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Selected Derivational Morphological Processes in English, Hausa, Igala and Some other Languages of the World

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Abstract

This article investigates selected derivational morphological processes in English, Hausa, Igala and some other languages of the world. Morphological processes are a means of changing a word base or root to adjust its meaning and to fit into different syntactic and communicational contexts. To achieve this in a language, linguists usually utilise certain tools called morphemes or affixes or word-elements, which are added or attached to the base or root of a word. In this article, the researchers have arduously and ardently examined these languages to bring out their rich and interesting morphological processes. We have found out that derivational morphology, which is concerned with forming new lexemes, i.e. words that differ either in syntactic category or in meaning from their bases, is extremely productive in languages.

Keywords: morphology, derivational morphology, morphological processes

Introduction

This paper treats derivational morphological processes, as selected and studied in English, Hausa, Igala and some other languages of the world. As a matter of fact, morphological processes are unique and interesting phenomena in the study of languages of the world, and they usually catch the attention of linguists. For this reason, before discussing the morphological processes selected in the languages under study, we have decided to proffer the definitions of morphology, derivational morphology and morphological processes as a brief literature review for easy comprehension. Furthermore, this study, to the best of its ability, has handled prefix, suffix, infix, interfix, circumfix, transfix and suprefix or superfix, among other morphological processes in the aforementioned languages and some other languages of the world.

Statement of the Research Problem

It is not an overstatement to say that a lot of studies have been carried out already on morphological processes both in English and other languages of the world but one may not find a text dealing with morphological processes in more than twenty languages in a single research. And this is not unconnected with the fact that going about such a wide research that involves collecting and reading materials in different languages is not an easy exercise. In view of this, the researchers have been driven, prompted or motivated to embark on this strenuous or demanding research with a view to congregating morphological processes in more than twenty languages in a single article.

Brief Literature Review

- **Morphology**

Since derivational morphological processes are a product of morphology, we deem it necessary to offer a brief definition of it (morphology). According to Aronoff and Fudeman (2005:1), the term morphology is generally attributed to the German poet, novelist, playwright, and philosopher, Johann Wolfgang von Goethe (1749 – 1832), who

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coined it early nineteenth century in a biological context. Its etymology is Greek: morph – means ‘shape, form’. Therefore, morphology is the study of form or forms. In biology, morphology refers to the study of the form and structure of organisms, and in geology, it refers to the study of the configuration and evolution of land forms. In linguistics, morphology refers to the mental system involved in word formation, or it is a branch of linguistics that deals with words, their internal structure, and how they are formed. Also, Crystal (1991:225) states that morphology is a branch of grammar which studies the structure or forms of words, primarily through the use of the morpheme construct. Morphology as a branch of linguistics was not treated separately until the early part of the 19th century.

- **Derivational Morphology**

In morphology, derivation is a process of creating a new word out of an old word (called base or root), which is usually achieved by attaching affixes to them (i.e. old word or base or root). In other words, it is a process or method of adding affixes to, and change the shape of the old word or base, thereby assigning the result to a form class that may undergo further changes or participate in different syntactic constructions. In view of this, derivational morphology, as noted by Tyler and Nagy (2007:2), is the basic units of word formation and the principles governing their combination. This means that derivational morphology is concerned with forming new lexemes, that is, words that differ either in syntactic category (part of speech) or in meaning from their bases. Moreover, Dantata (2008:11) stresses that derivational morphology can be defined as a process that deals with the formation of new words. It consists of the formation of new words from a variety of morphological categories, which involves a change of grammatical class between the base word and the new one. This is to say a verb can be derived from a noun and vice-versa. Furthermore, Adeniyi, Daniel and Iyere (2010:11) say that a derivational morpheme which is also called a derived morpheme is a type of bound morpheme which generates or creates new words by either changing the class of words or forming new words. Adedimeji (2005:4) reports that derivational affixes are bound morphemes that usually precede or follow the base or stem or root form. Ursula (1982:28) states that derivation morphology studies the structure of lexemes, of words in the sense of lexical units, and of lexical, as opposed to inflectional processes.

- **Morphological Processes**

A morphological process is a means of changing a stem to adjust its meaning to fit its syntactic and communicational context. In other words, morphological processes function to make one word or inflection distinct from another. Also, morphological processes can be defined as different ways of building words – the two principal ones being inflection and derivation or word-formation. To this end, they are operations by the forms of words which are derived from technical concepts used to describe new words. Truly, morphological processes are a cover term for

processes in which morphological meaning can be associated with segmentable parts of words in languages. That is why Zapata (2007:4) says that morphological processes are processes that affect roots and stems and which lead to the production of new words in a language. Morphological processes define the shape of words and they are usually classified into two types of processes – derivation, which deals with word formation (such processes can create new words from existing ones, potentially changing the form or category of the original word) and inflection – a process which is not typically highly productive but constructed to adhere to some syntactic constraints, but they do not change the basic or original meaning of the base form. Furthermore, Sheela (2011:54) says that words can be formed or expanded by various morphological processes possible in a language. There are certain specific word formation processes or morphological processes which convert a morpheme into a word in a language. He quotes Murray (1995) as stating that new words can enter a language in only two general ways: either they are borrowed from another language or they are created from elements that already exist in that language. There are many patterns of word formation processes used to coin new words, and we have categorised them into derivation and inflection. However, we are only dealing with derivation in this study.

Before we consider the morphological processes selected for this study, it is worthy of note to mention that in derivational morphology, affixes (also called morphemes) are the tools normally used by linguists to bring about derivation. What then are affixes? An affix is a grammatical element that is combined with a word root or stem, or phrase to produce derived or inflected forms. In a similar fashion, an affix is a word element that can be attached to a base or root to form a new word or a new form of the word, usually occurring at the beginning, in the middle or at the end of the base or root word. The process of adding or attaching these affixes to the base or root words to change their form is called affixation. Therefore, Adebileje (2013:1757) defines affixation as a process where new words are formed through the addition of affixes or morphemes. These affixes or morphemes could be added at the beginning (before) or end (after) of the root word. When an affix or a morpheme is added to a word at the beginning, it is called a prefix, and when it is added at the end of a word, it is called a suffix. Others include infix, interfix, transfix, circumfix and suprafix. We shall examine all these one after another in addition to other morphological processes that have been selected for this study.

Prefixes

Latilo and Beckley (2008:61) define prefixes as word elements (or letters) that are added to the core or root or base words at the beginning to give another word(s). They further say that prefixes do not generally change or alter the word class of the root or stem to which they are attached. The process of attaching or adding a prefix to the roots or stems to form new words is called prefixation. Examples include (1): un- in unkind, unhappy, uncommon, unbelief, unbecoming; mis- in misunderstand, mistake, misdeed,

misinform, misinterpret; sub- in substandard, submarine, subconscious, subway, sublet; inter- in intermarriage, international, intercontinental, interstate, interaction, interdenominational, etc.

In Hausa, Buhari (2006:42) comments that prefixation is one of the processes of affixation where a morpheme comes before the root word. Thus, when the affix precedes the root it is called prefixation. She further says that there are four categories prefixes in Hausa that are illustrated here. They are: **ba-**, **-ma-**, **-mai-**, and **maras-**, as exemplified below:(2)

a. Ba- (it has the idea of ‘man of’):

- Bahago (ba + hagu = left) = lefty
- Batuuree (ba + turai = Europe) = European
- Balarabe (ba + l’arab) = Arab

b. (i) Ma- (it has the idea of ‘doer of’):

- Maharbii (ma + harbii = shoot) = hunter
- Mataimaki (ma + taimako = help) = an aid
- Makadii (ma + kida = to beat drum) = drum beater

(ii) Ma- (it has the idea of ‘place’):

Prefix	Root (V)	Gloss	Prefix+Root(N)	Gloss
a. á-	lólú	‘sleep’	álólú	‘sleeper’
b. é-	jẹ	‘eat’	éjẹ	‘eating’
c. ì-	lò	‘discuss’	ìlò	‘discussion’
d. ó-	jí	‘steal’	ójí	‘thief’
e. ọ-	jẹ	‘eat’	ọjẹ	‘food’
f. ú-	kwú	‘die’	úkwú	‘death’.

