

Aberystwyth University

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Rodway, Simon

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The Ogham Inscriptions of Scotland and Brittonic Pictish

Simon Rodway

Aberystwyth University

In this paper, I examine the evidence brought forward by Katherine Forsyth in support of the hypothesis that the ‘Pictish’ ogham inscriptions of Scotland are linguistically Celtic. Having examined the five most promising inscriptions minutely, I conclude that they are in fact not Celtic, and that ‘Celtic-looking’ sequences in them are due to coincidence. Thus, the language of this corpus of inscriptions remains unknown.

1. Introduction

1.1 Of all the evidence brought to bear on the affinity of the Pictish language(s), the Scottish ogham inscriptions are the most intractable. A number of commentators have concluded that they are, in the main, composed in a non-Celtic, indeed non-Indo-European, language, which coexisted with a Brittonic language in Dark-Age Pictland.¹ This conclusion has been challenged by Katherine Forsyth. She has analysed some of the inscriptions as Gaelic, most promisingly those at Buckquoy in Orkney, and at Dunadd.² The latter, despite having been previously analysed as Pictish, is, of course, in the heart of Gaelic Dál Riata, so, if Gaelic, it can be straightforwardly excised from the Pictish corpus. The others, in Forsyth’s analysis, would reflect Gaelic influence in Pictland, and should be seen as outliers of the small corpus of Gaelic ogham inscriptions from Argyll. They would therefore have no bearing on the affinity of Pictish. Forsyth maintains that the rest of the Scottish stones, with the exception of the cryptic Logie Elphinstone inscription, which might have a ritual rather than a straightforward linguistic significance,³ should be considered as Brittonic (Forsyth 1995a:

687-88; Forsyth 1997: 31-36).⁴ This is consistent with recent opinion that the only language spoken in Pictland in the ancient and early medieval eras was a Brittonic Celtic one, ultimately supplanted by Gaelic.⁵ However, the majority of the inscriptions of Pictland continue to defy elucidation, and this is not in every case due to damage, poor execution on the part of the engravers, or the employment of ambiguous characters. *Pace* Alfred Smyth (1984: 58), the corpus of legible inscriptions is certainly large enough to attempt to identify the language in which they are written. It is not doubted that some of the inscriptions contain Celtic personal names. But this is also true of early medieval Roman-alphabet inscriptions in Britain, the matrix language of which is almost invariably Latin.

1.2 My purpose in this paper is to examine the features of the matrix language of the Scottish ogham inscriptions which Forsyth has considered to be Brittonic. I have aimed for comprehensiveness, i.e. to deal with every item which Forsyth seriously discusses in Brittonic terms.⁶ Nonetheless, I have not attempted a reconsideration of the corpus as a whole. Neither have I considered any other class of evidence for the Pictish language(s) at all (namely place- and personal names), mainly because others, better qualified than I, are engaged with such study. Thus my conclusions are not sweeping. Nonetheless, I think they are not insignificant.

2. Burrian

2.1 The most promising of the Scottish oghams, from a Brittonic point of view, is that from Burrian, Orkney, which Forsyth (1996: 198) reads as follows:

I(t/d/o/u/?) (/e/b)IR(/a)RANN(u/)(. /)RRACT(k/e/m/?)EVVC><RROCCS

Of this inscription, Forsyth wrote in 1997:

This is rebarbative to say the least, but if we break it up as *I[-]irann uract cheuc chrocs* we could take the second word as a Pictish cognate of the Old Welsh **guract* ‘he/she made’ (cf. *gwreith* ‘I made’) and the fourth as a spirantized form of a straightforward Pictish **crocs*, ‘cross’ (< Latin *crux*). The third word remains problematic, but if the damaged first word is a personal name we may have here a Pictish sentence explaining who carved the cross (Forsyth 1997: 36)

In a more recent publication, she stated:

the OGAM-inscribed slab from Burrian in Orkney reads, in part ...URRACT C[E]ROCCS ‘X made the cross’ (cf. Welsh *gwnaeth*, Breton *greaz* < British **wraχt(-)* ‘he/she made’) (Forsyth 2006: 1444)⁷

2.2 The first issue that we must address if we are to make any sense of this inscription is that of word division (cf. Forsyth 1996: 200-2). It seems plausible, despite the doubts of John Rhys (1892: 292-3), that the final word is indeed a borrowing from Latin *crux*. After all, this stone does bear a cross.⁸ However, there are some linguistic problems. According to Kenneth Jackson, British Latin *-x*, pronounced [χs], as in Gaul, became /i_xs/ in the Brittonic languages in the late sixth or early seventh century (Jackson 1953: 533, 537-40, 696).⁹ -CCS could be a conservative spelling for this sound. However, the **O** requires some explanation, if we accept that the regular Brittonic reflex of *crux* is represented by Welsh *crwys*, latterly considered to be plural, with standard Welsh *croes* being an analogical formation based on the alternation -oe- ~ -wy- seen in words such as *croen* ‘skin’ ~ *crwyn* ‘skins’.¹⁰ However, this analysis is

dismissed as ‘most unlikely’ by Peter Schrijver (1995: 222). He goes on to suggest (229, 233) that *crux* was treated as an *ā*-stem in Brittonic, with *croes* developing from **krox̄sā* < **krux̄sā*, with *crwys* perhaps belonging ‘to a more elevated level of speech’ (cf. Davies et al. 2000: 208). An alternative explanation is to derive *croes* from Vulgar Latin *crox* (*GPC* s.v. *croes*; *LEIA* C-247; Mac Cana 2001: 25, n. 26): this is characterized as ‘ad hoc’ by Schrijver (1995: 222). According to Kenneth Jackson, the Vulgar Latin change /u/ > /o/ in stressed syllables is apparently not attested in Roman Britain (Jackson 1953: 86-7, 259-60, 274; cf. Smith 1983, 903), but its absence from the record is ‘insignificant’, according to J. N. Adams (2007: 588).¹¹ At any rate, despite the asterisk in *GPC* et al., CROX is attested twice in inscriptions from early medieval Brittany (Davies et al. 2000: 206, 216; Sims-Williams 2003: 102),¹² and we have CROS in eleventh-century Wales (Redknap and Lewis 2007: 496), which shows this development, as well as Vulgar Latin confusion of *s* and *x*.¹³ Either of these explanations could also account for *crog* (not ***crwg*) < *crucem* (Lewis 1943: 35). Thus, Welsh *croes* and our Pictish form could plausibly derive from *crux*. Note also apparent examples of <o> for /u/ in Pictish (Koch 1982-3: 215; James 2013: 10) We might compare **CRRO**(/s)SCC from the Bressay stone on Shetland, which also bears a cross. The final /k/ apparently attested here is paralleled in the Scottish Gaelic forms *crasg*, *crosg* beside *crois* < Old Irish *cross* with the regular Gaelic development of Latin *x* (Lewis and Pedersen 1961a: 59). The origin of the final consonant in *crasg*, *crosg* is obscure,¹⁴ but if it was an early development, perhaps the Bressay form is borrowed from Gaelic.¹⁵ In Gaelic *cross(g)*, the /o/, if not from Vulgar Latin *crox* (*LEIA* C-247), can be explained as analogical to *ā*-stem nouns such as *coss* ‘foot’ (Thurneysen 1946: 575). Could the Burrian form in -CCS be due to metathesis? Oliver Padel (1972: 31, 78) prefers to consider it a mistake.

