JOLAN Volume 21 No 2 (2018) pp. 141-158 Èjèbá: A Linguistic Analysis of the Ígálá Plural Markers

A Linguistic Analysis of the Ígálâ Plural Markers, àma-/àbó-

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Abstract

The morphological status of the Igala plural markers is not clear based on varied accounts. One account claims they are inflectional/affixal elements while the other claims they are lexical elements. This paper is a pro-inflectional affix analysis of the Igala plural marker with linguistic evidence from the levels of phonology, morphology, semantics and syntax. Language samples for this paper come from the native speakers of Igala through direct personal contact in day-to-day social interactions, supplemented by the researcher's intuition as a native speaker of the Dekina variety of Igala and archival evidence. The data are glossed morpheme-by-morpheme for analysis within a descriptive paradigm with no particular recurs to a specific theory. The plural morphemes are analyzed as VCV syllable structures in conformity with the typical syllable pattern of the language, with dialectal phonological variation responsible for the abó-/ambó- interchange. The paper treats the plural morphemes as agglutinative affixes which mark plural inflection, the affixation of the morphemes being syntactically determined as typical of inflectional paradigms. The paper further establishes the plural markers as elements devoid of the semantic contents usually associated with homophonous nominal elements to the plural markers. The syntactic rule of relativization affects the combination of the plural markers and nouns in a manner characteristic of inflectional affix-stem rather than wordword relationship. This paper therefore establishes a linguistic analysis of the plural markers in Igala as inflectional elements and concludes that the Igala plural affixes are àma- and àbó-, which attach to noun stems for plural formation.

Keywords: Igala, morphological status, pro-inflectional affix analysis, plural markers, àma-/àbó-.

Introduction

This paper is a descriptive analysis of the Igala [ígálâ] plural markers, àma-/àbó-. Igala is a language spoken in Nigeria by the Igala ethnic group. The language has Igala has close affinities with Yoruba and Itsekiri, languages with which she constitutes the Yoruboid subgroup of the West Benue Congo branch under Niger-Congo phylum, according to Akinkugbe (1978) and Capo (1989). The Igala people are dominantly domiciled in Kogi State, Central Nigeria with a population of about 2,000,000 (Etu 1999 and Omachonu 2000).

In the literature on Igala plural formation, some grammatical number strategies have been undisputedly delineated across opinions (Omachonu 2004, 2008, Ejeba 2012 and Ilori 2013). However, there are arguments for and against the actual phonological structure and morphosemantic classification of the pluralizing element. This paper conceptualizes the arguments in the literature on Igala plural markers with regards to the status of the elements as inflectional morphemes within two premises: Omachonu's (2004, 2008) 'proinflectional affix' view and Ilori's (2013) 'contra-affix' view.

The primary method of data collection for this paper was incidental sampling of the native speaker's speech through day-to-day social interaction. This was supplemented by the intuitive knowledge of the researcher as a native speaker of the Dekina variety of the Igala language. The data presented for analysis use morpheme-by-morpheme mapping of object language to metalanguage structures followed by a translation, all in keeping with the Leipzig Convention for interlinear glossing (Available: www.eva.mpg.de/lingua/resource/glossing-rules.php). Representation of the object

language utilizes Igala orthography with phonetic data provided where applicable in square brackets in using the International Phonetic Alphabet (IPA) valued symbols.

This paper makes no recurs to any theoretical leaning for the analysis of data. However, in the use of a multi-tiered analysis in clarifying the tonal properties of the pluralizing morphemes and the phonological rules of tonal and segmental re-association in Section 2.1, the analysis applies insights from Autosegmental Phonology as expounded by Goldsmith (1999). Also, in the discussion of overt trace elements in the transformation of appositional compounds to relative constructions in Section 2.4, the analysis applies trace elements with insight from Chomsky's (1981) Trace Theory within the Government and Binding model.

Pro-inflectional Affix View of Plural Formation

The 'pro-inflectional affix' argument represents the Igala plural morpheme as an inflectional affix. This argument upholds the assertion that there is a clearly affixal plural element which occurs before animate nouns. The word 'inflection' here is used for the plural element from the perspective of agglutinative morphology. Based on this argument, Ejeba (2012) describes the plural morpheme àma- and àbó- as affixational morphemes. Omachonu's (2004, 2008) analysis represents the affixes as full forms àma and àbó as well as reduced forms àm- and àbó-. Omachonu (2008:34) points out that "the Igala language is morphologically agglutinative in that words are built up by stringing morphemes together and there is always a one-to-one correspondence between morphemes and morphs". Omachonu is thus the first to moot the view that plural affixes in Igala are agglutinative. Ejeba (2012) notes that the Igala plural affixes, àma- and àbó- are respectively merely homophonous with the third person plural pronoun àma and the word àbó 'people of/folks'. The claim therefore follows from the pro-inflectional affix analysis that the relationship between the affixes and the free forms is phonetic (accidental) rather than semantic.

Contra-Affix View of Plural Formation

The 'contra-affix' argument put forward by Ilori (2013) claims that the plural element is neither an affix nor an inflectional element. Ilori (2013) claims that there is no morphological or phonological basis for positing that the pluralizing morphemes, àm- and àb- by his analysis, are inflectional plural morphemes attached to noun roots. Furthermore, according to Ilori, the plural prefix view does not explain what he terms 'complex nominal words'. By 'complex nominal words', Ilori refers to his àmbógìjo example, which he claims is a sequence of the plural markers àma +àbó before ògìjo. Ilori thereby provides a contra-affix analysis in stating that àma and àbó are 'discrete nominal word items, and not prefixes'. Ilori (2013:461), on this basis, makes the following claims: "We therefore conclude that if àm- and àb- are plural morphemes at all in Igala, they cannot be bound or inflectional morphemes. Rather it would be more intuitively adequate to analyze them as free morphemes. In fact, they are nominal word items in compounding relationship with any lexical noun they pluralize."

Ilori's contra-inflection claims have implications at the levels of linguistic analysis: From the perspective of phonology, he claims that Omachonu's (2004, 2008) àm- and àb-morphemes are actually truncated forms of the full forms àma and àbó. This assertion leads to his morphological judgment that the full forms are free morphemes in compounding relationship with lexical nouns rather than affixes, contrary to Omachonu's (2008) claim.

