

Yorùbá sentential negative markers

Abstract

The main claim of this paper is that Yoruba has only 4 sentential negative markers, *kìí*, *kò*, *kó* and *má*, contrary to the traditional assumption that these markers are six in number. It is argued that these four markers can be subcategorized into two morphemes: the *k*-morpheme and the *má*-morpheme. The *k*- and *má*-morphemes are distinguished based on mood. By default, the *k*-morpheme is used in realis mood while the *má*-morpheme is used in irrealis mood. *Kìí*, *kò*, and *kó* are taken to be allomorphs of the *k*-morpheme, which are distinguished based on aspect and focus. It is also proposed that *kó*, which has been traditionally regarded as a NP negator, does not negate a NP but a Focus Phrase in which such NP is serving as an argument. While describing these negative morphemes, the paper points out that they exhibit the kinds of form-interpretation mismatches described for functional items in Carlson (2006). The main purpose of this paper is to describe Yoruba negation; it only points out the mismatches to buttress some of the claims made in the paper, for further empirical investigation, and to contribute to the discussion on form-interpretation mismatches.

Keywords: negative markers, allomorphs, form-interpretation mismatch, mood and aspect, Yoruba

1. Yorùbà sentential negative markers

Carlson (2006) argues that functional items pose greater challenges to language acquisition than lexical items because they often exhibit mismatches (between form and interpretation) which are not found for lexical items. Given that most languages of the world have relatively small number of morphemes which realize sentential negation, modern English for example has only ‘not’ and

‘n’t’ which according to R. Kayne (P.C.) have distinct syntactic distributions, Carlson’s (2006) learner problem may arise for language learners trying to learn languages where the negative markers number more than five and can sometime give rise to mismatches. Shupamem, a Grassfields Bantu language, described in Nchare (2012), for instance, has up to 9 distinct negative morphemes that are used to express sentential negation; which negative morpheme is used depends on tense, mood, and aspect. A similar phenomenon exists for Yoruba too, which has different markers for the expression of sentential negation.

Generally, six negative markers are often identified for Standard Yoruba¹:

- | | | |
|-------------------|--------------|--------------|
| 1. a. <i>kò/ò</i> | b. <i>kí</i> | c. <i>kọ</i> |
| d. <i>má/máà</i> | e. <i>mọ</i> | f. <i>yé</i> |

Note that the distinction between *kò* and *ò* in (1a) and *má* and *máà* in (1d) can be considered phonological, but what consequences this has for the claims made in this paper will become clear in due course. Traditionally, the negative markers in (1a& b) are treated as sentence negators, the one in (1c) is treated as NP negator, while those in (1d), (1e) and (1f) are treated as imperative negators. However, in what follows, I propose another way of looking at the members of (1). As will be shown shortly, I suggest that only (1a-d) can be regarded as true sentential negative markers (SN markers) in Standard Yoruba, and that (1e) is a Negative Polarity Item (NPI), while (1f) is a lexical verb.

The morpheme *mọ* in (1e) can be a variant of the imperative negator in (1d) in Ọ̀yọ̀-Ìbàdàn Yoruba dialect (Fabunmi 2013:7). This does not make it a separate negative morpheme just as

¹ This is the tradition in Bamgbose (1967, 1990), Ogunbowale (1970), Banjo (1974), Oke (1982); Awobuluyi (1978, 2008), Adéwọ̀le (1999), according to Fabunmi (2013).

the difference between *kò* and *ò* in (1a) does not give rise to two separate morphemes. But in standard Yoruba, *má* and *mó* are two distinct morphemes, which both carry the NEG feature. The difference between the two is that *má* is a negative marker while *mó* is a NPI, a strong NPI for that matter. See a detailed description of *mó* in Adéwolé (1990). Consider the following sentences:

2. a. *Mó/má sùn mó*
 NEG sleep anymore
 ‘Don’t sleep anymore.’ (Ọ̀yọ́-Ìbàdàn Yoruba dialect)
- b. *Má sùn mó*
 NEG sleep anymore
 ‘Don’t sleep anymore.’ (Standard Yoruba)

In (2a) it is clear that the SN marker *má* has a variant which resembles the NPI *mó*, while in (2b) the SN marker *má* is clearly distinct from the NPI *mó*. The consequent intuition therefore is that in Standard Yoruba, *mó*, which can be a phonological variant of the imperative negative marker *má* in some dialects of Yoruba, is not a negative marker but a NPI. To be sure, the meanings given to *mó* in the Yoruba-English Dictionary include only: ‘again’, ‘anymore’, and ‘any longer’. Banjo (1974) and Adewole (1990) also gloss *mó* as ‘anymore’ and ‘again’ respectively in most of their examples, suggesting that the intuition developed here is on the right track. A diagnostic that can be used to ascertain this intuition is the parametric fact that Yoruba is not a Negative Concord language like French, which can have two negative markers within the same simple indicative clause. For this reason, the glossing in (3a) violates this parameter for Yoruba, and so given the meaning that we get from the expression in (3a), *mó* can only be a NPI meaning ‘anymore’. This fact is presented in (3b).

3. a. * Adé kò sòrò mó
 Adé NEG say.word NEG

‘Adé is not talking/does not talk anymore.’

- b. Adé kò sòrò mó
 Adé NEG say.word anymore

‘Adé is not talking anymore.’

The morpheme in (1f) is also misplaced as it is clearly not a SN marker. According to the Yoruba-English Dictionary, *yé* means 'stop' or 'cease'. For this reason, the structure in (4a) cannot be said to have been properly glossed. In (4b), I give an alternative gloss that supports the view in this paper. To be sure, the diagnostic in (3) is used for *yé* in (5), and it is clear from (5a&b) that *yé* is far from being a SN marker.

- | | |
|-----------------------|--------------------|
| 4. a. *Yé sòrò | b. Yé sòrò |
| NEG say-word | Stop say.word |
| “Don’t say anything.” | ‘Stop talking.’ |

5. a. *Adé kò yé sòrò
 Adé NEG NEG say.word

‘Ade did not stop talking.’

- b. Adé kò yé sòrò
 Adé NEG stop say.word

‘Ade did not stop talking.’

As demonstrated, the morpheme *yé* is not a SN marker but a lexical verb meaning ‘stop’ or ‘cease’². However, the fact that this morpheme has been taken for a negative marker raises an important question of how the semantic and syntactic treatment of SN markers differs from that of constituents like *stop*, *disagree*, etc., which tend to reverse the truth-value of a proposition in ways resembling the SN makers. At any rate, the morpheme *yé* is not a SN marker.

Based on the foregoing, a refined form of (1) is given in (6).

6. SN markers in Standard Yoruba include:

- | | |
|-------|--------|
| a. kò | b. kii |
| c. kó | d. má |

Having established that only four SN markers can be identified in Yoruba, I propose that the four SN markers are simply two morphemes. This will be the major concern of Section 2, where I argue that the four negative markers are simply two morphemes with one of them having three allomorphs. Section 3 explores the aspectual-modal distributions of the Yoruba negative markers, while section 4 contains the syntax of the negative markers. In Section 5, I review

² Ola Orie (P.C.) notes that *ye* is different from canonical lexical verbs in the language, in some sense. This is generally correct, given the fact that, unlike most verbs, *yé* cannot be used as the sole lexical verb in a simple clause. It always requires a verb. Consider the following:

- | | | | | | | | | | |
|----------|------|---------------|-----|-----------------|-------|-----|------|--------|------|
| 1. a. Sọ | òrò | b. Má | sọ | òrò | c. Yé | sọ | òrò | d. *Ye | òrò |
| say | word | NEG | say | word | Stop | say | word | Stop | word |
| ‘Speak’ | | ‘Don’t speak’ | | ‘Stop speaking’ | | | | | |

(1d) is ungrammatical because there is no lexical verb that *yé* can apply to. Consider again the argument up to this point. *Má* in (1b) yields a perfect negative polarity of (1a) without adding any essential presupposition. *Yé* in (1c), on the other hand, does not yield this polarity. In effect, *yé* presupposes that the action or event denoted by the verb to which it applies (for example, *sọ* ‘say’ in (1a)) is already ongoing.

But this characteristic of requiring an additional lexical verb in a clause is not peculiar to *yé*. One might also make reference to the case of *fì* ‘use’ which also has this property:

- | | | | | | | | |
|------------------------------|-----|-------|-----|-------|-----------------|-----|-------|
| 2. a. Mo | fì | síbí | jẹ | ẹwà | b. *Mo | fì | síbí |
| 1SG | use | spoon | eat | beans | 1SG | use | spoon |
| ‘I used spoon to eat beans.’ | | | | | ‘I used spoon.’ | | |

Similar to the case of *yé* in (1d), (2b) is ungrammatical because the clause does not have another lexical verb to which *fì* can apply. The consequent intuition, therefore, is that there is a class of lexical verbs which cannot occur alone in a clause but must be used with other lexical verbs in a version tantamount to what has been described in the literature as verb serialization. *Yé* and *fì* can be said to belong to this category of verbs.