2.3 There remains the question of where the beginning of this word lies, however. The symbol >< is probably a version of the *forfid* ('additional letter') known as *Ébad vel sim* in the manuscript keys to the ogham alphabet (Forsyth 1996: 196, 200, 409-10). This could be analysed as /x/, i.e. spirantized /k/, thus the beginning of the word (Forsyth 1997: 36; cf. Forsyth 1996: 201; Koch et al 2007: 170). This *forfid* is conventionally transcribed **K** when it has consonantal value. Or could **CK** stand for /x/ (cf. Middle Welsh *cch* for /x/)?¹⁶ But >< was also used for a type of /e/ in Irish, hence its manuscript name. Could it here represent an intrusive vowel in the consonant cluster /kr/?¹⁷ In Continental Celtic and early Irish we have examples of this phenomenon internally, but only exceptionally, if at all, in initial position.¹⁸ However, we do have examples of intrusive vowels between initial stops and resonants in some medieval and early modern Welsh manuscripts, e.g. *gynaud* for *cnawd* 'flesh' (Jarman 1982: 27.17); *diristan* for *Drystan* (Jarman 1982: 35.17); *twrwm* for *trwm* 'heavy' (Williams 1935: 209); *kylywey* for *klywey* 'heard' (Llanstephan 1, p. 86); *gwnotaessynt* for *gnotaessynt* 'they had become accustomed' (Llanstephan 1, p. 130); *kereir* for *kreir* 'relic' (twice) (Peniarth 29, p. 44); *dylid* (Morris-Jones and Parry-Williams 1933: 9) = *dylit* (Evans 1911: 1146.34) for *dlid* 'attribute, material'; *dilideu*, *delideu* for *dlideu* 'attributes, materials' (Morris-Jones and Parry-Williams 1933: 21; Williams 1968: IX.12; Haycock 2015: 4.21); *thylws* for *tlws* 'treasure' (Bartrum 1962-3: 455), *bwlw(y)ddyn* for *blwyddyn* 'year', *byleiddiau* for *bleiddiau* 'wolves' (Jones 1915: 298, n. 1).¹⁹ Examples in which a form with an intrusive vowel has become regular in Welsh include *dyled* 'merit'²⁰ < Middle Welsh *dlyet*, *dylyet* : Old Irish *dliged*; *tyno* 'valley' < Old Welsh *tnou*, *tonou*; *dyrys* 'wild; difficult' < *drys* 'thorns' : Old Cornish *dreis* : Old Irish *driss*.²¹ Cf. also *tylawd*, a variant of *tlawd* 'poor', and its derivatives, which occur in late medieval and Early Modern Welsh texts, sometimes confirmed by metrics (*GPC*, s.v. *tlawd*; Jacobs 2012: III.21b, *dylodedd* for *tlodedd* 'poverty'; Jacobs 2012: XII [A].9d, *dylodion* for *tlodion* 'poor people'). This has also

happened in some Breton forms, e.g. Vannetais *dele* ‘debt’ beside Leonais *dle*; *barad* ‘treachery’ < **brad* : Welsh *brad* : Irish *brath* (Vendryes 1900-1: 307; Parry-Williams 1913: 22; Jackson 1967: 405), and cf. Late Cornish (Edward Lhuyd) *knyfan*, *kynyphan* ‘nut’; place-names Killiganoon, Killeganogue (Padel 1985: 61).²² In the light of Cornish *dylly* : Middle Breton *dellit* beside Middle Welsh *dyly* < *dly* : Old Irish *dligid* ‘to have a right or obligation to’ (Lewis and Pedersen 1961a: 358; Zimmer 2000: 351) and Old Breton *t(o)nou* : Cornish (*Tre*)*tdeno* beside Old Welsh *t(o)nou* (*GPC* s.v. *tyno*), this must have occurred in these lexemes at the Brittonic stage. Thus, the intrusive vowel between initial stop and resonant seems to have been an incipient Brittonic feature which developed sporadically in the separate languages. Therefore, Oliver Padel’s speculation that the intrusive vowel in the Burrian form is due to the fact that Pictish might have ‘had no initial group /kr/ of its own’ (Padel 1972: 31, 78; cf. Forsyth 1996: 201) is unnecessary. I conclude that a Brittonic Pictish *ceroccs* ‘cross’ is perfectly plausible.

2.4 Beyond this, we are on uncertain ground. If the first word in the inscription is a personal name, note that Pictish names in *-an* are well-attested, e.g. *Drostan*, *Talorgan* etc., and Adamnán’s Picts Broichan, Artbranan and Iogenan (discussed by Jackson 1980: 143).²³ Cf. **-[CRON(a)N(n)]-** (the incomplete Poltalloch inscription), i.e. Gaelic *Cronán*,²⁴ albeit from a Gaelic rather than a Pictish milieu. This name contains the Gaelic diminutive *-án* < **-agnos*, which was borrowed to Brittonic.²⁵ The section preceding **ANN** is so difficult to read, that it seems hardly worth speculating. Katherine Forsyth lists a number of possibilities (1996: 202-3). At any rate, her proposed word division is quite possible, but by no means certain.

2.5 Can we connect **(u)RRACT** with ‘Old Welsh **guract*’ < Brittonic ‘**wraχt(-)*’?²⁶ Compare Middle Welsh *(g)wreith* ‘I made’ from the poem ‘Pais Dinogad’, recorded by

Scribe A in the Book of Aneirin (Williams 1938: 1. 1102) < **wraxt-ū*; Middle/Modern Welsh *gwnaeth* (with intrusive *n*)²⁷ < **wraxt-*, beside forms derived from **wrext-*, **wrixt-* (Isaac 1996: 333-6; Schumacher 2004: 709-11). What would be the value of –CT here? /kt/ seems to have become /xt/ at the Common Celtic stage.²⁸ According to Kenneth Jackson, Pictish /xt/ had become ‘*it* [...] at least by the eighth century’.²⁹ CT could simply be a conservative spelling, normal in the Dark-Age British sources (Jackson 1953: 407). We can compare **NECTON** (Mains of Afforsk, Aberdeenshire)³⁰ beside **NEHHTON** (Lunnasting, Shetland), **NEITANO** (Peebles (Steer 1968-69)) and Bede’s *Naiton*, surely all forms of the same name,³¹ and Middle Welsh *rector* ~ *rechtur* ~ *reithur* (Williams 1938: 257; Rowland 1990b: 120; Haycock 2015: 301).³² As for the initial sound, Celtic initial /w/ was apparently retained in Pictish (Jackson 1980: 163; Koch, 2000: 33; James 2013: 28-9), i.e. it did not become *gw-* (as in other Brittonic languages) or *f-* (as in Gaelic). But why use the vowel U here rather than the consonant symbol V? Did the latter already represent /f/ in ogham by the time the alphabet reached Pictland?³³ Or was our oghamist aware that it had come to represent /f/ in Gaelic ogham inscriptions? Note the ninth-century Roman-letter inscription from St Vigean which contains the names **FORCUS** < **Worgustus* (Padel 1972: 34, 159) and **UORET** < **wo-*, the first, but not the second, showing the Irish development /w/ > /f/ (cf. Rhys 1898: 387; O’Rahilly 1946: 369-70).³⁴ Or does this show the influence of Latin literacy, in which *u* and *v* are interchangeable (cf. Sims-Williams 2007: 86-7)? John Rhys mentions Old Norse ‘which had *u* and *w* represented by one and the same symbol in the later runic alphabets’ (Rhys 1892: 297, 301; cf. Page 1973: 192), but, of course, the runic alphabet originally did distinguish between the vowel /u/ and the semi-vowel /w/, as did ogham (McManus 1991: 23). The Burrian inscription is probably too early to show Norse influence, but note a possible example of *u* for *w* in an Anglo-Saxon runic inscription from Whitby (Page 1973: 171).³⁵ Note further that the ogham letter U is used with consonantal value in the eighth- or

ninth-century Codex Bernensis (McManus 1991: 135).³⁶ The fact that the **U** in our inscription is angled may or may not have a bearing on its phonetic value (Forsyth 1996: 90, 156, 200, 212, 275-7; Forsyth 2007: 466). Francis John Byrne (2008: 97) states that ‘in the Pictish examples, insofar as the obscurity of the language allows us to infer, it seems that the consonant **V** (> Old Irish **F**) and the vowel **U** are interchangeable’. At any rate, formally the interpretation of **(u)RRACT** as a Brittonic verb meaning ‘made’ looks fine.³⁷

