

# The Essential Morphosyntactic Prerequisites in Natural Language Word-Formation Techniques

## Shahab Ahmad Al Maaytah<sup>1\*</sup>, Joseph Philip Ayobami<sup>2</sup>, Ibrahim Abdelfattah Almajali<sup>3</sup>

<sup>1</sup>Department of Languages and Humanities, Applied College, King Faisal University, Alhafof, The Eastern Province, Saudi Arabia; Salmaaytah@kfu.edu.sa (S.A.A.M.)

<sup>2</sup>Department of Linguistics and African Languages, Faculty of Arts, The University of Ibadan, Nigeria; pjoseph0494@stu.ui.edu.ng (J.P.A.)

<sup>3</sup>Department of of Arabic language , Art college King Faisal University, Alhafof, The Eastern Province, Saudi Arabia; ialmajali@kfu.edu.sa (I.A.A.)

Abstract. It is an indispensable act of human beings to create novel words in their language(s). Morphology is the branch of linguistics that studies the internal structure of words and how words are formed in a language and it accounts for word formation in languages. The open class category, such as nouns, verbs, adverbs, and adjectives, all fall under the open class category (new words can be added). All the world's languages accept the creation of new words in their lexicon. Adequate attention has not yetbeen paid to the interdependent relationship between Syntax and Morphology in the Yorùbá word-formation system. Therefore, this paper has made an indelible effort to exemplify the essential prerequisites of word formation in a Yorùbá language and also empirically identifies the interdependence be tween syntax and morphology in the holistic overview of Yorùbá word-formation system. This paper adopted primary and secondary data collection methods to source data. Some native speakers of the standard dialect (Yorùbá) were intentionally selected for structured oral interviews based on their proficiency. Data were also sourced from relevant texts, articles, journals, and so on from libraries and the internet. The W eak Lexical ist Hypothesis (WLH) is also formally employed to showcase the limitation of only morphology in Yorùbá word-formation system. Given this, v arious essential morphosyntactic prerequisites have been carefully selected and impeccably analyzed. Such morphosyntactic prerequisites like affixes, reduplication, nominalization through desententialization, and loan words.

Keywords: Morphosyntactic, Prerequisite, Word Formation.

# **1. INTRODUCTION**

There are various levels in linguistics, among the few most important linguistic levels, morphology and syntax are parts of the essential ones, and they are also prominently referred to by sundry linguists. Most importantly, various linguists have contributed immensely to the morphological and syntactic aspects of Yorùbá word-formation techniques, some of them are Bamgbose (1990), Owolabi (1995), Taiwo (2006), Awobuluyi (2008) among others. They through various means exemplify the various segments attached to morphology and syntax in the Yorùbá language. Though there are collections of research works on the Yorùbá morphology and syntax which have served as eye-opening materials in the lexicon of the Yorùbá language, despite this effort, the morphosyntactic aspect of the Yorùbá word formation techniques still needs more emphasis, it is now very important to enlighten those who still examine the Yorùbá word-formation with the partial conception of morphology alone, without the accompaniment of its counterpart (syntax), for a systemic overview. In light of this, this research work is committed to bringing to the fore various essential prerequisites in Yorùbá word formation through the morphosyntactic lens.

There are various prerequisites attached to word formation in the Yorùbá language, this research exemplifies these so obviously. One of the most prominent prerequisites that Yorùbá language adopts mostly is affixation (àfòmó). This application of affixation in nominal word formation varies from one language to another (in Greek, for instance, it employs suffixation). Morpheme is embedded in morphology, as morpheme is the backbone of morphology, the frequent creation of new words in a language usually strengthens its existential longevity and brings about its expected development. Continuous coinage of new words in a language does not expose a language to any form of endangerment or extinction.

# 1.1. A Brief Historical Background of the Yorùbá People

The Yorùbá people, one of the largest ethnic groups in West Africa, primarily inhabit southwestern Nigeria, as well as parts of Benin and Togo. Their history is rich and complex, characterized by intricate social structures, vibrant cultural practices, and significant historical events. The origins of the Yorùbá people can be traced back to the ancient city of Ife, which is regarded as the spiritual and cultural heart of the Yorùbá civilization. According to oral traditions, Ile-Ife is believed to be the birthplace of humanity. Ile-Ife was a powerful kingdom that flourished from the 12th century onward, with its influence spreading across the region (Adéyemo A. 1940, Bamgbose A. 1990).

