Vowel Deletion and Insertion in Úwù

Idris Olawale Allison

Ekiti State University

Correspondence concerning this article should be addressed to Idris Olawale Allison, Department of Linguistics and Nigerian Languages, Faculty of Arts, Ekiti State University, Iworoko road, Ado Ekiti, Ekiti State, Nigeria, 360213. E-mail: idrisallison2012@yahoo.com

Úwù is one of the many endangered languages in Nigeria. The number of its fluent speakers is believed to be less than 2000. The language is spoken in a small community known as Àyèré in Ìjùmú Local Government Area (LGA) of Kogi state. This paper describes the manifestation of vowel deletion and insertion in the language with the view of testing earlier assertions on the nature of vowel deletion and insertion in languages that are genetically related to Úwù. Apart from this, the paper is also an attempt to document these phonological phenomena (i.e. vowel deletion and insertion) before the language goes into extinction. About six hundred (600) lexical items of Úwù were collected for this research work with the aid of the 1000 word-list of the Summer Institute of Linguistics. Both linear and non-linear models were adopted for analysis in this research work. Cases involving segmental phonemes were analyzed with the linear phonology, while cases of feature stability and feature spread were analyzed using the non-linear model. The paper, among other things, reveals that the pattern of vowel deletion is predictable in Úwù, auto-segments like tone (mostly high tone), nasality and labial or round features usually persist even when the vowel which bore them was deleted. Apart from this, the paper also reveals that [i] is the epenthetic vowel in Úwù, and lastly, it is argued in the paper that nouns in Úwù are virtually vowel initial.

Keywords: Vowel deletion, Insertion, Linear Phonology, Autosegmental Phonology, Prothesis

Earlier scholarly works in the area of phonology have proven that vowel deletion and insertion are two of the most productive phonological processes observed in many languages of the world (Glowacka, 2001; Uffmann, 2002; Frajzyngier, 2003; Hall, 2006). Research works carried out on the phonology of many African languages and precisely Benue-Congo languages have shown that there is hardly any African language that does not manifest the two or at least one of these phonological processes. Scholars, including Elugbe (1973), Egbokhare (1990), and Abiodun (2000; 2004), have all shown the pattern of vowel deletion in, Edo, Emai, Ukaan, and Yorùbá languages. Elugbe (1973) and Egbokhare (1990), report that vowel deletion is unpredictable in Edo and Emai languages because sometimes the first vowel (henceforth V_1) is deleted and some other times the second vowel (henceforth V_2)

could be deleted in a $V_1 \# V_2$ construction. According to Egbokhare (1990), the choice of the deleted vowel is determined by the morpho-syntactic relations between the lexical sequences bearing the vowels (in Emai). Abiodun (2000; 2004) also reports that vowel deletion is also unpredictable in both Ukaan and Yorùbá languages. According to him, on vowel deletion within a verb phrase in Yorùbá, the vowel of the verb is most likely deleted if the noun is a derived one. However, in the case of an underived noun, any of V_1 or V_2 could be deleted.

On the pattern of vowel insertion, earlier scholars who have worked on various Benue-Congo languages have shown that vowels are usually inserted to break unwanted consonant clusters in languages that do not manifest consonant clusters. Apart from this, vowels may also be inserted to ensure that a vowel

ends every word in a language that operates only the open syllable type. Lastly, a vowel may also be inserted in the form of a prothesis so that a consonant-initial word conforms to the syllable structure of a language where non-verbal words are mainly vowel initial. A typical example of such a language is Edo as reported in Adeniyi (2008).

In this paper, these two phonological phenomena are described and by implication documented in the Úwù language. The paper is divided into four sections. Section one is the introduction, section two presents the pattern of vowel deletion in Úwù, while section three presents the pattern of vowel insertion in the language. Finally, section four is the conclusion of the paper.

Materials and Methods

Vowel Deletion Úwù

According to Abiodun (2007), the deletion process involves a loss of sound, which may be a vowel, a consonant, or a suprasegment. This paper shows that vowel deletion is very robust in the Úwù language. The process is technically referred to as elision. As the name implies, it is the loss of a vowel in the course of derivation. On the effect of vowel deletion in languages where it occurs, Bamgbose (2006, p. 56) comments that; "Such a loss (of vowel) leads to the reduction in the number of syllables in the word or phrase".

The process of elision in Úwù occurs in three different grammatical constructions that include:
  i.   associative morpheme + noun
  ii. verb + noun
  iii. pronoun + future tense morpheme

Vowel Deletion in Associative Morpheme + Noun

In Úwù, a noun-noun construction is usually mediated by a medial particlewhich prevents the occurrence of two nouns across word boundaries. Ibikunle (2014) observes a similar particle which performs the same function in Ìyínnɔ́ (a dialect of Àíka spoken in Ondo state). Ibikunle (2014) referred to this particle as "associative morpheme" henceforth (AM). The same nomenclature is therefore adopted for the particle in this study. In Úwù, this study reveals that the associative morpheme is underlyingly "nì". However, the vowel of the morpheme is usually deleted whenever thenoun after the word boundary in the construction begins with a vowel, but when the noun after the word boundary begins with a consonantthe vowel of the associative morpheme becomes overt. Consider the examples in 1 (a) and (b) below:

