

## I. FORSCHUNGSBERICHTE

### Early Irish Lexicography – A Research Survey<sup>1</sup>

#### 1. Introduction and Previous Research Surveys

This article is primarily concerned with lexicographic resources, i.e. glossaries, word-lists, dictionaries, and lexica of various shapes and form, for Early Irish. Early Irish comprises of several distinct stages of the Irish language: Primitive Irish (c. 4<sup>th</sup>–6<sup>th</sup> centuries A.D.), almost solely attested in Ogam inscriptions, Early or Archaic Old Irish (c. 7<sup>th</sup> century), Old Irish (c. 8<sup>th</sup>–9<sup>th</sup> centuries), and Middle Irish (c. 10<sup>th</sup>–12<sup>th</sup> centuries), the latter three transmitted through manuscripts. A large grey area exists between lexicographic resources in the strict sense and monographs that treat subsections of the Early Irish lexicon under particular phonological, morphological, or other grammatical perspectives. However, examples of the latter, unless they contain substantial lexicon-like portions, will not be considered here.

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1 This article started out as a review of Séamus Kavanagh's *Dictionary of the Würzburg Glosses* (Kavanagh 2001), which now forms section 5. The article builds on the results of several research projects. The research on the project *Chronologica Hibernicum (ChronHib)* receives funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No. 647351). The *electronic Dictionary of the Irish Language* received funding from the British Arts and Humanities Research Council (AHRC) (AH/L007428/1 *Text and Meaning: Contributions to a Revised Dictionary of Medieval Irish*). The projects mentioned in section 6 received funding from the Austrian Fonds zur Förderung der wissenschaftlichen Forschung (FWF) (P19137-G03 *Dictionary of the Old Irish Glosses in the Milan Manuscript Ambrosianus C301*; P22859 *A Dictionary of the Old Irish Priscian Glosses*); from the Irish Research Council (IRC) (GOIPG/2014/448 *New edition and dictionary of the Poems of Blathmac son of Cú Brettan*; GOIPD/2016/174 *Languages in Exchange: Ireland and her Neighbours*; IRCLA/2017/57 *Medieval Irish Medicine in its North-Western European Context: A Case Study of Two Unpublished Texts*), or form part of *ChronHib*. Our acknowledgments go to all the team members who contributed to these projects.

A first overview of Early Irish lexicography was undertaken by Thurneysen (1916: 290–292) as part of his contribution to a state-of-the-art review of Indo-European Studies in the early years of the 20<sup>th</sup> century. With the exception of Pokorny (1953: 146), who makes a mere passing remark about the state of lexicography in an equally wide-ranging survey of Celtic Studies, the next exhaustive contribution is that by Schmidt 1991, who devotes a lengthy article to Old Irish in a collective volume on lexicography. The modern Gaelic languages are treated by Ternes (1991: 2345–2347) in the same volume. McCone (1996: 39–50) provides a brief survey of the state of Irish lexicography up to the middle of the 1990s, mainly focussing on DIL and LEIA. The website of eDIL contains a brief history of the dictionary at <http://edil.qub.ac.uk/about>. Finally, a critical overview of the history of the topic forms the first part of Nyhan 2006 (1–91), a PhD thesis on the application of XML to the lexicography of Early Irish.

The main bibliographical resource for Irish philology and linguistics is BILL, the ‘Bibliography of Irish Linguistics and Literature’. Three volumes, covering the years until 1912, 1913–1941, and 1942–1972 respectively, appeared in print (BILL I, II, III). For the years after 1972, a database is maintained and constantly updated at the Dublin Institute for Advanced Studies by its bibliographer, currently Alexandre Guilarte. The third printed volume has also been converted into database form, while pdfs and online readable versions have been created of the earlier volumes. Links to all electronic resources are found at <https://bill.celt.dias.ie/>. Lexicology and lexicography are treated in BILL I, 6–21; BILL II, 3–7; BILL III, 111–120. In the electronic bibliographies they are covered under the classification D1 ‘Lexicon (lexicology, lexicography and etymology)’.

## 2. The Early Lexicography of Irish

It could almost be said that lexicography lies at the beginning and at the heart of medieval Irish literacy and literature. One impulse for engaging with the native language on a reflective, linguistic level was the exposure of the Irish intellectual elite to a foreign written language, Latin, which the literary educated had to learn from scratch, typically with the help of glossaries. The impact that Isidore of Seville’s *Etymologiae*, an encyclopedic lexicon with a strong interest in the origins of words had on the native intellectual climate and on the cultural production of Ireland, cannot be overestimated. Soon after its publication around 623, Isidore’s work was known in Ireland, where it became eventually known by the name *Cuilmen* ‘Culmination of Knowledge’. It is probably not a coincidence that the production of written texts in the vernacular language of Ireland started precisely at that time, around the middle of the 7<sup>th</sup> century.

Lists of words and glossaries of earlier stages of the Irish language, sometimes even in metrical form, have been compiled in Ireland since the early middle ages, but the tradition has continued long into the modern period.<sup>2</sup> The purpose of these lists was to collect and explain rare, obscure or obsolescent words, and to elucidate the ‘true meaning’ (etymology) of words and their relationship to the sacred languages Hebrew, Greek, and Latin, following closely the style of Isidore of Seville. Although modern standards of etymology cannot be applied to the methods of these texts, they nevertheless permit a fascinating glimpse on the intellectual environment of medieval Ireland. Such lists served as convenient sources for dictionaries in the modern period; many glossaries are edited in the three volumes of *Archiv für celtische Lexicographie* (Stokes & Meyer 1900, 1904, 1907) and in the *Early Irish Glossaries Database* (Russell et al. 2009). One of the most substantial examples is *Sanas Cormaic* ‘The Whispering of Cormac (Úa Cuilennáin, king-bishop of Cashel)’ (Meyer 1913) from around 900, commonly known as ‘Cormac’s Glossary’. Recently, another extensive glossary, *De Origine Scoticae Linguae* (traditionally, albeit wrongly, called *O’Mulconry’s Glossary*), going back in its core at least to the early 8<sup>th</sup> century, has been edited by Moran 2018, with an important discussion of the linguistic and philological context. In particular, the rich vernacular legal tradition sparked off an extensive activity of glossing throughout the middle ages and the early modern period (on this, see Breatnach 2005: 99–159, 338–353). The occurrence of the term *Sengoidelic* ‘old(er variant of) Irish’, not only in linguistic texts like *Sanas Cormaic* or *Cóir Anmann* ‘The Fitness of Names’ (Arbutnot 2005–7), but also in ostensibly narrative texts such as *Táin Bó Cúailnge* ‘The Cattle-Raid of Cooley’, illustrates an awareness of diachrony and of language change already among the medieval Irish.

