# Tense and Aspect in North-Western Edoid

Simeon Olaogun<sup>1</sup>, Oluwaseun Oyelade<sup>2</sup>

<sup>1</sup>Department of Linguistics and Language, Adekunle Ajasin University, Akungba Akoko Ondo State, Nigeria 
<sup>2</sup>Department of Linguistics and African Languages, University of Ibadan, Ibadan Oyo State, Nigeria

Abstract: Tense and aspect are a universal category. That is, there is no natural language in the world that does not have some means of expressing the relationship between the time of an event and its reporting (tense) and the duration of an action expressed by the verb in a clause (aspect). However, the morpho/phono-syntactic features of tense and aspectual markers viz their distribution and interaction differ from one language to another. The paper, therefore, compares Abèsabèsì with Ossé, with a view to proposing a unified analysis for all of the distributional nuances of tense and aspect markers in these two subgroups. It is observed among other things that in Abèsabèsi, each of tense and aspect realization has three forms conditioned by vowel harmony. Also, in Abèsabèsi, perfective markers occur pre-verbally yielding to aspect-verb order but in Proto Ossé, they occur in clause final positions yielding to verb-aspect order. In an attempt to present a unified systematic account of the intraand/or inter-lingual tense and aspect variations, the paper, using the minimalist program, argues that the aspectual head (Asp<sup>0</sup>) in Proto Ossé has Extended Projection Principle feature which is satisfied by pied-piping the whole VP to the specifier of Aspectual Phrase.

Keywords: minimalist program, pied-piping, extended projection, principle and specifier.

### I. INTRODUCTION

The existing works such as Bull's (1963), Omamor (1982), **1** Táíwò (2003), Fabunmi (2009), Norbert, (2009), Olaogun, (2011), Olumuyiwa, (2013), John (2013), Egbert (2019), Adeoye (2019), Eliane (2020) and Nwizug and Nwala (2021) have empirically established that tense and aspect are elements of Universal Grammar in that, there is no known natural language in the world that is devoid of tense and aspect system. However, the morpho/phono-syntactic features of the tense and aspectual system differs from dialect to dialect, language to language and from one language subgroup to another. This being the case, this paper compares Àbèsàbèsì (a subgroup of Edoid Language family spoken in both Akoko North Eastern and Akoko Northwestern Local Government Areas of Ondo State, Nigeria) with İpè (Ùkùè) and Ìsùà (Ùhàmù) another subgroup of Edoid language family classified as Proto Ossé under North-western Edoid) with a view to proposing a unified analysis for all of the distributional nuances of tense and aspect markers in these two subgroups. We observe that in Abèsabèsì, tense and aspect have morpho/phono-syntactic features in that, each of the tense and aspect realization has three forms: bá bó and bé whose distributions are conditioned by the harmonic feature of the vocalic element in the following syllable. Also, in Àbèsàbèsì and other dialects within the subgroup, perfective aspect markers occur pre-verbally yielding to aspect-verb order but in Ìpè and Ìsùà, they occur in clause final positions yielding to verb-aspect order. Lastly but never the least, when future tense and perfective aspect co-occur in a clause, the perfective marker linearly comes before the future marker in Àbèsàbèsì, as opposed to the universal word order of tense coming before aspect. Attempting to present a unified systematic account of the intra-and/or inter-lingual tense and aspect variations, the paper, using the minimalist program and cartographic approach with insight from Pollock's (1989) Split-Infl and Borer-Chomsky Hypotheses, argues that the aspectual head (ASP<sup>0</sup>) in Ìpè and Ìsùà has Extended Projection Principle (EPP) feature which is satisfied by pied-piping the whole VP to the specifier of Aspectual Phrase leaving the Aspectual morpheme stranded in clause final position: It is also shown that, although at the surface realization, it appears that Aspectual Phrase AspP dominates Tense Phrase TP in Àbèsàbèsì, this poses an interesting challenge to universal hierarchical order of TP dominating AspP. However, the paper proposes that Asp<sup>0</sup> raising such that Asp<sup>0</sup> adjoins to T<sup>0</sup> for the realization of Abèsàbèsì aspect-tense surface order. The paper is organized into six sections. The first section introduces the focus of the paper. Section two and three provide information about language classification and the theoretical orientations adopted in this work. Section four explains the research statement. Section five gives detailed explanations on the tense and aspectual system in the Northwestern Edoid. Section six touches on the syntactic derivation of clauses containing perfective aspect and future perfective tense, and their implication for Universal Grammar while section seven concludes the work.

### II. LANGUAGE CLASSIFICATION

Williamson (1989) recognized Akpes as a separate branch of Benue-Congo and classified Àbèsàbèsì under it. But Agoyi (1997, 2008) reclassified Akpes and renamed it Àbèsàbèsì, and then put it under the Edoid Languages. Àbèsàbèsì is spoken in nine Àkókó communities of Ondo State. These communities are Àkùnnù, Àjowá (Ìlúdòṭun) Ìkárámù, Ase, Ìbárámù, Ìyàní, Gèdègédè, Èṣúkú and Dàjà. Except for Àkùnnù that is in Àkókó North East Local Government Area, the remaining eight towns are located in Àkókó North West Local Government Area of Ondo State.

### III. THEORETICAL ORIENTATION

This paper is carried out within Bull's (1963) analysis of tense and aspect, and the minimalist programme as contained in Chomsky (1995, 1998, and 2000) with insight from cartographic analysis and Borer-Chomsky Hypothesis. The

justification for choosing two theoretical frameworks is that one theory will complement the other. Bull's analysis would handle descriptive explanations of tense and aspect while the minimalist program will take care of the derivation of clausal expressions containing tense and aspect.

