

**LOANWORD ADAPTATION IN BORO-UKWALA DIALECT OF
DHOLUO: A CASE OF BORROWING FROM LUMARACHI,
LUNYALA AND KISWAHILI**

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A project submitted in partial fulfilment of the requirement for the award of the degree
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DECLARATION

This project is my original work and has not been presented for the purpose of award of a degree in any other university.

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This project has been submitted for examination with our approval as the appointed university supervisors.

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Date

DEDICATION

To Mr and Mrs. Yamo for always encouraging me to achieve academic success

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ABSTRACT

This study seeks to investigate and establish loanwords in the Boro-Ukwala (B-U) dialect of Dholuo from the Luhya group of Lumarachi and Lunyala B who neighbour the speakers of B-U dialect of Dholuo. The study further investigates and establishes the adaptation strategies a loanword undergoes from the Luhya dialects of Lumarachi and Lunyala so that it is adapted into the B-U of Dholuo. It also looks at the adaptation strategies a loanword undergoes from Kiswahili so as to be accommodated into the B-U dialect of Dholuo. The study adopts the Source-Similarity model of loanword adaptation which was founded by Smith (2009) which stresses on identity between the perceived form and the spoken form. The study uses the research methods of interview and questionnaires to collect data from the respondents who are the native speakers of B-U dialect of Dholuo. Data is further collected from the native speakers of the Kisumu South Nyanza dialect of Dholuo and the native speakers of sister languages of Dholuo like Padhola, Lango and Acholi who are given a list of words to give the word equivalents in their language for comparative analysis. Data is also collected from the native speaker of Lunyala and Lumarachi. For comparative analysis data is also collected from the other Luhya dialects of Logooli, samia and Wanga. The major finding is that there are loanwords in B-U from Lunyala and Lumarachi. The loanwords have to undergo various adaptation strategies so as to be accommodated into the B-U dialect of Dholuo.

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LIST OF SYMBOLS AND ABBREVIATIONS

[]	- Phonetic representation
/ /	- Phonemic representation
{ }	- Morphemic representation
σ	- Syllable unit
\$	- Syllable boundary
O	- Onset
C	- Consonant
V	- Vowel
L	- Low tone
H	- High tone
B-U	- Boro Ukwala dialect
KSN	- Kisumu South Nyanza dialect
SB	- Source – Borrowing
IO	- Input – Output
PLS	- Posited source – Language representation
TCRS	- Theory of Constraints and Repair Strategy
L1	- Borrowing Language
L2	- Source Language
ATR	- Advanced Tongue Root

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CHAPTER ONE

INTRODUCTION

1.0 Introduction

Chapter one introduces basic information about the study. It looks at the background to the study, statement of the research problem, rationale of the study, objectives, research hypotheses, scope and limitation, theoretical framework, literature review and the methodology that was used in the study.

1.1 Background of the Study

Dholuo has interacted with other languages. The speakers of B-U dialect of Dholuo have had a long history of contact with the neighbouring Luhya dialects of Lunyala, Lumarachi, Samia and Wanga whom they have interacted with through contact. On the other hand there has also been a lot of contact with languages like English and Kiswahili which have also continued to add lexical items to the language. Langacker (1968:176) asserts that, no language whose speakers have ever had contact with any other language is completely free of borrowed forms.

According to Ruiquin (2005) borrowing is the process by which a new loanword becomes established in a speech community, involving both the adaptation of the loanword by one or more L1 speakers, and the subsequent transmission of the loanword from those initial borrowers to the other members of the speech community. Mira (2012:299) notes that lexical inventory in the borrowing language is expanded by adapting new words from the source language through language contact.

According to Kenstowicz and Suchato (2006:921), in adapting a loan the speaker tries to remain faithful to the source word while still making the loan conform to the native language (L1) segmental inventory, phonotactic constraints and prosodic structures. Therefore, this means that the L1 speech community can use the loanword and not only an individual L1 speaker who cannot be understood by other L1 speakers. This adaptation of the word by one or more L1 speakers who are exposed to L2 through contact or exposure and then exposing the word to other L1 speakers who may have been exposed to the language or not exposed to the L2 language is borrowing.

Arlotto (1972:184) says that the borrowed words are assimilated into the phonemic (or sound) system of the borrowing language. The loanword in the long run will fit into the system of the borrowing language through various adaptation strategies.

Table 1: Loan words from Bantu languages

B-U dialect	Word	Source	Gloss
/rasihingwa/	/esihingwa/	Lunyala	Fool
/sihoho/	/sixoxo/	Lumarachi	Evil eye
/bahasa/	/bahaʃa/	Kiswahili	Envelope
/ɔtanda/	/kitanda/	Kiswahili	Bed

Borrowing refers to the process by which a large enough number of speakers have adapted or adopted loanwords into their lexicon use. Therefore this implies that the L1 speaker who cannot be understood by other L1 speakers may not be able to communicate. This means that there was an initial adaptation of the word by one or more L1 speakers

who are exposed to L2 through contact or exposure and then exposing the word to other L1 speakers, who may have been exposed to the language or not exposed to the language.

In the case of the speakers of B-U dialect of Dholuo, borrowing from the neighbouring Luhya dialect, identifying the direction of borrowing requires comparative analysis, since the two languages have been in contact for a long time. On the other hand, Kiswahili was introduced much later to the speakers of B-U dialect, but at the same time both Kiswahili and Luhya are Bantu languages, while Dholuo is a Nilotic language.

1.1.1 Dholuo Language

Dholuo is a west Nilotic language spoken by the Luo people of Kenya. They are part of the Nilotes collectively referred to as Lwo, Okombo (1982). Dholuo is closely related to other languages which belong to the Western Nilotic branch like Acholi, Allur, Lango, Padhola and Shilluk. Dholuo traces its roots in the Southern Sudan. It belongs to the Nilo-Saharan family of languages. Dholuo is grouped under the Western Nilotic branch.

Figure 1: The Western Nilotic group



In Kenya, it is only Dholuo that belongs to the western Nilotic branch of the Nilotic group, Dholuo speakers live in Nyanza province (currently Homabay County, Siaya County, Migori County and Kisumu County) of western Kenya, along the eastern shores of Lake Victoria. They are also found in various parts of the country. Other Dholuo speakers are also found in Tanzania from Butegi in Northern Mara region. The population census of 2009 puts the Dholuo speakers at about 4.2 million of Kenya's population.

The immediate neighbours of the Luo in western region are the Luhya, Kuria, Gusii, Kalenjin, Suba and Maasai who the Luos have interacted with in varying degrees. Stafford (1967) identified two major regional varieties, the Trans-Yala dialect and the South Nyanza dialect. This is later clearly defined by Oduol (1990) who states and

shows that Dholuo has two major dialects; the Kisumu – South Nyanza dialect (K-SN) spoken in Kisumu, South Nyanza district (currently Migori County and Homabay County), Bondo division (excluding Yimbo) and parts of Yala division in Siaya district, while the Boro – Ukwala dialect (B-U) is spoken in Boro division, Ukwala division, Yimbo location of Bondo district and parts of Yala division in Siaya district (currently Siaya County).

Oduol's work shows that Dholuo has regional dialects based on phonological, lexical and grammatical features, she also notes that the Kisumu - South Nyanza dialect has a wider geographical coverage and is the one regarded as standard, since it is majorly used in Dholuo literature and radio broadcast. The Boro – Ukwala dialect is spoken in a smaller region and is considered less prestigious. It is the Boro – Ukwala dialect that we are majorly concerned with in this study.

1.1.2 Luhya Group

Luhya is a Bantu language spoken in the western regions of Kenya. They are majorly found in western Kenya and they are made up of mutually intelligible dialects. They belong to the Benue – Congo subgroup of the Niger – Congo group. Various scholars have supported the fact that the Luhya have different dialects ranging from between sixteen to seventeen dialects. These dialects differ in terms of vocabulary and pronunciation. Were (1967), William (1973), Itabete (1974) and Angogo (1983) support the fact that the language has seventeen dialects.

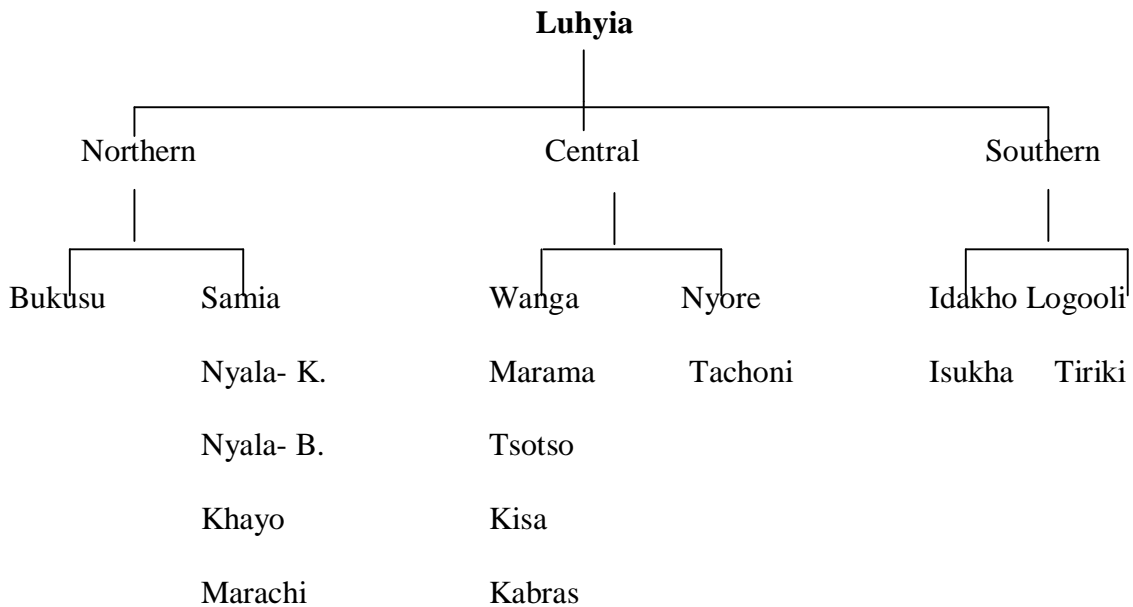
Itabete (1974) distinguishes the seventeen dialects into Northern, Central, Eastern and Southern.

Table 2: The Luyha group

Northern	Central	Eastern	Southern
Bukusu Tachoni (who speak Bukusu)	Wanga Marama Tsotso Kisa Marachi Samia Nyala lake (B) Nyala North (S) Tachoni (who speak Kabras)	Isukha Idakho Tiriki	Logooli

Angogo (1983) divides the seventeen dialects into three; the northern, central and southern dialects based on intelligibility tests and availability of linguistic data.

Figure 2: The Luhya Group



Speakers of Luhya dialects claim different ancestral origin depending on the dialect.

Some claim to have originated from West Africa, others claim to have originated from

Egypt. For the purpose of this study the Northern Luhya specifically the Nyala- B and Marachi who neighbour the Luo of Siaya County and speakers of Boro-Ukwala dialect will be looked at.

1.2 Statement of the Problem

Oduol (1990) states that Dholuo has two major dialects; the Kisumu – South Nyanza dialect (spoken in Kisumu and South Nyanza districts as well as parts of Bondo division and parts of Yala division in Siaya district) and the Boro –Ukwala dialect spoken in Boro division, Ukwala division, Yimbo location of Bondo district and parts of Yala division in Siaya district. She also notes the interaction of the Boro – Ukwala dialect speakers with the Luhya speakers who are their neighbours. This study seeks to look at the Dholuo speakers of the Boro – Ukwala dialect who are found in Siaya County and the neighbouring Luhya speakers of Lumarachi and Lunyala dialects who have had a long history of contact. There are similarities in words between the two languages which are not genetically related as one is a Bantu language and the other a Nilotic language. The relationship is due to social and cultural contact which has led to borrowing of words from one language to the other.

Pre-investigation indicates that there are some similarities between the Boro – Ukwala dialect of Dholuo and the neighbouring Luhya dialects of Lunyala and Lumarachi.

Table 3 – Similar words in B-U Dholuo and Luhya group

Gloss	Kisumu-South Nyanza Dialect	Boro-Ukwala Dialect	Manyala	Marachi
Basket	abundu	hamiero	simwero	simwero
Fool	raura	rasihingwa	esiingwa	esihingwa
Boil ugali water	pi kuon	hawarha	khawalika	khawalika
Cooking stick	oluth kuon	oliho	mwikho	omwikho
Garden	puodho	ndalo	indalo	indalo
Home	pacho	dala	lidala	lidala

This study investigates loanwords from the Luhya group of Manyala B and Marachi; and Kiswahili into the Boro-Ukwala (B-U) dialect of Dholuo and the adaptation processes involved to make Lumarachi, Lunyala and Kiswahili loanwords to be accommodated into the B-U dialect of Dholuo.

1.3 Objectives

The following are the objectives of the study

1. To identify closely similar words in the two languages, B-U dialect of Dholuo and the Luhya dialects of Lunyala and Lumarachi.
2. To establish the direction of borrowing between the Luhya dialects and the B-U dialect of Dholuo using comparative analysis.
3. To investigate and establish the various phonological and morphological processes a loan word undergoes to be accommodated into B-U dialect of Dholuo.

1.4 Hypothesis

1. There are similar phonological, morphological and lexical items between the B-U dialect of Dholuo and the Luhya dialects of Lumarachi and Lunyala.
2. There is borrowing of words between Dholuo and the Luhya dialects of Lumarachi and Lunyala.
3. Loan words from Lumarachi, Lunyala and Kiswahili will be accommodated into B-U dialect of Dholuo through various phonological and morphological processes.

1.5 Rationale for the Study

In the study, Dholuo dialects; synchronic state and some historical inferences, Oduol (1990) did a study on dialects of Dholuo where she identified features that mark the Kisumu – South Nyanza dialect and the Boro – Ukwala dialect as regional dialects within Dholuo. She also noted that Dholuo speakers of the Boro – Ukwala dialect who neighbour Luhya speakers interact a lot, through sharing market places and even through inter-marriage.

This study aims to look at the direction of borrowing between Dholuo of the Boro – Ukwala dialect and the Luhya dialects of Lumarachi and Lunyala then establish borrowed words in B-U dialect from the Luhya group. The study will be useful to those who wish to do further study on African languages and especially Dholuo and its dialects.

1.6 Scope and Limitation

The study examines the extent of borrowing from the two Luhya dialects of Lumarachi and Lunyala, that neighbour the Dholuo speakers of Boro – Ukwala dialect of Dholuo and establish borrowed words in B-U dialect of Dholuo, from the Luhya group using

comparative analysis with the sister languages of Dholuo and the Luhya group. The K –S N dialect will be used for comparative analysis and for clarifications where necessary. The study will use Lumarachi and Lunyala to study the phonological and morphological processes, a loanword undergoes to be accommodated into B-U dialect of Dholuo. The study will also use Kiswahil for further illustrations on phonological adaptation since it is also a Bantu language.

This study does not account for phonological and morphological processes of loanwords in Lunyala and Lumarachi from Dholuo. The study does not also investigate the stage at which the borrowing may have occurred

1.7 Theoretical Framework

Antila (1972), states that sometimes an item occurs in two neighbouring unrelated languages without any certainty of the direction of borrowing. This can call for a criteria to determine the direction of borrowing. Therefore historical and comparative linguistics is important to determine the direction of borrowing between the Dholuo language and the Lumarachi and Lunyala dialects of the Luhya group.

The study uses the Source-Similarity model of loanword adaptation which was advanced by Smith (2009). It was a development from the Optimality-Theoretic (OP) explanations that proposed to account for loanword adaptations using internal phonological grammar of the borrowing language only.

