

VOWEL HARMONY IN LÒKÓǾ

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This paper¹ deals with vowel harmony in LòkÓǾ simple and compound noun stems. LòkÓǾ has a phonemic eight-vowel, partially overlapping harmonic system in which prefix vowels /i, u, a/ are neutral, but there appears to be an underlying phonetic ten-vowel system with two variants of [i] and [u]: (i) those which occur with Set I (wide) vowels, and (ii) those which occur with Set II (narrow) vowels. On the basis of the co-occurrence pattern of /i, u/, it is claimed that Proto-LòkÓǾ must have had a ten-vowel harmony system which divided into two sets of five vowels, and in which *ɪ and *ʊ contrasted with *i and *u, a phonemic distinction which has since been lost.

It is further observed that the language is undergoing another vowel reduction process: (a) the alternation between Ǿ/a is restricted to noun stems, as only /a/, never /Ǿ/ occurs in prefixes; (b) it is extremely difficult to differentiate between /i/ and /e/, /u/ and /o/. There may well be a series of vowel mergers in the making. If such mergers occur and LòkÓǾ becomes a five-vowel system, it would lose its vowel harmony.

Cet article traite de l'harmonie vocalique dans les racines de noms simples et composés en LòkÓǾ. Le LòkÓǾ a un système de huit voyelles à harmonie partiellement recouvrante, dans lequel les voyelles des préfixes /i, u, a/ sont neutres, mais où il semblerait exister un chevauchement du système phonétique à dix voyelles, avec deux variantes de [i] et [u]: (i) celles qui se trouvent avec le Groupe I de voyelles ouvertes, (ii) celles qui se trouvent avec le Groupe II de voyelles fermées. Basé sur la coprésence de /i, u/ il est soutenu que le Proto-LòkÓǾ devait avoir un système d'harmonie vocalique de dix voyelles, divisé en deux groupes de cinq voyelles, dans lesquels *ɪ et *ʊ contrastaient avec *i et *u, distinction phonétique qui a disparu depuis.

On peut aussi noter qu'une autre réduction vocalique de la langue est en cours: (a) l'alternation entre Ǿ/a est limitée aux racines des noms, c'est à dire, seulement /a/ se trouve dans les préfixes, jamais le /Ǿ/; (b) la différence entre /i/ et /e/, /u/ et /o/ est extrêmement difficile à distinguer. Il est possible qu'une réduction vocalique en série soit en cours. Si cette réduction arrivait et le LòkÓǾ devenait un système vocalique de cinq voyelles, son harmonie vocalique serait perdue.

0. INTRODUCTION

Greenberg (1963) classifies Lòkóó, otherwise known as Yake, Yakö, Lukö, Yakurr or Kö, as a member of the Cross River 3 sub-branch of the Cross River Group which in turn is a sub-family of the Benue-Congo language family. More recently Lòkóó has been classified as a member of Upper Cross (Williamson, 1982).

Lòkóó is the mother-tongue of the Yakö Clan in the Obubra division (formerly Ogoja Province) of the Cross River State of Nigeria. Ugep, the headquarters of this division is about 90 kilometres north of Calabar, the State capital. Lòkóó is the name given to the dialects spoken by the Yakö clan which comprises six villages namely Ûgép, Èkòrì, Ñkó, Ñkpàni, Ídómì, and Àssígà. The analysis in this paper is based on the dialect spoken in Ugep. There is no remarkable difference between the various dialects of Lòkóó.

1. VOWEL HARMONY

Lòkóó has eight phonemic vowels: /i, e, ε, ə, a, ɔ, o, and u/ which divide into two partially overlapping sets:

<u>Phonemic Vowel</u> <u>Chart</u>	<u>Set I (Wide)</u>	<u>Set II (Narrow)</u>
i	i	i
u	u	u
e	e	ε
o	o	ɔ
ə		
ε	ə	a
ɔ		
a		

Vowel harmony is observable in both the verbal and nominal systems of Lòkóó.

