

Allomorphy — Selection, not optimization

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This paper argues for the existence of a separate module of inviolable constraints, MORPHOLEXICAL CONTROL, on the evidence of phonologically unnatural allomorph distributions in a variety of languages. The proposal builds on previous work on the theory of CONTROL by Orgun and Sprouse (1999), but in contrast to the original version, the constraints in MORPHOLEXICAL CONTROL are unabashedly language-specific, encoding combinatorial requirements of specific morphological units (cf. ‘morpholexical rules’ of Lieber 1980, 1982). This nullifies the force of the objections marshalled by Raffelsiefen (2004) against CONTROL as entailing a duplication of CON.

The sources of morpholexical constraints and phonological constraints of CON/EVAL are fundamentally different. While the constraints of CON/EVAL are (depending on one’s theory) innate or distilled from phonetic knowledge (e.g. Boersma 1998; Hayes 1999), morpholexical constraints represent *post hoc* generalizations over a static lexicon. The difference in origin correlates with a difference in the formal properties of evaluation in the two components. While the constraints in CON are ranked and violable, morpholexical constraints are declarative. The only interaction permitted between them is thus intrinsic (e.g. Scobbie 1993). Morpholexical constraints are formulated here as attribute-value matrices.

Otherwise, the details of deriving absolute ungrammaticality are more or less the same as in the original version of CONTROL Theory. After evaluation of the candidates in EVAL, the winner is passed to MORPHOLEXICAL CONTROL. If it satisfies all of the morpholexical constraints, it is accepted; if it violates any of the morpholexical constraints, it is rejected, leaving a gap.

I will compare MORPHOLEXICAL CONTROL with two optimization-based theories of allomorph distribution: the Markedness-driven approach (Mester 1994; Anttila 1995; Kager 1996, 1999, 2003; Drachman et al. 1996; Mascaró 1996; Tranel 1996a,b, 1998; Dolbey 1997; Perlmutter 1998; McCarthy 2001; Rubach and Booij 2001; Picano 2002; Yip 2004; Green 2005; Wolf 2005), and MPARSE (McCarthy and Prince 1993; McCarthy and Wolf 2005). The markedness-driven theory holds that allomorphs compete directly and that all allomorphs are present in the input as a disjunction $/\{A, B\}/$. Allomorph selection on this view instantiates the emergence of the unmarked. As Rubach and Booij (2001) put it, “While the allomorphs themselves are arbitrary, their distribution is not”. This literature has uncovered a significant number of cases in which allomorph selection does indeed appear phonologically sensible. However, there is also a significant number of clear cases in which the choice of allomorph is either phonologically neutral or ‘pessimal’, negating Rubach and Booij’s central assumption.

An impressive case of pessimization in allomorphy comes from Haitian Creole. In this language, the suffixed determiner varies in shape between *-la* and *-a*, but the distribution of these allomorphs is the reverse of what we would expect: *-la* is selected by consonant-final stems, e.g. *malad-la*, ‘the sick’, while *-a* is selected by vowel-final stems, e.g. *papa-a*, ‘the father’. As if to add insult to injury to the markedness-driven approach, which holds, crucially, that *all* allomorphs are present in the input form, vowel hiatus is under certain conditions repaired through the insertion of the glide, e.g. *papje[j]-a*, ‘the

paper’, *bato*[w]-a, ‘the boat’. If both allomorphs were present in the input, we should expect the selection of *-la* to resolve the hiatus, since it would entail no violation of DEP.

A bit of digging around in the library turns up a raft of similar cases: the Korean conjunctive, the Dyirbal ergative, Sibe suffix allomorphy, the Kentakbong imperfect, the Pohnpeian possessive, the Trukese durative, and the Axininca Campa genitive all invite the same conclusions. Although I won’t have time to address this in the talk, countenancing the possibility subsegmental affixes potentially brings many more cases of unnatural allomorph distribution into the fold as well.

The main problem with MPARSE is conceptual. In common with MORPHOLEXICAL CONTROL, MPARSE theory holds that allomorphs do not compete directly but that each allomorph is input to separate evaluations. MPARSE fares better in dealing with cases of unnatural allomorph distribution, but is forced to rely on stipulating the order in which competing allomorphs are ‘tried’ (Russell 1995). This of course is a violation of the principle of the richness of the base, according to which there can be no language-specific restrictions on the input. MORPHOLEXICAL CONTROL entirely circumvents this conceptual problem.

MORPHOLOGICAL CONTROL is able to subsume all cases of allomorphic variation, even cases where the choice of allomorph is phonologically sensible. Naturalness may assist the learning of allomorph distribution, but it does not entail that the distributions are synchronically the result of optimization.

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