The source similarity model allows variations between adaptation strategies related to misperceptions of the borrower and phonological mappings. The model stresses on faithfulness constraints that impose similarity between the perceived source form and the

corresponding spoken form, this postulates a loanword specific correspondence relation. In the model a correspondence pair occurs between the Posited Source Language (PLS) representation and the loan form, the Source- Borrowing (SB) correspondence relation which accounts for the source word and the borrowing word, ensures faithfulness between the spoken form and perceived form.

The input-output (IO) correspondence governs the correspondence between the underlying form and the spoken form. It stresses that segments in the source form must appear in the borrowed form and those in the borrowed form must appear in the source form. It allows for repairs in the loanword adaptation and therefore different repairs take place. For example in the B-U dialect of Dholuo the loanword /ɔkũmbɔ/ can have some of the segments or all the segments from the source word /exumbo/ from Lunyala, so that there is an aspect of correspondence.

The PLS is based on perceptual and/or orthographic information and other factors like the borrowers knowledge of the source language representation. The PLS is considered the input. This model allows perceptual similarity in the selection of adaptation strategies (Yip 2002 and Kang2003). It also accommodates the deletion of non-salient segments at the perceptual level (Shinohara 2006). The Source-Similarity model allows Perceptual Similarity in the selection of adaptation strategies.

Smith (2006) points out that while epenthesis is normally used to repair illegal coda consonants and consonant clusters in Japanese loanwords for example best – bestow, deletion is used instead for repairs in verb conjugation patterns. The solution Smith proposes is to postulate a loanword specified correspondence relation for the source

language (L2) and the borrowing language (L1). She further proposes the corresponding set of faithfulness constraints. The model stresses on the faithfulness constraints:

MAX – SB which asserts that segments in the source word must appear in the borrowing;
DEP – SB which asserts that segments in the borrowing segment must appear in the source and so on. Therefore this allows a free rankable source borrowing constraints, Smith (2006: 2009)

1.8 Literature Review

This section is divided into two parts. The first part consists of works on Dholuo language and the Luhya subgroups. The second part discusses works on borrowing.

1.8.1 Literature on Dholuo and the Luhya group

Huntingford (1959), Ogot (1967), Stafford (1967) and Tucker (1974) give background information on Dholuo. They give a historical background and the geographical location of the Luo which is important for this study as some data is picked from their works.

Osogo (1966) also looks at the history of the Baluyia and also notes the interaction between the Baluyia of Samia, Marachi and Abamanyala dialects with the Luo's of Ugenya and Alego who are speakers of the Boro – Ukwala dialect.

Were (1967), Angogo (1983) and Kanyoro (1983) look at the history of the Luhya giving background information on the Luhya group, their subdialects and geographical distribution. These works provide adequate information on the Luhya group.

Adhiambo (1981) studies Dholuo vowel processes using the Boro – Ukwala dialect in her presentation. This work was also important in our study since some the data used is from the dialect under study.

Oduol (1990) establishes the existence of regional dialect making a comparative analysis of the two Dholuo dialects, K-SN dialect and B-U dialect, thus providing appropriate data on the B-U dialect. Her data is also helpful in this study as she provides differences and similarities in Dholuo phonology, grammar and vocabulary however this work goes further to establish the loanwords in the B-U dialect of Dholuo and the processes they undergo to be accommodated into Dholuo of B-U dialect.

Nimura (1996) studies prosodic features of Dholuo using the B-U dialect which also provides some relevant data to this study even though he uses a different theory from the theory being used in this study.

Oduor (2002) investigates syllable weight and its effect in Dholuo phonology, showing how syllable weight is related to stress, tone and vowel process majorly deletion, compensatory lengthening and glide formation. This work gives an insight into Dholuo phonology which is an important aspect in this study.

Akwala (2008) in the study of morphophonological nativisation of Lumarachi loan words; A case of borrowing from Dholuo finds phonological and semantic resemblance in some forms between Dholuo and Lumarachi with evidence showing borrowing of lexical items from one language into another. The data used is useful in this study as there is data collected from Dholuo. This work also has a lot of data from the Lumarachi sub-dialect of Luhya which is important for this study. However he uses the NGP theory

to analyse his data this study on the other hand uses the source similarity approach and also looks at loanwords in B-U dialect of Dholuo

Achien'g (2012) in her study of Dholuo sub-dialects: A comparative study of dialectal variations within Boro-Ukwala dialect, examines variables (phonological, morphological and lexical) in terms of the regional differences that are characteristic of the locality indigenously occupied by the Luo of the Boro – Ukwala dialect in Siaya County. This work deals majorly with the Boro – Ukwala dialect thus providing relevant data used in this study.

1.8.2 Literature on borrowing

The study of borrowing as an area in linguistics has been looked at by a number of researchers therefore it is not a new area of study in linguistics.

Arlotto (1972) states that sometimes an item occurs in two neighbouring unrelated language. In this case the borrowing is as a result of contact. He further defines borrowing as the process by which one language or dialect incorporates some linguistic element from another language. He further expresses the fact that a borrowed word has to fit into the phonology of the host language. His work is important to this study as it touches on borrowing and on the fact that the borrowed lexical item has to fit into the phonology of the borrowing language.

Anttila (1972) states that, sometimes an item occurs in two neighbouring unrelated languages without any certainty of the direction of borrowing. This can call for a criteria to determine the direction of borrowing. Therefore historical and comparative linguistics

is important to determine the direction of borrowing between the Dholuo language and the Lumarachi and Lunyala dialects of the Luhya group.

Poplack et al (1998) show that nativisation in a loanword depends on the number of speakers using it. This shows that nativisation continues with the other speakers, but not only with those who borrowed the word initially.

Peperkamp and Dupoux (2003:369) point out that it might very well be the case that the bilinguals who introduce loanwords pronounce them as in the source language and that the adaptations are subsequently done by the monolingual population. This is important to this study since it is the bilinguals who introduce borrowed words into the language and the adaptations done majorly by the monolinguals as in the case of Dholuo and the neighboring Luhya dialects.

Owino (2003) investigates phonological nativization of Dholuo loanwords and in his study he investigates nativisation of loanwords from English and Kiswahili using the K-SN dialect of Dholuo. This study however uses the B-U dialect of Dholuo and investigates loanword adaptation from the Bantu languages of Lumarachi, Lunyala and Kiswahili using the Source-Similarity model.

Kimani (2005) looks at phonotactic adaptation of Maasai loanwords in the Gikuyu language where she focuses on how loanwords in Gikuyu from Maasai are nativised and the effects of the loanwords on the phonology of Gikuyu. It is worth noting that Gikuyu and Maasai are neighbouring languages just as in the case of Dholuo of B-U dialect and the Luhya dialects of Lumarachi and Lunyala. This study however uses a different theory from the one used by Kimani.

Lacharite and Paradis (2005) argue that loanword adaptation is overwhelmingly phonological. Their major claim being that loan word adaptation is based on the identification of the phoneme categories of the source language and that phoneme categories of the source language plays a major role and that phonetic approximation plays only a minimal role.

Kenstowicz and Suchato (2006) note that loanword adaptation is constraints and repairs in real life, they further say that in adopting the loanword the speaker tries to remain faithful to the source word while still making the loanword conform to the native language segmental inventory, phonotactic constraints and prosodic structures

Karuru (2012) investigates the phonological and morphological adaptation of loanwords in Gi-gichugu. She investigates loanwords from English and Kiswahili using the Source-Similarity model. Her study is useful to this study as it gives some background to the model in use, even though the language she studies is different from the language under study in this case.

Peperkamp and Dupoux (2003), Kenstowicz (2005) and others hold the view that adaptation is determined by acoustic and perceptual factors, Peperkamp and Dupoux propose that all adaptations apply perception and that they are always phonetic in nature.

Extensive research on loanword phonology has been undertaken on a number of languages ranging from Fula (Paradis and Lacharife 1997) Fijian (Kenstowicz 2003), Hausa (Leben 1996), Japanese (Ito and Mester 1995) Shinohara 2000), Korean (Kang 2003, Kenstowicz 2005), Mandarin Chinese (Mao 2005) and many others.

Extensive research has been carried out in loanword adaptation leading to different view points. Some of these viewpoints include the Perception viewpoint based on Silverman's (1992) research on Cantonese where a speaker perceives a foreign word based on phonetic similarity. Peperkamp and Dupoux (2003) assert that under this approach, speakers base their adaptations purely on perception or misperception and that they have no access to the phonology of the foreign word.

There is also the production viewpoint which assumes that adaptation is done by bilinguals who possess knowledge of the phonologies of both languages, thus ignoring phonetic realization, Ito and Mester (1995) and Paradis and Lucharite (1997). There is also the perception and production viewpoint which utilizes both perception and production to explain loanword adaptation, Steriade (2002), Kenstowicz (2003b) and Kang (2003).

1.9 Research Methodology

1.9.1 Data Collection

The data collection involved library research, native speaker intuition and data collection from the field using interviews and questionnaires.

Library research was used in this study to get information and literature on borrowing, loanword adaptation and the theory. Information on Dholuo and the Luhya group was also gotten from literature in the Library. The internet also provided information on the theory. The researcher being a native speaker of Dholuo also used his competence in the language to draw data. During data collection in the field respondents were interviewed and given questionnaires with word lists to give the equivalents of the words in their

language. The target respondents included the native speakers of B-U dialect of Dholuo, Lumarachi and Lunyala. The other target respondents included the native speakers of the K-SN dialect of Dholuo, Acholi, Padhola, Lango, Lumarachi, Lunyala, Samia, Logooli and Wanga which were used for comparative analysis. The respondents, who were picked on, were native speakers who had lived in the area where the language is spoken and had stayed in the area upto the age of 18 years of their life. The respondents who picked on were those who had attained the age of 25 years and above.

Determining the direction of borrowing

The direction of borrowing from the Luhya group to Dholuo of the Boro-Ukwala dialect was determined using comparative analysis with the sister languages of Dholuo.

For B-U dialect of Dholuo, K-SN dialect, Padhola, Acholi and Langi word equivalents were used for comparative analysis. These word equivalents were gotten from the native speakers of the languages. For the Luhya group, other Luhya dialects like the Samia, Wanga and Logooli were used for comparative analysis.

1.9.2 Data Analysis

The data collected was analyzed using the S-B model to determine the adaptation strategies.

Tables were also used to simplify the presentation of information.

CHAPTER TWO

DHOLUO PHONEMIC AND LUMARACHI PHONEMIC INVENTORY

2.0 Introduction

In this chapter the phonemic inventory of Dholuo and Lumarachi will be examined. The chapter will look at the phonology of Dholuo and phonology of Lumarachi.

2.1 Dholuo phonemic inventory

There is no difference between the B-U dialect and K-SN dialect in terms of the consonantal and vowel features. The consonants and vowels are the same in both dialects. Although there are some slight differences in terms of the phonological processes, the syllable and the supra-segmental elements, therefore this section looks at the consonants, the vowels, the syllable and the suprasegmental elements that are particular to Dholuo.

2.1.1 Dholuo Consonants

According to Okombo (1982:17-18) and Oduor (2002:73) Dholuo has twenty six consonants. Oduor (2002:73) says that Dholuo has twenty six consonants, five of the consonants are prenasalised, Okombo (1982) refers to them as nasal compounds and two semi vowels.

The consonants of Dholuo are given below. Each consonant is represented using its IPA symbol, followed by the orthography in Dholuo then a word in Dholuo. The words used are majorly from the B-U dialect of Dholuo.

Table 4: Dholuo Consonants

IPA Symbols	Orthography	Word	Gloss
p	p	/pap/	field
b	b	/bur/	hole
w	w	/wɪp/	birds
m	m	/mac/	fire
f	f	/fuwo/	stupidity
θ	th	/θo:l/	rope
ð	dh	/ðlaŋ/	cow
t	t	/tic/	work
d	d	/dala/	home
r	r	/rec/	fish
l	l	/lac/	urine
s	s	/shoho/	Evil eye
n	n	/nono/	investigate
c	c	/cik/	law
ʃ	j	/ʃakuo/	thief
ʒ	y	/ʒien /	Trees /medicine
ɲ	ny	/ɲir/	girls
k	k	/kado/	soup
g	g	/go:w/	debt
ŋ	n'g	/ŋor/	cowpeas
h	h	/hombo/	plead
mb	mb	/mbala/	scar
nð	ndh	/nðuno/	Pinch
nd	nd	/ndalo/	garden
ɲj	nj	/ɲjawo/	dilute
ŋg	ng	/ŋgece/	sayings

The phonemic inventory of Dholuo is summarised in the chart below. It is classified according to the manner of articulation, place of articulation and voicing.

Table 5: Consonantal phonemes of Dholuo

	bilabials	labia dentals	dentals	alveolar	palatals	labia velars	velar	glottal
Stops	p b			t d	c ɟ		k ɡ	
Fricatives		f	θ ð	s				h
Nasals	m			n	ɲ		ŋ	
Laterals				l				
Rolls (trills)				r				
Glides					j	w		
Prenasalised stops	mb		nð	nd	ɲɟ		ŋɡ	

Adopted from Okombo (1982:19) and Oduor (2002:73)

2.1.2 Dholuo Vowels

There are different versions concerning Dholuo vowels, researchers like Tucker and Brian (1966), Omondi (1982) and Casali (2003) support the fact that there are ten vowel sounds in Dholuo, while other researchers like Okombo (1977,1982) and Oduor (2002) support the fact that there are nine vowel sounds in Dholuo. Okoth (1982) explains that each pair contains +ATR (+Advanced Tongue Root) and -ATR (Retracted Tongue Root).

According to Tucker (1966) Dholuo has ten vowel sounds.

+ ATR	- ATR
a	ɑ
e	ɛ
i	ɪ
o	ɔ
u	ʊ

According to Oduor (2002:76) Dholuo has nine pure vowels grouped into four pairs. Each pair contains a + Advanced Tongue Root (+ ATR) and a - Advanced Tongue Root (-ATR) the tongue is projected forward to create a greater pharyngeal opening where as in (-ATR), the tongue root is retracted.

+ ATR	- ATR
e	ɛ
i	ɪ
o	ɔ
u	ʊ
	a

Adopted from Oduor (2002: 76)

	Front	central	back
High	i		u
Mid High	ɪ		ʊ
Mid	e		o
Mid low	ɛ		ɔ
Low		a	

Table 6: Orthographic representation of Dholuo vowels

Orthography	IPA Symbol	Word	Gloss
i	i	wic	head
i	I	wijɲ	birds
e	e	le	animal
e	ɛ	lɛ	axe
o	o	nego	to kill
o	ɔ	dIjɔ	to press
u	u	tugo	to play
u	ʊ	hʊlo	report
a	a	pala	knife

2.1.2.1 Dholuo vowel processes

Adhiambo (1981) and Okombo (1977) identified the Dholuo phonological processes involving vowels to be glide formation, compensatory lengthening, vowel deletion and vowel harmony.

2.1.2.1.1 Vowel deletion

Okombo (1982:21) states that deletion involves the non-high vowels /e,ɛ,a,ɔ o / which are deleted when followed by a vowel in a light syllable. Adhiambo (1981) asserts that vowels are lost in unstressed word-final and unstressed word internal positions. It takes place when they are adjacent to stressed vowels. In the B-U dialect, vowel deletion also takes place but at times differently from K-SN dialect. For example

Word internal vowel deletion.

K-SN dialect		B-U dialect
owuoyo	-	(o)woyo
wuowi	-	wow
migumba	-	mgumba
arijo	-	arjo
wuok	-	wok
sihoho	-	s(i)hoho

Word final vowel deletion

sinani	-	sinan
gowi	-	gow
adieri	-	adier
maṅasi	-	maṅas

2.1.2.1.2 Compensatory lengthening

Okombo (1982) states that compensatory lengthening takes place when part of a word is deleted and that conditions under which this takes place is not very clear.

