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## The Syllable Structures of Olunyala (K)

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### Abstract:

*The purpose of this study was to find out the syllable types and word positions of the syllable structures of Olunyala (K). Generative CV phonology theory was used to analyze the syllables of Olunyala(K) in order to establish the prevalent word positions for each syllable type. In order to get the right respondents and the required data, the study used purposive sampling. Only nouns and verbs were analyzed because these are the word categories that were needed in the study. A descriptive research design was used to put the nouns and verbs into different categories for analysis. The data analysis revealed that Olunyala(K) has six syllable structures, namely; V, CV, CVV, CCV, CCCV and GGV. It was observed that not all the syllable structure types can occur in all word positions in Olunyala (K). The study is significant because it contributes to an objective generalization to and comparison to other Luyia dialects and Bantu languages in general. A study on the branching syllable onset to capture the composition of the internally complex onset in other Luyia and Bantu dialects in order to come up with CV tier trees that are specific to Bantu languages is recommended.*

### 1. Introduction

Olunyala(K) is one of the Luyia continuum of dialects spoken in the western part of Kenya, East Africa. The K in brackets stands for the Olunyala spoken in Kakamega and differentiates it from the variety that is spoken in Busia which scholars refer to as Olunyala (B). The aim of this study was to find out the syllable types and word positions of the syllable structures of Olunyala(K). This study focuses on the phonological syllable because it is a structural unit which is capable of showing the internal structure of a word and the boundaries of syllables within it. The phonological syllable is formed by combining the consonant (C) and vowel (V) elements, combinations of which differ from one language to another (Hooper, 1976). According to Kenstowicz (1994), not all possible sound segments in a language exist due to accidental gaps.

The identification and description of the syllable is important in any language is important because this is what enables the determination of other phonological processes that are larger than the segment (Bauer, 1988). The objective of this study is guided by the assumption that even when languages have the same sounds in their phonemic inventories, the combinations of these sounds differ. This assumption is the same for Olunyala(K) and the sister Luyia dialects.

The argument regarding the complex syllable onset in this study is that an onset is complex when it is composed of sound segments that are distinct in the phonetic inventory of that language. It is from this standpoint that the prenasalized syllable onset is discussed as a single sound segment with the CV syllable in Olunyala(K). The argument for this as a distinct syllable type is based on the observation by other scholars on Bantu languages who single out the CGV syllable type (Savala, 2005, Nandelenga, 2013). Other syllable types that have more than one sound segment are explored using data from Olunyala (K). The study was carried out in Bunyala location of Kakamega County because that is where Olunyala (K) is predominantly spoken.

### 2. Literature Review

Generative phonology came to recognize the syllable as an essential concept in understanding phonological structure. Discovery of the syllable structure of any language involves looking at the phonological sequences of specific syllable configurations (Gussmann, 2002). The nucleus is the central element of the syllable (Kreidler, 2001). This means that each language cannot avoid the nucleus in the formation of its syllables. The nucleus of the syllable is formed by a vowel although there are some languages in which any segment, and in others, the semi-vowel can form a nucleus when it syllabifies (Prince and Smolensky, 1993). In Olunyala(K), like in most Bantu languages, the nucleus can only be formed by a vowel and semi-vowels are pure consonants which form the onset rather than the nucleus (Etakwa, 2010; Nandelenga, 2013). Olunyala(K), like most Bantu languages, has an open syllable structure which does not allow codas (Angogo, 1989; Ingonga, 1990; Mbugua, 1990; Ochwaya, 1992; Sumba, 1992, Savala, 2005, Nandelenga, 2013). In addition, the dialect, like most Bantu languages and Luyia dialects, does not also allow diphthongs in its syllable structure and will use various phonological processes to eliminate them (Mutonyi, 2000; Wasike, 2004; Nandelenga, 2013).

