

What's in an accent? Vowel harmony and dialect accommodation in Brazilian Portuguese mid-vowels  
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In Brazilian Portuguese, pretonic mid-vowels /e/ and /o/, as in /me.ni.no/ 'boy' and /bo.ni.to/ 'pretty', are considered a shibboleth of Southern and Northern speakers: while the former realize them as [i/e] and [u/o], the latter may also pronounce them as [ɛ] and [ɔ]. This paper analyzes dialect accommodation by contrasting the variable realization of mid-vowels of 12 Northeastern adult migrants from Paraíba living in São Paulo (SP) and Rio de Janeiro (RJ), the two largest cities in Brazil, with patterns of 13 natives of these cities. We focus on a context reported to favor vowel lowering in Northeasterners' speech: tokens of mid-vowels followed by a syllable with a [-high] vowel, a vowel harmony phenomenon (Pereira 2010).

All speakers, balanced for sex/gender, have low levels of education and ages between 30-45 y.o. In mixed-effects linear regression analyses in R, in a total of 1,248 tokens of /e/ and 1,201 of /o/, we analyzed Lobanov-normalized mid-vowel height (F1 measures) in models including preceding and following phonological contexts, F1 of following vowel, syllable structure, sex/gender and place of origin as fixed effects, and speaker and word as random effects. In migrants' samples, age of arrival and length of residence in host community were also added. Further, we analyzed the Euclidean distance between the pretonic and following syllable vowel as a dependent variable.

Results show that mid-vowel height correlates only with internal factors—F1 of following syllable vowel (the lower the following vowel, the lower the pretonic vowel) and preceding context (lowering favored by /r/)—, both in natives' and migrants' speech. Contrary to the initial hypothesis, there was no correlation with social factors, including place of origin. This contradicts the widespread expectation that harmony with following [-high] vowels is non-existent in Southern dialects of Brazilian Portuguese and opens the question of why they're perceived not to undergo lowering. The analysis of the Euclidean distance sheds light on this: although both natives and migrants exhibit vowel harmony, the distance between pretonic mid-vowel /e/ and following [-high] vowel is consistently smaller for Northeasterners than for SP and RJ natives, especially in migrant men's speech, which may cause the perception of lower pretonic vowels. However, for vowel /o/, migrants' Euclidean distances don't differ significantly from natives. Additionally, the lack of correlation with social factors points to the importance of individual behavior. Four migrants show no significant differences in relation to natives mean mid-vowel height and Euclidean distance, but there's no clear indication of this being due to age of arrival, length of residence, sex/gender or simply individual abilities.

These suggest that (i) the perception of vowel height is actualized in an item-by-item fashion, relating F1 measures of vowels within the same word; (ii) in accommodating to host community patterns, migrants may adjust both vowel height and relative distance between vowels; and (iii) some adult speakers do acquire new variation patterns, supporting results from real-time analyses (e.g. Sankoff & Blondeau 2007).