

The possible role of alternative perceptual cues in sound change: Diphthongization in Standard Southern British English /u/-fronting

Fronting of the back high vowel /u/ is a diachronic process that occurred in the history of several languages, for instance French and Swedish (Meyer-Lübke 1908 and Kock 1911). Harrington et al. (2011) illustrate with data from German that a driving force behind this diachronic process is the high articulatory cost involved in the articulation of /u/ compared to /i/ and /y/. Articulatory effort, however, cannot be the only cause, otherwise we would expect far more languages to exhibit this process.

For the recent case of /u/-fronting in Standard Southern British English (SSBE; see e.g. Gimson 1966, Wells 1982, Henton 1983), Harrington et al. (2008) propose an interaction of articulatory effort with large allophonic variation of /u/ that resulted in a misperception of fronted /u/-allophones as default /u/, based on Ohala's hypocorrection account (Ohala 1981 and following).

The present study proposes an alternative perceptual cause in the process of SSBE /u/-fronting. Due to the allophonic variation exhibited by the older generation and the resulting confusability on the acoustic dimension of the second formant (F2), younger SSBE speakers are likely to have focussed on a more reliable perceptual cue. The acoustic study by Chládková & Hamann (2011) shows that the vowels /i/ and /u/ in SSBE can be reliably distinguished by their direction of diphthongization. Diphthongization therefore qualifies as distinguishing cue for the new generation. The present study presents the results of a perception experiment with two age groups of SSBE speakers which shows that the younger SSBE speakers reliably distinguish between the vowels /i/ and /u/ by employing diphthongization in cases of ambiguous F2 values, while the older speakers are less sensitive to diphthongization.

References:

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