Bull's (1963) analysis, unlike Chomsky (1957,1965) encapsulates the universality of tense and aspect, Chomsky analysis of tense and aspect in English is morphological in nature which was why scholars such as Bánjo (1969), Welmers (1973), Comrie (1976) who based their analysis on the Chomsky's assumption erroneously established that Yoruba has no tense simply because there is no morphological opposition between present and past in the verbal elements of the language as found in the English language. This being the case, we decide to employ Bull's analysis because of its universal assumption.

## IV. RESEARCH STATEMENT

Scholars have investigated tense and aspect in Nigerian languages. Their works focus on the forms and functions as well as the structural distribution of tense and aspectual markers in various languages and dialects in Nigeria. For instance, Oláogún (2011) examined the inflectional relationship that exists between tense/aspect and negation in Òwò dialect of Yorùbá. Olúmúyìwá (2012) investigated the forms and functions of tense and aspectual markers in Mòbà dialect. Ògúnmodìmú (2013) examined the various forms of tense and aspectual markers as well as their distributions in negative sentences in Àhàn dialect of Yorùbá. Oláògún (2014) compares the tense and aspect of Owo dialect with Standard Yorùbá with a view to lending credence to the claim that tense and aspect are a universal category but their surface manifestation differs from language to language and dialect to dialect. Ogbeifun and Omoregbe (2018) investigated the form, function and distribution of tense and aspect markers in Usèn dialect of Yorùbá while Adeoye 2019 carried out a research on the forms and functions of tense and aspect in Ìgásí. However, to the best knowledge of these writers, there is no known work that has espoused minimalist syntax to investigate tense and aspect system in two subgroups of Edoid languages with a view to proposing a unified analysis for all of the distributional nuances of tense and aspect markers in the two language subgroups. This is exactly the goal of this present paper.

# V. TENSE AND ASPECT DEFINED

Lyon (1968:305) explains that the essential characteristic of the category of the tense is that it relates the time of an action, event, or state of affairs referred to in the sentence to the time of utterance: the time of utterance being now while Aspect is the grammatical category that stated whether the action described by the verb is completive or continuative. By completive we mean that the action of the verb is already perfected while being continuative indicates that the action of the verb is on-going, or imperfective.

### 5.1. Tense and Aspectual system in North Western Edoid

Unlike English, the languages in the North Western Edoid seem to lack an observable marker for an action that took place before such an action is being reported or takes place during the time of the initiation of speech. But in English, as exemplified in examples (1d and e) below, the inflections on the verb indicate the dichotomy between present and past. The present sentence is realised by -s while the past tense is indicated by -ed. However, semantically, one can make a distinction between past and present event in the North western Edoid. Omamor (1982:119-121) claims that lexical items such as 'yesterday' and 'tomorrow' can denote that an action or event took place before or during the time of the initiation of speech. as given in the examples below.

**Epìnmì** 

North western Edoid	English	
a. Olú ri àhùn Olú eat pounded yam 'Olú eats/ate pounded yam'	d. Olu dances very well	
b. Olú ri àhùn oòdè Olú eat pounded yam yesterday 'Olú ate pounded yam yesterday'	e. Olu danced very well yesterday	
c. Olú áà ri àhùn aàhò Olú FUT, eat pounded yam tomorrow 'Olú will eat pounded yam tomorrow'	f. Olu will dance very well tomorrow	

(1a) and (1b) differ from (1c) by the fact that, (1c) contains an overt or observable marker áà like English 'will' in 1(f) which indicates that the time of the event is after the point of the initiation of speech. In (1a), there is no overt marker to show or indicate that the event actually took place before the point of the initiation of speech or at the point of the initiation of speech. Also, (1b) does not contain an overt tense marker, but, contains a lexical item oòdè 'yesterday' indicating absolute calendar time. Although, oòdè 'yesterday' is an adjunct, but its occurrence in (1b) actually indicates that the event took place before the time of the initiation of speech.

However, the lexical item ààhò 'tomorrow' in (1) also indicates absolute calendar time that the time of the event in the sentence is after the point of the initiation of speech. But, if the lexical item aàhò 'tomorrow' (which is an adjunct) is removed, the time of the event will not change, it will still be after the point of the initiation of speech, because, there is the presence of an overt marker áà and 'will' in English which is an indication of the future tense.

Therefore, English has three tenses, namely, present, past and future while the North western Edoid has two tenses, namely, future and non-future. In North western Edoid, the tense that does not have an overt or observable marker will be called Non-Future tense (which captures the present and the past tense in English and other comparable languages), while

the tense that has an overt marker will be referred to as future tense. This means that in the North Western Edoid, by the means of temporal distinction "future and Non-future tense" show or indicate whether any given event described in a sentence is simultaneous with, anterior to or posterior to the point of the initiation of speech or moment of utterance.

## 5.1.1 Future Tense

The elements that determine whether an action will be performed or will take place after the time or the point of the initiation of speech in the North Western Edoid are of different forms. In other words, the languages in this group have different future tense markers. All the future tense markers usually occur before the verb in North Western Edoid as exemplified in the example sentences below.

