Variable domains and variable relevance: interpreting phonetic exponents.

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Spoken language is a resource which is systematically deployed in the management of social interaction—its primary site of occurrence. The patterns and structures in language are emergent properties of and shaped by the exigencies and contingencies of social interaction. However, despite significant advances in modelling speech perception and understanding, and an increasing acknowledgment of the relevance of phonetic detail, there continues to be an overemphasis on issues of lexical distinctiveness and lexical access with the consequence that all sorts of systematically controlled fine phonetic detail do not find their way into contemporary models. Moreover, despite the explanatory potential of emergent, rich, category representations in self-organising episodic/exemplar models there is a continuing willingness to accept and model the kinds of category schemata to be found in rather traditional linguistic descriptions.

I will argue that it is now timely to think more carefully about what it means to talk about linguistic-phonological contrastivity and distinctiveness and the relevance of phonetic detail. In an attempt to kick-start this enterprise I will draw on ideas from Firthian prosodic analysis and argue that:

• lexical contrastivity is overvalued in speech perception and understanding;
• it is time to examine more closely the phonetic detail of talk-in-interaction;
• particular pieces of phonetic detail and phonetic variability go around with particular interactional, grammatical and lexical systems and that this ‘context-embeddedness’ is both useful for and used in speech understanding.

I explore two (related) observations. The first is that some phonetic details which might define or contribute to, say phonological, category membership or ‘meaning’ in one context do not necessarily do so in another;—that is, the same phonetic detail may have ‘variable relevance’. The second is that phonological contrastivity operates over different pieces of linguistic structure—‘variable domains’.

Two results arise from examining spoken language in this (Firthian) way:

• phonetic details (exponents) associated with (even so-called ‘phonemic’) linguistic contrasts may be ‘non-local’ with varying temporal extents and we need to look for these and model them just as systematically as any ‘local’ phenomena.
• if we are to understand the workings of phonetic detail and its variability, we need to systematically and differentially relate the phonetic detail of utterance to various categories and levels of analysis (interactional, grammatical, lexical) but not assume the lexicon has a privileged status.