

The lexicography and etymology of OIr. *eclas* ¹

Abstract

This article examines the existing lexicographical evidence for the rare Irish word *eclas*, typically translated as ‘stomach’ or ‘gizzard’, and presents some hitherto unnoticed attestations of this term from a large collection of Irish medical remedies now preserved in two sixteenth-century manuscripts. The new data allow better insights into the historical phonology and morphology of OIr. *eclas* and its Breton cognate *elas*, and make it possible to set up an Indo-European etymology for it and the related word *glas* in Welsh and Cornish. This reconstruction $*(e\acute{g}^h s)-g^h l H-ST-o/eh_2-$ also has repercussions for the reconstruction of words for ‘digestive organs’ in other Indo-European languages. Even though *eclas* occurs as an equivalent for *gaile* ‘stomach’ in the context of late-medieval medical writing, it is argued that it probably originally referred to some other internal organ in the vicinity of the stomach, possibly the ‘oesophagus’.

Keywords

Irish medical texts; anatomy; lexicography; etymology (of *eclas*); geminate stops in Celtic

I. The lexicography of OIr. *eclas*

Only four attestations of the word *eclas* with the primary definition ‘stomach’ are given in *eDIL* (dil.ie/19586). What is probably the earliest of these is from the collection of eighth-century Old Irish glosses on the Latin text of the Pauline Epistles in Würzburg, Universitätsbibliothek MS M. p. th. f. 12, where the phrase *ar biith galar n-eclis forsu* ‘for the gastric disease abides on thee’ glosses Lat. *propter stomachum tuum* (Stokes and Strachan 1901–3: i, 687). In a note on this gloss, the editors stated that *eclis* was the ‘gen. sg. of *eclas* “stomach” or (in case of birds) “craw”’. The latter, specifically avian, definition might be linked to their citation of the phrase *Frith grainne ’na egluis 7 ní fess cid arbar* (‘in whose *egluis* was found one grain, but of what cereal was unknown’) from the early sixteenth-century British Library, Egerton MS 1782 (fol. 40b1). This phrase – which is itself one of the four citations given for the word *eclas* ‘stomach’ in *eDIL* – occurs in the text known as *Aided Diarmata meic Fergusa Cerrbeoil* (‘The Violent Death of Dermot son of Fergus Cerrbeoil’), a prose tale originally composed in the Middle Irish period (ca 900–1200), where the referent of *egluis* in the sentence is a bird (*ferán eighinn*, ‘ringdove’) that has been killed.²

A third citation given under the headword *eclas* in *eDIL* is the phrase *eclas crainn*, described in the dictionary simply as ‘an opprobrious epithet’. This attestation is drawn from the third of four Middle Irish metrical tracts first published by Rudolf Thurneysen in the late nineteenth century (*MV* III).³ The quatrain in question, which can be described as an

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² O’Grady 1892: i, 81.30 (text) and ii, 87.25–6 (translation). O’Grady’s misreading of the form *egluis* as *egán* is noted in Meyer 1893: 329 and Meyer 1894: 116; in the latter Meyer compares *egluis* to Bret. *elas* ‘gésier, foie’.

³ Thurneysen 1891: 102 (§189). For further comments on this tract, see McLaughlin 2005.

invective, has most recently been published with a translation by Roisin McLaughlin as follows:

A máelscolb do messair,
a eclas crainn, a chacc cuirre uidre ittige,
a eóin ré n-ossaib,
a fertas a braind bicire, a Bressail!

You blunt splinter from a measuring vessel,
you wooden stomach, you shit of a brown wingy heron,
you bird fleeing from deer,
you shaft from...o Bressail! (McLaughlin 2008: 150–1)⁴

In the notes on this stanza, McLaughlin draws attention to the similarity between the form *eclas* in the second line and the much more widely attested word given in *eDIL* s.v. *eclais*, *eclas*, ‘church’ (a borrowing from Lat. *ecclesia*) when arguing that the word should here be understood to mean ‘stomach’, because ‘describing someone as a “wooden church” could hardly be construed as an insult, since churches were commonly built of wood’ (McLaughlin 2008: 227). Given the fact that the quatrain in question makes two explicit references to birds, however, one might suggest that it had some kind of avian association in this context as well, and could therefore instead be translated as a ‘gizzard’ or ‘bird’s craw’ (with the modifying genitive form *crainn* [< *crann* ‘tree’] alluding to the typical domicile of such an animal).

The fourth and final citation of the word *eclas* given in *eDIL* is drawn from the Old Irish glossary known as *De origine scoticae linguae* or ‘O’Mulconry’s Glossary’. Although this text only survives in late-medieval manuscripts and clearly consists of a number of different strata, its most recent editor, Pádraic Moran, has argued that the contents of *De origine* manifest features associated with the Irish language between around the seventh and late-ninth or early-tenth century, i.e. the Old Irish and Middle Irish periods (Moran 2019: 76–7). The following two entries in the glossary, presented below as they appear Moran’s edition with his accompanying translation, are of interest here:

OM 359: Eclas .i. *eclosin grece, congregatio; unde eclogae .i. congregaciones, quia uenter congregat cibos.*

Eclais ‘church’, i.e. *eclosin* [ἐκκλησία?] in Greek, a gathering. From which [Lat.] *eclogae* ‘selections’, i.e. gatherings, because a belly gathers food.

OM 360: Eclais *grece ab eclessia .i. conuocatio .i. conuocare ad homines, congregare ad greges pertinet.*

Eclais ‘church’, Greek from *ecclesia* [ἐκκλησία], i.e. a calling together, i.e. [Lat.] *convocare* ‘to call together’ pertains to men, *congregare* ‘to flock together’ to flocks.’ (Moran 2019: 174)

A closely related glossary that Moran refers to as *Irsan*, which contains a large number of entries that overlap with material in O’Mulconry’s glossary, features an etymology for the

⁴ On the dating of this tract to c. 1060, see McLaughlin 2005: 119 and 2008: 118–19. Cf. also the edition of this quatrain published in Meyer 1919: 36 (§86). The vocative form *a eclas* suggests that the word was understood as a feminine noun in this text, and therefore that confusion with the word for ‘church’ may have been a relatively early development.

headword *eclais* that is similar, but not identical, to that given for the form *eclas* in the first of the two excerpts above:

Irsan 87*: *Eclais* .i. *eclosin grece congregatio; unde egloge {nó lestra fína}*.

