Enriching our understanding of language change with vowel formant trajectories

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Abstract

Most descriptions of English vowels are based on acoustic measurements taken at their midpoint. However, there are more to vowels than their midpoints. Advances in computational power and statistical modeling have made robust analyses of vowel trajectories now possible and sociophoneticians can now ask questions that, until recently, were impossible to answer. I present three case studies on vowel trajectories and their change over time in American English. Front lax vowels in the Pacific Northwest reveal that changes in trajectory can accompany vowel shifts. However, back vowels in the American South show that vowel shifting does not imply changes in trajectory. Finally, prelateral vowels in Utah can enrich our understanding of vowel merger. These examples illustrate that as more studies incorporate vowel trajectories, we can greatly expand our descriptive, theoretical, and sociolinguistic understanding of language, even on vowels canonically considered monophthongs.

Bio

Joey Stanley is an Assistant Professor of Linguistics at Brigham Young University in the United States. He received his PhD from the University of Georgia in 2020 after doing a sociophonetic analysis of speech in the Pacific Northwest. His current research focuses on language and language ideologies in the Rocky Mountain region of the United States, particularly in Utah, and he is especially interested in variation within a religiolect he calls “Mormonese.” His tutorials on R, Praat, and statistical analysis have been used by linguists on six continents (still working on Antarctica!).