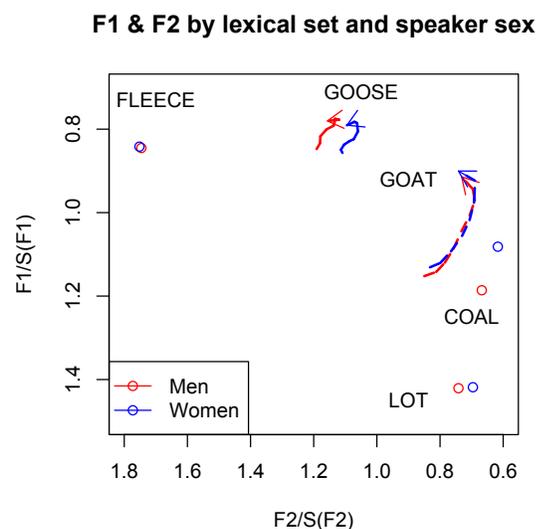


The exceptionality of Tyneside back vowel fronting

One of the most influential of Labov's (1994) generalizations about vocalic change concerns the relationship between processes of back vowel fronting, namely that fronting of /ow/ is dependent on /uw/ fronting. For English varieties, Labov's generalization entails that fronting of GOAT will co-occur with fronting of GOOSE, a pattern reported in much subsequent research (Baranowski, 2008; Fridland, 2008; Hall-Lew, 2009; Thomas, 2001). An apparent exception to this generalization, however, was reported by Watt (2000, 2002) in the Newcastle upon Tyne dialect of northern England. Based on an auditory analysis of data gathered in the 1990's, Watt observed [e] for GOAT, particularly for younger male speakers, but noted that fronting of GOOSE was very rare within the community. Watt reported no fronting of diphthongal realizations of GOAT.

This poster reports on a recent study of Tyneside GOAT and GOOSE designed to provide a real-time point of comparison with the 1990's data set gathered by Watt and colleagues. Word list and free conversation data were gathered in 2008 and 2009 from 20 speakers (aged 18-25, 12 women) using a sampling and interview method similar to that described in Watt (2000, 2002). This procedure yielded 471 tokens from the word list data, which we discuss, here. For each GOAT/GOOSE token, nine time-normalized F1 and F2 measurements were extracted using a Praat script and then hand corrected. We normalized the data using Watt and Fabricius's modified procedure (Fabricius et al., 2009), with reference vowels FLEECE, LOT and COAL. Linear mixed-effects regression models were fit using the lme4 package.



Unlike in Watt's analysis of the mid-90's data set, the 2008 data show clear evidence of GOOSE fronting relative to GOAT, COAL and LOT (see figure), as reported for several other northern English dialects (Ferragne and Pellegrino, 2010). In addition, the analysis revealed a positive correlation in by-speaker mean F2s for GOAT and GOOSE, as also expected from the perspective of Labov's generalization. Fronted monophthongal [e] realizations for GOAT are observed in the data, but in our results, there is no effect of speaker sex, unlike in Watt's description of the 1990's data set. For GOAT but not GOOSE, Euclidean distance measures of diphthongal vs monophthongal realizations are directly related to F2, indicating a continuum of variation between back monophthongs and fronted diphthongs for GOAT in the data. Dynamic formant analysis shows that fronting of both GOAT and GOOSE is across the vowel, with somewhat greater fronting toward the nucleus.

Hence, notwithstanding the exceptional status of GOAT in Watt's (2000, 2002) description, our real time comparison with Watt's results suggests that the Tyneside back vowels are undergoing a process of change similar to those described for many other English dialects from northern England and elsewhere.

References:

- Baranowski, M., 2008. The fronting of the back upgliding vowels in Charleston, South Carolina. *Language Variation and Change* 20, 527–551.
- Fabricius, A. H., Watt, D., Johnson, D. E., 2009. A comparison of three speaker-intrinsic vowel formant frequency normalization algorithms for sociophonetics. *Language Variation and Change* 21, 413–435.
- Ferragne, E., Pellegrino, F., 2010. Formant frequencies of vowels in 13 accents of the British Isles. *Journal of the International Phonetic Association* 40, 1–34.
- Fridland, V., 2008. Patterns of /uw/, /u/, and /ow/ fronting in Reno, Nevada. *American Speech* 83, 432–454.
- Hall-Lew, L., 2009. Ethnicity and phonetic variation in a San Francisco neighborhood. Ph.D. thesis, Stanford University.
- Thomas, E. R., 2001. An acoustic analysis of vowel variation in New World English. *Publication of the American Dialect Society* .
- Watt, D., 2000. Phonetic parallels between the close-mid vowels of Tyneside English: Are they internally or externally motivated? *Language Variation and Change* 12, 69–101.
- Watt, D., 2002. ‘I don’t speak with a Geordie accent, I speak, like, the Northern accent’: Contact-induced levelling in the Tyneside vowel system. *Journal of Sociolinguistics* 6, 44–63.