Carlson (2006) and discuss the mismatches that are identified in Section 3. Section 6 concludes with a summary of the paper.

2. *Kìí, kò and kó as allomorphs of the k-morpheme*

Given the intuition that primitive functional elements are often very minimal in natural language, it seems right to pursue the idea that *kìí*, *kò* and *kó* are allomorphs of the same NEG morpheme whose surface forms depend on aspect, focus and phonological constraint. It should already have been noticed that the three SN markers look similar as the only difference among them is the vocalic elements. Apart from this basic fact, there is a useful syntactic operation which readily lends itself to accounting for this intuition: this is the syntax and semantics of NPIs offered in Collins and Postal (2014).

Collins and Postal (2014), henceforth CP2014, identify two types of NPIs that pattern with the traditional categories of NPIs: strict NPIs, which are licensed in antiveridical context and the non-strict NPIs which, in addition to being licensable in antiveridical contexts, can occur in veridical contexts (Giannakidou, 2011). In CP2014, the former is regarded as *Unary NEG NPI* (Type 1), while the latter is taken to be *Binary NEG NPI* (Type 2). This categorization is different from the traditional categorization in essential theoretical terms. This is a detail I am not addressing here (see CP2014:6 for a more elaborate discussion); it is sufficient here to establish a general understanding of these two types in the CP2014 sense.

In CP2014, NPIs are interpreted as consisting of NEG, a covert existential quantifier, and the NP that is quantified. A Type 1 NPI contains only one NEG and requires negation somewhere in the structure while a Type 2 NPI has two NEG's and does not require any negation in the structure. For instance, *anybody* in (7) is a Type 1 NPI which contains one NEG and requires the

n't morpheme. In (8), *anything*, a Type 2NPI, contains two NEGs and does not require any negative morpheme in the structure.

7. a. I didn't see anybody
 b. I did.NEG see [[<NEG> SOME] body] (Collins et al., 2017)
8. a. If you see anything, tell me.
 b. If you see [[<NEG> [<NEG> SOME]] thing], tell me (Collins et al., 2017)

For the purpose of the present paper, I focus only on the Type 1 NPIs to account for the allomorphy status of three of the Yoruba SN markers. Based on the assumption that NPIs contain NEG, Collins et al. (2017) analyze structures containing NPIs in terms of Classical NEG-raising, a phenomenon in which NEG originates in the NPI (or in a subordinate clause—not relevant here) and raises to the post-auxiliary position (for English). I will return to the notion of Classical NEG-raising shortly. First, I explore the cross-linguistic interpretation of Type 1 NPI. Based on CP2014 and Collins et al. (2017), I assume that (9) represent a cross-linguistic interpretation for Type 1 NPIs.

9. [[NEG SOME] NP]

Where NEG and SOME can be null or overt, and the order of the elements can vary cross-linguistically, so that (9) works fine for English, and for Ewe (see a detailed description of Ewe NPIs in Collins et al., 2017) the structure is [[SOME NP] NEG], while for Yoruba, we have [NP [NEG SOME]]. Consider (10) and (11).

10. I said **nothing**.
11. I did not say **anything**.

In (10), NEG is overtly spelt out as *no* and SOME is covert in the n-word *nothing*, while SOME is spelt out as *any* and NEG is null in *anything* in (11). (10) and (11) can be given the same interpretation as in (12).

12. $\neg\exists x[\text{thing}(x) \wedge \text{say}(\text{I}, x)]$

The basic syntactic difference between the two is that in (10) NEG does not raise to the post-AUX position while it does in (11) in a manner consistent with what CP2014 call *Classical NEG-raising*. This is shown below.

'10. I said [[NEG <SOME>] thing]

'11. I did NEG₁ say [[<NEG₁> SOME] thing]

In the CP2014 framework, <...> signifies that an element is silent. Based on the foregoing, Collins et al. (2017) arrive at two parameters which distinguish English NPIs from Ewe NPIs. The first parameter is that NEG does not leave a copy when it raises in English while it does in Ewe. The second one is that in structures containing NPIs, NEG optionally raises in English while it obligatorily raises in Ewe.

Turning now to Yoruba, there are NPIs in the language which pattern with the description of Type 1 NPIs above (however, I do not explore the details of Yoruba NPIs here; see Adebayo (2017a) for an elaborate discussion on Yoruba NPIs). Consider the Yoruba N-k-N form of NPI in (13). These are somewhat close to the English *any*-NPIs. As expected, they have only one NEG and require negation in the structure:

13. Adé kò rí ẹnikẹni

Adé NEG see anybody

‘Adé did not see anybody.’

Applying (9), we have:

14. Adé **k(ò)** rí ẹni **k** ẹni
 Adé NEG see [person[_cNEG SOME??]]

In (14), NEG originates in the NPI and obligatorily raises to the preverbal position leaving a copy. In the framework of Collins et al. (2017), there is room for _cNEG to be phonologically identical to the raised NEG. My assumption is that this is an instance where this is the case. The main difference between *k* (_cNEG) and *kò* (raised NEG) can be explained. When *k* raises to preverbal position, it occupies a position in the syntax where it has to stand alone. Since Yoruba as a language does not allow a consonant to stand in isolation without a vowel, *k* has to surface with a vowel, to satisfy the syllable well-formedness constraint (Ola, 1995), which forbids a non-moraic consonant, such as *k*, from standing alone as a syllable. The vocalic derivation for *k* is determined by the aspectual modal environment where *k* is raising to. Contrast (15) where *k* raises to an imperfective indicative environment, with (14) where *k* raises to a perfective indicative environment.

15. a. Adé kii jẹ **ohunkóhun** lálẹ
 Adé NEG eat anything at.night
 ‘Adé doesn’t eat anything at night (habitually).’
 b. Adé **k(ií)** jẹ ohun **k** óhun lálẹ
 Adé NEG eat [thing[_cNEG SOME??]] at.night

Note, however, that the case of *kó* is different as shown in (16). The *k*-morpheme in the NPI cannot raise to a position where it can negate the focus phrase. There are two instances of

negation here: one originates from within the NPI, the other is pronounced in the Matrix clause. What is interesting here however is that we are able to see how the syntactic operation of Neg raising helps illustrate how the *k*-morpheme is derived (as in (14) and (15)) and how this derivation is done in cases not involving NPI. The derivation of *kó* in (16) is done at syntax-phonology interphase. This is described shortly.

16. Adé **kó** ní **kò** lọ sí íbì **k** íbì
 Adé NEG Foc cNEG go to [place[cNEG SOME??]]
 ‘It’s not Adé who did not go anywhere.’

The main idea here is that the *k*-morpheme comes out with three vocalic elements *ò*, *ì* and *ó* depending on aspect and focus. It comes out with *ò* in non-progressive aspect, *ì* in progressive aspect and *ó* in focus constructions. However, there are cases where these vocalic elements, with the exception of *ó*, are used without the *k*-morpheme. While these cases are mainly phonological, as Szabolcsi (P.C.) rightly suggests³, it seems there is room for some distinctions based on syntactic distributions: the *k*-morpheme is used in wider syntactic environments than the vocalic elements. It is proposed here that these vocalic morphemes assimilate the NEG feature of the *k*-morpheme and can therefore exist without the *k*-morpheme in some contexts, but not where the *k*-morpheme is involved in some form of emphasis or focus in a simple indicative clause⁴.

17. a. Adé KÒ jẹ ìrẹ̀sì
 Adé NEG eat rice
 ‘Ade did NOT eat rice.’

³ Deleting a consonant from a functional element in rapid speech is well attested in the Yoruba grammar. An example is the case of the future marker ‘yoo’ in which ‘y’ gets deleted as in *Wọ̀n (y)óò lọ* ‘They will go’.

⁴ Note that the account I have provided here is purely novel and completely improvised. Syntactic feature assimilation is not a thing. I have only used it here as a heuristic to account for why the focus SN marker *kó* does not reduce to *ó* like other *k*-allomorphs.

b. Adé ò jẹ ìrẹ̀sì

Adé _{ass}NEG eat rice

‘Ade did not eat rice.’

