

The social and linguistic conditioning of back vowel fronting across ethnic groups in Memphis, TN
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While most recent studies on regional vowel shifts have documented the back vowel changes affecting White varieties nationally, a few studies in Detroit and Memphis (Anderson and Milroy 1999, Anderson, Milroy and Nyguyen 2002, Fridland 2003) suggest African-American varieties are also affected by back vowel fronting. Beyond these preliminary reports, however, little work has been done comparing the social and linguistic commonalities and contrasts in the progress of the shift and the classes affected. The present study explores how ethnic and regional alignment affects the dispersion of fronting in three key back vowel classes, the *BOOT*, *BOOK* and *BOAT* classes. Using instrumental acoustic measurement of relevant vowel classes, this paper will examine both the social and linguistic conditioning governing the fronting of these classes in White and Black speakers in Memphis, TN, looking at these results in light of those found by Milroy, Anderson and Nyguyen (2002), Ash (1996) and Labov (1994) in the North.

Initial results from thirty-two native Memphians suggest that both African-American and European-American speakers in Memphis are strongly affected by fronting in the /uw/ and /U/ classes, but are only marginally affected by fronting in the /ow/ class. In addition, the results suggest that European-Americans are more advanced in shifting in all classes compared to African-Americans. Preliminarily, it appears that back vowel fronting in the *boot*, *book* and *boat* classes is quite uniform across different regional and social groups, with the main distinctions revolving around the advancement of these differing groups in the process of shift.

Examining the distribution of fronting by linguistic environment within and across classes, the paper suggests that the linguistic constraints on fronting are very similar across regional and ethnic groups and can be explained by examining the acoustic characteristics of neighboring consonants' second formant (F2) loci. With an already inherent pressure toward drift in languages with large vowel inventories, a back vowel transitioning to or from a consonant with a high F2 value (e.g. palatals, alveolars) will be the most likely candidate for fronting. Back vowels following consonants with low F2 loci (e.g. labials, dark laterals) are more resistant to fronting. Once, however, a large number of vowel tokens have fronted, younger speakers appear to re-analyze the appropriate frequency range for that vowel class as a whole, shifting the F2 range so that even previously backed tokens are fronted (showing fronted variants even in labial and liquid contexts). Thus, it would seem that phonetic context effects, while highly regular, are not absolute. That is, when socially salient factors, such as the recognition of new dialect norms, come into play, they apparently prevail over such phonetically-driven constraints.

References:

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