Cue-based analysis of speech: implications for prosodic labelling systems

Over the past few decades it has become clear that an adequate account of systematic context-driven variation in word forms requires representations below the level of the abstract symbolic phoneme or even the allophone. One proposal for this sub-allophonic level of description is in terms of feature cues, such as the cues to articulator-free features and articulator-bound features proposed by Halle (1992) and by Stevens (2002), also assumed in the concept of enhancing cues in Stevens and Keyser (2010), Keyser and Stevens (2006) and Stevens, Keyser and Kawasaki (1986). This proposal of a level of representation of discrete feature cues, along with continuous-valued cue parameters, has the potential to bridge the gap between abstract symbolic categories of the phonology and the concrete spatial and temporal specifications that drive the articulatory-acoustic implementation of word forms in continuous communicative speech. Such an approach suggests that phonetic transcription might benefit from a focus on capturing the individual cues to feature contrasts that are realized in the speech signal. Does this approach to understanding phonetic variation in word forms have implications for prosodic labelling? We will explore this possibility, taking as our point of departure Arbisi-Kelm's (2006) proposal for labelling the separate correlates of prosodic disfluency in stuttered speech, and adapted by Brugos and Shattuck-Hufnagel (2012) for prosodic disfluencies in utterances produced by typical speakers. Our hypothesis is that variation in cue selection and cue parameter values is systematically governed by context, and that cue-level transcription may be needed to capture systematicity in the phonetic implementation of prosodic phonology as well as of lexical phonology.

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