Example

Θo + orumo - Θo:rumo

Ko + aci ε l - ka:ci ε l

le + aciel - la:ciel

le + eco - le:co

Adhiambo (1981) asserts that compensatory lengthening is a process that lengthens a word phoneme when the following vowel phoneme is deleted.

In the B-U dialect, compensatory lengthening usually takes place during the word final vowel deletion for example:

maundu	-	mau:nd
mgosi	-	mgo:s
gowi	-	go:w
jowi	-	jo:w
odundu	-	odu:nd

2.1.2.1.3 Vowel Harmony

Okombo (1982) states that the effect of harmony is usually noticed when an affix is added to the root of a given word. He further notes that it involves the modification of the tongue root position of a given vowel under the influence of a given neighboring vowel.

Adhiambo (1981) notes that vowel harmony is an assimilatory process by which all the vowels in a morpheme or a word agree in some well defined features. Dholuo vowel harmony involves the tongue root position which can be divided into Advanced Tongue Root (+ATR) or Retracted Tongue Root (-ATR). Okombo (1982) further notes that the infinitive suffix – O is realized as (+ ATR) depending on the root vowel

Kan-ɔ	to keep
dɛj-ɔ	to strangle
tʊr-ɔ	to break
dɪj-ɔ	to press
neg-o	to kill
oro-o	to send
ik-o	to bring

The B-U dialect reacts differently to this harmony in some instances, for example:

Singular	K-SN dialect plural	B-U dialect plural	Gloss
Pap	pɛwɛ	pawɛ	field

2.1.3 Syllable in Dholuo

Crystal (1991) says that understanding of the syllable structure of a language is important in the analysis of its phonology.

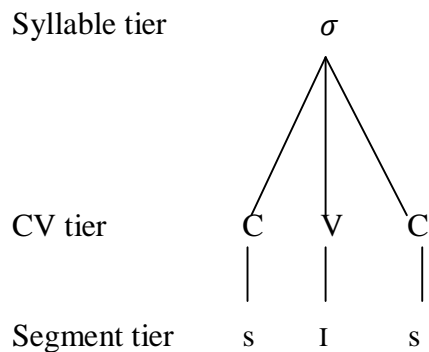
Katamba (1989) notes that the syllable is the basic unit in terms of which phonotactic rules are best stated. Radford et al (2006) asserts that different languages permit different kinds of syllables and those native speakers of a language bring their knowledge of syllables and syllable structure in their attempt to produce words from another language.

Oduor (2002) using the CV phonology notes that Dholuo has a maximum of one consonant in the onset followed by a peak and a consonant.

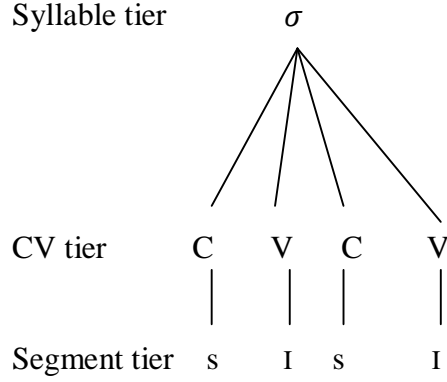
Hyman (1975:188) notes that an open syllable ends in a vowel while a closed syllable is checked by a consonant.

Odero (2008) and Oduor (2002) identify the two types of syllable structure in Dholuo to be open and closed syllable structure. In the B-U dialect some of the open syllables change to closed syllable.

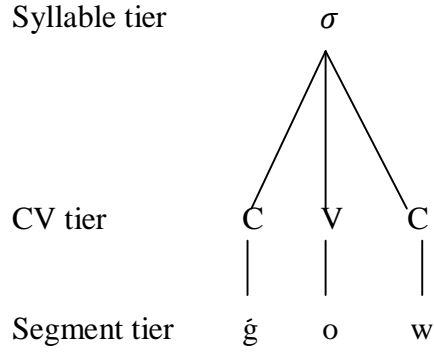
For example



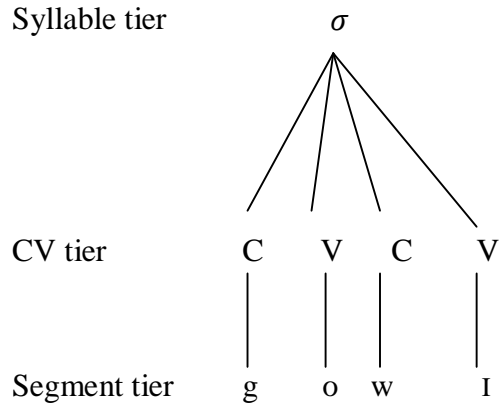
Instead of
Syllable tier

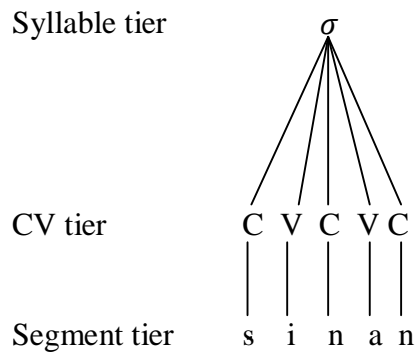


Syllable tier

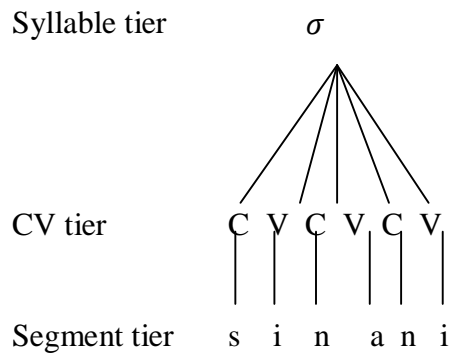


Instead of
Syllable tier





Instead of Sinani



The vowel is an obligatory element in Dholuo syllable.

Oduor (2002:81) identifies different open syllables in Dholuo and she groups them into different types; type A, B, C, D and E. She also identifies closed type F, G, H, I and J .

These can further be looked at as monosyllabic, bisyllabic and polysyllabic

2.1.3.1 Type A (CV syllable)

This type of syllable is made up of a consonant followed by a vowel. This the most common type of syllable structure in Dholuo.

lɛ	axe	CV
mʊɓ	to touch	CV\$CV

2.1.3.2 Type B (V syllable)

In Dholuo short vowels can form syllables without an onset

a	to leave	V
oteŋa	eagle	V\$CV\$CV

2.1.3.3 Type C (CV: syllable)

In Dholuo a consonant can be followed by a long vowel

θo:	to be fed up with something	CV:
θɔ:	mist	CV:

2.1.3.4 Type D (V: symbol)

In Dholuo there are syllable structures that have long vowels

e:	yes	V:
i:	to fight	V:

2.1.3.5 Type E (CVV syllable)

In Dholuo a consonant can be followed by two vowels in a sequence. Majorly the high vowels.

yuoro	brother/sister	CVV\$CV
huolo	cough	CVV\$CV

2.1.3.6 Type F (CVC syllable)

This is common in the B-U dialect of Dholuo where some of the open syllables become closed.

pod	not yet	CVC
mit	sweet	CVC
ler	muscle	CVC

2.1.3.7 Type G (VC syllable)

In Dholuo a short vowel can be followed by a consonant

an	me	VC
In	you	VC

2.1.3.8 Type H (CV: C syllable)

In the B-U dialect the open syllable can become a closed syllable and the last vowel becomes a long vowel.

si:s	wall	CV: C
jo:w	buffalo	CV: C

2.1.3.9 Type I (V: C syllables)

The long vowel in this case is followed by a consonant

ɔ: r	brother-in-law	V: C
e: n	him/her (third person)	V: C

2.1.3.10 Type J (CVVC syllables)

In Dholuo this structure has a consonant part the onset followed by a high vowel-vowel and a consonant at the end

duol	goat/sheep	CVVC
duog	come back	CVVC

2.1.4 The Suprasegmental Features

Suprasegmental of prominence are stress, tone and duration, Hyman (1975). The suprasegmental features that are mainly found in Dholuo are tone and stress.

2.1.4.1 Tone

Dholuo is a tone language and tone plays an important factor in showing lexical differentiation in minimal pairs, aspect, tense and word class. Okombo (1982:26) notes basic tone patterns as:

High (H), Low (L) and down stepped high.

Pattern	Phonological Symbol	Example	
Low (L)	[-]	le [-]	axe
High (H)	[/]	lθ [/]	ear
Downstrepped	[! /]	ywe ↓yo [! /]	breathe
Pattern	Phonological Symbol	Example	
Low – Rising	[- /]	ciem	eat
High – Falling	[/ \]	agaak	a crow
Downstrepped	[- /]	ap Ūl	kind of deer

This study will settle on the low (L) and High (H) tone as the basic tone in Dholuo and from these the falling tone can also be constituted. A falling tone is usually realised over a diphthong.

Examples.

Pattern	Example	
Low (L)	bēl	millet
High (H)	pí'	water
High Low (HL)	cí'ēl	fence
Low High (LH)	ndālo'	garden
Low Low (LL)	būrā	meeting

High High (HH)	kéndó	again
Low High Low (LHL)	cōkrúōk	gathering
High Low Low (HLL)	tíĒl̄ō	leg
High High Low (HHL)	m̄lhā	child

Tone can be used to mark difference

Example	Tone	Gloss
Kic	H	Bee
	L	orphan
Bur	H	dust
	L	grave
Wendo	HH	Guest
	LL	visit
ʼɔganda	LLL	bean
	LHH	group

In Dholuo tone is also used to mark word class

Example	Tone	Gloss	
kɛc	H	bitterness	(Noun)
	L	bitter	(Adjective)
bɛr	H	goodness	(Noun)
	L	good	(Adjective)
bor	H	height	(Noun)
	L	tall	(Adjective)
kendo	HL	to marry	(Verb)
	LL	fire place	(Noun)
	HH	again	(Adverb)

2.1.4.2 Stress

Stressed sounds are those on which the speaker extends more muscular energy so that there is additional increase in pitch Ladefoged (1993:249). There is prominence given to one syllable per word. Owino (2003) notes that stress falls mainly on the stem vowel of a word in Dholuo and not in the affix except in the plural form of verbs in the imperative. He added that prefixes do not upset the pattern between stress and length.

Example

ǹnd	sleep	(imperative)
kàḏ	pass	(imperative)
wòθ	walk	(imperative)

2.2. Lumarachi Phonemic inventory

2.2.1 Lumarachi consonants

The consonants of Lumarachi are given below. Each consonant is represented using its IPA symbol, followed by the Orthography in Lumarachi then a word in Lumarachi

Table 7: Lumarachi Consonants

IPA Symbol	Orthography	Word	Gloss
b	b	/baba/	father
β	b	/βana/	children
p	p	/ipasi/	iron box
f	f	/ifula/	rain
t	t	/itaa/	lamp
d	d	/idajwa/	cock
s	s	/silaro/	shoe
tʃ	ch	/tʃweja/	miss
dʒ	j	/lidʒoki/	yoke
g	g	/igwena/	crocodile
x	kh	/xuna/	beat
k	k	/tsa:ka/	start
l	l	/li:la/	intestine
L	l	/mulamwa/	sister-in-law
r	r	/ria/	fear
w	w	/wefu/	ours
j	y	/ijamwa/	axe
m	m	/musiro/	taboo
n	n	/jana/	pay
ɲ	ny	/ɲanga/	day
ŋ	ng	/ɲgombe/	cow
mb	mb	/mukumba/	barren woman
nd	nd	/ndala/	one
nz	nz	/inzuhi/	bee
ts	ts	/tsia/	go

Adopted from Akwala (2008:32-33)

Akwala (2008: 32) notes that Lumarachi has nineteen pure consonants, two semi-vowels, four prenasalised compounds and one consonant cluster. The phonemic inventory of Lumarachi is summarised in the chart below. It is classified according to the manner of articulation and voicing.

Table 8: Consonantal phonemes of Lumarachi

	bilabials	labial dentals	alveolar	Post alveolar	Retroflex	palatals	velars	velar labial	uvular
Plosives	p b		t d				k ɡ		
Fricatives	β	f	s				x		
Affricates			tʃ	tʃ dʒ					
Nasals	m		n			ɲ		ŋ	
Trills			r						
Laterals			l		L				
Glides						j		w	
Prenasalised stops	mb		nz nd						ŋɡ

Adopted from Akwala (2008:37)

2.2.1 Lumarachi vowels

The Lumarachi phonetic inventory has five vowels

i u
e o
a

The five short vowels can also be prolonged to come up with corresponding long vowels.

Table 9: Orthographic representation of Lumarachi vowels

Orthography	IPA symbol	Word	Gloss
a	a	ifula	rain
e	e	ekulo	yesterday
i	i	iruxa	run
o	o	kona	sleep
u	u	musiani	boy
aa	a:	musaatsa	man
ee	e:	reera	bring
ii	i:	liila	intestine
oo	o:	Loora	to say
uu	u:	mukuunda	farm

2.2.3 Lumarachi syllable structure

Segments dominated by a C-element of a CV tier are non syllabic while those dominated by a V-element are syllabic. The Luhya group favours words which have an open syllable structure, thus Lumarachi and Lunyala favour words that end in vowel sounds. According to Akwala (2008:52) there are several types of open syllable structure in Lumarachi. They include:

2.2.3.1 CV Structure

A consonant can be followed by a short vowel

/lola/ see CV \$ CV

/xera/ milk CV \$ CV

2.2.3.2 CVV Structure

A consonant can be followed by a diphthong

/lia/ cat CVV

ria fear CVV

2.2.3.3 CV: structure

A consonant can be followed by a long vowel

/daa / no. CV:

/re:ra/ bring CV:CV

2.2.3.4 VCV structure

A word can begin in a vowel and end in a vowel

/uka/ wonder VCV

/ikula/ open V\$ CV \$ V

2.2.3.5 CCV structure

A word can have consonants in a sequence followed by a vowel

/fwa / die CCV

/ɲwa/ drink CCV

2.2.4 Tone

Akwala (2008: 31-32) gives a distinction between two types of tones, the lexical tone and the grammatical tone. The lexical tone differentiates between two lexical items while the grammatical tone is used to differentiate grammatical entities such as tense.:

Example	Tone	Gloss
iinda	LH	belly
	HL	louse

CHAPTER THREE

PHONEMIC ADAPTATION OF LOANWORDS

3.1 Introduction

This chapter looks at phonological adaptation strategies a loanword undergoes to be accommodated into B-U dialect of Dholuo. Borrowed words from the Bantu language will majorly be looked at. This chapter will look at loan word adaptation strategies a loanword undergoes from the Lunyala and Lumarachi dialects of the Luhya group so as to be accommodated into the B-U dialect of Dholuo; loanword adaptation strategies from Kiswahili to B-U dialect of Dholuo will also be considered. The source languages in this case are Bantu languages which have a different phonemic adaptation from Dholuo which is a Nilotic language. The study applies the Source-Similarity (S-B) model.

The model demands identity between the perceived source form and the corresponding loan form. This correspondence is governed by the Input-Output (I-O) correspondence relation. The input is the PLS in the borrowing situation. It is not the underlying form of the source language but it is the perceived form. This model allows perceptual similarity in the selection of adaptation strategies and accommodates the deletion of non salient segments at the perceptual level. For loanwords from Lumarachi and Lunyala into B-U dialect of Dholuo there will be need to establish the direction of borrowing so as to identify borrowed words from the Luhya group into Dholuo.

3.1 Establishing the direction of borrowing

To establish the direction of borrowing a comparative analysis was done between B-U dialect of Dholuo, K-SN dialect and the sister languages of Dholuo which included Langi, Acholi and Padhola. On the other hand a comparative analysis was done between

Lumarachi, Lunyala and the Luhya dialects of Logooli, Samia and Wanga, to establish words that are similar.