Ilori's (2013) analysis here also runs contrary to Ejeba's (2012) view on the status of **àma**-and **àbó**- as plural affixes.

Ilori's compounding view further suggests that there could be sequences of what he terms 'plural nominals' in examples such as àmbógìjo 'elders/old folks' and àmbímoto'children'. Ilori (2013:458) moots this view as follows: "Going by the same token that àm- equals àma just as àb- equals àbó, it is logical to assume that these two free morphemes are combined in the complex noun-plural forms." It is worthy of note however that the plural analyses of Omachonu (2004, 2008), Atadoga (2011) and Ejeba (2012) do not attest to Ilori's àmbó form in the discussion of Igala plural formation.

From the perspective of semantics, Ilori (2013) holds that the uses of the plural morphemes àma and àbó are in all contexts the same in meaning as the independent nominals, àma 'they' and àbó 'folk/people'. Ilori's (2013) conclusion arising from his analysis suggests that the plural elements are not merely homophonous to the independent nominals but congruent with these in all grammatical contexts. Ilori (2013:459) claims that "since àm-shares meaning and form with àma, the logical conclusion that should be drawn is that the two are one and the same morpheme; ditto àb- and àbó for similar reasons."

From the perspective of syntax, Ilori claims that the formal relationship between the pluralizing elements and the nouns to which they are attached is that of apposition, resulting in the structural process of 'appositional compounding'. As Kari (2015:106) explains, in appositional compounds, "members of the compound refer to one and the same thing." In other words, the two independent words have the same reference. The process of apposition, thus, does not impose any morphosyntactic restriction on the elements juxtaposed. Crystal (1997:24) also defines apposition as "a sequence of units which are constituents at the same grammatical level, and which have an identity or similarity of reference; and they have the same syntactic function." In an appositive structure, therefore, the omission of one of the elements juxtaposed will not affect the grammaticality of the sentence in which they are found. This is for the reason that the juxtaposed elements have the same syntactic function. The observations based on Crystal (1997) and Kari (2015) will form the basis for argument later in this paper against the view that the pluralizing elements and the nouns with which they occur are juxtaposed as appositional compounds.

For the purpose of this paper, the various positions on Igala pluralizing elements in the literature are open to scrutiny. There are no significant contentions on the position in the literature that Igala specifies plurality differently for [+ANIMATE] and [-ANIMATE] nouns. Also, it is clear from the literature that, in [-ANIMATE] nouns, a distinction is particularly made between those nouns which are necessarily implicit in plural and those class of nouns which may indicate plurality by reduplication (Omachonu 2004, 2008 and Ejeba 2012). Omachonu (2008) and Ejeba (2012) are in agreement that the àbó or (àbó-) plural marker is the specific plural morpheme for the class of [+HUMAN] nouns which denote sex and age, whereas the àma or (àma-) form is the general form for [+ANIMATE] nouns. These general bits of information are assumed as background knowledge in this paper. However, the paper aims at a linguistic analysis of plural formation in Igala, with a focus on the contrast between the two predominant views on the àma- and àbó- plural morphemes: the pro-inflectional affix argument and the contra-affix argument.

The analysis of the Igala pluralizing elements, **àma-** and **àbó-**, in this paper is based on compelling evidence from the Igala language structure at the levels of grammatical description. On the basis of the overall description in this paper, one of the two arguments will be essentially modified in favour of the other, especially at the morphosemantic and

syntactic levels of analysis. This work will hopefully put to rest the controversies around the subject of grammatical number in Igala.

A Linguistic Analysis of the Ígálâ Plural Markers, àma-/àbó-

In this section, the paper discusses the Igala pluralizing morphemes with linguistic evidence from the levels of phonology, morphology, semantics and syntax. Before proceeding with the discussion of the plural markers at these levels of linguistic analysis, it is important to make brief statements on the distribution of the **àbó-/àma-** plural markers. Either of the two pluralizing morphemes may occur in occurrence with some nouns. Examples in the literature on Igala plural formation show that only animate nouns are morphological marked for plurality (Omachonu 2004, 2008, Atadoga 2011, Ejeba 2012 and Ilori 2013). However, Omachonu (2008) and Ejeba (2012) further note that **àma-** is the marker used generally on animate nouns, as in (1) and (2), whereas **àbó-** is in addition used exclusively with animate nouns that possess [+HUMAN] features and denote age and sex, as in (1).

1a. ónobùle : àbó-bùle\àma-ónobùle > [àbóbúl ϵ]\[àmonobùle]

woman 'woman' PL-woman 'women'

b. ónekele : àbó-kèle\àma-ónekèle > [àbókéle]\[àmɔnɛkèle]

man 'man' PL-man 'men'

c. ìgbèlé : àbó-ìgbèlé\àma-ìgbèlé > [àbígbèlé\àmiìgbèlé]

young.lady 'young lady' PL-young.lady 'young ladies'

d. òkólóbyâ : àbó-òkólóbyâ\àma-òkólóbyâ > [àbígbèlé\àmiìgbèlé]

young.lady 'young lady' PL-young.lady 'young ladies'

e. ímoto : àbó-ímoto\àma-ímoto > [àbímɔtɔ]\[àmimɔtɔ]

child 'child' PL-child 'children'

2a. íye : àma-íye > [àmiye]

mother 'mother' PL-mother 'mothers'

b. àtá : àma-àtá > [àmaàtá]

father 'father' PL-father 'fathers'

c. óyâ : àma-óyâ > [àmɔjà]

wife 'wife' PL-wife 'wives'

d. èluché : àma-èluché > [àmeèlutsé]

farmer 'farmer' PL-farmer 'famers'

e. ókwuno : àma-ókwuno > [ókwunɔ]

cow 'cow' PL-cow 'cows'

f. ábyá : àma-ábyá > [àmab^já]

dog 'dog' PL-dog 'dogs'

From examples (1) and (2), it is clear that the plural marker, **àma-** is used with animate nouns generally. As the literature on Igala plural already establish, inanimate nouns do not take any overt morphological marker for plural formation in the language. Plural marking is left implicit for the inanimate nouns with contextual and syntactic cues

responsible for the recovery of grammatical number in this class of nouns. As examples in (1) show, beside indicating plural using **àma-** as the morphological marker, animate nouns that possess [+HUMAN] features denoting age and sex in the examples may mark plurality using **àbó-** instead. Opinions in the literature on Igala plural marking have not put forward any structural synchronic or diachronic reasons for the possibility of marking plurality on this particular class of nouns with a specific and exclusive element, **àbó-**.

