

Journal of West African Languages XVI.2 (1986)

PLURALIZATION STRATEGIES IN EDO

Thomas O. Omoṛuyi

Dept. of Linguistics and African Languages
University of Benin, Benin City

This paper¹ is a synchronic investigation of the different strategies for making number distinction in Edo. The language operates a two-tier system of singular and plural but few human nouns are overtly marked for plurality. We examine the different vowel alternations for singular and plural in Edo and some Edoid languages, and argue that it is by vowel substitution in word-initial position and not by prefixation. Noun prefixes perform different functions so there are no prefixes that function solely for pluralization. We find the use of the pluralizer *ávbé*, pluralizing verbs and reduplication to be effective alternative strategies. These explain why vowel substitution is not widespread in Edo as it is in other Edoid languages.

Cet article s'agit d'une enquête synchronique concernant les différents procédés de la distinction des nombres en Edo. La langue s'opère sur un système à deux-tiers du singulier et du pluriel mais peu de noms humains sont overttement marqués par la pluralité. Nous examinons les différentes variations des voyelles du singulier et pluriel en Edo et quelques langues Edoid pour tenir l'argument que c'est plutôt par substitution des voyelles en position initial de mots et pas par prefixation. Les préfixes nominaux assument des fonctions différentes donc il n'y a pas des préfixes dont la seule fonction est de marquer la pluralité. On constate l'emploi du pluralisateur *ávbé*, les verbes pluralisateurs et la reduplication est en effet un des procédés alternatifs. Cela explique pourquoi la substitution des voyelles n'est pas un phénomène généralisé en Edo comme dans le cas des autres langues Edoid.

1. INTRODUCTION

Natural languages provide systematically for number distinctions but the realizational processes vary significantly from one language to another. Robins (1964:247) observes that the commonest number distinction is between singular and plural but some languages such as Ancient Greek, Sanskrit and Old Slavic "formally distinguish three numbers, called singular, dual and plural". Some Fijian languages, on the other hand, distinguish four numbers: singular, dual, trial or 'paucal' and plural. These differences clearly show that although the concept of plurality may be universal, the application is definitely not universal.

It has also been observed that the syntactic classes on which number is marked vary across languages. Formal expression of number can be observed in nouns, pronouns, adjectives, determiners, and so on in different languages. A major cause of these differences is people's arbitrary conception of count and non-count entities. This concept is relevant as we examine number distinction strategies in Edo.

Edo operates the apparently simpler two-tier system of pluralization in which the singular-plural dichotomy represents one entity and more than one entity respectively, but this two-tier system has its own intricacies. In the first place, only a small class of human nouns can be formally or overtly marked for singular-plural distinction. As a large proportion of Edo nouns are unmarked whether in their singular or plural forms one wonders how native speakers refer to one or more than one noun. Secondly, one wonders why Edo restricts formal singular-plural distinctions to very few human nouns whereas other closely related languages make such distinctions without hindrances. These questions call for a close examination of other syntactic categories, especially the verbs, adjectives and other pluralizing particles in the language.

Contextual information and knowledge of the world, of course, play significant roles in the singular-plural distinction but we do not wish to elaborate on these in this study. We shall also ignore numerals and quantifiers, which as a matter of course, must agree in number with the nouns they modify. Our aim is to investigate those strategies that have lexical or structural significance through which Edo speakers make number distinctions. We shall focus our attention mainly on nouns, verbs and pluralizing particles.

Edo (also called Bini) is a member of the Edoid group of languages (Elugbe, 1979) which belongs to the Kwa subgroup of the Niger-Congo family of African languages (Greenberg, 1963:8). Some analysts say that Edo structures are complicated by elision rules (see Welmers, 1973:42-3). In this study, we shall analyze unelided structures. Also, without necessarily making our study a contrastive analysis, we shall from time to time refer to the systems of some Edoid languages with a view to identifying their similarities and differences. We hope then to be able to explain why one system of pluralization is prevalent in one language but not prevalent in another.

The data for this study have come largely from our native speaker intuitive competence in Edo. We were, however, assisted by many informants.² We also used Edo data from written sources, especially from Itan Edagbon Mwen written by Jacob Egharevba, a renowned Edo writer who has served as informant to many eminent linguists.

