

Some Alternative Hypotheses for the Emergence of Monophthongal /ai/

Monophthongal or glide-shortened /ai/ is among the most important phonological features of Southern American English (SAE). Work by Labov et al. (forthcoming) suggests that monophthongal /ai/, especially before voiced obstruents, not only can be used to delimit the linguistic South, but that it also was the enabling event for the Southern Shift. Recent work by Thomas (2001) and by Tillery, Bailey, Andres, Miller, and Miller (2003) indicates that /ai/ is a relatively recent development in SAE, occurring primarily after the middle of the 19th century. The latter also show that /ai/ apparently emerged first before /r/ and /l/ and occurs more extensively there than before other voiced obstruents. They suggest that the centralizing effects of /l/ and /r/ on preceding front vowels may have been the initial trigger for monophthongization, with monophthongal /ai/ developing first before /r/ and /l/ and then spreading to other environments.

While the effects of a following /r/ or /l/ offer a plausible explanation for the triggering event for monophthongal /ai/, those effects do not explain how and why monophthongal variants would have spread to other environments. This paper explores the process by which monophthongal /ai/ might have spread from pre-/l/ and /r/ environments to other phonological environments (before nasals, voiced obstruents, and voiceless obstruents) and then examines three alternative hypotheses for its initiation and diffusion. The three alternative hypotheses are as follows:

- o monophthongization is actually two processes, with the shortening of the glide before /r/ and /l/ representing one process and monophthongization elsewhere representing a second, independent process, perhaps triggered by the shortening of the glide in open syllables under tertiary stress
- o monophthongization is a single process, but it results from several different initiating factors, including the effects of a following /r/ or /l/, the shortening of the glide in open syllables under tertiary stress, and the tendency for offglides to be shorter before voiced obstruents
- o monophthongization is the result of several independent processes, with the development of monophthongal /ai/ in one environment independent of its development in other environments

This paper examines these hypotheses using two sources of data: (1) the Linguistics Atlases of the Middle and Atlantic States and of the Gulf States and (2) a set of tape-recorded interviews with Southerners born during the last half of the 19th century. A quantitative analysis of the data in these sources suggests that monophthongal /ai/ is the result of a single process, although that there may have been multiple triggers for the process. While it is not clear whether or not there was one trigger or multiple triggers, it is clear that the process results from the interaction of /ai/ with the phonetic contexts in which it occurs.