

Tense and Aspect in Edo

Constantine Yuka & Esohe Omoregbe

Department of Linguistics, University of Benin, Nigeria

This paper examines the application of basic tense and aspect in Edo. It argues that the specification of temporal distance in the language is more complex than has been recognized by previous studies (Dunn, 1998, Emovon, 1980, Aikhionbare 198), Agheyisi 1990, Omoruyi 1991, Ogie 2003 and Omozuwa 2003). Apart from the use of verbal extensions to mark tense and aspect in Edo, the role of tone in the specification of the time within which an event occurs and the distribution of such an event is shown to be more prominent than earlier studies have tended to assume. This paper exhibits both monosyllabic and disyllabic verb types with low, rising and low-high tonal patterns respectively. The thrust of the study is to revisit the Edo inflectional node (INFL) in an attempt to isolate and distinguish the various tense and aspectual morpho-syntactic units. How these lexical units interact with tone and the components of the INFL to derive appropriate tense and aspectual delineations is the focus of this paper. Our expectation is that the morpho-syntax of the Edo INFL stands to benefit from an analysis of grammatical derivational restrictions that are determined by the interaction between tone, morphology and semantics.

Preliminaries

Modern day speakers of Edo descend from the inhabitants of the ancient Benin Kingdom of Benin. There are over 2.5 million Edo speakers who live mostly in Edo State of Southern Nigeria. Edo is an Edoid language (Elugbe 1989) that belongs to Eastern Kwa which is part of the putative Western Benue-Congo group of the New Benue-Congo (NBC) (Williamson and Blench 2000). Igboanusi and Peter (2005) have listed Edo among Nigeria's important minority languages.

The paper is organized as follows: Section 2 discusses the Edo tonal pattern and its role in the distinction of tense and aspect. In section 3, we review previous works on tense and aspect in Edo. Section 4 attempts an analysis of the interaction between tonal alternations verbal extensions and other tense and aspect components of the Edo INFL. Section 5 is a summary of our findings.

Previous Works on Tense and Aspect in Edo

Tense and Aspect are two important constituents of the inflectional node of any natural language. Many studies, have attempted a description of the manifestation of tense and aspect in Edo: (Dunn, 1998, Emovon, 1980, Aikhionbare 198), Agheyisi 1990, Omoruyi 1991, Ogie 2003 and Omozuwa 2003) amongst others. The basic argument that cuts across these works is that the striking similarities between tense and aspect in Edo makes it difficult to clearly make a distinction between the two. A few studies which we consider relevant to our paper are reviewed below.

Dunn (1968: 216) attempts an analysis of the Edo INFL. He splits tense into past and non-past and aspect into perfective, progressive and habitual. The modals are categorized into six units: will, necessity, intensified, used to, going to and about to. His interpretation of the Edo INFL been challenged by subsequent researchers.

Unlike Dunn, Emovon (1980) preferred to divide Edo tense into: present, past and future. Aspect is evaluated from the progressive, imperfective and perfective point of view. Emovon indicates that the progressive aspect is marked by the forms *ghá* and *gháá*, the non-progressive aspect is marked by *ne*, *nè* and *ne*, while the imperfect is unmarked. Our data shows enough evidence that Edo does not exhibit the mid tone which Emovon claims is part of the distinctive attributes of the forms marking aspect and tense in Edo. This paper also examines Emovon's grammatical representation of simple past tense marker (*-re*) in Edo in which he opts to delete the initial /r/ in the suffix leading to the apparent interpretation that the complex morphological V+ suffix is a single morphological unit. 1 below shows some of Emovon's examples.

- | | | | | |
|------|--------|-----|---------|-------------|
| 1.a) | ì dáé | for | ìdáré | 'I drank' |
| b) | ì giéé | for | ì giéré | 'I laughed' |
| c) | ò rréè | for | ò rréré | 'he came' |

1 above shows that Emovon's choice of morphological representation conflicts with the correct interpretation of the Edo tonal pattern since 1 depicts tonal clusters that are contestable. Since Emovon fails to provide lexical translations to his examples, it is difficult to follow his syntactic representations and arguments. We address these issues in section 4 of our paper.

