

A community divided: co-occurrence in salient feature shift

Betsy Sneller ~ University of Pennsylvania

Recent work in Philadelphia has found a systematic allophonic restructuring sweeping across the Philadelphia speech community (Labov et al. 2013; Prichard and Tamminga 2012; Labov et al. 2015). Specifically, the traditional Philadelphia split TRAP system (where tokens are tensed in a complex set of environments) is being replaced by the supraregional standard Nasal split TRAP system, where tokens are tensed before nasals. Labov et al. find that this shift from Philadelphia TRAP (henceforth P-TRAP) to Nasal TRAP (N-TRAP) is systematically stratified by the “eliteness” ratings of the high school that speakers attended.

Previous work has argued that the shift away from the P-TRAP system is only a single aspect of a larger shift away from stigmatized Philadelphian features (e.g. Labov et al. 2013; Prichard 2014). In this paper, we build on this hypothesis by investigating the co-occurrence of Philadelphian features with varying levels of social salience in the speech of 54 college students from Philadelphia.

We investigate 7 additional features that are considered to be markers of the Philadelphia dialect, to test whether they co-occur with the new N-TRAP system in the speech of college-educated students. These features vary in level of awareness, and are shown in Table 1. Using a Wilcoxon rank-sum test comparing productions of these vowels for N-TRAP Philadelphians to the productions of P-TRAP Philadelphians, we find two important findings:

- 1) Philadelphians who exhibit the new N-TRAP system also show retraction from additional features of the Philadelphian dialect
- 2) These retractions are most vigorous for the variables that are overtly stigmatized (see Figures 1 and 2)

Note that the Wilcoxon rank-sum test was performed over the relevant dimension for each variable (F1 for raised variables, F2 for fronted variables, and F2-2*F1 for a variable shifted along both F1 and F2, following Labov et al. 2013).

Below awareness	Marker	Overt stigmatization
Lowered DAY p=.35	Raised START p=.02*	Raised THOUGHT p<.001***
Fronted NEW p=.12	Raised NORTH p<.001***	Fronted MOUTH p<.001***
	Raised PRICE p=.001**	

Table 1: features selected for investigation, with p-values showing the results of a Wilcoxon rank-sum test

We find that speakers with the N-TRAP system have significantly lower THOUGHT and backed MOUTH vowels, compared with their P-TRAP peers. Likewise, P-TRAP speakers are more likely to have raised START, NORTH, and PRICE than their N-TRAP peers. In these

cases, the N-TRAP speakers show a shift away from the traditional Philadelphian features. However, we do not find a difference in the production of DAY and NEW, supporting Prichard (2014)'s conclusion that it is the socially salient features that are targeted for reversal or restructuring.

Finally, these findings suggest that the dramatic division in the speech community found by Labov et al. 2015 holds true for more features of the Philadelphia dialect than just the traditional P-TRAP system, revealing an increasingly deeper rift in the speech community.

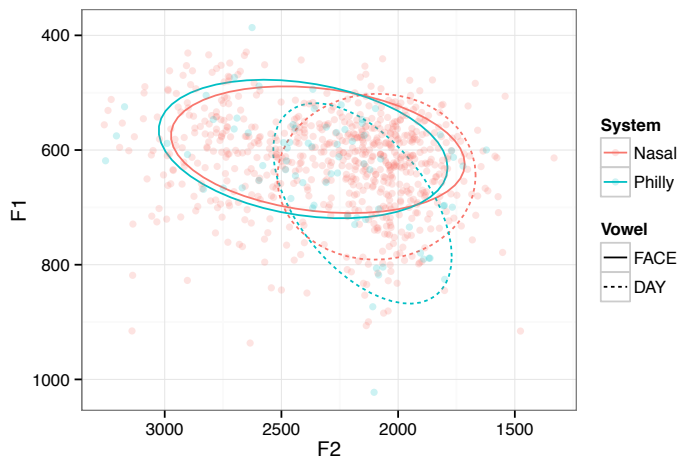


Figure 1: no difference between closed-syllable FACE or open-syllable DAY for N-TRAP and P-TRAP speakers

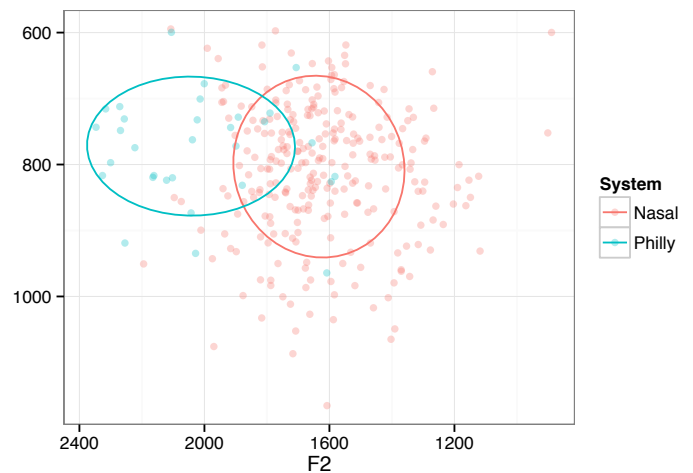


Figure 2: difference between fronted MOUTH for N-TRAP and P-TRAP speakers

Selected References

- Labov, W., I. Rosenfelder, and J. Fruehwald. 2013. One hundred years of sound change in Philadelphia: linear incrementation, reversal, and re-analysis. *Language* 89:30-65.
- Labov, W., S. Fisher, A. Henderson, H. Prichard, and B. Sneller. 2015. *The systematic partition of a speech community*. Poster presented at 89th annual LSA. Portland, OR.
- Prichard, H. 2014. *Educational attainment and the actuation of sound change*. Paper presented at 88th annual LSA. Minneapolis, MN.
- Prichard, H. and M. Tamminga. 2012. The impact of higher education on local phonology. *University of Pennsylvania Working Papers in Linguistics* 18.2.