# THE SCOPAL AUTHORITY OF HEADS IN YORUBA–ENGLISH CODE-SWITCHING\*

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#### ABSTRACT

Many studies have confirmed that code-switched structures have some underlying grammatical and semantic rules that account for their well-formedness and acceptability. The importance of the heads in their structures has, however, not been fully explored. This paper studies the interaction of functional and lexical heads and the scope of each. It confirms that while functional heads legislate on the structure of an expression, lexical heads regulate the meaning of the structure. This is done through their influence over elements within their respective scopes. The Scope Limiting Constraint is proposed to account for the overlap between two heads as they co-operate to ensure grammaticality and acceptability of expressions.

Keywords: code-switching, English language, scope, Yoruba language

#### INTRODUCTION

Many terms have been used to describe the combination of two or more languages used as a single code. These terms usually describe two phenomena: (1) the situation in which large chunks of expression elements, such as sentences and clauses, are switched from one language to another, and (2) the linguistic product of a mixture of small bits of expression elements from two languages. The two most prominent terms are code-switching, which describes the former, and code-mixing, which accounts for the latter.

For the purpose of this paper, the term code-switching is adopted as a cover term for the two phenomena. This is because, firstly, the distinction has no syntactic basis since it has not been shown that either structure excludes the other. Secondly, no speaker uses one form rather than the other at a speech event. And finally, a speaker can use the two forms simultaneously and unconsciously as in the following statements produced by one subject (English is italicized).

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(1) *Imagine* kí irú *boy* yìí máa *mock* mi! *What an insult*! Màá kókó *deal* pelu e ná *before I report you to your parents*.

'Imagine this little boy making a mockery of me! What an insult! I'll first deal ruthlessly with you before I report you to your parents?'

In this example, both code-mixed (1st sentence) and code-switched structures (2nd and 3rd sentences) co-occur, and we can hardly separate them. Thus there is no syntactic or semantic basis for distinguishing between the two terms. Hence, the term code-switching is adopted.

## 1. FUNCTIONAL AND LEXICAL HEADS

The head of a phrase is important in many ways. The head is unique such that it has specific features that distinguish it from other heads, and it is obligatory since other words in the phrase converge on and derive their overall meaning in relation to it (Cowper, 1992; Chomsky 1981, 1986 and Kornai and Pullum, 1990). These features follow from the  $\theta$ -criterion (Chomsky 1981: 36), the Projection Principle (Riemsdijk and Williams 1986: 52), and the Endocentricity Principle (Chomsky 1981: 36). Abney (1987: 55) has discussed two types of heads: the functional head and the lexical head. The characterization of these heads is arrived at through binary feature specifications of  $[\pm F)$ . While functional heads are [+F], lexical heads are [-F). Webelhuth (1995: 31) has also used the binary feature of  $[\pm GF]$  to distinguish between the two heads. Functional heads are [A-GF] while lexical heads are [A-GF]. Through these features both arrived at the following functional heads: complementizer, inflection and determiners. The lexical heads therefore include nouns, adjectives, verbs and prepositions. Abney (1987), Webelhuth (1995) and Radford (1997) discuss certain features that distinguish functional categories from lexical ones. The first is that functional categories belong to a closed set such that new ones cannot be created or added to the existing ones. These include determiners, inflection elements and complementizers. Lexical heads can, however, accommodate additional words that are created.

Another distinction is that while lexical heads have independent substantive meaning, functional heads do not. They derive their meanings through the contexts in which they occur. In addition, unlike lexical heads, they do not have  $\theta$ -roles, because they have  $\bar{A}$ -GF. However, as heads, functional elements may take certain kind of complements but may not take a specifier (Chomsky and Lasnik, 1995: 54). They are usually inseparable from their complements. While functional heads permit only one complement, lexical heads form such complements (e.g. VP and NP). Finally, functional heads serve as linguistic frames for structures in a language while lexical heads serve as flesh for the

frames. A functional head is assumed to maintain the structural integrity of phrases in which it occurs.

Awoyale (1995) has identified functional heads in Yoruba. Some of these are the complementizers ki, pé, and wipé, and the determiners  $n\dot{a}a$  and yen. Lamidi (2003) has also discussed functional and lexical heads in Yoruba-English code-switching. We shall study two functional heads (pé and ki) and two lexical heads (verbs and nouns) in Yoruba-English code-switching.

