



Cognitive Characteristics of the Leaders of Language Change
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While linguists know a lot about what sort of people tend to lead the adoption and propagation of innovative linguistic variants in broad demographic terms, even within larger demographic groups we observe plenty of variation, raising questions about how individuals within these categories who demonstrate divergent linguistic patterns can be further differentiated. My work with Professor Tamminga on her Young Women and Language Change project this summer sought to answer such questions by focusing in on young women, a group known to lead sound change in progress, and comparing the data from analysis of the participants' speech against their performances on assessments of various individual-level cognitive and social-psychological characteristics.

I had two main roles in this project. First, I transcribed participants' speech and used the transcript for a process called FAVE-alignment to create annotations of each participant's sound segments for the audio file containing their speech. This allows for rapid extraction and analysis of phonetic data. Secondly, I was tasked with investigating the specific sound change of /s/-retraction, by which the /s/ sound in /str/ clusters is produced further back in the mouth, sounding more like /sh/ so that "street" begins to sound like "shtreet." For this, I wrote a program using the speech analysis software Praat in order to extract spectral center of gravity, a measurement used for /s/-like sounds.

Unfortunately, we were only able to collect a limited amount of /str/ data due to the infrequency of /str/ clusters in naturalistic speech. However, although perhaps not statistically significant in the current data, some promising patterns and correlations have emerged that will be of interest in my continuing work with Professor Tamminga as we revise the project in order to elicit more /str/ words from the participants going forward. Most strikingly, participants with the most retracted /str/ clusters (i.e. the leaders of the change) also scored lowest on an assessment of phonemic awareness, or how conscious they are of individual sound segments in speech. This suggests the interesting conclusion that those least aware of the speech sounds they use are the ones most likely to innovate these sounds.

I acquired a number of new skills through my summer with PURM. I learned conventions and methods for transcription of conversational data and FAVE-alignment, which will prove useful to me in any future academic work or research in sociolinguistics. Learning to script in Praat, something of an industry standard among linguists, is an invaluable skill that I will be able to make continued use of as a student of linguistics. More generally, this summer has introduced me to and allowed me to fall in love with research, which I will continue to pursue both as an undergrad and as I continue forward to graduate studies and an intended career in academia.