Eclais ‘church’, i.e. *eclosin* in Greek, a gathering, from which [Lat.] *eclogae* ‘selections’ (or wine vessels).’ (Moran 2019: 257)

Moran’s translations of these three entries indicate that he has identified them all as explanations of the word given in *eDIL*, s.v. *eclais*, *eclas* ‘church’. He offered the following commentary in support of this interpretation:

OM 360 provides a Greek etymology, followed by further comment on the Greek word. Irish *eclais* is derived from Greek ἐκκλησία ‘assembly’ (literally ‘a calling out’), translated *convocatio* ‘calling together’. The related Latin word *convocare* is then contrasted with *congregare*, drawing on a pejorative etymology for the word ‘synagogue’ in *Etym.* 8.1.8: *inter congregationem, unde synagoga, et convocationem, unde ecclesia nomen accepit, distet aliquid; quod scilicet congregari et pecora solent, quorum et greges proprie dicimus; convocari autem magis est utentium ratione, sicut sunt homines* ‘there is some difference between “congregation”, from which synagogue takes its name, and “convocation”, from which church takes its name: no doubt because cattle, which we properly speak of in “herds” (*greges*), are accustomed to “congregate” (*congregare*); and it is more fitting for those who use reason, such as humans, to be “convoked”’.

In OM 359 and *Irsan* 87*, a similar etymology seems to have undergone some alteration. The Greek form *eclosin* may be a simple corruption of ἐκκλησία (or less likely a corruption of the verbal infinitive ἐκκλησιάζειν). But *congregatio*, the term deprecated in OM 360, here replaces *convocatio*. The remainder of the entry provides a puzzling etymology for a different Latin word of Greek origin. *Eclogae* ‘excerpts, selections’ is explained in OM as *congregationes* (in the sense ‘collections’?). The semantic explanation that follows in OM seems to associate *eclogae* with food; *Irsan*’s gloss *nó lestra fína* ‘or wine vessels’ may also suggest some association with gastronomy. This might be based on a metaphor explaining literary selections as ‘tasters’ (cf. Latin *satura* ‘satire, full plate’)? (Moran 2019: 397–398)

Moran thus makes no mention of the word listed in *eDIL* s.v. *eclas*, meaning ‘stomach’. Yet given the specifically gastronomical associations of the explanation for the form *eclas* in OM 359, where the headword in the text itself (as opposed to Moran’s citation of it in his translation of the entry) does not end with a palatal consonant, it seems more probable that the term for ‘stomach’ was in fact what the glossator had in mind in that case, and there is therefore no reason to interpret it as a mere alteration of the entry under OM 360 for *eclais* ‘church’. This would appear to be supported by the comparable entry in *Irsan*, where the final consonant of the headword has been palatalised in the text, but the derivation of the word given by the glossator is close to that in OM 359, and the gloss *nó lestra fína* suggests that a similar connection may have been made between this word and a part of the body that serves as a ‘receptacle’ for food or drink. The association of both the headwords given under OM 359 and 360 with the Latin term *congregatio* may reflect some confusion on the part of the glossator between the two very similar Old Irish words for ‘stomach’ and ‘church’ respectively; however it should be observed that the entries for each of these terms are otherwise fundamentally different from one another.

The similarity in form of OIr. *eclas* ‘stomach’ and *eclais* ‘church’ also appears to have resulted in some uncertainty surrounding the gender and stem-class of the former. The *eDIL* entry s.v. *eclas* suggests, on the basis of the four citations given therein, that it is either an *o*- or an *ā*-stem noun. In a note on his edition of the quatrain of invective from *MV III*, Meyer similarly made reference to the genitive singular form *eclis* given in the Würzburg glosses, but also observed that the word appeared to be feminine in the later language. He was presumably referring to the feminine vocative form of the word in the stanza from *MV III*, but may also have had in mind Stokes and Strachan’s reference to the form *’na egluis* in Egerton MS 1782, which could be interpreted as a dative singular form of an *ā*-stem noun.⁵

That the word was later taken to be a feminine noun is also suggested by entries in lexicographical sources for Modern Irish, where it was clearly understood to be a homonym of *eaglais* ‘church’, but is also consistently translated not as ‘stomach’ (and thus with the implication that this could refer to the anatomy of a human), but with the more restricted sense of ‘a bird’s stomach’ or ‘gizzard’. Thus Dinneen’s *Foclóir Gaedhilge agus Béarla* cites two feminine nouns with the nominative singular form *eaglais*, one with the meaning ‘the Church, a church’ and the other with the definition ‘a bird’s stomach’; the latter entry includes the masculine form *eaglas*, *-ais* as a variant, and is cross-referenced with the entry s.v. *iogaois*, *-e* (*al. eagaois*), itself defined as ‘the gizzard or strong muscular second stomach of a bird’. Ó Dónaill 1977 likewise gives two separate headings for the form *eaglais*, but equates the second of these with f. *eagaois*, defined simply as ‘gizzard’. It is clear from these entries that the term attested in *eDIL* s.v. *eclas* ‘stomach’ had, by the modern period, come to have a rather narrower semantic range as a reference to the ‘crop’ or ‘gizzard’ of a bird in lexicographical sources for the Irish language.