# **Epìnmì**

(2) a. Táyé áà ri àhùn Táyé FUT. eat pounded yam 'Táyé will eat pounded yam' b. Ìyà áà wìren They FUT. sleep 'They will sleep' c. Olú ni Solá áà dí bàtà Olú Conj. Sola FUT. buy shoe 'Olú and Sola will buy a pair of shoes' d. Ò áà dí bàtà S/he FUT. buy 'S/he will buy a pair of shoes' Ìpè (3)a. Bólá ni Adé à dí bàtà Bólá Conj. Adé FUT. buy shoe

'Bólá and Adé will buy a pair of shoes' b. Ìyà aà bìsen They FUT. sleep 'They will sleep' c. Táyò de esènni Táyộ FUT. sell fish 'Táyò will sell some fishes' d. Me à dùro I FUT. eat-food 'I will eat food' e. Ò à dí bàtà S/he FUT. shoe buy

'S/he will buy a pair of shoes'

Sósan

(4) a. Bísí à dí emà Bísí FUT. eat pounded yam 'Bísí will eat pounded yam' b. Ìyà á bisen They FUT. sleep 'They will sleep' á c. Ó bàtà S/he FUT. buy shoe 'S/he will uy a pair of shoes' d. Ayò ni Délé à fu eşínè Ayò Conj. Délé FUT. cook beans

As observed in the data above, morphologically, the languages in the North-western Edoid employ different elements for indicating future tense. That is, an action that will take place after the point of initiation of speech. While Ìpè and Ṣósan use à and á respectively, Ḥpìnmì use áà.

'Ayò and Délé will cook beans'

However, the future tense marker in Àbèsàbèsì has three forms which are; bé, bó or ba. The choice of any of the three forms depends on the vocalic feature of the vowel of the verb following it as given in the (5a-e)

# Àbèsàbèsì

Ó bé è (5) ti FUT. he push it 'He will push it' b. Bólá ewùlò bé ji Bólá FUT. pounded yam eat 'Bólá will pounded yam' eat Ó bé c. ko S/he FUT. sing 'S/he will sing' Ó d. bé de S/he FUT. buy 'S/he will buy' Ó e. bó hu S/he FUT. die 'S/he will die' f. Bòó bó fù aye They FUT. cook beans

'They will cook beans'							
	g.	Ó	bá	tọ	ę		
	S/he	FUT.	burn	3sg			
'S/he will burn it'							
	h.	Ó	bá	seme			
S/he	FUT.	greet					
'S/he will greet'							
	i.	Ó	bá	sà			
	S/he	FUT.	know				
'S/he will know'							
	j.	Adé	bá.	ba			
	Adé	FUT.	come				
'S/he will come'							

As said earlier, the choice of any of the future tense markers;  $b\acute{a}$ ,  $b\acute{e}$  or  $b\acute{o}$  depends on the harmonic feature of the vocalic feature of the verb following it. In the data above, one can observe that if the verb that follows the functor contains vowels such as [i o e u] which are [+ATR], the choice of the future tense marker will be either bé or bó as evident in (5a-f) while the marker to be selected will be  $b\acute{a}$  if the verb that follows the functor contains vowels such as [a e o] which are [-ATR] as shown in examples (5g-j).

# 5.1.2 Aspectual System of North-western Edoid

Aspect denotes the duration of event described by the verb in a given clause to show whether such an event is ongoing (progressive) or have been completed (perfective) (Ìlòrí 2010:50).

Just like English and Yorùbá, there are three types of aspect; progressive or continuous, habitual and perfective aspect in North-western Edoid. The languages under these family use different elements for indicating each of these types of aspect. Therefore, we shall examine them in the next sections.

### 5.1.2.1 Progressive/Continuous Aspect

As hinted earlier, the elements that show or denote progressive aspect in North-western Edoid are of different forms and they usually occur before the verb (pre-verbally in sentences). Epinmi, Isùà and Sósan use the same element for indicating progressive aspect as shown in the examples below:

