Tone and Nominalization in Edo

Abstract. Tone and nominalization interact in Edo, a minority language spoken by about 2½ million people in the mid-western part of Nigeria. For this study data were collected and analyzed using the theory of autosegmental morphology, a geometric approach to the analysis of language that states that the phonetic representation be composed of a set several simultaneous sequences of these segments, to study this interaction. The research shows three patterns of nominalization in Edo based on the tones they bear. The first involves the creation of an all-low tone patterns from diverse input; the second involves tone polarization also from diverse inputs; the third shows there is no tonal changes after collocation. The study reveals that Edo is distinctive because of the unique roles that tones play in the nominal constructions. The study therefore contradicts earlier claims by Omozuwa (1997) that only vowel ò can occur as a nominal prefix in verb phrases and that the tonal outputs of the nominalization are always low. The study also demonstrates that after collocating nominalizing prefixes with certain verb phrases, their tonal outputs can either be LLL (L) or LHL (H). That apart from the low tone prefix /ò/ other vowels can also be used to nominalize the verb phrase.

Key words: Edo, autosegmental, nominalization, phonotonemic, nominal prefix, tone
1.0 Introduction

Nominalization in Edo is characterized by complex morphotonemic alternation. These tonal reflexes are syntax driven. The tonal patterns noticeable in the nominalization in the language are triploid/threefold. The first involves the creation of an all-low tone pattern from diverse input; the second involves tone polarization also from diverse inputs; in the third case, there are no tonal changes after collocation. Syntactic reasons account for these diverse outputs. First, the prefixal nominalization that causes an all-low tone involves non-gerundive nominals, while those that create polarization produce gerundive nominals. It must, however, be noted that both polarization and the creation of an all-low tone pattern take place with nominalization after vowel elision. After collocation, what we have is either an all-low tone pattern or a LHL (H) tonal pattern.

Although earlier studies on Edo and related languages, (Elugbe1973, Amayo 1976 and Omozuwa (1997) for Edo; Elimelech (1976) for Etsako, Donwa (1982) for Isoko; Egbohare (1990) for Emai; Urua (1990) for Ibibio and Aziza (1997) for Urhobo), have all discussed the roles of tones in Noun-phrase construction in various dimensions, available records show that this is the first of such attempt to examine the roles of tones in nominalization. This work controverts earlier claims by Omozuwa (1997) and Aziza (1997) concerning the peculiarity of the tonal patterns of the non-gerundives in Edo and Urhobo respectively.

2.0 Theoretical Framework


What is presented in this work is, however, an abridged version of autosegmental phonology, which draws abundantly from the works mentioned above. We adopt a non-linear approach within the autosegmental paradigm.

The theory of autosegmental phonology came as a result of the inadequacies of the earlier theory propounded by Chomsky and Halle (1968) in their book, The Sound Patterns of English (SPE). They are of the view that phonetic representation is linear. They describe utterances as ‘bundles of unordered features arranged in an ordered sequences’. However, it was discovered, ‘Ever since there have been segments in phonology, there have been phenomena that evaded segmental classification, and so there have been suprasegmental’ (Goldsmith 1976b: 05). It is this fundamental shortcoming of SPE that gave birth to autosegmental phonology. This theory attempts to provide adequate understanding of phonetic representation. The theory was proposed by Goldsmith (1976a), who asserts,

Autosegmental phonology constitutes a particular claim, then, about the geometry of phonetic representations; it suggests that the phonetic representation be composed of a set of several simultaneous sequences of these segments, with certain elementary constraints on how the various levels of sequences can be interrelated.

Goldsmith contradicts Chomsky and Halle (1986) with the following proposals.

i. Phonetic representation is multilinear or multitiered (Goldsmith 1976a):
ii. Tiers are linked;
iii. Feature specifications have an internal hierarchical structure (Striade 1982; Clements 1985; Sagey 1986).
iv. Some tiers may be morphemes (McCarthy 1979; 1981; Sagey 1986)
The standard generative phonology model was unable to account for some phonological phenomena in natural languages. A fundamental problem of *SPE* is that it sees segments as atomic elements which are linearly ordered with segments, some of which bear suprasegmental properties, for example, tones, arranged in a neat sequence. But the relationship between the segmental and suprasegmental levels is not given serious consideration in this theory.

