

Yoruba Pronominal Anaphor *Òun* and the Binding Theory¹

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1. Introduction

In this paper, we are concerned with the Yoruba pronominal anaphor *òun*. This pronoun exhibits all the characteristic features of Long Distance Reflexives (LDR), but differs from them in that it may not be locally bound. The evidence suggests that other syntactic factors besides logophoricity may be responsible for the licensing of the pronominal anaphor *òun*. Accounts of LDRs in Chinese and other East Asian languages suggest Infl plays a crucial role in the licensing of LDRs (see Cole and Hermon 1990, 1994, 1997; Progovac 1992, 1993). The Yoruba data supports this claim but suggests a parametrization of the Infl system in order to account for anti-local anaphors like *òun*, and for the licensing of LDRs in general.

This paper is structured as follows: In the first section, we examine the behavior of the pronoun *òun* and the problem it poses for the binding theory. In section two, we examine Pulleyblank's Avoid Pronoun account of *òun* and conclude that it does not satisfactorily account for the behavior of *òun*. In section three we examine the logophoric account and find that the logophoric principle does not explain why Yoruba has LDR while a language like English does not. In the following section we compare the behavior of the pronominal anaphor *òun* with the typology of LDRs established by Cole and Hermon (1997) based on the behavior of LDRs across languages. The accounts of LDRs given by Cole et al. (1990, 1994, 1997) and others like Progovac (1992, 1993) support our conclusion that other factors, besides logophoricity, specifically the type of INFL that a language has, may be responsible for whether or not a language has LDR.

2. *Òun* and the BT

Consider the following Yoruba sentences:

- 1) Taiwo_i so pé Bóla_i fẹron *òun*_{i/*k}
Taiwo said that Bola like self

In (1) the pronoun *òun* may be coreferential with the matrix clause subject but not with the subject of the embedded clause 'Bola' or with an NP outside the sentence. Contrast the Yoruba sentences above with an equivalent English sentence (2):

- (2) John said that Bill likes him

The pronoun 'him' in the English sentence (2) has three possible readings: it may refer to the NP John or to an NP completely outside the sentence. Thus the sentence could mean Bill likes John or that Bill likes someone else. The equivalent Yoruba sentence (1) has only one interpretation, namely one in which the pronoun is coreferential with the subject NP Taiwo. The sentence cannot mean that Bola likes someone other than Taiwo. It is clear from the examples (1) and (2) above that the Yoruba third person singular pronoun *òun* is an anaphor and not a pronoun since it can only have a bound variable

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reading. Further evidence comes from the contrast found between *òun* and its English equivalent, *him*, in examples (3) and (4) below:

(3) John and Mary spoke to George; John believes that Mary likes him.

(4) Ayo_i ati Taiwo_k sòrò si Adé_j; Ayo gbàgbó pé Taiwo féron *òun*_{i/*j/*k}
 Ayo and Taiwo spoke to Ade; Ayo believes that Taiwo likes self.
 Ayo and Taiwo spoke to Ade; Ayo believes that Taiwo likes him.

In both (3) and (4), the NPs John and Ayo occur in the same sentence with the pronouns *him* and *òun* respectively. Since anaphors must take their antecedents from within the sentence in which they occur, we should expect that if the pronoun *him* in (3) and *òun* in (4) are anaphors, they should be bound by the NP *John* and *Ayo* respectively, but not by the NP *George* or the NP *Ade* because the pronouns *him* and *òun* do not occur in the same sentence with *George* and *Ade*. We find that, in the English example (3), the pronoun *him* could refer either to John or to George but in the Yoruba example the pronoun *òun* can refer only to *Ayo*; it may not refer to *Ade*. The fact that *òun* in (3) can only refer to the NP *Ayo* shows that *òun* has only a bound variable reading. This example further supports the conclusion that *òun* is an anaphor while English ‘him’ is a pronoun. The contrasts show that the English ‘him’ behaves like a pronoun as it may refer to either of the two NPs *John* or *George* while Yoruba *òun* behaves like an anaphor in that it may only refer to the subject *Ayo*. Below are further examples in support of the claim that *òun* is a true anaphor.

