JCARM
Journal of Contemporary Academic Research and Methodologies

An Online Peer Reviewed / Refereed Journal
Volume 1 | Issue 2 | March 2026
Website: www.journal.jcarm.in

Research

# Structure of the INFL in Kana

**Dr. Kukang Neeka Nkeh**

Department of General Studies, Kenule Beeson Saro Wiwa Polytechnic, Bori, Nigeria.

Correspondence should be addressed to: kukangnkeh@gmail.com

**Abstract**: This paper is based on the structure of the INFL in Kana, a language spoken in the Khana, Gokana and Tai Local Government Areas of Rivers State in South-South Nigeria. This paper explores the structures of the INFL in Kana using the Government and Binding theory. The paper makes the point that INFL is either [+ tense] or [- tense] in Kana. The [+ tense] in Kana has an agreement property, while the [- tense] INFL has no agreement property. This goes on to show that [+ tense] INFL has a substantive subject while the [- tense] INFL has no substantive subject. PRO is therefore the subject of the infinitival clause, which is [- tense]. The paper observes that INFL accommodates the tense and agreement properties of the sentence. The data for this paper are drawn from two sources: primary and secondary. In the primary source, some of the data are generated, and others are collected from mature native speakers of the language through personal and informal interaction. The secondary source is based on data collected from the library. This work stands as a useful material for teachers and students of English and Linguistics who wish to study syntax using the modern syntactic approach.

**Keywords**: INFL, PRO, + tense, - tense, AGR co-indexation, C-Command.

## 1. Introduction

The different epochs in Chomskyan thinking have become known by the names of particular books developed by him. Chomsky has made several revisions in syntactic theory that are dependent on earlier models proposed by him. In 1972, Chomsky proposed a model of grammar that includes the projection of heads. In this model, Chomsky believes that the head can project more than once. In other words, there is the inclusion of the intermediate category and the ultimate category. The intermediate category, according to Ndimele (1992, p. 59), "is not as big as the head and not as small as the ultimate." The quest for the accommodation of these intermediate categories in syntactic description gave rise to the


https://doi.org/10.5281/zenodo.19501829

X-Bar theory. Thus, the basis of the intermediate category is that every head can project more than once. The model of grammar proposed in 1972 is known as the Extended Standard Theory (EST). Further revisions were made by Chomsky and his associates. The model that deals with principles and parameters is called the 'Government and Binding Theory'. After proposing other grammatical theories, the Government and Binding Theory was developed in 1981, directly and without any radical break from his earlier works.

In Chomsky's 'standard theory (STD)', a sentence was assumed to have three equal sister constituents, i.e. NP-AUX-VP.