2.6 Semantically, too, there are no problems here. We have plenty of Dark-Age insular examples of the formula ‘X made this monument’ and variants, although none in the Irish ogham inscriptions (McManus 1991: 51). Beginning with those containing the form *fecit*, semantically comparable to **uract*, we have the lost fifth-century stone from Aberdâr, Glamorgan ERECOR MAGLORI CVNIIAC FICIT (Redknap and Lewis 2007: 264),³⁸ the ninth-century inscription from Llanddeti, Breconshire GUADAN SACERDOS FECIT CRUX [sic!] (Redknap and Lewis 2007: 175), the ninth- or tenth-century inscription from Baglan, Glamorgan BRANCU F (= *fecit*?) (Redknap and Lewis 2007: 266; cf. Jackson 1953: 484, n. 1), the ninth- to tenth-century cross-slab from Llanveynoe, Herefordshire HAERDUR {h} FECIT CRUCEM ISTAM (Redknap and Lewis 2007: 534), the ninth- to eleventh-century inscription from Llandecwyn, Merionethshire HELIDIACO[.] / MEFECI ‘Heli the deacon, I made it’ (Edwards 2013: 401), the twelfth-century font from Partishow, Breconshire MENHIR ME FECIT (Redknap and Lewis 2007: 240), and the eleventh-/twelfth-century cross from Llanarthne, Carmarthenshire, ELMON [.]ECIT[HC]CR[U]CEM (Edwards 2007: 224). Perhaps also Lanhadron, Cornwall, if Macalister was right to read LURATECUS FECIT CRUCEM, but the reading of this very weathered inscription is uncertain (Okasha 1993: 131-2; Sims-Williams 2003: 195). The incomplete Dark-Age inscription from Tintagel, Cornwall contains two instances of FICIT for *fecit* (Hale 2006:

1669).³⁹ Several Roman-alphabet inscriptions from Ireland contain the formula OR DO X DORIGNE... ‘a prayer for X who made...’ (*CIIC*, II: ii), but most are later than the Scottish oghams (eleventh century onwards). A possible earlier example is OR DO COLMAN DORRO..IN CROSSA AR RIG HERENN ‘A prayer for Colman who made the cross for the king of Ireland’ from the Kinnitty cross (842 × 862) (de Paor 1987: 140; Harbison 1992, I: 356), assuming that the damaged DORRO.. stands for something like Middle Irish *do:róni* ‘made’, a form attested from at least the tenth century (Breatnach 1994: 306; McCone 1997: 234).⁴⁰ Note also English inscriptions containing variants of the formula ‘X wrought Y’.⁴¹

2.7 As for the syntax, Forsyth notes that this would be a subject-initial sentence (Forsyth 1996: 203; Forsyth 1997: 36, n. 138). Brittonic seems to have inherited an unmarked verb-initial word order.⁴² Nonetheless, subject-initial constructions undoubtedly occur in early Welsh poetry, e.g. *beird byt barnant wyr o gallon* (Williams 1938: l. 285) ‘poets of the world pronounce judgement on men of heart’ (Isaac 1996: 243).⁴³ This seems likely to reflect poetic license rather than an underlying subject-initial syntax shared by Brittonic and Gaulish.⁴⁴ Note that, according to John Morris Jones’s reading, the ninth-century Tywyn inscription shows subject-initial syntax: CINGEN CELEN TRICET NITANAM ‘Cynien’s corpse remains beneath’ (Morris Jones 1918: 261-3; cf. Fleuriot 1983: 104; Isaac 1996: 62-3).⁴⁵ According to Ifor Williams’s interpretation, however, TRICET begins a new sentence (Williams 1980: 36-7), and this corresponds to Old Welsh evidence for the syntax of absolute verbal forms which almost invariably occur at the beginning of a clause (Rodway 2013: 91-5). Or could the Tywyn inscription bear a *nominativus pendens* construction (on which see McCone 2006: 11)? An Old Welsh example of such a construction, also containing an absolute verbal form, is *ir pimhet eterin diguormechis Lucas, hegit hunnoid* ‘the fifth bird which Luke added, this one goes...’.⁴⁶ This could provide a comparandum for the Burrian

inscription. Or perhaps we see here influence from the Latin formula X FECIT CRUCEM?
At any rate, syntax is not a bar here.

2.8 Another interpretation occurs to me, however. If we segment the words differently, could we compare **(u)RRAC** with Welsh *gwraig* ‘woman, wife’ < **wrakī* < *wrakō* (Jackson 1953: 595; Lewis and Pedersen 1961a: 66; *GPC s.v. gwraig*)? If so, there is no indication of *i*-affection here. This need not worry us unduly - Kenneth Jackson dated this Brittonic sound change to the late fifth or early sixth century,⁴⁷ but notes that it begins to be indicated in the native written tradition in the seventh century (Jackson 1953: 600-1, 603, 619, 695; cf. Sims-Williams 2003: 282-3, 290). The Burrian inscription may be as old as the seventh century (Padel 1972: 12, 75; Forsyth 1996: 187, 191) - at any rate conservative spellings which do not indicate *i*-affection are recorded in Old Welsh, Cornish and Breton as late as the tenth century.⁴⁸ In fact, Jackson sees little evidence for *i*-affection in Brittonic Pictish at all.⁴⁹ Besides, there exists a secondary formation in all the insular Celtic languages with gemination and *ā*-stem flexion, namely **wrakkā* > Old Irish *fracc* ‘woman’ : Old Cornish *gruah* gl. *anus* ‘old woman’ : Breton *gwrac’h* ‘old woman’ : Welsh *gwrach* ‘witch’ (de Bernardo Stempel 1999b: 520-1; Zimmer 2000: 278; Meid 2015: 80, 253). The negative force of *-ch* from geminated /kk/ seen in *gwrach* appears to represent an internal Welsh development (see Wmffre 2007: 59; Sims-Williams 2011: 183-4),⁵⁰ and while the meaning ‘old woman’ attested in Cornish and Breton may not appear to suit our context as well as ‘wife’ *vel sim*, the Old Irish form seems to have meant quite simply ‘woman’. Another issue is the apparent lack of gemination in the Burrian inscription, but as we do not fully understand the principles behind the use of double consonants in the Scottish ogham inscriptions (Padel 1972: 29; Forsyth 1996: lvii, 114), this is not certain. Thus we could have a Brittonic Pictish word for ‘woman, wife’ here. Only one Gaelic ogham inscription (from

Wales) commemorates a woman (McManus 1991: 63). However, insular Roman-alphabet and runic memorials for women occur, some of whom are described as wives of named individuals. We have two possible Old Welsh terms for wife, CIMALTED GU[REIC] (?)⁵¹ and BEN, on the Tywyn inscription (Williams 1980: 28-9, 30, 33, 35, 39; Sims-Williams 2003: 128, n. 725, 176; Edwards 2013: 103, 422-30), five runic inscriptions from Man commemorating wives (Kermode 1907: 169, 195, 198, 209, 210; cf. Jesch, 1991: 74), and a number of examples of Latin CONIU(N)X, MULIER, UX(S)OR from Wales (Sims-Williams 2007: 183; Edwards 2007: 491; Edwards 2013: 54, 199, 201-2, 208-9, 210, 214, 346-8, 349-51, 409), plus one of MULIER from Brittany (Davies et al. 2000: 206).⁵² If we adopt this interpretation, the following section, **T(k)EVV[C]**, would have to contain a male personal name, or an abbreviation of one. Abbreviations in the Dark-Age inscriptions of Britain and Brittany are uncommon (Rhys 1879: 197) and are generally confined to Latin formula words (cf. frequent abbreviation in Latin inscriptions in the Classical tradition), but abbreviated vernacular words are probably attested at Tywyn (the personal name TENGR[UM]UI, M[ORT]C[IC] ‘?memorial’, in addition to GU[REIC]).⁵³ Abbreviations are absent from Gaelic ogham inscriptions, with the possible exception of the Buckquoy spindle-whorl (see Forsyth 1995a: 690; Forsyth 1996: 178-80 – but see Rodway 2017 for a different interpretation). R. I. Page (1973: 172) notes some examples of single runes or pairs of runes on household items from England, which he takes to be abbreviations of the owners’ names, but one would expect a rather different register on a sepulchral monument.

