun class,’ can be defined as nouns sharing the same prefix and/or the same set of concords and pronouns and semantic features.

A sub-class can be defined as a set of nouns either lacking a true prefix or having a different prefix with an associated series of concords and pronouns of a major class, (Twala, 1992).

The number of noun classes (also known as genders, or gender classes) varies — from two, as in Portuguese or French, to ten or so, as in Bantu, or even to several dozen, as in some languages of South America. In Icibemba, there are fifteen noun classes and

three locatives as will be seen later. Noun classes can to a greater or lesser extent be semantically transparent, and their assignment can be based on semantic, morphological and/or phonological criteria (Alexandra, 2006).

Alexandra (2006) says the cross-linguistic properties of noun classes are that:

(i) There are a limited countable number of classes.

(ii) Each noun in the language belongs to one (or sometimes more than one) class.

(iii) There is always some semantic basis to the grouping of nouns into gender classes, but languages vary in how much semantic basis there is. This usually includes animacy, humanness and sex, and sometimes also shape and size.

(iv) Some constituent outside the noun itself must agree in gender with a noun. Agreement can be with other words in the noun phrase (adjectives, numbers, demonstratives, articles, etc.) and/or with the predicate of the clause, or an adverb.

8.5 Noun Class Semantics and Pairings

Most nouns occur in a singular/plural pair, one class indicates singular another indicates plural. When both a singular and a plural class occur with the same noun stem, that stem is said to belong to a noun class pairing. Nouns which do not make a distinction between singular and plural occur with only one class prefix and are said to belong to unpaired classes (Smith, 2001).

8.6 The Noun

The bulk of words which make up the lexicon of a language, as in dictionaries, are common nouns (Iorio, 2011). Icibemba, like any other language, also has a wide variety of such words. It should be mentioned that in English, there are words that are spelt the same but belong to different word class. When such words are borrowed, in many cases only the nouns are borrowed leaving out other word classes like verbs, adverbs and adjectives. When an English word is borrowed, it usually undergoes not only phonological but also morphological changes, so that the new word can be applied to the Icibemba morphological system.

The morphological order of a noun in Icibemba is:

(Augment) + Nominal Prefix + Stem.

i + mi + ti ‘trees’

Most nouns begin with an augment. Nevertheless, some other nouns do not have any augment at all.

8.7 Borrowability by Word Class

To ascertain the Icibemba word class which is prone to more borrowing, the loanwords were grouped according to the part of speech they belong to. The results of that classification are presented in Table 10 below.

Table 10: Borrowability by Word Class

Word Class	Number	Percentage
Adjectives	21	2.1
Adverbs	3	0.3
Interjections	4	0.4
Nouns	929	92.9
Preposition	1	0.1
Verbs	42	4.2
Total	1000	100

Adapted from (Matiki, 2016 p.5)

It is clear from Table 10 that nouns are the most borrowable lexical items. This is not particularly surprising as there is plenty of literature with evidence that nouns are more borrowable than all other word classes, including verbs. For instance, 31% of all the loanwords in the Loanword Typology database involving 41 languages, (Haspelmath and Tadmor 2009) are nouns. Walter (1999) also shows that the majority of loanwords in French are nouns.

Another scholar Whitney (1881) arrived at the following hierarchy:

nouns – other parts of speech – suffixes – inflection - sounds

Haugen (1950) elaborated on Whitney’s hierarchy, using data from Norwegian immigrants in the United States, to include:

nouns – verbs – adjectives – adverbs – prepositions.

Nouns are borrowed more than verbs according to this perspective, verbs more easily than adjectives, and so on.

Independently from Haugen, Singh (1981) came to a hierarchy on the basis of English borrowings from Hindi :

nouns – adjectives – verbs - prepositions

Kayigema (2010) says the most borrowed parts of speech are nouns and verbs, especially because all the languages of the world have at least the two parts of speech. In addition, they express more concrete realities than adjectives, articles, pronouns, adverbs, prepositions, conjunctions, and interjections.

In this present study, the researcher has the following hierarchy:

Nouns - verbs - adjectives - interjections – adverbs - prepositions

This hierarchy is somewhat similar to that of Haugen whereby more verbs were borrowed compared to adjectives. The results vary depending on the languages, but despite differences in the duration of language contact and the languages involved in contact, the common finding is that nouns are the most frequently borrowed followed by either adjectives or verbs, followed by other word classes.

Hout and Muysken (1994:42) give the following explanation:

> *"A very important factor involves one of the primary motivations for lexical borrowing, that is, to extend the referential potential of a language. Since reference is established primarily through nouns, these are the elements borrowed most easily."*

According to Myers-Scotton (2002), nouns are borrowed preferentially "because they receive, not assign, thematic roles", so "their insertion in another language is less disruptive of predicate-argument structure".

Unlike nouns, verbs are not as borrowable because they tend to be more complex and part of a rigid system, (Tadmor, 2009, Simango, 2000). For instance, it has been said that verbs cannot be borrowed in French because of their elaborate inflection, so that it is difficult to incorporate other languages' verbs into French (Meillet, 1921, cited in

Thomason & Kaufman, 1988). It should however be mentioned that French does have loan verbs such as ‘shooter’. The few verbs in the present data mostly cover activities that are not indigenous to Icibemba culture, e.g.

(112)

kopa	‘to photograph’
batisha	‘to baptise’
fola	‘to que to get something’
foota	‘to vote’
buking’a	‘to book’
ceking’a	‘to jerk a vehicle’
feluka	‘to fail’
pasa	‘to pass’

It should be noted that Icibemba, like Chewa, has borrowed *fola* to avoid the more meandering *tantameni* ‘stand in a queue’ (Matiki, 2016). Similarly, Icibemba has borrowed ‘phone’ and has abandoned *‘kamusange’*. Consequently, it can be said that one of the motivations for borrowing is to avoid complex words or expessions. According to Matiki (2016), one of the earliest scholars to discuss why most languages have difficulties borrowing verbs than nouns was Moravcsik (1975). On the basis of the few languages she studied, she claimed that if verbs are borrowed, they seem to be borrowed as if they were nouns: the borrowing language employs its own means of denominal verbalization to turn the borrowed forms into verbs "before" using them as such.

However, Tadmor (2009) shows that this is not always the case. He notes that structural constraints do indeed play a role in the borrowability of verbs, because the more isolating the recipient language, the less morpho-syntactic adaptation is necessary for borrowing verbs as such; conversely, the more synthetic the language , the more adaptation is required. For this reason, it is much easier to borrow verbs into isolating languages than it is into synthetic languages given that the latter are complex and part of a rigid system (Hock, 1991; Simango, 2000). In general, languages borrow more nouns than verbs, not for grammatical reasons, but for social reasons (Tadmor, 2009). Things and concepts are easily adopted across cultures along with the words for them.

8.8 The Augment

An augment is any element apart from a concord prefix that stands before a stem. Khumalo (2003) calls it the initial vowel or pre-prefix or the augment. The following example illustrates this:

(initial vowel/augment) (nominal prefix/prefix proper) (stem) = u-mu-ntu (person)

u mu ntu = u-mu-ntu 'person'

An augment or pre-prefix or initial vowel is a morpheme that is prefixed to nominals. Although the grammatical status of the augment is highly contentious, according to Iorio (2011), augments are another way to express definiteness. While simple nominal prefixes normally have the phonological shape CV, the addition of an augment leads to the phonological shape VCV. Typical CV nouns are indefinite, non-specific, or predicative, whereas VCV nouns are definite, specific, or referential. Thus an augment has a similar function as the definite article (Iorio, 2011).

In Icibemba just as in some other Bantu languages, the augment is claimed to mark definiteness (Bleek, 1869; Mould, 1974, Progovac, 1993; Krifka & Zerbian, 2008). In these analyses, the augment is equated to the English definite article 'the' while the absence of augment is equated to the indefinite English article 'a'.

It should be emphasised that when a noun is used in its evocative sense the augment is discarded, for example:

(113)

muntu! (person!),

mwana! (child!)

8.8.1 Types of Augment

According to Kayigema (2010), augments are mostly attested in the Great Lakes Region languages. Examples are, in Hunde D51, Haavu D52, Tembo D53, Bembe D54, Ruanda D61, Burundi D62, Fuliro D63, Herero 31, Kunde M31, Icibemba M42, Xhosa S41 and Zulu S42. The augments are u-, o-, e-, i-, and a-.

Augments differ from one language to another. According to Kayigema (2010), they have the following characteristics:

(i) a homorganic vowel like that of the nominal prefix. For example, Rwanda D61 has u-mu-hungu, a-ba-hungu: ‘a boy’, ‘boys’, respectively.

(ii) a vowel with a degree of aperture larger than that of the prefix vowel. For example in Haavu D52 there is o-mu-lume, a-ba-lume: ‘a man’, ‘men’; Ganda D51: o-mu-ti, e-mi-ti: a ‘tree’, ‘trees’, respectively.

(iii) an invariable vowel before all the nouns. For example, in Herero R31 (SouthWest Africa): o-mu-ndu, o-va-ndu: ‘a man’, ‘men’

(iv) a form -CV-which is the same as the nominal prefix. For example in Gisu E31 (Eastern Uganda and Western Kenya) there is ba-ba-ndu: ‘men’.

In Icibemba there are three kinds of augments preceding nouns in different nominal classes:

(114)

a-: class 2, 6, 12: a-ba-ume, ‘men’; a-ma-tanta, ‘thighs’; a-ka-muti, ‘small tree’

i-: class 4, 5, 7, 8, 9, 10: i-mi-tima, ‘hearts’; i-lisho, ‘eye’; i-ci-puna’, ‘stool’, i-fi-muti, ‘trees’, i-nkonde, ‘banana’. and i-nkombo, ‘drinking vessel’

u-: class 1, 3, 11, 14, 15: u-mu-kashi, ‘wife’; u-mu-mana, ‘river’; u-lu-limi, ‘tongue’; u-bu-nang’ani , ‘idleness; u-ku-boko, ‘an arm’.

The most important feature of the Icibemba augment is that it consists of a single vowel that is identical to the vowel of the corresponding noun class marker; that is, /u/, /i/ or /a/. According to Petzell (2003), the following seems to be the rule in the use of augments:

augment----------{a,u,i} /----------C {a,u,i ∅}; where C is a consonant.

This can be interpreted as follows: The augment in Icibemba is *a* if the vowel of the prefix is *a, u* if the vowel of the prefix is *u* and *i* if the vowel of the prefix is either *i* or zero. Wa Mbeira (2015) calls this process as morphological vowel harmony.

8.8.1.1 Nouns with Augment

Nouns of this class include all common nouns, both concrete and abstract nouns. These are nouns denoting the family, farming, wielding, craftsmanship, fishery, livestock, human body, army, liquids and materials.

8.8.1.2 Nouns without Augment

Nouns without augment include proper nouns denoting persons, kinship, places, rivers, lakes, mountains, volcanoes, some diseases, cows (when personified).