2. PLURAL FORMATION THROUGH VOWEL SUBSTITUTION

2.1 PLURALIZATION OF HUMAN NOUNS THROUGH VOWEL SUBSTITUTION

Strictly speaking, only a few Edo nouns which possess the semantic feature [+Human] can be pluralized through vowel substitution in word-initial position. These include cases in which the following changes take place:

(1) Singular ɔ changes to e for plurality³:

òkhàèmwè	'chief'	èkhàèmwè	'chiefs'
òdiònwèré	'village head'	èdiònwèré	'village heads'
òtén	'relation'	ètén	'relations'
òmwa	'person'	èmwa	'persons'
òvién	'slave'	èvién	'slaves'
òmó	'child'	èmó	'children'
òkhèn	'traveller'	èkhèn	'travellers'
òbó	'doctor'	èbó	'doctors'
òguòmwaðià	'servant'	èguòmwaðià	'servants'
òná	'this one'	èná	'these ones'
òníí	'that one'	énií	'those ones'

(2) Singular ɔ changes to i for plurality:

òdùèkì	'trader'	ìdùèkì	'traders'
òmùàdà	'royal sword bearer'	ìmùàdà/èmùàdà	'royal sword bearers'
òsùàràbà	'rubber tapper'	ìsùàràbà	'rubber tappers'
òrhiàèvbò	'malefactor'	ìrhiàèvbò	'male-factors'
òdòlèvbò	'social conformist'	ìdòlèvbò	'social conformists'

(3) Singular o changes to i for plurality:

òkpià	'man'	ìkpià	'men'
òkhùò	'woman'	ìkhùò	'women'
ògiè	'king'	ìgiè	'kings'
òvbíyòkùò	'soldier'	ìvbíyòkùò	'soldiers'
òvbiógùè	'poor person'	ìvbiógùè	'poor persons'
òvbiyé	'child of the same mother'	ìvbiyé	'children of the same mother'

Our data reveal only one example in which e changes to i for plurality. This is the initial vowel alternation in *éghélè* 'young man' and *íghélè* 'young men'. There is also only one occurrence of suppletive variation in which *òvbókhàn* 'child' becomes *ìbièkà* or *ìbièlèkà* 'children'. The plural is phonologically unrelated to the singular except that it conforms with the ɔ to i vowel alternation in (2).

In most Edoid languages, nouns whether human or non-human can be pluralized through the process of vowel substitution in word-initial position. Kelly (1970/71:12) carefully tabulates the

singular-plural vowel pairings for Urhobo, Epie, Dẹgẹma, Ora and Esan - all Edoid languages. Some examples Elimelech gives (1978:15) in Yẹkhee (Etsakọ) are as follows:

(4)	[akpa]	'cup'	[ikpa]	'cups'
	[ukpo]	'cloth'	[ikpo]	'cloths'
	[εkpε]	'tiger'	[ekpe]	'tigers'
	[ope]	'rat'	[epe]	'rats'

He underlines all the word-initial vowels for both singulars and plurals and calls them 'vowel prefixes'.

In Urhobo, our informant gave the following examples:

(5)	úkó	'cup'	íkó	'cups'
	àmá	'cloth'	èmwá	'cloths'
	óhò	'chicken'	éhò	'chickens'
	èni	'elephant'	ini	'elephants'

Also, in Emai the following singular-plural pairings can occur. Since Emai has no standard orthography, a phonetic transcription is used.

(6)	[úkó]	'cup'	[íkó]	'cups'
	[úkpū]	'cloth'	[íkpū]	'cloths'
	[ófè]	'rat'	[éfè]	'rats'
	[ʃʃxʃ]	'chicken'	[éʃxʃ]	'chickens'

The Edo translations of these Yẹkhee (Etsakọ), Urhobo and Emai examples cannot be pluralized through initial vowel substitution because they do not possess the semantic feature [+Human] which we earlier identified as a prerequisite for pluralization through initial vowel substitution. Therefore, the plural of o-xwae 'basket' cannot be *i-xwae 'baskets' in Edo as erroneously given by Westermann and Bryan (1952:92). We also disagree with the isolation of o and i in these examples as prefixes.

2.2 PLURALIZATION OF NON-HUMAN NOUNS THROUGH VOWEL SUBSTITUTION

We should hasten to add that semantic extensions make it possible for some non-human nouns to be pluralized by initial vowel substitution. For example, in (1) above, the deictic pronouns ọ̀nà 'this one' and ọ̀nií 'that one' can be pluralized as 'ènà 'these ones' and énií 'those ones' respectively even when they are used with reference to non-human nouns. The emphatic form of ọ̀nà is ọ̀nọ̀nà 'this particular one' and the plural is énéni 'these particular ones'. Ọ̀nií has no emphatic form. It is possible to pluralize these deictic pronouns even when they replace non-human nouns because Edo does not make any gender distinction - whether masculine, feminine or neuter - in its pronominalization system. Human pronouns can be extended to non-human nouns in usage.

