

**MORPHO-PHONOLOGICAL ADAPTATION OF VERB BORROWINGS  
FROM ENGLISH ON THE VITALITY OF LUKABRAS LANGUAGE**

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**A Thesis Submitted to the School of Arts and Social Sciences in Partial Fulfilment  
of the Requirements for the Award of the Degree of Masters of Arts in Applied  
Linguistics of Masinde Muliro University of Science and Technology**

**July, 2025**

## DECLARATION

This thesis is my original work prepared with no other than the indicated sources and support and has not been presented elsewhere for a degree or any other award.

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## CERTIFICATION

The undersigned certify that they have read and recommend for acceptance of Masinde Muliro University of Science and Technology a thesis entitled '*A morpho-phonology and linguistic vitality of Lukabras loan verbs from English*'.

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## **DEDICATION**

I dedicate this work to my mother, Sevenzia Muhanda, who motivated me to pursue further education.

## ACKNOWLEDGEMENTS

I thank the Almighty God for the good health which has enabled me to carry out my study. I also appreciate my supervisors Dr. Lucy K. L. Mandillah of the Department of Language and Literature Education, Masinde University of Science and Technology and Dr. Ben Nyongesa of the Department of English, Literature, Journalism and Mass Communication, Kibabii University for their great guidance and support.

I owe my gratitude also to all my course lecturers Dr. Mandillah, Dr. Barasa, Dr. Atichi, Dr. Mudogo, Mr. Omondi, Dr. Nyongesa and Mr. Oduma for making this long journey a success. My gratitude also goes to Alloys Moebe who guided and encourage me in carrying out my research.

I sincerely appreciate my family. My mother Sevensia Mudogo has been very instrumental in cheering me on and supporting me morally. My husband Elphas Milimo has also been a great inspiration. It is your never giving up attitude that has always inspired and driven me to overcome many challenge Your financial support has been overwhelming. To my daughters, Esther, Syblina, Anne, Natasha and Natalia and son Liam I thank you for your encouragement by eagerly waiting for my graduation.

## ABSTRACT

Loan adaptation in language contact situations occurs when a language borrows words or expressions from another language and modifies them to fit the phonological, morphological, or syntactic norms of the borrowing language. The adapted forms might affect the vitality of the receiving language. In this perspective, this study focused on the morphophonological adaptation of Lukabras verbs borrowed from English language and sought to establish the effects of these borrowed verbs on the vitality of Lukabras language. The specific objectives of the study were; to examine the morphophonological processes involved in the adaptation of Lukabras loan verbs from English language, to establish the morphophonological constraints that govern the adaptation of Lukabras loan verbs from English language and to establish the effects of English language loan verbs on Lukabras linguistic vitality. The study was informed by the Optimality Theory by Prince and Smolensky and Ethnolinguistic Vitality Theory. Optimality Theory was used to analyse the morphophonological processes and constraints involved in the adaptation of Lukabras loan verbs while the Ethnolinguistic Vitality Theory accounted for the vitality of Lukabras language during borrowing. Ethnolinguistic vitality theory provided the tenets that were used to measure the vitality of Lukabras language. The study adopted a descriptive research design with qualitative research approach focusing on Lukabras borrowed verbs from English. The verbs were derived from native speakers located in Kakamega North Sub-County. Kakamega North Sub- County is multilingual where people speak Lukabras, English and Kiswahili languages. The study employed purposive sampling procedure to arrive at fourteen (14) Lukabras native speakers as respondents and 150 borrowed verbs as the units of analysis. Through systematic sampling, 50 lexical items were picked from the 150 borrowed verbs for analysis. Focus Group Discussions, and In-depth interviews were used to collect data. Content analysis also used to describe the data by identifying themes that emerged from the findings. The study established that Lukabras and English morpho-phonology differ and the borrowed English loan verbs are morphologically adapted in Lukabras through morpho-phonological processes such as prefixation, suffixation, vowel epenthesis, deletion, reduction, consonant devoicing, substitution and deletion. The study also revealed that the morphophonological constraints that governed the nativization of the English loan verbs in Lukabras are; COMPLEX, NOCODA, MAX IO, ONSET, DEP IO, IDENT IO, ALGHN (left edge) and PEAK. The loan verbs from English had also added to Lukabras vocabulary thus increasing its vitality. It is hoped that the findings of this study will contribute to the existing literature on Bantu languages in relation to borrowing.

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## LIST OF ABBREVIATIONS AND ACRONYMS

|             |                                 |
|-------------|---------------------------------|
| <b>*</b>    | Violation                       |
| <b>C</b>    | Consonant                       |
| <b>CV</b>   | Consonant Vowel                 |
| <b>EVT</b>  | Ethnolinguistic Vitality Theory |
| <b>FGDs</b> | Focus Group Discussions         |
| <b>GEN</b>  | Generator                       |
| <b>IO</b>   | Input-Output mapping            |
| <b>OT</b>   | Optimality Theory               |
| <b>V</b>    | Vowel                           |

## OPERATIONAL DEFINITION OF TERMS

**Constraint** - A structural requirement that may either be satisfied or violated when Lukabras borrow verbs from English language.

**Evaluator** - This is a function is used to evaluate all the possible candidates supplied by the generator and select the optimal output in the process of borrowing of Lukabras verbs from English.

**Faithfulness** - It is the relationship between the surface forms and their lexical representations.

**Generator** - It is the function that is responsible for free generation of potential output forms that is subject only to very general universal well-formedness constraints.

**Lukabras** - Language spoken by the Kabararas and a member of the macro language Luhya.

**Nativization** - Phonological modification of loan verbs from English into Lukabras

**Syllable** - It is the smallest unit of speech in Lukabras and English language.

**DEP IO**-A universal constraint which requires that each segment in the output has a corresponding form in the input.

**Markedness**-It entails that all types of linguistic structures consist of unmarked and marked values. Unmarked values are cross linguistically preferred and are basic to all grammars while marked values are cross-linguistically avoided and are used by grammars only to create contrast.

**MAX IO**-It is a universal faithfulness constraint that requires that each segment in the input (I) has a corresponding segment in the output form (O). That is, the input is 'maximally 'represented in the output. It does not allow deletion of segments.

**IDENT (F)**-It is a universal constraint that requires that every feature (F) in the input sequence is identical to every feature in the output segment.

**OPTIMAL FORM**; It is candidate that is better on a hierarchy of constraints, the one that survives after all the filtering of competing candidates.

## CHAPTER ONE

### BACKGROUND TO THE STUDY

#### 1.1 Introduction

This chapter focuses on the background information in the context of the study objectives, the statement of the problem, the purpose of the study followed by the research objectives. The chapter also outlines the research questions, discusses the significance of the study, examines the scope and limitations of the study.

#### 1.2 Background to the Study

The Kenyan linguistic landscape just like other African countries is characterized by a rich diversity of languages, with over 100 ethnic groups with over 70 languages spoken across the country. (Ethnologue,2024). One of these languages is Lukabras, a language spoken in the Northern part of Kakamega County. Marlo (2006) states that Lukabras is one of the Luhya groups of speakers of the Western part of Kenya. Luhya is an umbrella term for the nineteen language groups of Western Kenya with varying degree of mutual intelligibility. Marlo (2011) adds that Luhya language is made up of a minimum of nineteen dialects. They are; *Lubukusu, Luwanga, Lunyore, Lutura, Luloogoli, Lutirichi, Lwisukha, Lutachoni, Lutsotso, Lwitakho, Lumarama Lukabarasi, Lukhayo, Lushisa, Lumarachi, Lusamia, Lunyala East and Lunyala West.*

The linguistic controversy surrounding whether to describe the nineteen Luhya groups of speakers as languages or dialects has been a topic of study several research studies have delved into similar linguistic controversies in various regions, shedding light on the complexities of defining languages and dialects within diverse linguistic landscapes. One such study is Lewis et al. (2009) who has reclassified Luhya as a macro-language promoting the various dialects to the status of languages. The reclassification is based on the view that there is no standard. Luhya language, but

rather each Luhya speaker speaks one of its variants. Mandillah, (2016) holds the same view that Olutachoni is a language rather than a dialect of the Luhya since Tachoni speakers speak their own distinct variety. Lukabras is therefore a language based on the linguistic diversity and unique characteristics that it exhibits.

Language contact is a ubiquitous phenomenon that has been extensively studied in linguistics. It refers to the situation where speakers of different languages interact and influences each other's language use (Weinreich,1977). One of the outcomes of language contact is language convergence, where features from one language are incorporated into manifestation of language convergence and they can provide valuable insights into the dynamics of language contact and change.

The concept of linguistic vitality is also relevant to the study. Linguistic vitality refers to the capacity of a language to survive and thrive in a multilingual setting ((Giles & Taylor, 1977). It is influenced by a range of factors, including the number of speakers, the language's official status, and its use in various domains. The analysis of linguistic vitality is essential for understanding the dynamics of language contact and long-term viability of minority languages like Lukabras. Lukabras language is spoken by approximately 205,166 people (KBS, 2019) in the North part of Kakamega County. It is an indigenous language that has been in contact with English, the official language of Kenya, for several decades. English was introduced to Kenya during the colonial period and has since become the language of government, education and commerce.

The morpho-phonological structure of loan verbs is a critical aspect of language contact studies. The analysis of loan verbs in Lukabras will involve a detailed examination of their phonological and morphological properties. Phonologically, loan verbs in Lukabras may undergo changes to conform to the sound system of the

language. For example, English words may be adapted to fit the Lukabras phonological pattern, which may involve change in pronunciation or addition of Lukabras phonemes.

According to Owino (2003) the majority of English language speakers are second language speakers who acquire the language through the educative system. Being an official language, Constitution of Kenya (2010), English is used as a medium of communication in areas such as administration, courts, the media and learning Institutions. English language is therefore dominant over Lukabras making it the donor language. According to Winford (2010), the main reasons for borrowing are need and prestige and that the direction of borrowing goes from the dominant language to the socially subordinate one.

Speakers of a language tend to transfer some linguistic features such as lexical, morphological and syntactic across languages (Trudgil, 2003). According to Hall-lew, Mavoungou (2005), Speakers may borrow from other languages in an attempt to deal with new concepts, technology and products, because languages are dynamic. The current study thus focused on the morphophonological adaptation of Lukabras loan verbs borrowed from English and their linguistic vitality on Lukabras language.

According to Ochilo (2018), when two languages get into contact, the speakers of such languages influence each other in one linguistic aspect or another. Ochilo further argues that borrowing is a process by which one language takes words from another language and makes it part of its vocabulary. In this view Lukabras and English have in contact thus influence each other in terms of borrowing.

When words are borrowed, they are modified to fit in the recipient language structure since languages have different structures. Bender ((2000) notes that loanwords are

modified to fit in the structure of the borrowing language and every speaker has the tacit knowledge to form an infinite number of words in their language. Rose and Demuth (2006) define loanword adaptation as the process in which a lexical form is adapted from a source(donor)language and integrated into the target borrowing(recipient)language performed by a borrower. Sankoff (2001) on the other hand observes that borrowed items in the borrowing language may be altered such that there are alterations and changes in the morphology of these words.

Loanwords are adjusted to reconcile to the receiving language's phonological and morphological systems. The systems give a stage where the phonotactics and morphotactics of the receiving language can be explored because phonologies and morphologies of languages differ (Mose,2020) The adaptation of loanwords differs because languages position constraints differently when they form syllables, (Fossi, 2012). According to Katamba (2003), the syllable is the heart of phonological representations, forming a unit upon which phonological systems are organized. For instance, Roach (2009) argue that English has a very complicated syllable structure which allows up to three consonants at the onset and four consonants at the coda. The syllable therefore, depending on what is acceptable or not, decides the phonotactics of languages and also result in different phonological procedures especially if the languages concerned do not have the same syllabic structures. This will be applicable to English language and Lukabras which are the languages under focus in the present study.

In Bantu languages, inflection is in nouns and verbs. Nurse (2008) posits that Bantu languages are 'verby, 'therefore express verbal inflections. Lukabras is one of the Bantu languages. This provided a basis on the present study as it focused on the inflections on verbs borrowed by Lukabras from English.

Words are assimilated in the borrowing language when they are borrowed (Katamba 1997). According to Katamba, assimilation occurs in order to make a sound more like one of its neighboring sounds. He further points out that assimilation is done to make the sound become smoother and more effortless flow from one sound to another. Smeaton (1973), on the other hand notes that the morphological structure of a loanword is adjusted in order to harmonise it with the predominant pattern and root systems of the receiving languages. The study thus looked at how phonemes of borrowed Lukabras verbs from English change to get assimilated into the Lukabras sound system.

Morphophonemics according to Ramlan (2001) refers to the changes of phonemes as a result of the merging of one morpheme and another. Morphophonemic process is employed in borrowing as loan verbs are modified to fit the morphological structure of the borrowing language. Crowley (1989) puts morphophonemic processes as follows; lenition, sound addition, metathesis, fusion, unpacking, vowel breaking, assimilation and dissimilation. The study focused on the morpho-phonological processes involved when loan verbs from English adapt in Lukabras language.

According to Prince & Smolensky (2004), languages have different phonologies and that are guided by universal constraints. These constraints account for the difference in the morphonology and phonology of languages. Lukabras and English have different morphological and phonological structures because they are guided by different phonotactic constraints. The study therefore examined both the morphological and phonological constraints the borrowed verbs from English undergo as they adapt in Lukabras language.

Borrowing between two languages may have effects on the recipient language. Thomas and Kaufman as cited in Meyers-Scotton (2002), three features about borrowing that

imply the process where speakers who borrow elements will maintain their L1, the extend of borrowing and that borrowing includes structural borrowing that is, incursions into the phonology, morphology or syntax of the recipient language. This implies that if speakers maintain their L1, the language's vitality is maintained. UNESCO (2003) identified six major factors affecting language vitality. These factors were; intergenerational language transmission, absolute number of speakers within the total population, proportion of speakers within the total population, loss of existing language domains, response to new domains and media and material for language education literacy. The study focused on the effects of borrowed verbs from English into Lukabras.

### **1.3 Statement of the Problem**

There is language contact in multilingual settings which results to borrowing between the interacting languages. Lukabras is one of the indigenous languages in Kenya and has come in contact with English language which is Kenya's official language making it possible for Lukabras to borrow words from English and vice versa. Languages have different phonological and morphological structures resulting into the borrowed words adapting to the recipient language's structure. The present study therefore investigated the morpho-phonological processes and constraints which verbs borrowed from English undergo when adapting into Lukabras. Consequently, there was also need to establish the effects of these loan verbs on the vitality of Lukabras language.

### **1.4 Purpose of the Study**

This study aimed at investigating how loan verbs borrowed from English into Lukabras underwent morpho-phonological adaptations. The study also assessed the linguistic vitality of these loan verbs within the Lukabras language, shedding light on the dynamics of language contact and change in a minority language context.

### **1.5 Objectives of the Study**

The study was guided by the following objectives;

- i. To examine the morphophonological processes involved in the adaptation of Lukabras loan verbs from English.
- ii. To establish the morphophonological constraints that govern the adaptation of Lukabras loan verbs from English.
- iii. To establish the effects of loan adaptation of verbs borrowed from English to the linguistic vitality of Lukabras language.

### **1.6 Research Questions**

The study sought to answers the following questions;

- i. What are the morphophonological processes involved in the nativization of Lukabras loan verbs from English?
- ii. What are the morphophonological constraints that govern the nativization of Lukabras loan verbs from English?
- iii. What are the effects of morpho-phonologically adapted English loan verbs on the vitality of Lukabras language?

### **1.7 Significance of the Study**

This study provides insights into the dynamics of language contact. The analysis of the morpho-phonological structure and linguistic vitality of Lukabras loan verbs derived from English will contribute to our understanding of language convergence and language maintenance in multilingual settings.

This research holds significance in contributing to the understanding of language contact phenomena and the dynamics of loanword integration. By examining the

morpho-phonological structure and linguistic vitality of Lukabras loan verbs derived from English. The findings of this study are beneficial to who are scholars keen on language contact outcomes in Kenya indigenous languages.

This study focused on Lukabras. Nash (2017) asserts that out of the estimated 650 known varieties of Bantu languages, approximately 10% have adequate grammatical descriptions. Existing literature indicate that are studies that have been documented in Lukabras, they included; Phonological adaptations of Lukabras borrowed nouns (Mukulo, 2016). Lexical borrowing involving Lukabras and Nandi (Sasala,2020) and Translation (Mudogo, 2018). The present study will add to the available existing linguistic literature on indigenous languages.

### **1.8 Scope of the Study**

This study specifically concentrated on Lukabras loan verbs derived from English excluding loanwords from other languages. By narrowing the scope to loan verbs from English, the study maintained a clear and focused research direction, allowing for in-depth analysis of a specific linguistic phenomenon. In addition, by limiting the study to English loan verbs enables a more direct comparison between the morpho-phonological structures and linguistic vitality of these loan verbs in Lukabras and their counterparts in English, facilitating a more detailed analysis of the borrowing process. In addition, English loan verbs may have a significant impact on the Lukabras language due to historical, cultural, or sociopolitical reasons. Focusing on English loan verbs allows for a more nuanced understanding of how these borrowings have influenced the Lukabras language system.

The study is morphophonological embedded with aspects of sociolinguistics. It is designed to analyse the morphophonological adaptations of borrowed verbs in Lukabras from English and to establish the effects of the borrowings to Lukabras language. Other linguistic levels like syntax, pragmatics and semantics were not investigated. The study was also limited to borrowing in the aspect of adaptation and not adoption because the borrowed words are modified to fit in Lukabras language structure. Other sociolinguistic aspects such as code-switching and code-mixing were not dealt with since the study targeted all Lukabras native speakers and not bilinguals only. Coining was not also addressed as the study was not investigating the creation of new words. Kakamega County comprises of speakers different Luhya languages like Lwisukha, Luloogoli and Lunyala. However, Kakamega North Sub-County was chosen because it is inhabited by Lukabras native speakers. Variations in the adoption and adaptation of loan verbs in different Lukabras-speaking regions will not be extensively covered to maintain coherence and relevance to the chosen linguistic context.

Optimality Theory was used to account for the phonological and morphological processes and constraints involved during the adaptation of English loan verbs into Lukabras while Ethnolinguistic Vitality Theory was appropriate to account for the effects of the borrowed verbs from English to Lukabras language. The study also limited itself to verbs which are content words as the units of analysis. Meyers-Scotton (2002) posits that nouns and verbs are the most borrowed category. According to Meyers-Scotton (2006), verbs are often more morphologically complex than nouns and adjectives, with features like conjugation, tense, aspect, and mood. Analysing loan verbs allows for a deeper exploration of how Lukabras integrates and adapts these complex morphological features from English. Focusing on loan verbs enables

a more detailed examination of how Lukabras adapts the phonology of English verbs to fit its own phonological system. Meyers-Scotton (2006) further notes that verbs are often more productive and creative in language use, with speakers frequently using verb forms to convey nuanced meanings and create new expressions. Analyzing loan verbs therefore, provides insight into how Lukabras speakers use and adapt English verbs to express new ideas and concepts.