Today, the Yorùbá plays a significant role in Nigeria's sociopolitical landscape while maintaining a rich cultural identity through language, religion, and traditional practices. With a population exceeding 20 million, the Yorùbá language is one of the most widely spoken languages in Nigeria, and their cultural festivals, music, and

### art remain integral to their heritage (Irele A. 2001).

#### 2. LITERATURE REVIEW

This is the aspect where the research works that align with this study are discussed. Since morphosyntactic issues are addressed, the related research works of seasoned linguists will be synthesized and analyzed. The theoretical framework carefully chosen for the formal approach to this study, the Weak Lexicalist Hypothesis, will also be construed.

## 2.1. Morphosyntax

Morphosyntax represents a specialized branch of linguistics that investigates the interplay between morphology (the study of word structure) and syntax, which pertains to the structure of sentences. This discipline centers on understanding how words and their various forms integrate to communicate meaning and establish structure within sentences. Morphosyntax examines both the modifications that words undergo, such as the addition of prefixes, suffixes, or inflections, and the organization of these forms to delineate grammatical relationships. Such relationships encompass elements including subject-verb agreement, tense, case, number, and word order. Various linguists have done scholarly works on morphosyntax, scholars such as Spencer A. (1991), Anderson S.R. (1992), and many more. Scholars who have done scholarly work on the morphosyntactic aspect which is intimately related to this present paper are Pulleyblank and Akinlabi (1988), Adeniyi (2007), Taiwo (2013), and many more.

#### 2.2. Morphology

The term "morphology" denotes the study of forms and structures and can be applied across various disciplines. In the field of biology, it refers to the examination of the forms and structures present in living organisms. In geology, morphology pertains to the analysis of landforms, including their configurations and evolutionary processes. Within linguistics, morphology encompasses the exploration of the forms and structures of words. This is accomplished by deconstructing words into their smallest units, known as "morphemes." These morphemes are subsequently compared to those from other words to assess their interrelations. Each morpheme fulfills a specific grammatical function. (Abayomi, Adam, and Joseph, 2016). Morphology is the study of the structure of words and how word structure reflects relation to other words (Spencer 1988:146). It is an aspect of grammar that is concerned with the analysis of the internal structure of words and of the rules by which words are formed (Fromkin, Rodman, and Hyams 2007: 77). The discreetness of morphological operations makes it a proper grammatical phenomenon. One common object that recurs in morphological analysis is the morpheme, often defined in traditional terms as a minimal sign composed of the unity of constituent of form with a constituent of meaning.

#### 2.2.1. Morpheme

Morpheme is very important to morphology. Many linguistic scholars have defined it in various ways. (Taiwo 2006) defines morpheme as "the prime meaningful constituent in any language, but the meaning can be covert or overt. (Awobuluyi 2008) defines morpheme as "the aspect of a word which has its inherent meaning, indivisible and cannot be analyzed without uttering its inherent meaning. Morphology is the branch of linguistics that studies the internal structure of words and how words are formed in a language and it accounts for word formation in languages. The basic unit of analysis in morphology is called the "morpheme". A morpheme is defined as the minimal meaningful unit of grammatical analysis, that is, a meaningful sequence of constituents that is not divisible into smaller meaningful units (Abayomi, Adam, and Joseph 2016).

With these scholarly definitions, it is obvious that a morpheme is so prime, that it is indivisible. These are examples below:

 1a. a- + lo → àlo "going" agent verb

1b, \* l- + o → lo "go"

In the examples above, the first one is meaningful when it is analyzed through a division, but the second one cannot be analyzed as a bimorphemic word.

#### 2.2.1.1. Morphemic Subcategory

There are broadly two subcategories of morpheme in Yorùbá, these are:

- (a) Free morpheme
- (b) Bound morpheme

#### 2.2.1.1.1. Free Morphemes

These represent a category of morphemes capable of functioning independently as meaningful words or sentences. Unlike bound morphemes, which require attachment to other morphemes to convey meaning, free morphemes possess their inherent significance and can stand alone in linguistic contexts. Their prevalence is particularly notable in Yorùbá verbs, where they play a fundamental role in expressing actions and intentions. This prominence suggests that free morphemes are integral to the structural and functional dynamics of the Yorùbá language, facilitating clear and direct communication. Furthermore, the ability of free morphemes to be utilized in imperative forms enhances their importance in conveying commands and facilitating effective verbal interaction within the language.