**Epìnmì** 

```
Ι
         CONT. buy
                           shoe
'I am buying a pair of shoes
Ìsùà
(7)
         a. Jídé
                   é
                           rì
                                    órì
                  CONT. eat
         Jídé
                                    food
         'Jídé
                  is eating'
         b. Táyé sáìsí
                           Ayọ
                                     é
                                             di
                                                     èrèsìn
         Táyé Conj.
                                   CONT. buy
                           Ayo
                                                     cap
        'Táyé and Ayo are buying a cap'.
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Sósan

As evident in the data above, Epìnmì, Ìsùà and Ṣósan employ the same element  $\acute{e}$  for denoting progressive aspect. That is, the action that started in the past which still continues as of the moment of utterance. This implies that these three dialects employ one and the same invariant marker which may be one of the syntactic reasons for classifying them into the same group.

However, Ìpè and Àbèsàbèsì have different progressive aspect markers. The progressive aspect marker in Ìpè is e, while that of Àbèsàbèsì are  $\acute{a}$ ,  $\acute{e}$ , and  $\acute{o}$  as exemplified below.

Ìpè

á (10)a. Bàá das They CONT. go 'They are going' b. Ó á S/he CONT. sleep 'S/he is sleeping' c. Solá é aye Şolá CONT. eat beans 'Şolá is eating bean' d. Àó ó aye We CONT. cook beans 'We are cooking beans'

The data above show that, e in  $\hat{l}p\hat{e}$ , is used consistently for progressive aspect marker, but in  $\hat{A}b\hat{e}s\hat{a}b\hat{e}s\hat{i}$ , there are three different forms of progressive aspect marker. Again, the choice of one marker as opposed to the other is heavily dependent on the harmonic feature of the vowel that is contained in the verbal element that follows it. The functor will be a if the verb that follows it has [-ATR] feature while  $\acute{e}$  or  $\acute{o}$  is selected if the vowel that follows it has [+ATR] feature.

### 5.1.2.2 Habitual Aspect

In North-western Edoid, there are different items or elements for denoting habitual aspect. Epìnmì, Ìpè and Ìsùà use the same marker  $\acute{e}$  (in Epìnmì and Ìsùà) and  $\acute{e}$  (in Ìpè) for both habitual and the progressive aspects. The question may arise as to when the ideal native speakers-hearer know when an expression that contains any of this marker will be interpreted as conveying habitual or progressive interpretation. The answer to this semantic-syntactic puzzle is two folds. Theoretically, and in the spirit of the lexicalist hypothesis, each of the functional elements is present in the lexicon with their features fully specified. Each of them will be specified among others for [+CONT] and [+HAB]. So, if a speaker wants to form a clause with continuous aspect, s/he will choose the one with [+CONT] and put it in the numeration and then merge it appropriately. Conversely, if the intention of the speaker is to form an expression with habitual reading, s/he will select from the lexicon the item with feature [+HAB] and put it in the numeration for an appropriate merger operation. As for the hearer, the langue, in Saussure's language which is known as common ground in information structure will come to play in contextually resolving the ambiguity as given below.

Lastly, we are inclined to answer the question that may be raised by inquisitive and curious readers as to why should the same functional element be used for both habitual and continuous aspect in this language group. Our speculative response is that both aspectual systems have an

expression of continuity as of the time the action or event described in the clause is being reported.

**Epìnmì** 

(11) a. Şolá é wìren
Şolá HAB. sleep
'Solá usually sleeps'
b. Mè é dí bàtà
I HAB. buy shoe

'I usually buy a pair of shoes

Ìsùà

(12)a. Jídé é rì órì Jídé HAB. eat food ʻJídé usually eats food' b. Táyé sáìsí Ayò é di èrèsìn Táyé Conj. Ayò HAB buy cap

'Táyé and Ayo usually buy a cap'

Ìpè

(13)a. Bólá dí ni Şolá áà bàtà Bólá Conj. Şola HAB. buy shoe 'Bólá and Sola usually buy a pair of shoes' b. Me e thi Ι HAB, come

'I usually come'

c. Ìyà e di àhùnThey HAB. eat pounded yam'They usually eat pounded yam'

d. Ó e bìsẹn Ṣ/he HAB. sleep 'S/he usually sleeps'

Şósan and Àbèsàbèsì use different items indicating habitual aspect. However, while Àbèsàbèsì employs a lexical morpheme for marking habitual aspect, Şósan uses a suprasegmental item, that is, a high tone as exemplified in (14a-g).

(14) a. Táyé é bìsen
Táyé HAB. sleep
'Táyé usually sleeps'
b. Màhìn ín de emà
We HAB. buy shoe

'We usually buy a pair of shoes'

c. Òjó ó di emà

Òjó HAB. eat food

'Òjó usually eats'

d. Ò ó de eşínè

Ş/he HAB. sell beans

'S/he usually sells beans'

e. Ìyà á bìsen

They HAB. go

'They usually go'

f. Mì í de òdè

I HAB, sell cloth

'I usually sell cloth'

g. Táyé ní Dàda á bìsen

Táyé Conj. Dàda HAB. sleep

'Táyé and Dàda usually sleep'

In Sósan, as evident in the data above, the high tone that indicates habitual aspect takes the final vowel of the preceding subject DP as its tone bearing unit. This means that the tone bearing unit of the high tone tends to copy the final TBU of the preceding subject DP.

However, the habitual aspect marker in Àbèsàbèsì has three forms. These three forms are; *màá, mèé and mòó. Màá* is selected if the vowel of the following verb has the [-ATR] feature while *mèé or mòó* is chosen if the vowel of the verb that follows it has [+ATR] feature as exemplified by the sentences below.

