SOME ISSUES ON MORPHOLOGY IN YORÚBÁ COMPARATIVES AND SUPERLATIVES

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This paper provides a descriptive analysis of some issues concerning the morphology of Yorùbá comparatives and superlatives. Data were obtained from the researcher who is a native speaker of the language as well as from two adults (a man and a woman) in their fifties who are also native speakers of the language. I was able to describe and translate the data using my intuition as a native speaker of the language. The data were grouped into three categories, monosyllabic, disyllabic, and trisyllabic adjectives. The implication of the analysis shows that in Yorùbá, tone is a distinct marker of the comparative and the superlative. Also, the comparative and the superlative suffix reflects inflectional morphology and can attach to any tone pattern of base adjectives that are monosyllabic, disyllabic, or trisyllabic. In addition, the study contributes to research by formalizing and explaining the descriptive aspects of Yorùbá comparatives and superlatives within the scope of construction morphology as well as discussing the functionality of Yorùbá comparatives and superlatives within the typology of Yorùbá adjectives and syntax.

Keywords: construction morphology, word construction schema.

1. Introduction

Yorùbá is one of the three major ethnic groups that constitute Nigeria, a country in West Africa. The Yorùbá language, spoken by the Yorùbá people belongs to the Niger-Congo language family (see Bamgbose 1966). Standard Yorùbá has seven oral vowels [a, e, ë, i, o, ò, u] and five nasal vowels [ã, ë̃, ĩ, ò̃, ũ]. The lax or -ATR vowels are represented with a dot underneath in traditional Yorùbá orthography e.g., ë̃, ò̃, etc. Following Bamgbose (1966) there are three level tones in Yorùbá which are High (´), mid (unmarked), and low(¨). Standard Yorùbá neither permits consonant clusters nor allows for a consonant appearing in word final position (see Bamgbose, 1966). According to the Ethnologue of World Languages, there are about 21 dialects of Yorùbá. They are Oyo, Ijesha, Ila, Ijebu, Ondo, Wo, Owe, Jumu, Iworro, Igbonna, Yagba, Gbedde, Egba, Akono, Aworo, Bunu (Bini), Ekiti, Ilaje, Ikale, Awori, and Òo.

In Yorùbá, the morphology of comparatives and superlatives is expressed as suffixation. Other morphological processes observed in Yorùbá include prefixation, interfixation, compounding, desententialization, total and partial reduplication (see Owolabi, 1995; Yusuf, 2007; Awobuluyi, 2007; Adegbola, 2016). Adegbola (2016) mentioned that in Yorùbá, while prefixes can be attached to verbs, verb phrases, nouns, adverbs, and adverbial phrases to fulfill various morphological functions, interfixation, compounding, desententialization, and reduplication manifests in different templates such that their pattern cannot be easily observed at surface structure. This is because they use free morphemes and identify as word labels that can be broken into shorter sub-labels as seen in the example in (1).

(1) a. etidò ‘near river’
   b. idikò ‘motor park’

The word etidò stems from two source words eti ‘near’ and odò ‘river.’ Also, idikò stems from two source words idì ‘source’ and ọkò ‘cars.’ Therefore, eti + odò = etidò ‘near river,’ idì + ọkò = idikò ‘motor park.’ Thus, the use of free morphemes and word labels that can be broken into shorter sub-
labels are observed in other Yorùbá words which contain other morphological processes such as interfixation, desententialization, and reduplication.

The organization of this paper is as follows: In section one, as seen above, I briefly discuss the Yorùbá language and its morphology. In section two, I examine tone issues related to the morphology of Yorùbá comparatives and superlatives. In section three, I consider the motivation for the study. The comparative and superlative data are presented in section four. In section five, I analyze tone issues in the data. In section six, I discuss the criteria that distinguish between morphology that is inflectional from derivational, maintaining that the morphology of Yorùbá comparative and superlative reflect inflectional morphology. I highlight the functionality of Yorùbá comparatives and superlatives within the typology of Yorùbá adjectives in section seven. In section eight, I offer a formal analysis within the framework of construction morphology and provide a word construction schema on the morphology of the comparative and superlative. In sections nine and ten, I present the summary of my findings and the conclusion.