2. VOWEL HARMONY IN THE NOMINAL SYSTEM

Lòkóó is a noun class language. A noun in Lòkóó usually consists of a prefix and a stem, with the prefix indicating the gender of the noun. Vowels in prefix position normally harmonise with the stem-initial vowels. Where a noun has any of /e, ə, o/ as stem-initial vowel, the prefix vowel is either /e/ or /o/; and where the stem initial vowel is any of /ε, a, ɔ/, the prefix vowel is either /ε/ or /ɔ/. However, because of the partial overlap in the harmonic system of Lòkóó, /i, u and a²/ in prefixes do not harmonise with the stem vowels. By the same token, when /i, u/ occur as stem-initial vowels, there is no way of telling which set of vowels (wide or narrow) they will take as prefixes. In other words, /i, u, a/ in prefixes and /i, u/ in stems appear to be neutral at least on the phonemic level.

Prefix vowel /e/ alternates with /ε/

lè-bèm	'chin'	à-bèm	'chins'
lɛ-bɛ	'breast'	à-bɛ	'breasts'
é-kò	'mate (noun)'	Ñ-kò	'mates'
è-kò	'cloth'	Ñ-kò	'pieces of cloth'

Prefix Vowel /o/ alternates with /ɔ/

kò-fijè	'brain'	lì-fijè	'brains'
kó-pijà	'wall'	lí-pijà	'walls'

Neutral Prefix vowels /i, u, a/

kù-bém	'lie'	lì-bém	'lies'
kú-blèni	'mat'	lí-blèni	'mats'
ká-kóò	'pig'	lì-kóò	'pigs'
kà-wóŋ	'top'	lì-wóŋ	'tops'
jì-pál	'calf of leg'	jò-pál	'calves of legs'
jì-tò	'he-goat'	jò-tò	'he-goats'

3. VOWEL HARMONY IN THE VERBAL SYSTEM

A verb usually consists of a stem which may or may not be preceded by a prefix of some kind. Such prefixes (where they exist) may be pronominal or infinitival, and where such occur, the prefix vowels normally harmonise with the stem vowels e.g.

(a) Verbs with non-close stem-initial vowels:

ó dɔ́	'(s)he slept'	ó tó	'(s)he cried'
ó fɔ́ŋì	'(s)he wrote'	ó béjí	'(s)he stood up'
ó wá	'(s)he drank'	ó pləmì	'(s)he refused'

(b) Verbs with close stem-initial vowels:

ó fì	'(s)he killed'	ó dʒí	'(s)he ate'
ó pì	'(s)he moulded'	ó pìlì	'(s)he broke(a stick)'
ó bùmì	'(s)he roasted'	ó wú	'(s)he pounded'
ó jìkà	'(s)he descended'	ó jímé	'(s)he knew'
ó fúká	'(s)he gathered'	ó túká	'(s)he ran'

Examples in (b) show that there are actually two types of close vowels in Lòkɔ̀ɔ̀:

- (i) those that take ó as their third pers. sing. marker and
- (ii) those that take ó as their third pers. sing. marker.

We have earlier noted that both *i* and *u* seem to belong to the two harmony sets. However, on the basis of their co-occurrence with wide and narrow vowels, together with their choice of third pers. sing. marker, we are claiming that there are two types of close vowels in Lòkɔ̀ɔ̀, namely, *i*₁ *u*₁ which co-occur with wide (set I) vowels, and *i*₂ *u*₂ which co-occur with narrow (set II) vowels:

<u>Set I (Wide) Vowels</u>		<u>Set II (Narrow) Vowels</u>	
<i>i</i> ₁	<i>u</i> ₁	<i>i</i> ₂	<i>u</i> ₂
e	o	ɛ	ɔ
	ə		a

The behaviour of *i* and *u* suggests that there must have been two different sets of close vowels at an earlier stage of the language - **i* **u* co-occurring with set I vowels and **I* and **U* co-occurring with set II vowels. The merging of **I* and **U* with **i* and **u* respectively (on the phonemic level) results in a reduction of the harmonic system of the language.

