Overview of Ibibio Adjectives

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1. Introduction

This paper discusses some relevant characteristics of adjectives and adjectival agreement in Ibibio, a Lower Cross Niger-Congo language spoken in Nigeria. The existence of a closed class of adjectives in African languages is a point of controversy in the literature. While some authors suggest the existence of a small class of adjectives (Welmers, 1973), other authors have shown that there are African languages with an open adjective class (e.g., Mbum, Tikar, Tigrigna), and among those languages where the class is closed, the number of items ranges from 2 (e.g., Kemantney or Keley) to more than 100 (e.g., Dagbani) (e.g., Bohnhoff & Kadia, 1991; Delplanque, 1997; Houis, 1977; Olawski, 2004; Segerer, 2008).

One of the main sources of debate comes from the fact that there is not a universal definition of "adjectives", so it is difficult to determine how many adjectives a language has. Dixon (2004) proposed a definition of adjectives that includes both grammatical as well as semantic criteria. However, most modern scholars prefer using a merely morphosyntactic one, even though the actual criteria differ from one author to another.

Essien (1990) described adjectives in Ibibio, the language studied in the current paper, as being very similar to verbs in syntactic behavior, as both manifest concord with the subject of the sentence, as in (1) and (2), and they can be inflected for tense, as in (3) and (4) below:

- (1) ànyé á-yàiyá (ùyài)¹²
 3SG 3SG.PRS-pretty (beauty)
 'She is pretty.'
- (2) à-mé á-yàiyá (ùyài) 2SG-PRS 3SG.PRS-pretty (beauty) 'You are pretty.'
- (3) ànyé á-mă á-sè á-yàlyá (ùyàl)
 3SG 3SG-PST 3SG-ASPECT 3SG-pretty (beauty)
 'She used to be pretty.'

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¹ Examples herein are rendered in the popular Ibibio orthography. Ibibio is a tonal language, but tone is not marked orthographically. The tone markers in this paper are as follows: $\dot{a} = \text{high}$, a = mid, $\dot{a} = \text{low}$, $\hat{a} = \text{falling}$, and $\check{a} = \text{rising}$. The glosses used in this paper are as follows: $1=1^{\text{st}}$ person, $2=2^{\text{nd}}$ person, $3=3^{\text{rd}}$ person, SG=singular, PL=plural, OBJ=object, NMLZ=nominalizer, CONJ=conjunction, PST=past, PRS=present, FUT=future, NEG=negative, COMP=complementizer.

² All the information reported in this paper was elicited from Mfon Udoinyang as part of a field methods class at KU in the spring of 2014.

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(4) ànyé á-yà á-yàiyá (ùyài)
3SG 3SG-FUT 3SG-pretty (beauty)
'She will be pretty.'

However, he also pointed out that verbs and adjectives differ in that only adjectives can be used as nominal modifiers, as in (5), in which case they agree with the noun they modify only in number, as shown in (6).

- (5) ádúfá àfòñ new cloth 'New cloth.'
- (6) ń-dúfá àfòñ
 PL- new cloth
 'New clothes.'

Kaufman (1969) pointed out in her dissertation that Ibibio adjectives have some freedom in the order in which they occur (p. 192), as we can see exemplified in (7) and (8), even though individual differences may play a role in the preference of one combination over the other. In any case, her arguments suggest that adjective-noun constructions are limited in Ibibio due to the small number of adjectives in the language.

- (7) ádúfá [íném ñwèd] new interesting book 'An interesting book which is new.'
- (8) íném [ádúfá ňwèd] interesting new book 'A new book which is interesting.'

The current study reviews the claims just outlined regarding Ibibio adjectives, and discusses each point in more detail. The paper is divided into two main sections. Section 2 provides a brief background of the Ibibio language. Section 3 discusses some of the main characteristics of Ibibio adjectives, including tone sandhi, agreement, and word order limitations. The paper ends with a conclusion, which highlights the main points discussed in the paper.

2. Ibibio background

Ibibio belongs to the Lower Cross language group of the East Benue-Congo branch in the Niger-Congo language phylum. Ibibio is spoken in the southern part of Nigeria (see Figure 1) by 1.75-2 million speakers, and it is the official language of Akwa Ibom State in Nigeria.

