Yorùbá COPY negative polarity items

Abstract

This paper gives a syntactic account of two forms of Negative Polarity Items (NPIs) in Yorùbá, which correspond to English *any*-NP NPIs (N-*k*-N, e.g. *enikéni* "anybody", and N-*kankan*, e.g. *eni-kankan* "anybody"). I dub these two forms COPY NPIs because they involve reduplication. The Yorùbá COPY NPI data are described using the framework developed in Collins and Postal (2014), where NPIs are analyzed in terms of NPI-internal NEG formation, matrix clause NEG raising, and NEG deletion. The paper establishes that the COPY NPIs are ambiguous between Type1 (strong) and Type2 (weak) NPIs. I argue that this way of looking at NPIs provides an insight into the internal properties of NPIs cross-linguistically. Building on the proposed parameters in Collins et al. (2017), four parameters are set for Yorùbá COPY NPIs against English *any*-NP NPIs and Ewe *ke*-NPIs.

Keywords: COPY, Negative Polarity Items, Yoruba, NEG raising and deletion, cross-linguistic parameters

1. Introduction

The main purpose of this paper is to provide a syntactic account of two forms of Yorùbá negative polarity items (NPIs), corresponding to English *any*-NP NPIs. These are the N-k-N forms such as *ohunkóhun* ('anything') in (1a) and the N-kankan forms like *ohun-kankan* ('anything') in (1b). I have tagged them COPY NPIs because they both involve reduplication. N is reduplicated in the first form while the specificity marker *kan* is reduplicated in the second form. These two forms are highly productive in that any noun can occupy the N slot in both¹:

¹ But see Section 7 on the distributional restrictions on the two forms.

- 1. a. Won kò je ohunkóhun
 - 3PL NEG eat anything

"They did not eat anything"

- b. Won kò je ohun-kankan
 - 3PL NEG eat anything

"They did not eat anything"

- 2. a. Won kò rí enikéni
 - 3PL NEG see anybody

"They did not see anybody"

- b. Won kò rí eni-kankan
 - 3PL NEG see anybody

"They did not see anybody"

NPIs are lexical items that are known to occur primarily in negative contexts or licensed by negation (or anti-veridicality), downward entailment, or non-veridicality (Giannakidou, 2011). They are also licensed in some other syntactic environments such as within the restriction of the quantifier *every*, and in interrogative clauses. NPIs are attested in quite a number of languages and cross-linguistic works devoted to determining their distributions are common in the literature. Haspelmath (1997), for example, provides a typology of 100 languages which are known to have indefinite pronouns. Since Haspelmath's sample was designed to accommodate mostly known language families and given the fact that indefinite pronouns are the prominent members of the class of items dubbed NPIs (indeed Ladusaw, 1996:193, observes that NPIs have been termed indefinites since Klima 1964), it can be argued that NPIs are attested in most known languages.

NPIs have been described in the literature of formal linguistics mostly from the viewpoint of pragmatics and semantics (generally regarded as the standard approach) where they are considered as indefinites occurring within the scope of negation and in some other licensing environments. In this tradition, attention is paid mostly to the different environments in which various kinds of NPIs are said to be licensed. As such, the compositional structures of the NPIs are not often a priority. What is important is to define what environment is such that it licenses a given NPI. This practice goes as far back as Ladusaw (1979). Later works, such as Zwarts (1995), Van der Wouden (1994), Giannakidou (1997, 1999, and 2011), Lin et al (2015) among several others, have continued in this tradition. There have also been syntactic theories (such as Klima 1964, Baker 1970, Linebarger 1981 and 1987) accounting for the distribution of NPIs. But Collins and Postal, 2014 (henceforth CP2014), extending some of the proposals advanced in Fillmore (1963), represents a recent attempt to provide a syntactic analysis of NPIs. The syntactic account provided for NPIs in that monograph holds a lot of insight into the compositional make-up of NPIs in different languages, and can be very useful in establishing a cross-linguistic pattern for NPIs, the any-NP NPIs especially.

In the literature of formal linguistics, Yorùbá NPIs have received little attention, and even one work, (Koch, 2005) that account for Yorùbá NPIs focuses on one realization of Yorùbá *any*-NP NPIs, the N-*k*-N form. This account is from a semantic point of view. In this paper, I provide a syntactic account of Yorùbá NPIs, from the viewpoint of the framework developed in CP2014, and show what consequences my analysis has for the theory proposed therein.

In Section 2, I lay out the basic components of CP2014's treatment of NPIs and suggest its usefulness for providing a cross-linguistic account of NPIs and in further investigating the underlying forms of negative particles in natural language. Section 3 provides general

distributions of the two forms of NPI in Yoruba while Section 4 takes on the issue of reduplication that is found in them. Section 5 provides an analysis of NEG raising for the two types of *any*-NP NPI that are the focus of this paper. In Section 6, the NPIs are analyzed in terms of long distance licensing, determiner sharing and remnant raising, while Section 7 addresses the question of whether they are Type 1 or Type 2, or are ambiguous between the two, in accordance with the CP2014 framework. Section 8 concludes with discussion on cross-linguistic variation and parameters.

2. An overview of CP2014 framework on NPIs

Central to CP2014 is the idea of NEG raising, which is used to account for the alternation found between sentences such as those in (3) and (4).

- 3. a. John believes Mary did not do it.
 - b. John does not believe Mary did it.
- 4. a. They think it will not happen.
 - b. They do not think it will happen.

Each of the pairs have the same underlying forms but the alternation is brought about by a transformational rule dubbed NEG raising, so that the basic difference between (3a) and (3b) on the one hand and (4a) and (4b) on the other hand is that in the (a) sentences, NEG is in the position where it is interpreted while in the (b) sentences, NEG raises to the matrix clause but is interpreted in its original position². In other words, in (3a) and (4a) NEG is pronounced in the

² However, in the pragmatic-semantic approach to this phenomenon of Neg raising, there is a diametrically opposed tradition formally initiated in Bartsch (1973) and extended in Gajewski (2005 and 2007), and Romoli (2013). This is called the Excluded Middle Assumption which according to Zeijlstra (2017), is a property of predicates like *think p*

embedded clause where it is interpreted, while in (3b) and (4b), Neg is pronounced in the matrix clause but is interpreted in the embedded clause. This can be rendered as in (5).

5. a. [CPJohn believes [CPMary did NEG do it]

This idea of NEG raising is a well-established notion in the literature, dating to as far back as Fillmore (1963), and much work has been done in this respect. Stretching this idea a bit, CP2014 propose that NEG raising occurs even within a matrix clause that lacks an embedded clause: that is, in a sentence containing an NPI, NEG originates from within that NPI. This same proposal has been used to analyze bipartite negation in Ewe (See Collins et al., 2017), where NEG originates from within a VP-internal DP, raises to T and then to C, where it is pronounced. Blanchette (2015) has also applied this notion to account for double negation and negative concord phenomena in some non-standard varieties of English. NEG raising involving NPIs is depicted in (6) and (7), ignoring the detailed composition of NPIs for now.