Aikhonbare (1986:66) correctly asserts that Edo is a language in which words acquire tones in specific contexts. He adds that apart from the *-rv* suffix of the simple past tense, all tenses are marked by tone variation. We demonstrate that the specification of time in Edo does not restrict itself to the tones or suffixes alone. Our data reveals that tonal alternations on both verbal and non-verbal elements within sentential constructions contribute to specifying the time of an event.

Like Emovon (1980), Agheyisi (1990:68) splits tense into: past, present and future. She marks the past and future tense with suffixes and other lexical particles. The present tense is marked with a low tone or a low-high tone. Unlike Emovon and Dunn, Agheyisi recognizes the basic opposition between the perfective/imperfective aspectual distinctions in Edo. She identifies *gha* as the imperfective marker and *ne* as the perfective marker as shown in 2 below;

- | | | | | | |
|-------|---------------------|--------|-------|------|---|
| 2. a) | Òzó | déè | èbé | ne | ̄ |
| | Ozo | buy | book | PERF | |
| | 'Ozo bought a book' | | | | |
| b) | Òzó | ghá | kpíló | | |
| | Ozo | IMPERF | sweep | | |
| | 'Ozo is sweeping' | | | | |

Like Emovon, she combines the verb and the past tense suffix (*-re*) as a single lexical unit (see 2a, *déè* rather than *dèré*).

Omoruyi (1991) proposes that the simple past tense in Edo is marked by both verbal inflections and tonal changes while aspect and modality are represented with auxiliaries. We add that adverbials and verbal extensions are prominent in the location of events on the Edo time line. The following examples culled from Omoruyi (1991: 2) illustrate the different aspectual markers he employs.

2. a) Òsàsú déré
 Osasu pst-fall
 'Osasu fell'
- b) Òzó sàámén
 Osasu pst-jump
 'Ozo jumped'
- c) Írán rhààré
 they pst-steal
 'They stole'

The Inceptive and terminative notions in the language are marked by *sue* 'n̄ (begin and *fó* (finish) as in 3 below;

3. a) O sue èvábàré nè à ré ne
 he begin food that one eat already
 'He has begun to eat'
- b) O rrí èvbàré fó ne
 he pst-eat food finish already
 'He has finished eating'

Interestingly, Ogie (2003:2) demonstrates that tense and aspect in Edo are marked by tone, suffixation and the use of auxiliaries as shown in her examples below presented as our example 4.

4. a) Òtà gbén
 Òta pres-intrn-write
 'Ota writes'
- b) Òtà gbénrèn èbé
 ota pres-trn-write book
 'Ota writes a book'
- c) Òtà gbén èbé
 Ota pst-trn-write book
 'Ota wrote a book'
- d) Òsàró ghá tié ebe
 Osaro Fut-prog read book
 'Osaro will be reading a book'

- e) Òzó rá khmé
Ozo incept bathe
'Ozo is about to bathe'
- f) Òzó rrí èvbàréne□
Ozo pst-eat food perf
'Ozo has eaten food'
- h) Òzó rhùléré kpàá
Ozo pst-run go
'Ozo ran away (from the speaker)'

4a-d illustrates Òtá's present and past tense, while 3e-h shows the progressive, inceptive and perfective markers respectively. We argue that her syntactic positions of tense, aspect and mood are faulty.

Omozuwa (2003), like Agheyisi (1986), recognizes the dichotomy between the perfective and non-perfective marker and differentiates them with tones as shown in 6 below;

- 5.a) Ò le evbare [ò lè èβàré]
she/he pres-cook food
'She/he is cooking'
- b) O le evbare [ò lè èβàré]
she/he pst-cook food
'She/he cooked'
- c) Ekí lo ehuien [Èkì lò ÈhyÉ]
Eki pres-grind pepper
'Eki is grinding pepper'
- d) Ekí lo ehuien [Èkì ló ÈhyÉ]
Eki pst-grind pepper
'Eki ground pepper'

In the examples above, the minimal aspectual distinctions are conveyed by the tones on monosyllabic verbs. In example 6 below, the past perfective verb form is marked by a heightened rising tone (Omozuwa 1987). As in 5, the low/high contrast is maintained.