Table 10: Comparative analysis of the Western Nilotic group

BU dialect	K-SN dialect	Lango	Acholi	Padhola	Gloss
osirgoho	chieth gweno	cet gweno	cet gweno	chieth gweno	chicken dropping
oliho	oluth kuon	lut kwon	oliwo kuon	alith kuon	cooking stick
sis(i)	kor ot	apona/kor ot	kor oot	kor ot	wall
rashingwa	raura/mingo	mindo	lababa	jamingo	fool
dawe	oyoo	pe	kuu	be	no
luya	kuok	kwok	kwok	kuok	sweat
omuogo	mariwa	mogo	gwana	muogo	cassava
oduma	bando	nywagi/duma	anywagi	duma	maize
hanyinya	oliktiga	olik	olik	wakafundo	bat
osirawende/odikinyi	okinyi	odiko	odiko	odikinyi	dawn
okumbo	okumbo	otyeno	otwenga	kumbo	elbow
musumba	misumba	oulo gobe	laco mape onyone	msemeli musuma calur	bachelor
dala	pacho	paco	gong	pecho	home
ndalo	puodho	polo	gong	ndelo	garden
uholo	fuolo	aola	aona	wolo	cough
rashihingwa	raura/ming	dano aming			fool
hawaraha	p.kuon	ten piikuon	pi kwon	piu kon	bol ugali water
mgumba/lur	migumba	dako ape nywal	lur (alur)	mugamba	barren woman
msiro	kwer	kwer		kwer	taboo
sihoho	Sihoho/wang marach		layir		evil eye
manyasi	manyasi	yien	yien	yien	herbs
homo/chwoyo	komo	p ito	loyo kodi	chwoyo	to sow
dede	dede	otwono	otwong'o	otwong'o	grasshopper
haniaf	ong'ong'ruok	agogo			
ohurema	Ngol	ang'walo	lugoro	ngol	handicapped/di sabled
hamiero	atonga/adita	adita	adita	adita	type of basket

Table 11: Comparative analysis of the Luhya group

BU dialect	Lumarachi	Amanyala	Samia	Maragoli	Wanga	Gloss
hanyinya	liinya:nya	linyinya	embudombudo	linyinya	linyinya	bat
okumbo	ikhumbo	ekhumbo		inguku	ikhumbo	elbow
homo	khoma	okhoma				To sow
msumba	mukumba	omusumba	omusumba	umusumba		bachelor
oliho	mwikho	omwikho	omwikho		omwikho	cooking stick
dawe	dawe		khaba	dawe	tawe	no
omuogo	muoko	omwoko	omuogo	mwogo	omwoko	cassava
oduma	madimwa	amatuma	edimwa	liduma	amatuma	maize
siro	siro	eshiro	esiito		eshiro	market
uholo	khalola	ukholola	ehololo	khokhola	okhukholola	cough
manyasi	manyasi	amanyasi	amanyasi	madamiku	amanyasi	herbs
mgumba	buyango	omukumba	omukumba	umugumba	omukumba	barren woman
osungru	sisokoro	eshisokono	esinduya	ekesogote	eshisokoro	cob
msir		omusiru			omusiru	dumb
dede	lidede	litete	edede		litalala	grasshopper
ng'or	tsingoli		eng'ori			cowpeas
ohala	bukhala	obukhala	enganga			business
ohurema	mulema	omulema	omurema		omulema	handicapped
ohudhalha	Bichalalire	sianyalala	ochalala			tasteless
ndalo	indalo		endalo			garden
haniaf	likhaniafu	lihaniafu	ehaniafu			chameleon
hawarakha	khawadikha	khawalekha	ohwarikhau			boil/ugali water
sis(i)	lisisi	isisi	esida			wall
luya	luya	oluuya	oluya	ruya	oluya	sweat
osirawende	maheberende	mahererende	maheberende			dawn
msiro	musiro	msiro	omusiro		omusiro	taboo
rabuon	mabwoni		amabuoni	libwoni	amapuoni	potatoes
ohuhaga	bikhaka		ebihaka			stale food
sihoho	sikhokho	esiholo	esikhokho			evil eye
osirgoho	masirikodi	amasilikhokho	amasirikotio			chicken dropping
rasihingwa	wesiingwa	visihingwa				fool
hamiero	simwero		esimwero			small basket
sino	khusinyikha		osinyiha			disgust

3.2 Adaptation of Lumarachi and Lunyala loanwords to B-U dialect of Dholuo

Since Lumarachi and Lunyala are sister languages which fall under the Northern Luhya, the phonemic inventory of Lumarachi will be used for illustrations in this case.

3.2.1 Consonantal Adaptation Strategies

According to Akwala (2008:32) Lumarachi has nineteen pure consonants, one consonantal cluster, four prenasalised compounds and two glides in the consonantal system.

3.2.1.1 Consonant substitution

According to Antila (1972) absent segments will always be assigned the closest bundle in L1. This therefore implies that if a segment is absent in the B-U dialect then a bundle that is close to it in the B-U dialect will be used to substitute it. On the other hand a sound segment from the source language may be perceived differently by the borrowing language speakers leading to substitution. In the Source-Similarity (S-B) model, the representation of the source form which is the posited loan form may be distinct from the source form leading to substitution.

The Lumarachi and Lunyala voiceless velar fricative /x/ which is common in most Luhya dialects is substituted with voiceless glottal fricative /h/ in the B-U dialect. The voiceless velar fricative /x/ does not exist in Dholuo phonemic inventory; therefore it is substituted with the voiceless glottal fricative /h/ which is the closest bundle in the B-U dialect of Dholuo. The possibility being that the voiceless velar fricative [x] is perceived as the voiceless glottal fricative [h]

B-U dialect	Source word	Source language	Gloss
/sihoho/	/sixoxo/	Lumarachi	evil eye
/hawaraha/	/xawalixa/	Lunyala	boil ugali water
/ɔliho/	/omwixo/	Lunyala	cooking stick
/homo/	/xoma/	Lumarachi	to sow
/ɔhala/	/buxala/	Lumarachi	business
/haniaf(u)/	/lixaniafu/	Lunyala	chameleon

The voiceless glottal fricative /h/ in the B-U dialect also substitutes other consonants apart from the voiceless velar fricative /x/. It also substitutes consonants like /l/, /m/ and /s/.

Other consonant substitutions

B-U dialect	Source word	Source language	Gloss
/dawe/	/tawe/	Lunyala	no
/hajiŋa/	/liŋiŋa/	Lunyala	bat
/ɔkombɔ/	/exumbo/	Lunyala	elbow
/ɔhorema/	/omulema/	Lunyala	handicapped
/rasihŋwa/	/wesiŋwa/	Lumarachi	fool
/sInɔ/	/sIŋa/	Lumarachi	to disgust
/hamiero/	/simwero/	Lunyala	a type of basket

Based on the substitutions above, It means that consonant substitution leads to nativisation of loanwords from the Luhya group so that they are adapted into the B-U dialect of Dholuo.

3.2.1.2 Consonant preservation

Loanword adaptation is also about preservation. If a consonant can be adopted into L₁ phonology then the consonant will be preserved so that there is an aspect of faithfulness between the source form and the perceived form. This consonant preservation is common if the perceived form from the Luhya group is available in the Dholuo phonology. Therefore in line with the Source-Borrowing (SB) model faithfulness, the consonant sound will be preserved if the sound can be accommodated into the B-U dialect.

B-U dialect	Word	Source	Gloss
/sisi/	/risisi/	Lumarachi	Wall
/mapas/	/amapasi/	Lunyala	Herbs
/dawe/	/tawe/	Lunyala	No
/luya/	/luya/	Lumarachi	Sweat
/mgumba/	/mukumba/	Lumarachi	Barren woman

3.2.2 Vowel adaptation strategies

3.2.2.1 Vowel preservation

The vowels present in the Luhya group are also present in Dholuo. This implies that those vowels present in Lumarachi and Lunyala can be preserved in the B-U dialect of Dholuo.

B-U dialect	Word	Source	Gloss
/mapas/	/amapasi/	Lunyala	herbs
/s(I)hoho/	/sixoxo/	Lumarachi	evil eye
/hawaraha/	/xawalixa/	Lunyala	boil ugali water
/dawe/	/dawe/	Lumarachi	no

3.2.2.2 Vowel substitution

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

B-U dialect	word	Source	Gloss
/sIs(I)/	/risisi/	Lumarachi	Wall
/ɔkɔmbɔ/	/exumbo/	Lunyala	Elbow
/ɔhɔrema/	/omulema/	Lunyala	Handicapped
/sIno/	/sɪna/	Lumarachi	Disgust
/rasihɪŋwa/	/wesiŋwa/	Lumarachi	fool

The back high rounded vowel / u / can be substituted with / ɔ / while the back mid high rounded vowel /o/ can be substituted with the back mid low rounded vowel / ɔ / and the front mid high unrounded vowel / e / can be substituted with the front mid low rounded vowel / ɛ /

Lumarachi and Lunyala being Bantu languages will mostly have an open syllable structure unlike the B-U dialect of dholuo which has mostly closed syllable structure but also accommodates an open syllable structure.

3.3 Adaptation of Kiswahili loanwords to Boro-Ukwala dialect of Dholuo

Kiswahili was introduced to Dholuo speakers much later. Therefore for the B-U dialect speakers it is much easier to determine borrowed words from Kiswahili to Dholuo.

Kiswahili as a language is the national language in Kenya and it is also taught in Kenyan schools together with English. Kiswahili being a Bantu language is different from Dholuo in terms of the phonemic inventory and as a result most loanwords from Kiswahili have to be adapted so as to fit into B-U dialect of Dholuo. This section will look at consonant adaptation strategies first and later look at the vowel adaptation strategies.

3.3.1 Consonant Adaptation strategies

The consonant adaptation strategies that a loan word from Kiswahili undergoes so as to fit into Dholuo include:

3.3.1.1. Consonant Deletion

The consonant is deleted at word initial position and replaced with the tense mid high back vowel. In this case the vowel replaces the consonant

B-U dialect	Word	Source	Gloss
/ɔpira/	/mpira/	Kiswahili	ball
/ɔkɛbɛ/	/mkebe/	Kiswahili	container
/ɔkɛka/	/mkeka/	Kiswahili	mat
/ɔcɛlɛ/	/mcɛlɛ/	Kiswahili	rice

3.3.1.2 Consonant preservation

The consonants that are present in Kiswahili are preserved in Dholuo. This is because the borrowing language tries to remain as faithfully as possible to the source language by preserving the segments that are there in the source language.

The voiceless alveolar fricative [s] in Kiswahili is preserved in B-U dialect of Dholuo

B-U dialect	Word	Source	Gloss
/sanduk/	/sanduku/	Kiswahili	box
/san /	/sahani/	Kiswahili	plate
/sim/	/simu/	Kiswahili	phone

The voiceless velar stop / k / and voiced bilabial stop / b / in Kiswahili are preserved in the B-U dialect

BU-dialect	Word	Source	Gloss
/kibɛt/	/kibɛti/	Kiswahili	Purse
/kibrit/	/kiberiti/	Kiswahili	Matchbox
/kabat/	/kabati/	Kiswahili	Cupboard
/kalam/	/kalamu/	Kiswahili	Pencil/pen

BU-dialect	Word	Source	Gloss
/bakul/	/bakuli/	Kiswahili	bowl
/brika/	/birika/	Kiswahili	Kettle
/bahasa/	/bahafa/	Kiswahili	Envelope

Other consonants that are preserved include /f, p, m, t, c/

BU-dialect	Word	Source	Gloss
/faras/	/farasi/	Kiswahili	horse
/capat/	/capati/	Kiswahili	Chapati
/mabat/	/mabati/	Kiswahili	Iron roof
/jumapil/	/jumapili/	Kiswahili	Sunday

3.3.1.3 Consonant substitution

A consonant is substituted if it does not exist in the Dholuo phonemic inventory. This means that Kiswahili segments which are not present in Dholuo are substituted with those consonants which are perceived to be closer to them. For example the voiceless post alveolar fricative /ʃ/ and the voiced alveolar fricative /z/ do not exist in Dholuo but exist in Kiswahili. The voiceless post alveolar fricative /ʃ/ which exists in Kiswahili is substituted with /s/ which is the closest bundle to it.

BU dialect	Word	Source	Gloss
/drisa/	/dirifa/	Kiswahili	Window
/bahasa/	/bahaʃa/	Kiswahili	envelop
/msip/	/mʃipi/	Kiswahili	belt

The voiceless alveolar fricative /z/ found in Kiswahili is substituted with the voiceless alveolar fricative /s/ in Dholuo since the voiceless alveolar fricative does not exist in Dholuo and the voiceless alveolar fricative /s/ is the closest bundle to it.

B-U dialect	word	Source	Gloss
/msip/	/mfipi/	Kiswahili	Belt
/ngas/	/ngazi/	Kiswahili	Ladder
/mesa/	/meza/	Kiswahili	Table
/mandas/	/mandazi/	Kiswahil	burns

Other consonant substitutions are shown below

BU-dialect	Word	Source	Gloss
/kalatas/	/karatasi/	Kiswahili	paper
/msumal/	/msumari/	Kiswahili	nail
/hofuria/	/sufuria/	Kiswahili	cooking pot
/bao/	/mbao/	Kiswahili	wood

3.3.2 Vowel adaptation strategies

The vowel adaptation processes include vowel insertion, vowel preservation and vowel substitution

3.3.2.1 Syllable replacement / prothesis

In Dholuo syllable replacement usually takes places at word initial position and it involves introducing the tense mid high back vowel in the word initial position or by replacing the first syllable in the Kiswahili word.

B-U-dialect	Word	Source	Gloss
/ɔ̄jɪkɔ̄/	/kijiko/	Kiswahili	spoon
/ɔ̄kɔ̄mbɛ/	/kikɔ̄mbɛ/	Kiswahili	cup
/ɔ̄tanda/	/kitanda/	Kiswahili	bed
/ɔ̄tuŋgu/	/kituŋgu:/	Kiswahili	onion
/ɔ̄paŋga/	/paŋga/	Kiswahili	panga

3.3.2.1 Vowel Preservation

In line with the S-B model, the vowels that are in Kiswahili and are also present in Dholuo are preserved. This is to preserve the source similarity correspondance

B-U dialect	Word	Source	Gloss
/bao/	/mbao/	Kiswahili	wood
/mabat/	/mabati/	Kiswahili	roof
/drisa/	/dirifa/	Kiswahili	window
/sim/	/simu/	Kiswahili	phone
/chumb(i)/	/chumvi/	Kiswahili	salt

Epenthesis is not common in B-U dialect instead vowel deletion is common in adapted words from Kiswahili especially in the word final position.

3.4. Adaptation of the syllable structure

Hyman (1975:188) deals with the syllable as a phonological unit in line with most phonologists and therefore explains that words and larger utterances can be syllabified on the basis of the phonotactic (or sequential) constraints of a given language, subject to certain universal tendencies.

3.4.1 Adaptation of the syllable structure from Lumarachi and Lunyala

Dholuo favours both open and closed syllable on the other hand Lumarachi, Lunyala and Kiswahili which are Bantu languages favour the open syllable. The source similarity model stresses on similarity or correspondence between the segments in the L1 and L2. B-U dialect of Dholuo tries to adapt the open syllable of the Luhya group thus loanwards end up having similar syllable structure.

Syllables are constructed by combining phonemes together in neighbouring environments and forming a pattern that is articulated as one. Katamba (1989:153) defines a syllable as a unit in terms of which phonological systems are organised. According to Katamba a syllable is purely a phonological identity.