(15) a. Olú màá das

Olú HAB. go

'Olu usually goes'

b. Ó mèé di bàtà

S/he HAB. buy shoe

'S/he usually buys a pair of shoe'

c. Ayò mèé jí aye

Ayo HAB. eat beans

'Ayo usually eats beans'

d. Àó mòó fù aye

We HAB. cook beans

'We usually cook beans'

The data in (15) show that the habitual aspect marker  $m \dot{a} \dot{a}$  tends to harmonize the vocalic feature [-ATR] of the

vowel of the verb that follows it. All the data above show is that all the habitual aspect markers in North-western Edoid usually occur at the pre-verbal position.

# 5.1.2.3 Perfective Aspect

The language in the North-western Edoid also employs different items for denoting perfective aspect as shown in the examples below.

**Epìnmì** 

(16) a. Táyò ré yò

Táyò PERF. go

'Táyò has gone'

b. Òjó ré di ìwé

Òjó PERF. buy book

'Òjó has bought a book'

c. Màrìn ré soró

We PERF. wake

'We have woken up'

d. Ò ré wìren

S/he PERF. sleep

'S/he has slept'

Şósan

(17) a. Ayò hinaà şe

Ayò PERF. sleep

'Ayò has slept'

b. Mì hinaà de bàtà

I PERF. buy shoe

'I have bought a pair of shoes'

c. Màhìn hinaà bìsen

We PERF. sleep

'We have slept'

As shown in the data above, the perfective aspect marker in Epìnmì is  $r\acute{e}$ , and that of Sosan is  $hina\grave{a}$ . However, the perfective aspect marker in Àbèsàbèsì is ka, ke and ko. As said earlier in the case of the functors  $b\acute{a}$  (future tense marker), and  $\acute{a}$  (continuous aspect marker) in Àbèsàbèsì, the choice of any of these forms is equally predicated on [+/-ATR] feature of the verb that follows the functional item at any given instance. Consider the sentences in Àbèsàbèsì below.

(18) a. Àá ka das

We PERF. go

'We have gone'

b. Ó ka mis S/he PERF. sleep 'S/he has slept' c. Táyò ke ji aye Táyò PERF. eat beans 'Táyò has eaten beans' d. Òjó ke di ìwé Òjó PERF. buy book 'Òjó has bought a book' e. Bòó ko fù ida They PERF. cook fire 'They have cooked'

However, while the perfective aspect markers in Epìnmì, Sósan and Àbèsàbèsì occur at the pre-verbal position, the perfective aspect markers  $d\hat{a}$  in Ìpè and  $\hat{o}$  in Ìsùà occur in sentence final position as presented in Ìpè and Ìsùà example sentences below.

Ìpè

(19)a. Adé ri ùro dà Adé eat food PERF 'Adé has eaten' b. Ìyà di bàtà dà They buy shoe **PERF** 'They have bought a pair shoes' c. Màhìn gbi eşệnni dà We kill fish **PERF** 'We have killed a fish' d. Ìyà di bàtà dà I buy buy shoe PERF 'I have bought cloth'

Ìsùà

(20)

a. Olú di evén-èn ò

Olú buy cloth PERF

'Olú has bought a cloth'

b. Wà gbi eṣènì ò

They kill fish PERF

'They have killed the/a fish'

c. Ùmè ni ùwè fi eṣìnnè ò

You Conj. I cook beans PERF

'You and I have cooked beans'

d. Mi ze eşênî ò

I sell fish PERF

'I have sold the fish'

The data in (19) and (20) show that the perfective aspect markers  $d\dot{a}$  in Ipè and  $\dot{o}$  in Isùà occur in clause final position.

However, the occurrence of the perfective aspect markers  $d\hat{a}$  in Ipè and  $\hat{o}$  in Isùà at the sentence final position actually contradicts the universal order of sentence:

S NP INFL VP

The universal order of sentence is that every INFL or Aux elements have to occur at the pre-verbal position (before the verb or verb phrase) in a sentence. In the spirit of cartography, the claim is that AspP must dominate the VP but the reverse is the case in Ipè and Isùà. This is the one of the distributional nuances observed in the aspectual system of the North-western Edoid. Does this asymmetry then make the two dialects to be different from others in the language group or groups examined in this paper? Following the Borer-Chomsky hypothesis, the answer is no, because, the aspo head has a strong edge feature which is why the VP is pipe-pied to the Spec-AspP and the Aspo is left stranded in the clause final position. The position we hold in this paper is that in all of the dialects in these language groups, the aspectual markers occur in the pre-verbal position and that the differences we see in the surface realizations is a result of some internal merge. The detailed explanation is given in section five of the paper.

## 5.2 The Interaction between Tense and Aspectual Markers

This section focuses on the co-occurrence of tense and aspect within a clause in the North-western Edoid. It examines how future tense co-occurs with continuous and perfective aspect.

# 5.2.1 Future Continuous Tense

This combination implies that an action or event that is posterior to the moment of utterance or initiation of speech will be in progress.

Apart from Ìsùà and Ṣósan that use only the progressive aspect markers e for denoting future continuous tense, other dialects in the North-western Edoid use a combination of future tense marker and the continuous aspect marker for indicating future continuous tense. All of the functors that indicate future continuous tense in the North-western Edoid usually occur at the pre-verbal position as shown in the example sentences below.

**Epìnmì** 

(21) a. Títí áà é yọ aàhọ̀ Títí FUT. CONT. go tomorrow

'Títí will be going tomorrow' b. Ìyà áà é di bàtà They FUT. CONT. buy shoe 'They will be buying a pair of shoes' c. Ó áà é ri àhùn S/he FUT. CONT. eat pounded yam 'S/he will be eating pounded yam' d. Màhìn áà é di ebì We FUT. CONT. buy goat

'We will be buying a goat'

Ìpè

(22) a. Adé à ré di bàtà
Adé FUT. CONT. buy shoe
'Adé will be buying a pair of shoe'

b. Màhìn à ré yọWe FUT. CONT. go'We will be going'

c. Mè à ré di àthàI FUT. CONT. buy cloth'I will be buying cloth'

d. Ò à ré bìsen
S/he FUT. CONT. sleep
'S/he will be sleeping'

