

## **Sibilants and ethnicity in Glaswasian girls**

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The acoustic realization of English /s/ is known to be constrained not only by phonetic factors, such as adjacent segment, but also by social factors, especially gender. Recent research has concentrated on the influence of cross-gender identities on /s/ in e.g. male/female, gay/straight speakers (Levon et al 2017). Eckert (e.g. 2012) observes that the linguistic construction of gender is often most clearly seen in oppositions within gender (e.g. Detroit vowels in ‘burned out’ Burnout girls vs the keenest Jock girls). Few studies have examined how English /s/ might vary within gender, though Stuart-Smith (2007) found greater separation of spectral peak within female Glasgow speakers, than across gender.

This paper focuses on the realization of /s/ and /ʃ/ within gender, and specifically within the spontaneous speech of 43 British-born 16-18 year old girls of Pakistani heritage at a Glasgow high school. Observations from a long-term ethnography identified that the girls belonged to six Communities of Practice in terms of shared social practices, from (cultural) ‘Conservatives’ to ‘Moderns’, ‘Messabouts’ and ‘Religionistas’. Here we analysis all instances of stressed word-initial /s ʃ/, coded according to preceding and following phonetic context, position in the phrase, lexical frequency, and Community of Practice. Spectral measures (Centre of Gravity, Spread, Peak, Front Slope) will be taken from spectra calculated over the central 70% of the fricative, after downsampling and high/low pass filtering. These measures will be analysed using linear mixed effects regression in R. We will further compare the Glaswasian measures with existing sibilant measures from Glasgow non-Asian speakers.

Urdu and Punjabi /s/ is described as alveolar (e.g. Farooq 2014); Glasgow /s/ varies from high frequency alveolar realizations in the standard, to auditorily-retracted, low-frequency, apical articulations in the vernacular. We predict acoustic differences in /s/ by Community of Practice such that those girls (Moderns, Messabouts) orienting more to Western practices, shared with more working-class Glasgow girls, will show lower frequency /s/, whereas those aiming for higher education, with more sophisticated knowledge of Islamic theology (Religionistas) will show higher frequency /s/; Conservative girls’ /s/ will fall in between. Overall we anticipate that our results will show within-gender (girls) differentiation in sibilant realization, and at the same time, continue to demonstrate the difficulty of assuming monolithic phonetic markers for minority ethnic speech communities.

### **References**

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