There are two levels of representation given by *SPE*, the underlying and the surface. There is a rule that converts the underlying representation to surface representation. These rules are capable of adding or deleting features. But the kernel of autosegmental phonology is that the underlying and surface forms consist of parallel strings of segments arranged in two or more tiers, which Goldsmith (1976a) further affirms to be,

> parallel sequences of segments, none of which ‘depend’ or ‘ride on’ the others. Each is independent in its own right, hence the name autosegmental level.

Despite the fact that the tiers are independent, they still need to be connected to each other for one to obtain a well-formed phonological representation. This is done with the aid of association conventions, which we shall discuss later.

Apart from the inadequacies of the standard generative phonology discussed above, it cannot account for other phenomena in tonology, which autosegmental phonology is able to fully resolve. These are representation of contour tones, tonal preservation, melody levels, the issue of floating tones, and the bi-directional spreading in language.

### 3.0 Nominalization and Tone in Edo

Nominalization is a process of deriving nominals from a combination of other lexical categories or phrasal entities. In Edo, a noun is formed from a combination of a prefix and a verb phrase or from the combination of a prefix and other lexical categories. Nominalizations can be separated
in two categories, gerundive and non-gerundive. Gerundive nominals are formed by the
affixation of a discontinuous morpheme ù...mwè to a verb stem. In most cases, the tonal pattern
on them is LHL (H), while gerundive nominals are formed by the affixation of prefixes to verbs
or verb phrases. The tones on them are peculiar; they all have low tone i.e. LLL (L). In Edo,
nominalization as a word formation process is very productive. Nouns are formed from other
lexical categories, including nouns themselves. These nouns are formed through the
concatenation of other lexical items. The structure of Edo nominalisation that we will examine in
this work can be represented as:

1. Noun prefix + vb + (vb) + Nn + Nn → nominalization.

The above representation says that nouns can be formed with the concatenation of a nominalising
prefix (which can be any of the following six oral vowels i; ù; ô; è; à); a verb; optionally
another verb; a noun; and, optionally, another noun. Let us consider these examples:

2. i) ô # dòlò # èvbò → òdòlèvbò
   Nam. prefix ‘to reconcile’ ‘people/kind’ ‘social conformist’

   ii) i # ghè # ègbè → ighègbè
       Nam. prefix ‘to support’ ‘body’ ‘self support; security’

   iii) ô # só # árábà → òsòárábà
        Nam. prefix ‘to tap’ ‘rubber’ ‘rubber tapper’

Omozuwa (1997) and Aziza (1997) noted the peculiarity of the tonal pattern of the non-
gerundive nominals in Edo and Urhobo respectively. Omozuwa (1997:116) said that “all
instances of CV # VCV (CV) collocation or indeed all verb phrases in Edo could be nominalized
by means of a low tone prefix ô. Thus, irrespective of the tones on the verb phrase, the
nominalised forms are realized with a low melody on successive syllable”. Some of his examples
include the following:

3. i ô # lè # ízè → òlìzè
   ‘nom. prefix’ ‘cook’ ‘rice’ ‘boiling rice’
Omozuwa (1997:116) in his statement above made two assertions. First, that it is only the vowel Ò that can occur as a nominal prefix. Second, that the tonal outputs of the nominalisation are always low tones. From the available data at our disposal, we will not agree with this. This is because after collocating nominalising prefixes with certain verb phrases, their tonal outputs are not always low. Hence, the sub-categories of gerundive and non-gerundive. Also, it is not only the low tone prefix Ò that can be used to nominalise the verb phrase. In fact, six of the oral vowels in the language can be used. Let us consider these examples:

4. i) Ò # ëfúà → Òëfúà
   Nom.prefix ‘to perish’ ‘destruction; annihilation’
 ii) Ò # kхиè → Òkхиè
    Nom.prefix ‘to mourn’ ‘mourner’
 iii) È # ëtàlò → Ètàlò
     Nom.prefix ‘to talk’ ‘the act of talking’
 iv) È # iyámà → ‘iyámà
    Nom.prefix ‘to put a mark’ ‘an identification mark’

The above examples from our data controvert Omozuwa (1997) claims that tonal outputs of the nominalization are always low tone. It is also seen that other vowels in the language can also participate in the nominalization process.

Aziza (1997:217) also noted the influence of a nominalizing prefix on a verb phrase in Urhobo (an Edoid language) when she said that most nominals, which signal the agentive, are derived from verb + noun sequences and bear only low tones. The process of nominalization includes alternating the original tones borne by the nouns so that all the vowels in the nominals are realized on low tones. Some of her examples include:
5. i) jórè + íghó → ìjóríghó
   ‘hold’ ‘money’ ‘treasurer’

   ii) tà + ótá → ótòtá
       ‘say’ ‘word’ ‘spokesman’

   iii) rèrè + ó!tá → órèròtá
       ‘watch’ ‘ground’ ‘security guard’

Aziza recognizes only two nominalizing prefixes, /ò/ and /ô/, which we assume are driven by vowel harmony.

4.0 Types of Verb Stems in Edo Nominalization

However, we shall look at the various types of stems that are utilised in this nominalization process. Based on their morphological behaviours, Edo verb stems can be categorized into five main groups. These are simple verb stems; splitting verb stems; verb + noun stems; verb + verb + noun stems; and verb + noun + noun stems. Any of these stems can be collocated with the vowel prefixes to give us the various nominals that we have in the language. We will give samples of these stems with their various vowel prefixes.

4.1 Simple Verb Stems

A simple verb stem may be either monosyllabic or bisyllabic. It is monosyllabic when it is CV and bisyllabic if it is either CVV or CVCV. Examples of monosyllabic simple verb stems are stated below:

   6. i) è # kpá → èkpá
       nom.prefix ‘vomit’ ‘vomiting’

   ii) i # vè → ivè
       nom.prefix ‘price’ ‘a price’

   iii) ù # wú → ùwú
       nom.prefix ‘die’ ‘death’

Examples of bisyllabic simple verb stem with CVV pattern are stated below:

   iv) à # rùé → àrùé
       nom.prefix ‘circumcise’ ‘circumcision’
v) ò # xòò → xòò
   nom.prefix ‘evil’ ‘malicious act; evil deed’

vi) è # fùà → èfùà
   nom. prefix ‘white’ ‘whiteness’

Examples of disyllabic simple verb stems with CVCV structures are stated below:

7. i) î # lèlè → ilèlè
   ‘follow’ ‘procedure’

ii) è # hòhò → Èhòhò
    ‘blow’ ‘wind’

iii) î # ghàghà → òghàghà
     ‘brag; show off’ ‘brag; boast; swaggering’

4.2 Splitting Verb Stems

These consist of two root morphemes. They are of two types, either two root verbs or a verb with a particle; some of these include:

8. i) ò # mù # rú → Ômúrù
    ‘carry’ ‘do’ ‘cheating’

ii) à # sî # kòkò → Àsíkòkò
    ‘pull’ ‘gather’ ‘gathering’

iii) à # fíà # gbè → Àfíàgbè
     ‘cut’ ‘particle’ ‘blessing’

vi. à # kú # gbè → Àkúgbè
   ‘join’ ‘particle’ ‘unity; accord’

Some of the structures of verb stems that we discussed above are not peculiar to Edo.

Egbokhare (1990: 80 – 84) makes a similar classification. However, his classification includes the following structures, which cannot be attested in Edo. These are VCV; VV; V and CVVV.

