

Research

Tense Projection (TP) in Kana

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Abstract: This article is based on tense projection (TP) in Kana, a language spoken in the Khana, Gokana and Tai Local Government Area of River State in the South-South region of Nigeria. The article examines tense projection in Kana using the Government-Binding theory as its frame work. The data for the study were drawn from two sources: the primary source and the secondary source. In the primary source, some of the data were obtained from mature speakers of the language, while some were taken from my own intuition as a competent native speaker of the language. The secondary source of data is based on information collected from the library. Works of other scholars were consulted and used for this research. The study reveals that in Kana, tense behaves differently from those of other languages. Three tenses: the factitive, past and the definite future tense are distinguished in Kana. The factitive tense is either stative, locative and non-locative. There is no present tense marker in Kana. Present tense in Kana is expressed by the factitive tense, mostly in its locative form. In Kana, tense projects to the T1 and maximally projects to the TP (Tense Projection). This work is useful for teachers and students of English and linguistics who are interested in the study of syntax, using a modern syntactic approach.

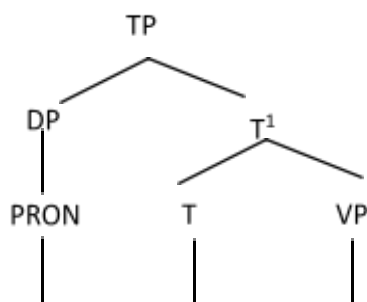
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1. Introduction

Tense is an obligatory aspect of language, whether spoken or written. It is the core of sentence construction in any given language. Tense is an aspect of the sentence that projects maximally to become the head of the sentence. Chomsky, in his 1981 work proposed the model of grammar which includes the projection of heads. In this model, Chomsky believes that the head of a construction can project more than once. In other words, there is the inclusion of the intermediate category and the ultimate category. Ndimele (1992, P.59) asserts that the intermediate category “is not as big as the ultimate category”. The quest for the inclusion of the intermediate category in syntactic description

gave rise to what is known as the X-Bar theory. The X-Bar theory is one of the theories proposed by Chomsky in his grammatical analysis.

The TP is the projection of tense. Tense can project into the T-bar (T¹) and maximally projects into the TP (tense projection) as shown bellow:



In Government and binding (GB), the projection principle has taken care of previous models of grammatical description which put constraint on the projection of heads. Pollock (1989, P.216) asserts that “tense projection is the syntactic structure where the Tense phrase (TP) acts as the head of a sentence...”. Tense projects maximally to become the head of the sentence. Hence, “tense is a sentential head” (Nkeh, 2014, P.156).

1.1 Theoretical Framework

Government and Binding theory is the theoretical framework for this study. Government and Binding is one of the theories propounded by Noam Chomsky. The GB theory is a descendant of “the extended standard theory and ultimately of classical transformational grammar” (Ndimele, 1992, P.129). In the same vein, Nkeh (2014, P.101) observes that “the theory does not represent a sharp deviation from Chomsky’s previous models”.

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 comparison of different languages (Radford, 1988, P.189). In GB, however, the range of language specific rules are reduced. Nkeh (2014, P. 231) asserts that “severe constraints are imposed on rules and systems of rules”. Hence, the many transformational rules have been reduced to move Alpha, that is, move anything anywhere. Proponents of GB syntax are of the view that “the same principles of syntax are operative in all languages, though, language specific options are allowed in the form of very small number of parameters” (Radford, 1988, P.221). In GB, two kinds of perspective in the study of grammar are distinguished: the rule system and the systems of principles. The rule system encompasses

the lexicon, the syntactic and the interpretive components, while the system of principles include the ‘X-bar theory’, ‘Government theory’, ‘Theta theory’, case theory’, Binding theory’, ‘Bounding theory’, and ‘control theory’. These are the seven interlocking theories of Government and binding theory. Though, only two of the theories are taken to represent them.

For the purpose of this study, we shall adopt only X-Bar theory. The X-bar theory fits into this discussion and therefore, shall be used.