Most Luyia dialects have four syllable structures, namely, CV, V, CVV and CGV(CSV); for example, Lubukusu and Lwitakho, (Savala, 2005, Nganga, 2008). The current study focuses on the CVV and V syllable structures, particularly at word medial position to find out the boundaries of the verb elements in the words in which they occur. This focus is guided by the observation by Etakwa, (2010) and Lwangale et al, (2016) that Olunyala(K) is one of the Luyia dialects that has a lot of the V syllable structure. The V

syllable structure at word medial position can easily be confused with the heavy syllable in the CVV syllable type. The observation by Oduor (2002) that in Dholuo, the VV syllable structure occurs word medially also holds true for Olunyala(K). However, the current study sought to show that in Olunyala(K), the VV syllable structure could easily be confused with the V syllable structure in which the vowel elements follow each other and yet they are syllabified in two distinct syllables. The confusion is even more likely when the two vowel elements are similar. The current study is also meant to rule out the occurrence of diphthongs in Olunyala (K) because sequences with vowels elements that occur together can easily be confused with diphthongs. The syllabification of the V and CVV syllable types is discussed in 4.1 and 4.3. The analysis of the two types of syllable structures in Olunyala(K) is as per Aronoff and Oehrle (1984) who posit that the difference between the phonologically long and short syllables can only be shown by looking at syllable boundaries. Most linguistic literature only refers to the diphthong and the long vowel while the current study shows that there is, also, the occurrence in which two vowels that follow each other fall in different syllables.

### 3. Methodology

A descriptive research design was used to describe the syllable structures of Olunyala(K) and their prevalent word positions. The design enabled the researcher to categorize the data as per the research objectives so as to identify and analyze the syllable structures. Following Creswell (1994), the data was put into the categories of nouns and verbs and the syllable types identified. Purposive sampling was used to get the respondents from, Lwakhupa village, Navakholo subcounty of Kakamega County. Two respondents and the researcher's speaker intuition were used to get the required data (Kenstowicz, 1994). Only primary data was used because secondary data in Olunyala(K) is hardly available owing to the fact that the dialect is understudied (Etakwa, 2010). A total of 200 words were used in the analysis; that is, 100 nouns and 100 verbs and these were further grouped into monosyllabic, disyllabic, trisyllabic and polysyllabic words so as to answer the objective on syllable position. The number of words is in line with Milroy (1987) who argues that large samples are not necessary in linguistic studies and even fewer word would have been used. The CV tier model proposed by Clements and Keyser (1983) was used to show and analyze the syllable types.

### 4. Findings and Discussion

The objective of this study was to find out the syllable types of Olunyala(K) The results are based on the following thematic areas which represent the syllable types that occur in Olunyala(K).

#### 4.1. The V Syllable Structure

This is the type of syllable that is referred to in linguistic literature as the onsetless or zero onset syllable. The V syllable structure is composed of one vowel segment only and does not, therefore have a branching tree. The V syllable structure mainly occurs at the beginning basic Olunyala(K) verbs at which position it manifests itself as a verbal prefix. The V syllable structure mainly occurs in disyllabic and trisyllabic verbs at word initial position but does not occur in polysyllabic verbs. This is due to the fact that Olunyala(K) does not have many polysyllabic verbs. The occurrence of this syllable structure at word medial position is not so common in Olunyala(K) verbs.

In polysyllabic nouns the V syllable structure was found to occur at word initial position. It was observed that the V structure occurs as the second and as such, the middle syllable in proper nouns that have the CV syllable as the first and last syllable. It does not also occur at the word final position in verbs unless it occurs as an affix to show position as in /e.ndi.o/ (I am here).

The V syllable is seen to manifest itself as a prefix before Olunyala nouns, both proper and common. The V syllable is the optimal syllable as far as names of places are concerned because it is the one that occurs at the beginning of such words. The only exception are the names of places whose pronunciation has borrowed from English; for example *Enamirama* is written as *Namirama*. The V syllable structure occurs at word final position in trisyllabic nouns in the words in 1.

1.

/e.fu.u/	a hippo
/e.nda.a/	a thicket
/o.lu.pa.u/	a piece of timber

The V structure does not occur at word medial position in verbs but does occur in the same position in nouns. It also occurs in the various forms of the verb as the verbs changes pertaining to the grammatical category of person. The analysis in this study shows that Olunyala(K) has the occurrence in which two syllables follow each other in word medial position but are syllabified in two different syllables, that is, V and V syllables.