8.9 The Nominal Prefix

According to Ziervogel and Mabuza (1976) and Dewee (1971), the simple noun prefix is the one that is consistent of two smaller units which are the initial vowel and the basic prefix. These have been given different names by different scholars. Doke (1935) calls an initial vowel a pre-prefix and the basic prefix as a real prefix. The pre-prefix and the basic prefix form one complete entity which is a full noun prefix. For the purposes of this study, the term augment and nominal prefix will be used.

The nominal prefix is the most important part of the prefix more than the pre-prefix because it forms the link between the noun and the syntactic categories as it provides the concordial agreement. Xala (1996:6) says, “It gives 'life' to the noun prefix itself - to the noun and to other words with which it co-occurs.” This suggests that the nominal prefix has an influence to most of the words in a sentence.

8.10 The Stem

The stem is that part of a nominal which remains after the removal of any concord prefix. A stem can also be defined as the common feature in a series of nominals with commutable prefixes. According to Ndlovu (2009), the noun stem carries the central meaning of the word and does not change when the noun changes from singular to plural; it remains constant. It does not have any specific meaning until a prefix is attached to it (Hadebe, 2006). It is a bound morpheme because it needs the prefix in

order to give it a specific meaning. Most Icibemba noun stems come in consonant-commencing phonological forms and end in a vowel:

(115)

u-mu-**t**i	‘tree’
u-mu-**l**endo	‘travellor’
u-mu-**n**we	‘finger’
i-li-**n**so	‘eye’
i-li-**b**we	‘stone’
u-mu-**m**ana	‘river’
a-ba-i**p**i	‘short ones’

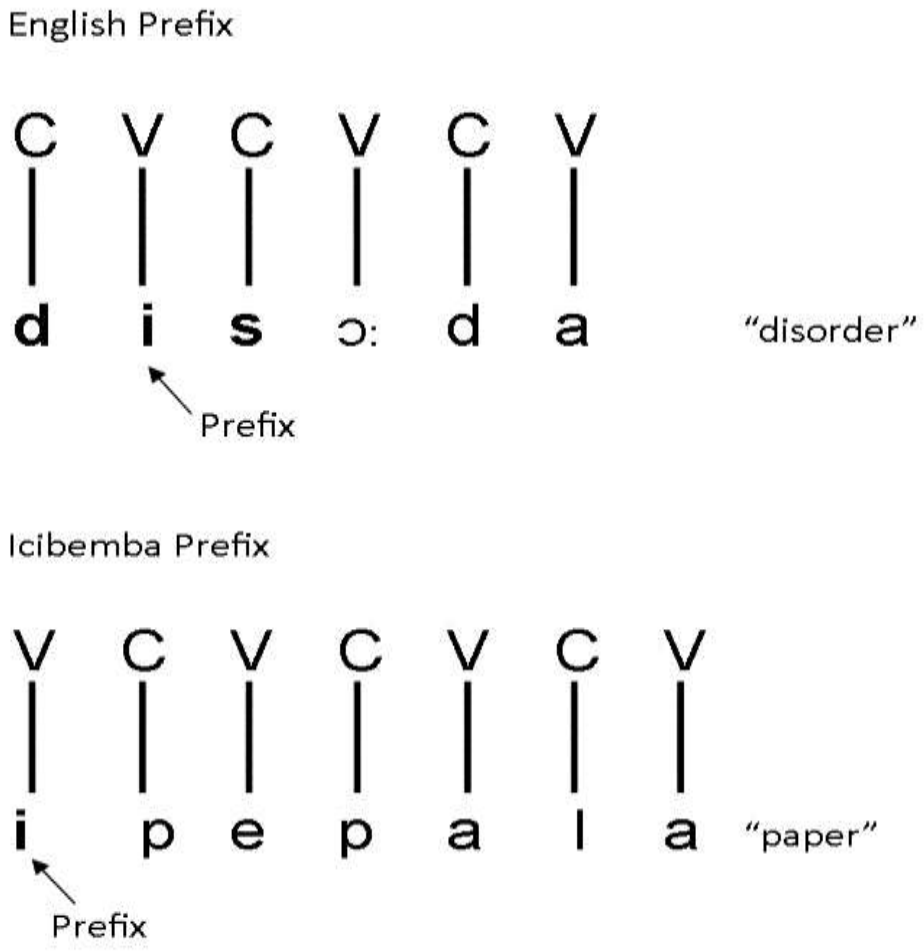
8.11 Morphological Adaptation

This section discusses the morphological processes that explain morphological changes from the English system to suit the Icibemba grammar in the process of lexical adaptation. This entails analysing how lexical items change morphologically from the English linguistic environment into the Icibemba environment. According to the Lexical Phonology and Morphology Theory (LPM) (Kiparsky, 1982), such changes are at three levels, namely, the base-word, vowel level and affix or suffix level. The first level is characterized by base-words, followed by vowel alteration and the third level is characterized by higher order morphological processes - affixation and suffixation. Stages two and three are characterized by derivational morphology, whilst level one is simple baseword morphology. Simple baseword morphology refers to the breaking down of a word into its immediate constituencies. Though the discussion is basically morphological, the discussion will adopt the LPM paradigm, which marries phonology and morphology. This study therefore, uses both phonological and morphological principles in handling morphological units.

8.12 Handling Nouns

English and Icibemba have different base-word morphologies. Icibemba is generally both prefixal and suffixal language in the same way as the English language. This can be demonstrated as follows:

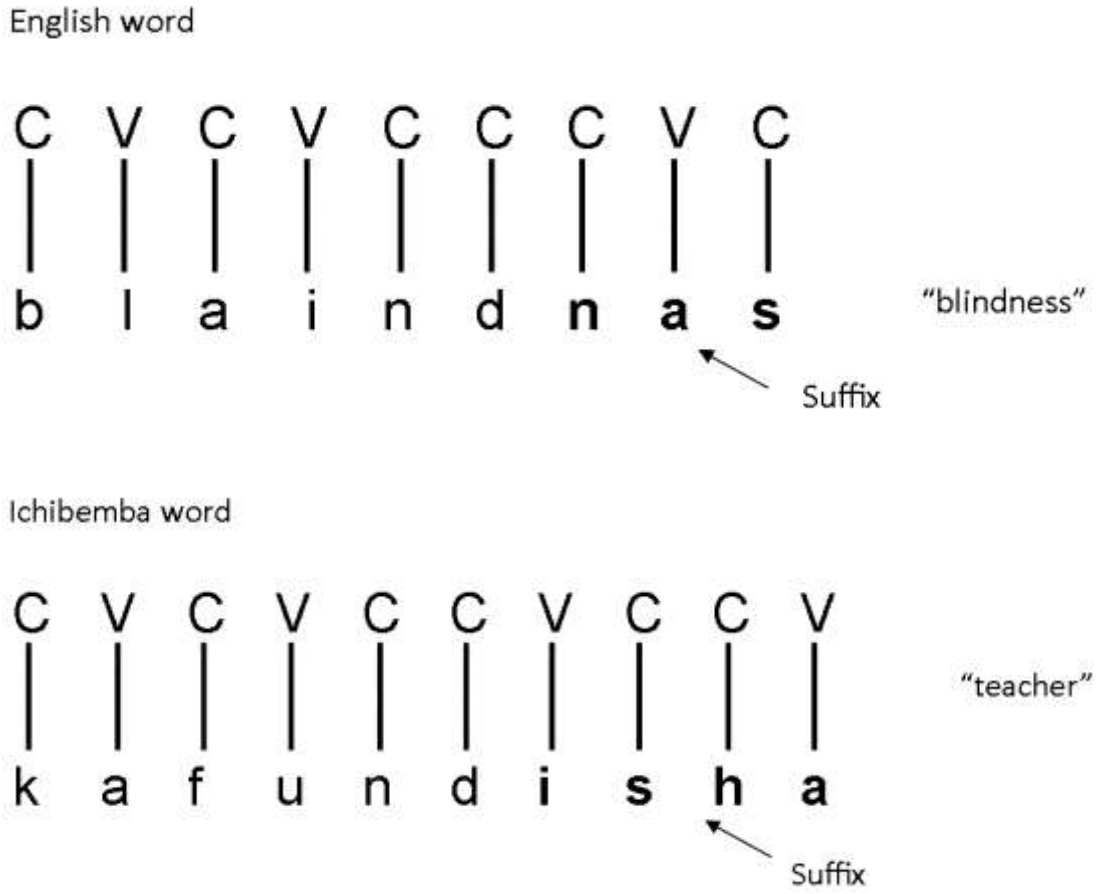
Figure 26: English and Icibemba Prefixes



Adapted from (Zivenge, 2009 p.287)

Both English and Icibemba are prefixal and suffixal languages. Suffixes for the two languages again are inserted after the base word, as demonstrated below:

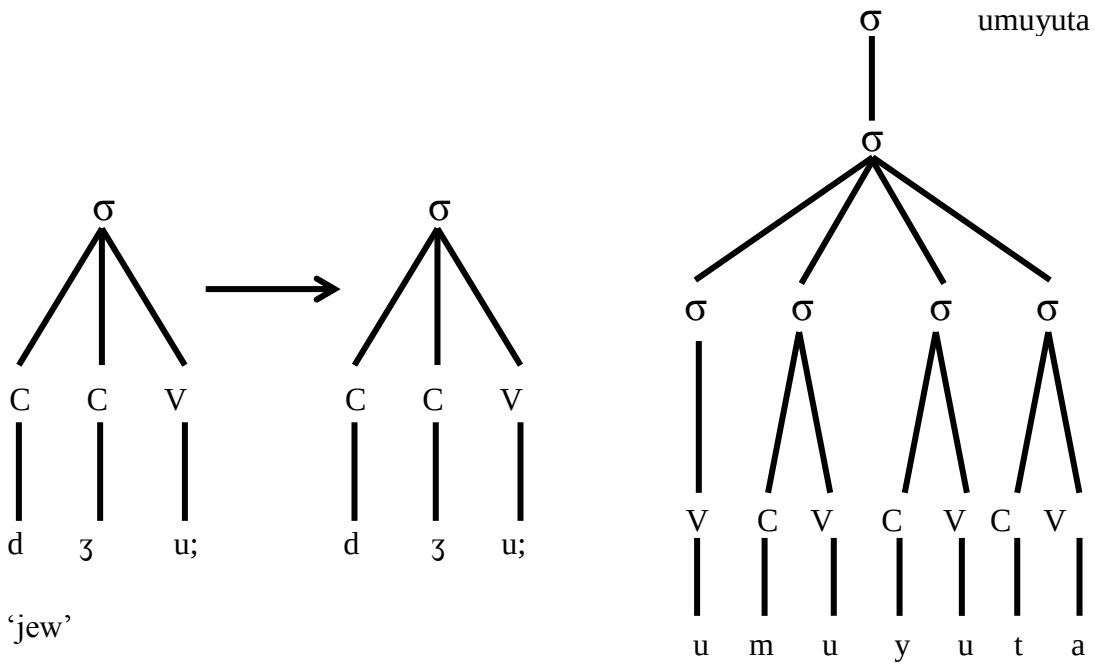
Figure 27: English and Icibemba Suffixes



