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# Nature and Functions of Vowel Epenthesis in Yoruba Loanwords 

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#### Abstract

: Vowel epenthesis processes vary in their characteristics, and many aspects of their typology are still under continuous study even in English, wherein a lot of academic work has been done, much less so in Yoruba and other African languages where a large part of academic research on the phenomenon is still evolving. The focus of this work is on the identification of form and pattern as well as on the diversity of vowel epenthesis processes in loanwords in Yoruba language. The work also attempts to identify the functions performed by epenthetic vowels in ensuring the complete adaptability of loanwords into the language by examining nature and processes. In addition to identifying and classifying vowel epenthesis as it appears in Yoruba loanwords, this work also examined some empirical questions on the causes and functions of vowel epenthesis, as well as the location and quality of epenthetic vowels in Yoruba loanwords. This study revealed that vowel epenthesis processes in Yoruba loanwords are diverse in nature, functions and position.


Keywords: Vowel epenthesis, loanwords

## 1. Introduction

In Phonology, the term 'epenthesis' refers to the insertion or addition of an extra sound or sounds outside the original phonotactic constraints of a word. The word is from Greek and literally means 'putting in' or 'insertion.' Epenthesis involves the introduction of extraneous elements, which are not present originally into an utterance, usually to break up unwanted sequences (Oyebade, 1998:67). It is a morpho-phonological process or change in which successive sounds are separated by an intervening segment. The additional sound can be either a vowel or a consonant. It is known as excrescence /ik'skresəns/, for the addition of a consonant, and anaptyxis Lænæp'trksis/, for the addition of a vowel (Wikipedia, 2014:1). Epenthesis occurs frequently in language. An example is the addition of an ' i ' before the ' t ' in 'speciality,' which used to be 'specialty' in Middle English [still so in American English]. Similarly, the pronunciation of 'jewelry' as 'jewelery' is a result of epenthesis. (Block, 2004:1)

Epenthesis is usually a feature of the spoken language, but it gradually tends to become represented in writing.

## 2. Epenthesis

According to Block (2004), cited in an undated online article by Nordquist (nd), when a word becomes widely used with the added sound, the spelling of the word changes to conform. Over the years, words like 'thimble,' 'thunder' and 'empty' have been obtained by the process of epenthesis. The original Middle English words 'thimel,' 'tunor,' and 'emty,' from which these words were respectively derived, were originally pronounced as spelled. The consonants were added during a period when speech prevailed overwriting. The process of epenthesis slowed when writing became the foremost means of communication. Now we are back to the emphasis on speaking via television, radio, and films and our language is reflecting the prevailing influence of the oral media over the written word. (Gertrude Block, Legal Writing Advice: Questions and Answers. William S. Hein, 2004). Consonant epenthesis has been observed to only occur in very rare cases in a few languages like Japanese. For example, the word 'harusame' (spring rain) is a compound of 'haru' and 'ame' in which an 's' is added to separate the final 'u' of haru and the initial 'a' of ame. In English, consonant epenthesis involves seemingly unnatural processes, such as the insertion of 'r' in some dialects of English, which have called for special explanation in both the recent Optimality Theory (OT) and Articulatory Phonology (AP). Both OT and AP stand in stark contrast on this count to rule-based theories, which allow rules to insert synchronically arbitrary segments.

## 3. Loanwords

Loanwords are linguistic items 'imported' or 'borrowed' from another language. The constant use of the item in a language other than the one where it originated confers the status of 'loan' on it. Such items have unique phonological elements specific to them and possess patterns that can be described as separate from those of the main body of vocabulary of the target language. (Matthews, 2007:230). There are many types of loan processes recognized in line with nature. Some are imported 'whole,' some are taken in parts, while others are adapted gradually. Crystal (2007:275) describes the true loan word as "...the linguistic item with both form and meaning borrowed." Some are assimilated with some adaptation to the phonological system of the new language. There are also those referred to as loan blend, which is a word that is composed of some or all parts from different languages (e.g., 'monolingual' $=$ Greek prefix and a Latin root, martyrdom $=$ Greek root and English suffix) or that in which the meaning is borrowed, but with only part of the form. Loan shifts are those in which the meaning is borrowed but with the form given a native quality in the new language. E.g., the word 'vidyut,' which had the original meaning of lightning in Hindu, is now extended to mean electricity in many other Indian languages. There are also the items described as loan translation or calque, in which the morphemes in the borrowed word are translated item by item in the target language. E.g., 'skyscraper' in English, which in Slovene is neboticnik (literally sky-toucher) and in Dutch is wolkenkrabber (literally cloud-scratcher). Loan items are a primary source of the unnatural phonological structures which epenthesis attempts to address.

