

THE INTERFIX: AN ASPECT OF UNIVERSAL MORPHOLOGY.

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Whereas prefixes and suffixes have been universally attested and infixes found in a few languages, the interfix has been discussed in two languages only: Igbo and Dghwede. Evidence from these languages supports the notion that interfixes do differ from infixes and should be accorded status among affixes in universal morphology. This difference is not one of function, structure or co-occurrence restriction, but on the position they occupy in the word: infixes split morphemes, interfixes do not. Also there is symmetry where interfixes occur, i.e. in Igbo the interfix comes between disyllabic elements, which are basically repetitions of the same element. A critique of Ezieojiaku's work on Igbo reveals mistaken analysis of certain elements as interfixes.

Tandis que les préfixes et les suffixes ont été universellement attestés et les infixes découverts dans quelques langues, l'interfixe n'a été étudié que dans deux langues: l'igbo et le dghwede. En fait, l'analyse de ces deux langues démontre que les interfixes diffèrent des infixes et que l'on doit leur accorder une place parmi les affixes dans la morphologie universelle. Cette différence ne relève ni de la fonction, ni de la structure, ni de la distribution des interfixes mais uniquement de la position qu'ils occupent dans un mot: les infixes divisent les morphèmes, contrairement aux interfixes. De plus, il y a une symétrie de distribution parmi les interfixes, c'est-à-dire qu'en igbo l'interfixe figure entre éléments disyllabiques qui sont essentiellement des répétitions d'un même constituant. Une critique de l'oeuvre d'Ezikeojiaku sur l'igbo révèle qu'il a commis une erreur en analysant certains éléments comme interfixes.

0.0 This paper¹ is partly a critique of Ezikeojiaku's interesting paper entitled "An aspect of Igbo morphology: The Interfix" and partly - and more importantly - a case for recognising the interfix among affixes in universal morphology.

1.0 In general linguistics, affixes are usually divided into prefixes, suffixes and infixes. Whereas prefixes and suffixes have been universally attested, and infixes found in a few languages, the Interfix has only been mentioned and discussed in two languages:

Igbo, (Ezikeojiaku, 1978); and Dghwede, (Frick, 1978). However, long before Frick used this term for that Chadic language spoken to the north-east of Nigeria, Professor Kay Williamson had invented it and been using it in lectures though not in publications, in her teaching of Igbo grammar at the University of Ibadan. It may be necessary to add that Ezikeojiaku was a student of Williamson's!

1.1 Infixes or Interfixes

It is very tempting for analysts to confuse infixes and interfixes as Emenanjo (1978:217) has done. It is, therefore, necessary at the outset to begin with the infix about which some definitions and examples are available. Bloomfield (1933:218), Fromkin and Rodman (1978:143), Robins (1968:210) and Nida (1949:68) following Slocum (1948) have provided different definitions with examples for infixes. Bloomfield defines them as "affixes added within the underlying form". Fromkin and Rodman define them as "morphemes which are conjoined to other morphemes by inserting them into a morpheme". Robins defines them as "affixes that appear within the consonant and vowel sequence of root forms; they occupy fixed positions that are stutable by reference to the consonants and vowels". Without attempting a definition, Nida indicates that in the Semitic languages infixes are used for splitting root morphemes of the CCC structure. The following are languages in which the infix has been attested: Cambodian, a South-east Asian language; Sudanese, Arabic, Yurok, an Amerindian language spoken in California, Tagalog, and Bontoc, languages spoken in the Philippines; Tzeltal, a Mayan language, and Latin (Matthews, 1978:124-132).

1.2 In all the languages in which infixes have been found, these affixes perform derivational and/or inflectional functions. For example, whereas in Bontoc verbs are formed from nouns or adjectives by infixation, in Cambodian or Yurok nouns are formed from verbs.

Examples: (1) Bontoc (from Fromkin and Rodman p. 143)

<u>Noun/Adjectives</u>	<u>Verbs</u>
fikas 'strong'	<u>fumikas</u> 'to be strong'
kilad 'red'	<u>kumilad</u> 'to be red'
fusul 'enemy'	<u>fumusul</u> 'to be an enemy'

(2) Cambodian (from Robins p. 210)

<u>Verb</u>	<u>Noun</u>
de: k 'to sleep'	<u>dəmne: k</u> 'sleep'

(3) Yurok (from Robins p. 210)

<u>Verb</u>	<u>Noun</u>
Kemoʔ 'he steals'	ke <u>gemo</u> ʔl 'he is a thief'

In terms of inflectional function infixes can be used for indicating number as in:

(4) Yurok

Sepolah	'field'
Se <u>ge</u> polah	'fields'

or complex inflectional processes as in:

(5) Egyptian Arabic

ktb	'write'
<u>ka</u> tab	'he wrote'
<u>ki</u> ta.b	'book'
<u>ma</u> ktab	'place for writing'
<u>ma</u> <u>ka</u> . <u>ti</u> b	'places for writing'

1.3 From the above definitions and examples of infixation the following points stand out about infixes:

- (i) they result in splitting a root or morpheme;
- (ii) in some languages especially the Semitic ones like Egyptian Arabic there can be a discontinuous infix since the form has only one meaning;
- (iii) they can perform either derivational or inflectional functions.

