Language variationists have long recognized that linguistic features vary not only between individual speakers, but also within them. Third-wave variationists in particular view speakers as “stylistic agents, tailoring linguistic styles in ongoing…projects of self-construction and differentiation (Eckert 2012, p. 97-98). The study of linguistic style construction lends itself nicely to qualitative approaches, but it has been difficult to operationalize stylization quantitatively.

This talk outlines a quantitative analytical approach for contextualizing individual stylization within the patterns of the speech community. Specifically, the study investigates the full range of intra-speaker stylistic production via data that are multi-dimensional, representative, and quantitatively rich: self-recordings of everyday speech. The study analyzes all tokens of vowel classes TRAP and GOAT uttered by one individual, “Pearl,” over every waking minute of two full days of her life. Model-based cluster analysis reveals significant differentiation (clustering) of these vowels within Pearl’s vowel space (i.e., several distinct articulations), suggestive of different styles.

TRAP and GOAT are two California Vowel Shift (CVS) implicated vowels known to carry salient regional and stylistic meanings (D’Onofrio 2016; Podesva 2011). A young female lifelong Californian, Pearl generally retracts TRAP and fronts GOAT, but not all of her TRAP/GOAT articulations pattern so uniformly. For this analysis, all primary-stressed tokens of TRAP and GOAT were extracted and incorporated into normal mixtures model-based cluster analysis for each vowel class using midpoint F1, midpoint F2, and duration as the clustering factors. Significant and consistent clustering patterns emerge for both vowel classes, resulting in three main cluster types: reduced, baseline, and stylized. Reduced clusters contain reduced articulations of the vowels (short duration, central F1/F2). Baseline clusters comprise the majority of tokens for each vowel class, which hover tightly around a consistent articulatory target. Finally, smaller stylized clusters exhibit extreme F1 and/or F2 measurements and longer durations. I argue these clusters are stylized not only because they have extreme F1/F2/duration values relative to the baseline/reduced clusters, but also because they correlate significantly with factors known to be perceptually/stylistically salient, including prosodic prominence (Mo 2008; Cole et al. 2010) and non-modal voice quality (e.g., Podesva 2007). This clustering suggests that Pearl systematically uses acoustically distinct articulations of vowels to both present a consistent baseline style and to deviate from it for stylistic effect.