

Co-occurrence patterns in Turkish vowel (dis)harmony
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In this talk, I will present the results of a study that investigated vowel co-occurrence patterns in the first two syllables of Turkish roots in the Turkish Electronic Living Lexicon (TELL), an online database of about 30,000 words. The main finding of the current study is that there are restrictions on the co-occurrence of vowels from the set [i, e, o, u, a], the prototypical “unmarked” 5-vowel system which has been widely reported to freely combine in disharmonic roots (Clements & Sezer 1982), and that disharmonic sequences involving the vowels [ü, ö] (the so-called “marked vowels”) are not any less common than those involving some of the vowels from the unmarked vowel set (e.g., words with [i-u], [u-o], [u-i] are as scarce as [ö-a], [a-ö], [a-ü]). Furthermore, the combination of [ü-a] outnumbers even some perfectly harmonic sequences (e.g., [ö-ü], [o-o], [ö-ö]), providing genuine counter-evidence for previous analyses of vowel disharmony (e.g., Kirchner 1993, Polgardi 1999). The results further suggest that vowels do not always combine in either order with equal frequency, yielding significant asymmetries in their distribution to first (V₁) and second vowel positions (V₂). For instance, [i] prefers to precede [a] more than [a] prefers to precede [i] (31% of all [i]-initial roots are [i-a] vs. 16% of all [a]-initial roots are [a-i]). Likewise, [u-a] is far more common than [a-u] among the combination of these two vowels (52% vs. 7% respectively) although [u] occurs almost equally as often as V₁ and V₂ in the corpus. Strikingly, vowel sequences that mismatch with respect to labiality involve twice as many [LABIAL]-[NON-LABIAL] sequences as [NON-LABIAL]-[LABIAL] ones (66% vs. 34% of all labial mismatches, respectively), and the great majority of V₂ in [LABIAL]-[NON-LABIAL] sequences is a low vowel (89%). These tendencies highly influence not only an individual vowel’s co-occurrence preference with another vowel but also the order in which the vowels co-occur, strongly suggesting that markedness cannot be the sole explanation for disharmonic patterns.

In the remaining part of the talk, I will discuss the consequences of these findings for the status and representation of vowel co-occurrence (sub)regularities in roots. Previous models which primarily restricted their focus on the interplay of markedness constraints (e.g., *ü, *ö, *ı) with directionless harmony constraints (e.g., AGR(F)) fail to explain the above mentioned asymmetries since a given vowel sequence *x-y* will incur as many constraint violations as *y-x* (e.g., Kiparsky & Pajusalu 2003). Furthermore, the discrepancy between the co-occurrence of, for instance, [a-u] and [u-a] cannot be due to violations of markedness constraints since neither of the vowels in question is “marked”. Instead, I will argue that vowel harmony should crucially be viewed as an autosegmental rule of feature spreading with a direction and context, and must be active within all kinds of Turkish roots, harmonic and disharmonic alike. Everything else (e.g., markedness considerations) being equal, when surfacing features in a given sequence cannot be linked between the trigger and the target via a rule that would normally cause the features in question to be shared, the sequence will constitute an exception, its rate of occurrence largely being determined by how restricted the offended harmony rule is. The more restricted a rule is, the less likely the occurrence of a surface sequence offending the rule will be. As such, palatal harmony restrictions are more common than labial harmony restrictions since the latter has a more restricted context than the former. Furthermore, [NON-LABIAL]-[LABIAL] sequences are less preferred than [LABIAL]-[NON-LABIAL] ones because there is no reason why V₂ should surface as [LABIAL] in the absence of a proper context that satisfies the labial spreading rule. In [LABIAL]-[NON-LABIAL] sequences, however, [LABIAL] is not expected to spread unless the target vowel is high, explaining why the majority of non-labial vowels in such contexts is low.

References

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