6. a) Agho kpee ema [àγò kpe◇ èmà]
Agho pres-beat drum
'Agho is drumming'
- b) Agho kpee ema [àγò kpe◇ èmà]
Agho pst-beat drum
'Agho drummed'

Omuzuwa's analysis does make clear the difference between the simple rising tone and the heightened rising tone. In section 4 of this paper provides this difference and proposes a diacritic to mark the difference.

Tonal patterns in Edo

There are basically two tones in Edo: the high [´] and low [˘] tones that the language employs contrastively to semantically distinguish lexical items with identical segments. The examples below show the distinctive import of these tones.

- | | | | | |
|-----|-------|-----------|-------|--|
| 7a) | ówé | ‘broom’ | òwè | ‘leg’ |
| b) | ówá | ‘market’ | òwá | ‘house’ |
| c) | íbá | ‘evil’ | íbà | ‘mud seat’ |
| d) | ùkpó | ‘year’ | úpko | ‘road’ |
| e) | ódó | ‘mortar’ | ódò | ‘a kind of potash used to thicken native soup’ |
| f) | ákhùè | ‘morrow’ | àkhue | ‘bath’ |
| g) | àgo | ‘village’ | àgò | ‘crookedness’ |

8 above, shows disyllabic verbs in which the tone patterns: HH, LL, LH and HL. Other The combination of the high and low tones can also occur within disyllabic as well as polysyllabic words as shown below.

- | | | | | |
|-------|----------|--------------|---------|-------------------|
| 8. a) | ágádá | ‘bow leg’ | àgádà | ‘a type of dance’ |
| b) | ùkhùnmwù | ‘famine’ | ùkhùnmù | ‘medicine’ |
| c) | ùpkòkpò | ‘harassment’ | úpkókpò | ‘stick’ |
| d) | èkàrhà | ‘umbrella’ | èkhàrhà | ‘peom/recitation’ |
| e) | èkhàrhà | ‘animal’ | áranmwè | ‘tongue’ |

In 8, the high and the low tone combine in a sequence to derive L-L-L, H-H-H, L-H-L and H-H-L pattern. Omuzuwa (2003: 57-58) shows that the low tone and the rising tone also contrast lexically in Edo. The low-rising tone pattern which is prominent in aspectual distinction in Edo, occurs with the CVV verbs while the CV verb types in 9 below take the low tones.

- | | | | | |
|-------|----|---------|-------|-----------|
| 9. a) | dè | ‘fall’ | dee◊ | ‘tie’ |
| b) | sà | ‘fetch’ | saa◊ | ‘busrt’ |
| c) | dà | ‘drink’ | daa◊◊ | ‘collect’ |
| d) | bò | ‘build’ | boo◊ | ‘pacify’ |
| e) | kà | ‘count’ | kaa◊ | ‘dry’ |

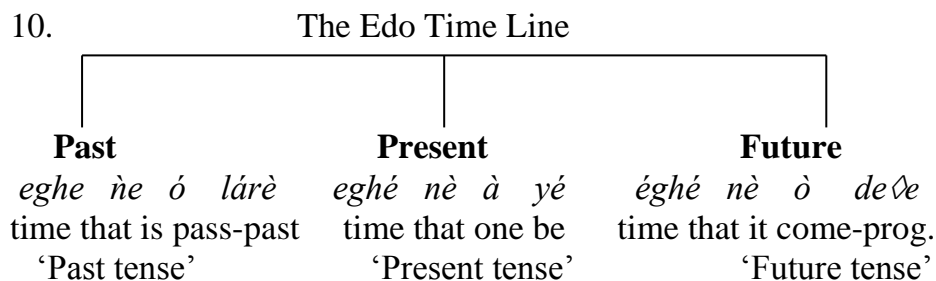
It may not be totally wrong to posit from 8 and 9 that the low tone is a fundamental tone height in Edo. But each tone height is as important as the other in their role to specify the time and duration of events as we will see in the next section of this paper.

The Present Study

In this paper, we are interested not only in the simple basic tense and aspect marking in Edo but also in the relationship that exists between tone and the graduations of tense and aspect as well. Apart from illustrating the operation of tone in tense differentiation, these examples reveal that tense in Edo describes events around the deitic centre. The Edo native speaker's distinction of tense and the segmentation of the life of an event are deeply rooted in his/her interpretation of time (*eghe*). In the following sections, we present an analysis of this time in Edo with an eye on some of the major claims in the previous works reviewed in section 2 of this paper.