Adapted from (Zivenge, 2009 p.287)

For both English and Icibemba, insertion of suffixes is mostly done after the base word. The way these two languages represent the syllables of the prefixes and suffixes nonetheless differ, since Icibemba has a CV pattern while English sometimes has CVC. Most of the nouns in Icibemba begin with an augment followed by a prefix. Therefore, noun words entering into Icibemba are prefixed (VCV) in order to make them acceptable grammatically. Icibemba speakers therefore insert augments and prefixes before the English base-word, as demonstrated below:

Figure 28: Insertion of Augment and Prefix



Adapted from (Zivenge, 2009 p.288)

The insertion of [umu-] augment plus prefix onto the English word 'Jew' was done because Icibemba has augments and prefixes. This means that the morpheme [u] + [mu-], which is monosyllabic [CV], of class 1, makes the word [umuyuta] 'Jew' to be in noun class 1. The other noticeable phonological change is that the syllable nodes increased from one, /dʒuː/ to four [umuyuta] in Icibemba. The syllable structure was changed, especially from /CCV/ to [VCVCVCV].The output of the adaptation process, introduces new segments to the base-word segments. Segments [u], [m] and [u], which were introduced to the base-word /dʒuː/ make the base-word belong to class 1 nouns in Icibemba. In general, augment and the prefix were inserted before the English noun /dʒuː/ and the output was [umuyuta]. All augments and prefixes inserted onto the English nouns are done before the English base word. This means that there are a set of rules governing insertion of augments and prefixes adopted in the process of lexical adaptation at base-word level.

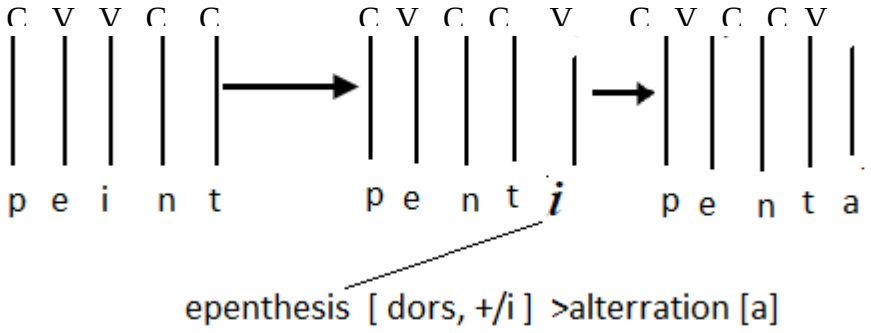
It should be emphasised that the above rules apply to all countable loanwords in all noun classes (plural and singular).

8.13 Handling Verbs

According to the Lexical Phonology and Morphology Theory, vowel alteration is the second level of word building. Besides altering the morphological patterns of English words in the Icibemba linguistic environment, the Icibemba native speakers also alter vowels of the last syllables of words. Words entering into Icibemba as noun base-words go through three morphological process. The first process is base-word morphological adaptation, the pre-occupation of the previous section. The second morphological process is vowel-alteration in the environment [dorsal+-i]. The third level of word building deals with handling of tenses. It should be mentioned that this thesis deals with only the first two processes. The following diagram demonstrates how vowel alteration is done:

Figure 29: Vowel Alteration

English version Icibemba output



C VV C C ‘peint’ epethesis [dors.+/i] > alteration,[a]

Adapted from (Zivenge, 2009 p.304)

The word /peɪnt/ was borrowed and then nativised into the Icibemba morphological environment. In the English linguistic environment, the lexical item /peɪnt/ is a noun. In order to be accepted in the Icibemba morphological environment, the paragogic vowel [i] is epenthesised, at the level of phonology. The product is a noun version (penti) only in Icibemba. Epenthesis of the vowel [i] onto the coda consonant [t] is possible applying the rule [dors+/-i/]. This is because [t] and [i] have feature matrices [+ high] and [- round]. The epenthesis of the high, front and unrounded vowel [i] onto the

English word /peɪnt/ ‘paint’ makes it acceptable as a well-formed noun base-word of class 1, in the Icibemba language.

The alteration of the high, front and unrounded vowel [i] to [a], a central, low and unrounded vowel [a] in the same phonetic environment [dors + i]> [dors + a], changes the base-word from a noun to a verb. There is change of the signified from object (noun) to action (verb). The noun base-word / peɪnt/>[penti] signifies a noun object of class 1, whilst /peɪnt/> [penta] signifies action done in the object of class 1, / peɪnt / ‘paint’.

Vowel alteration affects word category as already demonstrated by / peɪnt/> [penti] and /peɪnt/ > [penta] signifying noun and verb respectively. Vowel alteration is characterized by a two tier morphological process (noun-base-word (Noun Morphology) and verb baseword (derivational morphology). The immediate constituencies of the word /peɪnt/ are alterated, [NP + NS]>[VR + TV] as a result of the [dorsal + i]> [dorsal + a] vowel alteration. This rule [dorsal + i]> [dorsal + a] is also applicable to the following words:

(116)

buking’i	‘booking’
pompi	‘pump’
coini	‘join’
kampeni	‘campaign’
foti	‘vote’
shaini	‘shine’
pulani	‘plan’
puleni	‘plane’
polishi	‘polish’

8.14 Assignment of Loanwords to Noun Classes

Typically, Bantu languages have an extensive noun classification system, with obligatory prefixing that marks gender and number, and concord between the noun phrase and verb or any other category within the structure (Ochieng and Chai, 2014).

Noun classes mark more than just membership; they generally also convey information about grammar and number, meaning that singular and plural forms of a noun are classified in different classes. Individual noun classes are commonly referred to with a numbering system initially devised by Whelm Bleak during the 19th century. Later, it was expanded by Carl Meinhof, thus the name 'Bleek-Meinhof system'. The Bantu noun class system has been extensively studied. The reason is that alongside verbal extensions, it is the next most significant feature of Bantu languages; that is, it is a typological feature used to classify languages.

Meinhof's classification (1906, 1948) based on Bleek's (1869), is an internationally acclaimed work that can be applied to Icibemba. According to his method, nouns indicating singular or plural are not classified into the same class. In other words, each class is regarded as a class in its own right and not as the singular or plural of some other class. It should be noted that most recent publications on Icibemba use Meinhof's system. It has, however, been expanded to include subclasses.

The classification of various classes is based on three criteria: morphology, syntax and semantics. It should be mentioned that in this thesis, only morphology and semantics will be discussed. The main criterion used seems to be morphological, involving the form of the class prefix. It is for this reason that nouns with {umu-} (cl.1) and {aba-} (cl.2) are regarded as different classes. The syntactic criterion is based on the concords and pronouns associated with the various prefixes while the semantic criterion involves the meaning of the nouns concerned.

Katamba (2003) observes that the classification of nouns into numerous noun classes is an important feature of African languages and pervasive in all Bantu languages. In Icibemba, each nominal root is categorised and assigned to a particular noun class of which Icibemba has 15. Each noun class is linked to a class-specific which is traditionally said to encode the grammatical features of number and gender (Corbett, 1991).

8.15 Criteria for Assigning Loanwords to Noun Classes

There are three different criteria at work for the assignment of loanwords to Icibemba noun classes: zero prefix, phonological, and semantic assignment.

8.15.1 Assignments of Icibemba Loanwords to a Zero Prefix Class

Most studies on the morphological adaptation of non-Bantu words to Bantu languages have shown that most of the loanwords are allocated to Class 1 (a), 5 & 9 on the basis of the zero prefix (Madiba, 1994). 'Zero' prefix refers to loanwords which cannot be identified with any class prefix. As a result, according to the zero prefix principle, such nouns are assigned to those noun classes with nouns that do not normally have overtly marked prefixes. In general, loanwords are allocated to 1 (a) if the referent is human and 5 & 9 if the referent is nonhuman (Chimhundu, 1982). However, in Icibemba, countable zero prefix loanwords are allocated to class 1(a) whether they are referring to humans or not. Uncountable zero prefix loanwords are allocated to class 9. These loanwords could not fit into any of the other classes by virtue of the nature of their initial consonant. The following are some examples of nouns that belong to Class 1 (a):

(117)

English	**Icibemba**
referee	lifali
captain	kapiteni
cup	kaapu
houseboy	kaboyi
cement	sementi
candle	kandulo
file	faelo

In Class 9 we find the following uncountable loanwords which have been allocated to this class on the basis of the zero prefix principle:

(118)

English	**Icibemba**
AIDS	ekeshi
Africa	Afilika

Allah	Áala
asthma	aashima
beer	biiya
bilharzia	biluaasha

It appears that most of the Icibemba loanwords allocated to a class on the basis of the zero prefix principle are found in class 1a.

Verbal loanwords are allocated to class 15, for example,

(119)

ukufoota,	'to vote'
ukusaina,	'to sign'
ukushaina	'to shine'
ukupolisha	'to polish'
ukupasa	'to pass'

8.15.2 Phonological Assignment

Like in many other Bantu languages, phonology and morphology are interrelated. The term 'morphophonology' is very often applied to show this link (Kayigema, 2010). Studies done in other African languages on the morphological adaptation of foreign words (Van Warmelo, 1929; Whiteley, 1963; 1967; Hansford & Hansford, 1989; Chimhundu, 1982; Poulos, 1990) have shown that in some loanwords the first syllable contains sound elements which are similar or identical to the sound/sounds of one or other of the noun prefixes, and as such the original syllable undergoes slight modifications in order to be accommodated into the class system of target language.

Icibemba loanwords are also subjected to the phonological assignment in response to the requirements of Icibemba phonology and morphology. Resemblance of the initial segment of the loanword to the nominal affix of a given class determines the assignment to that class and to the gender of which that class is a constituent. Some loanwords belong to classes because the initial segment resembles the nominal affix. According to Dahl's law, the phonological assignment is applicable to the infinitives and the diminutives. For example,

(120)

akabati	‘cupboard’
akampani	‘company’
akamwana	‘small baby’
akamusana	‘small waist’

8.15.3 Semantic Assignment

With an exception of very few cases, one would easily identify nominal classes according to the semantic grouping (Kayigema, 2010). Concepts dealing with human beings are grouped in given classes, things, animals, parts of the body to specific ones. This criterion deals with categorization of concepts: human beings, things, animals, places, and actions.

The semantics of noun classes in the languages of the world involves the following parameters (Alexandra, 2006):

- sex: feminine vs masculine, as in many Afroasiatic languages, in East-Nilotic and in Central Khoisan;
- human vs non-human, as in some Dravidian languages of India;
- rational (humans, gods, demons) vs non-rational as in Tamil and other Dravidian languages;
- animate vs inanimate, as in Siouan, from North America.