4.3 Verb + Noun Stems

These are verb stems with verb plus noun combinations. They are numerous in the data. Some examples of these will include:

9. i) ò # gbè # èhè → ògbèhè
    nom. prefix ‘pick’ ‘fish’ ‘fisherman’
4.4 Verb + Verb + Noun Stems

These are verb stems with serial verbs plus a noun as an object. Some of these examples include:

10. i) u # tón # yé # òtò → utòyòtò
   ‘bury on the ground’ ‘to set’ ‘ground’ ‘a big drinking pot buried to the rim in the ground to keep water cool’

   ii) u # dè # fi # àgbọ̀n → údẹ́yàgbọn
      nom prefix ‘fall’ ‘throw’ ‘world’ ‘one who dropped into the world; ‘an orphan’

4.5 Verb + Noun + Noun Stems

These are verb stems with a verb and two-noun combinations. Some of these examples are,

11. i) ì # re # o # ko # de → ìro # ko # de
    ‘eat’ ‘a parcel’ ‘way’ ‘eating of a parcel on the way’; ‘misappropriation of property’

   ii) ò # màà # òmwáń # òmwiń → òmàmàwànmàmwin
      ‘teach’ ‘person’ ‘thing’ ‘teacher’

4.6 Verb + Noun + Verb Stems

These are verb stems with verb + noun + verb combinations. Some of these examples are:

12. i) ò # myé # òmwáń # fá → òmyòmànfnàn
    ‘see’ ‘person’ ‘set free’→ ‘saviour (in the Christian sense)’

   ii) i # fáa # ègbé # rúá → ifáègbwá
       ‘disgrace’ ‘body’ ‘extreme’ ‘the act of disgracing oneself; ‘disgrace, embarrassment’

5.0 Meaning of Vowel Prefixes in Nominalization

The nominal prefixes that we have in Edo do not occur haphazardly, but can have the following semantic implications:
5.1 Instrumental. The prefix /u/ denotes instruments for achieving the action or state expressed by the verb or verb phrase to which it is attached. This instrumental prefix is not peculiar to Edo. Elimelech (1976) and Egbokhare (1990) attest to this in Emai and Etsako languages respectively. Egbokhare (1990) even goes further to say that the meaning comes out clearly in verb phrase nominalization where objects are involved in the process. Some of his examples include,

13. i) u # kpè # åròkà → úkpàkò̀n  
   ‘wash’   ‘teeth’    ‘chewing stick’

   ii) u # kpè # ábò → úkpàbò  
   ‘wash’  ‘hand’   ‘bowl for washing hands’

   iii) u # gbè # Ewè → úgbèwè  
   ‘kill’  ‘goat’    ‘plague/disease that kills goats’

When this vowel prefix is attached to the verb stems in Edo (as we have in Emai above) the output will be derived nominal with the meaning ‘an instrument used for performing an action’. Some of our examples are,

14. i) u # ghè # edè → ughèdè  
   nom prefix ‘look at’ ‘day’    ‘sun glasses’

   ii) u # gbè # èkùn → úgbèkùn  
   nom prefix ‘tie’   ‘waist’    ‘belt’

   iii) u # gbè # udyà → úgbìdyà  
   nom prefix ‘kill’  ‘tsetse fly’ ‘fly-whisk’

5.2 Agentive. o- and a- can be regarded as agentive nominal prefixes. They have a definite reference which can be glossed as ‘something / somebody’. Omoruyi (1990) is of the view that the agentive prefix q- appears to be derived from the underlying third person subject pronoun q he/she/it, which means ‘he who does’. We quite agree with this, considering the data we have at our disposal. We would want to assume that this agentive nominal is common to Kwa languages as attested to by Anagbogu (1981: 89) for Igbo; Egbokhare (1990:128) for Emai; Adéniyì
(2000:130) for Yorùbá. Examples include:

