

Contrastive Analysis of the Morphemes of Yoruba and Igbo Languages

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Abstract

Languages worldwide all have words used to convey meaning, which possess specific forms and structures. This article analyses and contrasts the morphemes of Yoruba and Igbo languages. A theoretical foundation for this study was developed on the concepts of contrastive analysis proposed by Lado. Since this research compares and contrasts the morphemes of Igbo and Yoruba languages, contrastive data analysis was used to analyse the data. The various rules and processes of forming words via morphemes were identified and classified for contrastive studies. The researchers used the marching approach of contrastive analysis. All word-formation processes are discovered to be typically rule-governed; however, these rules can occasionally be highly complex, and certain processes overlap and interact with one another. Findings from the study show that both languages exhibit general borrowing patterns, affixation, and compounding patterns. Prefixes are used in both languages to create words using morphemes; compounding is an effective technique in both Igbo and Yoruba languages. All compounds in Igbo and Yoruba languages are semantically endocentric; while Yoruba offers a flexible word order kind of compounding, Igbo uses a fixed order of words.

Keywords: Contrastive Analysis, Morphemes, Igbo language, Yoruba language

Introduction

Language is a vital communication tool, enabling individuals to convey their thoughts, ideas, and emotions. Every language has specific forms and structures that are used to convey meaning. Thus, the expression of word classes such as nouns, verbs, adjectives, prepositions, conjunctions, pronouns, and adverbs differ from one language to another (Makinde and Aniekwe, 2022). This study analyses and contrasts the morpheme processes of the Yoruba and Igbo languages. The study of morphology involves the internal structure of morphemes. Morphologists investigate the structure of words and how they are formed by studying morphemes. Studying morphemes is essential in developing a language because it helps to understand its lexical and grammatical features. Scholars have identified two sub-fields of Morphology: inflexion and word formation. Word formation and inflexion are two different areas; while the former focuses on generating new words, the latter adds grammatical features to existing words without changing their meaning. Morphemes can be free or bound and play a critical role in word formation through some rules. Scholars have tried to compare languages based on their word-formation processes. This study focuses on two Kwa languages, Yoruba and Igbo, and their morphological processes. The comparison aims to identify the structural differences and similarities between both languages, the forms of words, and the morphemes used in their formation.

Brief History of Yoruba Language and Its Morphology

The Yoruba language is spoken by over 50 million primary and secondary speakers (Adetugbo, 1973 and Bamgboṣe, 1965; *Wikipedia*, 2020). It is primarily spoken in the southwestern region of Nigeria, parts of the Benin Republic, and Togo. The Yoruba language uses several processes to generate words, including affixation, reduplication, and compounding. Yoruba has a subject-verb-object word order and no indication of gender in its grammar. Bishop Samuel Ajayi Crowther is one of the earliest linguists to study the Yoruba language and explain its various structures. He was the first person to translate the Bible from English to Yoruba. Other Yoruba scholars have also ventured into explaining the Yoruba morphology (Adetugbo, 1973 and Bamgboṣe, 1965).

Brief History of Igbo Language and Its Morphology

The Igbo language falls under the Kwa group of the Niger-Congo family of African languages, estimated to be spoken by around 40 million people (Ejiofo, 2002). The standard form of the Igbo language is based on the dialects of Owerri and Umuahia. The language uses several morphological processes to generate words, including affixation, borrowing, calquing, clipping, compounding, and reduplication.

Research Questions

The following research questions guide our analysis:

1. What factors differentiate the morphemes of the Yoruba language from that of the Igbo language?
2. To what extent are the morphological processes of the Yoruba language similar or different from that of the Igbo language?
3. In what ways do the functions of bound morphemes in the Yoruba language differ from those of the Igbo language?

Literature Review

A morpheme is a meaningful morphological unit of a language that cannot be further divided. Several scholars have tried to capture and explain extensively their understanding of the word "morpheme". Anagbogu *et al.* (99) refer to morpheme as the smallest indivisible form with a specific grammatical function. Osuagwu *et al.* (1997) outline other characteristics of morphemes that distinguish them from other grammatical units.

- i. A morpheme is not identical to a syllable.
- ii. A morpheme may consist of only one phoneme.
- iii. A morpheme may be realised in more than one phonemic way.
- iv. The different ways in which a morpheme is realized are in complementary distribution.

As Arokoyo (2017) asserts, every morpheme plays a significant role in whatever construction it finds itself; a morpheme can be seen as a relational, indivisible, and semantic unit. According to Andrew (1998), morpheme is a language unit with definite meaning and syntactic function. To him, a morpheme is an essential part of a language because it generates other words. Ndimele (2002) defines a morpheme as "the smallest meaningful unit of an utterance which may not exist in isolation". Unlike words, a morpheme often needs the presence of another grammatical unit to which it attaches. A major way morphologists investigate words, their internal structure and how they are formed is by identifying and studying morphemes (Aronoff and Fudeman, 2011). According to Haspelmath and Sims (2010), morpheme can be defined as the smallest meaningful constituents of a linguistic expression.

Classification of Morphemes

Morphemes can be classified basically into two types. These are free morphemes and bound morphemes.

Free Morphemes

Free Morphemes are stand-alone words. e.g. aka, 'hand', a 'fish' etc. They can occur in isolation and carry meaning without attachment to other morphemes. A rich system of affixation, reduplication, etc characterizes Igbo morphology. Free morphemes in Igbo are words that can stand alone and carry meaning without any attachment to other morphemes. Examples of free morphemes in Igbo include "nwa", meaning child; "obi", meaning heart; "ala", meaning land; and "ebe", meaning place. According to Ukaegbu (2017), Igbo's free morphemes are classified into monosyllabic and multisyllabic. Monosyllabic words consist of only one syllable, while multisyllabic words have more than one syllable. Examples of monosyllabic free morphemes include "nwa", meaning child, "ala", meaning land, and "nwanyi" meaning woman. On the other hand, multisyllabic free morphemes include "okwu", meaning word, "ebe", meaning place, and "anwụ", meaning sun.

