

# Resyllabification of Loan Words in Kalenjin Phonology

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## Abstract

The description of syllable structure in the individual languages is important in realizing syllabic markedness which motivates re-syllabification in the recipient language. The paper therefore is an analysis of re-syllabification of Kipsigis and Tugen loan words borrowed from Kiswahili language. The paper also gives an overview of the syllable structure in Kipsigis and Tugen as the recipient languages and Kiswahili as the source language. Data analysis was guided by consonant vowel (C.V) phonological framework. The study found out that resyllabification is a morphophonological process during word formation in any given language.

**Keywords:** Re-syllabification, Syllables, Loan words, Tugen, Kipsigis

## 1. Introduction

A syllable is a minimal pronounceable phonological unit (Kenstowicz, 1994). It can be utilized as a linguistic unit for studying distributional restrictions in a language. This paper analyses how words borrowed by Kipsigis and Tugen, nilo-saharan languages forming part of Kalenjin dialects (Sambu, 2008 and Kipkorir, 1985), are re-syllabified in order to match with the recipient language patterns. This happens when the syllable structure of the source language differ from that of the recipient language. As a result of this process, a number of borrowed words differ in syllable structures with their original forms.

Re-syllabification is prompted by the requirement to unmark the marked associations of the donor language forms (Oduma, 2006, Kenstowicz, 1994). Vowel epenthesis is frequently used in the unmarking process. Syllable structures are restructured as the words are adapted in the recipient language. The structures are re-syllabified by addition of either epenthetic consonants or vowels. Functionally, re-syllabification is shown in this paper as a process meant to introduce phonological conformation in the borrowed lexical forms.

## 2.0 Conceptual Framework

This paper is based on the *markedness principle* in analyzing and explaining re-syllabification of borrowed words in the phonological structure of the recipient language (Goldsmith, 1995, Aswani, 2001). Our study reveals processes such as vowel epenthesis and consonant epenthesis that are as result of the re-syllabification processes.

The CV phonological theory was adopted in analyzing re-syllabification in Kalenjin and Tugen languages. The theory is a three-tiered model which is useful in segmental and supra-segmental analysis of units such as sound segments, syllables and tiers. We comparatively analyzed the syllable structures of the two languages involved in this study so as to illustrate the re-syllabification processes prompted by the need for phonological convention with the recipient language structures (Aswani, 2001; Kenstowicz, 1994).

The basic data used in this paper are forms collected from a Kipsigis-English-Swahili Dictionary (Towett, 1979) and Tugen-Swahili Dictionary (Yet to be published, by Mosol Kandagor and Kutol Kiprono by end of 2014). This study limits its scope to the description of Kipsigis and (or) Tugen syllables whose forms were borrowed from Kiswahili.

## 3.0 Syllable Structure in Kalenjin (Kipsigis/Tugen)

The data studied in this research illustrate that there are many lexical forms that are originally from either Kipsigis or Tugen dialects of Kalenjin language. This section explores the aspect of syllable structure in Kalenjin language. This study established that there are two possible phonetic relations that can occur as a result of morphological borrowing from Kiswahili to Kipsigis and Tugen dialects. Firstly, there can be unmarked relations and, secondly, marked relations can be brought about.

Unmarked phonetic relations produce syllable structures that are usual in Kipsigis and Tugen sub-languages in the sense that they are acceptable in its phonological system. The marked associations are those that have to be re-syllabified or reconfigured so as to fit into the recipient language. This section, for that reason, gives an overview of the Kipsigis and Tugen syllable structure because its rules are responsible for the re-syllabification process. It consists of both open and closed syllable structures as shown below:

### 3.1 Open Syllable Structure

Kalenjin language has open syllable structures which are made up of individual vowels or a combination of vowels and consonants. Every open syllable may be made up of either a vowel only or is ending with a vowel. We can illustrate the open Kipsigis and Tugen syllable structures in the examples below:

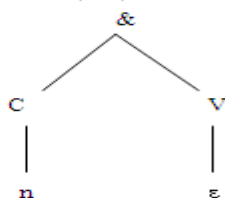
**Example 1. Vowel (V) Structure**

#I# = Second person Pronoun (you)  
 Si\$



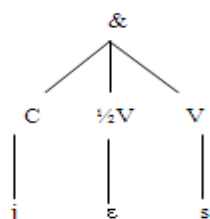
**Example 2. Consonant Vowel (CV) Structure**

#ne# = Sne\$ 'What?'



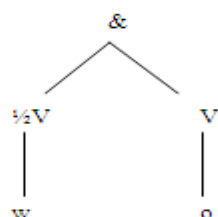
**Example 3. Consonant, Half Vowel-Vowel (C½VV) Structure**

#yes# = 'To nod'  
 Sjes\$



**Example 4. Half Vowel-Vowel (½VV) Structure**

#kiwoto# = 'border'  
 Ski\$wo\$Sto\$



From the above examples we can see that Kipsigis and Tugen has an open syllable structure which can be represented as V, C½VV, ½VV and V. Unlike Kiswahili, Kipsigis cannot use open structures in the last syllables of definite nouns.