- (5) Taiwo_i ro pé *òun*_{i/*k} sanra
 Taiwo thinks that self fat
- (6) {Ore Ayo}_i so pé *òun*_{i/*k} le na Bóla.
 Ayo’s friend said that self can beat Bola.
- (7) Ayo_i fé ki òun_{i/*k} ti ilèkùn
 Ayo want that he shut the door
- (8) {Èro Ayo}_i ni pé Bola_j bú *òun*_{i/*j/*k}.
 Ayo’s thinking is that Bola insulted him.
- (9) Ayo_i gbó ti Bola n bú *òun*_{i/*j}.
 Ayo heard Bola insulting him.

In all examples 5-9, *òun* has no independent referent. It must be bound by an antecedent within the sentence. This behavior of *òun* contrasts with that of the third person singular pronoun *ó* in (10) and (11) below:

- (10) Taiwo_i rò pé *ó*_i sanra.
 Taiwo thinks that CL fat
 Taiwo thinks that self fat
- (11) Ayo_i so pé *ó*_i féron Dúpé.
 Ayo said that CL likes Dupe
 Ayo said that self likes Dupe.

Contrast sentences (10 and 11) above with (12 and 13) below:

- (12) Taiwo_i rò pé *òun*_{i/*j} sánra
 Taiwo thinks that self fat

- (13) Ayo_i so pé òun_{i/*j} féron Dúpé.
 Ayo said that self likes Dupe
 Ayo said that he likes Dupe.

When we contrast the co-referential possibilities in (10-11) and (12-13) we can see that we have two possible readings in the examples in which the pronoun *ó* appears: the first interpretation is where the pronoun *ó* is coreferential with the matrix subject, and the second is where the pronoun refers to someone else outside the sentence. In the examples where we have *òun* on the other hand, the sentences have only one interpretation, namely, one where the pronoun is coreferential with the matrix subject only. The pronoun *òun* may not refer to another NP outside the sentence. The grammatical contrasts in (10 and 11) and (12 and 13) above support the claim that *òun* is an anaphor while the third person pronoun *ó* is a true pronoun.

Now contrast the behavior of *òun* with that of the reflexive pronoun *araare* in (18-23) below.²

- (14). Taiwo_i féron araare_i /*òun_i
 Taiwo like self
- (15) Taiwo_i ti ilèkùn mó araarè_i /*òun_i
 Taiwo locked door against self
 Taiwo locked self out.
- (16) Taiwo_i wo araare_i /*òun_i ninu dínjí.
 Taiwo looked self in mirror
 Taiwo looked at self in the mirror.
- (20) Ayo_i léri pé *araare_i/òun_i le na Bóla.
 Ayo boasted that self can beat Bola.
 Ayo boasted that he can beat Bola .
- (21) Ayo_i gbàgbé péki *araare_i /òun_i ti ilèkùn
 Ayo forgot that self/he shut door
 Ayo forgot to shut the door

Yoruba reflexive pronouns behave just like reflexives in English, in the sense that they must be locally bound. In (14-16) where the use of the reflexive is acceptable, the reflexive is bound within the clause. However in (20-21) where the antecedent of the reflexive occurs outside the clause, the use of the reflexive is unacceptable. Thus (14-21) above show that the reflexive pronoun *araare* may not be bound by an antecedent outside its governing category. The contrary is the case with the pronoun *òun*. The grammatical contrast between *òun* and the reflexive illustrated in the examples above shows that the reflexive *araare* satisfies the binding condition for anaphors as it is bound within its GC. *Òun* on

² Reflexive pronouns in Yoruba are strictly local, that is they must be bound by an antecedent within the clause in which they occur. Yoruba has the full range of reflexive pronouns:

Singular		Plural	
araami	myself	araawa	ourselves
araare	yourself	araayin	yourselves
araare	him/herself	araawon	themselves

A reflexive is formed by combining the word *ara* ‘body/self’ with the appropriate genitive pronoun. The genitive pronouns are:

Singular		Plural	
mi	my	wa	our
re	your	nyin	your
rè	his/her	won	their

the other hand although is an anaphor violates the binding condition for anaphors as it may not be bound within its GC. All the sentences in which *oun* is bound by an antecedent within its GC, i.e. the containing the clause, are unacceptable.