Examples: 2a. sùn "sleep" b. lọ "go" c. ję "eat"

The examples in 2a, b, and c are all free morphemes, and apparently, they are all verbs. If they function alone as the only constituents in a sentence, it will be an imperative sentence.

### 2.2.1.1.2. Bound Morpheme

These are dependent constituents, they are usually attached to independent morphemes to form meaningful words. All the oral vowel letters are useful in this aspect, except "u" which does not start a Yorùbá word.

Table 1: Examples of words derived from monosyllabic verbs in Yorùbá:

Bound morpheme	Free morpheme	Derived Word	English Equivalence
a-	Dé	Adé	Crown
è-	bè	èbè	Plea
ì-	fe	ìfé	Love

The illustration above shows the dependence of bound morphemes on free morphemes to create meaningful words.

# 2.3. Syntax

Syntax is a core component of linguistics that deals with the structure and rules governing the formation of sentences in a language. It examines how words combine to form phrases, clauses, and complete sentences. Scholars like Chomsky (1957), Radford (2004), and some others have done scholarly work on syntax.

#### **3. THEORETICAL FRAMEWORK**

According to (Fatai and Sale 2024), there are two versions of the Lexicalist Hypothesis; Strong and Weak Lexicalist Hypotheses. The Strong Lexicalist Hypothesis constrains syntactic operations/transformations in the process of word formation. It argues that both derivational and inflectional morphology are operated in the lexicon (Halle, 1973). This implies that there is no interaction between syntax and morphology. However, the Strong Lexicalist Hypothesis did not go scot-free from criticisms. (Lieber 1981, p.18) says, "The Lexicalist Hypothesis is too strong. Some measures of interaction between morphology and syntax must be allowed..."

To this effect, The Weak Lexicalist Hypothesis is the model adopted for this study, it suggests that some words are derived through syntax, while others are not (Adeniyi 2007:36). According to this hypothesis, morphology and syntax are somewhat independent components. Morphological principles govern categories of level X<sup>0</sup>, and there is no strict ordering between the components, except for the standard situation where morphology provides inputs for syntax. Additionally, syntax can also derive a word-level category. This model is adopted from (Pulleyblank and Akinlabi 1988) as shown in the diagram below.



(Pulleyblank & Akinlabi 1988:158)

The diagram above shows the two categories of morphology (1 and 2), which can be further construed thus: Morphology 1: This is the kind of morphological component, where morphological constituents are employed to form syntactic constituents, in other words, morphology gives an input to syntax, while syntax absorbs the input to produce a syntactic output. The diagram below explains this better.

#### Morphology 1 ------ Syntax

These are some examples to buttress the diagram above.

3a. ì- + yè → ìyè
Agentive prefix live life/personal name
b. o- + yè → oyè
Agentive prefix live chieftaincy/personal name

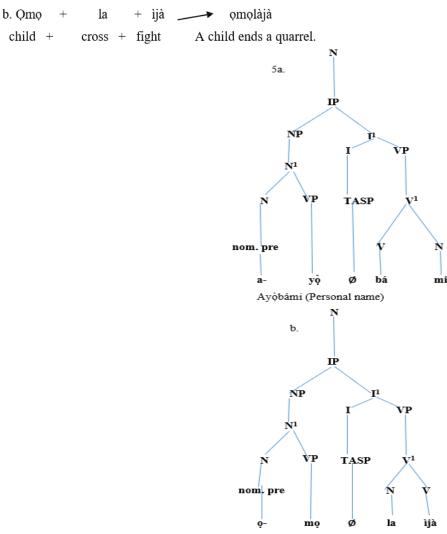
In the illustrations above, it is very obvious that only the morphological level is involved.

#### Syntax \_\_\_\_ Morphology 2

The diagram presented above demonstrates how a non-lexical category can lead to the emergence of a lexical category. It illustrates that all morphological processes encompassing both derivation (including phrasal derivation) and inflection—are encompassed within a single grammatical component (Pulleyblank & Akinlabi 1988:158-160). The proposed model features a unified morphological component in which syntactic input is imperative for the formation of specific words, thereby allowing for the potential recursion from syntax into morphology.

4a. Ayò + bá + mi Ayòbámi (OR)

Joy + meet + me Joy meets me.