- 6. a. They saw nobody
 - b. They saw NEG body
- 7. a. They did not see anybody
 - b. They did NEG_1 see $< NEG_1 > body$.

in (4) which presupposes either that one thinks that p or one thinks that not p, and the presupposition that one does not think at all (the middle presupposition) is excluded. In this approach, NEG is said to be interpreted in its surface form and there is an assumption that cases like (3) and (4) do not involve NEG-raising. However, Collins and Postal (2017) have shown that these two approaches, i.e. the syntactic approach with NEG-raising and the pragmatic-semantic approach with the Excluded Middle Assumption, are motivated independently by different kinds of data, arguing that there are cases (such as Horn clauses) which the syntactic approach accounts for effectively but which the pragmatic-semantic approach cannot account for, just as there are cases which the pragmatic-semantic approach is not able to. They therefore argue that to account for the wide range distributions of this phenomenon, both approaches are necessary. This is also the view defended in Crawley (2016).

As in the previous examples, in (6a), NEG is pronounced (within the DP) where it is interpreted. But in (7b), it is pronounced higher up in the structure while it is interpreted within the DP. In other words, (6) does not involve NEG raising, while in (7) NEG raises higher up in the structure. From this picture, it is clear that quantifier words like *no one*, *nobody*, *no food*, etc. have equivalent meaning with their corresponding *any*-NP NPIs, given the similarities between (6) and (7). I elaborate more on this below.

Treating NPIs in this version gives rise to teasing out the individual components of NPIs. In CP 2014 framework, an NPI such as *anybody* has the following form:

8.
$$[DP]$$
 any body

Here, NEG is unpronounced, *any* spells out the supletive SOME, while the NP, *body*, remains the same. Bearing in mind the similarity between (6) and (7), consider (9).

In (9), NEG is pronounced as *no*, SOME is unpronounced and the NP, *body*, remains the same. The basic difference between (8) and (9), therefore, is in whether or not NEG or SOME is pronounced within the DP. The fact of (8) and (9) presupposes (10).

10. Neg is pronounced within n-words⁴ (quantifier words) but it is unpronounced within *any*-NP NPIs in English.

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³ <> indicates that the enclosed item is unpronounced.

Note that in (8) and (9), the second line represents the underlying representation of the DPs in the first line. Focusing on the second line, one will notice that NPIs, as DPs, are made up of three components with NEG and SOME appearing to modify the NP as determiners. CP2014, however, argue that NEG and SOME are not actually determiners of the NP but that they belong to a different projection tagged Negative Merge Phrase (NMP) where NM is the head having SOME as its complement, and NEG as its specifier; and the NMP is in the Spec of the DP dominating the NP. Since CP2014 do not use this idea throughout the monograph and since they treat them mostly as determiners, I will continue treat them as determiners where necessary. Returning to the number of components within the underlying forms of the NPIs, especially the any-NP NPI, the following can be postulated.

11. Any-NP NPIs are tripartite in their underlying representation having the structure [DP [<NEG> SOME] NP] and the semantics of $\lambda P \lambda Q \lambda x \neg \exists x [P(x) \land Q(x)]$

The idea in (11) is that NEG may be unpronounced within the NPI, while the other two components (SOME and NP) are pronounced (as we have seen in the case of English). Based on the description of Ewe NPIs in Collins et al. (2017), Yorùbá NPIs in Adebayo (2016), and the subsequent discussion in this paper, a refined version of (11) is given in (12).

12. Any-NP NPIs are tripartite in their underlying representation, cross-linguistically, having the structure [DP [<NEG>/ cNEG SOME] NP] and the semantics of $\lambda P \lambda Q \lambda x \neg \exists x [P(x) \land Q(x)]$, with variation in how <NEG>/ cNEG and SOME are realized.

So far I have been concentrating on the kind of *any*-NP NPIs which appears within a negative clause (consider (7) for example). This type of NPI is tagged Type 1 NPI in CP2014, and its

⁴ N-word is used to follow the convention in the literature and in line with Giannakidou (2011).

basic property is that it requires that negation is present in the structure. There are, however, some other NPIs which appear in other clauses that have no negation. These kinds of NPIs are tagged Type 2. An example of these clauses is the conditional clause. In (13), *anybody* is used as an example of Type2 NPI, but note that *any*-NP NPIs in English are ambiguous between Type1 and Type2.

13. If you see anybody, tell me

Clearly, *anybody* is within a clause without negation. Other contexts where Type2 NPIs like *anybody* in (11) can occur include: yes-no questions, the complement of "surprise", the restriction of universal quantifiers, and the scope of only-DPs. The question that arises then is: what happens to the structure *anybody* in (11) as an NPI? The answer provided for this in the CP2014 framework is that it has the same underlying representation, but instead of one NEG, it has two NEGs. This is given in (14).

14. If you see [
$$[DP < NEG_1 > [< NEG_2 > SOME]]$$
] body], tell me

So, one basic difference between Type1 and Type2 NPIs is that Type1 NPIs are unary-NEG NPIs and Type2 NPIs are binary-NEG NPIs. With this understanding of the two types of NPI in place, I now turn to the analysis of both types. Type1 NPIs involve NEG raising. The unary-NEG within the NPI DP raises to the post-Aux position. Applying this to (7a) yields the structure in (15).

15. They did
$$NEG_1$$
 see [$< NEG_1 > SOME$]] body]

Type2 NPIs on the other hand involve NEG deletion, and they could be said to require the presence of a NEG deleter. The analysis of the structure in (13) is given in (16).

16. [If]_{DEL}⁵ you see [[$_{DP} \le NEG_1 > [\le NEG_2 > SOME]]$] body], tell me = If you see SOME body, tell me.

In (16), if is a lexical NEG-deleter that deletes NEG₁ which in turn deletes NEG₂, yielding the interpretation *If you see SOME body, tell me*. The analysis of these two types of NPI can be formalized as in (17).

17. Type1 NPI is a unary-NEG NPI that requires negation in the structure, while Type2 NPI is a binary-NEG NPI that requires the presence of a NEG-deleter in the structure.

Before turning to the Yorùbá NPIs in the next section, the following observation is in order. In clauses involving n-words like *nobody*, there is no NEG raising (see 6b), whereas in clauses with a corresponding NPI, Neg raises to the post-Aux position (see 7b). This fact led Collins et al. (2017) to claim that NEG optionally raises in English, since one could choose to use the n-word rather the NPI. In a language like Ewe, however, where there are no n-words, NEG obligatorily raises away. As will be shown in subsequent sections, NEG obligatorily raises in Yorùbá as well, since there are no words in the language corresponding to n-words. What follows from this can be formalized in (18).

