PLURAL STRATEGIES IN YORÙBÁ

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This paper accounts for the strategies that Yorùbá adopts to mark plural. One way in which plural is marked syntactically is by certain plural words. The plural word can either interpret the noun as plural directly as in the case of àwọn and quantifying words such as púpò ‘many’ and méjì ‘two’; or it can be realized on a primitive adjective (in the form of COPY) or on a demonstrative (in the form of wọn-). Such elements in turn make available the plural interpretation of the noun they modify. The paper proposes that these plural words possess a covert or an overt [PLURAL] feature, which percolates onto the NP. This analysis of plural marking predicts that there are two ways by which languages may (overtly) mark their nouns for plural cross-linguistically. Languages like Yorùbá, which do not show agreement, mark plural syntactically and make use of a plural feature percolation mechanism, while languages like English, which show agreement, mark plural morphologically and use a plural feature-matching mechanism. It further demonstrates that in Yorùbá, an NP can be freely interpreted as singular or plural in specific discourse context and proposes a general number analysis to account for this type of case. As to the syntax of these plural words, It is proposed that like other non-morphological plural marking languages (e.g., Halkomelem (British Columbia, Canada) as in Wiltschko 2008), Yorùbá plural words are adjuncts that are adjoined to the host head (noun or modifier/demonstrative).

1. Introduction

This paper addresses the various ways by which plural is expressed in Yorùbá, a Benue-Congo language spoken mainly in southwest Nigeria. The first thing to note about plural marking across languages is that there are two types: morphological and

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1 This paper is part of chapter 6 of AjiboYe 2005, thoroughly revised here in terms of data, proposal and analysis. I thank the two anonymous reviewers and Victor Manfredi for their comments and suggestions.
syntactic. By morphological plural marking, I mean a process whereby plural is marked by a noun inflection, either a prefix as in the case of Tagalog and Bantu languages or a suffix as in English.

(1) a-i. wa-toto ‘children’ *Swahili* *(Bantu)*
   PL-child

   a-ii mga-aso ‘dogs’ *Tagalog*
   PL-dog

   b. book-s ‘books’ *English*

Such languages have obligatory plural marking and obligatory agreement. A syntactically marked plural on the other hand is instantiated by a morpheme or word that may not be solely dedicated to plural marking. Such elements are often referred to as “plural words”, e.g., Dryer 1989.² In Halkomelem, for example, there are different ways of marking plural: a noun may be distinctively marked for plural internally as in the case of (2a); some other markers of plurality may appear on the determiner as in (2b); or even somewhat morphologically, as when a plural morpheme is prefixed to a noun, (2c).

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²A plural word according to Dryer (1989) is a word or morpheme that gives a noun or an entity it co-occurs with a plural interpretation. Dryer goes further to draw a similarity between it and plural affix when he asserts that ‘a plural word is a morpheme whose meaning and function is similar to plural affixes in other languages. In the same spirit, Corbett (2000: 135) defines ‘plural words’ as special ‘number words’ that languages use to indicate number.
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(2) a. te swóweles ‘boys’ Halkomelem (Wiltschko 2004)
    DET boy-PL

    b. ye swíweles ‘boys’
    PL-DET boy

    c. méle má-mele ‘children’
    PL-child

Such languages that syntactically mark plural do not have obligatory plural marking and obligatory agreement. In particular, in Halkomelem’s example (2b) above, the noun itself does not have to be formally marked plural. Thus, if either the noun or the determiner is marked for plural, the whole NP is interpreted as plural (Wiltschko 2008). The second thing to note about plural words cross-linguistically is that they do not belong to a natural syntactic class. As noted in Dryer (1989), the grammatical category of words that function as plural words varies from language to language. For example, the fact that plural meaning is reflected in a determiner in Halkomelem in (2b), rather than on the noun directly, qualifies the language as one that has plural words.

This paper addresses syntactic plural marking as well as the free interpretation of NPs as singular or plural (subject to a discourse context of occurrence) in Yorùbá and shows that plural marking in this language is syntactically manifested through the use of modifier words or morphemes rather than dedicated plural words.

1.1 The Yorùbá data set. In this subsection, a set of data that reflect all cases of plural interpretation of nouns in Yorùbá is presented. It is observed that, there are four types of plural words in the language. First is àwòn ‘third person plural pronoun’, which gives nouns as in (3a) a plural interpretation. Second are quantifiers like púpò ‘many’ as in (3b-i) and numerals denoting two or more as in (3b-ii). The third category is wùn, which marks demonstratives as plural. This plural demonstrative in turn marks the entire NP it modifies as plural as shown in (3c). The fourth category of plural word contains copied modifiers as in (3d).

(3) a. Mo kí [àwọnòkùnrin]tí ó wà nìbè
    1sg greet PL man that RP be there
    ‘I greeted the men that were there.’
b. (i)  Adé pa  [eku púpò] nínú ahéré Òjó
         A. kill rat many inside hut O.
         ‘Ade killed [many rats]inside Ojo’s hut.’

(ii) Adé pa  [òkétéméjí] pèlù pàkúté
         A. kill giant-rat two with trap
         ‘Ade killed two giant-rats with trap.’

c. Ọdè gidi ni ajá wòn-ýen
       hunter proper  FOC dog  PL Dem
       ‘Those dogs are good in hunting games.’

d. Fádèyí ra  ológbò  dúdú dúdú lójà Ejìgbò
         F.  buy cat  black black at-market Ejigbo
         ‘Fadeyi bought black cats at Ejigbo market.’

There are two things to note with respect to the set of data in (2). First is that the plural morpheme, wòn in (2c), is highly restricted as it can only co-occur with demonstratives such as yìí ‘this’ and yen ‘that’ to give them a plural interpretation. As earlier mentioned, once the demonstrative is made plural, the plural demonstrative in turn enforces a plural interpretation on the noun.\(^3\) Second, with modifiers, it is observed that in order for plural construal to be attained, a modifier must necessarily

\(^3\)The wòn plural morpheme can be treated as a 3pl plural pronoun because of its segmental similarity with the short 3pl pronoun. However, it differs from it in some respects. The short 3pl pronoun has two forms that are syntactically conditioned: high-toned wòn which is the form it assumes when in subject position (i) and mid-toned wön, which is the form it assumes when in the object position or the subject of a negative sentence (ii) whereas the form the plural word takes is the low-toned one (iii).

(i) Wòn rí Adé (ii)a. Adé rí wòn b.Wòn kò rí Adé (iii) ọmọ wòn-yìí
      They saw Ade     Adé saw them     They did not see Adé child PL-this

Following from the above is the fact that only the low toned wòn is found with demonstratives for the purpose of plural marking; as such, we do not have *wòn-yìí or *wön-yìí. If we hold on to the claim that there is only one WÒN, then, the argument will be that, the phonological variants are syntactically conditioned; an instance of phonology-syntax interface (Déchainé 2001). Note too, that it is the low-toned form that can undergo nominalization (see footnote 27). The essential thing is that the low-toned variant indirectly marks nouns for plural.
be copied, and like demonstratives, it is the plural modifier in turn that gives the noun a plural interpretation.\(^4\)

Lastly, in Yorùbá, an NP can be freely interpreted as singular or plural depending on the discourse context.