### 3.2 Closed Syllable Structure

In addition to the open syllable structure, Kipsigis and Tugen languages primarily have a closed syllable structure. The closed syllable structure may consist of a consonant ending with other constituent phonemes. Closed syllables always end with consonants (Lehiste, 1992; Kadurenge, 2000). Kipsigis and Tugen languages have a few syllable structures with consonant clusters containing a consonant followed by an approximant or a liquid syllable such as mw, pw, kw, tw, rw, dw, pj, mj and ky. See the syllable structure patterns of Kipsigis and Tugen words that were not borrowed from other languages in the following table:

**Example 5. Table 1: Examples of Closed Syllables in Kipsigis and Tugen**

Kipsigis	Gloss	Syllable Structure	Representation
[amwaun]	'I am telling you'	V.C <sup>1</sup> / <sub>2</sub> VV.VC	\$a\$mwa\$un\$
[lakwet]	'baby'	CV.C <sup>1</sup> / <sub>2</sub> VVC	\$la\$kwet\$
[otwogindet]	'slave'	V.C <sup>1</sup> / <sub>2</sub> V.VC.CCVC	\$o\$two\$gi\$ndet\$
[arwet]	'kid'	V.C <sup>1</sup> / <sub>2</sub> VVC	\$a\$rwet\$
[chokjin]	'hasten'	CV.CCVC	\$okjin\$
[nwach]	'short'	C <sup>1</sup> / <sub>2</sub> VVC	\$nwach\$
[kaswan]	'listen to me'	CV.C <sup>1</sup> / <sub>2</sub> VVC	\$ko\$swan\$
[put]	'destroy'	CVC	\$put\$

In the above illustration, it is evident that Kipsigis and Tugen have a closed syllable structure which can be represented as VC, C<sup>1</sup>/<sub>2</sub>VVC, CVC and CCVC. Unlike Kiswahili, Kipsigis and Tugen cannot use individual nasal sounds such as /m/ and /n/ to form independent syllables. This is the reason why re-syllabification is effected on borrowed words.

#### 4.0 Kiswahili Syllable Structure

Kiswahili is a source language to many words in the Kipsigis and Tugen languages. This section describes the Kiswahili syllable structures which as it will be seen; greatly differ from that of Kipsigis and Tugen. Most of the Kiswahili words with Bantu origin have open syllables.

##### 4.1 Open Syllable Structure in Kiswahili

Kiswahili syllable structure is mainly open (Mgullu, 1999, Aswani, 1995). Words that have Bantu origin in Kiswahili notably have open structures. Only a few words that were borrowed from Arabic, English and other languages display closed syllable structures. Data points out to the conclusion that Kiswahili has a CV syllable structure. A C<sup>1</sup>/<sub>2</sub>VV syllable structure occurs in Kiswahili when a C-element follows a liquid or semi-vowel [j] or [w]. Look at the following examples:

**Example 6. Table 2: Examples of Open Syllable Structures in Kiswahili**

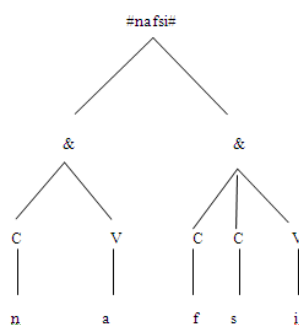
	Kiswahili word	Syllable representation	Syllable structure	Gloss
a)	na	<b>\$na\$</b>	CV	and
b)	nafsi	<b>\$na\$</b> \$fsi\$	CCV	soul
c)	kisha	\$ki\$ \$a\$	V	then
d)	wa	<b>\$wa\$</b>	<sup>1</sup> / <sub>2</sub> VV	of
e)	mbwa	<b>\$m\$</b> \$bwa\$	C <sup>1</sup> / <sub>2</sub> VV	dog

All the syllables that are represented in bold in table 2 above, are open as they are ending with vowels. The syllables which are merged to build morphological units are structured as represented below:

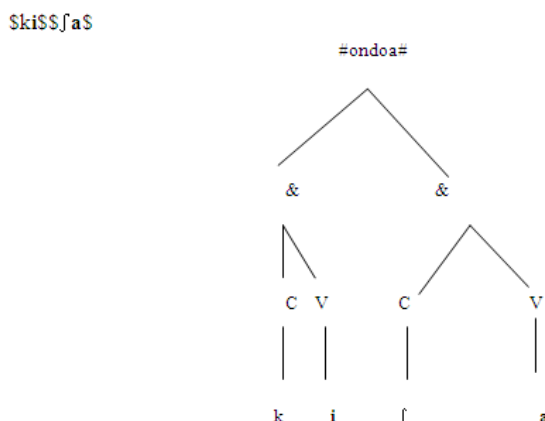
#### Morphological Units: Merged Syllables

Example 7. =nafsi=

\$na\$ \$fsi\$



**Example 8. #kisha#**



The above examples demonstrate a phonological reality that open syllable structures in Kiswahili may vary from form to form but the base is that they constitute a single vowel or must end with a vowel.