A semantic extension is even more noticeable in the use of the genitival prefix *òvbí-* which translates as 'child of ...' (See (3) above). In its literal sense, *òvbí-* possesses the semantic feature [+Human] so when it is pluralized as *ìvbí-* 'children of ...' it does not violate the rule that only human nouns can be pluralized in this manner. However, *òvbí-* is commonly employed as a diminutive prefix when it occurs with non-human nouns. It can still be pluralized as *ìvbí-* as in the following examples:

(7)	<i>òvbiówà</i>	'small house'	<i>ìvbiówà</i>	'small houses'
	<i>òvbiógò</i>	'small bottle'	<i>ìvbiógò</i>	'small bottles'
	<i>òvbímótò</i>	'small car'	<i>ìvbímótò</i>	'small cars'
	<i>òvbiéwè</i>	'small goat'	<i>ìvbiéwè</i>	'small goats'

The literal translation of *òvbiówà* (or *òvbí-òwá*, as some writers prefer to see it as a compound noun) in (7), for example, will be 'child of house' but the intended semantic interpretation is 'a small house'. This device of prefixing *òvbí-* to nouns for the purpose of diminution and the subsequent substitution of the initial vowel for the purpose of pluralization which results in *ìvbí-*, makes it possible for a number of non-human nouns to be pluralized overtly. Our informant in Esan tells us that *òvbí-* and *ìvbí-* are also commonly used as diminutive prefixes.

2.3 PLURALIZATION OF PRONOUNS

Number, person and privilege of occurrence in the sentence determine the forms of Edo personal pronouns. Thus, the language has first person singular and plural, second person singular and plural, and third person singular and plural pronouns. The underlying pronouns are used for emphatic purposes while elision creates many variants. Subject pronouns and their variants are as follows:

(8)

Person	Number	Underlying forms	Variants	Gloss
1st person	sing.	<i>ìmèmwè</i>	<i>mèmwè, ìmè, mè, i</i>	'I'
	plur.	<i>ìmàmwà</i>	<i>màmwà, ìmà, mà</i>	'we'
2nd person	sing.	<i>ùwè</i>	<i>wè, u</i>	'you'
	plur.	<i>ùwà</i>	<i>wà</i>	'you'
3rd person	sing.	<i>ìròrèn</i>	<i>ìrèn, ròrèn rèn, ọ</i>	'he/ she/it'
	plur.	<i>íràn</i>	-	'they'

Object pronouns and their variants are as follows:

(9)

Person	Number	Underlying forms	Variants	Gloss
1st person	sing.	ìmèmwè	mwè, imè	'me'
	plur.	ìmàmwà	mwà, imà	'us'
2nd person	sing.	ùwè	rùé, ué	'you'
	plur.	ùwà	rùá, uá	'you'
3rd person	sing.	ìròèṅ	ìrèn, ónrèn rèn, éṛé, éṅ	'him/ her/it'
	plur.	íràn	-	'them'

We observe in (8) and (9) that the first and second person singular pronouns are pluralized through vowel substitutions in word-final position. The third person singular pronoun is, however, pluralized by substituting vowels word-medially.

2.4 PHONOLOGICAL RULES FOR VOWEL SUBSTITUTION

A synchronic study of Edo singular and plural nouns does not reveal any phonological conditioning in the vowel substitution pattern. We are unable to adduce the phonological motivations for the alternation of ọ and e in (1) and then ọ and i in (2). In fact, our informants sometimes gave variant forms as can be observed in the plural of ọmàdà and the plural èmàdà, but what really concerns us here is the initial vowel alternation.

The vowel alternation in Yekhee (Etsakọ) is largely predictable. Elimelech (1976) observes 'that nouns which have initial [i], [u] and [a] in singular show an initial [i] in the plural, whereas those with [e], [ɛ], [o] and [ɔ] in the singular have initial [e] in the plural'. Also, Elugbe (1976a) says 'in Ghotuo, a North-Central Edo language, a word with a singular u-prefix always takes an i- prefix in the plural'. The only phonological pattern we observe in Edo nouns is the tendency for the singular back vowels ọ and o to change to higher front vowels e and i.

2.5 A CASE AGAINST PREFIXATION APPROACH TO EDO PLURALITY

All Edo nouns commence and end with vowels. This is a common characteristic of Edoid languages on which data are available. A diachronic study of these nouns suggests that these initial vowels are prefixes. Plurality has consequently been examined in terms of prefixation. Laver (1969:261) says 'like other Edo languages, Etsakọ uses vowels as number-prefixes in nouns'. Westermann and Bryan (1952:92) use hyphens to isolate the prefixes from the stems in their wrong Edo examples of o-xwae 'basket' and *i-xwae 'baskets' (also see Elimelech 1976, 1978; Elugbe, 1976a; and so on).