Although the scope of this paper does not cover investigation of the source of $\grave{a}b\acute{o}$ -as a plural marking element, it seems clear, particularly from the occurrence of the $\grave{a}b\acute{o}$ -plural marker in 1 (a) – (b) that the plural marker is a sort of vestige of an earlier noun class system that must have existed in Igala. By virtue of this observation, it follows that diachronically, Igala might have had, not only a plural class prefix $\grave{a}b\acute{o}$ - but also a singular class prefix $\acute{o}no$ -/ $\acute{o}ne$ - which reflect sex distinction and attach to the bound root, - $b\grave{u}le$ 'woman' in (1 a) and -kele 'man' in (1 b). In tandem with this assumption of a diachronic system of noun classes in Igala, this paper represents the examples in 1 (a – b) as 3 (a – b).

3a. óno-bùle : àbó-bùle

SG-woman 'woman' PL-woman' women'

b. óne-kele : àbó-kèle SG-man 'man' PL-man'men'

The analysis of Igala singular-plural grammatical distinction in 3 (a - b) may be seen as a historical reflex of the singular-plural distinction in Itsekiri (a sister language to Igala under the Yoruboid group). The Itsekiri data in 4 (a - b) which illustrate this cognate structure comes from Ilori (2013:459).

4a. o-biren : e-biren

SG-woman 'woman' PL-woman 'women'

b. o-kenren : e-kenren SG-man 'man' PL-man 'men'

In view of the obvious correlation between the singular-plural grammatical distinctions in the Igala and Itsekiri nouns observed in (3a-b) and)4a-b) respectively, it may be necessary, not only to do a comparative analysis of plural formation of these two sister languages, but to do an investigation of the phonosyntactic and morphosemantic reflexes in the class system or historical vestiges of this in the Yoruboid subgroup. This may serve as a useful means in piecing together the historical puzzle of critical features of Proto-Yoruboid for diachronic purposes as well as for a better insight into the synchronic manifestations of the sister languages under the subgroup.

However, for the purpose of establishing the affixal status of the Igala pluralizing elements in this paper, it may not be necessary to go beyond the brief discussion of the distribution of the **àbó-/àma-** plural markers in the language and the advantage of this diachronic perspective as pursued so far in showing the likely affixal origin of the elements in question. The paper shall now proceed with the synchronic case for an affixal analysis of the Igala pluralizing morphemes with evidence of this at the levels of phonology, morphology, semantics and syntax.

The Phonology of Igala Plural Morphemes

This section tests Ilori's (2013) claims that the àm- and àb- morphemes are truncated forms of àma and àbó. The CV structure of the so-called full forms agrees with Ejeba's (2012) view that the plural affixes are àma- and àbó-, which are uniformly a VCV syllable pattern. It is also congruent with Omachonu (2004) and Atadoga's (2011) analysis which represent these plural morphemes as the truncated forms, àm(a) and àb(ó) where the word final vowel is considered an optional element. The analysis however contrasts with Omachonu's (2008) analysis of the àm- and àb- pluralizing elements as VC syllable pattern without recognizing their relatedness to full forms.

Omachonu (2004), Atadoga (2011), Ejeba (2012) and Ilori (2013) all agree to a phonological relationship between the **àma**- and **àbó**- plural morphemes and the **àma** and **àbó** independent nominals. The only difference in opinion of the VCV syllable pattern arises between Ejeba (2012) affixal analysis and Ilori's (2013) lexical analysis. This will be sorted out in Section 2.2 dedicated to morphological arguments on the status of the plural morphemes. However, the **àm-** and **àb-** plural morphemes constitute a VC syllable structure, which would be an additional syllable pattern to the basic syllable types of Igala. The tonal evidence is against positing the VC forms, as these forms do not convincingly predict the changes in tones at the juncture between the plural morpheme and the nouns which they inflect. The examples in 1 (a – e) repeated here as examples in 5 (a – e) contrast with 5 (a' – e') illustrate this fact of tonal modification. The examples in 5 (a – e) are based on the position that the plural morphemes are VCV structures with products of juncture tone interactions akin to what is consistent to tone behaviour generally in Igala. The counter examples in 5 (a' – e') are based on the position that the plural morphemes are VC structures.

5. a. ónobùle : àbó-bùle\àma-ónobùle > [àbóbúl ϵ]\[àmonobùle]

woman 'woman' PL-woman 'women'

a'. ónobùle : àb-bùle\àm-ónobùle > [*àbbúlɛ]\[*àmónobùlɛ]

woman 'woman' PL-woman 'women'

b. ónekele : àbó-kèle\àma-ónekèle > [àbókéle]\[àmɔnɛkèle]

man 'man' PL-man 'men'

b'. ónekele : àb-kèle\àm-ónekèle > [*àbkéle]\[*àmónekèle]

man 'man' PL-man 'men'

c. ìgbèlé : àbó-ìgbèlé\àma-ìgbèlé > [àbígbèlé\àmiìgbèlé]

young.lady PL-young.lady 'young lady' 'young ladies'

c'. ìgbèlé : àb-ìgbèlé\àm-ìgbèlé > [*àbìgbèlé]/[*àmìgbèlé]

young.lady PL-young.lady 'young lady' 'young ladies'

d. òkólóbyâ : àbó-òkólóbyâ\àma-òkólóbyâ > [àbókólób^jâ\àmoòkólób^jâ]

young.man PL-young.man 'young man' 'young men'

d'. \dot{o} kólóbyâ : \dot{a} b- \dot{o} kólóbyâ\ \dot{a} m- \dot{o} kólóbyâ > [* \dot{a} b \dot{o} kólób \dot{a}]/[* \dot{a} m \dot{o} kólóbyâ

young.man PL-young.man 'young man' 'young men'

e. ímoto : àbó-ímoto\àma-ímoto > [àbímɔtɔ]/[àmimɔtɔ]

child PL-child 'children'

e'. imoto : àb-imoto,\am-imoto > [àbimoto]/[*àmimoto]

child PL-child 'children'