15. i) ọ # xié → ọxié

‘mourn’   ‘mourner’

ii) ọ # gbén # èbé → ọgbènbè

‘write’   ‘book’   ‘clerk’

iii) ọ # má # àxé → ọmàxè

‘to mould’   ‘clay pot’   ‘potter’

iv. à # bémwèn → abémwèn

‘stammer’   ‘stammerer’

v. à # gbè # irén → àgbirèn

‘be’   ‘dirty’   ‘a dirty person’

5.3 Abstractive. The prefix /ì/ derives abstract nouns from verb stems, i.e., names or qualities such as goodness, states or conditions such as sickness, health and actions such as arrival or departure (cf: Omoregbe 2000). Some of these examples include,

16. i) i # xèè # ègbé → ixègbè

‘support’   ‘body’   ‘self support’; ‘security’

ii) i # xòó # èkòò → ixèkò

‘bad’   ‘belly’   ‘unhappiness’

iii) i # wò # àkò → iwàkò

‘to be strong’   ‘tooth’   (strong of teeth) ‘avarice’; ‘greed’

5.4 Verbal Nouns. /é/ and /ó/ can be said to express the result of the action, process or state expressed by the verb.

17. i) ọ # mú # hèn → ọmùhèn

‘carry’   ‘begin’   ‘beginning’

ii) ọ # lèé # gàá → òlègàà

‘run’   ‘round’   ‘a ring’

iii) è # zùró → ëzùró

‘be stupid’   ‘stupidity’

vi) è # zághà-zághà → ëzághà-zághà

‘scatter’   ‘scatter’   ‘disorderliness’
Despite the prevalence of noun prefixes in Edo and in many Edoid languages, it might be misleading to conclude that all initial vowels of nouns in Edo are prefixes. Welmers (1973:184); Elimelech (1978); Donwa (1982) and Elugbe (1989) have all observed that these initial vowels could be vestigial prefixes of a decadent noun class system. As Omoruyi (1990:108) rightly said that the phonological forms of verbs and nouns overlap in several instances. However, they are semantically unrelated; therefore, the latter cannot be said to derive from the former. Some examples below attest to the above claim:

18.  i) khuó ‘be slippery’ òkhuò ‘woman’  
     ii) hú ‘grow fast’ òhù ‘anger’  
     iii) gà ‘serve’ ágá ‘chair’  
     iv) mòmò ‘borrow’ ômòmò ‘baby’

It must be noted that sequences of two identical vowels are usually reduced to one in the derivation of verbal nouns, e.g.,

19.  i) kùú ‘to play’ ikù ‘play’  
     ii) yànán ‘to vow’ èyánán ‘vow’  
     iii) ghòó ‘hawk’ Èghó ‘hawking’  
     iv) tènén ‘relate’ tènén ‘relation’

Also, in few cases in the language, vowel alternations occur in the verb stems when verbal nouns are derived from them, e.g.,

20.  i) vbiè ‘to sleep’ òvbé ‘sleep (n)’  
     ii) diè ‘be senior’ òdìò ‘senior’  
     iii) bó ‘divine’ òbó ‘diviner’  
     iv) viè ‘to cry’ èvé ‘cry (n)’
6.0 Types of Nominalisation in Edo

Basically, we identify three types of nominalization in Edo. We identify them from the point of view of different tonal patterns that they bear. These are gerundive nominalization with tone polarization, the non-gerundive nominalization with an all-low tone pattern, and those that bear no tonal changes.

6.1 Nominalization with All Low Tone Patterns

In this section, we will examine the structures with low tone patterns. As mentioned above, six oral vowels that take part in this process are: i; û; ò; è, à. The following examples illustrate each of the vowel prefixes in Edo combining with stems involving diverse tonal patterns.