Another unique feature of *oun* is its ability to be bound across several intervening clauses. This is illustrated below:

- (22) [Ayo_i fè [ki Taiwo_j rò [pé Bola_k toju *oun*_{i/j/*k}]]]
 Ayo want that Taiwo think that Bola takes care of self.
 Ayo wants Taiwo to think that Bola takes care of him.
- (23). [Ayo_i mò [pé Taiwo_j so [pé Bola_k fè [ki Adé_m we *oun*_{i/j/*k/*m/}]]]]
 Bola knows that Ayo said that Taiwo want that Ade wash self

The examples (22) and (23) show that binding of *oun* is not restricted to the adjacent embedded clause. As we can see in (22) and (23), *oun* may be bound across several intervening clauses. Taiwo or Bola or Ayo may be selected as the antecedent of *oun* in the sentences (23) and (22). Any of the NPs in (22) and (23) outside the GC of the pronoun could be the antecedent of the pronoun, the only requirement is that it be a subject. In other words, several interpretations can be given to the sentence, depending on which NP is interpreted as being the antecedent. If *oun* is an anaphor as we have shown it to be, then its behavior in (5-9), (12-13) and in (22) and (23) violates the binding theory which states that an anaphor must be bound within its governing category.

The canonical definition of Binding theory is found in Chomsky (1981):

- (24) A. An anaphor must be bound in its governing category.
 B. A pronoun must be free in its governing category.

Governing category (Chomsky 1986a) is defined as in (25) below:

- (25) a) \mathcal{P} is the governing category for \mathcal{B} iff \mathcal{P} is the minimal category with a SUBJECT containing \mathcal{P} **and** a governor for \mathcal{P} and
 b) \mathcal{P} contains a SUBJECT accessible to \mathcal{P}

Possible accessible SUBJECTs are [NP, IP], [NP, NP], or AGR/INFL

The governing category for *oun* in (22) and (23), (5-9), and (12-13) is the lowest embedded sentence, but *oun* is not bound within it. This behavior of *oun* violates the BT. *oun* thus behaves like an anaphor and a pronoun at the same time in the sense that it must be bound, but it must be free in its GC. This means *oun* is a pronominal anaphor. This presents a problem for the theory because it is assumed that such an item cannot exist because it will be required to obey contradictory binding requirements, that is, it will be required to obey both principles A and B at the same time and it is assumed this is impossible.³ How, then, can we account for this behavior of *oun*?

³ As a lexical item it must satisfy the case filter, but in order to satisfy the case filter it must be governed. However, if it is governed, it will have to obey both conditions A and B at the same time. Based on these assumptions, it is believed that such an item will be ungoverned and therefore cannot receive case. Hence it cannot be lexical.

3. The Avoid Pronoun Principle

The only study that attempts to account for the distribution of *òun* is Pulleyblank (1986). Pulleyblank argues that the coreference properties of *òun* is due to the Avoid Pronoun Principle (Chomsky (1981). The avoid pronoun principle simply states that a lexical pronoun should be avoided whenever possible in favor of *pro* or *PRO*.

(26) Avoid Pronoun Principle:
Avoid Pronoun

Pulleyblank argues that in Yoruba, a clitic subject pronoun of an embedded clause always has to be interpreted as disjoint in reference from all c-commanding NPs because it is co-indexed with a variable subject to Condition C. Therefore, by the Avoid Pronoun Principle, *òun* is chosen only when the disjoint interpretation is not required. Thus according to Pulleyblank, the choice of *òun* over a clitic pronoun is dictated not by the binding principle but by the Avoid Pronoun Principle. This hypothesis is based on the assumption that a null operator appears in the Comp of the matrix clause and since the subject NP is in the domain of the operator that binds the embedded clitic-NPe sequence, it cannot be co-indexed with the clitic. The configuration (24) illustrates this (Pulleyblank, 1985):

(27) OP_j [Taiwo_i ro pé [NPe]_j oj sanra]
Taiwo thinks that CL fat

If Pulleyblank's hypothesis is correct, a reading in which the clitic NPe sequence is co-referential with the matrix subject should be impossible, but the following examples (28) through (31) shows that this is not the case:

(28) Taiwo_i rò pé ó_{i/j} sanra.
Taiwo thinks that CL is fat
Taiwo thinks that he is fat

(29) Ayo_i so pé ó_{i/j} feron Dupe.
Ayo said that CL likes Dupe
Ayo said that he likes Dupe.

