

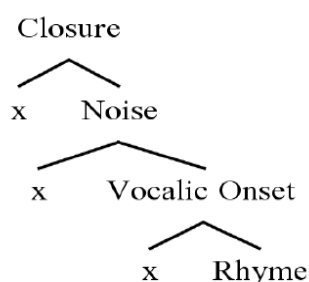
## Onset Prominence, loanword epenthesis, and the phonetics-phonology interface

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In “phonetically-based” phonology we find a striking contradiction. On the one hand, Wright (2004) discusses the importance of a perceptual boost at stimulus onset. On the other hand, in Hayes et al (2004: 23) we read that “[n]othing about perception, articulation, or processing leads us to expect any licensing asymmetries among syllable positions”. Indeed, citing the failure to find perceptual correlates of the syllable (e.g. Krakow 1999) this tradition has largely eschewed the possibility that constituent structure may be a phonetic object. The onset boost is seen as facilitating the perceptibility of segmental cues, rather than as a marker of structure. This approach has fanned the flames of the cue vs. prosodic licensing debate that has smoldered in the literature for well over a decade. However, there is no reason to assume that cue licensing and prosodic licensing are incompatible. Speech does indeed contain prosodic cues (Maddieson 1985). If these cues do not correspond with traditional representations of structure, it is the representations that must be refined.

*Onset Prominence* is a theory of segmental specification that incorporates constituent structure on the basis of auditory properties observable in initial positions. The theory posits the structure in (1) as a universal from which all representations are derived.

(1) – Onset-Rhyme structure



The top three layers of structure represent the inherent sequencing of specific auditory properties associated with onset articulations. Closure allows for auditory recovery enabling the onset boost, which aligns temporally with aperiodic Noise and Vocalic Onset (housing CV formant transitions). Rhymes correspond with auditory saturation (Wright 2004: 44; Figure 2.4) and tend to be sonorous in order to be perceptible. A “coda” is a pruned onset structure that is submerged under the Rhymal layer. Manner of articulation is defined in this theory on the basis of structure (Golston and Hulst 1999, Pöchtrager 2006), producing a non-arbitrary portrait of strength and lenition, and capturing both place restrictions (e.g. the rarity of initial /t/ clusters) and sonority-based generalizations in the area of phonotactics.

The empirical focus of this presentation will be epenthesis in loanword adaptation. Our approach unifies strategies for avoiding both codas and illicit consonant clusters. Most epenthesis is analyzed as listener-induced restoration (Ohala 1981) of onset specification, rather than the insertion of a lexical vowel (Davidson 2007). Prothesis in ST clusters results from auditory ambiguity associated with sibilants (Blevins and Garrett 2004). Asymmetries in cluster resolution (Fleischhacker 2001) fall out naturally from these structures.

Onset Prominence eliminates the need for alignment constraints, unifying segmental and prosodic phonology in a way that makes useful predictions for future phonetic studies. Phonetic features associated with onsets produce identifiable boundaries in the speech signal, providing a speech-based link with the defining property of phonology: discreteness.