# **1.1 FUNCTIONAL HEADS**

The functional heads  $p\acute{e}$  and  $k\acute{i}$  belong to the class of complementizers. Complementizers are functional heads that serve as clause introducers. Since they are erected over lexical heads, they regulate the structure of sentences. In Yoruba-English code-switching, they also determine whether or not certain elements can be switched from one language to the other. As complementizers  $p\acute{e}$  and  $k\acute{i}$  are base-generated in the C position of CP. This means that they are not products of movement transformation. Witness (2)

- (2a) Ó *mean* **pé** Adé *pass*. 'It means that Adé passed'.
- (2b) Ó *possible* kí doctor *test* Funmi.
  'It is possible that the doctor would test Funmi'.

In these structures, neither  $p\acute{e}$  nor  $k\acute{i}$  is moved from its deep structure position.

Despite their similarities, however,  $p\dot{e}$  and  $k\dot{i}$  have specific differences which dictate the form of structures that each permits. We shall discuss the peculiar features of each.

# $1.1.1 \ P \acute{\rm E}$

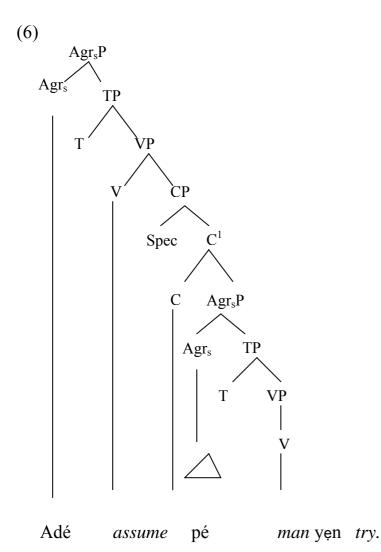
 $P\acute{e}$  as a functional head has specific characteristics. One of these is the fact that it occurs in many environments of code-switched structures since it permits a variety of structures as its complement. Consider the following examples:

- (3a) Everybody believed pé he was tough.'Everybody believed that he was tough'.
- (3b) So many people know pé they will not go there.'So many people know that they will not go there'.
- (4a) Won gbà pé he was right.'The agreed that he was right'.
- (4b) E mo pé he brooks no nonsense.'You know that he brooks no nonsense'.
- (5a) Adé assume pé man yen try.

'Adé assumed that that man tried'.

(5b) A *inform* won pé *snacks* ti *ready*.'We informed them that the snacks were ready'.

A study of the examples (3-5) shows that  $p\acute{e}$  serves as a complementizer that introduces embedded clauses in each sentence. In (3)  $p\acute{e}$  occurs between matrix and embedded clauses which are fully written in English. In (4),  $p\acute{e}$  introduced an embedded English clause and both are preceded by a Yorùbá matrix clause. And in (5)  $p\acute{e}$  is preceded and followed by a mixture of English and Yoruba words. The last example is analysed in the following schema.



**Pé** can also nominalise clauses. In this case simple declarative sentences are nominalised and embedded under a matrix clause.

- (7a) Aina so pé *teacher* wa *bright*.
  'Aina said that our teacher was bright'.
- (7b) Òjó assume pé everyone is happy.
  'Òjó assumed that everyone was happy'.
- (7c) Adé gbọ **pé** baba *sick*.

'Adé learnt that father was ill'.

In (7) the embedded clauses serve as the complements of the verbs  $s_{0}$  'said' *assume* and  $gb_{0}$  'heard'. This means that the  $p\acute{e}$  clauses behave as nominals and they can be focused as in (8)

- (8a) **Pé** teacher **wa** bright ni Aina so.
- (8b) Pé everyone is happy ni Òjó assume.
- (8c) Pé baba *sick* ni Adé gbó.

The initial  $p \acute{e}$  clauses in (8) are nominals which are derived from initial simple sentences below:

- (9a) *Teacher* wa *bright* 'our teacher is bright'.
- (9b) *Everyone is happy.*
- (9c) Baba *sick* 'Father is ill'.