Irish dictionaries, in particular lexica with English as the target language, were produced throughout the 16<sup>th</sup>–19<sup>th</sup> centuries. Their focus is usually on the contemporary, literary language, but in their title subscriptions (for which see the entries in the bibliography) reference is often explicitly made to early manuscripts which were quarried for vocabulary lists (e.g., Lhuyd 1707; O’Brien 1768; Shaw 1780; O’Reilly 1817). In particular, the new edition of O’Reilly’s Dictionary from 1864 contains as a supplement the material compiled by John O’Donovan for a first truly historical dictionary of Irish (see next section). In order to make progress in the analysis of the medieval language and to make sense of its word forms, the first generations of Celtic scholars had to rely on the available contemporary dictionaries, and on the explanations found in the medieval and early modern glossaries mentioned above.

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<sup>2</sup> See the extensive work by Paul Russell on this, conveniently referenced in the bibliography section of Russell et al. 2010–.

As a consequence of the lack of an authoritative lexicon of Old Irish, editions of texts were supplied with extensive and detailed glossaries that not infrequently contained accessory information, such as etymologies, parallels or grammatical explanations. Illustrative examples are Whitley Stokes' 1905 edition of *Félire Óengusso* where 112 pages of poetry are accompanied by an 80-page glossarial index plus 75 pages of onomastic indices, or Ernst Windisch's edition of Recension II of *Táin Bó Cúailnge* (Windisch 1905) in which a 'Wörterverzeichnis' of 150 pages is appended to the 900 pages of edited text plus translation. For generations of scholars, glossaries like these served as a substitute for a real dictionary. Despite the availability today of DIL and eDIL, the practice of supplying text editions with glossaries has persisted in Early Irish philology unto the present day. It finds additional justification in the fact that hitherto unattested lexemes or special semantics of known lexemes continue to be discovered in the sources. The constant critical examination of the lexicon, as represented by eDIL today, goes so far that sometimes textual editions contain lists of ghostwords that need to be removed from eDIL (e.g., Breatnach 2017: 332).

Systematic lexicography of the early stages of Irish, in their own right and to the exclusion of modern varieties, does not set in before the second half of the 19<sup>th</sup> century. Aside from the dictionary project at the Royal Irish Academy (for which see the next section), several independent attempts were made at creating dictionaries of Old Irish at the end of the 19<sup>th</sup> and the beginning of the 20<sup>th</sup> century, attempts that were still imbued with the 19<sup>th</sup>-century spirit of the lonesome, devoted scholar working in his study and with the entire material of a language at his command. While this approach may have borne fruit in the 19<sup>th</sup> century, the medieval Irish material proved too extensive and philologically too complex for such an approach. Moreover, only a small portion of all the relevant material was accessible in an appropriate format.

Between 1879–1907, Graziadio Ascoli published a series of fascicles for a dictionary specifically of the Old Irish glosses, entitled *Glossario dell'antico Irlandese*. Arranged according to roots, the letters A, E, I, O, U, L, R, S, N, M, G and parts of C saw the light of day, but the completion of the remaining five letters B, D, F, P, T was cut short by Ascoli's death.

The three issues of the series *Archiv für celtische Lexikographie* (Stokes & Meyer 1900–1907) were meant as a medium to make readily available texts and collections that would form the source material for proper lexica in all Celtic languages. Kuno Meyer's informal series 'Zur irischen Wortkunde' (1912–192) served similar purposes, but was more oriented towards individual words. This material flowed into Meyer's project of *Contributions to Irish Lexicography* of which a single volume extending from A-DNO was published in 1906, after having appeared as supplements to the *Archiv für celtische Lexikographie*. Occasionally, Meyer's dictionary contains more information than DIL that superseded and – purportedly – absorbed it.

Hans Hessen's project of a concise tri-lingual dictionary of Old and Middle Irish with German and English glosses took off with an inauspicious start. After the initiator's death 1915 in World War I, the project was continued by Séamus Kavanagh and Rudolf Hertz; two volumes (*A-Cennad* and *I-Ruud*) in five parts were published between 1933 and 1940. The Second World War put an end to this enterprise, which was not resumed after the war.

All of these works remained unfinished. The only project that was ultimately successful in producing a full dictionary of the language was the team-based one in the Royal Irish Academy.

David Stifter

### 3. DIL

The Royal Irish Academy's *Dictionary of the Irish Language based mainly on Old and Middle Irish* was published in 23 fascicles between 1913 and 1976. It is the first complete historical dictionary of the Gaelic languages of Ireland and Scotland and describes the lexicon from the 7<sup>th</sup> century to the 17<sup>th</sup>, although the emphasis throughout is on the Old and Middle Irish periods. It consists of 2,525 double-column pages and is by far the largest dictionary of Irish ever produced.

The idea for the Dictionary was first suggested in 1852 at a meeting of the Irish Archaeological Society. The eminent philologists John O'Donovan and Eugene O'Curry were initially proposed as editors and the project had to be delayed while they completed their edition of the Irish Brehon law tracts. O'Donovan began work on the design of the dictionary in 1859. The basis of each entry would be a scientific analysis of the forms and meanings of each word based on a comprehensive collection of citations excerpted from printed editions and manuscripts. Etymologies were not to be included except in the case of derivatives from within the language and loanwords. Unfortunately, O'Donovan died in 1861 and O'Curry the following year, so that progress on the dictionary was limited. Before their deaths, they had compiled a large number of slips. O'Donovan's work was published as a supplement to Edward O'Reilly's Irish-English dictionary (1864). O'Curry's collection was never published but is preserved in the Royal Irish Academy, Dublin.

In 1880, Robert Atkinson was appointed editor of the Dictionary and he remained in that post until his retirement, although little progress was made during his tenure. Other, smaller-scale, projects were proceeding apace (see section 2). Kuno Meyer assumed editorship of the Academy's Dictionary on Atkinson's retirement in 1907 and argued for a less ambitious output. However, he was appointed to the Chair of Celtic in Berlin in 1911 and his direct association with the Dictionary came to an end. He was succeeded by Carl Marstrand, who at only twenty-seven was already highly

respected. He remained as editor after his appointment to the Chair of Celtic in Oslo in 1912, supervising the work of his assistants in Dublin.

Publication of the dictionary was to be funded by a bequest left to the Academy by the Rev. Maxwell Henry Close in 1903. A condition of the gift was that part of the dictionary should appear in print within ten years of his death. This intolerable pressure, coupled with Marstrander's absence in Oslo, proved catastrophic. The work was rushed and Marstrander later complained that in some cases he was not even given a chance to correct the first drafts. The resulting fascicle (*D-degóir*) appeared in 1913, just thirty days before the deadline permitted by Close's will. Kuno Meyer (1915) published a devastating review and Marstrander was forced to resign as editor. Indeed, Meyer was so incensed by the quality of the work that he refused to have anything more to do with the Dictionary. He gave his personal copy of his own *Contributions to Irish lexicography*, together with his own annotations and unpublished material, to Hans Hessen who was then working on his own shorter dictionary.