#### 4.2. The CV Syllable Structure

This is the syllable structure that is referred to in linguistic literature as the onset syllable (Katamba, 1993). In Olunyala(K), the CV syllable structure has one consonant phoneme and one vowel element. This means that this structure does not have a branching onset as seen in figure 1.

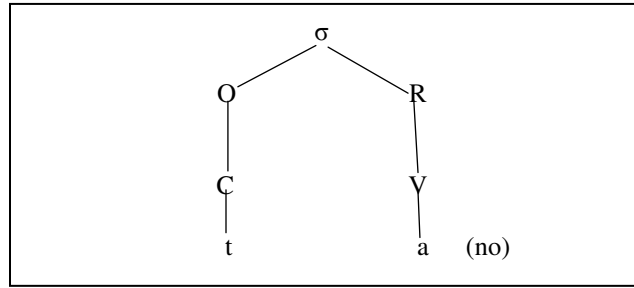


Figure 1: Olunyala(K) CV syllable structure

Thirteen Olunyala(K) consonants form the onset in this CV structure as seen in 2.

2.

/β/	/aβana/	children
/f/	/futa/	rub
/k/	/kula/	buy
/l/	/luma/	bite
/ʎ/	/ʎima/	dig
/m/	/mi:na/	press
/n/	/nu:na/	suck
/p/	/pusula/	snatch
/r/	/mira/	swallow
/s/	/suna/	jump
/t/	/tima/	run
/w/	/wulira/	listen
/j/	/jeta/	help

The CV syllable structure with the alveolar trill /r/ does not occur at word initial position in Olunyala(K).

In disyllabic verbs, the CV syllable structure occurs at both word initial and word final positions while it occurs in all word positions in trisyllabic and polysyllabic words.

The CV syllable structure in Olunyala(K) also has an onset that has the prenasalized sounds /<sup>m</sup>b/, /<sup>n</sup>d/ and /<sup>ŋ</sup>g/. This syllable type occurs as the last syllable in most Olunyala(K) nouns and verbs. This is the only syllable type that occurs as the last syllable in proper nouns. We wish to note here that this syllable type is discussed by some scholars as a CCV type, for example Mwaliwa (2014). In this study we discuss it under the CV type because, as mentioned in the introduction, the second element in this structure does not occur as a distinct consonant in the phonemic inventory of Olunyala (K). This is shown in figure 2.

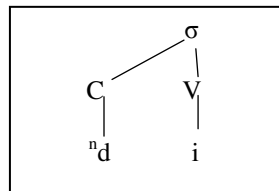


Figure 2: Olunyala(K) prenasalized syllable onset

The CV syllable structure with semi vowels in the onset occur in monosyllabic verbs. Apart from the semi-vowels, the only other Olunyala(K) consonant sounds that are used in the formation of the syllable in this category are /k/ and /h/. Only the vowel sound /a/ is used in the nucleus position. The data analyzed also revealed that Olunyala (K) does not have monosyllabic nouns with semi vowels in the onset.

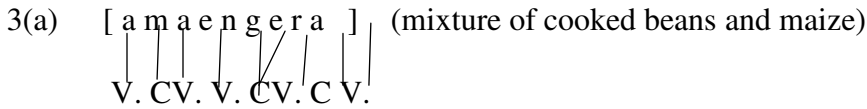
In disyllabic verbs, the semi vowel onset was found to occur in both the word initial and word final positions. As far as the formation of the nucleus is concerned, the study found out that the vowel sounds /e/ and /u/ do not occur in the first syllable. The vowel sound /a/ does not occur in the nucleus position in the final syllable in the semi vowel onset structure in disyllabic verbs.

In trisyllabic words, the semi vowel onset structure was only attested in the middle and last syllables in nouns. It was noted that the consonants that occur in the onset in the formation of the syllables in this position are limited to /k/, /m/, /n/ and the semi vowel /w/. In nouns, all vowel sounds, apart from /u/ can form the nucleus in the middle syllable while only /a/ and /i/ may occur in the final syllable.

The semi vowel onset structure was not found at word final position in trisyllabic words. Olunyala(K) does not have many polysyllabic words as seen from the data analysis. In polysyllabic nouns, the semi vowel onset structure was found as the second, third or fourth syllable in common nouns. This structure can only occur as the first syllable in people’s names.