Suffixes

A **suffix**, according to Latilo and Beckley (2008:65), is a word element (or a group of letters) that is added to the base or root word at the end to give another word. Suffixes are the most productive affixes in English and some other languages of the world because they change the word class or parts of speech of the base or root to which they attach from one class to another. In other words, through derivational suffixes, we can have one part of speech or

Masaakaa (ma + saaka = weave) = textile factory
 Majeema (ma + jeema = tan) = place for tanning skins
 Ma’aunaa (ma + auna = weigh) = place for selling grains

(iii) Ma- (it has the idea of ‘instrument’ in the following):

- Maduubii (ma + duuba = look) = mirror
- Magashi (ma + gasa = roast) = roaster Masaarii (ma + saara = cut) = grass cutting instrument.

In **Igala**, out of the seven vowels of the language, six of them, namely: **á-**, **é-**, **ì-**, **ó-**, **ọ-** and **u-** are said to be derivational affixes and serve as prefixes in the language. When any of them is affixed or attached to the verb roots/stems (usually before them), they change their grammatical class from that of a verb to that of a noun. This is exemplified below: (3)

word class derived from another. The process of attaching or adding suffixes to the roots or stems to form new words is called **suffixation**. For example (4), if the suffix -able is attached or added to the word pass, the word passable is formed or created. Likewise, if the prefix im- is attached or added to the word passable, a new word is also formed or created, namely impassable.

Below are more examples:

(5)a. Nouns from verbs	Word Class
Derivational suffix	Verb Noun
-age	break breakage
-al	revives revival
-ation	explore exploration
-ment	govern government
-ee	pay payee
-ant	inform informant, etc.

(6) b. Adjectives from nouns	Adjective
Suffix Noun	Adjective
-ful	careful
-less	childless
-n	Nigerian
-able	lovable
-ous	desirous, etc.

(7) c. Nouns from adjectives	Noun
Suffix Adjective	Noun
-ity	rapidity
-ness	kindness
-ce	fragrance

(8) d. Verbs from adjectives	Verb
Suffix Adjective	Verb
-en	weaken
-ize	liquidize
-ify	solidify
-ate	activate

(9) e. Adjectives from verbs

Suffix	Verb	Adjective
-able	wash	washable
-ive	digest	digestive
-tory	mandate	mandatory

(10) f. Nouns from nouns

Suffix	Noun	Noun
-hood	child	childhood
-arian	grammar	grammarian
-ian	music	musician
-ery	fish	fishery
-ism	ego	egoism, etc.

In Hausa, Sani (2002:109) says that the chief morphological process is the use of derivational morphemes in deriving nouns from verbs. According to him, there as many as eleven derivational morphemes which are used to derive nouns from verbs in Hausa Language, and they are suffixes. Some of them are discussed below as follows:

a. -waa derivational morpheme

Some nouns are derived from verbs when -waa morpheme is suffixed to the verbs. This morpheme always has a high tone and a long vowel, as exemplified thus:

(11) Verb stem	Derived from	Gloss
a) Gamàà	gamààwaa	finish
b) taaràà	taarààwaa	ather together
c) zubàà	zubààwaa	pour
d) yankàà	yankààwaa	slaughter
e) ginàà	ginààwaa	build
f) fasàà	fasààwaa	break, etc.

b. -iyaa derivational morpheme

Semantically, -iyaa means act of. There are verbs in Hausa which when -iyaa morpheme is suffixed to them, they change gerundives. Depending on the kind of verb, the -iyaa morpheme derivational morpheme takes two different tone patterns. In some cases, it takes high-high (H-H), while in some other, the last tone of the derivational bound morpheme takes high-low (H-L) tone. Below are some examples of the -iyaa high-high tone variants include:

(12) Verb stem	derived from	Gloss
a) kafàà	kafiyaa	stand firm
b) murdàà	murdiyaa	twist
c) waràà	waariyaa	separate
d) goocèè	goociyaa	slide/slip
e) goodèè	gòddiyaa	thank
f) daurèè	dauriyaa	be steadfast

c. -yavyaa derivational morpheme

Certain nouns in Hausa are derived from verbs by suffixing -yavyaa morpheme to the verbs. The -aa vowel can be shortened to become -a at the end of the verbs which usually takes place during the process of derivation, and the tone pattern of the verbs remain the same. In terms of meaning, these morphemes are said to denote mutuality and and reciprocity of action respectively, according to Abraham (1959), Abubakar (1989) and Jinju (1980) as cited by Sani (2002:113). Below are some examples:

(13) Verb stem	derived from	Gloss
a) ja	jàâyayyàà	pull
b) ki	kiyayyàà	hate

c) bi	biyayyàà	follow
d) ci	ciyayyàà	eat

d. -au derivational morpheme

Another derivational morpheme used in deriving nouns from verbs is the -au morpheme. When this morpheme is suffixed to some verbs, nouns are derived. The type of nouns derived consequent upon the use of this morpheme may refer to either the act of performing action for wages or to the performer of the action. Abubakar (2001) as cited by Sani (2002:114) argues that semantically, the derivative denotes the following: (a) one who is known for the action of the corresponding verb; and (b) to engage in performing the action of the corresponding verb for money. Notwithstanding, Sani (2002:114) also quotes Jinju (1980) as arguing that sometimes, some people are nicknamed with this derived nouns not necessarily because they perform the action. Such name includes: Kerau, Mayau, Zamnuu, Korau, and Sallau, for example. The -au morpheme always takes a high tone pattern, and as a result, the final syllable of the derived form is always high. The following are the examples:

(14) Verb stem	derived from	Gloss
a) níkà	níkau	'grind'
b) saakà	sààkau	'weave'
c) dakà	dàkau	'pound'
d) noomà	nòðmau	'cultivate'
e) saadà	sààdau	'cause to meet'
f) hanà	hànau	'prevent', etc.

Infixes

Adeniyi, Daniel and Iyere (2010:144) say that an infix is an affix which is incorporated inside the root of a word. In other words, an affix interrupts the sequence of a root. English does not have any clear-cut case of an infix, even though some people seem to argue that the changes we witness in words, such as the ones shown below are instances of infixes:

(15) i.	foot	feet
ii.	Tooth	teeth
iii.	Man	men
iv.	Come	came
v.	give	gave
vi.	Get	got.

However, the sensible position to take appears to be that the changes observed in the above examples are not infixes in English.

According to Zapata (2007:2), infixes are bound or dependent morphemes that are inserted within words.

