

Geographic mobility and the Northern Cities Shift in the American Midwest

Cynthia G. Clopper, Rachel Steindel Burdin, Rory Turnbull

Geographic mobility can lead to the acquisition of new regional dialect features (Nycz, 2015). This second dialect acquisition is affected by a range of linguistic and social factors. Vowel shifts are easier to acquire than vowel splits (Nycz, 2015), transplants with social networks comprising other transplants show less acquisition than those with more varied networks (Campbell-Kibler et al., 2014; Evans, 2004), and more prestigious forms are more likely to be acquired than less prestigious forms (Bigham, 2010; Evans & Iverson, 2007; Walker, 2019). In addition, transplants have been shown to vary their production of regionally-marked features across speaking styles (Clopper et al., 2017). The goal of this study was to explore second dialect acquisition among Midwestern university students, particularly as it relates to speaking style. The American Midwest comprises two major dialect regions: the North, characterized by the Northern Cities Shift, including raising and fronting of /æ/, lowering and backing of /ɛ/, and fronting and lowering of /ɑ, ɔ/, and the Midland, characterized by widespread features of American English, including fronting of /u/ and merger of /ɑ, ɔ/. The Midland dialect is therefore closer to the ideologically prestigious general American English and is expected to be acquired as a second dialect. Nonetheless, despite its phonetic differences from ideologically general American English, the Northern Cities Shift is not explicitly associated with the North and the Northern dialect is perceived as prestigious by Midwesterners (Campbell-Kibler, 2012).

To examine the effects of speaking style on second dialect acquisition, 15 lifetime residents of the North (5 male, 10 female) were recorded in the North and 15 transplants from the North (5 male, 10 female) were recorded in the Midland. Advancement of the Northern Cities Shift was assessed relative to 15 lifetime residents of the Midland (5 male, 10 female) recorded in the Midland. All of the participants were young adults aged 18-25 years and were recorded in a university setting reading short stories containing ~40 target words for each of three vowel categories involved in the Northern Cities Shift, /ɛ, æ, ɑ/. Each talker produced the short stories in a plain style directed toward an imagined friend or family member and in a clear style directed toward an imagined non-native listener. Linear mixed-effects models predicted z-scored F1 and F2 estimated at vowel midpoint with talker group, gender, and style as fixed effects, vowel duration as a covariate, and maximal data-driven random effects.

The results, summarized in Figure 1, revealed significant fronting and raising of /æ/, lowering of /ɛ/, and lowering and fronting of /ɑ/ for both groups of Northern talkers relative to the Midland talkers, consistent with the Northern Cities Shift. The results also revealed significant lowering of all three vowels, as well as fronting of /ɛ, æ/ and backing of /ɑ/ in clear speech relative to plain speech, consistent with vowel space expansion in clear speech (Picheny et al., 1986). The regional differences were more robust for female talkers than for male talkers for /ɛ, æ/, as expected for an ongoing sound change, and for plain speech than for clear speech for /æ/, consistent with Clopper et al.'s (2017) findings. However, the two Northern groups did not differ significantly for any measure. The results therefore provide no clear evidence for differences in the realization of the Northern Cities Shift between Northerners in the North and Northerners in the Midland, suggesting that transplanted Northerners do not accommodate to the local Midland variety, in either clear or plain lab speech. This lack of an effect of mobility on the realization of the Northern Cities Shift, together with its robust production by Northern talkers in read lab speech, is consistent with its overall lack of stigmatization by Midwesterners and the suggestion in the literature that second dialect acquisition may be limited when the native and new varieties or variants are equally prestigious (Bigham, 2010; Campbell-Kibler et al., 2014).

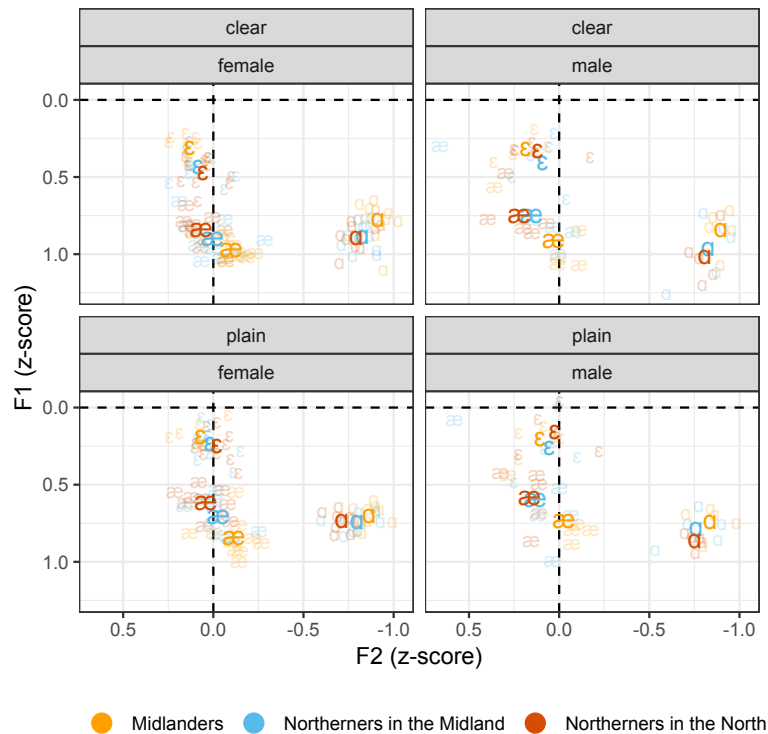


Figure 1. Summary vowel spaces in each style for each gender for each talker group (bold symbols). Light symbols represents the mean midpoint vowel production of individual talkers.

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