\(4\)  
\begin{align*}
\text{Adé rí [ejò] lónà oko} \\
\text{A. see snake on-path farm} \\
\text{ (a) ‘Ade saw a snake on his way to farm.’} \\
\text{ (b) ‘Ade saw snakes on her way to farm.’}
\end{align*}

On appropriate discourse contexts for each interpretation, see section 3.1 below.

From the examples above, the emerging picture is that, plurality in Yorùbá is done mainly through some multifunctional morphemes which may be realized on the head noun or an element within the noun phrase. As a way of accounting for the data relating to the overt plural markings, the feature percolation mechanism as laid out in section 1.2 is proposed. On contextually determined plurality, the General plural marking mechanism, as discussed in section 3, is also assumed.

1.2 The percolation mechanism analysis. The plural-marking strategy in Yorùbá is intended to capture the fact that certain lexical items, by virtue of being a plural word, enforce a plural interpretation on nouns. To account for this, I propose a

\(^4\) Note that, when reduplicated modifiers occur by themselves, they cannot be construed as plural except in certain restricted contexts.

(i) a. Mo ra ajá pupa pupa  b. #Pupa pupa ni mo rà  
‘I bought red dogs’

(ii) Context for acceptance of bare copied modifier: Speaker B has sets of mixed-coloured balls for sale and Speaker A wants red balls only. Pupa pupa here means “red Xs” known to both speakers.

Speaker A: Pupa pupa ni ki o sà fùn mi ninú âwọn bóèlù red red FOC that 2sg pick for 1sg inside they ball

\begin{align*}
\text{tí o rà} \\
\text{that 2sg buy}
\end{align*}

‘Pick only red ones for me out of the balls you bought.’

Speaker B: Ó dára  
That is all right.
feature percolation mechanism. Observe that there are two mechanisms of plural marking that are available cross-linguistically: feature percolation and feature matching. The assumption in this paper is that; while Yorùbá and any other languages that mark plural syntactically adopt a feature mechanism, languages that mark plural morphologically adopt feature matching.

In its broad use as a well-formedness condition, Selkirk (1982) and Scalise (1984) define percolation as follows:

(5) If a constituent $\alpha$ is the head of a constituent $\beta$, $\alpha$ and $\beta$ are associated with an identical set of features (syntactic or diacritic) (Selkirk 1982: 21)

In the same spirit, Owólabí (1995: 106) claims that percolation is a device which enables a complex word to inherit the syntactic properties (or features) of its head. This suggests that feature copying is usually from the head. These percolation approaches differ from the present analysis in one respect. In the proposal here, based on the available data from Yoruba, what makes an NP plural does not essentially rely on the head $\textit{per se}$. Indeed, a plural feature of an adjunct can percolate onto the NP if the head noun that the adjunct is adjoined to is not specified for plural.

I formulate the notion of percolation in the sense of copying where the copied feature is $\alpha$, as outlined below.
(6)  a. Node X immediately dominates node Y

\[
\begin{array}{c}
X \\
| \\
Y
\end{array}
\]

b. Y is specified for the feature \( \alpha \), X is unmarked for the feature \( \alpha \)

\[
\begin{array}{c}
X \\
| \\
Y^{[\alpha]}
\end{array}
\]

c. The feature \( \alpha \) is copied on to X

\[
\begin{array}{c}
X^{[\alpha]} \\
| \\
Y^{[\alpha]}
\end{array}
\]

The structure in (7) illustrates how plural feature percolation works. The assumption is that plural feature percolation mechanism copies the plural feature of a node onto the node that immediately dominates it.

(7)  a. \hspace{1cm} NP \hspace{1cm} \text{Input} \hspace{1cm} X_{[\text{PLURAL}]} \\

\[
\begin{array}{c}
\text{NP} \\
| \\
X_{[\text{PLURAL}]}
\end{array}
\]

b. \hspace{1cm} NP_{[\text{PLURAL}]} \hspace{1cm} \text{Output} \hspace{1cm} X_{[\text{PLURAL}]} \\

\[
\begin{array}{c}
\text{NP}_{[\text{PLURAL}]} \\
| \\
X_{[\text{PLURAL}]}
\end{array}
\]

As it is demonstrated in 2.4, it is possible for percolation to come from one or more nodes within a nominal expression. Such cases are treated as multiple plural marking.

The Plural Feature Theory proposed here falls within the theory of features in syntax in general.\(^5\) The feature theory is aimed at understanding how nouns which are

\(^5\)Such syntactic feature theory in the literature is also manifested in PERSON (1st, 2nd, 3rd), and TENSE (present, past) among others.
not morphologically marked have a plural interpretation. In view of this, I propose a NUMBER feature which includes singular and plural.

2 Syntactically determined plural marking in Yorùbá

As earlier mentioned in the introduction, Yorùbá marks plural in its nominal expressions in one of the following four ways; by the use of àwọn ‘third person plural pronoun’, quantifiers and numerals, the element wọn which is prefixed to a demonstrative, and a copied modifier. The paper accounts for all of these in the next four subsections using the feature percolation mechanism spelt out above.

2.1 Plural marking with àwọn ‘3pl pronoun.’ As it has been established in the data presented earlier, one way by which plural is overtly marked on nouns in Yorùbá is the use of àwọn ‘3pl strong pronoun’ (Dryer 1989, Rowlands 1969). In what follows, more examples of how the presence of àwọn makes available the plural interpretation are given.

(8) a. Ìyàwó ọ mi kí [àwọnṣìkùnrin]tí ó wà níbè
    Wife G-M 1sg greet PL man that RP be there
    ‘My wife greeted the men that were there.’

        b. [Àwọn obinrin ] wá tún pín sí òwó méji
            PL woman come again divide to group two
            ‘The women again divide into two groups.’

Note that Yorùbá is not the only language that uses 3pl to mark plurality. Others include Chamorro and Ngarinjin (Dryer 1989: 877), Angas and some Creoles (Corbett 2000: 135 fn.3).

(i) a. mandjan biri
    stone PL
    ‘stones’

        b. biri-ma-ra
            they-say-past
            ‘They said.’  (Dryer 1989: 87)

The universal quantifier gbogbo, patterns with àwọn in terms of distribution as it also precedes the noun.
I propose the structure in (9) which shows that Yorùbá NP consists of a bare NP and a plural word that is left adjoined to the NP. Applying the percolation mechanism, it is claimed that the [PLURAL] feature of àwọn percolates onto the higher NP node to give the plural interpretation to the entire nominal expression.

(9) 

\[
\begin{array}{c}
\text{NP} \\
\text{NP}_{\text{PL}} \\
\text{PL-3P} \\
\text{awọn} \\
\text{igi} \\
\text{tree}
\end{array}
\]

As we can see the plural word àwọn is an adjunct that is left adjoined to the NP.

The proposal that bare nouns have the structure of NPs rather than N in Yorùbá is developed in Ajiboye (2005). It is there established that these bare nouns are arguments and they can be construed as (in)definite in appropriate discourse context or generic with the presence of a generic Operator. This proposal does not in any way eliminate the traditional syntactic nodes like N, V, A. Quite the contrary, it suggests that, since these bare nouns can be construed as indefinite or definite in appropriate discourse contexts (among other factors), they are essentially analyzable as NP rather than N.

