## 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. bróg 'shoe' (radical form - initial consonant is [b])
b. an bhróg 'the shoe' (lenited form - initial consonant is [v])
c. ar an mbróg 'on the shoe' (eclipsed form - initial consonant is [m])
- Discussion below based primarily on data from the Connaught dialect of lorras 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-th orthaí 'micro-products' (Type II)
c. 'an-'dona, *'an-'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 or 'an[g]-'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 lorras Aithneach, County Galway; volumes I-IV. DIAS.