18. a. Adé KÍÍ jẹ ìrẹ̀sì

Ade NEG eat rice

‘Ade does NOT eat rice (habitually).’

b. Adé ìí jẹ ìrẹ̀sì

Ade _{ass}NEG eat rice

‘Ade doesn’t eat rice (habitually).’

19. a. Adé KÓ ní ó jẹ ìrẹ̀sì

Ade NEG Foc 3SG eat rice

‘It is not Ade who ate rice.’

b. *Adé ó ní ó jẹ ìrẹ̀sì

Ade _{ass}NEG Foc 3SG eat rice

‘It is not Ade who ate rice.’

In the examples above, _{ass}NEG is used heuristically to indicate that the vocalic morphemes are assimilated NEG and are not themselves NEG. In other words, they carry assimilated NEG features. The idea here is that the vocalic morphemes manifest the NEG feature, but are not themselves the carrier of the NEG feature. This treatment of the vocalic elements is closely related to the assumption in Zeijlstra (2014) that if a morpho-syntactic element X manifests the presence of some semantic feature F, but X cannot be assumed to be the carrier of F, then X is an uninterpretable feature. Based on this, let us improvise syntactic feature assimilation as follow: if a phonological process reduces a morpho-syntactic element XY, carrying feature F, to Y and Y

manifests the presence of F, but there is a syntactic distinction between XY and Y, then Y carries an assimilated F and not F itself. _{ass}F therefore is a place holder for F, whose syntactic distribution is limited than that of F. In (17) and (18), note that the _{ass}NEG can stand in place of NEG when there is no contrast involved. But when NEG is contrasted, the _{ass}NEG cannot stand in its place. Since *kó* is always in contrast and there is no context in which it is non-contrastive, the _{ass}NEG *ó* is not possible in any context. This explains why (19b) is ungrammatical. To be sure about this, the case of *kíí* should be mentioned. *Kíí* can also be used to negate a focus phrase (details of this can be found in the next section). When this happens, the _{ass}NEG *íí* cannot be used as shown below. This is particularly when the clause is a simple indicative clause.

20. a. *Kíí* *se* *Adé* *ni* *ó* *jẹ* *ìrẹ̀sì*
 NEG COP Ade Foc 3SG eat rice
 ‘It is not Ade who ate rice.’
- b. **íí* *se* *Adé* *ni* *ó* *jẹ* *ìrẹ̀sì*
 NEG COP Ade Foc 3SG eat rice
 ‘It is not Ade who ate rice.’

The essential claim here is that the NEG raising in (14), (15) and (16) and the idea pursued in (17) through (20) are evidence that *kíí*, *kò* and *kó* are variants of the same *k*-morpheme which is also found in N-k-N NPIs. The variation in vowel is only due to the syntactic environments in which it is used and the phonological well-formedness constraint in Yoruba which forbids a syllable made up of only a non-moraic consonant like /k/.

However, there is a problem that arises from using the CP2014 framework. Note that in the NPIs above, there is some sort of reduplication: *eni* in *enikení*, *ibi* in *ibikibi*, and *ohun* in

ohunkohun. So far, the reduplicated copies and their base forms appear to be having different interpretations. This cannot be right as it violates Kayne’s (2016) no homophony principle. Therefore, while it is clear that *eni* comes out as *person*, *ibi* as *place*, and *ohun* as *thing*, it is not immediately clear what the contribution of their reduplicated counterparts would be, and this is why I put ‘??’ in front of SOME, what they would superficially appear to spell out. It could well be posited that the copies in front of *k* are reduplications whose underlying semantics spells out as SOME, and this might be in the right direction given that reduplications of this sort abound in Yoruba that could be given similar treatment. This is a question that has been addressed in Adebayo (2017a).

Also, the idea that there is a morpheme that is made up of only a consonant sound in Yoruba is counter-intuitive with respect to the general idea that Yoruba morphemes are canonically CV. However, the proposal here is that the *k*-morpheme underlyingly has a vocalic element whose ROOT is specified but whose place is unspecified, so that it is the place value of the vocalic element (and not the whole segment) that is supplied at the phonology-syntax interface before SPELLOUT and when the syntactic operation of NEG raising takes place. This is illustrated in the following diagram.

Underlying	aspect/focus	Syntax/Phonology interface	SPELLOUT	Non-emphatic
		(Place specification)		environment
a. $k+V_{\text{ROOT}}$	perfective	$k+\text{ò}$	$k\text{ò}$	ò
b. $k+V_{\text{ROOT}}$	imperfective	$k+\text{íí}$	$k\text{íí}$	íí
c. $k+V_{\text{ROOT}}$	focus	$k+\text{ó}$	$k\text{ó}$	×
d. $k+V_{\text{ROOT}}$	non-clausal	$k+\text{í}$ (after redundancy rule)		

The conception in the above diagram is that in the underlying representation of the *k*-morpheme, a vowel is present, but its place value (i.e. \pm low, \pm back, etc.) is unspecified. It is at the syntax-phonology interface however that this specification is made. After SPELLOUT or

after the syntactic operation of NEG raising has taken place, the *k*-morpheme can be dropped in rapid speech but not in emphatic environments. But *ó* is not possible since the allomorph *kó* is always used in emphatic environments. However, within the N-K-N NPI we have seen above, which is not a clausal position, this specification is not active. As a result, when the place feature of the V in the *k*-morpheme is to be specified because of consonant clustering which is forbidden in Yoruba, Pulleyblank's (2003) redundancy rule, which supplies the front high vowel /i/ automatically in most phonological processes requiring vowel epenthesis, is assumed to be active, so that for *bàbá-k-bàbá* (father-_cNEG-father) 'any father', the resulting form after the redundancy rule has applied is *bàbá-kí-bàbá*. This is what item (d) in the above diagram demonstrates. Of course, this is applicable to vowel-initial nouns as well. Take *enikéni* in (13) for example; the full form is *eni-kí-eni*. But this case gives rise to vowel hiatus which is resolved by the deletion of /i/.

Granted that *kìí*, *kò* and *kó* are allomorphs of the *k*-morpheme, it follows that Yoruba has only two morphemes for the expression of sentential negation: the *k*-morpheme and the *má*-morpheme which are distinguished based on mood. This is captured in the following table.

Aspect	Mood	
	Realis (K)	Irrealis (<i>má</i>)
Perfective	<i>kò/ kó</i>	<i>Má</i>
Imperfective	<i>kìí, /kó</i>	

Table showing the aspectual-modal distribution of Yoruba NEG morphemes

What the table displays is an unmarked (default) distribution; it will be clear from the next section that the SN markers can be used in different aspectual-modal environments in a way that usually gives rise to mismatches. What can be taken from the foregoing is that at a closer look, functional (or primitive functional) elements are extremely minimal in number so that the

multiplicity of negative markers described in Nchare (2012), for example, can be reduced to a reasonably minimal number. This kind of systematic reduction is the main purpose of Kayne (2016), where the different types of English *there* are reduced to one through no homophony hypothesis. In what follows, I present data that demonstrate how the negative markers are used with respect to aspect and mood.

3. Aspectual-modal distributions of SN markers in Yoruba

If we assume that *kò* and *kìí* are the SN markers for past and present realis mood, disregarding aspect, and that *má* negates the irrealis mood, while *kó* negate focus irrespective of the nature of what aspect is involved, we might be tempted to think that the jobs of these negative markers are clearly spelt out for each of them so that the idea put forward in the previous section appears to be neatly worked out. But as the data presented below will suggest, this is far from being so. However, before going to this detail, the appropriate point of departure seems to be a review of the relationship that negation has with tense, mood and aspect in Yoruba.

Tense is not overtly marked in Yoruba, though the temporal frame of the verb can be expressed optionally by temporal adverbials (Fabunmi, 2013), and there is a prospective aspectual morpheme *yoo/a*, which some writers have claimed is the future tense marker (see Hewson 2010). By implication, the same structure is used to express the present tense and the past tense, with the distinguishing factor being the context or the optional modification of a temporal adverbial. Aspect and modality on the other hand are overtly marked in the syntax and this has consequences for the choice of SN markers. With this background, we can now explore how modal and aspectual sentences are negated by the SN markers in what follows.

a. Negation in indicative simple present and past

21. a. Adé yọ lókèèrè sí wa

Adé appear from.afar to 1PL

‘Adé appeared/appears to us from afar.’

b. Adé kò yọ lókèèrè sí wa

Adé NEG appear from.afar to 1PL

‘Adé did/does not appear to us from afar.’

(21) shows that only *kò* can be used effectively in indicative present and past. The other three SN markers either yield wrong interpretation or are ungrammatical. Note also that it is only *kò* that is used in indicative present and past progressive and even in present and past evidential. What is interesting about its use in the progressive is that it deletes the progressive marker, as seen in (22).

