

Measuring dialect contact: The conceptual cost of traveling across Maryland.

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Vowel measure differences help identify major dialect boundaries in the US (Labov 1966/2006, 1991 *et seq.*; Thomas 2001) and are important in identifying border regions where dialects congregate (e.g., Llamas et al. 2009; Watt et al. 2010; Johnson 2010). Understanding the socio-geographic forces can be especially complex in some border regions. The Mid-Atlantic region of the US, specifically Maryland, poses just such a problematic border region because of the intersection of major dialect regions (North, South, Midland), the influence by neighboring urban centers (Philadelphia, Pittsburgh, Washington D.C.), and the absence of a highly stigmatized feature not found in other dialect regions (Kurath & McDavid 1961). Maryland is also problematic because of how geography and ensuing dialect regions lean diagonally on a line from DC in the south to Philadelphia in the north (Kurath 1949, Greatman 1970). To make matters worse, the Chesapeake Bay posed a barrier to contact up until the Bay Bridge connected the western and eastern shores in 1950. As noted elsewhere (Labov et al. 2006), during this bridgeless period, Philadelphia exerted its influence over the Eastern Shore via transportation.

This paper examines archival recordings of “Arthur the Rat” (*Dictionary of American Regional English*, Cassidy & Hall 1985-2013). Using recordings from 1968 for 36 Maryland speakers (b. 1920, or earlier), this paper identifies how geographic transportation patterns prior to the 1950s co-varied with speaker behavior. To this end, this paper analyzes measures of vowels that contrast between neighboring dialects. Examined vowel processes include monophthongization/raising on /ai/ and /au/, fronting/rounding on /u/, /o/ and /ɔ/, and centering/ingliding of /ʊ/ and /ɪ/. This paper assesses these vowels by age, gender, community type and geographic location to answer the question, do vowel measures arranged by speaker attribute co-vary significantly with actual geography (direct “crow flies” measure using latitude and longitude) or conceptual geography (weighted travel times)?

Capturing the effect of pre-1950 transportation patterns entails measuring the cost of travel times along two different route types: driving time on present-day interstates and highways that were old highway routes (Interstate 68, 70, 95; US 13; multiplied by a factor of 1.054); and the more costly driving time off of major routes (by a factor of 1.397). Baltimore acts as the anchor of the transportation system. The sum of the distances to the anchor from all of the speakers’ locations on the two road types divided by the sum of the times for the same roads provides a weight for the individual’s travel time to Baltimore and a means for assigning a greater cost for non-highway driving. Initial results demonstrate the utility of reorienting locations by the costs of transportation. For example, this cost of travel time significantly co-varies with the diphthongization of /ʊ/ (*foot*), while the straight-line measure does not. Travel cost is also significant for the rounding of /u/ and /o/, and interactions are found for travel costs and gender, in the backness of /aw/. This paper contextualizes the cost-time measure within broader topics of dialect contact.

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