
A diachronic mechanism for form-frequency asymmetries in inflectional paradigms

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Cross-linguistically there exists a negative relationship between the relative frequency of values for inflectional features, and the length of the forms which realise them – thus singular forms tend to be shorter than plurals, third person forms tend to be shorter than other persons, and so on (Greenberg 1966). This paper considers a possible diachronic explanation for this recurring structural characteristic of inflectional paradigms, starting from the observation that the following two factors influence morphological change:

(a) Frequency – lower frequency forms in inflectional paradigms are more likely to be replaced in morphological change, while higher frequency forms are more likely to serve as analogical bases for the remodelling of other forms (Mańczak 1980).

(b) Openness – operations which add phonological material to an analogical base are more open than those which subtract or replace material, in that they can be extended to a greater number of lexemes, because they do not require that a particular sequence exists in the input to be subtracted or replaced. For example, an alternating pattern like *foot* – *feet* can only be extended to words containing a particular vowel, whereas the pattern of *sister* – *sisters* can be extended to any noun (Bybee 1995).

Together, (a) and (b) should promote changes which derive less frequent members of paradigms by adding phonological material to more frequent members. In turn, this should concentrate phonological length and morphological complexity in the least frequent paradigm cells over time.

The paper tests the contribution of this diachronic explanation to the synchronic relationship between form length and frequency, using a computational simulation of morphological change.

References: • Bybee, J. (1995). Regular morphology and the lexicon. *Language and cognitive processes*, 10(5), 425-455. • Greenberg, J. H. (1966). *Universals of language*. Cambridge: MIT Press. • Mańczak (1980). Laws of analogy. In Fisiak, J. (Ed.), *Historical Morphology* (pp. 183-88). Berlin: de Gruyter.