Omolàjà (Personal name)

The illustrations above involve two levels: morphology and syntax, it is very obvious that if the Yorùbá word-formation system is systemically construed, morphology and syntax will be inseparable. The illustrations above show that the Weak Lexicalist Hypothesis (WLH) is indispensable for the content of this research

regarding the various levels of Yorùbá word formation, most especially in the concept of nominalization through desententialization.

# 4. THE ESSENTIAL PREREQUISITES OF WORD FORMATION IN YORÙBÁ

There are many essential prerequisites in Yorùbá word formation, some of them are affixation, reduplication, nominalization through desentialisation, loan words, etc.

# 4.1. Affixation

There are various affixes in Yorùbá, and each of these has its functions in word formation. Some of these are prefixes, suffixes, class-changing affixes, class-maintaining affixes, interfixes, etc.

# 4.1.1. Prefixes

These are the bound morphemes that are usually attached to the beginning of the free morphemes. Prefixes cannot function independently without the aid of free morphemes. Examples are:

#### Table 2:

Prefix	Free Morpheme	Derived Word	English Equivalence
ì-	ję	ìję	Bait
Àì	lọ	àìlọ	not going

The first columns are the prefixes that are added to the free morphemes to derive meaningful new words. The prefixes can bring positive or pejorative consequences.

# 4.1.2. Interfixes

These are the morphemes that are employed in Yorùbá word formation, interfixes are used to form words by joining two free morphemes together. It is observed that these two free morphemes are usually taken from the same word class.

Examples:

#### Table 3:

Free Morpheme(N)	Interfix	Free Morpheme (N)	Derived Words	English Equivalence
ilé (house)	-sí-	ilé (house)	Ilésílé (N)	house to house
ise (work)	-ki-	ise (work)	işekìşe (N)	illegal work/job
omo (child)	-oní-	omo (child)	omolomo (N)	someone else's child

The tabular illustration above shows that the interfixes can be employed to join two free morphemes together to create other meaningful words. It is observed that the two free morphemes do not only belong to the same word class but have the same meaning. The joining of two free morphemes by interfixes results in new meaningful words, though they have the same meaning initially.

# 4.13. Suffixes

In Yorùbá grammar, there is an existing scholarly argument among the Yorùbá grammarians regarding the existence of suffixes in Yorùbá or it is void. Some accept its existence, while some detest it. One of the Yorùbá grammarians who accepts its existence in Yorùbá is Ogunwale (2006), he opines that suffixes exist in Yorùbá grammar, these are some of the examples he gave below:

Table 4:				
Free morpheme	Suffix	Derived word	English equivalence	
tààrà (adj)	-tà	tààràtà (adj)	Straight (adjective)	
Gééré (adj)	-gé	géérégé (adj)	Accurate (adjective)	
b <b>ẹ</b> rẹẹ (adj)	-bẹ	b <b>ẹẹ</b> r <b>ẹ</b> b <b>ẹ</b> (adj)	Plenty (adjective)	

The tabular illustration above shows that there is no additional meaning to the existing word, even after the inclusion of a suffix. Also, the suffix in Yorùbá is class maintaining.

The researcher suggests that in as much a suffix in Yorùbá is class maintaining and it does not have any semantic effect on the existing morpheme it is added to, if we do not really reckon with it, it is not an offense.

# 4.2. Reduplication

This is also one of the prominent prerequisites for Yorùbá word formation. This can be done by repeating a partial part of a morpheme or the full (whole) morpheme. There are various subcategories of reduplication in Yorùbá. (Taiwo 2011) showcases some of them, which are: partial reduplication, full reduplication, agentive

reduplication, emphatic reduplication, numerical reduplication, etc. Some of these will be analyzed below:

# 4.2.1. Partial Reduplication

This is a kind of reduplication that employs the duplication of a partial part of a free morpheme to create new words.

Examples are:

# Table 5:

Prefix	Free morpheme	Derived word	English equivalence	
lí-	l <b>o</b> (verb)	líl <b>ọ</b> (noun)	Going	
gbí-	gbóná (verb phrase)	gbígbóná (noun)	Become Hot	
dí-	dára (verb phrase)	dídára (noun)	Become Good	

The illustration above shows the processes involved in duplicating the verb consonants (/l/ and /gb/ and /d/), attaching them to the root (lo, gbóná, and dára), and inserting the high vowel /í/ to avoid consonant cluster. The derivations (lílo, gbígbóná, and dídára) are prefixed by reduplicants (lí, gbí, and dí), therefore changing the word classes of the derived words from that of the root words.