Infixes are present in languages such as Tagalog and Bontoc (Philippino languages), infixes are represented by the morphemes preceded and followed by a hyphen (-um-). Zerrouki and Balla (2007:61) also define infix is an affix inserted inside another morpheme. This is common in Austronesian and Austroasiatic languages. For example, the Tagalog language has borrowed the English word graduate as a verb. In this language, a grammatical form similar to the active voice is formed by adding the infix as close to the left edge of the verb (provided that the /m/ does not act as the end of a syllable), so a speaker saying I graduated uses the derived form grumaduate. Anagbogu (2011:104) states that an infix occurs between the initial consonant and the second phoneme (usually a vowel) in a word. He further comments that while prefixes and suffixes occur in many languages of the world, the infix is restricted to a limited number of languages. Emenanjo (1982:78) posits that in all the languages in which infixes have been found, the affix performs derivational or derivational function or both. In Bontoc language, according to him, verbs are formed from nouns or adjectives infixation, as exemplified below:

(16) Nouns/Adjectives	Verbs
i. Fikas 'strong'	fumikas 'he is becoming strong'
ii. Kilad 'red'	kumilad 'he is becoming red'
iii. Bato 'stone'	bumato 'he is becoming a stone'
iv. Fusul 'enemy'	fumusul 'he is becoming an

enemy'. Emenanjo (1982:78) further stresses that in Cambodian language (the language of the Khmer people and the official language of Cambodia), nouns are formed from verbs through infixation, as exemplified thus:

(17) Verb	Noun
De: k 'to sleep'	dəmne: k 'sleep'.

In Yurok language (an Algonic language spoken in the Del Norte County and Humboldt County on the far north coast of California), nouns are also formed from verbs, as shown below:

(18) Verb	Noun
Kemo 'he steals'	kegemo 'he is a thief'.

Still in Yurok, the inflectional function of infixes is seen in number, that is, it is used to indicate number as in singular and plural forms of nouns. This is shown as follows:

(19) Singular	Plural
Sepola 'field'	segepolah 'fields'.

Pedroza (2012:11) discloses that there are only two used

(22)	Stem (V)	Infix (N)
i.	kaati 'to carve'	k-ni-aati 'carving'
ii.	ii. kasi 'to dig'	k-ni-asi 'act of digging'
iii.	iii. kakri 'to cry'	k-ni-akri 'act of crying'
iv.	iv. pe\$pnā 'to fence'	p-ni-e\$pnā 'act of fencing, fence'
v.	v. kili 'to look'	k-n-ili 'act of looking'
vi.	vi. kini 'to kiss'	k-n-ini 'act of kissing, kiss'
vii.	vii. surta 'to write'	s-n-urta 'act of writing, memory'
viii.	viii. tutu 'to support'	't-n-utu 'act of pporting, support'
ix.	ix. davra 'cut'	-i-avra 'act of cutting, cut'
x.	x. dèdma 'to smoke'	'd-i-èdma 'act of somoking'
xi.	xi. l-lòì 'to dance'	l-i-òì 'act of dancing'.

Interfixes

Adeniya, Daniel and Iyere (2010:115) state that an interfix

infixes in Filipino language. Both infix -in- and -um- are affixed to a verb and they signify past action. It is also worth to note here that if the first syllable of the verb where these infixes being affixed is repeated, the meaning of the word changes. For example:

(20)	Laki 'size'	lumaki 'grew' (growth)
	Kaya 'ability'	kinaya 'came within ability'.

He further states that the infix -in- is usually used within the verbs that start with b (binato, hit something with a stone or any material), k (kinaya, came within ability), and w (winagayway, raised or waved). On the other hand, the infix 'um' is used to signify past action and is commonly affixed to verbs that start with l (lumaki, grew), p (pumunta, went) and t (tumakbo, ran). Albright (2000:1) asserts that it is not uncommon in the world's languages for a particular morpheme to surface variably as an infix. He further says that infix is often driven by prosodic considerations in the phonology. For example, possessive markers in Ulwa language (spoken in Nicaragua and Honduras) are placed after the first foot of the root, with the result that they are infixed in roots that are longer than one foot, and suffixed in words which contain just one foot. A second consideration which can drive infixation is syllable structure. An example of this is the morphemes -um- and -in- in Tagalog, which are prefixed to vowel-initial roots, but infixed in consonant-initial roots to create CV syllables and avoid VC syllables. He cites the example of singular subject first person marking wa in Lakhota Language (a language spoken in India), which can be used both as a prefix (wa-) and an infix (-wa-), as illustrated below:

(21)	a. Prefixed:
i.	lówan 'he sings' → wa-lówan 'I sing'
ii.	núwe 'he swims' → wa-núwe 'I swim'
iii.	káge 'he does/makes' → wa-káge 'I do/make'
	b. Infixed
i.	máni 'he walks' → ma-wá-ni 'I walk'
ii.	aphé 'he hits' → a-wá-phe 'I hit'
iii.	hoxpé 'he coughs' → ho-wá-xpe 'I cough'.

In his definition, Yu (2006:10) says that it is often stated that an affix is considered an infix when it occur[s] within stem. He reports Blevins (1999) as citing a case in Leti language (an Austronesian language spoken on the island of Leti, east of Timor), which has three nominalizing infixation forms: -ni-, -n-, and -i-. When these are affixed to verb stems, they change them to nouns, as exemplified below:

is an affix which occurs between two identical or sometimes non-identical roots. In other words, an interfix

interrupts the sequence of two roots. Of all the affixes identified in human language, the interfix is the least discussed.

English does not have any case of interfixation. But Yoruba language has many good examples of interfixes, as we see in the following examples:

(23)	Base	Gloss	Interfix	Derived from	Gloss
	Omo	'child'	-ki-	omokómo	'useless' or 'bad child'
	Ilé	'house'	-ki-	ilékílé	'any how' or 'bad house'
	Omo	'child'	-bi-	omóbómo	'child meets child'
	Èyà	'race'	-mọ-	èyàmẹyà	'races'.

Notice that in the above example, a phonological process of vowel elision has taken place, and as such, the first morpheme or word loses its final vowel and takes on the tone quality of the initial vowel (syllable) of the following second morpheme to allow easy pronunciation.

Moreover, Frick (1978) as cited in Emenanjo (1982:79), interfixes are affixes which occur between the verb root and the final suffix or occasionally between the verb root and the final vowel of the basic form. He goes further to say that they can never occur word finally, and that they are in form and function quite different from suffixes. Similarly, Onumajuru (2015:1) defines interfixation as a

process of derivation whereby an affix occurs between two identical or sometimes non-identical roots. It is a situation where an interfix interrupts the sequence of two roots. Igbo interfixes are morphemes which perform distinct derivational functions such that nouns can be derived from nouns or from verbs. The interfixes are either consonants or monosyllabic CV forms. There are two types of interfixation in the Onicha variety of Igbo: (a) Noun-base form of interfixation (b) Verb-base form of interfixation. She provides some examples as obtained in Onicha variety of Igbo as follows:

(24)	a. Base (noun)	Interfix	Derivative	Gloss
	(i) ánú 'meat'	-m-	ánúmànù	'beast/animal'
	(ii) ó'gó 'height'	-tù-	ógónógó	'tallness'
	b. Base (verb)	Interfix	Derivation	Gloss
	(i) lí 'eat'	-m-	éliméí	'banquet/feast/food'
	(ii) sí 'cook'	-m-	ésímésí	'cooking'.

Emenanjo (1982:80) also says that in Dghweḍe language (a Chadic language spoken in Gwoza Local Government Area of Borno State, Nigeria), interfixes are many, and that besides this fact, they also mark essential grammatical relationships like person, instrumental, adverbial, object, voice and transitivity in the language. In addition, interfixes

are interestingly used derivationally to function as transitivizers with intransitive verbs. For instance, in the completive aspect, by interfixing **-n-** between the verb root and the affix and changing the tone pattern, an inherently intransitive verb becomes transitive, as exemplified below:

(25)	Intransitive Verb	Gloss	Transitive Verb	Gloss
	Kàláyà	'it broke'	kàlánáyà	'he broke it'
	Wàráyà	'he returned'	wàránáyà	'he returned it'.