Some hitherto unnoticed attestations of the term *eclas* in an unpublished Irish medical text of the sixteenth century can now be adduced, however, in order to shed further light on the meaning of the word. These attestations indicate that the semantic range of OIr. *eclas* did in fact originally encompass a part of the human anatomy, as would appear to be the case in the earliest appearance of the term as a gloss on Lat. *stomachus* in the eighth-century Würzburg manuscript. In addition, they suggest that this meaning may have continued to be associated with the word even until a fairly late stage in the development of the language. The medical text in question is a substantial prosimetrical collection of over 900 herbal remedies, charms and prayers for various bodily ailments, roughly arranged in head-to-toe order. The pages of this treatise were sundered at some point in its history, and the collection as a whole is now preserved in two separate Royal Irish Academy manuscripts, namely RIA MS 24 B 3 (445), pp. 33–[90], 90a, 90b and 91–3 and RIA MS 23 N 29, (467), fols 1–4 and 6–9. Its main scribe (who was probably also the compiler of the text), was Conla Mac an Leagha, a practising surgeon and member of the hereditary medical family of that name active in the region of north Connacht during the fifteenth and sixteenth centuries. Various aspects of the form and contents of this remedy book, which Conla appears to have compiled for his own use, have been discussed recently elsewhere and will not be rehearsed here.⁶ For present purposes, it suffices to note that the term *eclas* occurs at least seven times in this text, with all attestations noted thus far being found in the chapter of the collection that is concerned with ailments affecting the stomach. In each of these cases, the word occurs in the

⁵ Meyer 1919: 36: “*eclas* ‘Magen’, dessen Gen. Sg. *eclis* Wb 29a26 belegt ist, scheint in der späteren Sprache weiblich zu sein.”

⁶ For preliminary discussions of the prosimetrical content of the text, as well as editions of five separate poems, see Hayden 2018, 2019c and 2021. Attributions to various types of authorities in the work are discussed in Hayden 2019a and Barrett 2019, while some charms in the collection have been treated in Carney and Carney 1960 and Hayden 2022. The codicology of the text has recently been examined in Nic Dhonnchadha 2019a, while further remarks regarding the content of the remedy collection are also found in Nic Dhonnchadha 2019b: 75–85 and Hayden 2020.

heading of a medical recipe, and in all but one instance (where it forms part of a quatrain of verse) it takes the genitive form:

RIA MS 23 N 29:

1. fol. 2v6: *Tendus san eccluis malle / ō rāter galar gaile...* ('Tightness in the *eclas*, along with that which is called ailment of the stomach [*gaile*']')
1. fol. 2v16: *Ar galur n-egulsa 7 clēib...* ('For ailment of the *eclas* and of the chest')
1. fol. 2v21: *Cosc ar idain eculsai...* ('To prevent a pain of the *eclas*')
1. fol. 3r1: *Cosc ar luas eculsa .i. gaile 7 ar secad bronn...* ('To prevent swiftness of the *eclas*, i.e. of the stomach (*gaile*), and tightening of the abdomen...')
1. fol. 3r3: *Cosc ar galar n-egalsa...* ('To prevent ailment of the *eclas*')
1. fol. 3r10: *Cosc ar galar n-egulsa...* ('To prevent ailment of the *eclas*')
1. fol. 3r18: *Ar galar n-egalsa...* ('For ailment of the *eclas*')

The chapter of the remedy book in which these cures are found begins with the sentence *Do gallraib an gaile is laburta duin fesda* 'Here below we speak of ailments of the stomach (*gaile*)'.⁷ A perceived equivalence between the terms *gaile* and *eclas* is indicated by example 4 in the above list, where the latter term glosses the former; however only *gaile* is recorded in modern Irish dictionaries as a reference to the anatomy of a human, and indeed this is the term used far more frequently in Conla Mac an Leagha's chapter on stomach ailments as a whole.⁸ One might therefore wonder whether the seven recipes listed above were taken from an earlier source, and the scribe felt the need to draw a specific association between *eclas* and *gaile* because he thought that the meaning of the former term might not be clear. It may likewise be noteworthy, in this regard, that other sections of Conla's text include words for diseases or parts of the body that are uncommonly attested in contemporary medical treatises.⁹ Some of these terms are not attested at all in lexicographical sources for the Gaelic languages, historical or modern, while others do appear in texts dated to a much earlier period, but are only attested in *eDIL* on the basis of citations found in works of other literary genres, and are therefore not translated in the dictionary with any specific medical meaning.¹⁰

Whatever be the case about the date of the above remedies for stomach ailments, it is clear that the scribe of this sixteenth-century medical remedy book understood that the term *eclas* could be employed in reference to the human anatomy. It is possible that the word originally referred more specifically to a part of the human body that was located in close proximity to the stomach, perhaps the alimentary canal or oesophagus. Indeed, such a reading would be supported by the earliest attestation of the word as a gloss on Lat. *stomachus*, which is recorded in sources of the classical and late antique periods as meaning either 'oesophagus' or 'stomach' (Lewis and Short 1879, s.v.). Either way, it can be argued that the use of Ir. *eclas* in reference to human anatomy should be given a more prominent place alongside definitions such as 'gizzard (of a bird)' in lexicographical accounts of the Irish language that are based on sources of the late-medieval and early-modern periods.

⁷ RIA MS 23 N 29, fol. 2v1.

⁸ For the earliest citations of *gaile*, see *eDIL*, s.v.; for its definition in Modern Irish, see e.g. Ó Dónaill 1977 and Dinneen 1927, s.v. *goile*.

⁹ Nic Dhonnchadha 2019: 81; the author gives a list of several of these terms, including the word *eclas*, in nn. 78 and 79.

¹⁰ An example of a term not found in *eDIL* or other dictionaries of the Gaelic languages is *loch tuile*, which clearly refers to pulmonary ailment; on this, see Hayden 2019b.

II. A comparative-linguistic analysis of *eclas*

II.1 The phonology and morphology of OIr. *eclas*

OIr. *eclas* ‘stomach, gizzard’ (or an internal organ closely associated with the stomach) has not been the subject of a comprehensive etymological analysis before. While Irish etymological studies seem to be completely silent about it, with the sole exception of the very brief remark in Meyer (1894: 116; see fn. 2), it has received brief mentions in Breton etymological literature as a cognate of Middle Breton *elas* (Ernault 1895: 206; Henry 1900: 111; Deshayes 2003: 212). Campanile (1974: 49) mentions a possible connection with Old Cornish *glas* without any further discussion. None of these sources compares related words outside Celtic, nor do they provide reconstructions that would account for the words. Since no extra-Celtic comparisons suggest themselves *prima facie*, it is advisable to follow a deductive, bottom-up route, starting from the Irish word and its British Celtic cognates in order to extract as much phonological and morphological information as possible from the available data. From the solid cornerstones established by such a procedure it will then be easier to identify cognates in other languages – of which there are several, as will be argued below – and to attempt a pre-Celtic and Indo-European reconstruction.