22. a. Adé ñ ka iwé

Adé PROG read book

‘Adé is/was reading.’

b. Adé *kò* ka iwé

Adé NEG read book

‘Adé is/was not reading.’

This fact generally supports the argument that *kò* is used unmarkedly in realis mood. Indicative mood, simple or past, is a realis mood, and the fact that only *kò* is possible in this context suggest that the argument in Section 2 is in order.

b. Negation in simple future, perfective future and imperfective future (prospective)

23. a. Adé yóò/á ka iwé

Adé FUT read book

‘Adé will/would read.’

b. Adé kò ní (*yóò/*á) ka iwé or Adé kì yóò/*á ka iwé

Adé NEG FUT read book Adé NEG FUT read book

‘Adé will/would not read.’

Again, only *kò* works fine in prospective negation. But it has some inconsistencies: note that *kò* cannot occur with the prospective morpheme *yóò* without bringing some changes in the morphology of the prospective marker. If *kò* is to be used, *níí*, an out-of-the-blue morpheme, has to be the one signaling the prospective mood. If *yóò* is to be retained, *kò* has to change to *kì*, another arbitrary form whose existence in this context can only be explained phonologically. The *á* form of *yoo* does not surface at all in negation. This is the case for the prospective perfective and imperfective presented in (24) and (25) respectively.

24. a. Adé yóò ti sùn

Adé FUT PFV sleep

‘Adé will/would have slept.’

b. Adé kò ní (*yóò/*á) tíì sùn or Adé kì yóò/*á tíì sùn

Adé NEG will PRF sleep Adé NEG FUT PRF sleep

‘Adé will/would not have slept.’

25. a. Adé yóò/á ti máa sùn

Adé FUT PRF IPRF sleep

‘Adé will/would have been sleeping.’

- b. Adé *kò* níi (*yoo/*a) tíì máa sùn or Adé kì yóò(/*á) tíì máa sùn
 Adé NEG FUT PRF PROG sleep Adé NEG FUT PFV IPFV sleep
 ‘Adé will/would not have been sleeping.’

The data above suggest that the distribution of *kò* is far much wider in the perfective-imperfective domain than *kíì*. Since we are assuming that *kíì* is the unmarked negative marker in the imperfective aspect, we would expect it to be used in (25), rather than *kò*. The result of this is that in addition to being the negative marker in all realis perfective aspects, *kò* is used in future imperfective.

c. Negation in indicative present and past habitual

Consider the following sentences.

26. a. Túndé máa-ń jẹ ẹwà l’ójoojúmọ
 Túndé IPFV eat beans in.everyday
 ‘Túndé eats/used to eat beans everyday.’
- b. Túndé kíì jẹ ẹwà l’ójoojúmọ
 Túndé NEG eat beans in.everyday
 ‘Túndé does/ did not use to eat beans everyday.’
- c. Túndé *kò* ń jẹ ẹwà l’ójoojúmọ
 Túndé NEG PROG eat ẹwà in.everyday
 ‘Túndé does/ did not use to eat beans everyday.’

As shown in (26), *kíì* and *kò* can be used in present and past habitual, but since *kíì* can negate the habitual sentence without any overt progressive or imperfective marker present, and *kò* cannot do this without the progressive *ń*, the correct intuition seems to be that *kíì* is the unmarked

habitual SN marker. But since we have seen above that it does not surface in imperfective future, we can assume that *kii* is the unmarked negative marker in present and past imperfective. In Adebayo (2017b), it is established that *kii* is diachronically made up of *kò* and *i*, a progressive marker. The implication of this is that in all of the examples we have seen so far in this section, *kò* is the unmarked diachronic SN marker.

d. Negation in present and past copula

- | | |
|---|---|
| 27. a. i. Túndé jé akẹ̀kọ̀ọ̀ ni UI | ii. O jé akẹ̀kọ̀ ni UI |
| Túndé COP student at UI | 3sg COP student at UI |
| ‘Túndé is a student at UI.’ | ‘S/he is a student at UI.’ |
| b. i. Túndé <i>kò</i> jé akẹ̀kọ̀ọ̀ ní UI | ii. <i>Kò</i> jé akẹ̀kọ̀ọ̀ ní UI |
| Túndé NEG COP student at UI | NEG COP student at UI |
| ‘Túndé is not a student at UI.’ | ‘S/he is not a student at UI.’ |
| c. i. Túndé <i>kii</i> se akẹ̀kọ̀ọ̀ ni UI | ii. <i>Kii</i> se akẹ̀kọ̀ọ̀ ni UI |
| Túndé NEG COP student at UI | NEG COP student at UI |
| ‘Túndé is not a student at UI.’ | ‘S/he is not a student at UI.’ |
| 28. a. i. Túndé ga | ii. Ó ga |
| Túndé be.tall | 3sg be.tall |
| ‘Túndé is tall.’ | ‘S/he is tall.’ |
| b. i. Túndé <i>kò</i> ga | ii. <i>Kò</i> ga |
| Túndé NEG be.tall | NEG be.tall |
| ‘Túndé is not tall’ | ‘S/he is not tall’ |
| c. i. *Túndé <i>kii</i> ga | ii. * <i>Kii</i> ga |
| Tunde NEG be.tall | NEG be.tall |

‘Tunde is not habitually tall.’

‘He is not habitually tall.’

While *kii* and *kò* are both possible in copula as shown in (27), it turns out that *kii* is not possible when the complement is an adjective. This can be seen in (28ci) and (28cii). We can also observe that when the SN markers *kò* and *kii* are preceded by a third-person singular pronoun, such pronoun gets deleted, so that the subject argument in the syntax is absent while it is present in the semantics. Since this is a realis mood, it is natural that only *kò* and *kii* are possible.

e. Negation in prohibitive, imperative, interrogative, subjunctive, and potential

Kò and *má* are used in prohibitives and imperatives respectively as can be seen in (29) and (30).

29. Ẹ/o kò gbọdọ wọlé

2PL/SG NEG must enter

‘You must not enter.’

30. Ẹ má wọlé

2PL NEG enter

‘Don’t enter.’

However, note that the imperative in (30) can pass for both negative imperative and prohibitive. *Kò* cannot be used in the prohibitive mood without the modal *gbọdọ*, and it is not possible at all in negative imperative. *Má* is okay in both, suggesting that it is the unmarked element in this context, while *kò* is marked. All of the SN markers are possible in interrogatives as most of the structures we have seen for each of them so far can easily be turned into question. In potential, only *má* is possible with some variations. Consider (31) and (32).

31. a. Túndé lè kọrin
 Túndé can sing
 ‘Túndé can sing.’
- b. Túndé kò lè kọrin
 Túndé NEG can sing
 ‘Túndé cannot/could sing.’
32. a. Túndé lè kọrin
 Túndé may sing
 ‘Túndé may sing.’
- b. Túndé lè má kọrin
 Túndé may NEG sing
 ‘Túndé may/might not sing.’

When *lè*, the potential morpheme, signals ability, to negate it, the SN marker *kò* has to be used and precede it, but when it signals possibility, the SN marker *má* has to be used and follow it. This fact favors the distinction we have made between the *k*-morpheme and the *má*-morpheme. Expression of ability is a realis mood whereas expression of possibility is an irrealis mood. But there is an important question here: in Yoruba, SN markers are generally preverbal, why is *má* post-modal in (32b)? This is a question for further empirical studies. The subjunctive mood on the other hand seems to come with a load of surprises.

First, all of the SN markers are possible in subjunctive mood. This is illustrated in (33).

33. a. Tí ó bá se pé ìwọ kọ ni wón pè ni...
- If it were COP that 2SG NEG FOC 3PL call FOC

‘If it had not been you they called...’

b. Àfí bíí pé wòn kíí se èniyàn
 As.if like that 3PL NEG COP Human

‘As if they were not human...’

c. Mo dábaá pé kí Pọ̀ọ̀lù má jẹ ápù
 1SG suggest that such.that Paul NEG eat apple

‘I suggest that Paul does (should) not eat apple.’

d. Tí Pọ̀ọ̀lù kò báà jẹ àpú yẹn ni...
 If Paul NEG were eat apple that FOC

‘If John had not eaten that apple...’

Second, the subjunctive mood allows bipartite negation with *kò* and *má*. For a detailed description of bipartite negation, see Bell (2004) and Collins et al. (2017). Take a look at the following sentences.