The data in (21) and (22) above show that Epìnmì and Ìpè consistently use a combination of future tense markers and the continuous aspect marker to indicate a future continuous tense. Similarly, Àbèsàbèsì also employs a combination of future tense marker and the continuous aspect for denoting future continuous tense, but, the functors are in variant forms. That is, the functors tend to harmonize the vocalic [+ATR] feature of the vowel of the verb that follows it as presented in the Àbèsàbèsì sentences below.

a. Ó (23)há á mìs S/he FUT. CONT. sleep 'S/he will be sleeping' b. Bàá bá á das They FUT. CONT. go 'They will be going' c. Bólá bé é ji aye Bólá FUT. CONT. eat beans

'Bólá will be eating beans' d. Àé hé é di bàtà We FUT. CONT. buy shoe 'We will be buying a pair of shoe' bó ó e. N fù ave I FUT. CONT. cook beans 'I will be cooking beans'

Using English and Yorùbá as mirror image, the universal order of tense in relation to aspect is that tense has to occur before aspect in a syntactic structure as evident in the English and Yorùbá example sentences below.

# English

a. John will be going tomorrow
FUT. CONT.
b. John will have gone
FUT. PERF.
c. John will have been going
FUT. PERF. CONT.

Yorùbá

(25) a. Adé yóò máa lo lǫ́la
Adé FUT. CONT. go tomorrow
'Adé will be going tomorrow'
b. Adé á ti de
Adé FUT. PERF. come
'Adé will have come'
c. Adé á ti máa bọ̀

c. Adé á ti máa bò
 Adé FUT. PERF. CONT. come
 'Adé will have been coming'

The English and Yorùbá examples above show that the universal order of tense in relation to aspect is actually that tense has to come before aspect in a syntactic structure. Therefore, one can conclude that the data in (21), (22), and (23) show that the languages in the North-western Edoid actually obey the universal order of tense in relation to aspect.

## 5.2.2 Future Perfect Tense

This co-occurrence indicates that an event that is posterior to the moment of utterance will be completed. The languages in the North-western Edoid combine their future tense and perfective aspect markers for denoting future perfect tense as given in the examples below.

**Epìnmì** 

(26) a. Ayò áà ré yọ
Ayò FUT. PERF. go
'Ayò will have gone'
b. Ìyà áà ré ri àhùn
They FUT. PERF. eat pounded yam
'They will have eaten pounded yam'

c. Ó áà ré di àrhà
S/he FUT. PERF. buy cloth
'S/he will have bought cloth'

## Sósan

(27) a. Títí á hinaà dẹ bàtà
Títí FUT. PERF. buy shoe
'Títí will have bought a pair of shoe'
b. Màhìn á hinaà bìsẹn

b. Māhin á hinaā bisei
We FUT. PERF. sleep
'We will have slept'

c. Ò á hinaà di èsèlè S/he FUT. PERF. eat fish 'S/he will have eaten the fish'

The examples in (26) and (27) above show that the markers for future perfect tense in the North-western Edoid occur at the pre-verbal position. The same happens in Àbèsàbèsì, but, the functor in Àbèsàbèsì has three forms in relation to the vocalic [+ATR] feature of the vowel of the verb following it. Consider the following data in Àbèsàbèsì.

(28)a. Olú ka bá das Olú PERF. FUT. go 'Olú will have gone' b. Àé ke bé ii ave We PERF, FUT, eat beans 'We will have eaten beans' c. N bó fù aye ko I PERF. FUT cook beans

'I will have cooked beans'

However, it is observed that the future tense markers occur before the perfective aspect markers in Epìnmì and Ṣósan, but in Àbèsàbèsì, the future tense marker  $b\acute{a}$ ,  $b\acute{e}$  and  $b\acute{o}$  occur after the perfective markers ka, ke, and ko respectively. Therefore, one can infer that in Àbèsàbèsì, the co-occurrence of the future tense and perfective aspect markers to indicate future perfect tense runs contrary to the universal order of

tense in relation to aspect, in that, the future tense marker occurs after the perfective aspect markers.

Moreover, while the future tense and perfective aspect markers that indicate future perfect tense co-occur contiguously in Epìnmì, Sósan, and Àbèsàbèsì, they do not co-occur contiguously in Ìsùà and Ìpè. While the future tense marker occurs at the pre-verbal position, the perfective aspect marker occurs at the sentence final position as shown (29 and 30) below.

# Ìpè

(29) a. Adé á di bàtà dà
Adé FUT. buy shoe PERF.

'Adé will have bought a pair of shoes'
b. Mé à gbi esènnì dà
I FUT. kill fish PERF.

'I will have killed a fish'
c. Ò à bìsen dà
S/he FUT. sleep PERF.

'S/he will have slept'

Ìsùà

(30) a. Olú ò di evén-èn ò
Olú Agr-FUT. buy cloth PERF.
'Olú will have bought cloth'
b. Táyé sáìsí Olú wá di bàtà ò
N Conj. N Agr-FUT. buy shoe PERF.
'Táyé and Olú will have bought a pair of shoes'

We can observe in the data above that the functors do not co-occur contiguously. However, the occurrence of the functors  $d\hat{a}$  in Ìpè and  $\hat{o}$  in Ìsùà at sentence final position is contrary to the universal order of Fut-Perf aspect in a sentence. In the spirit of Borer-Chomsky Hypothesis, the only plausible explanation we can offer is that there is a piped-piping of the verb phrase to the spec of AspP, leaving the functors  $d\hat{a}$  and  $\hat{o}$  stranded in the clause final position.

# 5.2.3 Future Perfect Continuous Tense

This is a construction that involves the interaction between the future tense, perfective aspect and progressive aspect. This implies that an action that is posterior to the initiation of speech which is in progress will be completed.

In the North-western Edoid, the only language that clearly attests future perfect continuous tense is Sósan. It combines its future tense, perfective aspect and progressive aspectual markers for denoting future perfect continuous tense. In this construction, the future tense marker occurs first, followed by the perfective aspect marker, and then, comes the