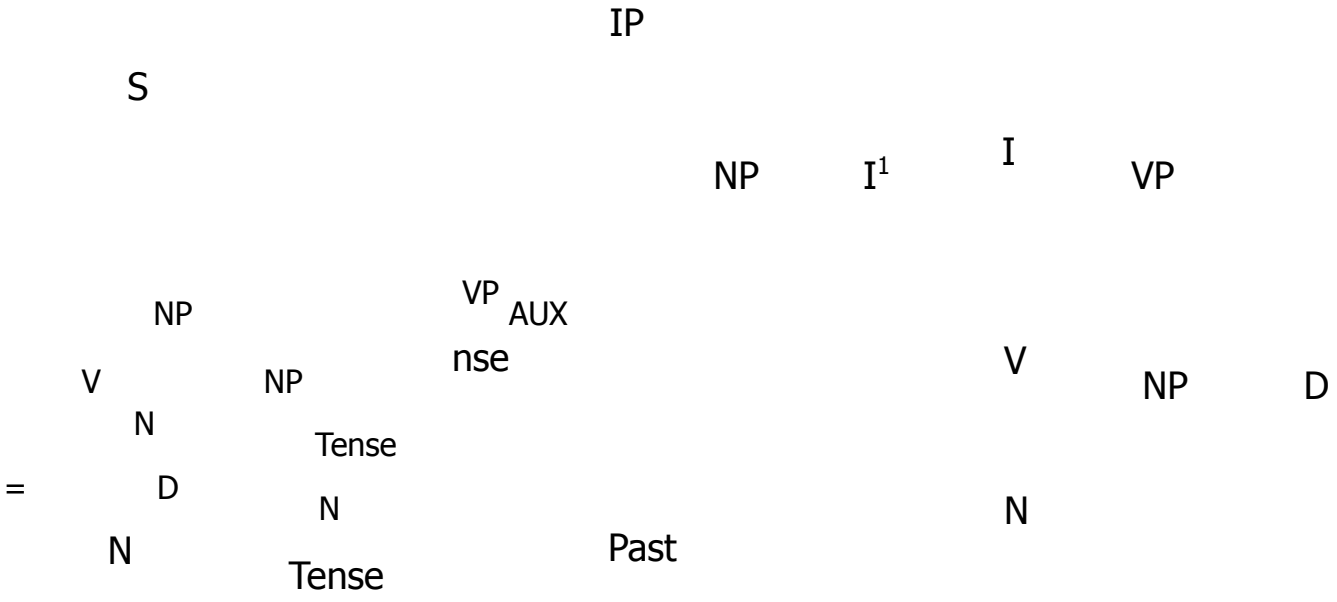
S

NP VP

AUX

In Government and Binding (GB), the auxiliary node has been replaced by INFL. INFL stands for inflection. The reason for this replacement is that AUX does not participate in the X-bar convention. In X-bar theory, the assumption is that every head must project into a maximal category. There is no AUX phrase in the GB convention; hence, AUX cannot be used. Furthermore, most of the elements dominated by AUX have no bearing on the auxiliary. In GB, the ' S node' has been replaced by IP (inflectional projection). This is because 'S' cannot participate in the X-bar convention. INFL is the head of the IP, as it can project into the I-bar (I'). In GB, a sentence is said to have two sister constituents, which are 'the NP and the I'.

STD Model, GB Model




In GB, INFL is conceived as a collection of features; it can be plus (+) or minus (-) tense. If INFL is in the plus tense, it must have agreement, but if it is in the minus tense, it has no agreement. The INFL is a node that contains obligatory AGR and tense features, as well as optional modal (M) and aspect (ASP) features (Lamidi, 2000, p. 86). He further notes that AGR contains the features of person, number, gender, and case, while tense contains the features of modal and aspect.

**1.1 Theoretical Framework**

The theoretical framework for this study is Government-Binding theory (GB). The GB theory is a descendant of the extended standard theory and ultimately of classical transformational grammar (Ndimele, 1992, p. 129). Hence, the theory does not represent a sharp deviation from Chomsky's earlier works in generative grammar.

The hypothesis of generative grammar is that language is a structure of the human mind. The goal of generative grammar is to create a complete model of this inner language (known as I-language). This model could be used to describe all human languages and to predict the grammaticality of any given utterance (that is, to predict whether or not the utterance would sound grammatical).

This approach to language was pioneered by Noam Chomsky, the father of modern structuralist linguistics.

Government and Binding (GB) describes grammar as an interlocking set of sub-theories. It views grammatical theory as a product of interactive processes necessary for the comparison of different languages. In GB, the range of language-specific rules is narrowed down. Severe constraints are imposed on rules and systems of rules. Thus, the numerous transformational rules have been reduced to move Alpha ($\propto$), i.e. move anything anywhere. Proponents of GB syntax suggest that essentially the same principles of syntax are operative in all languages, although language-specific options are allowed in the form of a very small number of parameters (Radford, 1988, p. 221). The GB theory differentiates between two kinds of perspectives in the study of grammar: the rule system and the principles of grammar. The rule system comprises the lexicon, the syntactic component, and the interpretive component.

The lexicon is viewed as a repository of information associated with lexical items that cannot be predicted based on universal or particular language parametric variations. The entries for lexical items provide information about category class membership, thematic notes, and subcategorisation. Lexical generalisations are captured through lexical redundancies. Ndimele (1992, p. 109) asserts that "for every lexical item, the lexicon provides the phonological (pronunciation), the syntactic (categorical features as

well as distributive patterns of words), and semantic (meaning) information." There are two levels of syntactic description: the D-structure and the S-structure. Although the terms D-structure and S-structure originate from deep and surface structures, respectively, they are now specialised in their function and scope. The D-structures are projected from the theta-making characteristics of lexical heads of construction. The rules of the transformational component map D-structures to their corresponding S-structures by the rule move ($\propto$). The structure is an essential bridging level between sound and meaning, leading on one hand to the phonetic form (PF) and on the other hand to the logical form (LF). The S-structure indicates the original locations of the elements that are moved by the use of traces, which mark the original places in the sentences from where the elements have been moved (Cook, 1988, p. 109).