2.2 Plural marking with quantifiers and numerals. The concern in this section is to demonstrate how quantifying elements readily make available the plural interpretation of nouns that they modify, thereby capturing the generalization that exists between quantifiers and numerals in language. The only difference is the fact that in most languages, the nouns must, in addition, be independently marked plural, so that, there will be agreement between the two. However, such agreement is not required in Yorùbá.
2.2.1 Quantifiers and numerals as plural words. We notice that when NPs in Yorùbá occur with group-denoting expressions that are inherently plural, namely, quantifiers and numerals, they are unambiguously expressed as plural. There are three quantifiers that make available such a plural construal of Yorùbá NPs. These are *púpò* ‘many’, *díè* ‘few’ and *gbogbo* ‘all’. In (10), where the only element in the nominal expression in addition to the bare NP is the quantifier, the whole NP is also construed as plural.

(10)  
   a. Mo ra [ìwé *púpò*] NP Q  
       1sg buy book many  
       ‘I bought many books.’

   b. Mo ra [ìwé *díè*] NP Q  
       1sg buy book few  
       ‘I bought few books.’

   c. Mo ra *gbogbo* iwé Q NP  
       1sg buy all book  
       ‘I bought all (the) books’

The Yorùbá case contrasts with Chierchia’s (2005:8) claim that ‘quantifiers generally lack inherent NUMBER/PLURAL feature. Rather, they receive this through agreement.’ As previously illustrated, bare nouns are unmarked for plural in the language. Thus, unlike English, it is not essential that the noun must be plural before it can take a plural quantifier.

We must point out that the syntactic position of *gbogbo* in relation to *púpò* ‘many’ and *díè* ‘few’ is not clear at the moment; we can only say that while *gbogbo*, a universal quantifier precedes the NP, *púpò* ‘many’ and *díè* ‘few’ follow the NP. The other thing to note is that *gbogbo* sometimes occurs post nominally in a context that is yet to be determined.

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8 Lawal (1986, 1989) and Adèwọlẹ (1989) show that *púpò* is derived from the verb *pò* ‘be plenty’. Two other words that are derived from the same word are *ọpò* and *ọpọlọpọ*, both of which mean ‘many/plenty’ and ‘plentiful’.
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(11) a. Òógùn bo ara [gbogbo èniyàn]
    sweat cover body all people
    ‘The body of everybody is covered with sweat.’

    b. Eruku bo ọmọ [aráyé gbogbo]… àfì eyẹ kékeré gbogbo
dust cover child relation-world all… except bird small all
    ‘The body of everybody is covered with dust…except all small
    birds.’(Fagunwa 1961:1)

However, if the order is reversed, gbogbo ọmọ aráyé and gbogbo eyẹ kékeré will still
be construed as ‘the body of everybody and ‘all small birds’ respectively. It appears
that the syntactic position of gbogbo, whether pre-nominal or post-nominal, has no
effect on the quantificational interpretation of the noun.

Note, also, that gbogbo can co-occur with àwọn. When this happens, gbogbo
precedes àwọn, never following.

(12) a. Gbogbo àwọn ọmọ ọn dé
    PL PL child HTS arrive
    ‘All the children have arrived.’

    b. *Àwọn gbogbo ọmọ ọn dé
    PL all child HTS arrive

The co-occurrence of the two, however, is not surprising; as we shall show in section
2, there are cases of multiple plural words co-marking single NPs to mark plural.

The other quantificational group of words that perform the function of plural
marking is numerals. Nouns which co-occur with the cardinal numeral ‘two’ or any
cardinal numeral greater than two are interpreted as plural in Yorùbá.

(13) Mo ra [iwé méji]
    1sg buy book two
    ‘I bought two books.’

The case of Yorùbá data in (13) has parallels elsewhere. According to Corbett (2000:
211) and Wiltzschko (2008), any noun that takes a numeral denoting a set with
cardinality ‘greater than one’ should be able to have a plural interpretation in any
language. Expressing the same view, Ionin and Matushansky (2004) assert that the
semantics of numerals is the same cross-linguistically; numerals always signify plural (cf. Chierchia 2005).9

Based on the interpretation of these nominal expressions, I propose that quantifiers and numerals have an abstract (covert) [PLURAL] feature, which can be realized on nouns that they co-occur with. By abstract plural feature, I mean quantifiers and numerals are inherently plural and need no other independent pluralizing morpheme to make the noun they are adjoined to plural. This claim is justified in that whenever a noun takes any other non-quantifying modifiers, as with the case of nouns occurring with an adjective,10 it is ambiguous between a singular and a plural interpretation.

(14) a. aja ‘dog(s)’
    b. ajá pupa ‘red dog(s)’
    c. ajá burúkú ‘bad dog(s)’
    d. ajá gíga ‘tall dog(s)’
    e. ajá kékeré ‘small dog(s)’

However, the only interpretation that is available when a noun takes a quantifying element is plural. This suggests that both group-denoting quantifiers and numerals have the semantic feature [PLURAL] denoting a group, while plain plural words on the other hand introduce a [PLURAL] feature and nothing else.

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9 Observe that in a language like English, parallel examples will be considered ungrammatical in most dialects.


The reason this is ungrammatical for English but grammatical for Yorùbá is that the two languages mark plural differently and therefore adopt different mechanisms: while Yorùbá which marks plural syntactically with feature percolation; English marks plural morphologically through the use of certain inflectional morphemes adopts feature matching (cf. Ajiboye 2005).

10 See section three for the account of examples such as given in (14).
Using the feature percolation mechanism, I propose that the [PLURAL] feature of the quantifying element percolates onto the NP, thus, enhancing it a plural interpretation as illustrated in (15).

\[\text{(15) a. } \text{NP}_{\text{PL}} \quad \text{b. } \text{NP}_{\text{PL}}\]

\[\text{Q}_{\text{PL}} \quad \text{NP} \quad \text{Num}_{\text{PL}} \quad \text{t}_{\text{NP}}\]

\[\text{gbogbo} \quad \text{iwé} \quad \text{méji}\]

Note that for \textit{gbogbo}, there is no need for the NP to move since the modifier precedes the noun in the surface syntax. However, for numerals and \textit{pùpò} and \textit{díè}, which follow the noun in surface syntax, the NP moves to Spec of higher NP to derive the [NP Modifier] surface linear order.

Evidence from French also supports the claim that quantifiers are inherently plural. The word \textit{plusieurs}\(^{11}\) ‘many’ combines only with a plural noun. Compare (16a), where the noun is plural with (16b) where it combines with a singular noun. For the latter, the result is ungrammaticality because there is no agreement between the noun and the quantifier.

\[\text{(16) a. } \text{plusieurs chevaux} \quad \text{many horse.PL}\]

\[\text{‘many horses’}\]

\[\text{b. } \ast \text{plusieurs cheval} \quad \text{many horse.sg}\]

\[\text{‘many horse’}\]

The fact that we are trying to establish here is that \textit{plusieurs} is like Yorùbá \textit{pùpò} in the sense that it occurs only with plural nouns. Where French differs from Yorùbá is that in the latter, the noun need not be marked for plural for the whole NP to be interpreted as plural, once the quantifiers is marked for plural; in the case of French, the plural must be plural before the whole phrase is interpreted as plural.

\(^{11}\)One should not mistake the presence of ‘s’ at the end of this quantifier to mean a plural morpheme.
In English, the quantifiers ‘many’ and ‘few’, among other quantifiers, are also inherently plural. Compare example (17a), where ‘many’ combines with a plural noun, to example (17b) where it does not.12

\[(17) \quad \begin{align*}
    &\text{a. many orange-s} \\
    &\text{b. } *\text{many orange}
\end{align*}\]

But more than this, English is like French since a noun that occurs with a quantifier or a numeral that is greater than one must itself be marked for plural. Again this is a property that differentiates languages that mark plural morphologically from those that mark plural syntactically.

