Segment-internal structure and recursion combine to unify all levels of phonology

Geoff Schwartz (geoff@wa.amu.edu.pl) – Adam Mickiewicz University

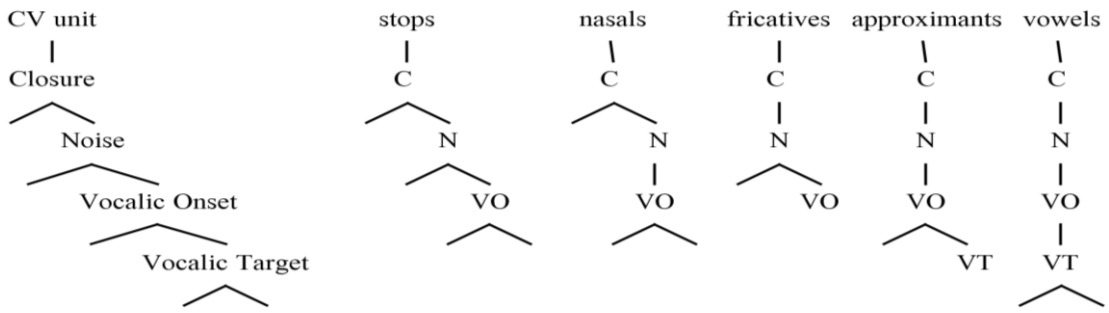
In order to evaluate claims of recursion, it is necessary to have agreed-upon definitions of the units that are supposed to recur, or not recur. For the most part, this has not been a problem for syntax. In the case of phonology, however, this is a more serious issue. While many authors take for granted the validity of traditional units such as the feature, phoneme, mora, syllable, and foot, there is in fact little consensus as to what the units of phonology actually are, and whether they are primitive and universal or emergent and language-specific (Mielke 2008, Schiering et al. 2010).

In the Onset Prominence framework (OP; Schwartz 2016), a single representational hierarchy derived from the phonetic events of a stop-vowel CV sequence constitutes the lone universal building block for phonological structure at all levels, from segment-internal properties to larger units including phonological words and phrases. The CV hierarchy is shown in the leftmost tree in (1). For OP, manner of articulation is a structural property, as we see in the other trees in (1). Thus, there are no association lines between prosodic constituents and individual 'segments' (cf. Pöchtrager 2006). In other words, segments *are* prosodic structure, and vice versa.

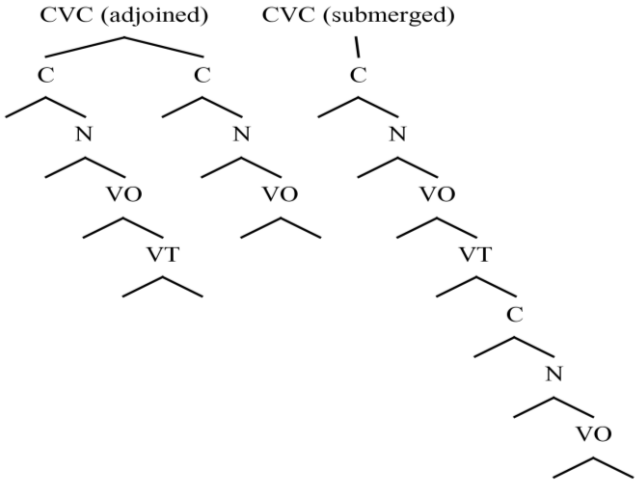
In the OP model, recursion is necessary for defining the relations between segmental and suprasegmental phonology. In essence, each 'segment' in (1) is itself a recursion of the CV unit in from which it was extracted. Meanwhile, larger prosodic units, regardless of their size, are constructed by means of two basic mechanisms: one is a recursive 'submersion' mechanism that builds down from the Closure level, the other is an adjunctive mechanism that joins constituents at a higher level of structure. The configurations produced by these mechanisms produce two basic structures for each type of unit in traditional prosodic hierarchies. In (2) we see adjoined and submerged CVC sequences, while in (3) we see adjoined and submerged phrases.

The different configurations make different predictions for phonological behavior at all levels of phonological structure, including low-level allophonic processes, word-level phonotactic constraints, as well as the type of stress system (mobile or fixed). Languages allowing submerged structure typically show strong lexical stress and vowel reduction, weakening of codas and intervocalic consonants, along with robust effects of prosodic position on phonetic measures such as VOT or closure duration in stops (Fougeron & Keating 1997; Choi 2003). Languages with adjoined prosodic constituents typically show fixed stress, less consonant lenition, and less dramatic effects of prosody on segmental phonetics (Malisz & Żygis 2015; Schwartz 2016). This presentation will show the OP perspective on three different types of patterns below, at, and above the word-level. Submersion is conducive to the suppression of coda stop release, restrictions on the type of consonant that can appear in coda position, and the widespread development of apparently ternary foot structures.

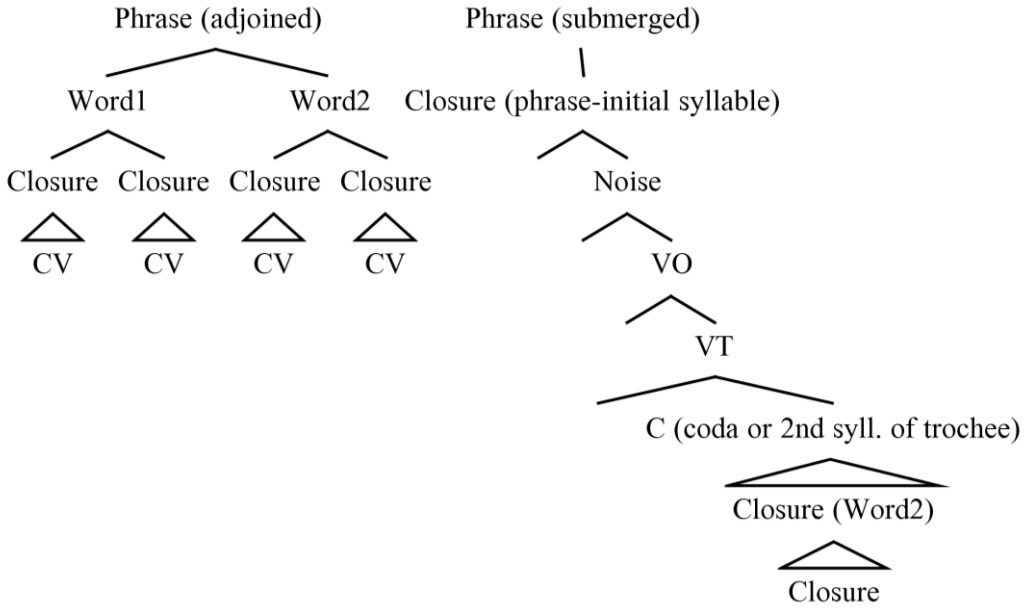
(1) OP hierarchy (left) and manner categories



(2) Adjoined vs. submerged CVC sequences



(3) Adjoined vs. submerged prosodic phrases



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