

## Linearization in Bare Prosodic Structure

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This paper discusses three PF-related problems for the minimalist program. It proposes that prosodic structure is recursive, and that phonology applies strictly in parallel with syntax, not after it. Linearization is derived by means of templates that link the terminals of syntax with intervals of phonological time (CV units). The basic object at the PF interface in this model is not the edge, but the lexical item.

**1a.** A growing literature on quantification, stress, and movement-triggers suggests that the syntax might ‘respond to’ certain phonological features (Fox 2000; Reinhart 2006; Richards 2006). On standard assumptions, there should be no such look-ahead from syntax into phonology.

**1b.** The derivation of interface representations is remarkably redundant, as compared with the general austerity of the minimalist program. The semantic interface must recognize and delete phonological features; the phonological interface must recognize and delete semantic features. In the best case, such redundancy should be avoided without weakening the inclusiveness condition.

**1c.** Pinker and Jackendoff (2005) (PJ) reject the recursion only hypothesis proposed by Hauser, et al. (2002) with reference, among other things, to the claim that phonology is not recursive. If PJ’s view of phonology is correct, it challenges an important background assumption of the minimalist research agenda.

**2a.** The look-ahead problem is exemplified with German umlaut-causatives: the merger of a certain causative head is sensitive to the morphological class of the base verb (only strong verbs can be umlaut-causativized). To account for such facts, the standard serial model is forced to refer to “indexed phonological representations” (Borer 2003) in the syntax, *i.e.*, to look ahead to PF.

**2b.** Neither look-ahead, nor redundancy arise as problems, if syntactic and phonological features merge at the same stage of the cycle. Phonological features merge in phonology, syntactic/semantic features merge in syntax, and the derivation proceeds cyclically in parallel.

**2c.** To guarantee the convergence of phonological and syntactic derivations, phonology and syntax must be homomorphic for *merge*. They are, if the recursive core of grammar includes both syntax and prosody (contra PJ). It is shown that the mechanisms of bare phrase structure generate prosodic structure on the assumptions that a) prosodic structure is recursive, and b) its basic unit is CV (Lowenstamm 1996; Scheer 2004). The *bare prosodic structure* of a closed syllable like [fal] is  $\{V_{[a]}, \{V_{[a]}, \{C_{[f]}, V_{[a]}\}\}, \{V_{[\emptyset]}, \{C_{[l]}, V_{[\emptyset]}\}\}\}$ . Inclusiveness thus holds at PF.

**3.** Linearization patterns are derived by means of ordering rules along the lines of Fitch and Hauser (2004); (cf. Naigles 2002; Pléh, Lukacs et al. 2003 on acquisition). Fitch and Hauser’s rules refer to classes of elements, rather than edges. The same is true of templates, conceived as ordering rules over sets of CV positions, where each set is associated with a bundle of syntactic features, *i.e.*, a category (Bendjaballah and Haiden 2005). Templatic linearization is illustrated for morphology with Classical Arabic and German verbal derivation. The formalism is then extended to syntactic notions like the head parameter and X-second.

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