Marstrander's fascicle is rather eclectic and shows many of his own interests. It frequently ranges into twentieth-century Gaelic, both Irish and Scottish, even where there is no evidence of a medieval form, and headwords are often given with no supporting citations. Marstrander had also included a wide range of proper names, particularly personal names, a practice that was discontinued in later fascicles. However, the most serious problem remains the profoundly inconsistent approach to the treatment of the material and the poor quality of many of the entries.

The next fascicle E did not appear until 1932, eighty years after the project was first proposed. Attempts were soon made to expedite publication under a new, more modest, title, *Contributions to a Dictionary of the Irish Language*. Under this new scheme, the editors were to prepare and publish, with the minimum of revision, any materials that had already been collected. However, much of the work on the Dictionary was already at an advanced stage and the remaining fascicles largely followed the original plan. Work on F was already well advanced and was published in the original format in 1950 and 1957. Publication of the remaining fascicles proceeded much more rapidly with the last remaining substantial fascicle (the remainder of D) appearing in 1975. The following year, the work on the Dictionary was brought to a conclusion with the publication of H which consisted of just a single leaf with two columns of material.

The *Dictionary of the Irish Language* has established itself as the most comprehensive and authoritative dictionary of medieval Irish and has been of enormous benefit to scholarship during the twentieth century. The strict adherence to an evidence-based approach has been invaluable and the publication of supporting citations has enabled scholars to adopt a critical approach to the content of the Dictionary. As with any large-scale work produced over a long period of time, the Dictionary con-

tains many inaccuracies and inconsistencies, and some of its contents are now out of date. The inconsistent spelling of headwords is a common source of complaint although the editors here were undoubtedly constrained by varying orthographical practices employed during the long period covered by the dictionary. Normalisation would have produced anomalies such as a word borrowed from English in the fifteenth century being spelt according to Old or Middle Irish orthography.

The dictionary was conceived and led by scholars with a robust philological training. One of the results of this is that separate words are frequently grouped together under a single headword depending on their perceived relationship. For example, verbal nouns often appear under the corresponding verb form, although they represent a different part of speech and can behave as nouns or abstract nouns with no verbal aspect. Similarly, past participles are usually given under the corresponding verb although they frequently are used adjectivally. The philological driver is perhaps clearest, however, in the treatment of compounds and prefixes. *Cloicthech* 'round tower' is treated under its first element, *cloc* 'bell' rather than as a separate lexeme which it clearly is. *Inchomórtais* 'comparable', a compound of the prefix *in-* and *comórtas* 'competition', is given under the prefix with no cross-reference. Thus, the entries are constructed in order to illustrate the use of prefixes rather than to facilitate the user in finding a particular word.

In 1983, the Royal Irish Academy issued a compact edition modelled on the *Compact Oxford Dictionary*. The entire dictionary was reproduced in a condensed format with four quarto pages of the original fascicles reduced to a single page. This was much more convenient to handle but the drastic reduction of the print size, despite the high quality of the production, strained the eyes of many users. The restriction in blank space also had the unintended consequence of hindering scholars from penning their own additions and corrections in the margins. New work on the Dictionary ceased after 1976 but an online collaborative site was developed in the early 2000s with the aim of enabling scholars to pool their own additions and corrections to DIL. Known as PACDIL (*Published Additions and Corrections to the Dictionary of the Irish Language*), it provided access to several hundred corrections, mostly contributed by the site's originator, Neil McLeod. These were, for the most part, later incorporated into eDIL's online supplement (see below). The PACDIL site itself is no longer online.

#### 4. eDIL

Work on a digital edition of the Academy's Dictionary began in 2003. The text of the dictionary was scanned, OCR-ed and tripled-keyed, with all four copies being compared and corrected against each other. This resulted in a text that is 99.995% accurate. All formatting was retained, including the original column and line breaks to

preserve the possibility of referencing entries by fascicle, column and line number. Supplementary additions and corrections which appeared at the end of a number of fascicles were also incorporated into the text.

The research team tagged the text using XML (Extensible Markup Language) following the Text Encoding Initiative (TEI) guidelines for print dictionaries. All significant discrete data types were identified and tagged, including headwords, definitions, citations, translations, sources, cross-references, text in languages other than medieval Irish and any grammatical information. The grammatical information was further broken down into person, number, tense, mood, gender, case and stem. Inflected forms of the headword were also given a distinct tag (`<oVar>`), and translation equivalents within definitions were also identified (`<def>`).

The first electronic edition was published in 2007 at [www.dil.ie](http://www.dil.ie). This publication was intended to accurately represent the contents of the original dictionary, but in a searchable format. Consequently, users could browse the dictionary in its original format by letter, column and line and continue to use the old citation methods, but they could also browse by headword. The level of markup allowed searches to be confined to particular data types (headwords, definitions, language, etc.). Internal cross-references were active links and a fuzzy search mechanism compensated for some inconsistencies and errors in the original cross-references. Bibliographical sources were linked to a bibliography and hyperlinks loaded the appropriate details in a separate window.

Immediately following on from the publication of the electronic edition, work began on a Supplement to the Dictionary with further funding from the Arts and Humanities Research Council (2008–2013). The reading scheme, secondary literature in the field, concentrating on the major relevant journals, identified several thousand entries in the dictionary that required revision, together with several hundred new entries. The corrections were compiled in a separate database package and published as an electronic supplement on the eDIL website in 2013. Simultaneously, the revisions were incorporated into a new edition and both the 2007 and 2013 editions were made available online with a revised interface and search engine.

A more ambitious revision of the dictionary began in 2014, this time examining editions of primary texts that were not available to the original compilers or which had become available only after some of the fascicles had been published. This third edition of the electronic dictionary is due for publication in 2019. The website was revised in 2015 to improve its robustness and usability, and to introduce social media and mobile capability. The continued revision has impacted on the original formatting of the print dictionary: lines have been removed or inserted and, more significantly, some headwords have been corrected, leading them to appear in a different part of the dictionary. As a result, the old layout was abandoned, although the original electronic



edition with column and line numbers has been retained in an archive available through the website.

The future development of the dictionary is largely dependent on funding opportunities. The Early Modern Irish period is not well-served by the current dictionary with its emphasis on Old and Middle Irish, and a separate dictionary, covering bardic poetry as well as prose, is desirable. Other specialised lexicons, such as of early Irish law, would also add greatly to our knowledge of the early language. Links to other dictionaries of modern Gaelic languages are also desirable although not as straightforward as might be thought. Following the completion of DIL, the Royal Irish Academy began a large-scale historical dictionary of Modern Irish which goes back to the 17<sup>th</sup> century. A historical dictionary of Scottish Gaelic is being compiled in Scotland (<http://www.faclair.ac.uk/>) and will include medieval material of Scottish provenance. The linking of these three dictionaries, when the two modern dictionaries become available, would be a powerful research tool for scholars of the medieval and modern languages.

