

*Papers from the Eighth Conference
on African Linguistics
University of California, Los Angeles
April 1-3, 1977*

STUDIES
in
AFRICAN LINGUISTICS

SUPPLEMENT 7

UCLA

Published by the Department of Linguistics
and the African Studies Center
University of California, Los Angeles

SOME IMPLICATIONS OF LOW TONE RAISING IN SOUTHWESTERN EDO

Ben Ohi Elugbe
University of Ibadan

1. Introduction

There are five Edo languages called Southwestern Edo. They are Eruwa, Isoko, Okpe, Urhobo, and Uvbie.¹ The Edo languages are mostly spoken in Bendel State, though there are some spoken in the Rivers and Ondo States. Greenberg [1966:9] classifies Edo as a Kwa subgroup: e; Elugbe [1973] classifies Southwestern Edo with Delta Edo (the Edo languages of the Rivers State) as co-ordinate branches of a South Edo branch of Edo.

Isoko and Urhobo are the best known of the Southwestern Edo languages, while the other three are often spoken of as dialects of these two: Eruwa, as a dialect of Isoko (a fact strengthened by the political and economic dominance of Isoko); Okpe and Uvbie (also called Evhron in the literature) as dialects of Urhobo. As a matter of fact, these people refer to themselves as Urhobo and invariably also speak Urhobo, which is taught in the schools and used as a lingua franca in the Urhobo Divisions. The following discussion will be based on the Uzere dialect of Isoko and the Agbarho dialect of Urhobo.

All these languages, none of which has extensive literature and little or none on tone, exhibit (with the exception of Eruwa, to judge by Odumosu [1973]) a phenomenon of final low tone raising.

2. Low Tone Raising

As there are different kinds of low tone raising mentioned in the literature², I will start by explaining what I mean here by low tone raising. By low tone raising, I refer to a process whereby all final low tones

¹The following conventions should be noted: i = [ɪ], e = [ɛ], o = [ɔ], u = [ɔ], th = [t], dh = [d]. In Urhobo, [ỹ] contrasts with [ɲ], so that yVn → [ỹṼ], as in òyèn 'his' → [òyě̃], [--]; as well as nyV → [ɲṼ], as in ònyọ 'honey' → [òɲ̃] [-].

²Cf. Hyman and Schuh [1972], Leben [1971].

are raised. In general, the languages exhibiting this process are found to be without key lowering or downdrift. The downglide often associated with low tones in a downdrift system (cf. Stewart [1971], Amayo [1976]) is absent. As is well-known, such a downglide is most noticeable in final position where low tones are terminated on a low-falling pitch. But while low tones in a downdrift system are basically low-falling (the fall or downglide is not realized except in final position, though its effect is noticeable in the lowering of post-low highs), the low tones of Isoko and Urhobo lack any such downglide. In final position, rather than terminate on a falling pitch, low tones are raised. Instead of (1) we get (2):

- (1) LHL > [_ -] < / _ - / (key lowering)
 (2) LHL > [_ -] < / _ - / (final low raising)

It thus appears that in (1) the downglide pulls down the high tone; in (2) there is no downglide to cause any such effect. Besides, the final low tone is raised.

In dealing with Isoko and Urhobo as tone systems, therefore, it is not the lowering effect of downdrift that one has to deal with but the absence of this lowering and the presence of final low raising. Like downdrift, however, final low raising may be treated as an intonation feature of statements, since it is subject to interference or blockage by a change of intonation, for example, from statement to question.³

3. Final Low Raising in Isoko and Urhobo

Mafeni [1969] called Isoko a "two tones plus downstep" system, claiming that there was terracing or downdrift. My own investigation has revealed that although there is a third level (mid), it is totally predictable: occurring only in final position, having no variants (as might have been expected of a downstep), and conditioned by the phenomenon of final low raising.

In Isoko, all final lows are raised to mid in statements and citation forms; that is, questions and exclamations do not exhibit this feature.⁴

³Cf. the question forms of example (3a,d):
 3aQ. òbù' → òbù [_] 'native doctor?'

3dQ. ógbá' → ógbâ [-] 'warrior?'

In Isoko, as in Urhobo, questions are not subject to final low raising. In addition, they are characterized by a final floating low which causes highs to fall but merges with low.

