

A Stratal OT Typology of Lexical Tonal Melodies

Jeroen Breteler (University of Amsterdam)

Following Uwano (2012a), languages with so-called N-pattern accent can be defined as those that have no more than N accentual oppositions, regardless of word length. Previous literature has focused on the description and diachrony of such languages, but so far there has been little investigation from a more formal point of view. Challenges abound for such an investigation; N-pattern accent languages display complex tonal melodies, interactions with prosodic structure, postlexical processes, and morphological differences between accent classes.

The presentation will show that this complexity can be accounted for in a Stratal OT framework by reranking a small set of constraints (Kiparsky 2000). In addition to standard constraints on alignment and tone association, newly proposed SPREADLEFT and SPREADRIGHT constraints and their negative counterparts enforce tone (non-)spreading at either edge of the domain, and a FAITH-LINK constraint enforces the retainment of association links from one morphological stratum to another.

As an example, consider the Wan dialect of Japanese, with data reinterpreted from Uwano (2012b). One accent class, type alpha, displays a HLH tonal melody over the noun + particle domain, with the leftmost tone spreading over excess moras. Uppercase = H-tone.

miDU	TAtaMI	MIDUkuMI
MIDU-kaRA	TATAMI-kaRA	MIDUKUMI-kaRA

Starting from an HLH melody, an active SPREADLEFT constraint is enough to derive the forms; all tone spreading is done by the leftmost tone in the word, so the constraint is unviolated.

Type beta displays a HLHL tonal melody (forgoing postlexical deletion):

NAbi	haTAna	MUcjiGUmi	HANSUUBaTEe
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Here too the leftmost tone will associate to any excess moras. However, forms with suffixes retain the tonal makeup of the noun, instead of associating additional parts of the melody:

NABI-KAra	haTANA-KAra	MUcjiGUMI-KAra	<i>(not reported)</i>
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The correspondence between the two strata is accounted for through FAITH-LINK; most links between tone and TBU are kept, with only the word-final L tone breaking away. This suggests that FAITH-LINK is violated to satisfy *SPREAD(L), a constraint militating against the spreading of L tones (if not, */NAbi-kara/ would win out). The difference between type alpha and beta is morphological; derivations of beta start out at the stem-level, and consequently have to deal with FAITH-LINK, while derivations of alpha start at the word-level. This means SPREADLEFT has to be active for the two types on two different levels, so the final account comes out as:

Stem SPREADLEFT (type beta nouns associate tones)
Word *SPR(L)>FAITH-LINK>SPRLEFT (alpha + suffixes associate, beta reassociates to suffixes)

The account shows that the dialect can be interpreted as a single phonological system; there is no need to stipulate a cophonology or to make use of enhanced representation targeting specific tones. A range of N-pattern accents is accounted for in a similar vein, notably including Koshikijima dialect, reported by Kubozono (2012), and Kikai-jima dialects (Uwano 2012b). Similar patterns outside the Japanese language sphere are also considered.

In conclusion, it is argued that the discussed phenomena can be accounted for by leveraging constraint rankings in a Stratal OT framework, without the need to stipulate major additions to the theory of phonological representations.