(30) Ayo_i léri pé ó_{i/j} le na Femi.
Ayo boasted that CL can beat Femi.
Ayo boasted that he can beat Femi.

(31) Ayo_i gbàgbé pé ó_{i/j} ra móto náà ni òpò.
Ayo believes that CL bought car the cheap
Ayo believes that he bought the car cheaply.

Contrast (28-31) above with (32-35) below:

(32) Taiwo_i ro pé òun_{i/*j} sanra.
Taiwo thinks that he is fat

(33) Ayo_i so pé òun_{i/*j} feron Dupe.
Ayo said that he likes Dupe

(34) Ayo_i léri pé òun_{i/*j} le na Femi.
Ayo boasted that he can beat Femi.

- (35) Ayo_i gbàgbé pé òun_{i/*j} ra móto náà ni òpò.
 Ayo believes that he bought car the cheap

When we contrast the co-referential possibilities in (28-31) and (32-35) we can see that the clitic pronoun *ó* may occur in the same environment as *òun*. All the examples in which the clitic appears have two possible readings: the first is where the higher subject is co-referential with the clitic, and the second is where the higher subject is disjoint in interpretation with the clitic. The examples show that the clitic like *òun* can also have a coreferential reading in the same context. In other words, in examples (28-31) and (32-35) both the clitic and *òun* may refer to the same NP, that is, the higher NP *Ayo*. Pulleyblank's account rests crucially on the hypothesized null operator appearing in the matrix comp, within the domain of the matrix subject. However, the fact that the sentences in which the clitic appears have two readings implies that the operator need not take maximal scope contrary to what is assumed in Pulleyblank (1985). The null operator can have scope over the embedded clause only in the case where the subject is free in the scope of its operator.⁴ This is illustrated in (36):

- (36) NP1 [OP... NPe cl]...

In (36) the subject NP1 is free in the scope of the operator so coreference with the NPe clitic sequence is possible. This configuration accounts for the reading in which the clitic is bound by the matrix subject. The examples here shows clearly that the Avoid Pronoun Principle does not account for the distribution of *òun*.

4. Oun and the Logophoric Principle

Pronouns similar to *òun* in behavior have been found to exist in several West African languages (Clements 1975, Koopman and Sportiche 1989, Sells 1987). Clement's study of Ewe *ye*, is one of the few detailed descriptions of these pronouns. He describes the behavior of the Ewe logophoric pronoun as follows:

- (37) The pronoun *ye* is used exclusively to designate the individual (other than the speaker) whose speech, thoughts, feeling, or general state of consciousness are reported or reflected in the linguistic context in which the pronoun occurs (Clements 1975).

A similar definition of logophoric pronouns is given by Sells (1987):

- (38) In contexts embedded under a logophoric verb, and only in these contexts, a special pronominal form called the logophoric pronoun must be used to indicate reference to the person whose speech, thoughts, or perceptions are reported.

It was Clements who first used the term logophoric to describe these pronouns. The term logophoric pronouns is now widely used to refer to these and other pronouns whose distribution seem to be determined by pragmatic factors. To account for the unique ability of these pronouns to be bound outside their clauses in violation of the BT, it is claimed that logophoric pronouns are bound by purely discourse rules; it is claimed that they do not obey the c-command condition and are thus outside the BT.

⁴ This was pointed out to me by an anonymous reviewer.

