Lexically restricted phonological alternation: the case for via-rules

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This talk addresses lexically restricted phonological alternation, focusing on a case-study from present-day Spanish: the alternation between high and mid vowels that affects the roots of approximately 24% of third-conjugation verbs (Bermúdez-Otero 2016: §2). Membership in this alternating set is unpredictable, but, when a verb does take part, the distribution of its alternants is phonologically conditioned, automatic, and exceptionless.

Crucially, although the alternation submits to a straightforward autosegmental solution involving an underlying floating [-high] feature, behavioural and neurolinguistic evidence (Linares et al. 2006) reveals that, in fact, learners of Spanish fail to adopt this analysis, opting instead for listing the two allomorphs in the lexicon. I therefore model the alternation as involving phonologically driven selection among listed stems. This approach maintains modularity, correctly predicts the size of local domains for allomorph selection, and demarcates the productive and unproductive aspects of the alternation. It is also independently supported by evidence from recognition latencies (Domínguez et al. 1999, 2000).

Elaborating this approach, however, I argue that stored allomorphs are linked by VIA-RULES (Vennemann 1972: 225), i.e. by 'non-directional, non-generative relational rules' (Tiersma 1978: 65) akin to the 'non-productive schemata' of Jackendoff & Audring (2018). Since they are non-generative, via-rules play no role in production and are therefore unable to trigger the systematic extension of allomorphic patterns. They do, however, play a role in lexical acquisition: language learners are subject to a general anti-alternation bias (McCarthy 1998; Hayes 2004; Tessier 2006, 2016; Do 2013, 2018), but they accept a new alternating item more readily if its behaviour matches a pattern of allomorphy encoded in a via-rule.

Via-rules thus capture a range of facts: that lexically restricted phonological alternations typically fall into a small number of recurrent patterns (Revithiadou et al. 2019), that the learnability of an 'irregular' form depends not only on its own frequency but also on that of its class (Yang 2005), and that unproductive patterns may show 'islands of reliability' (Albright et al 2001). More generally, positing via-rules in the context of a modular stratal architecture of grammar (Bermúdez-Otero 2018) allows us to capture the differences between strong suppletion, weak suppletion, and the stem-level phonology proper, which behave differently in paradigm extension and show different frequency effects.

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