2. Tone issues in the morphology of Yorùbá comparatives and superlatives

African languages have been viewed from two perspectives in terms of their tonal properties. The first is concerned with languages whose written and identifiable morphological elements are few, but tonal values are so important that written passages have no meaning without tonal references e.g., Yorùbá, Vietnamese, Mandarin Chinese, etc. The other has to do with those languages that have a lot of written and identifiable morphological elements where written passages still retain their meaning without tonal references e.g., Hausa, Swahili, etc. (see Tucker 1964:594). Yorùbá belongs to the former category where tone marks out each syllable and differentiates meaning such as seen in (2).

(2)  

a. Mid-Mid: ọko ‘husband’  
b. Mid-Low: ọkọ̀ ‘car’  
c. Mid-High: ọkọ̀ ‘hoe’

The implication of the example above is that in Yorùbá, tone is lexically contrastive, such that a word can have different meanings depending on the tone. This applies to the morphology of Yorùbá comparatives and superlatives such that although the comparative and the superlative are marked by the same suffix [ju], tone is used to differentiate their morphology. Hyman (2012) posits that “the mistake researchers make is to think of tone as somehow deficient whereas, the opposite is the case.” Morphology in Yorùbá comparatives and superlatives presents an interesting case where tone happens to be a distinct marker to distinguish between the comparative and the superlative. According to Hyman and Leben (2000:58), ‘tonal morphology exhibits essentially the same range of morphological properties as in all of segmental morphology.’ The implication of this is that tone can do everything a morpheme can do. Hyman (2012) argues that in African languages tone can be the sole exponent, a systematic co-exponent, or an arbitrary co-exponent. In Yorùbá, tone marks the sole exponent of comparatives and superlatives where the suffix of the comparative [ju] is marked by the mid tone which is not represented by any diacritic while the suffix of the superlative is marked by the low tone which is represented as [jù]. This is represented by the diacritic ('). Therefore, the superlative and the comparative have the same suffix [ju] phonemically, but the tone is different. However, it is important to note that there is an exception to the use of the comparative. This is such that when the comparative appears before a proform such as a demonstrative adjective or an object pronoun, the tone on the comparative suffix is low, as seen in examples (3) and (4). All other cases where the comparative does not appear before a proform, the tone on the suffix of the comparative is mid as seen in the example in (5) below.
Some issues on Morphology in Yorùbá Comparatives and Superlatives

(3) Ṭ̀Ọ̀kùrní náà gajù ú
man DET tall-more him/her/it
‘The man is taller than him/her/it’

(4) Ṭ̀Ọ̀mọ̀ náà gajù yii/yen
child DET tall-more DEM
‘The child is taller than this/that’

(5) Ṭ̀Ọ̀mọ̀ náà gajù ṭ̀ọ̀mọ̀ mi
child DET tall-more child my
‘The child is taller than my child.’

3. Motivation for the study
The study examines the morphology of Yorùbá comparatives and superlatives because it is the only morphological process in Yorùbá where tone performs the same function as a morpheme. The motivation for selecting ‘Construction morphology’ as a theoretical tool for analysis is to show a model that captures a three-fold process in one representation. The first is how the connection between an adjective and a bound morpheme evokes meaning (semantics of the comparative and superlative). The others are the phonology, and morphosyntax, all conflated in one schema.

4. Data Presentation
The data below consists of twenty-six adjectives where, for each one, I show the base adjective, the comparative form, the superlative form, the phonemic transcription, and the gloss. The data is classified into three sections, Data Set 1 contains twelve monosyllabic adjectives, Data Set 2 comprises ten disyllabic adjectives while Data Set 3, consists of trisyllabic adjectives.