Tense in Edo

The Edo native speaker makes the distinction between three different times point in locating an event. Theses specification of these events is conceived within *eghe* (time). We follow most of the previous studies to maintain the traditional three-way distinction of tense: past, present and future, shown in 10 below.



This time axis in 10 shows the three major conceptions of time points as interpreted by the native speaker of Edo. We take our premise in the analysis of components of the Edo from 9 and examine the morpho-syntactic relations that enable the proper delineation of the time of events and their duration in Edo.

The Past Tense

The past tense signals an event frame that precedes the moment of speech. It is located at a point to the left of the present time point on the time line. In Edo, past tense is marked by an overt morphologically realized element generally referred to in the literature as the *-rv*. The basic morphological form of this suffix is posited as *-rè*. *-rè* has phonologically conditioned variants: *-rè*, *-rì*, *-rù*, *-rò*, *-rèn*, *-rìn* and *-rùn* whose morphological realizations depends on the nature of vowel occurring in the verb stems to which it is attached.

Example 11 shows a cross section of such phonological variation given the environment of occurrence of the *-rv* suffix in Edo.

- | | |
|---|---|
| <p>11. a) gbé → gbé-rè
dance dance + pst</p> <p>c) kùú → kùú-rù
play play + pst</p> <p>e) fàn → fàn-rèn</p> | <p>b) fí → fí-rí
throw throw + pst</p> <p>d) gbà → gbà-rè
tie tie + pst</p> <p>f) do n̄ → do n̄-rèn</p> |
|---|---|

save	save + pst	learn	learn + pst
g) buun break	→ buun-run break + pst	i) ban peel	→ b́an-rèn peel m + pst

The *-rv* suffix in Edo marks the simple past (Agheyisi, 1990, Omoruyi, 1991) as well as pluralizing. Both morphological processes involve suffixation either as the simple past tense suffix *-rè* or the plural suffix *-lè*. Like the *-rè* suffix, the *-lè* suffix also has phonologically conditioned variants of the form: *-lè*, *-lò*, *-ne*, *-no*. These variants are determined by the final vowel of the verb stem. The two forms of suffixation can occur with one verb stem as shown in the examples below:

12 a)	sò weep	só + -rò weep + pst	so + -ló weep + pl.	rò + -rò weep + iterative
b)	váa split	vá + -rè split + pst	va + -lo split + pl	rè + -rè split + iterative
c)	wù die	wú + -rù die + pst	wù + -ló die + pl	wu + -rò die + iterative (i.e. as in more than one person)

These examples show that the plural suffix syntactically precedes the past tense suffix bearing an appropriate tone. Unlike other African languages that select a single tone mark or a particular lexical form to mark past tense, transitivity and the syllabic composition of the verb stem determines the tone pattern that designates past tense in Edo. Past tense on transitive CV verb stems is marked with a high tone.

13. a)	de	→	O de èbé he pst-buy book 'He bought a book'
b)	sa	→	Òzó sá àmè Ozo pst-fetch water 'Ozo fetched water'
c)	kpe	→	Èkì kpé òkpán Eki pst-wash plates 'Eki washed plates'

For intransitive CV/CVV verb stems, past tense is marked with a simple high tone plus an *-rv* suffix as shown in example 14.

14. a)	de	→	O dérè he pst-buy 'He fell'	b) so	→	Èkì sóró Eki pst-weep 'Eki wept'
c)	lee	→	O leeòrè	d) kuu	→	O kuuòrù

	he pst-run 'He ran'	he pst-play 'He played'
e) loo →	Ó loo◊' ùpkòn he pst-iron cloth 'He ironed the cloth'	f) Òzó hoo◊' ùpkòn Ozo pst-wash cloth 'Ozo washed the cloth'

Notice from 14 that unlike the CV intransitive stem which bears a high tone, the CVV intransitive stem bears a rising tone (see example c-d) in addition to the *-rv* suffix bearing a low tone on the vowel. With transitive CVV verb stems, past tense is reflected as a heightened rising tone as shown in 14 e-f. Omozuwa, (2003) proposed the heightened rising tone but does not differentiate it from the simple rising tone (*boo◊*). This study suggests a superscript diacritic marked on the rising tone (*boo◊'*) to distinguish the two tone patterns.