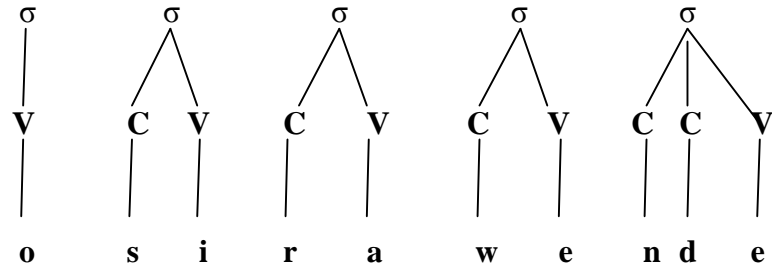
As mentioned earlier the Source-Similarity (S-B) model of loanword adaptation which is applied here exploits loanword specific faithfulness constraint, that impose similarity between the perceived form and its correspondence spoken loan. MAX-SB imposes the fact that segments in the source word must appear in the borrowing and DEP-SB that imposes that segments in the borrowing must appear in the source. In the loanwords from Lunyala and Lumarachi in the B-U dialect of Dholuo, the syllable structure in the loanwards can have the same structure as the source.

Hyman (1975) explains that an open syllable ends in a vowel while a closed syllable is 'checked' or arrested by a consonant. As observed in the B-U dialect some of the open syllables change to closed syllables. But the B-U syllable structure can also adopt so as to have an open syllable structure, especially in the loan words from the Luhya group.

B-U dialect	Word	Syllable structure	Gloss
/ɔhurema/	/omulema/	V\$CV\$CV\$CV	handicapped
/osirawende/	/maheverende/	CV\$CV\$CV\$CV\$CCV	dawn
/ɔkumbo/	/exumbo/	V\$CV\$CV	elbow
/hanyina/	/lipina/	CV\$CV\$CV	bat
/sihoho/	/sixoxo/	CV \$ CV \$ CV	evil eye
/oliho/	/omwixo/	V \$ CCV \$ CV	cooking stick
/homo/	/xoma/	CV \$CV	sow

osirawende

Syllable tier

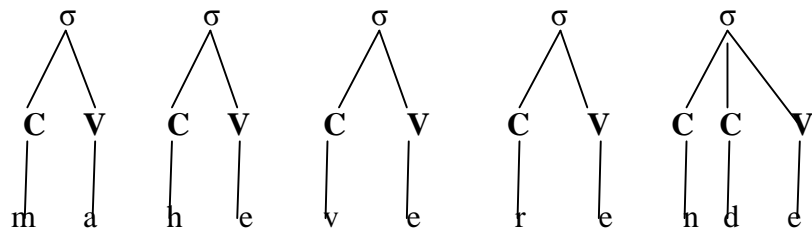


maheverende

Syllable tier

CV tier

Segment tier

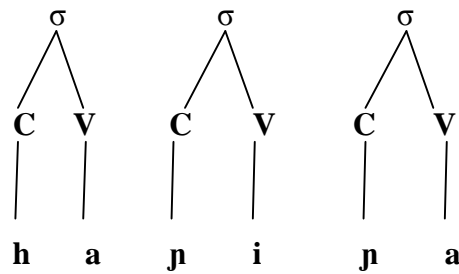


hanyinya

Syllable tier

CV tier

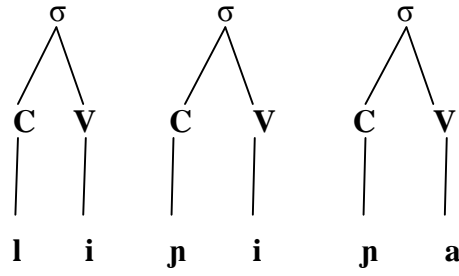
Segment tier



linyinya

Syllable tier

CV tier

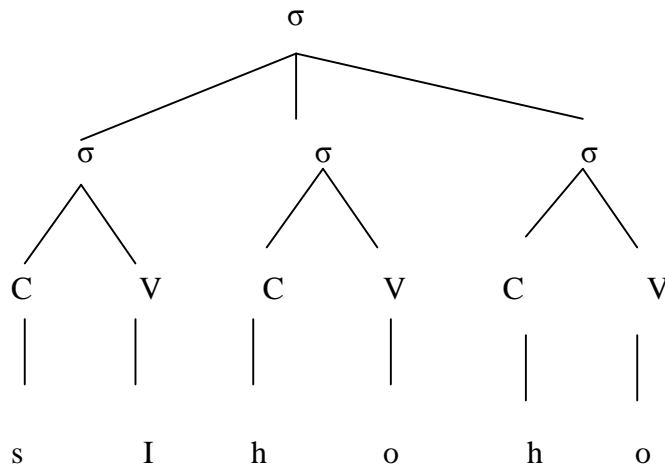


sihoho

syllable tier

CV tier

Segmental tier

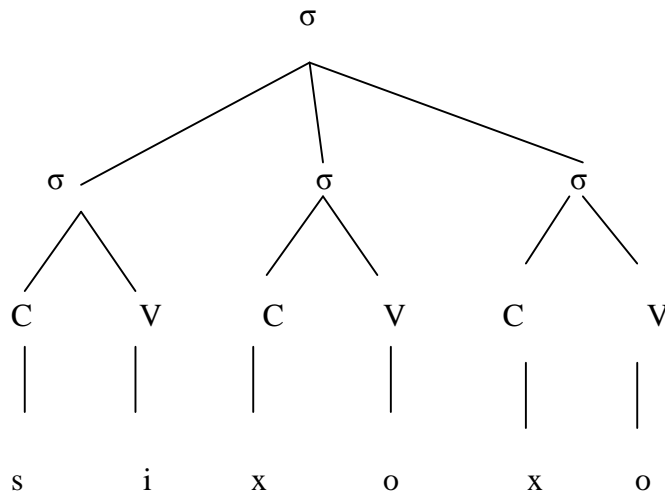


sixoxo

Syllable tier

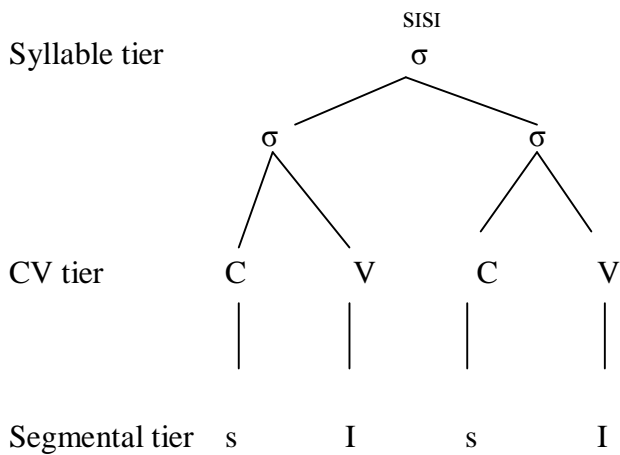
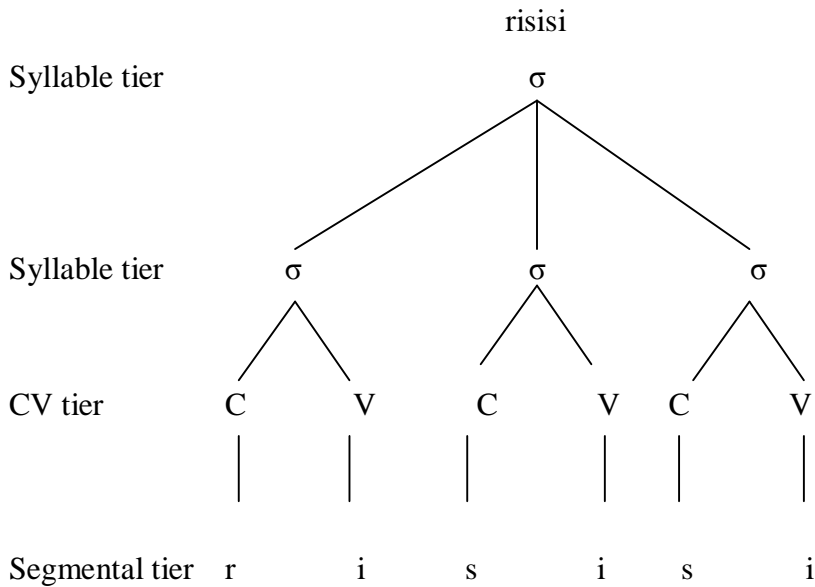
CV tier

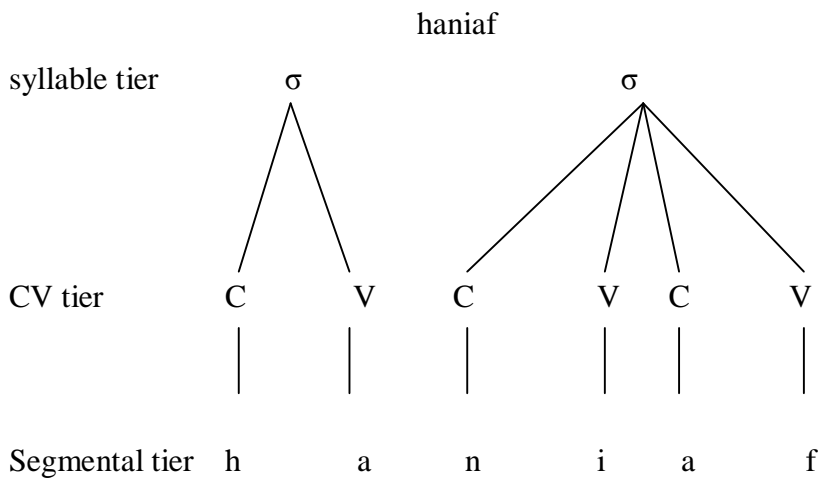
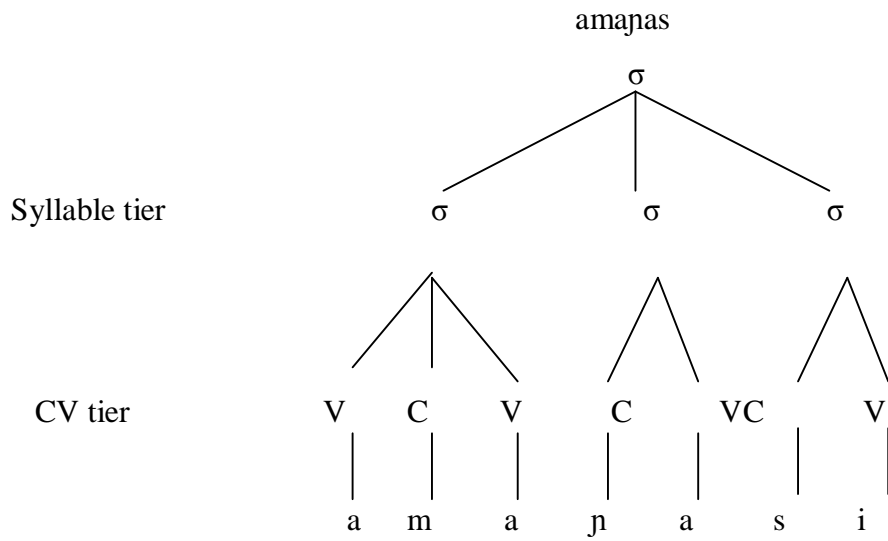
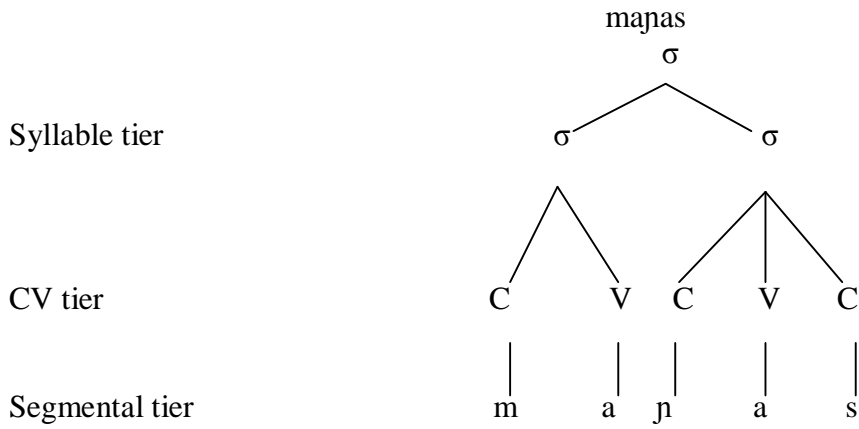
Segmental tier



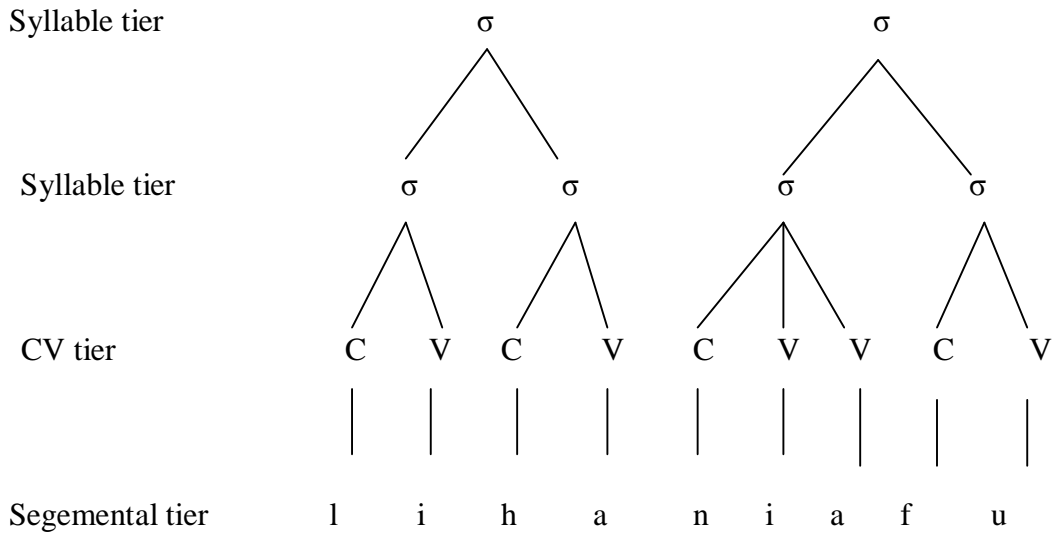
The syllable structure can be adapted from Lunyala and Lumarachi to fit into the B-U dialect of dholuo, so that an open syllable structure becomes a closed syllable in B-U dialect

B-U dialect	syllable structure	word	syllable structure	Gloss
sis(i)	CVC(V)	risisi	CV\$CV\$CV	wall
maɲas	CVCVC	amaɲasi	V\$CV\$CV\$CV	herbs
haniaf	CVCVVC	lihaniafu	CV\$CV\$CVV\$CV	chameleon





lihaniafu

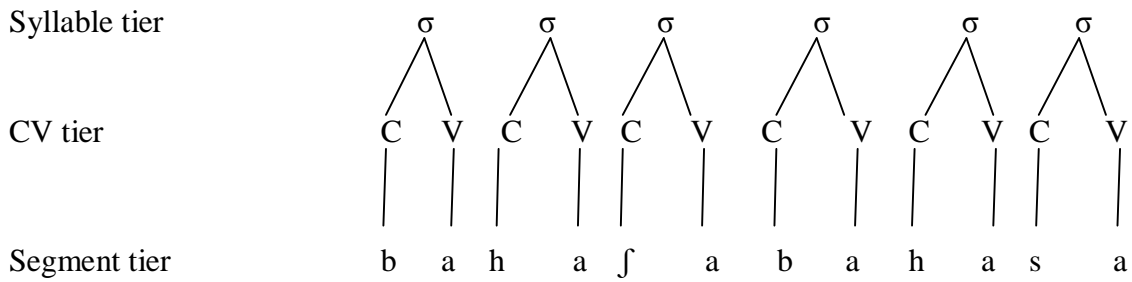
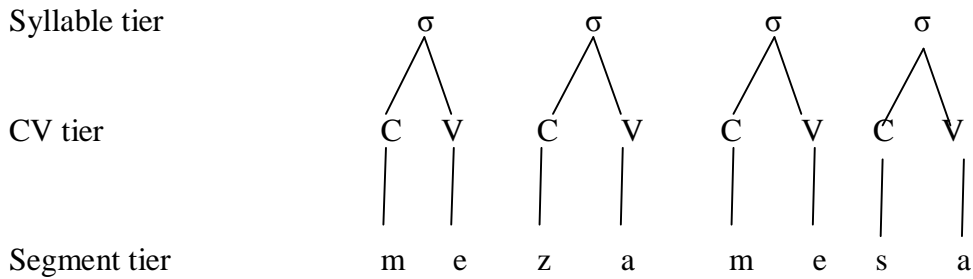
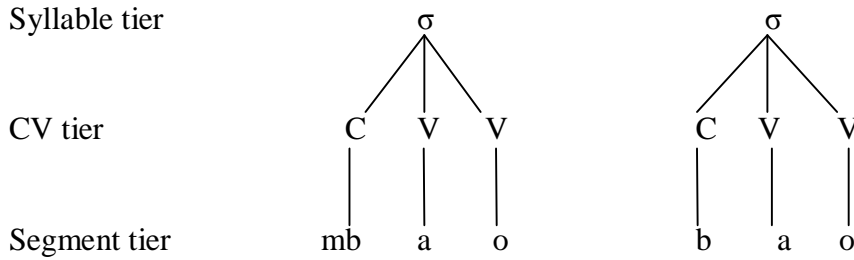


Words which correspond in syllable structure shapes in both the B-U dialect of dholuo and the luhya group of Lumarachi and Lunyala are preserved, so that the source corresponds with the loanword in terms of syllable structure.