2.2.2 The form of Yorùbá numerals in plural marking. Having discussed plural marking involving quantifiers and numerals, we will now explain the form and structure of numerals that mark plural. It has been observed that Yorùbá numerals have at least three different forms (Abraham 1958, Bámgbósé 1967, Awóbùlúyi 1978, Ajibóyè & Déchaine 2004). In particular, Ajibóyè & Déchaine discuss two forms that are crucial to the account of plural formation being discussed here: the base form and the $m$-form. The latter is derived from the base numeral by a surface prefix $m$-with a H tone that docks onto the initial vowel of the base numeral. The $m$-

\[12\] Although, the quantifier ‘many’ is supposedly inherently plural, the phrase: [a man] may occur with this quantifier in certain restricted contexts.

(i) \[\begin{align*}
    &\text{a. During the 1930s [many [a man]] sold his farm and moved west.} \\
    &\text{b. During the 1930s [many men]sold their farms and moved west} \\
    &\text{c. } *\text{many man}
\end{align*}\]

Observe also the parallel situation in other English quantifiers: ‘every’ versus ‘all’. Both denote groups. While ‘all’ takes a plural NP, ‘every’ takes the unmarked form.

(ii) \[\begin{align*}
    &\text{a. Every man} \\
    &\text{b. All men} \\
    &\text{c. } *\text{All man}
\end{align*}\]
form contrasts with the base form phonologically in that the initial tone of the base numeral is replaced with a H, as seen in (18).\(^{13}\)

\[
\begin{array}{|c|c|c|c|}
\hline
\text{a. ení} & m^\prime + ení & *měnì & \text{‘one’} \\
\text{b. ọkan} & m^\prime + ọkan & *mọkan & \text{‘one’} \\
\text{c. ějì} & m^\prime + ějì & méjì & \text{‘two’} \\
\text{d. ẹ́ta} & m + ẹ́ta & měta & \text{‘three’} \\
\text{e. ěrin} & m- +ěrin & mérin & \text{‘four’} \\
\hline
\end{array}
\]

(adapted from Ajíbóyè & Déchaine 2004: 6)

The numeral ‘one’, which has two base forms (ení and ọkan), cannot take the \(m\)-prefix. The reason may not be unconnected with the fact that the \(m\)-form, though a modifier, is dedicated primarily to plural marking. In what follows I present the syntactic distributions that differentiate the two types. On the surface, both types can occur by themselves as nouns.

\[
\begin{align*}
\text{(19) a. } & \text{Mo ra ě́ta } & \text{b. Mo ra méta} \\
& 1\text{sg buy three} & 1\text{sg buy three} \\
& \text{‘I bought three.’ } & \text{‘I bought three.’ }
\end{align*}
\]

However, only the \(m\)-form can occur as a modifier, and therefore only the \(m\)-form seems capable of marking plural (20).

\[^{13}\text{One can speculate that the } m\text{-prefix is a reduced form of } m\check{\check{\text{V}}}, \text{where this unspecified vowel deletes, leaving the tone floating before it displaces the tone on the noun. In fact, Awóbúlúyí (2008) postulates } m\check{\text{u}} \text{as the underlying form for this morpheme, the vowel of which obligatorily deletes when in collocation with numerals.}\]

(20) a. *Mo ra [ìwé ẹ̀ta]  
   1sg  buy  book  three  
   ‘I bought three books.’
 b. Mo ra [ìwé mèta]^{14}  
   1sg  buy  book  three

(19b) is indeed a reduced form of (20b); thus (19b) is to be interpreted as ‘two X’.

As mentioned earlier, the m-form of numerals cannot occur with òkan and ení to modify nouns, as seen in (21).

^{14}Only the m-form can co-occur with a noun. But observe that the base form like èji ‘two’ also inherently contains an abstract [PLURAL] feature. As such, it ought to qualify to mark plural on nouns. But this is not the case. However there are certain instances where only the base form can modify nouns and mark them for plural. A few things to note about such numerals: first, they do not allow the m-form (i-a); secondly, they precede the noun they modify, (i & ii). Third, they are multiples of ten starting from ogún ‘twenty’ (see Abraham 1958: xxxii-xxxvi, (i-iii).

(i) a. Ṣehun ra [ogún iwé]  
   S.  buy  twenty  book  
   ‘Sehun bought twenty books.’
 b. *Ṣehun ra [iwé mögún]

(ii) a. Jénrolá ta [øgbön iṣu ]  
   J.  sell  thirty  yam  
   ‘Jenrola sold thirty yams.’
 b. *Jénrolá ta [iṣümøgbön]

When these numerals follow the nouns, they show ordinals and as such, they no longer mark nouns for plural.

(iii) a. Ṣehun ra [iwéogún]  
   S.  buy  book  twenty  
   ‘Sehun bought the 20th book.’
 b. Jénrolá ta [iṣu øgbön]  
   J.  sell  thirty  yam  
   ‘Jenrola sold the 30th yam.’

There is more to say than claiming that only the m-form or the base form of numerals qualifies as a plural marker. What determines which numeral must be in the m-form and which one must be in its base form to mark plural as well as the linear order between the numeral and the noun requires further research.
The ungrammaticality in (21) suggests two things: (i) only a numeral that denotes a set with cardinality $\geq 1$ can be used to derive the ‘$m$-numerals’, (ii) it might be the case that the $m$-form has to do with the semantics of more than ‘oneness’. I return to this later.

It is essential to note that Yorùbá is not the only language where numerals are used as plural words. There are other languages that require no further marking whenever a numeral that denotes a set with cardinality $\geq 1$ is used. Hungarian is one such language. In (22), lány ‘girl’ is marked as plural only by the presence of the numeral két ‘two’.

However, there is a slight difference between Yorùbá and Hungarian. In Yorùbá it is possible to use other plural words to mark nouns for plural even when a numeral is present. Hungarian does not allow any other plural marker. The question that arises is, How do we treat a language like Hungarian in the present analysis?

The explanation might be that Hungarian permits only one instantiation of the PLURAL feature. It could also be that there is a language specific rule that prohibits further plural marking once a numeral is introduced. Note that even for Yorùbá, all that is required for a noun to be interpreted as plural is for at least one plural word or
There are also languages where a numeral and a dedicated plural word do not co-occur. The reason for this might be because numerals occupy the same syntactic position as the plural word. In Gurung, a Tibeto-Burman language of Nepal, the plural word occurs in the same syntactic slot as numerals. The examples in (23) illustrate this.

(23) a. cá pxra-báe mxi jaga
   that walk-adj person PL
   ‘those walking people’

b. ca mxi só-bra
   that person Numeral
   ‘those three hundred people’  (Dryer 1989: 872)

(24) a. *cá pxra-báe mxi só-bra jaga
   that walk-adj person Numeral PL

b. *cá pxra-báe mxi jaga só-bra
   that walk-adj person PL Numeral

This suggests that the dedicated plural word and numeral in this language are in complementary distribution (cf. Dryer 1989: 871).

