## **Variation in Finnish Suffixal Vowel Harmony**

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Finnish has a palatal harmony system where front harmonic vowels  $[y,\emptyset,æ]$  cannot occur with back harmonic vowels  $[u,o,\alpha]$ . The two transparent neutral vowels [i,e] may occur with either harmonic class of vowels. Harmonic suffix vowels conform to the harmonic class of the root. If there are only neutral vowels in the root, the harmonic suffix vowels surface as front.

Though Finnish vowel harmony is, for the most part, quite regular, there is a class of words which evidence suffixal variation. Disharmonic or long (four or more syllables) loanwords display suffix allomorph variation. This is particularly unexpected for loans which contain only back harmonic vowels (1c). Both inter- and intra-speaker variation have been demonstrated (Levomäki (1972), Ringen and Heinämäki (1999) and Välimaa-Blum (1999)).

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1. a. back vowel + front vowel
b. front vowel + back vowel
c. back vowel + neutral vowel mart.tyy.ri-a mart.tyy.ri-ä 'martyr (partitive)'
ty.ran.ni-a *ty.ran.ni-ä 'tyrant (partitive)'
ap.pel.sii.ni-a ap.pel.sii.ni-ä 'orange (partitive)'
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Earlier analyses of the variation have made crucial reference to stress and sonority (Kiparsky 2003; Ringen and Heinämäki 1999; Välimaa-Blum 1999). As well, most have relied on the 'prosodic compound' hypothesis which assumes speakers may treat the loans as compound words with suffixes agreeing with the final disyllabic element.

Previous work has centered mostly on written surveys, which do not normally elicit a large amount of data. As well, speakers are likely to determine the nature of the experiment, which could result in overly thoughtful responses leading to skewed results. Interviews are also inadequate since the loans in question are mostly low frequency and may not occur in a sentential position requiring a harmonic suffix, especially if the speaker is unsure of the 'correct' allomorph. Thus, to attain extensive natural data, I used Query Google to search for 53 roots suffixed with both partitive allomorphs, amassing 8,576,764 tokens, which were then analyzed for variation in the suffix vowel.

The results reveal that there is actually less variation than previously assumed. Three syllable disharmonic words consistently behave as shown in (1) above. However, four syllable words, either disharmonic or of the type (1c) do not. In contrast to what has been reported in earlier research, variation occurs only when the two classes of vowels occur in the same foot. Moreover, the variation is controlled by competing sonority and proximity constraints. When only a single harmonic vowel occurs in the foot closest to the suffix, this vowel controls the harmony.

The implications of these results for Finnish vowel harmony are immense in that they require a new analysis of the both the factors controlling harmony as well as the harmonic domain itself.

## References

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