On the (lack of) long term accommodation in the regional vowels of college students

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A key issue in variation currently is phonetic change through time within individual lifespans (e.g. Sankoff & Blondeau 2007). Two possible influences on such change are exposure to other varieties and the linguistic performance of social identity. The current study investigates these factors in the speech of college students, hypothesizing that college is a particularly useful life stage to examine such effects, given its rampant changes in both interlocutors and social identity (see Wagner 2012).

The data were collected as part of a project to integrate researching and teaching by prompting college students to record their voices and using the recorded data as teaching tools. Data from consenting students are added to the research corpus, currently numbering 718 speakers total. Recorded data are analyzed automatically using the p2fa forced aligner and formant extraction in Praat.

The current analysis is based on data from 336 college students, all White, under 25 and having lived in a single town in Ohio between the ages of 6 and 17. Students were regionally divided into north, central and south Ohio based on the latitude of their hometown. The year of school for each speaker was used to represent an apparent-time view of change through exposure during college. The fixed effects of year of school, gender, greek life membership, urban vs. non-urban background and self-reported networks were examined on four regional variables: fronting/raising of TRAP, fronting of LOT and the monophthongization of PRICE, and diphthongization of fronted GOOSE. Mixed-effects linear regression models were fit, with random effects as close to maximal (Barr et al 2013) as would allow models to converge.

Northern Ohioans show fronted/raised TRAP and fronted LOT vowels, relative to central Ohioans, while non-urban southern Ohioans show a reduced connection between GOOSE fronting and GOOSE diphthongization (see Koops 2010). Across all three regions, men show more monophthongal PRICE and GOOSE tokens, suggesting greater engagement with "country" speech patterns.

However, despite clear regional effects and a relatively large corpus, the results show little to no support for exposure effects. Only one effect of year of school was found: that northern speakers show lowered/backed (less northern) TRAP vowel after the first year. Contrary to preliminary results with a smaller corpus, no network effects were observed.

Two hypotheses are entertained for the apparent absence of most exposure effects. First, long-term exposure may not be causing long-term change in this population. Second, the broad division of three regional areas and two levels of urbanness may be inadequate for modeling the "hometown vowels" of our speakers, thereby obscuring patterns of change during the college years. More sophisticated spatial approaches are considered as tools for distinguishing between these explanations.