The corpus from which primary phonological and morphological information about Irish *eclas* is drawn consists of the attestations cited in the entry in *eDIL* 2019 (dil.ie/19586), augmented by the examples from a sixteenth-century medical text identified by Deborah Hayden in the preceding section of this article. For the other languages, the standard handbooks have been consulted.

The *o*-stem genitive *eclis* in the contemporary Old Irish Würzburg manuscript (Wb. 29a26) points to masculine or neuter gender of the word. The nominative *eclas* in OM 359 (Moran 2019: 174) is compatible both with an *o*-stem and with an *ā*-stem, while the vocative *a eclas* (McLaughlin 2008: 150; if it belongs here), the dative *egluis* (British Library, Egerton MS 1782 fol. 40b1) and the various spellings of the genitive such as *eculsa*, *egulsa* etc. in the sixteenth-century medical manuscript speak for feminine gender. It is conceivable that the younger feminine gender was influenced by the formally similar word *ecluis* ‘church’.

The spellings *eclas*, *eclis*, *eculsa*, *egulsa* etc., and finally ModIr. *eaglais* establish firmly that the letter <c> stands for the sound /g/ in this word, and that the initial vowel is short. For the diachronic assessment of the cluster *gl = <cl>, the new evidence assembled in the first part of this article proves crucial. Six of the seven new instances are in the genitive singular: *eculsa*, *eculsai*, *egalsa* (2×), *egulsa* (2×). They could be interpreted as modernised spellings of what would be an *ā*-stem genitive **ecalsae* in Old Irish, or an *i*-stem genitive **ecalso*. Neither form can be old. An *i*-stem genitive is incompatible with the *o*- or *ā*-stem nominative *eclas*. If the *ā*-stem genitive were old, on the other hand, it ought to be *ecailse** with a palatalised cluster.¹¹ So whatever the original inflection and gender of the word, the attested feminine genitives must be due to formal influence from the *i*-stem genitive *ecolso*, *ecalsa*, etc. ‘of the church’, which in turn must be analogical after the model of most *i*-stems that have a non-palatalised consonant before the ending of the genitive (Griffith 2006: 40).

However, the genitives of the type *eculsa* etc. demonstrate that the word was synchronically felt to continue a pre-syncope stem **eglVs*^o. The quality and quantity of the medial vowel are irrecoverable from the Old Irish surface forms. When a further syllable was added to this stem, the middle vowel underwent syncope, i.e. **egl^hs*^o. This resulted in the intermediary form **egl^hs*^o with a syllabic resonant. In accordance with the phonotactic rules of

¹¹ According to the convincing arguments of Breatnach (2005: 149), Griffith (2007) and (2016: 39–48), the pre-syncope sequence **IVs*^e of the *ā*-stem genitive should have resulted in OIr. **ailse*.

Old Irish, a schwa was inserted as a prop vowel before the syllabic resonant (McCone 1996: 127–128; Griffith 2007), which then yields the ‘syncopated’ stem *ecals-*. If OIr. *eclas* were itself already the outcome of a pre-syncope **egVlVs*, i.e. **eg^llVs^o*, then any added overt inflectional ending would also just result in the surface stem ***eclas^o*, which evidently it does not. Even though, as demonstrated above, the genitive singular *eculsa* etc. is analogical, the inherited syncope pattern **eclVs^o > ecals^o* would have been recoverable to the speakers of the language in the dative and accusative plural, where overt endings were added in any inflectional class.

The sequence of an initial stressed short *e* followed by *g* is not very frequent in Old Irish (see section II.4 for a comprehensive list). It cannot simply continue inherited Proto-Celtic **g* because that would have been first lenited and then lost in the position before an **l* in Primitive Irish, with concomitant lengthening of the preceding vowel (McCone 1996: 122–123). The stop before the **l* must therefore have been a geminated **gg* at the time when lenition affected single stops between vowels and a following resonant.

The final *-s* of *eclas* continues an earlier ‘strong’ sibilant sound that resisted lenition of simple inherited *s > h*. The comparison with the *-s* in British Celtic, e.g. Breton *elas*, limits the sources for this *s* to clusters of dentals and *s* or voiceless clusters of dentals. It is thus equivalent to the *tau Gallicum* of Gaulish (cf. Eska 1998). For the sake of convenience, this ‘strong’ sibilant will be written as **ss* in Celtic reconstructions. The Irish evidence accordingly and unavoidably leads to the reconstruction of a preform **egglVss^o/ā-*.

II.2 British cognates of *eclas*

These findings can be reconciled with the cognate forms in British Celtic. Middle Breton *elas* (which will be used as the default cognate hereafter), Modern Breton *elaz* is attested in a variety of meanings, all of which are connected with internal organs. It is either defined as ‘gizzard’ (in the 15th-century *Catholicon* and in the Vannetais variety of the language) or as ‘liver’ (in the Middle Breton *Liber Vocabulorum* and in the 18th-century dictionary of Grégoire de Rostrenen). In *Le Grand Mystère de Jésus* (Hersart de la Villemarqué 1865:85; line 1746 in Le Berre 2011), it is used for the seat of emotions, i.e. in the sense of ‘from the bottom of the heart’. In the same text (Hersart de la Villemarqué 1865: 137; Le Berre 2011 l. 2819), it also stands for ‘heart’.

