

Frontier, lower, (and shorter): The trajectory of /aw/ and /ow/ in Columbus, OH

Previous studies of /aw/ and /ow/ fronting in Midlands speech (*e.g.*, Labov, 1991; Labov, et al., forthcoming; Thomas 1989/1993, 2001; Johnstone et al., 2002) have revealed that variation shown by the nucleus and offglide of these diphthongs is a complex process, and in terms of variation involving the offglide of (aw), one that is not well-documented. Although a general understanding of variation involving (aw) and (ow) has been obtained in these studies, several questions remain. What influence does the covariant fronting of /ow/ have on the offglide of /aw/, and how does the trajectory of /ow/ influence the fronting and possible monophthongization of /aw/?

This paper attempts to provide answers to these questions via the real and apparent time study of both (aw) and (ow) in Columbus, OH—a metropolis located in the heart of the Midlands dialect region in which both diphthongs undergo fronting. Building on previous research conducted in Columbus and surrounding areas of Central Ohio, this instrumental sociophonetic study documents the trajectory of (aw) and (ow) in apparent time via conversational data collected from 32 metropolitan and suburban informants (stratified by age and sex) in 2004-2005. In addition, it draws on real time comparative data obtained via several previous dialect studies: Thomas (1989/1993; 2001); The Dictionary of American Regional English (Cassidy, 1985; Frazier, 1978); and The Linguistic Atlas of the North Central States (McDavid & Payne, 1977).

Results of a statistical analysis reveal that sex and age are significant factors impacting variation. Younger women produce more fronted variants of both when the range of realizations is considered. However, younger men produce more fronted (ow) realizations, and younger women produce more fronted (aw) realizations, when mean F1/F2 values are considered. Generally, these patterns indicate both changes are becoming more robust in Columbus than has previously been discussed.

In terms of linguistic factors, the results show that following coronal segments appear to play a significant role in conditioning (ow) variance, while the impact of syllable environment (free vs. checked) in which an /ow/ token occurs is less significant. Following Labov (1994), we argue that these findings may indicate that (ow) is a change now nearing completion. More importantly, the results indicate fronted (aw) in Columbus has begun to exhibit more pronounced tendencies toward onset lengthening and glide shortening/lowering. Following Johnstone, et al. (2002), we argue that this tendency results in increased partially-monophthongized realizations. Glide lowering in (aw) appears to be impacted by the increased centralization of (ow), while glide shortening appears to correspond to the degree of fronting shown by the onset of (aw). In the most extreme cases, our speakers exhibit productions of /aw/ as either [æə] or [a.ə], particularly in phonetic contexts in which coronal stops precede and /n/ follows. These are the variants we argue most clearly indicate the trend toward monophthongization. Ultimately, our data suggest Columbus realizations of /aw/ are becoming more like those observed in present-day Pittsburg (Johnstone, et al., 2002), while realizations of /ow/ resemble those found in Philadelphia (Labov, 1994; 2001).