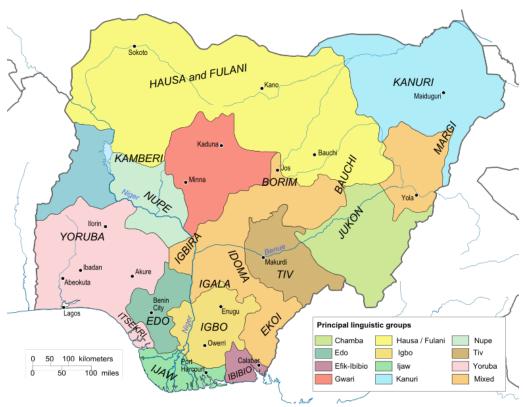


Figure 1: Linguistic Map of Nigeria.³

2.1. Syntax

Ibibio is predominantly a subject-verb-object (SVO) language, which has two options to realize the arguments: overt full pronouns or r-expressions and argument markers. This is the word order of ordinary sentences in which the DPs are present, as in ((9)a). However, it also allows some of the DPs to be dropped, in which case the SOV word order surfaces, and the arguments are marked by means of argument markers, as in (0b), as illustrated below:

S V O

(9) a. ámi m-mà á-kòp ìkwó
1SG 1SG-PAST 1SG-hear song
'I heard a song.'

S O V
b. à-mé ḿ-má
2SG.SUBJ-PRS 1SG.OBJ-like
'You like/love me.'

³ Map by Hel-hama (CC BY-SA 3.0); http://commons.wikimedia.org/wiki/File:Nigeria_linguistical_map_1979.svg.

2.1.1. Agreement

Ibibio shows agreement between different elements of the sentence, as shown in (10 a-b). In this example, there is agreement between the subject, Ekpe and the marker \acute{a} - that precedes the tense marker, but also between the pronoun *mien* and the 1SG object marker \acute{m} -. This agreement does not seem to be restricted to pronominals, but it is also triggered by full DPs. However, a more exhaustive analysis on this point would be required.

- (10) a. **Ekpe á-**mà **á-**ḿ-má **mien**Ekpe 3SG.SUBJ-PRS 3SG.SUBJ-1SG.OBJ-like 1SG.OBJ
 'Ekpe liked me.'
 - b. àmì ḿ-mé á-má Ekpe 1sg.sub 1sg.subj-prs 3sg.obj-like Ekpe 'I like Ekpe.'

One problem arises from the existence of a process of vowel hiatus resolution in the language, as a given personal marker may be representing two different persons by means of the segment and the tone used. It is known that some languages try to avoid dissimilar vowel sequences (arising as a result of morpheme concatenation), by means of diphthong formation, consonant epenthesis, vowel deletion, glide formation, and vowel height coalescence (Ngunga, 2000; Pulleyblank, 2003; McCarthy & Prince, 2004). This process is known as hiatus resolution. Table 1 represents the subject pronouns, and personal markers in Ibibio.

Subject Pronoun	Personal marker	Gloss
	(agreement)	
àmì	Nasal ⁴	1st person singular
àfò	à	2nd person singular
òfò		
ènyé	á	3rd person singular ⁵
ànyé		
'nnyìn	í	1st person plural
'nnyèn		
'ndùfò	è	2nd person plural
mbùfò		
òmmô	é	3rd person plural

Table 1: Subject pronouns and personal markers in Ibibio.

⁴ It is not clear from the evidence analyzed so far what the personal marker representing the first person singular may be. Two options may exist: (1) that the personal marker has two allomorphs (/m/ and /a/), or that it is representation by means of compensatory lengthening. The language only has one morpheme, /m/, but in certain contexts, the nasal is dropped and the previous vowel /a/ is lengthened and adopts the high tone.

⁵ No evidence has been attested of whether this pronoun could also be used to translate "it".

Table 2 represents the object pronouns in Ibibio.

