

## VOWEL PATTERNS IN THE URHOBO NOUN

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Set out in columns below are two groups of disyllabic non-borrowed Urhobo nouns in their singular and plural forms.<sup>1</sup> In the transcription  $\beta$  is used for a voiced bilabial frictionless continuant, rh for a voiced (sometimes voiceless) alveolar tap, and r for a voiced flap with lateral onglide. n, when final in a syllable, indicates nasality of the preceding vowel(s). Low tone is unmarked, high tone is shown by ' , and downstep by ' . Other symbols approximate to their I.P.A. values.

Group 1			Group 2		
Singular	Plural	Meaning	Singular	Plural	Meaning
ajá	ejá	bat	u $\phi$ ó	i $\phi$ ó	throat
akpé	ekpé	lock	ú $\delta$ ú	í $\delta$ ú	chest
ájá	éjá	lobster	úk $\beta$ é	ík $\beta$ é	lamp
o $\beta$ á	e $\beta$ á	stake	erhu	irhu	hat
órhó	érhó	ear	otu	itu	age-grade
e $\beta$ e	e $\beta$ e	kola	océ	icé	pot
ej $\beta$	ej $\beta$	masquerade	isé	isé	proverb
ero	ero	eye	ete	ite	ward
orhe	erhe	plantain	erhuén	irhuén	cow
égbá	égbá	cheek	úkpe	íkpe	bed
okó	ekó	village	oró	iró	mudwasp
égbén	égbén	edge	ógbón	ígbón	python

One feature immediately noticeable as distinguishing the groups, as groups, one from the other, is the quality of the plural marker, e in group 1, i in group 2. With few exceptions, which will be mentioned later, all Urhobo non-borrowed nouns belong to one of these two groups. Examination of the groups reveals that the sets of vowel qualities present in the items of one of them are not the same as the sets of vowel qualities present in the items of the other. Sets such as i-o, u-e, for example, do not occur in group 1, and group 2 has no sets such as a-e, e-o. The sets found are:

<sup>1</sup> Urhobo, *urhobo*, is one of the southern Edo languages, and is spoken by the Urhobo, who live in the northern part of Delta Province, Mid-Western Nigeria. For a sketch of the sound-system see the section on the language in E. Dunstan (ed.), *THE SOUND SYSTEMS OF THE MAIN NIGERIAN LANGUAGES AND ENGLISH* (Longmans, forthcoming). I should like here to offer my grateful thanks to the two informants, Mr P. C. Obakponovwe (P. C. O.) and Mr S. U. Eriwwo (S. U. E.), who provided the material on which this article is based.

Group 1		Group 2	
Syllable 1	Syllable 2	Syllable 1	Syllable 2
a	a ɔ ε e	o	ɔ ε o e u i
ɔ	a ɔ ε o e	e	ɔ ε o e u i
ε	a ɔ ε o e	u	ɔ ε o e u i
o	a ɔ ε	i	ε o e u i <sup>2</sup>
e	a ε		

The gaps a-o, e-ɔ, i-ɔ I regard as accidental. Further work with an informant would probably lead to their being filled.

There is then a relationship between the phonetic qualities of the vowel sets of the two groups and that of the plural marker for each of them. The qualities for group 1 are seen to be exclusively non-close, a ɔ ε o e, those for group 2 exclusively non-open, o e u i. Two other differences between the two groups will also be noticed: first, that group 1 has a three-way height contrast in syllable 1 as against a two-way contrast in group 2, and, second, that there are two different vowel sets for syllable 2 in group 1 as against a sole vowel set for the same syllable in group 2. All of these features are to be reflected in the phonological statement of Urhobo noun structure. The non-close versus non-open qualities of the vowel sets are seen as being the phonetic expression, respectively, of the two terms 'lower' and 'higher' of a phonological 'levels' system. The phonological formula for any noun item will include a level index, l, for 'lower', and h, for 'higher', will be used here as level indices and will be placed after any noun item they characterize, or final in any phonological formula in which they occur. The noun items set out in the two groups above can now be rewritten with their level indices, giving, for example: ajá (l), akpé (l), through to égbén (l), and uḥó (h), údú (h), through to ógbón (h).