A rich system of affixation, compounding and reduplication characterizes Yoruba morphology. Free morphemes in Yoruba are words that can stand alone and carry meaning without any attachment to other morphemes. Examples of free morphemes in Yoruba include "òmọ" meaning child, "ẹyẹ" meaning bird, "irin" meaning metal, and "ìkòkò" meaning yam. According to Akinkugbe (2020), free morphemes in Yoruba can be classified into monosyllabic, disyllabic, and polysyllabic. Monosyllabic words consist of only one syllable, disyllabic words have two syllables, and polysyllabic words have more than two syllables. Examples of monosyllabic free morphemes in Yoruba include "ẹyẹ" meaning bird, "òkọ" meaning husband, and "òmọ" meaning child. Disyllabic free morphemes include "ìkòkò" meaning yam, "àyàn" meaning mirror, and "oràn" meaning story. Polysyllabic free morphemes include "alajẹba", meaning governor, "àwọn" meaning they, and "adájọ" meaning meeting.

Free Morphemes are morphemes that can stand alone as a word. e.g. dog, gentle, picture, aka 'hand', a 'fish' etc. The free morpheme is a morpheme that can occur in isolation. Arokoyo (2017) classifies free morphemes into two, namely, Lexical morphemes and Functional morphemes.

- a. **Lexical Morphemes:** Lexical morphemes bear the meaning in sentences; Arokoyo (2017) opines that they serve as carriers of the information being conveyed in a sentence. Lexical morphemes consist primarily of the open class of words, which are open to receiving new lexis, such as nouns, verbs, adjectives and adverbs.

The following examples are from Yoruba and Igbo.

	Yoruba	Igbo
Noun	ilé 'house', òkùrin 'man'	eke 'python', nkụ 'firewood'
Verb	lọ 'go' gé 'cut'	si 'cook', re 'sell'
Adjective	kpukpa 'red', dudu 'black'	ocha 'clean', mma 'good'
Adverb	tètè 'fast', kíákíá 'quickly'	ọsọsọ 'fastly' nwayọọ 'slowly'

- b. **Functional Morphemes:** These are a kind of functional morphemes that show the relationship between or among lexical morphemes (Arokoyo, 2017); they belong to the closed class, i.e. which means they are not open to new members and have a high frequency of occurrence, Arokoyo states that two members of a class cannot be used together they include functional classes like prepositions, pronouns, conjunctions, determiners and interjections.

	Yoruba	Igbo
Preposition	inú 'inside' abẹ́ 'under'	n'ime 'inside'
Pronoun	èmi 'I', àwa 'we'	m 'I', gi 'you'
Conjunction	àti 'and', àbí 'or'	na 'and' ma 'but/or'
Interjection	aa, ye	hja, hei

Babarinde (2009:22) sees the free morphemes as the root, and he defines the root as the smallest morphological unit that is associated with a free morpheme. It is the heart of word formation and the core of any given word. The major part of a word after all affixes have been removed is known as the root.

Bound Morphemes

These are a type of morphemes that cannot stand alone as a word and need to be accompanied by either a base or a root, e.g. -logy, an (an agentive infix in Yoruba) Tinuoya (2000), o (an agentive infix in Igbo) Ogwudile (2018), etc. According to Anagbogu et al., Bound Morphemes can be categorised into Prefix, Suffix, Infix, Circumfix and Interfix; below, we will explain each category using examples in Yoruba and Igbo.

(a) Prefix

This is a category of bound morphemes that involves the addition of an affix to the beginning of a word. This type of affix appears before the root, base or stem to which it is attached Arokoyo (2017).

i. Prefix in Yoruba

There are three ways in which prefixes are realised in the Yoruba language: through all oral vowels a, e, ẹ, i, o, ọ, except [u], Lexical prefixes and Negative prefixes. These prefixes in Yoruba serve a lexical function as they produce new words.

Oral Vowels: Arokoyo (2017) states that in Yoruba, all oral vowels a, e, ẹ, i, o, ọ, except [u], function as prefixes in Yoruba. According to Tinuoye (2000:24), "they are used primarily to form concrete nouns denoting *“the actor or agent”*". These prefixes appear before verbs or verb phrases to derive nouns (Nominalization).

Lexical prefix: According to Arokoyo, the one-morpheme with its variants alá, oló, ọlọ', elé, eḷe' also prefixes in Yoruba and can also mean lord, owner, seller, possessor etc. They are actor or agentive prefixes attached to nouns. Oní 'owner' + ilé 'house' = Onílé 'landlord'.

Negative Prefix: Another type of Yoruba prefix is the negative prefix 'àì'; this prefix, when added to verbs, adjectives and verb phrases, derives nouns and adjectives, but the main purpose is to negate. Bamgbose (1990:106) describes it as a negation of abstract nouns. Àì 'neg' + mọ 'know' = àìmọ 'ignorance'.

Sn	Vowels (a, e, ẹ, i, o, ọ)	Lexical prefixes (olu, alá, oló, ọlọ', elé, eḷe')	Negative prefixes (ai)
1.	kú ---- ikú 'to die --- 'death',	Olú + awo = Olúwo 'Lord' 'cult' 'head of cult'	Àì + mọ = àìmọ 'Neg' know 'ignorance'
2.	jà --- ijà 'to fight' --- 'fight'	Oní + ilé = Onílé 'head' 'house' 'landlord'	Àì + ní = àìní 'Neg' 'have' 'lack'
	Tinuoya (2000:24)	Arokoyo (2017)	Bamgbose (1990:106)

ii. Prefix in Igbo (Nganiihu)

Igbo, just like every other African language, has the presence of prefixes in its words, most usually added to verbs to form nouns and some word classes. Igbo uses vowels like a, e, i, ị, o, ọ, m, and n, i.e., some of its vowels and the 'm' and 'n'.

Prefix (Nganiihu)	Base or root that is usually a verb	Word (Mkpuruokwu)
a	gụ	agụ 'lion'
e	De	ede 'write'
i	Si	isi' head'
ị	gba	igba 'drum'
o	pi	opi 'fluit'
ọ	kụ	ọkụ 'fire'
n	dụ	ndụ 'life'
m	kpa	mkpa 'important'

Igbo also possesses some other kinds of prefixes that have lexical meaning and are used to form new words, e.g. nwa, oke, di, onye, ulo, chi or Chukwu etc.