2.9 One of the biggest problems with this inscription is: what on earth is **(k)EVV[C]**? Is it connected with **HCCVVEVV** from Lunnasting? Oliver Padel points out that the latter could begin with /xw-/, a phoneme sequence attested initially in Brittonic languages (Padel 1972: 30, n. 1, 123; cf. Forsyth 1996: 415-6; Sims-Williams 2003: 146) – for an orthographical

comparandum, cf. HC for /x/ in BROHCMA(I)L (twice) on the Pillar of Eliseg (Sims-Williams 2003: 138; Edwards 2013: 333; cf. Rhys 1879: 223), and note Old Cornish *elerhc* ‘swan(s)’ (Campanile 1974: 41).⁵⁴ But Welsh and Breton initial /xw-/ are apparently late and independent developments from /hw/ < /sw/, and note that /hw-/ is retained in modern Welsh dialects in the south,⁵⁵ and apparently in Middle Cornish where it is generally realized as *wh-* (Schrijver 1995: 325).⁵⁶ At any rate the Burrian form seems to have /x-/ , not /xw-/ , so the two forms are very probably unrelated (cf. Forsyth 1996: 203). The apparent spirantization of the Burrian word, indicated by the use of the symbol **K**, is hard to account for in a Brittonic context. One word which is consistently spelled with **K** in the Irish inscriptions is the formula word **KOI** /xoi/ ‘here’.⁵⁷ Initial /x/ in this word is apparently corroborated by the Roman-letter inscription CAMVLORISHOI ‘here lies Camulorīx’ from Rhuddgaer, Llangainwen, Anglesey (Sims-Williams 2003: 27, 138, 146, 302; Sims-Williams 2007: 140-1, 204).⁵⁸ Could we have a form of **KOI** in our inscription?⁵⁹ Could **KE** represent an unstressed variant, i.e. [xə] or some such? The pretonic variant **KI** discussed by Pokorny (1915; cf. Thurneysen 1946: 501), which might have provided a comparandum, appears to be a ghost, however (McManus 1991: 70-1, 171, n. 12; cf. Thurneysen 1946: 703). Do we see instead a phonological development of the diphthong in the stressed form? Primitive Irish /ai oi ui/ became [e:] *vel sim* in at least some dialects of Middle Irish.⁶⁰ Thus could **KE** stand for /xe:/ < /xoi/? By the middle of the seventeenth century, the [e:] pronunciation was perceived to be southern.⁶¹ However, in the modern period, as well as appearing in parts of Munster (Hickey 2011: 241) and Leinster (Williams 1994: 476), it can be found in the Isle of Man (Jackson 1955: 47-50; Wagner 1958: 26), and in Rathlin Island off the coast of Co. Antrim, where *caora* ‘sheep’ was pronounced [kè:rə] (Wagner 1958: 26). The spelling *e* for this diphthong is attested in the twelfth-century Scottish Book of Deer (Jackson 1972: 133-5) and in a thirteenth-century version of the Scottish king list (Broun 1998: 194). Ronald Black (2001:

447) notes that rhyme between *ao* and *é* is ‘normal’ in eighteenth-century Scottish Gaelic poetry. Thus geography is not necessarily an obstacle here. But what of chronology? Damian McManus notes a handful of examples of Irish ogham <E> for <AI OI> (McManus 1991: 121), but these can all be explained differently. One, *CIIC* 26 **NETTAVRECC** (= *Nad-Fróich*), is damaged, and should perhaps be read **NETTAVROECC** or **NETTAVROICC** (McManus 1991: 66, 110, 121), but note ‘most peculiar’ **NIOTT-VRECC** (*CIIC* 202 - with hypercorrect **NIOTT** under the influence of **NIOTTA** ‘nephew’?). If these are not precocious examples of ‘Middle Irish’ monophthongization, both could represent an Old Irish variant with a monophthong according to Sabine Ziegler (1994: 252, n. 406; cf. Meid 2015: 78). In the case of **DUMELEDONAS** (for **-AIDONAS**), the second **E** could represent reduction of an unstressed vowel to [ə], if it is not an example of ‘erroneous spelling’, to use McManus’s term (cf. MacNeill 1909: 369-70; Harvey 1987: 69-70; Swift 1997: 97). Ziegler (1994: 91, 98, 175, n. 294) posits Brittonic influence on this inscription, which is from Llandawke in Carmarthenshire (cf. Brittonic /ai/ > /ɛ:/ (Jackson 1953: 328-30)), while Patrick Sims-Williams suggests that it might have **E** for *áe/aí* ‘according to medieval Latin conventions’ (Sims-Williams 2003: 78, n. 364, 196, 305, n. 71; Edwards 2007: 234).⁶² /oi/ > /ɛ:/ would be attested on an (apparently late) ogham inscription from the Isle of Man (*CIIC* 502) if we were to accept J. J. Kneen’s analysis of **]MAQ LEOG[** as ‘*Mac Laoghóg, “son of Laoghóg” (dim. of *laogh* [< Old Irish *lóeg*], “a calf”)’ (Kneen 1937: 261),⁶³ but this seems unlikely: the posited diminutive is not attested, and the omission of internal /y/ would be unexpected in a Gaelic inscription (see Edwards 2007: 288-9, 293).⁶⁴ Sabine Ziegler compares Old Irish *Mac-Líac* ‘Sohn des Steines’ (Ziegler 1994: 193; cf. Sims-Williams 2003: 132, 302), although such a spelling would be unprecedented. At any rate, this cannot be taken as a secure example of this sound-change.

2.10 Another apparent ‘Middle Irish’ phonetic development in the Pictish inscriptions, which could provide a comparandum, is **MEQQ**, if this is genitive *meic* ‘son’ < Old Irish *maicc* < ogham **MAQ(Q)I**.⁶⁵ However, in this form **QQ** seems to show orthographic conservatism, while **E** apparently shows innovation. Is this credible? Perhaps. As Damian McManus has shown, the use of **Q** in Irish ogham inscriptions is not a conscious archaism on the part of the oghamists, but rather a well-established convention which lasted well beyond the completion of the phonological change /k^w/ > /k/.⁶⁶ We do not know what sound **Q** (which almost only occurs in this word in the Scottish inscriptions (Forsyth 1996: 9, 38)) represented to the Pictish oghamists – it could conceivably have been /p/ or even /b/ (cf. Forsyth 1996: xxxvii-xxxviii, 64). Thus we should not necessarily look for a Gaelic explanation for the fluctuation **A/E** in this word. Note that Macalister attempted to explain the variants **MAQQ** and **MEQQ** as reflecting a Pictish vowel harmony rule (Macalister 1940: 204, 224). This is very speculative, of course, but not necessarily wrong – Forsyth describes it as ‘highly unlikely’, suggesting instead that **MEQQ** may be a ‘northern dialectal variant’ of **MAQQ** (1996: 132; cf. 314-5, 369). This too is speculation. Thus, our putative corroborative evidence for a ‘Middle Irish’ development in the Scottish oghams is perhaps illusory. At any rate, would a formula word like **KOI** which is unattested outside the inscriptions (and which is uncommon in the later ones (McManus 1991: 80; Swift 1997: 106-7)) undergo a Middle Irish change? Especially as, if we accept a tentative seventh- or eighth-century date for the Burrian inscription (Padel 1972: 12, 75; Forsyth 1996: 187, 191, 195), it would pre-date by centuries the earliest evidence for this sound change in Irish – I am unaware of examples of <e> for /ai oi ui/ prior to the eleventh century.⁶⁷ Could our form be a variant of **KOI**, cf. Old Irish *cé* ‘here’ (Thurneysen 1946: 501; McManus 1991: 119; Hamp 2003)?⁶⁸

