

## **Mapping Production and Perception in Regional Vowel Shifts: The Effects of Vowel Duration and Formant Trajectories**

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### Abstract:

Based on multiregional, web-based vowel identification and discrimination experiments, our projects have so far looked at community norms in terms of regional dialect differences, not at the level of individual speakers' production systems. Expanding on earlier findings, the current project acoustically analyzes the vowel productions of a subset of the vowel identification experiments' participants to map their productive and perceptual spaces for the high and mid front vowel classes, asking what kinds of links exist between speakers' actual speech production and perception. Recent research has demonstrated the importance of considering vowel duration in understanding *production* difference so, in addition to examining formant values, we investigate at length the role of duration and durational norms across dialect regions in the *perception* of vowel quality.

For a copy of this powerpoint presentation  
or for our 3D duration plotting script access:  
<http://ncslaap.lib.ncsu.edu/tools/durplot3d/>

Please feel free to email either author with additional questions or comments.  
Thank you.

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