We will first examine the pronoun *òun* to see whether it is a logophoric pronoun and if it is, whether or not it obeys the c-command condition, the critical requirement that will determine whether the behavior of *òun* falls under the BT or not. We begin first by identifying the matrix verbs that are commonly used in logophoric contexts. The most typical of these are verbs of saying or reporting. Examples in Yoruba are *so* (say) *kede* (announce), *so fun* (tell). These verbs are inherently logophoric and *òun* does occur with them as the sentences below show:

- (39). Ayo_i so pé *òun*_i maa borí
Ayo said that he has won.
- (40). Ayo_j kède pé *òun*_{j/*k} borí
Ayo announced that he won.
- (41). Ayo_i so fún Kola_j pé Bola_k mò okùnrin ti ó tan *òun*_{i/*j/*k}
Ayo told Kola that Bola knows man that he deceived him.
Ayo told Kola that Bola knows the man who deceived him.

The examples show that *òun* occurs with typical logophoric verbs such as those in (39-41); however, *òun* may also occur with a wide range of other complements taking verbs which are not inherently logophoric. They range from verbs of perception and cognition, to verbs denoting emotion, desire, request, etc. Examples of these are *jé*(cause/let) *lérí* (boast), *mò* (know), *gbàgbé* (forget), *ránti* (remember), *fé* (want), *féròn* (like) *bè* (beg), *rò*(think), *puró* (lie), and *tàn* (deceive). *Òun* can cooccur with all kinds of matrix verbs provided the clause is introduced by the complementizer (pé)kí (that). This complementizer is normally used to introduce reports or indirect statements. Its presence in a sentence is indicative of an indirect statement or report. Hence when it is used to introduce a clause whose matrix verb that is not inherently logophoric the sentence acquires a logophoric interpretation. It is the presence of this complementizer that gives the sentences a logophoric interpretation even when the matrix verb is not inherently logophoric. The presence of the complementizer thus allows the logophoric pronoun *òun* to occur with a wide range of verbs which may not be inherently logophoric. The following sentences illustrate:

- (42). Ayo_i lérí pé *òun*_{i/*j} ó borí
Ayo promised that he will win.
- (43). Ayo_i mò pé *òun*_{i/*j} ti borí.
Ayo asked if he has won.
- (44). Ayo_i bè wa péki a je kí *òun*_{i/*j} borí.
Ayo begged Bola that she let him win.
Ayo begged Bola to let him win.
- (45). Ayo_i gbàgbó pé *òun*_{i/*j} ti borí.
Ayo believes that he has win.
- (46). Ayo_i gbó pé *òun*_{i/*j} ò borí.
Ayo heard that he did not win.
- (47). Ayo_i fé kí Kola jé kí *òun*_{i/*j} borí.
Ayo want that we vote for him
Ayo wants us to vote for him.
- (48). Ayo_i mòómò jé kí Bola_j we *òun*_{i/*j}
Ayo deliberately let Bola bathe him

In all the examples above, the sentences have a logophoric interpretation in that *òun* refers to the subject *Ayo*, the person whose feelings and thoughts and perceptions are being reported. Now consider the grammatical (a) and the ungrammatical (b) sentences below:

- (49a). *Ayo_i bú okùnrin tí ótan *òun*_i
 Ayo knows man that he deceived him
 Ayo knows the man who deceived him.
- (50a) *Obinrin_i tí Ayo_j fé n tójú *òun*_i
 Woman that Ayo married habitual takes care him.
 The woman that Ayo married takes care of him.
- (51a) *Okùnrin_i tí ó ra ilé fèròn *òun*_i
 Man that bought house likes himself
- (52a) *Omo_i tí Ayo fún ni ounje yio fo aso *òun*_i
 Child that Ayo gave money washing clothes his
- (53a). *Ayo_i mo okùnrin tí o tan *òun*_i
 Ayo knows man that he deceived him
 Ayo knows the man who deceived him.
- (49b) Ayo_i so pé Bóla_j bú okùnrin tí ó tan *òun*_{i/*j}
 Ayo said that Bola insulted the man who deceived him.
- (50b) Ayo_i mò pé obinrin tí Bóla_j fé n tojú *òun*_{i/*j}
 Man that Ayo married habitual takes care him.
 The man that Ayo saw takes care of himself.
- (51b) Ayo_i gbàgbó pé okùnrin tí Bóla_j ta ilé fún fèròn *òun*_{i/*j}
 Ayo believes that the man who bought our house likes him.
- (52b) Ayo rò pé omo_i tí Délé fún ni ounje yio fo aso *òun*_{i/*j}
 Child that Ayo that Dele gave food will wash clothes his
 Ayo thinks that the child that Dele gave food to will wash his clothes.