⁴Cf. footnote 3.

- (3) a. òbù (LL) → òbū
'native doctor' [- -]
- b. òbù ònà nà → òbù`nà nà
doctor this
'this doctor' → òbūnānā
- c. òbù ònà nà ò dé èbì
doctor this he bought books
'the doctor bought books' → òbù nà nà ò dēbī / òbù nà nà ò dēbī
[- - - - -] [- - - - -]
- d. ógbá (HH) → ógbá
'warrior' [- -]
- e. ógbá ònà nà
'this warrior' → ógbā nānā / ógbānānā
[- -] [- -]
- f. ógbá ònà nà ò kpé òbù ònà nà → ógbānānà ò kpōbūnānā
he killed
'the warrior killed the doctor' [- -] [- -]

From (3) we note that two complications exist in the surface realization of tones in Isoko statements: glides, occasioned by vowel assimilation and deletion/contraction (3c,e,f), and mid tones brought about by final low raising (3a-c,e-f). Non-final lows are not raised and there is no limit to the number of final lows that may be raised.

As mentioned above, there is no downdrift so that the successive highs in (4) are not downdrifted:

- (4) ò tá` kẹ̀ ùmẹ̀ nV ùmẹ̀ déf → ò tá kùmẹ̀ nùmẹ̀ déf
he tell give me that I buy [-] [-]
'he told me to buy it'

In Urhobo as in Isoko, all final lows in statements (including citation forms) are raised. However, Urhobo differs from Isoko in that final lows are not raised to the level of mid, and the mid level in Urhobo is a significant one, contrasting with high and low, as seen in (5):

- (5) a. òbò (LL) → òbò c. ónyọ (HM) → ónyō
'native doctor' [- -] 'bee, honey' [- -]
- b. ómó (HH) → ómó d. énwù (HL) → énwù
'child' [- -] 'shirt' [- -]
- e. òbò ònà nà ò dé ónyọ → òbò nà nà (ò) dónyō
doctor this he buy honey [- - - - -]
'this doctor bought honey'
- f. òbò ònà nà ò dé énwù → òbò nà nà (ò) dénwù
doctor this he buy shirt [- - - - -]
'this doctor bought a shirt'

It is seen from (5a-f) that in final position, in spite of low raising, there is a contrast between high, mid, and low. The mid tone, however, is not as widely distributed as are high and low: it occurs only after a high; after low, the contrast between mid and high is neutralized. Even so, it can be demonstrated that this is not a downstep. First, it can not be shown to be derived from a lost low tone. In (6), we see that a surface tone sequence reminiscent of a classical downstep language is non-occurring:

(6) ò xwé èvbé → *ò xwévbē [_ - -] 'he killed a goat'

Rather, we find the following:

(7) ò xwé èvbé → òxwévbé [_ - -] 'he killed a goat'

Secondly, there are cases where movement from mid to high occurs as in the following:

- (8) a. ó ka dé → ó k̄a dé [- - -]
 he will buy
- b. ótọ + rV + òcé → ót̄orócé [- - - -]
 ground assoc. pot
 marker
 'bottom of pot'
- c. ótọ + rV + òyèn → ót̄oróyèn [- - - -]
 'his piece of land'
- d. ínwù + rV + àyèn → ínwùráyèn [- _ - -]
 'their shirts'
- e. ónyọ + rV + àyèn → ónȳoráyèn [- - - -]
 'their honey'

In view of the analysis of Urhobo just presented, two brief discussions of Urhobo by Welmers [1969] and Elugbe [1973], are of interest. Welmers, writing on the Eku dialect, said that it was only at the end of an utterance--and then only after high--that a third level was heard as mid. According to him, "...the phenomenon of terracing or downstep within a phrase is not found...Up to the last syllable of any given utterance, all tones can be described in terms of a two-tone system..." (p.88). Welmers also notes that high-low nouns (in contrast with high-mid) were very few and that, in any case, this contrast was always lost in non-final position.

Elugbe [1973], writing on the Agbarho dialect, confirmed that there was no terracing or downdrift, but claimed there was a third, downstep, level (albeit a very restricted one) in addition to the low and high levels. It is now clear that the third level in the Agbarho dialect lacks the distributional restrictions that one would have expected of a downstep and is to be regarded as a mid tone.