2.11 What then would **VV** be? It is tempting to see a form of **wo* ‘under’ (> Old Irish *fo* : Welsh *g(w)o*) here, perhaps **wu* (if we are prepared to accept **V** for /u/ as well as for /w/). This preposition occurs once in a Middle Welsh poem with a term for a sepulchral monument, namely *kyn y olo go uudelw* (Williams 1938: l. 1472) ‘before he was buried beneath a pillar’ (Isaac 2002: 76, 85). It was supplanted at an early stage by Old Welsh *guotan*, Middle Welsh *o dan* (with variants *a dan*, *y dan*),⁶⁹ hence, for example, *y dan y* [MS *vy*] *guerid rut nv neud araf* (Jarman 1982: 17.30) ‘Under the red earth now he is silent’ (Bollard 1990: 25); *Bedd Gwydion ap Don ym Morfa Dinl[l]eu/ y dan fain deveillon* ‘The grave of Gwydion son of Dôn on Morfa Dinlleu/ under the stones of Defeillon’ (Jones 1967: 134, 135). In Gaelic literature, however, there is a number of examples, in a funerary context, of *fo* + a word for ‘stone’ which probably refer to monuments rather than naturally occurring rocks, although there are no early examples from funerary inscriptions *per se*.⁷⁰ But positing a Pictish form such as **wu* seems dangerously *ad hoc*, however well it might suit semantically. I know of no examples of **wu* in Brittonic in independent position, with the possible exception of Old Welsh *gutan* ‘under’ (Williams 1980: 96; Falileyev 2000: 75), which may be, judging from its modern reflex *o dan*, a loose rather than a close compound (*contra* Williams 1948-50: 6). However, as *guotan* occurs in the same text, it may simply be an error. The (mostly South-West) Brittonic change **wo-* > **wu-* in compounds (Jackson 1967: 432-5; Schrijver 1995: 111-6; Russell 2015) is irrelevant when considering the independent preposition. At any rate, it may well not have applied to Brittonic Pictish (Jackson 1980: 163; Koch 2000: 34). We do have examples of *fu* for *fo* in Old Irish (Thurneysen 1946: 512), including from sources categorized by Thurneysen as ‘archaic’ (i.e. seventh-century) (Stifter 2014: 225-6), but I am not aware of an example in *ogham* Irish.⁷¹ *Fu* may reflect allophonic variation in the realization of unstressed rounded vowels of various origins (/o u o: u:/) depending on a variety of factors (Thurneysen 1946: 63; Stifter 2014), or may have been

merely orthographical by the seventh century (McCone 1996: 135; cf. Charles-Edwards 1995: 728). The only other possibility which occurs to me is that **VV** might stand for *w*, i.e. an abbreviation – note examples of *F* for *for* in the formula *bendacht for anim X* ‘a blessing on the soul of X’ in Irish inscriptions (*CHIC* 529, 916, 917; cf. Forsyth 1995a: 689; Forsyth 1996: 178). However, this is a common formula, whereas abbreviation in our example would be ill-motivated, and would, at any rate, scarcely save any space. Besides, it is not certain that the monument was funerary (Forsyth 1996: 189-90). In some ways it resembles the casual ‘graffiti’-type inscriptions (Forsyth 1996: lxv, lxvii; cf. 198). Thus, tempting as it might be, I am not going to endorse a translation ‘X wife of T. [lies] here under a cross’. At any rate, *were* we to accept such an interpretation, some elements (**KE**, **VV**) are more easily explicable in Gaelic than Brittonic terms. On the other hand, **C><ROCCS** with an intrusive vowel in the initial consonant cluster is explicable in Brittonic, but not in Gaelic terms.⁷²

3. Brandsbutt

3.1 IRATADDOARENS[- (Brandsbutt, Aberdeenshire; reading from Forsyth 1996: 112). Katherine Forsyth suggested that perhaps ‘IRA is a Pictish verb, cognate with the Breton *irha* “he lies” proposed for the Lomarec inscription by L. Fleuriot’ (Forsyth 1997: 36, n. 133).⁷³ According to Fleuriot (1970: 644-50), IRHAEMA from Lomarec is to be divided *irha ema*. The second word would be *ema* ‘here’, with *irha* being a denominative in **-sag-* from *ir* ‘earth, tomb’, an extension of *ir* ‘verdant, fresh’, cf. Irish *úir*, *úr* ‘mould, earth, clay, soil [...] freq. of the grave’ (*DIL* s.v. *úir*, *úr*) < *úr* ‘fresh, new’ (*DIL* s.v. 2 *úr*). One of the meanings given by Dinneen for the verb *úruighim* < *úr* is ‘I moulder into earth’ (Dinneen 1927: 1306). Thus Fleuriot translates IRHA EMA ‘est enterré ici’ (1970: 652). The Brandsbutt form, however, is IRA, not IRHA. This is not really a problem. We have Middle Welsh examples of *h*-less spellings of such denominatives (Rodway 2013: 136),⁷⁴ and note HIROIDIL for

Hirhoeddl on a ninth-century inscription from Llanwnnw, Ceredigion (Rhys 1879: 238; Sims-Williams 2003: 107, 225; Edwards 2007: 183). Also, the ambiguity in the Pictish inscriptions of the symbol traditionally transliterated **H** (= /x/? /j/?)⁷⁵ might make it unsuitable for use to represent /h/.

3.2 What about the rest of the inscription? Could **TAD[D]** correspond to Welsh *tad* ‘father’?

This could only work if we accept that the orthography here shows Brittonic lenition of intervocalic /t/ > /d/. This is highly unusual in the early Christian inscriptions of Britain and Brittany (Jackson 1953: 176-7, 549-50), and in Old Welsh, Cornish and Breton (Jackson 1953: 68-9, 71; Jenkins and Owen 1984: 101; Sims-Williams 1991: 23-4). Nonetheless, we have a handful of examples of *d* for internal /d/ in these sources, e.g. Old Welsh *hendat* ‘grandfather’ (Falileyev 2000: 82; cf. Jenkins and Owen 1984: 109), *modreped* ‘aunts’ (Falileyev 2000: 114); Old Cornish personal names *Wendeern*, *Anaudat* (Förster 1930: 95, 97). In these examples, it could be due to English influence (Gwara 2004: 28, n. 148). It is, however, more common (although still rare) in Old Breton (see examples cited by Jackson 1953: 69; 399, n. 2). Cf. *BELADORE* or *BELADO RE*(*quiescit*) on a sixth- or seventh-century inscription from Bourg Saint-Pair in Brittany, if this is a feminine form of *Belator*, or a derivative of **Belatu-* (Davies et al 2000: 79, 262-3; Sims-Williams 2003: 49; Koch et al 2007: 171). These examples are exceptional however - normally /-d(-)/ is spelled *t*. It might be objected that this convention may not have applied to ogham, as Irish ogham inscriptions, unlike manuscript Old Irish in which *t* is normally employed for /-d(-)/, consistently represent internal or final /d/ (e.g. < /nt/) with **D** (McManus 1991: 123-24), e.g. **SEDAN[I]**, **SEDDOINI** (McManus 1991: 87; Ziegler 1994: 231-32). However, the evidence of the bilingual ogham inscriptions from Wales shows that Brittonic lenition was rarely indicated, either because the oghamists were influenced by Brittonic/British Latin orthographical