The result of tone modification in the plural forms of 5 (a - e) shows that the final high tone (T1) of $\grave{a}b\acute{o}$ - in 5 (a and e) as well as the final mid tone of $\grave{a}ma$ - in the same set of examples interact with the initial tones (T2) of the nouns with different tonal outputs in a manner that is consistent across the examples. In $\grave{a}b\acute{o}$ - $\grave{i}gb\acute{e}l\acute{e}$ 'young ladies' as in (5 a) and $\grave{a}b\acute{o}$ - $\grave{o}k\acute{o}l\acute{o}b^{\dagger}\acute{a}$ 'young man' as in (5 d), a high (H) T1 and a low (L) T2 result in H just as H+H in (1 e) result in H. When T1 is mid (M), as in the variant form of the examples in 5 (a - e), the result of the interaction with a high T2 is mid (M) as in the tonal output, $[\grave{a}monob\grave{u}l\epsilon]$ 'women', $[\grave{a}mon\epsilon k\grave{e}l\epsilon]$ 'men' and $[\grave{a}mimoto]$ 'children' in 5 (a - b and e). However, the tonal output is a mid-tone when the mid T1 interacts with a low T2, as $[\grave{a}mi\grave{i}gb\grave{e}l\acute{e}]$ 'young ladies' in (5 c) and $[\grave{a}mo\grave{o}k\acute{o}l\acute{o}b^{\dagger}a]$ 'young men' in (5 d) show.

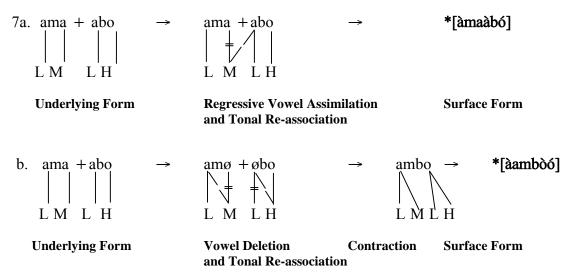
If the noun stems were to combine with the VC prefix, as in 5 (a' - e'), only [àbímətə] which is only part of the output in (5 e') would be well-formed. All the others would not be tonally well-formed. This is because there would be neither appropriate tone nor environment for the interaction of juncture tones to trigger the kind of modification consistently observed in 5 (a - e). Moreover, beyond being tonally deviant, the phonetic product of [*àbbúlɛ] and [*àbkélɛ] with juxtaposed consonants in (5 a') and (5 b) are not attested in the phonology of Igala. The deviant phonetic transcriptions at junctures represented in 5 (a' - e') constitute phonological evidence that the plural morphemes are VCV syllable structures than VC structures.

Furthermore, Ilori's (2013) compounding view posits the forms $\grave{a}\grave{m}b\acute{o}g\grave{j}o$ 'elders/old folks' and $\grave{a}\grave{m}b\acute{m}oto$ 'children' as proof that two free morphemes are combined in the 'complex noun-plural forms'. These so-called complex forms, according to Ilori, are cases where the plural morphemes $\grave{a}ma$ and $\grave{a}b\acute{o}$ co-occur with other nouns to form compounds. This complex forms which Ilori postulates do not conform to the typical CV structures of Igala. What Ilori suggest is set out as in 6 (a – b).

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6a. àma àbó ógijo > *[àmbógidʒo]
PL<sub>1</sub> PL<sub>2</sub> elder 'elders/old folks'
b. àma àbó ímoto > *[àmbímətə]
PL<sub>1</sub> PL<sub>2</sub> child 'children'
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Whereas Ilori's analysis does not demonstrate the phonological processes involved in the derivation from the underlying sequence of the two pluralizing morphemes followed by the noun to the surface phonetic realization; he makes assertions on the pluralizing morpheme as follows: "Evidence suggests it is an appositional compounding which subsumes some phonological processes – vowel deletion, tone transfer, and contraction – in which the final vowel of **àma** or **àbó** constantly deletes while the initial vowel of the pluralized noun is retained in the output" (Ilori 2013:459). Observation based on the

phonetic output according to Ilori shows that àmbó could be seen as constituting either of two syllable structures: a VCCV, if the bilabial nasal were analyzed as a true consonant; or a VVCV structure, if the nasal were analyzed as a tone bearing unit of some sort, as Ilori's analysis consistently represents. The VCCV analysis does not favour the nasal as a tone bearing unit, just as it does not conform to the CV structure of Igala. On the other hand, whereas the VVCV structure accounts for the nasal as a tone bearing unit as expected from Ilori's perspective, it does not conform to the typical syllable pattern of Igala. Neither a VCCV nor a VVCV analysis is therefore a desirable structure by the phonotactics of Igala. Furthermore, the tone pattern of àmbó does not conform to a complex of àma and àbó. A concatenation of the two pluralizing elements as in (7 a) would have been *[àmaàbó] by regressive vowel assimilation at juncture of words in Igala. This is because the tonal product of the word final mid T1 of àma and the word initial low T2 of àbó is a mid low tone (cf. Ejeba 2016). If one however were to turn to Ilori's suggestion on the ordering of phonological processes being 'vowel deletion, tone transfer, and contraction', the concatenation of àma+àbó would yield the bizarre output *[àambòó] in (7 b) through the re-association of the tone on the deleted segments to the available tone bearing units (to the left or to the right), as represented autosegmentally:



Neither the solution in (7 a) nor (7 b) predicts what actually happens as far as the so-called complex form, **àmbó**, is concerned. This lack of suitable phonological analysis weighs heavily on Ilori's analysis of his **àmbó** form as a complex of **àma** and **àbó**.