In terms of language focus, this research specifically concentrated on Lukabras loan verbs originating from the English language. While other loan verbs from different languages such as Kiswahili exist in Lukabras, this study maintained a narrow focus on those derived from English language to ensure depth and specificity in the analysis.

In methodological approach this research employed a qualitative research approach, focusing on in-depth analyses of selected Lukabras loan verbs. Quantitative data on the frequency of usage or distribution of these loan verbs may not be extensively explored, aligning with the qualitative nature of the research design.

The study was also limited to purposive sampling technique to allow the researcher to select participants based on specific criteria relevant to the research objectives. In the context of analyzing loan verbs in Lukabras, researcher targeted native speakers or individuals with expertise in Lukabras to provide valuable insights into the adaptation of loan verbs. In addition, this technique enables the researcher to gather in-depth and specialized information on the morpho-phonological structure and linguistic vitality of loan verbs. This targeted approach ensures that the data collected is relevant and insightful. On the other hand, systematic sampling allows researchers to make the most of their resources by selecting a representative sample from the population. This is particularly important when studying a specific dialect like Lukabras where resources may be limited (Lwangale, D & Nyongesa, S, (2020). Systematic sampling according

to Lwangale and Nyongesa further ensures that the sample is representative of the population, which is crucial in linguistic studies where the goal is to generalize findings to the entire language or dialect. By selecting every ninth element from the population, researchers can be confident that their sample reflects the characteristics of the population.

### **1.9 Limitations of the Study**

The researcher experienced the challenge of limited sources. Thus, by studying a lesser-known language like Lukabras presented challenges in terms of available resources such as dictionaries, grammar books and linguistic corpora. In order to overcome this challenge, the researcher collaborated with native speakers of Lukabras to gain access to data on loan verbs.

Lack of funding was another challenge. Insufficient funding limited the scope and depth of language analysis studies, mainly in terms of data collection, analysis and publication. The researcher overcame this challenge by sourcing for soft loans from table banking organizations and financial aid from friends.

### **1.10 Chapter Summary**

The chapter introduced the background of the study by briefly explaining the about the languages in contact (Lukabras and English) and the study variables. The chapter also gave the statement of the problem, objectives of the study, research questions, significance of the study, scope and limitations the of study. Th next chapter reviews literature based on the objectives of the study and the theoretical framework which underpins the study.

## **CHAPTER TWO**

### **LITERATURE REVIEW AND THEORETICAL FRAMEWORK**

#### **2.1 Introduction**

The chapter reviews literature on Lukabras and English phonology, Lexical and cultural borrowing, morphological and phonological processes and morpho-phonological constraints. The chapter also reviews literature on language vitality and on the theories underpinning the study.

#### **2.2 Literature Review**

This section reviews literature according to the objectives of the study. It comprises of a review of literature on Lukabras language Lukabras phonology and morphology, English phonology, borrowing, Morphotactics that constrain borrowing, morphological processes phonological processes, language vitality, and Luhya languages and Kakamega County as discussed below.

##### **2.2.1 Lukabras phonology**

Lukabras language orthography has five vowels and twenty consonants with two approximants as illustrated in the example below.

##### **2.2.2.1 Lukabras phonemic inventory**

Lukabras phonemic inventory is made up of vowels and consonants. According to Angogo (1983), Lukabras has five vowels. The five vowels are as shown below;

### 2.2.2.1.1 Lukabras Vowel System

|           |       |         |                |
|-----------|-------|---------|----------------|
| Unrounded | Front | Central | Back (rounded) |
| Close     |       | i       | u High         |
| Close mid |       | e       | o Mid          |
| Open      |       | a       |                |

*Source; Angogo (1980)*

Lukabras vowels are phonetically and orthographically. The phonemic and orthographic representation of Lukabras verbs as shown below;

| Phonetic symbol | orthographic symbol |
|-----------------|---------------------|
| /a/             | a                   |
| /e/             | e                   |
| /i/             | i                   |
| /o/             | o                   |
| /u/             | u                   |

*Source; Angogo (1980)*

Mukulo (2016) adds that Lukabras vowels occur at all word positions, word- initial, and word -medial and word-final. The above system guided the current study in identifying vowels in the borrowed verbs not present in Lukabras and these new verbs adapt in the Lukabras vowel system.

### 2.2.2.1.2 Lukabras consonants

Lukabras language is made of twenty-two consonants. Two of the consonants are semi-vowels. The consonants are represented in the table below;

**Table 2.1 Lukabras consonants**

| <b>Manner of articulation</b> | <b>Place of articulation</b> | <b>Labial</b> | <b>Dental</b> | <b>Alveolar</b> | <b>Palatal</b> | <b>Velar</b> | <b>Glottal</b> |
|-------------------------------|------------------------------|---------------|---------------|-----------------|----------------|--------------|----------------|
| Plosives                      | p                            |               |               | t               | k              |              |                |
| Prenasalized plosives         | b                            |               |               | nd              |                | ŋg           |                |
| Affricates                    |                              |               | fs            |                 |                |              |                |
| Prenasalized affricates       |                              |               |               |                 |                |              |                |
| Fricatives                    | f β                          |               |               | s               |                | x            |                |
| Prenasalized fricatives       |                              |               |               | nz              |                |              |                |
| Nasals                        | m                            |               |               | n               |                | ŋ            |                |
| Glides                        |                              |               |               |                 |                |              |                |
| Approximants                  |                              |               |               | l               | r              |              |                |

***Source; Angogo (1980)***

From the table above it was revealed that Lukabras has twenty consonants with two approximants. This table therefore provided a comparison between Lukabras and English consonants which guided the study in generating the phonological processes and constraints English loan verbs undergo when adapting into Lukabras.

The Lukabras consonants and semi-vowels can be represented phonetically and orthographically as in the table below.

**Table 2.2 Lukabras consonants represented phonetically and orthographically.**

| <b>Phoneme</b> | <b>Orthography</b> |
|----------------|--------------------|
| /β/            | b                  |
| /k/            | k                  |
| /t/            | t                  |
| /p/            | P                  |
| /mb/           | mb                 |
| /nd/           | nd                 |
| /nz/           | ns                 |
| /ts/           | ts                 |
| /f/            | f                  |
| /s/            | S                  |
| /□/            | sh                 |
| /x/            | kh                 |
| /m/            | m                  |
| /n/            | n                  |
| /□/            | ny                 |
| /ŋ/            | ŋg                 |
| /w/            | w                  |
| /j/            | y                  |
| /l/            | l                  |
| /n□/           | n                  |
| /r/            | r                  |

**Source; Angogo (1980)**

#### **2.2.2.2 Lukabras syllable structure**

Hyman (2003), states that Bantu languages have an open syllable structure (CV) which is reinforced by the well-known agglutinative morphology. Lukabras is under the umbrella of Luhya language who are Bantus and therefore share a similar syllable structure. Akidah (2000) posits that Luwanga syllables are made up of two parts, a consonant and a vowel and consonants do not appear at word final position. Luwanga and Lukabras are sister languages under the Luhya macro language so they share similar syllable structure. Similarly, to Mukulo (2016) Lukabras has an open Consonant Vowel (CV) Syllable structure. This guided the researcher in identifying the syllable structure the borrowed verbs from English take as they are incorporated in Lukabras language structure.

## 2.2.2 English phonology

English language comprises of vowels which are classified as monothongs, diphthongs and triphthongs and consonants. These vowels and consonants are discussed in the following subsections;

### 2.2.3.1 English vowel inventory

Roach (2000), cited by Mukulo (2017), classifies English vowels as monothongs, diphthongs and triphthongs. Roach (2000), notes that monothongs refer to one vowel and would be incomprehensible on its own. Roach (2000), says English are 12 monothongs namely; /æ/, /ʌ/, /ə/, /ɜ:/, /ɑ:/, /e/, /ɪ/, /i:/, /ɑ:/, /u:/ and /ʊ/.

Roach (2000), also argues that English has eight diphthongs These are; /eɪ/, /əɪ/, /ɔɪ/, /ɪə/, /eə/, /ʊə/, /əʊ/ and /aʊ/. He adds that English has five triphthongs. This guided the researcher in identifying how English verbs adapt in Lukabras.

### 2.2.3.2 English consonant inventory

English language is made up of twenty-four consonants. These consonants are illustrated in the table below;

*Table 2.3: English Consonants*

| Manner of articulation | Place of articulation | Labial | Labiodental | Dental | Alveolar | Palatal alveolar | Palatal | Velar | Glottal |
|------------------------|-----------------------|--------|-------------|--------|----------|------------------|---------|-------|---------|
| Plosives               |                       | p b    |             |        | t d      |                  |         | k g   |         |
| Affricates             |                       |        |             |        |          |                  | tʃ dʒ   |       |         |
| Fricatives             |                       |        | f v         | θ ð    | s z      | ʃ ʒ              |         |       | h       |
| Nasals                 |                       | m      |             | n      |          |                  | ŋ       |       |         |
| Glides                 |                       | w      |             |        |          | j                |         |       |         |
| Approximants           |                       |        |             | l      | r        |                  |         |       |         |

*Source; Ladefoged (2001)*

The table above shows that English has twenty-four consonants. The knowledge on the Lukabras and English vowel and consonant systems will give the basis when analyzing the morphophonological processes involved in the formation of English borrowed verbs from Lukabras and the constraints the borrowed verbs undergo when adapting in Lukabras.

Roach (2009), notes that English language has a composite syllable form that permits up to three consonants at the onset and up four at the coda. This will be a guide to the present study on how the borrowed verbs from English that have a complex syllable structure adapt in Lukabras language which has a simple syllable structure.

### **2.3 Borrowing**

Hoffer (2005), defines borrowing as the action where words from one language are shifted into another language. This implies that when a word is borrowed it is adapted by the recipient language and becomes part of its vocabulary. Since Lukabras has come in contact with English for a long time thus it has borrowed a good number of words from English This study will discuss lexical and cultural borrowing as follows;

#### **2.3.1 Lexical borrowing**

Lexical borrowing is the acquisition of single or many words from another language. Sankoff (2001), says that the first alien item to get into a native language are words. According to Myers-Scotton (2002), when loanwords from the donor language (loanwords) are adopted by the recipient (borrowing language) language, the donor language does not lose the borrowed word and the words borrowed are not copied exactly the same way into the borrowing language. English being a donor language of the verbs to Lukabras, it does not lose the loaned verbs. The loan verbs exist in Lukabras in modified state and in the original form in English. The loanwords are

mostly used by people and in time gains a certain position of approval. Myers-Scotton (2002) also argue that any language can be a borrowing language and also a donor language and that there is no language entirely free of lexical borrowing. These observations by Myres-Scotton (2002) gave a basis on the present study that when words are borrowed, they are modified to fit in the recipient language structure. This study therefore investigated borrowing between English which is the donor language and Lukabras as a borrowing language.

There are studies that have been done on lexical borrowing in Lukabras. For instance, Sasala (2020) carried out a study on lexical borrowing of Lukabras from Nandi in Chepsaita Scheme. In this study, he posits that lexical borrowing is a communication strategy for speakers to live in harmony with each other. So Lukabras speakers living in Chepsaita scheme have borrowed from Nandi so as to communicate effectively with the Nandi. This study therefore informed the present study on the need for borrowing. The present study deviated from Sasala's (2020) study by analysing the morphophonological adaptations of borrowed verbs in Lukabras from English and the effects of borrowing on Lukabras language.

Mukulo, (2016) also carried a study on phonological adaptations of Lukabras borrowed nouns in English, established that nouns adapted in Lukabras were first morphologically conditioned and nativized through nominal prefixation because Lukabras nouns have prefixes. However, unlike Mukulo (2016), which focused on the phonological adaptations of nouns but does not address the constraints involved, the current study investigated the morphophonological processes and the constraints involved in the process of adaptation of verbs borrowed by Lukabras from English. Mukulo (2016) study did not address the effects of the borrowed nouns on Lukabras. Despite these differences, the findings by Mukulo (2016) were relevant during the

analysis of the phonological processes involved when the borrowed verbs from English adapt into Lukabras language.

Anyona (2016), studied how English borrowed nouns are nativized phonologically and morphologically into Ekegusii. He observed that the vowels and the morphology of English and Ekegusii are different and that phonemes of English not present in Ekegusii are substituted for those present in Ekegusii. The study also revealed that English nouns borrowed into Ekegusii are characterised by the pre-prefix. This gave vital information to the present study which analyzed the phonology of verbs.

Owino (2003), carried out a phonological nativisation of Dholuo loanwords. The findings of this study were similarly be of great relevance to the present study. He highlighted motives behind borrowing which included prestige and the need to designate new things among others. This was be beneficial to the present study which focused on borrowing of verbs into Lukabras and English and the reasons for borrowing. However, unlike Owino (2003), the present study investigated the morphophonological adaptations of verbs and their effects of the borrowings to Lukabras language.

Mwikali (2018) posits that Rabai language has borrowed words from English language and Kiswahili and that these words are phonologically modified to fit into the Rabai native language. The adaptation processes that loan words from English and Kiswahili underwent as they adapted in Rabai were used; syncopation, prothesis, metathesis, substitution, epenthesis and apheresis. Mwikali (2018) however did not investigate the effects of the borrowed words on Rabai language. The present study deviated from Mwikali's study by carrying out a morphophonological adaptation of loan verbs from English into by Lukabras and their effects on Lukabras language.

Ndambuki (2013), posits that languages in contact affect each other in this case Kikamba and English have come in contact which has motivated the borrowing of words by kikamba from English. He further argues that the English words borrowed by Kikamba undergo certain phonological modification processes in order to adapt into kikamba native language. This will be informing to the current study which will study the effects of the contact between Lukabras and English languages. The current study however analysed the morphophonological adaptations of Lukabras loan verbs from English and nouns like the later.

Yamo (2014), observed that loanwords into Boro-Ukwala dialect of Dholuo from borrowed from Lumarachi, Lunyala and Kiswahili. The current study however did not deal with phonological aspects only but also morphological and also endeavored to establish whether these borrowings affected the vitality of Lukabras language. The findings of Yamo (2014) were significant in guiding the present study in analysing the morphological and the phonological processes the loan verbs from English undergo when adapting in Lukabras.

Riro (2020) observed that Igukuria has borrowed words from English in semantic areas that are not similar to fill the lexical gap in the language. He also noted that Igukuria borrowed from English for prestige and for stylistic reasons. The present study will also to analyze lexical items (verbs) borrowed by Lukabras from English. He analysed the results morphologically which was different from the current study which carried out a morphophonological analysis.

### **2.3.2 Cultural borrowing**

Cultural borrowing is the use of items that are new to the receiving language. Though loaning of words is two ways, the source language has the merit of power, prestige and

wealth which makes it a lender of many words. This is because its objects and ideas are useful to the receiving language. Cultural borrowing is done for necessity as the words loaned represent new things or objects linked to technology that are not present in the recipient language.

Mukulo (2016) says that lexical borrowing in Lukabras from English is motivated by lack of native words for new objects and abstract ideas that are being introduced into Kabras culture. For example, Kabras culture did not have computers before coming in contact with English speakers and thus borrowed words from English. Lukabras language has thus borrowed a verb like “*ekomputa*” from the English word “computer”. The presented study deviated from Mukulo (2016) by focusing on verbs and analysing both the morphological and phonological processes. The present study also analyses the morpho-phonological constraints and the effects of the borrowed verbs on Lukabras. These variables were not addressed by Mukulo (2016).

Muandike (2007) observed that Lubukusu has borrowed cultural words from English. Muandike’s (2007) findings were of importance to the present study though looked at Lukabras and not Lubukusu. Meyers-Scotton (1993) posit that cultural forms materialize in a language when powerful persons or groups start using them. This also helped the current study which seeks to establish the cultural forms appearing in Lukabras.

### **2.3.3 Verb borrowing**

According to Wohlgemuth (2009) a loan verb is an established borrowed lexical item. Research on borrowability of verbs show that verbs are seldom borrowed. An example is Tadmor (2010) who argue that verbs are rarely borrowed. According to Versteegh (2009) on the hand confirms that there are examples of successful borrowing of verbs.

The present study thus investigated the borrowing of verbs by Lukabras from English. This was based on Bahaha (2016), that verbs are a challenging category to borrow due to the challenges of integration, there are relatively few studies that have focused on the borrowing of verbs.

A study by Jemwetich (2002), on morphological adaptation of verb borrowings from Keiyo and Nandi languages on the vitality of Talai-Marakwet dialect. The findings showed that adapted words undergo morphological modification to fit in the Talai-Marakwet morphological templates of words in the verbal context. The present study dealt with morphological and phonological adaptations of the borrowed verbs and Lukabras and English which is foreign language. The findings of Kwambai (2002) however played an important role by providing background information on morphological adaptation of verbs and language vitality.

Magara, Anyona & Aberi (2024), carried out a study on phonological adaptation of Dholuo verbs borrowed into Ekegusii and confirmed that borrowed Dholuo words are integrated into Ekegusii phonology through stop weakening, devoicing of Dholuo consonants, consonant substitution, vowel epenthesis and vowel substitution. Though the current study focused on Lukabras and English, the findings of Magara, Anyona and Aberi (2024) played a vital role by providing information on the phonological adaptation of loan verbs.

Wagner (2019) studied the perception of loan verb integration strategies in Romanian. He observed that borrowed verbs in Romanian tend to take three suffixes -ez, -esc or -uiesc during conjugation and that the suffixes hold no meaning and yet seem obligatory.

## **2.4 Morphological processes**

Morphological processes are means used by speakers of a language to adjust the meaning of base forms and foreign words. Obuasi, (2016). They may include adding, subtracting or altering the base forms in words in a language. According to Plug (2003) morphological structure in languages differ because languages use different processes morphologically in the formation of their words.

Finch (2000) and Aronoff (2005) observe that morphological processes can be viewed in two ways; those which do not change the meaning or category of the words they are pinned to and the other which change the meaning. These processes have been discussed below;

### **2.4.1. Inflectional morphology**

According to Aronoff (2005), inflectional morphology does not change lexical meaning of the words they are attached to. Caestaisr-McCathy (2002) argue that inflection is the process of changing the form of a word that it expresses in formation such as number, person, case, tense, mood and aspect but the syntactic class of the word without changing the syntactic class. Katamba and Stonham (2006). posits that inflection involves issues related to addition of the morphemes like -s-which marks tense and number in English language. Nurse & Philipson (2015) say that verbs have several affixes. Verbs can be modified morphologically for time and number as in the morphological marking of verbs in the language. This is done mainly by affixation. For example; the suffix ‘anga’; is added on the verb ‘tekha’(cook)to mark the present tense ‘tekhang’a’(cooking)and suffix ‘shile’ is added to the verb ‘tekha’(cook) to mark the past tense “teshile” (cooked). The findings in these studies will be relevant to the current study as it dealt with morphological changes on Lukabras borrowed verbs from English.

