What is happening to the Scottish Vowel Length Rule in Glasgow?

The number of real-time studies of phonological variation and change is still relatively small (Sankoff 2006), and there has been little investigation into change in features other than segments, such as vowel quantity, which we might also expect to interact with speech prosody (Nakai et al 2012). Glasgow vernacular, like other varieties of Scottish English, is known for showing a quasi-phonemic pattern of vowel duration, the ‘Scottish Vowel Length Rule’ (SVLR). Unlike other English accents, Scottish English shows rather little low-level-lengthening of vowels before voiced consonants. Vowels are generally short, and only lengthened before voiced fricatives, /r/ and morpheme boundaries. Aitken’s (1981) original formulation applied the SVLR to all vowels, but McKenna (1988) and then Scobbie et al (1999) only found evidence for /i u/ and /ai/. At the same time, the SVLR appears to be weakening, and being replaced by low-level-lengthening, in situations of high contact with English English (for children of English-speaking parents in Edinburgh, Hewlett et al 1999; in younger speakers in the border town of Berwick, Watt/Ingram 2000; in speakers from Aberdeen, Watt/Yurkova 2007). What is the fate of the SVLR in Glasgow, where there is less contact with other varieties of English, and where it is expected to be more robust (Scobbie et al 1999)?

This paper begins to tackle these questions drawing on a real-time corpus of Glaswegian, and here, spontaneous speech from the 1970s and 2000s. We compare four speaker groups, two of middle-aged men, 70M and 00M, born in the 1930s and 1060s respectively, and two of adolescent boys, 70Y and 00Y, born in the 1950s and 1970s. All tokens containing /i u a/ (except preceding /r/), were extracted and labelled according to segmental and morphological environment. Each target syllable was also coded for prosodic factors: prominence (stressed, accented and nuclear), and phrasal position (initial, medial, final). The data were analysed using linear mixed effects models with crossed, maximal random effect structure to account for possible idiosyncrasies in the dataset (Barr et al 2013).

Our results show that - across all four speaker groups - /a/ was lengthened at morphological boundaries, but slightly shortened before voiced fricatives. /a/ does not seem to belong to the vowel set participating in the SVLR, and there has been no change since the 1970s. /i/ and /u/, on the other hand, undergo substantial lengthening in SVLR lengthening environments. However, there was a significant interaction between prominence and the realization of the SVLR across the four groups. Both adolescent groups showed very little lengthening in stressed syllables, but SVLR ‘long’ vowels were shorter in nuclear accents produced by the 00Y group, than all other groups. These results are intriguing for three reasons. First, SVLR seems to be eroding in Glasgow vernacular. Second, they point to the importance of prosodic factors in sound change (Nakai et al 2012). And third, the absence of low-level-lengthening of vowels before voiced consonants in Glasgow suggests that weakening of the SVLR in this low-contact situation is proceeding differently from contact-induced erosion elsewhere.
References