Still in Dghweḍe, Emenanjo (1982:81) further stresses that interfixes also perform purely extensional functions by extending the lexical meaning of the root to which they are affixed or attached. To this end, notions like 'thoroughly', 'completely' and 'immediately' are expressed by interfixes. Notice that 'immediately' generates and represents the sense of imperative or command in the language. To

achieve this, the interfix **-m-** comes between disyllabic elements which apart from tones and some vowels, appear to be the same elements repeated twice (to issue an imperative or a command). The **-m-** is actually a marker for second person plural imperative. The following examples illustrate this phenomenon:

(26)	Non-imperative form	Imperative form	Gloss
	Kàdá:	kàdòmàkòdǎ	'beat him!'
	Jòwá:	jòwòmàjòwá	'go!'
	Xwàyá:	xwàyòmàxwàyá	'run!'

Furthermore, Atadoga (2011:98) reports that interfixation in Igala language is a productive morphological process that involves the placement of an affix between two

identical stems either to create a new word or alter the meaning of the existing one. Here are some examples as proffered by Atadoga (2011:98):

(27)	Root	Interfix	Derivation	Gloss
	òchíbú 'plate'	-tu-	òchíbútóchibu	'any plate'
	uchu 'yam'	-tu-	uchutuchu	'any yam'
	ògbà 'line'	-ne-	ògbànògbà	'line after line'
	oma 'child'	-tu-	omatoma	'any child'
	únyí 'house'	-tu-	únyítúnyí	'any house'

ene 'one' or 'somebody' -tu-

eneteṅe 'any one'.

Again, notice that in the above example, a phonological process of vowel elision has taken place, and as such, the first morpheme or word loses its final vowel and takes on the tone quality of the initial vowel (syllable) of the following second morpheme to allow easy pronunciation.

Important Note: As one considers both the definitions and examples of infix and interfix very closely, one discovers that there is no clear-cut and essential difference between them. In consonance with this, Emenanjo (1982:81) says when we look at their phonological structure, both infixes and interfixes may be consonants or monosyllabic elements. However, if we consider their relative positions in the base words of the languages in which examples have been offered so far, we could discover that both infixes and interfixes split a word, but whereas infixes split a morpheme, interfixes do not. This perhaps is the only slight difference noticed, and as such, the two have become controversial among linguists, making some to use infix and interfix interchangeably.

Circumfixes

Ndimele (1999) as cited in Onumajuru (2015:61) defines circumfixation as a situation where both the prefix and the suffix are simultaneously employed to express one meaning. The circumfix is a discontinuous morpheme which surrounds the root of a word such that the first half occurs before the root and the second half occurs after the root. Having synthesised comments by linguists such as Anagbogu (1990), Anagbogu, Mbah & Eme (2010), Fromkin (2003), Boeckx & Fumikazu (2004), Spencer (1991), Finegen (2004) and Ihezuonu (2011), Mbah (2012:1) states that circumfixation is a process in which a discontinuous affix comprising two dissimilar parts surround an otherwise free morpheme. According to him, the often cited English illustration is the dialect English example with the general pattern: a-...-ing as in a-going, a-coming. The type of root or stem that may host the circumfix varies from language to language. The circumfix has different grammatical functions in different languages. Fromkin (2003) as cited in Mbah (2012:2) presents some examples of circumfixation from Chikasaw language (a language spoken in Oklahoma), and they include the following:

(28) ik-....-o (the circumfix)

Root	New word
(i) Chokma 'he is good'	ik-chokm-o 'he isn't good'
(ii) Lakna 'it is yellow'	ik-lakn-o 'it isn't yellow'
(iii) Palli 'it is hot'	ik-pall-o 'it isn't hot'
(iv) Tiwwi 'he opens (it)'	ik-tiww-o 'he doesn't open (it)'

In Kakanavu (also spelled Kakanabu) language (a Formosan language of the Austronesian family and a Southern Tsouic language spoken by the Kakanavu aborigines of Taiwan), circumfixation is

an affixation process that is usually found in nominal morphology. In the language, when the circumfix of this pattern: ta-...-a is affixed or attached to a verb, it adds a local meaning to that verb and works as a nominaliser. This is thus illustrated by the following example: tupuru 'sit' versus ta-tupuru-a 'sitting place' or 'place for sitting' (<https://www2.uni-erfurt.de>).

Transfixes

A transfix is a discontinuous affix which occurs at more than one position in a word. A transfixes are usually inserted into the roots of words in assigned positions, dictated by templates which are tied to the specific meaning of a given inflection or derivation. In Egyptian Arabic (a member of Semitic languages) has an insightful template for transfixation: k-t-b meaning 'write', and inflection and derivation are done by vowels, as follows:

- (29) (i) *katab* 'he wrote'
 (ii) *kitaab* 'book'
 (iii) *kutub* 'books'
 (iv) *maktab* 'place for writing'
 (v) *makaṭib* 'places for writing' (Culled from Emenanjo, 1982:79).

Furthermore, citing an instance from the general Arabic language, Al-Hassan (2011:40) stresses that the root k-b-r which connotes 'size' or 'quantity' can take the following transfixes:

- (30) (i) a...i → (*kabir* 'great')
 (ii) i...a → (*kibar* 'great' PL)
 (iii) u...aa → (*kubaar* 'huge')
 (iv) u...u → (*kubur* 'atrocious')
 (v) a...a...a → (*kabara* 'to exceed in age')
 (vi) a...i...a → (*kabira* 'atrocious' PL) (Culled from Al-Hassan, 2011:40).

Al-Hassan (2011:42) reports that Archangeli (1988) makes a statement which is as relevant to the Hausa transfixation as it is to that of Semitic: "In Semitic the root template is fixed by the morphology independently of any affixation". Descriptions of the 'broken morphology' of the Semitic languages make two essential characteristics of that morphology worthy of note and mention: firstly, that both the roots and the transfixes (i.e. the kind of affixes peculiar to Semitic) are discontinuous; secondly, that the roots comprise only consonants whereas the transfixes comprise only vowels. Transfixation is therefore the phenomenon whereby discontinuous vocalic affixes and discontinuous consonantal roots interlock in the process of word building or word formation. In Hausa language, transfixation is a type of constitutional synergism between essentially consonantal morphs and essentially vocalic morphs, and it is manifested in noun plural forms. Al-Hassan (2011:41) provides some examples along with their tone pattern; some of which are presented below, as modified by us:

(31)	Transfix	Root/Base	New word	Gloss
	(i) aa...aa(L-H)	zartòò 'saw'	zàrààtáá	'saws'
	(ii) aa...ee(L-H)	jírǵ'íí 'boat'	jírààǵ'ée	'boats'
	(iii)aa...ii(L-H/H-H)	sárk'íí 'emir'	sàrààk'íí	'emirs'
	(iv) aa...uu(L-H)	káfàà 'leg'	káfààfúú	'feet'
	(v) aa...ai(L-H)	gúnk'íí 'idol'	gùmààkái	'idols'.