### 3.1. Loanwords in Yoruba

Yoruba language contains a good inventory of linguistic items borrowed without translation from other languages into Yoruba. Foreign language terms frequently enter a recipient language either as a technical term in connection with exposure to a foreign culture or through a new field of activity like arts, philosophy, religion, business, science and technology where the foreign culture has a dominant role. Loanwords in Yoruba language have been traced to English, Hausa, Arabic, and French languages/cultures. [Bamgbose (2001:75), Oyebade, (1998:15-16,67)].
Examples:
$\left.\begin{array}{lllll}\text { English } & \text { Tyre } & = & \text { taya } \\ & \text { French } & \text { Bread } & = & \text { buredi }\end{array}\right]$

The few items borrowed from Hausa language have been remotely traced to Islam and commercial activities between the two linguistic groups as veritable channels through which loaning has occurred both ways. The few French loan items are such as were indirectly borrowed through the English language. E.g. simi (chemise)<[chemise]; taba (tabac)<[tobacco]. It is from English, however, that the largest number of Yoruba loanwords were borrowed. This is clearly because English is the official language of education, legislation, commerce, and inter-ethnic interaction in the country, and more importantly, the foreign language that has a long-standing principal contact in Nigeria. As is universally the case with loaning, the items borrowed into Yoruba language undergo some processes to fully integrate them into the language and make them conform to specific phonological processes of the language. These include deletion, vowel change, consonant change/approximation, word structure change, cluster breaking, nasalization, epenthesis, etc.

The concern of this paper is an examination of the nature and functions of epenthesis, specifically as one of the processes in the general environment of loanword adaptation. For the purposes of the present study, a number of Yoruba loan items have been examined. The observed insertions are classified into two main types:

- Consonant epenthesis
- Vowel epenthesis


## 4. Consonantal Insertion

Consonantal insertions are processes in which consonants that are not present underlyingly in a word structure appear on the surface. The inserted segments ordinarily have a different status in the language: they can be sounds that do not ordinarily occur in the language. In Yoruba language, epenthetic consonants are rare. The only criterion adopted for mentioning them, even for the purposes of the present analysis, is that they are perceived as segments and do manifest so in Yoruba language.
Examples:

| 1. | Ink | /pjk/ | $\rightarrow$ | /yin- $\eta$ ki/ |
| :---: | :---: | :---: | :---: | :---: |
| 2. | Ibo | /ibo/ | $\rightarrow$ | /yibo/ |
| 3. | Wire | /waia/ |  | /waya/* |
| 4. | Tyre | /taia/ | $\rightarrow$ | /taya/* |

## 5. Vowel Epenthesis

According to Hall (2011:1576), the term 'vowel epenthesis' can refer to any process in which a vowel is added to an utterance. Uffmann (2002:1) describes it as a common process in loanword adaptation to satisfy constraints on
phonotactics and syllable structure in the borrowing language. However, vowel epenthesis processes vary in their characteristics, and many aspects of their typology are still undergoing continuous study even in English, wherein a lot of academic work has been done, much less so in Yoruba and other African languages where a large part of academic research on epenthesis is still evolving.
Examples:

| 1. | Pen | $\longrightarrow$ | peeni |
| :---: | :---: | :---: | :---: |
| 2. | File | $\longrightarrow$ | faili |
| 3. | Bread | $\rightarrow$ | bureedi |
| 4. | Slate | $\rightarrow$ | sileti |
| 5. | Brush | $\rightarrow$ | buroṣi |
| 6. | Al-Quran | $\rightarrow$ | alukurani |
| 7. | Albassa | $\rightarrow$ | alubosa |

### 5.1. Functions of Vowel Epenthesis

According to Hall (2011:1576), the function of vowel epenthesis is to repair an input that does not meet a language's structural requirements. In particular, vowel epenthesis allows the surfacing of consonants that mainly appear in phonotactically illegal contexts. The central function of vowel epenthesis is the resyllabification of borrowed words to conform with the phonology of the borrowing language.

In Yoruba language, epenthesis performs this and other functions in ensuring the complete adaptability of loanwords into the language. A careful study of the nature, form and location of these insertions tends to reveal a lot about the various phonological positions and the functions they perform in the language. The phonological positions of parentheses in Yoruba loanwords are the Word-medial and Word-final positions. None of the samples examined revealed any manifestation of epenthesis in the word-initial position. The peculiarities of the positions are revealed in the functions performed by the insertions, as discussed below.

## 6. Insertion of Vowel to Modify Consonant-Final Structure

One of the basic phonological rules in Yoruba language is that consonants do not appear in word-final positions. The language has a coda-less open syllable system. The implication of this is that there are no words with VC, CVC, CCVC, or any

C-final syllable structure in the language. Thus when linguistic items with close syllable structures are borrowed into the language, the conflict is usually resolved by putting a vowel after the final C (word-final) and thereby making it open and amenable to the phonological rules of the language.
Examples:


## 7. Insertion of Vowel to Break Initial and Medial CC-Cluster

One of the most acknowledged functions of vowel epenthesis is the breaking up of consonant clusters in the source item to conform with the rules of the host language. When vowel epenthesis is used to break up a consonant cluster, there is often more than one location where the vowel could be placed to produce phonotactically acceptable output. For example, if a language has the syllable structure ( C$) \mathrm{V}(\mathrm{C})$, hence disallowing CC clusters at the beginning of a word, an initial CCV could be broken up by putting a vowel before the consonants (VC.CV) or between the consonants (CV.CV). The choice of epenthesis locations is language specific. In Yoruba language, CC clusters at either the initial or medial positions are obligatorily broken by inserting a vowel between the two consonants.