An alternative phonological analysis to Ilori's view of $\grave{amb6}$ as a complex form made up of the two pluralizing morphemes is to view it as a dialectal variant of the $\grave{ab6}$ -plural form. In similar structures to the instance in context, Omachonu (2011:62) observes that homorganic nasal assimilation takes place in Ankpa/Afia dialect of Igala in which "there is consistent agreement in place of articulation." The examples in 8 (a – c) are instances from Omachonu (2011). Example (8 d) is the reanalysis of Ilori's $\grave{amb6}$ as $[\grave{amb6}]$, where the nasal is a non-syllabic nasal homorganic with the following voiced bilabial plosive. The examples in (8 a – d) show data from the Dekina and Ankpa variety, the variant of which are derived uniformly following the rule of homorganic nasal assimilation, according to Omachonu (2011).

	Dekina Variety	Ankpa Variety	Gloss
8.	a. ŏkâ /ŏkâ/ > one	[ŏkâ] ónkà/óNkà/ one	> [óŋkà] 'one'
	b. ὀbe/ > knife	[àbε] òmbe /àNbε/ knife	> [àmbɛ] 'knife'
	c. ùkọdę /ùkɔdɛ/ > spoon	[ùkədɛ] ùkọndẹ /ùkəNdɛ/ spoon	> [ùkòndɛ] 'spoon'
	d. àbó- /àbó/ >	[àbó] àmbó /àNbó/ PL	> [àmbó] (Plural)

The data in (8) provide a consistent analysis of the interchange in pronunciations between the Dekina and Ankpa/Afia varieties of Igala. Importantly, it provides an intuitively realistic analysis of the àbó-/àmbó- interchange. A fair judgment on the basis of this intuitively plausible solution renders Ilori's (2013) argument for complex forms of the plural morphemes untenable from the perspective of phonology.

The Morphology of Igala Plural Morphemes

Following from the assumption that Igala plural markers presents certain 'complex forms' in their concatenation, Ilori (2013:458) states as follows: "Going by the same token that àm- equals àma just as àb- equals àbó, it is logical to assume that these two free morphemes are combined in the complex noun-plural forms." Ilori (2013:459) follows up this assertion by stating that "evidence suggests it [the so-called complex of the plural markers] is an appositional compound". He concludes with the contra-inflection judgment that the plural markers are the free morphemes, àma and àbó, in compounding relationship with lexical nouns in the following statements: "if àm- and àb- are plural morphemes at all in Igala, they cannot be bound or inflectional morphemes. Rather it would be more intuitively adequate to analyze them as free morphemes. In fact, they are nominal word items in compounding relationship with any lexical noun they pluralize" Ilori (2013:461).

As Kari (2015: 26) however observes, compounds are "words that are made up of two or more free root morphemes", where a root morpheme is, according to Kari (2015:7) "that part of a word to which other word-building elements can be attached." Katamba and Stonham (2006:350) call the process of compounding the "combining of two or more roots into a single word." Compounding is thus essentially a word formation process across human languages. In a compound word, at least three distinct words are involved: each of the two words which form the compound and the new word formed through the combination. Examples 9 (a – d) illustrate clear cases of compounds in Igala. Word (A) is the first word in the combination, Word (B) is the second and Word (C) is the compound word – the third word. The ungrammatical example in (9 e) shows the impossibility of the plural markers to exist as independent words or as a compound word made up of the two plural markers as lexical items.

	Word (A)	Word (B)	Compound Word (C)
9a.	óma child 'child'	ówó hand 'hand'	óma ówó child hand 'little finger'
b.	òlà	ójó	òlà ójó
<i>3.</i>	word'word'	God 'God'	God word 'the Gospel'

c.	óma child	òlà word	óma òlà child trouble
	'child'	'trouble'	'bastard'
d.	ólù	áné	ólù áné
	sun	evening	sun evening
	'sun'	'evening'	'west'
e.	àma	àbó	*àma àbó
	PL_1	PL_2	*PLURAL PLURAL
	PLURAL	PLURAL	?

Beyond the fact in (9e) that the pluralizing elements, **àma** and **àbó**, do not exist as lexemes nor occur together as a compound, the sequence of àbó+Noun or àma+Noun do not also occur as compound lexemes. Furthermore, whereas Ilori (2013:458 - 459) specifically treats the so-called compounds in 10 (a - d) as appositional compounds, this paper presents other instances of appositional compound constructions in 10 (a' - d') and others in 11 (a - d) for comparison.

10a.	Word (A) àbó folk.of 'folk/people of'	Word (B) ìgbèlé young.lady 'lady'	Compound Word (C) *àbó ìgbèle *folk.of young.lady ?
a'.	àbó	àbó-ìgbèlé	?àbó àbó-ìgbèlé
	folk.of	young.lady	folk.of PL-young.lady
	'folk/people of'	'lady'	? 'the ladies' folks'
b.	àma	óyâ	*àma óyâ
	3PlP	wife	*they wife
	'they'	'wife'	?
b'.	àma	àma-óyâ	àma àma-óyâ
	3PlP	PL-wife	they PL-wife
	'they'	'wife'	'they the wives'
c.	àma	èluché	*àma èluché
	3PlP	farmer	*they farmer
	'they'	'farmer'	?
c'.	àma	àma-èluché	àma àma-èluché
	3PlP	PL-farmer	they PL-farmer
	'they'	'farmer'	'they the farmers'
d.	àma	ókwunọ	*àma ókwunọ
	3PlP	cow	*they cow
	'they'	'cow'	?
d'.	àma	àma-ókwunọ	àma àma-ókwunọ
	3PIP	PL-cow	they PL-cow
	'they'	'cow'	'they the cows'
11a.	Òchùmâ	ébo	Òchùmâ ébo

	Prop N 'Ochuma'	oracle 'oracle'	Prop N oracle 'Ochuma the oracle'
b.	Èjìká	àchù	Èjìká àchù
	Prop N	thistle	Prop N thistle
	'Ejika'	'thistle'	'Ejika the thistle'
c.	òmi	èjè	òmi èjè
	1SgP	leopard	I leopard
	'I'	'leopard'	'I the leopard'
d.	ùwe	énwútunwu	ùwę énwútunwu
	you	worthless.thing	you worthless thing
	'you'	'worthless thing'	'You idiot'

Grammatically, the members of an appositive compound refer to one and the same entity. According to Kari (2015:106), therefore, "the members of such compounds have the same reference".