Table 1: Monosyllabic Adjectives

<table>
<thead>
<tr>
<th>Base</th>
<th>Comparative</th>
<th>Superlative</th>
<th>Phonemic Transcription</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) gbọ́n</td>
<td>gbọ́nju</td>
<td>gbọ́njù</td>
<td>/gbɔnʤu/</td>
<td>‘wise’</td>
</tr>
<tr>
<td>b) kún</td>
<td>kúnju</td>
<td>kúnjù</td>
<td>/kunʤu/</td>
<td>‘full’</td>
</tr>
<tr>
<td>c) wọ́n</td>
<td>wọ́nju</td>
<td>wọ́njù</td>
<td>/wɔnʤu/</td>
<td>‘expensive’</td>
</tr>
<tr>
<td>d) mọ́</td>
<td>mọ́ju</td>
<td>mọ́jù</td>
<td>/mɔʤu/</td>
<td>‘clean’</td>
</tr>
<tr>
<td>e) ga</td>
<td>gaju</td>
<td>gajù</td>
<td>/gaʤu/</td>
<td>‘tall’</td>
</tr>
<tr>
<td>f) gbẹ́</td>
<td>gbẹ́ju</td>
<td>gbẹ́jù</td>
<td>/gbɛʤu/</td>
<td>‘thin’</td>
</tr>
<tr>
<td>g) kan</td>
<td>kanju</td>
<td>kanjù</td>
<td>/kɔnʤu/</td>
<td>‘sour’</td>
</tr>
<tr>
<td>h) le</td>
<td>leju</td>
<td>lejù</td>
<td>/leʤu/</td>
<td>‘difficult’</td>
</tr>
<tr>
<td>i) dùn</td>
<td>dünju</td>
<td>dünjù</td>
<td>/dundju/</td>
<td>‘sweet’</td>
</tr>
<tr>
<td>j) gün</td>
<td>günju</td>
<td>günjù</td>
<td>/gundju/</td>
<td>‘long’</td>
</tr>
<tr>
<td>k) jìn</td>
<td>jinju</td>
<td>jinjù</td>
<td>/ʤ3ndʒu/</td>
<td>‘deep’</td>
</tr>
<tr>
<td>l) pò</td>
<td>pòju</td>
<td>pòjù</td>
<td>/kpɔʤu/</td>
<td>‘many’</td>
</tr>
</tbody>
</table>
Table 2: Disyllabic Adjectives

<table>
<thead>
<tr>
<th>Base</th>
<th>Comparative</th>
<th>Superlative</th>
<th>Phonemic Transcription</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) kúrú</td>
<td>kúrúju</td>
<td>kúrújù</td>
<td>/kurudʒu/</td>
<td>‘short’</td>
</tr>
<tr>
<td>b) dündú</td>
<td>dünduju</td>
<td>dündujù</td>
<td>/dududʒu/</td>
<td>‘dark/black’</td>
</tr>
<tr>
<td>c) dára</td>
<td>dárajú</td>
<td>dárajù</td>
<td>/daradʒu/</td>
<td>‘good’</td>
</tr>
<tr>
<td>d) láta</td>
<td>látajú</td>
<td>látajù</td>
<td>/lataʤu/</td>
<td>‘spicy’</td>
</tr>
<tr>
<td>e) yára</td>
<td>yárajù</td>
<td>yárajù</td>
<td>/yaradʒu/</td>
<td>‘quick’</td>
</tr>
<tr>
<td>f) tóbi</td>
<td>tóbijù</td>
<td>tóbijù</td>
<td>/tobidʒu/</td>
<td>‘big’</td>
</tr>
<tr>
<td>g) koró</td>
<td>koróju</td>
<td>korójù</td>
<td>/korodʒu/</td>
<td>‘bitter’</td>
</tr>
<tr>
<td>h) tutú</td>
<td>tutúju</td>
<td>tutújù</td>
<td>/tutudʒu/</td>
<td>‘fresh/cold/cool’</td>
</tr>
<tr>
<td>i) bájé</td>
<td>bájéju</td>
<td>bájéjù</td>
<td>/bajɛʤu/</td>
<td>‘spoilt’</td>
</tr>
<tr>
<td>j) dótí</td>
<td>dótiju</td>
<td>dótijù</td>
<td>/dotidʒu/</td>
<td>‘dirty’</td>
</tr>
</tbody>
</table>

Table 3: Trisyllabic Adjectives

<table>
<thead>
<tr>
<th>Base</th>
<th>Comparative</th>
<th>Superlative</th>
<th>Phonemic Transcription</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) lágbára</td>
<td>lágbárajú</td>
<td>lágbárajù</td>
<td>/lagbardʒu/</td>
<td>‘powerful’</td>
</tr>
<tr>
<td>b) lááyan</td>
<td>lááyanju</td>
<td>lááyanjù</td>
<td>/la:jandʒu/</td>
<td>‘active’</td>
</tr>
<tr>
<td>c) lágbaja</td>
<td>lágbajaju</td>
<td>lágbajajù</td>
<td>/lagbaʤaʤu/</td>
<td>‘active’</td>
</tr>
<tr>
<td>d) iyọ́ja</td>
<td>iyọ́jaju</td>
<td>iyọ́jajù</td>
<td>/ıyɔʤaʤu/</td>
<td>‘salty’</td>
</tr>
</tbody>
</table>

5. Data analysis

In this section, I present an analysis of tone issues in data sets 3, 4, and 5. For each data set, I group the data into different sections according to the tone pattern observed on the base adjective.

