Zero marking in inflectional morphology.
Patterns and possible explanations

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This talk focuses on zero marking in inflectional morphology and form-frequency effects. It has long been known that more frequent forms (i.e. words, constructions, grammatical markers) tend to be shorter than functionally equivalent but less frequent forms (e.g. Zipf 1935, Greenberg 1966, Croft 2003, Hawkins 2004, Haspelmath 2008a,b, 2021, Levshina 2018, Diessel 2019). Related to that, it is also well-known that one value of a grammatical feature can often be left unexpressed or "zero-marked" in opposition to the other value(s). For instance, singular, nominative, present, or indicative may not be expressed overtly as opposed to other number, case, tense, or mood values, which has usually also been related to frequency and economy (e.g. Bybee 1985, 1994, 2010, Dahl 1985, Greenberg 1966, Croft 2003, Hawkins 2004, Haspelmath 2008a,b, Stolz et al. 2014).

However, there are two complications that have not received much attention in many previous studies arguing for such form-frequency associations. First, a single value can often be expressed by various markers that may also differ in length; second, several grammatical features are often expressed together in a single marker, making it not always easy to tear apart the encoding of different features. These issues can be dealt with if defining stems as the longest sub-string that all forms of a lexeme share, and defining all additional material of a word form as a marker for a given cell in the paradigm (Beniamine & Guzmán Naranjo 2021, Guzmán Naranjo & Becker in press). Applying this to crosslinguistic data from the Unimorph database and the Universal Dependency treebanks confirms the trend of more frequent forms to be shorter than equivalent less frequent forms. However, the results also suggests that zero markers are less frequent than expected and do not necessarily follow the trend we observe between short vs. long markers (cf. also Stolz & Levkovych 2019). I will also present the results of a typological study of zero markers in verbal inflectional paradigms which point in the same direction: zero markers appear to be less common than expected if we want to motivate their occurrence by primarily by economy in the way that the association between shortness and frequency of a marker is usually motivated.

Taken together with the attested scenarios through which zero markers develop, i.e. the development of a marker for the opposite value(s), the loss of the marker, or reanalysis, (cf. Bybee 1994, Koch 1995, Cristofaro 2019), those patterns have an interesting consequence for efficiency as a driving force of language (change) in the sense of functional-adaptive explanations for recurrent or universal structures in language (e.g. Haspelmath 2019, 2021, Levshina 2018). Against this background, I will argue that the intralinguistic and crosslinguistic distribution of zero markers calls for a more variegated account of what should be understood as efficiency. In certain scenarios, zero markers appear to result indirectly from the preference for developing inflectional markers to signal less expected (or frequent) functions

but they do not necessarily reflect a preference for zero marking as such. The creation of zero markers through reanalysis is bound to specific conditions, and such zero markers are again an indirect result of a preference for morphological transparency rather than a preference for zeros as such. In line with e.g. Bybee (1988) and Mithun (2018), this suggests that although functional-adaptive constraints definitely play a major role in shaping grammar, they do not have to be result-oriented in that they would necessarily favor certain resulting configurations, but they come in different forms that can motivate different changes and processes which then result in e.g. zero markers.

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