

## Multiple Mergers: Production and perception of three pre-/l/ mergers in Youngstown, Ohio

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Mergers have been a much-researched topic in sociolinguistics (Baranowski, 2013; Flanigan, 2008; Thomas & Hay, 2005; Hall-Lew, 2013), including in pre-lateral contexts (Bowie, 2000; Faber & DiPaolo, 1995; Thomas, 2001; Schmidt & Weaver, 2013). However, aside from Thomas & Bailey's (1992) study on "competing mergers" in Texas, little work has been done on the interaction among several mergers involving some of the same phonemes and occurring in the same contexts when they coexist in a given community. Even less research has addressed the role of perception in competing-merger contexts.

This study examines the status of mergers among /ul/, /ol/, and /oɪ/ in Youngstown, Ohio. Although at least three forms of the merger have been cited in this community—/ul/-/oɪ/, /ol/-/oɪ/, and /ul/-/ol/-/oɪ/—not all speakers in the community are merged, and those who are merged do not all merge the same phonemes (Schmidt & Weaver, 2013). Using acoustic analyses and multiple-forced-choice perception task results from 26 speakers from the Youngstown area ranging from ages 9-81, this project examines the similarities and differences among the /ol/-/oɪ/, /ul/-/oɪ/, and /ol/-/oɪ/ -/ul/ mergers, addressing the following questions: 1) Are these mergers all progressing in production and/or perception, and at the same rate, in this region? 2) Are they motivated by the same internal linguistic forces? 3) Do they show similar social distributions? 4) Does production of the mergers directly correlate with perception?

Production data was collected from four reading tasks, including a reading passage, word list, and minimal pair list. Reading tasks were chosen over conversational speech in order to collect sufficient numbers of tokens. Additionally, if speakers exhibit merger while reading, it can be assumed that the merger would be present in less careful speech. Tokens of interest from the production data were then extracted for use as perception stimuli and played for the same and additional participants in a forced-choice word discrimination task. The perception task contained 24 target words and 32 distractors, with two answer options provided for each stimulus.

Acoustic analyses of F1 and F2 measured a quarter of the way into the vowel, as well as multivariate statistical analyses, suggest that the three mergers are progressing differently in the community. While the /ol/-/oɪ/ merger is progressing in apparent time, mainly with respect to F1, the /ul/-/oɪ/ merger is remaining steady but with a significant male lead. Additionally, the /ul/-/oɪ/ merger appears to exhibit features unique to Youngstown in that it is realized more closely to /ul/, unlike what has been typically described of this merger throughout the United States (Labov, Ash & Boberg, 2006; Schmidt & Weaver, 2013). Triple mergers, on the other hand, are so scarce in the community that generalizations about the merger's progression cannot be made. However, those who are triple merged realize the merger closer to /oɪ/ than those merged only between /ol/ and /oɪ/ or /ul/ and /oɪ/. Initial analysis of perception data suggests that production does not directly correlate with perception, perhaps as a result of exposure to multiple types of merger as described in the production results. Though this region does not show a simultaneous progression of the three "competing mergers," it does exhibit considerable inter-speaker variation that, though puzzling, allows for another angle from which to examine sound change.

## References

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