

**The Low Back Merger in Miami**  
Jeremy Doernberger and Jacob Cerny  
*Williams College*

The last major study of the low-back merger in Miami, Florida, was Labov, Ash, and Boberg's (2006) work for the Atlas of North American English (ANAE). In that influential work, Labov et al. found the low-back merger to be in transition in Miami. However, the ANAE was based on Telsur data, the most recent of which was collected nearly 10 years ago. Presumably, since that time, the low-back merger has progressed in Miami towards a full merger.

This study focuses on the progress of the low back merger in a Miami speech community. Eighteen participants were interviewed. Interviews consisted of a word list with 8 words containing vowels of the /o/ word-class, and 8 others containing vowels of the /oh/ word-class, as well a short reading passage and a commutation test. Acoustic analysis focused on the words in the word list, and a cursory examination of the passage data was in agreement with the findings from the word list pronunciations. The data from the word lists was analyzed using Praat 4.4.11, and the F1 and F2 of /o/ and /oh/ vowels were averaged for comparison. Vowels preceding [r] and [+nasal] obstruents were excluded from analysis, due to their significant effect on formants. This exclusion should also serve to make any results suggesting movement towards a merger more compelling, because ANAE data found that 2 of 5 Miami residents interviewed had a merger only before nasals

Keeping analysis within the listed restraints, it appears that the low-back merger has continued towards fruition in Miami. To determine the presence of a merger, techniques were replicated from an earlier study on near-mergers (Bowie 2001), using T-tests to compare the averages of the first two formants of the /o/ and /oh/ vowels for each speaker. Initial analysis suggests that 13 of 18 interviewees have a low-back merger in perception, and 11 of 18 have a merger in both production and perception. This pattern follows predictable patterns of merger proliferation, suggesting that merger is continuing to spread among Miami residents and that the city and surrounding areas continue to diverge from traditional Southern dialect characteristics.

**REFERENCES**

- Bowie, David. "Dialect Contact and Dialect Change: The Effect of Near-Mergers." *U. Penn Working Papers in Linguistics*, 7.3. 2001.
- Labov, Bill, and Sharon Ash and Charles Boberg. *The Atlas of North American English*. New York: Mouton de Gruyter, 2006.