2.3 Reduplicated modifier as plural word. Another way by which Yorùbá expresses plurality on its nouns is through the use of modifiers. The claim we make

---

15 For Hungarian, one can also speculate that the PLURAL feature takes precedence over the SINGULAR feature, hence when an NP contains a numeral that has an abstract PLURAL feature and a noun with a SINGULAR feature, the NP is interpreted as plural because of this precedence constraint. This is illustrated in (i).

(i) \[
\begin{array}{c}
\text{NP}_{\text{PL}} \\
\text{Num} \\
[\text{PLURAL}] \\
\# \\
\text{Két} \\
\text{lány}
\end{array}
\]
in this regard is that modifier-as-plural-word has a structure of a “COPY-modifier”. Observe that bare nouns with or without plain modifiers display an ambiguity between a singular and plural interpretation. This is illustrated in all the (a) and (b) examples in (25)-(29). However, this ambiguity disappears once the modifier is copied. This is reflected in the (c) examples.

(25) a. Ìlú yìí ni [àṣà]
   town DEM have custom
   ‘This town has a custom.’ or
   ‘This town has customs.’

   b. Ìlú yìí ni [àṣà burúkú]
   town DEM have custom bad
   ‘This town has a bad custom.’ or
   ‘This town has bad customs.’

   c. Ìlú yìí ni [àṣà burúkú burúkú ]
   town DEM have custom COPY bad
   ‘This town has bad customs.’ or
   ‘This town has a bad custom.’

16 Note that cross-linguistically, reduplication is used extensively to mark ‘plural’ in many formally distinct ways.
17 The use of “COPY” as a mechanism of marking plural is famous among the Yorùbá people, as demonstrated in the early novels. The example in (i) is taken from one of the works of Fágúnwà, a famous Yorùbá novelist. The copied modifier ńlá in citation means ‘big’ but when used as a plural word as in (i), it means ‘great Xs’.

(i) Ìwọ ni o ni [agbára ńlá] tí o fi dá gbogbo [ńkan
   2sg  FOC  2sg own power big  that 2sg usecreate all thing

   ńlá  ńlá] inú ayé...
   COPY big inside world

   ‘You are the one that has a strong power that you used in creating all the great things in this world.’ (Fágúnwà 1961: 146).
(26) a. Péjú ta [bóɬù ]
P. sell ball
‘Peju sold a ball.’ or
‘Peju sold balls.’

b. Péjú ta [bóɬù papu]
P. sell ball red
‘Peju sold a red ball.’ or
‘Peju sold red balls.’

c. Péjú ta [bóɬù pupa papu]
P. sell ball COPY red
‘Peju sold red balls.’
‘Peju sold a red ball.’

(27) a. Omóle fọ [iɡò]
O. wash bottle
‘Omole washed a bottle.’ or
‘Omole washed bottles.’

b. Omóle fọ [iɡò palaba]
O. wash bottle flat
‘Omole washed a flat bottle.’ or
‘Omole washed flat bottles.’

c. Omóle fọ [iɡò palaba palaba]
O. wash bottle COPY flat
‘Omole washed flat bottles.’ or
‘Omole washed a flat bottle.’

(28) a. Mo ra [òɡèdè]
1sg buy banana
‘I bought a banana.’ or
‘I bought bananas.’
b. Mo ra [ọgèdè ńlá]
   1sg buy banana big
   ‘I bought a big banana.’ or
   ‘I bought big bananas.’

c. Mo ra [ọgèdè ńlá ńlá]
   1sg buy banana COPY big
   ‘I bought big bananas.’ or
   ‘I bought a big banana.’

(29) a. Abiólá ní [ilé] ní Èkó
   A. have house P Lagos
   ‘Abiola has/owns a building in Lagos.’ or
   ‘Abiola has/owns buildings in Lagos.’

   b. Abiólá ní [ilé gogoro] ní Èkó
      A. have house tall P Lagos
      ‘Abiola has/owns a tall building in Lagos.’
      ‘Abiola has/owns tall buildings in Lagos.’

   c. Abiólá ní [ilé gogoro gogoro] ní Èkó
      A. have house COPY tall P Lagos
      ‘Abiola has/owns tall buildings in Lagos.’

Following Ajibóyè and Déchaine (2004), I assume that the copied entity is at the left edge of the base. Consequently, I adopt the structure in (30) for the Yorùbá copy-

18On the Copy-Modifier order, there may be nothing that hinges on the suggestion that the copied entity is prefixed to the base since both are the same. However, there is language internal evidence in other structures that supports the order suggested here. In partial reduplication that derives gerunds (i-a) and partial reduplication that derives universal quantification (i-b), it is clear that the copied elements are attached to the left of the base.

(i) a. wí-wá ‘coming’ (ii) a. ojú-ojúmó (ojoojúmó) ‘everyday’
    copy-come copy-day-break

   b. *wá-wí           b. *ojúmó-ojú
modifier. The plural marker is left adjoined to the modifier to form a plural modifier (cf. Kayne 1994).

(30) \[
\text{COPY} \quad \text{Mod}_{\text{PL}} \\
[\text{n\text{\'{a}}} \quad \text{n\text{\'{a}}}] \\
\text{big}
\]

The analysis of modifiers is the same as those previously accounted for. For completeness, I show how the mechanism of feature percolation derives plural NPs with modifiers using (31a) as an illustration.

(31) \textit{plural percolation through modifier}

\[
\text{NP}_{\text{PL}} \\
\text{NP}_i \\
\text{og\text{\'{e}}} \text{d\'{e}} \\
\text{COPY} \\
\text{MOD} \\
[\text{n\text{\'{a}}} \quad \text{n\text{\'{a}}}] \\
\text{big} \quad \text{big}'
\]

It must be noted that Yorùbá speakers do not have the same judgments on which subclass of modifiers can be copied to mark plural. Quality modifiers (e.g. burúkú ‘bad’) and quantity modifiers (e.g. n\text{\'{a}} ‘big’) can be copied to “indicate more-than-oneness” (Bámgbósé 1967: 112-113), a finding that our study also found to hold true. In addition, we have demonstrated that copying that involves color\(^{19}\) (such as dí\text{\'{u}}\text{\'{u}})

---

\(^{19}\) Observe that quantity modifiers (quantifiers and numerals) are treated as a kind of plural word with an abstract [PLURAL] feature. They, therefore, require no copying to function as plural words. However, whenever they are copied, they modify verbs, (i-b).
‘black’), quality, and dimension can undergo copying for plural marking. However, some native speakers disagree. As reflected in (25-29), quality, dimension and color\(^{20}\) are considered as modifiers that can undergo copying for plural marking.

Putting aside speaker variation, the fact remains that in Yorùbá, not all modifiers are eligible for copying to mark plural. In particular, the class of attributives (32a)\(^{21}\), most ideophones (32b),\(^{22}\) and locatives (33-34) cannot be copied to form plurals.

\[(i)\] a. Mo ra iwé púpò
1sg buy book many
‘I bought many books.’

b. Mo ra púpò púpò
1sg buy COPY many
‘I bought in large quantity (i.e., the buying was done in large quantity).’

\(^{20}\) Observe that quantity modifiers (quantifiers and numerals) are treated as a kind of plural word with an abstract [PLURAL] feature. They, therefore, require no copying to function as plural words. However, whenever they are copied, they modify verbs, (i-b).

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1sg buy book many
‘I bought many books.’

b. Mo ra púpò púpò
1sg buy COPY many
‘I bought in large quantity (i.e., the buying was done in large quantity).’