For the second syllable of both groups three degrees of height need to be recognized in establishing the vowel system. These three degrees are symbolized here as T, M and B, standing, simply enough, for 'top', 'middle' and 'bottom'. They have phonetic expression as follows:

In l items			In h items		
T	M	B	T	M	B
e o	ε ɔ	a	i u	e o	ε ɔ <sup>3</sup>

The fact that only a ɔ ε are found in syllable 2 of group 1 items with initial o e has, as far as I am at present aware, no repercussions elsewhere in the phonology or in the grammar of the language, and for this reason I have chosen not to reflect it in the phonology by recognizing, say, a subsystem with two degrees, T and B, operating in syllable 2 of a subgroup of group 1. For all its apparent lack of import, the subgroup, with its phonological characteristics fully displayed, must of course appear in any listing of the phonological formulae of the various noun groups, and it does so below. The two degrees of height in

<sup>2</sup> Not every one of these possibilities is illustrated in the example columns, but all are well-attested in the corpus.

<sup>3</sup> The front-back contrast is not taken into consideration in the analysis: for the purposes of this article only tongue-height contrasts are relevant. So, in discussing the phonology of the flexional syllable below, i and u are subsumed under i, e and o under e, ε and ɔ under ε.

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syllable two which characterize this subgroup I would equate with the two degrees M and B of the other subgroup of group 1.

The initial, flexional, syllable is treated differently in this analysis from the second, non-flexional, syllable. The two phonetic qualities i and e in h items and the two phonetic qualities ε and a in l items are regarded as the phonetic expression of the two terms 'close' and 'open' of a phonological 'closure' system. c and o will be used here as closure indices, placed before the syllable to which they refer. Initial e in group 1 items is regarded as being neither c nor o, and the third term in the closure system, 'non-close/non-open' is given no visual index. With the allocation of the whole range of vowel quality in the initial syllable to the closure and levels systems, nothing remains to be stated at this point except vocalicness, and this is represented here by ə. A cumulative phonological formula for the Urhobo noun would now be<sup>4</sup>

c T l  
 əCM h  
 o B

where C stands for consonant and vertical arrangement symbolizes a system, only one of which may be chosen at a time. Phonological formulae for the various groups of nouns would be, for singular forms,

Group 1 in its two subgroups	Group 2
$\begin{array}{ccccc} \overbrace{c \quad T \quad l} & & & & l \\ o \quad \text{əCM} & & & & \text{əCM} \\ & & & & B \\ & & & & B \end{array}$	$\begin{array}{ccc} c \quad T \quad h \\ o \quad \text{əCM} \\ & & B \end{array}$

In the case of plural forms the closure system has only one term, the 'non-close/non-open' term, the phonetic expression of which is e in l words, i in h words. Phonological formulae for the plural of the above groups would be

$\begin{array}{ccc} T \quad l & & l \\ \text{əCM} & & \text{əCM} \\ B & & B \end{array}$		$\begin{array}{cc} T \quad h \\ \text{əCM} \\ B \end{array}$
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Analysis in the terms presented above has a second advantage, apart from that of preserving a unique phonological shape for singular and plural forms of all groups. It allows very economical statement of diminutive forms such as

l items	h items
$\overbrace{\begin{array}{ccc} \acute{a}maj\acute{a} & \acute{e}mej\acute{a} & \text{small bat} \\ om\acute{o}y\text{c} & em\acute{e}y\text{c} & \text{small branch} \end{array}}$	$\overbrace{\begin{array}{ccc} \acute{o}moc\acute{e} & \acute{i}mic\acute{e} & \text{small pot} \\ \acute{o}m\acute{o}dod\acute{o} & \acute{i}m\acute{i}dod\acute{o} & \text{small flower} \end{array}}$

and so on. The phonological shapes of ajá and océ being, respectively, o əCB l and o əCB h, the phonological shapes of their diminutives are o əCəCB l and o əCəCB h, in the singular, and əCəCB l and əCəCB h in the plural, where the closure-index relates to both the ə syllables, and the level-index, as elsewhere, to the whole word.