4. Isoko and Urhobo Compared

From the above, it appears that the main difference between Isoko and Urhobo as tone systems is in the merging of mid and low in Isoko. A comparison of nouns⁵ in both languages shows the loss of a mid versus low contrast in final position in Isoko:

(9)	Urhobo		Isoko		Gloss
	òbò	LL	òbù	LL	'doctor'
	òcé	LH	òthé	LH	'door'
	ókà	HL [- -]	ókà	HL [- -]	'maize'
	ísò	HM [- -]	ísò	HL [- -]	'faeces'
	órhó	HH	úzó	HH	'ear'

The evidence (which can be expanded as in the appendix) suggests that Urhobo is the older system and that final low tone raising has caused a merger of mid and low in Isoko. This has not happened in Urhobo where, in spite of final low raising, mid and raised low are still kept distinct. However, if the raising of final low were to reach a stage that merged it with mid in final position, this merger could be extended automatically to non-final, thus reducing a three level tone system with final low raising to a two-level system with final low raising. Already, in Urhobo, high-low nouns are very rare while high-mid are common.

If we were to assume the opposite, namely the splitting of a non-high tone into two (mid and low) tones, there would be no plausible motivation or explanation.

The analysis of the Èku dialect of Urhobo as given by Welmers would suggest that the merging of low and mid in final position did not necessarily precede a merger of mid and low in non-final position. I have not checked this myself, but consideration of the Èku dialect would mean that we have three systems to compare:

1. Urhobo (Agbarho): three tones plus final low raising (no merger anywhere between low and mid).
2. Urhobo (Èku) : three tones (plus final low raising?) and complete merger of low and mid in non-final position.
3. Isoko : two tones plus final low raising

⁵Nouns fall into lexical tone groups but not verbs, which, given the same number of syllables, invariably have identical tones. The various tone realizations of the verb in Southwestern Èdo are determined by context.

It is to be assumed that a merger of low and mid will take place in final position in Eku, which would then make it clearly a two-tone language. I cannot base too much on Eku since I have no data on it myself; but for the purposes of my arguments below, the near complete merger of low and mid in that dialect is encouraging support.

5. Historical Implications

The kind of tone system just discussed is not common. The tone systems most often associated with Kwa languages are:

a. three levels and no "key lowering" or downdrift. Stewart [1971] cites Ewe as an example of this, but this is apparently controversial. Idoma [Armstrong, personal communication] and Ghotuṣ [Elugbe 1973] are better examples.

b. three tones plus downdrift. Yoruba and Yala Ikom are examples of this, although they differ in their operation of this phenomenon. In Yoruba, only low may lower non-low tones. In Yala Ikom, both low and mid have a lowering effect on high while mid is in turn lowered by low.

c. two tones plus downdrift. Examples of this abound--Twi, Igbo (the classical cases) and Edo (Bini) are interesting examples.

There are, at the moment, two views of the relationship between these types. Stewart speculates that the proto-type of these three types was an (a) type, discrete level system. Somehow, key lowering set in, resulting in type (b), a rather complex kind of system. Simplification of this (b) system through a merger of mid and low resulted in type (c) [1971:196].

Maddieson [1974] summarizes the other view, which is essentially a splitting hypothesis⁶. Maddieson shows that splitting models advanced by those who think that the proto-type of the Niger-Congo tone systems was a two-level tone language include a downdrift model, a sandhi model and a 'phonation type' model. He rejects all these and proposes to explain the development of Yoruba-type mids in terms of a tensivity feature of consonants which "has acted historically as a depressor of tone".

In view of the facts of Isoko and Urhobo outlined above, I would think that Stewart's [1971] position on the three-level proto-type is quite plausible. However, it appears that if a merger of low and mid took place

⁶The proponents of the splitting hypotheses are rarely as definite and straightforward as Stewart [1971] in what they believe. However, see Maddieson for an interesting reference list, to which one may add Schachter and Fromkin [1968].

it was not always necessarily through a downdrift model. Some languages may not develop downdrift, but some other feature--final low raising, for example--which leads to a merger of mid and low as in Isoko.

After studying Èdo (Bini), a classical "two tones plus downdrift" language and Èku, a dialect of Urhobo without downdrift and with a dying mid-low contrast, Welmers [1973:113] suggested that "it would obviously be interesting to study the tonal systems of other Urhobo dialects, and other languages of the Èdo group". Nothing could be more welcome! It may be premature for us to line up on either side of a splitting-merging match.

