Phonotactic word form shapes are selected to be morphotactically indicative

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Our paper asks, (a) if there is a preference for word to have shapes that indicate their morphological structure, and (b) if such a preference exerts a selective pressure in the evolution of word level phonotactics, and thereby motivates, or constrains phonological changes.

We address the issue by hypothesising that the preference described in (a) exists. Adopting the idea from Dressler & Dziubalska-Kołaczyk 2006, and Dressler at al. 2010, we call this the Strong Morphonotactic Hypothesis, or SMH. From that hypothesis, we derive predictions that we test against the evolution of word final consonant clusters in Middle and Early Modern English. These periods lend themselves well for the purpose for two reasons. First, during the Middle English period, system wide loss of schwa in open and checked final syllables increased the number and the variety of final consonant clusters. Second, the loss of schwa in unstressed inflectional endings made inflectional endings more difficult to recognize because they ceased to be syllabic. The prediction we test is that a preference for morphotactically indicative word shapes would select *for* clusters that could only occur either in complex or in simple word forms, and *against* clusters that occurred in both.

We test this prediction on the **ECCE** database. The database was set up in a project (FWF grant P27592-G18) on the **E**volution of **C**onsonant **C**lusters in **E**nglish (hence ECCE), and was derived from the *Penn Helsinki Parsed Corpora of Middle and Early Modern English*. It contains all word forms that ended – or might have ended – in a consonant cluster at any point in time between 1150 and 1750. It is going to be made accessible at the beginning of 2018.

We use the ECCE database for simulating schwa loss on Early Middle English data, analysing the resulting distribution of final clusters among simple and complex word forms, and holding it against the distribution attested in actual post-schwa loss data from end of the Early Modern English period. When the morphotactic ambiguity of final clusters is smaller in their actual distribution than in the simulated one, we take this as a corroboration of our hypothesis.

In our presentation we focus on final clusters of the types C[s|z] and C[d|t]. These are particularly interesting because they can occur both in simple and inflected word forms (cf. ModE *waltz* vs. *halt+s*, *fox* vs. *lock+s*, *find* vs. *fine+d*, *field* vs. *fail+ed, apt vs. kep+t, hunt vs*. *mean+t*, etc.*)*. We will show that the clusters were – statistically speaking – more indicative of morphological structure in their actual Early Modern English distributions than in the distributions that would have resulted if nothing had happened in English except schwa loss. We take this to corroborate the Strong Morphonotactic Hypothesis. We also show that it throws interesting new light on some developments that have so far not been fully explained such as, in particular, the sporadic devoicing of dental stops in past tense from like (e.g. *spilt* < *spilled*, *burnt* < *burned*), or the emergence of the voiced {z} suffix in nominal plurals and genitives, and in verbal 3SGPRES forms.

References

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