What Ilori (2013) refers to as appositional compounds as in 10 (a-d) do not pass the criterion for appositional compounds: those under Word (A) are plural markers whereas those under Word (B) are nouns not marked for plural. On this basis, they cannot be treated as appositional compounds. However, with the introduction of a plural element on Word (B) in 10 (b' - d'), the compound words under Word (C) become grammatical as appositional compounds. Although (10 a') is an oddity in the context of appositional compounds, it is grammatical as a phrasal constituent. The examples in (10) are compared with other examples of appositional compounds in 11 (a-d).

Appositional compounding in Igala may function as a strategy for eulogy in 11 (a -c), such as **òmi èjè** 'I the leopard' in (10 c) or as an imprecative strategy for expressing an insult (cf. Sadock and Zwicky 1985), as in **ùwẹ énwútunwu** 'You idiot' in (10 d). As it is clear from the instances of phrasal expression in (10a') and apposition in 10 (b' -d'), the attachment of the Igala plural morpheme to a noun results in a grammatical form of the noun itself rather than the formation of a new word. The plural morphemes do not on their own constitute appositional elements in 10 (b' -d'). Rather, they attach to nouns which are otherwise singular to indicate plurality on the nouns which may then co-occur with plural nominals in appositive constructions. Thus, the plural morphemes are better treated as agglutinative affixes which mark plural inflection on nouns.

Katamba and Stonham (2006:224-226) and Kari (2015:17-21) identify some criteria for identifying inflectional affixes, on which basis this paper further delineates the pluralizing morphemes, **àma-** and **àbó-**, as inflectional affixes.

- a. **Obligatoriness**: inflection occurs when, at different points in a sentence, syntax imposes obligatory choices from a menu of affixes. If the right choice is not made, an ungrammatical sentence results.
- b. Lack of change in lexical category: the attachment of an inflectional affix to whatsoever unit that provides the basis for such attachment does not change the lexical category or meaning of that unit. The attachment of such affix only creates variations or tokens of the same word.
- c. **Productivity:** derivational processes tend to be more sporadic while inflectional processes tend to apply automatically across the board to forms belonging to the appropriate paradigm.

- d. **Syntactic determination/motivation:** typically, affixes serving a syntactic function are inflectional while those which are used to create new lexical items are derivational.
- e. **Closure:** When an inflectional and a derivational affix both attach to a given linguistic unit, it is often the case that the inflectional affix occurs after the derivational one, not the other way round.

The following examples in (12) are a paradigm of words in appositional compounds to illustrate the inflectional characteristics of the Igala plural markers using criteria (a - d) for identifying inflectional affixes as premises. Criterion (e), which is closure, may not apply insightfully in the description of Igala pluralizing morpheme.

Whereas the affixes are morphemes of the outer layer, there may not be instances in which there is a concatenation of inflectional and derivational affixes where closure may be observed to apply or not to apply. The first nominals in the appositional constructions in (12) are pronouns inherently distinguished for number. The second nominals in the appositional constructions are animate nouns not distinguished inherently for number, to which however the plural marker may be attached. The examples provide illustration of the criteria for identifying inflectional affixes

12a.	Word (A)	Word (B)	Appositional Compound (C)
	òmi	èluché	òmi èluché
	1SgP	farmer	1SgP farmer
	'I'	'farmer'	I the farmer'
a'.	òmi	àmẹ-èluchẹ́	*òmi àmẹ-èluché
	1SgP	PL-farmer	*1SgP PL-farmer
	'I'	'farmers'	*I farmers
b.	ùwe	èluché	ùwe èluche
	2SgP	farmer	2SgP farmer
	'you'	'farmer'	'you the farmer'
b'.	ùwę	àmẹ-èluchẹ́	*ùwe àme-èluché
	2SgP	PL-farmer	*2SgP PL-farmer
	'you'	'farmer'	*you the farmer
c.	ònwu	èluché	ònwu èluché
	3SgP	farmer	3SgP farmer
	'(s)he'	'farmer'	'(s)he the farmer'
c'.	ònwu	àmẹ-èluché	*ònwu àmẹ-èluch¢
	3SgP	PL-farmer	*3SgP àmẹ-farmer
	'(s)he'	'farmers'	*(s)he farmers
d.	àwa	èluché	*àwa èluché
	1PIP	farmer	*1PIP farmer
	'we'	'farmer'	*we the farmer
d'.	àwa	àmẹ-èluché	àwa àme-èluché
	1PIP	farmers	1PIP àme-farmer
	'we'	'farmer'	'we farmers'

e.	àmẹ	èluché	*àme èluché
	2PIP	farmer	*2PlP farmer
	'you'	'farmer'	*you the farmer
e'.	àmẹ	àmẹ-èluché	àme àme-èluché
	2PIP	farmers	2PIP PL-farmer
	'you'	'farmer'	'you farmers'
f.	àmẹ	èluché	*àmẹ èluché
	3PIP	farmer	*3PIP farmer
	'you'	'farmer'	*you the farmer
f'.	àmẹ	àme-èluché	àme àme-èluché
	3PIP	PL-farmer	3PIP PL-farmer
	'you'	'farmers'	'you farmers'

Obligatoriness is one of the features of inflectional affixes that are demonstrated particularly in data (12). In examples (d' - f'), there is the obligatory choice of the plural affix, **àma-**, without which the form of the appositional compound is ungrammatical as shown in (d - f). Conversely, the context of appositional compound between the singular pronouns in (a - d) legislates that the plural markers cannot be selected. The choice of the plural marker in (a' - c') therefore causes ungrammaticality. The syntactic context of the plural pronouns therefore includes the affixation of the plural marker on the following nominal just as the syntactic context of the singular pronouns excludes the affixation of the same morpheme. Since the plural affixes in Igala serve such a syntactic function, they meet the criterion of syntactic determination or motivation for inflectional affixes.

Also, in consonance with an inflectional analysis, the attachment of the prefix, **àma**to the second noun in 12 (d'-f') does not change the lexical category of the noun to which it attaches. Therefore, **èluché** 'farmer' in 12 (d-f) and **àme-èluché** 'farmers' in 12 (d'-f') both constitute a single lexeme, **èluché** 'farmer', modified for the grammatical purpose of plural formation in the latter set of examples by the addition of the plural affix.