A synchronic study of Edo nouns reveals that some initial vowels can be isolated as prefixes. For example, *u-* in *ùghègbè* 'mirror', *ùgbètò* 'scissors', *ùgbèkùn* 'belt', *ùkpákòn* 'chewing stick', and so on, is an instrumental prefix. This analysis is plausible because *ghé ègbé!* for example, is an imperative construction which translates literally as 'look body' while the initial *u-* gives the sense of 'something for looking at the body'. The prefix *òvbí-* 'child of ...' as we observed in (7) is a diminutive prefix. Also, all the examples in (2) commence with the agentive prefix *ọ*. For example, *dùèkì!* 'trade!' is an imperative construction derived from *dò èkì!* which translates literally as 'hold market!'. The *ọ* that is prefixed to it designates 'a doer of something' or 'an agent'; therefore, *ọdùèkì* translates as 'a trader'.

It is, however, counterintuitive to isolate the initial vowels of some Edo nouns and label them as prefixes. For example, we can say that *kó* 'to meet' is the verb stem of *ikó* 'meeting' or 'gathering' and that the prefix *i-* is a nominalizer, but we cannot do a similar morphemic analysis for *èkó* 'camp', *èkó* 'belly', *ákó* 'pepper fruit', *àkó* 'enclosure', *òkò* 'parcel', *ókò* 'diviner's horn', *òkó* 'nest', *úkókò* 'tobacco pipe' and *úkó* 'calabash'. Similarly, we cannot analyze the initial vowels of *òdiònwèrè* 'village head', *òmwa* 'person', *òvièn* 'slave' in (1) and *òkpià* 'man', *òkhùò* 'woman', *ògiè* 'king' in (2) as prefixes except we completely disregard meaning in our morphemic analysis. Since these latter examples do not have identifiable prefixes, they can be entered separately into Edo lexicon.

Our contention, therefore, is that prefixation, whenever it occurs, serves a different purpose while plurality is a phonological process of substituting an initial vowel of nouns with another vowel - whether it is a prefix or not. In the case of the pronouns in (8) and (9) above, prefixation is totally out of the question in the pluralization processes. We also cannot talk about suffixation or infixation. There is only vowel substitution. These pronouns clearly show that pluralization and prefixation do not necessarily operate or occur together.

The pluralization of these Edo nouns and pronouns seems to us to be by what Langacker (1972:65) calls 'process morphemes' which according to him, 'have no segmental representation of their own; they are manifested instead through phonological modification of other morphemes'. Langacker illustrates with the past tense formation in English verbs such as 'sing' and 'ride' which become 'sang' and 'rode' respectively. He thinks that 'it would be artificial to point to any segment of 'sang' as the past tense morpheme'. In the same vein, we cannot identify any segment in Edo nouns that is solely for pluralization. If plurality is overtly marked in a segment, such a segment has some other basic functions in the noun formation. Such functions may even be prothetic as can be observed in the noun *nógiè* 'king' (derived from a relative clause) and *ènógiè* 'king' with the plural *ènígiè* 'kings'.

On the restriction of the system of vowel substitution to a few human nouns in Edo, Kelly (1970/71) similarly observes that 'very few formally marked singular-plural pairs exist' in Esan and Ora human nouns. This further justifies Elugbe's (1979) classification of these three languages as a sub-branch of the Proto-North-Central Edoid. Kelly posits that this system of pluralization is lost in these languages and he also observes 'that the singular-plural distinction is going out of use in contemporary Urhobo' (p.6).

Vowel substitution may have historically fallen into disuse in Edo, Esan and Ora as the languages adopted some innovations for pluralization which we have not found in some North-Western and South-Western Edoid languages. For example, we are informed that the use of the pluralizer *ávbé* or similar lexical items and the occurrence of pluralizing verbs (see 3.0 and 4.0 below) are unknown in Yekhee (Etsako) and Urhobo. The initial vowel substitution in only human nouns in Edo may, in fact, be a remnant of an ancient system of pluralization in Proto-Edoid.

On the other hand, one can reasonably argue that initial vowel substitution may have been restricted to only human nouns in Proto-Edoid as a way of distinguishing the most important noun from other nouns. Other strategies we shall discuss below may have been employed for pluralizing non-human nouns. However, North-Western, South-Western and Delta Edoid languages may have extended the system of initial vowel substitution to non-human nouns. They may have lost the use of pluralizing verbs and other devices which, as we shall soon discover, are more complex in their operation. They may have opted for the simpler system of pluralization. Our data on other Edoid languages are unfortunately insufficient for us to draw conclusive inferences.