6.1.1 Structures with prefix i

21. i) i # wó # akón → iwàkòn
   nom prefix ‘strong’ ‘tooth’ (strong of teeth) ‘avarice; greed’
   ii) i # bó # òwá → ibòwá
       nom prefix ‘build’ ‘house’ house-building’
   iii) i # hè # nhè # uñú → ihènhènhù
        nom prefix ‘level up’ ‘mouth’ (leveling of mouth) ‘a concensus’
   iv) i # ré # òkò # òdé → iryòkòdè
       nom prefix ‘eat’ ‘a parcel’ ‘way’ (eating a parcel on the way) ‘misappropriation of funds’

6.1.2 Structures with ù

22. i) ù # gbé # ádiyè → úgbàdiyè
    nom prefix ‘kill’ ‘chicken’ (that which kills chicken) ‘a disease fatal to chickens’
   ii) ù # gbé # ùdyánn → ùgbidyan
       nom prefix ‘kill’ ‘tsetsefly’ ‘fly-whisk’
   iii) ù # mú # òxòxo → úmwòxòxo
        nom prefix ‘catch’ ‘chicken’ ‘tiger cat’
   iv) ù # ghèè # ëdè → ùghèdè
       nom prefix ‘look at’ ‘day’ ‘sun-glasses’
6.1.3 Compound structures with prefix ò

23. i) ò # gbé # èhén → ògbèhèn
   nom. prefix ‘pick’ ‘fish’ ‘fisherman’

   ii) ò # gbën # èbè → ògbèbè
      nom. prefix ‘write’ ‘book’ ‘clerk’

   iii) ò # mà # àxè → ò màxè
      nom. prefix ‘mould’ ‘clay pot’ ‘potter’

   iv) ò # gwî # èzôn → ògwèzôn
      nom. prefix ‘quarrel’ ‘case’ ‘litigant’ (i.e., who argues a case)

6.1.4 Structures with prefix ò

24. i) ò # gha # gha → òghàghà
    nom. prefix ‘brag; show off’ ‘brag; boast’ ‘swaggering’

   ii) ò # èghè → òghè
      nom. prefix ‘fornicate’ ‘prostitution; adultery’

   iii) ò # bâlô → òbâlô
      nom. prefix ‘be painful’ ‘pain; misery’

   iv. ò # sôrô → sôrô
      nom. prefix ‘irritate’ ‘irritating sight’

6.2 Nominalization with LHL (H) Patterns

Under this section we will examine nominals with alternating tones i.e. LHL (H). In this case, the tones are polarized. These are also sub-divided into two. The first type is called gerundive nominals (cf. Elugbe 1989; Egbokhare 1990) while the second type of nominals is those that state actions or abstract nouns. In the case of the latter, four vowels (ì, o, à, ò) take part in these types of constructions, while in the former; it is only vowel ù that takes part in the constructions.

The following examples illustrate each of the vowel prefixes in Edo combining with stems involving diverse tonal patterns:

6.2.1 Structures with prefix ì

25. i) ì # yåyì → iyáyì
    nom. prefix ‘believe’ ‘belief’
ii) ì # tótàá → itótà
   nom prefix ‘sit’ ‘sitting’

iii) ì # zòzó → ìzózò
    nom prefix ‘wander’ ‘wandering’

iv) ì # yámat → iyámá
    nom prefix ‘put a mark’ ‘an identification mark’

6.2.2 Structure with prefix  ù

26. i) ù # dè # fi # ágbòn → ùdéfyágbòn
    nom prefix ‘fall’ ‘to throw’ ‘world’ (one who drops into the world)
    an orphan, one without relations’

ii) ù # hiá # mwén → ùhámwén
    nom prefix ‘struggle’ ‘being’ ‘struggling’ (with problems or difficulties)

iii) ù # bón # mwén → ùbónmwén
    nom prefix ‘predict’ ‘being’ ‘the act of predicting through the oracle’

iv) ù # ghán mwén → ùghamwén
    nom prefix ‘behave haughtily’ ‘being’ ‘arrogance; haughtiness’

6.2.3 Structures with prefix  ò

27. i) ò # fùrré → òfùrè
    nom prefix ‘be calm’ (coolness; calmness) ‘tranquility’

ii) ò # xòò → òxòò
    nom prefix ‘evil’ ‘malicious act’; ‘evil deed’