34. a. Adé **kò** báà **má** ríí, wàhálà yín nìyèn
 Adé NEG₂ even.if NEG₁ see.3SG problem your FOC.that

‘Even if Adé does not see it, that is your problem.’

b. È **kò** báà **má** lọ, wàhálà yín nìyèn
 2PL NEG₂ even.if NEG₁ go problem your FOC.that

‘Even if you do not go, that is your problem.’

In (34a&b), there is an instance of two negative morphemes in the syntax while the semantics has only one negation. Still, there is something crucial to note in the sentences in (34). If NEG₁ is removed, the sentences appear to be perfectly fine. The only difference is that the subjunctive

clauses are no longer negative, even with the presence of NEG₂. This is shown in (35). However, if NEG₂ is removed in both (34) and (35), the sentences are ungrammatical.

35. a. Adé **kò** báà rii, wàhàlà yin nìyèn
 Adé NEG₂ even.if see.3SG problem your FOC.that
 ‘Even if Adé sees it, I am not concerned.’
- b. È **kò** báà ló, wàhàlà yín nìyèn
 2PL NEG₂ even.if go, problem your FOC.that
 ‘Even if you go, that is your problem.’

What the use of *kò* in (35a&b) suggests is that *kò* is semantically redundant in this subjunctive context. It is therefore an element present in the syntax but with no import in the semantics. This redundancy or mismatch can be explained away by the fact that it is in a marked position. But this does not account for the facts of (33) where all the three *k*-morpheme allomorphs occur in subjunctive mood without apparent markedness.

f. Negation in focus constructions

Yoruba has a distinct focus construction which can be taken as a clean-cut phrase that is projected from the focus morpheme which serves as the head. The details of this are presented in the next section. In focus constructions, only *kó* and *kìí* seem to work out fine.

36. a. Adé ni ó wọlé
 Adé Foc 3SG enter
 ‘It is Adé that entered (not another person).’
- b. Adé kó ni ó wọlé

Adé NEG FOC 3SG enter

‘It is not Adé that entered.’

c. *Kií* se Adé ni ó wọlé

NEG COP Adé FOC 3SG enter

‘It is not Adé that entered.’

The SN marker *kó* can be taken as the unmarked negative marker for focus construction based on the following reason: it yields a perfect negative polarity for a sentence in focus with no additional morpheme as shown in (36b). *Kií*, on the other hand is marked, since it has to combine with the copula *se* whose presence in the syntax has no semantic effect.

g. Summary

From the above data, it looks like we can make some generalizations about the SN markers in Yoruba. We can establish that SN markers in Yoruba are generally of the ‘strong preverbal type’ (Ziejstra, 2007:502). All of them are to the left side of the VP, with one exception: *má* appears to have a marked distribution in (32). We have seen that tense does not have anything to do with the choice of the SN markers, and that rather their selection is largely determined by aspect and mood. We have also seen that *kò*, *kó* and *kií* are unmarkedly used in realis context, while *má* is unmarkedly used in irrealis context. The data generally favors the claim in Section 2. Their usage in different modal or aspectual environment gives rise to mismatches (but not in all the cases we have seen; the data in (35) is an exception which further work might account for). These mismatches are described in section 5.

4. The syntax of Yoruba SN markers

In this section, I turn to the syntax of each of the Yoruba SN markers basically from the view point of X-bar scheme (Chomsky 1995 and Ouhalla 1999). My purpose is to explore their points of convergence and highlight their differences. I show that though all of them appear to the left of the VP with some minor variations (and the exception of *má*) and can be taken as syntactic heads (Fabunmi 2013), there seems to be some differences in what they c-command as a result of aspect and mood. Following Ouhalla (1999), Fabunmi proposes that Neg in Yoruba heads its own projection and takes a VP in its complement. While this is reflected in the analysis below, it is shown that Neg takes projections other than the VP in its complement.

There is the question of tense in Yoruba that must be clarified before embarking on this enterprise. Yoruba does not mark tense morphologically but since tense category is a salient characteristic of UG and given that tense can be checked by a temporal adverbial in Yoruba, I assume that Yoruba has the category TP which is headed by a null head T and is generated above NegP. This assumption of a null T head is in line with Koopman's Principle of Projection Activation (Koopman, 2000:369). The principle requires that there be movement of some sort, but since this has only a marginal role to play in this paper, the derivation of the movement is assumed. (See Cummings, 2001:277 for a full derivation). In line with this assumption, I suggest (37) to proceed.

37. Yoruba has the category TP which can be checked by a temporal adverbial

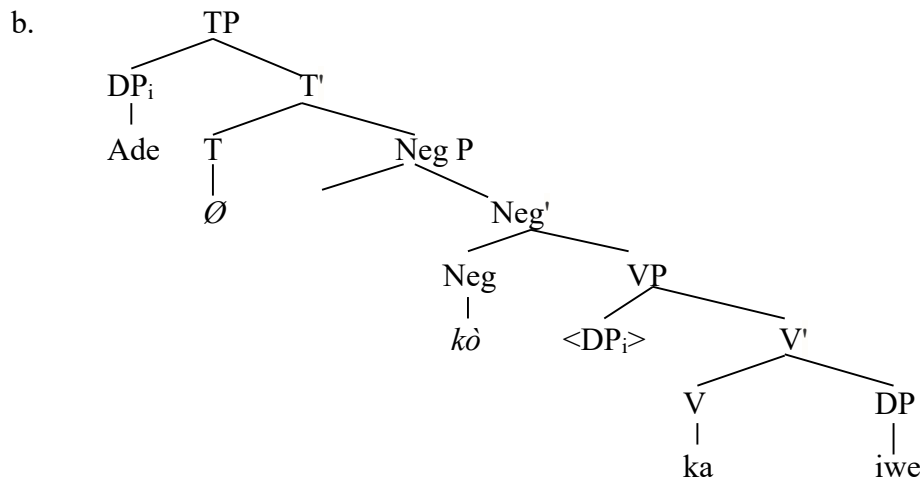
In the trees presented subsequently, I abstract away from such functional categories as vP, AgrOP, AgrIOP and CP. These are not reflected in the trees in most cases, so that the interaction of NegP with other phrases in the structures can be focused on. Also, to distinguish cases which

involve explicit marking of modal elements, I use MoodP (following Boneh and Doron, 2013) to represent the projections that these elements head.

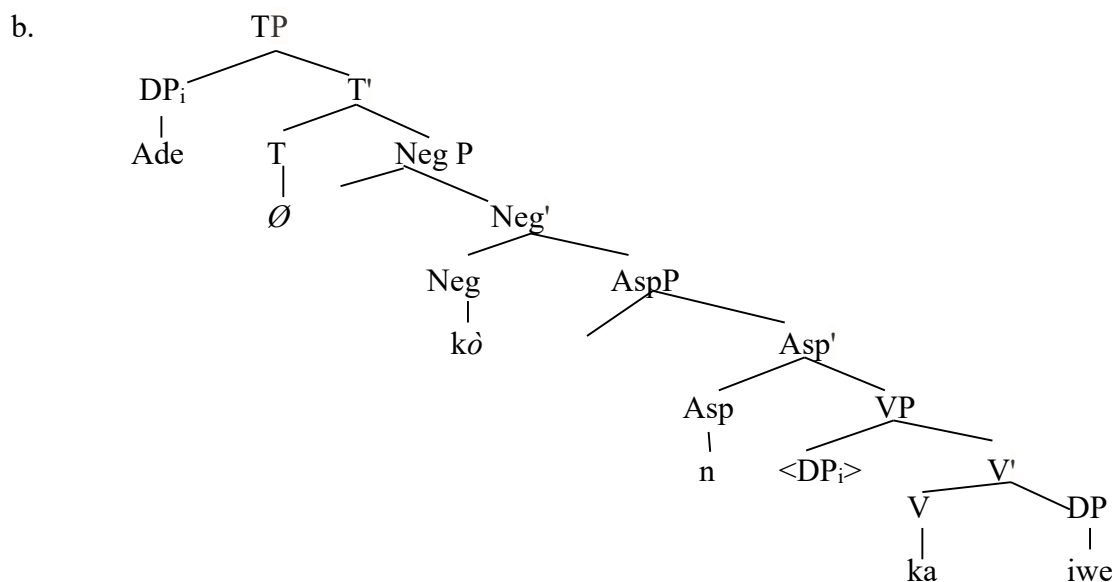
a. The syntax of *kò*

Generally, *kò* is used in three distinct syntactic environments: where it precedes the VP (38), where it precedes the AspP (39 & 40) and where it precedes a MoodP headed by the modal *lè* (41).

38. a. Ade *kò* ka iwé
 Ade NEG read book
 ‘Ade does/did not read.’