Although on the surface no sound corresponds to the *c*, Bret. *elas* can nevertheless be compared with OIr. *eclas*. First of all, this comparison allows us to determine the vowel of the second syllable as Celtic short **a*. The question of the, as it were, ‘missing’ guttural is more complicated. Proto-British simple **g*, the lenition of earlier **k*, appears to have been vocalised to *i* before **l* in Breton. However, in all pertinent examples the expected outcome as an *i*-diphthong is obscured by further changes (Jackson 1967: 302, 508–509). In the case of Bret. *iliz* ‘church’, from Proto-British **egluis* < **eglēsja* < VLat. *eclēsia* ‘church’ < Gr. ἐκκλησία ‘congregation, assembly’, and *illur* ‘brilliant’ < **eklouro-*, the new vowel *i* of the diphthong (perhaps **eiluis* and **eilūr*) merged with the initial *i*, which in turn is the result of secondary *i*-affection. Something similar is true of *huzil* ‘soot’ < **hūdigl* < earlier **sūdik^llo-* < VLat. **sūdiculum* (cf. W *huddygl*). In **bakulāko-* ‘having a staff’ (derived from the Latin loanword *baculum* ‘staff’) > **bak^llāko-* > **baglōg* (cf. W *baglog*) > **baileg* > MBret. *baieleg* > ModBret. *beleg* ‘priest’, the resulting diphthong **ai* was ultimately monophthongised to *e*. Under the hypothesis that geminate **gg* was simplified to **g* in Breton (thus Jackson 1967: 317 without examples), it would be expected that Proto-Celtic **egglass^o/ā-* was first reduced

to **eglasso/ā-*, which should then have resulted in Bret. **eilas* (for the fate of **ei* in Breton, see Jackson 1967: 156–159), which is not the attested form.¹²

The alternative possibility is that **gg* was not simplified to **g*, but became **χ* in Breton and the other British languages. This possibility is suggested by a small number of words. For example, OIr. *bec* ‘small’, which needs to be reconstructed as **biggo-*, corresponds to W *bychan*, OCorn. *boghan*, Bret. *bihan*. **χ* may perhaps also be the outcome of intermediate **gg* in W *achlan* ‘all, total’, if from **ad-glano-*, and in W *dyrchafael*, MCorn. *drehevel* ‘rising, ascending’, if from **duruggabaglā-* << **to-ro-ud-gab-aglā-*.¹³ Keeping this in mind, we can compare W *dichlyn* ‘to choose, pick’ < **dīgglenn-* < **dī-ek/eχs-glenn-* (cf. OIr. *as-gleinn*, *-eclairn* ‘to examine’ < **eχs-glenn-*) with Bret. *dilenn* ‘to choose, select’, under the assumption that this reflects an earlier **dīχlenn*, similar to the Welsh verb, whose **χ* had been lost in the position before *l* (pers. comm. A. Jørgensen).¹⁴ The loss of **χ* could be parallel to the above-mentioned loss of **g* before *l*, i.e. via an **i* that was absorbed into the preceding *i*, or it could be due to weakening of **χ* > **h* (parallel to the weakening seen in Bret. *bihan* ‘small’ vis-à-vis W *bychan* < **biggo-*) and then > Ø before the *l*. On the basis of the foregoing, I tentatively propose that Bret. *elas* continues earlier **eχlas* < **eglasso/ā-*.

The other British languages have no words that can be traced directly to **eglasso/ā-*, but words of similar shape and meaning can be found. These words therefore carry the potential of shedding more light on the latter’s meaning. The Old Cornish *Vocabularium Cornicum* has the gloss *stomacus · glas* (no. 60; Campanile 1974: 49). *Glas* is attested three times in curses in Middle Cornish texts: *vyngsans y’th glas* ‘vengeance in your stomach’ (*Passio Domini* 2716), *vynyons y ges glas* ‘vengeance in your (pl.) stomach’ (*Passio Domini* 3074), and *an jawl re’th ewno th’y glas* ‘the devil adjust you to his maw’ (*Origo Mundi* 2527). The translation of *glas* as ‘stomach’ in the first two curses is based on the Old Cornish glossary. The precise meaning is not entirely beyond doubt, but reference to an internal organ is very plausible.

In Welsh, words for the ‘gizzard’ are *glasog* and *afu glas/las*, the latter literally ‘glas-liver’. *Glasog* can also be used for other internal organs of a fowl. GPC analyses these words as formations with the common colour adjective *glas* ‘green, grey, bluish’, but in view of the aforementioned congeners there can be no doubt that in fact they belong to the unrelated etymon **glas* ‘gizzard, stomach’, which is unattested as a simplex in Welsh. Due to the nature of the evidence, the gender of *glas* can be ascertained neither in Welsh nor in Cornish, but it may be noted that *glasog* is feminine.

There is, to my knowledge, no rule by which Welsh or Cornish would lose an initial vowel in a fully stressed word. The prime hypothesis must be to regard *glas* not as an exact equation with, but as a related formation to OIr. *eclas* and Bret. *elas*, namely one that continues Common Celtic **glasso-* or **glassā-*. By all appearances, **eglasso/ā-* looks like a compound of this with what must be some sort of prefix. It remains to determine the nature of this prefix.

¹² A non-guttural parallel for the loss of a voiced stop before *l* in Breton is the plant name *tuleltulew*, also *tulo* ‘navelwort, penny-pies, wall pennywort (*Umbilicus rupestris*)’, from earlier **tudle(w)*, cf. OW *tut lob* < PC **tout(i)o-lubī-* ‘magic(?)-herb’. Note the lack of a vocalic reflex of the lost dental stop.

¹³ However, it is possible that in the case of the latter the Celtic root **gab-* had been replaced by **kab-*, in which case **χ* is just the regular outcome of **kk* (Schumacher 2004: 319–321).

¹⁴ Fleuriot (1964: 138) cites Old Breton *diclinatuiiu*, gl. *legendae* ‘to be chosen’, without indicating the source of this form. The OBret. spelling <cl> is ambiguous and could stand for **χl* and for **gl*. I regard this verbal adjective as the Old Breton representative of ModBret. *dilenn*. Fleuriot, however, explains *dilenn* as the equivalent of OIr. *do-gleinn* ‘to select, collect, gather’ < **dī-glenn-*.