Gregory Toner

#### 5. Kavanagh's Dictionary of Würzburg [review]

With the availability of DIL as a central lexicographic resource for Early Irish, a resource which by its nature can only provide representative examples for all lexical items, the focus has shifted back in recent years to the comprehensive lexicography of key texts or manuscripts, in order to achieve a precise picture of the lexical usage of texts or of specific points in time. Glossaries are commonly included at the end of new editions in book format. With short texts, it is feasible to create comprehensive glossaries, but in the case of long texts, only especially notable words and forms are usually included. Where these add new lexemes or provide examples of unusual semantic usage, this information has been added to the updated eDIL; however, additional funding will be needed to continue the regular updating of eDIL in the future.

One particularly ambitious and important lexicon merits special attention since, without having it as its goal, it turned into the model for a new and conceptually radically different generation of lexicographic works (see section 6), namely Séamus Kavanagh's *Lexicon of the Würzburg Glosses*.<sup>3</sup> Apart from participating in the publi-

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3 Kavanagh, Séamus †: *A Lexicon of the Old Irish Glosses in the Würzburg Manuscript of the Epistles of St. Paul*. Herausgegeben von Dagmar S. Wodtko. Mitteilungen der Prähistorischen Kommission, 45, Lexika und Fachwörterbücher. Verlag der Österreichischen Akademie der Wissenschaften Wien, 2001. XVII, 907 Seiten. Gebunden, mit CD-ROM, 72,20 EUR. ISBN: 978-3-7001-3014-7. Since this research survey originally started out as a review of Kavanagh's dictionary, it is given more attention than other works in this article.

cation of Hessen's Dictionary (see section 2), Séamus Kavanagh dedicated his academic life to the study and lexical analysis of the Würzburg Glosses, the oldest of the three major extant glossed manuscripts of the Old Irish period (see Kavanagh 2001: vii–xii), contained in Universitätsbibliothek, M. p. th. f. 12.<sup>4</sup> During his lifetime, the work only existed in the form of slips and finally as a typescript. It was only in 2001, more than a decade after his death in 1989, that the fruit of Kavanagh's life-long labour appeared. It was edited posthumously from his notes by Dagmar Wodtko, and published by the Austrian Academy of Sciences.<sup>5</sup>

After a brief 'Introduction' (vii–viii) by the author, and an 'Editor's Preface' by Wodtko (ix–xii), which throw a light on the history of the lexicon, the dictionary of the 3500 glosses occupies over 900 pages (3–907). Every single occurrence of every word or clitic is recorded, using the conventional reference to the *Thesaurus Palaeohibernicus* (*Thes.*).<sup>6</sup> In the case of words of infrequent occurrence in the Würzburg Glosses, Kavanagh cites all attestations *in extenso*. In the case of frequent words, such as the copula or the common prepositions and articles, only representative examples are cited in full. Every form is recorded in the orthographic variant in which it occurs in the text. The use of the mathematical symbols  $\gamma$  and  $\supset$  to represent the Tironian notes  $\gamma$  'et' and  $\supset$  'con' looks clumsy and could have been improved by the publisher. The grammatical particle *ro* is not recorded under a separate headword, but is only found under the verbs with which it occurs. Glosses by the linguistically older *prima manus* 'first hand' are always indicated as such. The glosses on the final three manuscript pages, which were written by a third scribe (*tertia manus*; called *Wb. II* in GOI 4) and which display a somewhat younger – or in any case different – linguistic profile (Stifter 2014: 215), are not marked.

There is no uniform principle discernible behind the spelling of headwords. For instance, in the case of *aicentatu* 'necessity' (once attested), the unusual spelling of the attestation has been retained (vs. normalised *éicentatu*, as in dil.ie/19715). The adjective for 'big, great' occurs in the alphabetic sequence under the uncommon,

4 The manuscript is now accessible online at <http://vb.uni-wuerzburg.de/ub/mpthf12/ueber.html> (accessed 3.10.2018).

5 Dagmar Wodtko had previous lexicographic experience through her dictionary of Celtiberian (Wodtko 2000). From 2014–2018, Dagmar Wodtko was part of the team of eDIL. A review of her Celtiberian lexicon (Stifter 2002), in its turn, was one of the starting points for developing the concept of an interactive online dictionary, which led to the creation of *Lexicon Leponticum* (*LexLep*) (Stifter et al. 2009–), a dictionary of the Ancient Celtic language of Lepontic.

6 Omissions are very rare. We have noted only one: in gloss 5a28, the form of the 2sg *nota augens -su* in *tussu* is not noted under 2 -so.

archaic headword *máar*, even though the normal Old Irish spelling *mór* is much more common in the Würzburg glosses. In other cases the headword is normalised, e.g. *dérnum* ‘detrimentum’ (once attested as *dernum*), or *ad-laech* ‘ex-layman’ (albeit without *fada*; once attested in nom. pl. *adláig*). Another inconsistency concerns words with hiatus: *dēad* ‘end’ is written with a trema over the *e*, but *dearc* ‘love’, which likewise consists of two syllables, is not. *Bestae* ‘moral’ must be due to a mere typo: etymologically, it has a long *é* which is borne out by the spelling in the manuscript. Kavanagh’s headword has a short *e*, though.

It was not Kavanagh’s intention to compile an exhaustive bibliography for the Würzburg Glosses. In the case of *alailiu* in Wb. 9a23 (p. 52), Kavanagh references only an article by Pedersen (*Ériu* 15, 191). Although other scholars contributed to this gloss also (Bergin in *Ériu* 17,1–3; Quin in *Studia Celtica* 2, 91–95), Kavanagh makes no reference to them, not even to Bergin (*Ériu* 14, 29) whose analysis of the gloss he actually follows. Likewise unreferenced are, for instance, Ó Cuív (*Éigse* 9, 6) on *molaid(ir)* (p. 681) and Pokorny (*ZCPH* 10, 68) on *immurgu* (p. 549).

Kavanagh’s dictionary of the Würzburg glosses is an important milestone in the lexicography of medieval Irish. For the first time it allowed to study one of the earliest of the great Old Irish manuscript glosses in its entirety without having to wade through the edition in *Thesaurus Palaeohibernicus*, like, for instance, Wodtke 1995 had to for her study of secondary adjectives in the Old Irish glosses. Conceptually, however, Kavanagh’s Dictionary is the survivor of a by-gone epoch, a last demonstration of a craft that lies at the foundation of how Old Irish studies were pursued in the 20<sup>th</sup> century. Its usefulness as a complete collection of the Würzburg glosses is outweighed by the evident shortcomings of its traditional form and structure, contrasted with the possibilities afforded by contemporary digital standards. The only concession to modern technology is a CD-ROM that accompanies the book. It contains a searchable pdf of the lexicon, however not as one comprehensive file, but separated into single files for each letter. Its overall functionality is further reduced by the fact that only searches for text strings can be carried out, but semantic searches for grammatical meta-information are not possible. Given the technical tools that are at our disposal today, Kavanagh’s approach to collecting and presenting the material can no longer be a model of how to compile a dictionary.