The phonetic form leads to the phonological component, while the logical form, according to Mary (1977, p. 119), is concerned with rules that determine the scope of qualifiers and those that describe antecedent anaphor relations. The logical form acts as the interface between the S-structure and the semantic component. The PF and LF are interpretive in nature, providing different representations of the S-structure.

Note also that within the GB framework, the AUX (Auxiliary) node has lost its position as one of the obligatory nodes of the sentence. The Aux node is now replaced with the inflectional element (INFL), since AUX does not participate in the X-bar convention. The INFL houses the AGR (Agreement) node in addition to the traditionally recognised elements: Tense, Aspect, and Mood. AGR (Agreement) ensures that the subject of a clause is very important in tracing the locus of movement and identity of reference. Haegeman (1994, p. 86) argues that the entire sentence is a projection of INFL; hence, the replacement of the sentence node with inflection projection (IP).

GB has been described as a modular theory because a number of subsystems interact at the interface. The systems of principles include the 'X-bar theory', 'Government theory', 'Theta theory', 'Case theory', 'Binding theory', 'Bounding theory', and 'Control theory'. For the purpose of this study, we shall discuss only the X-bar theory.

**1.2 The X-bar Theory**

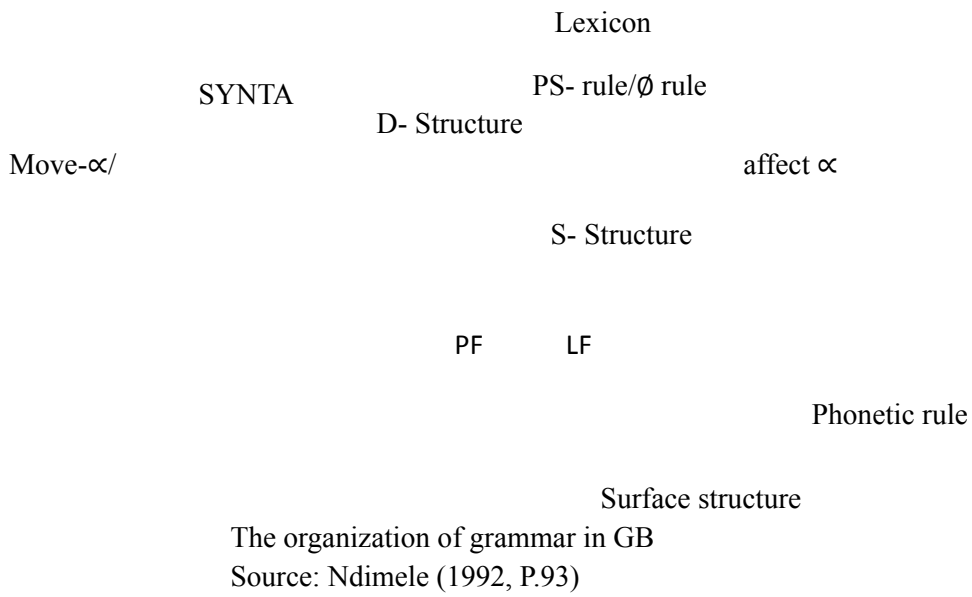
The X-bar theory was first proposed by Noam Chomsky in the early 1970s. The article that introduced the notion of X-bar theory was entitled "Remarks on Nominalization." This was later revised by Ray Jackendoff in 1977 in a book entitled "X-bar Syntax" (Ndimele 1992, p. 68).

Radford (1988, p. 122) notes that X-bar theory plays a crucial role in GB syntax. This role includes:

It accounts for word order in human language. X-bar theory is important in studying the sequential order of heads and their modifiers or heads and their complements. It is relevant at both phrasal and sentential levels.

ii. X-bar theory also determines the configuration of D-structure. It was proposed to remedy the inadequacies of PSG. For example, in PSG, only two levels of representation were recognised: the lexical

and phrasal levels. Proponents of X-bar theory hold that there can also be intermediate categories that exist between the lexical categories and phrasal categories. These intermediate categories are not as small as the lexical categories and not as large as the phrasal categories or ultimate categories. These intermediate categories are labelled X-bar or X. This X-bar is endlessly interactive.




