

## **The diffusion of the low back merger in New York City**

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Phonemic mergers have received considerable attention in variationist sociolinguistics, with the low back vowel merger (LBM) as the most widely studied case in North American varieties (Gordon 2002). Herold (1990) and Johnson (2010) report data suggesting that language and dialect contact respectively may facilitate the LBM, but few studies have examined the merger in speech communities in which both of these kinds of contact occur simultaneously. This study aims to address this gap with a report on recent developments in New York City English (NYCE), which has historically resisted the LBM (Newman 2014, 2016).

Although Labov et al. (2006) see New York's traditionally high thought as a source of resistance to the LBM, Becker (2010) and Wong (2012) show thought lowering (albeit without merger), particularly among Whites and East Asians in Manhattan. A small-scale minimal pair judgment survey found evidence of the LBM itself, particularly in Queens, and again, more clearly among East Asians, and (especially) South Asians (Johnson 2007).

Our current study is the first to examine the low back vowel status of a large, diverse group of New Yorkers. NYC public university undergraduates collected 792 responses from their friends, family and co-workers. Participants ranging between 17 and 91 (median=22) years old were from all five boroughs and Long Island and included all major demographic categories of New York City. All subjects were native speakers of NYC English.

We employed a questionnaire that included "same or different" homophony judgements for six lot-thought minimal pairs. Following Johnson (2007), which validated the same survey items on both merged and distinct speakers, we know that intermediate judgments (e.g. 50% same, 50% different) do not necessarily correspond to intermediate productions (e.g. merged on some items, distinct on others). However, the proportion of "same" responses does correlate with the advancement of the LBM in a speech community. We analyzed the data by fitting a series of logistic mixed effects regression models.

Our results support three main findings. First, our data show a clear decline in the distinction in apparent time (-.08 log-odds units/year). The trend is evident in all five boroughs, with Queens and Manhattan showing the highest rates of merger. These results therefore provide apparent time evidence in support Johnson's (2007) suggestion of incipient diffusion of the LBM within New York City.

Second, respondents with a native-speaking NYCE parent strongly favor distinctions. These results stand to reason, given that native speaking caregivers of our participants, would have been of a generation that overwhelmingly favored the distinction (Newman 2014). This finding therefore aligns with Herold's (1990) and Johnson's (2010) evidence that parental input plays a role in advancement of the merger.

Finally, the results show an independent effect of ethnicity, with Whites and Blacks strongly favoring the distinction and "newer" ethnic communities—Latinos, East Asians and particularly South Asians—strongly favoring a merged pattern. The fact that Blacks pattern with whites suggests, again, that heritage language effects may be relevant to the spread of the merger.