## The role of social network and social identity in language change

Sociolinguistic research often appears to fall along two distinct lines of inquiry. The first focuses on how macrosocial factors such as social class or ethnicity affect linguistic variation and change, while the other takes a microsocial approach to understanding the reciprocal relationship of identity and language variation. Though these two perspectives may appear disparate, they are two sides of the same coin: our understanding of one increases with our understanding of the other. In this examination of /ae/ in Philadelphia English, we combine the insights of both macro and micro-level analysis to gain a more thorough understanding of speakers' linguistic production and sociolinguistic identity.

Here, we take a close look at five individual speakers from Philadelphia whose linguistic production is best interpreted through a combination of large-scale network analysis and speakers' individual identity and orientations. /æ/ is currently undergoing change in Philadelphia English from the traditional allophonic split to an incoming nasal split. While most speakers only produce either the traditional split system or the new nasal system, some speakers produce variation between these two allophonic systems; this can be understood as an intermediate phase between the old and the new /æ/ systems (author citation). For more information about the phonology of /æ/ in Philadelphia and about speaker classification, we refer the reader to Labov et al. (2016) and *author citation*; here we focus primarily on an analysis of the sociolinguistic outliers.

A bipartite social network diagram (Dodsworth, 2014), shown in Figure 1, demonstrates the robust influence of school network on linguistic production: NAS dominates the public schools, while PHL dominates the Open Admissions Catholic schools. Crucially, this community-wide network analysis also enables a more nuanced analysis of individual speakers. For example, while Jerry P. and Christine L. appear on the surface to have a similar linguistic profile (producing variation between the two systems), we see that their position within their respective social networks renders them quite different social profiles: while Christine is a leader of linguistic change within her community, Jerry is a conservative holdout against the encroaching NAS system. A closer look at Jerry and Christine's orientations towards Philadelphia as a city as well as their own aspirations and self identity provides a deeper insight into their variable use of both the old and new allophonic systems.

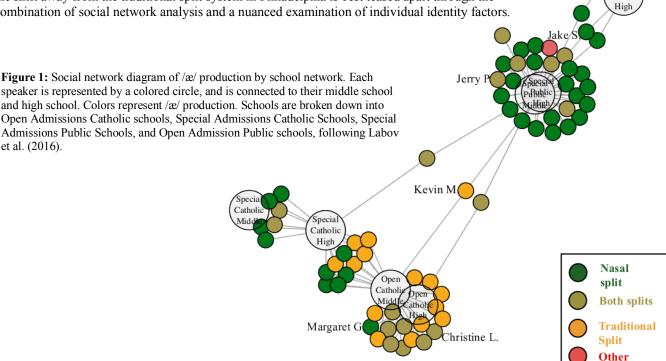
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By the same token, our network analysis also enables the identification of speakers who are linguistic outliers within their subcommunities: Kevin M. (the only PHL speaking graduate of a public school), Margaret G. (the only NAS speaking graduate of an Open Admissions Catholic high school), and Jake S. (whose data is unlike any other speaker in the data set). For each of these speakers, we find that their geographic orientation (local vs. global) and their personal aspirations are reflected in their language use. We find that the factors impacting the shift away from the traditional split system in Philadelphia is best teased apart through the combination of social network analysis and a nuanced examination of individual identity factors.



References: Dodsworth, R. 2014. Network embeddedness and the retreat from Southern vowels in Raleigh, NC. University of Pennsylvania Working Papers in Linguistics 20.2: Selected Papers from NWAV 42. Labov, W., Fisher, S., Gylfadottir, G., Henderson, A., and Sneller, B., 2016. Competing systems in Philadelphia Phonology. Language Variation and Change 28(3).