Possible and impossible variation

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In this paper, we address a very general problem, the problem of morphological segmentation, using very specific questions, related to Hungarian morpho-phonology. These empirical problems are centered around the description of linking vowels in Hungarian (a linking vowel is one that alternates with zero, and which only appears in the affixed forms of stems, not in their base forms). It is obvious that the problem of linking vowels is tightly related to the problem of segmentation: any segmentation-based approach has to decide whether (and when) a linking vowel belongs to the stem, the affix or neither.

We will argue that an analysis that is not bound to decide where a given segment or sequence of segments belongs to morphologically, i.e., whether it is part of the stem, an affix or neither, is better suited for explaining Hungarian linking vowels. The arguments come from various (language-specific) constraints applying to surface forms involving linking vowels. These constraints are pervasive, but not exceptionless, and can be in conflict with each other, which leads to possible cross-speaker or intra-speaker variation in some cases. In this sense, all existing forms represent some (local) optimum of the optimization of the entire paradigm.

For example, for many speakers, stem-internal vowel shortening in the class of "shortening stems' such as $sz\acute{e}n$ 'coal' is obligatory with suffixes that contain a linking vowel, but optional in superessive forms (thus szenen 'coal + SUE', from $sz\acute{e}n$ 'coal' is also a possible form, in addition to standard $sz\acute{e}nen$). The interesting question is why such variation never appears in some other comparable cases. For example, no such variation is observable with back-vowel stems (*nyaron 'summer + SUE', from the 'shortening stem' $ny\acute{a}r$ 'summer' is excluded for all speakers, only $ny\acute{a}ron$ is possible). The aim of the paper is to show how this difference in behaviour follows from the interaction of the constraints.

Analyses relying on morphological segmentation must account not only for the status of the linking vowel, but also for the conditions of its presence, its quality and the various alternations that it is related to. Instead of such a procedure, we revive the tradition of analogical explanations (existing under various disguises throughout the history of linguistics, such as paradigm uniformity or compositionality). We claim that the constraints that we posit (which stem from empirical generalizations) act as attractors in the space of linguistic forms and meanings, and if a speaker has to come up with a new form (and/or meaning) given partial information, then her decision will

be controlled by these attractors. Sometimes a single option is enforced, in other cases (we might call them 'unstable'), there is more than one option, eventually with some preference for one or the other. The force of each constraint depends on the (relative) frequency with which it obtains. In this sense, our framework is similar to data- or exemplar-oriented theories.

In sum, our approach does not posit

- (i) an exhaustive segmentation with clear-cut morph boundaries;
- (ii) underlying forms;
- (iii) abstract representations.

Instead, we posit

- (i) surface forms (and generalizations that arise from them) together with their surface relationships (similarity);
- (ii) frequencies of formal and functional properties as well as of their co-occurrence;
- (iii) decisions based on constraints arising from these generalizations, with conflicting effects and varying force controlled by frequency.

References

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