18. NEG optionally raises in languages with n-words, while NEG obligatorily raises in languages without n-words.

With this theoretical framework spelt out, I take on the analysis of Yorùbá NPIs in subsequent sections, starting with their general distributions.

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⁵ DEL = NEG deleter

3. General distributions of Yorùbá N-k-N and N-kankan NPIs

As stated above, Yorùbá has two forms that realize *any*-NP type of NPI such as English *anybody*, *anything*, etc. The implication is that to form an NPI of this nature, Yorùbá speakers have the choice between the N-k-N form and N-kankan form. Consider the structures in (19) and (20).

19. Wálé kò rí enikéni

Wálé NEG see anybody

"Wálé did not see anybody"

20. Wálé kò rí eni-kankan

Wálé NEG see anybody

"Wálé did not see anybody"

It has to be noted however that the N-k-N form in (19) is more popular in the literature than the N-kankan form in (20). It is the form found in Haspelmath's (1997:213) list of cross-linguistic indefinites, as well as in Koch (2005) and Ajiboye (2005). To proceed with the two forms, I propose the following.

21. Yorùbá has two forms of any-NP NPI: N-k-N form and N-kankan form

To make sure that these two forms are proper NPIs, let us first observe that they are ungrammatical in simple positive declarative clauses. This is illustrated in the following examples.

22. a. Won kò pe enikéni

3PL NEG call anybody 'They did not call anybody.'

b. *Won pe enikéni

3PL call anybody

23. a. Won kò pe eni-kankan

3PL NEG call anybody

'They did not call anybody.'

b. *Won pe eni-kankan

3PL call anybody

However, we must distinguish the ungrammaticality of (23b) from the grammatical cases of instances with identical forms. This bring us to the issue of indefinite construction in the language. Yoruba makes use of the specificity marker *kan* (Ajiboye, 2005) to construct indefinites as in the following:

24. Mo ra ìwé kan

1SG buy book specific

'I bought a certain book.'

Interestingly enough, this specificity marker is homophonous to the numeral *kan* 'one' as exemplified in (25). As a response to the question 'How many books did you buy?', (25) is felicitous but (24) is not. This therefore brings out a contrast between the two.

25. Mo ra ìwé kan

1SG buy book one

'I bought one book.'

Indefinite constructions accommodate numerals and the numeral *kan* is no exception. But the implication of this is that the specificity marker *kan* and the numeral *kan* can be placed side by side, thereby resembling the N-*kankan* form of NPI identified above. The following are examples of indefinite constructions that include numerals:

b. Mo ra ìwé **méjì** kan lówó wọn

1SG buy book two specific in.hand 3PL

c. Mo ra ìwé **mệta** kan lówó wọn

book three specific

It should have been noted by now that indefinite constructions with numerals have the tendency to resemble the N-*kankan* NPI. For the sake of clarity, contrast (23b) repeated in (27a) below with (27b).

in.hand

3PL

1SG buy

3PL call anybody

b. Won pe eni kan kan

3PL call person one specific

^{&#}x27;I bought two certain books from them.'

^{&#}x27;I bought three certain books from them.'

^{&#}x27;They called one certain person.'

Superficially, one might think that we are dealing with the same phenomenon in (27a and b), but this is not the case, as the *eni-kankan* in (27a) is an NPI while the *eni kan kan* in (27b) is an indefinite construction with a numeral. To be sure, the phonology of the language makes this clear distinction. The *kankan* in (27a) is treated as a single prosodic word in that there is no prosodic break between its compositional parts (*kan* and *kan*): [kankan]. On the other hand, the phonology treats *kan* and *kan* in (27b) as two separate prosodic words. The numeral *kan* obligatorily undergoes vowel lengthening and tonal epenthesis while the specificity marker remains the same. The result of this is: *kan-án kan*. These facts are summarized in (28).

28. a. NPI: N-kankan [kan.kan]

b. Indefinite with numeral: N *kan kan* [kan-án kan]

The question, however, is, what is the relationship between these two? An available intuition is that (28a) is diachronically formed from (28b), but this is orthogonal to the primary concerns of this paper. For this reason, I do not pursue this further.

Now let us turn to the issue of whether or not the two forms can serve as n-word. N-words are a class of words that correspond to English *nobody*, *nothing*, etc. One peculiar characteristics of these words is that they can generally be used as fragment answers as illustrated below:

29. A: What did you buy?

B: Nothing.

There are no words in Yoruba that are equivalent to n-words. The closest elements to n-words in the language are the two forms of NPI we have identified, but these cannot be used as fragment answers as illustrated in (30). This fact suggests that they are not n-words, but proper NPIs.

30. A: Kí ni o rà?

What FOC 2SG buy

'What did you buy?'

B: *Ohunkóhun/ *Ohun kankan

To answer A's question, an entire sentence has to be used. This will be something like (31).

31. Mi ò ra ohunkóhun/ohun-kankan

1SG NEG buy anything

'I did not buy anything'

One interesting thing about the two forms is that they can be mixed in the same sentence.

Consider the following:

- 32. a. Enikeni ko gbodo so ohunkohun si eni-kankan
 - Anybody NEG must say anything to anybody

'Nobody should say anything to anybody'

- b. Eni-kankan ko gbodò so ohun-kankan si enikéni
 - Anybody NEG must say anything to anybody

'Nobody should say anything to anybody'

- c. Enikeni ko gbodo so ohun-kankan si enikéni
 - Anybody NEG must say anything to anybody

'Nobody should say anything to anybody'

- d. Eni-kankan ko gbodò so ohunkóhun sí eni-kankan
 - Anybody NEG must say anything to anybody

'Nobody should say anything to anybody'

In section 6, an analysis consistent with CP2014 is given for sentences like these, which contain multiple NPIs. What is more interesting in the interaction between the two forms is that their templates can be combined to form a single NPI in one of the following two ways:

33. a. N-k-N kan

b. N-k-N kankan

Examples of (33a) can be given as follows:

34. a. Èmi kò rí ajákájá kan o

1SG NEG see any.dog kan EMPH⁶

'I did not see any dog at all'

b. Won kò kọ orinkórin kan

3PL NEG sing any.song kan

'They did not sing any song at all.'

The following examples of (33b) are taken from Barber (2012):

35. a. Emi kò gbọdò gba ìgbàkugba kankan... (p.182)

1SG NEG must take any.nonsense any

'I should not take any nonsense at all'

b. Oluware yoo mo pé kò tún sí ilúkílú kankan

One will know that NEG in addition be any town

lábé òrun ti... (p.284)

in.under heaven which

'One will know that there is not any other town at all under the sun which...'

One thing that is common to all of the examples in (34) and (35) is that they involve emphasis: note the expression 'at all' in all the interpretations provided. We also have to note that structures like these are rare in common conversations, compared to using them separately. In Section 6, I

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⁶ EMPH = emphasis

provide an analysis of this data that is consistent with CP2014. With this general understanding, we can then turn to the structural make up of each of the forms in the following section.