4. VOWEL HARMONY IN COMPOUND NOUNS

There are different ways of forming compound nouns in Lòkóó. We are here primarily concerned with the type of compounding in which one of the component nouns is embedded within the other. Often, in the formation of compound nouns, the basic noun forms the matrix inside which the second noun is embedded. More precisely, the stem of the second noun is inserted between the prefix and the stem of the matrix noun e.g:

jàtù	+	òkáláŋ	jà-kálán-tù
'wine'		'white man'	'beer'/'wine'
lɛ́táà	+	kòí	lè-kòí-táà
'stone'		'grind'	'grinding stone'
kòbó	+	òdám	kò-dám-bó
'hand'		'man'	'right hand side'
kòkpáŋ	+	kètí	kò-tí-kpáŋ
'skin'		'tree'	'bark of tree'
kòkpòl	+	èdʒáú	kò-dʒá-kpòl
'long'		'rope'	'long rope'

These examples show that vowel harmony within the compound nouns is partial in that not all vowels harmonise as in simple noun stems. Harmony exists only between the prefix vowel of the matrix noun and the stem-initial vowel of the embedded noun.

5. VOWEL HARMONY REDUCTION IN LÒKÓÓ

Stewart (1971:203) posits a ten-vowel system for '...the latest common ancestor of the Kwa languages'. He notes that more often than not, the first vowel to be lost in a ten-vowel system is 3 (or ə), followed by the two high vowels I and u because of their '...awkward combinations' on the low-mid-high scale.

Williamson (1973) reports that many Benue-Congo languages have a ten-vowel system. She further raises the possibility of such vowel systems going 'back to a period when the Benue-Congo and Kwa languages were not distinct.'

Hoffman's (1973) report on Okpe (an Èdoid language) as well as Williamson's report on Agwagwune (an Upper Cross language which is closely related to Lòkóó) support Stewart's hypothesis.

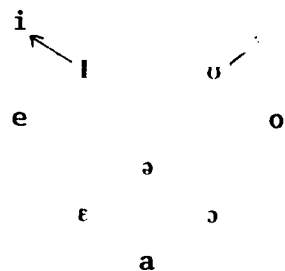
It is possible that Proto-Lòkóó may have had a ten-vowel harmony system. If this is the case, it means that unlike many languages whose systems have been reduced first from ten to nine vowels, and later from nine to seven (cf. Stewart, 1971; Hoffman, 1973; and Williamson, 1973), it appears that the Lòkóó vowel reduction has been from ten to eight vowels, *₁ and *_u having completely merged with *_i and *_u respectively.

According to our initial grouping of Lòkóó vowels, we noted that i and u seem to belong to the two harmonic sets. However, we have also shown that there is ample evidence in the language to suggest that /i/ and /u/ which co-occur with wide vowels are different from those which co-occur with narrow vowels. We suggest that all occurrences of i₂ and u₂ should be regarded as recent developments of *₁ and *_u, the latter pair being formerly phonemes

of the language. However, though *I and *u have merged with *i and *u, i_2 and u_2 still behave like bona fide set II (narrow) vowels. We therefore conclude that although Lòkóó appears to be an eight-vowel system, it is still underlyingly a ten-vowel system.

Reduction Pattern of Lòkóó

Proto Lòkóó:



(The solid arrows represent complete mergers)

Earlier in this paper we mentioned that /ə/ never occurs as a prefix vowel in Lòkóó and that /a/ does duty for it in this position, thus accounting for the neutrality of /a/ in prefixes. The co-occurrence of /a/ with both wide and narrow vowels and the co-occurrence of /ə/ and /a/ in words such as:

à-b`n	'faeces'
à-bl`l	'arrows'
à-kôl`	'calabashes'

suggest that there is another reduction going on in the language. It is likely that some of the occurrences of /a/ in nominal prefixes are actually cases of /ə/ in an earlier stage of the language.

