Irish initial consonant mutation: disentangling phonology from morphosyntax

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The Celtic initial consonant mutations involve a complex interaction of phonology, morphology and syntax, and have long posed a challenge to modular theories of language structure. In my talk I will demonstrate that, despite evidence that seems to show the contrary, the phonological and morphosyntactic aspects of Irish initial consonant mutation can be sep- arated from one another. The mutations are thus shown to be compatible with a modular system of grammar.

Initial consonant mutation (ICM) is the systematic phonological alternation of word- initial consonants in a range of morphosyntactically defined environments. For example, consider the Irish word bróg 'shoe', whose base (radical) form is realised with an initial /b/. When preceded by the definite article an, it becomes an **bh**róg 'the shoe', realised with an initial /v/. As the complement of a prepositional phrase, it becomes ar an **mb**róg 'on the shoe', realised with an initial /m/. A similar mutation process is observed in initial consonants throughout the language, primarily targeting the lexical categories of nouns, adjectives and verbs. Each initially-occurring consonant undergoes a unique set of mutations. The particular form chosen depends on a wide range of factors, including syntactic context, morphosyntactic properties of the trigger and/or target word and semantic considerations. In some cases even phonology appears to play a role.

Previous theoretical approaches to mutation have generally emphasised either the phonological (Ó Dochartaigh, 1979; NíChiosáin, 1991; Swingle, 1993; Gnanadesikan, 1997) or the morphosyntactic (Duffield, 1995; Stewart, 2004; Green, 2006; Hannahs, 2013) side of the process, but to date there has been relatively little research into how these modules work together to effect the mutations (Pyatt (1997) and Breit (2019) being two exceptions). However, the question of how the work is split between grammatical modules is crucial, because it provides us with a direct test of the strict modularity hypothesis: that is, the view that grammatical modules such as phonology, morphology and syntax operate distinctly and independently of one another.

My research aims to tease apart the phonological and morphosyntactic aspects of Irish ICM, in order to better understand the role played by each in the mutation process. In most cases, the triggering mechanism for the mutation can be defined in purely morphosyntactic terms, while the mutations themselves are defined phonologically. However, there are a small number of cases where phonological considerations appear to affect whether or not mutation is triggered. In my talk, I will focus on two examples of this:

1. The triggering of ICM by plural nouns that end in a palatalised consonant
2. The blocking of ICM when two coronal consonants come together at a word or morpheme boundary in some morphosyntactic environments

In both cases, elements of phonology and morphosyntax appear to interact in order to determine whether mutation is realised in the output. However, I will demonstrate that the phonology can be separated from the triggering mechanism in each case. This implies that these seemingly problematic mutation environments are in fact compatible with a strictly modular grammatical system. I will conclude my talk with a brief sketch of what such a fully modular account of Irish ICM might look like.

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