2.0 The only published discussion of interfixes known to us is that given by Frick (1978) about Dghwede.

2.1 Frick defines interfixes as "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. They can never occur word finally. They are in form and function quite distinct from the suffixes. Whereas the suffixes are mutually exclusive, i.e., a verb can contain no more than one, several interfixes can occur together."

Frick then provides a chart to illustrate the relative positions of suffixes and interfixes vis-à-vis the verb root thus:

verb root - m - d - $\begin{matrix} k \\ \text{dak} \end{matrix}$ - g - ar - (d) - n - c - suffix

where

- m- = second person plural imperative
- r- = third person plural subject
- d- = 'with' instrumental. (In this chart this interfix appears in two positions. The second position is preferred when there is an object interfixed beginning with a consonant occurring in the verb.)
- k- = 'thoroughly' 'completely'
- dak- = 'immediately'
- g- = middle voice
- ar- = object
- n- = transitivizer
- c- = third object.

From this chart and Frick's own definition it is easy to see that in Dghwede, interfixes are not only many but also mark essential grammatical relationships like person, instrumental, adverbial, object, voice and transitivity.

Interfixes also have fixed positions between the verb root and the suffix. By way of summary:

- (i) whereas there can be only one suffix occurring with the verb, a maximum of three interfixes and one suffix can occur with the verb;
- (ii) two interfixes are mutually exclusive in the same position;
- (iii) interfixes are extensively used inflectionally to indicate:
 - (a) second person plural imperative
 - (b) third person plural subject
 - (c) middle voice
 - (d) objects
- (iv) interfixes are also used derivationally to function as transitivizers with intransitive verbs. For example, in the Completive aspect, by interfixing -n- between the verb root and the suffix and changing the tone pattern an inherently intransitive verb becomes transitive, e.g:

- (6) â kèláyà 'it broke'
 â kélénáyà 'he broke it'
 â wèráyà 'he returned'
 â wéré_unáyà 'he returned it'.

- (v) interfixes also perform purely extensional functions by extending the lexical meaning of the root to which they are affixed. Notions like 'instrumental', 'thoroughly', 'completely', 'immediately' are expressed by interfixes.
- (vi) in terms of their phonology, they can consist of a consonant, monosyllable or (rarely) a disyllable. It is necessary to point out that in Dghwede it is consonants that carry lexical meaning whereas vowels are used to express different aspects.

2.2 If we compare the functions performed by infixes and the interfixes in Dghwede, there is really no essential difference between the two types of affixes. If we also observe that in Dghwede as in the Semitic languages more than one of such affixes can be found, there is again no essential difference between infixes and interfixes. In terms of their phonological structure, both infixes and interfixes may be consonants or mostly monosyllabic elements. However, if we consider their relative positions in the languages we notice that:

- (i) both infixes and interfixes split the word, but whereas infixes split the morpheme, interfixes do not;
- (ii) there appears to be some symmetry when interfixes are involved.

Notice the examples in (6) and the following examples of -m- the marker of second person plural Imperative:

- (7) kèdá: kèdémàkèdá 'beat (him)!'
 jèwá: jèwèmà jèwá 'go!'
 xwàyá: xwàyèmà xwàyá 'run!'

In (6), the interfix splits the four-syllable element into two syllables on either side. In (7), the interfix comes between disyllabic elements which apart from tones and some vowels appear to be the same element repeated twice with the interfix coming in between. In view of this fact, therefore, interfix rather than infix appears the better name for referring to this type of affixes.