As it is the case with inflectional affixes across human languages, the plural affixes **àma-** and **àbó-**, and particularly the former, are highly productive across the inflectional paradigm, combining with virtually every [+ANIMATE] noun in plural formation. This point is well illustrated in example (12) as well as (1) - (3), (5) and (10) of this paper.

The àma-/àbó- Igala inflectional affixes are agglutinative because there is no significant change in these morphemes which are strung to the nouns they modify. Contrary to Ilori (2013), therefore, this paper asserts on the basis of their morphology that àma- and àbó- are plural inflectional affixes and do not constitute compounding relationship with the nouns they modify. As illustrated in (12) and elsewhere in this paper, however, when the plural markers occur in appositional compounds, they do not occur as one of the two nominals that constitute the compound. Rather, they occur to mark a noun for plural as typical of inflectional affixes. Section 2.4 of this paper shall further justify the affixal status of the plural elements from the perspective of syntax, showing that the clearly identifiable plural morphemes are indeed strung together with the nouns they modify. The syntactic operation affecting the combination of the plural marker and nouns is characteristic of inflectional affix-stem relationship rather than word-word (compound) relationship. First of all however, section 2.3 dealing with semantics will prove that the plural affixes àma-

and **àbó-** are referentially empty and functionally separate from their homophonous counterparts,**àma** 'they' and **àbó** 'folks'.

The Semantics of Igala Plural Morphemes

From the perspective of semantics, Ilori (2013) holds that the uses of the plural morphemes àma- and àbó- are in all contexts the same in meaning as the independent nominals àma 'they' and àbó 'folk/people'. Contrary to Omachonu (2008) and Ejeba (2012) then, Ilori's analysis suggests that the plural elements are not merely homophonous to the independent nominal forms but congruent with these in all grammatical contexts. Ilori (2013:459) draws this conclusion in the following statement: "Since àm- shares meaning and form with àma, the logical conclusion that should be drawn is that the two are one and the same morpheme; ditto àb- and àbó for similar reasons."

If following Ilori (2013) the plural morpheme **àma-** were analyzed as the third person plural pronoun instead of the plural affix in (13 a) and (14 a), then there should be no grammatical explanation for the ungrammaticality of the forms in 13 (b - c). This is because the ungrammatical structures in (13 b - c) constitute a system of paradigmatic choices for number with the third person plural pronoun as only an item from the possible choices (others being first and second person plural pronouns). As the data shows however, only the so-called third person plural pronoun is curiously the grammatical option as a plural marker in (13 a) or (14 a). However, in the context of appositional compounds in 13 (a' - c'), the entire paradigm of plural pronouns is grammatical as they occur with a noun inflected by the plural marker, **àma-**. However, in the context of appositional compounds where the paradigm of plural pronouns occurs with a noun not inflected by the plural marker, as 14 (a' - c') the entire construction of compounds are ungrammatical. This is because the plural features of the nouns fail to be specified without the plural morpheme, **àma-**. The presence of the first, second and third person plural pronouns fail to specify the grammatical number feature on their own in appositional contexts, as in (14).

Grammatical Number	Contexts

13. a. àma-èluché PL-farmer 'farmer'

- b. *àwa-èluché *PL-farmer
- c. *àmẹ-èluché *PL-farmer

Grammatical Number Contexts

14. a. àma-èluché
PL-farmer
'farmers'
b. *àwa-èluché
*PL-farmer

Context of Appositional Compounds

- a'. àma àma-èluché they PL-farmer 'the farming folks'
- b'. àwa àma-èluché we PL-farmer 'we farming folks'
- c'. àme àma-èluché PL.you PL-farmer 'you farming folks'

Context of Appositional Compounds

- a'. *àma èluché *they farmer
- b'. *àwa èluché *we farmer
 ?

```
c. *àme-èluché
                                                 c'. *àme èluché
          *PL-farmer
                                                    *PL.you farmer
        Grammatical Number Contexts
                                                 Context of Appositional Compounds
15.
        a. *ònwu-èluché
                                                 a'. ònwu èluché
          *PL-farmer
                                                    (s)he farmer
                                                    's(he) the farmer'
       b. *òmi-èluché
                                                 b'. òmi èluché
         *PL-farmer
                                                   I farmer
                                                    'I the farmer'
        c. *ùwe-èluché
                                                 c'. ùwe
                                                           èluché
          *you-farmer
                                                    SG. you farmer
                                                    'you the farmer'
```

Whereas in (13 a) and (14 a) the form **àma-èluché** 'farmers' is grammatical in the context of plural marking, no other choice in the plural paradigm in 13 (b - c) and 14 (b c) as well as in the singular paradigm in 15 (a - c) occurs grammatically in the context of plural formation. In the context of appositional compounds, the plural forms, which are *àma èluché? 'they the farming folks', *àme èluché? 'you the farming folks' and *àwa **èluché** ?'we the farming folks' in 14 (a' - c'), are all ungrammatical from the perspective of semantics. In contrast, the plural forms, which are **àma àma-èluché** 'the farming folks', àme àma-èluché 'you farming folks' and àwa àma-èluché 'we farming folks', as in 13 (a' -c') and the singular forms, which are **òmi èluch** \acute{e} 'I the farmer', **ùwe èluch** \acute{e} 'you the farmer' and onwu eluché '(she) the farmer', are appropriate in the context of appositional compounds. It is clear even in the context of appositional compounds that the plural pronouns are consistently in the plural form with the agglutinating affix, àma- whereas the singular are without the affix in the same context. The àma- form is therefore not a referential form for an antecedent. It is referentially empty and therefore cannot be said to have semantic components of person and number like the pronominal element. This observation is a clear delineation of the form ama- as a plural marker devoid of the semantics components of the third person plural pronoun, àma. This observation sets àmaout as a non-referential form in the grammar of Igala.

Just as it is the case in the **àma-** form, the **àbó-** plural marker is a referentially empty form, a grammatical marker of plurality which is simply homophonous with the lexical form **àbó** 'folks/people of'. The affix-stem form **àbó-ímoto** 'children' is thus the form for such plural nouns. Whereas **àbó àbó-ímoto** 'the children's folks' would be the form in appositional context, ***àbó ímoto** as an appositional compound would be ungrammatical. In the appositional context, the first **àbó** form is 'folks', which is a noun whereas the second is the plural marker, in the exact position specified for plural formation in Igala.