3. USE OF *ÁVBÉ* AS A PLURALIZER

A highly productive and simple system of pluralizing count nouns in Edo is to prepose the particle *ávbé* to them. It has no lexical meaning of its own nor a possible gloss in English. Its primary function is to pluralize nouns but it also adds some form of definitive function to this. A particle that performs a similar function in Esan is *ílàèn* or its variant *íbhàè*. In Emai, it is *évbá*, an interesting interchange of the vowels of *ávbé* in Edo. In a sense, the use of *ávbé* is similar to the use of *àwón* in Yoruba - a language that is also genetically related to Edo.

Ávbé can occur with all count nouns and the constraints of human and non-human distinction does not hinder its usage. Whenever it is preposed to a count noun, the noun is automatically interpreted as plural. For example:

(10)	<i>ágá</i>	'chair'	<i>ávbé ágá</i>	'chairs'
	<i>òwá</i>	'house'	<i>ávbé òwá</i>	'houses'
	<i>íkèkè</i>	'bicycle'	<i>ávbé íkèkè</i>	'bicycles'
	<i>iyán</i>	'yam'	<i>ávbé iyán</i>	'yams'
	<i>ígùé</i>	'village'	<i>ávbé ígùé</i>	'villages'

Our contention is that some transformations move or shift plurality from this particle to the noun that follows it. In the event of a noun that overtly marks plurality following *ávbé*, plurality will be doubly marked on the noun. We observe a tendency among young Edo speakers not to mark plurality on such a noun because they consider the second plurality marker superfluous. Strictly speaking, that would be ungrammatical. Since *ávbé* has no lexical meaning, we shall gloss it as PLUR (pluralizer) in the following examples:

- (11) *Ávbé èmó tótà yè ágá.*
 PLUR children sit on chair
 'Children are sitting on the chair'.
- (12) *Òsàró tì ávbé èbé nìí.*
 Osaró read PLUR book that
 'Osaró read those books'.

Plurality is doubly marked on *èmó* in (11) as it literally moves from the particle *ávbé* to *èmó* which is already inflected for the same purpose. **Ávbé òmó* 'children' is ungrammatical but appears acceptable to some of my informants who say that *ávbé èmó* is only 'more correct'. This probably confirms our earlier assertion that the introduction of innovations for pluralization resulted in the less frequent use of initial vowel substitution in Edo, Esan and Ora. Languages such as Yekhee (Etsako) and Urhobo which do not have such pluralizing particles rely heavily on initial vowel substitution.

In the case of nouns that are not inflected for plurality such as *èbé* 'book' in (12), plurality also 'moves' from *ávbé* to them and it becomes the only source of plurality interpretation for such nouns. The pluralizing function of *ávbé* continues after the plural interpretation for *èbé* in (12); it moves to *nìí* which is now interpreted as 'those'. Barring the context in which (12) is uttered, there is nothing else apart from *ávbé* that makes *èbé* a plural noun and *nìí* a plural demonstrative.

The use of *ávbáó* 'who (PLUR.)' in Edo interrogative sentences can be underlyingly traced to *ávbé*. For example:

- (13) *Ávbáó ó rri èvbàré (yí)?*
 Who (PLUR.) he/she eat food Q
 'Who ate food?'

In (13), *ávbáó* 'who (PLUR)' and *yí* are both question markers but *yí* occurs optionally and has no lexical meaning of its own so we have simply glossed it as Q (question marker). Although the interrogative pronoun focus marker *ó* (derived from *òré* 'he/she/it is' by elision) is singular, *ávbáó* can only be employed for inquiring about plural human nouns. The speaker's presupposition in (13) is that the questioned human noun is more than one, otherwise he should have said *dè òmwà* 'who (SINGULAR)'.

4. PLURALIZING VERBS

4.1 VERBAL PLURALS

There is a class of Edo action verbs which can be inflected or extended for the purposes of number agreement with the nouns that co-occur with them in sentences, and also to express repetitiveness, iteration, intensity and even a continuing process or activity. This phenomenon is more complex than mere concordial relations between nouns and verbs because if it is the case that the noun does not change the initial vowel for plurality as discussed in 2. above, the plurality of the noun can only be inferred from the inflection of the verb. Our thesis in this study is that the burden of plurality lies entirely on these verbs. In a sense, it is like the burden placed on the verb 'jump' in determining the number of 'sheep' in the English sentences 'The sheep jumps over the fence' and 'The sheep jump over the fence'. From the point of view of the hearer, the inflection or non-inflection of the verb is crucial for the singular or plural interpretation for 'sheep'. A large proportion of Edo nouns do not change their forms when they are pluralized and therefore these verbs perform the syntactic role of determining their singular or plural forms. As regards the iterative function of these verbs, their inflection helps to mark the concept of 'more than once' with reference to the action of the verbs themselves. Plurality underlies all the functions of the verbs so we shall refer to them as 'verbal plural'; we have taken a cue from Frajzyngier (1977). Here are some examples.

