Non-concatenative allomorphy as argument against paradigmatic Realize Morpheme

Eva Zimmermann (Eva.Zimmermann@uni-leipzig.de)
University of Leipzig

The phenomenon that different types of non-concatenative morphology can realize one and the same morpheme in different contexts (=non-concatenative allomorphy) is often taken as a main argument for an OT-constraint Realize Morpheme. I will argue that a RM-based theory is neither necessary nor empirically adequate to account for instances of non-concatenative allomorphy.

**Background:** The original concept of Realize Morpheme demands the mapping of each morpheme to some phonological element in the output (e.g. Samek-Lodovici (1992), Walker (2000)). In contrast, RM as defined in Kurisu (2001) is satisfied if the output is phonologically different from its base: A morpheme could be realized by any conceivable operation the languages phonology provides. He discusses non-concatenative allomorphy as a strong argument for such an approach: e.g. in Saanich (1), a morpheme is realized through reduplication, infixation or metathesis whereas each of these allomorphs has its own (phonological) context.

(1) **Saanich continuative aspect**

<table>
<thead>
<tr>
<th>Operation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduplication</td>
<td>q' w al’ “say” q’ w’ q’ w al’ “saying (sth.)”</td>
</tr>
<tr>
<td>Infixation</td>
<td>w eq’ s “yawn” w’ eq’ s “yawning”</td>
</tr>
<tr>
<td>Metathesis</td>
<td>sq ’ t “tear it” s’ q ’ t “tearing it”</td>
</tr>
</tbody>
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**Problems:** First, analysing metathesis as morphological exponent which falls out from low-ranked LIN predicts metathesis of two consonants as a possible morphological exponent: LIN does not differentiate between the kind of segments whose underlying order it preserves. This prediction is empirically wrong since metathesis in a morphological context always involves CV-reordering (cf. e.g. the survey in Hume (2001)). Second, I will show that any RM-based analysis must be empirically inadequate since general markedness constraints, crucial to exclude allomorphs in wrong contexts, mispredict phonological repair operations in phonologically licit structures. A ranking paradox in the analysis Kurisu (2001) gives for Saanich illustrates this point. Since any (non-concatenative) realization of a morpheme violates some faithfulness constraint, their ranking determines a preference order for different allomorphs D- in Saanich (following from Kurisu’s ranking (2)): /t/-infix >> reduplication >> metathesis.

(2) **RM >> *ComplOns >> *ComplCoda >> LIN >> Integ >> Contig**

A less preferred allomorph is only chosen if another allomorph’s realization would result in a marked structure; *ComplCoda for example is necessary to exclude the /?/-infix in stems with a closed Prst syllable like reduplicating /q’ w’ al/ or metathesizing /sq’ w al/ (*/q’ w’ al/ and */sq’ w’ t/). But this high-ranked general markedness constraint mispredicts phonologically improving candidates not being considered by Kurisu to become optimal: a correct metathesis form /sq’ t/ for example looses against a reduplicating candidate /sq’ al/. Reranking Integ above *ComplCoda would exclude this but would incorrectly prohibit reduplication in general.

**Proposal:** A survey of attested patterns of non-concatenative allomorphy shows that they are always analysable as affixation of some phonological structure (e.g. a single (abstract) feature for consonant mutation and insertion in Irish (Trommer (2009), Rice (1993)) or a mora resulting in nasal insertion, V-, or C-lengthening in Shizuoka Japanese (Davis and Ueda (2002))). I will show that the Salishan allomorphy Kurisu (2001) discusses can be reduced to affixation of a mora (Saanich, cf. Stonham (2007)) or a foot (Upriver Halkomelem).
A language might provide different strategies to realize those morphemes in the output (e.g. metathesis might be one strategy to achieve prosodic weight, i.e. realize a morphemic mora, cf. e.g. Stonham (2007), McCarthy (2000), Buckley (2002)), but the number of potential allomorphs is quite smaller than in a RM-based theory and most important, no general markedness constraints are crucial for the exclusion of allomorphs but rather faithfulness constraints like $\text{MAX}-\mu/\text{Ft}$. In addition, analysing metathesis as result of mora-affixation excludes CC-metathesis as possible morphological exponent since reordering of two consonants does not change the prosodic weight of a syllable.

References
Davis, Stuart and Isao Ueda (2002), The Typology of Mora Augmentation, in 'Proceedings of Linguistics and Phonetics'.