

Phonological processes as lexical insertion: more evidence from Welsh and elsewhere

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The processes of initial consonant mutation in Welsh (and generally in Celtic), while having a relatively straightforward diachronic explanation, have consistently defied both phonological and syntactic approaches. From the phonological point of view, they present highly “unnatural” patterns which are not amenable to a simple account in terms of floating features or similar devices (Green 2003, Stewart 2005) that does not take recourse to diacritics à la Hamp (1951). On the other hand, Roberts (1997, 2005), proposing a syntactic account relying on recognized morphosyntactic features (Case), still cannot avoid a floating diacritic *L*.

A purely syntactic approach to Welsh ICM that eschews these difficulties is proposed by Borsley and Tallerman (1996), Tallerman (in press). It makes no reference to phonology at all, relying on a “direct-syntax rule” (Hayes 1990): “XP triggers soft mutation on the initial consonant of the right-adjacent constituent which it c-commands” (Borsley and Tallerman 1996); but the precise mechanism, as Tallerman (in press) acknowledges, is unclear.

In this paper, I present data that argue for a non-autosegmental, non-diacritic approach to Welsh (and Celtic) mutations. In particular, beside reviewing the points made earlier (Green 2003, Bye 2005), I point out that the ‘diacritic’ supposed to trigger non-lenition of *ll* and *rh* actually does so in the case of adjectives (Morgan 1952); that NPs coreferential (“in apposition”) to other NPs are mutated when they are *non*-adjacent to the latter, which is troublesome for the “floating diacritic” approach; that some mutations actually take place *before* the lexical item deemed responsible is inserted into syntactic structure (as pointed out by Hannahs and Tallerman 2006); finally, that the output of mutations can be the *input* for some phonological processes, for which there is ample evidence especially from Breton (Jackson 1967), but also from Cornish and Manx (for the latter, see Green 2003).

Following up from Hannahs and Tallerman’s (2006) suggestion that mutation has to do with lexical insertion, I demonstrate that there is no need to view (at least some) Celtic mutations as productive processes in the phonology. In particular, this approach allows eschewing Duke-of-York derivations for apparent non-mutations in the phonology. It is also compatible with the fact that mutations, which seemingly need to be construed as deviations from the underlying form and thus violations of faithfulness, can create marked structures.

According to my proposal, the mechanism for mutation is as follows. Each word has a number of “variants” listed in the lexicon, which is a network of relations (as in e. g. Koenig and Jurafsky 1995). Each of the variants is equipped by a subcategorization frame, a list of the contexts with which this particular variant is compatible (cf. Bye 2005, which is very similar in this respect). In the course of the derivation, the context is checked several times for compatibility with each variant’s frame: since the derivation is not over, syntactic information is available. This checking is part of the successive processes of Spell-Out (in the spirit of Fox and Pesetsky 2004). The productivity and regularity of mutation is accounted for due to the nature of the lexicon, which is different from that espoused in similar proposals such as (Pyatt 1997) or (Borsley 1999). Such a view supports Booij’s (2002) conclusions with regard to phonological patterns stored in the memory.

I show how this model of “narrow phonology” can be construed and constrained. In particular, it predicts not only the above facts, but also the well-known cases of phonologically driven selection of listed allomorphs, and the limitations on both linear and syntactic “distance”, found both in Celtic and elsewhere, e. g. in Bantu languages such as Herero and Tswana (Creissels 1996) or in Servigliano Italian (Loporcaro 1997).

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