(14) Verbal Plural with Oral Vowels

Verbal singular	Verbal plural	Gloss
gbé	gbèlé	'kill/break'
tá	tàlọ	'say/tell'
dó	dòlọ	'weave/knit'
sé	sèlé	'sew'
họ	họlọ	'lay e.g. egg'
bí	bílọ	'push'
biẹ	bièlẹ	'give birth'
vá	vàlọ	'break open'
fí	filọ	'throw'
zọọ	zọlọ	'pick with sharp object'
vbọ	vbọlọ	'uproot'
gbá	gbálọ	'tie'
sọọ	sọlọ	'tear'
dé	dèlé	'fall'
vú	vùlọ	'uproot'

(15) Verbal Plural with Nasalized Vowels

Verbal singular	Verbal plural	Gloss
ván	vànnó	'shout'
mié	miènné	'squeeze out liquid'
bán	bànnó	'detach with force'
khién	khiènné	'sell'
má	mànnó	'mould'
sàán	sànnó	'jump'
tón	tònnó	'dig'
yán	yànnó	'open'
tín	tìnnó	'fly'
gbén	gbènné	'write'
bién	biènné	'slice'

Traditional relational notions such as 'subject of' and 'object of' play significant roles in the singular-plural interpretations for nouns that co-occur with verbal plurals. The rule is roughly that transitive verbal plurals pluralize object nouns while intransitive verbal plurals can only pluralize subject nouns. Consider the following example in which a transitive verbal plural occurs:

- (16) Ìkhùò dèlẹ̀ èbé.
 women buy + PLUR book
 'Women bought books'

The inflection of the verb *dẹ̀* 'buy' which results in *dèlẹ̀* 'buy + PLUR' is not in any way controlled by the plural subject noun *ìkhùò* 'women' because the verb can still be inflected if *òkhùò* 'woman' occurs as the subject noun. The inflection of the verb is intended to pluralize *èbé* 'book' which is normally not inflected for plurality. However, plurality literally moves from *dèlẹ̀* to *èbé* which is then realized as 'books'. An iterative interpretation for (16) will be that the act of buying is more than once; therefore, what is bought will be logically plural. In that case, (16) can mean 'Women buy books'; that is, women buy books repeatedly or are in the habit of buying books.

On the other hand, consider the following sentence in which an intransitive verbal plural occurs:

- (17) Èwé wùlọ̀ nóđẹ̀
 goat die + PLUR yesterday
 'Goats died yesterday.'

Plurality now moves or shifts backwards to the subject noun *èwé* 'goat' which in its present form, is unmarked for plurality. It is the inflection of the verb *wú* 'die' which results in *wùlọ̀* 'die + PLUR'. This triggers the plural interpretation for the subject noun *èwé* 'goat'. My informants did not give an iterative interpretation to *wùlọ̀*, because it is illogical to die more than once. However, the verb in the following sentence can only be given an iterative interpretation.

- (18) Èhíhì sàlò mwè
 ant bite+PLUR me
 'Ant(s) bit me'.

The subject noun of (18) can be interpreted as singular or plural but the plural interpretation is not determined by the transitive verb sàlò (see also 16 above). The object pronoun mwè 'me' cannot be pluralized as mwà 'us' without a change of meaning. The inflection is therefore to show that the object pronoun suffered the action of the verb more than once.

4.2 PHONOLOGICAL CONDITIONING OF VERBAL PLURALS

A close examination of (14) and (15) reveals that the verbal plurals are phonologically conditioned. The possible plural suffixes for verb stems with oral vowels are -lé, -lò, -ló and -lé. However, only -nò and -nè can occur as suffixes if nasalized vowels occur in the verb stem. As Elugbe (1976b) rightly observes, '/n/ is an allophone of /l/ before nasalized vowels' in Edo. The rule for the occurrence of a nasal consonant in the suffix can therefore be stated as follows:

- (19) /l/ -- /n/ /ĩ

In the case of nasalized vowels in the suffixes, we observe that /ẽ/ and /õ/ do not occur in Edo therefore a nasal lowering rule applies and it will give us /ẽ̃/ and /õ̃/ respectively. Amayo (1976:117-8) summarizes the suffix vowel selection rules as follows:

- (i) if the stem is high, the suffix vowel is o or õ, depending on whether the stem vowel is oral or nasal. õ then changes to õ̃;
- (ii) if the stem vowel is low the suffix is ɔ or ɔ̃ depending on the nasality of the stem vowel;
- (iii) if the stem vowel is neither high nor low, all the features are copied in the suffix.

