

The notion of Segment as a Challenge to a Sonority Syllable Model

At least since Jespersen (1897-99: 521ff, for a longer pre-history, cf. Ohala 2008) a "sonority hierarchy" or "strength hierarchy" has been used to account for segment order in the syllable (cf., e.g., Laver 1994: 503ff and Blevins 1995: 211ff).

John Ohala has insisted (e.g. Ohala 1992, Ohala & Kawasaki-Fukumori 1997, Ohala 2008) that "As explanations for syllable shapes they are circular...terms such as sonority, etc., are just labels for the rank ordering of segment types; they do not explain it" (Ohala & Kawasaki-Fukumori 1997: 344).

Hans Basbøll has been developing a Sonority Syllable Model (first presented in 1973, developed e.g. in 1999, see now 2005: 173-201) which is derived from the Universal Logic of Segment Types. This model is, he claims, neither circular nor ill defined. In the talk I shall briefly present the basic foundations of the model and then show that Ohala's claims about circularity do not apply to Basbøll's Sonority Syllable Model. I shall also attempt to demonstrate that the model does contribute to a better understanding of segment order in the syllable than standard versions of such hierarchies.

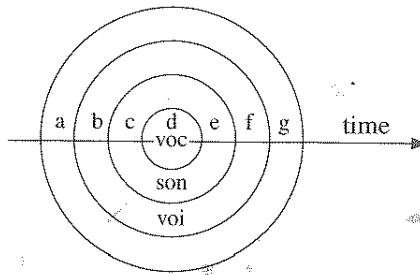


FIGURE 6.7. The Sonority Syllable Model of Figure 6.6 where each of the letters represents the part of one circle which is not part of any of the smaller or larger circles of the figure. a and g: segments which are not voiced = voiceless segments; b and f: voiced segments which are not sonorant = voiced obstruents; c and e: sonorant segments which are not vocoids = sonorant contoids (consonantal sonorants); d: vocoids.

The figure just above (fig. 6.7 from Basbøll 2005: 184) illustrates the model: when the arrow of time is disregarded, the fig. exemplifies a set of Euler's circles: [vocoid] *implies* [sonorant] (all vocoids are sonorant, not the other way round, cf. sonorant nasals/laterals); [sonorant] *implies* [voiced] (all sonorant segments are voiced, not the other way round, cf. voiced obstruents). When the time dimension is introduced in fig. 6.7, the model is turned into a non-circular model of sonority sequencing in the syllable.

The notion of *Segment* can in several respects be seen as presenting a challenge to such a Sonority Syllable Model: (1) are adjacent sequences which have the same sonority one or two phonological segments (cf. diphthongs)?; (2) what is the order principle applying to sequences with the same sonority? (here I give a solution to the /st/-problem stated in Ohala & Kawasaki-Fukumori 1997: 348, without treating such clusters as (composite) segments); (3) Danish syllable structure presents great challenges to any simple-minded notion of the segment: Rischel (2003) gives examples like those in fig. 2 (next page) where what seems to be, *segmentally* speaking, one segment, is distributed over several syllables, e.g. the last example (*h*)*årdere at åre(lade)* 'harder to bleed' (said by a veterinarian before two elephants in a zoo).

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2) Koge o(ver), (L)uge u(denfor), (H)årdere at åre(lade); Rischel 2003