The term neuter is often used to refer to irrational, inanimate gender, or a residue gender with no clear semantic basis.

8.16 Semantic Assignment of Icibemba Loanwords from English

8.16.1 Classes 1/2

In most publications like Colenso (1890) and Grout (1859), classes 1/2 are referred to as a personal or human class since the nouns appearing in this class indicate person and terms related to human beings: kinship, titles, professions, etc. In general, the

agreement nominal prefix markers are -mu- in singular (class 1) and -ba- in plural (class 2). Many Icibemba loanwords have been allocated to this class of animates.

According to Van Rooyen et, al, (1980), Class 1(a) is called 'appellative class.' Anything which must be named, for example, animals, insects, plants and loanwords is placed in this class.

In Nyembezi (1970), Nhlumayo (1979), Doke (1986) and Zulu et, al, (1988), plants, months, and diseases are additional words in class 1(a):

(121)

Singular	**Plural**	**Meaning**
akibishopu	baakibishou	'archbishop'
ambulela	baambulela	'umbrella'
yuniti	bayuniti	'unit'
bandeci	babandeci	'bandage'
bashikeeti	babashikeeti	'basket'
ambasata	baambasata	'ambassador'
bishikeeti	babishikeeti	'biscuit'

Class 2 (a) is the plural counterpart of class 1 (a). Grout (1859) and Doke (1986) have pointed out the peculiarity of this class in that when the plural of proper names is used, it does not denote a straightforward plural. For example, if a word like *yama* 'uncle' is put in its plural form *bayama,'*uncles' then it does not necessarily indicate more than one *yama.* It usually means *yama* and his associates or *yama* and his party, that is, *yama* and those who usually go about with him.

8.16.2 Classes 3/4

According to Miti (2004), classes 3/4 are miscellaneous. They generally denote plants, ditches, natural phenomena (fire, wind, light, darkness, rainbow, and lightning), rivers, bundles, farms, and some parts of the body (hair, heart, liver, head, back, temple, and navel). However, some loanwords (including some abstract nouns) that do not fall into this semantic group may be found in this class. The agreement nominal prefix markers are -mu- in singular (class 3) and -mi- in plural (class 4).

(122)

umufoolo	imifoolo	‘furrow’
umulaini	imilaini	‘line’
umupaipi	imipaipi	‘pipe’
umupoo	imipoo	’pole’

8.16.3 Classes 5/6

Classes 5/6 denote paired parts of the body such as eye, ear, breast, cheek, nose/nostrils (Kayigema and Mutasa, 2015). There is no fixed rule as such with loanwords. The agreement nominal prefix markers in singular (class 5) is -i- and -ma- in plural (class 6). Icibemba loanwords have been allocated to class 5, simply because there was no need of borrowing words denoting parts of the body. Loanwords allocated to class 5 refer to other realities.

(123)

ibotoolo	amabotoolo	‘bottle’
ibaatani	amabaatani	‘button’
ibaanshi	amabaanshi	‘bun’
ibeeseni	amabeeseni	‘basin’
iboomba	amaboomba	‘bomb’
ibuuku	amabuuku	‘book’
ibilaushi	amabilaushi	‘blouse’

8.16.4 Classes 7/8

According to Kayigema (2010), classes 7/8 generally denote things, plants, trees, languages, and pejoratives. The agreement nominal prefix markers are -ci- in singular (class 7) and -fi- in plural (class 8).

(124)

iceele	ifyeele	‘jail’
icibaala	ifibaala	‘wheel barrow’
icintini	ifintini	‘tin’
icisandulo	ifisandulo	‘saddle’
icitakishi	ifitakishi	‘duck’

icitesheni	ifitesheni	‘station’
icipepala	ifipepala	‘paper’

8.16.5 Classes 9/10

Morphologically speaking, both classes look the same. Only through nominal prefix agreement can one tell whether the word belongs to class 9 or 10. In fact, in order to distinguish the singular from the plural, one has to look at the context or consider the whole sentence structure. All non-identifiable nominal prefixes with the first syllable of the source word are assigned to this class. In general, class 9 includes nouns denoting most animals, some household effects and natural phenomena (Kayigema and Mutasa, 2015). Loanwords denoting things, plants, and some animals that were not known before the colonial period, have been integrated into class 9.

(125)

baata	‘butter’
eeyaloko	‘air lock’
cooko	‘chalk’
ceenji	‘change’
ciishi	‘cheese’
bulaandi	‘brandy’

Class 9 is also paired with class 6:

(126)

buleeki	(amabuleeki)	‘break’
buuca	(amabuuca)	‘butchery’
eepo	(amaeepo)	‘apple’
buukukeshi	(amabuukukeshi)	‘book case’

8.16.6 Class 11

According to Kayigema (2010), class 11 denotes thin and long entities, some body parts, augmentatives, depreciation and pejorative items. Usually, it pairs with class 10. Its prefix marker is –lu-

(127)

ulusamushi (insamushi) ‘maths’

8.16.7 Classes 12/13

Kayigema and Mutasa (2015) say classes 12 and 13 denote diminutives with the idea of contempt, smallness, and appreciation. The prefix marker of the diminutive is -ka- (class 12) in singular and -tu- (class 13) in plural. The augment preceding the diminutive prefix marker is generally a- in singular and u- in plural. Morphologically speaking, the loanword akampani ‘company’ behaves like a diminutive, but semantically it is not. Although the loanword akampani ‘company’ does not embody any idea of smallness or depreciation, it is classified into class 12 because of its prefix. This is a case of misanalysis based on the language structure that treats the nominal initial consonant as a noun class marker.

(128)

akabati	utwabati	‘cupboard’
akeyala	utweyala	‘care of’
akampani	utwampani	‘company’
akanesala	utunesala	‘razor blade’
akeetulo	utweetulo	‘kettle’
akalabu	utulabu	‘club’

Something should be said about this class. There are some variations in Icibemba about these words. Some Icibemba speakers pluralise akabati as ***ba***kabati. Similarly, ikeetulo is pluralized as amakeetulo.

Note that gliding takes place in the above examples

u-tu-ampani

u+a = wa

8.16.8 Class 14

According to Smith (2001), commonly, class 14 contains abstract nouns hence, sometimes, referred to as 'abstract class.' This class takes ubu- as a noun class prefix of Class 14 in Icibemba and Icibemba loanwords channelled into Class 14 are mainly nouns from Classes 1 and 1(a) (i.e. professional names) that also denote 'the state of being'.

(129)

butikonii	'the state of being a deacon'
ubukilishitu	'the state of being a christian'
bundokotala	'the state of being a doctor'
butica	'the state of being a teacher'

It should be noted that there is no plural for this class. The only exception in this class is ubulangeti 'blanket' that has been paired with class 6:

ubulangeti - amalangeti 'blanket'

It should be emphasized that this is a case of misalignment – putting this noun erroneously in class 14.

8.16.9 Class 15

This is the class that hosts loanverbs. Its class prefix is uku-

(130)

ukushaina	'to shine'
ukusaina	'to sign'
ukukoneka	'to turn'
ukupaasa	'to pass'
ukupenta	'to paint'
ukuwasha	'to wash'

8.16.10 Locatives

Just as there are no really locative specific nouns in the native language Icibemba, there are no loanwords in class 16, 17 and 18. It should however be mentioned that

loanwords can be used with locatives. The distinctive prefix markers are pa/pali ‘on’, ku/kuli ‘to’ and mu/muli ‘in’:

(131)

Icibemba	English
pa-tebulo	on the table
ku-maliketi	at the market
mu-motoka	in the car

Below is a summary of classes in Icibemba:

Table 11: Summary of Noun Classes in Icibemba

CLASSES	**CONTENTS**
1 / 2	for people
3 / 4	for plants, trees and natural phenomena
5/6	for objects that come in pairs or large groups
7/8	were heterogeneous
9/10	include animals and miscellanea
11	for extended body parts. Uses plural of classes 6 and 10
12/13	for diminutives
14	for abstract qualities
15	for verbal infinitives
16	for locatives (where)
17	for locatives (around which)
18	for locatives (in which)

Adapted from (Kayigema, 2010 p.89)

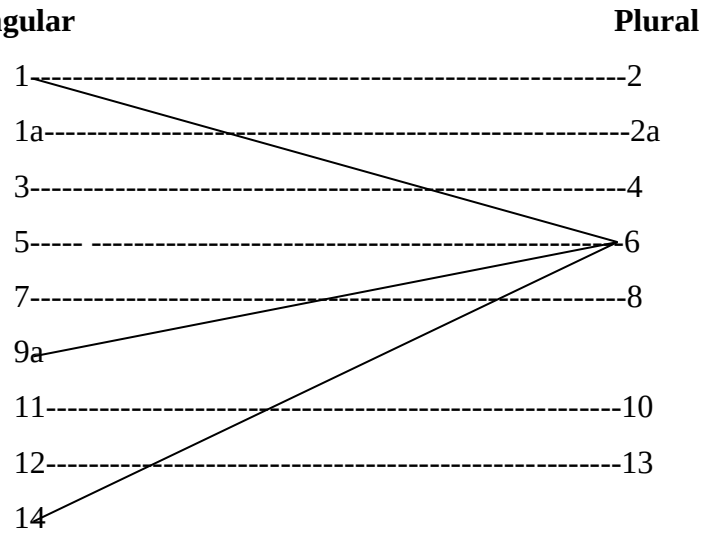
It can be said that the principle of semantic significance, though it may be useful in the classification of certain nouns in Icibemba, is not without problems. There is still the problem of certain significances that are found in more than one class. For example, a semantic significance such as body parts can occur in nouns of Classes 3 & 4, 5 & 6, 7 & 8, 9 & 10 and 11. The difficulty here concerns the assignment of a noun stem referring to body parts to a particular class.

8.17 Noun Class Pairings in Icibemba

Noun class prefixes 1, 3, 5, 7, 11, 12, and 14 always convey singularity, and classes 2, 4, 6, 8, 10, and 13 pluralities.

The figure below shows all the pairings of Icibemba loanwords from English:

Figure 30: Attested Pairings of Icibemba Loanwords from English



Adapted from (Iorio, 2011 p.48)

8.18 Borrowability of Nouns by Noun Class Pairings

To establish the Icibemba noun class pairing which is prone to more borrowing, the loanwords were grouped according to the noun class pairings. The results of the pairings are presented in Table 12 below:

Table 12: Borrowability of Nouns by Noun Class Pairings

Noun Class Pairing	Number of Loanwords	Percentage
1 / 2	8	0.86
1a / 2a	677	73
1/ 6	2	0.21
3 / 4	4	0.43
5/6	63	6.7
7/8	7	0.75
9 unpaired	135	14.5
9a/6	13	1.3
11/10	1	0.1
12/13	7	0.75
14/6	1	0.1

Adapted from (Matiki, 2016 p.12)

Most studies on the morphological adaptation of non-Bantu words to Bantu languages have shown that most of the adapted nouns are allocated to Class 1 (a), 5 and 9 on the basis of the zero prefix. Zero' prefix refers to adapted nouns which cannot be identified with any class prefix. So, according to the zero prefix principle such nouns are assigned to those noun classes with nouns that do not normally have overtly marked prefixes. Usually, adoptive nouns are allocated to 1 (a) if the referent is human and 5 and 9 if the referent is nonhuman (Chimhundu, 1982).

