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GP Round Table
Buapest, November 2017

Abstract

Two ways of being minimalist(ic)

Government Phonology has always been on the far end of "small is beautiful", considering that only a small subset of those alternations which can be observed are phonological in kind. Phonology is thus shrunk according to a number of criteria, namely those mentioned under (1).

(1)   An alternation cannot be phonological
    a.   if it is not 100% regular, i.e. surface-true, or
    b.   if there is no plausible causal relationship between the change observed and the triggering context.

These criteria are shared with Natural Phonology. Thus infamous alternations such as trisyllabic shortening or velar softening do not involve any phonological computation according to GP. This leads to a picture where most of what *SPE* thought is a result of phonological computation (say, 90%), is in fact something else: distinct lexical items, morpho-phonology (a distinct computational system, Gussmann 2007), allomorphy, analogy, phonetics. Kaye (2014) goes one step further, arguing that an alternation which involves level 2 (analytic) morphology (i.e. where the morphologically complex item does not have the same phonology as monomorphemes) is not phonological in kind. As a consequence, phonology boils down to static patterns in monomorphemic items (or heteromorphemic strings that behave as such). Under this view, the study of monomorphemic items alone is able to produce exhaustive insight into the workings of the phonology of a language.

In the 70s, this line of thought has led Natural Phonology to study mainly phonetic phenomena: if you are only interested in surface-true alternations, you will be looking into phonetics for sure. GP2.0 has gone this way.

Another way of reducing the purview of phonology also roots in GP: a consequence of so-called phonetic interpretation (Harris & Lindsey 1995: 46ff, Harris 1996, Gussmann 2007: 25ff) is that the the relationship between phonological and phonetic categories is arbitrary. As a consequence, phonological computation does not care for the phonetic properties of the items it manipulates. This view is discussed for example by Anderson (1981), Hyman (2001), Bermúdez-Otero (2006: 498), Hamann (2011, 2014) and Scheer (2014). It is the essence of substance-free phonology (Hale & Reiss 2000, Blaho 2008, Iosad 2017).

A consequence of this line of thought is that any segment may be turned into any other segment in any context and its reverse. In other words, grammar has no say on what happens with melody: given the life cycle of phonological processes (Bermúdez-Otero 2015), phonetic patterns are phonologized as phonological processes; they are well-behaved at first (regular, "make sense") but in further evolution may take on properties that estrange them from their initial phonetic transparency, a process that may lead to crazy rules (Bach & Harms 1972). Phonological computation happily manages all of these diachronic stages, including melodic craziness, since it is blind for substance: melody is absent from the phonology and only comes into play after phonological computation is completed. In a spell-out process (phonetic

interpretation), phonological categories are mapped onto phonetic categories: α ↔ [low position of the tongue], β ↔ [high front position of the tongue] for example (if phonetic categories are articulatory – in fact they most likely are acoustic). Phonologists then call alpha "A" and beta "I", but this is their phonetic, not their phonological identity. Phonological primes are phonetically meaningless. They are associated to phonetic items only through language-specific spell-out relations.

The talk lays out this view in more detail, showing that it is an incarnation of Saussure's "algèbre combinatoire", i.e. which uses meaningless primes. In production, phonology is fed by a spell-out (which pieces together the input string) and communicates with phonetics through a spell-out. The only items that it manipulates are thus discrete colorless units whose identity can only be described in morphological (unit A expones morpheme X) or phonetic terms (it is pronounced as Y). Since phonology is blind for either of these extra-phonological properties (something that follows from modularity and domain specificity), they cannot impact phonological computation in any way. Hence melody is just as irrelevant as morphological affiliation. Phonology does not obey or implement any melodic naturalness: any segment can be turned into any other segment in any segmental context and its reverse. There are no melodic universals.

The situation is different for true phonological categories such as syllable structure or stress (anything at and above the skeleton): there is no phonetic correlate of these items, which are the result of properly phonological computation. Hence they are relevant and legitimate players in phonological computation. Their influence is not arbitrary and they produce universals: l-vocalization is never restricted to word-initial consonants, and stress is never distributed in such a way that it falls on the third syllable of a word. Crazy rules back this division: they are only ever melodically crazy (there is no craziness in syllable structure or stress assignment).

Finally, the divorce from phonetics has implications for acquisition: the only thing that children are born with regarding melody is the ability to associate a piece of the real world (phonetics) with a discrete phonological prime. This is what is known as categorization in psychology, applied to real world items that happen to be phonetic. Knowledge about syllable structure and stress must be given at birth, though: it is universal, it does not depend on any real world items and relevant phonological items (onset, nucleus etc.) are not associated to any real world items.

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