Sonority is epiphenomenal – phonotactics in the Onset Prominence framework

Sonority is a bad habit in phonology. It is appealing in that it allows for robust cross-linguistic generalizations about syllable structure. Yet it should also come with clear warning labels: NO empirical coverage of sibilant clusters, NO explanation for place-based restrictions such as bans on #tl onsets (see e.g. Harris 2006). There is also a problem of a more conceptual nature. For the most part sonority is equivalent to manner of articulation, but established feature theories do not represent it by means of independently motivated manner features. Rather, sonority is typically posited as a 'scale' by which the value of a given segment must be 'looked-up'. As a result, phonologies employing sonority must encode the same phenomenon twice: once to capture sonority sequencing in phonotactics, and once to describe segmental manner features ([continuant], [consonantal], etc.). In this presentation, I will show how manner of articulation, encoded structurally (cf. Steriade 1993), renders sonority redundant and epiphenomenal in phonological systems.

In the Onset Prominence framework (OP; Schwartz 2013, 2015, in press), both prosodic constituents and segmental representations are constructed from the tree structure in (1), encoding the sequence of phonetic events associated with a stop-vowel sequence. Individual segments are extracted from this hierarchy, so manner (and to some extent sonority) is represented in terms of the active (binary) nodes in a given tree. A sample of segmental representations is given in (2). The segmental symbols are not ‘segments’ themselves, but simply shorthand for place and/or laryngeal specifications that attach to active nodes. Since ‘segmental’ representations derive directly from prosodic structure, there is no need for traditional constraints (such as ONSET) on the ‘segmental’ content of ‘syllables’. Both ‘segments’ and ‘syllables’ are derivative entities built from the same materials, without association lines linking one to the other.

Crucial to the OP account of phonotactic patterns are a number of ambiguities that are built into the hierarchy, motivating various adjustments to the representational system. These mechanisms either (1) join individual segments into a single branching structure (i.e. they govern synchronous articulation), or (2) ensure that segments are contained in separate constituents (i.e., they govern asynchronous articulation). OP representational ambiguities, and the mechanisms posited to resolve them, are compatible with a wide range of seemingly unrelated empirical patterns. This presentation will show shall how OP representations deal with the some or all (time/space permitting) of the following phenomena.

- Sonority reversals
- Large consonant clusters in Polish and Tashlhiyt Berber
- Restrictions on /tl/ onsets
- Cross language differences in the phonetic realization of onset clusters
- Cross-language differences in the release of coda stops
- Coda conditions
- Place restrictions on codas in English rhymes
- Excrescent stops vs. nasal deletion in NS codas
(1) The Onset Prominence representational hierarchy

Closure
  \[\text{Noise}\]
  Vocalic Onset
    \[\text{Vocalic Target}\]

(2) Manner of articulation in the OP environment

- Schwartz, G. (2013). A representational parameter for onsetless syllables. *Journal of Linguistics*, 49 (3), 613-646. DOI: [http://dx.doi.org/10.1017/S0022226712000436](http://dx.doi.org/10.1017/S0022226712000436)