## 6. Lexical Databases

Since the turn of the millennium, the medium through which Old and Modern Irish lexicography is practiced has shifted rapidly from printed books to digital platforms. Although the millennium had started with a mighty sign of life from lexicography in its most traditional shape, i.e. Kavanagh’s *Lexicon of the Würzburg Glosses*, within just a few years of its appearance not only did eDIL revolutionise how

dictionaries are used for Old Irish, but Kavanagh's Dictionary itself became the inspiration for a radical step forward in Early Irish lexicography. Recognising the usefulness of a specialised dictionary on the one hand, and realising the potential of digital media, Aaron Griffith developed the idea of an electronic lexical database for the largest Old Irish glossed corpus, the glosses in the Codex Ambrosianus C 301 inf. in the Biblioteca Ambrosiana in Milan (see section 6a).

Building on Griffith's pioneering work, a series of further specialised lexical databases have been created since 2010 (sections 6b-6f). The concept and layout of the databases evolved over time and allowed for increasingly greater functionality beyond what is normally expected from a dictionary. In the following paragraphs, attention is paid to the specific details of each database as they demonstrate the gradual evolution and the potential of the format.

Despite the massive advantages of electronic resources in general and of electronic databases in particular, a word of caution is still in order. Just as books can eventually become unreadable, so, too, can electronic resources. Griffith's database for the Milan Glosses was originally created in Filemaker Pro version 8. Files created in that version, however, are no longer compatible with most operating systems, for which reason updated versions have been created. Nonetheless, such updates require someone willing to make them, as well as pay for the latest versions of the computer programmes needed for the update. The more general problem of preservation of electronic resources is being considered within the *ChronHib* project.

An eternal problem of Early Irish lexicography is orthographic variation. Although the fundamental, idiosyncratic principles of spelling are stable throughout the period, the inherent ambiguities of the orthography allow for a considerable amount of legitimate variation. For instance, the word that is phonetically [orbe] 'patriony, heritage' can be spelled *orpe*, *orpae*, *orbe*, *orbae*, *orbbe* or *orbbae*. This is aggravated by the fact that the phonology of the language itself changes during this period. In Middle Irish, the word can (in theory) also appear as *orpa*, *orba*, or *orbba* (Schmidt 1991: 2340), and, with hypercorrection of the initial sound, it is also found as *forba* etc. The question then arises, which spelling to adopt for the headword? The way it is written in the earliest Old Irish texts, or in a normalised, albeit idealised Old Irish spelling, or in the way how a word is found in the majority of sources? DIL, and in consequence eDIL, does not follow a uniform principle. Apart from employing spellings from all periods, sometimes Middle Irish versions of headwords are used (e.g., in the present case *orb(b)a*), even where a word is attested differently in genuine Old Irish sources (e.g. *orpe*, *orbae*, *orbbae*). Griffith's Milan Glosses database oriented itself after the model of eDIL, but for most later databases a normalised system of writing Old Irish was adopted that

encodes as much unambiguous phonological information as possible, with as much internal consistency as possible.<sup>7</sup>

David Stifter, Aaron Griffith

#### 6a. Milan Glosses

The project, located at the Department of Linguistics of the University of Vienna, was funded by the Austrian Science Fund (FWF) from 2006–2010.<sup>8</sup> Griffith checked the readings in *Thes.* against the facsimile edition by Best 1936. Where doubts remained, the glosses were checked against the original manuscript during a research trip to Milan in December 2010. Scrutiny under ultraviolet light clarified a number of hitherto obscure passages, which were published in Griffith & Stifter 2014. Even under ultraviolet light, however, further uncertainties remained, some of perhaps a sentence in length. Whether multispectral imaging would allow more of these unclear passages to be read is uncertain.

The software chosen for the database was Filemaker Pro, then in version 8, currently in version 17. The programme consists, at its heart, of spreadsheets for the data, combined with a very high degree of flexibility about how those data are combined and displayed. For the Milan glosses, the database consists of three linked tables: one for the glosses, one for the lexicon, and one for each lexeme in the glosses. Through interlinking of these tables, one can easily navigate through the database, moving from the gloss table, where one can read the individual glosses, to the lexeme table, which contains detailed information on each autosemantic morpheme in the gloss, to the dictionary table, which presents every token of every morpheme in the Milan glosses.

The Milan glosses database is able to go beyond what Kavanagh did for Würzburg in several ways. One of these ways is the deliberate choice to give every autosemantic morpheme an entry, including all infixes and suffixed pronouns, as well as grammatical elements such as the multifunctional augment *ro-* and preverbs. Given that computer storage space is inexpensive (as opposed to printed book pages), the decision to include numerous extra entries was easy to make. Further, the database contains more supplementary information than Kavanagh could include, such as nearly the entire Latin text on which the glosses comment, which is incredibly useful for making sense of the glosses in their context. Kavanagh gave the context for many words, but could

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7 The principles of normalised Old Irish spelling are published on the *ChronHib* website, URL <http://dhprojects.maynoothuniversity.ie/chronhib/>.

8 'A Dictionary of the Old-Irish Glosses in the Milan Codex Ambrosianus C 301 inf.', Fonds zur Förderung der wissenschaftlichen Forschung (FWF) project number P19137-G03; URL: [http://www.univie.ac.at/indogermanistik/milan\\_glosses.htm](http://www.univie.ac.at/indogermanistik/milan_glosses.htm) (accessed 23 Jan 2016).

not do so for the most common lexemes. Most of the other ways in which the database is able to go beyond Kavanagh's work are connected to its digital nature, which allows for significantly improved searches.

Griffith was able to demonstrate the practical usefulness of a specialised lexicon in which every word is recorded. On the basis of detailed data about their attestation, he was able to discover hitherto unnoticed distributional patterns in the use of the so-called emphatic particles in Griffith 2008. A number of further projects, most of which would have been difficult without an electronic database, further show the utility of the database. Following up on an idea in Schrijver (1997: 72–78), Jongeleen 2014 explored the meaning of OIr. *fein*. Both Lash (under review) and Budassi (in progress) are exploring the information structure of Old Irish based on the Milan glosses database.

Partly in response to the danger of digital obsolescence (see introduction of section 6), but partly also in recognition of the bibliophile nature of many academics, a concise print edition of the Milan lexicon is planned for the future.