As can be seen from the table above, by far the noun class pairing 1a/2a is the largest pairing. In this pairing, nouns occur with no class prefix in singular and *baa* in plural. This is followed by class 9 which is unpaired. The absence of a class prefix for these classes may to a certain extent explain why they attract an excessive number of loanwords. According to Matiki (2016), the basis for class assignment for a majority of the nouns, nevertheless, is undefined and reflects, for the most part, the usual chaos of the Bantu nominal class system. Class 1/2 is usually organized on the basis of its semantic saliency; it is the 'people' class. It is clear from the data, though, that those nouns that are non-people and not normally associated with this class have ended up in this class. The fact that the semantic content of the loanwords is not the basis for class assignment of loanwords is also evident from the fact that some synonyms are assigned

to different classes. For example, *toileti* is in class 1/2 while its native synonym, *icimbusu* is in 7/8. Consequently, it can be concluded that semantics seems to play a limited role in the assignment of loanwords to Bantu classes. Matiki (2016) shows that some nouns which should be in class 1/2 on the basis of the semantic criteria may actually be 'dehumanised' and assigned to a non-human class. For instance, a big person may be called ici-muntu, a noun which is assigned to class 7/8 instead of 1/2 - the human class.

8.19 The Morphology of Noun Classes

As mentioned above, morphologically, a noun consists of a prefix and a stem. In Icibemba, the noun prefix begins with a vowel called the initial vowel or augment. The real prefix or the noun prefix is the one used in assigning nouns into different classes. This is why it is called class prefix. Below is a table showing the noun classes of Icibemba.

Table 13: Principal Noun Classes in Icibemba

Class (Pair)	**Example**	**Meaning**
1 / 2	umu-ntu/aba-ntu	a person /persons
1a/2/a	(zero prefix) fundi/baa-fundi	a hunter/hunters
3 / 4	umu-ti/imi-ti	a tree/trees
5/6	i-fupa/ama-fupa	a bone/bones
7/8	ici-puna/ifi-puna	a stool/stools
9/10	in-nama/in-nama	an animal/animals
11/6	ulu-kasa/ama-kasa	a foot/feet
12/13	aka-nwa/utu-nwa	a mouth/mouths
14/6	ubu-sanshi/ama-sanshi	a bed/beds
15/6	uku-boko/ama-boko	an arm/arms

Adapted from (Kashoki, 2012)

8.20 Morphological Adaptation of Icibemba Loanwords from English

According to Smeaton (1973), a loanword undergoes modification of morphological structure to achieve harmony with the predominance pattern and the root system of the

recipient language. This is called adaptation. According to Crystal (1991), the morphological process in which grammatical and lexical information is added to a stem is known as affixation. Fromkin and Rodman (1988) define affixation as a process in which prefixes, infixes and suffixes are conjoined to other morphemes to form words. When this happens in a language, it makes it easy for language users to communicate naturally.

The main affixation processes in Icibemba are prefixation and suffixation. Infixes are rare in the language.

Morphologically, as discussed above, in Icibemba, the second morpheme - the prefix - generally indicates the class to which a given noun belongs. A pair of prefixes comprising singular and plural represents one class of nouns. In Icibemba, prefixes and suffixes can be used to derive a noun from other grammatical categories like verbs and adjectives. Plural forms are derived from singular forms through prefixation as per the Icibemba noun classes. In nouns loaned from English, a vowel is inserted at the word initial or in the word final through prefixation and suffixation respectively so as to correspond to the Icibemba syllable structure for natural communication.

Words borrowed from English to Icibemba exhibit various morphological processes. In its discussion, this chapter uses two main processes below to show this.

8.20.1 Prefixation

Prefixation involves the addition of a morpheme at the initial position of a stem or root. In Icibemba, the plural morpheme is marked in the prefixes only. The prefix also indicates the class to which a noun belongs. In his study of Bantu phonology and morphology, Miti (2006) indicates that for most noun classes, there exists a regular association of pairs to show the singular / plural dichotomy. In Icibemba, the plural morphemes are placed before the root of the noun, for example:

(132)

Singular	**Plural**		**Gloss**
i+buku	ama+buku	=	book/books
i+saka	ama+saka	=	sack/sacks

i+ceketi	ama+ceketi	=	jacket/jackets
ici+ntini	ifi+ntini	=	tin/tins
i+tenti	ama+tenti	=	tent/tents

From the data in (132), it can be noted that the class prefixes such as {i and ama} act as both singular/pluralizing morphemes as well as noun class markers in Icibemba.

Fromkin (1988) states that, there are morphological rules that determine how morphemes combine to form new words. Therefore, loanwords have to be assigned to respective Icibemba noun classes to conform to the morphological rules and hence fit in Icibemba noun class system.

From the data above, the nouns indicated are from diverse Icibemba noun classes. This therefore explains the difference in the singular prefixes. The singular prefix taken by Icibemba speaker in the adaptation process dictates the plural suffix that the noun takes. This allows the adapted word to fit in the Icibemba morphological noun classes and hence allow for grammatically correct communication.

Some other loanwords borrowed from English are adjusted so as to become diminutive nouns that would fit in Icibemba noun classes 12/13. This is where a noun is changed from its ordinary size to a diminutive form by the addition of prefixes {ka-} for the singular form and {tu-} for the plural form. Things held with contempt are also placed in this class to belittle them and make them appear unimportant or non-consequential. It should be noted that such class forms do not exist in English but in order to allow for natural communication in recipient language; then this classes is introduced in the adaptation process. Examples of such loanwords are illustrated below:

(133)

Ordinary Size	**Singular** (diminutive)	**Plural** (diminutive)	**Gloss** (Ordinary)
suuti	kasuuti	tusuuti	suit
paani	kapaani	tupaani	pan
beeti	kabeeti	tubeeti	bed
filici	kafilici	tufilici	fridge

It is evident from data above that Icibemba loanwords are adapted into Icibemba morphologically through prefixation to allow them fit in the noun classes. Such adaptation clearly allows for natural communication.

8.20.2 Suffixation

Another adaptation process applied to words borrowed from English into Icibemba is suffixation. Crystal (1991) defines suffixation as a term used in morphology referring to an affix which is added following a root or stem. He further notes that the process of suffixation is common in English for derivational formation of new lexical items. Kinuthia (2008) refers to suffixation as morphological insertion where it refers to the addition of a class prefix marker and a nominalizing affix to the verb root of the derived nouns.

When English words are borrowed into Icibemba, a vowel is inserted at word final. This is because as stated earlier, Icibemba has strict CV structure. In other words all Icibemba words end in a vowel. However, in the case of such insertion in Icibemba, the nouns are not a product of derivational process. In such a case, the vowel found at the end of a root of loanword from English is just meant to create a morphological structure that is acceptable in communication using Icibemba and is not a result of nominalization. Examples are as indicated in below:

(134)

English	**Icibemba**
/book/	/ibuku/
/fan/	/faani/
/pencil/	/pensulo/
/box/	/imbokoshi/
/tin/	/icintini/
/furrow/	/umufoolo/

8.21 Universal Vowel Functions in Icibemba

All Icibemba vowels perform certain linguistic functions. These functions are divided into morphophonological and morphosyntactic. Morphophonological functions consist

of those functions that fall in two disciplines of phonology and morphology. The morphosyntactic one comprises vowel functions that fall into the disciplines of morphology and syntax. An analysis of the first function is discussed below.

8.22 Morphophonological Functions

There are many functions that Icibemba vowels perform phonologically or morphologically in this class. In observing the Bantu phonological rule that requires all words to end in vowels, Icibemba uses its vowels as end phonemes in all Icibemba words (Choge, 2009).

(135)

Word	**Type**	**End Vowel**
umulu ‘heaven’	noun	/u/
pita ‘pass’	verb	/a/
ifumo ‘stomach’	noun	/o/
umwipi ‘short’	adjective	/i/
kolwe ‘monkey’	noun	/e/

In terms of phonology, vowels adapt words of foreign origin. Any new non Bantu word that enters into Icibemba language is accepted phonologically mainly by using vowels to convert it into a Icibemba word according to Bantu vowel positioning in words (Choge, 2009). The words of Bantu origin and those from other languages with open syllable system are integrated into Icibemba without undergoing any morpho-phonological restructuring even if they may not carry their meanings into Icibemba. In cases where the morpho-phonological system is different from Icibemba, the word is reorganized to an open syllable (Chiraghdin & Mnyampala, 1977; Mbaabu, 1985 and Suleiman, 1999). The following are some of the foreign words which have been adapted into Icibemba through vowel insertion:

(136)

Source Word	**Navitised Word**	**Nativising Vowel**
pan	paani	/i/
pass	pasa	/a/
clock	inkoloko	/o/

farm	fwaamu	/u/

It should be mentioned that some adapted English words in Icibemba have retained their original end vowels in spite of the changes made to the other phonemes in the word.

(137)

Source Word	**Nativised Word**	**End Vowel**
cinema /cinema/	[shinema]	/a/
taxi /ˈtæksi/	[takishi]	/i/
three /ˈθriː/	[fili]	/i/
mini /ˈmɪni/	[mini]	/i/
manna /mæna/	[ma:na]	/a/
bye bye /ˋbai bai/	[bayi bayi]	/i/

However, there are some English words which undergo changes when they are adapted into Icibemba. They drop the original end vowel and adopt a different one depending on the preceding phonemes (Chiraghdin & Mnyampala, 1977).

