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Melody-free syntax

Zwicky & Pullum's (1986) claim that syntax is never impacted by any phonological property (phonology-free syntax) has been challenged empirically based on a large range of data, showing that intonation, stress, tree-geometric properties of the prosodic constituency, the size of lexical items (minimal word constraints), rhythm and tone may be a factor in syntactic computation. I show that all cases on record involve phonological properties that are located above the skeleton, and conclude that the correct generalization is *melody*-free syntax: items located below the skeleton, i.e. melodic primes (depending on the theory, binary or monovalent features, unary items such as GP-Elements), are invisible in syntax.

It is shown in a further step that the same is also true in the opposite direction: (morpho-)syntax can influence phonology only at and above the skeleton. There are no cases on record where the carrier of morpho-syntactic information in phonology would be, say, a feature [+labial]. All interface theories, structuralist and generative alike, implement this insight, if tacitly: carriers of morpho-syntactic information are held to be juncture phonemes, SPE-type diacritics (# and +) and more recently prosodic constituency – all are inserted at or above the skeleton.

The examination of other phenomena reveals the same watershed line: morphology (phonologically conditioned infixation and allomorphy), category-sensitive phonology and (phonological) absolute agrammaticality are also melody-free. On the other hand, melody is also unable to impact categories above the skeleton: cases where the computation of stress, tone or syllable structure reacts on the presence of absence of, say, labiality, are unheard of.

This straightforwardly leads to the conclusion that sonority is *not* a melodic prime: it *is* a factor in the computation of stress, tone and syllable structure. The non-melodic character of sonority was established independently (de Lacy 2002, Gordon 2006:52). The question, then, is what kind of animal sonority is if it is not a melodic prime, i.e. of the type [±son]. Systems based on unary primes offer an alternative: sonority is complexity: the more primes contribute to the segmental makeup, the more sonorous the segment. This (rather old) perspective on sonority is introduced in further detail, and it is argued that complexity-defined sonority also offers a way to make the melody → syllable transition cross-modal, and hence to preserve its universality. Sonority is a property of sound, absent from the other natural way of externalizing grammar, i.e. sign language. While only sound is more or less sonorous, all primes, whatever they be in kind, are more or less complex.

Finally, the overall landscape is given an interpretation in a modular perspective. The result is that phonology is made of two distinct computational systems, one taking melodic primes as an input and returning melodic primes in a different arrangement (e.g. a palatalization), another taking the linear order of segments and sonority as an input and computing syllable structure.

References

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Zwicky, Arnold & Geoffrey Pullum 1986. The Principle of Phonology-free Syntax: introductory remarks. Ohio State University Working Papers in Linguistics 32: 63-91.