Dialect Asymmetries in Vowel Perception (and Production)

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The study of phonological variation in terms of acoustic measurements instead of auditory transcriptions of phones became a paradigm shift fairly recently, as the shareware Praat became more user-friendly (2010, version 5.2 in our experience; Boersma & Weenink). Acoustic measurement facilitates tests of potential asymmetries between production and perception that were first broached in a classic article by Willis (1972). Do speakers with (variably) shifted vowels alter the norms of their vowel perceptions systematically so that their perception reflects their production? Or do they maintain community norms and perceive vowels much the same as more conservative speakers whose vowels are not shifted? Because the speakers with shifted vowels are not consciously aware that they produce vowels differently from others in the community, it seems plausible that the phonological system regularizes perceptions in order to maintain the communal norm. We tested these concepts as a codicil on successive production and perception studies of the Canadian Shift undertaken in the last three years. The production norms of the change in progress were established in interviews with 60 young Torontonians, 30 women and 30 men, aged 18-28. The perception norms were determined in tests comparing responses by younger speakers, aged 19-31, with those of older speakers, aged 66-96, including both women and men. Our most telling results come from the (ε)-lowering 'chain' of the shift, corroborating the implicit result of several production studies including ours that (ε) -lowering is the most active aspect of the change. Interesting light on production and perception comes from the lexical item milk, which is frequently lowered (melk), but is, as we demonstrate, an outlier in terms of the statistical norms established by other variant words in the sample. It is also an outlier in terms of production and perception.