Notice that the sentences in (9) are factive statements in line with Kiparsky and Kiparsky (1971).

Finally, *pé* may sometimes be switched into English in structures where it occurs without affecting the grammaticality of the structures.

- (10a) Adé *plan* pé/*that* oun máa *travel*.'Adé planned that he would travel'.
- (10b) Bolá assume pé/that fuel wà.'Bolá assumed that there was fuel'.
- (10c) Kunle *insist* pé/*that issue* yen wa *relevant*.'Kunle insisted that issue was relevant'.

The sentences in (10) are well-formed irrespective of whether  $p\acute{e}$  or *that* is chosen as the complementizer. Notice that both have identical meaning and function as a clause introducer (in 10).

# 1.1.2. KÍ

**Kí** has different features/characteristics when it occurs in a code-switched variety. Quite unlike  $p\acute{e}$ , which occurs almost everywhere, the occurrence of  $k\acute{i}$  in structures is restricted. First, it permits only structures that occur in Yoruba or mixtures of English and Yoruba. It does not seem to permit English structures.

- (11a) Ó necessary kí a invite wọn.
  'It is necessary for us to invite them'.
- (11b) A fe kí everybody ó respond.'We want everybody to respond'.

- (11c) Ó yẹ kí situation ti improve.'The situation should have improved'.
- (12a) \*Olú fẹ kí goat roams about'Olú wants the goat to roam the streets'.
- (12b) \*Ó necessary kí everybody to respond.'It is necessary for everybody to respond'.
- (12c) \*Ó wà *important* kí Joy *attends that meeting*.'It is important for Joy to attend that meeting'.
- (13a) Ó necessary kí everybody respond.'It is necessary for everybody to respond'.
- (13b) Ó wà *important* kí Joy attend meeting yen.'It is important for Joy to attend that meeting'.
- (13c) A *insist* kí *students resume*.'We insisted that students should resume'.

In (11), the complementizers introduced code-switched structures and all examples are grammatical. In (12), however, the structures are aberrant because ki subcategories wholly English IP structures. The examples in (13) are apparent counter-examples. To get at the root of the causes of their grammaticality we look at the accent on the words in the subcategorized structures. In (13a) the expression *everybody respond* is rendered with low tone on the last syllable of *everybody*. This is different from the English rendition in which no such feature is noticed.

In (13b) Joy attend meeting is also pronounced differently from the English edition. Given that Joy is a proper noun, yet it is an English word. There is a vowel lengthening in its pronunciation as there is in the /n/ of the second word, attend. Finally, the verb attend does not have the English agreement affix to mark subject-verb agreement. These features are peculiar to Yoruba-English code-switching. We see this as an influence of Yoruba language in which expressions are syllable timed rather them stress timed (Abercrombie 1967: 97). Notice also that O from Yoruba can be inserted just after the subject of the embedded clauses as in (14). Finally in (13c) there is a slight pause between students and resume.

- (14a) Ó necessary kí everybody ó respond.
- (14b) Ó wa important kí Joy ó attend meeting yen.
- (14c) A insist kí students ó resume.

As a result of the foregoing, therefore, we can say that the subcategorized IP complement of ki in (13) are code-switched structures rather than pure English structures, since they have components of Yorùbá in them.

Another feature of ki is that it usually introduces future or secondary actions. Witness the following:

- (15a) E jé kí man yẹn ó rest.'Let that man rest'.
- (15b) O fé kí *teacher* ó tete *arrive*.'He wants the teacher to arrive early'.
- (16a) Ó pé kí *dinner* tó *ready*.
  'It was late before dinner was got ready (dinner was late)'.
  (16b) Badé dé kí *anybody* tó *react*.
  - 'Badé arrived before anybody reacted'.
- (16c) A make several visits kí won tó assist wa.
  'We made several visits before they assisted to us'.
- (17a) \*A mò kí Tolu ń *late* dé *office*.'We know that Tolu comes late to the office'.
- (17b) \*Adé rí í kí accident yen occur.'Adé saw the accident occur'.
- (17c) \*Òjó assume kí Adé steal calculator yẹn.
  'Òjó assumed that Adé stole that calculator'.