(138)

Source Word	**Nativised Word**	**Nativizing Vowel**
acre /ˈeɪkə/	[eeka]	/a/
boiler /ˋbɔɪlə	[boila]	/a/
lorry /ˋlɒri/	[lo:le]	/e/
army /ˋɑːmi/	[a:me]	/e/

Icibemba is an open syllable language with two types of syllable skeletal tiers of CV or V. Vowels are syllabic and consequently any syllable must have a vowel or is formed by a single vowel (Choge, 2009). It should be emphasised that no two vowels form a single syllable in Icibemba. The function of vowels can also be derived from their participation in verb root formation. They form verb roots in conjunction with one or two consonants. Many verb roots in Icibemba have skeletal tiers of CVC:

(139)

Verb	**Root**	**Skeletal Tier**	**Vowel Used**
leta	‘bring’	let- cvc	/e/
sala	‘choose’	sal- cvc	/a/

pata	‘hate’	pat- cvc	/a/
soma	‘read’	som- cvc	/o/
lila	‘cry’	lil- cvc	/i/

However, monosyllabic verbs have consonant roots. The examples below expound this vowel functions:

(140)

-fwa	‘die’	-fw- cc -	/a/
-lya	‘eat’	-ly- cc -	/a/
-pa	‘give’	-p- c -	/a/

8.23 The Case of the Low Vowel /a/

The low vowel /a/ can be inserted in three positions; word initially, word-medially within clusters and word finally. The Icibemba low vowel /a/ is attached word-finally after a syllable-final consonant. It is worth mentioning that Icibemba verbs, like in many Bantu languages, end with the final vowel ‘-a’ (Mathangwane, 1996; Chebanne et al., 1995). English verbs adapted into Icibemba always occur with this final vowel ‘-a’ in compliancy to this tendancy. Thus such verbs assume the same morphological pattern as native Icibemba verbs as shown below:

(141)

ukukopa	‘to copy’
ukuwasha	‘to wash’
ukushaina	‘to shine’
ukuseeca	‘to search’
ukupaasa	‘to pass’
cinja	‘to change’
washa	‘to wash ’

It should be mentioned that this rule appears to have been so over-generalized in the phonological system of Icibemba that it also applies to nouns - that is, some English nouns that have come into Icibemba have copied this behaviour of verbs and end with

the low vowel /a/. In other words, nouns which end with a consonant in English have the final vowel /a/ attached to them in Icibemba consonant with the CV syllable structure. Occurrence of the low vowel /a/ word-final in borrowed nouns does not seem to be restricted to any particular environment. It occurs indiscriminately after different consonants. This is illustrated in the following examples of borrowed English nouns ending with a consonant:

(142)

Icibemba	**English**
isaaka	'sack'
ipulanga	'plank'
shitampa	'stamp'
boola	'ball'
fulawa	'flour'
ipepala	'paper'

8.24 Noun Re-assignment in Icibemba

Although each noun stem is governed by one prefix appropriate to the gender and number which that noun is associated with, all stems can undergo what Lyons (1968) has termed 'secondary recategorisation' or reclassification, i.e. each noun stem can be assigned another class prefix apart from its original or usual one. Indeed, the most common reclassification consists of diminutive, augmentative and abstractness. Most nominals in Bantu languages can be reclassified by adopting class prefixes underlying the idea of augmentative, diminutive or abstractness.

In Icibemba for example, we say

(143)

mu -	lumendo	mulumendo	'young man	(sing.)
cl_1	stem			
ba -	lumendo	balumendo	'young men'	(plur.)
cl_2	stem			
ka -	lumendo	kalumendo	'little young man'	(sing., dim.)

cl_{13}	stem			
tu	lumendo	tulumendo	‘little young men’	(plur., dim.)
cl_{12}	stem			
fi -	lumendo	filumendo	‘big young men’	(plur., dim.)
cl_7	stem			
bu -	lumendo	bulumendo	‘manhood’	(sing., abstr)

As can be seen above, the general principle in Icibemba noun classification is that any noun must have a noun class prefix for that noun/word to belong to the Icibemba word stock. Apart from the usual noun class prefix that each noun must have, the same noun can be reclassified by assigning it another prefix as the examples above have demonstrated.

From this principle of classification and reclassification, each word entering Icibemba through borrowing must also be assigned a class prefix for its full integration in the vocabulary. It will be seen below how this (re) classification operates with Icibemba loanwords from English.

8.25 Re-classification of Icibemba Loanwords from English

Many Icibemba loanwords from English are given a class prefix as the following examples illustrate:

(144)

ubulangeti	ubu-	langeti from English ‘blanket’ (blanket, sing.)
	cl_{14}	stem
amalangeti	ama-	langeti (blankets, plur.)
	cl_6	stem
akampani	aka-	mpani from English ‘company’ (company, sing.)
	cl_{12}	stem
utwampani	utwa-	mpani (companies, plur.)
	cl_{13}	stem
icintini	ici-	ntini from English ‘tin’ (tin, sing.)
	cl_7	stem

ifintini	ifi-	ntini from English ‘tin’ (tins, plur.)
	cl_8	stem

Reclassification occurs in the following word:

(145)

umu -	soca	umusoca	‘soldier’	(sing.)
cl_1	stem			
aba -	soca	abasoca	‘soldiers’	(plur.)
cl_2	stem			
aka -	soca	akasoca	‘small soldier’	(sing., dim.)
cl_{12}	stem			
utu -	soca	utusoca	‘small soldiers’	(plur., dim.)
cl_{13}	stem			
ici -	soca	icisoca	‘big soldier’	(sing., dim.)
cl_5	stem			
ifi -	soca	ifisoca	‘big soldiers’	(plur., dim)
cl6	stem			

As can be seen above, apart from the usual noun class prefix that each noun must have, the same noun can be reclassified by assigning it another prefix as the examples above have demonstrated. It has already been mentioned that when Icibemba loanwords are adapted in Icibemba, they have to follow all the rules of Icibemba because they are no longer English words but they are now part of Icibemba lexicon.

8.26 The Effects of Borrowing English Nouns on the Morphology of Icibemba Nouns

It has been indicated in this chapter that adapted English loan nouns are adapted to the noun structure of Icibemba. In this case nouns from English affix prefixes when they are taken over to Icibemba. After receiving prefixes, these nouns are then assigned to a particular class prefix.

Although Icibemba has successfully incorporated the English loan nouns to its prefix system, it has been affected in some ways. In the first place, the impact can be clearly seen in the semantic significances of certain noun prefix classes. Certain class prefixes are traditionally known to express certain specific semantic significances. In the previous discussion it was shown how certain adapted nouns are allocated to noun class prefixes. Rather than being allocated to a class prefix on the basis of their meaning, they are sometimes allocated to a class prefix on the basis of the resemblance of their initial sound segment to a class prefix. In a way, this weakens the semantic approach to the classification of nouns. There are some Icibemba loan nouns which have been allocated to class 12 because they start with *ka*, yet they do not carry the meaning significance normally expressed by nouns of that class. Other adapted nouns have been allocated to class 9 on the basis of their zero prefix**.** Zawawi (1979: 134-135) describes this kind of change in the following manner:

> *"As a result of the assimilation of these non-Bantu elements the semantic function of some of the indicators has changed. These changes range from a blurring of a common feature in those nominals which were considered to form a group to the extension of semantic function in those units which originally had only one function .... lt may be that the original meaning·of the indicator (traditional "Prefix") is still maintained even though a new reference or a new extension of meaning has been added".*

The effect of Icibemba loanwords can also be seen in deviations in the class system with regard to singular-plural pairings in Icibemba. Traditionally class prefixes are grouped according to singular and plural forms. In other words each singular class is said to have its corresponding plural form. However, it appears that Icibemba loanwords have introduced singular-plural pairings which are new to the language. This can be observed from the following examples:

(146)

Singular	**Plural**	
umuitaliani	amatailiani .	‘Italians’
umupotokishi	amapotokishi	‘Portuguese’
umucelemani	amacelemani	‘Germany’
umubunu	amabunu	‘boers’
umukalati	amakalati	‘coloureds’

These examples have to do with names which are indicative of nationality. It is very strange that **class 1** should take **class 6** as its plural. Normally nouns that belong to **class 1** take **class 2** as their plural and nouns which take the plural form in **class 6** are mostly those which belong to **class 5** in the singular.

What can be observed from the examples discussed above is a change in singular-plural pairings of some noun classes, and this has resulted in the emergence of new genders. Chimhundu (1982:75) regards this change "as evidence of an expansion of the native class-number gender system".

8.27 Other Morphological Adaptation Processes

This section discusses reduplication and verbal extensions which typically characteristics of Bantu languages.

8.27.1 Reduplication

According to O'Grady and Archibald 2000:131: "A common morphological process in some languages involves reduplication, which marks a grammatical or semantic contrast by repeating all or part of the base to which it applies …." Kauffman (ND) says reduplication in language is a morphological type that – through doubling a word, element, root, or stem – enhances, emphasizes, amplifies, enlarges, diminishes, adds number or changes verb tense – to bring about significant meaning changes or shades of meaning. There are two basic forms – full reduplication and partial reduplication – and some related forms that apply the technique of doubling through rhyming or vowel change**.**

In Icibemba, just like in any Bantu language, reduplication processes are either complete –the whole of the stem/base copies – or partial - as only part of the stem/base is doubled. In general, the repeated segment, in full or partial, becomes part and parcel of the stem (Mwita, 2008). When words are borrowed from English into Icibemba some loanwords are reduplicated in the same way Icibemba words are done.

8.27.1.1 Types of Reduplication in Icibemba

Generally, reduplication involves a variety of parts of speech. Major word categories that undergo reduplication in Icibemba are nouns, verbs, adjectives, adverbs and numerals. However, no attempt is made in this study to cover this aspect.

8.27.1.1.1 Total Reduplication

Odden (1996), Ngunga (2001) and Tak (2007) in Lusekelo (2008) say across world languages, total/complete reduplication involves copying of the entire base/stem. In other words, both the prefix and stem reduplicate. There are several words with complete reduplication behaviour found in Icibemba. Such words bring about specific tendencies presented and discussed below.

Examples

(147)

fashiti	'fast'	fashitifashiti	'kind of hurry'
wanu	'one'	wanuwanu	'one by one'
tu	'two'	tutu	'two two'
fili	'three'	fili fili	'three three'
shaina	'shine'	shainashaina	'to shine repeatedly'
saina	'sign'	saina saina	'to sign repeatedly'

8.27.1.1.2 Partial Reduplication

Partial reduplication is a form of reduplication where only part of the base is reduplicated. Derived bisyllabic nouns undergo partial reduplication, i.e. the noun class prefix is not affected. The examples below indicate that the bisyllabic rule is taken into account whereby only the CVCV or NGVCV are copied and then prefixed to the stem.

(148)

ukusaina	'to sign'	ukusainasaina	'to sign repeatedly'
ukucoina	'to join'	ukucoinacoina	'to join repeatedly'
ukuceking'a	'to check'	ukuceking'aceking'a	'to check repeatedly'
feluka	'to fail'	ukufelukafeluka	'to fail repeatedly'

ukufenta	‘to faint’	ukufentafenta	‘to faint repeatedly’
ukukopa	‘to copy’	ukukopakopa	‘to copy repeatedly’
ukukoneka	‘to turn’	ukukonekakoneka	‘to turn repeatedly’

8.27.2 Verbal Extensions in Icibemba

The concept of Bantu verbal extensions has been defined differently by different scholars. Although most authors seem to agree that the verbal extensions as a morphological process (Jensen 1990; Payne 1994; Katamba 1993; Nurse and Philippson 2003, and others), they differ in whether or not they should be considered as derivational or inflexional affixes. It should also be noted that the number, type and form of verbal extensions varies considerably among languages.