3.4.2. Syllable structure adaptation from Kiswahili

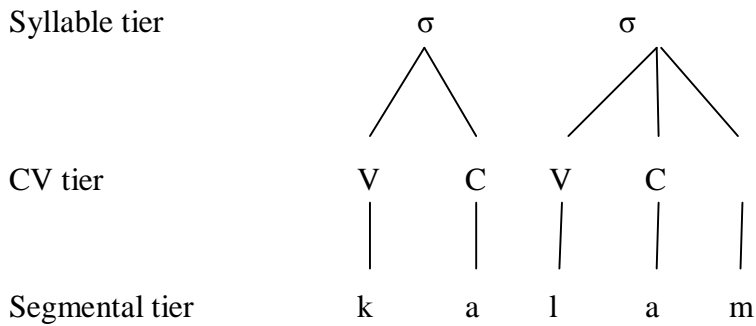
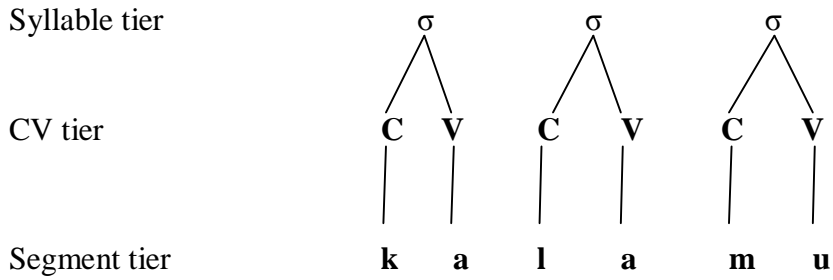
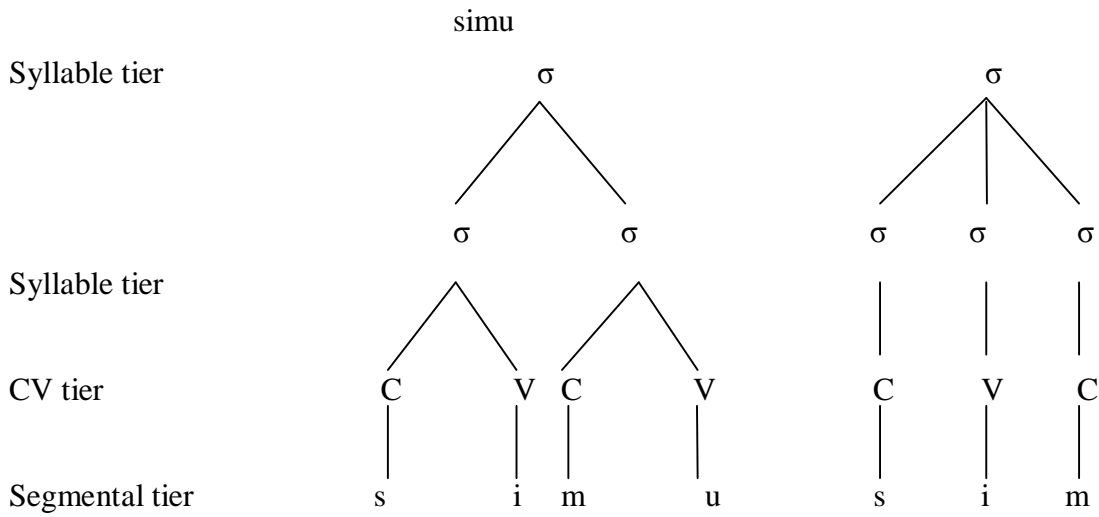
According to the Source Similarity model, as mentioned before, the segments in L1 language should be similar to the segment in the L2 language. In Kiswahili the syllable structure can be adopted by the B-U dialect.

B-U dialect	Word	Source	Syllable structure	Gloss
/bao /	/mbao/	Kiswahili	CVV	wood
/mesa/	/meza/	Kiswahili	CV\$CV	table
/bahasa/	/baha fa/	Kiswahili	CV\$CV\$CV	envelope



kiswahili syllable structure can be adapted to fit into the B-U dialect of dholuo, so that a loanword with an open syllable ends up having a closed syllable structure.

B-U dialect		Kiswahili		Gloss
sim	CVC	simu	CV\$CV	phone
kalam	CV\$CVC	kalamu	CV\$CV\$CV	pen
drisa	CCV\$CV	dirisha	CV\$CV\$CV	window



Summary

This chapter has looked at the phonological adaptation strategies a loan word undergoes to be accommodated into the B-U dialect of Dholuo from the Bantu languages of Kiswahili and the Luhya group specifically Lunyala and Lumarachi. The adaptation strategies identified are consonant substitution, consonant preservation, vowel substitution and vowel preservation. The chapter has also looked at the syllable adaptation of the B-U dialect of Dholuo from Lunyala, Lumarachi and Kiswahili whereby a loanword can be adapted so as to have a close syllable structure.

CHAPTER FOUR
MORPHOLOGICAL ADAPTATION

4.0 Introduction

This chapter focuses on how B-U dialect morphologically adapts loanwords from the Luhya group of Lunyala and Lumarachi. There is no major difference between the morphology of B-U dialect and the K-SN dialect, the difference is minimal. On the other hand morphologically the Bantu languages consist of a class prefix + stem.

4.1. Dholuo Morphology

4.1.1. Noun Morphology

Okombo (1982:29) notes that the morphology of nouns in Dholuo can be investigated in four areas namely: plurals, genitives and the forms which go with demonstratives.

Plural formation in Dholuo involves: Dropping the word-final vowel where it occurs in the Singular nominatives; addition of a plural suffix to the stem which remains after, in this case the suffix may be a vowel usually i-or-e or –ni; A change in the final consonant in the stem and the vowel quality readjustment governed by the principles of harmony. In the B-U dialect of Dholuo there is a slight difference in this harmony.

Examples of nouns which become plurals by adding the suffix –ni to their stems

Nom. singular	Nom. Plural	Gloss
/higa/	/higni/	knife
/law /	/lewni/	cloth

Nouns whose pluralisation involves a change in the final consonant are:

Nom. singular	Nom. plural	Gloss
/guok/	/guogi/	dog/dogs
/luə/	/luðe/	stick
/kidi/	/kite/	stone
/cogo/	/coke/	bone
/gowi/	/gope/	debt
/bao/	/bape/	wood
/pap/	/pawe/	field
/bul/	/bunde/	drum
/əuol/	/əuonde/	snake
/kom /	/kombe/	chair
/poŋ/	/poŋge/	mill

4.1.2 The genitive

The genitive plural form of a noun is identical to the nominative plural form.

Nom.singular	Nom. plural	Genitive singular	Genitive plural	Gloss
/kidi/	/Kite/	/kit/	/kite/	stone
/ɔt/	/ute/	/ɔd/	/ute/	House
/lowo/	/lope/	/lop/	/lope/	land

4.1.3 Verb morphology

The grammatical categories of tense, aspect, mood and number which are important in the study of verbs do not show morphophonemic changes.

Number is never shown in Dholuo verbs while tense is lexical; aspectual and modal distinctions are tonal.

Nouns can be formed from verbs

/puonJo/ (to teach) /puonJ/ (teaching) /japuonj/ (teacher)

/kwalo/ (to steal) /kwo/ (theft) /jakwo/ (thief)

4.1.4 Pronouns

Pronouns can be classified as personal, possessive demonstrative, interrogative and relative

Personal pronouns	short form	Gloss
an	a-	1 st person singular
In	i	2 nd person singular
en	ε	3 rd person singular
wan	wa-	1 st person plural
un	u-	2 nd person plural
gin	gi-	3 rd person plural

4.2 Lumarachi morphology

4.2.1 Lumarachi noun system

Lumarachi nouns are grouped in classes each representing a set of nouns. There are ten classes of nouns according to Akwala (2008:106-107).

Table 12: Noun classes in Lumarachi

Class	Singular	Plural	Gloss
1/2 MU – BA	mu-kumba	ma-kumba	barren women
3/4 MU-MI	mu-xula	mi-xula	floods
5/6 LI-MA	li-loβa	ma-loβa	soils
7/8 SI-BI	si-dwoli	bi-dwoli	cowsheeds
9/10 I – TSI	i-ndalo	tsi-ndalo	gardens
11/12 LU-TS	lu-loβo	tsi-ndoβo	fishing books
13/14 KHA-RU	xa-dala	ru-dala	small homes
15/16 MWI-BE	mwi-tsa	be:-tsa	friends
17/4 KU-MI	ku-sa:tsa	mi-sa:tsa	bigmen
18/6 BU-MI	bu-laji	ma-laji	goodness

4.3 Morphological adaptation

Mati (2006) says that Bantu phonology and morphology indicates that for most noun classes, there exists a regular association of pairs to show the singular/plural dichotomy.

The singular/plural morpheme in Lumarachi are placed before the root of the noun.

For example:

Singular	Plural	Gloss
/mu-kumba /	/βa-kumba/	barren woman/barren women
/i-ndalo/	/tsi-ndalo/	garden / gardens
/mu-xula/	/mi-xula/	flood/floods
/li-dala/	/ma-dala/	home/home

Dholuo marks plurals differently from the Luhya group and there is no regular association of pairs as the association between Singular/Plural dichotomy always take different forms. For example the word /ohula/ will not have a different plural form as in the luhya group thus it will be accommodated in the B-U pluralisation method. The loanwords from the Luhya group are adapted into the B-U dialect of Dholuo by losing the prefix. For example

B-U dialect	Source word	Source language	Gloss
/haniafu/	/li-haniafu/	Lunyala	chameleon
/sisi/	/ri-sisi /	Lumarachi	wall
/dede/	/li-dede /	Lumarachi	grasshopper

The major morphological adaptation that takes place in Dholuo is the suffixation of the morpheme {nga} which is borrowed from the Luhya group. The morpheme {nga} which is a borrowed form is normally adapted as a suffix to a verb to mark tense that shows an action that is habitual

B-U dialet	Lumarachi	Gloss
/Puonj/	/xuwetsia/	teaching
/opuonjo/	/xuweketsia/	He/she is teaching
/opuonjo-nga/	/ni yeketsia-nga/	he/she usually teaches He/she normally teaches
/apuonjo/	/esiendetsia-nga/	I am teaching
/aJapuonjo/	/eseindeketsia-nga/	I usually teach/ I normally teach

/nindo/	/ŋgona/	sleep
/anindo/	/ŋgona-ŋga/	I am sleeping
/aŋanindo/	/ndetsaŋga ŋgona /	I usually sleep/ I normally sleep
/anindo – ŋga/		I usually sleep/ I normally sleep
/Oja-nindo-ŋga/		He/She usually sleeps
		He/She normally sleeps

B-U dialect

Gloss

/aJaciemo/	/nditsaŋga/	I usually eat
/aciemo-ŋga/		I normally eat

BU-dialect

Lunyala

Lumarachi

Gloss

/ra-sihingwa/	/e-siingwa/	/we-siingwa/	fool
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The morpheme {ra} in the B-U dialect can be used to mark person attributes or quality.

The stem in this case – sihingwa means foolishness ra-sihingwa, a person who is foolish.

BU-dialect

Lumarachi

Gloss

O-hurema	O-mulema	disabled/handicapped
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Conclusion

This chapter has looked at the morphological adaptation of Dholuo loanwords from the Luhya group and the major borrowing is the borrowing of the suffix {ŋga} from the Luhya group. There is also prefixation of a loan word and the prefix introduced to make the loanword be adapted to Dholuo is the prefix {ra}

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter gives the summary and conclusion of our study where loanwords from Lumarachi, Lunyala and Kiswahili were looked at in the B-U dialect of Dholuo .The study was divided into chapter one, chapter two, chapter three and chapter four and in view of the discussion in these chapters a conclusion was reached. This chapter is divided into four sections where the first section gives the summary of the findings; the second section gives the conclusion and lastly the recommendations

5.1 Summary of the findings

The study's aim was to identify similar words in Dholuo and the Luhya dialects of Lumarachi and Lunyala, then establish the direction of borrowing since the languages under study have had contact for a long time therefore the need to establish the direction of borrowing from the Luhya group to B-U dialect of Dholuo. A comparative analysis was done to establish the direction of borrowing, using Dholuo sister languages and Lumarachi and Lunyala sister languages. For Boro-Ukwala dialect of Dholuo a comparative analysis was done with the Kisumu- South Nyanza dialect, Acholi , Langi and Padhola .On the other hand for the Luhya group a comparative analysis was done with the other Luhya dialects of Wanga, Samia and Maragoli .

The findings were that words borrowed from the Luhya into the B-U dialect of Dholuo group are limited and similarities in some words could be noted in the various Luhya dialects that were used for comparative analysis

The loanwords from the Luhya group into the B-U dialect have been used for a long time and have been assimilated and established as part of the B-U dialect words, at the same time some of the Dholuo sister languages like Padhola seem to also have borrowed from the Luhya dialects that neighbour them.

The study also looked at the phonological adaptations strategies that loanwords undergo from the Luhya group and Kiswahili so that they are accommodated into Dholuo since Kiswahili and Luhya are Bantu languages while Dholuo is a Nilotic language. It was realised that different adaptation strategies came in place for the loan word to be adapted into Dholuo of the B-U dialect amongst them consonant substitutions, consonant preservation, consonant deletion, vowel preservation, vowel substitution and syllable replacement/prothesis.

The finding in this case was that epenthesis/vowel insertion which is a common adaptation strategy was rarely used since the Bantu languages majorly allow open syllables but on the other hand the B-U dialect allows open syllables, and at the same time allows closed syllable and vowel deletion. As an adaptation strategy, vowel deletion is very common in the B-U dialect.

The study also looked at the adaptation of the syllable structure of the loanwords from Lunyala, Lumarachi and Kiswahili and the finding was that a loanword with an open syllable structure can be adapted into the B-U dialect so that it ends up with a closed syllable structure so as to be accommodated into the B-U dialect of Dholuo syllable structure.

The study finally looked at morphological adaptation of loan words in Dholuo and the finding is that the B-U dialect of Dholuo rarely accommodates loanwords morphologically as the Bantu languages do, because Lunyala, Lumarachi and Kiswahili have a system for noun pluralisation different from Dholuo.