4. Reduplication in Yorùbá any-NP forms of NPI

One thing that is common to both of these forms is reduplication: N is reduplicated in the N-k-N form, and kan is reduplicated in the N-kankan form. This is an issue with the framework laid out in Section 2. The postulation in (12) specifies that any-NP NPIs cross-linguistically are tripartite in their underlying representation. This means that any-NP NPIs can surface as three elements, each representing each of the components of the underlying form. This works perfectly for the two forms of any-NP NPIs. But consider the following.

36. Ęni k eni

Person NEG person

"anybody"

37. Eni kan kan

Person one one

"anybody"

The problem seems to arise in determining which elements in the surface form corresponds to each of the elements in the underlying representation. According to (12), an NPI has the following structure.

One way to specify the underlying form of (36) and (37), according to (12) will be to assume that they have the structure in (39) and (40) respectively.

39. Eni k eni

Person NEG SOME

"anybody"

40. Eni kan kan

Person NEG SOME

"anybody"

The problem with this assumption is that it incorrectly predicts that the reduplicated copies are individual words having different semantics than their bases i.e., that there is an eni in (39) that has an existential meaning and that there is a kan in (40) that has the meaning of negation. The other two elements are well attested in the language as having the respective specifications above. Eni in both refers to "person", the k in (39) is a sentential negative marker (see Adebayo, 2016), while kan has been treated as a marker of specificity (i.e. as a specific indefinite marker) in Ajiboye (2005), suggesting that it has an underlying existential feature. The eni which is taken to spell out SOME and the kan which is taken to spell out NEG however are not attested in the language. More so, the proposal above violates in some way Kayne's (2016) anti-bundling principle which forbids grammatical items from having the same spelling with other grammatical or lexical items.

To resolve this, I argue that these two elements are simply reduplications performing grammatical functions rather than having a lexical meaning of their own. This is in line with Nash's (1980) description of Walpiri which is argued to form its plurality by reduplication. Interestingly enough, one of the ways Yorùbá also forms plurality is reduplication. Ajiboye (2010) has a significant amount of data on this phenomenon and he treats the reduplicated items

as COPY. Following this line of argument, I suggest that the two structures of Yorùbá *any*-NP NPIs are as in (41) and propose a refined version of (39) and (40) in (42) and (43) respectively.

41. a. N-*k*-COPY

b. N-COPY-kan

42. Eni k COPY

Person NEG SOME

"anybody"

43. Eni COPY kan

Person NEG SOME

"anybody"

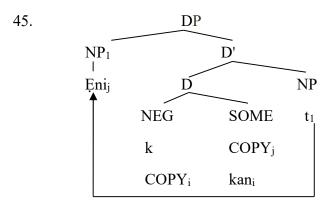
Essentially, I assume that the COPY in (42) spells out SOME and that the COPY in (43) spells out NEG. From now onward, I will refer to the two forms of *any*-NP NPI in (42) and (43) as COPY NPIs. Next, I address the question of the syntactic structure of the COPY NPIs from an X-bar theoretical point of view.

Following Kayne's (1994) Linear Correspondence Axiom (LCA), Ajiboye (2005) proposes the following for the DP in Yorùbá.

44. $\begin{array}{c|c}
DP \\
\hline
NP_1 & D' \\
\hline
D & t_1
\end{array}$

According to this proposal, the NP that complements the determiner, which could be null or pronounced, started out at the complement of D but raises to Spec DP via movement. I assume this in my analysis. Also, I assume that NPI DPs have a complex head made up of NEG and

SOME. This is shown in (45), combining both forms of the COPY NPIs. This assumption is in line with CP2014 where NEG and SOME are taken together as a determiner.



With this understanding, we are now in a position to examine the COPY NPIs in relation to NEG raising. This will be the focus of the next section.

5. Yorùbá COPY NPIs and NEG raising

Yorùbá COPY NPIs are Type1 NPIs, since they require negation in the structure and have one NEG in such structures. I leave the issue of whether they are strictly Type1 NPIs or are ambiguous between Type1 and Type2 like English (Collins et al., 2017) till next section. It has already been established in Section 3 that the COPY NPIs require negation in simple indicative clause, but consider the argument here again:

"Bímpé did not go anywhere"

47. a. Bímpé kò lọ **ibì-kankan**

Bímpé NEG go anywhere

"Bímpé did not go anywhere"

b.* Bímpé lọ **ibì-kankan**

Bímpé go anywhere

"Bímpé did not go anywhere"

The examples above show clearly that the COPY NPIs require negation in the structure and are therefore Unary-NEG NPIs. Next is to consider their interaction with the negative system in the language. Yorùbá has a negative system that is a bit complex. Contrary to the notion that Standard Yorùbá has six sentential negative markers, Adebayo (2016) argues that there are only two negative markers ($m\acute{a}$ -morpheme and and k-morpheme, whose surface form is determined by aspect, mood, and focus). $M\acute{a}$ negates irrealis mood while k negates realis mood. Constrained by the syllable structure well-formedness constraint (Ola, 1995), which requires every syllable to have a nucleus, the k morpheme comes out with different vowels depending on aspect and focus. It surfaces as $k\acute{o}$ and $k\acute{o}$ in perfective aspect and as $k\acute{i}i$ in imperfective aspect. According to Adebayo (2016), when the k morpheme occurs in a non-clausal position, this syntax-based vowel specification is not active. As a result, Puleyblank's (2003) redundancy rule (which supplies the front high vowel i in most phonological processes requiring epenthesis), is assumed to apply so that the N-k-COPY NPI can come out as N-ki-COPY in cases where consonant cluster would

have resulted in lack of well-formedness: e.g. *baba-k-baba* becomes *baba-ki-baba*. The diagram below shows this distribution but see Adebayo (2016) for more details.

| Underlying | aspect/focus | Syntax/Phonology interface | SPELLOUT | Non-emphatic |
|-----------------------|--------------|----------------------------|----------|--------------|
| | | (Place specification) | | environment |
| a.k+V _{ROOT} | perfective | k+ò | kò | ò |
| $b.k+V_{ROOT}$ | imperfective | k+ìí | kìí | ìí |
| $c.k+V_{ROOT}$ | focus | k+ó | kó | × |
| $d.k+V_{ROOT}$ | non-clausal | k+í (after redundancy r | rule) | |

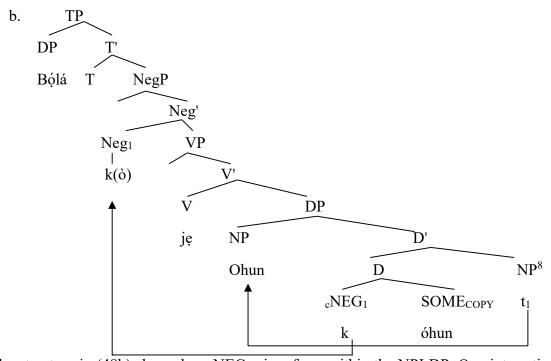
This diagram shows that the k morpheme has an underlying vowel root whose place value is not specified. The place specification is done at the syntax/phonology interface. But in non-clausal positions, this specification is not active. As a result, to get the place value of the nucleus of the same k morpheme in the N-k-COPY NPI, redundancy rule applies and it comes out as ki as in N-k-COPY.