The examples in (15) contain embedded ki-clauses that show future happenings or expectations. In (16), however, the matrix verbs pe 'late, de 'arrive' and *make* show that the respective events had occurred before the events in the adjoining embedded ki-clauses. In (17), the structures do not conform with either of the two groups. In (17a) the matrix verb mò 'know' is in the present or past tense while the verb in the insert is in the continuous tense. The matrix verb in (17b) and the verb in the embedded clause are in the past. And in (17c) both matrix and embedded clauses are in the past tense, and we can hardly state which event preceded the other. We can then say that the structures in (17) are ill-formed possibly because the subcategorized IPs do not conform with the acceptable features of Ki, which determines acceptable structures in each example.

*Ki* also introduces indirect commands. Consider the following:

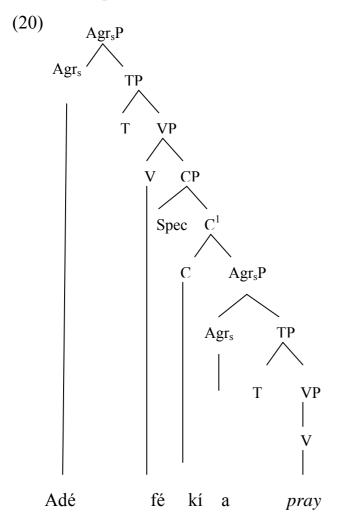
- (18a) Adé fé kí a pray.'Adé wants us to pray'.
- (18b) Olú ní **kí** daddy ó write. 'Olú asked daddy to write'.
- (18c) Bisi je kí Tolu so answer.'Bisi allowed Tolu to give answer'.
- (18d) Ayọ gbà kí Òjó assist àwọn labourers yen.
  'Ayo allowed Òjó to assist those labourers'.

In these examples (18) the embedded clauses are indirect commands because of the presence of ki. This is made clearer when the ki-clause is focused as in (19)

- (19a) Kí *a pray* ni Adé fé.
- (19b) **Kí** *daddy* ó *write* ni Olú wí.
- (19c) Kí Tolu sọ answer ni Bisi gbà.

#### (19d) Kí Òjó assist awon labourers yen in Ayo gbà.

Notice that wi 'say' in (19b) and gba 'allow' are substituted for ni in (18b) and je in (18c) because each pair is synonymous, and especially to avoid the unacceptable interpretation of ni as 'have' and je as 'be' since they are homonyms with each pair. Thus, since ki introduces the declarative statements in (18) and (19), it controls the embedded IPs. Sentence (18) is analysed for further description.



As (20) shows, ki dominates and determines the structure down the clause. Finally, ki may not be switched into English in some structures like (18). When switched, it makes such structures ill-formed as in (21).

- (21a) \*Adé fe *that* a *pray*.
- (21b) \*Olú ní that daddy ó write.
- (21c) \*Bisi je that Olú so answer.
- (21d) \*Ayo gbà that Òjó assist àwon labourers yen.

The ungrammaticality of (21) confirms the importance of ki as a functional head.

# **1.2 LEXICAL HEADS**

## 1.2.1 THE VERB

Recall that lexical heads serve as flesh to the skeletal frame provided by functional heads. The verb is one of the lexical heads (and the noun is another). Verbs serve as heads of verb phrases. Verbs take different shapes when they occur in Yoruba English code-switching. They can be lexical, phrasal, splitting or serial in nature. Our discussions in this section shall be restricted to lexical verbs.

Lexical verbs can occur either as English or Yoruba word in the codeswitched structure. Witness the following:

- (22a) Badé á *travel.* 'Badé will travel'.
- (22b) Òjó *play tricks*.'Òjó play tricks'.
- (23a) Sadé ra *lantern*.'Sadé bought a lantern'.
- (23b) Adé gbin banana.'Adé planted banana trees'.
- (24a) Olú **ní** *novel* kan. 'Olú was a novel'.
- (24b) Àyìndé *write* mi.'Ayìndé wrote me (a letter).
- (24c) Bóyè *reject offer* yen.'Boye rejected that offer'.

In these structures the verbs (in bold) occur as English words in (22 & 24b, c) and Yoruba words in (23 & 24a). Those in (22 & 23) also have complements, which are in English. In (24) the complements are in Yoruba (24b) or a code-switched DP (24a and c). This means that verbs may or may not subcategorize DP complements.