conventions, or because they were phonologically Hibernicizing Brittonic names (Sims-Williams 2003: 52-5; cf. Jackson 1953: 182-5). There are some apparent exceptions, however, e.g. **AMADU** < Latin *Amatus* in an inscription from Ardmore, Co. Kerry, showing British (or Vulgar) Latin /-t-/ > /d/.⁷⁶ Thus, reading *tad* here might be admitted, and there are semantic precedents. Note a handful of examples of PATER in Welsh inscriptions and one of PARENS from Herefordshire (Sims-Williams 2007: 182). Nash-Williams (1950: 221, n. 1) notes that ‘Christian-Roman epitaphs on the Continent not infrequently include mention of “parents”’. It seems odd, however, to refer to the incumbent of a grave only as someone’s father – we would expect a name too. Or do we have an unusual word order here with the son’s name coming after that of the father? This seems unlikely.⁷⁷ Could **TAD[D]** rather be an ecclesiastical title – cf. SACERDOS, PRESBYTER etc. in Latin inscriptions from Britain and Brittany,⁷⁸ **QRIMITIR** (McManus 1991: 52), SAGART ‘priest’ (*CIIC* 899) from Ireland? However, although there are examples from the eighth century onwards of *pater* as a title for ecclesiastics in British Latin texts (Latham et al 1975-2013: 2142), examples of this usage in the vernaculars appear to be late. The use of Welsh *tad* as a title for a priest, for example, is not recorded by *GPC* before the fifteenth century (*GPC s.v. tad*). *Pater* occurs as a personal name in medieval Wales (Evans and Rhys 1893: 415),⁷⁹ but not *Tad*, as far as I know. Note, however, the derivatives *Tadic* and *Tadou* in Breton cartularies (Cane 2003: 284, 290).⁸⁰ Cf. possibly Celtic personal names in *Tad-*, *Tat(t)-* from the continent.⁸¹ If we segment the inscription differently, could **IRAT** be an impersonal preterite in *-at* (Rodway 2013: 77), thus ‘X was buried’? Could **AD[D]** be the preposition *ad* ‘to’ which seems to have existed in Brittonic and in early Welsh and Breton?⁸² Note that *ad-* is also attested as a prefix in compounds (Lewis and Pedersen 1961a: 260; Zimmer 2000: 228; Falileyev et al 2010: 5), including personal names: there are dozens of ancient Celtic examples,⁸³ and plenty of later comparanda, e.g. Old Cornish *Eselt* : Welsh *Esyllt* < **Adsiltia* (Jackson 1953: 709), Gaelic

Adomnán, Adúar (Uhlich 1993: 144-5). **OA** might be the Gaelic form *oa* < *aue* ‘grandson, ancestor’ (attested in Irish ogham inscriptions as **AV(V)I**). The form *oa* occurs in the *Annals of Ulster* between 762 and 950 (Ó Máille 1910: 50-1, 137-9; cf. Thurneysen 1946: 44; Meid 2015: 108), and, according to John Francis Byrne (2008: 102), may lurk behind the form **AO** in one of the obscure ogham inscriptions from Knowth.⁸⁴ Forsyth (1996: 113, quoting John Koch) compares **REN** with Welsh *rhên* ‘lord’. None of this seems very satisfactory, however.

3.3 At any rate, Old Breton *irha* is doubtful, to say the least. The Lomarec inscription is fifth- or sixth-century, thus one would expect **irhag* < **ūro-sag-* (Jackson 1953: 458-9; Russell 1995b: 172).⁸⁵ The form *ema* rather than *eman vel sim* also seems unlikely at such an early date - indeed the modern Breton forms (*amañ* etc.) still display the final nasal.⁸⁶ Besides, it would constitute a unique use of Breton in an inscription, and would pre-date the earliest extant Breton in manuscripts by three or four hundred years.⁸⁷ **IRHAEMA** could rather be read as Latin I(c) R(*equiescit*) HAEMA ‘here lies Haema’, i.e. a feminine form of *Haemus* (Davies et al 2000: 188-91; Sims-Williams 2003: 109, 146; Koch et al 2007: 171). This does not completely invalidate Forsyth’s tentative interpretation of the Brandsbutt inscription, but it does at least call into question the external evidence for the usage of Brittonic *irha(g)* in a funerary context. There is no compelling evidence for a semantic development ‘verdant’ > ‘earth’ for *ir* in Welsh, let alone a further development to ‘grave’ (*GPC s.v. ir*). Fleuriot argues that Middle Welsh *irfedd*, attested only in early poetry, could be a compound of synonyms, like *bwystfil* ‘beast’, *pridwerth* ‘ransom’ or *treflan* ‘small village’; it would thus mean ‘grave’.⁸⁸ However, I see no reason to challenge the established interpretation of it as a compound of *ir* ‘fresh’ and *bedd* ‘grave’, thus ‘fresh[ly cut] grave’ *vel sim*, expressing a common topos in medieval Welsh poetry.⁸⁹ The Welsh denominative verb *irhau* is only

attested with the meanings ‘to become or make fresh or new, freshen, refresh, renew; become or make moist, moisten’ (*GPC s.v. irhaf: irhau*).

3.4 An alternative, Gaelic interpretation for this inscription was suggested by Thomas Clancy (as quoted in Forsyth 1996: 113-5), namely to segment the inscription **I RAT ADDOAREN S-**, i.e. *i rath Aduarén s-* ‘this is the property of Aduarén here’ *vel sim.*⁹⁰ *Aduarén* would be an otherwise unattested diminutive of the Irish male personal name *Adúar* (see O’Brien 1962: 493; Uhlich 1993: 144-5 for the name; Thurneysen 1946: 174 for the diminutive *-én*). This interpretation entails understanding the final **S** as a form of *so* ‘here’ (cf. Forsyth 1996: 330, 414, 416), a suggestion which appears totally *ad hoc* to me, as does Forsyth’s suggestion (1996: 218, 414, 416) that it might be ‘a reduced form of the Pictish cognate of the Breton affixed demonstrative *-se*’ (probably cognate with the Irish form – see Schrijver 1997: 25). In this inscription there appears to be text lost after the **S**: however, the ‘form of the extant carving shows that it cannot be followed by a vowel’ (Forsyth 1996: 114), thus ruling out **SO** *vel sim.* Nonetheless, Clancy could essentially be correct here. This is certainly more promising than any Brittonic interpretation so far offered.

4. Cunningsburgh (2) and Lunnasting

4.1 -EHTECONMORs (Cunningsburgh (2), Shetland; reading from Forsyth 1996: 216); **×TT.♣CUH)(TTS...** (Lunnasting, Shetland; reading from Forsyth 1996: 408). The symbols **×** and **)** in the Lunnasting inscription are probably both for some sort of /e/. **♣** is unique: perhaps it also stood for /e/ (see Padel 1972: 22, 123; Forsyth 1996: 410)?⁹¹ If this is correct, then these two sentences could contain parallel constructions. Thus I shall treat them together. Of them, Forsyth has said:

the Cunningsburgh and Lunnasting ogam inscriptions from Shetland (Sealtainn) reading EHTECONMORS and [E]TTECUHETTS... can be understood as early Brythonic ways of saying ‘this is as great’ and ‘this is as far’, appropriate messages for stones marking boundaries (Forsyth 2006: 1444).

4.2 Indeed, if we ignore the final **-S** for the moment, **CUHETTS** looks superficially comparable to Old Breton *cehet*; Welsh *cyhyd* (Old Welsh *cehit*) ‘as long as’ < **kom-sit*- (Schrijver 2011a: 44; cf. Morris Jones 1913: 248; Falileyev 2000: 27), although elsewhere in the corpus **H** seems to stand for /x/ rather than /h/. As for the spelling of the vowels, while <ou> can stand for /ö/ < /u/ in Old Welsh and Old Breton proclitic syllables,⁹² <u> for proclitic /ö/ < /o/ is not attested in Old Welsh (Sims-Williams 1991: 37, 45, 47, 75; Schrijver 2011a, 15).⁹³ In view of ‘hypercorrect’ <u> in *Cunbran* from **kintu*- (Sims-Williams 1991: 39, 45), however, **CU** < **kom*- seems possible, unless, of course, *Cunbran* derives from **Kunobranos* (Hughes 1993).⁹⁴ At any rate, there is some place-name evidence to suggest that the pronunciation of proclitic /o/ was rather higher in northern variants of Brittonic than in Welsh, cf. Pictish **cuper*-, Cumbric **cūmber*- < **kon-ber*- (James 2013: 17). <e> occurs for /i/ in Brittonic inscriptions and in Old Welsh, perhaps under the influence of Vulgar Latin.⁹⁵ Semantically, Forsyth (1996: 414; cf. Koch et al 2007: 170) compares the use of Old Breton *cohiton* ‘as far as’ in the eleventh-century Cartulary of Redon (de Courson 1863: 112, 163 (charters 146 and 212)) and Old Welsh *cehit*, *cihitan* in boundary clauses in the twelfth-century Book of Llandaf (Evans and Rhys 1893: 73.1, 122.6, 122.8).

