# Mophophonological changes of borrowed words from English to Lubukusu dialect of Western Kenya 

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#### Abstract

This study set out to investigate how Lubukusu borrows words from English and yet the two differ widely in terms of phonemic inventories. Borrowing of words form English to Lubukusu required assimilation processes to enable the transfer of characteristics of one language into the other. The study identified and described the morphophonological change that the loan words from English go through to fit into Lubukusu speech system and established morphophonological rules that account for the changes. The study adopted the theory Natural Generative phonology (NGP) which was propagated by Hopper (1976) as the theoretical framework. Sampling procedure was used to arrive at the fields most affected and sample population. Eighty speakers of Lubukusu from Bumula Division, Bungoma district were interviewed, ten respondents from each field of Education, Police, Health, Mechanics, commerce, Building and Construction, Religion and domestic. An interview schedule was used in data collection. The loan words were also recorded on a magnetic tape during articulation for the sake of analysis to get a clear picture of their morphophonological structure. The Loan words were transcribed for Morphophonological analysis. It was evident that there were lot of consonantal changes like consonant insertion, consonant deletion and consonant substitution among others. There were also vowel changes that were observed such as vowel deletion, vowel substitution and vowel insertion. No single loan word was found to maintain its original morphophonological structure when it moved from English to Lubukusu in both singular and Plural form. The study contributes to linguistic scholarship in the area of Lubukusu Morphophonemics. The knowledge acquired could be utilized by institutions of higher learning and translation centres. It was recommended that more studies like the current study should be conducted in the rest of the remaining dialects of Luhyia to give a clear picture of how Luhyia borrows words from English and also the suprasegmental level should be considered.


Key words: Lubukusu, English, higher learning and translation, languages, communication.

## INTRODUCTION

According to Makila (1978), Babukusu of Western Kenya - Bungoma District originated from Egypt to their current place via Uganda under one Native name Masaba. They settled at the foot hills of Mount Elgon. At the end of $18^{\text {th }}$ Century, Bukusu migrated to the present Bungoma

District. During this time, many Luhyia groups were also migrating (Were, 1967). The Babukusu therefore lived together with many neighbours from the Luhyia Community as well as the Kalenjins.
Makila (1978) states that Lubukusu was spoken with

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many dialects of Luhyia, and is one of the related languages to Luhyia. This language is however more closely related to the Lumasaba Language of Eastern Uganda than the other dialect of Luhyia. Lubukusu Spoken in Bungoma District has three main variations according to Makila (1978):

1. The dialect spoken North of Kimilili area, with its influence being noted in the region around Kitale.
2. The dialect spoken West of Bungoma town, with its purest form being in Bumula region.
3. The dialect spoken East of Webuye Town, extending to Kakamega and Lugari Districts.

Of these, the Lubukusu Spoken around Bungoma townBumula is considered the purest form. This is because the other two dialects are influenced by other dialects of Luhyia languages. This study focused on Lubukusu around Bungoma (West of the town).
Lubukusu is a dialect which belongs to the vast Luhyia Language spoken in Western Province of Kenya and Eastern region of Uganda.

In Western Kenya, the Luhyia language has 17 dialect: Lutiriki, Lumaragoli, Lunyore, Lukhayo, Lumateka, Lunyala, Lusamia, Luisukha, Luitakho, Lushisa, Lumarachi, Lutsotso, Lukabarasi, Lutachoni, Luwanga, Lumarama and Lubukusu.

In Eastern Uganda there are 4 dialects: Lumasaba, Lusamia, lunyole and Lubukusu (Were, 1967). Therefore, according to Were (1967), Lubukusu language is spoken in Kenya (Western Kenya in the large Bungoma District) and Eastern region in Uganda (Manafwa, Bududa, Mbale and Sironko Districts).

