

**Vowel Serialization:
A Derivation Contextualized
Phenomenon in Yorùbá Morphology**

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Abstract

The paper argues against the linguistic contextualisation of vowel serialization as basic phenomenon in the appraisal of Yorùbá concatenation morphology. Its findings are based on lexical derivation hypothesis of the lexical morphology theory to be able to account for the phonology and etymology of specified examples of vowel sequence in the language. Primary and secondary data were collected and subjected to analysis. Two sequence of vowel serialization as a morpho-phonological process in the word formation are identified: the VVCV, VCVV and CVV sequence. Vowel serialization frequently occurs consequent on the deletion of the first intervocalic segment and assimilation process between V1 and V2 in Yorùbá VVCV word sequence. Ideophonic words like gbòò, fòò, sàà, wàà and so on also undergo the similar processes. Also, functors such as kì í, má à, and tí ì comprise two separate syntactic units each which mark two different functional categories in the language. Therefore, they are to be written separately.

Keywords: *Vowel sequence, transformation, Yorubá, lexical morphology, syllabic structures*

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Introduction

Ordinarily, little efforts had been made in the literatures on the preponderance of vowel serialization in the language (see Awóbùlúyì 1978, 2008; Adékúnlé 2006). Although, the afore-stated works give a brief analysis of the study, each of the literatures however, failed to present a clinical and disetting analysis of the incursion of the vowel serialization in the language. Many of these extant works only cited related examples of vowel serialization when discussing morpho-phonological processes^{‡‡}. This study therefore, presents the basic origin of vowel serialization in the language. Our findings focus on lexical derivation hypothesis of the lexical morphology theory. The study explores some aspects of descriptive derivational hypothesis of the theory. This is necessitated due to our efforts to account for the etymology and phonology of some specified examples as deemed fit in the study. The aspect of the theory contains some specifications and explanations that can express our candid opinion to solve some seemingly intractable problems on the phono-morphological explanation of the issue of vowel serialization in Yorùbá language as well as many other languages in the world. The study is divided into three sections: section one is the general introduction, in section two, the analysis is carried out while the conclusive remarks are drawn in the third section.

Analysis

Three sequences of vowel serialization as a morpho-phonological process in the word formation are identified in this study. These are VVCV, CVV and VCVV.

The VVCV Sequence

This type features two vowels at the surface structure as the first two syllables. Identified below are examples of VVCV sequence after transformational processes (elision, assimilation) are applied on them.

Item	gloss
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^{‡‡} The following abbreviations are used in this paper: NEG= Negation marker; IMP= Imperative marker; PROG= Progressive aspect marker; FUT= Future tense marker; HAB= habitual aspect marker; POT = Potential mood marker; 3pl = Third person plural pronoun; C = Consonant; V = Vowel; Ø = Empty category

(1)	<i>àánú (àrínú)</i>	mercy
	<i>Eégún (egígún)</i>	masquerade
	<i>eegun (egigun)</i>	bone
	<i>aáyán (ayíyán)</i>	cocroach
	<i>oògùn (ogùngùn)</i>	charm
	<i>òógùn òrígùn)</i>	sweat
	<i>òòlò (òlìlò)</i>	grinder
	<i>ààbò (àbìbò)</i>	a half
	<i>òórò (òwúrò)</i>	morning

A cursory look at the above data shows that vowels [a], [e], [o] and not [i], [ɔ] and [ù] do not function as vowel serialization in the word-initial position of polysyllabic words in standard dialect of Yorùbá. Such a rule does feasible in Central Yorùbá dialects of Ifẹ and Ijẹ̀sà where [ɔ] can be duplicated at the word-initial position as shown in words like *òórò* “morning”, *òótó* “truth” and so on (see; Adékúnlé, 2018; Olánrewájú, 2022). This is not included in Awóbùlúyì's (1998) characteristics features of Central Yorùbá dialects. This sub-categorical account has been well spelt out in many literatures in the language as a product of VCVC basic phonological alternants (Owólabí 2011, Bámbgósé, 1990; Oyèláràn, 1971). Some of the postulated examples are shown below where the vowel serialization frequently occur due to the deletion of the first intervocalic segment and the operation and the occurrence of assimilation process between V1 and V2. The V1 obligatory maintains the unmarked status in the process. That is, the V1 is constantly retained.