Suprafixes (Superfixes)

Adeniyi, Daniel and Iyere (2010:115) define suprafix as an

affix which is marked over the syllables that form part of a root. Superfixes come in the form of tones/or stress marks placed over words. Superfixes are also morphemes because they carry some element of meaning. Tone or stress marks can cause meaning differences between morphemes or words that are segmentally alike. Omachonu (2001:61) reports that suprafixation is another derivational process by which an affix is not represented by a segment (consonant or vowel) but by what is called a prosodic feature, which include tone, stress, or intonation. In nontonal languages like English, stress is highly applicable. For example, when two (or three) syllable verbs are converted into nouns, the primary stress is sometimes shifted from the second to the first syllable, as exemplified below:

(32)	Verb	Noun
	conVER	CONvert
	perMIT	PERmit
	imPORT	IMport
	exPORT	EXport
	conDUCT	CONduct
	conFINE	CONfine
	reCORD	REcord
	reBEL	REbel
	proDUCE	PROduce
	proGRESS	PROgress
	PerFUME	PERfume
	inCREASE	INcrease
	conTACT	CONtact, etc.

According to Omachonu (2001:61), a common example of suprafixation in Igala language is tone. Tone in Igala and many other tonal languages (i.e. a language where a variation in the pitch of the voice causes a change in meaning between segmentally identical utterances) perform a lexico-semantic function in this instance. Many meanings are sourced from the same word or lexical item following changes in the tone(s) of the word. This process applies to both nouns and verbs in the Igala language. Consequently, Igala is a tonal language, and it has three register tone, which are high (H), mid (always unmarked) and low (L) tones. This is exemplified in the following examples:

(33)	Form (N)	Gloss
a.	àkpà	'muslim'
b.	àkpá	'insect'
c.	ákpà	'hard word'
d.	ǎkpà	'maize'
e.	ákpā	'killer'
f.	ákpá	'cloud'

(34)	Form (V)	Gloss
a.	dá	'to cut'
b.	dà	'to draw'
c.	da	'to weave'
d.	gbā	'to read'
e.	gbà	'to collect/receive'
f.	gbá	'to sweep'.

The examples above show the productive nature of the application of tone in the Igala language. This means that when tone is applied on words belonging to the grammatical classes of both noun and verb, it usually results to differences in meaning. In addition, like Igala, Igbo as a tonal language also displays interesting instances

of suprafixation as portrayed below:

(35)	Tone-marked Word	Gloss
a.	(i) ísí	'head'
	(ii) isí	'odour'
	(iii) isí	'blindness'
	(iv) isí̄	'to cook'
b.	(i) íké	'strength'
	(ii) ikè	'to share' or 'buttocks'
	(iii) ikē	'to tie'
c.	(i) ákwá	'to cry'
	(ii) ákwà	'cloth'
	(iii) àkwá	'egg'
	(iv) àkwà	'bed' or bridge'.

In Igede language (a language spoken in Oju and Obi Local Government Areas in Benue State, North Central Nigeria), tone causes differences in meaning both lexically and syntactically or grammatically. Syntactically, Yusuf (2007:55) states that tones perform grammatical function when it is used to distinguish meaning between phrases and also clauses or sentences, and between phrases and clauses or sentences. Below are the examples:

(36)	Clause	Gloss (syntactic)
	(a) àhì rù lè	'We have left'
	(b) áhì rù lè	'We have not left'
	(c) àhī rù lè	'Shouldn't we leave?'
	(a) Olu hù áfù	'Olu washed clothes'
	(b) Olu hù áfù	'Olu washed clothes?'

(Yusuf, 2007:55).

Compounding

This is a morphological process that consists in the combination of two or more (usually free) roots to form new words. For example (37), the word blackboard, heartfelt, homesick, brother-in-law are compound words; they are made up of the roots (at the same time words themselves) black and board, heart and felt, home and sick, brother, in, and law, respectively.

Compounding is a very common process in most languages of the world, especially among synthetic languages. In English, for example, Zapata (2007:4) reports that compound words have the following characteristics: (i) Compound words behave grammatically and semantically as single words (ii) Since compound words behave as units, between their component elements no affixes (whether inflection or derivation) can usually occur. However, inflectional suffixes can appear only after compound words; e.g., (38) bathrooms, dovetailed, pickpockets, padlocks, common rooms, etc. Note some exceptions: passersby, sisters-in-law, courts-martial, etc. (iii) Compound words can be written in three different ways:

- Open:** These are compounds that are usually written with an open space in between their component words; e.g., (39) drawing board, toy store, rat race, school bus, sitting room, driving license, etc.
- Hyphenated:** These are compounds usually written with a hyphen (-) separating their component elements or words; e.g., (40) flower-pot, money-bag, care-giver, kind-hearted, bad-temper, man-made, etc.
- Solid:** These are compounds usually written without a space or hyphen between their component elements or

words. Examples include (41): pickpockets, washrooms, padlock, bathroom, etc.

Dantata (2008:14) says that compounds are a combination of two or more free morphemes that are combined together to represent a single word, whose meaning may or may not be predictable the components of the morphemes. In addition, Buhari (2006:53) defines compounding as a process of combining two or more words to produce a single meaning and one sense word. She goes further to say that in Hausa language, many Hausa linguists have classified Hausa compound nouns into subtypes based on the combinations of elements that make up such compounds, as shown below:(42)

- i. Noun-based compound nouns – they have nouns or adjectives as their core.
Examples: taarin-kasaa (heap of sand), taurin-kai (stubbornness).
- ii. Verb-based compound nouns: These have verbs as

(43)	Word+Word	Compound	Gloss
(a)	ɔma+ɕɛɕ (N+N) child leg	ɔmɕɛɕ	'toe'
(b)	ɔma+ɔwɔ (N+N) child hand	ɔmɔwɔ	'finger'
(c)	éfũ+óko (N+N) stomach farm	éfoko	'bush'
(d)	Ōnú+ógwu(N+N) king/chief war	ónógwu	'warrior'
(e)	Ōjɔ+mà (N+V) God knows	ŋjɔmà	'God knows'

Notice that both words in each of the above connections belong to the grammatical class of noun (N) except for the last one, which is noun (N) +verb (V). Noun + Adjective compound is also possible in the language. Notice also that a phonological process of vowel elision has taken place, and as such, the first morpheme or word loses its final vowel and takes on the tone quality of the initial vowel (syllable) of the following second morpheme to allow easy pronunciation.

Reduplication

Adeniyi, Daniel and Iyere (2010:128) say that reduplication is the compounding of identical (goody-goody) or slightly different morphemes (wishy-washy). Usually, there is difference in the different morpheme types in single phonemes at either initial or medial positions. Their use is usually informal. In reduplication, there is a process of addition leading to the compounding by repetition of a part or the whole of a stem morpheme. There is identity relationship between the items so repeated in terms of their phoneme make-up, as well as their morphological shapes. In English, such examples as wishy-washy, walkie-talkie, tick-tock, hanky-panky illustrate reduplication as a morphological process. There are other morphological processes that are equally important; not only to English, but also to all other languages.

The difference between the two elements comprising reduplication may be phonologically conditioned: the initial consonants in both elements differ, as in walkie-talkie, or in the medial vowels e.g. criss-cross. Reduplicatives have certain common uses as outlined below:

- a) to imitate sounds: e.g. tick-tock ('of clock'), ping-pong

their core;

Example: tumaa-kasa (a woolen shawl).

- iii. Idiophone-based compound nouns: these are nouns that have idiophones as their core.

Example: kyal-kyal-banza (useless thing or good for nothing).

According to Omachonu (2001:63), a process by which new words are formed or derived by combining stems or root morphemes is known as compounding. He states further that in compounding, the two words or morphemes so combined to form a compound word must have equal morphological status. This process which requires the joining together of different lexical items to form new words, does not necessarily require the change of the class of the word combined. In **Igala language**, compounding is achieved mostly through vowel elision or deletion, and it is often restricted to noun-noun collocation as shown below:

- (of hitting table or lawn tennis ball), rat-a-tat (knocking on door), bow-bow (of dog).
- b) to suggest alternating movements, for example: seesaw, flip-flop, ping-pong.
- c) to disparage by suggesting instability, nonsense, insincerity, vacillation, etc., e.g. higgledy-piggledy, hocus-pocus, hodge-podge, wishy-washy, dilly-dally, shilly-shally, mumbo- jumbo.
- d) to intensify, for example, teeny-weeny, tip-top, willy-nilly.

