**Anonymous Tone Linking in Olusamia**

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It is well established that the structures in (1a-e) can form (or be part of) underlying morpheme representations: a segment (1-a), a floating mora (1-b), a floating tone (1-c), a mora underlyingly linked to a segment (1-d), and a tone underlyingly linked to a segment via a mora (1-e). A structure such as (1-f) where tone is underlyingly associated to a prosodic node which is not linked to a segment is predicted by the formal inventory of autosegmental representations, but doesn't seem to play any role in nonsegmental morphology. In this talk I argue that configurations of this type ("anonymous tone linking") obviate otherwise necessary parochial constraints on tone alignment. More specifically, I show that tone placement in Olusamia, a Bantu language spoken at the Northern coast of lake Victoria, which is captured in Poletto (1998) by morpheme-specific alignment constraints derives from anonymous tone linking interacting with general faithfulness and markedness constraints.

(5) shows some representative tone distributions for different paradigms in Olusamia. Thus, disregarding the shaded cells, the Negative Recent Past (NRP) has a high tone on the first mora of the stem and a low tone on one or more following moras (marked by "+"), while the infinitive has low tone on the first syllable and a high tone on one or more following syllables. Under the assumption that the tonal pattern for the NRP has an underlying association with a mora (6), and the pattern for the Infinitive an underlying association to a syllable (7) the constraints Max | (2) and Uniformity (3) ensure that NRP forms are linked consistently to moras, and infinitives to syllables, overwriting the markedness constraints $*\sigma_{\text{T}}$ and $*\mu_{\text{T}}$ which otherwise determine the preferred type of TBU ((6),(7)). In effect, underlying anonymous tone linking determines the respective surface TBU for each tone pattern. The exact linking patterns can then be derived from any constraint ranking which induces one-by-one left-to-right TBU-tone association with spreading at the right edge (cf. e.g. Yip, 2002). This holds also for The Present and Conditional forms which can be represented as L H H (linked to $\mu$) and L H L (linked to $\sigma$) respectively, and all other tone patterns in the language.

The shaded cells in (5) correspond to cases where there are not enough appropriate TBUs to link the tone melodies. In theses cases low tones are deleted, in patterns with more than two low tones (e.g. the Conditional) the leftmost L. This follows straightforwardly from the constraint Align(Stem,Left,H,Left) (4) ranked below the constraints discussed so far.

<table>
<tr><td>(1)</td><td>a. u</td><td>b. $\mu$</td><td>c. H</td><td>d. $\mu$<br>|<br>u</td><td>e. H<br>|<br>$\mu$<br>|<br>u</td><td>f. $\mu$<br>|<br>H</td></tr>
</table>

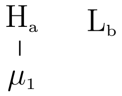
(2) Max |: If an underlying tone $T$ is linked to a TBU $U$
any output tone corresponding to $T$ must be linked to a TBU corresponding to $U$

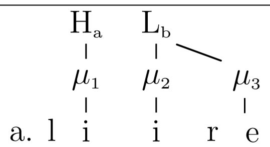
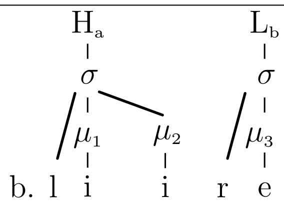
(3) Uniformity: All tones in a prosodic word are associated to the same TBU type

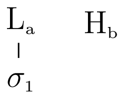
(4) Align(Stem,Left,H,Left): The left edge of a stem
is aligned with the left edge of a high tone

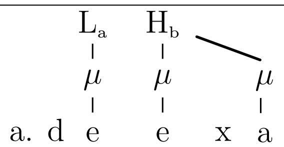
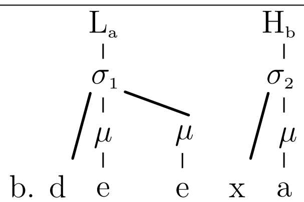
(5) **Tone Patterns in Olusamia**