1. (a)	i.	oɲĩnì àtá water AM gushing	→	oɲĩnᾶ̀tá	'spring'
	ii.	àdʒánìajĩ̃ku house AMfaeces	→	àdʒánãjĩ̃ku	'toilet'
	iii.	anũnìùwa mouth AMdoor	→	anũnũ̀wá	'door way'
	iv.	ahi nì àdʒá stomach AM house	→	ahinᾶ̀dʒá	'room'
	v.	ɔkɔ̀ nìédʒé nìoɲĩ vehicle AM eye AM water	→	ɔkɔ̀nɛ́̃dʒénõɲĩ	'boat/ ship'
	vi.	ɔkɔ̀ nì Adé vehicle AM Ade	→	ɔkɔ̀nadé	'Adé's car'
	vii.	ɛdʒa nì írĩ̀gòrĩ̃go egg AM ant	→	ɛdʒanírí̃gòrĩ̃go	'rice'
1(b)	i.	oɲĩ ni kɔ̀ŋga water AM well	→	oɲĩnìkɔ̀ŋga	'well water'
	ii.	àkì nì Bɔ́lá cloth AM Bɔ́lá	→	àkì nibɔ́lá	'Bola's cloth'
	iii.	ùwàʃenì tíʃà food AM teacher	→	ùwàʃe nìtíʃà	'teacher's food'
	iv.	àdʒá nì tajɔ house AM Tayo	→	àdʒá nìtájɔ̀	'Tayo's house'

As shown in 1 (a-b) above, the vowel of the associative morpheme which is contiguous with the first sound of the noun after the word boundary is lost at the derived form of the construction throughout the examples in 1 (a). This is because the initial sound of the noun after the word boundary is a vowel. However, the case in 1 (b) is different because the nouns after the word boundaries begin with consonants. This implies that for deletion to take place in an "associative morpheme + noun construction" in Úwù, the noun after the morpheme boundary must begin with a vowel. It is noted that the nasal feature of the alveolar nasal; [n] is usually acquired by the vowel [i] of the associative morpheme. It is also noted that the nasal feature is usually transferred to the initial vowel of the noun after vowel [i] is deleted. This shows that when the vowel is deleted, its nasal feature persists. The deletion rule is captured by the rule below:

2.
$$\begin{bmatrix} +syll \\ +high \\ -back \end{bmatrix} \longrightarrow \emptyset \ / -\# \ [+syll]$$

On the pattern of deletion in Úwù, it is observed that, the vowel [i] of the associative morpheme which is always the deleted segment shows that in an "associative morpheme + noun construction", V_1 is usually deleted and its nasal feature transfers to V_2 in a $V_1 \# V_2$ construction.

It should be recollected as said earlier that this phenomenon is not peculiar to Úwù alone as Ibikunle (2014) reports a similar case in Iyinno. The examples below show the manifestation of the associative morpheme in Iyinno:

(Ibikunle, 2014, p. 13)

3	a.	èná mè̀ àháĩ	→	[ɛnɔ́mãháĩ]	'animal'
		meat AM farm			
	b.	àʃú mè̀ itítí	→	[àʃúmĩtítí]	'Titi's faecces'
		faeces AM Titi			
	c.	àʃú mè̀ ehú	→	[àʃúmẽhú]	'rice'
		faeces AM rat			

The examples from Iyinno have shown that just as the vowel [i] of the associative morpheme is deleted whenever the noun after the word boundary begins with a vowel in Úwù, the vowel [ɛ] of the morpheme is also deleted in Iyinno whenever the noun after the word boundary begins with a vowel.

Vowel Deletion in Verb + Noun

Elision within a verb phrase is highly productive in Úwù. This is not strange as several scholars have shown that vowel deletion is highly productive in various languages of the worl. Scholars like Elugbe (1973), Egbokhare (1990), Schiffman (1993), Abiodun (2000; 2004), Molczanow (2007) among others have shown the robustness of vowel deletion within a verb phrase in different languages. Apart from the robustness of vowel deletion within a verb phrase, scholars in the area of phonology have also shown that the choice of the deleted vowel across word boundries in a V₁# V₂ construction varies from one language to another. While some languages delete V₁ (e.g. Ukaan as shown in Abiodun (2000), other languages either delete V₁ or V₂ (e.g. Yorùbá as shown in Awobuluyi (1978; 1988), Bamgbose (2006), and Abiodun (2004). For instance, the data below taken from Abiodun (2004, pp. 3-8) show that any of V₁ and V₂ could be deleted in a V₁ # V₂ construction in Yorùbá:

4. (a)	pa ejò	→	pejò	'kill a snake'
	wo ọnà	→	wọnà	'be on the look out'
	ra epo	→	repo	'buy oil / fuel'
	ʃέ èpè	→	ʃέpè	'put a curse'
(a)	ta ọjà	→	tajà	'sell goods'
	ra ọjà	→	rajà	'buy goods'
	se ọbè	→	sebę	'cook soup'
	ro ọbę	→	robę	'stir soup'

In the examples above, V₂ survives deletion in 4 (a) while V₁ survives deletion in 4 (b). Based on the data presented above, it becomes convincing that the choice of the deleted vowel is unpredictable in Yorùbá.