**4.2 Closed Syllable Structure in Kiswahili**

Words that were borrowed from other languages such as English and Arabic have closed syllable structures. The following are examples of closed syllables whose forms were borrowed from other languages to Kiswahili:

**Example 9. Table 3: Examples of Closed Syllable Structures in Kiswahili**

	Kiswahili Word	Source Language	Syllable structure	Closed Syllable	Gloss
a)	labda	Arabic	\$lab\$\$da\$	CVC	perhaps
b)	sentensi	English	\$sen\$\$ten\$\$si\$	CVC	sentence
c)	konsonanti	English	\$kon\$\$son\$\$a\$\$nti\$	CVC	consonant

The first syllables in the following Kiswahili examples have closed structures which consist of single nasal consonants as shown below:

**Example 10. Single Nasal Consonants**

- a) Nchi [n\$□i\$] C.CV (country)
- b) Mtoto [m\$to\$to\$] C.CV.CV (child)
- c) Mpya [m\$pya] C.C½ VV (new)

**5.0 Resyllabification of Loan Words in Kipsigis and Tugen**

Re-syllabification is prompted by the requirement to remove the phonological associations to the donor language forms that are not acceptable in the recipient language (Lehiste, 1992). The chief function of re-syllabification lies in the unmarking of a word for ease in pronunciation and acceptance.

Vowel epenthesis is one of the unmarking strategies used in re-syllabification in Kipsigis and Tugen. A word such as *mkoba* [m\$ko\$ba\$] which is borrowed from Kiswahili is re-syllabified so that even an open syllable structure can be translated into a closed syllable in Kipsigis as the word is represented as *mokubet* [mo\$ku\$b□t\$]. This word is re-syllabified with the addition of the epenthetic [o] in the previously closed syllable translating it to an open syllable [mo] in the recipient language. This process unmarks the consonant cluster which was in the Kiswahili word *mkoba* by inserting a vowel so as to conform to Kipsigis syllabification rules which prohibit most consonant clusters in the first syllables of the word.

Another re-syllabification process is the addition of an epenthetic [t] affixed to the end of the last syllable of every noun which is borrowed into Kipsigis. This morphophonological condition applies to both animate and inanimate nouns.

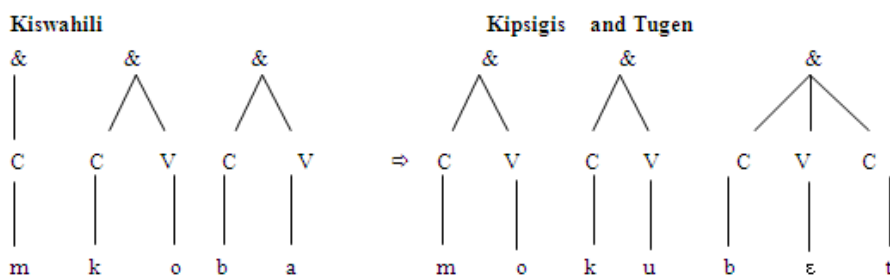
As it can be seen, because of differences in syllabic rules in Kipsigis and Kiswahili, where Kiswahili syllabic orders appear in Kipsigis loanwords, they are considered as marked. Examples of marked syllables are those whose structures are constituted by a consonant alone or end with a vowel in the last syllable of a borrowed noun. The re-syllabification processes of such marked syllable of loanwords can be represented as shown in examples below:

**Example 11. Table 4: Re-syllabification of Loan Words in Kipsigis and Tugen**

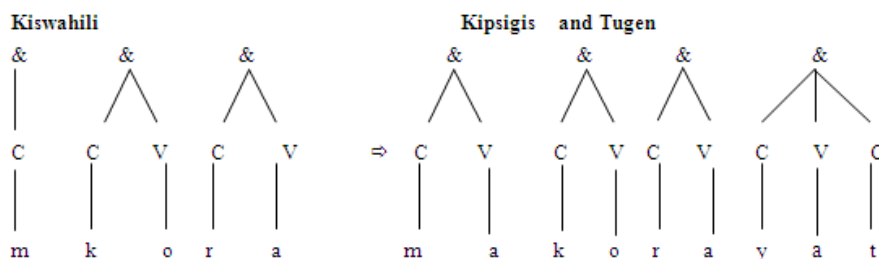
	Kiswahili word	Syllable structure	Gloss	Kipsigis equivalent	Syllable structure
11	Mkoba	$m\ k\ o\ b\ a$ C.CV.CV	Bag	Mokubet	$m\ o\ k\ u\ b\ e\ t$ CV.CV.CVC
12	Mkora	$m\ k\ o\ r\ a$ C.CV.CV	Conman	Makorayat	$m\ a\ k\ o\ r\ a\ y\ a\ t$ CV.CV.CV.½VVC