4.3 CONMORS, putatively ‘as big as’, is more problematic. The other Brittonic languages all have forms deriving from **kom*- + **mantī* ‘size’, thus Middle Breton *quement* : Middle Cornish *kymmys*, *kemmys* : Middle Welsh *kymeint* (Lewis 1935: 16; Lewis 1946: 21; Evans

1964: 38). Our form looks more like Middle Irish *commór* ‘equally, very great’, although **NM** seems odd.⁹⁶ Katherine Forsyth’s statement that ‘Pictish may have had something like *conmor*’ as the equative of **mōr* ‘big’ (Forsyth 1996: 218; cf. Koch et al 2007: 170) does not seem to have any firm basis, but is not necessarily wrong. After all, Irish has *comméit* beside *commór* (*DIL* s.v. *comméit*), and the latter formation is not exclusive to Goidelic if the Gaulish personal name *Comar(i)us* (Evans 1967: 226; Raybould and Sims-Williams 2009: 85-6, 90) derives from **kom-māros* (thus Schmidt 1957: 61; Delamarre 2001: 101; de Bernardo Stempel 2013b: 33).⁹⁷ We may, in fact, have a reflex of this in Brittonic. Patrizia de Bernardo Stempel (2013b: 33) cites an Old Breton personal name *Commor* < **kom-māros*, possibly also extant in the Breton place-name *Trégomeur* (Le Moing 1990: 258). She is presumably referring to the *Commorus* of the *Life of St Samson*, so it should be pointed out that Thomas Charles-Edwards has argued that this is the same character as Gregory of Tours’ *Chonomoris* < **Kunomāros*, with the *Life of Samson* version of the name showing syncope and *con-* > *com-* under Latin influence (Charles-Edwards 2013: 67-8; cf. Sims-Williams 2003: 282, n. 76, 284; Rodway 2016: 80). Alternatively, if **EHTECON** is a personal name (see Padel 1972: 37, 84-5; Forsyth 1996: 218),⁹⁸ then **MOR** could be a Pictish or Gaelic epithet ‘great’ (Forsyth 1996: 217).⁹⁹ Or could we have here Gaelic *Conn* or a cognate¹⁰⁰ + Gaelic *mór* or Pictish **mor*? But again, what is the **-S**? Forsyth mentions, if only to dismiss it, Latin *mors* ‘death’ (Forsyth 1996: 217).

4.4 EHTE and **ETTE** *could* be (orthographical?) variants of the same form, although, again, **H** is problematic.¹⁰¹ Katherine Forsyth cites John Koch’s suggestion that they might represent ‘a Pictish copula + pronoun construction cognate with OIr *is-e* or *it-e*’ (Forsyth 1996: 414; cf. p. 356). Her *is-e*, *it-e* should rather read *is é*, *it é*, i.e. the Old Irish construction in which a 3 person pronoun is inserted between copula and predicate (cf. Thurneysen 1946: 492-3).¹⁰²

However, in Old Irish, this construction is limited to instances in which the predicate is ‘(a) a substantive defined by the article, a possessive pronoun or a definite genitive, or (b) a proper noun, or (c) a substantival demonstrative’ (Thurneysen 1946: 492). It would not be expected with an adjectival predicate. Note, however, *Do·bert a máthair di baí déc dó assint síd, it é finda áuderga* (Meid 2015: 1. 4) ‘his mother gave him twelve cows from the fairy mound, they are white with red ears’ from *Táin Bó Fraích*, an Old Irish saga preserved in the twelfth-century Book of Leinster. This appears on the face of it to be an example of this construction with an adjectival predicate, but Wolfgang Meid (2015: 91-2) persuasively argued that *it é* here stands for Old Irish *ot é* ‘and they’, with a form of the conjunction *os, is* ‘and’.¹⁰³ This would not be appropriate in our inscriptions in which **EHTE**, **ETTE** stand at the head of the clause.¹⁰⁴ The **T[T]** in the Pictish forms seems superficially comparable to 3 plural *it* ‘they are’ < **senti* in Old Irish (in which case Forsyth’s translation ‘this is’ cited above would be inappropriate), but note that the Old Welsh and Breton cognates of this form, (*h*)*int*, retain the /nt/.¹⁰⁵ Brittonic Pictish also seems to have retained Celtic /nt/ at least as late as the early third century, to judge by Dio Cassius’s *Argentocoxos* ‘Silver Leg’ (Jackson 1980: 137), by which time the sound change /nt/ > /d/ seems to have occurred in Irish, as we can see from Ptolemy’s *Argita*, if this is also from **arganto-* ‘silver’.¹⁰⁶ The Old Irish 3 pl. pronoun *é* corresponds to Middle Welsh *wy*,¹⁰⁷ but the evidence for the sound-change /e:/ > /ui/ in Brittonic Pictish is ambiguous (Jackson 1980: 162; James 2013: 21-2). At any rate, the conservative spelling <e> appears as late as the ninth century in Wales (Sims-Williams 1991: 58-9; Sims-Williams 2003: 287; Koch 1997: cxxviii, cxxx), despite the fact that the sound change seems to have happened here by the middle of the sixth century.¹⁰⁸ Thus Brittonic Pictish **ē* ‘they’ is possible. Note, furthermore, Middle Cornish *y*, *i*, Breton *i* ‘they’, which could conceivably be spelled with **E**. Nonetheless, these sequences, if they are to be interpreted in terms of this copula construction, hardly look like ‘early Brythonic’ to me. In

his discussion of *it cluis* in one of the Old Welsh Juvenius poems, Ifor Williams (1980: 111) stated: ‘With an adj., *it* [...] can be synonymous with *ys* “it is”’. This could be a useful comparandum for our form, but is not entirely clear to me what Williams means by this, and other commentators have not taken up this suggestion.¹⁰⁹ Perhaps instead we could compare **EHTE**, **ETTE** with the Middle Welsh particle *yd*, *yt*, perhaps cognate with Latin *ita* ‘so, thus’?¹¹⁰ But, in that case, what is the final **-E**? A pronoun (cf. *yd y klywi* ‘he would hear of it’, *yd i gweles* ‘he saw it’)?¹¹¹ Or could it be compared to *yd y cedwis* ‘kept’ (Bramley *et al* 1994: 1.127) which has two preverbal particles, according to Catherine McKenna (Bramley *et al* 1994: 31)?¹¹² In either case, the following words would be verbs in **con-*, but no obvious candidates occur to me. Or could **E** be a verb? Perhaps an ancestor of Welsh *oedd* ‘was’ (cf. Koch 1997: 234)? This does not seem at all compelling to me, especially as both of these inscriptions are probably ninth-century or later (Forsyth 1996: lxvi), by which time the Brittonic languages show a diphthong <oi> in the imperfect forms of the verb ‘to be’ (see n. 84 above).