In some cases, when verbs subcategorize DPs, the resulting structure may be semantically unacceptable, even if structurally acceptable. The examples below are cases in question:

(25a) **?**Adé *look* wa.

'Adé looked at us'.

(25b) ?Bimbo *see* mi. 'Bimbo saw me'.

The major problem with the structures is that the complements do not collocate well with the NPs which had been subcategorized. What this means is that when

the concept of verbs such as *see* and *look* occur as English words, they may not be followed by the complements in (25). To correct these, we can have (26):

- (26a) Bimbo *see* mi *off.* 'Bimbo saw me off'.
- (26b) Adé *look fresh.* 'Adé looks fresh'.

This means that the verbs determine structures they co-occur with. Recall that in our discussion of  $p\acute{e}$  and  $k\acute{i}$  we used verbs such as those in (27) which subcategorize clauses.

- (27a) Ó *necessary* kí a *invite* wọn.'It is necessary for us to invite them'.
- (27b) Olú ní kí daddy ó write.'Olú asked daddy to write'.
- (27c) Aina so pé *teacher* wa *bright*.'Aina said that our teacher was bright'.
- (27d) A *inform* won **pé** *snacks* ti *ready*.'We informed them that snacks were ready'.

In these examples, the lexical verbs *necessary*, ni 'say', so 'say' and *inform* subcategorize clausal complements. Notice too that they are both in English and Yoruba forms. We are however concerned in this paper with the V + DP complements.

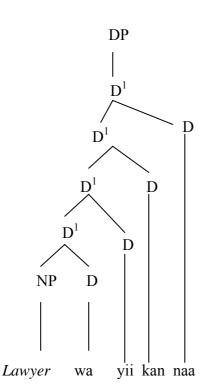
# 1.2.2 The Noun

Nouns in Yoruba-English code-switching have specific features Following Radford (1997), nouns and noun phrases often serve as complements to determiners in DPs. Such nouns are c-commanded by the functional heads in the structure. Consider (28)

- (28a) *boy* yen 'that boy'
- (28b) *lawyer* wa yìí kan náà 'this same lawyer of ours'

The nouns *boy* and *lawyer* occur as complements to the respective heads. In (28b) *lawyer* is a direct complement to *wa* 'our' because of their proximity. In addition, the nouns are c-commanded by the determiners, which are functional heads. It follows then that the nouns are in the domain and under the influence of the functional heads. This can be seen in the following analysis of (28b):

(29)



Notice that NPs can also be in Yorùbá but that the determiner may not be in English as the ungrammaticality of (30) shows:

- (30a) **omokùnrin** that
- (30b) Agbejórò this same too.

This means that nouns can occur in either English or Yoruba (if there are more than one lexical head) while the functional heads remain in Yoruba (following Banjo (1983) and (1996). The nouns in DPs can also be modified by nouns and adjectives. Depending on the nature of the noun which is the lexical head of the NP complement, these modifiers may or may not be switched into English. Witness (31).

- (31a) *Teacher* oko 'village teacher'
- (31b) *Cup* oníke 'plastic cup'
- (31c) **Owóo** school 'school fees'
- (31d) **omo** *butter* 'a child brought up with butter (i.e. a weakling )'

The head nouns in (31) are *teacher*, *cup*,, *owó* 'money' and *omo* 'child'. It should be noted that the first two are English words while the last two are Yoruba words. The English heads are modified by Yoruba words (31a&b) while Yoruba heads are modified by English words (31c&d) without the structures being ill-formed.

For adjective modifiers, consider (32)

- (32a) **Òdàa** green 'green paint
- (32b) **aso** *blue* 'blue cloth'
- (32c) fresh ewé 'fresh leaves'
- (32d) normal síbí-obe 'normal stew-spoon'
- (32e) girl black 'black girl'
- (32f) *tall* **ògá** 'tall master'

In 32(a-d) the head nouns and the adjectives are in either Yoruba or English. When one is in English the other may be in Yoruba or, on some occasions, both may be in English with a code-switched grammar structure (32e). English adjectives can post-modify the head (32a&b) or premodify it (32c, d, f). However, while colour adjectives post-modify their respective nominal heads, adjectives of texture/height premodify theirs and it is hardly acceptable to change their positions as in (33). Notice that (32a, b&e) follow Yoruba NP pattern while (32c, d&f) follow English NP structure.

