Asymmetric re-pairing in Hungarian vowel harmony

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In many vowel harmony systems, some vowels are unpaired, in that they lack inventory counterparts that differ in only the harmonic feature. As Baković (2000) notes, there are three broad ways in which unpaired vowels may behave: they may be overlooked by harmony ('transparency'), they may block harmony ('opacity'), or they may participate in an alternation with a vowel that differs in more than the harmonic feature ('re-pairing'). In classic cases of re-pairing, as found in Nilotic languages like Maasai, an unpaired vowel is brought into an alternation with one member of a harmonic pair. For example, the low vowel [a] in Maasai lacks a [+ATR] counterpart; in progressive ATR harmony, it re-pairs, harmonizing to [o], which is otherwise the ATR counterpart of [ɔ] (Baković 2000). However, there are other cases in which re-pairing is symmetrical, with two unpaired vowels behaving like a harmonic pair despite differing in more than just the harmonic feature. For example, the Turkish vowels [ɑ] and [e] behave like a harmonic pair for front/back harmony, despite differing in height (Baković 2000).

In this research, I use data from Hungarian to propose an additional type of re-pairing, which I term asymmetrical re-pairing. This case is similar to Turkish in that both relevant vowels lack harmonic counterparts, but similar to Maasai in that only one vowel is targeted by re-pairing; the other vowel is instead neutral. Such an asymmetry results in a system in which two unpaired vowels alternate with each other harmonically, yet have distinct behaviour, with one consistently participating in harmony and the other being otherwise neutral.

In Hungarian, which has a well-described system of front/back harmony, both [e:] and [a:] lack inventory counterparts that differ from them only in the feature [back] (Siptár and Törkenczy 2000). However, while [e:] is transparent to backness harmony, [a:] participates fully, in that it is a trigger of (suffix) harmony and cannot co-occur with (non-neutral) front vowels in roots (Siptár and Törkenczy 2000). Moreover, the harmonic alternant of [a:] in suffixes is [e:], as in the adessive case [-na:l]~[-ne:l] and the 3rd singular definite conditional [-na:]~[-ne:] (Siptár and Törkenczy 2000). While many suffixes contain non-alternating [e:] (e.g. [-e:rt] 'for' and [-e:] 'belonging to'), non-alternating [a:] is absent except in rare domain-external suffixes; the large majority of suffixes with [a:] have an alternant with [e:] (Siptár and Törkenczy 2000). While the transparency of [e:] has frequently been analyzed as related to the absence of a harmonic counterpart in the Hungarian inventory (e.g. Vago 1973), its status as a counterpart for [a:] in suffix alternations is typically not discussed, nor is the fact that [a:] is also unpaired.

I suggest that Hungarian [a:] and [e:] are a case of asymmetrical re-pairing: [a:] always re-pairs with [e:], but [e:] is not subject to re-pairing. This analysis correctly predicts the facts of Hungarian. Indeed, in suffixes, we expect /a:/ to show a harmonic re-pairing alternation [a:]~[e:]. However, since re-pairing is asymmetrical, suffixes with /e:/ can surface unchanged regardless of harmonic environment. Similarly in roots, [e:] will be neutral and occur freely, but combinations of [a:] with (non-neutral) front vowels will be impossible; /a:/ is subject to root-internal harmony through re-pairing, so any such underlying combinations would surface with [e:].

Overall, I propose a new perspective on Hungarian vowel harmony that expands upon the concept of re-pairing. In previous analyses of Hungarian (e.g. Ringen and Vago 1998), the reasons behind the unexpected alternation of [a:] with [e:] are generally left as a complication. However, I show that this behaviour is part of a broader, systematic pattern that can be better understood by drawing on notions and analyses of re-pairing. As such, Hungarian suggests the addition of asymmetric re-pairing to the typology of behaviours of unpaired vowels, contributing to our understanding of how patterns of inventory contrast can shape harmony systems.

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