

How flexible is “flexible” in speech processing? Evidence from behavioural and neurophysiological studies of second dialect acquisition

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Recent work in sociophonetics has argued for a hybrid approach to speech perception & production; phonetically detailed information is retained in memory and accessed during speaking & listening, with phonological knowledge built up through aggregation in memory of the exposure a listener has had to meaningful phonetic characteristics of spoken language over their lifetime (Docherty & Foulkes, 2014). Whilst these models provide a powerful way of accounting for how listeners adapt to variation, exactly how socio-indexical information is incorporated into such hybrid representations and subsequently used in speech processing remains unclear.

In this talk, I will present results from 2 experiments using behavioural and neurophysiological approaches that demonstrate that although individuals can become highly proficient at producing & perceiving a non-native contrast in a second dialect, they do not do so in the same way as native speakers. Rather, underlying, abstract phoneme representations appear to be highly stable and largely resistant to change. I will argue that adaptation in production and perception likely comes from the application of socio-indexical knowledge to phoneme categorization and thus requires a degree of cognitive control, such that a first-learned style or dialect may have cognitive primacy (cf. Sharma, 2018).

References

- Docherty, G.J. & Foulkes, P. (2014). An evaluation of usage-based approaches to the modelling of sociophonetic variability. *Lingua* 142: 42-56.
- Sharma, D. (2018). Style dominance: Attention, audience and the ‘real me’. *Language in Society* 47: 1-31.