Lusaka (2002) investigated inflection related to the object markers in Bantu languages in which a morpheme appears within a verb that represents the number, person, animacy and other features of the lexical noun phrase in Kinyakyusa language. The present study will benefit from this study as it will seek to analyze the morphological processes Lukabras borrowed verbs from English undergo when adapting to the Lukabras language. The present study however did not deal with features of lexical noun phrases.

Akidah (2000) in his study on Luwanga morpho-phonemics, observes that, inflection in Luwanga is on a word form. They inflect for tense, number, and negation and that most of these inflectional affixes do not change the class of their stems. Lukabras being a sister language to Luwanga, the present study employed the inflections on words used in Luwanga, for example;

1.Omukhana+a+tesita

A girl            tastes

2.aba+khana    ba+tesita

Girls            taste

Luwanga and Lukabras languages belong to the luhya macrolanguage thus share similar morphological processes. The present study thus adapted these findings in analyzing the verbs borrowed by Lukabras from English.

#### **2.4.2 Derivational morphology**

Derivational processes involve morphemes which alter the meaning or grammatical category of a base. Katamba. (1993). According to Booij (2005) derivation helps in making new words. Derivational morphemes can be prefixes or suffixes in English.

Prefixes modify the meaning but do not adjust the syntactic class. For instance, Akida (2000) says that Luwanga has two types of affixes. Prefixes are attached before the stem and suffixes are attached after the stem. Akida (2000) also notes that the derivational affixes show various lexeme of the same word. For instance, the word (/sinza/slaughter) which is a verb when a derivational affix /o/is added it changes the class of the lexeme to become /o-mu-sinz-i/(slaughterer)which is a noun. Luwanga being one of the luhya dialects, it shares the same derivational patterns with Lukabras current study did not however deal with derivation of native Lukabras borrowed verbs.

## **2.5 Phonological processes**

Different phonological processes occur during loanword alteration at the segment and syllable level as a result of the differences in the language's phonology. Mukulo (2016) observed that Lukabras loanwords adapts phonologically by vowel raising, vowel lowering, reduction of long vowels, monophthongization of diphthongs, devoicing of consonants, stop weakening and consonant substitution processes. Mukulo's study was useful to this study which is concerned with the morphophonological processes involved during the adaptation of Lukabras loan verbs from English.

Ayuni (2012) using the constrain approach notes that the most frequent phonological processes that happen to Indonesian borrowed words are epenthesis, dissimilation and metathesis. The current study deviated from this to investigate the morphophonological processes and constraints verbs borrowed from English undergo when adapting in Lukabras language.

Mose (2020) investigated morphophonological processes and constraints evident in Ekegusii borrowed words from English. Similar to the current study, Optimality theory informed the study on the morpho-phonological processes and constraints verbs borrowed from English undergo when adapting in Lukabras. Mose (2000) observed that Ekegusii borrowing phonological processes were; epenthesis, deletion, substitution, lenition and monophthongization. Re-syllabification was done by English monosyllabic loans replaced by disyllables and vowels inserted between clusters or at the coda because Ekegusii has open syllables. There are clear differences between this study in terms of the language under study and the aspect of linguistic vitality. Mose's study however forms a strong backbone to the current study in terms of the macromorphological constraints and the theoretical framework that guided the study.

Ndambuki (2013) did a constraint-based analysis of Kikamba nativized loanwords using the Optimality Theory. Ndambuki observed that Kikamba has open syllables and does not allow consonant clusters in the onset while English has closed syllables and allows consonant clusters in both onset and coda positions with different phonemic inventories. He posits that the high ranked Markedness constraints in Kikamba trigger the repair strategies in order to increase the well-formedness of the surface forms. Three main strategies were employed; insertion, deletion and feature changes. These strategies are used to satisfy high-ranked markedness constraints in Kikamba. Both Kikamba and Lukabras are Bantu languages which have open syllables. The findings on Kikamba were therefore relevant to the present study on Lukabras which investigated the morphophonological adaptations of loan verbs from English into Lukabras language. However, the present study was different in that it focused on morphophonological adaptations of Lukabras loan verbs from English and not phonological and nouns as in Ndambuki's study.

Anyona (2016) in his study a syllabic nativization of English loanwords into Ekegusii established that English loanwords words maintain CV structure when adapting into Ekegusii. The focus on syllable adjustments during nativization will be of merit to the current study. The current study however dealt with the morphophonological processes and constraints involved when English loan verbs adapt in Lukabras language.

Mose (2020) using an Optimality Theory perspective, observed that OT constraints explained all the phonological and morphological processes where markedness constraints control the faithfulness constraints restraints. These finding gave merit to the present study used Optimality Theory to guide the study. Optimality theory accounted for the first and second objectives. Its tenets cannot account for objective three thus the researcher adopted Ethnolinguistic Vitality Theory to account for the third objective.

Mukulo (2016) studied on loanword adaptation in Lukabras and noted that the prevalence of marked constraints clusters is a popular case of Markedness in Lukabras loanwords. She notes that in Lukabras there are no consonant clusters because of the CV shape syllable structure while English allows consonant clusters. Mukulo adds that when English consonant clusters get in Lukabras, they violate Lukabras syllable structure triggering re-syllabification rules to unmark the marked syllable. The present study used these findings as it analysed loan verbs from English into Lukabras. However, the present study analysed both the morphological and phonological adaptation of borrowed verbs from English into Lukabras unlike Mukulo (2016) study which analysed only the phonological adaptation of borrowed nouns and not verbs. The present study also investigated the effects of the loan verbs from English on the vitality of Lukabras language, an aspect that was not addressed by Mukulo (2016).

## **2.6 Morphophonological constraints**

Prince and Smolensky (1993;2004) assert that all languages have a set of universal constraints which are part of universal grammar. These constraints explain why languages have different phonologies. For instance, there are constraints that dictate morpheme position or syllable structure which results to a language's hierarchy and constraints are violable. According to Prince and Smolensky there are two constraints; faithfulness and markedness constraints and are ranked differently by different languages. This gave vital background in the current study which investigated the phonological and morphological constraints loan verbs from English undergo when adapting in Lukabras.

According to Mose (2020), language phonotactics which is concerned with the freedoms and restrictions that languages allow in terms of syllable structure, which sounds precede and follow one another, determines linguistic borrowing. She noted that loan words from English into Ekegusii deal with the repair strategies of deletion, insertion and feature change to satisfy the high ranked Markedness in Ekegusii. Mose (2020) also observes that markedness constraints dominated faithfulness constraints as loan words from English adapted into Ekegusii. This study deviates from Edina's in that it deals with morphophonological processes and constraints of Lukabras language. Mose (2020) also analysed both nouns and verbs while the present study analyzed verbs only.

Anyona (2016) did a syllabic nativization of English loanwords into Ekegusii using OT and posits that Ekegusii native speakers use vowel epenthesis to repair illicit structures in Ekegusii when they borrow words from English. He identified constraints like \*COMPLEX V, NOCODA, IDENT IO and MAX IO that constrain the syllable

adjustments. Although the study is similar to the current study it focused more on nouns while the current study focused on verbs.

Harb (2014) did a study in Hawaiian borrowing from English using the Optimality Theory. He established that in Hawaiian, onset is optional and if it occurs, maximally one consonant is allowed, initial consonant sounds are prohibited, nucleus is obligatory and codas are strictly prohibited. He also noted that Markedness constraints override faithfulness in Hawaiian. However, the current study focused on not only on morphophonological processes and constraints.

## **2.7 Language Vitality**

Ryan and Giles (1982), defines linguistic vitality as the span and consequence of the illustrative task a variation performs. Vitality is measured based on geographical, status and institutional support factors such as the number of speakers a language has, if the cultures involved are similar or not, or if it has status in the government. Lihemo (2017), asserts that a language with high vitality is used largely in and out of the home by all people and in many fields. She adds that the study of linguistic vitality is essential for deciding whether a language will continue to be used in future and if efforts to develop the language can be sustainable. This observation merits the present study to investigate the effects of English loan verbs on the vitality of Lukabras.

Ethnolinguistic vitality introduced by Giles, Bourhis and Taylor (1975), who view language prestige, access to stable and acceptable economic base, domains in which the language is used and relative position on the urban-rural continuum as elements which affect the liveliness of a language. If an ethnic group's liveliness its viability will be secured and little vitality might gesture the dying of the group. These assertions

were relevant to the present study which sought to establish if the vitality of Lukabras in the event of borrowing verbs from English.

Magaspag (2009), posits that Kachok language is very dynamic and spoken in many domains in the society and that the Kachoka people have a positive attitude towards their language. Kachok language is therefore maintained and had an indicator of a strong vitality. The indicators used to assess the language use and vitality of Kachok language gave the present study the basis for assessing the effects of the borrowed verbs on the vitality of Lukabras language.

Muandike (2007), observes that Lubukusu speakers have borrowed cultural nominals from different word fields and these are blended into the Lubukusu morphology system hence increasing its expressive power. The present study benefited from these findings as it also endeavors to establish if the verbs borrowed by Lukabras from English will affect its expressive power or not. The present study however investigated borrowing in Lukabras and not Lubukusu.

Lihemo (2017) observed that Lunyore speakers in Maseno Division preferred Dholuo language over Lunyore. Lihemo (2017) further noted that one of the factors that contributed to this is that Lunyore preferred their children to learn Dholuo language but speak Lunyore for identity. Lihemo adds that Lunyore is slowly diminishing and its vitality not strong in Maseno Division. She noted that in order to maintain Lunyore language, the native speakers of Lunyore should be encouraged to use the language in many contexts. Basing on these facts, the present study also investigated if Lukabras native speakers preferred speaking their language.

## **2.8 Theoretical Framework**

This section presents the theoretical framework which underpins the study. It highlights the key tenets of the theories as advanced by the theorist and shows its relevance to the present study. The two theories used to underpin the study are discussed below.

### **2.8.1 Optimality Theory (OT)**

This theory was propounded by Prince and Smolensky (1993;2004). It is a constraint-based approach where conditions are forced on the surface form and any form which does not obey is dropped for the one that obeys. According to this theory all languages have a set of universal constraints which are part of the Universal Grammar. Constraints are therefore unlimited and inborn and that children are born with the restraints already in place. Constraints have two essential attributes that spell out why languages have distinct phonologies. The first feature is that constraints are ways of characterizing language universals. Thus, the phonology of a language is dictated by how a language orders a set of universal restraints. For example, constraints which dictate morpheme position or syllable structure which results to a language's hierarchy. The second feature is that constraints may disagree and as a result they will be violated. Since Lukabras and English are different languages, they have different morphological and phonological structures, they rank constraints differently. Therefore, as loan verbs from English adapt in Lukabras, there is different ranking of constraints. Thus, this study investigated the constraints involved as loan from verbs from English adapt in Lukabras language.

Three important constraints to express faithfulness as proposed by McCarthy and Prince (1995) are; MAX-IO which first maximizes all input segments in the output and needs all pieces in the input form ('I') has a matching to the piece in the output structure('O'). The input is 'maximally' represented in the output and the constraint is therefore violated if a piece is removed. This tenet will account for the constraints that are violated by deleting segments during the process of borrowing the English verbs in Lukabras.

Secondly the dependent output segments on having an input (Dep-IO) which needs that all pieces in the production form have a matching piece in the input structure. Therefore, the output must be totally reliant on the input, and the restraint is infringed by any inserted piece. This tenet will also be relevant in accounting for the constraints that are violated by inserting segments in the verbs borrowed by English from Lukabras. Thirdly, the Identity of the voice specification (Ident) needs that each feature (F) of the output piece is 'identical' to every feature in the output piece. That is this constraint is contravened if a piece changes from voiceless /k/ to voiced/g/. The difference in English and Lukabras phonology might lead to either changing voiced sounds to voiceless or voiceless sounds to voiced. This merited the use of this tenet in this study as it helped in explaining the constraints borrowed verbs from English undergo when adapting in Lukabras. The free generation of potential output forms are taken care of by a function called GEN (for generator), which is subject only to very general constraints of well-formedness. All linguistic structures consist of 'marked and 'unmarked' principles. The unmarked values are cross-linguistically favoured and fundamental to grammars, while the marked values are cross-linguistically evaded and utilised by grammars only to generate distinction (Kager1999).

The Markedness restraint called NOCODA is arranged to see to it that syllables have no codas. The idea of Markedness is intrinsically balanced as some structures are favoured over others. (Kager, 1999) asserts that Markedness heeds to the output form, faithfulness constraints concentrate on both input and output. They are therefore naturally conflicting. Markedness constraints dictate well formedness of structural markedness of output representations while faithfulness constraints dictate that output representation is the same as the input (underlying representations). To find the optimal output, these constraints are infringed. The output may also not be able to meet the structural requirements of both constraints at the same time. The powerful constraint is as a result satisfied at the cost of the less powerful. Grammars of languages control clash amidst universal constraints to select the most harmonic form and OT hold up that to satisfy one restraint means the violation of another.

The second objective of the study examined the constraints involved when loan verbs in English adapt in Lukabras language. This study embraced the use of Optimality Theory to find out the constraints that the Lukabras loan verbs from English face and if they are violated or they are loyal to the receiving language. According to Gussenhoven & Jacobs, (2005), there are two perspectives which can be used to rationalise for phonological alterations in languages. They are; derivational approach based on regulations and constraint approach. Derivational approach present rules that change the phonological representation of the morpheme in a particular context. The regulations are unvarying and will need constraints to distinguish the phonological well-formedness of a piece. Constraint approach will entail the recognition of restraints the loaned verbs will go through in the process of loaning.

Mose (2020) using an Optimality Theory perspective, observed that OT constraints explained all the phonological and morphological processes where markedness constraints control the faithfulness constraints restraints. These finding gave merit to the present study used Optimality Theory to guide the study. Optimality theory accounted for the first and second objectives. Its tenets cannot account for objective three thus the researcher adopted Ethnolinguistic Vitality Theory to account for the third objective.

### **2.8.2 Ethnolinguistic Vitality Theory**

Giles et al (1977), define Ethnolinguistic Vitality as systematic quality of status factors, geographical rendition and institutional support linked to a language. Giles et al, (1977) add that the vitality of a native linguistic class is that which makes a class probably to act as a person and usable mutual organisation in between class affairs. A Group's power and fragility can be gauged in order to give uneven designation of ethnolinguistic groups as having small, or elevated vitality. High vitality groups are likely to keep their language and unique traits in multilingual setting while low vitality groups are probable to lose their language and unique properties. These findings were relevant to the present study as it established the effects of English on Lukabras language.

Ethnolinguistic Vitality has the following indicators as proposed by Landweer (2008) Respective situation on the urban-rural continuum.

1. Domains in which the language is used.
2. Frequency and type of code-switching.
3. Population and group dynamics.
4. Distribution of speakers within the speech community.

5. Social outlook regarding and within the speech community.
6. Language prestige.
7. Access to stable and acceptable economic base.

Landweer (2008), also argue that these indicators are relevant in explaining the connection between language use and vitality and the indicators of domain usage frequency and type of code-switching, population and group changes and spread of speakers in the speech community are the cue signs of language life. Musyeken and Appel (1987), posits that economic changes, that is modernisation, industrialisation and urbanisation are important variables in the description of language maintenance and shift. There is a tendency to shift from language speakers who have a low economic status to the language of a group which has high economic status because a group's social status relies on its economic status.

Another variable in bilingual communities is the language status. Muandike (2007) observes that it is easy to protect an upper-class language in a community than the one with a low class. The present study therefore investigated the effect of English language which is perceived as an upper-class language on Lukabras which is perceived as a low-class language and if Lukabras can be protected.

Geographical factors are the number of members and their disposal all over the territory. Musyeken and Appel, (1987) observe that if the quantity of speakers of a language reduces, it implies declining functionality of the language in question, which paves way to shift away from the minority language. That is if a language is spoken by many people across all ages, then the vitality of such a language is most likely maintained. This factor helped the researcher in the present study to establish if the

number of Lukabras native speakers using the borrowed verbs from English affected its vitality positively or negatively.

Institutional support variables refer to a broad range of institutions like mass media, religion, managerial services and education. If for example in mass media the news broadcasts, newspapers, adverts and so on can the minority language it can improve these languages. Also, if government services can be offered in mother tongue it can stimulate maintenance. The present study seeks to establish the effects of the borrowed verbs from English into Lukabras language. The Ethnolinguistic Vitality Theory was therefore an appropriate guide to the current study.

## **2.9 Chapter Summary**

This chapter reviewed relevant literature on Lukabras and English morphology and phonology and borrowing. The chapter also highlighted the morpho-phonological processes and morpho-phonological constraints loan verb English undergo when adapting into Lukabras. The chapter also reviewed literature on language vitality, Optimality Theory and Linguistic Vitality Theory. The next chapter discusses the research design and methodology.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter highlights the research design, the study area and the study population. The sampling procedures that were used and data collection instruments are described, as well as the techniques used in the analysis and presentation of the collected data. The pilot study and ethical consideration are also discussed in this chapter.

#### **3.2 Research Design**

The study adopted a descriptive research design. Kombo & Tromp (2006) argue that descriptive approach is designed to obtain information concerning the current phenomena and to draw valid conclusion from the facts discussed. In the same vein, Ruane (2005) observes that descriptive research gives a vivid description or account of some social phenomenon, setting, experiences or group. The present study utilised this design to descriptively examine the morpho-phonological processes and constraints loan verbs from English undergo when adapting into Lukabras. The descriptive design was also used to examine the effects of these loan verbs on the vitality of Lukabras language.

#### **3.3 Area of Study**

According to Fassold (1990), the ideal setting for any study is directly related to the researcher's interests. The researcher therefore selected Kakamega North Sub-County because the study investigated the borrowed verbs from English into Lukabras. Kakamega North Sub-County was ideal for this study since the majority of the residents in this Sub-County are Lukabras native speakers.

### **3.4 Target Population**

The target population for the study comprised of all Lukabras native speakers in Mugai Location, Kakamega North Sub-County, Kakamega County. The researcher targeted Lukabras-English speakers to identify the borrowed verbs from English and Lukabras native speakers not conversant with the English language. The two groups helped determine the variability in the borrowed items. The Units of analysis(verbs) were derived from this target population for investigation. The linguistic population comprised of Lukabras loan verbs borrowed from English language.

### **3.5 Sample Size and Sampling Techniques**

A multistage sampling technique was used by the researcher to obtain the sample for the study. According to Creswell (2014) multistage sampling first involves the researcher identifying groups or organizations from which individuals within those clusters or groups are sampled. Additionally, Pandey and Pandey (2015) argue that multistage sampling is more comprehensive and representative of the population.

In the first stage, purposive sampling was used to identify Lukabras native speakers living in Kakamega North Sub-County. According to Saunders, Lewis & Thornhill (2007), purposive sampling is a research technique in which a sample is selected according to researcher's personal judgment in order to cultivate an in-depth understanding of the phenomena under study. Basing on this argument, the researcher purposively sampled 14 respondents. The choice of the fourteen was based on the argument of Makuto (2009) that linguistic usage is homogenous and that a small sample yields better analytical returns than big samples. Vasilieou, Thorpe and Young (2018), observe that qualitative samples are purposive, that, is the respondents are selected by virtue of their capacity to provide richly textured information that is

relevant to the phenomenon under study. The choice of the respondents was guided by the native speakers' intuition.

