

Sociophonetics

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Sociophonetics integrates principles, techniques, and theoretical frameworks from phonetics with those from sociolinguistics. Early work under this label typically involved applications of standard phonetic methods – vowel formant analysis, for example – to ‘sociolinguistic’ data, such as socially-differentiated corpora of speech, or to non-standard dialects of widely-spoken languages. In that sense such work lay truly at the intersection of phonetics and sociolinguistics and served to deliver largely incremental gains to the parent fields. (Indeed, much of the work might be pastiched as ‘sociolinguists dabbling in phonetics, and phoneticians dabbling in sociolinguistics’.)

In recent years, however, the scope of sociophonetics has broadened. While retaining a focus on speaking and listening in natural(istic) settings, sociophonetics now draws on and contributes to psycholinguistics, clinical linguistics, first and second language acquisition, theoretical phonology, conversation analysis, forensic speech science, and computational linguistics. So eclectic is the range of work now conducted that the field has been described as ‘a loose confederation of industries’ [1, p. 704], and its remit has evaded consensual definition and delimitation.

However, it is possible to discern an emerging trajectory. My own view, in a nutshell, is that truly sociophonetic research offers more than the sum of its parts. Combining phonetic methods with socially-situated data enables us to test theoretical predictions based on idealised, controlled or hypothesised materials; it provides ever more refined information about the immense range of ‘fine phonetic detail’ that human beings produce, understand and represent cognitively; it reveals the intricate relationships between variation, change, representation, and social context; and it reinforces the importance of recognising speech as a collaborative human activity.

The papers selected for this session exemplify the kind of work that I think are defined by this new trajectory. On the one hand they extend phonetic methods to new data sets, and as a consequence they identify new challenges for those methodologies. On the other, they present new data that offer significant challenges to theoretical models of speech and language.

Docherty, Gonzalez and Mitchell explore different methods of vowel analysis on a corpus of Australian English. They find striking differences between analyses based on traditional F1:F2 midpoint data, and those based on dynamic measurement over a vowel’s full duration. Their results are representative of a growing number of studies to challenge the long-standing hegemony of the F1:F2 method, which underpins many widely-accepted theories of variation and change. We can extrapolate from this study a warning against the literal interpretation of acoustic data in articulatory terms.

Stuart-Smith and colleagues also apply dynamic acoustic analysis, of vowels + liquid sequences, in a study parallel to ultrasound investigations of the same dialect, Glaswegian English. Their study is designed to address theoretical claims made in respect of phonological representation of the contrast between /l/ and /r/ in the context of a dialect undergoing extensive change in the realisation of rhotics. Results show that speakers of different ages signal the contrast with different phonetic resources, in turn suggesting that representations of these sounds is changing over time as other processes affect the paradigmatic relationship between liquids.

Tomé Lourido and Evans describe variation and change in Galicia. Their focus is on neofalantes, Spanish-dominant bilinguals who consciously switch to Galician in adulthood for ideological or identity-related reasons. While the neofalantes' production patterns change (i.e. they develop 'hybrid' representations), their perceptual categories remain stable. The study thus questions whether cognitive representations mediate between production and perception, or are specific to one domain. The study further raises important issues in modelling within-speaker variation and change over the life course, necessitating an understanding of social as well as linguistic factors.

Ogden and Hawkins investigate rhythmic properties of question-answer pairs. Through detailed qualitative and quantitative analysis of natural conversation they show that phonetic timing is negotiated between participants in a way that parallels temporal entrainment between musicians. The authors highlight more general relationships between language, talk, gesture, and music, and address neuroscientific evidence for the synchronisation of brain activity during social interaction. The potential implications of this work are profound: the results suggest the "need for a grammar which is dynamic and which is a shared resource between participants: built not so much on a speech chain model, as on a model of socially shared cognition".

Taken together the four papers illustrate the richness and diversity of both sociophonetics, and of spoken communication.

[1] Foulkes, P., Scobbie, J.M. & Watt, D.J.L. (2010) Sociophonetics. In Hardcastle, W., Laver, J. & Gibbon, F. (eds.) *Handbook of Phonetic Sciences* (2nd ed.). Oxford: Blackwell. pp. 703-754.