The examples shown in the table 11 indicate words borrowed from Kiswahili are re-syllabified by vowel insertion. Existence of consonant clusters in the first syllables of borrowed words in Kipsigis and Tugen renders them to be marked. Therefore, the main function of the process is to unmark marked syllable that was a result of the empty coda position in the first syllables. Re-syllabification of the above borrowed words can be illustrated as shown below:

**Example 12. Re-syllabification of Borrowed Words**



**Example 13. Re-syllabification of Borrowed Words**



In summary, illustrations shown in *examples 12* and *13* indicate a pattern where a word with C.CV.CV syllable structure is re-syllabified in the recipient language so as to appear as CV.CV.CVC. Another borrowed lexical form which had C.CV.CV syllable structure in the source language is re-syllabified also so that its final syllable order appears as CV.CV.CV.½VVC.

**5.1 Re-Syllabification Rules**

It is important to note that supra-segmental rules can result in the addition of a whole new syllable that was not there in the source language. Other rules only changed the syllable structures of the borrowed forms. In this regard, the following re-syllabification rules which apply to Kipsigis and Tugen loan words can be identified from this study:

**Example 14. Re-Syllabification Rules**

- (i) Ø o#.....
- (ii) Ø a#.....
- (iii) Ø yat/ .....&
- (iv) a e/C.....C
- (iv) o u/C.....C
- (iv) Ø t/..... #

As a result of the above rules, vowels and consonants are inserted into loanword structure during re-syllabification. This process can be termed as morphophonological since it involves syllable changes that occur as a word is introduced into another language. Re-syllabification is mainly motivated by the need for phonological conformation and ease in pronunciation. There is no evidence from this study that re-syllabification

can be used to add semantic value to the borrowed word other than the meaning it conveyed in the source language.

### 5.2 Re-Syllabification by Vowel Insertion

Ordinarily, Kiswahili nouns are restructured in Kipsigis and Tugen languages by insertion of a vowel after the class prefix 'm'. Often, the closed syllable [m] is re-syllabified thus losing its syllabic peak to an epenthetic vowel [u] or [a] in Kipsigis and Tugen loanwords as shown in the table below:

**Example 15. Table 5: Vowel Insertion**

Kiswahili	Kipsigis/Tugen	English
[mshahara]	[mushara]	'salary'
[mkate]	[makatiat]	'bread'
[mkwaju]	[mukwajit]	'ball'
[mchele]	[muchelek]	'rice'

Table 5 above indicate that loanwords are re-syllabified by insertion of vowel [u] and [a]. The reason for this process is that sequences of consonants such as 'msh-', 'mk-' na 'mch-' do not exist in the recipient language syllables. Consequently, when they are introduced from Kiswahili into Kipsigis and Tugen, they turn out to be marked. Re-syllabification is meant to unmark the relevant syllables through vowel insertion.

### 5.3 Re-Syllabification by Consonant Insertion

Loanwords from other languages into Kipsigis and Tugen languages which have open syllables are modified by inserting a consonant so as conform to Kipsigis and Tugen morphophonological patterns that can effectively convey form. For this reason, a final default epenthetic consonant [t] is used to unmark the empty codas in nominal forms that are borrowed into Kipsigis as shown below:

**Example 16. Table 6: Consonant Insertion**

Kiswahili	Kipsigis	English
[Kitanda]	[Kitandet]	'bed'
[mwalimu]	[mwalimuyot]	'teacher'
[malaika]	[malaikayat]	'angel'
[soksi]	[sikisyot]	'socks'
Hadithi	[atindoniot]	'story'

### Rule 2

$\emptyset \rightarrow t/ \dots \#$

An epenthetic consonant [t] is inserted word-finally in nominal loanwords in Kipsigis and Tugen languages.

### 6.0 Conclusion

This paper concludes that re-syllabification is meant to break or remove marked or foreign syllable patterns in word borrowing. Re-syllabification is therefore an assimilative linguistic procedure which may introduce new and/or delete some phonological elements of the source language in the borrowed words. This process is thus not purely phonological, rather it is morphophonological in its very nature. It ensures that syllable structures that may pose pronunciation challenges and do not conform to the canonical syllable structure rules of recipient language are customized.

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