\(^{21}\) The term ‘attributive’ as used here is a kind of modifier that describes or characterizes the mental state of the noun it modifies. This contrasts with the standard use of the term as any adjective, which appears directly beside the noun. These modifiers are attributives because they assign some kind of quality to the noun they modify.

\(^{22}\) According to Doke in Awóyalé (1974:139), an ideophone is a word, often onomatopoetic, which describes a qualitative, predicative, or an adverb with respect to sound, color, smell, manner, state, action or intensity. Moreover, there is a category of ideophones that can be copied to mark plural (cf. Beck 2005).
(32) a. *ajá olóríburúkú olóríburúkú (cf. ajá olóríburúkú; ‘bad-luck dog’)
   dog COPY bad-luck

   b. *ajá játijàti játijàti (cf. ajá játijàti; ‘useless dog’)
   dog COPY feckless

(33) *eyín òsì òsì (cf. eyín òsì; ‘left tooth’)
   tooth COPY left

(34) *apá òtún òtún (cf. apáòtún; ‘right hand/way’)
   arm COPY right
   ‘right arm’

It might be the case that locative modifiers cannot undergo copying because ‘left’ and ‘right’ are unique nominal adjectives.

The next thing that we would like to discuss is the size of the copied item. Whenever a modifier is copied for the purpose of marking plural, it is the whole word that is copied even though, in most cases, full copying is subject to certain phonological constraints. The particular claim is that the principle of “foot binarity” determines the size of what is to be copied (Ola (1995) and Ola-Orie and Pulleyblank (2002)). In this approach, at least the copied entity must be bi-moraic. Thus, in tri-syllabic or polysyllabic words not more than two syllables are copied.

Note also that, whenever a modifier is copied, it does not undergo any phonological process of either deletion or assimilation, either at the segmental or tonal level. The reason may be due to the fact that the kind of copying under discussion is syntactic. It may also be because of its phonological

23 The category of ideophones that can be copied to mark plural in Yorùbá is shown in (41).
structure: the modifiers in question are all consonant initial.\(^{25}\)

(35) a. ũlã > ũlã ũlã
   big       COPY    big

b. pupa > pupa pupa
   red       COPY    red

c. kékeré > kékeré kékeré
   small     COPY    small

One final question that is addressed in this section is the case when two or more modifiers modify a noun. In the discussion of overt plural marking with modifiers above, it has been shown that the COPY of the modifier functions as a plural word. However, there is a restriction on the copying process when there is more than one modifier within a nominal expression. It appears only the modifier that is adjacent to a noun can undergo copying. This claim is supported by the examples in (36) where there are two modifiers: ũlã ‘big’ and tuntun ‘new’ that modify ilé ‘house’. As it turns out, only one and the first of the two, can be copied.

---

\(^{25}\) Observe that Yorùbá also makes use of the partial copying strategy to derive gerunds. If modifiers were to be partially copied for the purpose of plural marking, the process would involve copying the first consonant of the modifier and the insertion of a fixed segment a.k.a. H toned /í/.

(i) a. kékeré *kî-kékeré
   small     COPY-small

b. dúdú *di-dúdú
   black     COPY-black

c. ũlã *ni-ũlã
   big       COPY-big

However, partial copying does not apply to modifiers not to talk of using it for plural marking. With this, we conclude that copying that involves plural marking must be full and not partial.
(36)  

<table>
<thead>
<tr>
<th></th>
<th>ilé</th>
<th>ndá</th>
<th>ndá</th>
<th>tuntun</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>house</td>
<td>PL</td>
<td>big</td>
<td>new</td>
</tr>
<tr>
<td></td>
<td>‘new big houses’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. *ilé ndántuntun tuntun

In (37), despite the fact that the adjacent modifier is copied, thus satisfying the adjacency constraint, it is not possible to extend copying to the next modifier.

(37) *ilé ndáfólátuntun tuntun

<table>
<thead>
<tr>
<th></th>
<th>ilé</th>
<th>ndá</th>
<th>ndá</th>
<th>tuntun</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>house</td>
<td>PL</td>
<td>big</td>
<td>PL</td>
</tr>
</tbody>
</table>

When the noun itself is already marked for plural with òwọn, the same generalizations obtain.

(38) a. òwọn ilé kékeré kékeré tuntun

<table>
<thead>
<tr>
<th></th>
<th>PL</th>
<th>ilé</th>
<th>kékeré</th>
<th>kékeré</th>
<th>tuntun</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>house</td>
<td>PL-small</td>
<td>new</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘new small houses’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. *òwọn ilé kékeré tuntun tuntun

<table>
<thead>
<tr>
<th></th>
<th>PL</th>
<th>ilé</th>
<th>kékeré</th>
<th>tuntun</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>house</td>
<td>small</td>
<td>PL</td>
<td>new</td>
</tr>
</tbody>
</table>

(39) a. òwọn ajá dúdú dúdú kékeré

<table>
<thead>
<tr>
<th></th>
<th>PL</th>
<th>ajá</th>
<th>dúdú</th>
<th>dúdú</th>
<th>kékeré</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>dog</td>
<td>PL</td>
<td>black</td>
<td>small</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘small black dogs’</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. *òwọn ajá dúdú [kékeré kékeré]

<table>
<thead>
<tr>
<th></th>
<th>PL</th>
<th>ajá</th>
<th>dúdú</th>
<th>[kékeré kékeré]</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>dog</td>
<td>black</td>
<td>PL</td>
<td>small</td>
</tr>
<tr>
<td></td>
<td>‘small black dogs’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From the foregoing, it is clear that there is more to be done before we can state definitively what accounts for specific restrictions of copying modifiers when they are
stacked within NPs in Yorùbá. The case of plural marking with demonstratives is the next to be discussed.

2.4 Plural demonstratives as plural word. Observe that without prior discourse cues, it is difficult to guess whether a bare N refers to a singular or a plural, even with adjectives as shown in the previous section, possessive pronouns, or NPs as illustrated in (40).

(40) a. iwé e rè  

his/her book(s)

b. iwé Adé  

Ade’s book(s)

However, the case with demonstratives is quite different. The data below show that the base form of demonstratives is unmarked for plural. That is probably the reason, the nouns which they combine with are obligatorily interpreted as singular.

(41) a. Mo ra ilé yìí ní mìliònù mèwáá náírà  

1sg buy house Dem for million ten naira  

‘I bought this house for ten million naira.’

b. Mo ta ilé yên ní pòntò  

1sg sell house Dem for cheap  

‘I sold that house at a ridiculously low price.’