II.4 *eglasso/ā- < *eχs-glasso/ā-

Word-internal geminates in Celtic compounds are typically the result of assimilation across morpheme boundaries (see Stifter forthc. for a detailed study of gemination in Celtic). Limiting ourselves to examples with transparent etymology, and leaving aside obscure words such as the plant name *ecim* or loanwords such as *eclais* ‘church’ < Brit. Lat. *eglēsĭā < Lat. *ecclesia*, the following list of etyma from eDIL, which begin with the sequence *ec-*, and their Proto-Celtic reconstructions bear out this hypothesis:

- ecal* ‘fearful, timid’ < *eχs-gal-o- ‘being out of force/steam’
- ecguiste* ‘wished for, desired’ < *eχs-gus-tiġo-, past participle of *asa-gú* ‘to desire, wish’ (with analogical reintroduction of *t*)
- eclaimn*, prototonic stem of *as-gleinn* ‘to investigate, examine’ < *eχs-gland-ne-, and its verbal noun *eclaimm* ‘investigation’ < *eχs-gle/and-sman-
- ecnae* ‘wisdom, knowledge’ < *eχs-gniġo-, verbal noun of *as-gnin* ‘to recognise, understand, know’ (Stüber 2015: 308–309)
- ecnae* ‘manifest, clear’ likewise < *eχs-gniġo-, another formation derived from *as-gnin* ‘to recognise, understand, know’

All these words are compounds with the Celtic preverb and preposition *eχs- ‘out (of)’ < PIE *eġ^h-s (Dunkel 2014: 204–208). The only odd one out is *ecor* ‘arrangement’, the verbal noun of *in-cuirethar*, which continues *in-kor-o- (Stifter forth.). The structurally similar words beginning with *et-* all happen to continue voiceless geminates:

- etaim*, *aitim* ‘chance, opportunity (?)’ < *eχs-tud-sman- ‘act of falling out’ or *eχs-dī-tud-sman-?
- etal*, *etail* ‘pure, sinless’ < *eχs-tol-o/i- ‘being outside of desire’
- ettech* ‘refusal’ < *eχs-teg-o-, verbal noun of *as-toing* ‘to refuse’

II.5 The Indo-European perspective

It follows almost automatically from the foregoing that *eclas* is to be analysed as a compound of the preverb *eχs- ‘out of’ as first element with Common Celtic *glasso- or *glassā- ‘stomach’ as the second element. It is suggestive to associate the local preverb *eχs- with a meaningful function and to analyse the entire complex as a prepositional governing compound (*präpositionales Rektionskompositum*), i.e. ‘that which is outside of the stomach’. This can, for example, refer to the ‘oesophagus’. In the case of birds, it refers to the internal organ that is found before the ‘stomach’, i.e. the ‘gizzard’.

Old Irish attests to another word for ‘stomach’ that, like PC *glasso/ā-, has an initial *g* and an internal *l*, namely *gaile* < PC *galġo-. This allows the reconstruction of a total of three phonetically similar Proto-Celtic items for the ‘stomach’ or associated organs: *galġo- ‘stomach’, *glasso/ā- ‘stomach’ (of unspecified semantic difference from the former), and the compound *eχs-glasso/ā-, perhaps meaning ‘oesophagus, gullet; gizzard’. From the point of view of pre-Celtic reconstruction, for both etyma that underlie the Celtic words, *galġo- and *glasso/ā-, a form with an Indo-European laryngeal can be postulated by internal reconstruction, namely *G_lH-STo- and *G_lH-ġo-¹⁵ (where *G stands for any Indo-European

¹⁵ See Zair (2012: 70–77; 89–93) for the development of the laryngeals in the respective contexts. Without a laryngeal, the first word *G_l-STo- would result in Proto-Celtic *galsso- or *glisso-, none of which would lead to the actually attested forms.

sound that results in Proto-Celtic *g, and *ST for any cluster that yields an unlenited *s in Insular Celtic).

The reconstructions have become incrementally more reminiscent of words for digestive organs in other Indo-European languages. Although the pair Greek *χολάδες* ‘intestines’ and Slavic **želodьkь* ‘stomach’ does not form an exact equation,¹⁶ they are manifestly cognate and must reflect different *ablaut* paradigms of the same elements. Descriptively those elements are a lexical root **g^hel-* and an athematic suffix **-Vnd-*, to which a further, velar suffix has been added in Slavic (Beekes 2010: 1641; Derksen 2008: 567). Gr. *χολάδες* can be described as an *o/e*-acrostatic formation **g^hol-ηd-* of this underlying structure, Slavic **želodьkь* as amphikinetic **g^hel-ond-*. The suffix, whose further nature is unclear, looks similar to that of Lat. *glāns, glāndis* ‘gland’ < **g^hlh₂-nd-* (De Vaan 2008: 263) and of Slavic **žěldьbь* ‘acorn’ < **g^hel_hond-* (Derksen 2008: 567), whose *ablaut* relationship echoes that of the previous pair, and perhaps also of Lithuanian *skilāndis* ‘sausage-stomach’. Although the root element is traditionally reconstructed as **g^hel*, nothing prevents us from operating with a base ending in a laryngeal, namely **g^helH-*. In either language the laryngeal would have disappeared: in Slavic before the following vowel, in Greek through the ‘Saussure-effect’, i.e. the loss of laryngeals if preceded by the vowel *o* in the preceding syllable (Nussbaum 1997). In Celtic, on the other hand, the laryngeal makes itself more noticeably felt, as was seen above.

Potentially a few more words can be added to the equation. Greek *χόλικες* ‘entrails, guts’ can be analysed as a formation in **-ik-* from the same lexical root *χολ-* < **g^holH-*. In Hesychius’ lexicon of Greek, reference is made to *γάλλια* (Schmidt 1867: 334.20) of unspecified provenance and Macedonian *γόλα* (emendation for MS *γόδα*, Schmidt 1867: 356.7), both glossed *ἔντερα* ‘intestines’. Since voiced aspirates became voiced stops in Macedonian, the latter of the two could be a genuine cognate of Gr. *χολάδες*, namely a neuter plural or a feminine collective **g^holHeh₂-*. While the analysis of *γάλλια* is less clear due to its unknown linguistic affiliation, it too attests, if related, to a formation without the suffix **-nd-*. Whether the Cypriote word *καλίδια* (Schmidt 1867: 800.4), also glossed *ἔντερα* by Hesychius, belongs here is uncertain.