There is one small group of nouns that does not allow of analysis into any of the groups

<sup>4</sup> The third term in the closure-system is represented in the formula by the space between c and o at the beginning of the formula. The spacing shows this to be a three-term system as opposed to the two-term levels system. In all other formulae in the text the absence of c or o initially in the complex signifies the presence of the third term, neither c nor o.

established above. There are only two nouns in the group, namely *obɔ* ('hand') and *owɔ* ('leg, foot'). These form plurals *abɔ*, *awɔ*. The noun *aje* ('woman') has as its plural *eja*. These three nouns are left outside the analysis. Of disyllabic nouns only one other presents any problem: this is *ifá* ('beans'), singular *úfá*. This word has an irregular vowel set u-a as it occurs in the speech of one of my informants, the Agbɔn dialect speaker (P. C. O.): in the speech of S. U. E., however, the form is *éfá*, singular *ófá*, and perfectly regular. I have elicited the second form from other speakers of S. U. E.s dialect, that of Ughelli, but have not had the opportunity to question other Agbɔn speakers.

Trisyllabic nouns show vowel set unity in the same way as the disyllables examined above, with the modification that the set e-e-e is found in both l and h items.<sup>5</sup> This is in fact a simplification, in that there is now no two-term system in the second syllable of l items: all possibilities, T, M and B, are present. The vowel sets found are summed up as

Group 1 (l)				Group 2 (h)		
Syll. 1	Syll. 2	Syll. 3		Syll. 1	Syll. 2	Syll. 3
a	a	a	} Occurring in all combinations <sup>6</sup>			
ɔ	ɔ	ɔ			ɔ	ɔ
ε	ε	ε		o	o	o
o	o	o		e	e	e
e	e	e		u	u	u
				i	i	i

A complete list of examples would be very long: a short exemplificatory list follows:

Group 1 (l)			Group 2 (h)		
oḡáro	e-	face	uḡróḡró	i-	hole
ɔḡɔɔ	e-	raffia-palm	oxori	i-	worm
erheren	e-	anthill	igede	i-	drum
exarha	e-	umbrella	égéré	i-	mortar
agbara	e-	chair	obobo	i-	albino
ogaga	e-	fish-spear	ubíbé	i-	nail
erhorho	e-	leech	uyɔɔɔ	i-	clock
ekpéré	e-	shout	ígbéhen	i-	wall

Phonological formulae for these can be established in exactly the same way and using the same systems as for the disyllabic groups: *oḡáro* would have the formula  $\text{əCBCT}^1$ .

<sup>5</sup> I am not at all sure that the two e-e-e sets are comparable: e-e-e in l items is found only in nouns derived immediately from verbs, as the example below shows. This particular category of noun has appeared nowhere else in the analysis, this simply because I have excluded it on the grounds that its phonology seems divergent from that of what we might call 'common' nouns. This divergence takes the form of an extreme limitation on the vowel sets found in the category. For the time being I leave e-e-e items of this type in the l group of 'common' trisyllabic nouns. If they are made into a separate category for the purpose of phonological analysis, as may happen, this will simply have the effect of introducing an imparity into the trisyllabic system to match that of the disyllabic.

<sup>6</sup> Again, not all possibilities are shown in the columns of examples. In this case, however, I do not have every possibility attested in my corpus. I do, though, have every TYPE of possibility, close-close-close, open-close-open, and so on, and feel justified in assuming that such gaps as I have are accidental, like the gaps a-o, etc., in the disyllabic nouns.