The difference between the grammatical sentences (49b- 52b) and the ungrammatical (49a-53a) is due to the presence or absence of the complementizer *pé* in the grammatical sentences and its absence in the ungrammatical sentences. Since the complementizer is used to introduce reports and indirect statements, it is only logical that it would be required when the embedded clause is to be given a logophoric interpretation. The fact that sentences with *òun* require this complementizer further suggests that *òun* is a logophoric pronoun.

The question now is why do some languages like Yoruba have Long Distance Anaphors while others like English do not? What determines the presence or absence of Long Distance Anaphors and logophoric pronouns in a language? To account for this, we will first compare the behavior of *òun* with pronouns referred to in the literature as Long Distance Reflexives (LDR). LDRs occur in several languages among which are Chinese, Dutch, and Icelandic. In this paper we will focus mainly on the Chinese LDR '*ziji*'.

5. *Òun* and the Typology of Long-Distance Anaphors

The behavior of *òun* seem to parallel the behavior of pronouns referred to in the literature as Long Distance Reflexives (LDR). The uniqueness of these pronouns lies in their ability to be bound outside their clauses (Cole et al., 1990, 1994, 1997), Progovac (1992, 1993), and Huang and Tang (1991), among others. *Òun* is similar in behavior to LDRs in this sense as shown in the numerous previous examples. Long-distance anaphors have been found to exhibit other unique characteristic features which set them apart from ordinary pronouns or anaphors (Cole and Hermon 1997). These features are as follows:

(54) Typology of long-distance anaphors (Cole and Hermon 1997)

1. they are monomorphemic
2. they observe c-command
3. they are subject oriented
4. they manifest blocking effects in languages without subject verb agreement

From the numerous examples given, we have shown that *òun* observes most of the requirements of LDRs: First, it is monomorphemic, it observes c-command, and it is subject oriented. In all the sentences in which *Òun* occurs, the antecedent of *òun* is always the matrix clause subject of the higher clause. We repeat some of the examples below:

(55) Ayo_i so fún Bóla_j pé Fémí_k bú *òun*_{i/*j/*k}
 Ayo told Bola that Femi insulted self
 Ayo told Bola that Femi insulted him

(56) Ayo_i tan Bóla_j pé *òun*_{i/*j} bori.
 Ayo deceived Bola that self won
 Ayo deceived Bola that he won

In examples (55) and (56), it should be possible for the pronoun *òun* to refer to the object NP Bola as well as to the subject NP Ayo since both NPs c-command the pronoun, but this is not the case. The anaphor may only refer to the subject Ayo and to no other NP. Since the only difference between the NP Ayo and Bola is that the former is a subject while the latter is an object, it is clear that the anaphor *òun* can only bind subjects. This shows *òun* satisfies the subject orientation requirement.

5.1. *The Blocking Effect*

LDRs in some languages also observe what is called the blocking-effect. In other words, binding is only possible if all intervening NPs share the same number and person features. This means an intervening NP with a different number and person features blocks binding. Yoruba does not observe the blocking effect as the examples below shows:

(57) Ade_i rò pé mo so pé Bóla bú *òun*_i
 Ade thinks that I said that Bola insulted self

(58) Ade_i fé kí a rò pé Bóla fèròn *òun*_i
 Ade want that they think that Bola likes self

In (57) the first person singular pronoun mo intervenes between *òun* and the antecedent Ayo while in (58) the intervening NP is the first person plural pronoun a. The sentences however remain grammatical. This indicates that the blocking effect is not operative in Yoruba. As stated above, not all long-distance anaphors exhibit this feature. Even in some languages that observe the blocking effect,

there are certain contexts where the blocking-effect does not apply. The Chinese examples (59a) and (59b) below (taken from Tang 1989) illustrate both situations:

(59a) Zhangsan_i shuo wo_j zhidao Lisi_k chang piping ziji_{m/*i/*j/k}
Zhangsan say I know Lisi often criticize self