S/N	Vowels like (a, e, i, ị, o, ọ) and nasals (m and n)	Lexical prefixes (NWA, oke, di, onye, ulo)	Chi prefixes (chi)
1.	a + gụ ---- agụ 'lion'	ulo + ma = Uloma 'house' 'good' 'name'	chi + nedu = Chinedu
2.	ọ + kụ ---- ọkụ 'fire'	nwa + afor = Nwafor 'child' 'market day' 'name'	chi + dimma = Chidimma
	Emeribe and Mbagwu (2018)	Ugochukwu (2021)	Ogwudile (2018)

(b) Suffix

This category of bound morphemes involves the appearance of morphemes at the back of the root, base or stem. Adding a suffix brings about a new word that would change the grammatical class of the root or provide additional information.

i. Suffix in Igbo

In Igbo, there are two types of suffixes: extensional and inflectional.

1. **Extensional suffix:** This type of suffix in Igbo denotes the addition of some lexical affix at the back of the verb for a better understanding of the verb, i.e. the suffix is used as an extension to the verb to add better meaning to the verb.

Si + godu = sigodu nri 'cook'	chọ + ta = chọta ihe 'find'	ma + lite = malite ihe 'start'
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2. **Inflectional suffix:** This type of affix shows the grammatical function of tense, aspect, affirmative and negative.
 - i. **Tense:** These types of inflectional affixes are used to show the grammatical function of tense; examples of suffixes used are -buru, -ere, -uru, -ri e.g
 - ii. **Aspect:** This type of inflectional affix is used to show aspect; examples used to show affix include -ro, -re, -la, -ri, -rọ
 - iii. **Affirmative(imperative & requests):** These types of inflectional affixes are used at the end of verbs to show imperatives or requests; they include -e, -a, -o, -u etc
 - iv. **Negatives:** These types of inflectional affixes are used at the back of verbs to show negation and are usually in one form, '-ghi.'

S/N	Tense	Aspect	Affirmative (requests or imperatives)	Negatives
1.	o tiyere ya ofe 'he/she put soup in it.'	o toro ogologo 'he/she is tall.'	1. dee ihe 'Write something' 2. taa atu 'Brush teeth' 3. sie nri 'cook food'	1. o jeghi uka 'he/she didn't go to church.' 2. o sighi nri 'he/she didn't cook.'
Emeribe and Mbagwu (2018)				

ii. Suffix in Yoruba

There are no suffixes in the Yoruba language. The Yoruba language, unlike Igbo, uses some other form of affixation or word-formation process different from suffixation. The Yoruba language is seldom inflected nor exhibits suffixation (Tinuoye, 1991).

(c) Infix

This type of affix is inserted into the base of a word to create a new meaning or intensify the meaning.

- (i) **Infix in Igbo:** This is an affix in Igbo that comes after the main verb but does not end the word. e.g. me + **bi** + ri = mebiri 'spoil.'
- (ii) **Infix in Yoruba:** Pulleybank and Akinlabi (1988:152) discuss infix, which seems to be productive in Yoruba, the morpheme infixed is 'mâ' e.g a-nù-**mâ**-dárò 'one who is not important'

SN	Infix in Yoruba	Infix in Igbo
1.	i. a-nù- mâ -dárò 'one who is not important' ii. à-wá- mâ -ridìí 'unsearchable thing (mystery)'	i. me + bi + ri = mebiri 'spoil' ii. ta + cha + pu = tachapu 'ate and left remains'
Pulleybank and Akinlabi (1988:152)		Ugochukwu (2021)

(d) Interfix

According to Arokoyo (2017), interfixes are affixes between two root morphemes. The two roots are always the same thing, and the affix (Interfix) acts like a link to join the two roots. Interfixes are present in both Igbo and Yoruba languages; below are vivid explanations from scholars on what they look like in each of the aforementioned languages.

i. Interfix in Igbo (Nnọnetiti)

Ugochukwu *et al.* (2021) explain that an interfix is an affix that is added in the middle of a word, whereby what is at the front of the affix is the same thing as what is at the back of the affix. Examples: ede + **r** + ede = ederede ‘text’.

ii. Interfix in Yoruba

Awoyale (1979, 1981) lists some other Yoruba grammar items as infix based on the position such items occupy within words. He writes, "Infixation of certain monomorphemic elements between a nominal system and its copy to express the extent of time, degree and particularity, etc." e.g. Ìgbà-**kí**-ìgbà 'wrong acceptance.'

SN	Interfix in Yoruba	Interfix in Igbo
1.	i. Ìgbà- kí -ìgbà ‘wrong acceptance’	i. ede + m + ede = edemedede ‘article’
	ii. ojó- dé -ojó ‘for days’	ii. agu + m + agu = agumagu ‘literature’
	iii. ayé- rí -ayé ‘for generations’	iii. ata + r + ata = atarata ‘bite’
		iv. ogo + l + ogo = ogologo ‘length’
	Awoyale (1979)	Ugochukwu (2021)

(e) Circumfix

A circumfix is an affix that surrounds the root Arokoyo (2017). A circumfix consists of two parts: a prefix and a suffix, i.e. a circumfix has an affix in front of the verb root and at the back of the verb root.

i. Circumfix in Igbo: Circumfixation is present in the Igbo language. Mbah (2012) points out two types of circumfix in Igbo: Vowel - Syllabic Nasal Circumfix and Vowel Incorporated Preposition Circumfix.

Vowel - Syllabic Nasal Circumfix: This type of circumfix involves a Vowel in front of the verb root and a syllabic nasal, which is compulsory a bilabial nasal (m)

e.g à –verb root- m

- à-**dí**-m ‘being’
- à-**gà**-m ‘going’
- à-**zà**-m ‘sweeping’ Mbah (2012)

Vowel Incorporated Preposition Circumfix: This type of circumfix comprises an initial syllable and a –rv suffix that expresses a preposition. e.g

a- verb root –ri

- si à-**sí**-ri
‘Say gossip’ Mbah (2012)

ii. Circumfix in Yoruba: There are no circumfixes in the Yoruba language; rather, the Yoruba language, unlike the Igbo, uses some other form of affixation or word-formation process different from circumfixation.

Methodology

The study adopts a descriptive research design suitable for the research objectives and utilises a cost-effective and time-efficient secondary data collection method. The method of data analysis used is contrastive, which involves comparing and contrasting the morphemes of both languages to identify their differences and similarities. The methodology used in this study is critical to ensuring the research's overall success.