All along the study adapted the Source-Similarity model in the analysis of the adaptation strategies a loan word undergoes to be accommodated into the B-U dialect of Dholuo, which was the borrowing language in this case. This model stresses on loan word specific faithfulness constraint that impose similarity between the perceived form and the corresponding loanword form. Since the study was investigating borrowing and loanword adaptation the theory was appropriate as it was stressing on the source similarity with the corresponding form.

5.2 Relating the findings to hypothesis

Our first hypothesis is validated that there are similar phonologica, morphological and lexical items between the B-U dialect of Dholuo and the Luhya dialects of Lumarachi and Lunyala, where similar words have been identified.

The second hypothesis that there is borrowing of words from Lunyala and Lumarachi into B-U dialect of Dholuo is also validated as loanwords from the two Luhya dialects into B-U dialect of Dholuo have been identified through comparative analysis.

The last hypothesis has also been validated in that loanwords from the Luhya dialects of Lumarachi, Lunyala and Kiswahili have been accommodated into the B-U dialect of Dholuo through various adaptation strategies like consonant substitution, consonant preservation, consonant deletion, vowel substitution, vowel deletion and prosthesis.

5.3 Conclusion

This study applied the source-similarity correspondence model that stresses on the loanword specific faithfulness constraint, that impose similarity between the perceived form and the corresponding loan word form. In this study there was the task of establishing borrowed words in Boro-Ukwala dialect from Lumarachi and Lunyala using comparative analysis with the sister languages, after establishing closely similar words. The borrowed words in the B-U dialect were established.

The other task was to establish the loanword adaptation strategies a loanword from Lumarachi, Lunyala and Kiswahili undergo in order to be accommodated into the B-U dialect of Dholuo and the study established the various adaptation strategies that lead to the loanword to fit into the borrowing language.

5.4. Recommendations

The scope of this study was limited to establishing loanwords in the Boro-Ukwala dialect from the neighbouring Luhya dialects of Lumarachi and Lunyala. The study also touched on the loanword adaptation strategies in the mentioned Luhya dialects including Kiswahili. Considering the data collected for comparative analysis, there is still need for further research on language change in Dholuo and a further study could also be carried out on loanwords in the Kisumu-South Nyanza dialect from the neighbouring languages.

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APPENDICES

APPENDIX A – SAMPLE QUESTIONNAIRE

Name (optional).....

Level of Education

Please fill in the word equivalent to the following list of words in your language.

GLOSS	B-U Dialect	K-SN Dialect	
Chicken dropping	Osirgoho	Chiethgweno	
Cooking stick	Oliho	Oluthkuon	
Wall	Sis	Korot	
Fool	Rasihingwa	Raura/ming	
No	Dawe	Ooyo	
Sweat	Luya	Kuok	
Cassava	Omuogo	Mariwa	
Maize	Oduma	Bando	
Bat	Hanyinya	Oliktiga	
Dawn	Osirawende	Okinyi	
Lie	Miriasia	Miriambo	
Today	Gonyo	Kauono	
Abundant	Ohusira	Thoth	
Market	Siro	Chiro	
Elbow	Okumbo	Okumbo	
Field	Pap	Pap	
Bachelor	Msumba	Misumba	
Desire	Gombo	Gombo	
Home	Dala	Pacho	
Gate	Rangach	Rangach	
Tasteless	Ohudhalha	Ongendhadhu	
Garden	Ndalo	Puodho	
Evil eye	Shoho	Wang' marach	
Cough	Uholo	Fuolo	
Calabash	Agwata	Agwata	
Herbs	Manyas	Manyasi	
Determination	Sinan	Sinani	
Fool	Rasihingwa		
Boil ugali water	Hwarha	Pi kuon	
incite	Thuwo	Thuo	
Fracas/wrangles	Miero	Gwandruok	
Barren woman	mgumba	Migumba	
Spacious	Ohuyanga	Thuolo/Lach	

Reed	Odund	Odundu	
poison	Kwiri	Kwiri	
cob	Osungru	Ogusu	
basket	Odher	Odheru	
Space between the roof and the wall	Galambewa/genda mbewa	Yiendambewa	
Isolated homestead	Gunda	Gunda	
Taboo	Msiro	Kwer	
Floods	Ohula		
To sow	homo	Komo	
Goat/sheep hut	Duol	Abila	
Prune to begging	Rahawanya	Jawanya	
She-goat	Swini	Simi	
To instruct	Hwaro	Nyiso	
Green grams	Olayo	Ochiago	
Cowpeas seeds	Ng'or	Ng'or	
Dumb	Msir	Momo	
Grasshopper	Dede	Dede	
Small basket	Hamiero	Atonga	
Vegetable type	Mto	Mito	
Millet	Bel	Bel	
Irish Potato	Rabuon	Rabuon	
Business	Ohala	Ohala	
Group	Oganda	Oganda	
Fend	Kisuma	Kisuma	
Tsetse fly	Maugo	Maugo	
Disgust	Sino	Jogo	
Pride	Sunga	Sunga	
Potato hoe	Hasir	Hasiri	
Scales	Hagakla	Ogakla	
Born fire	magenga	Magenga	
Buttocks	Mhenye		
Stale food	Ohuhaga	Owichore	
Disabled/handicapped	Ohurema	Ongol	
Make haste	Hanambra	Rikni	
Persistent	Sinisia	Kinda	
Chameleon	Haniaf	Ongongruok	
Heartless	Ohunyira		
Immoral/overflow	Ohulala		
Filthy/dirty	Nyore/sinyor	Lil/nywandruok	
Clumsy/not alert	Ohubagabaga	Ng'eng'	
Cold	Ohudhira	ngich	
Newly wed woman	Miaha	Miaha	
Heap/ parcel of land	Sirund	Orundu	

APPENDIX B – DATA

GLOSS	B-U Dialect	K-SN Dialect	Padhola
Chicken dropping	Osirgoho	Chiethgweno	Chieth gweno
Cooking stick	Oliho	Oluthkuon	Alith Kuon
Wall	Sis(i)	Korot	Kor ot
Fool	Rasihingwa	Raura /ming	Jamingo
No	Dawe	Ooyo	Bbe
Sweat	Luya	Kuok	Kuok
Cassava	Omuogo	Mariwa	Muogo
Maize	Oduma	Bando	Duma
Bat	Hanyinya	Oliktiga	Wakafundo
Dawn	Osirawende	Okinyi	Odikinyi
Lie	Miriasia	Miriambo	Twodo
Today	Gonyo	Kauono	Konon
Abundant	Ohusira	Thoth	Thotho
Market	Siro	Chiro	Katale
Elbow	Okumbo	Okumbo	Kumbo
Field	Pap	Pap	Mbolera
Bachelor	Msumba	Misumba	Msemeli
Desire	Gombo	Gombo	Mar
Home	Dala	Pacho	Pecho
Gate	Rangach	Rangach	Wang' kach
Tasteless	Ohudhalha	both	Booth
Garden	Ndalo	Puodho	Ndelo
Evil eye	S(i)hoho	Wang' marach	Ngol piero
Cough	Uholo	Fuolo	Wolo
Calabash	Agwata	Agwata	agwata
Herbs	Manyas	Manyasi	Yien
Determination	Sinan	Sinani	kinen
Fool	Rasihingwa		
Boil ugali water	Hwarha	Pi kuon	Pi kwon
incite	Thuwo	Thuo	Thuyo
Fracas/wrangles	Miero	Gwandruok	Nyworuok
Barren woman	mgumba	Migumba	Mugumba
Spacious	Ohuyanga	Thuolo/Lach	Lach
Reed	Odund	Odundu	Midole
poison	Kwiri	Kwiri	
cob	Osungru	Ogusu	Gongoliro
basket	Odher	Odheru	Adher

Space between the roof and the wall	Galambewa/gendambewa	Yiendambewa	
Isolated homestead	Gunda	Gunda	Gunda
Taboo	Msiro	Kwer	Kwer
Floods	Ohula		Mukula
To sow	Homo /chwoyo	Komo	Chwoyo
Goat/sheep hut	Duol	Abila	Chiel
Prune to begging	Rahawanya	Jawanya	
She-goat	Swini	Simi	Min diel
To instruct	Hwaro	Nyiso	Chiko
Green grams	Olayo	Ochiago	Mbalayo
Cowpeas seeds	Ng'or	Ng'or	Ngor
Dumb	Msir	Momo	Obadha
Grasshopper	Dede	Dede	Otuong'o
Small basket	Hamiero	Atonga/adita	Adita
Vegetable type	Mto	Mito	Fufa
Millet	Bel	Bel	Kal
Irish Potato	Rabuon	Rabuon	Rabwo
Business	Ohala	Ohala	
Group	Oganda	Oganda	Lwak
Fend	Kisuma	Kisuma	Dwaro
Tsetse fly	Maugo	Maugo	Kinasese
Disgust	Sino	Jogo	Jok
Pride	Sunga	Sunga	Noroo
Potato hoe	Hasir	Hasiri	Kweri
Scales	Hagakla	Ogakla	Magambala
Born fire	magenga	Magenga	Ooi
Buttocks	Mhenye		
Stale food	Ohuhaga	Owichore	Onyiekre
Disabled/handicapped	Ohurema	Ongol	Ngol
Make haste	Hanambra	Rikni	rikni
Persistent	Sinisia	Kinda	
Chameleon	Haniaf	Ongongruok	Ngokno
Heartless	Ohunyira		
Immoral/overflow	Ohulala	Olak	Olak
Filthy/dirty	Nyore/sinyor	Lil/nywandruok	Kech
Clumsy/not alert	Ohubagabaga	Ng'eng'	
Cold	Ohudhira	ngich	Ngich
Newly wed woman	Miaha	Miaha	
Heap/ parcel of land	Sirund	Orundu	

GLOSS	B-U Dialect	K-SN Dialect	ACOLI
Chicken dropping	Osirgoho	Chiethgweno	Cet gweno
Cooking stick	Oliho	Oluth kuon	Oliwo kwon
Wall	Sis	Korot	Kor oot
Fool	Rasihingwa	Raura /ming	Lababa
No	Dawe	Ooyo	Kuu
Sweat	Luya	Kuok	Kwok
Cassava	Omuogo	Mariwa	Gwana
Maize	Oduma	Bando	Anywagi
Bat	Hanyinya	Oliktiga	Olik
Dawn	Osirawende	Okinyi	Odiko
Lie	Miriasia	Miriambo	Bwola
Today	Gonyo	Kauono	Tin
Abundant	Ohusira	Thoth	Pol
Market	Siro	Chiro	Cuk
Elbow	Okumbo	Okumbo	Otwenga
Field	Pap	Pap	Baa
Bachelor	Msumba	Misumba	Laco Mape onyone
Desire	Gombo	Gombo	Gombo
Home	Dala	Pacho	Gong
Gate	Rangach	Rangach	
Tasteless	Ohudhalha	Ongendhadhu	Bot
Garden	Ndalo	Puodho	Poto
Evil eye	Shoho	Wang' marach	Layir
Cough	Uholo	Fuolo	Aona
Calabash	Agwata	Agwata	Agwata
Herbs	Manyas	Manyasi	Yat
Determination	Sinan	Sinani	Mito
Fool	Rasihingwa		
Boil ugali water	Hwarha	Pi kuon	Pi kwon
incite	Thuwo	Thuo	Puoya
Fracas/wrangles	Miero	Gwandruok	Lava
Barren woman	mgumba	Migumba	
Spacious	Ohuyanga	Thuolo/Lach	
Reed	Odund	Odundu	Kigingi
poison	Kwiri	Kwiri	Kwir
cob	Osungru	Ogusu	Cung Anywagi
basket	Odher	Odheru	Gikabo
Space between the roof and the wall	Galambewa/gendambe wa	Yiendambewa	
Isolated homestead	Gunda	Gunda	
Taboo	Msiro	Kwer	
Floods	Ohula		Pong' paping
To sow	homo	Komo	Coyo kodi

Goat/sheep hut	Duol	Abila	Room Oot Dyel
Prune to begging	Rahawanya	Jawanya	
She-goat	Swini	Simi	Min dyel
To instruct	Hwaro	Nyiso	Miyo twero
Green grams	Olayo	Ochiago	Coroko
Cowpeas seeds	Ng'or	Ng'or	
Dumb	Msir	Momo	
Grasshopper	Dede	Dede	Otwongo
Small basket	Hamiero	Atonga	Kikapo matidi
Vegetable type	Mto	Mito	Kwai pot dek
Millet	Bel	Bel	Kau
Irish Potato	Rabuon	Rabuon	Layata
Business	Ohala	Ohala	Buacara
Group	Oganda	Oganda	
Fend	Kisuma	Kisuma	
Tsetse fly	Maugo	Maugo	Ajonga miya
Disgust	Sino	Jogo	
Pride	Sunga	Sunga	Yweka
Potato hoe	Hasir	Hasiri	Kweri
Scales	Hagakla	Ogakla	
Born fire	magenga	Magenga	Wangoo.
Buttocks	Mhenye		
Stale food	Ohuhaga	Owichore	Dakmukwok
Disabled/handicapped	Ohurema	Ongol	Lugoro
Make haste	Hanambra	Rikni	
Persistent	Sinisia	Kinda	
Chameleon	Haniaf	Ongongruok	Lagwe
Heartless	Ohunyira		Cunye tek
Immoral/overflow	Ohulala	Olak	Malaya
Filthy/dirty	Nyore/sinyor	Lil/nywandruok	Cilo
Clumsy/not alert	Ohubagabaga	Ng'eng'	Re oyupe
Cold	Ohudhira	ngich	Ngico
Newly wed woman	Miaha	Miaha	Dako mapo ginyomo
Heap/ parcel of land	Sirund	Orundu	

GLOSS	B-U Dialect	K-SN Dialect	Lango
Chicken dropping	Osirgoho	Chiethgweno	Cet gweno
Cooking stick	Oliho	Oluthkuon	Lut kwon
Wall	Sis	Korot	Apana/korot
Fool	Rasihingwa	raura	Mingo
No	Dawe	Ooyo	Pe
Sweat	Luya	Kuok	Kwok
Cassava	Omuogo	Mariwa	Mogo
Maize	Oduma	Bando	Nywagi/Duma
Bat	Hanyinya	Oliktiga	Olik
Dawn	Osirawende /odikinyi	Okinyi	Odiko
Lie	Miriasia	Miriambo	Bwolo
Today	Gonyo	Kawuono	jin
Abundant	Ohusira	Thoth	dwong
Market	Siro	Chiro	Cuk
Elbow	Okumbo	Okumbo	Otyeno
Field	Pap	Pap	Lek
Bachelor	Msumba	Misumba	Oulo
Desire	Gombo	Gombo	Maro
Home	Dala	Pacho	Paco
Gate	Rangach	Rangach	Dok cat
Tasteless	Ohudhalha	Ongendhadhu	Pe mit
Garden	Ndalo	Puodho	Poto
Evil eye	S(i)hoho	Wang' marach	Wange rac
Cough	Uholo	Fuolo	Aola
Calabash	Agwata	Agwata	Gwata
Herbs	Manyas	Manyasi	Yen
Determination	Sinan	Sinani	Twero
Fool	Rasihingwa	Raura/ming'	Dano aming
Boil ugali water	Hwarha	Pi kuon	Ten pii kwon
incite	Thuwo	Thuo	Cupo
Fracas/wrangles	Miero	Gwandruok	Nyangawac
Barren woman	mgumba	Migumba	Dako ape nywal
Spacious	Ohuyanga	Thuolo/Lach	Lac
Reed	Odund	Odundu	Obaya/Alado
poison	Kwiri	Kwiri	Kwiri
cob	Osungru	Ogusu	Alem (Nywaga)
basket	Odher	Odheru	Odero
Space between the roof and the	Galambewa/gendamb	Yiendambewa	Leewic

wall	ewa		
Isolated homestead	Gunda	Gunda	Wiiebur
Taboo	Msiro	Kwer	Kwer
Floods	Ohula		Kan pii opong'
To sow	homo	Komo	Pito
Goat/sheep hut	Duol	Abila	(Dyel/Romo)
Prune to begging	Rahawanya	Jawanya	Akwacata
She-goat	Swini	Simi	Min dyel
To instruct	Hwaro	Nyiso	Miyo cik
Green grams	Olayo	Ochiago	Coroko
Cowpeas seeds	Ng'or	Ng'or	Lapena
Dumb	Msir	Momo	Lebe otoo.
Grasshopper	Dede	Dede	Otwomo
Small basket	Hamiero	Atonga	Adita
Vegetable type	Mto	Mito	Pot dek
Millet	Bel	Bel	Kal
Irish Potato	Rabuon	Rabuon	iCok/Rabwa
Business	Ohala	Ohala	Bie acara
Group	Oganda	Oganda	Jo onote kaal
Fend	Kisuma	Kisuma	Leja lega
Tsetse fly	Maugo	Maugo	Omche
Disgust	Sino	Jogo	Pe amito
Pride	Sunga	Sunga	Awaka
Potato hoe	Hasir	Hasiri	Kweri
Scales	Hagakla	Ogakla	Pokrec
Born fire	magenga	Magenga	Gadi
Buttocks	Mhenye		
Stale food	Ohuhaga	Owichore	Dek okwok
Disabled/handicapped	Ohurema	Ongol	Angwalo
Make haste	Hanambra	Rikni	Bunyo
Persistent	Sinisia	Kinda	Jem
Chameleon	Haniaf	Ongongruok	Agogo
Heartless	Ohunyira		Cuny arac
Immoral/overflow	Ohulala		Alaya
Filthy/dirty	Nyore/sinyor	Lil/nywandruok	Col (Rac)
Clumsy/not alert	Ohubagabaga	Ng'eng'	Re engeo
Cold	Ohudhira	ngich	Ngic
Newly wed woman	Miaha	Miaha	Dako otwogit
Heap/ parcel of land	Sirund	Orundu	