5.1 Data description of tone issues in Monosyllabic Adjectives. For the monosyllabic adjectives here, I group the data into three sections by tone: monosyllabic adjectives with high tone, with mid tone, and with low tone.

Table 4: Classifications of Monosyllabic Adjectives by tone

<table>
<thead>
<tr>
<th>Base</th>
<th>Comparative</th>
<th>Superlative</th>
<th>Phonemic Transcription</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) gbón</td>
<td>gbönju</td>
<td>gbönjù</td>
<td>/gebɔngu/</td>
<td>‘wise’</td>
</tr>
<tr>
<td>b) kún</td>
<td>künju</td>
<td>kúngù</td>
<td>/kʊndʒu/</td>
<td>‘full’   Base with High tone</td>
</tr>
<tr>
<td>c) wón</td>
<td>wónju</td>
<td>wónjù</td>
<td>/wɔnʤu/</td>
<td>‘expensive’</td>
</tr>
<tr>
<td>d) mó</td>
<td>móju</td>
<td>mójù</td>
<td>/mɔʤu/</td>
<td>‘clean’</td>
</tr>
<tr>
<td>e) ga</td>
<td>gaju</td>
<td>gajù</td>
<td>/gadju/</td>
<td>‘tall’</td>
</tr>
<tr>
<td>f) gbẹ</td>
<td>gbẹju</td>
<td>gbẹjù</td>
<td>/gbɛʤu/</td>
<td>‘thin’   Base with Mid tone</td>
</tr>
<tr>
<td>g) kan</td>
<td>kanju</td>
<td>kanjù</td>
<td>/kanʤu/</td>
<td>‘sour’   Mid tone</td>
</tr>
<tr>
<td>h) le</td>
<td>leju</td>
<td>lejù</td>
<td>/leʤu/</td>
<td>‘difficult’</td>
</tr>
</tbody>
</table>
i) dún dúnju dúnjù /dundju/ ‘sweet’
j) gùn gúnju gúnjù /gunjù/ ‘long’ Base with
k) jìn jìnju jinjù /jindju/ ‘deep’ Low tone
l) pò pòju pòjù /pɔʤu/ ‘many’

From the data above, it is observed that the suffix of the comparative is marked by the mid tone, while the low tone marks the suffix of the superlative. For example, consider data (4a-4l). Also, it is important to note that the comparative suffix [-ju] and the superlative [-jù] can attach to a monosyllabic adjective regardless of whether that adjective has a high tone, mid tone, or low tone as seen by the data in (4a-d), (4e-h), and (4i-4l), respectively. This means for the monosyllabic adjectives, the comparative and the superlative suffix can attach to a monosyllabic adjective with a high, mid, or low tone.

5.2 Data description of tone issues in Disyllabic Adjectives. In this section where I consider disyllabic adjectives, I examine the tone environment of the adjective, which the comparative and the superlative suffix attaches to. I group the data into four sections.