The Edo native speaker conceives past tense as that event that occurred before the moment of speech. To appropriately locate exact time points in the past, relevant time adverbials are employed: *nódè* 'yesterday', *núkpò* 'last year' *noínéré* 'in the morning', *ne□de□* 'in the olden days' Data from Edo does not reveal that Edo differentiates between today past, later today past, yesterday past, and remote past. Some African languages like Lamnso' morphologically distinguish such past tense types.

The Present Tense

Events that are simultaneous with the moment of speech are said to be in the present tense. In Edo, such events are marked distinctly on different morphological verb forms. In example 15, we present sentences that portray events that are ongoing at the moment of speaking. Notice once more the behaviour of tone and the role of syllable structure in determining the semantic interpretation of each derivation.

15. (a) Òtà lè èvbàré Ota pres-cook food 'Ota is cooking food'	b) Òzó kpè ókpán Ozo pres-wash plates 'Ozo is washing plates'
c) Úyì kpòlò òwá Uyi pres-sweep house 'Uiyi is sweeping the house'	e) Úyì dolo ùkpòn Uyi pres-sew cloth 'Uyi is sewing cloth'
d) Òzó hoo◊ ùkpon Ozo pres-wash cloth 'Ozo is washing cloth'	f) Òzó loo◊ ùkpo□n Ozo pres-iron cloth 'Ozo is ironing cloth'

In 15, present tense is marked on the transitive CV verb stem as a low tone. On the transitive CVCV verb stems, it is reflected as low-low and a rising tone on transitive CVV.

Some verbs in Edo exhibit the CVV syllable structure (*dèé* 'tie'; *kpàá*, 'leave'; *kpèé*, 'beat' etc. As we have noticed, others have the CV syllable structure. Basically, the

CVV verbs bear low-high tones while the CV verbs bear either a low or a high tone. Omozuwa (2003) analyses the CVV verb types to have a CV phonemic structure with a rising tone: *de* [dè]: *dee* [de◊]. Phonemically and semantically plausible as this analysis is, the syntactic ordering of tone bearing segments and their interpretation becomes problematic since the rising tone cannot be explicitly reflected on the segment that rightly bears it. We therefore adopt the rising tone proposal, but reflect the verb stem with a long vowel. The rising tone is borne by the first vowel segment.

Example 16 below reveals that present tense is marked as a high tone on intransitive CV verb stems. It is reflected as low-high on intransitive CVCV verbs and as a rising tone on CVV intransitive verb stems.

- | | |
|---|--|
| 16. a) Úyì só
Úyì pres-sweep
'Uyi is sweeping' | b) Úyì gbé
Uyi pres-dance
'Uyi is dancing' |
| c) Ó rré
he pres-come
'He is coming' | d) Ó winná
he pres-work
'He is working' |
| e) Ekita gboo◊
dog pres-bark
'The dog is barking' | f) Úyì ghee◊
Uyi pres-fornicate
'Uyi is fornicating' |

The Future Tense

The future tense locates events in some time ahead from the moment of speech. In Edo, it is marked by the overt preverbal morphological form: '*ghá*' which bears a high tone. Example 17 shows that the tones borne by verb stems preceded by '*ghá*' do not vary the tones they bear along transitivity lines as is the case with past tense in the language.

- | | |
|---|--|
| 17. (a) Ò ghá dé imo◊tó
he fut. buycar
'He will buy a car' | (b) O◊ ghá gbé
he fut. dance
'He will dance' |
| (c) Òtà ghá kpòló òwá
we fut. sweep house
'We will sweep the house' | (d) Ò ghá winná
he fut. dream
'He will jump' |
| (e) Òzó ghá daa◊ àmè
Ozo fut collect water
'Ozo will fetch water' | (f) Ò ghá lee◊
he fut run
'He will run' |

ghá is homophonous with a *wh-question* word '*gha*' (who) in one of the *wh-question* types in Edo.

- | | |
|---|---|
| 17.(a) <i>Gha ere O dee</i>
Wh+ human it-be he prog-come | (b) <i>Gha ere u gualo</i>
Wh+human it-be you find |
|---|---|

'Who is coming'?

'Whom are you looking for'?