This study is on the Lubukusu dialect of Luhyia Language in Kenya in Bungoma District. The dialect has been in contact with English language for a long time. This can be traced as far back as the coming of the missionaries and colonial administrators in the early nineteenth century.
The Bukusu people who joined missionary schools learnt English to help in the process of Evangelism. Schools which were started by missionaries such as St. Mary's Kibabi High School and Kamusinga Boys High School encouraged the use of English language latter on. English language was also used in training the Bukusu people for vocational jobs under the colonial government.
Ominde (1964) after independence published a report in which he recommended English language be used from primary schools to other higher levels of learning. Borrowing of lexical items from English occurred as the learning of English became more formal. Lexical borrowing was not only enhanced by the learning system but also by the advancement of apprentice jobs to cover the whites materials and values that Babukusu learnt from English.

Ladeforged (1980) notes that English language has a total of twenty one vowels, nine diphthongs, white Were
(1967) reports that Lubukusu language has five vowels which due to vowel length, doubles to ten.

Therefore English language and Lubukusu languages are different in terms of phonemic inventories and morphological structure:

Khasandi (1996), states that English language has final consonants while Lubukusu has a vowel at the end of the word. She says that while the plural marker of regular nouns in English is in the suffix position, the plural marker in Lubukusu is in the prefix position. It was therefore of Linguistic interest to study the various aspects and characteristics of Lubukusu loan words from English using the prospects of a Modern theoretical model. The morphonological changes were analysed using the claims of linguistic change made by Natural Generative Phonology (NGP), which is adopted as a theoretical framework in this study.

The theory that was used in this study is NGP by Hooper (1972). As observed by Hooper, it helps in making concrete predictiosn about sounds of natural language. It examines relationship between morphology and phonology. The NGP has several categories of rules of phonology.

## The P-rules (phonological rules)

This accounts for only phonetic information in their environments. The phonetic information includes syllable boundaries of borrowed words. They use features which have intrinstic phonetic content. These rules include assimiliation, strengthening and weakening. The morphemes deleted and inserted in the borrowed words justify these rules.

## The MP - rules (morphonological rules)

These rules are determined by the morphosyntactic or lexical conditioning. They take into account morphological and syntactic information such as morpheme boundaries, morpheme classes and lexical categories. They are determined within sound meaning correspondence of individual languages.

For instance the regular morpheme marker for plural in English is in the final position while in Lubukusu is in the initial position.

## The Via - rules

These rules express phonological relationship in situation where none of the two or more related forms can justifiably been said to be underlying and other (s) derived from it. This means they are applied to cases that cannot be explained phonetic or morphosyntactic terms. They relate one lexical item to another without having to claim
that one is derived from the other. The rules established from the borrowed words from English to Lubukusu in this study are propagated by this via rules. This implies that the items are entered in a borrowing language from a donor language as separate items showing the relationship between the two terms of the language without claiming that one is derived from the other.

## The morphological spell out rules

These rules determine the phonological shapes or realisation of abstruct morphemes especially those dealing with tense. These rules are applied in morphosyntactic context of borrowed words where the borrowed noun word cause changes in the verb that follows it when used in the sentence

## The word formation rules

These specify what the morphological elements can constitute a word and the nature of their arrangement within the language. This explains how borrowed words from English to Lubukusu were joined forming borrowed words.

## The syllabification rules

These rules assign boundaries to the phonological strings or sequence .During the analysis of borrowed words conditions were met under which certain words were borrowed. These conditions such as the environment in which the syllable appears helps in forming specific rules to the given borrowed word. They therefore help in showing the changes that take place in a given word.

Hooper (1976) defines morphophonology as the study of phonemic variation where phonemes undergo in combination with one another e.g. Hoof - /hu:f/, has a plural hooves - /hu:vs/in English. It is therefore, the study of phonological structures of Morphemes within and the permitted combination of morphemes within words in any given language or language variety. According to Hooper (1976) the language structure consists of lexicon from other languages.

Langacker (1967) argues that language, among other reasons, changes with time. These changes occur due to language contact. One of the occurrence of language contact is borrowing. Langacker (1967) adds that the loaning affects the borrowing language phonologically.

According to Langacker (1967), the main reason of language borrowing is to enable communication between the speakers of different languages.

The current study agrees with this view because the Lubukusu Speakers lacked words to term the new items/ ideas that came with the English language and so had
to borrow words from English.
Accordingly the words had to undergo changes that are discussed in this study. Langacker (1967) also notes that during borrowing process a word undergoes phonological changes that can make it fit into the borrowing language.