Table 5: Classifications of Disyllabic Adjectives by tone

<table>
<thead>
<tr>
<th>Base</th>
<th>Comparative</th>
<th>Superlative</th>
<th>Phonemic Transcription</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) kúrú</td>
<td>kúrúju</td>
<td>kúrújù</td>
<td>/kuruʤu/</td>
<td>‘short’</td>
</tr>
<tr>
<td>b) dúdú</td>
<td>dúdúju</td>
<td>dúdújù</td>
<td>/duduʤu/</td>
<td>‘dark/black’</td>
</tr>
<tr>
<td>c) dára</td>
<td>dáraju</td>
<td>dárajù</td>
<td>/daradju/</td>
<td>‘good’</td>
</tr>
<tr>
<td>d) láta</td>
<td>látaju</td>
<td>látajù</td>
<td>/lataʤu/</td>
<td>‘spicy’</td>
</tr>
<tr>
<td>e) yára</td>
<td>yárajù</td>
<td>yarájù</td>
<td>/yaraʤu/</td>
<td>‘quick’</td>
</tr>
<tr>
<td>f) tóbi</td>
<td>tóbijù</td>
<td>tóbijù</td>
<td>/tobidju/</td>
<td>‘big’</td>
</tr>
<tr>
<td>g) korò</td>
<td>koròju</td>
<td>korójù</td>
<td>/koroʤu/</td>
<td>‘bitter’</td>
</tr>
<tr>
<td>h) tutú</td>
<td>tutùju</td>
<td>tutùjù</td>
<td>/tutudju/</td>
<td>‘fresh/cold/cool’</td>
</tr>
<tr>
<td>i) bàjé</td>
<td>bàjéju</td>
<td>bàjéjù</td>
<td>/bajɛʤu/</td>
<td>‘spoilt’</td>
</tr>
<tr>
<td>j) dótí</td>
<td>dótìju</td>
<td>dótìjù</td>
<td>/dɔtıʤu/</td>
<td>‘dirty’</td>
</tr>
</tbody>
</table>

In this second set of data above, I also observe that the mid tone marks the suffix of the comparative while the low tone distinguishes the suffix of the superlative. For example, consider data (5a-5j). As observed in the data, the comparative suffix [-ju] and the superlative [-jù] can attach to a disyllabic adjective in four different tone environments. These are the disyllabic adjectives with high-high tone, mid high, mid low and low high tone. This means, the comparative suffix [-ju] and the superlative [-jù] can attach to a disyllabic adjective with a combination of syllables with the high-high tone pattern as seen in data (5a-5b). It can attach to a disyllabic adjective comprising syllables with high-mid tone.
pattern as seen in data (5c-5f). It also conjoins with an adjective which consists of mid-low tone pattern. This is seen in (5g-5h). It also attaches to adjectives with low-high tone patterns as in (5i-5j). Essentially, the suffix attaches to the bisyllabic adjective regardless of the tone pattern of the adjective.

5.3 Data description of tone issues in trisyllabic adjectives. In the data set below, I consider the tonal environment where the comparative suffix [-ju] and the superlative [-jù] attaches to trisyllabic adjectives. I group the data into three sections.

Table 6: Classifications of Trisyllabic Adjectives by tone

<table>
<thead>
<tr>
<th>Base</th>
<th>Comparative</th>
<th>Superlative</th>
<th>Phonemic Transcription</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) lágbára</td>
<td>lágbáraju</td>
<td>lágbárajù</td>
<td>/lagbárajù/</td>
<td>‘powerful’ Base with</td>
</tr>
<tr>
<td>b) lááyan</td>
<td>lááyanju</td>
<td>lááyanjù</td>
<td>/lááyanjù/</td>
<td>‘active’ High-high-mid tone</td>
</tr>
<tr>
<td>c) lágbaja</td>
<td>lágbajaju</td>
<td>lágbajajù</td>
<td>/lagbajajù/</td>
<td>‘active’ Base with</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>High-mid-mid tone</td>
</tr>
<tr>
<td>d) iyọja</td>
<td>iyọjaju</td>
<td>iyọjajù</td>
<td>/iyọjajù/</td>
<td>‘salty’ Base with</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Mid-low-mid tone</td>
</tr>
</tbody>
</table>

In the data set above, I again observe, that tone is still the distinctive marker of the comparative and the superlative. Here also, the comparative suffix [-ju] and the superlative [-jù] attach to trisyllabic adjectives with the sequence high, high, mid tone as shown in 6a and 6b. Also, it suffixes to trisyllabic adjectives with the sequence high, high, mid, mid, tone as seen in (6c). Furthermore, it also attaches to other trisyllabic adjectives with other tone patterns as seen in (6d). Also, it should be noted that the data in (a-c) relates to verbal adjectives and the data in (d) is a nominalized adjective. The preference for the data in (d) is because the data considers trisyllabic adjectives and the different adjectival categories the comparative and superlative affix attaches to. Also, as observed in the data, although trisyllabic adjectives donot permit the preceding syllable to have any other tone except the mid tone before the comparative and the superlative, this does not always reflect that trisyllabic adjectives always end in a mid tone. For instance, consider the example in (6).