6.2.4 Structures with prefix  à

28. i) à # hòó # bèkúñ → ãhòbèkúñ
    nom prefix ‘look’ ‘unsuccessful’ ‘state of being lost’

ii) à # gbè # ètè → ãgbètè
    nom prefix ‘bring about’ ‘sore, ulcer’ ‘afflicted with bodily ulcers’

iii) à # fìyàngbè → ãfìyàngbè
    nom prefix ‘bless’ ‘blessing’

iv) à # gbè # ákpàń → ãgbákpàń
    nom prefix ‘cause’ ‘bald head’ ‘a bald person’
6.3 Nominalization without any Tonal Change

In this case, we discover that there is neither tonal polarization nor the creation of all-low tones.

What we notice is that all the elements that constitute the nominal still retain the tones they bear after collocation. Some of these examples are:

29. i) \( ò \)    # fùá \( → \) òfùá
    nom prefix  ‘perish’   ‘destruction’; ‘annihilation’

   ii) \( ò \)    # xié \( → \) òxié
        nom prefix  ‘mourn’    ‘mourner’

   iii) \( ò \)    # xòò \( → \) òxòò
            nom prefix  ‘evil’    ‘evil’

   iv. \( ò \)    # ròò \( → \) òròò
           nom prefix  ‘transgress’    ‘sin’; ‘wrongdoing’

In the analyses of these three different tonal patterns above, first, we discover that, when the nominalizing prefixes (which can be any of the six oral vowels) are collocated with the verb and noun stems, all the tones on the verb stems are realized as low tones. Thus, irrespective of the tones on the verb and noun stems before collocation, the outputs are always low tones. The first analysis, which one may be tempted to use is the low tone spreading rule arising from the low tone of the nominalizing prefixes. In this case, we will postulate low spreading to potentially indefinite H tones in the construction. But as good as this analysis is overtly, we may not be able to justify it because such a rule will be too powerful if we consider the fact that we have never had a situation where L tones have such a dominating behaviour in Edo or in any other Edoid languages. Another option is to postulate a rule that will replace all the high tones with low tones after vowel elision. If this is done, the outcome of all the collocations will then create all low nominals.

Finally, we can postulate a grammatical floating low tone, which has been referred to as ‘tomorph’ by Elugbe (1985). This low tone will then link to other tones in the construction after
vowel elision. The output will also give us all low tone nominals. We must say that any of the last two analyses can be adopted to give us the fact of the tone in Edo. We will, however, adopt the latter option by postulating a grammatical floating low tone, because if its simplicity. Semantically, it is seen that most of the examples in this category (non-gerunds) signal agentive nouns. We must remark that these types of all low tones are not peculiar to Edo. Aziza (1997) notes, ‘most nominals which signal agentive meaning are derived from verb + noun sequences and they bear only low tones’. Although, Aziza (1997) did not tell us how she derived these all low tone patterns. However, this is not the case with Emai as seen from Egbokhare’s (1990) examples. There are no particular patterns on the tones of the verb phrase. Some of his examples include:

30. 
   i) à # sì → àsì
      ‘inhale/pull’ ‘snuff’
   ii) è # fè → èfè
      ‘be rich’ ‘riches’
   iii) é # kpà → ékpà
      ‘to vomit’ ‘vomit’
   iv) ó # hòó → òhòó
      ‘be dizzy’ ‘dizziness’
   v) ô # fò # ré → ôfòré
      ‘cold’ ‘arrive’ ‘dampness’

It is seen from the Emai examples that the creation of all-low tones as we have in Edo and Urhobo do not apply to Emai. It does not also seem that the non-gerunds in Emai follow a particular tone pattern as enunciated by Egbokhare (1990).