In the next stage the researcher employed systematic random sampling technique to get the units of analysis which were the borrowed verbs from English language into Lukabras. The researcher used a systematic interval of three in the subsequent sets by picking every third character to get 30% verbs to be transcribed from a list of recorded verbs. A sample of 150 verbs were collected from the interviews. The researcher stopped at 150 after the data reached saturation point where the respondents started repeating the verbs already mentioned. By employing purposive sampling, researchers selected a sample of 150 Lukabras loan verbs derived from English. This ensured a comprehensive representation of the linguistic phenomena. Systematic sampling was used to categorise the loan verbs based on their morpho-phonological structure, such as vowel harmony, prefixation, and affixation, allowing for a detailed analysis of the adaptation processes. This was in line with Grinnels (2001) observation that a minimum sample of 30% of the study population is considered sufficient in generalising the population of the linguistic elements of the proposed study.

### **3.6. Instruments of Data Collection**

Focus Group Discussions FGDs, In-depth interviews (IIs), and text analysis were used for data collection. Data generated from IIs and FGDs were audio recorded. Secondary data on the other hand was gathered through library research and internet search. During data collection, notes were also made to supplement the data collected through FGDs and IIs. The triangulation of the above research instruments is deemed essential for the extensive collection of relevant information of the study (Patrick ,2009).

### **3.6.1 Focus Group Discussions (FGDs)**

Krueger (1988) outlines Focus Group Discussion as a means of assembling facts from people of the same surroundings and involvements to deliberate a detailed material of attention. The members consequently have the liberty to express themselves without fear thus easy to get a diverse set of responses which saves on time and costs. The researcher and the research assistant used one Focus Group Discussion with 10 selected respondents. The discussions in the FGD were conducted in the month of December and took a duration of one month. This FGD was guided by open-ended questions Lukabras which allowed flexibility in discussing and the respondents giving their opinions. (See appendix I). This FGD was used to get in-depth information from the native speakers on the morpho-phonological adaptations of Lukabras loan verbs from English. The researcher together with the research assistant tape recorded the informants' responses to the questions posed. The recorded data was replayed to extract the required data. The selected loan verbs from the collected data were transcribed using phonetic symbols to capture their pronunciation and morpho-phonological structure, which was crucial for analyzing the adaptation processes. Morphological analysis was conducted to identify any prefixes, suffixes, or affixes added during the adaptation process, revealing the strategies used to integrate English verbs into the Lukabras language. Phonological analysis examined the phonological changes that occurred when English verbs were adapted into Lukabras, such as vowel harmony and consonant changes helping to understand the phonological constraints and processes involved in the adaptation. Frequency analysis provided insights into the linguistic vitality and integration of the loan verbs into the Lukabras language by analysing their frequency of occurrence in natural conversations or texts.

### **3.6.2 In-depth Interviews**

In-depth interviews were conducted with the selected respondents to capture their perceptions, insights, and understanding of the morpho-phonological phenomena in Lukabras loan verbs from English and establish the effects of these loan verbs on the vitality of Lukabras language. Four respondents were interviewed. The selection of the 4 respondents was based on the assertions by Makuto (2009) that linguistic usage is homogenous and that a small sample yields better analytical returns than big samples.

The interviews were administered individually to the participants and then notes were taken on their responses. The interview schedule contained open-ended question, which enabled the interviewer to probe the respondents for more information, thereby gaining in-depth understanding of the research problem. Questions on loan verbs from English were asked and respondents put to pronunciation tests. Questions to gather demographic information, language proficiency, and attitudes towards the use of Lukabras loan verbs were also asked to provide data and insights into the linguistic vitality and future prospects of the language. According to Leedy and Omrod (2014) interviews allow the respondents to verbalise their views and express their own feelings and thoughts concerning the investigation. Interview also provide opportunities for the researcher to clarify issues and further probe the interviewees for more information thus providing detailed data about the subject under inquiry. The interviews focused on the morpho-phonological processes of Lukabras loan verbs from English. The interviews also focused on establishing the effects of verbs borrowed from English on Lukabras language. The interviews were audio recorded to ensure accurate data collection and analysis of the morpho-phonological structures. The recordings were transcribed using phonetic symbols to capture the

nuances of pronunciation. Each interview lasted approximately 20 minutes every two days for a period of one month in the month of January 2024.

### **3.7 Data Collection and Elicitation Procedure**

Data collection depended on mutually prime and subordinate sources of data. According to Kombo and Tromp (2006) there is a distinction between key and secondary bases of information. They observe that main data is gathered directly from respondents.

Primary data was gathered from respondents through Focus Group Discussions and In-depth interviews. The investigator with the help of the research assistant asked the questions on in-depth interviews and FGDs by reading out and then translated by the researcher. The research assistant used an audio recorder to gather the responses. The process lasted for 10 days after which the researcher played back the audio for the purpose of picking out the borrowed verbs for transcription. The researcher also used Focus Group Discussions for another 10 days. With the help of the research assistant, the research administered the questions on the FGD guide to respondents.

### **3.8 Data Analysis and Presentation**

Verbs borrowed into Lukabras from English were the linguistic units of analysis. The study analysed and presented data in form of single words and out of the 150 borrowed verbs collected the researcher systematically sampled 50 verbs for analysis. Data was presented and analysed in the context of the research objectives. The researcher used content analysis basing on the assertions of Weber (1990) content analysis that it is a method for steadily investigating and creating interpretations from writing and extra systems of qualitative information.

Data was evaluated basing on the morphophonological constrains and processes borrowed verbs from English undergo when adapting in Lukabras and the effects of these borrowings on the vitality of Lukabras. The analyzed set of data was clustered in three categories basing on the study objectives. The first category consisted of the morphophonological constraints these borrowed verbs will undergo. The second category was the morphophonological processes borrowed verbs from English undergo when adapting into Lukabras. The third category consisted of the factors that determined the effects of these borrowings on Lukabras vitality. Data for the three objectives were analysed qualitatively and presented in forms of tables and texts.

### **3.9 Validity and Reliability**

According to Orson & Onen (2009), appearance rationality denotes to the notch to which a trial appears over the applicable content. The present study therefore sought to establish face validity by ensuring that the research devices and facts gathering systems are in conformity with the theories underpinning the study. Reliability of the research instruments were also pre-tested during the pilot study. Creswel (1998), states that consistency of devices can be determined by test-retest method at two different times.

### **3.10 Ethical Considerations**

This study-maintained integrity by foremost looking for authorisation from the School of Graduate Studies, Masinde Muliro University of Science and Technology. After getting the approval, the investigator applied for a research permit from NACOSTI before starting research. According to Cohen et al (2001), Barasa (2017) researchers have a responsibility to pursue their research projects truthfully and protect the respondents' freedoms, rights, privacy and values. The researcher therefore sought the consent of the respondents before they participated in the study and ensure there is

friendly environment during the time of data collection. The researcher also maintained discretion and concealment during the facts gathering and scrutiny steps in order to guard all the informers' personalities. The well-being of respondents was therefore taken care of basing on the assertions of Mugenda and Mugenda (2009), investigators are persons who are honestly anxious about other persons' value of life and therefore must be persons of honor who will not assume research for own advantage.

### **3.11 Chapter Summary**

This chapter has discussed the research design and described it as a detailed plan on how research is to be completed. There were details on the target population and area of study which was Kakamega-North Sub-County. The chapter also provided information on the sampling design, sample size, data collection methods and tools. Data presentation and validity and reliability of tools and the ethical considerations were also discussed. The next chapter discusses data presentation and analysis.

## **CHAPTER FOUR**

### **DATA ANALYSIS, PRESENTATION AND DISCUSSION**

#### **4.1 Introduction**

This chapter presents research findings, their interpretation and discussion. The analysis will be based on the objectives of the study.

#### **4.2. Morphophonological Processes in the Adaptation of Lukabras Loan Verbs**

The first objective of the study sought to analyse the morphological and phonological processes in the adaptation of Lukabras loan verbs from English. Focus Group discussion and In-depth interviews were used to elicit information from fourteen native Lukabras respondents. Open-ended questions on borrowed verbs from English Lukabras were asked in order to get the verbs that were analysed in order to obtain the morphophonological processes involved in the adaptation of English loan verbs into Lukabras language. The processes are discussed at the morphological and phonological levels as shown below.

##### **4.2.1 Morphological Processes**

According to Offlong (2011), morphological processes are operations by which the forms of words are derived from technical concepts used to describe new words. The morphological processes that accounted for the different processes of forming words are discussed in the example below;

##### **4.2.1.1 Prefixation**

According to Fromkin et al (2011), prefixation is a process whereby a bound morpheme is attached to the front part of a root or stem. From the data collected, it was

noted that surface realization of loan verbs from English adapted in Lukabras by adding prefixes as illustrated in the following examples.

#### 4.2.1.1.1 Prefixation with Modal Auxiliary Verb ‘will’

The modal auxiliary verb ‘will’ in Lukabras is used to show events that will happen in future. The modal ‘will’ is equivalent to the prefix *la-* in Lukabras. The study established that *Lukabras* loan verbs from English took the prefix *la-* to show modality. Data of the source language (English) and the borrowed forms in the receiving language (Lukabras) is presented in Table 4.1 below.

**Table 4. 1. Prefixation of loan verbs to show modality ‘will’**

| <i>English Form</i> | <i>Phonemic form</i> | <i>Lukabras borrowed form</i> | <i>Transcription</i> |
|---------------------|----------------------|-------------------------------|----------------------|
| 1. will plan        | /wɪl plæn/           | <i>la-pulana</i>              | /lapulana/           |
| 2. will apply       | /wɪl əpləj/          | <i>la-pulaya</i>              | /lapulaja/           |
| 3. will roof        | /wɪl ru:f/           | <i>la-rufa</i>                | /larufa/             |
| 4. will plot        | /wɪl plɒt/           | <i>la-pulota</i>              | /lapulota/           |

The results in Table 4.1 above show that there was prefixation of the verbal root through the morpheme {*la-*} which is a bound morpheme. The morpheme {*la-*} mark modality {will}. The base forms of the words; ‘plan’, ‘apply’, ‘roof’ and ‘plot’ are free morphemes. For instance, the root of the loan verb ‘plan’ from English is morphologically integrated in Lukabras by adding the prefix *la-* that it is realized as ‘*lapulana*’. There are also morphemes attached to these verbs to show number as in the following examples;

Example 1. *Ba-la-pulaya nibashili okhubarema eming’onye.*

Transcription; /βalapulaja niβafili okhurema emiŋgonye/

English; They will apply before they harvest sugarcane.

The word ‘ba-la-pulaya’ has attached morpheme ba- which marks number showing second person plural followed by morpheme la- which is a modal marker for modality and then the root verb “*pulana*’

Example 2; *Khu-la-pulaya nikhushili okhurema eming’onye.*

Transcription; /*khulapulaja nikhufili okhurema emiŋgonye/*

**English; We will apply** before we harvest sugarcane

In this example the bound morpheme khu- is a first-person plural marker followed by morpheme la- which is a modal marker and finally by the root verb ‘*pulana*’

Example 3; *Na-pulaya neshili okhurema eming’onye.*

Transcription; /*napulaja nefili okhurema emiŋgonye/*

English; **I will apply** before I harvest the sugarcane.

In example 3, the morpheme -na is a to first person gender marker is added at the beginning of the root to show first person singular, followed by the modal marker la- and then the root at the end.

Example 4; *a-la-pulaja neshili okhurema eming’onye.*

English; He/she will apply before harvesting sugarcane.

In example 4, it was revealed that the bound morpheme a- which is a possessive pronoun is attached at the beginning of the verb, followed by la- the modal morpheme and lastly “*pulana*” the root morpheme.

Example 5; *O-la-pulaya neshili okhurema eming’onye*

Transcription; /*olapulaja nofili okhurema emiŋgonye/*

English; You will apply before harvesting sugarcane.

This example indicates that the bound morpheme {o-} which is a second person marker is attached at the beginning of the verb while {la-} follows as a modal to the root verb {pulaya}.

Example 6; *Mulapulaya nimushili okhurema emi*]gonye

Transcription; /mulapulaja nimufili okhurema emi]gonye/

English; You will apply before harvesting sugarcane

From example 6 above the prefix mu- marks number and it indicates the plural form (you) and is attached to the root of the verb at the beginning then the modal la- follows and then the root. The results of this study are similar to the findings of Robinson (2016) that nouns in Nyakyusa add prefixes such as mu- and ki- but the prefixes are used to show to show word classes.

#### 4.2.1.1.2. Prefixation of Lukabras loan verbs from English with modal auxiliary [would]

The Modal auxiliary “would” is normally used to express past tense and conditional or conditional tense. Lukabras loan verbs from English that have added the prefix kha- are shown in the table below;

**Table 4. 2 Prefixation of Lukabras loan verbs from English with (would)**

| English form   | Phonemic form | Lukabras borrowed form | Phonemic form  |
|----------------|---------------|------------------------|----------------|
| 1.would meet   | /wɔd mi:t/    | <i>kha-mitile</i>      | /xamitile/     |
| 2.would revise | /wɔd rɪvəjz/  | <i>kha-rivayisile</i>  | /xarɪβajisile/ |
| 3.Would feel   | /wɔd fi:l/    | <i>kha-filile</i>      | /xafilile/     |
| 4.would vote   | /wɔd vɔt/     | <i>kha-votile</i>      | /xavotile/     |

Results in Table 2 above indicate that prefix kha- which is equivalent to the modal auxiliary ‘would’ which is a bound morpheme is added to the root verbs to express modality. For instance, the prefix kha- which is representation of ‘would’ has been added to the root verb ‘meet’ to form Lukabras borrowed form ‘*khamitile*’ in order to fit in Lukabras morphological system.

Example *Abana bakharibayisile elichela*.

Transcription; /aβana βa-xa-riβajisile elichela/

English; The children **would revise** the examination.

The prefix *kha-* is added to the root verb to show modality as in /*xamitile*/. The suffix *nga-* when added to the borrowed verb to show conditions in the past that did not occur.

These findings are related to Robinson (2016) study that Kinyakyusa language insert the prefix *ka-* which is a negative marker showing the past perspective and prefix *ti-* which is used to show present and future tense.

#### 4.2.1.2 Suffixation

Suffixation is the process whereby suffixes are placed to the end of its base (O’Grady & Archibald ,2010). From the FGDs and in depth interviews we conducted with the informants, the following borrowed verbs by *Lukabras* from English emerged:

##### 4.2.1.2.1. Suffixation with -nga to shows present tense

The suffix *-nga* in the *Lukabras* is used to demonstrate the present continuous tense.

The table 4.3 below shows data collected on the verbs borrowed by *Lukabras* from English and have added suffix *-nga*

**Table 4.3 Suffixation with -nga**

| <i>English form</i> | <i>Phonemic form</i> | <i>Lukabras borrowed form</i> | <i>phonemic form</i> |
|---------------------|----------------------|-------------------------------|----------------------|
| 1. browsing         | /braʊziŋ/            | <i>Purawusanga</i>            | /purawusanga/        |
| 2. grouping         | /gru:piŋ/            | <i>Kurupanga</i>              | /kurupanga/          |
| 3. growing          | /grəʊŋ/              | <i>Kurowanga</i>              | /kurowanga/          |
| 4. limiting         | /limitiŋ/            | <i>Limitanga</i>              | /limitanga/          |

From table 4.3 it is observed that suffix *-nga* which cannot occur independently is added to the root verbs to show present tense. For example, *-nga* is added to the root verb “group” to become “kurupanga”

Example 2; Abasomi *balakurupa-nga etsiranji*

Transcription; /aβasomi βalakurupanga etsiranji/

English; Learners **are grouping** colours.

From the findings above, it is noted that suffix -nga is adapted on the borrowed verbs from English into Lukabras to show present tense in the loan word. These results are agreement with Sasala (2020), observation that verbs borrowed from Nandi adapted morphologically into Lukabras language by adding the suffix a- on the verbs and suffix i- on the nouns. The addition of the suffix -nga to the borrowed verbs suggests that Lukabras integrates these borrowed verbs into its verbal system. This prefix might be used to mark the verbs as foreign or non-native, while still allowing them to be used within the Lukabras language system.

#### 4.2.1.2.2. Suffixation with -ile

The suffix -ile in Lukabras is used the past tense. Results from the interviews showed that Lukabras added suffix -ile to verbs to show present perfect tense as shown in the table 4.4. below;

*Table 4.4. Suffixation with -ile*

| English verb     | Phonemic form | Lukabras borrowed form | Phonemic form  |
|------------------|---------------|------------------------|----------------|
| 1. they plotted  | /pla:təd/     | bapulotile             | /βapulotile/   |
| 2. they wiped    | /waɪpt/       | bawayipile             | /βawayipile/   |
| 3. they blocked  | /bla:kt/      | bapulokile             | /βapulokile/   |
| 4. they scrubbed | /skrəbd/      | basukurapile           | /βasukurapile/ |

The study established that loan verbs from English are adapted in Lukabras by adding suffix ile- to the root of the verb to show present perfect tense.

Example; *a-ba-sanji bapulot-ile okhupa omulindi.*

Transcription; /aβasanji βapulotile oxupa omulindi/

English; The believers have plotted to kill the preacher.

The borrowed verbs from English adapt into Lukabras by adding the bound morpheme *ile-* to the root verb to mark past tense. The addition of the bound morpheme *ile-* suggests that Lukabras is integrating English verbs into its own grammatical system. By using a native morpheme to mark the present perfect tense, Lukabras is incorporating English verbs into its conjugation patterns while maintaining grammatical consistency. The adoption of English verb forms into Lukabras through morphological adaptation may also reflect broader cultural assimilation or prestige associated with the English language. It could indicate that English holds a certain status or influence in the linguistic and cultural landscape where Lukabras is spoken. Another study by Robinson (2016) indicate that Nyakyusa insert the applicative suffixes *-il* and *-el* which meaning of the verb by deriving the concept of “to” and “for”.

#### 4.2.1.2.3. Suffixation with vowels -a, -i and -u

Suffixes -a, -i and -u are attached to some English loan verbs to integrate in Lukabras language as shown in the table below.