## METHODOLOGY

## Design

The study design was descriptive and both qualitative and quantitative technicques of data collection and analysis were found more applicable.

Qualitative techniques established the number of populations that was of interest in the study area especially the fields of administration police, commerce, health, religion, domestic, education, motor vehicle and building and construction that experience the frequent use of Lubukusu hence influencing borrowing from English language.
Quantitative techniques were used to find the morpho-phonological changes behind the established fields. Eight fields were sampled. The sample comprised of 10 speakers per field and therefore 80 speakers from 8 fields. This covered $0.3 \%$ of the total population of Bumula division- Bungoma District. The percentage of capacity correctly borrowed words was shown per field.

## Location

The data acquired was only limited to loan words borrowed from English to Lubukusu dialect of Luhyia. Thus the data collection was conducted in Bumula Division of Bungoma District. Bumula Division boarders Busia and Teso Districts in the west, Mt Elgon District to the North, Butere- Mumiasi District to the South and Lugari and Tranzoia Districts to the East.

## Population

The target sample in this research consisted of eighty native speakers of Lubukusu language from Bumula Division of Bungoma District. This had an advantage of helping the researcher to select a linguistically homogeneous group of respondents that was best suited for this study. According to Were (1967), the Bukusu speakers belong to a vast Luhyia speakers of Western Kenya. Luhyia belong to the Bantu group of language and has seventeen dialects.
The loan words in the study were selected from 8 fields of Education, Administration Building and construction, Domestic, Religion and Commerce. Atleast two borrowed words will be analysed from each field, showing the Morphophonological changes. A total of 80 words borrowed from 8 fields this means that at least 10 words from each field.

## Sampling methods

The purposeful sampling procedure was used to select the fields in the rural areas. In these fields, the use of Lubukusu is predominant among the people. For urban speakers a significant of them speak other languages like Kiswahili, and other Luhyia Languages. Featuring such speakers in the study was therefore likely to lead to erroneous conclusions (Bakari 1985).
Simple random sampling was employed in selecting the actual fields. This was done by assigning numbers to the fields in the

Division that were in the rural areas and picking the numbers randomly. To select the speakers simple random sampling was applied through randomly picking the names of the people (speakers) from the lists provided by their leaders. The sample comprised 10 speakers per field and adding up to 80 speakers from 8 fields.

## Data collection

An interview schedule in the form of structured interview was used. A tape recorder was used to record the articulation of the lexical items for purposes of transcription.

## Data collection processes

An interview schedule was used to help in collecting English loan words in Lubukusu. The answers to the questions in the interview schedule were filled in by researcher himself. Such control measures ensured safety and neatness as some of the areas where the research was conducted like the garage and building sites could easily grease them. The interview schedule was divided into two main sections. Section one consisted of general information about the respondent like the age, occupation, level of education and the number of the languages spoken.

Section two was divided into eight sub sections to represent the areas where there has been massive borrowing as outlined in the background to this study. Each sub section had some objects/ items referred to using borrowed words from English. In different places the researcher pronounced the English words in the interview schedule and asked the respondent to give the Lubukusu equivalent of that word. Whenever possible the researcher pointed out some of the objects or items and wrote down the responses given.

Section two was also designed in such a way that enough space was left for the researcher to fill in other object's referred to using lubukusu borrowed words from English, but which the researcher had not included in the research schedule. The section with blanks on the interview schedule under the heading 'any others' was for this purpose. The data collected by the interview schedule was raw without any word of analysis.

## Limitations

During the study the researcher encountered the following limitations: There was a lot of noise in some areas where the researcher went to collect data; like the garage and building site. The researcher had to persuade the respondents to move away from the site to a quiet place but in the same vicinity. This enabled the researcher in listening to the words that were being pronounced by the people working in the field of mechanics for transcription analysis.
Some of the sounds encountered in the Lubukusu dialect do not exist in English like the voiced bilabial fricative / $\beta$ /and hence the researcher had problems with transcription because most of the comprehensive dictionaries available deal with English sound and transcription. Lubukusu has no dictionary and so the researcher had to use the information got from the native speakers to transcribe the loan words from English to Lubukusu.