1.1.1 The X-bar theory

The X-bar theory was first proposed by Noam Chomsky in 1970, in his article, “Remarks on nominalization” and developed later by Jackendoff in 1974, 1977a and 1977b. The work that carries this is “A study of phrase structure” in 1977. Other developments of the theory came out later as Radford (1988, P.122) notes that “the X-bar theory plays a crucial role in GB syntax”. These roles according to Radford (1988,P.122) include:

- i. “It accounts for word order in human language. It is important in the study of the sequential order of heads and their modifiers or heads and their complements. It is relevant at both phrasal and sentential levels.
- ii. It determines the configuration of the D-structure. It was proposed to take care of the inadequacies of PSG. For instances, in PSG, only two levels of representation were recognized: the lexical and phrasal levels. The X-bar theory incorporates the intermediate categories which can exist between the lexical level and the phrasal levels”.

1.2 Research Methodology

This research deals with tense projection (TP) in Kana. The researcher uses two sources of data for this study; (i) the primary source and (ii) the secondary source. In the primary source, some of the data were generated, and others collected through informal interaction with mature native speakers of the language.

The secondary source is the library. The library served as very important source of secondary data collection. Inputs were drawn from works of scholars on Kana, especially in the field of syntax. Books relating to the subject matter were also consulted and used for the study. The internet also played key roles in supplying the needed information for this research.

1.3 Aim and Objective

The aim of this article is to examine the syntactic structure of tense in the Kana

language. Tense is the core of every sentence in Kana and the study aims to analyze it using the modern theoretical approach of the government and binding theory.

More importantly, the objective of this article is to show that tense can project maximally to become the head of the sentence in Kana. By this, tense is a sentential head.

2.0 Review of Related Literature

Cook (1988, P.132) defines tense as “a technical notion that refers only to the past versus present distinction, sometimes abbreviated to TNS” Eyisi (2006, P.59) sees tense as “any of the forms of a verb that may be used to indicate the time of the action or state expressed by the verb”.

Eyisi (2006,P.59) further says that three tense-forms are used to express the notion of time in English. They include “the present tense, the past tense and the future tense”. There is therefore a conflict of opinion between cook and Eyisi in looking at the distinction in tense. Whereas Cook identifies only two tense forms in English, Eyisi identities three.

Obisakin (1993, P.89) says that tense means time. She asserts that: “the tense of a verb indicates whether the action or the state of being denoted by the verb takes place in the present, took place in the past, or will take place in the future”. The above analysis by obisakin shows that tense is of three types- that is present, past and future in English. Ndimele (1996, P.89) notes that tense is concerned with how a verb changes its form with respect to discourse time. Ndimele (1996, P.89) considers tense in English in three phrases, that is, past, present and future. This view of Ndimele conforms with that of Obisakin. Both of them consider tense in three phases. Nordquist (2012, P.36) looks at tense as “the time of a verb’s action, or state of being, such as present or past”. Hopper and Traugott (2003, P.124) define tense as “a form of a verb used to indicate the time, and sometimes the continuation or completeness of an action in relation to the time of speaking”. Hopper and Traugott see tense as a method that we use to refer to time – past, present and future. In this view of tense, there is total agreement among all of them.

IKoro (1996, P.162), in looking at tense in Kana has the following: “a Verbal conjugation may be either in the imperative or perfective form depending on the temporal view of an action or event, which may be either completed or not yet completed”. He also observes that “with the exception of one tense which has no overt tense marker, each form in Kana Is marked by a combination of tone and segmental morphemes”. These tense markers according to him may occur in any of the following three positions: on the subject, as an independent morpheme, or as a verbal affix. We have observed that tense marking in

Kana is a complex phenomenon to handle. We therefore agree with Ikoro that tense marking can take the form of a tone mark or as an independent morpheme or as a verbal affix. From our discussion here, we have observed that tense cannot be used to mean “aspect”. For tense in Kana, we have the factative, the past and the definite future. The idea of the present tense is expressed by the factitive.