(59b) Zhangsan_i shuo Wangwu_j zhidao Lisi_k chang piping ziji_{m/i/j/k}
Zhangsan say Wangwu know Lisi often criticize self

In (59a), binding of *ziji* by the matrix NP is blocked because the intervening NP *wo* has different number/person features. As we can see, the main difference between (59a) and (59b) is that in (59a) the intervening NP has a different number and person features from the antecedent while in (59b), the antecedent and the intervening NP have the same features, both are third person. Contrast (59) with (60) where the blocking effect does not apply:

(60a) Zhangsan_j gaosu wo_j ziji_{i/j/*k} de fenshu.
Zhangsan tell me self DE grade
Zhangsan told me about his own grade.

(60b) Zhangsan_j gaosu wo_j ziji_{i/j/*k} mei bei dahui xuanshang.
Zhangsan tell me self haven/t by conference select
Zhangsan told me that *I/he was not selected by the conference.

As we showed in (57) and (58) above, an intervening NP with different number and person features does not affect binding between *oun* and its antecedent.

5.2. *Òun* and the Locality Condition

All the previous examples suggest that *oun* is a long-distance anaphor. However, there is one feature that distinguishes *oun* from most long-distance anaphors: while most LDRs may be both locally and long-distance bound, *oun* may only be long-distance bound. Thus compare the behavior of *oun* in (62) with that of the Chinese long-distance anaphor *ziji* in (61) below:

(61) Zhangsan_i renwei Lisi_j zhidao Wangwu_k xihuan ziji_{m/i/j/k}
Zhangsan thinks that Lisi knows that Wangwu likes self

(62) Bóla_i rò pé Ayo_j mò pé Fémí_k fěròn *oun*_{i/j/*k}
Bola thinks that Ayo knows that Femi likes self

The Chinese LDR *ziji* may refer to the subject *Wangwu* within its clause, whereas *oun* may not refer to the subject NP *Femi* within its clause. This behavior of *oun* sets it apart from other long-distance anaphors.

6. Construction in which *Òun* May Not Occur

There are three types of constructions in which *oun* may not occur. They are serial verb constructions,⁵ *látí* (infinitive) constructions, and *fé* clauses. Serial verb constructions and the *fé*-clauses have the structure of a simple sentence (Lawal 1994). The occurrence of *oun* in these constructions would result in *oun* being bound locally contrary to its binding requirement. The ungrammaticality of the infinitive clauses can also be explained in the same way: the subject of an infinitive clause cannot bind *oun* because the infinitive clause also behaves like a simple clause and

⁵ Serial verb constructions are sentences that contain two or more verbs without any overt marker of subordination or coordination. This is a very common construction in Yoruba and other West African languages.

thus binding within it would violate the binding requirement of *òun*. The examples below illustrate this.

Serial verb constructions containing òun:

(63). Bóla_i rántí ti ilèkùn * òun /re_{iĵ}
Bola remembered shut door his

(64). Bóla_i sèsi ti ilèkùn * òun /re_{iĵ}
Bola accidentally shut door his

(65). Bóla_i bèrèsí kàwé * òun /re_{iĵ}
Bola start read book his

(66). Bóla_i tan Ayo lo ilé * òun /re_{iĵ}
Bola deceived Ayo go house his

Infinitive clauses containing òun

(67). Bóla_i léri láti ka iwé * òun /re_{iĵ}
Bola promised to read book his

(68). Bóla_i pinnu láti ti ilèkùn * òun/re_{iĵ}
Bola decided to shut door his

(69). Bóla_i gbèrò láti ka iwé * òun_{iĵ}
Bola thought to read book his

Fé clauses

(70). Bóla_i féé lo ilé *òun /re_{iĵ}
Bola want go house his

(71). Bóla_i fé ka iwé *òun /re_{iĵ}
Bola want read book his

7. Accounting For The LDR Òun

7.1. The Infl (AGR) Parameter

The question left to answer is why do some languages, such as Yoruba, have LDRs while others, such as English, do not? The answer to this question we believe is tied to the Infl parameter.