1.0 Let us look at the following sets of examples from Igbo:

- (8) -ri 'eat' erimeri 'something to be eaten, edible'
 -gu 'read' agumagu 'something to be read, literature'
 -de 'write' edemede 'something to be written, text'
 -bà 'enter' abàmàbà 'something to be entered into, cult'
 -mù 'learn' amùmàmù 'something to be learnt, knowledge'
 -tù 'point-out' atùmàtù 'something to be pointed out, example'
- (9) -ko 'hang' okomoko 'arrogance'
 -anụ(n) 'meat' anụmanụ 'animal kingdom'
- (10) -ha 'be equal to' ìhàmì!hà 'total equality'
 -je 'go' èjèmeèjè 'excessive going about'
 -zù 'meet' èzùmeèzù 'excessive meeting together'
 -kù 'blow' èkùmeèkù 'excessive blowing about'
 -nyò 'peep' ènyòmeènyò 'excessive peeping'
 -nyị 'be heavy' ànyịmaànyị 'excessive weight; impossibility'
 -kwo 'be in a haste' èkwòmeèkwò 'excessive scrambling'
- (11) -gò 'be bent' ngòrìngò 'tortuous'
 -ka 'be tattered' nkarìnka 'tattered'
 -pe 'be small' mperimpe 'smallishness'
 -chọ 'be petite' nchọrìnchọ 'petiteness'
- (12) -be? 'be lost' ìbèrìbè 'simpleton'
 -fù 'be lost' èfùrìèfù 'never-do-well; rascal'
- (13) -ha 'be equal to' nhàtàhà 'sameness'
 -ka 'be strong' àkàtàakà 'very enormous and strong'
 -kpọ 'be dry' òkpòtàòkpò 'stunted but dry and fat'
 mkpòtàmkpò 'dry and tough'

(14)	ùwà(̄n)	'world'	ùwà <u>ta</u> ùwà	'eternity, to the end of time; everlasting'
	mkpu	'anthill'	mkpù <u>ta</u> mkpù	'elevation, raised and uneven land'
(15)			òkò <u>ta</u> òkò	'very huge'
			h̀kò <u>ta</u> h̀kò	'huge and rough'
(16)			ege <u>le</u> ge	'straightness'
	ogō(̄n)	'height' 'top'	ogo <u>lo</u> go	'length, height'
(17)	-gwù	'play'	egwù <u>reg</u> wù	'play, drama'
	-kwu	'talk' 'speak'	èkwur <u>è</u> kwu	'quarrel'

3.1 With regard to our conclusion in 2.2 and the morphological structure of the Igbo examples in (8) - (17) above, the following deductions will be made:

- (i) Igbo clearly has affixes which qualify to be called interfixes in view of their distinct morphological position in the derivatives in which they are found. The morphological structure of the verbal derivatives in which interfixes are found can be charted thus:

Prefix - Verb root - Interfix - Prefix - Verb root

-m-

-mv-

-rI-

-ta-

-l-

-r-

- (ii) In words in which the Igbo interfix is found, the word is divided into two equal parts by the interfix in such a way that the part before the interfix is repeated after it with or without tonal changes. The Igbo verbal derivative containing an interfix has the following phonological structure:

$$S_1 C_1 V_1 - I - S_1 C_1 V_1$$

where S = Syllabic i.e. any vowel or the homorganic syllabic nasal

C = Consonant

V = Vowel

I = Interfix

(iii) Igbo interfixes are morphemes which perform distinct derivational functions for deriving types of verbal derivatives from verbs, as in most of the examples, or for deriving new nouns from nouns as in (14) or *ogolo* in (15) which is clearly derived from *ogō* 'height' or *anụmànụ* in (9) which is clearly derived from *anụ* 'meat'.

(iv) Igbo interfixes are either consonants or monosyllabic CV forms.

(v) Igbo interfixes are found in the middle of complex and derived words, some of which are full lexical items in their own right e.g. *ùwà* and *ogō*; and some of which are further derivations from verbs, e.g:

e-gwu 'play' < -gwù 'play'

(vi) The lexical class of the verb determines the interfixes that can go with it. For example:

-m- in (8) and -r- in (17) appear to be only used with Active verbs.

-rI- in (11) - (12); -ta- in (13) appear to be used mostly with Stative verbs.

-mI- in (10) appears to be neutral to Action and Stative verbs.

4.0 Ezikeojiaku (1978) makes very interesting reading, even though no definition is provided for interfixes in Igbo. Unfortunately, however, a number of elements have been included as interfixes which they are not because of mistaken analyses of certain morphological structures in Igbo. The following observations need to be made about Mr. Ezikeojiaku's analyses:

(i) He recognises seven classes of interfix thus:

- I -mV-
- II -tV-
- III -rV-
- IV -nV-
- V -chV-
- VI -kV-
- VII -wV-

From the examples provided by Ezikeojiaku himself (pp. 10-19), some of these classes are not viable. The -mV- interfix found in non-identical roots is not an interfix. As shown in Emenanjo (1978a:218) all these forms are phrasal nouns that have resulted from tonal changes:

e.g.	àhùm̀ỳz̀ò	<	ah̀ù̀ m̀ ỳz̀ò
	'ability to see'		'I see road'
	èz̀ùm̀ike	<	ez̀ù̀ m̀ ike
	'resting period/ holidays'		'I rest'
	àch̀ò̀m̀okwu	<	ach̀ò̀ m̀ okwu
	'trouble making'		'I look for trouble'