## DISCUSSION OF FINDINGS

## Consonantal change

In the introduction, it was observed that English and

Lubukusu have different linguistic systems and that, the English words that have found their way into Lubukusu have undergone major Morphophonological alterations to fit into the Lubukusu speech system. This section looks at the consonantal changes that occur when English words are borrowed into Lubukusu, which include consonantal deletion, consonant substitution and consonant strengthening.

## Consonant strengthening

This is a linguistic process in which a sound with a single segment is replaced with a sound with two segments which are considered as one. Some words borrowed from English to Lubukusu show a process of consonant strengthening. For instance where the velar nasal $/ \mathrm{n} /$ changes to velar compound $/ \mathrm{ng} /$ when it is followed by voiced velar stop/g/as shown below

| English | Gloss <br> /jilin/ | Lubukusu <br> Shillings | Glosilingi/ |
| :--- | :--- | :--- | :--- |
| Rule | $[n]>[n g] /$ V-V |  |  |
| eshilingi |  |  |  |

## Consonant deletion

This is a linguistic process in which a consonant is eliminated from its position. The deleted sounds are especially those that do not occur in the Lubukusu Consonant inventory.
The /h/ sound in English words borrowed to Lubukusu is deleted when the words are integrated in the Lubukusu language, for example

| English | Gloss | Lubukusu | Gloss |
| :--- | :--- | :--- | :--- |
| /hautel/ | hotel | leoteli/ | eoteli |
| /hǽndbrek/ | handbreake | leandißureki/ | eandibureki |
| /hauspit// | hospital | leosißito/ | eosibito |

The rule governing the deletion here as a process of change can be as follows: -
$[\mathrm{h}]>[\varnothing] /-\mathrm{V}$
That is $/ \mathrm{h} /$ is deleted in the environment where vowels come after it. In a few cases, we have [t] deletion process as in the following examples.

| English | Gloss | Lubukusu | Gloss |
| :--- | :--- | :--- | :--- |
| /Sigдret/ | Cigarette | lesikara/ | Esikara |

The rule for this change can be written as follows: -
$[t]>[\varnothing] /-\mathrm{V}$.
In this case the sound $/ t /$ is deleted in its word final position when it gets into Lubukusu. Other examples that
show these consonantal changes are as follows: -

| English | Gloss | Lubukusu | Gloss |
| :--- | :--- | :--- | :--- |
| $/$ Pikt $J \partial /$ | Picture | lepi: $\mathrm{f} / \mathrm{a} / \mathrm{l}$ | epiicha |

The Consonant deleted here is /K/
$[\mathrm{K}]>[\varnothing] /-\mathrm{V}$

| English | Gloss <br> /Sainpaust/ | Lubukusu <br> Signpost | Gloss <br> /Esainipoti/ |
| :--- | :--- | :--- | :--- |
| esainipoti |  |  |  |

The consonant deleted here is $/ \mathrm{S} /$
$[\mathrm{S}]>[\varnothing] /-\mathrm{C}$.

## Consonant substitution

This is a linguistic process in which a consonant is replaced by a completely different consonant. In the process of borrowing words from English to Lubukusu some consonants are substituted so that the words can fit into the Lubukusu dialect of Luhyia Language. Most of Lubukusu sounds are voiceless and do not pair according to the state of the glottis. English, on the other hand has many voiceless and voiced sounds has many voiceless and voiced sounds which are paired into phonological opposition apart from the nasal sounds $/ \mathrm{m} /, / \mathrm{n} /$ and $/ \mathrm{n} /$, the frictionless continuant $/ \mathrm{r} /$, the semi - vowel glides $/ \mathrm{j} /$ and $/ \mathrm{w} /$ and the voiceless glottal fricative $/ \mathrm{h} /$.

Daniel Johns (1960) says the following about English consonants
............ Some Consonants are breathed voiceless, others are voiced. To every breathed sound corresponds a voiced sound i.e. are articulated in the same place and manner but with voice substituted for breath, and vice versa thus /v/ corresponds with /f/. /z/ to /s/and/b/ to /p/.