Amayo went on to posit /ɔ/, albeit arbitrarily chosen, as the underlying suffix vowel for both verb stems with oral and nasalized vowels. The derivational process he proposes for gbènné, for example, will be as follows (his numbering is 21):

- (20) gbèl'ó --> gbèl'è --> gbèl'è --> gbèné --> gbèné

4.3 VERBAL PLURAL SUPPLETION

Our study reveals that there are some cases of suppletive variations in the verbal singular-plural forms. We observe in our data that rhié 'take' and sá 'fetch e.g. water' become við 'take + PLUR' and bàlò 'fetch + PLUR' respectively. Although the forms of these verbs in their singular and plural are unrelated, they distinguish singular-plural nouns in the same manner other verbs discussed above distinguish singular and plural nouns. Consider the following examples:

(21) **Òzó rhié òkhùò**
 Ozo take woman
 'Ozo married a woman'.

(22) **Òzo viọ ìkhùò**
 Ozo take + PLUR women
 'Ozo married women'.

In (21), **rhié** 'take' a singular verb, is obligatorily followed by a singular noun **òkhùò** 'woman'. There are some inflectional irregularities in the occurrence of **viọ** in (22). The underlying form of **viọ** is **rhié** + PLUR and this should have been realized as ***rhiélé** but for no obvious phonological reasons, the surface realization is **viọ**. In the case of **sá** and **bàlọ**, they are used with reference to liquids to mean 'draw', 'fetch' or 'pour'. The verbs serve as quantifiers or measure words as can be observed in the following examples:

(23) **Òsàró sá àmẹ̀ yẹ̀ òtọ̀**
 Osaro pour wate on floor
 'Osaro poured a small quantity of water on the floor'.

(24) **Òsàró bàlọ̀ àmẹ̀ yẹ̀ òtọ̀**
 Osaro pour + PLUR water on floor
 'Osaro poured plenty of water on the floor'.

4.4 FOSSILIZED VERBAL PLURAL

There are some verbs in Edo which we can no longer call verbal plurals because plurality appears to be 'fossilized' in them. The semantic interpretation of the action of these verbs implicitly or explicitly includes the concept of 'more than one' or 'more than once'. They also possess what we can call the vestiges of the plural suffix but the suffixes can no longer be morphologically excised from the verb stems because such stems that should normally be the singular forms are no longer in use. The verbs, however, take the tone pattern of those identified in (14) and (15) and agree with the phonological conditioning rules discussed in 4.2 above. Here are some examples:

(25)	Oral vowels	Nasalized vowels
	làlọ̀ 'lick'	hànnọ̀ 'select'
	kpòlọ̀ 'sweep'	gbànnọ̀ 'becoming clear'
	kpàlọ̀ 'peel'	kànnọ̀ 'loosen'
	guòlọ̀ 'dig deep'	kpànnọ̀ 'abort pregnancy'
	kọ̀lọ̀ 'pluck'	nọ̀nọ̀ 'drip'
	bòlọ̀ 'peel'	
	tọ̀lọ̀ 'scratch'	
	kpòlọ̀ 'big'	

The intrinsic properties of plurality can be observed in their lexical meanings, circumstances of use, objects or persons involved, and so on. For example, **kpòlọ̀**, **làlọ̀**, **kpàlọ̀** and **tọ̀lọ̀** always involve repeated movements of the fingers or hands.

5. REDUPLICATION FOR PLURALITY

A great deal has been written about the syntax of reduplication for the purposes of plurality, repetition, customary activity, increase in size, intensity, and so on in African languages (See Welmers, 1973). Reduplication is very prevalent in Edo and almost all syntactic classes can be reduplicated. We shall focus our attention on reduplication for pluralization purposes. Reduplicated nouns are commonly topicalized or focused as in the following sentence:

- (26) Ìkhùìkhùò èré ọ viọ
 women-women it-is he take + PLUR.
 'He keeps marrying women'.

Ideophonic adjectival qualifiers are also commonly reduplicated for number agreement with the nouns they qualify. For example:

- (27) Ìvbíyòkùò néghélúghélú múdià yè òdẹ.
 soldiers that-huge-huge stand on way
 "Huge soldiers stood on the way'.

