

Vowel Harmony in Trabzon Turkish

Neşe Demir | UC San Diego | ndemir@ucsd.edu

Trabzon Turkish (TT) is a variety spoken in the North East of Turkey. Similar to Standard Turkish (ST), TT has backness and rounding harmony in roots as well as suffixes; however, compared to ST, TT displays a break-down in vowel harmony. I show that vowel harmony in TT is disrupted as a result of two main factors: i) suffixes with non-alternating vowels and ii) the influence of adjacent consonants on vowels. Nevertheless, vowel harmony still robustly extends to the rest of the word. Unlike reported cases of vowel harmony decay, no decay across the word is observed in TT.

In TT, as in ST, vowel harmony extends from left to right. Backness harmony applies to all vowels as seen in the harmonic TT examples below, where all vowels are front in (1a) and back in (1b,c). Rounding harmony only applies to suffixes with underlying high vowels such as the aorist (AOR). The AOR is realized with a rounded back [u] following [u] in (1b) and with an unrounded back [ʊ] following the unrounded back [a] in (1c). Rounding harmony does not apply to the 3rd person plural marker (3PL) in (1a,b) since the 3PL vowel is underlyingly non-high.

1. a) [de-r-ler] say-AOR-3PL
- b) [bul-ur-lar] find-AOR-3PL
- c) [kal-ur] stay-AOR

Nevertheless, both types of harmony are only partially productive in TT. To quantify the harmony patterns statistically, data was extracted from a corpus of written texts in TT (Brendemoen, 2002). The data compiled for this study contains 1216 inflected words in TT, with 1860 suffixes. To be able to judge the vowels in TT words as harmonic/disharmonic, backness and rounding harmony rules of ST were taken as a baseline for comparison. The results show that 69% of suffix tokens in TT have harmony, but 31% lack harmony compared to ST, where the suffixes are harmonic in all instances. Backness harmony is satisfied in TT in 83% of suffix tokens. These are predominantly (91%) suffixes with non-high vowels (e.g., 3PL) Rounding harmony, which only applies to high vowels, is satisfied in only 65% of the suffix tokens.

In disharmonic forms, certain suffixes have fixed vowels. The accusative suffix (ACC) in (2) is realized with a non-alternating front [i]. This makes it harmonic in (2a) as it follows a front unrounded vowel, but disharmonic in all other cases. Backness is violated in (2b) as [i] follows the unrounded back [a]. Rounding is violated in (2c) following the front rounded vowel [y], and both backness and rounding are violated in (2d) since the suffix would be predicted to be the rounded back [u] according to vowel harmony.

2. a) [siz-i] 2PL-ACC *harmonic*
- b) [tʃaj-i] tea-ACC *backness violation* ([tʃaj-ʊ] in ST)
- c) [gyn-i] day-ACC *rounding violation* ([gyn-y] in ST)
- d) [bun-i] this-ACC *backness & rounding violation* ([bun-u] in ST)

Despite being resistant to harmony themselves, disharmonic suffixes are opaque not transparent – they can trigger further harmony on following suffixes. The past tense marker (PST), like the ACC, is realized with an unrounded front [i] However, 3PL, which does alternate (see

1a,b), consistently harmonizes with the preceding PST vowel (3a,b). Indeed, in TT, there is no apparent and consistent linear decrease of harmony across the word. This finding is different from reported cases of vowel harmony decay where vowel harmony peters out across the word (McCollum, 2015; McPherson & Hayes, 2016).

3. a) [ara-r-di-ler] look.for-AOR-PST-3PL *backness violation* ([ara-r-**du**-lar] in ST)
 b) [de-di-ler] say-PST-3PL *harmonic* ([de-**di**-ler] in ST)

Another source of disharmony is the influence of following velar consonants. While some suffixes appear to have fixed forms with front vowels (e.g. ACC, PST), others are fixed as the back round vowel [u], so there is no default non-alternating vowel. The suffixes with fixed [u] are more likely to occur adjacent to velar consonants. (4a) demonstrates that the vowel preceding the velar [k] is rounded even when rounding is not predicted by vowel harmony. (4b) shows that rounding (as well as backness) in the PST vowel, which precedes the velar [k], is not predicted since it follows an unrounded front [e]. (Note: the AOR has two allomorphs; one with a high vowel and subject to rounding harmony as in 1b-c, the other with a non-high vowel to which rounding harmony does not apply as in 4a-b).

4. a) [jap-ar-**uk**] do-AOR-1PL *rounding violation* ([jap-ar-**uuz**] in ST)
 b) [gid-er-**du**-k] go-AOR-PST-1PL *backness & rounding violation* ([gid-er-**di**-k] in ST)

This local effect dominates the expected vowel harmony pattern. Data drawn from the corpus confirms that this pattern is robust. Figure 1 shows that disharmony arises due to unrounded vowels induced by an adjacent velar consonant (symbolized with ‘k’).

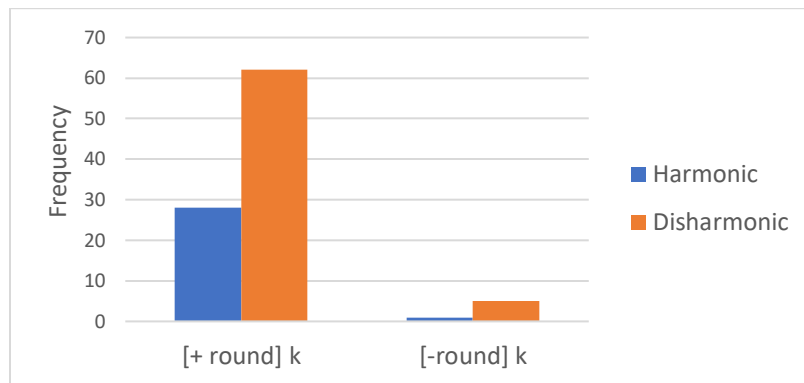


Figure 1: Rounding harmony preceding velars (The figure contains only the tokens where rounding harmony applies).

The patterns of vowel harmony in TT, in which there a large percentage of disharmonic forms, may be due to the second language acquisition of Turkish by Greek, Armenian, and Laz speakers in the area, who have smaller vowel systems compared to ST. Or, the vowel harmony of TT might have been originally more productive, but has undergone decay due to language contact. From a broader perspective, this research helps us understand how language change affects vowel harmony.