(2)	<i>èniyàn</i>	→	<i>èyàn</i> (human being)
	<i>àrírè</i>	→	<i>àárè</i> (sickness)
	<i>àrínú</i>	→	<i>àánú</i> (mercy)
	<i>egígún</i>	→	<i>eégún</i> (masquerade)
	<i>egigun</i>	→	<i>eegun</i> (bone)

<i>òtító</i>	→	<i>òótó</i> (truth)
<i>àbíḃò</i>	→	<i>ààḃò</i> (half)
<i>àrírín</i>	→	<i>àárín</i> (middle)
<i>òwúrò</i>	→	<i>òórò</i> (morning)

The CVV Sequence

Data from Yorùbá language reveal that some words in the lexicon take the CVV sequence at the interface level. Such examples are: *yíí* (this), *náá* (the), *gbòò*, *fòò,sàà*, *wàà*. These words are encapsulated into many examples of ideophonic words in Awóyalé's works; most especially Awóyalé (1989)

To smoothen our analysis, we shall try to consider in-depthly the morphological composition of some related examples of words with CVCVV such as *mésàn-án* (nine), *mẹwàá* (ten) and so on. Then we divide our explanation into two categories: the first category occurs for adjectives such as *yíí* (this), *mésàn-án* (nine), *mẹwàá* (ten) and so on. Our analysis shall take the sequence as afore-stated.

CVCVV Sequence (*Mésàn-án, Mẹwàá*)

Yusuf (1995) attest to the morphological derivation of many adjectives through verbs or nouns. The analysis below will provide the morphological account of the above-stated three words.

(3) *mú + ẹwá* → *mẹwǎ* → *mẹwàá* (ten)

mú + ẹsán → *mésǎn* → *mésàn-án* (nine)

Awóbùlúyì (2008) demonstrates many examples of the countable nouns derived through the latest morphological process.

CVV Sequence (*Gbòò, Fòò Wàà, Sàà*)

One of the phonological characteristics of the ideophones in Awóyalé work is the preponderance of vowel sequence. He stressed that ideophones attain that linguistic phenomenon through deletion or permutation of either the identical consonant

or the second consonant (C2). Based on such claim, we can trace the base forms of the above-stated examples to:

- (4) *gbògbò/gbòrò* → *gbòò*
fòfò/fòrò → *fòò*
wàwà/wàrà → *wàà*
sàsà/sàrà → *sàà*
yàyà/yàrà → *yàà*

The process of second consonant C2 deletion as shown in the ideophones above is unattested in the nominal group of the language. Instead, the first consonant C1 in the disyllabic or trisyllabic nouns are only allowed to be deleted such as in:

- (5) *òtító* → *òótó* (truth)
egúngún → *eégún* (masquerade)
egigun → *eegun* (bone)
àrírín → *àárín* (middle)

We observed from the forgoing examples reflect occurrence of assimilation process after the deletion of the inter-vocalic consonants in V¹CV²CV³ sequence. That is, the first word always stays at the output. The peculiarity of the process of C2 deletion attested in the ideophones like *gbògbò/gbòrò* → *gbòò*, *fòfò/fòrò* → *fòò*, *wàwà/wàrà* → *wàà* (Awóyalé, 1995) and so on is therefore, one of the distinctive features of adverbs in the language.

On the issue of CVV sequence, there are few recondite lexical items that obtain their sequence vocalisation through phonosyntactic processes. These words occur in aspectual or tensual sentences. They occur in *má à*, *kì í*, *tí ì*, *mòómò*, *déédé*, *şéşe* and so on. They occur in close-ended syntactic position: aspect and tense. Our analysis would be sub-divided into two based on their phonological sequence

Pre-modifiers (Kì í, má à, tí ì)

These words have two basic syntactic units *kì* or *ì* is the basic negative introducer in standard dialect of Yorùbá (Fábùnmi, 2012; Adékúnlé, 2018). We will try to expand upon each of them sequentially as follow:

Kì í

Kì: a negative marker

í: progressive aspect marker

Let us consider these two syntactic units as used in a string of sentence in each of the examples below:

(6) *Olú kì í jà.*

Olú NEG PROG fight.

'Olú does not fight'

(7) *Wọ̀n kì í wá sí ibí.*

They NEG PROG come to here

'They do not come here.'

Má à

Má: imperative marker

à (ì): a negative marker

As identified above, these two basic syntactic units (má, à) mark different functional categories (imperative and negation). For a clearer understanding, let us consider them in the examples below.

(8) *Ø má à wá.*

IMP NEG come

'Do not come.'

(9) *Má ì sùn.*

IMP NEG sleep

'Do not sleep.'