Zapata (2007:6) says reduplication is a morphological process that involves the repetition of all or part of a root or stem to form new words. If the entire root or stem is repeated, the process is called complete or total reduplication. Total reduplication is fairly frequent in Indonesian, Tojolabal (Mexico), Hausa (Nigeria, Sudan, Niger), and Hawaiian (spoken in US). For example, in Tojolabal language, oŋ means 'to enter', oŋoŋ 'to enter little by little'. Similarly in Indonesian language, total reduplication is used to form the plural nouns, as in rumah 'house', rumahrumah 'houses'; ibu 'mother', ibuibu 'mothers'; lalat 'fly', lalatlalat 'flies'. Also in Hawaiian (a language spoken in the Hawaii State of America), holo 'run', holoholo 'go for a walk or ride'; lau 'leaf', lalau 'leaf food package'. On the other hand, if only a part of the root or stem is repeated, the process is called partial reduplication, and the reduplicated portion is called reduplicative (Zapata, 2007:6). In Kananavu, when a syllable of a consonant and a vowel is reduplicated, it is called CV-reduplication. And when this happens, the result of the reduplication process is pluralisation. In this case, the

reduplication is partial. A lot of examples of CV-reduplication abound in this language, and here is an example: manu 'child' versus mamanu 'children'.

Musa and Alkhataineh (2015:33-4) quote Bauer (2003) as saying that reduplication is a morphological process of word formation that involves identity, whereby the root or stem of a word, or part of it is repeated. In other words, reduplication is used in inflections to convey a grammatical function, such as plurality and intensification. In derivation, it is used to create new words. In other words, reduplication is often used when a speaker adopts a tone more expressive or figurative than ordinary speech and is also often, but not exclusively, iconic in meaning. They also report that McCarthy and Prince (1995) recognise it as a matter of identity, where the reduplicant copies the base, they explain that perfect identity cannot, however, always be achieved. In addition, citing Kager (1999), they say that morphological reduplication is defined as a kind of affixation, both in its morphosyntactic contribution (it forms morphological categories such as plurals) and in its linear position with respect to the stem (preceding it as a prefix or following it as a suffix). Looking at the phonological perspective, reduplication has a special property, in that, the reduplicative affix is unspecified for segmental content but is copied from reduplicated stem. Therefore, reduplication involves phonological identity between the reduplicant and the adjoining base. They go further to say that Hausa has three permissible and possible syllable structures as identified by most researchers, adding that all the syllable structures of Hausa are consonant initial. According to them, an example of this can be found in Hausa's pluractionals, where the first stem reduces to its initial CVC string and the other one remains as it is. Also, gemination occurs in the final C of the base initial consonant. Yakasai (2013:474) also comments that

(45)	Verb base	Verbal Nouu	Complete Reduplicated Adverb
(a)	yankà 'cut'	yankaa 'cut'	yankaa-yankaa 'cut into pieces'
(b)	waarà 'separate'	waarù	waarù-waarù 'in separation (one of two halves)'
(c)	jeefà 'throw'	jiifàà 'throwing'	jiifàà-jiifàà 'from time to time'
(d)	zo 'come'	zuwàà 'coming'	zuwàà-zuwàà 'periodically'

Yakasai (2014:154-5) states that Hausa is one of the natural languages that extensively use reduplication in lexical formatives and grammatical structures. As for partial reduplication, he says that Hausa exhibits prefixal, infixal and suffixal reduplication. Reduplicative patterns have various meaning and functions within different lexical categories. He exemplified reduplication in Hausa as follows:

Full reduplication

- (46) a. gàrii 'town' gàrii gàrii 'town to town'
 b. jooji 'judge' jooji jooji 'judges'
 c. ðaya 'one' ðaya ðaya 'one each'
 d. kusa 'near' kusa kusa 'very near'
 e. ðaazu 'a while' ðaazu ðaazu 'just a while'.

Modified full

- (47) a. tàfiyàà 'journey' tàfiye-tàfiye 'journeys'
 b. buusàa 'blow' bùushe-bùushe 'blowing'
 c. gàarii 'flour' gàari-gàari 'powdery'

Partial reduplication: prefixal (modified)

reduplication may be analyzed at phonological, morphological, syntactic and semantic levels. He further says that the distinctiveness of reduplication with relation to other morphological processes in Hausa is strengthened by the fact that there is a set of phonological changes known as Law of Codas in Reduplication (LaCoRe), which is specifically related to the consonantal clusters resulted from duplication. Below are some examples of duplication in the Kano Hausa, as given by Musa & Alkhataineh:

(44) Base Reduplicate

- a) buga 'beat' bub-buga 'beat severally'
 b) ka:wo 'bring' kak-ka:wo 'bring continuously'
 (Musa & Alkhataineh, (2015:34).

In Hausa, Sani (2002:107) says that a speaker doubles or reduplicates unitary adverb to show that the action (partially reduplicated adverbs showing manner in which an action takes place) happens severally. As a result of the speaker's fast speech, repeating the complete words is simplified to allow for easy utterance; hence final vowel deletion of the first segment takes place. It is followed immediately by total assimilation of the last consonant of the first segment to the first consonant of the second segment. In addition, the tone pattern of the base form (unitary adverb) has LH tone pattern while the derived partially reduplicated has LLH as tone pattern. The base form is disyllabic while the derived form is trisyllabic. On the other hand, complete reduplicated adverbs are those that are formed by total repetition of the word. The words are simply repeated to get adverbs. In the process of deriving complete reduplicated adverbs, certain morphological processes take place. In the first place, the verbs are turned into gerunds (verbal noun) before they are repeated to derive adverbs. Examples of these are presented below with their tone pattern, as given by Sani (2002:107):

- | (48) | a. kaamá 'catch' | kakkàamaa 'catch repeatedly' |
|------|------------------|------------------------------|
| | b. yankàa 'cut' | yayyànkàa 'cut repeatedly' |
| | c. biyu 'two' | bibbiyu 'two each' |
| | d. kusa 'near' | kurkusa 'very near' |

Partial reduplication: infixal (modified)

- (49) a. rugùzaa 'destroy' rugurgùzaa 'destroy repeatedly'
 b. jákaa 'bag' jakunkunàa 'bags'
 c. maagàanii 'medicine' maagungunàa 'medicines'.

Partial reduplication: suffixal (modified)

- (50) a. Bintù 'proper name' Bintuutu 'little Bintu'
 b. gidàa 'house' gidàjee 'houses', etc.

Omachonu (2001:61) reports that reduplication is a process whereby either a part or a whole stem is copied and attached to the stem either at the beginning or the end. Reduplication is a productive morphological process in noun plural formation in Igala. He however argues that not all nouns in Igala language form plural through this process. He further says that reduplication can either be full or partial in Igala, as shown below:

(51) a. **Partial Reduplication**

Word	Gloss	Reduplicated	Gloss
a. òkwó	‘grand’	oyík-wó-òyík-wò	‘great grand parents’ or ‘forefathers’
b. ògbé	‘always’	ògbé-nùgbé	‘all the time’
c. ògbèkwú	(ideophonic)	ògbèkwú-gbèkw	‘greatness/wealth’
d. píó	‘fast/quick’	òpíó-píó	‘very quickly’
e. gbé	‘ever’	ògbé-gbé-ílẹ̀	‘forever and ever’.

b. **Full Reduplication**

Word	Gloss	Reduplicated	Gloss
a. úná	‘hot’	úná-uná	‘very hot’
b. úwó	‘hill’	úwó-úwó	‘hills’
c. ájí	‘river’	ájí-ájí	‘rivers’
d. ójójí	‘different’	ójójí-ójòjì	‘differently’
e. ùnájú	‘hurry’	ùnájú-ùnájú	‘hurry-hurry’.