Object	Personal	Gloss
Pronoun	marker	
	(agreement)	
mìén	High tone	1st person singular
fién	à	2nd person singular
ènyé	á	3rd person singular
ànyé		
înyén	í	1st person plural
'nnyèn		
'ndùfò	è	2nd person plural
mbùfo		
òmmộ	é	3rd person plural

Table 2: Object pronouns in Ibibio.

Ibibio shows hiatus resolution, and it is particularly problematic, because many of the subject/object markers are realized as vowels and, in many cases, only one argument surfaces before the verb:

- á-í-dìòñó **Underlying Structure** (11) a. Ekpe (nnyin) Ekpe 3SG.SUBJ-1PL.OBJ-know 1PL 'Ekpe knows us.' b. Ekpe í-dìòñó **Object Marker** (nnyin) Ekpe 1PL.OBJ-know 1_{PL} 'Ekpe knows us.' c. Ekpe á-dìòñó (nnyin) **Subject Marker** Ekpe 3sg.subj-know 1_{PL} 'Ekpe knows us.' d. Ekpe *á-í-dìòñó (nnyin) **Subject and Object Marker** Ekpe 3SG.SUBJ-1PL.OBJ-know 1PL
 - 'Ekpe knows us.'

The examples in (11) show how Ibibio requires an argument marker to be prefixed to the verb, but that only one can surface when both happen to be vowels. Either the object marker, as in ((11)b) or the subject marker ((11)c) are acceptable, but not both (as in ((11)d)).

3. Adjectives

3.1. Defining adjectives

As described in the introduction, there is not a universal definition of "adjectives". This makes it difficult to determine what should be considered to be an adjective. The current study includes all elements that Ibibio employs to qualify other nouns. This classification includes nouns that work as adjectives, and inflected verbs that have been converted into adjectives so as to qualify other elements in the sentence. It was particularly difficult to determine whether a real class of adjectives exists in the language. However, this discrepancy and difficulty is not limited to Ibibio. It has been attested in other African languages as, for example, Madugu (1976) pointed out for Yoruba (a Niger-Congo language spoken in Nigeria and Benin), that both verbs and adjectives are merged or in the process of merging.

When undergoing adjectivization, Ibibio verbs attach a prefix, which indicates the new category of the word. This prefix may be a [nasal] (which would undergo place assimilation to the following consonant) or a [vowel] (which evidence seems to suggest to be /a/), as shown in Table 3.

Verb	Derived Adjective	English Gloss
sọ́ñ	á-sọ́ñ	'to be old' – 'old'
dàt	ń-dàt	'to be ripe' – 'red'
fíá	à-fiá	'to become white' – 'white'
fón	m̀-fón	'to be good' – 'good, elegant'

Table 3: Some examples of verbs and their derived adjectives.

With some exceptions in the language, such as 'old', Ibibio shows tonal polarity. Tonal polarity is a markedness constraint, which claims that roots and suffixes have opposite tones (Kenstowicz et al. 1988). In all the examples attested so far, the prefix tone seems to be the tonal opposite of the tone that first appears on the verb.

3.2. Types of adjectives

Adjectives in Ibibio can be attributive, appearing before the noun, as shown in (12), predicative, appearing after the noun they modify, as in (13), and postpositive adjectives, as in (14).

- (12) ádúfá nwèd new book 'a new book'
- (13) ñwèd ádó/ódó á-dò á-dúfá book that 3sG-be 3sG-new 'That book is new.'
- (14) ñkpó ítíé étó sitting place wood 'A wooden chair.' Literally 'A chair of wood'

Notice that predicative adjectives do not occur immediately after the noun. Instead, they follow a verb. However, in those instances in which the adjective is derived from a verb, as for example $\dot{a}fi\dot{a}$ ('white'), which derives from $fi\dot{a}$ ('to become white'), the predicative adjective immediately follows the noun it modifies. Example (15(a,b)) shows this pattern as well as the possibility of the adjective being reduplicated. When reduplication occurs, it is to be interpreted as transmitting emphasis.

