DOWNSTEP DISPLACEMENT IN KIKUYU (abstract)

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1. We are concerned with a number of processes in Kikuyu tonal phonology involving downstep, and with the contribution Kikuyu affords to our understanding of the status of downstep in phonological theory. Specifically, we propose to view downstep as a phonological entity ordered among the tonemes which constitute an independent level of phonological representations [Clements 1976], rather than, as in some treatments, an intonational process determined by certain features (or configurations of features) within the feature matrices defining tones.

We review the major tonal processes involving DS (downstep) in 23 Kikuyu idiolects, representative of the northern, southern, and western districts of the Kikuyu-speaking region. The processes in question are rules of phrase phonology (rules of "external sandhi"), dependent upon both a bipartite division of nongrammatical morphemes (for the most part, independent words) into two tonal classes, I and II, and the syntactic configurations in which these may occur. These processes are summarized in the following sections. In several cases, it can be shown that significant generalizations can be formulated only if DS is viewed as an entity ordered among strings of tonemes. Space permits the discussion of only two such cases in this abstract.

2.1 Noninterrogative sentences are marked finally by intonational processes of key-lowering which can be summarized as follows:

\[
\text{R.O. } \emptyset \rightarrow / \_\_L_q(H_q) \_S \quad (\text{where } L \text{ is a maximal string of } L \text{ tones})
\]

n'é mwayáhiña [- - - - ] 'he's a weakling'

mwayáhiña mórito [- - - - - ] 'heavy weakling'

It will be noted that DS is "total" (Meeussen) in the sense that a sequence L!H is phonetically equivalent to the sequence LL, the sequence H!H to the sequence HL, etc. As RO is an automatic, exceptionless process in these sentences the DSs it introduces are fully predictable and are not indicated in the examples.
2.2 Words of all word-classes (excluding grammatical particles) are classified into one of two sets, I and II as mentioned above, according to whether they do (II) or do not (I) undergo a rule of tone flattening to be discussed below (sec. 2.5). This classification is also relevant to the formulation of the DS insertion rules. Certain details aside, DS is introduced into strings after every item of class I, except in two environments: (i) between a verb and a following N, ADJ, or ADV (this restriction applies in positive statements only), and (ii) between the head of a NP and the first following complement. DS is introduced after class II items in more restricted circumstances, namely, after the first complement to a V, in positive statements.

2.3 By a process of DS displacement, a DS following a H tone introduced by the rules described above is copied to the right of a string of following L tones, all of which become H; the original DS is deleted in all but one of the idiolects considered. This is the rule termed "block raising" in Ford [1975].

R1. $!L_Q \rightarrow H_Q !$ / H

/nyâñéêiře mwayâñéiñá moñaké/ 'he-gave weakling tobacco-plant'

H L H L H H! L L H! (after DS placement)
H L H L H H H! H! (by R1, in majority idiolects)

2.4 In certain words a H tone spreads to a following L tone across any word boundary not marked by DS, if the following root tone is L:

R2. L + H / H $! L$

2.5 The final H tones of class II items become L sentence-finally after L, unless immediately following the main verb in a positive statement:

R3. $!H_Q \rightarrow L_Q / L $]_II $! # S$ (the flattening rule: see Ford [1975:51-52])

The syntactic condition has not been included in this formulation of the rule. This is because it is unnecessary, given the rules of DS insertion stated in sec. 2.2. Note that in positive statements (only), DS is inserted after the first complement to a N or V. In such sentences, therefore, items of class II ending in final H tone will be of the form: ...H]_II $! # S$. Due to the presence of DS, such items will not meet the structural description of R3. Cf. the following examples: (i) né kéyírëryä! 'it's a hindrance' (positive statement: R3 inapplicable); (ii) kéyírërya 'hindrance' (citation form: no DS inserted, and R3 applies).

These facts strongly support the view that DS is an entity ordered among tonemes in phonological representations. Under the contrary assumption, there is no way of relating the fact that DS is inserted, and R3 fails to apply, in exactly the same set of circumstances.

2.6 Final H tones are classified as $[\pm$ stable] [Ford 1975]. It is
not impossible that this diacritic marking may be eliminable in favor of a purely phonological analysis, but this will not affect our discussion. All unstable H (UH) tones become L before a H tone across a WB, provided that no DS intervenes:

\[ R4. \quad \text{UH} + \text{L} / \quad \# \quad \text{H} \]

As before (sec. 2.5), no special mention need be made of the condition that no DS intervenes, since a string of the shape UH # ! ! H does not meet the SD of the rule.

2.7 Two contiguous DSs undergo context-free deletion:

\[ R5. \quad ! ! \rightarrow \emptyset \]

2.8 These rules can be illustrated by the following further derivation (all items crucially involved are class I):

he gave Njuguna banana heavy one long ago very
/né ahéiré njowanyá iriyo irito rámwe tẹnẹ mónś/ |
H L L H L H H H H H H H H H H H H H H H H H H H H H H H H (by DS intro)
H L L H L H H H H H H H H H H H H H H H H H H H H H H H H (by R1)
H H L H L H H H H H H H H H H H H H H H H H H H H H H H H (by R2)
H H L H L H L H H H H H H H H H H H H H H H H H H H H H H H H (by R4)
H H L H L H L H H H H H H H H H H H H H H H H H H H H H H H H (by R5)

Naturally, single DSs remaining in strings after the operation of R1 are not deleted (see e.g. the example in sec. 2.3). Sentence-final DSs have no phonetic effect.

3.0 The summary of Kikuyu tone sandhi presented here can only be regarded as a very schematic overview of a system that offers many complexities. We believe, however, that it accurately characterizes the nature, if not the detail, of the tonal processes involved.

REFERENCES