In Marshallese (also known as Ebon, is a member of the Micronesian group of the Malayo-Polynesian branch of the Austronesian language family spoken in the Republic of Marshall, an island nation in the central Pacific Ocean), reduplication process can be classified according to the amount of a form that is duplicated, whether complete or

partial, and if the latter, it is according to exactly which part is duplicated. In view of this, there are at least three types of partial reduplication in Marshallese, which are exemplified here along with their pattern or mode of duplication:

(52)	Pattern	Word	Reduplication
	Initial C:	liw scold someone	lliw be angry
	Initial CVC:	yetal Go	yetyetal walk
	Final CVC:	takin socks	takinkin wear socks
	Combination:	kijdik Rat	kkijdikdik be infested with rats.

(<https://www2.hawaii.edu/~bender/process.html>).

Blending

Delahunty and Garvey (2010:137) state that blending is a morphological process that involves taking two or more words, removing parts of each, and joining the residues together to form or create a new word whose form and meaning are taken from the source word. Furthermore, blending is the process whereby new words are formed by combining parts of two words, usually the beginning of one word and the end of another. Here are some examples: smog (smoke + fog), brunch (breakfast + lunch), heliport (helicopter + airport), motel (motor + hotel), prevacid (prevent + acid), eracism (erase + racism), and webinar (worldwide web + seminar).

The following is the list of other commonly used blends: breathalyser (breath + analyser), urinalysis (urine + analysis), electrocute (electro + execute), Eurovision (European + television), multiversity (multiple + university), newscast (news + broadcast), paratroops (parachute + troops), telecast (television + broadcast), travelogue (travel + catalogue), telex (teleprinter + exchange), telecast (television + broadcast), Amerindian (American + Indian) fantabulous (fantastic + fabulous). In November 2007, an interviewee on US National Public Radio (NPR) news item created the blend snolo to refer to playing bike polo in the snow. Recently, the exit of Britain from the European Union has given rise to a new blend popularly known as Brexit. There is also a new blend that has just emerged: communication in entertainment is now commutainment (communication + entertainment).

According to Shehu (2015:77), blending is a morphological

process where some parts of two words are joined together to form a new word with new meaning different from the other original words while omitting at least part of one word. In Hausa language, blending is found to play a role as a word formation process that is used in different contexts. Various words of different word classes are found through this process in Hausa including noun, verb, adjectival and idiom based blending. He goes further to give examples of blending in Hausa, some which are outlined below:

(53) a. Gida-n biradi-n Yushab su-n iya biredi
House-GEN bread-GEN Yusuf & Habiba 3PL-PFV can bread
‘Yushab bakery is expert in making bread’

Original/stand forms: F1+F2 Yusuf ‘personal name’ (M) +Habiba ‘personal name’ (F)

Formation of blends: Yus + Hab (two initial splinters with overlap)

Blended form: Yushab (name of a bakery)

Process: blending of two nominal forms (M and F).

b. Sankano ya-a dawo
Emir of Kno 3MSG-PFV return
‘The Emir of Kano has returned’

Original/stand forms: F1 +F2 Sarki (N) + Kano (N)

Formation of blends: san + kano (initial splinter + full

word) Blended form Sankano Process: blending of two nominal forms (N +N).

Sentence (b) above consists of a blended form Sankano. The blended form Sankano is formed by the combination of two words, Sarki and Kano, which are Hausa names denoting name of a person and place. The second syllable of the first word 'ki' is deleted, and the consonant r is replaced by n. Then the remaining segment of the first word is combined together.

- c. Amadina su-n ci abinci-n-su
Amadu da Madina 3PL-PFV eat food-LNK-3PL
'Amadu and Madina ate their food'

Original/stand forms: F1 +F2 Amadu (N)+ Madina (N)

Formation of blends: Ama + dina (initial splinter + final splinter with overlap)

Blended form: Amadina

(54)	Name + Name	Blended form	Gloss
	a. Àmăđe + Òjòrú	ámòrú	'one who knows one for something'
	b. Àmájé + Ánone	ámone	'one who knows somebody'
	c. Ùnùbì + Ùfèđò	ùnùfèđò	'I have love'
	d. Ónúbí + Ùgbéde	ónúgbéde	'the king is happy/fine'
	e. Ómâta + Àgbényo	ómâgbényo	'the forgotten child'
	f. Ányágbà + Ilèígò	ányágò	'we are going to see'.

Borrowing

According to Zapata (2007:10), borrowing is a process whereby new words are formed by adopting words from other languages together with the concepts or ideas they stand for. Over its 1500 years history, English has borrowed from a good number of other languages of the world. Examples of such languages, and the words borrowed from them by English include the following: homicide (Latin), chorus (Greek), mutton, garage, fiance/fiancé, (French), aria, pizza, mafia, piano (Italian), ranch (Spanish), semester (German), law (Scandinavian), alcohol (Arabic), Zebra (Bantu), tycoon (Japanese), angel (old French and Ecclesiastical Latin), tailor (Latin), etc. Note that the borrowed word never remains a perfect copy of its original. This is because it is made to fit into the phonological, morphological, and syntactic pattern of its new language or host. In example, guerrilla /gə'ri:lə/ (English), /ge'rijja/ (Spanish); banana /bənæno/ (English), /ba'nana/ (Spanish); mango (sing), mangoes (pl) (English), mangos (Spanish).

It is important to also note that, in many cases, words are borrowed due to historic occurrences, such as conquests and invasions, or to geographical proximity. The borrowed term may substitute for a native term, or may live along with the native term in different social contexts; for example, beginning and début (French), donkey and burro (Spanish). However, the most common reason for a language to borrow words is to fill lexical and semantic gaps, that is, to express new concepts and ideas for which the borrowing language has no terms, such as in the field of science, politics, culture (especially cookery and music); e.g., guerrilla, taco, tango, junta, matador, arena, radio, etc. Buhari (2006:43) says that every language is the product of change, and continues to change as long as it is spoken. This is based on the contention that living languages never hold still. A one-way language change is through the influence of other languages. At one time, for example

Process: blending of two nominal forms (N + N).

Sentence (c) consists of a blended form Amadina. The blended form Amadina is formed by the combination of two words, Amadu and Madina, which are Hausa nouns denoting names of persons, Amadu is proper name of a person (male), and Madina is a proper name of a female. In the first name 'Amadu', the third syllable 'du' is deleted, and in the second name Madina, the first syllable Ma has been deleted from the original form. After the deletion of the segments from each of the two words, the remaining parts were blended together to formed 'Amadina'.

In Igala language, blending is possible in human names. In this case, when two names are joined together, they produce a blended result. One thing worthy of note about this is that the blended form produces a different word with a new and special meaning in the language, as exemplified below:

(64), the Hausa word mota (mo:ta) a motor car was not part of Hausa vocabulary. Now it is. The addition of this word to the Hausa lexicon, thus, constitutes a change in its linguistic system, albeit a minor one. Moreover, Hausa speakers did not create the word out of thin air. Prior to its use, as a Hausa word, it was an English word with a comparable meaning. The addition of the word to Hausa vocabulary clearly results from the influence of the speakers of English who were familiar with the word, who started using it in Hausa. Its use spread, and now it is a well-established word of Hausa. Borrowing therefore is a situation whereby a language adopts the words of another language into its vocabulary for use. Borrowing requires that the borrowing language and the source language come in contact with each other.