The Yorùbá folk song below also elucidates better on *má ì* the underlying form of *má à*.

(10) Lílé: *Ìyá má ì lọ* (Lead: Mother, do not go)

Ègbè: *Àjàntièlè* (Chorus: Àjàntièlè)

Lílé: *Bàbá má ì lọ* (Lead: Father, do not go)

Ègbè: *Àjàntièlè* (Chorus: Àjàntièlè)

The implication borne out of identifying *má* in (8) and (9) as an imperative marker while *à* and *ì* in (8) and (9) respectively mark negation, a different functional category just like *a* (with a mid-tone) preceded by the same imperative marker in (6) below functions as a progressive marker.

(11) *Ø má a bọ ní ibí.*

IMP PROG come at here

'Come to this place (Come here).'

It is discovered that the underlying form of *a* in (11) above is *i* before regressive assimilation applies on it. With our position above, it is equally important to note the following:

- a. The future marker *máa* (in 12) below has different orthography and feature properties as *má* identified as an imperative marker, and therefore, must be written together.

(12) *Olú máa wá.*

Olú FUT come

'Olú will come.'

In a nutshell, *má à* (*má ì*) comprises two syntactic units of different functional categories (imperative and negation) while *máa* is a future tense marker. This resolution to the best of our knowledge is novel in the literature of Yorùbá Grammar.

b. *Máa n*, an aspectual marker in Yorubá behaves dissimilarly to *má à* and *má a* discussed above although it has its items (*máa*, *ń*) written separately. These two items only function as a syntactic unit; it is just a functional head as clarified in the examples below.

(13) (a) *Oyè máa ń ké.*

Oyè HAB shout

Oyè (always) shout.'

(b) ?*Oyè máa ń ké.*

Oyè FUT PROG shout

Oyè (always) shout.'

The glossing in 13b above is counter-intuitive because *máa* does not mark tense in *máa ń*.

c. Both syntactic units (*má*, *à*) are classified as pre-modifiers in this work. Whenever they precede a monosyllabic lexical verb bearing a high tone, the negative marker behaves similarly to what Bamgbose (1990) refers to as assimilated low tone shown below:

(14) (a) *oni apá* → *alápá*

Prefix arm arm's owner

(b) *oni àpá* → *alá`pá* → *alápàá*

Prefix scar owner of a scar (a person with a`scar)

(Bamgbose, 1990:43-

44)

(15) *È má ì wá.*

3pl IMP NEG come

↓↓

È má à wá. (vowel assimilation

3pl IMP NEG come

↓↓

È má ` wá. (assimilated low tone)

3pl IMP NEG come

↓↓

È má wáá.

3pl IMP NEG come

'Do not come.'

Tí ì

tí: imperative aspectual marker

ì: negative marker

Reference to the above analysis, it is evident that vowel serialization occurs in the afore-mentioned examples as a product

of phonological, morphological and syntactic processes. The negative aspectual marker *tí* in *tí ì* is an allomorph of *ti*, the perfect aspectual marker operated in affirmative sentences. Therefore, they are both mutually exclusive with respect to positive and negative polarity as shown below. Double negative markers are attested whenever *tí* (as a negative variant) is operated in the language as shown (in 16b) below:

(16) (a) *à - tí - lọ - rẹ̀*
Prefix – PERF – go – his
'his going/his to'

(b) *à - tí - bọ̀ - rẹ̀*
Prefix – PERF – come – his
'his going/his to'

(17) (a) *àì - tí - ì - lọ - rẹ̀*
Prefix – PERF – NEG - go – his
'his not going yet'

(b) *àì - tí - ì - bọ̀ - rẹ̀*
Prefix – PERF – NEG - come – his
'his not coming yet'

(18) (a) *Olú ti lọ.*
Olú PERF go
'Olú has gone.'

(b) *Olú kò tí ì lọ.*

Olú NEG PERF NEG go

‘Olú has not gone.’

Negation can still be retained in a derivation even without *kò/ò* ‘not’, particularly in a rhetorical question form as shown below:

(19) *Èyín tí ì mọ?*

You PEF NEG know

‘Have you known’

(You have not (really) known)

Therefore, identifying *kì ímá àtí ì* as a syntactic unit and having them written together in the orthography of the existing literature is still not in line with the intuition of the native speakers of the language based on the following syntactic facts:

- a. Two (or more) functional heads are allowed to collocate in a single clause in the language, however, they are written as separate syntactic units as depicted in the examples below:

(20) (a) *Ọgá kò ní wá ní ọla*

Master NEG FUT come at tomorrow

‘The master will not come tomorrow.’