This present study shows that vowel deletion within a verb phrase is highly productive in the Úwù language. Although, the phenomenon only occurs between a monosyllabic verb and a noun, in the case of a disyllabic or tri-syllabic verb, deletion does not occur, rather no phonological change is observed. But if the

contiguous vowels are identical, then deletion will occur as the occurrence of identical vowels across the morpheme boundary is not allowed in Úwù. Consider the data below:

5.(a)	kwũʃo ɛ̀ndʒέ	'gather/ collect fruits'
	ruhi ɔ́lá	'remember dream'
	fupá oŋwu	'climb tree'
	lɔlè̀ ogo	'swim river'
	bè̀rè̀ adʒɔ̀	'start work'
	ʃueũ éwó	'beat goat'
	ʃúéũ ɔ́mã	'beat child'
	wúrèé olowù	'ask for somebody'

(b)	gbala alè	→	gbalalè	'sweep floor'
	ruhi irĩ	→	ruhirĩ	'remember a song'
	ruhi ìlèmú	→	ruhìlèmú	'remember an orange…'
	kwũʃo òwú	→	kwũʃòwú	'gather/ collect threads'

As shown in data 5 (a and b) above, the items in 5 (a) do not reflect any phonological change, but those in 5 (b) reflect deletion. The difference is due to the kind of the contiguous segments as already said; those in 5 (b) are identical vowels, whereas those in 5 (a) are different vowels.

Apart from the above, the study also reveals that within a verb phrase where the verb before a noun is monosyllabic, in a V₁ # V₂ construction in the language, it is always the V₁ that gets deleted. The corpus data presented below validate our claim:

6.							
i.	ʃi	take	+	oɲĩ	water	→	ʃoɲĩ	'take water'
ii.	ʃe	be	+	ɔba	king	→	ʃɔba	'become king'
iii.	hí	cook	+	ɔ̃dɔ̀	soup	→	hɔ̃dɔ̀	'cook soup'
iv.	jwi	give birth	+	ɔ́mã	child	→	jɔ́ma	'give birth to a child'
v.	fo	wash	+	àki	cloth	→	fàkì	'wash cloth'
vi.	kpu	kill	+	ɛna	animal	→	kpɛna	'kill (an) animal'
vii.	ŋgo	weave	+	àkì	cloth	→	ŋgàkì	'weave cloth'
viii.	ʃe	eat	+	ɛ̀kpɛ̀jɔ̀	ground-nut	→	ʃɛ̀kpɛ̀jɔ̀	'eat groundnut'
ix.	dʒí	steal	+	ódʒí	thief	→	dʒódʒí	'steal something'
x.	kó	learn	+	ídʒú	dance (N)	→	kídʒú	'to dance'
xi.	kú	pack	+	àkì	cloth	→	kwákì	'pack clothes'
xii.	kú	pack	+	àwù	shirt	→	kwáwù	'pack shirts'

xiii.	gú pound	+	ɔ̀dɛ́ pounded yam	→	gwɔ́dɛ̀ɛ́	'pound pounded yam'
xiv.	ʃe do	+	iʃɔla fight(N)	→	ʃiʃɔla	'fight(V)'
xv.	hɛ̃́ throw	+	èkíta stone	→	hɛ̃̀kíta	'throw stone'
xvi.	jã tear	+	ɛlɛ́ money	→	jɛ̃lɛ́	'tear money'
xvii.	gbɔ́ hear/listen	+	irĩ song	→	gbírĩ	'hear/ listen to song'
xviii.	jà boil	+	ɛdʒa egg	→	jɛdʒa	'boil egg'
xix.	gbɛ́ abuse	+	ɔ̀gá boss	→	gbɔ́gá	'abuse/ insult the boss'
xx.	dà buy	+	ɛ̀ʃɛ́ yam	→	dɛ̀ʃɛ́	'buy yam'
xxi.	wù wear	+	àkì cloth	→	wàkì	'wear cloth'
xxii.	gù demolish	+	àdʒá house	→	gw àdʒá	'demolish house'
xxiii.	fu untie	+	éwó goat	→	féwó	'untie goat'
xxiv.	gbu tie	+	àkɔ̀kɔ cock	→	gbàkɔ̀kɔ	'tie cock'
xxv.	kpu kill	+	áʃʷá dog	→	kpáʃʷá	'kill dog'

From the examples above, it is apparent that the choice of the vowel that gets deleted is predictable; that is, only the vowels of the verbs are deleted. It is also evident in the data that the choice of vowels deleted is by no means dependent on the type of vowels of the verbs or nouns involved, or the form of the nouns (i.e. whether derived or underived); rather, it depends on the position of the vowel as it must be V_1 which is the vowel of the verb. Another point that needs to be emphasized here is that the vowels are not usually deleted with all their features. We observe that, such autosegmental features like tone (specifically high tone) (e.g. iii), nasality (e.g. xv), and roundness features (e.g. xi) usually persist only to realign with other segments within their environments. This kind of behavior is referred to as feature stability within the autosegmental theory, and it has shown us the relevance of the theory to this work. The illustration below shows the pattern of deletion within a verb phrase in the language:

$$[V]_1 \rightarrow \emptyset \: / - \# \: [V]_2 \qquad : \qquad [+syll] \rightarrow \emptyset \: / - \# \: [+syll]$$

It is also important that we discuss a type of phonological change that occurs between a verb and a consonant-initial noun as shown in the data below:

Note that the asterisked examples below are deviant.