Theoretical Framework

The ideas of Lado's contrastive analysis serve as the foundation for the study's theoretical framework. This linguistic method compares two or more languages to determine how their forms, structures, and functions are similar and different. In the 1960s and the early 1970s, contrastive analysis was employed to compare and contrast the structural features of two languages. This study examines and contrasts the morphemes of the Yoruba and Igbo languages using Lado's framework to identify their differences and similarities.

Data Presentation and Analysis

In this segment, our focus is to answer the research questions posed in the beginning by presenting an analysis of the morphemes of Igbo and Yoruba languages. This segment also examines the differences and similarities between these two languages regarding their use of morphemes.

Research Question One: What factors differentiate the Yoruba Language's Morphemes from that of the Igbo Language?

The differences between the Igbo morphemes and the Yoruba morphemes are presented and discussed under the following factors.

- 1. Use of single-letter prefix:** Prefix is an affix added in front of a root word to generate another word.

Table 1: Showing how Igbo uses bilabial nasal 'm' and how Yoruba uses only vowels and never consonants

SN	Igbo Language		Yoruba Language	
i.	m + bu prefix + 'is'	Mbu 'first'	i + kú prefix + 'to die'	ikú 'death'
ii.	m + kpotu prefix + 'drop off'	mkpọtụ 'noise'	à + se prefix + 'fulfilled'	àṣẹ 'order'
	Ugochukwu <i>et al.</i> (2021)		Tinuoye (2000:24)	

Table 1 shows how Igbo uses the bilabial nasal 'm' as a prefix, while Yoruba uses only vowels and never consonants. For example, the word 'mbu' meaning 'first' in Igbo is formed by prefixing the verb 'bu' with the consonant 'm'. Similarly, the word 'mkpotu', meaning 'noise', is formed by prefixing the verb 'kpotu' with the consonant 'm'.

Table 2: Showing how Igbo uses 'n' and how Yoruba uses only vowels and never consonants

SN	Igbo Language		Yoruba Language	
iii.	n + cha prefix + 'clean'	Ncha 'soap'	à + lọ prefix + 'to go'	àlọ 'departure'
iv.	n + jọ prefix + 'ugly'	njọ 'evil'	a + de prefix + 'cover'	ade 'crown'
	Ugochukwu <i>et al.</i> (2021)		Tinuoye (2000:24)	

Table 2 above represents how Igbo uses 'n' as a prefix, while Yoruba uses only vowels and never consonants. For instance, the word 'cha', meaning soap, is formed by prefixing the verb 'cha' with the consonant 'n'. Likewise, the word 'njọ', meaning 'evil', is formed by prefixing the verb 'jọ' with the consonant 'n'.

In using single letters for prefixes, Igbo uses its vowels and two consonants ('m' and 'n'), while Yoruba sticks only to vowels, specifically all oral vowels except 'u'. Adebileje (2013) notes that affixation produces Yoruba nouns by prefixing Yoruba verbs with six out of the seven Yoruba vowels (a, e, ẹ, i, o, ọ). This means that while Igbo uses two consonants and its vowels for prefixation, Yoruba does not use consonants.

2. Use of Suffixes

The suffix is an affix added at the back of a root word to generate another word; when suffixes are used, the meaning of the word or verb root is preserved.

Table 3: Showing how Igbo exhibits Extensional suffixes and how Yoruba does not

SN	Igbo Language		Yoruba Language
v.	si 'cook'	+ + <i>godu</i> suffix	<i>Sigodu</i> nri 'cook food'
vi.	chọ 'find'	+ + <i>ta</i> suffix	chọta ihe 'find something'
	Emeribe and Mbagwu (2018)		Tinuoye (2000)

In Table 3 above, the suffixes *godu'* and *ta* were added behind the root word to extend or add better meaning to the words; the suffixed words would also have to be added to a noun complement for the meaning extension to be complete.

Table 4: Showing how Igbo exhibits Inflectional suffixes and how Yoruba does not

SN	Igbo Language		Yoruba Language
vii.	Tense	ọ <i>tere</i> ya ofe 'he/she put soup in it.'	The Yoruba language is seldom inflected, nor does it exhibit suffixation Tinuoye (1991)
viii.	Aspect	ọ <i>toro</i> ogologo 'he/she is tall.'	
ix.	Affirmative	<i>Sie</i> nri 'cook food'	
x.	Negation	ọ <i>sighi</i> nri 'he/she didn't cook food.'	
	Emeribe and Mbagwu (2018)		Tinuoye (1991).

In Table 4 above, the suffixes '*re*', '*ro*', '*e*' and '*ghi*' in the Igbo language were added behind the root word to show the grammatical function of tense, aspect, affirmation and negation. In contrast, there is no exhibition of suffixes in the Yoruba language. It is further shown that Igbo uses extensional and inflectional suffixes to enhance the meaning of root words, while Yoruba uses no morphemes for suffixation. This is highlighted in Tables 3- 4 above.

3. Use of circumfix

Circumfix is a type of affix of two parts, a prefix and a suffix. It involves an affix in front of and at the back of the verb root. Igbo uses circumfix, while Yoruba does not exhibit circumfixation and uses no morphemes.

Table 5: Showing how Igbo exhibits circumfixation, and Yoruba does not

SN	Analysis of Igbo Language	Yoruba Language	
xi.	<p>Vowel - Syllabic Nasal Circumfix: à –verb root- m à- <i>di</i>- m àdim à-<i>gà</i>-m àgàm à-<i>zà</i>-m àzàm</p> <p>Vowel Incorporated Preposition Circumfix: à - verb root –ri à-sì-ri si àsiri</p>	<p>‘being’ ‘going’ ‘sweeping’</p> <p>‘say gossip’</p>	<p>After establishing that Yoruba doesn’t exhibit suffixation, it can be concluded that Yoruba does not exhibit circumfixation since its linguistic phenomenon involves both prefixes and suffixes simultaneously.</p>
xii.			
	Mbah (2012)		

In table 5 above, the vowel syllabic nasal circumfix is a type of circumfix that involves a vowel in front of the verb root and a syllabic nasal which is compulsory a bilabial nasal (m). In Table 5 above, the vowel incorporated preposition circumfix, on the other hand, is made up of an initial syllable and a –rv suffix, which expresses the preposition.