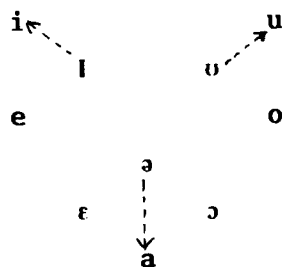
Stewart (1971:199) suggests that the neutrality of [a] in most West African vowel harmony languages must have been as a result of the merging of original [ɜ] (or [ə]) with [a]:

'we would expect the influence of the position of the highest part of the tongue on the position of the root to result occasionally in the replacement of [ɜ] (i.e.[ə]) with its root unadvanced counterpart [a].'

The merging of /ə/ with /a/ has not yet been completed in Lòkóó. It is possible that it will eventually be completed, resulting in a seven-vowel system. At any rate, the restricted distribution of /ə/ points in this direction.

As shown in the phonemic vowel chart of Lòkóó (Sect.1.), /e/ and /o/ are tending towards /i/ and /u/ respectively. In some words it was extremely difficult to identify which of the vowels our informants were trying to produce. However, in careful speech, we were able to tell whether a vowel was i or e, o or u. This suggests that eventually there may be a merging of /e/ with /i/ and /o/ with /u/. If such a merger occurs, then it is to be expected that by the time the system has reduced to a five-vowel system, the vowel harmony would have been lost.

Possible Mergers in Lòkǎǎ



(The broken arrows represent possible mergers)

NOTES

¹An earlier version of this paper was presented at the third Annual Conference of the Linguistic Association of Nigeria held at the University of Ilorin in August, 1982.

²Note that although /a/ is basically a set II (Narrow) vowel which normally co-occurs with /ɛ/ and /ɔ/ in noun stems, it is a neutral vowel in prefixes in that it occurs with both the narrow and wide vowels. Although /a/ alternates with /ə/ in noun stems, it would appear that /a/ now does duty for /ə/ in prefixes in that the latter never occurs as a prefix vowel.

REFERENCES

- Greenberg, J.H. 1983. The languages of Africa. The Hague: Mouton.
- Hoffman, C. 1973. The vowel harmony system of the Okpè monosyllabic verb. Research Notes. Department of Linguistics and Nigerian Languages, University of Ibadan. pp.79-112.
- Omamor, A.P.E. 1973. Uvwie - a case of vowel merging. Research Notes. Department of Linguistics and Nigerian Languages, University of Ibadan. Vol.6:113-143.
- Runsewe, O.I. 1980. The noun classes and tone system of Lòkǎǎ. MA project, University of Ibadan.
- Stewart, J.M. 1971. Niger-Congo, Kwa. In T.A.Sebeok (ed.) Current trends in linguistics. Vol 7: Linguistics in Sub-Saharan Africa. The Hague: Mouton. pp.179-212.
- Tucker, A.N. 1964. Kelenjin phonetics. In Abercrombie et al (eds.) In honour of Daniel Jones. London: Longman. pp.445-470.
- Williamson, K. 1971. The Benue-Congo languages and Ijò. In T.A.Sebeok (ed.) Current trends in linguistics. Vol 7: Linguistics in Sub-Saharan Africa. The Hague: Mouton. pp.245-306.
- _____. 1973. Some reduced vowel harmony systems. Research Notes. Department of Linguistics and Nigerian Languages, University of Ibadan. Vol 6:145-170.
- _____. 1983. Vowel merger in harmony languages. JOLAN 2:61-82.
- _____. 1974. Historical assimilation of vowels in Ijò.
- Winstan, F.D.D. 1962. The nominal class system of Lokǎǎ. African Language Studies 3:49-70.