**Table 4.5. Suffixation with -a, -i and -u**

| English verbs | Phonemic form | Lukabras borrowed verb | Phonemic form |
|---------------|---------------|------------------------|---------------|
| 1. Locate     | /lʌʊket/      | <i>Loketa</i>          | /loketa/      |
| 2. Act        | /ækt/         | <i>Akita</i>           | /akita/       |
| 3. Print      | /prɪnt/       | <i>Purinta</i>         | /purinta/     |

Data from table 4.5 show that English borrowed verbs add suffixes *-a, -i and -u* at word different positions. For instance, morpheme -a is suffixed on the vowel as in the -a, -i and -u at different positions in the verb. This is influenced by phonological, the positioning of suffixes -a, -i and -u could reflect an attempt to integrate borrowed English verbs into the morphological structure of Lukabras. Different suffix positions

may correspond to different morphological categorises or verb classes in Lukabras, allowing for considerations. Certain phonotactic constraints or phonological patterns in the recipient language (Lukabras) might dictate where these suffixes can be attached to maintain phonological harmony and avoid violating the language's phonotactic rules. In addition, more seamless integration of borrowed vocabulary in Lukabras language. verb system. Similar observations were seen in a study conducted by Sasala (2020) where the Nandi borrowed verbs into Lukabras adapted by adding morpheme {a} alone. Another study done by Prasetya (2012) also reveals that different suffixes -age is attached to certain adverbs, nouns and verbs while suffix {-ment} is attached to a verb.

#### **4.2.2. Phonological processes and the Adaptation of Lukabras loan verbs from English**

Phonological processes are derived from data elicited through interviews conducted; the following phonological processes were identified in the effort towards Lukabras speakers adapting to the English language:

##### **4.2.2.1. Vowel epenthesis**

Sarkar (2012) defines epenthesis as the addition of one or more sound segments to a word. According to Sarkar (2012), vowels can be inserted at the beginning syllable (prothesis), in the middle (anaptyxis) or at the ending syllable (paragoge). Vowel insertion according to Watson (2011) epenthesis is introduced in order to break consonant clusters in languages that do not permit consonant clusters in a syllable or even word final position. Bantu languages are agglutinating in nature and therefore do not allow consonant clusters. However, there is an exception where there are nasals as in; /mb/, /nd/, and /ŋg/ and /kh/ which is a digraph a scenario also observed in Lukabras.

According to the findings of this study, vowel insertion occurred in the medial and final syllables of the borrowed verbs in Lukabras from English hence taking the CVCV (Consonant Vowel Consonant Vowel) syllable structure as shown in the examples below;

#### 4.2.2.1.1 Insertion of Low Central Vowel /a/

This study established when Lukabras native speakers borrow verbs from English, they insert the low central vowel /a/ at the final syllable position as shown in the table below;

**Table 4.6 Insertion of Low Central Vowel /a/**

| <b>English verb</b> | <b>Phonemic form</b> | <b>Lukabras borrowed form</b> | <b>Phonemic form</b> |
|---------------------|----------------------|-------------------------------|----------------------|
| 1.Left              | /left/               | <i>Lefuta</i>                 | /lefuta/             |
| 2.Select            | /silekt/             | <i>Selekita</i>               | /selekita/           |
| 3.Win               | /win/                | <i>Wina</i>                   | /wina/               |
| 4.Clean             | /klɪ:n/              | <i>Kilina</i>                 | /kilina/             |

Table 4.6 above shows that there is insertion of the low central vowel /a/ at the syllable or word final position as in; *selekit-a*, *lefut-a* and *win-a*. The insertion of the low central vowel /a/ at the end of a syllable or word may be driven by phonotactic constraints within the recipient language (Lukabras). Many languages including Lukabras have restrictions on the permissible combinations of sounds in syllable-final positions, and the insertion of /a/ could help fulfill these constraints. Akida (2000) posits that in most Luhya dialects the /a/ is a neutral vowel attached to all verbal radicals to show the indicative mood. This study established that Lukabras being a Luhya language, vowel /a/ is inserted at the final position of the borrowed verbs from English to allow the word to have the CVCV (Consonant Vowel syllable structure) that is permissible in Lukabras language. For instance, when the verb /left / borrowed

into Lukabras, the phonemic low central vowel /a/ is inserted at the ending syllable. The consonant clusters *lft* interspersed with vowel prefixation becomes “*lefuta*’, select ‘*selekita*’ and win’ ‘*wina*’. These are examples of verbs which do not take an additional vowel at word ending position but rather at the end of every syllable. The low central is added to the borrowed verbs to break the consonant clusters. The English borrowed verbs in Lukabras take the CVCV syllable when they adapt in Lukabras.

#### 4.2.2.1.2 Insertion of the Phonemic High Front Unrounded Vowel /i/

This study also observed that there was the insertion of the high front unrounded vowel [i] on verbs borrowed from English into Lukabras as shown in table 4.7.

**Table 4.7 Insertion High Front Unrounded Vowel /i/**

| <b>Input</b> | <b>Phonemic form</b> | <b>Output</b>   | <b>Phonemic form</b> |
|--------------|----------------------|-----------------|----------------------|
| 1. Taste     | /teist/              | <i>tesita</i>   | /tesita/             |
| 2. Collect   | /kələkt/             | <i>kolekita</i> | /kolekita/           |
| 3. Arrest    | /ərest/              | <i>aresita</i>  | /aresita/            |
| 4. Mix       | /mɪks/               | <i>mikisa</i>   | /mikisa/             |

Table 4.7 indicate that the high front unrounded vowel /i/ is inserted between consonants. This happens in order to break the consonant clusters to make pronunciation easy. Additionally, inserting vowels between consonant clusters helps maintain syllable structure and aids in proper word stress and rhythm. For instance, the epenthic vowel /i/ is inserted to break the consonant clusters /st/, /kt/ and /ks/. Mukulo (2016) argues that the epenthic vowel /i/ is inserted to break the consonant clusters sibilant/s/ or a voiceless velar stop /k/ followed by a liquid or a stop in order to maintain the syllable structure. Mose (2020) on the hand observes that loan words from English insert vowel [i] at the end of borrowed word and Jika (2013) observes that Arabic borrowed words insert vowel [i] both in the middle and at the end as they adapt in Hausa and Kiswahili as in [as] to [asili]

#### 4.2.2.1.3 Insertion of the High Back Rounded Vowel /u/

It was noted that Lukabras native speakers insert the phonemic high back rounded /u/ in the middle of syllables as in the table below;

**Table 4. 8 Insertion of the High Back Rounded Vowel /u/**

| <b>English verb</b> | <b>Phonemic form</b> | <b>Lukabras borrowed form</b> | <b>Phonemic form</b> |
|---------------------|----------------------|-------------------------------|----------------------|
| 1.Print             | /print/              | <i>purinta</i>                | /purinta/            |
| 2.Lift              | /lift/               | <i>lifuta</i>                 | /lifuta/             |
| 3.Spray             | /sprei/              | <i>supureya</i>               | /supureja/           |
| 4.Try               | /traɪ/               | <i>turaya</i>                 | /turaja/             |

The results in table 4.8 above show verbs that have inserted the high back rounded vowel /u/ to break the consonant clusters when adapting to Lukabras. As aforementioned, consonant clusters are broken in this case to facilitate pronunciation or to conform to phonotactic constraints. This study observed that the epenthic vowel /u/ breaks the consonant clusters to have a CV syllable structure which is acceptable in Lukabras language. For instance, the phonemic high back rounded vowel is inserted between consonants /pr/ in the first syllable as in “print” to “purinta”; /ft/ in the second syllable as in “lift” to “lifuta” and between consonants /sp/as in “sprei” to “supureya”, between consonants /tr/ as in /traɪ/ to /turaya/ and between consonants /cl/ as in /kloʊs/ to /kulosa/. The vowel /u/ that has been inserted in the Lukabras form of the above pair of verbs is a back, high rounded vowel. This is contrary to Mukulo (2016) study results which revealed that the epenthic vowel /u/ is added to the English loan words that ends in the labial consonants as in /ekilaβu/. Other studies such as Mogaka (2009) reveal that Kiswahili loanwords adopt into Ekegusii by changing the high back high rounded vowel /u/ to the back high front unrounded vowel /i/ and the mid -high rounded vowel /o/while the mid-low back unrounded vowel /ə/is adapted as /u/.

#### 4.2.2.1.4. Multiple phonemic vowel epenthesis

Multiple phonemic vowel epenthesis entails the insertion of more than one vowel in different word positions. It was revealed in this study that English loan verbs insert multiple vowels when adapting into Lukabras; Examples of these verbs have been discussed below;

##### 4.2.2.1.4.1 Insertion of the Unrounded Front Vowel {i}and the Low Central Vowel /a/

There are loan verbs in Lukabras English that have inserted both the unrounded front vowel [i]and the low central vowel [a]as illustrated in the table below;

*Table 4. 9. Insertion of the Unrounded Front Vowel /i/and the Low Central Vowel /a/*

| English verb | Transcription | Lukabras borrowed verb | Transcription |
|--------------|---------------|------------------------|---------------|
| 1.Mix        | /mɪks/        | <i>Mikisa</i>          | /mikisa/      |
| 2.Invest     | /ɪnvest/      | <i>inivesita</i>       | /inivesita/   |
| 3.Correct    | /kɔːrɛkt/     | <i>Korekita</i>        | /korekita/    |
| 4.Select     | /sɪlekt/      | <i>Selekita</i>        | /selekita/    |

The table above shows Lukabras borrowed verbs that have inserted two vowels; these are the unrounded front vowel /i/ in between consonants /k/and /s/ as in /mɪks/ to “mikisa” and the low central vowel /a/ at the ending syllables as in “invest” to “inivesita” The phonological structure of Lukabras may not readily accommodate certain consonant clusters or word-final consonants without vowels. Inserting vowels between consonants and at the end of words can help align borrowed verbs to the phonological constraints of the language, making them easier to pronounce for native speakers. Furthermore, Lukabras speakers may prefer specific syllable structures, such as alternating consonants and vowels. Borrowing verbs with inserted vowels ensures

that they align with the typical syllable patterns of the language, facilitating easier pronunciation and word recognition.

For instance, in verb ‘mix’ the unrounded vowel /i/ is inserted in the second syllable, in /inivesita/ it is inserted in the second and third syllable. While in the verbs ‘korekita’, and ‘kolekita’, is inserted in the third syllable between consonant /k/ and /t/. The low central vowel /a/ is inserted at the final position in all the verbs. After epenthesis the borrowed verbs take the CVCV syllable structure that is acceptable in Lukabras. According to Mose (2020), English loans adapt in Ekegusii by inserting vowels {e} at the beginning of the words and {i} at the word ending.

#### 4.2.2.1.4.2. Insertion of the Rounded High Back /u/ and Low Central vowel /a/

Some verbs when borrowed into Lukabras from English they insert two vowels. That is the rounded high back vowel /u/ and low central vowel /a/ as illustrated in the table below.

**Table 4.10 Insertion of the Rounded High Vowel /u/ and Low Central Vowel /a/**

| English form | Phonemic form | Lukabras output | Phonemic form |
|--------------|---------------|-----------------|---------------|
| 1. Print     | /print/       | <i>Purinta</i>  | /purinta/     |
| 2. Play      | /pleɪ/        | <i>Puleya</i>   | /puleja/      |
| 3. Plot      | /plɒt/        | <i>Pulota</i>   | /pulota/      |
| 4. Break     | /breɪk/       | <i>Pureka</i>   | /pureka/      |

From these examples, rounded back vowel /u/ has been inserted in the first syllable and the phonemic low central vowel /a/ has been inserted at the end of the borrowed verbs to allow the CV syllable structure making it fit into Lukabras phonemic inventory. Borrowed verbs that closely resemble native linguistic patterns are more easily assimilated into the language. By inserting vowels in specific positions, borrowed verbs become more familiar and intuitive for speakers of Lukabras,

enhancing their integration into everyday speech. These results are in agreement with Ndambuki (2013) who studies that English loan words insert vowel /u/ to break consonant clusters and vowel /i/ at word final position to end codas.

#### 4.2.2.2 Vowel deletion

Mose (2020) defines vowel deletion as the omission of one or more vowel sounds. From the findings of this study, one segment of the English language diphthongs was deleted when such words are borrowed into Lukabras. Examples are given in Table 4.11 below:

**Table 4.11 Deletion of /i/ in the diphthong /ei/**

| <b>English verb</b> | <b>Phonemic form</b> | <b>Lukabras borrowed verb</b> | <b>Phonemic form</b> |
|---------------------|----------------------|-------------------------------|----------------------|
| 1. Bake             | /beik/               | <i>Peka</i>                   | /peka/               |
| 2. Make             | /meik/               | <i>Meka</i>                   | /mekə/               |
| 3. Take             | /teik/               | <i>Teka</i>                   | /teka/               |
| 4. Rape             | /teip/               | <i>Tepa</i>                   | /repa/               |

From the table above, it was established that since Lukabras vowel inventory does not have diphthongs, the diphthong /ei/ is reduced to the central mid central mid vowels /e/ through vowel deletion. Therefore, English vowels like ‘bake /beik/, make /meik/, take /teik/, and rape /reip/ when adapting into Lukabras, there is the deletion of the phonemic high front unrounded vowel /i/ from the diphthong /ei/ to the monothongs /e/ as in the verb /beik/ in English to /peka in Lukabras.

Lukabras has different phonotactic constraints compared to English. English diphthongs may not conform to the allowed sound patterns in Lukabras, leading to the deletion of one segment to fit the phonotactic structure of the language. Deleting one segment of English diphthongs helps maintain the typical syllable structure of Lukabras which consists of the consonant vowel structures. These findings are similar

to Nkieny (2016) that diphthongs in English are reduced to monothongs as they adapt in Ng'aturukana as in /aɪ/ to /a/, /ɔɪ/ to /ɔ/ and /əʊ/ to /ə/.

#### 4.2.2.3 Vowel reduction

This is a phonological process where vowels are reduced to fit in the phonemic inventory of a language. According to Kapatsinski et al (2020), vowel reduction is one of the many types of reduction observed in sound change and phonological processes.

Vowel reduction was evident in different verbs as discussed below;

##### 4.2.2.3.1 Reduction of the long vowel /i:/ to the high short vowel /i/

Since the long vowel /i:/ is not present in Lukabras language, it is shortened to the short vowel /i/when adapting in the language. Example of verbs with the long vowel/i:/ adapting in Lukabras by shortening it to /i/ are shown in the table below;

**Table 4. 12 Reduction of the long vowel /i:/ to the high front unrounded vowel /i/:**

| English verb | Phonemic form | Lukabras borrowed verb | Phonemic form |
|--------------|---------------|------------------------|---------------|
| 1.Breed      | /bri:d/       | <i>Purita</i>          | /purita/      |
| 2.Keep       | /ki:p/        | <i>Kipa</i>            | /kipa/        |
| 3.Meet       | /mi:t/        | <i>Mita</i>            | /mita/        |
| 4.Seek       | /si:k/        | <i>Sika</i>            | /sika/        |

The study established that since Lukabras vowel inventory does not have long vowels, the long vowel /i:/ was reduced to the high front unrounded vowel /i/. This reduction was evident in the verbs like; breed /bri:d/ to /purita/. Keep /ki:p// to /kipa/ feel /fi:l/ to /fila/, meet/mi:t/ to /mita/, seek/si:k/ to /sika/, kneel /ni:l/ to /nila/ and peel/pi:l/ to /pila/. Shorter vowels like /i:/ may be perceived as easier to articulate or may fit more naturally within the rhythmic and prosodic patterns of the language. This ease of articulation can contribute to the preference for the reduced vowel variant in speech

therefore native Lukabras speakers find it easy to articulate the short /i/. long vowel/i:/ reduction to /ε/ in Rabai another Bantu language Mwikali (Mwikali (018).

#### 4.2.2.3.2 Reduction of the long /u:/ to the short high back unrounded vowel /u/

The long vowel /u:/is shortened to the short vowel /u/ since long vowels are not present in Lukabras language. The examples are illustrated in the table below.

**Table 4. 13 Reduction of the long /u:/ to the short high back unrounded vowel /u/**

| English  | Phonemic Form | Lukabras form | borrowed | Phonemic form |
|----------|---------------|---------------|----------|---------------|
| 1.Choose | /tʃu:z/       | <i>Chusa</i>  |          | /tʃusa/       |
| 2.Pool   | /pu:l/        | <i>Pula</i>   |          | /pula/        |
| 3.Roof   | /ru:f         | <i>Rufa</i>   |          | /rufa/        |
| 4.Cool   | /ku:l/        | <i>Kula</i>   |          | /kula/        |

To make communication easy native Lukabras speakers reduce the long vowel /u:/ to the high back unrounded/u/ in Lukabras borrowed verbs from English since Lukabras vowel inventory does not have the long vowel /u/. The reduction was seen in the verbs; choose/tʃu:z/ to /tʃusa/ pool/pu:l/ to /pula/, /roof /ru:f/ to /rufa/ and cool /ku:l/ to /kula/. The reduction also reflects a simplification of articulatory effort while maintaining the essential phonetic quality. These results are in tandem with Mose (2020) who studies that English long vowel /u:/ is mapped into /u/in Ekegusii to enhance vowel harmony.

Consonants sounds are described according to the place of articulation (the different places of the roof of the mouth, the movements of the lips and different parts of the tongue) and also characterised by manner of articulation and phonation. (Ladefoged &Hashemi,(2011). The study established that there are different consonantal processes which are involved when loan verbs from English are adapted into Lukabras.

#### 4.2.2.4.1. Consonant Devoicing

This is a process where voiced sounds are replaced by voiceless sounds. When a normally voiced consonant is pronounced without vocal-fold vibration in some context, it said to be devoiced (Gussenhoven & Jacobs, 2005). According to Mukulo (2016) Lukabras language has twenty consonant sounds and two semi-vowels. Mukulo further observed that voiced sounds do not occur in Lukabras language. In this regard the voiced sound /b/, /d/, /g/ and /z/ in English verbs are rendered voiceless when adapting in Lukabras. The voiced sounds are replaced with voiceless sounds with which they share same features place and manner of articulation. Examples of devoicing are illustrated in the examples below.

##### 4.2.2.4.1.1 Devoicing of /b/

This a phonological process where the voiced bilabial plosive /b/ is devoiced to the voiceless bilabial plosive /p/ as presented in table 4.14 below;

**Table 4.14 Devoicing of /b/**

| <b>English verb</b> | <b>Phonemic form</b> | <b>Lukabras form</b> | <b>Phonemic form</b> |
|---------------------|----------------------|----------------------|----------------------|
| 1. Block            | /blɑ:k/              | <i>Puloka</i>        | /puloka/             |
| 2. Blame            | /bleɪm/              | <i>Pulema</i>        | /pulema/             |
| 3. Break            | /breɪk/              | <i>Pureka</i>        | /pureka/             |
| 4. Breed            | /brɪ:d/              | <i>Purita</i>        | /purita/             |

The devoicing of the consonant /b/ as indicated by the verbs in the table above shows that features such as voice in the input have not been preserved in the output as the consonant /b/ say in /blɑ:k/ has been replaced by /p/ as indicated by /puloka/. In the same verb, the syllable structure change to CVCVCV by inserting vowels. In the phonetic contexts of Lukabras, voiced consonants undergo devoicing due to adjacent voiceless sounds or voiceless environments. For example, when /b/ occurs at the end of a word or before another voiceless consonant, it may become devoiced to /p/ due to

the influence of surrounding voiceless sounds for easy articulation. Similar studies such as Edinah (2020) reveal that English consonant /b/ is adapted as /β/ in Ekegusii.