| | **Negative Recent Past** | **Present** | **Infinitive** | **Conditional** |
|---|---|---|---|---|
| 1 $\sigma$ 1 $\mu$ | $(\ \acute{\mu}\ )_\sigma$ | $(\ \acute{\mu}\ )_\sigma$ | $(\ \acute{\mu}\ )_\sigma$ | $(\ \acute{\mu}\ )_\sigma$ |
| 1 $\sigma$ 2 $\mu$ | $(\ \acute{\mu}\ \mu\ )_\sigma$ | $(\ \acute{\mu}\ \acute{\mu}\ )_\sigma$ | $(\ \acute{\mu}\ \acute{\mu}\ )_\sigma$ | $(\ \acute{\mu}\ \acute{\mu}\ )_\sigma$ |
| 2 $\sigma$ 2 $\mu$ | $(\ \acute{\mu}\ )_\sigma(\mu\ )_\sigma$ | $(\ \acute{\mu}\ )_\sigma(\acute{\mu}\ )_\sigma$ | $(\ \mu\ )_\sigma(\acute{\mu}\ )_\sigma$ | $(\ \acute{\mu}\ )_\sigma(\mu\ )_\sigma$ |
| 2 $\sigma$ 3 $\mu$ | $(\ \acute{\mu}\ \mu\ )_\sigma(\ \mu\ )_\sigma$ | $(\ \mu\ \acute{\mu}\ )_\sigma(\ \acute{\mu}\ )_\sigma$ | $(\ \mu\ \mu\ )_\sigma(\ \acute{\mu}\ )_\sigma$ | $(\ \mu\ \acute{\mu}\ )_\sigma(\ \mu\ )_\sigma$ |
| 3 $\sigma$ 3 $\mu$ | $(\ \acute{\mu}\ )_\sigma(\ \mu\ )_\sigma(\mu\ )_\sigma$ | $(\ \mu\ )_\sigma(\ \acute{\mu}\ )_\sigma(\acute{\mu}\ )_\sigma$ | $(\ \mu\ )_\sigma(\ \acute{\mu}\ )_\sigma(\acute{\mu}\ )_\sigma$ | $(\ \mu\ )_\sigma(\ \acute{\mu}\ )_\sigma(\mu\ )_\sigma$ |
| 3 $\sigma$ 4 $\mu$ | $(\ \acute{\mu}\ \mu\ )_\sigma(\ \mu\ )_\sigma(\mu\ )_\sigma$ | $(\ \mu\ \acute{\mu}\ )_\sigma(\ \acute{\mu}\ )_\sigma(\acute{\mu}\ )_\sigma$ | $(\ \mu\ \mu\ )_\sigma(\ \acute{\mu}\ )_\sigma(\acute{\mu}\ )_\sigma$ | $(\ \mu\ \mu\ )_\sigma(\ \acute{\mu}\ )_\sigma(\mu\ )_\sigma$ |
| 4 $\sigma$ 4 $\mu$ | $(\ \acute{\mu}\ )_\sigma(\ \mu\ )_\sigma(\mu\ )_\sigma(\mu\ )_\sigma$ | $(\ \mu\ )_\sigma(\ \acute{\mu}\ )_\sigma(\acute{\mu}\ )_\sigma(\acute{\mu}\ )_\sigma$ | $(\ \mu\ )_\sigma(\ \acute{\mu}\ )_\sigma(\acute{\mu}\ )_\sigma(\acute{\mu}\ )_\sigma$ | $(\ \mu\ )_\sigma(\ \acute{\mu}\ )_\sigma(\mu\ )_\sigma(\mu\ )_\sigma$ |
| **Basic Pattern** | $\acute{\mu}\ \mu^+$ | $\mu\ \acute{\mu}\ \acute{\mu}^+$ | $\sigma\ \acute{\sigma}^+$ | $\sigma\ \acute{\sigma}\ \sigma^+$ |

(6) **Input:** liire + 

| | UNIFORMITY | MAX \| | $*\sigma_T$ | $*\mu_T$ |
|---|---|---|---|---|
| ☞ a.  | | | | ** |
| b.  | | *! | ** | |

(7) **Input:** deexa + 

| | UNIFORMITY | MAX \| | $*\sigma_T$ | $*\mu_T$ |
|---|---|---|---|---|
| a.  | | *! | | ** |
| ☞ b.  | | | ** | |

## References


Poletto, R. (1998). Constraints on tonal asssociation in Olusamia: An optimality theoretic account. In Hyman, L. M. and Kisseberth, C. W., editors, *Theoretical Aspects of Bantu Tone*, pages 331–364. CLSI Publications.

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