Aaron Griffith

#### 6b. Priscian

The Milan database immediately sparked off another project for an electronic database of the Old Irish glosses on Priscian's Latin grammar, which completed the triad of specialised lexica of the chief contemporary Old Irish sources. The most extensively glossed manuscript in this corpus is the St Gall codex Stiftsbibliothek 904, but aside from it, a substantial number of parallel glosses is found in other old manuscripts (Karlsruhe Codex Augiensis (Reichenau) CXXXII; Paris BN ms lat. 10290; Milan Bibl. Ambr. Codex Ambrosianus A 138 sup.; Leiden Universiteitsbibliotheek, BPL 67). Although the parallels extend also to Latin and Old Breton glosses, only the Old Irish ones have been taken into account for the database. Work on this database was much facilitated by the availability of high-resolution scans of the manuscripts. While Kavanagh, Wodtke, and Griffith had to work with facsimiles, excellent high-resolution images have become available in the meantime for most of the medieval Irish manuscripts. Working directly from them has become the standard for all projects since.

The Priscian project was also funded by the Austrian Science Fund. Under the direction of Stefan Schumacher, the work was carried out by Bernhard Bauer at the University of Vienna from 2010–2014.<sup>9</sup> The main conceptual improvement to Grif-

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<sup>9</sup> 'A Dictionary of the Old Irish Priscian Glosses', Fonds zur Förderung der wissenschaftlichen Forschung (FWF) project number P22859; URL: <http://www.univie.ac.at/indogermanistik/priscian/> (accessed 5 Oct 2018).

fith's structure of the database was the introduction of links from the headwords to the corresponding eDIL headwords and of links to the online images of the manuscripts. This adds a multimedia dimension to the dictionary. Because the same glosses are sometimes found in different manuscripts, a facility had to be included to present parallel versions side by side. No print edition is planned for this lexicon. Previous work had been done on the St Gall glosses by Rijcklof Hofmann 1996 and Pádraic Moran. In 2017, Bauer's database was merged with their collection and published as one website.<sup>10</sup>

#### 6c. Poems of Blathmac

The two long *Poems of Blathmac* (Carney 1964) were probably written towards the middle of the 8<sup>th</sup> century and they are therefore equal in age with the main body of Würzburg glosses and of comparable importance for the study of the language. The original plan for the PhD-project of Siobhán Barrett (Maynooth, 2013–2017, funded by a PhD scholarship of the Irish Research Council (IRC) since 2014)<sup>11</sup> had been to create a lexical database, similar to Griffith's, on the basis of Carney's edition of the poems, but the work soon led to the realisation that a complete re-edition of the poems (including passages that had been left out by Carney) was necessary to make the lexical collection worthwhile at all. The Blathmac database demonstrates that the medium of an electronic lexicon can even be used to create textual editions.

The poems have been preserved in a single manuscript and therefore would have lent themselves to a treatment like the gloss manuscripts. Nevertheless, the decision was made to base the lexicon on the edited text. This necessitated the inclusion of two parallel versions of the text, namely one in normalised spelling and one for the diplomatic manuscript reading. In contrast to the preceding databases, fully normalised spellings were also used for the headwords, even against the evidence of the text and against the practice of eDIL. Occasionally this will mean that headwords can appear in spellings that are never found as such in Irish literature.

#### 6d. Annals of Ulster

A fourth version of this type of lexicon is devoted to the Annals of Ulster. They are of particular importance for the history of the Irish language since entries were added on a yearly basis, thus presumably reflecting the slow change of the Irish language over time. The predecessor of all the extant Irish annalistic texts, possibly a

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10 URL: <http://www.stgallpriscian.ie/> (accessed 2 Sept 2018).

11 'New edition and dictionary of the Poems of Blathmac son of Cú Brettan', Irish Research Council Government of Ireland Postgraduate Scholarship No. GOIPG 2014/448. PhD URL: <http://eprints.maynoothuniversity.ie/10042/> (accessed 4 Oct 2018).

chronicle or similar document kept in Iona, must postdate the year 563, when the monastery of Iona was founded. Largely fictional entries going back to the Creation were later added to the annals. The prototypical annals were copied and continued in various places in Ireland after the 8<sup>th</sup> century, while the surviving copies date from the 11<sup>th</sup> century and later. For practical purposes, the database represents only the Annals of Ulster, the most complete text in the early annalistic tradition, and covers the years 554–950, although the Annals go on for many centuries more.

The Annals of Ulster database is the work of Fangzhe Qiu in the *Chronologicon Hibernicum* project in Maynooth under the direction of David Stifter.<sup>12</sup> Notable new conceptual features are data fields for etymological information and for the expected normalised word forms. The latter serve as benchmarks against which variation of the actually attested forms can be measured. More importantly, in order to formally capture the synchronic variation and the diachronic changes observable in the text, variational tagging has been added to the structure of the database to represent the diachronic dimension of language. In this way, the dictionary provides information about the amount of phonological and morphological change for each token, not just about headwords.

#### 6e. Minor Glosses

The remaining smaller groups of glosses that are contained in *Thes.*, plus a few discovered since the publication of *Thes.*, are the focus of Elliott Lash's database (*Chronologicon Hibernicum*, Maynooth) of 'Minor Glosses' which he began when he was a ZIF Marie Skłodowska Curie 2-year Postdoctoral Fellow at the Zukunftskolleg at the University of Konstanz. The database is fundamentally the same structure as that of the Annals of Ulster and Priscian databases. Its main innovation is the introduction of syntactic parsing, but at the same time it improves on the existing editions of those texts. The approach to syntactic tagging builds on Lash's previous work, the syntactically tagged corpus POMIC (Lash 2014);<sup>13</sup> the various glosses on Bede have been updated with the new readings obtained in Bernhard Bauer's project LeXiN.<sup>14</sup> The 'Minor Glosses' are a test case for introducing syntactic parsing and graphic representation of syntactic structures into the lexicon.

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<sup>12</sup> URL: <http://dhprojects.maynoothuniversity.ie/chronhib/> (accessed 5 Oct 2018).

<sup>13</sup> *Parsed Old and Middle Irish Corpus*, URL: <https://www.dias.ie/celt/celt-publications-2/celt-the-parsed-old-and-middle-irish-corpus-pomic/>.

<sup>14</sup> 'Languages in Exchange: Ireland and her Neighbours', Irish Research Council Government of Ireland Postdoctoral Fellowship Award No. GOIPD/2016/174.



## 6f. Outlook

The electronic lexicography of the Old Irish glosses is coming full circle with efforts to create a digital database of the Würzburg Glosses. This enterprise was initiated by Aaron Griffith at the University of Utrecht in 2015, and was then passed on to the *ChronHib* project in Maynooth University, but it proved unfeasible to convert Kavanagh's Dictionary directly into a coherent data format within the framework of the established lexical databases described in the foregoing. The inconsistencies of how entries are arranged in the printed lexicon, albeit invisible to the adaptive human mind, create insurmountable obstacles to algorithms. A new, independent project was started in 2018 by Adrian Doyle (NUI Galway) who digitised the glosses directly from *Thes*.