Some of the examples of borrowing in Hausa as given by Buhari (2006:44) are as follows:

(55) i. Words borrowed from English into Hausa:

English	Hausa
a. bucket	bookiti
b. motor	moota
c. office	oofis
d. change	canjii
e. doctor	likita
f. carpenter	kaafinta.

ii. Words borrowed from Arabic into Hausa (with tone influence)

Arabic	Gloss	Hausa
a. Qur'ia	vote	kuriaa
b. Siyaasaa	politics	siyaasaa
c. Alkiima	science	ilmin imiyyaa
d. Majlis	council	ma'jalisaa
e. Jamhuuriyaa	republic	jamhuriyaa
f. Alma'aash	salary	albaashi.

According to Atadoga (2011:101), borrowing is a common

morphological phenomenon in all languages. It is one of the implications of languages in contact. Languages of the world tend to borrow lexical items or even phrases that are absent in their lexicon. The Igala language is assumed to have borrowed the underlisted from English, Hausa and Igbo respectively, as outlined below:

(56)	a. English	Igala
	(i) bible	íbáfùlù
	(ii) school	ìhèkwùlù
	(iii) table	ítébulù
	(iv) church	ìchòchì
	b. Hausa	Igala
	(i) gaskiya	ògèchà 'truth'
	(ii) lafiya	òlǎfiyà 'health/healthy/fine'
	(iii) sadaka	òhídàkà/òchídàkà 'sacrifice'
	(iv) dansiki	ìdáchiki 'armless wear'
	c. Igb	Igala
	(i) ntali	ítàli 'cane'
	(ii) abada	àbàdá 'a kind of cloth'
	(iii) akpa	ìkpà 'bag'

Clipping

Adeniyi, Daniel and Iyere (2010:105-6) say that clipping or abbreviation, as a morphological process, is very productive; not only in the English language but also in many African languages. It involves some element of reduction in the length of a word. They also quote Adeniyi (1997) as saying that clipping is a pseudo-lexical unit which results from the grapho-phonemic reduction of a word, which still shares the semantic and paradigmatic relationship with the full form of the word. It can also be seen as extracting a shortened form of a word from its longer morphological form. In English, for instance, 'telephone' becomes phone; brassiere is bra; fridge from refrigerator, showbiz from show business, 'cause or 'cuz or cos from because, praps from perhaps, mike from microphone, Mike from Michael, nark from narcotics, bike from bicycle, ad or advert from advertisement. Other common clippings are: demo from demonstration, doc from doctor, ed from education, gym from gymnasium, lib from liberation, photo from photograph, lit from literature, pub from public, stat from statistics, telly from television, hanky from handkerchief, turps from turpentine, van from caravan or vanguard, etc. In some cases, the clipped version has more or less completely replaced the original longer word, e. g. flu (from influenza). Note that a clipped form is a complete lexical unit which should not be confused as abbreviation of its full form. Crystal (1999), according to Adeniyi, Daniel and Iyere (2010:105) defines 'clipping as a type of word formation in which new words are derived by shortening another word'. Notice that the clipped form may not be used in the same contexts as the longer word. For instance, the word exam is mostly used to refer to academic examinations or tests, and not to medical examinations or check-up. However, Aronoff (1997) as cited in Adeniyi, Daniel and Iyere (2010:105) defines clipping as a process that shortens a polysyllabic word by deleting one or more syllables. In all the definitions above, it is clear that both the clipped form which it originates share both semantic and syntactic features. However, the two words are distinct lexical units with separate morphological identities.

We have to note that the various types of clipped form are restricted to everyday casual and informal discourse among family members, friends and acquaintances. However, the full length of these names are usually reserved and employed for formal interactions and official records. We can identify two types of clipping in the English language. These are back-clipping and fore-clipping. In fore clipping, an element or elements are taken from the beginning of a word. Some of the examples in this category include (ham) burger, (omni) bus, (alli) gator, (tele) phone, (heli) copter and many more. This type of clipping also occurs with personal names in the English language. Some of these examples include, Becky for Rebecca, Drew, for Andrew, Ginny for Virginia. In the case of back clipping, an element or elements are taken from the end of a name. What we then have is an abridged version, which can still stand in its place. In English, the following have undergone various back-clippings as can be seen from the following examples; chimp (panzee), deli (catessen), hippo (potamus), lab (ratory); gas (oline), Pro (fessor) and many more. Many names in the language have been clipped to the extent that some native speakers cannot relate the full version of the name with the clipped version.

Buhari (2006:58) reports that some Hausa linguists like Baner (1991), Abdulhamid (2001) and Sani (2002) define clipping as another way of word coining by shortening the base, while still retaining the same meaning and membership of the form class. Moreover, Buhari (2006:58) quotes Fagge (2004) as saying that both back-clipping and front-clipping or fore-clipping operate in Hausa language as displayed below:

a. Back-clipping:

a) Personal names

(57)	Full form	Clipped form
	Abubakar	Bukar
	Muhammad	Madu/Muda
	Khadija	Dija/Dije
	Aishatu	Shatu

b) Names of items

Apart from names of people as mentioned above, back-clipping could be noticed in other names (of items), as follows:

Full form	Clipped form	Gloss
Kuskure	kure	make a mistake
Kwakwalwa	kwakwa	brain substance
Hajiijuwa	juwaa	giddiness

Front-clipping

Full form	Clipped form	Gloss
Fate-fate	fate	a musky food
Kuli-kuli	kuli	groundnut cake (Buhari, 2006:58).

According to Okolo and Ezikeojiaku (1999) as cited in Atadoga (2011:100), the shortenings of polysyllabic words without regard to derivational analogy are referred to as clippings. If a word can be so identified in a rather closely restricted context, the remaining syllables can be dropped because they are redundant and the clipping results. Clipping therefore is a morphological process in which words are fragmented thereby taking the fragments to represent the whole? This is very common especially with human names in Igala language, as shown below:

(58)	Full form	Clipped form	Gloss
	Ójóchẹnẹmi	Ójóchẹne Chẹnẹmi Úchẹne Chẹne	God is mine
	Ójónugwà	Únúgwà Núgwà Ójọne Úgwà	thanks be to God
	Enẹmọna	Úmọna Enẹmà Mọna Ọna	who knows tomorrow?
	Ónúnojà	Ónúne Únojà Ónú Ọja	the king owns the people
	Ájánìgò	Únìgò Ìgò Ájánẹ Ájá	There is sightseeing in the market
	Úkwúbilẹ	Úkwúbie Ùbilẹ Úkwú Ìlẹ	Death has spoilt the world
	Ójónìmi	Ójọne Ùnìmi Nìmi Ìmi	God is the owner of life

(Culled from Atadog, 2011:101, as expanded by us).

Conclusion

Although a study of this sort can never be exhaustive, it has to some extent dealt with the selected morphological processes in the three main languages – English, Hausa and Igala, being the focus of this study as well as some other languages of the world. One thing worthy of mention about this research is the fact that it has brought morphological processes from over twenty different languages of the world and converge them on a single paper. Consequent upon this, this article is an invaluable reference point to linguists, language enthusiasts, students, as well as teachers of English and Linguistics alike.

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