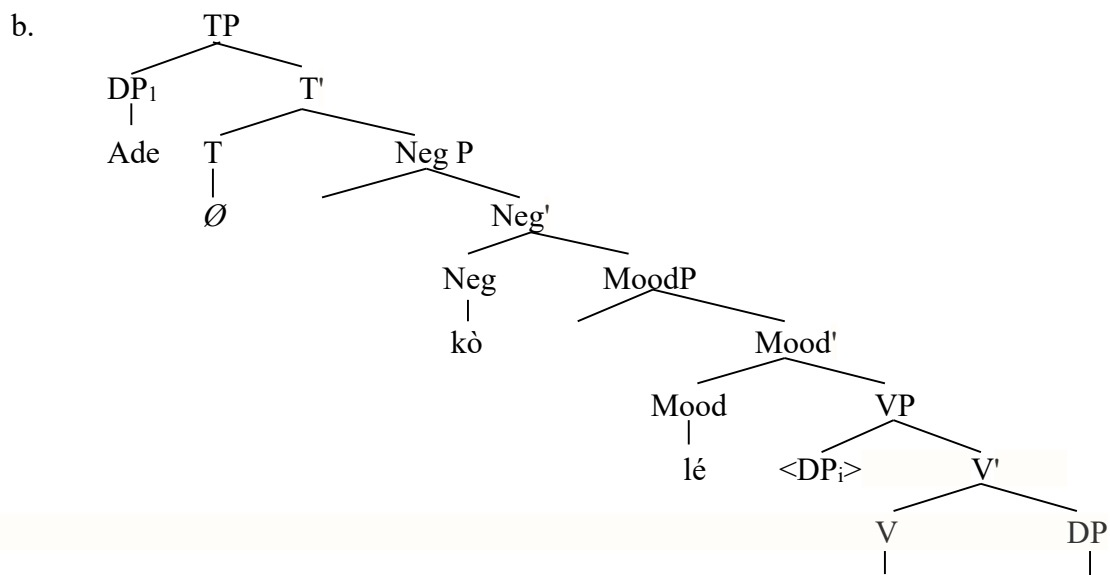
39. a. Ade *kò* ñ ka iwé
 Ade NEG PROG read book
 ‘Ade does not read (habitually).’



40. a. Adé kò tíì jẹ èwà
 Ade NEG PRF eat beans
 ‘Ade has not eaten beans.’

b. [NegP [Adé Neg' [kò AspP [tíì vp[jẹ DP[èwà]]]]]]

41. a. Ade kò le kọ orin
 Adé NEG can sing song
 ‘Adé cannot sing.’



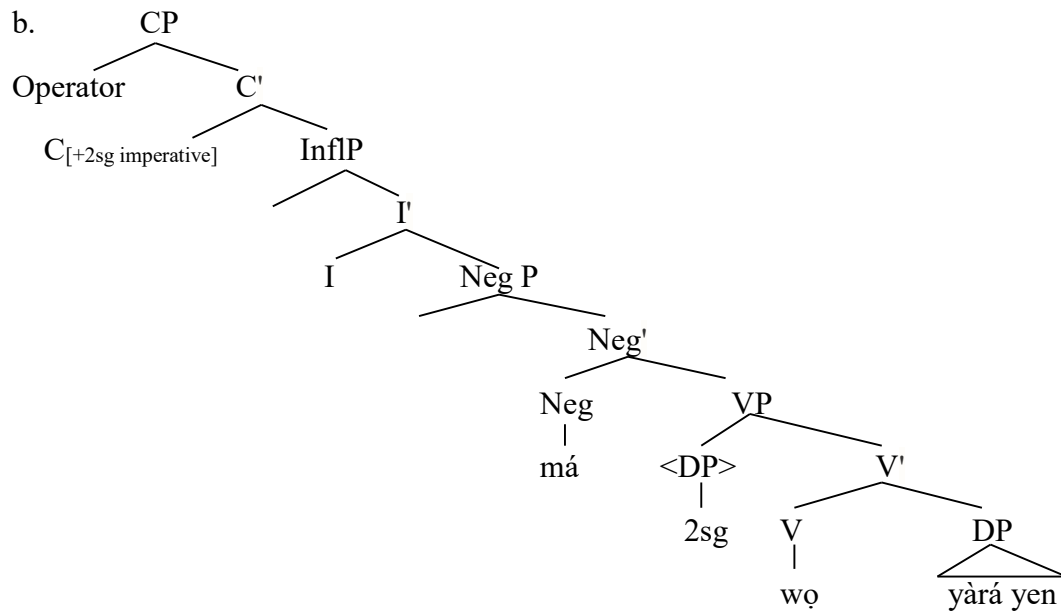
kọ orin

From the schemata above, we have seen that three basic syntactic derivations can be highlighted for *kò*: one in which it selects the VP in its complement (38b), one in which it selects the AspP in its complement (39b and 40b) and one in which a MoodP occupies its complement position (41b).

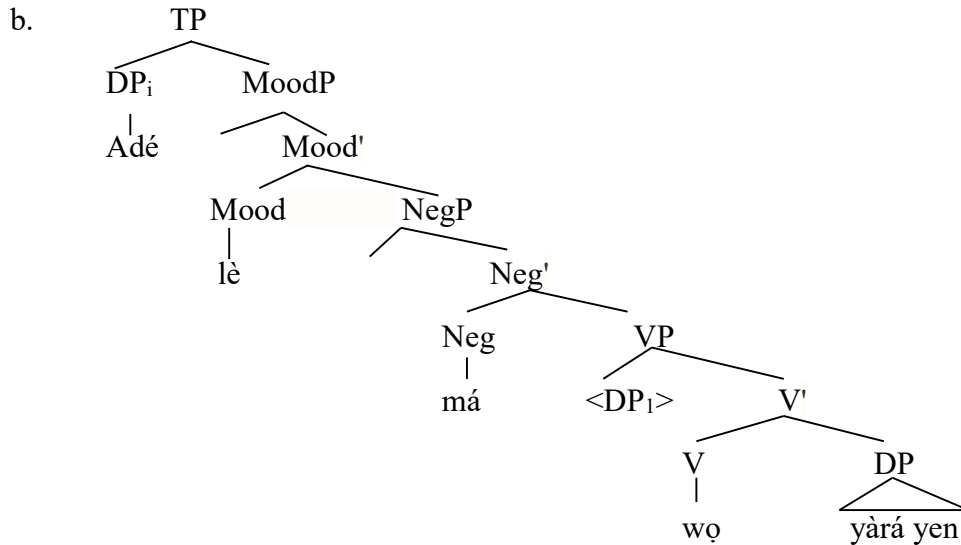
b. The syntax of *má*

Both uses of *má* in pure imperatives and in modal constructions have the same syntax. Consider (42) and (43).

42. a. Má wọ yàrá yen
 NEG enter room that
 ‘Don’t enter that room.’



43. a. Adé lè má wọ yàrá yen
 Ade may NEG enter room that
 ‘Ade may not enter that room.’



The derivation in (42b) for Neg in the imperative follows the convention in Nchare (2012:397) which is patterned after Zanuttini (2008). VP is the complement and both are dominated by an Inflectional (or Mood) Phrase.

c. The syntax of *kó*

Adewòle (1990) and Fabunmi (2013) take *kó* as the negator of the NP. This is to say that *kó* has the kind of status that the English ‘no’ has and to assume that it can form a constituent with an NP to generate a quantifier phrase like ‘no planet’, ‘no teacher’, etc. It appears that this may not be the right way to think about the syntax of *kó* for two good reasons. First, this treatment of *kó* does not acknowledge the specific syntactic environment in which *kó* is found, which is in focus constructions. Second, in a structure like *oba kó* (king NEG/ ‘it is not the king’), *kó* does not negate *oba*, such that we have something like ‘no king’ or ‘not king’, but a whole proposition in which *oba* is an argument. This proposition must be picked out in context, given the fact that a structure like *oba kó* is not felicitous out of the blue. So, if one utters *oba kó* out of the blue, people will be curious to know what proposition is such that it does not apply to *oba*.

The fact that *kó* cannot be found in any other context than in focus constructions rightly suggests that its syntax must be closely tied to focus. My starting point, therefore, is to propose that Yoruba has a focus phrase that is projected right from the focus morpheme which is its head (44), and then I will argue that it is this (and only this) focus phrase that *kó* selects in its complement position.