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(15) a. éwá àfiá (áfiá)
dog white
'The dog is white.'
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b. *àfiá (áfiá) éwáwhite dogIntended: 'The dog is white.'
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When two or more adjectives are used to modify a given noun, they work as cumulative adjectives in Ibibio. These adjectives do not separately modify the noun that follows. Instead, the adjective right before the noun pairs with the noun as a unit, and the adjective before that unit modifies that. This pattern was claimed to exist based on the semantic interpretations that the different sentences elicited had. Examples (16), (17), (18), (19) and (20) show this pattern.

- (16) ádúfá [íném mwed] new interesting book 'A new, interesting book.'
- (17) íném [ádúfá nwed] interesting new book 'An interesting, new book.'
- (18) *íném [nwèd ádúfá] interesting book new 'An interesting, new book.'
- (19)*ádúfá [ňwèd íném] new book interesting 'A new, interesting book.'
- (20) *nwed [ádúfá íném]book new interesting'A book which is new and interesting.'

Notice that, even though the phrases in the previous examples are translated into English as an ordering of coordinate adjectives modifying the noun, in Ibibio the first adjective always modifies the adjective-noun combination. The interpretation of (19) is, then, "an interesting book which is new".

3.3. Tone sandhi

Ibibio has the level tones low (L), and high (H), together with rising (LH) and falling (HL) tones. Both simple (L, H) and complex (LH, HL) tones are found in citation forms, as in (21), (22), (23), and (24) respectively.

(21) dèp Low tone (L) 'To rain'

(22) dép High tone (H) 'To buy'

(23) mfrĕ Rising (LH) 'Brain'

(24) ídêm **Falling (HL)** 'Masquerade'

When different elements are combined into larger units, the forms described above show tonal changes. Comparing with the citation form marked in (25) and (26), compounds as in (27) and (28) or adjective-noun combinations as in (29) and (30) show this tonal change. Note that the vowel $\acute{\bf e}$ appears in (27), when the citation form was either $\grave{\bf o}$ or $\grave{\bf a}$ (as in 25). This vowel is indicating an example of vowel harmony in the language.

- (25) **ộ**fòñ / **à**fòñ 'cloth'
- (26) èkà 'mother'
- (27) àkím **é**fòñ 'tailor'
- (28) èfîk èkà 'mother's hernia'
- (29) ádúfá **á**fòñ new cloth 'new cloth'
- (30) ádúfá ékà new mother 'new mother'

The pattern seems to be consistent, in that it is the second element of the phrase that undergoes a tonal change, and it is always the tone of the first syllable that is lowered. Examples

(31), (32), and (33) provide further evidence of this tonal change. Examples (34) and (35) provide further evidence of this

- (31) àfiá (àfiá) àfòñ white cloth 'white cloth'
- (32) ùyàiyá àfòñ beautiful cloth 'beautiful cloth'
- (33) ákân àfòñ old cloth 'old cloth'
- (34) ímá 'eye'
- (35) ényén ímà loving eyes 'loving eyes'

As described above, Ibibio allows both attributive and postpositive adjective. In certain cases, the same adjective may work as either an attributive or a postpositive adjective. However, sometimes there is a change in meaning depending on whether the adjectives appear before or after the noun. This double ordering may be limited to adjectival phrases with a "negative" meaning, as those in (36) and (37). The examples (34) and (35) represent the citation forms of the nouns involved in this adjective-noun combinations.

- (36) ìnó 'thief'
- (37) **à**kák 'money'
- (38) ìnó ákák

 thief money

 'thief of money'
- (39) àkák ínó Noun + Noun money thief 'money that was stolen'

Notice that in examples (36) and (37), the tonal change that both forms undergo is different than the one we saw in the previous examples. While in the combination of two forms to create a compound or an adjectival phrase, the tone of the first syllable is always low (as in (26)-(35)), in

this case we observe that it is high. It seems to be the negative semantics of the adjectival that seems to drive this tonal pattern. However, this aspect should be analyzed in more detail in future studies, as no other instance of a negative combination of nouns was elicited.