progressive aspect marker. However, all of these functors occur at the pre-verbal position as demonstrated by the sentences in Sósan below.

(31) a. Ayò á hinaà é de bàtà Ayò FUT. PERF. CONT. buy shoe 'Ayò will have been buying a pair of shoes'

b. Màhìn á hinaà é di èsèlè
 We FUT. PERF. CONT. eat fish
 'We will have been eating fish'

c. Ó á hinaà é bìsen

S/he FUT. PERF. CONT. sleep

'S/he will have been sleeping'

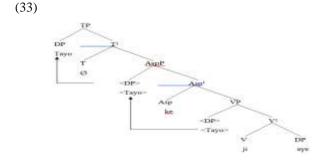
d. Mi á hinaà é fu èşinè
 I FUT. PERF. CONT. cook beans
 'I will have been cooking beans'

As shown in (31) above, the future tense marker  $\acute{a}$ , the perfective aspect marker hinaà and the continuous aspect marker  $\acute{e}$  occur contiguously to indicate future perfect continuous tense in Sósan. Moreover, it is observed that all these functors occur at the pre-verbal position and they do not contradict the universal order in relation to aspect.

# VI. DERIVATION OF CLAUSES CONTAINING PERFECTIVE ASPECT

Following cartographic approach with insight from Borer-Chomsky hypothesis, we propose in this paper that the distributional differences in the surface realizations notwithstanding, clauses containing perfective aspect in all the dialects in the two language groups are derived in the same way. This being the case, a simple clause containing a perfective aspect like (32) in Abèsabèsì is derived as sketched in (33) while a simple clause containing a perfective aspect like (34) in Ipè is derived as sketched in (35).

(32) Táyò ke ji aye Táyò PERF. eat yam 'Táyò has eaten yam'



The clause with a perfective aspect is derived by first merging the verb ji to its complement aye in order to satisfy its c-selection requirement while the subject DP  $T\acute{a}y\grave{o}$  is second merged with the same verb in the Spec-VP (in line with VP-internal Subject Hypothesis) so as to satisfy the EPP requirement of the head verb. The T head is merged with AspP to form a  $T^1$  which is in turn merged with a DP to form a TP.

The derivation proceeds by externally merging the Asp head (which is morphologically realized as **ke** because the verb contains a vowel with [+ATR] feature) to the VP in order to satisfy its c-selection requirement thereby projecting an aspbar. The asp head has an EPP/edge feature which is why it projects AspP by raising the DP subject from the spec of VP to the specifier position of AspP.

The derivation proceeds by taking the T head (which is realized as the phonetically null element) from the numeration and merging it to AspP to project a T-bar in order to satisfy its c-selection requirement. The T head has an edge feature which is why it projects TP by attracting the spec-AspP to its specifier position. There is a case of cyclic movement of DP subject from the spec, VP to spec-AspP lastly to the spec-TP.

(34) Ìyà di bàtà dàIya buy shoe PERF'Iya has bought a pair of shoe'

(35)

The clause with a perfective aspect is derived by first merging the verb **di** to its complement **bàtà** in order to satisfy its c-selection requirement while the subject DP **ìyà** is second merged with the same verb in the Spec-VP so as to satisfy the EPP requirement of the head verb.

The derivation proceeds by externally merging the Asp head (which is morphologically realized as **dà** to the VP in order to satisfy its c-selection requirement thereby projecting an asp-bar. The Asp head has an EPP/edge feature

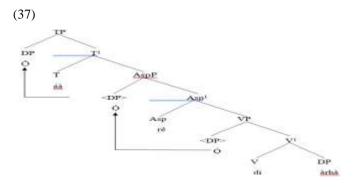
which is why it projects AspP by pied-piping the whole VP to the specifier position of AspP. In other words, we argue that the aspectual head (Asp°) in Ìpè and Ìsùà has Extended Projection Principle (EPP) feature which is satisfied by pied-piping the whole VP to the specifier of Aspectual Phrase leaving the Aspectual morpheme stranded in clause final position.

The derivation proceeds by taking the T head (which is realized as the phonetically null element) from the numeration and merge it to AspP to project a T-bar in order to satisfy its c-selection requirement. The T head has an edge feature which is why it projects TP by attracting the subject DP in the spec-VP to its specifier position.

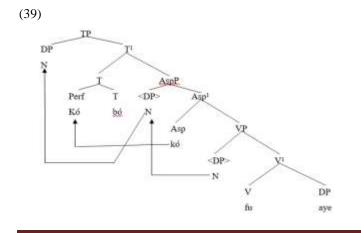
## 6.1 Derivation of Clauses containing Future Perfective Tense

A simple clause containing future perfective aspect like (36) in Epìnmì is derived as sketched in (37) while a simple clause containing a perfective aspect like (38) in Àbèsàbèsì is derived as sketched in (39).

(36) Ó áà ré di àrhà
S/he FUT. PERF. buy cloth
'S/he will have bought cloth'



(38) N ko bo fú aye
I PERF. FUT. cook bean
'I will have cooked beans'



The clause with a combination of future and perfective aspect known as future perfect tense is derived as follows: the verb  $f\dot{u}$  is first merged to its complement aye in order to satisfy its c-selection requirement while the subject DP N, is second merged with the same verb in the Spec-VP so as to satisfy the EPP requirement of the head verb.

The derivation proceeds by externally merging the Asp head **ko** to the VP in order to satisfy its c-selection requirement thereby projecting an Asp-bar. The Asp head has an EPP/edge feature which is why it projects AspP by attracting the spec-VP to its specifier position.

The derivation proceeds by taking the T head (which is morphologically realized as **bó**) from the numeration and merging it to AspP to project a T-bar in order to satisfy its c-selection requirement. The Asp head has an EPP/edge feature which is why it projects AspP by attracting raising the spec-AspP to its specifier position to satisfy this edge/EPP feature. The T head also has an edge feature which is why it projects TP by attracting the spec-VP to its specifier position.