Tense projection (TP) according to Stowell (1990, P.218), refers to “a functional category in a sentence structure that hosts tense features (Past, present, or future). He further says that the TP “acts as the head of the sentence, linking subject and predicate, often represented as TP in phrase structure trees, with the tense element (like modal verbs or inflection) determining the sentence’s temporal orientation”. Tense therefore projects to the T¹ and ultimately projects to the TP.

3.0 Data presentation analysis and discussion

The data for this study are presented, analyzed and discussed. The discussion reflects tense projection in Kana. Ndimele (1996,P.81) asserts that tense is “the changes in the form of the verb with respect to discourse time”. Ikoro (1996,P. 155) sees tense as “a verbal conjugation which may be either in the imperative or perfective form depending on the temporal view of an action or event, which may be either completed or not yet completed”. Following Ikoro’s discussion on tense, the following tenses are identified in Kana: factative, past and the definite future.

3.1 The factative tense in Kana

The factative tense according to Wolff (1964,P.76) has “a less specific time reference and may be interpreted as either present or past, depending on the inherent semantic nature of the verb”. Ikoro (1996,P.168) observes that the factative tense with a stative verb has an inchoative interpretation of “has become”, but with a locative verb (**le**), it is interpreted as present. It is therefore worthy of note that whether present or past, an action or event expressed in the factative, cannot have an extended duration.

3.1.1 The stative verb in Kana

A stative verb is “a verb that denotes a state of being” (Nkeh, 2014, P. 139).

With the stative verb, the tense has an inchoative interpretation of “has become”. Example:

- .1. Lèzina tó
PN cry: FACT
Lèzina cried

2. Lèzina dā́
PN hear: FACT
Lèzina heard it

The stative verbs in the above sentences are *tó* and *dā́*. They are stative because they occur without the object.

3.1.2 The locative verb in Kana

The locative verb **le** ‘to be somewhere’ retains its inherent low tone pattern irrespective of participant roles. The low tone is realized as mid before an object NP which is not a pronominal clitic.

- obj. NP**
- 3a. ṃ-lè
I-be: FACT
I am around

The above structure shows that the verb *lè* does not take an NP object. So, in Kana a pronoun can occur with a locative verb without an object to form a full sentence. The tense here is present.

- 3b. ì-lè
I-be: FACT
we are around

- + obj. NP**
4. ṃ-le wíí
I-be:FACT farm
I am on the farm

In the above structure, the verb ‘le’ takes an object NP. Therefore, the pronoun and the locative verb which takes an object NP form a sentence in Kana. The verb is in the present, hence the tense is present. Note however that there is no present tense marker in Kana. The locative verb in Kana is used for the present tense in the language.

5. ì-le tọ́
we-be: FACT house
we are in the house
6. lo nwíí [le bu tọ́]

the child be: FACT in house
the child is in the house

In the structure above, the verb *le* takes a prepositional phrase as its complement. It has a DP at the subject position which contains the determiner and the noun. The tense is present.

3.1.3 The non-locative verb in Kana

Non-locative verbs of the non-low tone class are assigned a raised-low contour tone in the first and second persons. If the verb root has a CV structure, vowel lengthening again occurs.

-obj. NP

7a m-lùù
I-come: FACT
I came

The above structure shows that the verb does not take an object. The DP contains the pronoun and the tense of the entire construction is past.

7b. i-dáàm
we-bite: FACT
we bit

7c. m-tógè
I-teach:·FACT
I taught

The examples in (7a-c) show the non-locative verb form in Kana. Observe that the non-locative verbs in the above constructions do not take an object NP. The tone of the verbs is a raised-low contour. Example (7a-b) contains the CVV verb structure while (7c) contains the CVCV structure with the same tone pattern.

+ obj. NP

8a. m-lùù wíí
I-come: FACT farm
I came to the farm

8b. i-dáàm ye
we-bite: FACT him
we bit him/her

The above structure indicates that the tense of the verb is in the past. The verb takes an object NP.

- 8c. bà-dám mẹ
 they-bite: FACT me
 they bit me

Observe in the following that low-mid verbs are assigned a mid tone. In the first and second persons, the mid-tone is marked only on the first CV of the verb. In the third person, the assigned mid tone is realized on the entire verb (Ikoro, 1996, P.162).

