

## Best boot forward? A real-time study of Scottish English /u/ over forty years

Recent research has demonstrated change in progress for in the high back vowels in several varieties of English (e.g. Standard Southern British English, e.g. Harrington 2007; American English, Labov, Ash and Boberg 2006; New Zealand English, Maclagan et al 2009). The direction of the change seems to be fronting towards /i/ in the acoustic vowel space. In SSBE, the change appears to have been taking place over the last fifty years (Harrington et al 2011). The factors involved in the changes are both linguistic and extra-linguistic. Following Ohala e.g. 1981, 1993, Harrington et al 2008 provide evidence from SSBE which proposes an relationship between coarticulatory variation and perception as a mechanism for the change; there is also evidence that acoustic fronting is the result of tongue fronting (Harrington et al 2011). The situation for Scottish English seems to be different from that of other varieties of English. Particularly in the vernacular, /u/ (a single lexical set, BOOT, corresponding to English English GOOSE and FOOT), has been reported to be fronted, and/or central in the vowel space, from auditory accounts since before the Second World War (McAllister 1938, Macaulay 1977, Johnston and Speitel 1983). Contemporary acoustic and articulatory analysis of Scottish English in the Eastern Central Belt suggests that /u/ is fronted and lowered, and that the tongue position is as front as that of front vowels /i/ and /e/ (Scobbie 2011). The intriguing question is whether this may reflect a real-time process of fronting, i.e. whether there has also been any change in the acoustic realization of the Scottish English vowel over the past 40 years.

In this poster we present the first results from a new study of real-time change in Scottish English vernacular in Glasgow. The corpus for the real-time project consists of existing sociolinguistic and oral history recordings from young, middle, and old, male and female, speakers recorded over four decades, from the 1970s to the 2000s. Here we concentrate on presenting real-time data from young and middle aged speakers recorded in the 1970s and 2000s. The recordings from 2000s were made for the Glasgow Media Project (Stuart-Smith 2006), and consist of spontaneous conversations from self-selected pairs of speakers. Those from the 1970s are from sociolinguistic interviews between fieldworker and informant (Macaulay 1977). All tokens of /u/ were extracted, including both Standard Scottish English items and those belonging to the Scots variable set OUT (e.g. SSE *out*, Scots *oot*). Instances of /i/ and /a/ were counterbalanced with /u/ for phonetic context and lexical item. The acoustic analysis of the vowels was carried out in Praat and Emu, in order to allow comparison of formant measurement from different recordings.

Our results suggest that in contrast to the rather substantial changes in the quality of the high back vowels south of the Border, in Scottish vernacular only rather slight shifts in fronting and lowering have taken place over the past 40 years. The changes are discussed with respect to segmental and prosodic context and the distinctive Scots lexicon.