# 4.2.2. Full/Total reduplication

This is a word formation process in which a whole morpheme is reduplicated to form another word. These are examples below:

Derived words	English equivalence
dáradára	Beautifully
<b>Ŏ</b> mŎ <b>Ŏ</b> mŎ	Grandchild
	dáradára

The tabular illustration above shows the process involved in duplicating the entire root word (omo, nlá, ose and peja). The reduplicated words (omoomo and osoose) are class-maintaining while the derivation (dáradára and pejapeja) is class-changing.

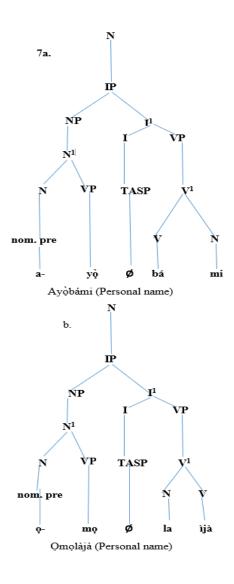
# 4.3. Nominalization through Desentialization

According to (Taiwo 2013), explains desentialization thus: "Desententialization is a word-formation process in the Yorùbá language by which a whole clause or sentence is reduced to a noun. Various sentence types could take part in this nominalization. Examples are focus constructions, dislocated sentences, relative clauses, multiple verb sentences, and underived sentences". The explanation above shows how various constructions, most especially sentences, become nominalized. It is important to note that the inflection which desententializes Yorùbá constructions through nominalization is usually covert.

Illustrations 4a and b with 5a and b above obviously buttress this concept. They are also employed as the needed examples:

6a. Ayò + bá + mi Ayòbámi (OR) Joy + meet + me Joy meets me.

The illustrations (6a and b) above show how Yorùbá sentences are desententialized without any overt inflection. Likewise, the diagrams (7a and b) below also buttress this concept more. The illustrations provided have shown that there can be a sentential input (syntax) which will subsequently give a nominal output (morphology).



#### 4.4. Yorùbá Loan Words

Numerous linguists have explored the concept of loanwords, commonly known as linguistic borrowing. Gleason (1961:446) describes borrowing as adopting linguistic items from speakers of different speech forms. Owolabi (2013) defines loan words as terms appropriated from one language for use in another. In the Yorùbá language, many such terms are derived from Hausa, Arabic, and English, among others. These borrowed words frequently describe new concepts arising from interactions in various domains, including religion, business, politics, and science, where no existing Yorùbá terminology may be available. There are two categories of words borrowed from the Yorùbá language: loaning by auditory reception and loaning by visual perception.

# 4.4.1. Loaning By Auditory Reception:

This form of lexical borrowing considers the structure of the source language from which the word is derived. Essentially, the way a phoneme sounds determines its pronunciation and spelling in the borrowing language. Examples of such borrowed words include:

6a. Peter – Pítà

- b. Bible Báíbù
- c. Table Tébù
- d. Tailor Télo
- e. Teacher Tísà

#### 4.4.2. Loaning by Visual Perception

This form of lexical borrowing takes into account the structure of the source language from which the word is derived.

Examples of such borrowed words are:

- 7a. Table Tábílì
- b. Peter Pétérù
- c. Bible Bíbélì

In the content (7) above, the pronunciation and orthography are influenced by the auditory perception of the

phonemic sounds.

According to Bamgbose (1990), a borrowed word must be nativized to make it conform to Yorùbá phonological structure or look like Yorùbá expression. Owolabi (2013) asserts that the Yorùbá language does not permit consonant clusters in its phonotactics.

For example:

8a. Break - brek – búrèkì

b. Plug - plog - púlogì

c. Bread - bred - búredì

In the illustrations above, loan words with clusters of two or more consonants are repaired by vowel insertion (epenthesis) or consonant deletion.

Also, loan words with a cluster of three or more consonants usually undergo re-syllabification. This is done either by vowel insertion or consonant deletion.

Examples of such words are; 9a. Tumbler - tonbla - tonbìlà

b. Transfer - tanskua - tansikúà

c. Street - teet - títì

d. Extra - esra- ésírà

The analyses as presented reveal that in the examples (I and ii) above, clusters of three consonants that commence with a nasal consonant form a syllable. In contrast, examples (iii and iv) demonstrate a reduction in the number of consonants to align with the requirements of words in the Yorùbá language.