Like many other Bantu languages, Icibemba has a robust agglutinative morphology that allows affixation of a variety of morphemes both to the left and the right of the verb stem. According to Kula (2000) the following is the Bantu verb shape:
prefix + verb stem + (extensions) + final vowel

The prefix in the verb serves to indicate the infinitive or citation form of the verb. The verb stem does not stand on its own without the final vowel though it is the stem that is assumed to be stored in the lexicon. All phonological and morphological processes apply to the verb stem before the final vowel is added. All suffixes are as such attached to the verb stem, represented by ‘extensions’ in the illustration above (Kula, 2000).

Verbal extensions are suffixes that are placed between the radical and the final inflection of a verb in order to extend the radical and form verb derivates (Cocchi, 2008). These are a phenomenon that typically characterises Bantu languages. When Icibemba loanwords are adapted into Icibemba they become part of Icibemba. Because of this, verbal extensions apply to some of these loanwords.

8.27.2.1 The Passive Extension

This form indicates that the subject is acted upon by an agent (Lodhi, 2002). The general rule is that in the active voice the verb ends in '-a' In the passive voice it ends in'-wa' –iwa, e.g. ukwita 'to call' kwitwa 'to be called':

(149)

Exceptions

Verbs ending in '-sha' have '-iwa'
ukutasha, ukutashiwa
Verbs ending in '-wa' or '-ya' have '-ikwa'
ukutemwa, ukutemwikwa
Verbs ending in '-ya' preceded by a vowel have '-ikwa'
kufwaya, kufwaikwa
Verbs ending in '-ya' preceded by a consonant have '-iwa'
ukulya, ukuliwa

When English words are adapted in Icibemba they follow the same pattern:

(150)

Simple Verb		**Passive Form**
ukucaca	'to charge'	ukucaciwa 'to be charged'
ukupompa	'to pump'	ukupompewa 'to be pumped'

8.27.2.2 The Applicative Extension

According to Mataka and Tamanji (2000), the applicative extension is sometimes called benefactive or dative and it indicates that the state or the action described is for the benefice of somebody else. In Icibemba, it is obtained by ending the verb in '-ela', '-ila', 'ena', '-ina':

(151)

Simple Verb		**Applied Form**	
ukususosa	'to speak'	ukususosela	'to speak for somebody'
ukutuma	'to send'	ukutumina	'to send to somebody'
ukufwa	'to die'	ukufwila	'to die for somebody'

When English words are adapted in Icibemba they follow the same pattern:

(152)

Simple Verb		**Applied Form**	
ukupompa	‘to pump’	ukupompela	‘to pump for somebody’
ukucinja	‘to change’	ukucinjila	‘to change for somebody’
ukupaasa	‘to pass’	ukupashila	‘to pass for somebody’
ukushaina	‘to shine’	ukushainina	‘to shine for somebody’
ukufoota	‘to vote’	ukufotela	‘to vote for somebody’
ukuwasha	‘to wash’	ukuwashila	‘to wash for somebody’
ukuwiina	‘to win’	ukuwinila	‘to win for somebody’
ukubeca	‘to bet’	ukubecela	‘to bet for somebody’
ukupenta	‘to pait’	ukupentela	‘to paint for somebody’

8.27.2.3 The Reflexive Extension

This extension is used to express ‘self’. It is obtained by prefixing ‘i’ to the verb stem.

(153)

Simple Verb		**Reflexive Verb**	
ukupata	‘to hate’	ukuipata	‘to hate oneself’
ukukana	‘to refuse’	ukuikana	‘to deny oneself’
ukutemwa	‘to love’	ukuitemwa	‘to love oneself’

When English words are adapted in Icibemba they follow the same pattern:

(154)

Simple Verb		**Reflexive Verb**	
ukupompa	‘to pump’	ukuipompa	‘to pump oneself’
ukucinja	‘to change’	ukuicinja	‘to change oneself’
ukufoota	‘to vote’	ukuifota	‘to vote oneself’
ukuwasha	‘to wash’	ukuiwasha	‘to wash oneself’
ukuwiina	‘to win’	ukuiwina	‘to win oneself’
ukubeca	‘to bet’	ukuibeca	‘to bet oneself’
ukupenta	‘to paint’	ukuipenta	‘to paint oneself’

8.27.2.4 The Causative Extension

The causative has the meaning "to cause or to make somebody do something" or "to cause something to become something different" (Mataka and Tamanji 2000:177). In Icibemba, it is obtained by ending the verb in '-ya', '-fya', '-sha', '-esha', '-isha' and '-ika':

(155)

Simple Verb		**Causative Verb**	
ukufuma	'to go out'	ukufumya	'to bring out'
ukulwala	'to be sick'	ukulwalika	'to cause to be sick'
ukuleka	'to let be'	ukulesha	'to forbid'
ukuluba	'to be lost'	ukulufya	'to lose'
ukufika	'to arrive'	ukufisha	'to cause to arrive'

When English words are adapted in Icibemba they follow the same pattern:

(156)

Simple Verb		**Causative Verb**	
ukupompa	'to pump'	ukupompesha	'to cause to pump'
ukucinja	'to change'	ukucinjisha	'to cause to change'
ukupaasa	'to pass'	ukupashisha	'to cause to pass'
ukushaina	'to shine'	ukushainisha	'to cause to shine'
ukufoota	'to vote'	ukufotesha	'to cause to vote'
ukuwasha	'to wash'	ukuwashisha	'to cause to wash'
ukuwina	'to win'	ukuwinisha	'to cause to win'
ukupenta	'to pait'	ukupentesha	'to cause to paint'

8.27.2.5 The Completive Extension

This is used to express that an action is thoroughly done. It is obtained by ending the verb in '-ilila', '-elela', '-enena' and '-inina'

(157)

Simple Verb		**Completive Verb**	
ukupena	'to be mad'	ukupenena	'to be completely mad'
ukupola	'to recover'	ukupolelela	'to recover completely'

ukufika	‘to arrive’	ukufikilila	‘to arrive completely’

When English words are adapted in Icibemba they follow the same pattern:

(158)

Simple Verb		**Completive Verb**	
ukupompa	‘to pump’	ukupompelela	‘to pump completely’
ukucinja	‘to change’	ukucinjilila	‘to change completely’’
ukupaasa	‘to pass’	ukupashilila	‘to pass completely’
ukushaina	‘to shine’	ukushaininina	‘to shine completely’
ukufoota	‘to vote’	ukufotelela	‘to vote completely’
ukuwasha	‘to wash’	ukuwashilila	‘to wash completely’
ukuwiina	‘to win’	ukuwininila	‘to win completely’
ukubeca	‘to bet’	ukubecelela	‘to bet completely’
ukupenta	‘to pait’	ukupentelela	‘to paint completely’

8.27.2.6 The Intensive Extension

According to Baumbach (1988:210), the intensive verbal extension is also referred to as intensive-causative, and it “indicates that an action is performed with intensity/thoroughness/quickness, or sometimes with extensiveness” In Icibemba, it is obtained by ending the verb in ‘-esha’and ‘-isha’

(159)

Simple Verb		**Intensive Verb**	
ukwenda	‘to walk’	ukwendesha	‘to walk very fast’
ukwikata	‘to hold’	ukwikatisha	‘to hold firmly’

When English words are adapted in Icibemba they follow the same pattern:

(160)

Simple Verb		**Intensive Verb**	
ukupompa	‘to pump’	ukupompesha	‘to pump so much’
ukucinja	‘to change’	ukucinjisha	‘to change so much’
ukupaasa	‘to pass’	ukupashisha	‘to pass so much’
ukushaina	‘to shine’	ukushainisha	‘to shine so much’

ukufoota	‘to vote’	ukufotesha	‘to vote so much’
ukuwasha	‘to wash’	ukuwashisha	‘to wash so much’
ukuwiina	‘to win’	ukuwinisha	‘to win so much’
ukubeca	‘to bet’	ukubecesha	‘to bet so much’
ukupenta	‘to pait’	ukupentesha	‘to paint so much’

8.27.2.7 The Frequentative Extension

This verbal extension is used to express frequency or extent. It is obtained by ending the verb in ‘-ula’.

(161)

Simple Verb		**Frequentive Verb**	
ukulasa	‘to wound’	ukulasaula	‘to cause many wounds’
ukuuma	‘to beat’	ukuumaula	‘to beat all over’

When English words are adapted in Icibemba they follow the same pattern:

(162)

Simple Verb		**Frequentive Verb**	
ukupompa	‘to pump’	ukupompaula	‘to pump so many times’
ukucinja	‘to change’	ukucinjaula	‘to change so many times’
ukupenta	‘to paint’	ukupentaula	‘to paint so many times’

8.27.2.8 The Reciprocal Extension

The reciprocal indicates that “the action denoted by the verb is done simultaneously one to another” (Botne 2003:437). It is obtained by ending the verb in ‘-ana’ or ‘-anya’

(163)

Simple Verb		**Reciprocal Verb**	
ukulolesha	‘to look’	ukuloleshanya	‘to look at one another’
ukutemwa	‘to love’	ukutemwana	‘to love one another’

When English words are adapted in Icibemba, the same pattern is followed:

(164)

Simple Verb		**Reciprocal Verb**	
ukupompa	‘to pump’	ukupompeshanya	‘to pump for one another’
ukucinja	‘to change’	ukucinjanya	‘to change for one another’
ukupaasa	‘to pass’	ukupashilana	‘to pass for one another’
ukushaina	‘to shine’	ukushaininana	‘to shine for one another’
ukufoota	‘to vote’	ukufotelana	‘to vote for one another’
ukuwasha	‘to wash’	ukuwashilana	‘to wash for one another’
ukuwiina	‘to win’	ukuwinilana	‘to win for one another’
ukubeca	‘to bet’	ukubecelana	‘to bet for one another’
ukupenta	‘to paint’	ukupentelana	‘to paint for one another’

8.27.2.9 The Reversive Extension

A reversive indicates an entire reversal of an action (Lodhi, 2002). At times it is also referred to as the converse or reversative. It is obtained by changing the final ‘-a’ of the verb into ‘-ola’ or ‘-olola’ after ‘o’

(165)

Simple Verb		**Reversive Verb**	
ukupomba	‘to tie’	ukupombolola	‘to untie’

When English words are adapted in Icibemba they follow the same pattern:

(166)

Simple Verb		**Reversive Verb**	
ukupompa	‘to pump’	ukupompolola	‘to deflate’
ukupenta	‘to paint’	ukupentulula	‘to undo the painting’
ukufoota	‘to vote’	ukufotolola	‘to undo the voting’

8.27.2.10 The Reduplicated Extension

Reduplication as a common phenomenon in Icibemba is employed to signify repetition of an act. It is obtained by repeating the verb stem.