Agheyisi (1990:89) notes that the function of *ghá* as a future tense marker is secondary; it occurs most systematically in indicative affirmative sentences. She says its occurrence in many syntactic constructions is more identified with mood serving to mark a variety of meanings ranging from potential, obligation, to optative. We add that *ghá* undergoes tonal alternation along with some of the elements in construction with it, to express different meanings as in (18).

- | | |
|---|--|
| 18. (a) Ò ghá rré
he fut come
'He will come' | b) Ó ghà rrè
He fut come
'He would have come' (wish) |
| (c) Ó ghá rré
He asp.come
'He must come' (obligation) | d) Ò ghá rré
he Aff come
'If he comes' |

In 18a, *ghá* with a high tone marks future tense. In 18b it takes a low tone which when combines with the low tone of the subject NP to express a conditional event. In 18c *ghà* bears a low tone complemented by the high tone on the subject NP to encode obligation.

The semantic interpretation of the different sentences above is greatly determined by the tonal alternations in the form *gha*, the subj. pronoun and even the syllable structure of the verb. Based on these examples and those of Agheyisi we propose that *gha* can be better described as a tense-aspect-mood particle in Edo.

Aspectual Distinctions in Edo

Most literature limit the interpretation of aspect to the basic distinction between events that are yet to be concluded at speech time and those that have come to a close at the time of speaking.. This limited interpretation of aspect as a perfective/imperfective split has not contributed much to the understanding of the internal structure of aspect. However, current literature (Comrie, 1976; Chung and Timberlake, 1985; Frawley and Elbraum, 1992 and others) have shown that aspect is conceptually and morphologically more varied across different languages. This section of the paper focuses on those aspectual distinctions that are influenced by tonal variations.

Perfective/Imperfective Aspect

The main aspectual distinction in Edo found in previous works, is that which involves the opposition between perfective and imperfective aspects. Basically, perfective aspect in Edo is marked as high tone (identical with that which marks simple past tense in Edo). Perfective aspect is also marked by the overt post-verbal morphological form *nè* 'already'. The imperfective aspect is also marked by *né* 'already'. Both aspects bear low and high tones respectively. Example 19 and twenty show the perfective and imperfective marking in basic sentences in Edo.

- 19 (a) Ò lè èvabàré nè
he pres-cook food prog-already

‘He is already cooking food’

- (b) Ò lé èvbàré nè
 he pst-cook food non-prog-already
 ‘He has already cooked food’
- (c) Ó kpòlò òwá né
 he pres-sweep house
 ‘I have bought a book’
- (d) Ò kpòlò òwá né
 prog-already he pst-sweep house non-prog-already
 ‘He has swept the house’
- (e) Ò loo◇ ùkpòn né
 he pres-iron cloth pro
 ‘He is already ironing the cloths’
- (f) O loo◇' ùkpòn nè
 he pst-iron cloth non-prog-already
 ‘He has already ironed the cloths’

Examples 19 illustrates that progressive events are marked by both the low tone on CV verb stems; by low-low tones on CVCV stems and by a rising tone on CVV verb stems for present transitive derivations. For past tense transitive derivations, CV verb stems bear high tone. The CVCV verbs bear the low-high tone pattern while the CVV verb forms bear a heightened rising tone. The progressive particle *ne* takes a high tone to indicate present progressive events. When it takes the low tone *ne* signals a non-progressive event.

Conclusion

Our analysis of the Edo tense and aspect so far has been very revealing as regards the INFL and more generally about the entire VP. Contrary to previous claims, our findings reveal more elaborate tense and aspect distinctions and the fact that they can indeed be kept apart, though very minimally in some cases. They differ in their conceptions as well as their position of occurrence in the Edo INFL. The difference is clearly noticeable in constructions in which fusion does not take place. In such cases, tense and aspectual distinctions depend solely on overt morphological forms. We note the overriding influence of tones in some of the major distinctions analyzed such as the simple past tense and perfective aspect, perfective and imperfective aspects. Infact, much of the argument for the similarity between tense and aspect in Edo, gain much support from the fusion of tone marks in the different distinctions. The study has semantic implications for the entire verb system of Edo apart from morpho-syntactic ones.