GLOSS	DHOLUO	LUNYALA	LUMARACHI
Chicken dropping	Osirgoho	Amasilikhokho	Masirikodio
Cooking stick	Oliho	Omwikho	Mwikho
Wall	Sis	Risisi	Isisi
Fool	Rasihingwa	Esihingwa	Wesiingwa
No	Dawe	Tame	Dawe
Sweat	Luya	Oluya	Luuya
Cassava	Omuogo	Omuogo	Muoko
Maize	Oduma	Amadimwa	Madimwa
Bat	Hanyinya	Linyinyi	Liinyinya
Dawn	Osirawende	Mahererende	Maheberende
Deceitful	Miriasia	Obubacha	Bubacha
Today	Gonyo	Lelo	Nyangaino
Abundant	Ohusira	Obungi	Bisabi
Market	Siro	Esiro	Siro
Elbow	Okumbo	Ekhumbo	iKhumbo
Field	Pap	Omukunda	Siguri
Bachelor	Msumba	Omusumba	Musumba
Desire	Gombo	Elienya	Khwekomba
Home	Dala	Lidala	Mudala
Gate	Rangach	Omwingiro	Sirivwa
Tasteless	Ohudhalha	Sianyalala	Bichalalire
Garden	Ndalo	Indalo	Indalo
Evil eye	Shoho	Esihoho	Sikhokho
Cough	Uholo	Ukhulola	Ihololo
Calabash	Agwata	Sikwada	Sikwada
Herbs	Manyas	Amanyasi	Manyasi
Determination	Sinan	Okhwesimirisia	Sinani
Fool	Rasihingwa		
Boil ugali water	Hwarha	Khawalekha	Khwalikha
incite	Thuwo	Ochubwia	Tsubia
Fracas/wrangles	Miero	Esiera	Miero/burasi
Barren woman	mgumba	Mukumba	Mukumba
Spacious	Ohuyanga	Bweyango	Buyango
Reed	Odund	Elikada	Liduru
poison	Kwiri	Sumu	Isumu
cob	Osungru	Sifundudu	Sisokoro
basket	Odher	Omukhinda	Sikapu
Space between the roof and the wall	Galambewa/g endambewa	Kendambewa	Madekei
Isolated homestead	Gunda	Likunda	Likunda
Taboo	Msiro	Msiro	Musiro
Floods	Ohula	Omukula	Muhula

To sow	homo	Okhoma	Khoma
Goat/sheep hut	Duol	sidwoli	Siduoli
Prune to begging	Rahawanya	Omusabisabi	
She-goat	Swini		Lidwasi
To instruct	Hwaro	okusubiswa	Khwana makevo
Green grams	Olayo		Olayo
Cowpeas seeds	Ng'or	Ching'ori	Tsingoli
Dumb	Msir		Mudimbe
Locust	Dede	Lidede	lidede
Small basket	Hamiero	simweru	Simwero
Vegetable type	Mto	limuto	Miro
Millet	Bel	Maberi	Mabere
IrishPotato	Rabuon	Elibuoni	Mabwoni
Business	Ohala	Omukhala	Bukhala
Group	Oganda	Omukanda	Siam
Fend	Kisuma		
Tsetse fly	Maugo	Esikenyi	Libukobuko
Disgust	Sino	Okhusinya	Khusinyika
Pride	Sunga	Isunga	Isunga
Potato hoe	Hasir		
Scales	Hagakla	Elikamba	Makamba
Born fire	Magenga	Amakenga	Makenga
Buttocks	Mhenye		
Stale food	Otuhaga	Esisasia	Bikhakha
Disabled/handicapped	Ohurema	Omulema	Mulema
Make haste	Hanambra	Okhwalalakho	Khola lwangu
Persistent	Sinisia	Esinani	Sinani
Chameleon	Haniaf	Elikhaniafu	Lihaniafu
Heartless	Ohunyira		
Immoral/overflow	Ohulala	Omudamba	
Filthy/dirty	Nyore/sinyor	Omuchafu	Buchafu
Clumsy/not alert	Ohubagabaga	Omun'ang'afu	Mung'ang'afu
Cold	Ohudhira		Nyifu
Newly wed woman	Miaha	omweya	mweya
Heap/ parcel of land	Sirund		

GLOSS	B-U Dialect	K-SN Dialect	Samia
Chicken dropping	Osirgoho	Chiethgweno	Amasirikotio
Cooking stick	Oliho	Oluthkuon	Omwikho
Wall	Sis	Korot	Esida
Fool	Rasihingwa		
No	Dawe	Ooyo	Khaba
Sweat	Luya	Kuok	Oluya
Cassava	Omuogo	Mariwa	Omuogo
Maize	Oduma	Bando	Edimwa
Bat	Hanyinya	Oliktiga	Embudombudo
Dawn	Osirawende	Okinyi	Maheberende
Lie	Miriasia	Miriambo	Obacha
Today	Gonyo	Kauono	Lwarero
Abundant	Ohusira	Thoth	Esaabi
Market	Siro	Chiro	Esiito
Elbow	Okumbo	Okumbo	
Field	Pap	Pap	Esikuro
Bachelor	Msumba	Misumba	Omusumba
Desire	Gombo	Gombo	Ohwenya
Home	Dala	Pacho	Edaala
Gate	Rangach	Rangach	Esirwa
Tasteless	Ohudhalha	Ongendhadhu	Ochalala
Garden	Ndalo	Puodho	Endalo
Evil eye	Shoho	Wang' marach	Esikhokho
Cough	Uholo	Fuolo	Ehololo
Calabash	Agwata	Agwata	Esikwada
Herbs	Manyas	Manyasi	Amanyasi
Determination	Sinan	Sinani	Esinani
Fool	Rasihingwa		Omusiru
Boil ugali water	Hwarha	Pi kuon	Ohwarihao
incite	Thuwo	Thuo	Ochubya
Fracas/wrangles	Miero	Gwandruok	Emiero
Barren woman	mgumba	Migumba	Omukumba
Spacious	Ohuyanga	Thuolo/Lach	Obweyango
Reed	Odund	Odundu	Edutu
poison	Kwiri	Kwiri	Obutwa
cob	Osungru	Ogusu	Esidunduya
basket	Odher	Odheru	
Space between the roof and the wall	Galambewa/gendambewa	Yiendambewa	Endekei
Isolated homestead	Gunda	Gunda	Endekei
Taboo	Msiro	Kwer	Ekuunda
Floods	Ohula		Omusiro
To sow	homo	Komo	Otaaka

Goat/sheep hut	Duol	Abila	Esiduori
Prune to begging	Rahawanya	Jawanya	Owe siwonya
She-goat	Swini	Simi	Edwasi
To instruct	Hwaro	Nyiso	
Green grams	Olayo	Ochiago	Olayo
Cowpeas seeds	Ng'or	Ng'or	Engori
Dumb	Msir	Momo	Omudimbe
Grasshopper	Dede	Dede	Edede
Small basket	Hamiero	Atonga	Esimwero
Vegetable type	Mto	Mito	Omuto
Millet	Bel	Bel	Amabere
Irish Potato	Rabuon	Rabuon	Amabuoni
Business	Ohala	Ohala	Enganga
Group	Oganda	Oganda	
Fend	Kisuma	Kisuma	
Tsetse fly	Maugo	Maugo	Amabuko
Disgust	Sino	Jogo	Osinyiha
Pride	Sunga	Sunga	Esuunga
Potato hoe	Hasir	Hasiri	
Scales	Hagakla	Ogakla	Amakaamba
Born fire	magenga	Magenga	Amakeenga
Buttocks	Mhenye		
Stale food	Ohuhaga	Owichore	Ebihaka
Disabled/handicapped	Ohurema	Ongol	Omurema
Make haste	Hanambra	Rikni	Yalala
Persistent	Sinisia	Kinda	
Chameleon	Haniaf	Ongongruok	Ehaniafu
Heartless	Ohunyira		
Immoral/overflow	Ohulala		
Filthy/dirty	Nyore/sinyor	Lil/nywandruok	Obuchafu
Clumsy/not alert	Ohubagabaga	Ng'eng'	Omung'ang'afu
Cold	Ohudhira	ngich	Enyifu
Newly wed woman	Miaha	Miaha	Omweya
Heap/ parcel of land	Sirund	Orundu	

GLOSS	Wanga	Logooli
Chicken dropping	amafumala	madome
Cooking stick	omwikho	mmbango
Wall	lisisi	lidiji
Fool	omusiru	musiru
No	tawe	dave
Sweat	oluya	ruya
Cassava	omwoko	mwogo
Maize	amatuma	liduma
Bat	linyinya	linyinya
Dawn	akoloba	mavwevwe
Lie	obubeyi	koveha
Today	nyangaino	kalanu
Abundant	obunji	vunyingi
Market	eshiro	ichitu
Elbow	ikhumbo	inguku
Field	eshikuri	kiguti
Bachelor	omusumba	umusumba
Desire	okhwenya	iyenya
Home	ingo	yengo
Gate	eshiribwa	kilivwa
Evil eye	Imoni imbii	zimonizimbi
Cough	okhukholola	kokolola
Calabash	eshimuka	kimuga
Herbs	amanyasi	madamiku
Determination	okhwitinyia	uvuha
Boil ugali water	Tekha matsi ko obusuma	yalika
Incite	okhutsuba	kosomeliza
Fracas/wrangles	lile	kivihiri
Barren woman	omukumba	umugumba
Spacious	eshilayi	nuvwiyangu
Reed	indiba	likindu
Poison	isumu	isumu
Cob	eshisokoro	ekesogote
Basket	eshikapo	kihinda
Space between the roof and the wall	Mwalobero/imugu	ligama
Isolated homestead	likunda	ziang'anganywa
Taboo	omusiro	mima
Floods	omukhula	imigella
To sow	okhuraka	kutaga
Goat/sheep hut	shiko	ekogo
Prune to begging	umusabi	musavasi
She-goat	isueni	esueni
To instruct	okhwechesia	Kuhana malago

Green grams	Thsindengu	umubochi
Cowpeas seeds	Thsimbindi	zimbiudi
Dumb	omusiru	idimbidi
Grasshopper	litalala	ridagala
Small basket	Eshilubi	inavonda
Vegetable type	tsifwa	izunguza
Millet	Amavere	onoroo
Irish potato	Amapuoni keshisungu	libwoni
Business	obukhala	uyakara/wasara
Group	lisanjira	umuganda
Feud		uvusigu
Tsetse fly		ligugu
Disgust	okhusinyakha	kusinya
Pride	obwiloli	kwelolo
Potato hoe	Imbako ya mapuoni	ekero
Fish/scale	Inyeni/iratili	
Born fire	omuliro	ichotero
Buttocks	amatakho	madako
Stale food	shikhuliaslivolo	kufunya
Disabled/handicapped	omulema	umulema
Make haste	Okhukhola bwangu	kusuushakana
Persistent	Okhwenya poo	kwiranira
Chameleon	inyambu	inyambu
heartless	omubii	
Immoral/overflow	Emima emibii/okhusundukha	mwimambii
Filthy/dirty	obuchafu	hagundu
Clumsy/not alert	okhurangala	mugoyagoya
cold	omunyiri	kizilu
Newly wed woman	omwiya	umwihi
Heap/parcel of land	omukunda	ekedonye

APPENDIX C - SAMPLE QUESTIONNAIRE

Name (optional).....

Level of Education

Please fill in the word equivalent to the following list of words in your language.

	Kiswahili words	B-U dialect
1	dirisha	
2	jumapili	
3	kijiko	
4	kikombe	
5	mabati	
6	mbao	
7	farasi	
8	bendera	
9	sufuria	
10	sindano	
11	mpira	
12	ngazi	
13	pakiti	
14	sanduku	
15	sahani	
16	serikali	
17	simu	
18	kikapu	
19	mkebe	
20	meza	
21	bahasha	
22	bakuli	
23	birika	

24	gazeti	
25	kabati	
26	firimbi	
27	kalamu	
28	kibeti	
29	kitanda	
30	kiberiti	
31	makasi	
32	karatasi	
33	kinyozi	
34	msumari	
35	kitambaa	
36	pilipili	
37	mchele	
38	pasi	
39	mkeka	
40	kitunguu	
41	chumvi	
42	taa	
43	askari	
44	mandazi	
45	chapati	
46	kusoma	
47	sing'enge	
48	panga	
49	mshipi	
50	shuka	

APPENDIX D - DATA

	Kiswahili words	B-U dialect
1	dirisha	drisa
2	jumapili	jumapil
3	kijiko	ojiko
4	kikombe	okombe
5	mabati	mabat
6	mbao	bao
7	farasi	faras
8	bendera	bandera
9	sufuria	hofuria
10	sindano	sindan
11	mpira	opira
12	ngazi	ngas
13	pakiti	paket
14	sanduku	sanduk
15	sahani	san
16	serikali	sirkal
17	simu	sim
18	kikapu	okap
19	mkebe	okebe
20	meza	mesa
21	bahasha	bahasa
22	bakuli	bakul
23	birika	brika
24	gazeti	gazet
25	kabati	kabat
26	firimbi	frimb
27	kalamu	kalam

28	kibeti	kibet
29	kitanda	otanda
30	kiberiti	kibrit
31	makasi	makas
32	karatasi	otas / kalatas
33	kinyozi	onyos/kinyos
34	msumari	msumal
35	kitambaa	otamba
36	pilipili	pilpil
37	mchele	ochele
38	pasi	pas
39	mkeka	okeka
40	kitunguu	ofungu
41	chumvi	chumb(i)
42	taa	taya
43	askari	askar
44	mandazi	mandas
45	chapati	chapat
46	kusoma	somo
47	sing'enge	ong'enge
48	panga	opanga
49	mshipi	msip
50	shuka	suka