7							
i.	ʃe eat	+	dodo plantain	→	ʃidodo	'fry plantain'
ii.	dà buy	+	bata shoe	→	dibata	'buy shoe'
iii.	tà sell	+	bɛ́líìtì belt	→	tibɛ́líìtì	'sell belt'
iv.	dá go	+	súkúrù school	→	dísúkúrù	'go to school'
v.	wá come	+	súkúrù school	→	wísúkúrù	'come to school'
vi.	wá come	+	ʃɔ̀ɔ̀ʃì church	→	wíʃɔ̀ɔ̀ʃì	'come to church'
vii.	* bɛ̀rɛ start	+	sùkúrù school	→	bɛ̀rɛ̀ sùkúrù	'start schooling'
viii.	* wúrèé ask	+	bàtà shoe	→	wúrèé bàtà	'ask/request for shoe'

From the data above, it is observed that a high front vowel [i] which is not present at the underlying representation surfaces at the phonetic representation. This change may make a casual observer to assume that the vowel of the verb changed to [i] whenever the noun begins with a consonant. However, this kind of assumption may not be correct because one may not be able to account for this kind of change as it is not a common phonological process that occurs in natural languages. Alternatively, one may assume that the vowels of the monosyllabic verbs were deleted and an extraneous vowel [i] introduced to block the cluster of consonants resulting from the deleted vowels. Consider the illustration below:

8. dà + bata : underlying representation'
   ddbàtà : v-deletion
   dibàta : i-insertion
   dibàta : surface representation

Although this assumption may appear to be more logical than the first one, it is worrisome to have the two rules; v-deletion and i-insertion to both apply to a single structure to arrive at its surface representation. One needs to ask the following questions:
   i. Why would a language delete a vowel only to replace it with another one?
   ii. How logical is the order of application of the two rules in terms of naturalness, economy, simplicity and plausibility?

The complexity and illogicality of the above rules may also compel one to consider a more appropriate and logical argument. This will lead one to assume that an extraneous vowel [i] which is technically referred to as a prothesis is introduced before the consonant initial-nouns so as to ensure that all nouns begin with a vowel in the language. The prothetic vowel [i] is covert when the nounsoccur as the subject of sentences as shown below:

Note that 9iii is deviant.

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9. i.   sùkúrù ne Olu á dá   'it is school that Olu went'
         school foc. O prv go

    ii. bàtà ne Ade á dà   'it is shoe that Ade sold'
         shoe foc. A prv sold

    iii. *isùkúrù ne olu á dá   'it is school that Olu went'
         school foc O prv go

Meanwhile, the vowel is overt whenever the nouns occur before a monosyllabic verb. Based on this new hypothesis, the underlying forms of the data in (7) may now be re-presented as:

10. i.   ʃe   + idodo   → ʃidodo   'fry
         eat   plantain   plantain'

    ii. dà   + ibata   → dibata   'buy
         buy   shoe   shoe'

    iii. tà   + ibέlíîtì   → tibέlíîtì 'sell
         sell   belt   belt'

    iv. dá   + isùkúrù   → dísùkúrù   'go to
         go   school   school'

    v.   wá   + isùkúrù   → wísùkúrù   'come to
         come   school   school'

    vi. wá   + iʃɔ̀ɔ̀ʃî   → wíʃɔ̀ɔ̀ʃî   'come to
         come   church   church'

One salient observation about the data above is that all the nouns are borrowed words. It can also be deduced from the data that nouns in Úwù must begin with a vowel; this explains why all the nouns in (10) begin with vowel [i]. It can therefore be argued that vowel [i] is usually inserted at the beginning of a consonant-initial loanword so that such a word fits into the phonotactic structure of the Úwù language. This kind of insertion is not strange. Elugbe (1989) and Adeniyi (2008) have both demonstrated that all nouns (and all non-verbal words) in Edo are vowel-initial. As a result, when the language borrows a word that begins with a consonant, a prothetic vowel [e] or [i] is usually introduced to nativise such a word. According to Adeniyi (2008), the extraneous vowel is usually inserted at the beginning of every consonant-initial borrowed word so that the word conforms to the phonotactic rule of Edo. Whereas, the prothetic vowel in Úwù is [i], it is [e/i] in Edo. Consider the data below from Edo which were drawn from Adeniyi (2008, p. 65)

11. èfìimù   'film'
    èbέlítì   'belt'
    èkóòmù   'comb'
    èkórísà   'chorister
    ìbúrù   'blue'
    èbúrέdì   'bread'

In the same vein, Awobuluyi (2013) argues that the vowel that exists between two nouns where the second one begins with a consonant in a Yorùbá noun phrase like:

12. ìwé e dàda   'Dada's book'
    isu u kólá   'Kola's yam'
    bàta a tísà   'Teacher's shoe'
    ìlú u kánò   'the town of kano'

is underlyingly [i] which is a prothetic vowel inserted at the beginning of a consonant-initial- noun as presented below:

13. ìwé idada   → iwe e dada
    isu ikola   → isu u kola
    bata itísà → bata a segun
    ìlú ikánò   → ilu u kano

The [i]-prothesis normally undergoes a perseverative assimilation such that it becomes like the final vowel of the first noun. He further asserts that all nouns in Yorùbá are vowel-initial. Oyebade (2008, p. 75) also reports a case of [e]-prothesis in Spanish. According to him, the language does not allow a consonant cluster that starts with the sibilant [s] to begin a word. When such happens, a vowel [ɛ] is inserted at the beginning of the word:

14. ɛspaɲol   'spanish'
    ɛslavo   'slavic'
    ɛsplin   'spleen'

The data presented in this section have also shown that just like the case of the 'associative marker + noun' V_1 is always the deleted vowel in a construction consisting of $V_1 \# V_2$ in the Úwù language.