44. Yoruba has a functional category headed by the focus morpheme *ni*, which projects a Focus Phrase (FocP)

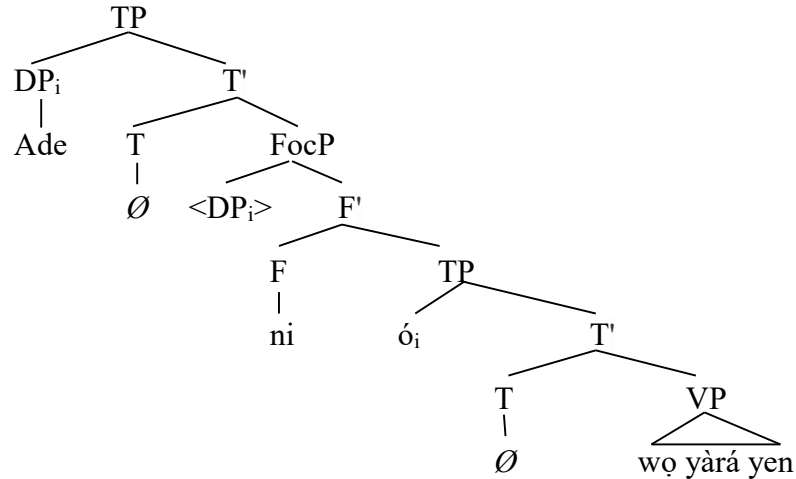
Assuming (44) certainly gives rise to a number of issues that need to be addressed. First, one has to consider the traditional treatment of *ni*, and then assess the legitimacy of the projection that *ni* heads. Previous works such as Jones (2006) and Bisang and Sonaiya (2000) take *ni* as a focus morpheme as well as a copula. Generally *ni* can be regarded as a copula focus morpheme. In Yoruba, three distinct copula morphemes can be identified: the pure copula *jé*, the emphasis copula *se*, and the focus copula *ni*. These three morphemes are described in Hewson (2010), but for detailed description of *ni*, see Jones (2006) and Déchaine (2002). My assumption in this paper is that *ni* is primarily a focus morpheme whose copula status is simply secondary and a requirement of its focus status. Assuming that the primary function of *ni* is to signal focus and that its use in this capacity is in most contexts it occurs, I propose that *ni* is a functional head, Foc, projecting a whole phrase FocP. This is schematized below.

45. a. Adé ni ó wọ yàrá yen

Adé FOC 3SG enter room that

‘It is Ade that entered that room.’

b.



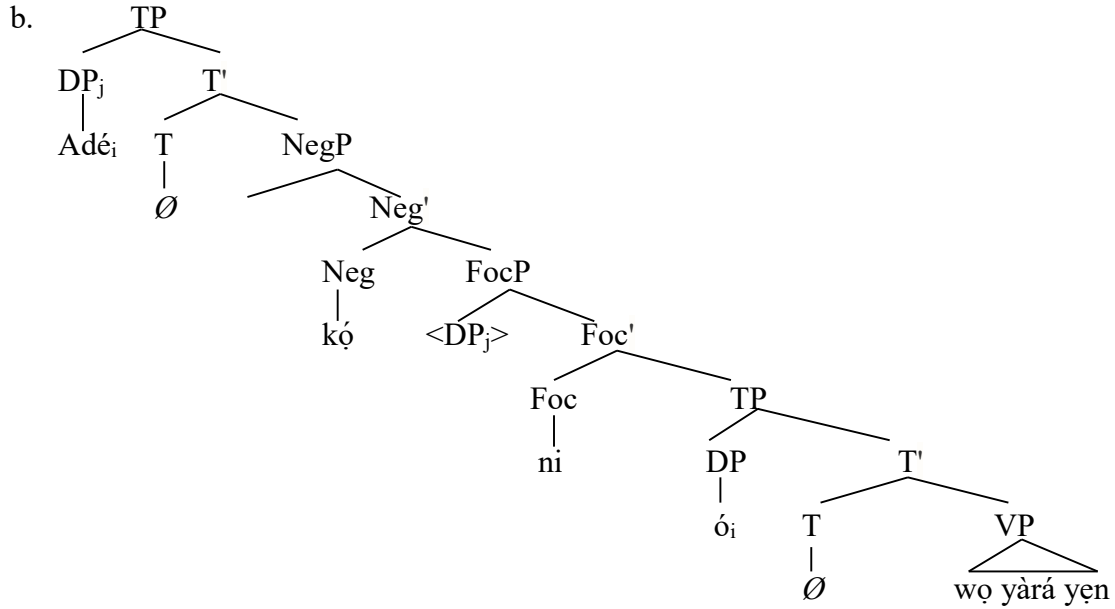
This idea that Yoruba has a distinct focus phrase is conceived in Jones (2006). It can also be found in Awobuluyi (1978) which recognizes that the function of *ni* is similar to that of the complementizer *ti* (which/who)⁵. However, the idea pursued here is different from that of Awobuluyi in the respect that the whole phrase that *ni* heads is not taken to be a noun phrase but a focus phrase. Assuming that this assumption works out fine, I then propose that it is this focus phrase that *kó* selects in its complement as shown in (46b).

46. a. Adé kó ni ó wọ yàrá yén

Adé NEG Foc 3SG enter room that

‘It is not Ade that entered that room.’

⁵ It is worth noting, however, that there are some works (such as Owolabi, 1983, 1987 and Yusuf 1990) which hold contrary views on this.



If the foregoing intuition is correct, then we can assume (47).

47. *Kó* negates a focus phrase (FocP) and not an NP.

One of the fundamental characteristics of the FocP headed by *ni* is that it takes a TP complement. In (45b) and (46b), DP₁ which originates from within the VP moves to the Spec of the lower TP to check case, but it raises away to land at the Spec of FocP to be picked out from alternatives and finally to the Spec of the higher TP to check case. The *ó* in the Spec of the lower TP is inserted to satisfy EPP (following Adesola (2010)).

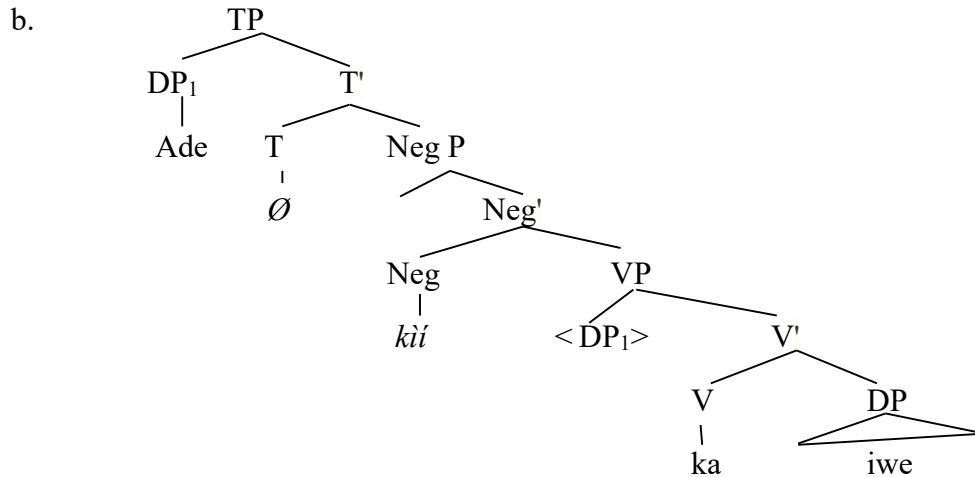
d. The syntax of *kìí*

Kìí has a similar syntax with *kò* when it is used to negate a habitual sentence as in (48). The only difference is that the aspectual head is not present in the syntax, unlike what obtains for *kò* in (39b) where *ń* is the aspectual head.