Since Voiceless sounds in Lubukusu do not have voiced counterparts, English words with voiced sounds being adopted by Lubukusu have these sounds substituted with voiceless ones. There are also some sounds that occur in English but these are not found in Lubukusu. In this case, when words with such sounds from English get to Lubukusu, the sounds are substituted so that the words can fit in the Lubukusu speech system.

For example, the voiceless bilabial stop /p/ in English words by Lubukusu changes to a voiced bilabial fricative $/ \beta /$. The linear rule can be written as below:

Rule

$$
[P]>[\beta] / V-V .
$$

The data below illustrates this change.

| English | Gloss | Lubukusu | Gloss |
| :--- | :--- | :--- | :--- |
| /dip/ | Dip | leti:ßu/ | etiibu |
| /rips:t/ | report | lerißoti/ | eriboti |
| /Zip/ | Zip | lesißu/ | esibu |

There is also a substitution process whereby the voiced labio-dental fricative
$/ \mathrm{V} /$ is replaced with the voiced bilabial fricative $/ \beta /$ as shown I the rule below:
Rule $\quad[\mathrm{V}]>[\beta] / \mathrm{V}-\mathrm{V}$
The data below illustrated this change.

| English | Gloss | Lubukusu | Gloss |
| :--- | :--- | :--- | :--- |
| /vдrǽnda/ | Veranda | leßaranda/ | ebaranda |
| /vest / | Vest | leßesit// | ebesiti |
| /ti:vi/ | Televesheni | leti: $\beta$ i/ | etiibi |

When English words bearing a voiced alvedar fricative /z/ enter Lubukusu, the sound is substituted with the voiceless alveolor fricative $/ \mathrm{s} /$. The following rule and data illustrated this.

Rule $[Z]>[S] / V-V$ :For example in the following examples.

| English | Gloss | Lubukusu | Gloss |
| :--- | :--- | :--- | :--- |
| IZiərдu/ | Zero | lesi:ro/ | esiiro |
| Iziərวu | Zip | lesi: $\beta$ / | esiibu |
| /æzzma/ | Asthma | lasima/ | asima |

English words having a voiced palato - alveolar /dz/ sound is substituted with a voiceless palato alveolar affricate sound /t $\mathrm{t} / \mathrm{when}$ used in Lubukusu speech system. This is illustrated as follows;
Rule
$[\mathrm{dz}]>[\mathrm{t}] \mathrm{l} / \mathrm{V}-\mathrm{V}$
Examples include:

| English | Gloss | Lubukusu | Gloss |
| :--- | :--- | :--- | :--- |
| /dzæ̇m/ | Jam | let tfa:mu/ | echaamu |
| /dzeil/ | Jail | letfe:la/ | echeela |
| /dz^g/ | Jug | letJa:ka/ | echaaka |

When English words having a voiced alveolar stop /d/ enter Lubukusu the sound changes to a voiceless dental stop /t/. This is illustrated as follows:

Rule $\quad[d]>[t] / V-V$ For example

| English | Gloss | Lubukusu | Gloss |
| :--- | :--- | :--- | :--- |
| /K $\wedge$ bdd/ | Cupboard | lekaßati/ | ekabati |
| /reidi 2 / | Radio | lere:tio/ | ereetio |
| /d $\wedge$ st $\partial /$ | Duster | letasita/ | etasta |

When English words have the velar nasal stop/ $\eta \mathrm{k} /$ the sound changes to alveolar nasal compound $/ \mathrm{hg} /$ in Lubukusu as illustrated:

| English | G | Lubukusu | Gloss |
| :---: | :---: | :---: | :---: |
| /h | handkerchief | /siangatiju/ | siandingachifu |
| /tæ̇nk/ | Tank | /lita:ngi/ | Litaangi |

## Consonant nasalization

Some consonants undergo the process of nasalization in the data below. In the data below a single segment changes into a nasal compound in Lubukusu. For example, the alveolar plosive /d/ changes to a nasal compound /nd/ when it comes after the alveolar nasal /n/ as in:

| English | Gloss | Lubukusu | Gloss |
| :--- | :--- | :--- | :--- |
| /deiri/ | Dairy | /ende:ri/ | endeeri |