What is important from the historical point of view is that we have here a merging of low and mid which is clearly not achieved through downdrift or downstep. Key lowering is not the only model of merging possible among Kwa languages. And splitting is not the incontrovertible process of tone change in Kwa.

REFERENCES

- Amayo, A. 1976. "A generative phonology of Èdo (Bini)." Doctoral thesis, University of Ibadan.
- Elugbe, B.O. 1973. "A comparative Èdo phonology." Doctoral thesis, University of Ibadan.
- Greenberg, J. 1966. Languages of Africa. The Hague: Mouton.
- Hyman, L. and R. Schuh. 1972. "Universals of tone rules: evidence from West Africa." Linguistic Inquiry 5:81-115.
- Leben, W. R. 1971. "The morphophonemics of tone in Hausa." In C.W. Kim and H. Stahlke, (eds.), Papers in African Linguistics, pp. 201-218. Edmonton, Alberta: Linguistic Research, Inc.
- Maddieson, I. 1974. "A possible new cause of tone-splitting--evidence from Cama, Yoruba, and other languages." In W.R. Leben (ed.), Papers from the Fifth Annual Conference on African Linguistics, pp. 205-221. Studies in African Linguistics, supp. 5.
- Mafeni, B. O. 1969. "Isoko." In E. Dunstan (ed.), Twelve Nigerian Languages, pp. 115-124. London: Longmans.
- Odomosu, F. 1973. "A phonemic analysis of Èruwa." Long Essay towards the B.A. Linguistics Examination, University of Ibadan.

- Schachter, P. and V. Fromkin. 1968. "A phonology of Akan: Akuapem, Asante and Fante." Working Papers in Phonetics no. 9. University of California, Los Angeles.
- Stewart, J. M. 1971. "Niger-Congo: Kwa." In Thomas A. Sebeok (ed.), Linguistics in Sub-Saharan Africa, pp. 179-212. Current Trends in Linguistics, vol. 7. The Hague: Mouton.
- Welmers, W. E. 1969. "Structural notes on Urhobo." Journal of West African Languages. 6: 85-107.
- Welmers, W. E. 1973. African Language Structures. Berkeley: University of California Press.

APPENDIX: More Urhobo-Isoko comparative noun series

<u>Urhobo</u>	<u>Isoko</u>	<u>Gloss</u>
(a) <u>LL(L) items:</u>		
ètòn [- -]	ìtù [- -]	hair
òbò	ùbò	hand
òwò	ùwò	leg
òmà	ùmà	body
èvhè	èvbì	kola nut
òbè	ùbì	leaf, book
èrèvbèn	èròù	tongue
èràvbèr	àràù	meat, animal
èrhàrèn	ìrràì	fire
ùyòvbìn	ùzòù	head
(b) <u>LH items:</u>		
òcé	òthé	waterpot
èvbé	èvbì	goat
èrhúèñ	èrrúé	cow (zebu)
àján	àdhá	bat
òhwó	òhúó	person
(c) <u>H...L items:</u>		
ọkà [- -]	ọkà [- -]	maize
óshùè	ózuè	spear
íkù	íkù	story
ìvbìrhìn	ìvbìrrì	smoke
útábà	útábà	tobacco
ọshàrè	òzàì	man, male
ọmọtè	ọmọtè	girl, daughter

<u>Urhobo</u>	<u>Isoko</u>	<u>Gloss</u>
(d) <u>H...M items:</u>		
ísọ̀n [- -]	ísò [- -]	faeces
ótọ̀	útọ̀	ground
úbì	úbì	seed
ọ̀nyọ̀	ọ̀nyọ̀	bee, honey
ọ̀sẹ̀	ọ̀sẹ̀	father
ónì	ónì	mother
ésìo	ésì	star
úfi	úfì	rope
úgbẹ̀hẹ̀n	úgbẹ̀hẹ̀	wall
(e) <u>HH items:</u>		
órhọ̀	úzọ̀	ear
óshọ̀	úhíọ̀	penis
úrhé	úrré	tree
úkẹ̀n	éké	egg
únwé	únwé	mosquito