

Exemplars of what?

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Current trends in quantitative linguistics are often associated with Exemplar Theory (e.g. Johnson 1997) and usage-based (e.g. Bybee 2001) approaches to phonology. From the perspective of these models, phonological categories are not primitives, but rather emerge on the basis of quantitative patterns of language use. It is claimed that language users form phonological grammars on the basis of statistical generalizations gleaned from exposure to language input, which is subject to all manner of variability, including speech rate, lexical frequency, syntactic and semantic context, as well as other factors that influence quantitatively measurable aspects of phonetic realization. Emergent representations based on input exemplars that are stored in memory are by nature rich in phonetic detail. In this sense, Exemplar models have been seen as a direct challenge to traditional generative phonology (e.g. Chomsky & Halle 1968), in which representations are claimed to be constructed from abstract features, and phonetic details are a matter of performance or implementation.

In this talk, I will present a theory of representation, the Onset Prominence representational framework (OP; Schwartz 2010 et seq.), that in my view may serve as a bridge between Exemplar models and generative phonology. Bridging this divide requires refined phonological representations. However, the refinements are expressed not as quantitative phonetic detail, but rather as categorical parses of perceptual ambiguities in the acoustic signal. Instead of the common vision of phonology as a linear string of segments grouped into larger units such as syllables, feet, and words, we should be asking how the *percepts* of such units may be derived from the signal. I argue that only when this question is addressed can we make progress in explaining the relationship between phonetics and phonology.

While in some circles, quantitative variability in non-contrastive phonetic detail is seen as a problem for theories of phonology, OP provides evidence for certain representational assumptions. We may consider the types of phonetic features that are constant in the face of performance phenomena, and suggest that these features are privileged from the point of view of phonological representation. In other words, Lindblom's (1990) principle of 'sufficient discriminability', which may be said to guide the amount of phonetic reduction in an utterance, indeed reveals the nature of phonological structure, particularly with respect to the relationship between prosody and segmental phonology.

Another 'phonological' aspect of performance phenomena is the fact that they are typically language-specific. OP representations explain how a range of non-contrastive phonetic details, which are often the focus of within-language quantitative studies, derive from categorical representational configurations that differ across languages. Consider the familiar example of intervocalic /t/, which in English is subject to lenition processes such as flapping and glottaling. By contrast, in Polish lenition is never attested. While Exemplar theorists have concerned themselves with factors that determine /t/-lenition in English will occur (e.g. frequency, speech rate), OP explains why English allows /t/-lenition but Polish does not – a question Exemplar Theory cannot even formulate.

References

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