The rule for this process of nasalization can be written as follows:

Rule

$$
[\mathrm{d}]>[\mathrm{nd}] / \mathrm{V}-\mathrm{V}
$$

Putting in wards, the rule states that /d/ because /nd/ in an inter-vocalic environment

## Vowel changes in Lubukusu Loan words from English

The Lubukusu vowel system differs greatly from that of English as observed in this study. Therefore, the English words that are adopted by Lubukusu, a dialect of Lulyia language undergo some vowel change to fit into the Lubukusu speech system. These changes include vowel substitutions, vowel deletion and vowel insertion.

## Vowel insertion

This is a linguistic process where a sound is added to the borrowed word. The vowel insertion process was realized to be motivated by morphphonological factors. The MP rules discussed in the theoretical framework were found to be at work in Morph-phonological motivated changes as illustrated in the noun classes in the literature review section. The prefixes added to the loan words denote the aspect of number. The following data shows vowels insertion in the loan wards as a result of Morphphonological conditioning.

It should also be noted that some of the prefixes contain a consonant sound, depending on the class they fall under in the noun classification system of the language in question.

| English | Gloss | Lubukusu | Gloss | Inserted <br> prefix |
| :--- | :--- | :--- | :--- | :--- |
| /risi:ts/ | Receipts | /tfiristi/ | Chirisiti | Chi- |
| /mдutдka/ | Motorcar | lemutoka/ | emutoka | emu |
| /Mita/ | Meter | lemi:ta/ | emiita | e- |
| /endzin/ | Engine | leinndzini/ | einjini | e- |

English words that are borrowed to Lubukusu with consonant Sounds in word final position have a vowel
inserted in word position due to phonological conditioning since Lubukusu has no final consonant. The following data illustrated these changes.

| English | Gloss | Lubukusu | Gloss | Inserted <br> Vowel |
| :--- | :--- | :--- | :--- | :--- |
| /t $\int \supset: K /$ | Chalk | let $\int o: k a / ~$ | echooka | a |
| /zip/ | Zip | lesi: $\beta \mathrm{u} /$ | esiißu | -u |

## Vowel deletion

Due to the difference in vowel inventories of the Lubukusu dialect and English language, some of the loan wants show the process of vowel deletion. The following example illustrates this change.

| English | Gloss | Lubukusu | Gloss | Vowel deleted |
| :---: | :---: | :---: | :---: | :---: |
| /Keis/ | Case | /ekesi/ | ekesi | - i |
| /Ziərдu/ | Zero | lesi:ro/ | esiiro | - $\partial$ |
| Rule: | [i] > $/$ / V |  |  |  |

## Vowel substitution

The English words entering Lubukusu have some of their vowel sounds substituted with Lubukusu vowel sounds. This is mainly because of the difference in vowel inventories of English and Lubukusu. For example, the change below involves the high front vowel /e/ in English words being replaced /i/ when the words get to Lubukusu.

| English | Gloss | Lubukusu | Gloss |
| :--- | :--- | :--- | :--- |
| /Kдmiti/ | Committee | lekomi:ti/ | ekomiiti |
| /Zip/ | Zip | lesi: $\beta$ / | esiibu |
| /Mis $\partial$ // | Missal | lemi:sa/ | emiisa |

Rule: /e >i:/
When adopted by Lubukusu, English words with the diphthong /a/ the sound is substituted by the back mind vowel /o/ as shown as follows

| English | Gloss | Lubukusu | Gloss |
| :--- | :--- | :--- | :--- |
| /hdutel/ | Hotel | leoteli/ | eoteli |
| /ndut/ | Note | lenoti/ | enoti |
| /ldun/ | Loan | leloni/ | eloni |
| Rule. |  |  |  |