4.1 Again the element -NV- exemplified as an interfix on p.16 is clearly the preposition, *na*, not an interfix. Here we are dealing with phrasal nouns made up of a number of morphemes and resulting from tonal changes:

e.g.	òmenà̀à̀l̀à	<	o m̀è n'̀à̀l̀à
	'custom'		'it happens on the land'
	̀m̀kpanaka	<	̀m̀kpa n'̀aka
	'staff'		'carrying in the hand'
	ògaǹỳz̀ò	<	òga n'̀ỳz̀ò
	'wanderer'		'goer on the road'

4.2 The element -chV- exemplified on p. 16 is not an interfix but an enclitic meaning 'completely'. (See Emenanjo, 1978a.) The four words cited as examples are complex words made of different morphemes thus:

òkàchàmara	<	òkàchà mara
'all knowing'		'it knows very much'
nzachapù	<	nzàchapù
'act of sweeping clean'		'sweep-completely-out'

4.3 The elements -kV, and -wV- treated and exemplified as interfixes on p. 17 are the verbs -ka 'be more than'; -wa 'break up/open' found in complex nouns thus:

òmèkaòmè	<	omè kà òme
'habitual criminal'		'doer more than doer'
ñnyòkàñnyò	<	nnyò kà nnyò
'inquisitiveness'		'peep more than peep'
òkòwàòkwu	<	òkòwà okwu
'interpreter, dictionary'		'narrator open-word'
òtiwambō	<	otì wà mbō
'breaker of pot'		'beat open pot'

That the elements -ka, and -wa are being used as interfixes is not in doubt. But their shapes combined with their meanings of 'excessive' for -ka, and 'exposure' for -wa, prove that we are dealing with the Stative verbs -ka 'be more than', and -wa 'break open'.

4.4 Although there is a -rV- interfix, some of the examples provided by Ezikeojiaku, are clearly wrong since they are nominals derived by processes other than interfixation. Whereas nkarĩnka, ngòringò, nchòrĩnchò, mperimpe, involve interfixation of -rI-, all the examples on pp. 15-16 and elsewhere in the paper are cases of nouns which can be truly re-analysed thus: IP - VR - BVC, where IP = Impersonal Pronoun; VR = Verb Root and BVC = Bound Verb Complement thus:

èdèrèède	<	e dèrè ède
'written form'		'it is written written'
àjùrùàjù	<	a jùrù àjù
'rejected types'		'it is refused refused'
àròròàrò	<	a ròrò àrò
'verse'		'it is thought out thought'
àkpùrùàkpù	<	a kpùrù àkpù
'moulded form of something'		'it is moulded moulded'

4.5 As with some of the forms involving -rV-, some of the forms with -mV- exemplified on pp. 10-12 and elsewhere, are wrongly analysed. In the first place, there is an interfix, but its shape is -m(V)- and not -mV-. For example, see

-m-	-mI-
edemede	
okomoko	ìhàmììhà
ajumaju	

All other examples given by Ezikeojiaku on pp. 10-12, are to be analysed thus: VP - VR - M - BVC where VP = Verbal Prefix; VR = Verb Root; M = 1st Person Singular Pronoun; BVC = Bound Verb Complement.

Examples:

ekemeke	ekè m' èke
'attire'	'I dress dress'
ebumebu	ebù m' èbu
'that which can be carried'	'I carry carry'
apìmàpì	apì m' àpì
'pressing (boils)'	'I press press'

5.0 From the examples in Igbo showing interfixes we can see from 4.0 that independent lexical items like verbs can be interfixed in complex nouns without necessarily being interfixes.

In Òwèrè, a Central Igbo dialect, in some verb forms the negative form results from interfixing the General Negative marker between the disyllabic marker of the particular verb form:

- (18) (a) Ọ nà nà riela ɾT 'He should have eaten food!'
 (b) Ọ nañùnà riela ɾT 'He should not have eaten food!'

In 18 (b), -ñy, the General negative marker is interfixed between the two identified syllables that make up the auxiliary verb - nàna 'Unfulfilled marker'.

6.0 The use of interfixes for deriving new words in Igbo appears to belong more to the diachronics than to the synchronics of Igbo. In fact, other than the processes in (8) and possibly (10), the processes are no longer productive in Igbo. This accounts for the fact that we can predict the affixes and the tonal patterns of derivatives as in (8) and (10), but cannot do so for the other derivatives containing interfixes. But in Dghwede the use of interfixes is still

productive. With the examples from Dghwede and Igbo it is clear that interfixes constitute a class of affixes, which at first sight appear like infixes, but are clearly distinct from them. This is the assumption in Emenanjo (1978a). Although like infixes, interfixes are not as widely attested as suffixes and prefixes, their presence should be recognised in universal morphology. There is, therefore, a need to expand the classification of affixes in the standard works in morphology to include interfixes along with prefixes, infixes and suffixes.

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