Standard analyses of LDRs including that of Cole, Hermon, and Sung (1990), Cole and Sung (1994), and Cole and Hermon (1997), among others, show that Infl /AGR plays a crucial role in determining the presence or absence of LDRs in a language. Cole et al., state that only languages with a lexical Infl or where Infl has the feature [+M] may license LDRs. If LDRs are licensed by Infl as Cole, Hermon, and Sung (1990) suggest, then it is valid to conclude that anti-local LDRs like *òun* must also be licensed by Infl. However, since Chinese Infl may licence LDRs that obey locality conditions, and Yoruba Infl only licences non-local LDRs, we must assume that the two types of LDRs are licensed by two different types of Infs. We give evidence below in support of this hypothesis.

Rizzi (1986) distinguishes between two types of Infs, a Case Infl and non-Case Infl. According to Rizzi, a Case assigning Infl may license pro but it may not qualify as a proper governor. Rizzi also states that where the head of IP absorbs the nominative case and is specified as [+Pronoun] having

clitic-like pronominal properties, a Case assigning Infl can function as a proper governor. Yoruba seems to provide the evidence in support of Rizzi's hypothesis. In Yoruba when a subject is extracted, a clitic pronoun must appear in the subject position otherwise the sentence will be ungrammatical. Carstens (1987) argues that the clitic pronoun is inserted in IP to allow the Infl to function as a proper governor for the trace of the subject. This is exactly what Rizzi predicted for a Case Infl. According to Rizzi, a Case Infl may function as a proper governor only when it absorbs the nominative case of the clitic. The fact that subject extraction in Yoruba requires that a clitic pronoun be inserted in the subject position suggests that Yoruba has a Case-Infl. The second feature of a Case Infl is the ability to license *pro* (Rizzi 1986). This criterion is also satisfied by Yoruba. As we stated earlier, Yoruba personal pronouns behave like clitics; they do not behave like true NPs or pronominals. For instance they cannot be conjoined or topicalised. They are therefore regarded as clitics (see also Pulleyblank 1985). Since these pronouns are clitics, they have the status of [*pro*]. The sentences below illustrate this:

(83a) Ó rí Bóla
 CL saw Bola
 He/she saw Bola

(83b) Bóla rí i
 Bola saw CL
 Bola saw him/her

Assuming Rizzi's hypothesis about Case Infl is correct, the fact that Yoruba has clitic pronouns which regularly occur as subjects and objects of verbs in sentences suggests that Yoruba has a Case Infl. The examples (83) above shows that Yoruba satisfies the two criteria for a Case assigning Infl. From the above evidence therefore, we may classify Infl into three types and languages may be grouped according to which of the three types of Infl systems they possess.

(84) Infl Types
 a. Functional Infl /AGR
 b. Lexical /Anaphoric Infl /AGR
 c. Case Infl /AGR

Rizzi (1986) classifies English as a functional Infl language based on the fact that the Infl in English does not properly govern or license *pro*; Cole and Hermon also, based on their work on Chinese LDRs claim that Chinese is a lexical Infl language since Infl functions as a proper governor and also licenses *pro* (Cole et al 1990, 1994). Based on Rizzi (1986) Yoruba may be classified as a case Infl language since it licenses *pro* but does not function as a proper governor. Since both Yoruba and Chinese have LDRs but English does not, we may conclude then that only Lexical and Case Infl languages may license LDRs. We may also conclude that since Yoruba licenses anti-local LDRs but Chinese does not, only Case Infl languages may license anti-local LDR. The above accounts for why Yoruba and Chinese, have LDRs and English does not.

8. Conclusion

In this paper, we have examined the behavior of the Yoruba LDR *òun* and have concluded that *òun* is a genuine pronominal anaphor. Based on the evidence from Yoruba, we argue for the existence of two types of long-distance anaphoric binding, one observes locality while the other does not. The first type is exemplified in languages like Chinese and Icelandic while the second is exemplified in Yoruba. The Yoruba data also support Cole et al.,'s hypothesis that LDRs are licensed by Infl. The evidence however suggests that two different Infl systems may be responsible for licensing LDRs, a Case Infl, which is responsible for licensing the anti-local LDRs and a lexical Infl, which is responsible for LDRs that obey locality.

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