4.3. The CVV (CV:) Syllable Structure

The CVV syllable type has one consonant and two vowels elements. The data analysis in this study shows that what would be a diphthong in English actually forms two distinct vowels in the phonotactics of Olunyala(K). This difference is shown in examples 3(a), (b) and (c).

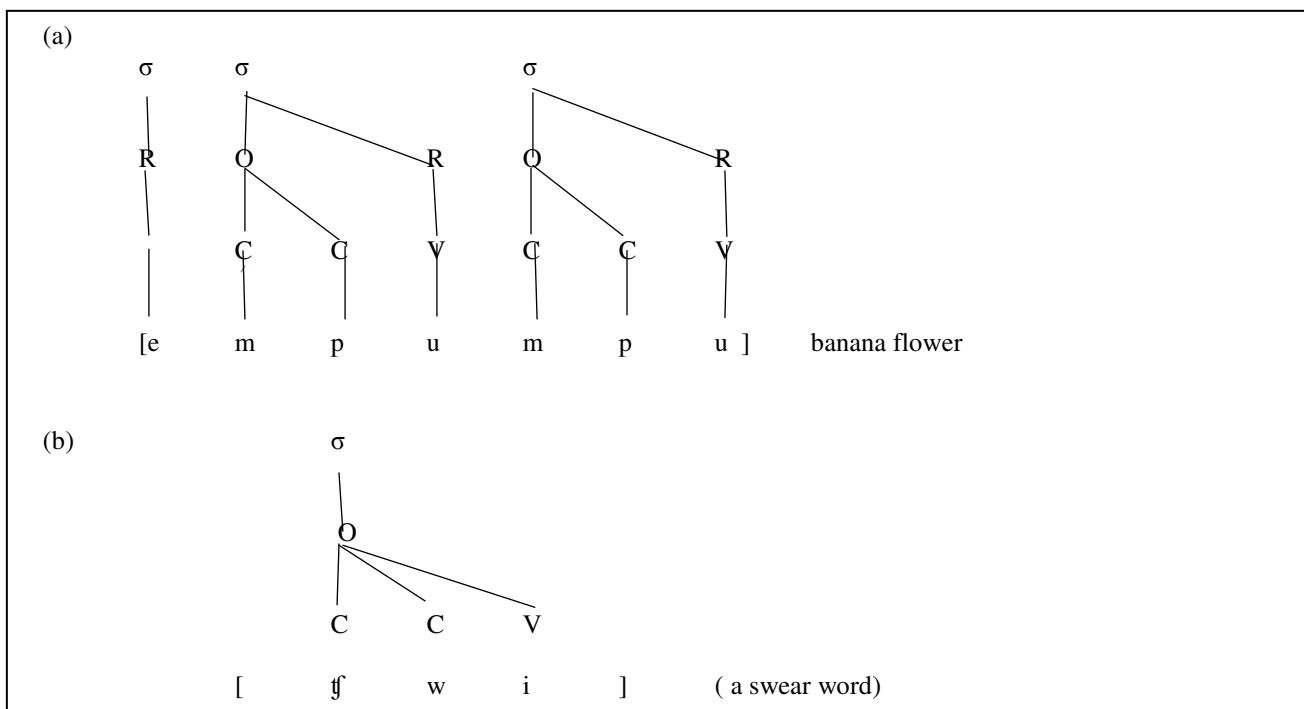


The focus here is on the V elements at word medial position. In 3(a), the vowel elements /a/ and /e/ are syllabified in two distinct zero onset syllables. This kind of structure is what would easily appear as a diphthong in English which does not occur in Olunyala(K). In 3(b) the V elements at word medial position are, unlike (a), syllabified in the same CVV syllable. This means that the nucleus of the syllable in (b) is constituted by a long vowel and, as such, has a heavy syllable.

In 3(c), the vowel elements, which in this case occur at word final position, are similar. Without CV Phonology analysis, the occurrence can easily be confused with the long vowel. In the phonotactics of Olunyala(K), the two vowels belong to different V syllables.

