## The apple doesn't fall far from the tree: incremental change in Philadelphia families

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The effect of education on individual language use has been well documented (e.g., De Decker 2006, Wagner 2008), and new work promises to shed light on the extent to which these effects lead to a reorganization of the grammar. For example, recent work in Philadelphia describes a shift in the phonology of the short-a system: some native Philadelphia college students are abandoning the local split system in favor of the more geographically-widespread nasal system (Labov et al. 2013). Previous work has also noted a parallel weakening of the low-back vowel distinction (Prichard and Tamminga 2012).

In this paper, we examine the vowel systems of three female undergraduates at the University of Pennsylvania and their families. Christine is a sophomore whose family members exhibit strong traditional Philadelphian features; Percia is also a sophomore, whose father exhibits weak traditional Philadelphian features; and Athena is a freshman, whose family exhibits traditional AAVE features. Given these three women's similar educational goals, but different family backgrounds, our analysis utilizes the salient short-a and low-back vowels to assess their participation in Philadelphia's local phonology. We analyze a total of 2,632 tokens, which were automatically extracted using the FAVE suite (Rosenfelder et al. 2014).

For both variables, we find that each young woman is a step removed from her family's system toward a less marked system. This agrees with Prichard and Tamminga's (2012) finding that students at nationally-oriented universities like Penn are leading a retreat from negatively-stereotyped local features. All three have low-back vowel distributions which are more overlapping than their parents, and in fact Percia and her younger brother provide the first evidence of a true low-back merger in Philadelphia. We see a similar step away from the traditional system for the short-a variable. Christine, whose family shows the strongest split short-a system, has a heavily overlapping weak traditional system. Percia, whose father shows a weak traditional short-a system similar to Christine's, has fully developed the less stigmatized nasal short-a system. Athena has abandoned her family's AAVE short-a system (which neutralizes the distinction between the tense and lax classes; see Labov 2014), also in favor of the nasal system.

Based on these findings, our hypothesis is that the emergence of the nasal short-a system and low-back merger in Philadelphia is accomplished via an intermediate stage of weak traditional system. Among the speakers analyzed here, we do not see a direct jump from the traditional system to the innovative system between generations. Rather, there is an intermediate generation (here, Christine, and Percia's father) which shows a high degree of variability and category overlap; this sets the stage for the next generation to complete the reorganization. In the specific case of short-a, because the AAVE system already represents a neutralization of the traditional distinction, no intermediate stage is required in conversion to the nasal system. This work thus contributes to the understanding of the mechanisms of phonological reorganization, as well as the role of the family and peer group in sound change.

## References

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