We can now proceed to a synthesis of the material. The combined evidence assembled above allows the postulation of an Indo-European nominal root **g^helH-* with the approximate meaning ‘digestive organ’, perhaps ‘stomach’.¹⁷ The attested words can be derived from it via the addition of various suffixes:

- **g^holH-eh₂-* > Macedonian *γόλα* ‘intestines’
- **g^hl_hH-jo-* > PC **galjo-* > OIr. *gaile* ‘stomach’
- **g^helH-end-* > Gr. *χολάδες* ‘intestines’ with *o/e*-acrostatic inflection, Slavic **želodьkь* ‘stomach’ with amphikinetic inflection
- **g^hl_hH-ST-o-* > PC **glasso-* > OCor. *glas* ‘stomach’, W **glas*
→ **eġ^hs-g^hl_hH-ST-eh₂-* > PC **egglassā-* ‘out-stomach (?)’ > OIr. *eclas*
‘gizzard, stomach, oesophagus (?)’, Bret *elas* ‘gizzard, liver’

What remains unclear is the origin of Proto-Celtic **-ss-*, which synchronically is no longer analysable as anything other than part of the lexeme, but which diachronically must have been a suffix or suffixoid. It could continue PIE **-sth₂ó-* ‘standing’ as second compound

¹⁶ These words for internal organs are not mentioned in Mallory & Adams (2006: 185–186).

¹⁷ For the record, this root is reminiscent of, albeit incompatible with, other words for internal organs, which feature aspirated gutturals and *l* as radical sounds. The word for ‘gall’ can be reconstructed as **ġ^holno-* etc. (Mallory & Adams 2006: 186). However, this is surely from the root **ġ^hel-* for warm light colours in the region of 500–590 nm wavelength. A word for a ‘gland’ is **g^helġ^heh₂* (Mallory & Adams 2006: 188), but has a different ‘root extension’, as it were.

member (NIL 637–659), but then the meaning of the entire compound **g^hlH-st₂ó-* would approximately have been ‘standing on the stomach’, which does not instil much confidence semantically. Other Celtic words with **-ss-* added directly to a root, which are broadly comparable from a formal perspective, are the colour adjective **glasso-* < **g^hlh₃-st-o-* and **brasso-* ‘big’ < **g^urh₃-st-o-*, which De Bernardo Stempel (1999: 271) calls “quasi-partizipial”. Such an interpretation does not impose itself for **glasso/ā-* ‘stomach’. Other old suffixes with **VssV-* in Celtic are typically disyllabic and extensions of IE **-e/os-* or **-ad/-h₂d-* by a dental suffix **tV-* (cf. De Bernardo Stempel 1999: 268–273, 401–422; Zimmer 2000: 302–303, 444–446; for the treatment of **st* in general see Schrijver 1995: 399–430) and can accordingly not add to the illumination of the present problem.¹⁸

References

- Barrett, Siobhán. 2019. The King of Dál nAraidi’s salve. *Ériu* 69: 171–178.
- Beekes, Robert. 2010. *Etymological dictionary of Greek*. With the assistance of Lucien van Beek [= Leiden Indo-European Etymological Dictionary Series 10], Leiden – Boston: Brill.
- Breatnach, Liam. 2005. Miscellanea Hibernica. In *A Companion in Linguistics. A Festschrift for Anders Ahlqvist on the occasion of his sixtieth birthday*, ed. Bernadette Smelik, Rijcklof Hofman, Camiel Hamans and David Cram, 141–151. Nijmegen: Stichting Uitgeverij de Keltische Draak.
- Campanile, Enrico. 1974. *Profilo etimologico del Cornico antico* [= Biblioteca dell’Italia dialettale e di studi e saggi linguistici 7]. Pisa: Pacini.
- Carney, James and Maura Carney. 1960. A collection of Irish charms. *Saga och Sed: Kungliga Gustav Adolfs Akademiens Årsbok*: 143–152.
- De Bernardo Stempel, Patrizia. 1999. *Nominale Wortbildung des älteren Irischen. Stammbildung und Derivation* [= Buchreihe der Zeitschrift für celtische Philologie 15]. Tübingen: Niemeyer.
- Derksen, Rick. 2008. *Etymological dictionary of the Slavic inherited lexicon* [= Leiden Indo-European Etymological Dictionary Series 4]. Leiden – Boston: Brill.
- Deshayes, Albert. 2003. *Dictionnaire étymologique du breton*. Douarnenez: Le Chasse-Marée.
- De Vaan, Michiel. 2008. *Etymological dictionary of Latin and the other Italic languages* [= Leiden Indo-European Etymological Dictionary Series 7]. Leiden – Boston: Brill.
- Dinneen, Patrick S. 1927. *Foclóir Gaedhilge agus Béarla*, 2nd ed. Dublin: Irish Texts Society.
- Dunkel, George E. 2014. *Lexikon der indogermanischen Partikeln und Pronominalstämme*. Band 1. *Einleitung, Terminologie, Lautgesetze, Adverbialendungen, Nominalsuffixe, Anhänge und Indices*. Band 2: *Lexikon*. Heidelberg: Universitätsverlag Winter.
- eDIL 2019 = *An Electronic dictionary of the Irish language, based on the contributions to a dictionary of the Irish language* (Dublin: Royal Irish Academy, 1913–1976). URL: www.dil.ie.
- Ernault, Emile. 1895. *Glossaire moyen-breton. Deuxième édition corrigée et augmentée. Première partie (A–G)*. Paris: Librairie Bouillon.
- Eska, Joseph F. 1998. Tau Gallicum. *Studia Celtica* 32: 115–127.
- Fleuriot, Léon. 1964. *Dictionnaire des gloses en vieux breton*. Paris: Klincksieck.
- Griffith, Aaron. 2007. The effect of syncope with subsequent anaptyxis on consonant quality in Old Irish. *Ériu* 57: 35–47.

¹⁸ A formal alternative is to reconstruct **(eg^hs)g^hl₂d-to/ā-*, based on the zero-grade stem of Gr. *χολάδες* and Slavic **želodъkъ*. This would conceivably result in Proto-British **(eg)glass* and in Primitive Irish **egglēssō/ā-*, both of which would lead to the attested outcomes in the respective languages. However, the function of the suffix **-to/ā-* remains equally unclear.