The organization of grammar in GB
Source: Ndimele (1992, P.93)

**1.3 Methodology**

This paper deals with the structure of the INFL in Kana. The researcher, upon embarking on this research, was privileged to have two sources of data: (i) the primary source and (ii) the secondary source. Some of the data from primary sources is generated, while others are collected through personal and informal interactions with mature native speakers of the language. Responses and elucidated information are documented immediately for preservation purposes.

The secondary source is the library, which served as a very important source of secondary data collection. Inputs were drawn from the works of scholars on Kana, especially in the area of syntax. Other books in English on topics relating to INFL were also consulted. The internet played an important role in supplying the necessary information for this research.

**2. Literature Review**

Chomsky (1981, p. 359) holds that INFL suggests inflection, indicating in particular whether the clause is finite or infinitival. He also asserts that INFL "has the value (± tense), where (+ tense) INFL stands for the finite category and (- tense) INFL stands for the infinitival category." There is, therefore, agreement among Haegeman, Chomsky, Ndimele, and Lamidi in asserting that INFL is used to replace the AUX and that it is a constituent of the sentence. However, Chomsky adds that INFL can be either (± tense), which corresponds to finite and infinitival. The finite clauses correspond with (+ tense) INFL, while the infinitival clauses correspond with (- tense) INFL. Ndimele (1992, p. 58) corroborates this fact when he notes that (+ tense) INFL has an agreement property, while (- tense) INFL has no agreement property.

Haegeman (1994, p. 148) posits that in all sentences, with or without overt auxiliaries, the tense morpheme is dominated by a separate terminal node known as the INFL for inflection. He further states that the INFL is used to replace AUX (auxiliary). This, according to Ndimele (1992, p. 56), is owing to the fact that the AUX does not participate in the X1-convention.

Again, it has been claimed that the whole sentence is a projection of INFL. Hence, the S node is now replaced by the inflection projection (IP). Lamidi (2001, p. 112) sees the INFL as a constituent of a sentence which, when expanded, contains other constituents that affect the grammaticality of the sentence.

He goes on to say that the rule governing the linear occurrence or ordering of these constituents is called the Auxiliary Expansion Rule, and that the AUX has now been changed to INFL. Lamidi (2000, p. 26) provides rules for the INFL and other features of the INFL as follows: INFL AGR Tns (Modal) (Aspect).

INFL

(a)

[+ tense] [+ AGR]

(b) tense]

INFL [-

AGR]

[-

The above is the structural presentation of [[± Tense] (AGR)] INFL.

**2.1 [+ Tense] (+ AGR) INFL**

In Government-Binding theory, INFL is a plus tense (+ tense) when it has agreement properties. This is because INFL dominates the tense feature and the agreement feature (AGR) associated with the verb. However, tense clauses are specified as having INFL (+ AGR). Haegeman (1994, p. 226) and Chomsky (1981, p. 58) have noted that (+ tense, + AGR) is only present in finite clauses.

Examples in English:

**1. John will abandon the exam.**

John abandoned the examination.

**2.2 [-Tense] (-AGR) INFL**

Infinitives in Kana typically lack tense marking and agreement. They are therefore (- Tense) and (- AGR). In English, the 'to' in infinitives corresponds to the verb inflection. (- Tense) (+ AGR) INFL, for tense or agreement. Haegeman (1994, p. 402) notes that there are three types of non-finite verb forms in English.

i. Uninflected infinitive forms, which comprise simply the base or stem of the verb with no added inflection, are frequently used after the so-called infinitive particle 'to'.

ii. Gerund forms, which comprise the base plus the -ing suffix and

iii. (Perfect/passive) participle forms, which generally comprise the base plus the -en inflection (though there are numerous irregular participle forms in English).

Non-finite verb forms are intrinsically tenseless and agreementless; they remain invariable in form, whatever the context and cannot carry finite tense/agreement inflections such as present tense or past tense.

Example in English:

**3. John abandoned the examination.**

In the above sentence, we observe that "there is no agreement between the subject and the non-finite clause." There is also no tense marker; therefore, it is both agreementless and tenseless.

**2.3 PRO**

PRO is [+anaphoric] and [+pronominal].