4. Usage of Morphemes

In the study of morphemes, there are two types of morphemes - free and bound morphemes. While many words in the Yoruba language contain free and bound morphemes, a great number of words in Igbo consist of only free morphemes.

Table 6: Shows how Yoruba and Igbo use free and bound morphemes together

SN	Analysis in the Yoruba language	Translation	Analysis in Igbo language	Translation
xiii.	a + pa + eja = apeja prefix + kill + fish = fisherman	Apeja ‘fisherman’	ogbe + nye = ogbenye portion + give = poor	Ogbenye poor
xiv.	a + kọ + orin = akorin prefix + write + song = singer	akorin ‘singer’	ma + ha + dum = mahadum know + they + whole = university	mahadum university
	Bangbose (1990)		Idoko (2016)	

In Table 6 above, the Yoruba word ‘**apeja**’ has a bound morpheme ‘a’, a free morpheme (verb) ‘pa’ and a free morpheme (noun) ‘eja’. The morphemes (bound and free) are joined to form a new word. Similarly, in Table 6 above, the Yoruba word ‘**akorin**’ has a bound morpheme ‘a’, a free morpheme (verb) ‘kọ’ and a free morpheme (noun) ‘orin’. The morphemes (bound and free) are joined to form a new word, although there is a process of elision in the joining process.

Table 6 above further shows that the Igbo word **Ogbenye** ‘poor’ may be said to have two free morphemes, as **Ogbe** and **nye**. **Ogbe** is a noun, meaning a portion, and the second morpheme **nye** is a free morpheme, a verb with the meaning given. In this example, two free morphemes are joined to form a new word. Similarly, in Table 6 above, the Igbo word **mahadum** ‘university’ has the free morphemes **ma**, which loosely means know, **ha** the third personal pronoun they, and **dum**, which means whole. In this example, three free morphemes are joined to form a new word.

Research Question Two: To what extent are the morphological processes of the Yoruba language similar or different from that of the Igbo language?

Yoruba and Igbo are two of the major languages spoken in Nigeria, with unique features distinguishing them from other languages. One of the most important aspects of these languages is their morphological processes, which refer to how words are formed. In answering this question, we will explore the similarities and differences between the morphological processes of Yoruba and Igbo languages.

1. **Clipping:** A morphological process of shortening a word by removing one or more syllables. Table 7 shows how clipping is exhibited in both Igbo and Yoruba languages.

Table 7: Clipping in Igbo and Yoruba languages

Igbo language	Yoruba language
<i>akwukwo</i> > <i>akwo</i> 'book'	<i>Adewale</i> > <i>dewale</i> 'The king returns home'
Ugochukwu <i>et al.</i> (2021)	Tinuoye (1990)

Similarities

- Shortening of words:** Clipping involves shortening a word by removing one or more syllables in both languages. In the Igbo example, the '*kw*' was clipped from the original word, while in the Yoruba example 'a' was clipped.
- Effect on meaning:** In both languages, the word's meaning is usually preserved even after clipping.
- Use in informal settings:** Clipping is more commonly used in both languages as it is seen as a way of making communication more efficient.

Differences

- Phoneme Deletion:** In the Igbo language, clipping involves the deletion of consonants, while in the Yoruba language, it mostly involves the deletion of vowels. For example, the Igbo word *akwukwo* 'book' is usually clipped to '*akwo*' with the consonant '*kw*' usually elided. However, *Adewale* is clipped to *de* in Yoruba with the vowel 'a' being elided.
 - Acceptability:** In the Igbo language, some clipped words are considered acceptable and can be used in formal settings, while in the Yoruba language, clipped words are generally not acceptable in formal settings.
2. **Compounding:** A morphological process combining two or more words to form a single word. Table 8 shows how compounding is exhibited in both Igbo and Yoruba languages.

Table 8: Compounding in Igbo and Yoruba languages.

Compounding in the Igbo language	Compounding in the Yoruba language
$\text{um\u0304} + \text{nne} = \text{um\u0304-nna}$ 'children' + 'mother' = 'siblings'	$\text{\u0304ok\u0304} + \text{iya} = \text{\u0304ok\u0304iya (mi)}$ 'husband' + 'mother' = 'mother's husband'
$\text{um\u0304} + \text{nna} = \text{um\u0304-nna}$ 'children' + 'father' = 'kindred'	$\text{iya} + \text{\u0304ok\u0304} = \text{iya\u0304ok\u0304}$ 'mother' + 'husband' = 'mother in-law'
$\text{nna} + \text{di} = \text{nnadi}$ 'father' + 'husband' = 'father-in-law'	
$\text{nne} + \text{di} = \text{nnedi}$ 'mother' + 'husband' = 'mother-in-law'	
Emeribe and Mbagwu (2018)	Tinuoye (1991)

Table 8 above shows the following similarities in the formation of compound words in both Yoruba and Igbo languages:

- i. **Formation of new words:** In both languages, compounding involves forming new words from two or more individual words.
- ii. **Use in everyday language:** Compounding is common among Igbo and Yoruba speakers. This is because it allows for the creation of complex concepts and ideas using simple words.
- iii. **Semantic transparency:** In both languages, the meaning of the new word formed by compounding is usually transparent, i.e., the meaning of the individual words used to form the new word can be easily discerned. For example, *umunne* 'siblings' is composed of *umu* 'children' and *nne* 'mother'.

In the same vein, the following differences are observed in the formation of compound words in both Yoruba and Igbo languages.

- i. **Word order:** In the Igbo language, the order of words used in compounding is fixed with the modifying word (the word that modifies the meaning of the other word) coming first, while the modified word comes last. For example, the word *umu* 'children' is modified by the word *nne* 'mother' to form *umunne* 'siblings'. In the Yoruba language, however, the order of words used in compounding is flexible, with the modifying word coming after the modified word depending on which word is assigned the headword. For example, the word *Iya* 'mother' can be joined with the word *Oko* 'husband' to form *okoiya* or *iyaoko* 'mother-in-law' to form a new word entirely.
 - ii. **Use of hyphens:** In the Igbo language, hyphens are commonly used to join the individual words in compounding, while in the Yoruba language, hyphens are rarely used. For example, the word *umu* 'children' can be compounded with the word *nne* 'mother' to form *umu-nne* 'siblings' in the Igbo language, while in the Yoruba language, the same words would be compounded without the use of hyphens.
3. **Borrowing/Loan words:** Languages are known to borrow from each other over time. This is because of the influence of culture, trade, and migration.