Results

Vowel Deletion in Pronoun + Future Tense Morpheme

This study also reveals that vowel deletion normally occur between a pronoun and a future tense morpheme. The future tense morpheme (henceforth FTM) in Úwù is égà. Its manifestation is illustrated with the examples below;

15.(a) i.   má égà dá   → mégà dá   'I will go'
            I FTM go

       ii. ŋgɔ égà dá   → ŋgégà dá   'you will go'
            you FTM go

       iii. wá égà dá   → wégà dá   'he/she will
            he/she TM go   go'

       iv. awá égà dʒídʒú → awégà dʒídʒú 'we will dan-
            we FTM dance   ceo'

       v.   ὲmέ égà dʒídʒú → ὲmégà dʒídʒú 'you(pl) will
            you(pl) FTM   dance'
            dance

| | vi. | àmá égà ʤíʤu → they FTM dance | àmégà ʤíʤú | 'they will dance' |

(b)

i. Adé égà dá — 'Ade will go'
A FTM go

ii. Olú égà dá — 'Olu will go'
O FTM go

iii. wálé égà dá — 'Wale will go'
W FTM go

iv. eʤi égà dà — 'it will rain'
rain FTM fall

v. mama égà ʤi — 'thunder will strike'
thunder FTM strike

vi. àʤá égà gu — 'the house will collapse'
house FTM collapse

In 15 (a) above, it is observed that the vowels of the pronouns get deleted before the FTM. However, in 15 (b) where the words before the FTM are nouns, the vowels of the nouns were not deleted. It appears therefore that Úwù language distinguishes between its nouns and pronouns by ensuring that the vowel of a pronoun is deleted before a FTM while that of a noun is not deleted in the same environment. It is also an indication that pronouns in Úwù may constitute clitics, since they have the ability to concatenate with the FTM which occurs after them. Radford et al (1999) describe such clitics as proclitics since they precede their hosts. This kind of concatenation between pronouns and verbs or preverbal particles is not strange. Radford et al (1999, p. 174) report that pronouns in Romance languages behave like proclitics while those of Spanish may behave like proclitics or enclitics depending on the form of the verb. The examples in 15 (a) above have also affirmed the earlier claim in this paper that V_1 is always deleted while V_2 survives in a $V_1 \# V_2$ construction in Úwù language. This implies that the pattern of deletion in Úwù is predictable. The illustration below shows the general pattern of deletion in the language.

$$[+syll] \rightarrow \emptyset \ / \ - \ \# \ [+syll]$$

Discussion

Epenthesis in Úwù

This is a process in which an extraneous segment (consonant or vowel) is introduced into a word to break up unacceptable sequences. It is also used to achieve the preferred syllable structure of a language. In Úwù, only vowels can be inserted into a word, consonant insertion does not exist in the language. Adeniyi (2008) reports that vowel insertion takes place in three positions in Edo. These are morpheme initial, medial and final. In Úwù, the same positions are also observed. According to Adeniyi (2008), the following forms can be pronounced in isolation in Edo (p. 65):

16. èfìimù 'film'
èbélítì 'belt'
èkóòmù 'comb'
èkọ́rísà 'chorister
ìbúrù 'blue'
èbúrέdì 'bread'

However, in Úwù, they are realized as:

17. fììmù 'film'
bélíitì 'belt'
kóòmù 'comb'
kọ́rísítà 'chorister
búlù 'blue'
búrέdì 'bread'

The same words are also assumed to be produced underlyingly as presented below when they are preceded by a verb:

18. ifììmù 'film'
ibélíitì 'belt'
ikóòmù 'comb'
ikọ́rísítà 'chorister
ibúlù 'blue'
ibúrέdì 'bread'

The realization of the prothetic vowel in Úwù has already been discussed in the previous section. In order to avoid repeating the same presentation; readers are advised to revisit section **2** for the argument on how the prothesis manifests in Úwù. Concerning the observation that the prothetic vowel [i] in Úwù only surfaces when a consonant initial-noun occurs after a verb, one can simply assume that the vowel is deleted when the nouns are in citation forms. The assumption that the vowel is deleted when the nouns are in citation forms appears to be correct because during an interaction with some native speakers of Úwù, it was observed that Úwù speakers do not normally distinguish between the forms of nouns in 19 and 20 below:

19. ilógbò 'rat'
iʃɔla 'fight (N)'
ìʃεkpέ 'cane'
ìlèmú 'orange'

20. lógbò 'rat'
ʃɔla 'fight (N)'
ʃεkpέ 'cane'
lèmú 'orange'

The data above show that the presence or absence of vowel [i] in nouns that begin with the vowel does not distort meaning. It therefore appears that vowel [i] is commonly deleted optionally when it begins a noun

in Úwù.This also points to the fact that Úwù nouns are probably vowel-initial and those nouns that are consonant-initial in the language are only products of clipping; it also seems like there is an on-going process of [i]-deletion at the initial position in Úwù nouns. It is also believed that the deletion of the vowel extends to consonant-initial borrowed words even when it was inserted to nativise such words. However, while the vowel is optionally deleted in the case of Úwù native words when they occur in isolation, it is obligatorily deleted in the case of borrowed words. The obligatory deletion of the vowel [i] at the beginning of a borrowed word when in isolation is believed to be influenced by the contact with Yorùbá language which is the lingua franca of the Àyèré people, or alternatively, those forms are rendered in Yorùbá, while the Úwù forms are already eroded. In Yorùbá, borrowed words are pronounced without the prothetic vowel [i] in citation form as presented below:

21.
bíbéli	'bible'
tábílì	'table'
ʃɔ̀ɔ̀ʃī	'church'
súkúùlù	'school'

Inspite of the forms presented above, Awobuluyi (2008; 2013) has consistently argued thatall Yorùbá nouns are vowel-initial. He buttressed his claim by citing examples from the Mòbà dialect where all consonant-initial nouns in Standard Yorùbá begin with vowel [i] in Mòbà. Consider the examples below:

22.
SY	Mòbà dialect	
bòdé	ibòdé	'name'
kólá	ikólá	'name'
mótò	imótò	'vehicle'
túndé	itúndé	'name'

In view of the above argument by Awobuluyi, Ajiboye (2011) argues that the realization of the prothetic vowel [i] in Móbà is context-based. According to Ajiboye, the prothetic vowel performs certain functions which include indicating possession and emphasis. However, when a supposed consonant-initial noun is pronounced in isolation, the prothetic vowels do not feature. This according to him explains why the following forms (Ajiboye, 2011, p. 58) are not acceptable forms in Mòbà and by extension in the Yorùbá language;

23.
*	ìfìlà
*	ìkókóró
*	ìgèlè

Although the above forms may not be acceptable in citation, there are some other nouns in Yorùbá that begins with vowel [i]. Consider the examples below:

24.
ìlèkùn	'door'
ìyàrá	'room'
ìdòwú	'name'
ìdògbé	'name'
ìyèwù	'room'
ìnàbì/ nàbì	'prostitution'

The nouns in (24) above and some others of the same form are believed to be the relics of the nouns that begin with the vowel [i] in Yorùbá. It therefore implies from a historical perspective that Yorùbá developed a rule that deletes the vowel [i] at word initial position in nouns, at some point along its historical development, and such words in (24) above and few others of the same form are the radical ones that were never affected by the deletion rule. Another area that supports the claim that [i] is often deleted in the Yorùbá language is the verb-noun construction. Awobuluyi (1988) and Abiodun (2004) both report that the pattern of deletion in Yorùbá may be predictable whenever [i] is involved. In the following examples, [i] is deleted as V_1 and V_2:

25.
| dʒí # owó → dʒówó | 'steal money' |
| ra # iʃu → raʃu | 'buy yam' |

Ebira is another language just like Edo where nouns are mainly vowel-initial. Consonant-initial loanwords are also nativised in Ebira by inserting vowel [i] at the beginning of such words. The examples below are drawn from Abiodun (2007):

26.
English	Ebira	
mɔtəu	imɔto	motor
bred	iburedi	bread
kəum	ikoomu	comb
sku:l	isukuru	school
pəlis	iporiisi	police

In the same vein, Anaang; a Benue-Congo language spoken in the Akwa Ibom state of Nigeria is another language whose nouns are mainly vowel-initial. When the language borrows a consonant-initial noun, [a]-prothesis is inserted at the beginning of such a word so as to conform to the phonotactic structure of the language. Consider the examples below (Ekpe, 2012):

27.
English	Anaang	
/waiə/	àwaya	'wire'
/maŋgəu/	amaŋgo	'mango'
/glæs/	àglas	'glass'
/kəmpju:tə/	àkomputa	'computer'
/fæn/	afan	'fan'

Evidence from Edo, Úwù, Yorùbá, Ebira and Anaang

languages presented above shows that nouns of most Benue-Congo languages are mainly vowel-initial, and various languages employ different prothesis to nativise loan words that are consonant-initial. For instance; it is [e/i] in Edo, it is also [i] in Úwù, Yorùbá and Ebira, whereas in Anaang it is [a]. From the foregoing, it becomes quite convincing that the prothetic vowel [i] is prespecified in the Úwù lexicon but it may be deleted when the nouns are in citation forms. However, the difference between Úwù and Yorùbá, and Edo, Ebira and Anaang is that while the prothetic vowels are deleted when the nouns are pronounced in isolation in the former, they are never deleted in the case of the latter.

Oyebade (1998, p. 75) reports that epenthesis is a very common phenomenon in the loan-word phonology of many African languages. The case of Úwù affirms this report as shown in the examples below:

28.
| English		Úwù
/belt/	/bɛlíìtì/	'belt'
/brʌʃ/	/búrɔ̀ɔ̀ʃì/	'brush'
/breik/	/búréèkí/	'brake'
/sku:l/	/súkúrù/	'school'
/sleit/	/síléètì/	'slate'
/kəum/	/kóòmù/	'comb'
/freim/	/fúrémù/	'frame'
/bred/	/búrɛ́dì/	'bread'
/treilə/	/tírélà/	'trailer'
/teibl/	/tébù/	'table'

From the examples above, one notices that the sound [l] in /sku:l/ is realized as [r]; /súkúru/ 'school' in Úwù, whereas the sounds do not alternate in other words. The question posed by this irregular alternation is "how come it is only restricted to /sku:l/?" Two logical answers could be provided for this question; the first one is to suggest that the form must have been influenced by contact with Owé dialect of Yorùbá spoken in Kàbbà which is about 8 kilometers from Àyèré. Findings reveal that school is also pronounced as sùkúrù in Owé. This assumption is possible due to the close relationship that exists between the people of Àyèré and Kàbbà. The second one is to suggest that the form is influenced by the contact with Èbìrà spoken in Òkenné which is about 28 kilometers away from Àyèré. The [l] → [r] alternation is common to Èbìrà. Apart from the close distance between Òkenné and Àyèré, some speakers of Èbìrà who are mainly farmers are also settled in Àyèré.