I now turn to how the NEG within the COPY NPIs interacts with those sentential negative markers⁷.

"Bộlá did not eat anything"

⁷ Note that in (48b), a different analysis can be proposed. It can be assumed that NegP is generally absent and that when NEG raises from within the NPI, it raises to merge with the null T head in head-to-head configuration.

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The structure in (48b) shows how NEG raises from within the NPI DP. One interesting thing to note here is that, unlike in English where NEG raises and does not leave a copy and Ewe where the copy left is not phonologically identical to the raising NEG (Collins et al., 2017), in Yorùbá, NEG raises and leaves a phonologically identical copy. Note that in the above tree, the NEG of the matrix clause is underlyingly the same as the NEG within the DP, the nucleus \dot{o} following it is derived as a result of syllable structure well-formedness constraint in Yorùbá. Note also that this derivation is shaped by aspect and focus, so that if k negates a focus phrase, the nucleus is derived as $k\dot{o}$, and if it negates an imperfective aspect phrase, it is derived as $k\dot{i}$.

However, looking at the N-COPY-*kan* in (49b), it will appear that it is not obligatory for the copy left by the raising NEG to be phonologically identical to it. One may claim that the copy

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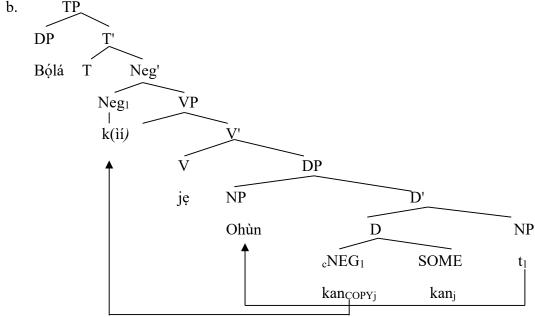
⁸ A different analysis suggested by Collins (P.C.) is to assume that when *ohun* raises to Spec DP it leave a phonologically identical copy in its original position. SOME will then be covert rather than resulting from a COPY. This seems to be a promising way to account for this raising. But if we assume this analysis, we will have to explain why this is not the case for ordinary DPs (and indeed the case of 49b) where such copy-raising does not exist. Baring such explanation, I continue to assume the analysis in (48b) and (49b).

left is not phonologically identical to the raising NEG, but that it is rather a reduplication that gets it phonological content from the existential morpheme following it.

49. a. Bộlá kìí jẹ ohùn-kankan lálệ

Bộlá NEG eat anything at.night

"Bólá does not eat anything at night (habitually)"



The PP in (49a), $l\acute{a}l\acute{e}$, is left out in (49b) as it has a marginal role in the current discussion. Observe, however, that in this structure the nucleus derivation for the raising NEG is $i\acute{t}$. This is in line with the assumption that aspect shapes the nucleus derivation of the raising Neg. In (48b), k negates a clause in perfective aspect and so comes out as $k\grave{o}$ whereas in (49b), it negates an imperfective clause and surfaces as $k\acute{t}$.

However, it might be useful to consider another way of looking at the NEG raising in (49b). It can be proposed that the cNEG in (49b) is not a complete reduplication of the following

existential morpheme but a partial copy of it. From this viewpoint the cNEG will be phonologically identical to the raising NEG as in (50).

But, (50) is not a phonologically well-formed prosodic word in Yorùbá since k lacks a nucleus, thereby violating the syllable structure well-formedness constraint. To resolve this, it can be assumed that k copies the nasal vowel in the following syllable. This process of feature copying is not unattested in the language. Orie (2014), for instance, provides an analysis of Yorùbá gerundive constructions where a deformed syllable copies the consonantal features of a syllable following it to satisfy the syllable structure well-formedness constraint. Assuming that this phonological process is active in this context, the surface structure of (50) results in (51).

The consequence of (51) is that (41) will have to be refined as in (52).

But (51) appears to be too ambitious. It is very unlikely that what we have in the N-*kankan* form is a partial copying rather than total copying. There are two good reasons to suspect (51). First, partial copying is rarer in the language than total copying. That is, total copying is more natural.

Second, facts from other languages in the Niger-Congo family suggest that (51) cannot be correct. For example, Ga, another Niger-Congo language, forms its *any*-NP NPIs through total copying: *tɔ kɔ tɔ kɔ* (bottle INDEF bottle INDEF) 'any bottle' (Korsah, 2016). For this reason, I reject (52) and reaffirm (41) repeated below with indices:

b. N-COPY₁-kan₁

At this point, it would appear that in realis mood NEG raising obligatorily leaves a COPY which may be phonologically identical or not, as the foregoing discussion has shown. But it has to be noted here that there are cases where NEG raising in realis mood does not leave any copy. Consider the following:

- 54. a. Kò sí enì kan tí ó sòrò
 - NEG be person SOME who 3SG say.word

'No one spoke/ There wasn't anyone who spoke'

- b. Kò sí enì kan kan tí ó sòrò
 - NEG be person **COPY** SOME who 3SG say.word

'No one spoke/ There wasn't anyone who spoke'

- 55. a. Won kò rí eni kan
 - 3PL NEG see person one

'They didn't see anyone/ They saw no one'

- b. Won kò rí eni-kankan
 - 3PL NEG see anyone

'I didn't see anyone/ I saw no one'

(54a) and (55a) are in no way peculiar to Yoruba, it is a cross-linguistic fact that indefinite

constructions can sometimes function in place of NPI. Consider the following from CP2014: 'I

didn't find a person who ate vegetables' (p.94). Given that this sentence can be paraphrased as 'I

didn't find anyone who ate vegetables', it is natural to consider 'a person' in this sentence as

roughly functioning as an NPI. Whatever we take the case of English to be, what is clear from

the alternation in (54) and (55) is that while NEG raising is obligatory, a pronounced copy or a

phonologically identical copy of the raising NEG in its original position is optional in the realis

mood.

Now, consider NEG raising in irrealis mood. According to Adebayo (2016), má is the

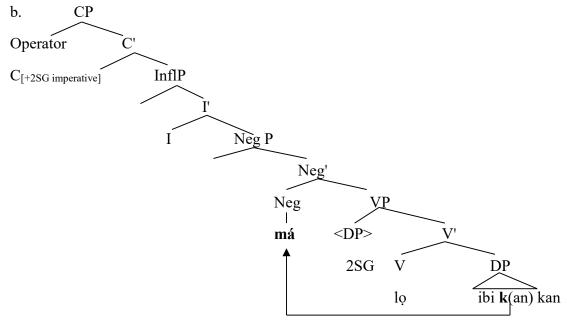
unmarked negative marker in imperatives. The derivation in (42b) is in line with the convention

of treating imperatives in Nchare (2012:397) and Zanuttini (2008).