Table 9: Borrowing/Loan Words from Igbo and Yoruba languages

Borrowing/Loan words in Yoruba	Borrowing/Loan words in Igbo
From Arabic - Allah = 'God' From English - Computer = 'electronic device' From Hausa - Suya = 'grilled meat' From Portuguese - geesi = 'English' From French - faranse = 'French'	From Arabic - Allah = 'God' From English - Computer = 'electronic device' From Hausa - Suya = 'grilled meat'
Emeribe and Mbagwu (2018)	Adewole (1995)

Similarities

- i. **Arabic Influence:** Both Igbo and Yoruba languages have borrowed words from Arabic. For example, the word "*Allah*", meaning God, in Arabic, is used in both languages.
- ii. **English Influence:** Due to the colonial history of Nigeria, both Igbo and Yoruba languages have borrowed words from English. For example, the word "*computer*" is used in both languages through direct translation or a phonological pattern peculiar to the language (*konputa*).
- iii. **Hausa Influence:** The Hausa language is a major language spoken in Northern Nigeria. Both Igbo and Yoruba languages have borrowed words from Hausa. For example, the word "*suya*", meaning grilled meat, is used in both languages.

Differences

- i. **Portuguese Influence:** The Portuguese were the first Europeans to arrive in Nigeria in the 15th century. The Yoruba language has borrowed words from Portuguese, such as "*geesi*", meaning *English*, while the Igbo language has not.

- ii. **French Influence:** The French language has significantly influenced the Yoruba language. Words like *faranse 'français'* are commonly used in the Yoruba but not in the Igbo language.
4. **Reduplication:** Reduplication is a linguistic phenomenon where a word or part of a word is repeated to create a new word or change the meaning of the original word. Table 10 below shows how reduplication is exhibited in Igbo and Yoruba languages.

Table 10: Shows how reduplication is exhibited in Igbo and Yoruba

Reduplication in Yoruba	Reduplication in Igbo
<i>Joko</i> > <i>jokojoko</i>	<i>kwuo</i> > <i>kwuokwuo</i>
<i>kia</i> > <i>kiakia</i>	<i>ngwa</i> > <i>ngwa ngwa</i>
<i>owo</i> > <i>owowo</i>	<i>okuko</i> > <i>okukokuko</i>
<i>dudu</i> > <i>dudu-dudu</i>	<i>mmadu</i> > <i>mmadu-mmadu</i>
Emeribe and Mbagwu (2018)	Adewole (1995)

Similarities

- i. **Verb Emphasis:** Both Igbo and Yoruba languages use reduplication to emphasize verbs. For example, in the Igbo language, "*kwuo*" means "to talk", while "*kwuokwu*" means "to talk about something". In the Yoruba language, "*joko*" means "to sit", while "*jokojoko*" means "to sit firmly".
- ii. **Adjective Intensity:** Both languages also use reduplication to intensify adjectives. For example, in Igbo language, "*Ngwangwa*" means quickly. In the Yoruba language, "*kia*" means "fast" while "*kiakia*" means "very fast or fastly".
- iii. **Noun Plurality:** Reduplication is also used to indicate a plurality of nouns in both languages. For example, in the Igbo language, "*okuko*" means "chicken", while "*okukokuko*" means "chickens". In the Yoruba language, "*owo*" means "money" while "*owowowo*" means "lots of money".

Differences

- i. In Igbo, the word "*mmadu*" means person, but when reduplicated as "*mmadu-mmadu*", it means a lot of people. Yoruba has no reduplication process to create a noun plurality form for "person".
- ii. In Yoruba, the word *dudu* means 'black; but when reduplicated as *dudu-dudu*, it means 'very black' or 'extremely dark'. In Igbo, there is no reduplication process to create an augmentative or diminutive form of an adjective for 'black'.
5. **Affixation:** Affixation is the process of adding prefixes or suffixes to a word to create a new word or to modify its meaning. We present how affixation is exhibited in Igbo and Yoruba languages, as shown in Table 11 below.

Table 11: Shows how affixation is exhibited in Igbo and Yoruba languages

Affixation in the Yoruba language	Affixation in the Igbo language
$\epsilon + b\textcircled{0} = \epsilon b\textcircled{0}$ prefix + worship = Sacrifice Negation = 'ai-', '-ma-', etc. $\textcircled{A}i + m\textcircled{0} = \textcircled{a}im\textcircled{0}$ 'Neg' know ignorance $a\textcircled{-}n\textcircled{-}m\textcircled{a}\textcircled{-}d\textcircled{a}r\textcircled{0}$ 'one who is not important'	$n + ri = nri$ prefix + eat = 'food' Negation = '-ghi' <i>Jeghi</i> 'didn't go', <i>Sighi</i> 'didn't cook'
Emeribe and Mbagwu (2018)	Adewole (1995)

Similarities

- i. One similarity between Igbo and Yoruba languages is that both languages use affixation to create new words and to modify the meaning of existing words. In Yoruba language, *e* + *bo* = *ebo*, which means 'Sacrifice', with the addition of the prefix 'e' to the verb 'bo', which means worship, the noun 'ebo', which means sacrifice, was created. In Igbo language, *n* + *ri* = *nri*, which means 'food', with the addition of the prefix 'n' to the verb 'ri', which means eat, the noun 'nri', which means food, was created.
- ii. Both languages use two types of prefixes, alphabet prefixes and lexical prefixes.
 - a. **Alphabet prefixes:** a, o, i, etc.
 - b. **Lexical prefixes:** Examples like ala, olu, ele, etc are used in the Yoruba language, while examples like Chi, oka, nwa, etc are used in the Igbo language.