However, this is for Àbèsàbèsì, before the T head projects the TP, the Asp<sup>o</sup> adjoins to T<sup>o</sup> for the realization of aspect-tense order.

Lastly, it is shown that, although at the surface realization, it appears that Aspectual Phrase AspP dominates Tense Phrase TP in Àbèsàbèsì, this poses an interesting challenge to universal hierarchical order of TP dominating AspP. However, the paper proposes a Asp $^{\rm o}$  raising such that Asp $^{\rm o}$  adjoins to T $^{\rm o}$  for the realization of Àbèsàbèsì aspecttense surface order.

As evident in the data above, perfective aspectual markers in Ìpè and Ìsùà occur in the clause final position while they precede the VP in Àbèsàbèsì. So, given that parametric variations have been reduced to the properties of lexical items, we propose that the aspectual markers in Ìpè and Ìsùà are base-generated in pre-verbal position but become stranded in the clause final position after the pied piping of the VP to the Spec, AspP in order to satisfy the EPP/edge feature of the Asp head.

## VII. CONCLUSION

In this paper, we have given a detailed, descriptive and theoretical analyses of tense and aspect. The differences and similarities observed in the morphological realizations and syntactic distributions of the tense and aspect markers notwithstanding, the paper corroborates the assertion that tense and aspect are a universal category. We observed that in the Àbèsàbèsì subgroup, perfective aspect markers occur preverbally yielding to aspect-verb order but in Ìpè and Ìṣùà, they occur in clause final positions yielding to verb-aspect order. Also, when future tense and perfective aspect co-occur in a clause, the perfective marker linearly comes before the future marker in Àbèsàbèsì, as opposed to the universal word order of tense coming before aspect. The conclusion of this paper is that, (1) the aspectual marker in Ìpè and Ìṣùà is base generated

in the pre-verbal position like Àbèsàbèsì despite the fact that it linearly occurs in clause final position in surface syntax, and (2) the paper proposes an Asp<sup>o</sup> raising such that Asp<sup>o</sup> adjoins to T<sup>o</sup> for the realization of Àbèsàbèsì aspect-tense surface realization.

### REFERENCES

- [1] Adeoye, J. A. 2019. Tense, Aspect and Negation (TAN) in Igasi. Linguistik online
- [2] Agoyi T. O. 1997. The Category of Number and the Genetic Classification of Ekíromi Seminar paper Presented to the Department of Linguistics and Nigerian Languages, University of Ilorin, Kwara State, Nigeria.
- [3] Agoyi, T. O. 2008. The Phonology of Vowel Harmony in Abèsabèsì. PhD Dissertation, Adekunle Ajasin University, Akungba-Akoko, Ondo State, Nigeria.
- [4] Bendor-Samuel, J. (Ed.) 1989. The Niger-Congo Languages. Lanham: University Press of America.
- [5] Bull, W. E. 1963. Time, Tense and the verb. Berkeley and Los Angeles: University of California Press.
- [6] Chomsky, N. 1957. Syntactic Structures, Mouton: The Hague
- [7] Chomsky, N. 1965. Aspect of the Theory of Syntax, Cambridge, Massachusetts: M.I.T.
- [8] Chomsky, N. 1995. Th Minimalist Program. Cambridge: MIT Press.
- [9] Egbert, F. 2019. Universality and Language-dependency of tense and aspect: Performatives from a Crosslinguistic Perspective. Language Typology, 23.1, 1-58
- [10] Elugbe, B. 1986. 'Comparative Edoid': Phonology and Lexicon. Port-Harcourt: Port-Harcourt University Press.
- [11] Fabunmi, F. A. 2009. A GPSG Structure of Aspect in Yoruba Akoko. Nordic Journal of African Studies 18.4, 258-285.
- [12] John, B.W. 2013. Comparative Tense and Aspect in the Mara Bantu Languages: Towards a Linguistic History. PhD Thesis, Trinity Western University.

- [13] Norbert, I. B. 2009. Tense and Aspect in English and Kiluba: The Role of Suffixation and Prosody. Journal of Applied Linguistics and Language Research, 6.3, 171-182.
- [14] Nwizug, S. S. and Nwala, M. A. 2021. Cross-linguistics Study of Tense and Aspect in English and Khana Languages. Journal of African Languages and Sustainable Development, 4.6, 207-226.
- [15] Ogunmodimu, M.D. 2013. Tense, Aspect and Negation in Ahàn. A paper presented at Hawai University International Conference, Arts, Humanities and Social Sciences from January 6th to 8th, 2013.
- [16] Ogbeifun, A.F. and Omoregbe, E.M. 2018. Tense and Aspect Markings in Uşen. Journal of the Linguistic Association of Nigeria, 21.3, 138-145.
- [17] Qiaògún, S. O. 2011. Pronoun, Tense -Aspect and Negation in Owo. Akungba Journal of Linguistics and Literature, 46-57.
- [18] Olaogun, S.O. 2014. Ibá-Ìsélè àti Àsìkò nínú Olórí Èka-Èdè Yorùbá àti Èka-Èdè Òwò. Ago-Iwoye Journal of Languages and Linguistics. 5. 123-131.
- [19] Olúmúyìwá, O. T. 2013. Tense/Aspect and Negation in Mòbà. Research on Humanities and Social Sciences, 3.1, 118-123.
- [20] Olumuyiwa, O. T. and Oshodi, Boluwaji (2012) 'On the Linguistic situation in Akoko'. California Linguistic Notes, 32.1, 1-8.
- [21] Omamor, A. P. E. 1982. Tense and Aspect in Itşekiri. Taiwan Journal of Linguistics, X.112, 118-121
- [22] Pollock J.Y. 1989. Verb Movement, University Grammar, and the Structure of IP. Linguistic Inquiry, 20, 365-424.
- [23] Táíwò, O. 2003. Tense and Aspect in Ao' in Linguistic in Nigeria. A Festschrift for Kay. 3.1, 773-790.
- [24] Williamson, K, and Blench, R. 2000. Niger-Congo' in African Languages: An Introduction. Cambridge: Cambridge University Press
- [25] Williamson, K. 1989. Niger-Congo Overview. In John Bendor Samuel (ed.). The Niger Congo Languages. Maryland: University Press of America Inc.