- (33a) \*green òdà 'green paint'
- (33b) *\*blue* **aso** 'blue cloth'
- (33c) \*ewée *fresh* 'fresh leaves'
- (33d) \*síbí-obè normal 'normal stew-spoon'
- (33e) \***ogá** *tall* 'tall master'.

We should note that English colour adjectives are more usually permitted in the code-switched structure while other categories such as adjectives of size, shape and height are less so. Rather, such adjectives are often substituted by Yoruba words:

- (34a) *boy* giga 'tall boy'
- (34b) stomach rogodo 'round stomach'
- (34c) *box* kekere 'small box'

Finally, as we have noted under VPs, NPs or DPs can serve as complements of VPs when they co-occur in structures.

### 2. SCOPAL AUTHORITY OF HEADS

Scopal authority can be described as a *c*-command relationship holding between a head and other structures down the clause that are dependent on it for the grammaticality of a structure. Quoting Frey (1993), Krifka (1998: 76) discussed the following scope assignment principle:

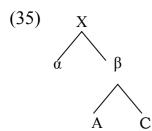
If  $\alpha$   $\beta$ , are operators occurring in a sentence S, then S has a reading in which  $\alpha$  has scope over  $\beta$  if and only if:

a.  $\alpha$  c-commands  $\beta$ , or b.  $\alpha$  c-commands a trace of  $\beta$ .

The first condition deals with c-command that does not involve movement. The second has to do with movement. The first condition is in line with our discussion and we subsequently adopt it. This position also tallies with May's (1985: 5) position that

The scope of  $\alpha$  is the set of nodes that  $\alpha$  c-commands at LF.

This means that a head that c-commands a lower node has authority over it and can control it grammatically and, possibly, semantically. Thus if a head c-commands another, the first has scope over the second. In this work, we employ the definition of c-command offered by Chomsky (1986: 8) that ' $\alpha$  c-commands  $\beta$  iff  $\alpha$  does not dominate  $\beta$  and every  $\gamma$  that dominates  $\alpha$  dominates  $\beta$ '. This means that both heads share the same maximal projection and neither dominates the other as in (28)



In (35)  $\alpha$  *c*-commands  $\beta$ , A & C because they are all dominated by X while  $\beta$  ccommands  $\alpha$  because they are both dominated by  $\beta$ . However A and C do not ccommand  $\alpha$  since there is a maximal category  $\beta$  shared by A and C but not by  $\alpha$ . It follows that  $\alpha$ , being higher up the clause, has scopal authority over  $\beta$  but not vice versa.  $\beta$  must therefore satisfy the categorial and selectional requirements of  $\alpha$  if the structure is to be well-formed. In essence,  $\alpha$  regulates the structure in (35).

Given this position, it can be observed that this phenomenon obtains in Yoruba-English code-switching. To prove this we bring structures in which two heads  $p\acute{e}$  and  $k\acute{i}$  (discussed above) co-occur. Witness (36):

- (36a) Adé agree pé Òjó write (past/statement)'Adé agreed that Òjó wrote him'
- (36b) Adé agree kí Òjó write (future/command)'Adé agreed that Òjó should write'
- (36c) Adé *agree* **pé kí** Òjó *write* (future/command) 'Adé agreed that Òjó should write'

- (37a) Wón *insist* pé Wale *pass* (past/statement)'They insisted that Wale passed'
- (37b) Wón *insist* **kí** Wale *pass* (future/command) 'They insisted that Wale should pass'
- (37c) Wón *insist* **pé kí** Wale *pass* (future/command) 'They insisted that Wale should pass'

