

Sound change proceeds via communal and generational change: longitudinal evidence from /s/-retraction in Australian English

This talk is concerned with the progression of phonetically-motivated sound changes at the population level and within individual grammars. Theoretically, a population-level sound change could involve individual speakers' pronunciations shifting in the same direction over time (communal change) or the addition of increasingly innovative speakers into the population (i.e. younger generations). This talk presents the results of research focused on the case study of /s/-retraction in Australian English /str/ (whereby e.g. the initial sound in *street* comes to resemble that in *sheet*). In a production study, eighteen middle-aged adult speakers were recorded twice, eight years apart. Coarticulatory /s/-retraction was evident for all speaker participants in /str/ in the first recording session (ca. 2014). After eight intervening years, incremental shifts in the same direction (/s/ -> /ʃ/) were evident for most – but not all – speaker participants. A perception experiment showed that the magnitude of the longitudinal change was sufficient to be audible to L1 English listeners. Interaction between the eighteen speaker participants was simulated in an agent-based model, seeded with the 2014 data. Comparison between the outcome of simulated interaction and the real-world changes over eight years suggests that phonetically-motivated sound change is predictable at the population level but not at the level of the individual speaker. Preliminary results from an apparent-time study show that younger speakers are increasingly innovative (showing a greater degree of /s/-retraction than older speakers). Taken together, results suggest that – contra Labov (1994) – sound change is the result of *both* generational change and real-time changes to the pronunciation norms of the individual members of a speech community.