Differences

- i. One difference between Igbo and Yoruba languages is in the kind of affix used to show negation in both languages. Igbo uses the suffix '-ghi', e.g. Jeghi' did not go', *Sighi'* didn't cook', while the Yoruba language uses the prefix 'ai', infix 'ma', etc., e.g. *Àì* + *mọ* = *àìmọ* which means 'ignorance', *a-nù-mâ-dárò* which means 'one who is not important.'
- ii. Another difference between Igbo and Yoruba languages is in the kind of affix they exhibit. Yoruba uses more Prefix, infixes and interfixes, while Igbo uses Prefixes, suffixes, Interfix, infixes and circumfixes.

6. **Acronyms/Abbreviations:** Abbreviations and acronyms are common in many languages and are used to shorten words or phrases for convenience and efficiency.

Table 12: Shows how Acronyms/Abbreviations are exhibited in Igbo and Yoruba

Acronyms/Abbreviations in Yoruba	Acronyms/Abbreviations in Igbo
<i>mo ni lati</i> > MNL	<i>dere gawazie</i> > DGZ
<i>Obafemi Awolowo University</i> > OAU	<i>onye</i> > O
Emeribe and Mbagwu (2018)	Tinuoye (1990)

Similarities

- i. One similarity between Igbo and Yoruba languages is that both languages use abbreviations and acronyms to shorten words or phrases. For example, in Igbo, the phrase "*dere gawazie*" means and so on, but it can be abbreviated as "DGZ" for convenience. Similarly, in Yoruba, the phrase "*Mo ni lati*" means I need to, but it can be shortened to "MNL" for convenience.
- ii. Another similarity between Igbo and Yoruba languages is that both languages use acronyms to represent organizations or institutions; for instance, both languages use the acronym "OAU", which stands for *Obafemi Awolowo University*.

Difference

- i. One difference between Igbo and Yoruba languages is that the abbreviations used differ. In Igbo, single letters are commonly used as abbreviations, while in Yoruba, multiple letters or words are often used. For example, some Igbo speakers use "O" for "*Onye*," while in Yoruba, "MNL" represents the phrase "*Mo ni lati*."

Research Question Three: In what ways do the functions of bound morphemes in the Yoruba language differ from those of the Igbo language?

Igbo and Yoruba languages have a rich system of bound morphemes, which are affixes that cannot stand alone as words but must be attached to other words to give them a different meaning. In answering this question, we will explore how the function of bound morphemes in the Yoruba language differs from those of Igbo.

1. **Prefix:** This is a type of affix that is added in front of the root word.

Table 13: Data showing the functions of the prefixes in the Yoruba language

Data showing Functions of prefixes in the Yoruba language	
<p>a. Agentive (a): a 'prefix' + peja 'kill fish' = apeja 'fisherman'</p> <p>b. Instrumental (a): a 'prefix' + de 'wear' = ade 'cover'</p> <p>c. Consequential (à): à 'prefix' + lo 'to go' = àlo 'departure'</p> <p>d. Consequential (è): è 'prefix' + tò 'arrange' = ètò 'arrangement'</p> <p>e. Consequential (ì): ì 'prefix' + kú 'die' = ikú 'death'</p> <p>f. Action (ì): ì 'prefix' + jó 'to dance' = ijó 'dance'</p>	<p>g. Implement (ì): ì 'prefix' + lù 'beat' = ilù 'drum'</p> <p>h. Thematic (ì): ì 'prefix' + jọ 'gather' = ijọ 'congregation'</p> <p>i. Result(ò): ò 'prefix' + kú 'die' = òkú 'corpse'</p> <p>j. Agentive 2 (o): o 'prefix' + gbó 'wear out' = ogbó 'old age'</p> <p>k. Negation (ai): Àì + ní = àiní 'Neg' 'have' 'lack'</p> <p>l. Oni' owner of: Oní + ilé = Onílé 'head' 'house' 'landlord'</p>
Adewole (1995)	

Table 14: Data showing the functions of the prefixes in the Igbo language

Data showing Functions of prefixes in the Igbo language	
<p>a. Prefix (i/ì) for deriving infinitive: i 'prefix' + si 'cook' = isi 'cook'</p> <p>b. Prefix (a/-e-) for deriving present participle: a 'prefix' + ga 'go' = aga 'going'</p> <p>c. Prefix (n/-m-) for deriving nouns from verbs: n 'prefix' + kụ 'cook' = nkụ 'firewood'</p>	<p>a. Prefix (o/o)- (n/-m-) for deriving noun classes from verbs: n 'prefix' + ri 'eat' = nri 'food'</p> <p>b. Syllabic nasal prefixes (-m/-n) for deriving verbal nouns: m 'prefix' + wepụ 'take out' = mwepụ 'taking out'</p> <p>c. Lexical prefixes (nwa, oke, di, onye, ulo, chi): chi 'prefix' + nedu 'lead' = chinedu 'The God that leads'</p>
Ojukwu (2018)	

Analysis

Table 13 above shows that Yoruba uses prefixes for many reasons, including agentive, instrumental, consequential, action, implementation, thematic, result, and negation. The language uses prefixes as a major source of deriving new words. On the other hand, table 14 shows that the Igbo language uses prefixes for Deriving Infinitive, Deriving present participles, Deriving nouns from verbs, Deriving noun classes from verbs, and Syllabic nasal prefixes for deriving verbal nouns.

While both languages use prefixes, Yoruba employs them more frequently than Igbo due to its complex grammatical structure with many inflexions, allowing for nuance and flexible language. The historical development of Yoruba and its interaction with other languages also shape its use of prefixes. While both languages use prefixes, their functions and usage may differ due to each language's unique grammar and syntax.

1. **Suffix:** Suffixes are a category of bound morphemes that are added to the end of a root, stem, or base. As it has been established in the literature review that the Yoruba language does not exhibit suffixation, the researcher will explain the different functions of suffixes in the Igbo language.