4.4. The CCV Syllable Structure

This syllable type consists of two consonant elements and a vowel. In Olunyala(K), the CCV syllable structure can be divided roughly into the three types shown in the figures in 4. One is the CCV which has two pure consonants and a vowel (1a), the second type is the CGV type which has the alveolar voiceless affricate and a glide (1b) while the third one, (c), is the one with a prenasalized sound and a glide in the onset. The GGV syllable structure which has two glides and a vowel can also fall under the CCV but it is discussed separately because it is a type that has not been mentioned in linguistic literature before. The examples of these three types are shown in the words in figures 4(a), (b) and (c) which all have branching onset. The words are analyzed in CV phonology to exemplify the foregoing argument.



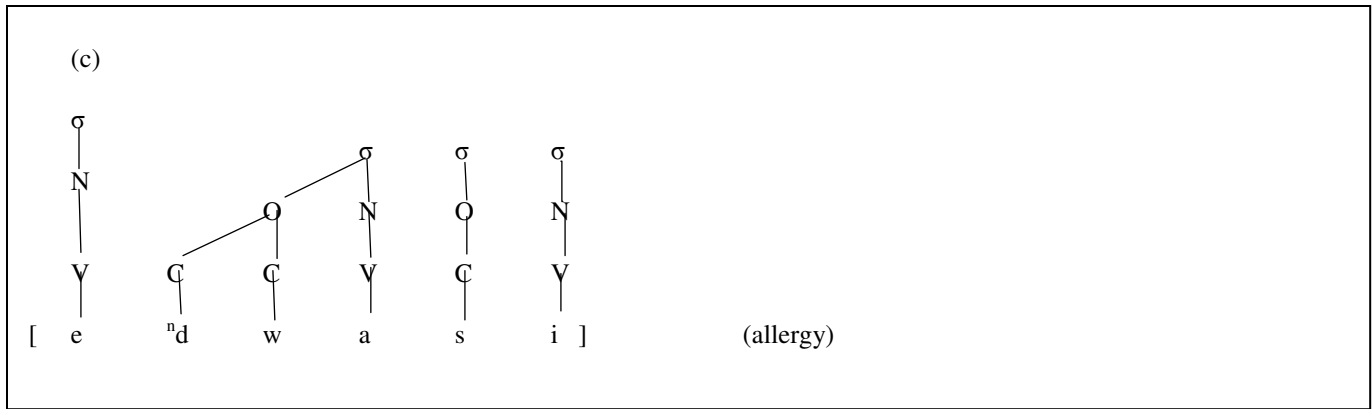


Figure 3: Olunyala(K) CC syllable sequences

The fusion of consonant graphemes in the prenasalized CV structure in Olunyala(K) forms a branching tree as seen in figures 3 (b). This is in line with CV phonology which offers the possibility of capturing the nature of complex segments like diphthongs and geminates (Carr, 1993). Using the CV notion of Onset and Rhyme, the trees in figure 3 (a) and (b) show a non-branching R and the postulation of an internally complex onset on the CV tier model respectively.

We take note of our argument that while the example in 3(a) constitutes a CCV syllable, the one in example 2 does not. This means that the two consonant constituents of the onset in 3(a) are distinct consonants in the phonology of Olunyala(K) while the /n/ and /d/ in figure 1 are not. The CC sequences in the onset /mp/ is marked in Olunyala(K) phonology as it is cross-linguistically as an \*NC sequence (Pater,2001,2004).

The CCV syllable type can occur in all word positions. However, Olunyala(K) words with the CCV structure with the voiceless affricate are not as many as those with the prenasalized sound segments.

4.5. The CCCV Syllable Structure

The CCCV syllable structure is composed of three consonant elements and a vowel. Examples of Olunyala(K) words with this syllable structure shown in 3.

- 3.
- /o.tʃwi.nʃwi/ a type of bird
- /o.wu.tʃa.nʃwa.ni/ rumour mongering
- /e.nʃja/ I am going

The CCCV syllable structure occurs at word medial and final positions only.