Notes

1. V¹ represents the heightened rising tone on the CVV monosyllabic verb type proposed by Omozuwa (2003). We propose the diacritic ¹ to differentiate between the regular rising tone v of the present tense and the heightened one of the past tense.
2. Three distinctive /r/ consonant phoneme occur in the Edo sound system represented orthographically as r, rr and rh. Only the single /r/ is permitted to occur with the past tense suffix.(Omozuwa).
3. Permitted to occur with the past tense suffix.(Omozuwa).
4. *Ghara*¹ is a preverbal auxiliary, which marks the future progressive imperfective aspect. It bears two high tones like the past progressive marker, with the high on the second syllable being heightened. The diacritic¹ is used to represent this heightening.

References

- Agheyisi, Rebecca (1986). *An Edo-English Dictionary*. Ethiope Publishing Corporation: Benin City.
- Agheyisi, Rebecca (1990). *Edo Grammar*. UNESCO.
- Aikhionbare, Matthew (1986). *Aspects of the Verb Phrase in Edo*. An Unpublished M.A. Department of Linguistics and Nigerian Languages. University of Ilorin, Ilorin.
- Amayo, Airen (1976). *A Generative Phonology of Edo (Bini)*. An Unpublished Doctoral Thesis, University of Ibadan, Ibadan.
- Amayo, Airen and Elugbe, Ohi (1983). *Edo Orthography*. In Kay Williamson (ed). *Orthographies of Nigerian Languages. Manual II*. National Language Centre. Federal Ministry of Education. Lagos. pp.1-11
- Binnick, Robert (1991). *Time and the Verb. A Guide to Tense and Aspect*. Oxford University Press. New York.
- Chomsky, Noam (1981). *Lectures on Government and Binding*. Foris Publications; Dordrecht.
- Comrie, Bernard (1976). *Aspect. In Introduction to the study of Verbal Aspect and Related Problem*. Cambridge University Press, Cambridge.
- Comrie, Bernard (1985). *Tense*. Cambridge University Press, Cambridge.
- Crystal, David (1985). *A Dictionary of Linguistics and Phonetics*. Basil Blackwell Limited, Oxford, U.K.
- Culicover, Peter (1997). *Principles and Parameters*. An Introduction to Syntactic Theory. Oxford University Press, New York.
- Elugbe, Ben (1989) *A Comparative Edooid: Phonology and Lexicon*. Port Harcourt Series. 6; University of Port Harcourt, Press.
- Dunn, Ernest (1968). *An Introduction to Bini*. African Monograph No.9. African Studies Centre Michigan State University, Michigan.
- Emovon, Aimuamwosa (1980). *An Introductory Study of Tense and Aspect in Edo (Bini)*. A paper Presented at the 14th Congress of West African Linguistics Conference at Cotonou, Republic of Benin.14th-18th April.
- Ero, Osemwegie (2003). *Egirama Edo Nogbae (Intensive Edo Grammar)*. Osunero Consult Incorporated. Benin.

-
- Frawley, William et al (1992). *Linguistic Semantics*. Hilldale: Lawrence Erlbaum Associates, New Jersey.
- Igboanusi and Peter 2005
- Langacker, Ronald (1972). *Fundamentals of Linguistics*. Harcourt Brace Inc. New York.
- Lyons, John (1977). *Semantic Vol.2*. Cambridge University Press, Cambridge.
- Ogie, Ota (2003). "About Multi-Verb Constructions; Past Tense Suffixation and Syntactic Representation in Edo". Proceedings of the Workshop on Multi-Verb Constructions. Trondheim Summer School.
- Omamor, Augusta (1982). "Tense and Aspect in Itsekiri". In *Journal of West African Languages*. Vol.11 pp.103-104.
- Omoruyi, Thomas (1991). "Tense, Aspect and Modality in Edo". In *Afrika Und Ubersee*, Band 74. pp.1-19.
- Omozuwa, Victor (2003). "Tones in Edo. An Experimental Overview". In *Kiabara Journal of Humanities*. Vol. 9 No.1 pp 57-65.
- Quirk, Randolph et al (1972) *A Grammar of Contemporary English*. Longman, London.
- Welmers, William (1973). *African Language Structure*. University of California Press, California.
- Williason, Kay and Belench, R (2000) Niger-Congo. In Hein, Bernd & Dereck Nurse (eds. 2000). *African Languages: An Introduction* p. 9-42.