Table 15: Shows the different functions of suffixes in the Igbo language

Data show the different functions of suffixes in the Igbo language	
<p>I. Extensional suffix: chọ + <i>ta</i> = chọta ihe 'find'</p> <p>II. Inflectional suffix: a. Tense ọ <i>tere</i> ya ofe 'he/she put soup in it.'</p>	<p>b. Aspect ọ <i>toro</i> ogologo 'he/she is tall.'</p> <p>c. Affirmative (imperative and requests) Sie nri 'cook food'</p> <p>d. Negation e.g ọ <i>Sighi</i> nri 'he/she didn't cook.'</p>
Ojukwu (2018) and Emeribe and Mbagwu (2018)	

Analysis

Extensional suffixes give additional meaning to a verb, which is usually followed by a noun complement, as demonstrated in Table 15. The example in Table 15 above shows how the suffix '*ta*' added meaning to the original verb, which is chọ 'find', to make a better meaning. Inflectional suffixes are used to show grammaticality, such as tense, aspect, affirmation, and negation, as demonstrated in Table 15.

While the Yoruba language does not use suffixes, the Igbo language has two types of suffixes: extensional and inflectional. Extensional shows and gives the verb more meaning, as shown in table 15, while inflectional adds grammatical information to the verb, as also shown in table 15.

2. **Interfix:** Interfixes are affixes that occur between two root morphemes. The two roots are always the same, and the interfix acts like a link between them.

Table 16. Shows examples of interfixes in Yoruba

Data showing examples of interfixes in Yoruba languages	Data showing examples of interfixes in Igbo
<p>a. Igbà-<i>ki</i>-ìgbà 'wrong acceptance'</p> <p>b. ọjó-<i>dé</i>-ọjó 'for days'</p> <p>c. ayé-<i>rí</i>-ayé 'for generations'</p> <p>d. omo-<i>k</i>-omo 'useless child'</p> <p>e. owo-<i>k</i>-owo 'express wealth'</p>	<p>Verb to noun: Verb root: Gwu 'play' Interfix: r Derived word: egwuregwu' drama'</p> <p>Noun to noun: Noun root: ogo' height' Interfix: l Derived word: OgoLogo' length'</p>
Adewole (1995)	Emeribe and Mbagwu (2018)

Analysis

While table 16 shows that interfixes are used to form phrases from the original verb root and can indicate time, degree, particularity, and other functions, table 17 demonstrates that interfixes are used solely for nominalization purposes, with nouns derived from verbs and nouns. While the interfixes in Table 16 were used to create and generate syntactic structures, the data in Table 17 shows that inter-fixation is solely used for nominalization.

3. **Circumfix:** Circumfixes are a category of bound morphemes that surround the root word. As it has been established in the literature review that the Yoruba language does not exhibit circumfixation, the researchers explain here the different functions of circumfixes in the Igbo language.

Table 18: Shows the different functions of circumfix in Igbo language

Data show the different functions of circumfix in the Igbo language	
Vowel - Syllabic Nasal Circumfix: à-zà-m 'sweeping' Mbah (2012)	Vowel Incorporated Preposition Circumfix: si à-sì-ri 'say gossip' Mbah (2012)

Analysis

Vowel-syllabic nasal circumfix is a type of circumfix, the example used in Table 18 above shows how the prefix 'a' and the suffix 'm', which is also a syllabic nasal, are added to the verb root. Vowel-incorporated preposition circumfix is also a type of circumfix, the example used in Table 18 above shows how the prefix 'a' and the suffix 'ri' are added to the verb root.

Vowel-syllabic nasal circumfix and vowel-incorporated preposition circumfix are two types of circumfixes used in the Igbo language, as shown in Table 18. These circumfixes help to create grammatical functions, such as tense for verb roots. While the Yoruba language does not use circumfixes, the two types of circumfixes in the Igbo language demonstrate how they modify and intensify word meaning.

4. **Infix:** Infixes are an affix inserted into the base of a word to create a new meaning or intensify the meaning.

Table 19: Shows the different functions of Infix in the Yoruba language

Application and function in Yoruba language	Application in Igbo language
i. a-nù- mâ -dàrò 'one who is not important'	i. me + bi + ri = mebiri 'spoil'
ii. à-wá- mâ -ridíí 'unsearchable thing (mystery)'	ii. ta + cha +pụ = tachapụ 'ate and left remains'
Adewole (1995)	Ugochukwu <i>et al</i> (2021)

Analysis

The infix 'ma' in the Yoruba language is used to indicate negation, as demonstrated in Table 19. In Igbo language, infixes extend the meaning of words, as shown in Table 19 above. While Yoruba and Igbo use infixes to modify and indicate grammatical relationships between words, their specific functions and usage may differ.

Conclusion

The study reveals that Yoruba and Igbo differ in their usage of morphemes, which are the smallest units of meaning in a language. Unlike Yoruba, Igbo employs vowels and two consonants, namely 'm' and 'n', for prefixation. Igbo uses suffixes and circumfixes for grammatical and derivational functions, whereas Yoruba does not exhibit any suffixes or circumfixes. This implies that suffixation and circumfixation, as a type of affixation, are present in the Igbo language but absent in the Yoruba language. Regarding word compounding, Yoruba allows for flexibility in the order of words used, with the modifying word placed after the modified word. For example, the word 'iya', meaning 'mother', can be modified by the word 'oko', meaning 'husband', to form 'okoiya' when the role is reversed, as in *iya* + *oko* to form 'iyaoko', a new word 'mother-in-law' is formed. However, in Igbo, the order of words used in compounding is fixed, with the modified word coming first and the modifying word coming last. For instance, the word 'ụmụ', meaning 'children', is modified by the word 'nne', meaning 'mother' to form 'ụmụnne', meaning 'siblings'. Any other arrangement of the word order changes or alters the meaning of the compounded word.

The researchers discover that the negation affix used in both languages differs. Igbo uses the suffix '**ghi**' to indicate negation, while the Yoruba language employs both the prefix '**ai**' and infix '**ma**'. Yoruba and Igbo languages exhibit similarities in their use of affixation for word formation, employing prefixes, infixes, and interfixes. Compounding is a highly productive process in both languages, with compound nouns being written as one word, two separate words, or without a hyphen. The vocabulary expansion in both languages is achieved through compound nouns and derivation (affixation).

Borrowing is another common phenomenon in both languages, with slight modifications made to fit the rules of the languages or by translating the meaning of the borrowed word. Acronyms and abbreviations are also utilized in both languages for convenience and efficiency. In conclusion, both Yoruba and Igbo languages demonstrate a shared linguistic phenomenon in their classification of noun-formation processes and their recommended usage patterns, indicating that every language has rules for forming nouns, despite the presence of irregular forms.

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