It is also observed that Úwù breaks the cluster of consonants either by the introduction of an epenthetic vowel [u] or [i] depending on the roundness or unroundness of the vowels that occur after such clusters, on the one hand, and also the involvement or non-involvement of a labial consonant on the other hand. [u] is usually inserted whenever the vowel that

occurs after the cluster is a round vowel or when the cluster involves a labial consonant otherwise, the vowel [i] is usually inserted. The same condition also determines which of the vowels is inserted when a word ends with a consonant. Consider the illustration below:

29.

30.

31.
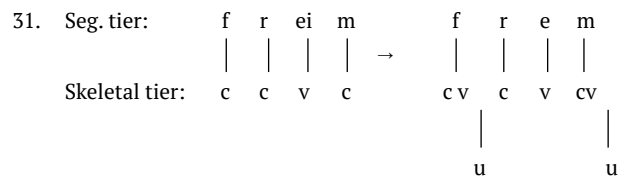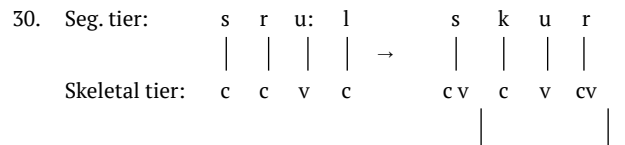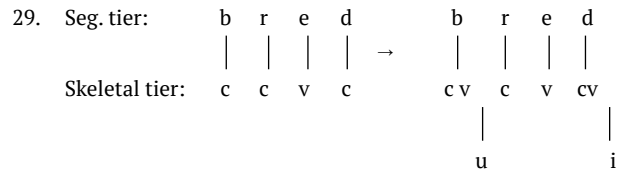
Using the linear model, the epenthetic rules are presented thus:
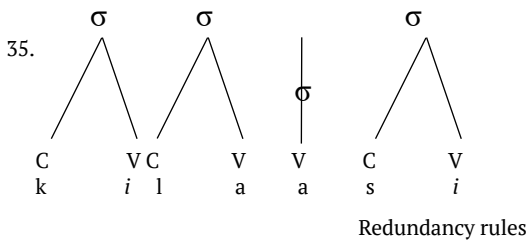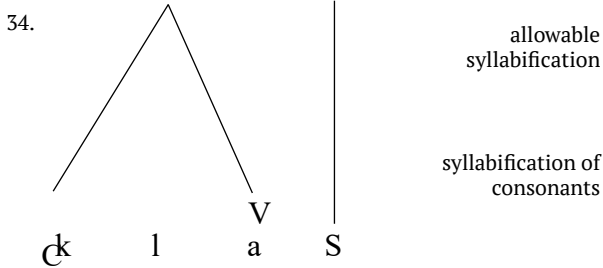
32.
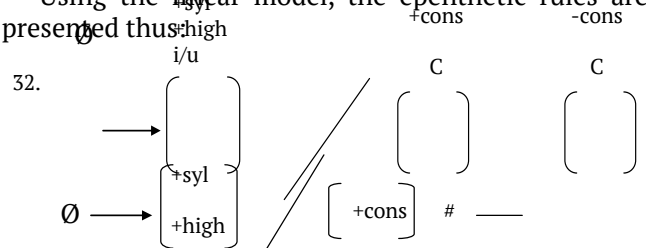
33.

The alternative use of the epenthetic vowels [i] and [u] as seen in the data above is not peculiar to Úwù. Egbokahare (1990) observes in Emai that [u] occurs also as the epenthetic vowel after labial consonants, it also occurs after other consonants if a rounded vowel occurs in an adjacent syllable. [i] occurs as the epenthetic vowel in non-labial environments. Adeniyi (2008) also asserts that the case of Emai as reported by Egbokhare (1990) is also applicable to Edo. Egbokhare (1990) further observes that a similar situation is reported in Yorùbá by Awobuluyi (1967; 1978) and Pulleyblank (1988). He notes that Pulleyblank accounts for the phenomenon in Yorùbá in terms of the application of redundancy rules and labial harmony rule. Redundancy rules account for the occurrence of [i] being the underspecified vowel while labial harmony ensures that [i] becomes [u] in the labial context. He stated further that "since consonants can only occur in the onset position, any unsyllabified consonant must be assigned a rhyme. And since there would be no motivation for any particular vowel quality to be present on that rhyme, the unmarked expectation will be for redundancy rules to fill in feature values for such an epenthetic vowel. The illustration below shows

the pattern of epenthesis in Yorùbá:

34.

σ

C k   l   a   S

allowable syllabification

syllabification of consonants

35.