#### 4.2.2.4.1.2 Devoicing /d/

This is the process where the voiced bilabial plosive /d/ is devoiced to the voiceless bilabial /t/ as in the table below;

**Table 4. 15 Devoicing /d/**

| English verb | Phonemic form | Lukabras form   | Phonemic form |
|--------------|---------------|-----------------|---------------|
| 1.Record     | /rekɔ:d/      | <i>Rekota</i>   | /rekota/      |
| 2.Donate     | /dəʊneɪt/     | <i>Toneta</i>   | /toneta/      |
| 3.Drink      | /drɪŋk/       | <i>Turinka</i>  | /turiŋa/      |
| 4.Drive      | /draɪv/       | <i>Turayiva</i> | /turajiβa/    |

From the table above it is noted that the voiced sound /d/, has been devoiced to /t/. The consonant sound /d/ is rendered voiceless when it occurs at the beginning or at the end of a word. For instance, /d/ in the word /rekɔ:d/ becomes voiceless as it appears at the end of the word and the /d/ in /draɪv/ is rendered voiceless as it appears at the beginning of the word. The devoicing occurs to ease communication by Lukabras native speakers since Lukabras does not have voiced sounds. Language. These findings are in agreement with Anyona (2023) that voiced sound /d/ is devoiced to /t/ in loanwords from English adapting in Ekegusii.

#### 4.2.2.4.1.3 Devoicing /g/

Examples of Lukabras borrowed verbs from English that have devoiced /d/ are shown in the table below

**Table 4. 16 Devoicing /g/**

| <b>English verb</b> | <b>Phonemic form</b> | <b>Lukabras borrowed form</b> | <b>Phonemic form</b> |
|---------------------|----------------------|-------------------------------|----------------------|
| 1. Grab             | /gra:b/              | Kurapa                        | /kurapa/             |
| 2. Grow             | /grəʊ/               | Kurowa                        | /kurowa/             |
| 3. Group            | /gru:p/              | Kurupa                        | /kurupa/             |

The results from the table above show that /g/ which is a voiced sound adapts in Lukabras by being voiceless as in the words; /gra:sp/ to /kurupa/, /grəʊ/ to /kurowa/ and /gru:p/ to /kurupa/. The devoicing is mainly done to ease communication and is followed by breaking of the consonant clusters. Similarly, Mose (2020) findings show that sound /g/ in English loans are devoiced to sound /k/ when adapting in Ekegusii language.

#### **4.2.2.4.1.4 Devoicing /z/**

The consonant /z/ is devoiced when adapting in Lukabras since it is not part of its phonetic inventory. The table below illustrates Lukabras loan verbs from English that have devoiced the voiced alveolar fricative /z/ to the voiceless alveolar fricative /s/.

**Table 4. 17 Devoicing /z/**

| <b>English verb</b> | <b>Phonemic form</b> | <b>Lukabras form</b> | <b>Phonemic form</b> |
|---------------------|----------------------|----------------------|----------------------|
| 1. Revise           | /rɪvaɪz/             | Ribayisa             | /rɪβajisa/           |
| 2. Realize          | /rɪəlaɪz/            | Riyalayisa           | /rɪjalajisa/         |
| 3. Choose           | /tʃu:z/              | Chusa                | /tʃusa/              |
| 4. Browse           | /braʊz/              | Purawusa             | /purawusa/           |

The outcomes from the table above show that consonant /z/ is devoiced to its close counterpart /s/ as in /rɪvaɪz/ to /rɪβajisa/, /rɪəlaɪz/ to /rɪjalajisa/, /tʃu:z/ to /tʃusa/ and /braʊz/ to /purawusa/. Similarly, Anyona (2023) assert that sound /z/ is devoiced to /s/ when adapting in Ekegusii.

#### 4.2.2.4.2 Consonant Substitution

According to Sarkar (2012), substitution is a phonological process that systematically changes a particular type of speech sound and replaces it with another. Data presented indicate that the consonant sounds /b/ or /v/ were substituted with the consonant /β/ as indicated in the words in the table below;

*Table 4. 18 Substitution of consonant /v/ with the consonant /β/*

| English verb | Phonemic form | Lukabras form | Phonemic form |
|--------------|---------------|---------------|---------------|
| 1. Save      | /serv/        | Seba          | /seβa/        |
| 2. Weave     | /wi:v/        | Wiba          | /wiβa/        |
| 3. Leave     | /li:v/        | Liba          | /liβa/        |
| 4. Wave      | /weiv/        | Wiba          | /weβa/        |

The table above shows that consonant /b/ which is used interchangeably with /v/ was substituted with /β/ since the consonant /v/ does not exist in Lukabras language. For instance, the borrowed verb [serv] becomes [seβa/ in Lukabras. These findings were similar Mukulo's (2016) observation that there was consonant substitution in borrowed Lukabras nouns from English. Mose (2020) posits that consonant substitution was present in Ekegusii language where consonant /b/ was substituted with /β/, /l/ as /r/ and /z/, /ʃ/ and /ʒ/ with /s/. Similarly, Mose (2020) and Anyona (2023) posit that sounds /b/, /p/, /v/ and /f/ are replaced by the sound /β/ when the borrowed word from English adapts in Ekegusii.

#### 4.2.2.4.3 Consonant Deletion

Mose (2020) observes that when deletion of sounds occurs, it may affect consonants, vowels, weak syllables or to break consonant clusters. Deletion in this study was observed in the verbs borrowed by Lukabras from English. Deletion was observed in the following segments.

**English output**

Baptize /bæptaɪz/

Multiply/m^ltɪplɑɪ/

**Lukabras input**

batisa /βatisa/

matipulaya/matipulaja/

The examples above show that when loan verbs from English adapt in Lukabras, consonant /p/ is deleted as in /bæptaɪz/ to /βatisa/ and /m^ltɪplɑɪ/. This is because Lukabras speakers prefer consonant deletion to break consonant clusters. Similarly, Jika (2013) observes that Hausa prefers consonant deletion to vowel epenthesis thus deletes consonant /h/ in words borrowed by Hausa and Kiswahili from Arabic.

#### **4.3 Morphophonological Constraints Governing the Adaptation of Lukabras Loan Verbs from English**

The second objective of the study sought to analyse the morpho-phonological constraints governing the adaptation of Lukabras loan verbs from English. Data for this objective was elicited through interviews and Focus Group Discussions. The questions in these interviews and FGDs were open-ended to allow variable answers.

This section therefore, takes into account of the Optimality Theory constraints that are observed by Lukabras verbs loaned from English. According to OT universal constraints are violable, meaning that rules governing word formation can be violated. Prince & Smolensky (1993/2004) According to Prince & Smolensky (1993/2004), there are two constraints; faithfulness and markedness constraints. In the faithfulness constraints the input and the output are largely and essentially identical. Properties of the input correspond to the properties of the output (MAX). Markedness constraints either demand unmarked configurations such as ONSET and PEAK or prohibit marked configurations such as NOCODA and COMPLEX. With regard to syllable structure universals Nurse (2003) it is true that although many or all Bantu languages designate CV as the syllable template, therefore sequences like C, CV and (C)VC are never

designated. The contrast is characterized by four universal constraints namely; ONSET, PEAK, NOCODA and COMPLEX with a focus on the morphophonological processes discussed in the first objective.

Although these constraints are universal, they can be ranked differently in the different languages, depending on the morphological and phonological patterns of each language. The ranking of the constraints determines which candidate is optimal, the one that satisfies the highest ranked constraint and incurs the least serious violations of the lower-ranked constraints (Prince & Smolensky 2004). Candidates are the possible forms that can be generated from the output to get the accepted form or the optimal form in the receiving language. The morphological and phonological constraints in the context of the current study findings are discussed basing on the morphophonological processes as discussed below:

#### 4.3.1. Morphological Constraints

Morphological Constraints according to Booij (2011) entail constraints on the segmental make-up of the morphemes of a language. The following examples show different morphological constraints governing English borrowed verbs into Lukabras. The examples are coded as 1,2 and 3.

##### 4.3.1.1 will plan-> /la- pulana/

The candidates for the optimal candidate [la-pulana] are outlined in the table below

**Tableau 4.19 Lukabras realization of ‘will plan’**

| Input /will<br>plan/ | *COMPLEX-<br>C | NOCODA | ALIGN<br>[la] | DEP-<br>PREF | IDENT-<br>IO |
|----------------------|----------------|--------|---------------|--------------|--------------|
| a /apulan/           |                | *      |               | *            | *            |
| b /lapulana/         |                |        |               | *            | *            |
| c /plan/             | *              | *      | *             |              | *            |
| d /pulan             |                | *      | *             |              | *            |

Lukabras realisation of the verb phrase ‘will plan’ is expressed by the candidates; Candidate a /a-pulan/. This candidate has dishonored contenders NOCODA since it has consonant /n/ at the end of the syllable, ONSET as it has vowel /a/ at the beginning of the syllable and IDENT IO since the input is not the same as the output.

Candidate b /la-pulana/. The candidate has dishonored the contender DEP-PREF for inserting prefix /la/ and IDENT IO since the output and the input are not alike.

Candidate c /plan/. The has dishonored the contender \*COMPLEX C for maintaining consonant group /pl/, NOCODA as there is a consonant at the end of the syllable, ALIGN [la] since it lacks prefix la- and IDENT IO since the input and output are not similar.

Candidate d /u-pulana/. The candidate has dishonored the contender NOCODA for having a consonant at the end of the syllable, ALIGN [la] for lacking prefix /la/ and IDENT IO since the input and output are not similar. These candidates are illustrated in the table below

Tableau 4.1 above reveals that candidate (b) is the most optimal since it has remained faithful to the NOCODA, ONSET, and COMPLEX C. The constraints will be ranked as;

NOCODA>>ALIGN [la]>>ONSET>>IDENT-IO>>DEP IO.

#### **4.3.1.2 would meet->/kha-mitile/**

The possible candidate the output /khamit-ile/ are illustrated in the table below;

**Tableau 4.20. Lukabras realization ‘would meet’**

| Input would meet] | ONSET | NOCODA | DEP-PREF | IDENT-IO |
|-------------------|-------|--------|----------|----------|
| a [mit]           | *     | *      |          | *        |
| b [emit]          | *     | *      |          | *        |
| c [khamit]        |       | *      |          | *        |
| d[khamitile]      |       |        | *        | *        |

Lukabras form of the verb phrase /khamit-ile/ can be expressed using the following restraints to obtain the optimal candidate;

Candidate a / imit. This candidate has dishonored the ONSET as it has vowel /i/ at the start of the syllable, NOCODA as it has consonant /t/ at the end of the syllable and IDENT IO as the output is not similar to the input.

Candidate b /e-mit/. This candidate has dishonored the ONSET for having vowel /e/ at the start of the syllable, NOCODA since it has consonant /t/ at the end of the syllable and IDENT IO since the input and the output are not alike.

Candidate c /kha-mit/. This candidate has violated the NOCODA for having consonant /t/ at the end of syllable and IDENT IO for lack of similarity between the input and the output.

Candidate d /kha-mit-ile/. This candidate has dishonored IDENT IO restraint since the output and the input are not alike.

Tableau 4.20 indicate that the most optimal candidate is (d), because it has violated fewer constraints; It has remained faithful to the NOCODA and ALIGN (kha) and ONSET constraints and violated the DEP-PREF constraint by adding the prefix kha- to represent the modal auxiliary verb /would/ and IDENT-IO. Candidates (a) and (b) have violated ONSET, NOCODA and IDENT-IO. Candidate (c) has violated the

NOCODA and DEP-PREF. The three candidates (a), (b) and (c) have violated most of the constraints hence not acceptable in Lukabras language. These constraints are ranked as;

NOCODA >> ALIGN (kha) >> ONSET-PREF >> DEP IO

The findings from the examples above on constraints observed during prefixation are similar to the findings of Mose (2020) that loan from English into Ekegusii add prefixes on nouns to show number and the constraints involved are; \*CODA, ALIGN L, ONSET and DEP IO. Mose (2020) adds that phonological constraints like NOCODA must dominate some morphological constraints like ALIGN L

#### 4.3.1.3 Suffixation with -nga

Candidates for the output form [kurowa-nga] are shown in the table below;

*Tableau 4.21 Lukabras suffixation with -nga*

| Input[growing] | *COMPLEX-C | NOCODA | DEP-SUFFIX |
|----------------|------------|--------|------------|
| a /groiŋ/      | *          | *      |            |
| b /krow/       | *          | *      |            |
| c /kurowa-nga/ |            |        | *          |

Lukabras form of the verb phrase [kurowanga] can be expressed using the following restraints;

Candidate a [groiŋ]. This candidate dishonored the \*COMPLEX as it has maintained the consonant group /gr/, NOCODA as it has consonant /ŋ/ at the syllable final position.

Candidate b [krow]. This candidate has dishonored the constraint \*COMPLEX C since it has the consonant group /kr/ and NOCODA as it has consonant /w/ at the end of the syllable.

Candidate c [kurowa-nga]. This contender has dishonored the DEP-SUFFIX constraint by inserting suffix nga-.

From the table above it is noted that candidate (c) is the winning candidate because it has very minimal violations. it has only violated DEP-SUFFIX by inserting the suffix [nga]. candidates (a) and (b) have violated the \*COMPLEX C by maintaining the consonant cluster /gr/ and /kr/ respectively and NOCODA since they don't have codas.

The ranking of the constraints is;

COMPLEX-C, NOCODA >> DEP-SUFFIX

Nkieny (2016) like the findings of this study, observes that English loan words undergo certain constraints as they adapt in Ng'aturukana language during suffixation. These constraints include; IDENT IO, ALIGN [=ATR] >> ALIGN [ɿ]L and ALIGN[i]root.

#### 4.3.1.4. Suffixation with -ile

Possible candidates for the output [turit-ile] are shown in the tableau below;

*Tableau 4.22. Lukabras realisation of [treated]*

| Input[treated] | *COMPLEX-C | NOCODA | DEP-SUFFIX | IDENT-IO |
|----------------|------------|--------|------------|----------|
| a /tri; t/     | *          | *      |            |          |
| b /trit/       | *          | *      |            | *        |
| c /trital/     | *          | *      |            | *        |
| d /turit-ile/  |            |        | *          | *        |

*Source; Fieldwork;(2024)*

Lukabras borrowed verbs from English take the suffix [-ile] to mark past tense as in the example below;

Candidate a /tri:t/. The candidate has violated constraint \*COMPLEX C, because it has maintained the consonant cluster /tr/ and NOCODA because it has consonant /t/ at the syllable end.

Candidate b /trit/. The candidate has violated constraint \*COMPLEX C because of the consonant cluster /tr/, NOCODA because of the consonant /t/ at the end of the syllable and IDENT IO because the output and the input are not identical.

Candidate c /trital/. The candidate has violated \*COMPLEX C for maintaining the consonant cluster /tr/, NOCODA because it has consonant /l/ at the syllable final position and IDENT IO because the output is not similar to the input.

Candidate d /turit-ile/. The candidate has infringed on constrain \*DEP-SUFFIX by inserting ile-and IDENT IO because the output and the input are not identical.

From the tableau above, the study established that candidate (d) is the winning candidate since it has minimal violations and conforms to Lukabras phonological and morphological system. Candidates (a), (b) and (c) are eliminated since they have infringed most restraints and does not conform to Lukabras language structure. The constraints are ranked as;

\*COMPLEX, NOCODA>>DEP SUFFIX>>IDENT IO.

Mose (2020) also observes that loan words from English nativize into Ekegusii morphological structure by adding suffixes These constraints included; \*CODA, ALIGN[e], ALIGN [Prwd, L, Stem, ONSET and DEP IO

#### **4.3.2. Phonological Constraints**

Phonological Constraints according to Nordquist (2020) mean rules and restrictions concerning the ways in which syllables can be created in a language. Phonological constraints are discussed at the segmental level (on vowels and consonants) as shown in the examples below;

### 4.3.2.1 left>>lefuta

The English borrowed verb /left/ while adapts in Lukabras as /lefuta/. The restraints involved during adaptation are shown in table below;

*Tableau 4.23; Lukabras realisation of the input /left/*

| Input/left/ | *COMPLEX<br>C | NOCODA<br># | ONSET | MAX-IO | DEP-IO |
|-------------|---------------|-------------|-------|--------|--------|
| a./lefta/   | *             |             |       |        | *      |
| b./lefuta/  |               |             |       |        | *      |
| c./left/    | *             | *           |       |        |        |

Candidate a /lefta/; This candidate violates \*Complex C because it has allowed consonant cluster /ft/.it has also violated DEP-IO since there is insertion of vowel/a/ at the final syllable.

Candidate b-/left/; This candidate violates IDENT-IO(F), because the final consonant cluster /ft/is simplified to /t/ in the output. It also violates ONSET, because the second syllable has no onset. The NO CODA is also violated since the first syllable has a coda.

Candidate c /Lef; ut/; This candidate violates IDENT-IO(F), because the vowel /e/is inserted between the consonant /l/ and /f/ in the output. It also violates DEP-IO, because the vowel /u/ is inserted in the output that is not present in the input. It also violates NO-CODA, because the final syllable has a coda.

Candidate d /lefuta/; This candidate violates IDENT /l/ and /f/ in the output. It also violates DEP-IO, because the vowels /u/ and /a/ are inserted in the output that are not present in the output.

Tableau. 4.23 above indicates that (b) /lefuta/is the most optimal candidate as it is optimally syllabified, faithful to the high ranked constraints \*COMPLEX C, NOCODA and ONSET. The violation of which results in the losses of candidates;(a),

(c) and (d). since vowel epenthesis in Lukabras is preferred over consonant deletion as a repair strategy to avoid codas in English, borrowed words, DEP-IO(V) is violable and ranked lowest. The ranking of the five constraints is as follows; \*COMPLEX C, NOCODA#, ONSET>>MAX IO(C)>>DEP-IO(V) Nkieny (2016) also observes that loanwords from English into Ng'aturukana display the IDENT constraint meaning that the output and the input segments are not similar, ALIGN constraint and DEP IO constraint denoting that there is insertion of vowels in the borrowed words as they adapt in Ng'aturukana language.

#### 4.3.2.2 Correct->korekita

The input is the English verb /correct/ and the output is the Lukabras verb is /korekita/. There are constraints involved as the verb is adapted into Lukabras. These constraints are outlined in the table below;

**Tableau 4.24 Lukabras realisation of the input /correct/**

| <b>Input/kərekt</b><br><b>/</b> | <b>*COMPLE</b><br><b>X C</b> | <b>NOCOD</b><br><b>A</b> | <b>ONSE</b><br><b>T</b> | <b>MAX</b><br><b>-IO</b> | <b>DEP=I</b><br><b>O</b> | <b>IDENT</b><br><b>-IO</b> |
|---------------------------------|------------------------------|--------------------------|-------------------------|--------------------------|--------------------------|----------------------------|
| a./korekti/                     | *!                           |                          |                         |                          | *                        | *                          |
| b./korekt/                      | *                            | *                        |                         |                          |                          | *                          |
| c./korekita/                    |                              |                          |                         |                          | *                        | *                          |
| d./korekit/                     | *                            | *                        |                         |                          | *                        | *                          |

The candidates in the tableau above are described as;

Candidate a /korekti/; This candidate violates IDENT-IO (F), because the vowel /ə/ is changed /o/ in the output. It also violates the ONSET as third syllable has no onset.it also violates CODA because the second syllable has no coda. \*COMPLEX-C is also violated as there a string of consonant /kt/.

