Irish initial consonant mutations: Disentangling phonology from morphosyntax

What are initial consonant mutations?

- ▶ Well-known characteristic of the Celtic languages
- Systematic phonological alternations of word-initial consonants, depending on morphosyntactic context
- (1) a. **b**róg 'shoe' (radical form initial consonant is [b])
 - b. an **bh** róg 'the shoe' (lenited form initial consonant is [v])
 - c. ar an **mb**róg 'on the shoe' (eclipsed form initial consonant is [m])
 - Discussion below based primarily on data from the Connaught dialect of Iorras Aithneach (Ó Curnáin, 2007)

Why are they interesting?

- ▶ At the interface of phonology, morphology and syntax challenging for modular theories of grammar
- ▶ Usually, the triggering mechanism can be defined in purely morphosyntactic terms, while the mutations are defined phonologically
- ▶ However, in some cases phonology appears to affect whether or not mutation is triggered

Case 1: Coronal blocking of mutation (CB)

- ▶ Blocking of mutation when two coronals come together
- e.g. an teanga, *an theanga 'the language'
- Regular after article an; occasionally in attributive adjectives
- ▶ In compounds, after some prefixes but not others
- ▶ Q: Why are some prefixes consistently more likely to block mutation?

Is CB determined by stress patterns?

- Stress patterns in Irish derivational prefixes:
 - Type I: no stress on prefix, main stress on base
 - Type II: primary stress on prefix, secondary stress on base
 - Type III: equal (primary) stress on prefix and base
- Observation:
 - Regular lenition associated with type II stress
 - CB associated with types I and III stress
- ► Generalisation: CB applies to targets that carry primary stress
- (2) a. in-'déanta, *in-'dhéanta 'do-able' (Type I)
 - b. * mion-torthaí, mion-thorthaí 'micro-products' (Type II)
 - c. 'a**n-**'dona, *'a**n-**'dhona 'very-bad' (Type III)
 - ► Next steps:
 - Can we generalise this to non-compounds?
 - Does CB apply to any target that carries primary stress within the NP?

Does phonology affect triggering in this case?

- Evidence from epenthesis (Ní Chiosáin, 1991):
 - CB sometimes circumvented through insertion of an epenthetic vowel
- e.g. $an + dona \rightarrow 'an-'dona \text{ or } 'an[\ni]-'dhona 'very bad'$
- Suggests mutation is still triggered as usual via morphosyntax
- Separate phonological process later blocks mutation when two coronals come together

Case 2: Palatalised consonants as triggers?

- Most mutation environments can be defined without reference to phonological features of the trigger or target
- One putative exception: lenition of attributive adjectives and nouns after a plural noun ending in a palatalised consonant
- e.g. buidéil bhainne 'bottles of milk'
- Q: Can this be explained without reference to phonology?

Evidence against phonological triggering

- ► Triggering of mutation by a set of words ending in schwa (orthographically -igh, plural form of -ach) in some dialects
- ► Triggering of mutation by English plural borrowings that are not palatalised, e.g. *teorams mhaith* 'good terms'
- ► No other mutation environment in Irish makes direct reference to phonology

Irish nominal plural classes

- ▶ Irish nouns divided into "plural classes' (Carnie, 2008)
- ► Set of plural words that trigger mutation aligns closely with plural class "W1"
- ▶ Both sets share the following properties:
 - "Weak" plural types, i.e. no syncretism between plural forms
 - Formation of plural does not increase syllable count
 - Common plural form ends in a consonant (usually palatalised)
 - Include the -igh forms mentioned above
- Proposal: plural nouns marked as members of this class trigger lenition
- New nouns (e.g. borrowings) are admitted to this class based on whether they have any of the core defining features
- Advantage: triggering mechanism no longer depends on phonology

Take-home points

- ▶ Despite appearances, the phonology can be disentangled from the triggering mechanism in each case
- ▶ The mutation environments discussed here are therefore still compatible with a modular system of grammar, where morphosyntax and phonology operate distinctly and independently from one another

References

Carnie, A. (2008). *Irish nouns: a reference guide*. Oxford: Oxford University Press.

Ní Chiosáin, M. (1991). *Topics in the phonology of Irish* (Doctoral dissertation). University of Massachusetts, Amherst Ó Curnáin, B. (2007). *The Irish of Iorras Aithneach, County Galway; volumes I-IV*. DIAS.

