
Vowel nasalisation in Scottish Gaelic: The search for paradigm uniformity effects in fine-grained phonetic detail

Donald Alasdair Morrison
The University of Manchester

donald.morrison@postgrad.manchester.ac.uk

According to the modular feedforward architecture of grammar, the phonetics is sensitive only to the output of the phonology and is thus blind to morphological or lexical conditioning (Pierrehumbert 2002). However, this prediction is challenged by claims that fine-grained phonetic detail may display e.g. paradigm uniformity (PU) effects (Steriade 2000) or effects of usage factors such as lexical frequency (Bybee 2001). In the present study I search for potential phonetic PU effects in vowel nasalisation in Scottish Gaelic by investigating alternating items in which a nasalising environment is removed by a morpho(phono)logical process known as *lenition*, which replaces initial /m/ with /v/ under certain morphosyntactic conditions.

In vowels following initial /m/, a clear distinction is found between (i) categorical phonological nasalisation, which may be subject to lexically conditioned blocking and which displays overapplication in lenited forms, and (ii) gradient phonetic nasalisation, which applies in those items where categorical phonological nasalisation fails to occur and which disappears completely in lenited forms. The differing patterns displayed by these two types of nasalisation fit neatly with the predictions of a modular architecture, in which categorical phonology has direct access to morphological (and lexical) information but gradient phonetics does not, and I conclude that wholesale dismissal of this empirically more restrictive framework in favour of non-modular architectures such as Exemplar Theory is premature.

References: • Bybee, J. 2001. *Phonology and Language Use*. Cambridge: CUP. • Pierrehumbert, J. B. 2002. Word-specific phonetics. In C. Gussenhoven & N. Warner (eds.), *Laboratory Phonology 7*, 101-39. Berlin: M de G. • Steriade, D. 2000. Paradigm uniformity and the phonetics-phonology boundary. In M. B. Broe & J. B. Pierrehumbert (eds.), *Papers In Laboratory Phonology V*, 313-34. Cambridge: CUP.