(b) *Wọ̀n kò tí ì lẹ̀ máa lọ sí*
ibẹ̀.

3pl NEG PERF NEG POT FUT GO to
there

‘They cannot be going there now.’

- b. Each of these functors are written separately when they are in their underlying forms as shown below:

(21) (a) \emptyset *má* *ì* *lọ*.

IMP NEG go

‘Do not go.’

b. $?\emptyset$ *má* *ì* *lọ*.

IMP-NEG go

‘Do not go.’

(22) (a) \emptyset *kò* *í* *jà*.

NEG PROG fight.

‘He does not fight’

(b) $?\emptyset$ *kò* *í* *jà*.

NEG-PROG fight.

‘He does not fight’

Déédé, mọ̀mọ̀, ẹ́ẹ̀şẹ

Syllabicity decomposition of the above words reveals that the second syllable takes a high tone. Also, the first and the third syllables possess the same phonologically identical characteristics. They behave like echo verbs in Yorùbá (Awóbùlúyì, 978: 54-55). Our analysis for this observation goes thus:

- i. There is a pre-specified *i* (with high tone) in the basic formation. This *í* was assimilated before the merger (Awóbùlúyì, 1978).
- ii. The flank verb occurs as echo verbs in adverbial syntactic position.
- iii. The pre-specified *í* may be a reduction form of *mí* or an anaphor. This paper does not intend to clarify this. Future researches may work into the clarifications.

The inferences of the high tone syllable has therefore, served as the basis of the attestation of vowel serialization in the afore-stated words.

Now, let us provide the anatomical and phonological description of some di-syllabic verbs of CVV sequence, such as *jẹun* “eat food”, *şeun* “do something” and so on. The basic segmental sequence of the foregoing examples is CVCV. These two examples appear as *jẹrun* “eat food” and *şerun* “do something” in Ìjẹbù dialect (Kújọórè, 2018). The C2 sequence got deleted in transposition. Also, Táiwò (2011: 14) listed an example of *zẹrun* (eat) from Ào dialect of Yorùbá as shown below:

(23) *Ọnikọni rhín zẹrun*

Nobody is eat

‘Nobody is eating.’

The phonological differences between *zẹrun* (Ào), *jẹrun* and *şerun* (Ìjẹbù), and *jẹun* and *şeun* (Standard Yorùbá) can be accounted for. Meanwhile, previous studies have rectified the susceptibility of liquids and glides (r, h, w, y) to deletion or permutation through phonological processes in the language (Bámgbóşè, 1990; Owólabí, 2011).

Before we round it off, we want to look into the manifestation of vowel serialization in-between poly-morphic personal names such as *Adéèboyèjẹ*, *Fáàşòràntì*, *Awóòşikà*, *Ọmọ̀òlayòlé* and so on. Before we proceed to the basic morphological description

of the forgoing examples, We wish to note that the forgoing examples are mis-spelt (as Adéboyèjé, Fášòràntì, Awóšìkà, Omólayòlé and so on) in the contemporary usage. Also, that the names are frequent if not indigenously Ońdó, Ìkálè, Ìlàjẹ and Àkúré. The personal names above are all sentential in status as shown below:

- (24) (a) *Adé è ba oyè jé.*
 Crown NEG hit chieftaincy respond
 ‘A crown does not spoil chieftaincy.’
- (b) *Ifá à se òràn tí*
 Ifá NEG do case fail
 Ifá never fails to solve a problem.’
- (c) *Awo ò se ikà.*
 Priest NEG dowickedness
 ‘A priest is not wicked.’
- (d) *Omó ò ní ayò-lé*
 Child NEG have joy-add
 ‘No gift exceeds that of a child’

The V2 in the CVV sequence in each of the examples above is a negative marker with (*k*)ò as its underlying form before phonological process (assimilation) and sentence nominalisation are applied on the clause.

Conclusion

In this study, we have presented the basic origin of vowel serialization in Yorùbá. Words in CVVCV, VCVV and CVV forms in the language occur consequent upon the morpho-phonological processes like merging of two distinctive linguistic units, influences of vowel assimilation, influences of high tone syllable, tonal configuration or phonological imbalances and so on. Word like *kì í*, *má à* and *tí ì* comprise two different functional categories. Therefore, they are to be written separately in the language. Also, manifestation of vowel serialization in-between polymorphic personal nouns could also be accounted for based on their morpho-syntactic processes.

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