Finally, here is an example of a verb that is reduplicated also for plurality:

- (28) Ọvbókhan ná nẹnẹ yè òtọ.
 child this defecate-defecate on floor
 'This child defecated everywhere on the floor'.

6.0 CONCLUSION

This is a taxonomic description of the different strategies for plural formation in Edo. Our main focus is on Edo structure but it inevitably involves some comparative analysis of some Edoid languages. This enables us to know that vowel substitution in word-initial position is a widespread device for pluralizing nouns in Edoid languages, but in Edo, Esan and Ora few human nouns employ this system of pluralization. We discover, however, that a semantic extension makes it possible for some non-human nouns to be pluralized in this manner.

Other devices such as verbal plurals and pluralizing particles compensate for the few instances of initial vowel substitution in Edo. The rules for their formation and occurrence in sentences are discussed in detail.

NOTES

¹Earlier versions of this paper benefited immensely from the valuable comments of Dr. Ben Elugbe, Dr. Airen Amayo and Mr. Francis Egbokhare. I am very grateful to them. All shortcomings of the paper are, however, mine.

²My wife and Dr. E.O. Imasuen, among others, served as my informants on Edo, Dr. O. Iweh on Urhobo, Mr. Stace Iyayi on Esan, Mrs. Grace Masagbor on Yekhee (Etsako) and Mr. Francis Egbokhare on Emai.

³In the Edo orthography adopted in this study, the oral vowels i, e, ẹ, a, o, o and u approximate respectively to /i/, /e/, /ɛ/, /a/, /ɔ/, /o/ and /u/ in the I.P.A. chart. The nasalized vowels are marked by a following nasal consonant as follows: in = /ɪ̃/, en = /ɛ̃/, an = /ã/, on = /ɔ̃/ and un = /ũ/. However, nasality is unmarked word-finally if a nasalized vowel is preceded by a nasal consonant e.g. ma 'mould', mwe 'me', and so on. All Edo consonants correspond with the I.P.A. transcriptions

except **kh** which represents /x/, **gh** which represents /ɣ/. **rh** which represents /r/, **vb** which represents /v/ and **mw** which represents /ʋ/ (See Amayo and Elugbe, 1983).

REFERENCES

- Amayo, Airen. 1976. A Generative Phonology of Edo (Bini). Unpublished Ph.D. Thesis. Ibadan: University of Ibadan.
- Amayo, Airen and Ohi Elugbe. 1983. Edo Orthography. In Kay Williamson (ed.) Orthographies of Nigerian Languages. Manual 11. Lagos: National Language Centre, pp. 1-11.
- Egharevba, Jacob. 1972. Itan Edagbon Mwen. Ibadan: Ibadan University Press.
- Elimelech, Baruch. 1976. Pluralization and Noun - Class Remnants in Etsako. Studies in African Linguistics. Supplement 6, pp. 39-46.
- _____. 1978. A Tonal Grammar of Etsako. Berkeley: University of California Press.
- Elugbe, Ben O. 1976a. Noun Class Vestiges in Degema. Afrika Übersee. Band LIX, pp. 224-33.
- _____. 1976b. Edo (Bini) in the Polyglotta Africana. African Languages. Vol. 2, pp. 145-51.
- _____. 1979. Some Tentative Inferences from Comparative Edoid Studies. KIABARA: Journal of Humanities. Vol. 2, Rains Issue. Port Harcourt: University of Port Harcourt, pp. 82-101.
- Frajzyngier, Zygmunt. 1977. The Plural in Chadic. In: Paul Newman and Roxana Ma Newman (eds.) Papers in Chadic Linguistics. Leiden: Afrika - Studiecentrum, pp. 37-56.
- Greenberg, Joseph H. 1963. The Languages of Africa. Bloomington: Indiana.
- Kelly, John. 1970/71. Towards Comparative Edo. In: David Dalby (ed.) African Language Review. Vol. 9. London: Frank Cass and Company Limited, pp. 5-16.
- Langacker, Ronald W. 1972. Fundamentals of Linguistic Analysis. New York: Harcourt Brace Jovanovich, Inc.
- Laver, John. 1969. Etsako in the Polyglotta Africana. In: David Dalby (ed.) African Language Review. Vol. 8. London: Frank Cass and Company Limited. pp. 257-62.
- Omoruyi, Thomas O. 1981. Error and the Mother Tongue: A Contrastive Analysis of Edo (Bini) and English Plurality Markers. Unpublished M.Ed. Thesis. Zaria: Ahmadu Bello University.
- Robins, R.H. 1964. General Linguistics. London: Longman, Green and Co. Ltd.
- Welmers, W. 1973. African Language Structures. Berkeley: University of California.