The data in (41) raise a fundamental question of why nouns occurring by themselves or when they take a modifier are ambiguous between a singular and a plural interpretation; whereas with an unmarked demonstrative, they are obligatorily

26 On what prevents N copy for the purpose of plural marking, one can only speculate that this might be due to the fact that all known cases of copying in Yorùbá already have been assigned a semantic function. For example, when the initial consonant of a verb is copied and the fixed high-toned /ì/ is inserted, this derives gerunds, e.g. wá ‘come’ wí-wá ‘coming’. Similarly, when temporal nouns such as ọ̀sán ‘afternoon’ and numerals such as ẹjí ‘two’ are copied, they derive quantificational nouns, e.g. ọ̀sòọ̀sán ‘every afternoon’, ẹjèèjì ‘all the two’ (cf. Ajiboye & Déchaine 2004). Lastly, when common nouns such as ilé ‘house’ is copied and kí is inserted between the base and the copied stem, the result is a polarity item, e.g. ilé-kí-ilé ‘any house’ (cf. Kock 2004). With modifiers, the output of copying, is to give a marked plural reading.
interpreted as singular. Put differently, what is there in an unmarked demonstrative that forces a singular interpretation? I return to this question in section 3.3. Meanwhile, for the nouns in (41) to be interpreted as plural, the demonstratives must first be pluralized by prefixing the morpheme \textit{wọn}-, and the noun in turn will take the plural demonstrative; then, the whole NP receives a plural interpretation.\footnote{Note also that, whenever \textit{wọn} combines with demonstratives to form plurals, the derived word can in turn undergo a nominalization process by prefixing \textit{i}-}.27

(42) a. Mo ra  ilé \textit{wọn-yií} ní míliönù méwáá náírá
\hspace{1cm} lsg buy house PL-Dem for million ten naira
\hspace{1cm} ‘I bought \textit{these houses} for ten million naira.’

\hspace{1cm} b. Mo ta  ilé \textit{wọn-yěn} ní póntò
\hspace{1cm} lsg sell house PL-Dem for cheap
\hspace{1cm} ‘I sold \textit{those houses} at a ridiculously low price.’

Recall that, in the present analysis, demonstratives are treated as a functional head which takes the NP as its complement. In the final analysis, the NP moves to Spec D(em)P, which derives the surface linear order of NP-Dem. The derivation follows the previous mechanism, namely, the plural feature of the demonstrative percolating to the D(em)P and assigning the whole phrase its plural feature.

---

\footnote{Note also that, whenever \textit{wọn} combines with demonstratives to form plurals, the derived word can in turn undergo a nominalization process by prefixing \textit{i}-. This suggests that \textit{awọn} is probably derived from \textit{wọn} by prefixation of \textit{i}- to the latter (cf. Awobuluyi 2008)}
Finally, the plural feature can multiply percolate through àwọn and -wọn.

Note that, the plural morpheme like the previous plural words already accounted for, is left adjoined to the host demonstrative.

As mentioned earlier, the unresolved problem involving demonstratives is that when there is a bare N inside an NP with a demonstrative, it must be interpreted as singular. One speculation is that it might be the case that Yorùbá demonstratives have some idiosyncratic property that is not yet understood. In section 3.2 below, we present further discussion.

3 Contextually determined singularity versus plurality

It has been observed that there are two distinct ways by which nouns that are unspecified for number in Yorùbá can be interpreted. There are contexts in which
they can be interpreted as singular or plural. I treat this type in 3.1. There are other contexts in which they can only be interpreted as singular, as seen in 3.2. Section 3.3 provides an analysis for both in 3.1 and 3.2.

3.1 Unspecified for number resulting in ambiguity. When a count noun occurs by itself (45a), or when it takes a modifier (45b), a relational noun (45c), or a possessive pronoun (45d), the noun can either be construed as singular or plural depending on the discourse context.

(45) a. Fálànà ra ìwé ní Lọ́ndọ̀
   F. buy book in L.
   ‘Falana bought a/some book(s) in London’

b. Fálànà ra iwé pupa ní Lọ́ndọ̀
   ‘Falana bought a/some red book(s) in London’

c. Fálànà ra iwé òfin ní Lọ́ndọ̀
   ‘Falana bought a/some law book(s) in London’

d. Fálànà ra iwé rẹ̀ ní Lọ́ndọ̀
   ‘Falana bought his book(s) in London’

The examples in (45) suggest that Yorùbá nouns are unspecified for number; as such, number marking can be said to be underdetermined in the language (cf. Rullmann 2004). Some specific contexts for singular interpretation are given in the folktale in (46).

(46) Context for singular interpretation: The song below story is taken from the story Dog and Tortoise who went to steal in another man’s farm:

a. Ajá, ajá o, ràn mí lèrù
   Dog, dog emph, help 1sg in-load
   ‘Mr. Dog, relieve me of my load.’
b. Bí o obá ràn mí lèrù, mà á ké sólóko
   If 2sg neg help me in-load, 1sg will call to-farm owner
   ‘If you refuse to relieve me, I will call on the owner of the farm.’

c. Bólóko gbọ o, á gbé ë ë
d   If-farm-owner hear emph, will carry 2sg tie
   ‘If the owner of the farm hears, he is going to arrest you.’

The use of the second person singular in (46b&c) leaves no doubt that ajá ‘dog’ in (46a) is singular. On the other hand, the example in (47) shows a context where ajá ‘dog’ can only be interpreted as plural. In the movie “Ṣaworoidé” (Íṣọ̀lá 1999), Adébòmí told a story of a hunter and his dogs to his children and the excerpt below is the song from the folktale.28

(47) **Context for plural interpretation**: The hunter in the story used to summon his dogs with songs like the one below in times of danger, and the dogs would then run quickly to his aid.

a. Ajá à mi dà o
dog G-M 1sg Q-tag emphatic
   ‘Where are my dogs?’

b. Ajá ọdẹ
dog hunter
   ‘the hunting dogs’

c. Òkémọkérèwú...Ọsọpàkàgbọmọmì...Ọgbálègbárawé

d. Ajá ọdẹ
dog hunter
   ‘the hunting dogs’

---

28.“Ṣaworoidé”, a famous Nigeria home video movie written by Professor Akínwùnmi Íṣọ̀lá, was produced in (1999) by the Mainframe Film Production under its director Túndé Kèlání.
e. Ṣí ṣárà ẹ̀ mi bọ̀ o
   2pl run 2pl Prog come emphatic
   ‘You should all come immediately.’

The mention of Òkèmòkèrèwú, Òsòpákágbómòmí, Ògbálègbáráwé in this song as well as the use of the 2nd person plural in (47e) leave no one in doubt that ajá ‘dog’ can only be interpreted as plural with no overt morpheme for such an interpretation. The example in (48) illustrates contexts where a noun with a modifier can be interpreted as singular, while the example in (49) shows the context for plural.

(48) **Context for singular interpretation of N modifier**

a. Ade is crying. Ajayi, his father who quickly thinks of what to do to pacify him gives the instruction in (48b).

b. Lómú [bọ̀lù popa] tó wà nínú àpò mí kí o máa
go take ball red that-it be inside bag my that you be

fì ṣèrè
use play

‘Go and take the red ball that is inside my bag and play with it.’

(49) **Context for plural interpretation of N modifier.**

a. Ajayi sells balls only. This morning, he asked Ade to arrange the balls on the shelves with the instruction in (49b).

b. To [bọ̀lù popa] sí apá .kan, kí o sì to [bọ̀lù]
arrange ball red to side one, that 3sg then arrange ball

dúdú sí apá kejì
black to side second

‘Arrange the red balls on one side and the black balls on the other side.’
From the preceding, we see that Yorùbá differs from some other languages where the expression of plurality is morphological. In such languages where plural marking is morphologically expressed, it is done through a dedicated plural morpheme. Consider the English examples in (50). The plural suffixes on ‘dog’ differentiates between the singular interpretation (50a) and the plural interpretation (50b).

(50)  

a. *(Singular)* I saw a **dog** on my way home this afternoon.

b. *(Plural)* I saw **dog-s** race at the Vancouver city hall when I visited Canada.