"Infinitival clauses without overt subjects have a non-overt subject represented as PRO" (Haegeman, 1994, p. 123). Chomsky (1981, p. 68) notes that NP is PRO when INFL is (-Tense), but not when INFL is (+Tense). PRO is either pronominal or anaphoric depending on the context in which PRO occurs. Bresnan (1982, p. 28) and Haegeman (1994, p. 326) assert that "when PRO is interpreted as referentially dependent on another NP in the same sentence, we say that it is controlled by that NP." The term control is used to refer to a relation of referential dependency between an unexpressed subject (the controlled element) and an expressed or unexpressed constituent (the controller). The referential properties of the controlled are determined by those of the controller (Bresnan, 1982, p. 124).

Ndimele (1992, p. 15) observes that "the main idea behind control theory is the choice of an antecedent for the (abstract) EC (empty category) PRO." Ndimele (1992, p. 102) goes further, asserting that "control entails a relationship or referential dependence between PRO (an understood subject of an infinitival clause) and another constituent, whereby the features of the constituent determine those of the understood subject." The overt constituent is the controller, while the unexpressed subject is the controllee.

**3.1 Data Presentation, Analysis and Discussion**

The data for this study are presented, analysed, and discussed accordingly. It is analysed to reflect the structure of INFL in Kana.

The inflection (INFL) in kana

In GB theory, INFL is used to replace the auxiliary (AUX). This is because AUX cannot take part in the X-bar convention (Ndimele 1992, p. 29). INFL is conceived as a collection of features, namely: INFL = (± Tense) (AGR).

(+ Tense) (+ AGR) INFL in Kana

In government-binding theory, INFL is a plus tense (+Tense) when it has agreement properties. This is because INFL dominates the tense feature and the agreement features (AGR) associated with the verb. However, tensed clauses are specified as having an INFL containing the features (+Tense).

and (+ AGR). Ndimele (1992, p. 41) notes that AGR is the label for the features of INFL licensed by subject-aux agreement. The phi-features are shared with the co-indexed subject NP through the agreement relationship.

Example:

1. Neeka á dé zĩã
   PN Aux eat food
   Neeka will eat food

2. Lézina beè sí du anyọọ-eea
   PN PAST go market yesterday
   Lezina went to market yesterday

3. Lénu ka kìi wíí
   PN PROG go farm
   Lénu is going to farm

4. Lénu à - si-a wíí
   PN PF.PRE-go-PS farm
   Lénu has been to farm
   Observe that in (1-4) above, there are substantive verbs that contain the tense forms of the sentences.

5a. Bàrile ém kpá yóó.
PN write book song
Bàrile wrote song book

5b Léélee sí du
   PN go: FACT market
   Leelee went to the market
   In (5a-b) above, the tense is not overtly marked. It is realised by the tone of the verb ‘em’. Therefore, the high tone marked on the verb is the past tense marker.

From the above, we observed that the auxiliaries ‘á’, ‘beè’, ‘ka’, and ‘à’ are base-generated under I in Kana, whereas the one in (5) above is associated with the verb. It is also observed that lexical verbs are retained under V.

[- Tense] [- AGR] INFL in Kana

Infinitives in Kana typically lack tense marking and agreement. They are therefore [-Tense] and [-AGR]. In English, the 'to' infinitive corresponds to the verb inflection. [-Tense] [-AGR] INFL contains verbs that are not inflected for tense or agreement. In English, there are three types of non-finite verb forms. They include:

"Uninflected infinitive forms which comprise simply the base or stem of the verb with no added inflection (such forms are frequently used after the so-called infinitive particle 'to')."

ii. "gerund forms that comprise the base plus the '-ing' suffix";

iii. "(perfect/passive) participle forms which generally comprise the base plus the '-(e)n' inflection, though there are numerous irregular participle forms in English."

Non-finite verb forms are intrinsically tenseless and agreementless; they remain invariable in form regardless of the content and cannot carry finite tense/agreement inflections such as the marker of present –(e)s or the marker of past –(e)d.

In Kana, the infinitive is formed by a low-toned prefix à- that is attached to the verb root.