-obj.NP

- 9a m-dʒigè
 I-snatch: FACT
 I snatched it
- 9b. ò-berè
 he-lease: FACT
 you leased it out

In example (9a-b), the verb tone is mid-low on the CVCV structure. The construction contains only the pronoun and the verb.

+ obj.NP

- 10aà dʒige kpá
 he-snatch: FACT book
 he snatched a book
- 10b. bà bẹrẹ kpá
 they-lease: FACT book
 they leased out a book

Observe that example (10a-b) contains subject which is made up of the pronoun, the verb and the object. The verb tone is mid on CVCV structure.

Since all the elements involved in the inflectional morphology of the factative are tonal, this might lead one to draw a conclusion that this particular tense is marked by floating tones.

11. Lénu le wíí
 PN be: FACT farm

Lenu is on the farm

12. Lénu bia le wíí
PN Neg be: FACT farm
Lenu is not on the farm

Observe that example (11) is an affirmative sentence while (12) is a negative sentence. Negativity in (12) is occasioned by the insertion of the negative word ‘bia’ before the main verb.

3.2 The past tense in Kana

Ikoro (1996,P.261) observes that the past tense in Kana indicates an incompleting event or action holding at a definite time in the past, but relevant to the moment of speaking. In a verbal predicate, the past tense marker is an unbound morpheme **beè**. Hence, the verb roots retain their inherent tone patterns.

13. Lénu [beè le wíí]
PN PAST be: FACT farm
Lenu was on the farm
14. lo nwíí beè dé lo zīā
the child PAST eat: FACT the food
the child ate the food

Observe that the past tense is formed in Kana with the use of the independent morpheme **beè** which occurs before the verb in the sentence. The tone of the past tense morpheme does not affect the tone of the main verb. The past tense morpheme occurs within the TP and not within the VP.

3.2.1 The definite past

The definite past tense in Kana indicates that an event or action started in the past and was completed in the past.

Example

- 15 ì- deè
 we: PAST eat LOG
 we ate.
- 16 Ò – deè
 you: PAST eat LOG
 you ate.

17. bò – deè

Observe in the structure above that a low tone on the subject NP and a low tone on the logophoric clitic è attached to the verb, are used to mark the definite past tense in Kana. This form is used only for first person plural **ì**, second person singular **ò** and second person plural **bò**.

Other forms of the definite past tense in Kana Include:

18. à – dé
 he/she: PAST eat
 he/she ate.
19. bà – dé
 they: PAST eat
 they ate.

In this structure, the low tone is marked on the subject NP, whereas the verb takes a high tone to indicate the definite past tense in Kana. This form is for third person singular and plural respectively.

3.3. The future tense in Kana

The future tense involves an action that takes place after the time of speaking or after the present time.

3.3.1 The definite future tense in Kana

Ikoro (1996,P.216) asserts that the definite future tense in Kana indicates an anticipated action or event that will definitely take place at some point in the future.

There is no difference between proximate and non-proximate future. The definite future tense takes a floating high tone which grounds left-wards on to either a V- or N-subject clitic. In the third person singular, the subject clitic is **a (á)**.

With an emphatic pronoun or a subject clitic with a CV syllable pattern, a relevant subject clitic and the grounded high tone are obligatory after the emphatic pronoun or a CV subject clitic. However, in the second person plural (**bò-**), a mismatch occurs between the CV subject clitic and the grounded tone bearer. Here, the subject clitic is not **ó-** but rather **í-**.

Examples:

a-obj.NP

- 20a. m-ẹb
 I: DF-look
 I will look at it

- 20b. á-yii
 he: DF-enter
 he will enter
- 20c. íli í-yigà
 we: EMP we: DF-accept
 we will accept it
- 20d. nda m-dʒige
 I: EMP I:DF-snatch
 I will snatch it

Observe in the above examples that the future tense maker is a high tone marked on the subject clitic and not on the verb of the sentences. Therefore, the marking of tense on the subject clitic is done with the use of tone.