56. a. Má lo ibì-kankan

NEG go anywhere

'Don't go anywhere'



NEG copy-raising here is highly marked in the context of the picture we have seen so far. There is something going on with the raising NEG in the imperative which is beyond the scope of the present work. It suffices to state here that the raising NEG is not phonologically identical to its copy in the imperative. Further research may shed more light into this, but see an argument in Adebayo (2016), that this is a way Yoruba grammar distinguishes between realis and irrealis mood.

So far, we have seen that NEG obligatorily raises in Yorùbá since it lacks quantifier words like *nobody*, in line with the consequences of (18). This makes it similar to Ewe ke-NPIs (Collins et al., 2017). Based on this, I claim the following.

57. NEG obligatorily raises in Yorùbá.

Also, it is clear from the foregoing discussion that when NEG raises in Yorùbá, it optionally leaves a copy in the DP where it is interpreted. Accordingly, (58) is proposed.

58. NEG raising optionally leaves a copy in Yorùbá.

It has been equally established that the copy left by the raising NEG is optionally phonologically identical to it, but that this is not the case in the imperative. To formalize this fact, (59) is proposed.

59. The copy left by the raising NEG is, optionally, phonologically identical to it in Yorùbá except in imperative constructions, where it is not identical.

The significance of (57)—(59) will become clear in the final section where cross-linguistic parameters for NPIs are discussed.

6. Long distance licensing, determiner sharing and remnant raising

The focus of this section is to examine the COPY NPIs in terms of long distance licensing, determiner sharing and remnant raising, in order to compare them to their counterparts in Ewe and English, described in Collins et al. (2017). First, I note that Yorùbá COPY NPIs can be licensed within an embedded clause. That is, they can occur in an embedded clause that has no negation and have their licensing negation in the matrix clause. The examples below reflect this.

[&]quot;Adé did not say that they did anything"

- Èmi 61. a. kìí bèrù рé ògá yóò ohùn-kankan so 1SG NEG fear that anything boss will say "It is not my habbit to fear that the boss will say anything"
 - b. Emì kìí bèrù ohùnkohun рé ògá yóò SQ 1SG NEG fear boss will anything that say "It is not my habbit to fear that boss will say anything"
- 62. a. Má bèrù рé olùkó lu enì-kankan yóò NEG fear that teacher will anybody beat "Don't be afraid that the teacher will beat anybody"
 - b. Má bệrù pé olùkó yóò lu enikéni
 NEG fear that teacher will beat anybody

The COPY NPIs in all of these examples are licensed within an embedded clause. Given that the COPY NPIs are being treated as Type1 NPIs which according to CP 2014 are licensed locally, one would not expect the possibilities in (60)—(62). To address this, I follow Collin's et al. (2017) and treat them as quantificational DPs with two syntactic occurrences—that is, the COPY NPIs, as quantificational DPs, have two occurrences, one in the matrix clause where they do not

[&]quot;Don't be afraid that the teacher will beat anybody"

have phonological content and one which is VP-internal where they are pronounced. From this viewpoint, the structures in (61a & b) will have the following analysis⁹.

In (63), it is from within the higher occurrence of DP₁ which is silent (thing-cNEG-SOME) that NEG raises from. This covert higher occurrence is in scope position and it c-commands the lower occurrence that has a phonological content, thereby making its position in the matrix clause legitimate. This analysis is natural for Yorùbá as this is manifested in somewhat related constructions. Consider (64), for instance.

Here the COPY NPI is pronounced in the scope position and c-commands its covert lower occurrence in the relative clause. The analysis conforming to this notion will look like (65).

65. Èmi kìí bẹru
$$DP_1$$
 tí \grave{o} gá yóò sọ <[ohun-kankan]₁> 1SG NEG fear anything which boss will say thing-cNEG-SOME "I don't fear anything that the boss would say."

binary NEGs in the embedded clause in a process called long distance deletion.

⁹ In section 7, it is shown that the COPY NPIs are ambiguous between Type 1 and Type 2. As a result, another way of looking at this data is to assume that the NPIs in these embedded clauses are simply Type 2 NPIs having binary NEGs. Collins (P.C.) suggests that, on this second view, the matrix NEG is the NEG deleter which deletes the

Let us now consider the case of determiner sharing. In Section 3, we saw that Yoruba allows multiple instances of the COPY NPIs in a single clause. An example is the following:

'Nobody ate anything anywhere'

b. Èmi kò jẹ ohunkóhun ní ibi-kankan1SG NEG eat anything in anywhere

'I did not eat anything anywhere'

This fact can be accounted for using the concept of determiner sharing proposed in CP2014:52. Determiner sharing is when more than one constituent share the same determiner, in a manner similar to the idea of polyadic quantification, where more than one variable share the same quantifier as in 'no teacher saw any student': $\neg\exists x, y$ [teacher $(x) \land boy (y) \land saw (y, x)$] ('it is not the case that there are some teacher (x) and boy (y) and x saw y'). In this example, the variables x and y share the same existential quantifier. CP2014:52 formalize this concept of determiner sharing as in (67).

67. a. NO man loves ANY woman.

b. [NEGe SOMEf] a man loves [NEGe SOMEf] a woman

Using the same mechanism, we can account for (66b) in the following way:

68. Èmi kò je ohunkóhun ní ibi-kankan

1SG NEG₁ eat thing-cNEG₁-SOME₁ in place-cNEG₁-SOME₁

The same analysis can be given to (66a), but since the subject COPY NPI which also shares the determiner will have to raise to Spec TP, we may need another level analyses called remnant raising, where (in our case) a DP moves to Spec TP after a constituent within it has already raised away. (I discuss remnant raising shortly). As a result, (66a) will have three levels of analysis: a first level involving determiner sharing, a second level where the NEG shared by the three COPY NPIs raises away, and a third level involving remnant raising where the subject COPY NPI moves to Spec TP.

We also saw in Section 3 that the templates of the two COPY NPIs can be combined to form a complex NPI in the manners of N-k-N kan and N-k-N kankan. Examples of these are (34a) and (35a) repeated here respectively in (69a) and (69b).

- 69. a. Èmi kò rí ajákájá kan o 1SG NEG see any.dog SOME EMPH
 - 'I did not see any dog at all'
 - b. Emi kò gbọdò gba ìgbàkugba kankan...

1SG NEG must take any.nonsense any

'I should not take any nonsense at all'

I argue here that, even though these forms appear superficially to contain a single NPI, they underlyingly involve a case where two elements of different nature share the same determiner NEG SOME. To account for Ewe bipartite negation, Collins et al. (2017:25) propose a syntactic version of the interaction between existential closure over events and event argument in Davidsonian events semantics (e.g. Susan sang: $\exists e [sing(e) \land ag(e, s)]$) as follows.