(6) Ọmọ náà dákẹjéju ọmọ mi
child DET quiet-more child my
‘The child is quieter than my child.’

This suggests that the comparative and the superlative suffix attach to any base regardless of the tone pattern. Also, there is no connection between the syntactic configuration of the base word and its tonal construct. Next, I consider the issues that mark the morphology of Yorùbá comparatives and superlatives as inflectional.

6. Morphology in Yorùbá comparatives and superlatives is inflectional
Following the description of inflectional versus derivational morphology in Haspelmath and Sims (2010), I argue that the morphology in Yorùbá comparatives and superlatives reflect inflectional morphology. This is based on the diagnostic criteria they presented for inflectional morphology,
which distinguishes inflectional morphology from derivational. In this section, I consider the seven criteria below.

a) No change of word class: if an affix changes a word class it is derivational; if it does not change a word class it is consistent with it being inflectional (although it could still be derivational). The addition of the suffix in the comparative [-ju] and the superlative [-jù] does not change the word class of the base. For example, kírí ‘short’ and kírí-ju ‘shorter’ does not change the word class of the base as an adjective. This is consistent with inflectional morphology.

b) Compositional meaning: If an affix and its base have a compositional meaning then this is consistent with inflectional morphology. The meaning of the comparative and the superlative adjective as a complex word is equal to the sum of the meaning of its component morphemes. The inflected value ‘ju’ in the comparative makes a predictable semantic contribution of ‘more’ while that of the superlative ‘-jù’ adds the meaning ‘most’ to the base. For example, diídú means ‘dark’, diídú-ju means ‘darker’ and diídú-jù means ‘darkest.’ The morphemes ‘ju’ makes a semantic contribution of ‘more’ to the base, while the morphemes ‘jù’ adds the meaning ‘most’ to the base. Since the meaning is compositional, it is consistent with inflectional morphology.

c) Same concept as base: When an affix is added to a base it does not change the concept expressed by the base. The addition of the superlative and comparative suffix does not change the concept of the base. For example, tóbi ‘big’, tóbi-ju ‘bigger’ tóbi-jù ‘biggest’ the addition of the suffix still maintains the idea or concept of the base, it just expresses a degree. This reflects inflectional morphology.

d) Not Iterable: If an affix is iterable (i.e., can be added on more than once to the same base) then it is consistent with derivational morphology. The suffix for both the comparative and the superlative cannot be iterated or repeated on the same base. For example, it is impossible to say gúnjuju for ‘shorter.’ This is consistent with the comparative and superlative being inflectional.

e) Relatively abstract meaning: If an affix adds a relatively abstract meaning to the base, then it is consistent with it being inflectional morphology. The notions of comparative and superlatives can be viewed as expressing a relatively abstract meaning since the notion of degree (more than, most) can be considered as relatively abstract. This is consistent with inflectional morphology.

f) Unlimited applicability: If an affix can be added to a word class without any arbitrary restrictions, then that is consistent with inflectional morphology. The Yorùbá comparative and superlative suffixes can be added to any adjective without arbitrary restrictions (although there may be a non-arbitrary restriction in that the suffix does not go onto nongradable adjectives). This reflects inflectional morphology.

g) Relevant to the Syntax: If an affix is relevant to the syntax, then it is consistent with inflectional morphology. The comparative and superlative suffix is relevant to the syntax in the sense that sentences with comparative and superlative have a certain word order as seen in (7)

(7) Ọkùnrin nàà gaju obirin nàà
man DET tall-more woman DET
‘The man is taller than the woman.’

The comparative requires a comparison of two nouns, and it requires that the comparative form of the adjective is in the middle (i.e. between the two nouns). Consider the next example in (8).
This would be ungrammatical because although there are two nouns, the comparative is at the beginning of the sentence; it is required to be in the middle. Another example, that indicates ungrammaticality is the example below.

(9) *gaju okùnrin náà
    tall-more man DET
    ‘The man is taller.’

This would also be ungrammatical because the comparative requires the comparison of two nouns. The above example only has one noun.

For superlatives, the word order requires just one noun, and the superlative adjective is always post nominal as seen in (10) even if it occurs in a predicative position as seen in (11).