The Syntax of Igala Plural Morphemes

The last evidence in support of an affixal analysis of the **àma-/àbó-** plural forms in Igala comes from the syntactic process of relativization. The relativizer element in Igala is a vocalically underspecified low-toned clitic $k\dot{V}$ that leans on the initial vowel element of the subject NP or subject clitic that follows it for phonetic realization. Igala is an instance of languages in which the relative marker does not have independent case marking. As

Luraghi and Parodi (2008:163) observe, for languages in which the relative marker does not have independent case marking, "the relative clause contains a resumptive pronoun (or resumption)." In the Igala example, a pronominal form co-referential with the relativized constituent occurs within the relative clause, indicating the function of the relativized constituent within the relative clause, as the examples in (16) show. Resumption in Igala relative clauses provides a proper syntactic context in which to observe the functional properties of the plural markers analyzed as lexical items, $\frac{\lambda ma}{\hbar b}$ which can enter into a compounding relationship as in (16 a – b) or as affixal elements, $\frac{\lambda ma}{\hbar b}$ in inflectional context as in 16 ($a^I - b^I$).

16a.	Morpheme/Word (A) àbó folks 'folks'	Word (B) ìgbèlé girl 'lady'	Relativized Form (C) *àbó _i kù=mà _i che ìgbèlé _i folks CR=3PISCL BE lady *Folks who are young lady
a ^I	àbó folks 'folks'	àbó-ìgbèlé PL-girl 'lady'	àbó _i kù=mà _i che àbó-ìgbèlé _i folks CR=3PISCL BE PL-lady 'folks who are young ladies'
	b. àma	ókwunọ	*àma _i kù=mà _i che ókwunọ _i
	3PIP	cow	*3PIP CR=3PISCL BE cow
	they	'cow'	*They who are cow
	b ^I . àma	àma-ókwunọ	àma _i kù=mà _i che àma-ókwunọ _i
	3PIP	PL-cow 3PIP CF	R=3PISCL BE PL-cow
	they	'cow'	'They who are cows'

The overt trace elements in the relativized constructions in (16) show the agreement in number features between the nominals and the resumptive pronouns. The plural markers are analyzed as lexical forms, $\grave{ama}/\grave{ab6}$ in a compounding relationship in 16 (a – b) and as pluralizing affixes, $\grave{ama}-\grave{ab6}$ in 16 (a^I – b^I). As lexical forms in 16 (a – b), the plural markers are in appositional relationship with the following nominals. Apposition presupposes that the two nominals in the compounding relationship possess identical features, hence the two appositive nominals, $\grave{ab6}$ 'folks' and $\grave{ab6}$ 'young lady' in (16 a) and \grave{ama} 'they' and \acute{okwuno} 'cow', may be co-indexed with overt trace elements in the context of relativization.

The treatment of the plural marker as the initial appositive nominal in 16 (a – b) however leaves the second nominals, \mathbf{igb} equality of the appropriate grammatical number features of plurality spelt out on the resumptive trace elements in relativized constructions. This lack of specified features on the second nominal is the result of the ungrammaticality in 16 (a – b). In contrast, however, in $16(\mathbf{a}^{\mathrm{I}} - \mathbf{b}^{\mathrm{I}})$ the pluralizing morphemes, \mathbf{ama} - $\mathbf{am$

appropriate grammatical number features of plurality spelt out on the resumptive trace elements in relativized constructions.

There is a morphosyntactic relationship between the $\grave{a}ma-/\grave{a}b\acute{o}$ -elements and the following nouns in $16(a^I-b^I)$, as the syntactic operation affecting the combination of the plural marker and nouns is characteristic of inflectional affix-stem relationship rather than word-word (compound) relationship. The sequence of the inflectional affix and the noun stem therefore enter into a chain with the first nominal and the resumptive pronoun in the relativized structures in $16(a^I-b^I)$, where the appropriate plural features are duly specified.

Evidence from the syntactic behaviour of the plural markers, àma- and àbó-, particularly in the context of relativization of appositive compounds, reveals that the plural markers are not lexical elements but affixes attached to noun stems for the specification of plurality on nouns which have their plural features otherwise unspecified. The non-specification of the plural features on such nouns may lead to ungrammaticality in certain constructions. The obligatory operation affecting the combination of the plural marker and nouns is characteristic of inflectional affix-stem combination rather than the relationship of compounding of two lexical items.

Summary and Conclusion

This paper analyzes the plural morphemes as àma- and àbó- VCV forms from a phonological perspective, in conformity to the typical syllable patterns of Igala. The paper implicates dialectal phonological variation rather than any so-called 'complex noun-plural forms' in the àbó-/àmbó- interchange. The tonal evidence also helps to buttress the establishment of the VCV plural morphemes. From the perspective of morphology, this study treats the plural morphemes as agglutinative affixes which mark plural inflection, since there are no significant changes in the meaning of the nouns to which these morphemes are strung. They produce mere grammatical forms of the same words and this is highly productive as typical of inflectional paradigms. Also as typical of inflectional forms, affixation is syntactically determined in Igala plural formation. From the perspective of semantics, the plural markers are referentially empty as they have no appropriate antecedent. This paper delineates the plural morphemes as plural markers devoid of the semantic contents usually associated with the nominal elements with which they are homophonous.

The specification of the appropriate nominal features of lexical elements on the overt trace elements in relativized structures justifies the affixal status of the plural elements from the perspective of syntax, as the syntactic operation affecting the combination of the plural marker and nouns is characteristic of inflectional affix-stem relationship rather than the relationship of compounding involving two separate lexical items. The literature on Igala plural formation contains a more recent contention that the Igala plural marker is not inflectional. Contrary to the hasty assertion objecting to an inflectional/affixal analysis as in earlier literature, the present paper that is based on ample facts from the object language established that the Igala plural markers are indeed inflectional/affixal. This analysis is description-oriented, having derived from the discussion of the phonology, morphology, semantics and syntax of Igala plural markers. It is therefore a safe conclusion that the Igala plural affixes are **àma-** and **àbó-**, which attach to noun stems for plural formation.

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