The CCV and CCCV syllable structures are referred to as the two and three tier affricate onsets by Etakwa(2010) respectively. Etakwa(2010) discusses the two under the CV syllable structure type and shows that the C in the onset has graphemes ranging from one to four making C an internally complex consonant element. The CCCV syllable structure which has a branching onset is shown in figure 4 (a) and (b)

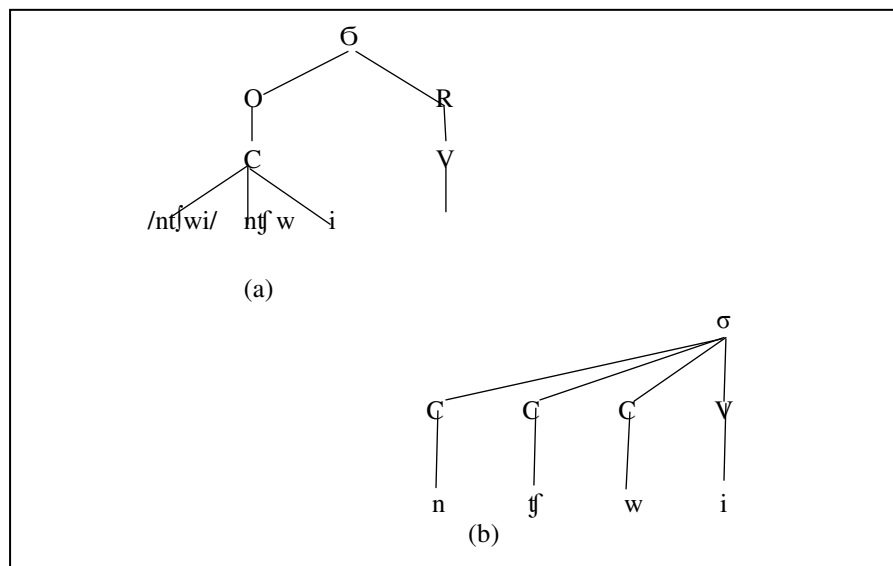


Figure 4: Olunyala(K) CCC syllable onset sequence

#### 4.6. The GGV/CGGV Syllable Structure

The GGV syllable type is composed of two glides and a vowel. Like the CCV syllable structure this type of syllable also shows a branching syllable onset as seen in figure 5. The GGC syllable structure occurs in Olunyala(K) can also be part of a syllable type that has a consonant and two glides in the onset which we refer to here as CGGV. Examples of the two structures are shown in the words in 4

4.

- |       |             |                               |
|-------|-------------|-------------------------------|
| (i)   | /jwaja/     | scoop in large quantity       |
| (ii)  | /njwa/      | drink                         |
| (iii) | /njwesa/    | score                         |
| (iv)  | /enjwe/     | you ( 3 <sup>rd</sup> person) |
| (v)   | /esiminjwi/ | a chick                       |

The data in table 2 shows that the back mid vowel /o/ and the back high vowel /u/ do not form the nucleus in the GGC syllable structure.

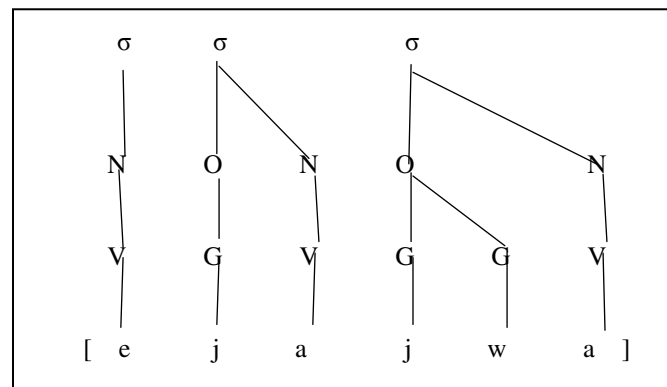


Figure 5: Olunyala(K) GGV syllable structure

The GGV syllable structure in Olunyala(K) only occurs at word final position. The data analyzed also showed that Olunyala(K) does not have many words with the GGV syllable structure.