(10) Ọkùnrin náà gajù
    man DET tall-most
    ‘The tallest man’

(11) Ọkùnrin náà lo gajù ninú gbogbo wọn
    man DET is tall-most among all them
    ‘The man is the tallest among all of them’

Therefore, the expression below would be ungrammatical as seen in the example in (12).

(12) *Ọkùnrin náà gajù obirin náà
    man DET tallmost woman DET
    ‘The man is tallest than the woman’

This would be ungrammatical because the superlative requires just one noun. Also, consider an example where the superlative is prenominal as seen in (13).

(13) *Gajù Ọkùnrin náà
    tall-most man DET
    ‘The tallest man’

This would be ungrammatical because the superlative requires that it should be post nominal. Therefore, for the superlative and the comparative, for these expressions to be good sentences they cannot be flipped. This means, while the comparative can be prenominal and post nominal, the superlative is always post nominal. This is unlike the case in Egyptian Arabic where, if the comparative occurs in a prenominal position the meaning of the phrase is understood as superlative (see Davis 2017:133), this is not the case in Yorùbá. We can conclude that the comparative and superlative are inflectional because they require a specific syntactic frame.

As a side point, it should be mentioned that comparatives and superlatives do not inflect for gender and number. For example, consider the following two comparative examples regarding gender:

(14) Ọkùnrin náà gaju obirin náà
    man DET tall-more woman DET
    ‘The man is taller than the woman’
Some issues on Morphology in Yorùbá Comparatives and Superlatives

(15) Obìrin náà gaju okùnrin náà
    woman DET tall-more man DET
    ‘The woman is taller than the man’

Next, consider the superlative example for gender.

(16) Òkùnrin náà gaju
    man DET tall-most
    ‘The man is the tallest.’

(17) Obìrin náà gaju
    woman DET tall-most
    ‘The woman is the tallest’

In the examples above, Òkùnrin represents the third person singular for ‘he’ and Obìrin signifies the third person singular for ‘she.’ The examples above show that the Yorùbá comparative and the superlative suffixes do not inflect for gender.

Similarly, the comparative and the superlative does not inflect for number. The example for the comparative is seen in (18) and (19) while examples for the superlative are seen in (20) and (21) below.

(18) Òlùkọ gbọnjú akẹkọó
    teacher wise-more student
    ‘A teacher is wiser than a student.’

(19) Àwọn Òlùkọ gbọnjú ìwọn akẹkọó
    PL Teacher wise-more PL student
    ‘Teachers are wiser than the students.’

(20) Òlùkọ naa gbọnjú
    teacher DET wise-most
    ‘The teacher is the wisest.’

(21) Àwọn Òlùkọ gbọnjú
    PL Teacher wise-most
    ‘Teachers are the wisest.’

The word ‘àwọn’ marks plurality, but the comparative and superlative suffixes are not inflected for number. From the analysis above, we can conclude that the Yorùbá comparative and superlative suffix is consistent with being an inflectional suffix.

7. Analysis/ Discussion of structural typologies of adjectives in Yorùbá

Coordinate adjectives: These are two or more adjectives that modify the same noun. In Yorùbá, while coordinate adjectives are existent, only the superlative affix attaches to coordinate adjectives. In other words, the comparative affix does not attach to coordinate adjectives. For instance, consider the example in (22) and (23).

(22) Ògèdè náà dárajù, ó dun jù
    banana DET good-most it sweet-most
    ‘The banana is most good and sweet.’
(23) *Ọgèdè nàá dàraju, ó dun ju
    Banana DET good-more it sweet-more
    ‘The banana is good and sweet.’

Attributive adjectives: These adjectives are directly adjacent to the noun they modify. In Yorùbá, the comparative and superlative affix can attach to an adjective in an attributive position. This is seen in the example in (24) and (25).

(24) Ọgèdè dáraju Ṡṣàn
    banana good-more orange
    ‘Banana is better than orange.’

(25) Ọgèdè dárajú
    banana good-most
    ‘Banana is the best.’

Verbal Adjectives: These are adjectives similar to a verb in form and meaning (see Crystal, 1980). In Yorùbá, Verbal adjectives are formed with a verb phrase and the comparative or superlative affix. The comparative and the superlative affix can attach to verbal adjectives as seen in the example in (26) and (27). See data 3a-c for other examples of verbal adjectives.