3.4. Agreement

As described in the introduction, Essien (1990) described adjectives in Ibibio as being very similar to verbs in syntactic behavior, as both manifest concord with the subject of the sentence. The paradigm in (40) to (44) represents this pattern of agreement. Notice that in (41), (42), (43), (44), and (45), the adjective agrees with the following noun 'beauty'. This explains why it triggers third person singular, instead of (or in addition to) the person marked as the subject. The present of one or the two possible agreements depends on the speakers desire, as any option is perfectly grammatical an understandable. However, the speaker preferred in these cases the agreement with the following noun.

- (40) mé-mê á-yàlyà (ùyàl) 1SG-PRS 3SG-pretty (beauty) 'I am pretty.'
- (41) à-mé á-yàiyà (ùyài) 2SG-PRS 3SG-pretty (beauty) 'You are pretty.'
- (42) (ànyé) á-yàiyá (ùyài) 3SG-PRS 3SG-pretty (beauty) 'He/she is pretty/handsome.'
- (43) i-mé í-yàiyà (ùyài)

 1PL-PRS 1PL/3SG-pretty (beauty)

 'We are pretty/handsome.'
- (44) è-mé é-yàiyà (ùyài)

 2PL-PRS 2PL/3SG-pretty (beauty)

 'You (pl) are pretty/handsome.'
- (45) (òmmô) é-yàìyá (ùyàì) 3PL-PRS 3SG/PL-pretty (beauty) 'They are pretty/handsome.'

Essien (1990) also pointed out that adjectives do not only perform traditional modifying functions but also exhibit certain syntactic behaviors like verbs. Such attributes include the adjectives ability to take inflectional properties which mark categories such as person, negation, tense and aspectual interpretation of sentences. The paradigm that is presented in (46) to (51) for the past tense, and (54) to (59) for the future tense, show some of these patterns. Recall that the agreement normally is triggered by the last noun ('beauty').

- (46) mma á-sè nma á-sè (ùyài)⁶
 1SG-PAST 3SG-ASPECT 1SG-pretty (beauty)
 'I used to be pretty.'
- (47) à-mà á-sè á-yàiyá (ùyài)
 2SG-PAST 2SG/3SG-ASPECT 2SG/3SG-pretty (beauty)
 'You used to be pretty.'
- (48) á-mă á-sè á-yàlyá (ùyàl)
 3SG-PAST 3SG-ASPECT 3SG-pretty (beauty)
 'He/she used to be pretty/handsome.'
- (49) ì-mà í-sè í-yàiyá (ùyài)

 1PL-past 1PL/3SG-ASPECT 1PL/3SG-pretty (beauty)

 'We used to be pretty/handsome.'
- (50) è-mà é-sè é-yàiyà (ùyài)

 2PL-PAST 2PL/3SG-ASPECT 2PL/3SG-pretty (beauty)

 'You (pl) are pretty/handsome.'
- (51) é-mà é-sè é-yàlyá (ùyàl)
 3SG/PL-past 3SG/PL-ASPECT 3SG/PL-pretty (beauty)
 'They used to be pretty/handsome.'

Notice that in some of the examples before, there is agreement in the third person singular (e.g., $-\acute{a}$ – in \acute{a} -se in example (47)). After comparing the sentences with the structure in (52) and (53), we hypothesized that this third person marker may agree with \grave{u} y \grave{a} i (beauty), which is optional and preferable, not present in the sentence.

- (52) mma á-sè mféhé itók 1SG-PAST 3SG-ASPECT 1SG-run (race) 'I used to run a race'
- (53) m-mă n-sè m-féhé ìtok 1SG-PAST 1SG-ASPECT 1SG-run (race) 'I used to run a race'
- (54) ń-yá á-yàìyá (ùyàì)
 1SG-FUTURE 3SG-pretty (beauty)
 'I will be pretty.'

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⁶ It is the tone what marks the first person in the two nasals used to represent the first person singular.

⁷ It is not clear at this point what the word 'sè' means in these cases.