When borrowed English words get into Lubukusu, the open central vowel / $/$ / is substituted by the open low front vowel /a/. This process is illustrated by the data as follows:

| English | Gloss | Lubukusu | Gloss |
| :--- | :--- | :--- | :--- |
| $/ \mathrm{k} \wedge \mathrm{b} \partial \mathrm{d} /$ | Cupboard | lekaßati/ | ekabati |
| $/ \mathrm{dz} \wedge \mathrm{dz} /$ | Judge | It $\mathrm{fat} \mathrm{j} \mathrm{i} /$ | Chachi |
| $/ \mathrm{K} \mid \wedge \mathrm{t} \mathrm{f} /$ | Clutch | /eklat $\mathrm{j} / \mathrm{l}$ | eklachi |

Rule: / $\wedge>$ a/
The open low front vowel /ǽ /in English words borrowed to Lubukusu are substituted by the open low front vowel /a/ as shown as follows.

| English | Gloss | Lubukusu | Gloss |
| :--- | :--- | :--- | :--- |
| /varǽnda/ | Veranda | leßaranda/ | ebaranda |
| lǽzama/ | Asthma | lasima/ | asima |
| /kǽlənda/ | Calendar | lekalenda/ | ekalenda |
| Rule /ǽ > a/ |  |  |  |

Jones (1963) reports that many words in English have a schwa sound $/ \partial /$ which is a relatively short vowel of intermediate quality and occurs in unstressed syllables in English. When this sound occurs in English, words borrowed to Lubukusu the sound is substituted by the open low front vowel $/ a /$. This is illustrated as follows:

| English | Gloss | Lubukusu | Gloss |
| :--- | :--- | :--- | :--- |
| /trekt $\partial /$ | Tractor | letrakta/ | etrakta |
| /n^mb $\lambda /$ | Number | lenamba/ | enamba |
| /splut/ | Salute | lesaru:ti/ | esaruuti |
| Rule: | $/ \partial>\mathrm{a} /$ |  |  |

## CONCLUSION

The current study was generally in the area of language contact and specifically borrowing. The two critical issues to the study as reflected in the objectives of the study were wether the borrowed words from English to Lubukusu undergo Morphonological changes and whether the changes are governed by the rules as stipulated in Natural Generative phonology by Hooper (1976). This scientific process through NGP if applied to other languages can be of great importance in the analysis of the structure of langagues.

The research questions of the study were confirmed since it was found that English words borrowed by Lubukusu undergo Morphophonological changes which are governed by Morphophonological.

The morphophonological rules were established as a result of certain principles. For example in consonantal deletion, a sound was deleted from a borrowed word in a given environment, either when the vowel comes after or before it. On the other hand when a vowel is delected the same principles of environmental changes happen so as the word is used in Lubukusu structure.
The difference between the structure of English and Lubukusu in relation to vowel and consonants is the basis of changes analysed in this study. The English Language having 24 consonants and 21 vowels while Lubukusu having 21 consonants and 10 vowels makes the structure of the two languages different. The singular and plural makers on the other hand coming in different positions gives a basis for the differences in structure of the languages.

Vowel and consonantal changes are established in this study on the basis of the data transcription shown earlier.

The consonantal changes observed were, consonant substitution, consonant deletion, and consonant strengthening. The vowel changes observed include vowel substitution, vowel insertion and vowel deletion. There was no single word that maintained its initial structure when borrowed from English to Lubukusu, in singular and plural form.
It can also be discovered that morphology which deals with word formation and phonology which deals with sound system of language were justified as two components of language which depend on one another. The words that were borrowed from English which had sounds such as $/ z /$ were assimilated by /s/ sound which is used in lubukusu. Sounds such as /b/./z, and /g/ are not used in Lubukusu instead we have the voiced or unvoiced alternative sounds. In this case morphology and phonology were seen in intergration.
Arlotto (1972) and Hock (1986), among others, who have done historical and comparative study of language agrees with the resources on the current study.Arlotto reports that words undergo systematic changes to fit into the recipient language from the donor language. Hock reports that a word is nativized to fit into the borrowing language and to be used like other words in that recipient language. In view of the foregoing, the questions of the current study were confirmed and the objectives were achieved.

## Conflict of Interests

The author(s) have not declared any conflict of interests.

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