I conclude, along the lines of Corbett (2000), that the issue of ambiguity of number interpretation of nouns as singular or plural is one of the peculiarities of languages with no overt dedicated plural marking. Yorùbá therefore does not constitute an exceptional case.

3.2 **Unspecified for number with obligatory singular interpretation.** From the discussion in the immediate previous section, it has been established that without prior discourse cues, one cannot say whether a bare NP is to be interpreted as singular or plural, even with adjectives, possessive pronouns or other NPs. Surprisingly, when there is a bare NP with a demonstrative, it can only be interpreted as singular.

(51)  

a. Mo ra ajá yií ní igba náírà
   ‘I bought this dog for two-hundred naira.’

b. Mo ra ewúrẹ̀ yẹn ni èçègbèta náírà
   ‘I bought that she-goat for five hundred naira.’

This suggests that demonstratives have some special (idiosyncratic) property with respect to marked-singularity. If the discourse suggests plurality, there will be some discourse infelicity.

(52)  

a. Mo pe ajá, Taúntólóun, Śùúrù
   ‘I called the [dog] Taúntólóun! Śùúrù.’

29 Matthewson (personal communication) notes that Brazilian Portuguese has number-neutral bare nouns and a real plural marker.
b. Ajá yèn wá, a si bèrè sí ní rin lọ
‘That-[dog] came and we started to walk.’

The utterance is strange, since there is a clash between the facts and the use of a bare N+dem as *ajá yèn* (52b) cannot refer to *Taípõlóoun* and *Ṣùùrù*. We would not expect this clash unless demonstratives have some kind of special property with respect to marked singularity. The task before us is to account for the phenomenon in a principled way.

A less elegant way out is to claim that *yìí* and *yèn* are intrinsically singular, whereas *wònyí* and *wònyèn* are intrinsically plural. There is, however, no overt singular FEATURE on *yìí* and *yèn*. Amore elegant explanation would be to suggest a reason these two items are necessarily singular. Such an explanation will never be morpheme-based, but will have to pass through the computational system (Manfredi personal communication). Consider a related fact in paradigm (53a) where *ajá* can be INDEFINITE plural, but not DEFINITE plural. For the latter interpretation to be obtained, we need a plural morpheme, as in (53b).

(53) a. Mo rí ajá
1sg see dog
‘I saw a dog/some dogs.’ or
‘I saw the dog in question.’
*I saw the dogs in question.’

b. Mo rí àwọn ajá
1sg see 3PL dog
‘I saw some (individual) dogs.’ or
‘I saw the dogs in question.’ (Manfredi 2010: 13)

According to Manfredi, there is something about the combination of definite and the plural word which requires overt “individuation” (Welmers 1973: 220-222).

The other context where bare nouns are not specified for number is when they co-occur with the numeral “one”, as in (54a), the specificity marker for indefinite NPs (54b), and the specificity marker for definite NPs (54c). Here the noun is obligatorily interpreted as singular.
(54) a. Mo rí [ajá (*ô)kan] N NUM=1
   1sg see dog one
   ‘I saw **one** dog.’

b. Mo rí [ajá kan] N SPF_{indef}
   1sg see dog SPF
   ‘I saw a **CERTAIN** dog.’
   ‘*I saw **CERTAIN** dogs.’

c. [Ajá náà] tóbi N SPF_{def}
   dog SPF be-big
   ‘The **VERY** dog is big.’
   ‘*The **VERY** dogs are big.’

While it is not surprising to see a bare noun with numeral “one” to have a singular interpretation, it is still not clear what explanation one can offer for the case of specificity markers kan and náà in Yorùbá which give a singular interpretation of the noun they modify.

The question of how to incorporate the exceptional cases in section 3.2 finds an answer in the “general number analysis” proposed in the literature. I give this account in the next section.

3.3 The General number analysis. The idea of General number adopted here follows Rullmann and You (2003) and Rullmann (2004). On the basis of the semantic and pragmatic properties of bare nouns, Rullmann and You claim that bare nouns are neither singular nor plural; i.e., they are unspecified for number (cf. Déprez 2004: 10). In order to determine whether a singular or a plural interpretation will be applicable, one has to put such bare nouns in a discourse context. Rullmann and You (2003: 2) claim further that nominal expressions with general number, have the same truth conditions as those which have a semantically singular object.

On the syntax of Yorùbá bare nouns, I follow Longbardi (1994, 2001) and propose that Yorùbá bare nouns have a DP structure comprising a null or overt D and an NP as its complement. In this proposal, the specificity markers kan and náà as well demonstratives yii and yen are treated as some kind of determiners.
(55)  a. Unspecified for number resulting in ambiguity
(56) a. *Unspecified for number with obligatory singular interpretation*

\[
\text{D(em)P} \\
\text{D(em) NP} \\
\{ \text{Spf NP \, i} \} \\
\text{Dem (Mod) t NP}
\]

Note that in the surface syntax, the NP precedes the modifier. This suggests that modifiers are right adjoined to the NP. But this is not so. In line with the earlier proposed structure, the modifier is also left adjoined and the NP moves to the Spec, NP of the next higher phrase. And when the D position is filled, as in the cases with the specificity marker or the demonstrative, the whole NP moves to Spec,DP as illustrated in (56b). Even with a bare NP, it is still assumed that there is a covert movement of the NP.

**4 Summary and conclusion**

It is clear that plural construals on nouns in Yorùbá divide into three interpretive classes as summarized in (57). Class 1 divides into three sub-groups: (i) cases where the plural word *àwọn* precedes the noun, (ii) cases where bare nouns are either accompanied by a numeral that is greater than ‘one’ or a quantifier and (iii), cases where a plural demonstrative or modifier occurs with nouns. In all of these, the noun is obligatorily interpreted as **plural**. Class 2 involves cases where a noun occurs bare or with a modifier and the noun is interpreted as **singular or plural**. Finally, class 3 involves cases where a noun can be accompanied by an unmarked demonstrative, the numeral ‘one’, or the specificity markers *kan/náà* and is obligatorily interpreted as **singular**.
A summary of the analysis

<table>
<thead>
<tr>
<th>CLASS</th>
<th>Syntactic context</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(i) 3PL + N</td>
<td>PLURAL</td>
</tr>
<tr>
<td></td>
<td>(ii) N + Num &gt;1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N + Q</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(iii) N + PL-Dem</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N + PL-Mod</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>(i) N</td>
<td>SINGULAR OR PLURAL</td>
</tr>
<tr>
<td></td>
<td>(ii) N + Mod</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>(i) N + Dem</td>
<td>SINGULAR</td>
</tr>
<tr>
<td></td>
<td>(ii) N + Num 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(iii) N + SPF</td>
<td></td>
</tr>
</tbody>
</table>

What remains to be discussed is how the feature percolation mechanism adopted in the account for Yorùbá contrasts with feature matching attested in English. Since this is not a comparative study, such cannot be addressed here. Readers are referred to Ajibóyè (2005).

This paper has accounted for the strategy that Yorùbá adopts in plural marking. The general picture that emerges is that plural is syntactically marked through the use of certain plural words or morphemes. The analysis of plural marking proposed for Yorùbá, namely, feature percolation, makes a prediction that there are two ways by which languages may mark plural on nouns. Languages like Yorùbá which do not show agreement mark plural syntactically, while languages like English which show agreement mark plural morphologically.

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