- (55) à-yá á-yàiyá (ùyài)
 2SG-FUTURE 2SG/3SG-pretty (beauty)
 'You will be pretty.'
- (56) á-yá á-yàìyá (ùyàì)
 3SG-FUTURE 3SG-pretty (beauty)
 'He/she will be pretty/handsome.'
- (57) ì-yá í-yàìyá (ùyàì) 1PL-FUTURE 1PL-pretty (beauty) 'We will be pretty/handsome.'
- (58) è- yá é-yàiyà (ùyài)

 2PL-FUTURE 2PL/3SG-pretty (beauty)

 'You (pl) are pretty/handsome.'
- (59) é-yá é-yàìyá (ùyàì)
 3SG/PL-FUTURE 3SG/PL-pretty (beauty)
 'They will be pretty/handsome.'

Essien (1990) also pointed out that verbs and adjectives differ in that only adjectives can be used as nominal modifiers. In this case, Ibibio adjectives are inflected to mark plural, while the nouns they modify are uninflected for number. Three different plural markers are attested in Ibibio. The plural morpheme {n}⁸, working as a prefix, disagrees with Essien (1990:91) that in Ibibio, "the plural morpheme is not affixal". The pattern is exemplified in example (61). It is not clear at this point, whether the m is (60) is also representing plurality or just working as a nominalizer, and the vowel lengthening in the adjective is the one carrying the plural meaning.

- (60) m-fóón étó NMLZ-be.pretty.PL tree-SG 'beautiful trees'
- (61) ń-tì-òwò
 PL-good-man
 'good men'

Given that number agreement, in these cases, only surfaces as a prefix of the adjective, we can assume that it originates higher than the noun phrase itself in the tree structure (otherwise it would appear as a suffix), as shown in (62).

(62) *tì-òwò-ń good-man-PL 'good men'

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⁸ Represented between brackets to show that this would be the underlying form that may undergo place assimilation as described earlier.

Figure 2 provides a representation of adjectival agreement in Ibibio, using (61) as an illustration of such.

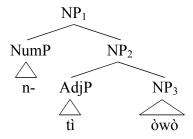


Figure 2: Representation of agreement in Ibibio adjectives.

Even though not enough evidence has been found to refute this finding, we can draw the conclusion that in Ibibio, inflectional morphemes (which may undergo phonological changes, such as nasal place assimilation) are the first element in the word structure. This finding contrasts with English, in which the inflectional morpheme is always the last element in the word structure (e.g., *directions*, where *-ion* is a derivational suffix, *-s* is an inflectional suffix, and *direct* is the base or root). This would be in line with Essien (1990:74), who remarks that:

"In Ibibio, inflectional morphemes are characteristically prefixes, while derivational morphemes are typically suffixes."

Some plural nouns in Ibibio are indicated syntactically – through the use of the plural marker $\grave{m}m\grave{e}$, as shown in the phrase in (63). This plural marker also surfaces in adjective-noun combinations (as in (64), (65), and (66)), in particular in cases in which the sentence would otherwise be ambiguous (given that the adjective is not marked with the plural prefix, as in (66)). Another possibility consistent with the word order in Ibibio would be that the plural marker is marking (attaching) to the adjective in these cases. Further evidence should be elicited in order to provide further support for one or the other hypothesis.

- (63) mmè àfòñ
 PL.MARKER cloth
 'Clothes'
- (64) mm-ufá áfòñ
 PL.MARKER-new cloth
 Connected speech: 'New clothes'
- (65) mmè úyàì úbóíkpà
 PL-MARKER pretty girl
 'Pretty girls'

Ibibio has a rule by means of which verbs which have CVC structure make the plural by removing the last consonant and inserting a vowel instead. Evidence elicited so far seems to

indicate that the inserted vowel is /ì/. However, more data would be required in order to provide a more accurate description of this inflection. Table 4 shows some examples of this pattern:

Verb in Singular	Verb in Plural	English Gloss
dìòk	dìòì	'to be bad'
wàk	wàì	'to tear'

Table 4: Example of verbs that undergo a root change to form the plural.

When these verbs are used as adjectives, the same pattern emerges, as shown in (66) and (67)

- (66) ìdíók ńkpò ìtié bad sitting place 'Bad chair'
- (67) n'-díóí nkpò itié

 PL-bad sitting place
 'Bad chairs'

The last form of marking the plural in adjectives corresponds to a lengthening of the vowel in the adjective. This form of marking the plural is limited to adjectives that have been derived from verbs (as shown in examples (68) to (71)). Notice that, in this case, the agreement seems to be optional (as shown in (69) and (70)), as the subject marker already provides the plural meaning.