48. a. Adé *kìí* ka iwé

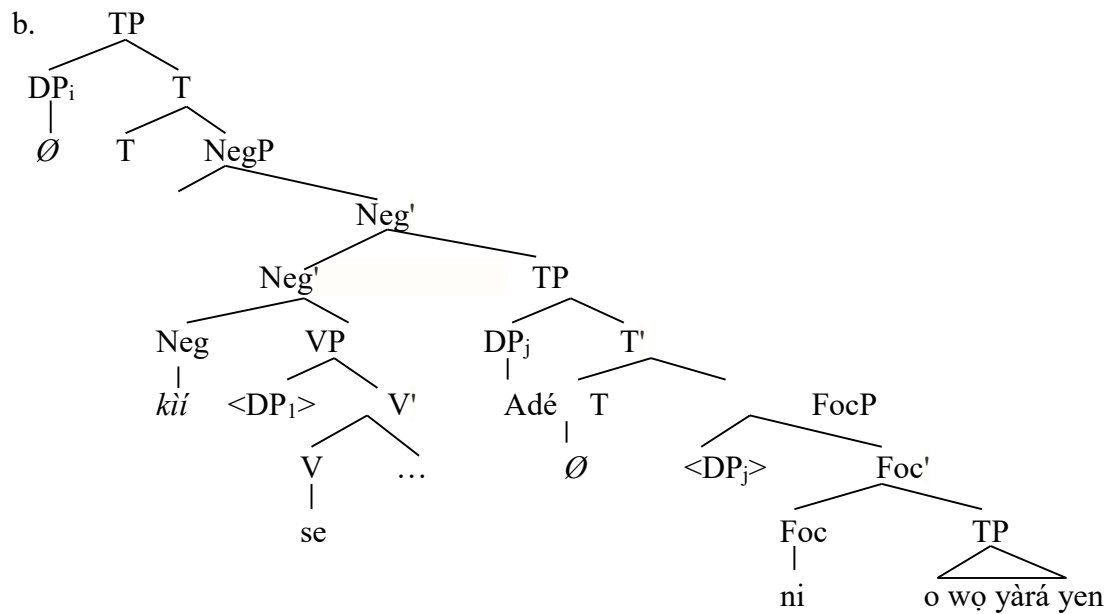
Ade NEG read book

‘Ade does not read (habitually).’



However, its syntax seems to be markedly different when it negates a focus sentence like (49a) as it has to combine with the focus phrase by adjunction. To negate a focus construction, *kii* has to combine first with the emphasis copula *se*, and then with FocP. This is illustrated in (49b).

49. a. *Kii se Adé ni ó wọ yàrá yén*
 NEG COP Ade FOC 3SG enter room that
 ‘It is not Ade that entered that room’



Note that DP_i represent the 3sg that is deleted by *kii*. This is described in section 3. This syntax of *kii* makes it distinct from the others as it is the only one in which NEG combines with what it negates by adjunction. *Kii* and the VP it c-commands can be paraphrased as ‘it is not the case that...’, while everything that TP and FocP dominates can be paraphrased as ‘It is Ade that entered that room’. Combining Neg’ with FocP, we have something like ‘It is not the case that it is Ade that entered that room’.

e. Summary

Among all the four Yoruba SN markers analyzed, only *kó* has a unified syntax, having FocP in its complement position, suggesting that it is not sensitive to aspect or mood. The rest have at least two syntactic analyses, having variations in what they select at their complement positions. My argument is that these variations are parametric on aspect and mood and that tense which is headed by a null head has no significance in the variation.

5. Mismatches of form and interpretation: the case of Yoruba SN markers

The major concern in Carlson’s (2006) work on functional elements is the challenges which an attempt to look at the syntax and semantics of function words poses. Carlson recognizes that learning the meaning of lexical items gives rise to a number of difficulties which have to do with identifying the specific sense of a lexical item in a given context, especially as it is the inherent property of lexical items to refer to a diverse number of things, and given the ambiguities that may result from how they are combined. However, far greater, Carlson notes, is the difficulties that arise when one seeks to understand the meanings of functional elements. Functional elements interact with the syntax of a language in ways quite distinct from their lexical counterpart and thereby give rise to a number of issues which are absent for lexical items when

mapping between form and interpretation. These ‘issues’ are what Carlson regards as ‘mismatches’. The appropriate starting point, then, is identifying what linguists understand by mismatches.

The term ‘mismatch’ has been used by linguists to describe linguistic phenomena that involve mapping between elements or structures that are incongruent. We have an instance of mismatch when an element performs a function that it does not normally perform. Take the Chichewa verb *kuti* (referenced in Francis and Michaelis, 2003) as an example: this verb, meaning ‘say’, performs its normal function of predication, relating an argument with another, but it can also perform another function which most verbs in natural language are not known to perform, that of serving as clause-linkage marker. Performing this function of clause-linkage marking, the verb *kuti* is taken to exhibit a mismatch between syntax and semantics. Consider also the case of the non-standard English expression ‘I didn’t do nothing’, where the double negation that appears in the syntax reduces to one at the level of semantics.

Francis and Michaelis (2003) classify mismatch phenomena into two: complexity mismatch and content mismatch. Complexity mismatch refers to instances where there is no one-to-one correspondence among the elements in the syntactic representation and the elements in the semantic representation of an expression, or among other forms of representation like LFG’s f-structure and d-structure. For instance, the idiomatic expression ‘taken aback’ has only one lexical entry at LF. This is a mismatch in so far as it defies any assumption of one-to-one correspondence among levels of representation, an idea popular in Montague tradition (Partee, 1975:203). One thing to note however is that this is clearly noticed in parallel-architecture grammars like LFG, HPSG, etc., and it has been taken to be an evidence in support of the

practice to have different levels of representation as this makes it easy to identify mismatches, while in derivational grammars, Chomskyan for example, this distinction is hard to make.

To prove that learning functional meanings poses a far greater challenge than learning lexical meanings because of the ‘mismatches’ they often exhibit, Carlson cites a number of phenomena. These include: two functional elements with the same meaning but with a different syntax, functional elements treated as higher level operator such as tense and plurality, functional elements with composite meaning such as French *du* which comprises *de* and *le*, two identical functional elements which reduce to one in the syntax but which are both present in the semantics, e.g., Japanese possessive postposition *–no* and pronoun *–no*), two or more functional items which add to one meaning such as Negative Concord in Zeijlstra (2014) and Szabolcsi’s (2015) KA and MO, functional elements which are empty such as expletives, and Hindi habituality marker (Iatridou 2000) which when used in certain syntactic environment is empty, and lastly functional items bearing other meanings different from what they are known to signify, e.g. Spanish *se* discussed in Palmutter (1971). Carlson finally goes on to discuss the English definite article, showing how the definite feature which the article carries may disappear in the semantics in some structures and how it is possible for singular bare nouns to carry the definite feature even without the definite article present in the syntax.

From the description in Section 3, it appears that Yoruba SN markers exhibit a number of mismatches like the ones Carlson describes. Take *kò* for example. It is generally used in the indicative mood, but as shown in (34) and (35), it is possible in the subjunctive mood where its presence in the syntax has no effect in the semantics. It also combines with *má* in a bipartite negation, in a way that the syntax has double negation and the semantics has only one. Consider also the instances in (27) and (28) where *kò* and *kíí* delete the third-person singular pronoun such

that the syntax has no subject argument that is present in the semantics. These cases well satisfy Francis and Michaelis's (2003) content and complexity types of mismatch.

A whole lot of other mismatch questions also arise from the description in section 3. Why does the progressive morpheme *ń* disappear in the presence of negation in (22)? Why does the morphology of the progressive marker *yóò* changes in the presence of negation and its other form *á* does not appear at all in negation in (24) and (25)? What is responsible for the atypical behavior of *má* in (32) where it splits the VP into two? In other words, why is the modal *lè* higher than the SN marker *má*? How also do we explain the emptiness of the copula *sé* in (36)? The fact that these SN markers have their distinct unmarked usages but are still interchangeable with some of their counterparts in some other usages can be considered instances of mismatches in itself. While some of the mismatches can be said to have arisen because of a SN marker being used in a different aspect and mood it is not normally used, a good example is the semantic vacuousity of *kò* in (35) and *sé* in (36), this does not explain all the mismatches ((33) is a good example).

These mismatches are only pointed out, therefore, for further empirical investigation. The point pursued here is that function items like Yoruba SN markers described above interact with the syntax in more complex ways than their lexical counterparts (Carlson 2006). To be sure, most of the questions raised above do not surface for lexical items. At any rate, I maintain here the claim that Yoruba has only two morphemes for the expression of sentential negation, which flesh out as the four SN markers *kò*, *kìí*, *kó*, and *má* whose uses in different aspectual and modal environments can explain some of the mismatches identified above.

6. Conclusion

I have tried to show that Yoruba has only two morphemes for the expression of sentential negation whose basic difference is modal: the realis *k*-morpheme which has *kìí*, *kò* and *kó* as allomorphs and the irrealis *má*-morpheme, and that the use of these morphemes in a different modal-aspectual environment often gives rise to mismatches which are similar to the mismatch phenomena described in Carlson (2006). While doing this, I suggest alternative ways of looking at negation in the language. For instance, I claim that, rather than being an NP negator, *kó* negates a focus phrase. I also claim that, despite the fact that they are majorly preverbal, the SN markers do not have a unified syntax, at least to the extent that there is no uniformity in what occupy their complement positions, and that this variation is only as a result of their interaction with aspect and mood. Some issues were left largely unaddressed. Some of the mismatches identified were not accounted for. The question of why all the SN markers are possible in the subjunctive mood was also not pursued. It is suggested, however, that further work may help shed more light on these issues.

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