The second pattern is that in which after collocating the nominalizing prefix with the verb and noun stems what we have is LHL (H) tonal pattern. These, as mentioned earlier, are either gerundive or those nominals that state actions or abstract nouns. The former, according to Elugbe (1989) and Egbokhare (1990) are called gerundive nominalization, i.e., Gerundivisation, which
turns verbs into gerunds. It is marked by the polarization of tones on the syllable peaks in Edo. They are formed by the affixation of the discontinuous morpheme ù...mwè to a verb stem. What we observed here is that the initial tone of the verb takes a tone that is polar opposite to the tone on the vowel prefix /ù/. Therefore, we will postulate a polarization rule for the tones in this category. We support Elugbe (1984:86). He examines six Edoid languages; these are Degema, Uvie, Isoko, Edo, Yekhee and Emhalhe. He concludes that ‘the full morpheme was *u-...-amhi in Proto Edoid’. Some of his examples will include:

31. i) gò → úgómwè
   ‘shout’ ‘shouting’
   
   ii) gbè → úgbémwè
   ‘beat’ ‘beating’
   
   iii) fù → ûfùmwè
   ‘be calm’ ‘be calm; calmness’
   
   iv) mé → úmèmwè
   ‘hiss’ ‘hissing’

From the examples given above, it is seen that the tone of the verb stems take the tone that is polar opposite the tone of the nominal prefix ù. Elugbe (1984:87) raises the possibility of functionally separating the prefix from the suffix. According to him “since PE is assumed to have employed only prefixes to mark noun classes, the possibility that the class marking U-prefix was originally different from the suffix -amhi cannot be discarded. Thus, while -amhi was used after the verb stem to deverbalise it, U was prefixed to the stems to mark it for a particular class”. We agree with Elugbe (1984) in functionally separating the prefix and suffix. There are numerous examples where U- is prefixed to verb stems and in such cases, this prefix identifies the result of the action or process of doing. Thus, the gerundiveness is the result of the suffixation of -amhi. The addition of U- follows the process of deverbalization, which requires that the resultant noun be allocated to a class. Egbokhare (1990)’s account of Emai is closer to
what Elugbe reports and which is confirmed by this study. In its case, it is marked by the affixation of a discontinuous morpheme /u’… υi/ as well as a high tone on the third syllable of a gerundive nominal. Some of his examples include:

32.  i) /à/ ‘run’ [ùlàmì] ‘running’
    ii) /ò/ ‘drinking water’ [ùòmì] ‘drinking’
    iii) /è/ ‘eat’ [ùëmì] ‘eating’
    iv) /fì/ ‘throw’ [ùfìmì] ‘throwing’

From our observation, it is seen that the tonal patterns of the gerundive nominals in Emai are similar to the tonal patterns in Edo.

Our analyses of the second types of constructions suggest that the analysis of state action or abstract nouns will be somewhat similar to that of gerundive nominals. We will equally postulate a polarization rule. We will assume that it is the nominalising prefixes that trigger off this polarization.

Before rounding up this section, we note from the available data that it may not be possible to subject the same inputs to the two changes. That is, the same nominalizing prefix and verb stem may not produce nominals that will have all low tones and LHL (H) tonal patterns.

7.0 Conclusion

An attempt is made in this paper to look at the roles of tones in nominalization in Edo. It was discovered that tones play significant roles in the grammar of the language, as equally attested to in Adéníyi (2003). The demarcation of different types of nominalization in Edo was based clearly on the different tones they bear. While a type of nominalization with all-low tones was classified as non-gerundive, another with polarization was classified as gerundive. This paper also made attempt to debunk earlier claims made by Omozuwa (1997). With the available data at our disposal, we were able to controvert earlier claims in Omozuwa that it is only the vowel ò
that can occur as a nominal prefix. We have seen clearly from this paper that six oral vowels in
the language can be used as nominalizing prefixes. The earlier argument that the final outputs of
the nominalization are always low cannot also hold. It was demonstrated that the tonal output of
the nominalization could either be all low or LHL (H) tones.

In all, we have been able to account for the different tonal behaviours in Edo in a
principled way. Hitherto, this has posed a challenge to linguists. This paper has therefore,
Attempts a contribution to the ongoing debate in this regard.
References


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