In a recently started project directed by Deborah Hayden (MIMNEC, Maynooth),<sup>15</sup> the creation of a lexical database will be a research tool in its own right to study two unpublished medical texts. It can be expected to unearth many hitherto unattested words. Another major text, 'Monastery of Tallaght', is currently being digitised by Romanas Bulatovas (*ChronHib*, Maynooth).

The purpose of the databases in this section is not as rivals to eDIL, but as philologically anchored supplements to it. In some respects, the *ChronHib* databases have a different focus: One of the innovative features is that headwords have been added for the nasalising and leniting relative and that different types of pronouns have been separated into different headwords, e.g., infixed pronouns, suffixed pronouns, stressed pronouns, possessive pronouns, and *notae augentes*. The various lexical databases, although very similar in layout and objectives, are not at the present completely identical in structure. The starting point were stand-alone digital databases. Each of the texts has its own structural requirements and accordingly different emphases were laid in the projects. Whereas in the case of the glosses and the annals the work was done on diplomatic texts, in the case of the Poems of Blathmac's an edited text (albeit not the one available in print) was the basis for the work. Each of the databases added new layers of complexity to the lexicon design, and each sounded out new conceptual possibilities of the system. In total, the currently existing databases amount to ca. 120.000 words. The focus has shifted since then to unite them under one uniform structure. The different designs and technical solutions of the databases are being harmonised and standardised in the current phase of the project *Chronologicon Hibernicum*. Ultimately, the entire material will be available in a single database, for which a web interface is being currently programmed to allow easy usability. It is hoped that

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15 'Medieval Irish Medicine in its North-Western European Context: A Case Study of Two Unpublished Texts', Irish Research Council Starting Laureate Award, project number IR-CLA/2017/57.

the website will go online on the *ChronHib* website as a free resource in 2019. Another line of future development is to use the existing material as the basis of a (semi-) automatic part-of-speech tagger for Old Irish.

#### 7. Thematic and Etymological Dictionaries<sup>16</sup>

It remains for various thematically restricted collections of Early Irish vocabulary to be discussed. Such works have often a strong etymological orientation so that they are best grouped together with etymological dictionaries proper.

In the area of onomastics, the century-old lexicon of Irish placenames by Edward Hogan 1910<sup>17</sup> has been replaced by two separate works. The late Donnchadh Ó Corráin subjected Hogan's often cumbersome work to a complete revision ('eHogan') that is available on the website of the Dublin Institute for Advanced Studies.<sup>18</sup> Ó Corráin's additions and corrections are indicated by asterisks \*...\* in the text. Parallel to this, an entirely new *Historical Dictionary of Gaelic Placenames* (HDGP) is being created as a long-term project at the University of Cork, under the directorship of Pádraig Ó Riain, Diarmuid Ó Murchadha and Kevin Murray. A puzzling feature of this dictionary is that the headwords for all placenames, even for exclusively medieval ones, are presented in Modern Irish spelling. Important historical information about placenames is also provided by *Logainm.ie*.<sup>19</sup>

As regards personal names, mention must be made of Ziegler 1994 for Primitive Irish names found on Ogam stones, Uhlisch 1993 for Old Irish names, excerpted from the extensive onomastic indexes of CGH, CGSH, and similar genealogical and historical sources, and Ó Corráin & Maguire 1981, which is aimed at a popular readership.

The only non-onomastic glossary with a narrow thematic focus is Anders Ahlqvist's 1993 collection of Old Irish grammatical terms.

In almost all historical-comparative resources, Old Irish is treated only as one language among others, be they the Celtic languages, or the classical Indo-European languages in general. The first etymological dictionary complying with modern scientific standards, albeit not specifically for Old Irish, but for the Celtic language family as a whole was Stokes 1894. Even at its time it was outdated, as it still partly follows pre-*Junggrammatiker* standards of Indo-European linguistics, most noticeably for modern users in the ordering of the roots which follows the model of Sanskrit, rather than that of the Latin alphabet. Alexander Macbain's *Etymological Dictionary of the Gaelic Language* (Macbain 1896) takes Scottish Gaelic at its starting point, but quotes

16 A more in-depth study of Old Irish and Celtic etymology will be published in Stifter forthc.

17 Online at <http://publish.ucc.ie/doi/locus>.

18 URL: <https://www.dias.ie/celt/celt-publications-2/onomasticon-goedelicum/>.

19 URL: <https://www.logainm.ie/en/>.

Old Irish material as comparanda. It is derived from Stokes 1894 and is equally outdated and replete with incorrect explanations. Unfinished because of Macbain's premature death in 1907, it is one of the earliest digitised etymological dictionaries on the internet of any language.<sup>20</sup>

The only etymological dictionary exclusively dedicated to Old Irish is *Lexique étymologique de l'irlandais ancien*, initiated by Joseph Vendryes in 1959, and continued after his death by Edouard Bachellery and by Pierre-Yves Lambert. The length in time of publication, extending now over more than five decades, and the gaps between the instalments are reminiscent of the history of DIL. The long timespan and the fact that the core of the lexicon builds on work done by Joseph Vendryes in the mid-20<sup>th</sup> century entails that its contents is of disparate quality and the notation of the reconstructed forms is not up to date.

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20 Caoimhín Ó Donnaile, the person responsible for this work, sent DS the following personal account of the digitisation process (email 2 Feb 2018) which is reproduced here because of its historical interest for the beginning of the internet:

“Scriobh mé isteach don ríomhaire é idir 1990-03-14 agus 1990-10-10, nuair a bhí mé ag obair ar ríomhaireacht don ionad taighde de chuid an Forestry Commission in aice le Dún Éideann. Ba sin an bhliain sula dtáinig mé go Sabhal Mòr Ostaig agus ní raibh Idirlíon nó WWW nó HTML ann, fíu amháin ag na seirbhísí ríomhaireachta ag na h-ollscoileanna.

Fuair muid ceangal Idirlín ag SMO i 1993 agus bhí freastálaí gréasáin ag obair againn i 1994 agus chuir mé foclóir MacBain ar WWW mar chomhad téacs. Chonaic fear i gCalifornia é, John T. McCranie, ríomhchláirithoir. D'iarr seisean cead, chuir sé cruth HTML air, rinne sé gléas cuardach – rud an-nua ag an am – agus chuir sé ar WWW é, áit a bhfuil sé go fóill i ndiaidh breis agus fiche bliain, cé nach bhfuil an gléas cuardach ag obair anois: <http://www.ceantar.org/Dicts/MB2/>.”

(“I typed it into the computer between 14 March 1990 and 10 Oct 1990 when I was doing computational work for the research unit of the Forestry Commission near Edinburgh. This was the year before I came to [the National Centre for Gaelic Language and Culture at] Sabhal Mòr Ostaig, and not even university IT services had internet, WWW, or HTML.