- + obj. NP**
- 21a. í-eb gbó
 we:DF-look dog
 we will look at a dog
- 21b. bó-ó-yii fá
 you (pl)-DF-enter vehicle
 you (pl) will enter a vehicle
- 21c. alẹ́ á-yiga bàrì
 he:EMP he:DF-accept God
 he will believe in God
- 21d. olo ó-dʒige fá
 you:EMP you (sg):DF-snatch vehicle
 you will snatch a vehicle

Verb roots of the non-low tone class are assigned a high tone pattern. With a disyllabic or poly-syllabic verb root, the high tone is realized only on the first mora.

- a-obj. NP**
- 223a. m-lú
 I:DF-come
 I will come
- 22b. á-tee
 he:DF-pass

he will pass

+ **obj. NP**

- 23a. m-lu wíí
I:DF-come farm
I will come to the farm
- 23b. á-tẹ̀ẹ́ ẹ̀ma-ẹ̀b
he:DF-pass examination
he will pass an examination

Wolff (1964) notes that the definite future is marked by a high tone on the pronoun subject. In Kana, the definite future is marked by a high tone on the subject pronoun which serves as the definite future marker.

3.3.2 The indefinite future tense in Kana

The indefinite future tense according to Ikoru (1996,P.216) indicates an anticipated action or event which may not hold (i.e. there is no absolute certainty). The tense marker is a complex formative derived from a combination of the progressive marker **ka** and the original proto-kegboïd future tense prefix **lé**. For indefinite future tense marking, **ka-lé-** is used.

- 24a. bà ka-lé-ẹ̀b gbó
they-IDF-look dog
they are going to look at a dog

Observe in the structure above that the tense marking the indefinite future is a combination of the progressive and the future marker. These two features combine to form the indefinite future tense in Kana.

- 24b. i ka-lé-bere fá
we:IDF-lease vehicle
we are going to lease a car
- 24c. ò ka-lé-sú ye
you:IDF-take him/her
you are going to take him/her

Observe that the tones are the same as those found in the definite future tense.

3.3.3 The future habitual in Kana

The future habitual expresses an action which would hold on a regular basis in the definite future. The intensive stem is more likely to be found in this tense than in any other tense.

The future habitual tense marker is a complex formative consisting of the definite future marker (i.e. floating high tone) and the habitual auxiliary (**wée**). Verb stem tones are as in the habitual tense.

25. pyá méné [á-wée u-gara]
 SPEC:PL rich FHAB die-INT
 chiefs will be dying

The future habitual tense form in Kana is marked by the future clitic *á* and the habitual morpheme *wée*. In some sentences in Kana the *á* can be deleted and the sentence still retains its meaning. This is shown in (26) and (27) respectively.

26. m-wée lú be
 I-FHAB come home
 I will be coming home
27. í-wée tọgẹ yóó
 we-FHAB teach music
 we will be teaching music

From the discussion so far, we observe that in most cases, low and low-mid verbs retain their inherent tone pattern, while non-low verbs are assigned a mid tone. Again, participant roles determine verb tones in the factative tense.

Conclusion

This article is devoted to the discussion of tense projection (TP) in Kana. The study is carried out in a more theoretical aspect from the beginning to the end. This is done using the GB framework. The discussion takes into account the fact that tense in Kana projects from the base to the T¹ and projects maximally to the TP (tense projection) which is the maximal category. In Kana, the factitive tense, the past tense and the definite future tense are distinguished. In This work, the researcher discusses the definite past which uses the factitive tense in its past form.

This research reveals that there is no present tense marker in Kana. Again, the idea of tense is realized by tone in the language. In most cases, low and low-mid verbs retain their inherent tone pattern, while non-low verbs are assigned a mid-tone. Also, participant roles determine verb tones in the factitive tense. The future habitual tense is expressed by the morpheme (**wee**) with a floating high tone. Tense in Kana has peculiar behaviour in the sentence. It is not straight forward as we see in the English language.

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