70. [\leq [SOME EVENT]₁ \geq [Susan sang DP₁]]

In (70), <[SOME EVENT]₁> is a silent quantifier which represents the '∃e', while DP₁ represents the event variable. Using this kind of formalization, I propose that there is an NPI and a covert event variable in the examples in (69). The NP in the NPI and the event variable share the same determiner NEG SOME. Let us formalize this as follows.

71. a. N-k-N
$$kankan = [<[SOME [EVENT]_j]_k>]$$
 ([TP NEG₁ [VP [V [NP [cNEG₁ SOME₁]]]]_k [<[EVENT]_j> cNEG₁ SOME₁]])

b. N-k-N $kan = [<[SOME [EVENT]_j]_k>]$ ([TP NEG₁ [VP [V [NP cNEG₁ SOME₁]]]_k [<[EVENT]_j> <_cNEG₁> SOME₁]])

The basic idea in (71) is that in addition to the simple clause containing a simple COPY NPI, there is an event variable that the second part of the complex COPY NPI is a determiner of. In both of the formalizations in (71), the NP within the VP and the covert event variable <[EVENT]_j> share the same determiner NEG SOME. The only difference between (71a) and (71b) is that while the second instance of cNEG₁ is pronounced in (71a), it is not pronounced in (71b). To make this clear, let us revise (33a) and (33b) as follows:

An analysis where the ideas developed above is fully implemented will look like the following examples. (69a) is analyzed as (73a) while, (69b) is analyzed as (73b)

73. a. Èmi kò [rí ajákájá]
$$_k$$
<[EVENT] $_k$ NEG $_1$ > kan 1SG NEG $_1$ [see dog- $_C$ NEG $_1$ -SOME $_1$] $_k$ SOME $_1$

The alternation in (73) is very much in line with the alternation we have seen previously, especially in (55).

I turn now to the issue of remnant raising (See CP2014 for more details on this). This has to do with the possibility that an NPI may occupy Spec TP i.e. it may function as a subject in which case it will be appearing higher in the tree than the NEG morpheme which is supposed to be raising from it. Yorùbá allows this kind of structure: COPY NPIs can appear in the subject position as shown below.

- 74. Enikéni kò sọ pé kí o lọ

 Anybody NEG say that such.that 2SG go
 - "Anybody did not say that you should go (Nobody said that you shoud go)"
- 75. Ḥnì-kankan kò jáde lánàá
 - Anybody NEG go.out in.yesterday

This kind of structure, according to Collins et al. (2017), is not readily available in English, and it should be noted that the interpretation in each of the above sentences is literal apart from those in brackets which show how this is expressed naturally in English. In Ewe, however, NPIs can be in the subject position, and this phenomenon is analyzed in Collins et al. (2017) in terms of remnant raising. I follow this line of argument and assume that the COPY NPIs in Yorùbá originate VP-internally in line with Koopman and Sportiche (1991). The NPI DP is therefore in

[&]quot;Anybody did not go out yesterday (Nobody went out yesterday)"

the Spec of VP when NEG raises out from within it. The remaining part of the DP consisting of cNEG₁, SOME and NP then raises to Spec TP to check case. This is illustrated in (76).

movement of the remnant DP to Spec TP in (76) satisfies the c-command condition on movement which requires that the higher occurrence of a moved X c-command its lower occurrence (CP2014:109). It also satisfies the remnant raising condition (given below in 77) in that the higher occurrence of DP₁ contains $_{c}NEG_{1}$ rather than a silent NEG ($< NEG_{1}>$).

77. The Remnant Raising Condition

If $M = [DP [D < NEG_x > SOME] NP]$, then no occurrence of M c-commands an occurrence of NEG_x. (Collins et al.,2017: 17).

In the above discussion, it has been noted that Yorùbá COPY NPIs pattern with Ewe *ke*-NPIs described in Collins et al. (2017) in two respects. First, both languages allow long distance licensing, since the NPIs can be licensed in an embedded clause by a matrix clause negation. Second, both languages allow NPIs in the subject position. These facts contradict how *any*-NP NPIs in English behave (Collins et al., 2017).

7. Yorùbá COPY NPIs as Type 2 NPIs

Up to now, I have treated Yorùbá COPY NPIs as Type 1 NPIs by claiming that they have one NEG and require negation somewhere in the structure. In this section, I show that Yorùbá COPY NPIs are ambiguous between Type 1 and Type 2 NPIs just as English *any*-NP NPIs. They can be licensed in other contexts different from negation such as in conditionals, the scope of only DP,

yes/no question, the restriction of quantifier words like *every*, and complement of *surprise*. The structure in (78) shows the COPY NPIs in conditionals.

- 78. a. Tí enì-kankan béèrè mi, mo jáde bá fún won so рé If anybody ask 1SG 3PL that 1SG went.out were say for "If anybody asks of me, tell them I went out."
 - b. Tí enikéni bá béèrè mi, fún won рé mo jáde SO 3PL that If anybody were ask 1SG say for 1SG went.out "If anybody asks of me, tell them I went out."

Both are found within yes/no questions as in (79), and within the complement of surprise (80).

- 79. a. Sé o rí enì-kankan níbè?
 - Q 2SG see anybody at.there
 - "Did you see anybody there?"
 - b. Sé o rí enikéni níbè?
 - Q 2SG see anybody at.there
 - "Did you see anybody there?"
- 80. a. Ó yà wón lénu рé rí ohunkóhun mú wá mo 3PL It open at.mouth that 1SG anything bring see come
 - "It surprised them that I was able to bring anything"
- b. Ó yà wón lệnu pé mo rí ohùn-kankan mú wá
 - It open 3PL at.mouth that 1SG see anything bring come

"It surprised them that I was able to bring anything"

Their use in the scope of *only*-DP is given in (81) while (82) shows how they are used in the restriction of the quantifier *every*.

81. a. Adé nìkan ló rí ohunkóhun je lánàá

Adé only FOC.3SG see anything eat at.yesterday

"Only Adé was able to eat anything yesterday."

b. Adé nìkan ló rí ohùn-kankan je lánàá

Adé only FOC.3SG see anything eat at.yesterday

"Only Adé was able to eat anything yesterday."

82. a. Gbogbo eni tí ó rí ohunkóhun ló sọ fún kábíyèsí

Every person who 1SG see anything FOC.3SG say for king

"Everybody who saw anything told the king."

b. Gbogbo eni tí ó rí ohùn-kankan ló sọ fún kábíyèsí

Every person who 1SG see anything FOC.3SG say for king

"Everybody who saw anything told the king"

The COPY NPIs in all of the above constructions are interpreted as binary-NEG NPIs, where their NEG deleters are the constructions in which they occur. For example, the structure in (79a&b) will have the following analysis.