σ   σ   σ

          σ

C   V C   V   V   C   V
k   i l   a   a   s   i

Redundancy rules

Pulleyblank provided strong motivations for recognizing [i] as supplied by redundancy rules in Yorùbá which is also observed to be true about Úwù. [i] is therefore postulated as the epenthetic vowel in Úwù. The Vowel becomes [u] in a labial environment as a result of the application of labial harmony rule which spreads the labial feature of a labial sound occurring in an adjacent syllable on the inserted vowel [i]. Egbokhare (1990) gives an accurate picture of the insertion process in Emai which fits squarely into Úwù. This is captured by the derivation below:

36. Ø → [i]   →   [u]/[+ labial]

by insertion   by labial harmony

Other salient observations are the cases of vowel lengthening, the High-Low (HL) tone sequence on the lengthened vowels and the low tone on the epenthetic vowel [i/u] that ensures that a nativised English word conforms to the open syllable structure of the Úwù language. On this note, Oyebade (2008) reports that Ayo Bamgbose and Kenstowicz (2000, p. 1) had observed a similar case in the Yorùbá language and both claimed that the lengthening was an attempt by the recipient language to stay faithful to the falling intonation pattern of English stressed syllable; since Yorùbá disallows glide tone on short vowels, it adopts the strategy of lengthening to accommodate the gliding pitch of English stress. However, Oyebade takes a look at the lengthening using the optimality theory, and makes a convincing argument about the process in Yorùbá. According to him, vowel lengthening in Yorùbá is motivated by the desire to preserve the prosodic structure of the input syllable from English. He argues this by saying that "stressed syllables in English are mainly bimoraic. In other words, they have a duration that is longer than their unstressed counterparts.

This fact can be asserted more firmly for heavy syllables. Heavy syllables are those ones with long vowel, diphthong or an arresting coda (that is, closed syllable)" (Oyebade 2008, p. 43). He went further to remark that lengthening in Yorùbá words on English providence is motivated by the desire of Yorùbá to preserve the prosodic structure of the syllable(s) of such word(s) as they come from their source. Thus, a monosyllabic word like 'brush' with an arresting coda comes with the prosodic structure:

37.

σ

μ   μ

b   r   ʌ   ʃ
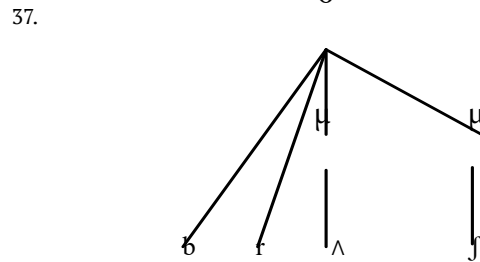
Borrowed into Yorùbá word, the word presents the structure below:

38.

σ   σ   σ

μ   μ   μ   μ

b   μ   r   ɔ   ɔ   ʃ   i
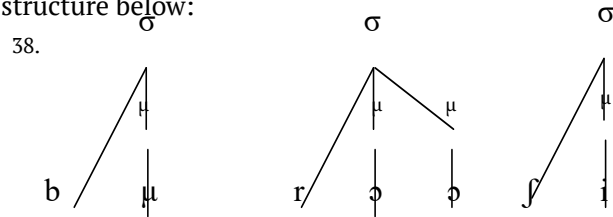
Notice that the structure of the input syllable is preserved subject to the ban, in Yorùbá, of complex onset in a syllable and prohibition of arresting consonant. The same is applicable to all monosyllabic words. Oyebade's argument is affirmed in this paper as the same case is applicable to Úwù.

Conclusion

This paper has described the manifestation of vowel deletion in Úwù. The paper observes that the process of elision in Úwù occurs in three different grammatical constructions that include:associative morpheme + noun, verb + noun, and pronoun + future tense morpheme. The vowel of the AM is usually deleted whenever the morpheme precedes a vowel-initial noun. In a verb phrase (or verb + noun construction), the vowel of the verb is usually deleted when the verb is a monosyllabic one. In a verb phrase where the verb is a disyllabic or tri-syllabic one, no phonological change occurs unless the contiguous vowels are identical (in which one of the vowel is usually deleted). In a construction involving a pronoun + future tense

morpheme, the vowel of the pronoun is usually deleted. When a vowel is deleted, autosegmental features like high tone, nasality and roundness usually survive the process and then realign with other neighboring segments. From the foregoing, it could be concluded that in a $V_1 \# V_2$ construction in Úwù, V_1 is usually deleted while V_2 survives the deletion process, which the pattern of vowel deletion is predictable in Úwù.

On the pattern of epenthesis in the language, this research work reveals that only vowels can be inserted into a word, consonant insertion does not exist in the language. Vowel insertion takes place in three positions in Úwù; these are morpheme initial, medial and final. The paper also reveals that [i] is the underlying form of the inserted vowel, and that the vowel usually becomes [u] in a labial environment. Another salient observation in the paper is the case of vowel lengthening, the HL tone sequence on the lengthened vowels and the low tone on the epenthetic vowel [i/u] that ensures that a nativised English word conforms to the open syllable structure of Úwù language. On this note, it is observed that these were motivated by the need to stay faithful to the prosodic structure of the donor language. These various observations imply that the pattern of insertion in Úwù does not differ from findings in earlier research on the manifestation of epenthesis in Benue-Congo languages. Finally, the paper holds that nouns in the language are mainly vowel-initial.

One of the major problems confronting minor languages is that not only are they endangered, quite a number of them are fast going into extinction without any form of documentation (Allison, 2015, p. 7). One of the ways to salvage endangered languages from going into extinction is to document them. It is therefore recommended in this paper that more researches should be carried out on Úwù. Future researchers should look into other aspects of phonology, morphology, syntax, semantics and sociolinguistics. The native speakers of Úwù are also enjoined to produce literature materials on the language. These two steps will make people know about the structure and grammar of Úwù and by implication ensure that the language is documented.

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