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Amongst trisyllabic items there are a large number which exhibit vowel sets deviating from those set out above. Some of these items are compounds, and their deviation is accounted for by the fact that vowel set unity is not maintained in compounds across the boundary between the component parts. So, from *eni* 'elephant' and *ame* 'water' there is *eniáme* 'hippopotamus'. Others may be crypto-compounds, but at the moment I have no evidence to justify me in so classifying them, and am able only to list them as items standing outside the main body of the material. Examples of items of this kind are:

<i>ukpacá</i>	i-	towel	<i>agbuná</i>	i-	match
<i>utita</i>	i-	onion	<i>árírí</i>	i-	castnet
<i>ugbejá</i>	i-	friend	<i>adadámù</i>	e-	dragon-fly
<i>akikón</i>	i-	water-snail			

It will be noted that all of these have a or u as initial vowel, and it is in fact the case that only three vowel qualities, a, i and u are found in this syllable in words of this type. It may be that they represent a separate type of trisyllable, and that the analysis will have to be extended to embrace them. No decision as to the status of this group, which consists of some thirty or so nouns in my present corpus, as against about 130 in the 'regular' trisyllabic groups, is possible without further investigation of a wider corpus.

Also standing outside the groups established above is, predictably enough, a body of loan material. Nouns such as

<i>itíjǎ</i>	teacher
<i>ikábadi</i>	calcium carbide
<i>igambarí</i>	Hausa
<i>isabátu</i>	shoe
<i>ukútá</i>	rock

exemplify this. Nouns in this category may, of course, fit, as far as their vowel set goes, into one of the regular groups; so, for example, *uféle* 'shilling' matches *úsekpe* 'water-snail'. The loan material in Urhobo would have to be handled, as so often, in terms of a different system.

One of the conclusions that follows from the examination of vowel patterns in the Urhobo noun and from the setting up of phonological groups is that, despite what the surface appearance of the language may suggest, there is no need to set up a system of 'noun-classes' for Urhobo. There is no grammatical concord, apart from that of number, and if the term 'noun-class' is to mean anything it cannot surely be applied to nouns that are participants in a number-concord system only. It is tempting, on an initial survey of the noun in Urhobo, to set up classes such as 'the o-i class, the a-e class, the ɔ-e class, the u-i class' and so on. I hope to have shown that such classes would be spurious. To reinforce this point, I have purposely avoided any use of the term 'class' in this paper, and would prefer to call the collections of items in my analysis 'groups'.

It also follows, as a point of practice, from the analysis presented, that any dictionary or word-list of the Urhobo language would have to show group membership in some, at least, of its noun entries, though by no means in all, as would be more nearly the case if Urhobo were a true class-language. Of group 1, only members of the subgroup with initial o or e need be marked, and then only when ɔ or ε is in the second syllable. Trisyllables in e-e-e would also need to be marked in some way, and all members of group 3 (the *ukpacá* group). A very large part of the corpus would, however, need no such marking

the plural form being evident from the singular entry, once the vowel sets are known.

It should be said, in conclusion, that the noun is not the only linguistic unit in Urhobo to show vowel patterning of the kind described here. The verbal system exhibits a similar feature: in the verbal system, though, it is more easily recognized. The patterns in the noun system are less immediately obvious, and it is for this reason that they were chosen for description and elaboration here. In a total statement of the phonology of Urhobo noun and verb patterns would have to be both described and integrated with patterns found in verbally-derived nouns and adjectives<sup>7</sup>.

<sup>7</sup> The value of a detailed examination of vowel patterns, even in a language like Yoruba, where some form of 'vowel harmony' has long been recognized, is demonstrated in A. Oladele Awobuluyi: 'Vowel and consonant harmony in Yoruba' *JOURNAL OF AFRICAN LANGUAGES*, vol. VI (1967), pp. 1-8, which appeared while the present article was in preparation. In it the author throws light on several phenomena in the phonology and morphophonology of Yoruba.