Candidate b /korekta/; This candidate violates \*COMPLEX-C because of the consonant cluster /kt/, IDENT-IO(F), because the vowel /ə/ is changed to /o/ in the output and DEP-IO since there is the insertion of vowel /a/ at the verb final position.

Candidate c /korekita/; This candidate violates IDENT-IO(F), because vowel /ə/ is changed to /o/ and DEP-IO because of the insertion of vowel /i/ and /a/.

Candidate d /korekit/ This candidate has violated the NO-CODA since there is a coda at the final syllable. It has also violated DEP-IO because there is the insertion of vowel /i/ that breaks the consonant cluster /kt/

The results from tableau above candidate (c) /korekita/ is the most harmonic since it satisfies most of the constraints. Candidates (a), (b) and (d) have violated most of the constraints thus not acceptable in Lukabras language. The ranking of the constraints above is as follows;

\*COMPLEX-C, >>NOCODA>>ONSET>>MAX-IO>>DEP-IO>>IDENT-IO

This ranking reflects the phonological pattern of Lukabras, which prefers to preserve the segments of the input. Jika (2013) revealed that loan words from Arabic into Hausa and Swahili undergo the following constraints in the process of nativization; \*CODA meaning that Hausa and Kiswahili did not allow consonants at word ending, COMPLEX meaning that Hausa and Kiswahili did not allow consonant clusters, and DEP IO constraint which prohibited insertion and yet Hausa and Kiswahili inserted vowels to break consonant clusters.

### 4.3.2.3 play->puleya

The English borrowed verb “play” is adapted as “puleya’ in Lukabras. In the process of adaptation, the verb undergoes some constraints. These constraints are illustrated in the table below;

*Tableau 4.25 Lukabras realisation of the input /play/*

| Input      | *COMPLEX-<br>C | ONSET | DEP-IO | MAX-IO | *CODA | IDENT-<br>IO |
|------------|----------------|-------|--------|--------|-------|--------------|
| a./ple/    | *              |       |        | *      | *!    | *            |
| b./ple. y/ | *              |       | *      | *      |       | *            |
| c.pleya/   | *              |       | *      | *      | *     | *            |
| d./puleya/ |                |       | *      | *      | *     | *            |

The English verb /play/ when borrowed into Lukabras becomes /puleya/. The possible candidates as shown above are;

Candidate a./ple/. This candidate has violated the \* COMPLEX C since it has maintained the consonant cluster /pl/, MAX IO by deleting /i/, \*CODA as it has does not have a consonant at word final position and IDENT IO as the input is not identical to the output.

Candidate b /ple. y/. This candidate has violated \*COMPLEX for maintaining a consonant cluster, DEP IO for inserting /y/, MAX IO for deleting /i/ and IDENT IO since the output and input are not the same.

Candidate c /pleya/. This candidate has violated \*COMPLEX C for allowing consonant cluster, DEP IO for inserting /ya/, MAX IO for deleting /i/ and IDENT IO for lack of similarity between the input and output.

Candidate d /puleya/. This candidate has violated DEP IO for inserting / u/ and /a/, MAX IO for deleting /i/ and IDENT IO because the input and output are not the same

The findings in tableau above indicate that the candidate (d) is the most optimal since it has minimal violations. It has violated IDENT-IO for change of the diphthong /ei/ to /e/, MAX-IO for deleting the diphthong /ei/ to /e/ and DEP-IO for inserting /u/ and /a/. Candidate (a) violates highest ranked constraint \*COMPLEX-C for maintaining the consonant cluster /pl/, IDENT-IO (F) and MAX-IO because there is deletion of the final sound segment /i/ in the input, and \*CODA because it does not have a coda at end of the verb. Candidate (b) and (c) violates \*COMPLEX-IO because of the consonant cluster /pl/, IDENT-IO(F), because the features in input are not identical to features in the output, DEP-IO since there is insertion of phoneme /i/, and \*CODA since there are no codas at final syllable. Candidate (c) violates IDENT-IO for change of features in the output, DEP-IO for inserting phoneme /u/ and NOCODA since the final syllable has a coda. The ranking of the constraints is as follows;

\*COMPLEX-C >> ONSET >> DEP-IO >> MAX-IO >> \*CODA >> IDENT-IO

These findings are in agreement with Nkieny (2016) that the constraints; \*DIP H, \*V, ALIGN L, IDENT and DEP IO are evident when English loan words are nativized into Ng'aturukana.

#### 4.3.2.4 record-> rekota

When the English verb “record” is adapted as “rekota” in Lukabras. As the verb adapted in Lukabras there are restraints involved. These restraints are shown in the table below;

**Table 4.26 Lukabras realisation of the verb /record/**

| Input /rekɔ:d/ | MAX-c | ONSET | NOCODA# | DEP-V |
|----------------|-------|-------|---------|-------|
| a./rekota/     |       |       |         | *     |
| b./rekti/      | *     |       |         | *     |
| c./rek. oti/   |       |       | *       | *     |
| d. /rek/       | **    |       | *       |       |

The English verb /record/ when borrowed into Lukabras language is realised as /rekota/. The possible candidates as illustrated above are;

Candidate a /rekota/. The candidate has violated constraint DEP IO by cause of inserting vowel /a/.

Candidate b /rekti/. The candidate has violated condition MAX IO by deleting vowel /o/ and DEP-V by inserting vowel /i/.

Candidate c /rek; oti/ The candidate has infringed the restraint NOCODA# because it has a consonant at the end of the verb and DEP-V by inserting vowel /i/.

Candidate d /rek/ This candidate has infringed the MAX IO by deleting vowel /o/. NOCODA# for having a consonant at the verb final position.

According to the findings in Tableau above, the optimal candidate is (a); /rekota/, because it satisfies the highest-ranked constraint, which is MAX-C because there is no deletion of segments, NOCODA# because it has no coda and ONSET because it has an initial consonant sound. Candidate (b) does not qualify as an optimal candidate because it has violated NOCODA because it has coda in the second syllable and DEP-IO by inserting DEP-IO. The ranking of the constraints are as follows;

MAX-C >> ONSET, NO-CODA >> DEP=V

This ranking reflects the phonological pattern of Lukabras, which prefers to preserve the segments of the input, even if it means changing or inserting vowels to avoid consonant clusters or syllable structure violations. According to Ndambuki (2013), constraints evident in loan words adapting from English into Kikamba during deletion of segments are the NOCODA which does allow consonants at the word ending,

\*COMPLEX which does not allow cluster consonants, DEP IO which does not allow insertion and MAX C which prohibits deletion of consonants.

#### 4.3.2.5 bake-> peka

The English verb “bake’ is adapted as “peka” when adapted in Lukabras. The constraints that are involved during the adaptation process are shown in table 4.27 below.

**Tableau 4.27** *The Lukabras realisation of the English borrowed verb is /peka/*

| Input<br>/beik/ | MAX-<br>C | NOCODA | ONSET | Align-<br>L | DEP-<br>V |
|-----------------|-----------|--------|-------|-------------|-----------|
| a./peka/        |           |        |       |             | *         |
| b./eika/        | *         |        | *     |             | *         |
| c./Pek/         | *         | *      |       |             |           |
| d./eka/         | *         |        | *     | *           | *         |

Lukabras output of the English input /bake/ is /peka/. The possible candidates for this word are;

Candidate a /peka/. This candidate has infringed one constraint DEP IO which does not allow insertion.

Candidate b /eika/. This candidate has infringed constraint MAX IO which prohibits deletion by deleting consonant /p/, ONSET since there is a consonant at the beginning of the syllable and DEP V by allowing the insertion of vowel a/.

Candidate c /pek/. This candidate has infringed MAX IO by deleting consonant /k/, NOCODA for having a consonant at the verb syllable final position.

Candidate d /eka/. This candidate has infringed constraint MAX-C by deleting the consonant /p/, ONSET by lacking a consonant at the beginning of the syllable, Align L because the left edge of the output is not similar to left edge of the output.

The findings in tableau above indicates that /peka/ is the optimal candidate since it has minimal violations. It has only violated DEP-V which prohibits insertion. Candidate (b) /eika/ violates NOCODA, MAX-C and ONSET. Candidate (c)/pe/ violates the highest ranked constraint MAX-C and NOCODA while candidate (d) violates the MAX-C, ONSET, Align L and DEP-V constraints. Violation of the highest ranked constraint disqualifies a candidate from being optimal thus the elimination of candidates (b), (c) and (d). The constraints can be ranked as;

MAX-C, NOCODA>>ONSET>>Align-L>>DEP-IO

Mose (2020) also observes that loan words from English into Ekegusii undergo constraints like \*CODA, DEP IO IDENT IO and OBSVOI when deleting segments.

#### 4.3.2.6. block -> puloka

The English verb “block’ when borrowed into Lukabras, is adapted as “puloka’. The restraints involved during adaptation are illustrated in the table below;

**Tableau 4.28 Lukabras realisation of the verb /block/**

| Input      | *COMP        | NOCO | MA   | DEP-V | IDENT-VOICE |
|------------|--------------|------|------|-------|-------------|
| /bla:k/    | LEX<br>ONSET | DA   | X -c |       |             |
| a./block   | *!           |      |      | *     |             |
| b./plok/   | *            | *!   |      |       | *           |
| c./poka/   |              |      | *!   | *     | *           |
| d./puloka/ |              |      |      | *     | *           |

Lukabras borrowed form of the English verb /block/ is /puloka/. There are constraints that govern this verb in order for it to fit in Lukabras phonological structure. Here is an example of a possible tableau with inferences for the optimal candidate /puloka/:

Candidate a /block/. This candidate has infringed constraint \*COMPLEX ONSET

Candidate b /plok/. This candidate has violated constraint \*COMPLEC ONSET, for having consonant cluster /bl/ at the onset, NOCODA for having consonant /k/ at the syllable final position and IDENT IO for devoicing consonant /b/ to /p/.

Candidate c /poka/. This candidate has infringed the constraint \*MAX c, for deleting consonant /l/, \*DEP-V for inserting vowel /a/ and IDENT IO for devoicing /b/ to /p/.

Candidate d; /puloka/. This candidate has violated constraint DEP-V because there is the insertion of vowel /u/ and IDENT VOICE because there is the change in voice. That is voiced /b/ is rendered to the voiceless /p/.

According to the results above, the optimal candidate /puloka/ satisfies both \*Complex Onset and \*Coda, which are the highest-ranked constraints. This is achieved by substituting /b/ with /p/ as well as /l/ and inserting /u/ and /a/ at the middle and end of the word. On the other hand, the candidate puloka violates DEP-IO, which is the lowest-ranked constraint, by inserting /a/ at the end of the word, but this violation is tolerated because it allows the satisfaction of the higher-ranked constraints. The optimal candidate /puloka/ differs from the input /block/ by two operations: substitution and insertion, which are both motivated by the constraints. Therefore, /puloka/ is the most harmonic output that can be derived from the input /block/, given the ranking of the constraints below;

\*COMPLEX ONSET, \*CODA>>MAX-C>>DEP-V

This study established that faithfull constraints outrank markedness constraints. These findings are contrary to Mose (2020) who argues that markedness constraints are ranked higher than faithfulness constraints. She further posit that in the process of devoicing loan words from English into Ekegusii, the following constraints were evident; \*CODA which indicated that Ekegusii did not permit consonant at word endings, \*[REDUCED-V] meaning there is devoicing of some sounds, \*[OBSSVOI] meaning there was strengthening of some sounds,, DEP IO because of inserting knew segments and IDENT IO meaning that the input and the output are not the same.

#### **4.4 Linguistic Vitality of Lukabras Loan Verbs from English**

The final objective of this study sought to establish the effects of the borrowed verbs from English on the vitality of Lukabras language. The researcher conducted one Focus Group Discussion with selected ten participants The researcher facilitated discussions on topics such as frequency of usage, contexts of use, perceived meanings, and attitudes towards loan verbs. The researcher also scheduled one-on-one interviews with selected participants to delve deeper into their experiences, attitudes, and language use regarding loan verbs. The questions used encouraged participants to express their opinions and experiences freely as per the tenets of the Ethnographic Vitality Theory. These tenets include; institutional support, demography factors and status factors. These factors were ranked on a continuum drawn by the UNESCO report on language vitality and endangerment (2003). According to this report languges endangerment can be ranked from ‘safe’ to ‘extinction’. That is the degree of endangerment vary depending on the institutional support, demography and status factors. These factors are discussed below;

#### 4.4.1 Institutional Support Factors

In order to generate data for this parameter, focus group discussions and interview questions touched on the existence of language policies or initiatives aimed at promoting and preserving Lukabaras language; allocation of resources (financial, human, and material) dedicated to language-related programs or projects; education and literacy to explore the role of educational institutions in teaching the language; developing curricula, and training teachers; presence of the language in media, publications, and digital platforms, as well as efforts to promote language use in these domains; involvement of institutions in community-based language revitalisation efforts, such as cultural events, language classes, or intergenerational transmission programs.

The recorded interviews were transcribed and analysed thematically by identifying recurring trends, patterns, and insights related to institutional support for language vitality. The results are summarized in Table 4.29. below

**Table 4.29 Institutional support factors**

| <b>Institutional support factors</b>                       | <b>Use of the borrowed verbs</b>            | <b>Degree of endangerment</b> |
|--|---|-------------------------------|
| 1.Trends in and responses to the existing language domains | The borrowed verbs are used in most domains | Safe                          |
| 2.Material for language education                          | There is limited available written material | Safe                          |
| 3.Language policies  | Lukabras is taught in lower primary school  | Safe                          |
| 4.Involvement of Institutions in language revitalization   | participation in cultural events            | Safe                          |

From the table 4.20, trends in existing language domain and the responses in these domains indicate that Lukabras language is used in many domains in the society. These domains included; home, school, market, church, school and media. Due to

modernisation and new technology, Lukabras native borrow verbs from English language to fill the gap where there are native verbs for these concepts. For instance, sermons in most churches in Mugai Location used Lukabras language in their services starting from the songs, testimonies, announcements and preaching. There was the use of borrowed verbs from English because there was no Lukabras Bible thus some verbs lacked equivalents in Lukabras necessitating the borrowing. For instance, in the question; “Who baptized Jesus?”/ *Wina waβatisa Yesu*/ the word baptize is adapted into Lukabras as /*βatisa*/ and has become part of Lukabras vocabulary thus increasing the expressive power of Lukabras language. The respondents expressed satisfaction using the borrowed verbs because they felt it was easy to borrow that to make a new word in Lukabras. In the home domain Lukabras language was dominant with the presence of the borrowed verbs from English. They borrowed verbs from English because of the new terminologies resulting from modernisation and technology. Lukabras speakers borrow verbs from English to gap the shortage in Lukabras verbs to address the challenge. In mass media Lukabras was used in radio stations like Mulembe and Lubao FM and also on Luhya TV. The use of Lukabras is also widely used on social media platforms. The use of Lukabras on these media platforms is characterised by many loan verbs from English which basically are associated with new technology. For example, on what’s up platform the word “left” is adapted as “lefuta” as in “people have left this group” /*aβantu βalefute ekurupu jino*). Use of Lukabras loan verbs from English was also seen in schools and market places. The results of the research showed that Lukabras speakers appreciated the use of the borrowed verbs from English and admitted that it eased communication and is now part of their vocabulary hence maintaining the language. Similarly, Muandike (2017) argued that Lubukusu is used

in many domains with many borrowed words from English. The English borrowed words have added to Lubukusu vocabulary increasing its vitality.

There are efforts in developing teaching and reference materials in Lukabras used for language education. The respondents admitted the lack of written materials like dictionaries, story books and Bible in Lukabras language. They were afraid it was threatening the vitality of Lukabras language. However, four respondents said that there were efforts that had come up in order to document Lukabras language. There were two churches who are in the process of translating the Bible into Lukabras. The Holy Spirit Church had copies of each book of the Bible written in Lukabras which are not yet published. The Friends Church was also in the process of translating the Bible into Lukabras which is also hope for documentation of the language. The respondents were also happy that with the upcoming researchers in Lukabras language, that there is hope for adequate documentation of the language and that the inclusion of the borrowed verbs was a positive indicator of enriching the language vocabulary. These observation and insights of Lukabras native speakers on the borrowed verbs in the Church has added to the vocabulary of the language hence increasing their communicative power. The study therefore established that since Lukabras language is safe since the native speakers have incorporated and assimilated the borrowed verbs from English into its word inventory. Muandike (2017) posit that there is printed literature in Lubukusu such as Lubukusu Bible, dictionary and textbooks with heavy borrowing from English which has added to the vitality of Lubukusu.

Language policy was another indicator to assess the vitality of Lukabras language in the event of borrowing from English. The language policy Kenya requires that indigenous languages should be taught in lower primary. Twenty percent of the respondents had knowledge on the existing language policy in education and observed

that Lukabras language was being taught in schools but there was a shortage of teaching materials in Lukabras language. They agreed that teachers are in serviced on how to teach Lukabras as an indigenous language and were using these skills to teach it even in the absence of reference materials. These findings show that as Lukabras is taught in most schools in lower primary. The borrowing of verbs from English was inevitable since they are used in the absence of equivalent native verbs thus strengthening Lukabras language.

Another institutional support indicator used to assess the effects on Lukabras loan verbs from English was the involvement of institutions in language revitalization. From the responses in the discussions between the researcher and the respondents, it was seen that most educational institutions engaged in music and drama festivals. The items presented during these festivals included songs, dances and poems in Lukabras and were blended with loan verbs from English to express ideas related to modernisation and technology with ease. The County Government of Kakamega also organised a cultural event on the Luhya culture and the items presented in Lukabras were also unified with English loan verbs. The event did not limit the age of the participants. The winners at these cultural events were motivated because they were given cash prizes and proceeded for a trip. The respondents felt that it was encouraging and many Lukabras native speakers were ready to participate the event which will boost Lukabras language. The loan according to them enriched Lukabras language study therefore observed that the involvement by the institutions in cultural events to has played a vital role in improving the vitality of Lukabras since it is used both by children in educational institutions and adults in the society. These findings are in agreement with the findings of Muandike (2017) that Lubukusu is d during most its

cultural events like circumcision and that borrowed nominals from English improved the expressive power of Lubukusu increasing its vitality.