6a. Lénu$_i$ béé-ko [IP t$_i$ à-íí wa]
PN seem say INF-marry wife
It appears that Lénu wants to marry a wife

6b. lo nwíí$_i$ zẹ̀ẹ̀ngà [ip t$_i$ à-sú lo kpùgì]
the child stupid INF-take the money
the boy/girl is stupid for not taking the money

In the above examples, there is co-indexing between Lénu and the underlying subject of the non-finite clause. This means that Lénu is also the underlying subject of the non-finite clause, even if Lénu does not appear as its superficial subject. Therefore, PRO becomes the underlying subject of the non-finite clause.

7a. Nwíílé$_i$ gbĩ [PRO$_i$ à-zĩã nee]
PN want: FACT INF-cheat person
Nwíílé wants to cheat someone

7b. Nwíílé$_i$ beè gbĩ [PRO$_i$ à-zĩã nee] PN
PAST want INF-cheat person
Nwíílé wanted to cheat someone

Observe that in the above sentences, there is co-indexation between the superficial subject of the sentence ‘Nwíílé’ and PRO, which is the underlying subject of the non-finite clauses. This means that Nwíílé and PRO are the same. That is, Nwíílé is also the underlying subject of the non-finite clause in the above sentences, but ‘Nwíílé’ cannot be repeated in the following clause.

It is possible in Kana for the subject of the embedded (non-finite) clause to be co-indexed with the superficial object of the main clause.

8a. Neeka ʤib Lézinaᵢ noo [IP tᵢ à-gbĩ-nu tọ] PN
beat: FACT PN top INF-find thing house
Neeka beat Lézina to find something in the house

8b. Neeka gbĩ Lézinaᵢ [lóó [PROᵢ] à-lu tọ
PN want:FACT PNᵢ so as PROᵢ INF-come house
Neeka wants Lézina to come to the house

Note that when the verbs ‘ʤib’ and ‘gbĩ’, meaning ‘beat’ and ‘want’ respectively, in the main clause are followed by an object NP, the infinitive complement will be introduced by noo ‘top’ and lóó ‘so as’, as exemplified above.

PRO as the underlying subject of the non-finite clause

PRO is [+ anaphoric] and [+ pronominal].

Akata (2010, p. 95) observes that “infinitival clauses without overt subjects have a non-overt subject represented as PRO.” Chomsky (1981) notes that NP is PRO when INFL is [-Tense], but not when INFL = [+Tense]. PRO is either pronominal or anaphoric, depending on the context in which PRO occurs.

Ndimele (1992, p. 122) asserts that “when PRO is interpreted as referentially dependent on another NP in the same sentence, it is controlled by that NP.” The term “control” is used to refer to a relation of referential dependency between an unexpressed subject (the controlled element) and an expressed or unexpressed constituent (the controller). The referential properties of the controlled element are determined by those of the controller (Bresnan, 1982, in Hageman, 1994).

Ndimele (1992, p. 128) observes that “the main idea behind control theory is the choice of an antecedent for the (abstract) EC (empty category) PRO.” Control entails a relationship of referential dependence between PRO (an understood subject of an infinitival clause) and another constituent, whereby the features of the constituent determine those of the understood subject. The overt constituent involves the controller, while the unexpressed subject is the controllee.

In the standard theory, it was argued that PRO is created as a result of identity erasure (Ndimele 1992, p. 20). In the GB framework, the argument has changed, asserting that PRO is base-generated in the D-structure. The claim that PRO is a consequence of deletion under identity is rejected on the grounds that

identity erasure may generate some meaning difference, especially when what is deleted is a quantifier. The identity erasure argument has proved to be counterproductive; therefore, it has become necessary to argue that PRO is a D-structure EC, which is assigned an antecedent at LF (to be assigned an antecedent means to be co-indexed).

PRO has the following features:

… NP … [IP … PRO …] → $NP_1$ … [IP … $PRO_1$ …]

Source: Ndimele (1992, p. 25).

i. The controllee (PRO) must have a controller (a lexical NP).

ii. The controller must be in the SPEC-I1 position or object of the verb of the immediately dominating clause (i.e. the matrix clause).

iii. A lexical NP and PRO are in complementary distribution (i.e. a lexical NP cannot be substituted for PRO in the same syntactic environment).