We got an internet connection at SMO in 1993 and we had a web server operating in 1994 and I put MacBain's dictionary as a text file onto the WWW. A man in California, John T. McCranie, a programmer, saw it. He asked for permission, turned it into HTML, created a search function – something very new at the time – and he put it onto the WWW, where it still is after more than twenty years, even though the search function doesn't work now: <http://www.ceantar.org/Dicts/MB2/>.”)

Caoimhín Ó Donnaile was also instrumental in putting the glossary *In Dúil Bélrai* (Dennis King, Elliott Lash, Liz Gabay) online in 2009, URL: <https://www2.smo.uhi.ac.uk/sengoidelc/duil-belrai/>. It contains 15,000 headwords and 5,000 inflected verbal forms.

For the primary verbal roots, reference must be made to Stefan Schumacher's *Die keltischen Primärverben* (KP) which arranges primary verbs by their Proto-Celtic root, and to Karin Stüber's *Verbalabstrakta des Altirischen* (Stüber 2015) with an extensive collection of original citations that feature verbal nouns of predominantly strong verbs.

Ranko Matasović's *Etymological Dictionary of Proto-Celtic* (EDPC) forms part of a series of etymological dictionaries for all Indo-European branches, published by Indo-European Studies at Leiden University. It concentrates on the inherited lexicon of Celtic, but contains a good deal of *Sondergleichungen*<sup>21</sup> as well, achieving completeness in neither area and leaving many gaps. Additions and corrections have been published online (Matasović 2011).

In Julius Pokorny's *Indogermanisches Etymologisches Wörterbuch* (IEW), Old Irish material is only incorporated where it is relevant for the overall objective. The same is true for its three modern successors, *Lexikon der indogermanischen Verben* (LIV, LIV<sup>2</sup>), initiated by Helmut Rix and edited by Martin Kümmel;<sup>22</sup> *Nomina im indogermanischen Lexikon* (NIL) by Dagmar Wodtke, Britta Irslinger and Carolin Schneider; and *Lexikon der indogermanischen Partikel und Pronominalstämme* (LIPP) by George Dunkel.

There is an ever growing number of short etymological annotations to a considerable number of Old Irish words on Wiktionary.<sup>23</sup> Given the nature of the medium, the entries cannot be linked to identifiable authors. Although they are generally of a high quality and appear to be derived from up-to-date sources, this is not a sufficient alternative to a dedicated website. A fully developed digital etymological resource of Early Irish that can be interlinked with eDIL remains a desideratum for the moment.

Globally speaking, Old Irish and Celtic etymological studies face a bi-directional bottleneck. Cutting-edge Indo-Europeanist knowledge is only trickling in slowly, while at the same time new insights by Celtic scholars is only received with a delay in Indo-European handbooks. Sims-Williams (2018: 117) laments this state of affairs: "Celtic evidence is under-represented in etymological dictionaries, partly because already discovered Celtic etymologies get overlooked and partly owing to a lack of systematic searches for new ones."

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21 *Sondergleichungen* are etymological cognates within a branch (e.g. Celtic) that are not shared by the wider language family (e.g. Indo-European). Especially when they show phonological and morphological peculiarities, this may be an indication that they are loans from a third language.

22 In Kümmel 2011–, the preliminary notes for a future third edition of LIV, ample use is made of KP.

23 URL: [https://en.wiktionary.org/wiki/Category:Old\\_Irish\\_language](https://en.wiktionary.org/wiki/Category:Old_Irish_language).

### 8. Modern Gaelic Languages

Although strictly speaking beyond the horizon of Early Irish, a quick word has to be said about the lexicography of Modern Irish and the other Gaelic languages because occasionally they have a bearing on the correct understanding of earlier stages of the language when disputed questions of phonology or semantics can only be clarified with reference to information found in younger sources of the language.<sup>24</sup> eDIL encompasses the language up to the 17<sup>th</sup> century, but its coverage of the Modern Irish period from *c.* 1200 onwards is patchy and unsystematic. For the period from 1600, the end of Gaelic cultural autonomy, until 1882, the beginning of the modern revival, a dedicated corpus-based dictionary has been a desideratum. Headed by Ruairí Ó hUiginn, the project *Foclóir na Nua-Ghaeilge* of the Royal Irish Academy aims at filling this gap.<sup>25</sup>

In 20<sup>th</sup>-century scholarship, the most important resource for Modern Irish has been Dinneen 1904 and, after the loss of the original printing plates, its complete revision from 1927, which replaced all earlier dictionaries such as O'Reilly 1864. No mention can be made here of the numerous word-lists and specialised dictionaries of local dialects. Dictionaries such as de Bhaldraithe 1959 and Ó Dónaill 1977 were aimed at the practical needs of the contemporary mid-20<sup>th</sup> century audience after the orthographic reform of the 1950s, and served their purpose at the time.<sup>26</sup> However, they are no longer adequate to cater for the requirements of 21<sup>st</sup>-century society with its rapidly changing technology and new social concepts. The last years have seen an explosion in new terminology. Aside from new coinages that arise from inside the speech community, neologisms are created by official bodies and are propagated via the platform <http://www.tearma.ie/Home.aspx> and its associated social media accounts.

The most comprehensive dictionary of Scottish Gaelic, which includes older and obsolete vocabulary, is Dwelly 1920.<sup>27</sup> The project for a *Historical Dictionary of Scottish Gaelic* was established at the University of Glasgow in 1966 by Derick

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24 OIr. *do méicethar* 'to hate, despise' is an illustrative example: not attested in the early period in a context that would reveal its phonology, it has been analysed (e.g. LEIA M-26–27; LIV 429) as having a medial /k/. ModIr. *dimhigean* 'contempt, reprobation', however, shows that the guttural is actually a voiced stop, with further implications for the etymology and the historical morphology of the verb.

25 URL: <https://www.ria.ie/research-projects/foclóir-na-nua-ghaeilge>.

26 They have meanwhile been fully digitised: Ó Dónaill and de Bhaldraithe at <https://www.teanglann.ie/en/>; Dinneen at [http://glg.csisdmsz.ul.ie/index.php?mobile\\_display=false](http://glg.csisdmsz.ul.ie/index.php?mobile_display=false).

27 Digitised at: <http://www.dwelly.info/>.

Thomson, with the aim of illustrating the language since the 16<sup>th</sup> century.<sup>28</sup> The project was finally suspended in 1997 after the retirement of its staff, without having achieved the publication of a dictionary. Its agenda were transferred to the interuniversity project *Faclair na Gàidhlig*.<sup>29</sup>

The lexicography of Manx does not start before the 19<sup>th</sup> century with the dictionaries of Cregeen 1835 and Kelly 1866; Thomson 1954–9 compiled a glossary for the early sources of the language. There is no historical dictionary of Manx as such.

David Stifter

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<sup>28</sup> URL: <https://dasg.ac.uk/about/hdsg/en>.

<sup>29</sup> URL: <http://www.faclair.ac.uk/>.

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