#### 4.4.2 Demographic Factors

Demographic factors refer to the number of people who speak a particular language. The number of speakers in relation to the total population of a group is an important gauge of language vitality. According to the population census of 2019, Kabras people are approximately 205,166. Open-ended questions were designed to get the approximate population of Lukabras speakers that have maintained their language by incorporating borrowed verbs from English the respondents' insights are shown in the table below;

**Table 4.30. Number of Lukabras native speakers**

| <b>Category Lukabras native speakers</b> | <b>Number of speakers using borrowed verbs from English in percentage</b> | <b>Degree of endangerment</b> |
|--|---|-------------------------------|
| 1.Children                               | 40%   | Safe                          |
| 2.Youth                                  | 60%   | Safe                          |
| 3.Elderly                                | 55%   | Safe                          |
| 4.Female                                 | 60%   | Safe                          |
| 5.Male                                   | 60%   | Safe                          |

From the table 4.30 above, it was revealed that Lukabras language is spoken across all age groups and domains. Due to the interaction with English language, the Lukabras native speakers borrow heavily from English. The borrowing is mainly due to the new concepts in related to modernisation and technology.

According to Fishman (1991), the most commonly used factor for evaluating the vitality of a language is whether or not it is being transmitted from one generation to the next. UNESCO Ad Hoc Expert Group on Endangered Languages (2003), there are six degrees of endangerment that may be distinguished in regard to Intergenerational

Language Transmission. That is languages can be described as safe, stable yet not threatened, unsafe, definitively endangered, severely endangered and critically endangered. The language is said to be safe when it is used by all ages, unsafe when it is used by some children in all domains and by all children in some domains. The language is definitively endangered when it used mostly by the parental generation and up, severely endangered when it is mostly used by grandparents and critically endangered when it is used mostly by very few speakers of great-grandparents generation. The present study established from the respondents that the verbs borrowed from English from Lukabras are used by all ages that is the young and aged. The percentage of the children incorporating the borrowed words in Lukabras was minimal because most children were not yet exposed to the world of technology. The youth had the highest use of English borrowed verbs in Lukabras since they were exposed to modernization and technology. They are also exposed to English in learning institutions. For instance, some of the verbs borrowed from English by the youth included; (*lefuta, purawusa, tayipa, kola, chusa and apulaya*)

The elderly group consisted of parents and grandparents which also had a high percentage in the use of the borrowed verbs from English in Lukabras language. This was attributed to the fact that they wanted the Lukabras language to be maintained and argued that the use of the borrowed verbs from English eased communication and motivated the young people to speak the language which ensured its safety across generations. The borrowed words were also used by both male and female an indicator that all Lukabras native speakers appreciated the use these verbs. The respondents argued that the borrowed verbs from English were now part of Lukabras vocabulary. The study therefore revealed that borrowed verbs from English are used by most of the Lukabras native speakers. The borrowed verbs have been adapted and are now part

of Lukabras dictionary. These borrowed verbs are transmitted across the generations. Lukabras language is therefore graded as safe thus enhancing its vitality. These views are similar to Magaspag (2009) that Kachok is used by all the children and adults at home and in the community and that no one has shifted from speaking the language making it dynamic and safe.

#### 4.4.3 Status factors

Status of a language is one of the indicators of the vitality of a given language. Speakers of a particular language may lack pride in their language or may be proud of their language. Open-ended questions address status factors like pride attached to language, access to stable and acceptable economic base rural-urban continuum and prestige. The table below shows status factors that affect language vitality.

*Table 4.31. Status factors assessing Lukabras vitality*

| <b>Status factors</b>                           | <b>Number of native speakers using the borrowed verbs in percentage.</b> | <b>Degree of endangerment</b> |
|---|--|-------------------------------|
| 1.Pride attached to the language                | 50%  | Safe                          |
| 2.Access to stable and acceptable economic base | 70%  | Safe                          |
| 3.Urban-rural continuum                         | 45%  | Safe                          |
| 4.Language prestige                             | 60%  | Safe                          |

From table 4.31 above, it was established that fifty percent of Lukabras speakers preferred using borrowed verbs from English claiming that it helped in maintaining Lukabras language. The borrowed verbs were used where there were no Lukabras native verbs They argued that it made them have a sense of belonging, dignity and identity as they communicated in Lukabras and that the borrowed verbs did not threaten the vitality of Lukabras language. According to the UNESCO report (2003) when most members support language maintenance it is graded with 4 points meaning

that the language is stable. The present study therefore noted that since approximately half of Lukabras speakers have a positive attitude towards their language and the incorporation of borrowed from English, the vitality of Lukabras language is not threatened.

Another status factor used to assess Lukabras vitality in the event of borrowing from English. Is access to stable and acceptable economic base. From the table above, it was revealed that 70% of Lukabras native speakers preferred using verbs borrowed from English in the business field in areas related to technology and modernisation. Verbs like; *supenta, kalikileta, kolekita, palanza, and, tiposita are borrowed from English.* Responses from the informants showed that borrowing is inevitable in Lukabras and that most borrowed words from English were related to technology, products in the business field and modernisation. The borrowed verbs from English are adapted and integrated in Lukabras language increasing its vocabulary. This has ensured the safety of Lukabras language.

Language prestige was another status factor that was used to measure Lukabras vitality as it borrows from English. Sixty percent of the respondents said that they borrowed from English for prestige. They felt that since English is a foreign language and is both an official language it felt good when used in communication. For instance, the verb “test” had an equivalent in Lukabras “konyelela” but respondents felt using the borrowed form “tesita” was prestigious. This has increased the Lukabras communicative power.

The institutional support which involves mechanisms of supporting the maintenance of language, demography which involves the number of people who speak a particular language and status factors which s involves the attitudes of speakers towards their

language provide a string basis of evaluating the vitality of a language. Therefore no one factor is sufficient to determine the vitality of a language. The present study therefore concluded that there were efforts to maintain Lukabras language, the number of Lukabras speakers was big and that Lukabras native speakers had a positive attitude towards their language hence preferred borrowing from English rather than shifting from the language. This has improved the vitality of Lukabras language. This was contrary to the findings of Lihemo (2017) who states that Lunyore speakers have a negative attitude towards their language since they preferred Dholuo reducing the vitality of Lunyore.

#### **4.5. Chapter summary**

The chapter has analyzed and presented data collected during the study. This data has also been interpreted in line with the study objectives

## CHAPTER FIVE

### SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1. Introduction

This chapter contains a summary of the findings based on the objectives that guided the study. It also covers the conclusions drawn from the findings and the recommendations and suggestions for the areas of further research. The aim of the study was to establish the morphophonological processes and constraints governing the adaptation of borrowed verbs by Lukabras language from English and the effects of the borrowing to Lukabras language.

#### 5.2. Summary of the Findings

This research investigated the morphophonological processes and constraints governing Lukabras verbs borrowed from English and the influence of these borrowing to Lukabras vitality. The study employed descriptive research design with qualitative approach. Fourteen respondents who are Lukabras native speakers living in Kakamega North Sub-County, Kakamega County were selected through purposive sampling. A corpus of 150 words were collected from which a sample of 50 verbs were selected using systematic random sampling to obtain a third of the lexical items transcribed. The data was collected using FGDs and In-depth interviews. The data collected was analysed descriptively and presented through tables followed by discussions. The findings of the study are summarised as per the objectives as follows;

#### 5.3 Morphophonological processes involved in the adaptation of Lukabras loan verbs from English

The data collected and analyzed showed that Lukabras speakers borrow verbs from English language and that these verbs undergo certain morphophonological processes

in order to fit in Lukabras language structure. The processes were categorized into Morphological and phonological processes as summarised below.

### **5.3.1. Morphological processes**

The study observed that the main morphological process involved in the adaptation of Lukabras borrowed verbs from English was affixation. The affixes involved were prefixes and suffixes. For example, the prefix -la was added to the borrowed verbs from English to show modality by use of the auxiliary verb “will”. These affixes did not change the meaning and the class of the borrowed verbs.

### **5.3.2. Phonological processes**

The study revealed that there were more phonological processes (75%) involved in the adaptation of Lukabras borrowed verbs from English than the morphological processes (25%). This was attributed to the fact phonological processes affected all segments (vowel and consonants) while morphological processes were applied to the root verb. Vowel epenthesis occurs since Lukabras language phonotactics do not allow consonant clusters therefore, there is the insertion vowels in order to break the consonant clusters. Vowel deletion on other hand is a common phonological process since some vowels in English do not occur in Lukabras language. There are no long vowels in Lukabras language leading to the reduction of the long vowels in the English borrowed verbs as they adapt in Lukabarasi. Consonant devoicing was evident because Lukabras language does not have voiced sounds and consonants that are not present in Lukabras substituted with the nearest consonant sounds in English. Because Lukabras language does not allow consonant clusters there is a tendency to delete the consonant sound that does not affect the pronunciation of the word. Therefore, the phonological processes involved in the adaptation of Lukabras borrowed verbs from English are;

vowel epenthesis, vowel deletion, vowel reduction, consonant devoicing, consonant substitution and consonant deletion.

#### **5.4. Morphophonological constraints governing the Adaptation Lukabras loan verbs from English**

The findings for this objective revealed that the faithful constraints are ranked higher than markedness constraints in Lukabras language. The faithful constraints from the data collected and analysed were; \*COMPLEX, MAX-IO, NOCODA and ONSET. The markedness constraints were the DEP-IO, IDENT, IO and PEAK. From the findings it was concluded that though constraints are universal, they are violable and are ranked differently by different languages and that it why the borrowed verbs from English had to violate some constraints and remain faithful to others in order for them to fit in the recipient language.

#### **5.5. Linguistic vitality and Lukabras Loan Verbs from English**

The third objective set to establish the vitality of Lukabras language as a result of borrowing from English language. The study investigated factors that motivates Lukabras native speakers to borrow verbs from English. The factors included; institutional support, demographic factors and status factors. The institutional support factors included the trends and responses to existing language domains, materials for language education and literacy, language policies and involvement of institutions in language revitalisation efforts. It was noted that these institutional support factors enhanced the vitality of Lukabras language in the event of borrowing. The demographic factors included the number of people using Lukabras native verbs against the total population. It was noted that majority of Lukabras native speakers incorporated English loan verbs into Lukabras language increasing its vitality. The

third factor was the status factors which indicated that Lukabras speakers had a positive attitude towards their language adding to its vitality.

## **5.6. Conclusions**

In conclusion, the study has shed light on the intricate morphophonological processes and constraints that govern the incorporation of English loan verbs into the Lukabras language. Through the analysis, we have unraveled the dynamic interplay between linguistic structures, morpho-phonological patterns, revealing the complex tapestry of borrowing and adaptation. Our findings underscore, the remarkable resilience of Lukabras in assimilating and integrating foreign elements while maintaining its distinct identity. Despite the influx of borrowed verbs from English, Lukabras has demonstrated a remarkable capacity for linguistic innovation and synthesis. Through processes such as phonological and morphological adaptation, the borrowed verbs have seamlessly woven themselves into the fabric of Lukabras, enriching its lexicon and expanding its expressive potential. However, this study also highlights the importance of recognising the potential effects of borrowing on Lukabras vitality. While linguistic borrowing can serve as a catalyst for innovation and growth, it also poses challenges and risks to language maintenance and identity. The indiscriminate adoption of foreign elements may lead to erosion of linguistic diversity, loss of cultural heritage and fragmentation of community cohesion. Therefore, it is imperative for stakeholders including language policy makers, educators and community leaders to carefully navigate the process of language contact and borrowing in order to safeguard Lukabras vitality. Strategies such as language planning, revitalization efforts and promotion of bilingualism can help mitigate the effects of borrowing while fostering a sense of pride and ownership among speakers.

In essence, this study underscores the importance of approaching linguistic borrowing as a dynamic and multifield phenomenon that requires careful consideration of its implications for language vitality. By embracing the complexities of language contact and adaptation, Lukabras can continue to thrive as a vibrant and resilient linguistic community, enriched by its interactions with the world.

### **5.7. Recommendations**

The study made the following recommendations based on the findings of the study.

- i. The study found out that Lukabras has borrowed and adapted verbs from English language through morpho-phonological adaptation processes. The study therefore recommends the development of Lukabras dictionaries, reference materials that will document the verbs in Lukabras including their phonological forms, meanings and usage context.
- ii. The study also revealed that there are morphological processes that English loan verbs undergo when adapting in Lukabras. The study therefore recommended the development of materials in Lukabras morphology especially learning references that can be used in the teaching and learning of Lukabras in schools and by language scholars.
- iii. The study established that there are morpho-phonological constraints that English loan verbs undergo when adapting in Lukabras. The study therefore recommends the documentation of these constraints so that they can be used for reference by researchers and educationists when designing materials for teaching Lukabras language.

## 5.8 Suggestions for Further Research

The study suggests that further research be carried out in the following areas;

- i. The present study focused on Morpho-phonological adaptation of Lukabras loan verbs from English. The study therefore recommends further research to be done in other linguistic fields like semantics and syntax in Lukabras language.
- ii. The present study focused on the vitality of Lukabras language. The study therefore recommends further research the socioeconomic implications of borrowing English verbs on Lukabras-speaking communities.
- iii. The present study dwelt on Lukabras community alone. The study therefore comparative studies with other languages that have experienced significant borrowing from English to identify patterns, differences and strategies for managing language contact. This could provide valuable insights into cross-linguistic borrowing phenomenon and their effects on vitality.
- iv. The present study dwelt on the analysis of the borrowed verbs by Lukabras from English. The study therefore recommends further research on other word classes such as adjectives and adverbs.

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## APPENDICES

### APPENDIX I: FOCUS GROUP DISCUSSION GUIDE FOR LUKABRAS

#### NATIVE RESPONDENTS

##### INTRODUCTION

Mulembe boosi, amera kanje bari Maxmillah Mudogo. Endulanga Etumbeni, embele Olukabras, omushu nateshela Abasonje. Esomanga Masinde Muliro. Nenyanga mukhonye okhuchipa amarebo kano ko Olukabarasi nimuyanza.

Greetings to you all, my name is Maxmillah Mudogo. I come from Tumbeni. I am a Kabras from Abashu subclan and am married to Abasonje sub-clan. I am a student at Masinde Muliro University of Science and Technology. I need help on a few questions on Lukabras native verbs and Lukabarasi loan verbs from English.

(The respondents were asked the following questions whose answers that were verbs

QUESTION 1; *Okholela shina ekomputa?*

(What do you do with a computer?)

ANSWERS; *okhupurawusa, okhutayipa*

(To browse, to type)

QUESTION 2; *Notifia elaisensi okholanga orie?*

(If you lose your license, what do you do?)

ANSWER; *narenuwa*

(I will renew)

QUESTION 3; *Nokwa amarebo okholanga orie?*

(If you fail questions, what do you do?)

ANSWER; *nakorekita*

(I will correct)

QUESTION 4; *Nibakhura khukurupu yo khuchanga tsisenti nolovile olakhola shina?*

*What will you do if you are added in a group that you don't want)*

ANSWER; *nalefuta*

(left)

QUESTION 5; *Niwenya eshimosi eshilahi olakhola orie?*

ANSWER; *nakurosa, purita* (cross breed)

QUESTION 6; *Kachila shina orumushilanga amakhuba kolusungu?*

(Why do you use English borrowed words)

ANSWER 7; *likhuba livulaho lie Shindu shenesho Mulukabarasi*

(There is no Lukabras word for this)

ANSWER 8; *okhwiulila tsa obulahi*

(To feel good)

QUESTION 9; *abantu boosi Emugai kamurushilanga amakhuba kolusungu*

(Do all people in Mugai use Lukabras borrowed verbs in speech)

ANSWER; *boosi tawe lakini abanyishi khurula khubana mpaka khubatukhu*

(Not all but most of them starting from the children to the elderly)

QUESTION 10; *abana basomanga Olukabarasi shesukulu*

(Do children learn Lukabras at school)

ANSWER; *yii* (yes)

QUESTION 11; *muvetsakho nende emilukha cho Lukabras? ne murusiakho Makhuba mulusungu?*

**ANSWER** *Chanzile omwaka kuwele. Omukhongo we kawunti yarereho December abantu bayanza. Etsinyimbo nende amashairi kavolwa mulukabrasi nende amakhuba kokhwikopa mulusungu.*

It started December last and was organized by the County. Songs and poems ere resided in Lukabras language blended with loan verbs from English.

## APPENDIX II: INTERVIEW SCHEDULE

Personal details of respondents

Name-----Sex-----

Age-----Place of birth-----

First Language-----Other languages-----

QUESTION 1; *onyela okhulompa ekeki orie?* (How can you make a cake?)

ANSWER; *napeka* (I will bake)

QUESTION 2; *Amatsi amachafu okhola orie kho kave amalayi kokhurushila*

(How do you make dirty water safe before you use?)

ANSWER; *eturitanga* (I treat)

*Emboyilanga* (I boil)

QUESTION 3; *Abana nibakwile elichela bakhola shina?* (When children fail exam what do they do?)

ANSWER; i. *baribayisanga* (They are revising)

*ii.bakorekitanga amarebo kabakwile.* (They correct wrong answers)

QUESTION 4; *abaami basunjile bari shina?* (What did the chiefs say?)

ANSWER; *balamita mutsuli.* (They will meet tomorrow)

QUESTION 5; *etsifwa tsikasile kachila shina?* (Why are the vegetables looking healthy)

ANSWER; *khusupreyile* (We sprayed)

QUESTION 6; *bakhakholile shina nibashili okhutsia obucheni?* (What would they have done before they went to visit)

ANSWER; *bakhapulanile* (They would have planned)

QUESTION 7; *wina wabatisa Yesu?* (Who baptized Jesus?)

ANSWER; *Yohana mubatisi* (John the Baptist)

QUESTION 8; *abalimu batsile ena?* (Where have the teachers gone to?)

ANSWER; *khukolekita elichela* (To collect exams)

QUESTION 9; *wayanza okhulakaya Olukabarasi?* (Do you love speaking Lukabras?)

ANSWER; yii

QUESTION 10; *kachila shina wayanza okhulaya Olukabarasi?* (Why do you like speaking Lukabras)

ANSWER; *nilwo olulomolomo lwanje mani naluyanza* ( It is my language and I love it)

### APPENDIX III; RESPONDENTS CONSENT FORM

Amera kanje bari Maxmillah Mudogo.Esomanga Masinde Muliro.Nakhabanga amakhuba ko Olukabarasi lwarusia Mulusungu. kalakhonya mumasomo kanje ka masitasi. Nasabanga enti nimuyanza mwiame okhukhonya mumasomo kano. Namusuvilisianga enti sinarusia amakhuba kenyu yilwanyi ta. Kalaba butswa kamasomo.

My name is Maxmillah Mudogo, a researcher from Masinde Muliro University of Science and Technology. I am collecting data for my master's thesis on Lukabarasi loan verbs from English. I am therefore requesting for your consent to share in the study. Promise that your info will be private.

Informer's signature-----Date-----

Investigator's signature-----Date-----

In case of question, you can contact the researcher through 0711339983.

Noli nende elirebo Khupa khu inamba yino 071133998

APPENDIX IV: NACOSTI PERMIT


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