These descriptions can be illustrated with the following example:

9. à-aaló lo zĩã bíé kẹ
   INF-abandon: FACT the yam leave ground
   ´´ ~
   to abandon the food on the ground

10. à-fo nu lee
    INF-plant: FACT thing good
    to farm is good

11. à-nọ nu na dum-a
    INF-learn: FACT thing be life-CL
    to study is life

We observe in the above examples that PRO does not have phonetic content. It is therefore a non-overt NP. This means that the ECP can be satisfied by this non-overt material. We also observe that the complementiser position is present, though not filled by any overt element.

PRO as the underlying object of the main clause

PRO is the underlying object of the main clause when it appears at the end of the sentence/clause.

12. Le nu lee à-dòò.
    good thing good INF-do
    it is good to do good

13. wíí lú kẹ à-sí
    ~
    farm be: FACT place INF-go
    farm is a place to go

In 12-13 above, PRO occurs in the object position of the sentence, meaning that its controller is in the subject position.

PRO and co-indexation in kana

From the study so far, we observe that when PRO occurs as the subject of the infinitive in Kana, it triggers lóó, analysed in Akata (2010, p. 59) as 'so as' before the infinitive. It does not require the logophoric enclitic after the verb. PRO in the following functions as a pronoun.

14a. [CP loo [PRO à-bíb lo ábíb]] lú me gbène lóó
(so as) INF-ask the question be: PRES me big body
to ask the question is very important to me

14b. [cp loo [PRO à-dé lonu]] agà
(so as) INF-eat the thing difficult
to eat the thing is difficult

In Kana, PRO does not occur as the superficial subject of a tensed sentence.

15a. PRO kÍi du
go: FACT market
went to the market

15b. à kÍi du
he/she go: FACT market
he/she went to the market

16a. PRO kúé lo neè - tògènù
. . . .
call: FACT the person teach thing
call the teacher

16b. à kùè lo nẹè tògènù
. . .
he/she call: FACT the person-teach thing
he/she called the teacher\

Observe in the examples above that 15a and 16a are ungrammatical because of the presence of PRO as the subject of the sentences. PRO is not, in any way, the subject of a tensed sentence in Kana; it can only occur as the subject of an infinitival sentence.

**Subject co-indexation with PRO in kana**

When PRO is co-indexed with the subject, it means that the controller of PRO is in the subject position of the sentence. In English, for example, we can have the following:

17a. John$_i$ wondered [CP whether [IP PRO$_i$ to invite her]]
17b. Jane$_i$ was asked [PRO$_i$ to thank herself]

In Kana therefore, PRO occurs in an infinitival complement to be controlled and co-indexed with the superficial subject of the main clause. In this case, PRO functions as an anaphor.

18a. Lézina$_i$ yerebá [lóó (PRO$_i$) à-dé lo-zĩã] PN
put hand: FACT so as INF-eat the food
Lézina helped to eat the food

18b. Léwa$_i$ ẹgéreló [lóó (PRO$_i$) à-tẹẹ èmà-èp]
PN strong body: FACT so as INF-pass try look
Léwa tried in order to pass examination

The verb gbĩ 'want' in the main clause, does not admit the element lóó 'so as' after the verb. This is exemplified in 66:

19a. Lenu$_i$ gbĩ [PRO$_i$ à-ém kpá]
PN Want:PRES INF-write book
Lenu wants to write a book

19b. Lenu$_i$ beè gbĩ [PRO$_i$ à-ém kpá]
PN PAST want INF-write book
Lenu wanted to write a book

Observe that gbĩ occurs in sentences in which the verb is immediately followed by the infinitive complement.

**Object co-indexation with PRO in Kana.**

In Kana, it is possible for PRO in the subject position of the embedded (infinitive) clause to be co-indexed with the overt object of the main clause.

20a. Lénwíí kúé Lénu$_i$ (lóó (PRO$_i$) à-lú tọ
PN call: FACT PN so as INF-come house
Lénwii called Lénu to come to the house

20b. Lénwíí gbĩ Lénu$_i$ (lóó (PRO$_i$) à-lú tọ
PN call: FACT PN so as INF-come house
Lenwii called Lenu to come to the house

Observe in the above sentences that the objects of the verbs 'kúé' and 'gbĩ' are co-indexed with PRO, the infinitive complement. This is the case of object co-indexation with PRO.