- Griffith, Aaron. 2016. On the Old Irish third palatalisation and the 3sg. present of the copula. *Ériu* 66: 39–62.
- Hayden, Deborah. 2018. Three versified medical recipes invoking Dían Cécht. In *Fír fesso: A Festschrift for Neil McLeod*, ed. Anders Ahlqvist & Pamela O’Neill, Sydney Series in Celtic Studies 17, 107–123. Sydney: Celtic Studies Foundation, University of Sydney.
- Hayden, Deborah. 2019a. Attribution and authority in a medieval Irish medical compendium. *Studia Hibernica* 45: 19–51.
- Hayden, Deborah. 2019b. The lexicon of pulmonary ailment in some medieval Irish medical texts. *Zeitschrift für celtische Philologie* 66: 105–129.
- Hayden, Deborah. 2019c. A versified cure for headache and some lexicographical notes. *Keltische Forschungen* 8: 7–22.
- Hayden, Deborah. 2020. Téacs leighis ó thuaisceart Chonnacht: comhthéacs, foinsí agus struchtúr. In *Téamaí agus Tionscadal Taighde. Léachtaí Cholm Cille 50*, ed. Eoghan Ó Raghallaigh, 60–84. Maynooth: An Sagart.
- Hayden, Deborah. 2021. Medieval Irish medical verse in the nineteenth century: some evidence from material culture. *Irish Historical Studies* 45 (168): 159–177.
- Hayden, Deborah. 2022. Old English in the Irish charms. *Speculum* 97.2 : 349–376.
- Henry, Victor. 1900. *Lexique étymologique du breton moderne. Texte établi par Faculté des lettres de Rennes*. Rennes: J. Plihon et L. Hervé.
- Hersart de la Villemarqué, Théodore. 1865. *Le Grand Mystère de Jésus. Passion et Résurrection. Drame Breton du Moyen Age*. Paris: Didier et C^e.
- Jackson, Kenneth H. 1967. *A Historical Phonology of Breton*. Dublin Institute for Advanced Studies.
- Le Berre, Yves. 2011. *La Passion et la Résurrection bretonnes de 1530 suivies de trois poèmes d’après l’édition d’Eozen Quillivere*. Brest: Centre de recherche bretonne et celtique.
- Mallory, James P. and Adams, Douglas Q. 2006. *The Oxford introduction to Proto-Indo-European and the Proto-Indo-European world*. Oxford University Press.
- McCone, Kim. 1996. *Towards a relative chronology of ancient and medieval Celtic sound change* [= Maynooth Studies in Celtic Linguistics 1]. Maynooth: Department of Old and Middle Irish, St. Patrick’s College, Maynooth.
- McLaughlin, Roisin. 2005. Metres in *Mittelirische Verslehren* III. *Ériu* 55: 119–136.
- McLaughlin, Roisin (ed. and trans.). 2008. *Early Irish satire*. Dublin: DIAS.
- Meyer, Kuno. 1893. Review of Standish H. O’Grady, *Silva Gadelica* [Part 1]. *Revue celtique* 14: 321–337.
- Meyer, Kuno. 1894. Review of Standish H. O’Grady, *Silva Gadelica* [Part 2]. *Revue celtique* 15: 108–122.
- Meyer, Kuno (ed.). 1919. *Bruchstücke der älteren Lyrik Irlands*, Abhandlungen der Preussischen Akademie der Wissenschaften, Philosophisch-Historische Klasse 7. Berlin: Gruyter.
- Moran, Pádraic (ed. and trans.) 2019. *De origine scoticae linguae (O’Mulconry’s Glossary). An early Irish linguistic tract, with a related glossary, Irsan* [= Corpus Christianorum Continuatio Mediaevalis, Lexica Latina Medii Aevi 7]. Turnhout: Brepols.
- Nic Dhonnchadha, Aoibheann. 2019a. An Irish medical treatise on vellum and paper from the 16th century. In *Paper and the paper manuscript: a context for the transmission of Gaelic literature*, ed. Pádraic Ó Macháin, 111–125. Cork: Cló Torna.
- Nic Dhonnchadha, Aoibheann. 2019b. Michael Casey’s medical transcripts in Gilbert MS 147. *Éigse* 60: 43–114.
- NIL = Dagmar S. Wodtko, Britta Irslinger and Carolin Schneider 2008. *Nomina im Indogermanischen Lexikon*. Heidelberg: Universitätsverlag Winter.

- Nussbaum, Alan J. 1997. The ‘Saussure Effect’ in Latin and Italic. In *Sound Law and Analogy. Papers in Honor of Robert S. P. Beekes on the occasion of his 60th birthday*. Alexander Lubotsky (ed.), Amsterdam: Rodopi, 181–203.
- Ó Dónaill, Niall. 1977. *Irish–English dictionary*. Dublin: An Gúm.
- O’Grady, Standish H. (ed.). 1892. *Silva Gadelica*, 2 vols. London: Williams and Norgate.
- Schmidt, Moritz. 1867. *Hesychii Alexandrini lexicon. Editio minor*. Zweite Auflage. Jena: Sumptibus Hermannii Dufftii.
- Schrijver, Peter. 1995. *Studies in British Celtic historical phonology* [= Leiden Studies in Indo-European 5]. Amsterdam – Atlanta: Rodopi.
- Schumacher, Stefan. 2004. *Die keltischen Primärverben. Ein vergleichendes, etymologisches und morphologisches Lexikon*. Unter Mitarbeit von Britta Schulze-Thulin und Caroline aan de Wiel [= Innsbrucker Beiträge zur Sprachwissenschaft 110]. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck.
- Stifter, David. forthc. The rise of gemination in Celtic. In ???, ed. Guus Kroonen. Berlin: Mouton de Gruyter.
- Stokes, Whitley and John Strachan (eds). 1901–3. *Thesaurus Palaeohibernicus: a collection of Old-Irish glosses, scholia, prose, and verse*, 3 vols. Cambridge University Press.
- Stüber, Karin. 2015. *Die Verbalabstrakta des Altirischen*. 2 vols. [= Münchner Forschungen zur historischen Sprachwissenschaft 15]. Bremen: Hempen.
- Thurneysen, Rudolf (ed.). 1891. Mittelirische Verslehren. In *Irische Texte mit Übersetzungen und Wörterbuch, vol. 3*, ed. Whitley Stokes and Ernst Windisch, 1–182. Leipzig: S. Hirzel.
- Zair, Nicholas. 2012. *The Reflexes of the Proto-Indo-European laryngeals in Celtic* [= Brill’s Studies in Indo-European Languages & Linguistics 7]. Leiden – Boston: Brill.