

Weight and Length

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Moras provide a unified representation of syllable weight and segment length. Good evidence for this unification comes, among others, from compensatory lengthening (Hayes 1989), from prosodic morphology (McCarthy and Prince 1993), and from weight phenomena that treat syllables closed by geminates as heavy and other closed syllables as light (Riad 1992, Davis 1999, 2003). My talk addresses two outstanding issues with the moraic model concerning compensatory lengthening (CL), and the related question of the status of moraic/syllabic Faithfulness and distinctiveness.

The first problem about CL is that the classic mora-preservation account is challenged by the existence of CL that seems to involve the loss of onsets. On the basis of a close analysis of the Samothraki Greek case, Topintzi 2006 argues that such CL requires resurrecting segment-based theories of CL. This would be an unfortunate outcome because those theories predict a range of unattested types of CL, and leave no room for the standard explanation of CL that is triggered by glide formation (such as Kihhe and Kimatuumbi *iV- → yVV-*, Odden 1996).

A second difficulty, this one OT-internal, is that CL often involves the preservation of weight that (by Richness of the Base) is not necessarily present in the input. OT-CC (McCarthy 2007) resolves certain special cases of this type (cf. Shaw 2007, with somewhat different assumptions) but it does not eliminate the problem in general. I demonstrate this with an interesting case of CL in Finnish. In all varieties of Finnish, a process of Consonant Gradation weakens stops in the onset of a closed syllable. In Western Finnish dialects, the weakened consonants are lost under certain conditions, always with CL of the following vowel. After resyllabification the lengthened vowel of the second syllable inherits the lost positional weight of the first: /jalka-*t*/ → *jal.ˌyat* → *ja.laːt* 'feet', /halko-*t*/ → *hal.vot* → *ha.loːt* 'logs', /selkä-*t*/ → *sel.jät* → *se.läːt* 'backs'.

I show that both problems have a solution in Stratal OT. The main point is that CL applies at the Word level to an input that comes fully syllabified from the Stem level. Thus CL crucially involves a relation between two distinct syllabified structures, governed by markedness constraints and moraic Faithfulness constraints. From this perspective, Samothraki Greek CL turns out to be the exact analog of Kihhe/Kimatuumbi CL, only with *r*-deletion instead of glide formation. The Finnish derivation crucially involves Consonant Gradation triggered by the Stem-level syllabification followed by deletion and resyllabification with CL at the Word level. The analysis predicts correctly that no Eastern Finnish dialect has CL, because in all these dialects Consonant Gradation deletes the onset *k-* directly in all contexts at the stem level: /jalka-*t*/ → *ja.lat*, /halko-*t*/ → *ha.lot*, /selkä-*t*/ → *se.lä-t*.

I conclude with an argument that both moraic and syllabic Faithfulness constraints are required (contra McCarthy and others). Apart from CL effects, such constraints are motivated by reduplication phenomena and by paradigmatic effects (whether modeled by O/O constraints as in parallel OT, or as cyclic inheritance by I/O constraints as in Stratal OT). Syllabicity, length, and weight can all be contrastive as long as the contrast has perceptible effects.