(167)

Simple Verb		**Reduplicated Stem**	
ukulanda	‘to speak’	ukulandalanda	‘to speak often’
ukushita	‘to buy’	ukushitashita	‘to buy often’
ukusenda	‘to carry’	ukusendasenda	‘to carry often’

When English words are adapted in Icibemba they follow the same pattern:

(168)

Simple Verb		**Reduplicated Stem**	
ukupompa	‘to pump’	ukupompapompa	‘to pump often’
ukucinja	‘to change’	ukucinjacinja	‘to change often’
ukupaasa	‘to pass’	ukupaasapaasa	‘to pass often’
ukushaina	‘to shine’	ukushainashaina	‘to shine often’
ukufoota	‘to vote’	ukufotafota	‘to vote often’
ukuwasha	‘to wash’	ukuwashawasha	‘to wash often’
ukuwiina	‘to win’	ukuwiinawiina	‘to win often’
ukubeca	‘to bet’	ukubecabeca	‘to bet often’
ukupenta	‘to paint’	ukupentapenta	‘to paint often’
ukusaina	‘to sign’	ukusainasaina	‘to sign often’

8.27.2.11 The Stative Extension

It expresses a state, a situation, the fact of being in a position (Cocchi, 2008). Such verbs end in –ika, eka, uka.

(169)

Simple Verb		**Stative Verb**	
ukutoba	‘to break’	ukutobeka	‘to be broken’
ukulepula	‘to tear’	ukulepuka	‘to be torn’
ukonaula	‘to spoil’	ukonaika	‘to be spoiled’
ukumona	‘to see’	ukumoneka	‘to be seen’
ukutula	‘to pierce’	ukutulika	‘to be pierced’

When English words are adapted in Icibemba they follow the same pattern:

(170)

Simple Verb		**Stative Verb**	
ukupompa	‘to pump’	ukupompeka	‘to be pumped’
ukucinja	‘to change’	ukucinjika	‘to be changed’
ukucoina	‘to join’	ukucoinika	‘to be joined’
ukushaina	‘to shine’	ukushainika	‘to be shined’
ukufoota	‘to vote’	ukufoteka	‘to be voted’
ukuwasha	‘to wash’	ukuwashika	‘to be washed’
ukuwiina	‘to win’	ukuwinika	‘to be won’
ukubeca	‘to bet’	ukubeceka	‘to be betted’
ukupenta	‘to paint’	ukupenteka	‘to be painted’

8.27.3 Hiatus Resolution of Icibemba Loanwords from English

As mentioned earlier, in Icibemba, vocalic hiatus is dispreferred and is resolved through glide formation and vowel coalescence or vowel fusion. Glide formation is the process whereby a high vowel of a class affixes or gender concord changes to become a glide when followed by a vowel commencing stem (Kadenge, 2010). In Icibemba, the glide formation process occurs with prefixes that have either /u/ or /i/. This means that class prefixes such as [mu-] and [mi-] surface in that form before consonant commencing stems.

Below are the examples of glide formation of Icibemba loanwords from English:

(171)

Augment	+	**Prefix**	+	**Stem**	**Surface Representation**
/ u	+	tu	+	ampani	[utwampani] ‘companies’
/u	+	tu	+	abati	[utwabati] ‘cupboards’
/u	+	tu	+	eyala	[utweyala] ‘care of’ meaning ‘addresses’
/u	+	tu	+	ampu	[utwampu] ‘camps’
/i	+	ci	+	ele	[ifyele] ‘jails’

8.27.4 Vowel Fusion between Loanwords and other Words in Icibemba

As already mentioned, in Icibemba, every word ends in a vowel. Many words also begin with a vowel. In a good number of cases, when two vowels come together one after the other, they are not pronounced as individual sounds. Instead, they run together to make a single sound. This also happens to Icibemba loanwords from English:

(172)

a+i = ee

motoka iyi = motokeeyi 'this vehicle'

e + i = ee

icele ici = iceeleci 'this jail'

i + a = yaa

amapaipi aya = amapaipyaaya 'these pipes'

o + i = we

impooto iyi = impootweyi 'this pot'

o + u = oo

umufoolo uyu = umufoolooyu 'this furrow'

u + i = wi

kapu iyi = kapwiyi 'this cup'

8.28 Chapter Summary

This chapter has looked at the morphological adaptation of Icibemba loanwords from English and has answered the question raised in Chapter One. An attempt was made in this chapter to review the approaches used for the assignment of English nouns in Icibemba. The traditional approach which is based mainly on the semantic content of the nouns was discussed in details. This approach attempts to provide semantic details for every class prefix.

It has been observed that although Icibemba has borrowed adjectives, adverbs, nouns and verbs, it is clear from the findings that more nouns have been borrowed than any part of speech. It is also true to say all the Icibemba noun classes accommodate Icibemba loanwords.

In the discussion of the morphological adaptation of the English nouns, it was pointed out that various factors are involved in the assignment of adapted nouns to different class prefixes. Here we discussed three different kinds of assignment of class prefixes, namely, assignment on the basis of the initial syllable resemblance to a class prefix, assignment on the basis of zero prefix and assignment on the basis of semantic content. Some problems that are encountered when using semantic content were also discussed. Other morphological adaptation processes which have been discussed are reclassification, reduplication, gliding, vowel fusion and verb extension.

Finally, it can also be concluded that from the above analysis, it is possible to predict the morphological patterns of future Icibemba loanwords from English.

The next chapter discusses conclusion and recommendations for further research.

CHAPTER NINE

CONCLUSION AND RECOMMENDATIONS

9.1 Overview

This chapter presents the conclusion to the study and recommendations for future researchers. The main goal of the research was to analyze the phonological as well as morphological adaptation of Icibemba loanwords from English. This study was carried out using the theoretical framework of CV Phonology which was propounded by Clements and Keyser (1983). The other theory used was Lexical Phonology and Morphology (LPM). The research was divided into eight chapters. Each chapter was dealing with a different aspect in detail.

9.2 Relating the Findings to the Objectives

This study was guided by the following research objectives:

a) To transcribe, gloss and allocate the Icibemba loanwords into Icibemba nominal classes by assembling a representative corpus.

   This objective was answered by chapter five. A corpus of 1000 loanwords was collected from primary and secondary sources. All these were transcribed and glossed. All the noun loanwords were allocated to the Icibemba nominal classes.

b) To describe and compare the segmental phonology and syllable structure of English and Icibemba.

   This objective was answered by chapter six. It described and compared the segmental phonology and syllable structure of English and Icibemba. Specifically it looked at English consonants and vowels, syllable structure and syllable templates. For Icibemba it discussed consonants and vowels, the syllable and tone.

c) To analyze the various phonological processes involved in the adaptation of Icibemba loanwords into Icibemba.

This objective was answered by chapter seven. It analysed the various phonological processes involved in the adaptation of Icibemba loanwords into Icibemba. In particular, it looked at the adaptation of consonants and vowels of Icibemba loanwords from English, epenthesis, deletion, reyllabification and adaptation of stress.

d) To analyze the various morphological processes involved in the adaptation of Icibemba loanwords into Icibemba.

The last objective was answered by chapter eight. It analysed the various morphological processes involved in the adaptation of Icibemba loanwords into Icibemba.

9.3 Summary of the Findings (Conclusion)

This section presents general findings and conclusions regarding all aspects discussed throughout this thesis. The study adopted CV Phonology and Lexical Morphology and Phonology theories. The former was employed in the analysis of the syllable structure of both the source and the recipient languages while the latter was used in the analysis of the morphological processes. The two theories have been deemed adequate in the analysis and explanation of the processes identified in loanword adaptation.

The thesis has so far discussed loanword adaptation processes in Icibemba. It set out to achieve chiefly two objectives. First, to identify and describe repair strategies which occur or apply loanwords from English into Icibemba. In that regard, it has been shown that in Icibemba loanword adaptation, major phonological processes such as vowel epenthesis and segmental substitutions apply in repairing illegal syllable structures in foreign words borrowed from English into Icibemba. Consonant deletions also apply in Icibemba as a repair strategy, but marginally. It has been observed that vowels are inserted to simplify complex onsets, syllable codas and to also simplify complex

syllables, essentially a sequence of consonants belonging to the same syllable, all aimed to achieve re-syllabification.

The driving force for loanword adaptation is Icibemba's native phonology which exhibits a modest CV syllable pattern; hence English word-forms have to undergo reconstruction since they reflect complex syllable shapes. Segmental substitutions also occur as foreign segments not realized in the Icibemba segment inventory are subsequently replaced with native counterparts considered auditorily, acoustically or articulatory closest to them. These replacements are necessary to ensure borrowed forms are well-formed to native phonotactic requirements. Segmental replacements occur in all positions wherever foreign segments appear. In the case of deletions, the most eliminated segments are those that are not found in Icibemba.

In conclusion, it has been realized that not much work within Icibemba's loanword adaptation process has been done adequately incorporating recent theoretical models of CV Phonology and Lexical Phonology and Morphology, so as to account for a total and conclusive phonological and morphological processes in Icibemba.

9.4 Recommendations for Further Research

Although the research has unveiled important data, it is not exhaustive. There were a number of interesting areas that remained to be explored. It is hoped that this study will stimulate further research in the areas of Icibemba semantics and syntax so as to deepen a phonological and morphological understanding of adaptation.

Using CV and Lexical Phonology and Morphology theories, the research has given an explanation of the loanword phenomena in Icibemba, especially the motivation for the use of different repair strategies in the nativization process. It is, therefore, recommended that language developers use the findings of this research to make logical and informed decisions about the development of Icibemba.

This research has endeavored to show that indeed phonological and morphological processes are involved in the adaptation of loanwords from English to Icibemba. However, research should be conducted on how loanwords are adapted semantically in

the language because there are cases whereby a loanword can broaden or narrow in meaning in the recipient language.

The study is also hoped to be used as a basis to further constructive studies relating to Bantu languages, other than Icibemba. Since Icibemba is a Bantu language, the findings from this study can be an 'eye opener' and insightful to the understanding of similar languages in a similar situation with English.

Recently, the Ministry of General Education in Zambia put emphasis on the teaching and use of L1 as the language of instruction in the first two years of primary school. This research recommends a review of L1 texts to include more assimilated loanwords that now form quite a large percentage of the Icibemba lexicon. With the influx of many loanwords from the field of technology, this research recommends that there be established an institute that will monitor the development of Icibemba.

Furthermore, it is recommended that translators and interpreters, especially those translating or interpreting English materials into Icibemba, make use of the findings of this research. Similarly, Icibemba radio presenters and journalists who encounter new terminologies everyday may use the findings of the study as it has explained the mechanism involved in the nativization of loanwords in Icibemba.

The research has only concentrated on the adaptation of loanwords from English. Icibemba has also borrowed lexical items from other African languages like Kiswahili and Nyanja. It is recommended that further research on how Icibemba adapts words from other languages should be carried out.

9.5 Chapter Summary

In this chapter, a summary of the findings, conclusions and recommendations has been given. The chapter has also given suggestions for areas of further research.

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