(26) Bólá láayanju Adé
    Bólá has-active-more Adé
    ‘Bólá is more active than Adé.’

(27) Bólá láayanjú
    Bólá has-active-most
    ‘Bólá is most active.’

Nominalized adjectives: These are adjectives that are actually a noun by function. In Yorùbá the comparative and superlative affix can attach to a nominal adjective such as seen in the example in (28) and (29).

(28) Iyôjaju iyên
    salty-more that
    ‘Saltier than that’

(29) Iyôjajú
    salty-most
    ‘Saltiest’

8. Theoretical framework – Construction Morphology
I consider a formalization of Yorùbá comparatives and superlatives within the framework of constructional morphology (Booij 2010). Construction morphology views morphological “processes” in a language (such as affixation) as being captured by schemas that show a tripartite division (and connection) between the phonology, morphosyntax, and semantics of that construction. I offer the following schema for the Yorùbá comparative and superlative below.

Figure 1: Word construction schema for the comparative

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wordᵢ     Adjᵢ
    ______/
    /  
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The schema above for the Yorùbá comparative captures that when the suffix [ju] is attached to the adjective, the suffix has a mid tone, the semantics of it is the comparative. Here, the construction schema shows the phonology which captures the word [x] and the affix [ju] as a string of phonemes which becomes the adjective and the suffix. The word has the subscript [j] while the affix has the subscript [k] as the trace. To capture the interface between morphology and syntax, the word remains an adjective when the suffix [ju] is attached. Here, the word represented as [x] is coindexed with the adjective using the subscript [j] as a trace of coindexation. The affix [ju] is the suffix using the subscript [k] as the trace of coindexation. The semantics of the comparative references the meaning of the base adjective as indicated by the co-indexing.

Next, consider the construction schema for the superlative.

![Figure 2: Word construction schema for the superlative](image)

The schema above for the Yorùbá superlative captures that when the suffix [jù] is affixed to the adjective the suffix has a low tone, the semantics of it is the superlative. Here, the construction schema shows the phonology which reflects the word as [x] and the suffix [jù] as a series of phonemes which becomes the adjective and the suffix. The word has the subscript [j] while the suffix has the subscript [k] as the trace. To show the interface between morphology and syntax, the word remains an adjective when the suffix [jù] is attached. Here, the word represented as [x] is linked with the adjective using the subscript [j] as a trace of coindexation. The affix [jù] is the suffix using the subscript [k] as the trace of co-indexation. The semantics of the superlative references the meaning of the base adjective as indicated by the co-indexing.

9. Summary of findings

In this section, I discussed the summary of findings based on the analysis presented so far. As regards the morphology of Yorùbá comparatives and superlatives, although, the suffix of Yorùbá comparatives and superlatives are the same phonemically, they are distinctive with respect to the tone. Except where the suffix of the comparative [ju] appears before a proform, the suffix of the comparative [ju] is marked by the mid tone while that of the superlative[jù] is marked by the low tone. In addition, based on the criteria for inflectional versus derivational morphology, the morphology in Yorùbá comparatives and superlatives can be classified as inflectional.

Finally, the comparative and superlative suffix can attach to any tone pattern within the base of monosyllabic, disyllabic, and trisyllabic words. Also, the functionality of Yorùbá comparatives and superlatives can be expressed within specific structural typology of Yorùbá adjectives e.g. coordinate adjectives, attributive adjectives, etc. The comparative and superlative affix can be formalized as constructional schemas within the theory of Construction Morphology.

10. Conclusion
This study was able to discuss some issues on Morphology in Yorùbá comparatives and superlatives. Examples include presenting an argument on why it is basically inflectional, and the tonal environment that is applicable to the morphology, and how tone accounts for the differences between the comparative and the superlative, etc. There are other aspects of the Yorùbá comparative and superlative that were not discussed here such as the issue of the applicability of these suffixes to gradable adjectives. I leave this and other matters for future research.

**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>DET</td>
<td>Determiner</td>
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<tr>
<td>PL</td>
<td>Plural</td>
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<td>Adjective</td>
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<tr>
<td>SEM</td>
<td>Semantics</td>
</tr>
</tbody>
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**Acknowledgement**

I appreciate Prof. Stuart Davis and reviewers for their insightful suggestions and comments on this paper.

**References**


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