**Towards a computational lexical resource for the diachronic study of Irish verbs**

In this paper, we propose a computational framework for a lexical resource that will better facilitate diachronic study of Irish verbs. The verbal system is subject to major morphological changes between Early Irish (c. 7th-12th centuries A.D.) and Modern Irish varieties (post-12th centuries) (McCone 1997). Moreover, whereas the literary output in the Old Irish period (c. 8th-9th centuries A.D.) points to a standardised language (Stifter 2009), all post-Old Irish historical varieties, except for bardic poetry (Early Modern Irish period, c. 13th-17th centuries A.D.), show a substantial degree of grammatical, orthographical and – particularly evident in the case of Early Modern Irish prose (Ó hUiginn 2013) – stylistic variation (cf. contributions in McCone 1994). The available digital support is insufficient to systematically trace the linguistic change and variation.

The research described here aims to mitigate the lack of digital support by creating and linking verb forms in morphologically annotated corpora by using a morphological analyser for contemporary, standardised Irish – already in the process of being adapted for successively earlier Modern Irish texts (Uí Dhonnchadha *et al.* 2014) – and by developing new tagging tools for Old Irish, to project forward to later forms.

This paper will focus on the creation of a morphological analyser for Old Irish using finite-state morphology (Beesley and Karttunen 2003). Recognition rates for an Early Irish sample text and associated findings and challenges will be reported on. The paper concludes with an outlook on the implementation stage of the lexical resource, its benefits and potential further research. We will (a) discuss challenges in morphologically tagging and accurately linking verbal cognates across historical corpora, (b) explore the ways in which this resource can serve and advance (digital) scholarship in historical Irish philology and linguistics, and (c) address more general questions relating to the balance between computational methods and manual work in successfully linking cognate verb forms.

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