The phonological effects of grammaticalization: a case study from Old Hungarian

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This paper discusses the process whereby two suffixes (allative and multiplicative), grammaticalized from nouns in (Pre-)Old Hungarian, gradually came into the scope of progressive labial harmony. From the phonological side, the process is interesting for two reasons. (1) The noun from which the allative suffix (*hoz*) was grammaticalized contained an original labial vowel and thus was affected by the progressive spreading of [-labial], whereas the noun from which the multiplicative suffix (*szer*) was grammaticalized contained an original non-labial vowel and thus was affected by the progressive spreading of [+labial]. (2) Progressive labial harmony itself was a new phenomenon diachronically emerging in the course of the Old Hungarian period (next to the much older palatal harmony, inherited most probably from Proto-Uralic). The convergence of the two processes, i.e., the emergence of progressive labial harmony and the grammaticalization of the two respective nouns produced an intricate pattern of gradual variation that is documented and traced in detail in this paper. The strongly data-driven discussion focuses on the way this variation crystallized into the pattern known in later stages of Hungarian.

Background: The appearance of progressive labial harmony itself results from a change whereby a variable but robustly attested regressive labial spreading reversed its direction (Polgárdi et al. 2023a, b). Similarly to many harmony phenomena, the regressive spreading is most likely to have been a simple coarticulatory phenomenon (cf. Ohala 1993, 1994, Przezdziecki 2000, Hansson 2001, Gafos 1996, 2021). The reversal of its direction is most probably linked to the enhancement of [labial] from a noncontrastive or marginally contrastive feature to a robustly contrastive feature. Due to the interplay of the regressive spreading and analogical levelling affecting morphologically complex forms, patterns emerged that could form the basis of the emergence of the first non-labial variants of the original labial allative suffix. When these (as well as variants of other suffixes) were reanalyzed as resulting from progressive labial harmony, originally non-labial suffixes (such as the multiplicative) followed suit and were labialized after labial vowels.

Data: The data were collected from the online Old Hungarian Corpus (http://omagyarkorpusz.nytud.hu/en-intro.html, cf. Simon 2014). We have taken all allative and multiplicative forms from all the extant codices from the period (late 14th – early 16th centuries); altogether, after checking and cleaning, these have yielded 1927+3030 data rows for allative and multiplicative, respectively (with source, locus and date as separate data points for each linguistic datum). We then established the major patterns into which the codices (or even the individual copying hands) fall.

Discussion: There are notable differences in the behaviour of the two suffixes. These may be due to the different timespans over which they were grammaticalized, but certainly also to the different type of vowel they contained at the outset of the grammaticalization process. The

diachronic sequence can be discerned in the case of the multiplicative with greater certainty. The major patterns, which differ diachronically as well as dialectally, are the following:

- (i) no harmony (for the multiplicative): két-szer 'twice', három-szer 'three times', öt-szer 'five times';
- (ii) palatal harmony without labial harmony: két-szer 'twice', három-szor 'three times', öt-szer 'five times'; kert-höz 'to the garden', ház-hoz 'to the house', üst-höz 'to the cauldron';
- (iii) palatal harmony with free variation as regards labiality: $k\acute{e}t$ - $szer \sim k\acute{e}t$ - $sz\ddot{o}r$ 'twice', $h\acute{a}rom$ -szor 'three times', $\ddot{o}t$ - $szer \sim \ddot{o}t$ - $sz\ddot{o}r$ 'five times'; kert- $h\ddot{o}z \sim kert$ -hez 'to the garden', $h\acute{a}z$ -hoz 'to the house', $\ddot{u}st$ - $h\ddot{o}z$ 'to the cauldron';
- (iv) palatal harmony with inconsistent labial dominance: like (iii) above but with the ö-variants significantly more frequent;
- (v) consistent palatal as well as labial harmony: két-szer 'twice', három-szor 'three times', öt-ször 'five times'; kert-hez 'to the garden', ház-hoz 'to the house', üst-höz 'to the cauldron';
- (vi) palatal as well as labial harmony with lexical idiosyncrasies: like (v) above but with idiosyncratic exceptions, e.g. *másod-szer* 'for the second time'.

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