83. Sé o rí enì-kankan/enikéni níbè?

 Q_{DEL} 2SG see [NP-[<NEG₂>[<NEG₄> SOME]] at.there

"Did you see anybody there?"

In (83), Q_{DEL} is a NEG Deleter (CP2014) which deletes NEG₁ which in turn deletes NEG₂, and so the sentence spells out without negation. This analysis can be applied to all the structures in (78) through (82).

One other licensing environment worth mentioning is the context of modal *lè* 'may' (Koch, 2005). Yorùbá COPY NPIs are also licensed when used in the context of *lè* modality. This context has been generally described as unique to what is termed in the literature as Free Choice Items (FCIs) (see CP2014 and Gainnakidou, 2011). Surprisingly, while N-k-COPY NPIs are licensed in this context, N-COPY-kan NPIs are not. That is, the N-k-COPY form can serve as FCI while the N-COPY-kan form cannot. Consider the following.

- 84. a. Enikeni lè wá
 - Anybody can come
 - "Anybody can come."
 - b. *Ḥnì-kankan lè wá
 - Anybody can come
 - "Anybody can come."
- 85. a. Ó lè se ohunkóhun tó bá fệ
 - 3SG can do anything which.2SG Prob like
 - "He may do anything he likes."
 - b. *Ó lè se ohun-kankan tó bá fệ
 - 3SG can do anything which.2SG Prob like
 - "He may do anything he likes."

This is a case where there seems to be some kind of difference between the two forms of NPI in Yorùbá. Another difference that one may also mention is that the N-k-COPY NPI has a sense in which it is interpreted as *bad-NP* (see Koch 2005, for more details). This is when the N-k-COPY form gives an interpretation where there is the denotation 'bad' which modifies the specified noun. For instance, there are situations where *bàbá-ki-bàbá* does not give the denotation 'any father' but rather the denotation 'bad father'. In this case, it behaves like other modified nouns and it lacks the various restrictions on both types of NPI (for example, it can occur in a simple positive declarative clause). This brings us to a serious issue that has to be addressed before this paper is brought to a close. This is an issue that concerns the restriction on the N-k-COPY form.

The reader is invited to note that the examples we have seen so far of the two forms are limited in number. In fact, we can list the mostly used examples here as *enikéni*, (*eni kanakan*), *ohunkóhun*, (*ohun kanakan*), *ibikíbi* (*ibi kanakan*). This limitation is because of the fact that these are roughly the N-k-COPY forms that still have the NPI reading. Most other forms (e.g. *ilékílé* 'bad house', *omokomo* 'bad child', *asokáso* 'bad cloth', *owókówó* 'bad money', *àṣàkáṣà* 'bad culture', *àlákálă* 'bad dream', *ojákójà* 'bad market', *isékísé* 'bad work', *òrékórě*, 'bad friend', *ìtànkítàn*, 'bad story', etc.) have the 'bad NP' reading. The N-COPY-*kan* perfectly yields NPI reading with all these examples. Let us summarize this fact together with what we have discussed up to this point as follows:

86. The N-k-COPY form is limited to a few instances in its NPI reading, while it gives rise to FCI reading and *bad*-NP reading in most cases. The N-COPY-*kan* form yields only NPI reading in all cases.

One way to account for the fact in (85) is to assume that the N-k-COPY is the oldest form of any-NP NPI in Yoruba which had only NPI and FCI readings but which, over time, developed a new denotation, bad-NP denotation, which began to take over most of its interpretation, as a new form of this NPI, N-COPY-kan, emerged in the grammar. According to this view, the NPI examples of the N-k-COPY form that we have seen above are a relic of a past form that exclusively had only NPI and FCI reading. Since the N-COPY-kan is relatively newer according to this assumption, it follows that it will be restricted in its interpretation. This will explain why it does not have FCI reading (and of course, by any chance, any other reading whatsoever).

8. Conclusion

From the discussion so far, the following have become clear. First, it was argued that the syntactic framework proposed in CP2014 has the potential to provide a comprehensive account for NPIs cross-linguistically, and that it can be used to further study the distributional properties of negation in one more context, that is, within NPIs. Nominal NPIs cross-linguistically were proposed to be tripartite in their underlying representation, having the structure [DP [<NEG>/ eNEG/ SOME] NP] and the semantics of $\lambda P \lambda Q \lambda x \neg \exists x[P(x) \land Q(x)]$, with variation in how $\langle NEG>/ eNEG \rangle$ and SOME are realized. Second, it was shown that Yorùbá has two forms of NPIs that correspond to the English *any*-NP NPI: the N-k-COPY and the N-COPY-kan. Because these two have the property of COPY in common, they were dubbed COPY NPIs. Third, it was shown that Yorùbá COPY NPIs pattern with Ewe Ke-NPIs and English *any*-NP NPIs, in that they participate in long distance licensing. But, it was shown that unlike English *any*-NP NPIs, the COPY NPIs involve remnant raising just like Ewe Ke-NPIs. Fourth, the COPY NPIs were shown to be ambiguous between Type1 and Type2 NPIs, patterning with English *any*-NPIs, but distinct from Ewe Ke-NPIs, which are strictly Type1 NPIs according to Collins et al. (2017).

Fifth, the discussion of the COPY NPIs in terms of NEG raising was brought within the cross-linguistic context of English and Ewe. To concretize the discussion in this respect and building on the parameters proposed in Collins et al. (2017), the following are put in order.

87. Parameters

A

| Ewe | NEG raising leaves a copy. |
|------------------|------------------------------------|
| Standard English | NEG raising does not leave a copy. |
| Yorùbá | NEG raising leaves a copy. |

В

| Ewe | NEG obligatorily raises from a unary NEG structure. |
|------------------|---|
| Standard English | NEG optionally raises from a unary NEG structure. |
| Yorùbá | NEG obligatorily raises from a unary NEG structure. |

 \mathbf{C}

| Ewe | Disallows Type 2 (binary NEG) NPIs. |
|------------------|-------------------------------------|
| Standard English | Allows Type 2 (binary NEG) NPIs. |
| Yorùbá | Allows Type 2 (binary NEG) NPIs. |

D

| Ewe | cNEG is attested but it is not phonologically identical to |
|------------------|--|
| | NEG ₁ . |
| Standard English | cNEG is not attested. |
| Yorùbá | cNEG ₁ is attested, and it is optionally phonologically |
| | identical to NEG₁ except in imperatives. |

Finally, the basic difference between the two forms of the COPY NPIs (the N-k-COPY and the N-COPY-kan) was mentioned, namely that the N-k-COPY has a sense in which it is interpreted as bad-NP while the N-COPY-kan does not, and that the N-k-COPY can be used in the context of modal le (as FCI) while the N-COPY-kan cannot. This fact was explained in terms of diachronic changes in the language which further works can help shed more light on. The question of why cNEG is not phonologically identical to the raising NEG in imperatives was not addressed in the paper, but it was suggested that these can be the subject of further research.

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