# 4.4.3. Arabic And Yorùbá Examples of Loan Words

Table 7: Arabic Yoruba English Ar-rad Aàrá Thunders Fatil Fìtílà Lamp Ad-Dua Àdúrà Prayer Al-Afiyah Àlááfíà Peace Alfa Àlùfáà Cleric

#### Table 8.

Hausa	Yoruba	English
Barawo	Bàráò	Thief
Buaya	Bùáyà	Enormous
Sanmo	Sánmộ	Sky
Albarsa	Àlùbọsà	Onion

#### 4.3.4. Hausa and Yorùbá Examples of Loan Words

The examples presented above illustrate specific instances in which certain words in the Yorùbá language are derived from the Arabic and Hausa languages. This phenomenon reflects the historical interactions and cultural exchanges among these linguistic groups, highlighting the influence of Arabic and Hausa on the development of Yorùbá vocabulary.

#### **5. CONCLUSION**

This research paper examines the morphological processes involved in Yorùbá word formation, specifically focusing on mechanisms such as affixation, reduplication, nominalization through desententialization and the use of loanwords. Each process is analyzed comprehensively through various media. Additionally, the perspectives of numerous scholars regarding these processes are presented, offering valuable insights into the subject matter. To dig deeper into this research, we also employ the use of a theoretical framework that perfectly aligns with the content of this research. The theory employed is the Weak Lexicalist Hypothesis (WLH). This is employed to systemically opine that the morphological level alone does not suffice in the Yorùbá word-formation system. The only way out is to involve the syntactic level as well. This consequently means, that when it comes to the issue of the Yorùbá word formation, our idea should not only be based on morphology but the combination of morphological and syntactical levels.

#### Acknowledgment:

The authors extend their appreciation to the Deanship of Scientific Research at King Faisal University for funding this research work through the project number KFU242986T

#### REFERENCES

Abayomi et al. (2016). Morphological Analysis of Standard Yorùbá Nouns. American Journal of Engineering Research. Adeniyi, H. (1997). Phrasal Morphology: The Case of Yorùbá Names. South African Journal of African Languages. Anderson, S. R. (1988). Inflection. In M. Aronoff & R. Oehrle (Eds.), Language Sound Structure, MIT Press. Awobuluyi, O. (2008). Ēko Ìseda-oro Yorùba. Àkúré: Montem Paperbacks. Bamgboşe, A. (1990). Fonolóji àti Gírámà Yorùba. Ìbadan: UPL. Fatai T. and Sale M. (2024). Numeral systems in Olùkùmi and Òwò dialects of Yorùba, evidence of Yorùba Affinity. Journal of Second and Multiple Language Acquisition (JSMULA), 12

(2) 582-599.

Fromkin, V., Rodman R. and Hymans N. (2007). An Introduction to Language 8th Edition. Thompson Wadsworth, Boston, pp. 71 – 114. Gleason, H. (1961). An Introduction to Descriptive Linguistics. Holt, Rinehart and Winston, Volume 10.

Halle, M. (1973). Prolegomena to a theory of word formation. Linguistics Inquiry, 4, 3-16. Lieber, R. (1981). On the Organization of the Lexicon. Indiana: USA. Indiana University. Ogunwale, J. A. (1996). Form of Meaning of Yoruba Language and Literature. Vol. 1, Pp.

15-22, website: w.w.w. Researching Yoruba.com.

Owolabi, K. (1989): Ijinle itupale ede Yoruba. Fonetiiki ati Fonoloji. Universal Akada Books Nig Ltd.

Pulleyblank, D & A, Akinlabi. (1988). Phrasal Morphology in Yorùbá. Lingua 74, 141- 166. Spencer, A., and Zwicky, A.M. (1998). The Handbook of Morphology. Oxford:

Blackwell Publishers Ltd.

Spencer, A. (1991). Morphological Theory: An Introduction to Word Structure in Generative Grammar. Blackwell.

Taiwo, O. (2006). Mofoloji. Ibadan: Layot Ventures.

Taiwo, O. (2011). Mojoloji. Ibadan University: Akada Books, Nigerian Limited.

- Taiwo, O. (2013). Morphology Syntax interaction in the derivation of nominal compounds in Yorùbá. Studi Linguistici e Filologici Online (10): 1-46
- Adéyemo A. (1940). The History of the Yoruba People.
- Bamgbose A. (1990). Language and the National Development in Nigeria: The Case of Yoruba in the National Linguistic Landscape.

Irele A. (2001). The African Experience in Literature and Ideology.