#### 5. Conclusion and Recommendations

The study is significant as it contributes to the documentation of Olunyala(K) which is one of the understudied dialects of the Luyia language and as such ensures that this dialect and the culture embodied it do not die. The results of the study show that Olunyala(K) has six syllable structures all of which are open like in most Bantu languages. More notable is the observation that the onset in the CV syllable structure is inclusive of the prenasalized syllable onset and the mention of the GGV/CGGV syllable. A study on the branching syllable onset to capture the composition of the internally complex onset in other Luyia and Bantu dialects is recommended. This should be based on the argument in this study that a complex onset is one that is composed of distinct consonants in the phonology of the language concerned. A comparative study on the sound segments and syllable structures of Olunyala (K) and other Luyia dialects so as to find out the differences in syllable composition is also recommended.

#### 6. References

- i. Angogo, R. (1980). "Linguistic and Attitudinal Factors in the Maintenance of Luyia Group Identity". Unpublished PhD Thesis: University of Texas.
- ii. Aronoff, M. and Oehrle, R. (1984). Language and Sound Structure. MIT Press.
- iii. Bauer, L. (1988). Introduction to Linguistic Morphology. Edinburg University Press.
- iv. Carr, P. (1993). Phonology. Palgrave
- v. Clements G. N. and Keyser, J. (1983). CV Phonology: A Generative Theory of the Syllable. Cambridge, Mass: MIT Press.
- vii. Creswell, J.W. (1994). Research Design: Qualitative and Quantitative Approaches. United Kingdom: Sage Publications.
- viii. Etakwa, E. (2010). "A Phonological Analysis of the Constraints on the Syllable Structures of Olunyala". Unpublished PhD Thesis: Kenyatta University.
- ix. Gussman, E. (2002). Phonology: Analysis and Theory. Cambridge University Press.
- x. Hooper, J.B. (1976). An Introduction to Natural Generative Phonology. New York: Academic Press.
- xi. Ingonga, L. (1991). A Comparative Study of Egekusii, Lulogooli and Lwitakho: The Phonological, Lexical Syntactic Structures'. Unpublished MA Thesis: Kenyatta University.
- xii. Katamba, F. (1993). Morphology. Palgrave. Macmillan Press Ltd.
- xiii. Kenstowicz, M. (1994). Phonology in Generative Grammar. UK, Basil Blackwell Ltd.

- xiv. Lwangale, W.D. (2016). Geneological Perspective of the Luluyia Dialects' Lexicosyntactic Similarities. *IJRDO-Journal of Educational Research*, Vol. 1 Issue 5. pp 54-64.
- xv. Mbugua, A.N. (1990). "A Phonological Reality of the Syllable". Unpublished MA thesis: Kenyatta University.
- xvi. Milroy, L. (1987). *Observing and Analyzing Natural Language: A Critical Account of Sociolinguistic Method*. Basil Blackwell LTD, New York.
- xvii. Mwaliwa, H.C. (2014). *An Analysis of the Syllable Structure of Standard Kiswahili Loanwords from Modern Standard Arabic*. Unpublished PhD Thesis, University of Nairobi.
- xviii. Nandelenga, H. (2013): *Constraint Interaction in the Syllabic Phonology of Lubukusu: An optimality Theory Account*. PhD Thesis: Kenyatta University.
- xix. Nganga, W.S. (2008). *The Tone Structure of Selected Lubukusu Verbs and Nouns*. Unpublished MA Thesis: Kenyatta University.
- xx. Ochwaya, Y. (1992). *The Influence of English on the Phonological Features of Lunyala*. MPhil. Thesis: Moi University (online published)
- xxi. Pater, J. (2001). Austronesian Nasal Substitution revisited: What is wrong with \*NC (and what's not). In L. Lombardi (Ed), *Segmental phonology in Optimality Theory*. Cambridge: Cambridge University Press.
- xxii. Pater, J. (2004). Austronesian Nasal Substitution and other NC effects. In J.J. McCarthy (Ed.), *Optimality Theory in Phonology*, pp272-278. Malden Mass. Blackwell.
- xxiii. Savala, A. (2005). "The Tonal Patterns of Lwitakho". Unpublished MA Thesis: Kenyatta University.
- xxiv. Sumba, K. (1992). "Logooli, Wanga and Bukusu Dialects of Luyia: A Study of Major Phonological Processes": Unpublished MA Thesis, University of Nairobi.
- xxv. Wasike, R. (2004). *Hiatus Resolution in Lubukusu*. MA Screening Paper. Cornell University.