

In-group variation among African Americans in Washington, DC: Neighborhood patterns of back vowel production

Sinae Lee
Ohio University

This study investigates the back vowel production among African Americans and European American speakers in DC, focusing on the fronting of high and mid back vowels (/u/ and /o/ fronting) and the merger of low back vowels (*cot-caught* merger). Though both fronting and merger in DC were examined in Labov et al. (2006) as part of dialectological documentation of North American English, it has yet to be closely studied with more speakers in the sample, or with African American speakers, who make up the majority of DC's population, included. By examining both European American and African American speakers, with the speech of European American speakers as a reference point, the study aims to follow up with the previous investigation by Labov et al. (2006) on back vowel fronting and low back merger in DC, and investigate whether DC African Americans are participating in these majority-led sound changes. The study also examines the different back vowel production between African Americans from a particular quadrant of the city, namely, Southeast (SE), and those from elsewhere DC. This distinction is based on the racial and socioeconomic landscape of DC, in which one particular quadrant, SE, is predominantly occupied by African Americans (95%) and is the most isolated from the rest of the city.

Data are taken from 40 sociolinguistic interviews with natives of DC (12 European American and 28 African American). The vowels were analyzed acoustically, taking F1 and F2 measurements at vowel midpoint. The degree of merger was measured by calculating pillai score for each speaker, and the degree of fronting was measured by referring to the F2 value for each back vowel token. A series of linear regressions was performed, with age, sex, race, and neighborhood (whether or not the speaker is from SE) entered as independent variables.

Results indicate that DC is participating in the 'mainstream' U.S. sound change, mainly led by European American speakers, in which high and mid back vowels are being fronted, and low back vowels are becoming less distinct. While lagging behind, DC African American speakers do take part in the phenomena; a robust age effect among African American speakers suggests that African American speakers not only exhibit evidence of participation in these sound changes, but are moving towards higher degrees of fronting and merger in apparent time. However, African Americans from SE exhibit different vocalic characteristics from those that are from elsewhere in the city: SE African Americans do not participate in the fronting of high back vowel /u/ at all, while they do participate in the fronting of mid back vowel /o/; and their low back vowels are largely distinct with no evidence of merging trend. The study further argues that this neighborhood pattern can be analyzed as (non)convergence to the local white norm, and that the convergence is more likely to be carried out by African American speakers who are not from SE, where the contact between African American speakers and European American speakers is minimal.