In these examples, (36a) and (37a) feature  $p\dot{e}$  as the head of CP. In both examples, pé subcategorizes a statement *Òjó write* 'Òjó wrote (him)' in (36a) and *Wale pass* 'Wale passed' in (37a). These statements are nominalised by pé and serve as complements to the verbs *agree* and *insist*. In the (b) examples, however, ki occurs at the head of the CP. Although it also introduces statements, it changes them into indirect commands which is lacking in the (a) examples. Finally the (C) examples in (36 & 37) have both *pé* and *kí* in the same structure. Since both are functional heads of their respective CPs, it means that their subcategorization requirements must be satisfied to make the structures in which they occur well-formed. It will be observed that pé subcategorizes IPs and CPs. This makes it possible for pé to subcategorize a kí-clause. Since pé preceded kí in (36) and (37), it is expected that there will be a clash of features given their peculiar characteristics discussed above. However, the fact is that since ki has satisfied the subcategorization requirement of pé (by being a CP complement to  $p\dot{e}$ ), it can exert its own control on elements over which it has scope. This is why the past tense meanings that pé effected in (36a) and (37a) have been changed to the future tense and the statements changed to commands in (36c and 37c).

How do we know that  $p\acute{e}$  must precede  $k\acute{i}$  in (36c) and (37c)? Consider the following structures which have base-generated heads.

- (38a) Wộn ní [c] Adé *sick* 'They said Adé was ill'
- (38b) Olú *plan* pé [c] á *travel* later 'Olú planned that we travel later'
- (38c) **Olú** *encourage* mi [c] **kí n** try Olú encouraged me to try
- (38d) Òjó ni [c] [c] á pray
  'Òjó said we should pray'

In (38) the only functional heads that can fill the COMP head position are  $p\acute{e}$  and  $k\acute{i}$ . In (39a&c) only  $p\acute{e}$  is acceptable, and in (38b) only  $k\acute{i}$  is acceptable. Finally in (d) both  $p\acute{e}$  and  $k\acute{i}$  are acceptable (in that order) as the following structures show.

- (39a) Wộn ní pé Ade sick
- (39b) \*Wón ni kí Ade sick
- (40a) Olù *plan* **pé kí** à *travel later*
- (40b) \*Olù plan **pé pé** à *travel later*

- (41a) Adé encourage mi **pé kí** n try
- (41b) \*Adé encourage mi kí kí n try
- (42a) Òjó ni **pé k**í à *pray*
- (42b) \*Òjó ni kí pé à pray

A study of the well-formed structures shows that  $p\acute{e}$  precedes  $k\acute{i}$  but not vice versa as the ill-formed (b) structures in (39–42) show. It follows then that  $p\acute{e}$  subcategorizes  $k\acute{i}$  when they co-occur in structures and  $k\acute{i}$  exerts its influence (or scope) after satisfying the requirements of  $k\acute{i}$ .

For lexical heads, we shall discuss the relationship that obtains between the verb and its DP complement. Recall that the lexical verb takes a clause or a DP as its complement. In this wise we can say the V c-commands its complement and therefore has scope over it. Recall too that despite the fact that a noun can be in either English or Yoruba language, its determiner may not be in English. Therefore, since a verb can subcategorize DPs with or without determiners, we assume that the verb has control over both. So if the DP is grammatical the VP is also well-formed. If, however, the DP is ill-formed, the VP becomes ill-formed. Consider (43).

- (43a) ? Olù write water '? Olù *writes water*'
- (43b) ? Titi *phone river*'? Titi phoned a river'
- (43c) ? Òjó se *foul*'Òjó played foul'
- (44a) \*Adé *kick ball the* 'Adé kicked the ball'
- (44b) \*Aina ti *man tall*'Aina pushed a tall man'
- (44c) \*Ajayi *enter competition that* 'Ajayi entered into that competition'

The structures in (43) are grammatical but anomalous in the sense that despite the fact that the NP complements are subcategorized, they do not agree in meaning with the verb. Hence, they are unacceptable. Instead of (36), we should have something approximating to (38).

- (45a) Olù write letter 'Olù wrote a letter'
- (45b) Òjó play foul,'Òjó played foul'
- (45c) Titi phone mi 'Titi phoned me'

In (44) the structures are ill-formed and these are worse than those in (43). The problems with them are the ill-formed DP structures that serve as complements. Although the complements are subcategorized by the different verbs, the ungrammaticality of the DPs emanate from the determiners and adjectives that are changed into English contrary to the requirements in the code-switched structure. Thus we should have the following (46) instead of (44).

