

On Some Deep Structural Analogies between Syntax and Phonology

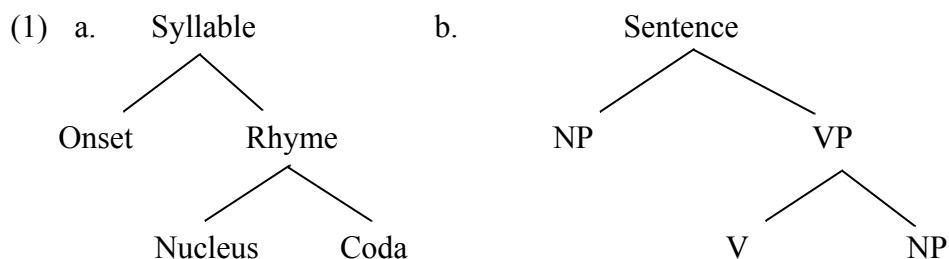
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A commonly held view in theoretical linguistics is that the formal organization of phonology is fundamentally different from that of syntax. Claims to that effect in the literature concern either representational aspects or derivational ones (phonology has extrinsic rule ordering, syntax does not). In the representational domain, it is customary to state that whereas recursion is a fundamental property of syntax, phonological structure is non-recursive:

“Recursion consists of embedding a constituent in a constituent of the same type, for example a relative clause inside a relative clause (...). This does not exist in phonological structure: a syllable, for instance, cannot be embedded in another syllable.” (Pinker and Jackendoff 2005:10)

Neeleman & van de Koot (2006:1524), as well as Scheer (2013), even reject the idea that phonological organization appeals to any notion of constituency; see also Carr (2006) for skepticism regarding syntax/phonology parallelism.

Contrary to these views, it has been remarked more than once that there is an ‘obvious’ parallelism between the structure of syllables (with an onset, rhyme division, and a division between nucleus and coda in the latter) and the structure of a ‘simple’ sentence (Kuryłowicz 1948; Pike and Pike 1947; Fudge 1987):



Most writers, while acknowledging that phonotactic structure is constituency-based (and making reference to X-bar(ish) organization of syllables), propose that phonological (often called ‘prosodic’) constituency is ‘strictly layered’, which means that no constituent contains a constituent of the same type. This explicitly bars (self-embedding) recursion.

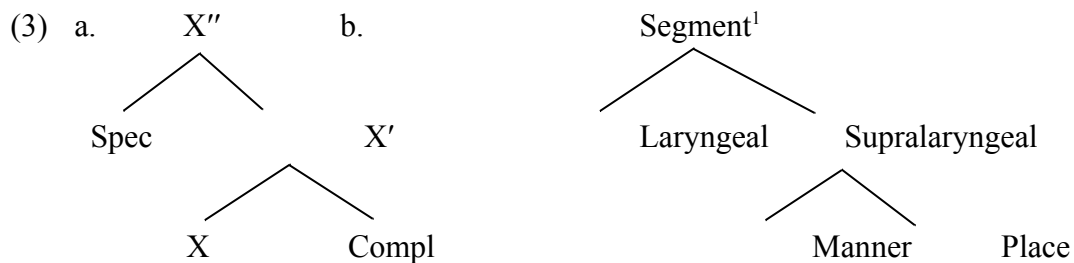
However, some phonologists – whose proposals differ in several ways that will not concern us here – have argued that syllable structure can display recursion (e.g., van der Hulst 2010). Following van der Hulst’s (2011) cue, the present chapter will support the idea that syllable structure shares non-trivial properties with syntactic structure (parallels that cannot have been inherited from syntactic phrasing), including, crucially, recursion. We will resolve certain problems that arise for van der Hulst’s original proposal, which will lead us to introduce structural properties in syllable structure that mirror aspects of more current versions of syntactic structure, specifically proposing a parallel to the so-called ‘light *v*’ of current ‘minimalist’ syntactic inquiry.

Our principal conclusion is that there is only one syntactic (or ‘computational’) system which underlies both phonological structure and morpho-syntactic structure (as well as operations). Whatever differences are found between the two systems are primarily due to the fact that both modules differ in their basic alphabet. Thus, we support what John Anderson calls ‘The Structural Analogy Assumption’ (SAA; Anderson 1987):

(2) The Structural Analogy Assumption

The same structural properties are to be associated with different levels of representation except for differences which can be attributed to the different character of the alphabet involved (as in the case of planes) or to the relationship between the two levels (as may be the case with any pair of levels), including their domains.

Though our focus will be on syllable structure, we will also address segmental structure, including the potential interweaving of both levels. In this context, we will discuss the applicability of X-bar structure within phonological segments, as in (4b) (van der Hulst 2005):



We will begin with outlining a proposal made in van der Hulst (2010) and then develop this idea in a more in-depth, leading to a proposal to import ‘light *v*’ structures into the representation of syllables and feet. We show how the model accounts for different types of ‘foot structure’ (trochaic, iambic, coordinate). We conclude by offering an explanation for the fact that recursion in phonology is less pervasive than in syntax.

¹ This structure follows the original proposal in Clements (1985). van der Hulst (2005) argues that the later idea to abandon a manner node (attaching manner features directly to the root node) should not be followed.