**C-command and PRO in Kana**

C-command is defined thus:
"Node A c-commands node B if and only if (i) A does not dominate B and B does not dominate A; and (ii) the first branching node dominating A also dominates B" (Haegeman 1994, P.344). The

notion of C-command is that the controller must c-command the controlled element or the controllee. C-command is possible in the Kana language only when the entire DP and PRO are involved.

21a. tèi Lénu yirayíí nè Neeka [lóó(PROi) à-lú]

father PN promise: FACT give PN so as INF-come
Lenu's father promised Neeka to come

21b. Neekai bia nọọ kpá [lóó (PROi) à-sua-ye]
PN stay: FACT on the book so as INF-know-it
Neeka is always reading a book in order to know it

We observe that the subject of the sentence C-commands the infinitive. Therefore, there is co-indexation between the subject and PRO.

**PRO in passive structure in kana.**

PRO is possible in a passive structure in Kana.

22a. Active form:
bà ko nè Lénui [lóó (PROi) à-lú]

they tell: FACT give PN so as INF-come
they told Lénu to come

22b. Passive derived form:
Lénui beè lú à-kọ nè [lóó (PROi) à-lú]

PN PAST be INF-tell give
Lénu was told to come.

Observe in the passive form of the sentence that there is the insertion of 'beè lú à-kọ', meaning 'was told'. In passive sentences, the object becomes the subject.

**Projection of the INFL in Kana.**

In Kana finite clauses, V moves to I only if V is an auxiliary. The I thus projects to the I1, which ultimately projects to the IP = S. The following exemplifies this:

23a. Lénu ka sí du
PN Aux go market
Lénu is going to the market

23b. pyá nwíí beè dé zĩã

PL child PAST eat: FACT yam

The children ate the food

**The split INFL hypothesis**

Note that IP decomposes into two projections: AGRP and TP, where AGR selects TP. Both projections are headed by inflectional elements and thus are functional projections (Haegeman 1994, p. 344).

The hypothesis that decomposes INFL into TP and AGRP is known as the split INFL hypothesis. The structure in FIG. 27 is used to demonstrate this:

24a. lo bu le yèè-a
the door be open
the door is open

24b. Lenwíí le tọ
PN be: FACT house
Lenwíí is in the house

In the above tree diagram, we observe that INFL is split into AGR and TNS. AGR defines the subject NP, while TNS defines the verb.

**Conclusion**

In GB theory, the INFL is used to replace the auxiliary (AUX). This is because the AUX cannot participate in X-bar syntax. The INFL is seen in Kana to dominate agreement and tense. The AGR defines the subject NP, while the TNS defines the verb. There is also the PRO, which is the subject of the non-finite clause in Kana. In Kana, PRO occurs.

In the infinitival complement, the verb is controlled and co-indexed with the superficial subject of the main clause. By this, PRO functions as an anaphor.

In Government-Binding theory, INFL is plus tense (+ tense) when it has agreement properties and minus tense (- tense) when it lacks tense marking and agreement. In Kana, there are three types of non-finite verb forms: (i) the uninflected infinitive forms, the gerund forms, and the perfect/passive forms. The non-finite verb forms in Kana are intrinsically tenseless and agreementless.

---

**References**

1. Akata, S.o. (2010). Kara and the coreferentiality of its nominals. Unpublished Ph.D thesis, University of Calabar, Nigeria.
2. Bresnan, J. (1982). “The passive in Lexical Theory” in J. Bresnan, ed. The Mental Representation of Grammatical Relations, Chapter 1, The MIT Press (1982), 3-86.
3. Chomsky, N (1972). Language and the mind. Harcourt Brace Jovanovich.
4. Chomsky, N. (1981). Lectures on government and binding. Foris publications Cook, V.J (1988). Chomsky’s Universal Grammar. Black well.

5. Haegeman, L. (1994). Introduction to government and binding theory (2nd el). Blackwell. Lamidi, M.T. (2000). Aspects of Chomskyan grammar. Emman Publications. May, R. (1977). Must the COMP to COMP movement be stipulated? Linguistic Enquiring, 10, 719-726.

6. Ndimele, O-M. (1992). The parameters of universal grammar: A government-binding approach. African Educational Services.

7. Nkeh, K.N. (2014). Sentential head projections in Kana. Unpublished Ph.D thesis, University of Calabar, Nigeria.

8. Radford, A. (1988). Transformational Syntax. Cambridge University Press.

---