- (46a) Adé kick ball náà
- (46b) Aina ti man giga
- (46c) Ajayi enter competition yen

Given the foregoing, we can say that after satisfying the requirements of each V, the DP or NP still exerts its influence to make the sentences well-formed as in (46). It follows that the verb has scope over its complement.

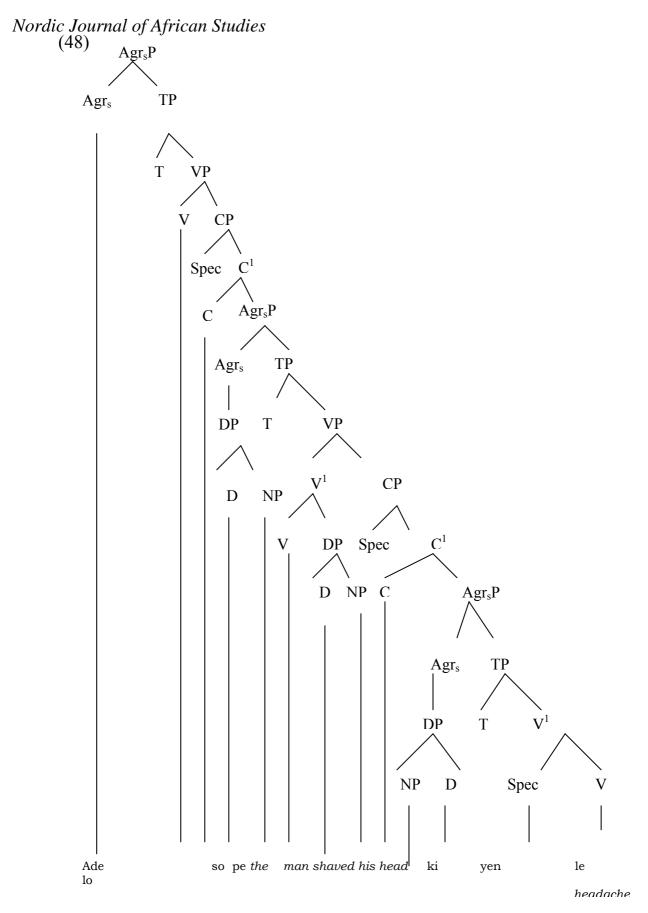
Given the foregoing relationships, between co-occurring heads, we propose the following rule.

#### (47) SCOPE LIMITING CONSTRANT

A lower head can stop the downward influence of an upper head after it has satisfied the subcategorization and selectional requirements of the upper head.

This means that each head has unique features and demand specific subcategorization and selectional features which differ from one head to the other. Given this situation, two heads that co-occur have distinct and possibly disparate requirements. The lower head in the structure must satisfy the requirements of the upper head before exerting its influence on lower heads. In this sense, it limits or curtails the downward influence of the upper head to the point at which the lower head intervenes.

The Scope Limiting Constraint implies that a lower head imposes limitations on the scope of an adjacent higher (functional) head. This confirms then that the higher head has scopal authority over the lower head. Furthermore, another head may limit the scope of the second head down the line such that it exerts a new control. Thus if a head permits only a pure English or mixed structure, the occurrence of another head say ki or  $n\dot{a}a$  can force a change to suit the purpose of the new head as in (48).



In (48) the first functional head is pe, which subcategorizes an IP that is wholly in English. Its requirement is satisfied by the DPs *the man* and *his\_head*, and the VP *shaved his head* which are units with specific heads. However, this trend is stopped by the introduction of ki, which requires a mixed structure. Again, the

DP *pain yen* 'that pain' satisfies this requirement. It has both English and Yoruba words, and to satisfy its own rules, the head of the DP, *yen* 'that' is in Yoruba. This confirms that the higher head has scopal authority over lower heads.

### 3. CONCLUSION

This paper has examined the peculiar features of specific functional and lexical heads and the overlapping relationship that obtains between co-occurring heads in Yoruba-English code-switched structures. Based on selected functional and lexical heads, it is observed that heads are distinctive and they have scopal authority over other heads down the clause. However, each exerts its influence after satisfying the requirements of the upper head. The Scope Limiting Constraint is proposed to account for this relationship.

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