## Examples:

[CC-initial]

| 1. | Bread | $\longrightarrow$ | buredi |
| :--- | :--- | :--- | :--- |
| 2. | Slate |  |  |
| 3. | Brush | $\longrightarrow$ | sileti |
| 4. | Class | $\longrightarrow$ | bilarosi |

[CC-medial]

| 5. | Al-Quran | $\longrightarrow$ alukurani |
| :---: | :---: | :---: |
| 6. | Albassa | $\longrightarrow$ alubosa |
| 7. | Alfa | $\longrightarrow$ alufaa |
| 8. | Doctor | - dọkita |

A pattern can be clearly seen in the above examples. It would appear as if consonant clusters are often broken with either $i$-epenthesis or $u$-epenthesis in specific environments. That would appear to be the situation in most cases. There are, however, observed exceptions that are yet to be explained under any rules.
The observed exceptions are a few instances where $e$-epenthesis is used to break up CC clusters in loanwords.
Examples:


## 8. Break Word-Final CC-Cluster by Deleting Final Consonant and Replacing It with Vowel

Another form of epenthesis used for breaking up consonant clusters, specifically at the word-final position, follows a simple process. In this case, the introduced vowel does not separate the CC cluster. Rather, it replaces the last of the two consonants. The simple process is to delete the final $C$ and then introduce the epenthetic vowel into the position previously occupied by the deleted consonant.
Examples:

| 1. | Gold |
| :--- | :--- |
| 2. | Pound |
| 3. | $\longrightarrow$ gooptist |
| 4. | $\longrightarrow$ poon- |
| Damask |  |$\longrightarrow$ bamutiisi

## 9. Break Word-Final CC-Cluster by Inserting a Vowel between the Cluster and another Vowel at the End

A unique form of behavior has also been observed in the epenthetic vowel used to break up word-final CC-clusters in loanwords. These also tend to follow a simple two-step process. The first step is to insert a vowel between the consonants in the cluster. The next step is to put another vowel at the final position of the word.


This, rather than being seen as a complex situation, can easily be explained as simple compliance with another phonological rule of Yoruba language that consonant sounds do not occupy the word-final position or that closed syllables do not end words in Yoruba language. The epenthetic vowel-1 breaks the cluster, but the output still violates another rule.


The complexities accompanying the loan item can only be resolved when it finally 'settles' into the acceptable domain of the host language. The final step of the resolution is to address the remaining violation [see ' $\mathbf{b}$ '] above. Another vowel is thus put in the word-final position to resolve the problem of a closed syllable ending the word.
$\begin{array}{ll}\text { 5. } \\ \text { 6. } & \text { Melt } \\ \text { Belt }\end{array} \longrightarrow$ miliki $i$
6. Belt $\longrightarrow$ belitit

## 10. Insertion of Reduplicated Vowel to Retain Original Tonal/Intonational Property

In some loanwords, certain rules of adoption and adaptability often leave other issues unresolved. Sometimes such resolutions are achieved at the suprasegmental level of language, such as tone and intonation. Yoruba is a tonal language, and tone properties possess lexical features. Tone refers to the use of pitch on a sequence of sounds to convey lexical information. Even though tone is not contrastive in English as it is in Yoruba language, items borrowed from English to Yoruba are subject to tonal modifications. Attempts are made here to ensure that:

- Such items retain some original suprasegmental property as stress,
- The loan items still retain some acoustic properties from the source language.

Examples:

| 1. | Gold | góòlu |
| :--- | :--- | :--- |
| 2. | Church | sọọsi |
| 3. | Fork | fọogi |
| 4. | Tea | tiö |
| 5. | Phone | fóọ̀nu |

This category of loanwords in Yoruba has been observed to have this peculiar pattern. However, the above explanations are light attempts to explain the nature of the vowel epenthesis noted in the pattern. No concrete explanation has been offered by the researcher or any report yet available to him to explain this phenomenon.

## 11. Conclusion

This work is by no means exhaustive. We have attempted to do a bit of seminal work on the phenomenon and do hope that this will attract reasonable critique to stimulate further interest in the issue. Further study can focus on the question of whether epenthetic vowels differ phonetically from lexical vowels and on the question of how vowel epenthesis interacts with other phonological processes. I have generally attempted to highlight some of the basic empirical questions about vowel epenthesis and to show that vowel epenthesis processes are diverse. A better understanding of vowel epenthesis will require deeper study and more extensive work involving particular studies that combine the
traditional, structural description of vowel epenthesis with attention to the acoustics, articulation, and perception of the inserted vowels and also examine speaker intuitions about the vowels. Not much work has been done in many languages in this direction. Further work on the subject might equally look into the questions of whether an epenthetic vowel is acoustically identical to a lexical vowel and whether it is open to other phonological processes in the same way that lexical vowels are. It would also prove challenging to embark on a comparative work on epenthesis in loanwords as opposed to native phonology on the assumption that the processes might be different.

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