- (68) (ènyé) á-sộñ 3SG-SUBJ 3SG-be old 'He/she is old.'
- (69) (òmmô) é-sóñ 3PL-SUBJ 3PL-be old 'They are old.'
- (70) (òmmô) é-sóóñ 3PL-SUBJ 3PL-be old 'They are old.'
- (71) (mmè) m-fóón íbàn PL-MARKER ADJ-be pretty girl 'Beautiful girls'

Examples in (69) and (70) also show another characteristic of Ibibio's adjectives. Agreement in adjectives has also been observed between the predicate adjective and its subject, as observed in (69), while a plural adjective with vowel lengthening following a singular noun is ungrammatical, as exemplified in (72).

(72) (ènyé) á-*sọọñ 3SG-SUBJ 3SG-be old '*He/she are old.'

Even though number agreement in adjectives has been elicitated in Ibibio, no other forms of agreement have been reported. For example, no gender agreement (neither grammatical nor of person) has been attested (as shown in (73), (74), and (75)). This is consistent with the fact that overt pronouns in Ibibio are genderless (e.g., the pronoun *ènyé* in (72) could be interpreted either as *he* or *she* depending on the context). No evidence for other types of adjectival agreement have reported during elicitations (e.g., case agreement).

- (73) (ènyé) á-sòñ 3sg-subj 3sg-subj-be old 'He/she is old.'
- (74) ákán édèn old man 'old man'
- (75) ákán ńwán old woman 'old woman'

Essien (1974:53-57) manifested the similarities between adjectives and verbs in Ibibio and proposed a system of feature specifications that would account for the differences of these two elements. He considered that both verbs and adjectives should belong to a bigger category called verbal.

As shown in Table 5, both verbs and adjectives have in common the feature [+VB], which indicates that both belong to the verbal category. However, they differ in their realization of the [+Adj] feature, present for adjectives, but absent for verbs.

Feature Specifications	Example	English Gloss
[+VB, -Adj]	kă	'to go'
[+VB, -Adj]	nék	'to dance'
[+VB, +Adj]	àfíá	'white'
[+VB, +Adj]	m̀fón	'good, elegant'

Table 5: Example of Verbs and Adjectives with their Corresponding Feature Specifications.

3.5. Order of adjectives

As pointed out by Kaufman (1969), strings of several adjectives are rare and considered to be unnatural in Ibibio, so it is difficult to discover what sequences and orders are permissible. The current study has elicited combinations of two adjectives, to determine whether any restrictions in permissible orders were attested. As shown in examples (76) to (81) Ibibio adjectives have some freedom in the order in which they occur.

- (76) ádúfá [íném mwed] new interesting book 'a new book which is interesting'
- (77) íném [ádúfá nwed] interesting new book 'an interesting book which is new'
- (78) ákàn [ékàmbà ńkpò ítié] old big sitting place 'an old chair which is big'
- (79) ékàmbà [ákàn fikpò ítìé] big old sitting place 'a big chair which is old'
- (80) ákàn [ńkpò ńdík ńkpò ítié] old thing impressive sitting place 'an old chair which is incredible'
- (81) nkpò ndík [ákàn nkpò ítié] thing impressive old sitting place 'an incredible chair which is old'

However, postpositive adjectives show a different pattern, as no free order is possible, as shown in examples (82)-(83) and (84)-(85). Similar to compound nouns in Ibibio, postpositive adjectives only allow a word order. In these cases it seems that it is the element to the left the one that carries the semantic meaning, by working as the head of the adjectival phrase.

- (82) ákàn [ńkpò ítíé étò] old sitting place wood 'an old, wooden chair'
- (83) *étò [ákàn fikpò ítíé] wood old sitting place Intended: 'an old, wooden chair' Meaning: 'wood from an old chair'
- (84) ákàn [ńkpò ítíé Ibibio] old sitting place Ibibio 'an old, Ibibio chair'
- (85) *Ibibio [ákàn fikpò ítíé]
 Ibibio old sitting place
 Intended: 'an old, Ibibio chair'

When we want to convert these sequences of adjectives and nouns into the plural, we observe that, as shown in examples (86) to (93), the plural marker appears on both adjectives. In fact, examples (88) and (89) show how these forms are ungrammatical when one of the plural markers is dropped (the same holds true for the rest of the examples in the paradigm).

- (86) (mmè) n-kàn [n-kpọn nkpọ ítié]
 PL PL-old PL-big sitting place 'old, big chairs'
- (87) (mmè) ñ-kpón [ñ-kàn ñkpò itié]

 PL PL-big PL-old sitting place 'old, big chairs'
- (88) (mmè) *á-kàn [n-kpón nkpò ítíé]

 PL SG-old PL-big sitting place 'old, big chairs'
- (89) (mmè) *á-kpón [n-kàn nkpộ ítíé]

 PL SG-big PL-old sitting place 'old, big chairs'
- (90) (mmè) n-kàn [m-fọọn nkpò ítíé]
 PL PL-old PL-elegant sitting place 'old, elegant chairs'
- (91) (mmè) m-fóón [n-kàn nkpò ítíé]

 PL NMLZ-elegant PL-old sitting place
 'old, elegant chairs'
- (92) (mmè) n-kàn [n-diòi nkpò itié]
 PL PL-old PL-bad sitting place 'old, bad chairs'
- (93) (mmè) n-díoí [n-kàn nkpò ítíé]
 PL NMLZ-bad PL-old sitting place 'old, bad chairs'

Again, we can observe that postpositive adjectives pattern differently, as the plural marker is only instantiated in the attribute adjective, as shown in examples (86)-(87) and (88)-(89). Again, the word order is limited to the version in which the postpositive adjectives appear after the noun they modify.

(94) (mmè) n-kàn [nkpò ítíé étò]
PL PL-old sitting place wood 'old, wooden chairs'

- (95) *(mmè) étò [ñ-kàn nkpò itié] PL wood PL-old sitting place Intended: 'old, wooden chairs' Meaning: 'different pieces of wood from an old chairs'
- (96) (mmè) n-kàn [nkpò ítíé Ibibio]
 PL PL-old sitting place Ibibio 'old, Ibibio chairs'
- (97) *(mmè) Ibibio [n-kàn nkpò ítíé]
 PL Ibibio PL-old sitting place
 Intended: 'old, Ibibio chairs'

4. Conclusion

The current study discusses in some detail some of the major claims regarding Ibibio adjectives. In line with previous research within the domain of adjectives in Ibibio, it seems to be the case that adjectives and verbs in the language are very similar in syntactic behavior, as both manifest concord with the subject of the sentence, and they can be inflected for tense. However, they also differ in that only adjectives can be used as nominal modifiers, in which case they agree with the noun they modify only in number. Essien's (1974) discussion on Ibibio adjectives, a system of feature specifications was suggested to account for the differences between verbs and adjectives. While both elements seem to have in common the feature [+VB], which indicates that both belong to the verbal category, they should differ in their realization of the [+Adj] feature, present for adjectives, but absent for verbs.

The paper also discusses the presence of tone sandhi in Ibibio, when citation forms are combined into larger units. The tonal change seems to be consistent, in that it is the second element of the phrase the one that undergoes a tonal change, and it is always the tone of the first syllable the one that changes. While in compounds there seems to be lowering, in negative forms this tone is in fact raised. Word order was also described in the current study. It had been suggested (Essien, 1974) that adjective-noun constructions are limited in Ibibio due to the small number of adjectives in the language, and that they show some freedom in the order in which they occur. The current study shows the same pattern. However, this claim is a little bit restrictive because, as shown here, it is true that attribute adjectives show free word order. However, postpositive adjectives do seem to show a more fixed order.

In the future, a further look at the adjectives in the language would be necessary to understand some of the key aspects of adjectivization in Ibibio, including detailed analysis of agreement, tone sandhi and word order restrictions.

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