4.5 At any rate, how plausible is it that a message of this type might be found on a stone in Pictland? There is plenty of evidence from medieval Ireland that ogham-inscribed stones were used as boundary markers (Plummer 1923; Eogan and Moore 2008: 308-10). The evidence from Wales is more ambiguous – the laws mention boundary-stones (Wade-Evans 1909: 55; Wiliam 1960: 63; Jenkins 1986: 128) as do some early charters (Edwards 2007: 59), and the etymology of the territorial term *maenor*, *maenol* < *maen* ‘stone’ might indicate an area bounded by stones (Charles-Edwards 1993a: 445-6; Zimmer 2000: 424).¹¹³ However, there is nothing to indicate that these stones would have borne inscriptions. Indeed the *hirmain guidauc* (Evans and Rhys 1893: xlv) ‘long stone of Gwyddog’ mentioned in a ninth-century charter from the Lichfield Gospels (Chad 4) is an uninscribed prehistoric standing

stone still extant today (Jones 1972: 313-5; Edwards 2007: 59). The evidence from Ireland suggests that graves were placed on boundaries, and therefore that the ogham boundary markers may well have been sepulchral inscriptions.¹¹⁴ It has been argued that some of the extant inscribed stones in Wales also served, perhaps secondarily, as boundary markers, although the evidence is not as compelling.¹¹⁵ A charter of 1209 mentions *Bethyresgyb* ‘Grave of Bishops’, perhaps the fifth-century inscribed stone from Trawsfynydd now known as *Bedd Porius* (Gresham 1985: 391; Pryce 2010: no. 229; Edwards 2013: 416), but we have no direct evidence for the earlier period. Nonetheless, we should not necessarily expect to find ‘boundary-clause-type’ inscriptions on boundary markers in Ireland or (probably) Wales. Certainly, I am not aware of examples from these countries of anything comparable to Forsyth’s interpretation of these two stones. However, the Pictish inscriptions are famously dissimilar to the formulaic ogham inscriptions of Ireland, and indeed to the Roman-alphabet inscriptions of the early medieval insular world, so I would not put too much weight on this consideration.

4.6 To return to the mysterious final **-S**, we might note, following Thomas Clancy (1999: 334-5; cf. Forsyth 1996: 217), that it occurs in what appears to be genitive position on five inscriptions aside from these two (Altyre, Brandsbutt, Bressay, Gurness and Inchyra). Whatever the explanation for this (and a Celtic one does not suggest itself),¹¹⁶ at least some, if not most, of these forms with final **-S** seem to be personal names, with Lunnasting’s **NEHHTONS** being the most certain.¹¹⁷ Thus it seems unnecessary to look beyond the attested Old Welsh personal name *Conmor* (either < **Cunoburros* (Jackson 1953: 485; Williams 1980: 24; Forsyth 1996: 217), or, more plausibly, cognate with Romano-British CVNOMORI, Primitive Breton *Chonomorus*, Middle Welsh *Kynfawr* (Koch 1987a: 256; Sims-Williams 1991: 44, n. 1, 63, n. 4)) to explain **CONMORs**. Indeed, in her PhD thesis,

Forsyth cited this interpretation as probable (Forsyth 1996: 357; cf. Koch et al 2007: 170). If so, the apparent parallelism of the Lunnasting and Cunningsburgh inscriptions might lead us to seek a comparable explanation for Lunnasting's **CUHETTS**. No suitable attested Celtic names spring to mind, however.¹¹⁸

5. Conclusion

5.1 In conclusion, it is certainly possible to find Brittonic-looking forms in the inscriptions,¹¹⁹ but convincing Brittonic explanations for whole inscriptions are elusive. I have been unable to make sense of the Burrian inscription, by far the most promising candidate for a Brittonic interpretation, without recourse to positing a (rather problematic) Gaelic borrowing and an otherwise unattested sound change (**VV** as /wu/ < **wo*). The other three inscriptions examined here are even less amenable to Brittonic explanation. Brittonic-looking elements in them are, no doubt, due to what R. W. Chambers called 'the long arm of coincidence'.¹²⁰ Katherine Forsyth rightly says (1997: 35): 'it is possible to extract plausibly Celtic words or roots here and there, but that is scarcely a defensible methodology'. Quite so. In 1892, John Rhys wrote:

Let those who cherish the Welsh or Brythonic theory – for they seem to be just now foremost – take the carefully written and punctuated Ogam from Lunasting: – X *Ttocuhetts : ahehhttmnnn : hccvevv : Nehhtonn*, and let them explain it as Welsh, and I shall have to confess that I have never rightly understood a single word of my mother tongue. If they cannot explain it so, let them explain it as any kind of Aryan. Till then I shall treat it as unintelligible to me as a Celt, and as being, so far as I can judge, not Aryan (Rhys 1892: 305 [spelling and ogham reading sic]).

This challenge, expressed with a belligerence which has characterized many contributions to the debate over the linguistic affinity of these inscriptions, has not, I feel, been adequately met.¹²¹ In 1997, Katherine Forsyth concluded that ‘on current evidence the non-Indo-European verdict is premature’ (Forsyth 1997: 36; cf. Forsyth 2006: 1444).¹²² Insofar as the ogham inscriptions are concerned, I would say the same about the Brittonic Pictish one.

5.2 I suppose it depends on where one thinks the burden of proof should lie. Certainly, no attempt to align the Pictish inscriptions with known non-Indo-European languages such as Basque has proved convincing.¹²³ As John Koch notes ‘we cannot offer the positive argument of a convincing etymology from a non-Indo-European language for a single word or name in the corpus’ (Koch 2003: 77, n. 5). However, only a small number of the inscriptions have been explained in Gaelic terms, none in Latin, and, as I have shown above, none in Brittonic. I am linguistically unqualified to judge Richard Cox’s Norse interpretation of a large portion of the corpus (Cox 1999), but I note the serious criticism of Michael P. Barnes (1999), and I endorse the reservations expressed by Thomas Clancy (1999) and, more forcefully, by Cathair Ó Dochartaigh (1999) regarding Cox’s frequent emendation and disregard for archaeological context. This exhausts the list of ‘obvious suspects’. All of these are extremely well-attested languages. Of course, there are other insular inscriptions that so far have defied elucidation, e.g. a second- or third-century AD inscription from Dodford, England (Tomlin 2009: 347), a tenth-century inscription on a carved cross at Meliden, Flintshire, Wales (Sims-Williams 2007: 179, n. 1, 210; Edwards 2013: 362), not to mention a few ogham inscriptions in Ireland, e.g. one on an antler from Clonmacnoise (King 2008), or those from Knowth (Byrne 2008). However, these are exceptions in corpora which are overwhelmingly Latin or Irish. The only insular *corpus* of undeciphered inscriptions is the corpus of ‘Pictish’ oghams from early medieval Scotland. The inability of scholars to explain perfectly legible

inscriptions such as those at Brandsbutt and Lunnasting in terms of any of the otherwise attested languages spoken in Britain and Ireland in the early Middle Ages is a fact which must be acknowledged, however unsettling its implications. It is, I think, more telling than our inability to provide non-Indo-European etymologies for words in the inscriptions. After all, I see no reason to insist that a putative non-Indo-European language spoken in Scotland would have been related to an attested language. Linguistic evidence of any sort is sparse from northern Europe in Antiquity, but if it was anything like as linguistically diverse as the better-evidenced Mediterranean region, then we must be prepared to think of countless languages which perished in the prehistoric period without leaving any easily recognizable trace.¹²⁴ Thus, we do not know to what we should be trying to compare a putative non-Indo-European Pictish. In the absence of secure (or, often, even tentative) Indo-European etymologies for most of the sequences in these inscriptions, I think that we could justify ‘non-Indo-European’ as a ‘working title’, without implying anything very far-reaching about their language – ‘non-Indo-European’ until proved ‘Indo-European’, as it were (cf. Isaac 2005b: 212, n. 8). Nonetheless, I feel that this term has become far too loaded in this context, and that ‘unknown’ might be the best label for now (cf. McManus 1991: 45). In other words, an open verdict. I certainly find it methodologically unacceptable to label them Brittonic (implicitly or otherwise) on the grounds that other evidence from Pictland, principally onomastic, leads us to expect that they would be. After all, there is comparative evidence for the use of long-dead high prestige languages on funerary and other lapidary inscriptions, including the use of non-Semitic Sumerian by the Semitic-speaking Babylonians, cited in this context by Kenneth Jackson (1983: 224) or, nearer to home, Latin in western Europe throughout the Middle Ages and beyond.¹²⁵

¹ For example, Rhys 1892; Rhys 1898; Macalister 1940; Jackson 1980; Padel 1972, 37-40; Padel 2015, 165-6; Isaac 2005a, 78; Sims-Williams 2012a, 431; Sims-Williams 2012b, 152, n. 14; Meid 2015, 245-7. In this paper, I use **BOLD CAPITALS** for transliterations of ogham inscriptions, CAPITALS for inscriptions in the Roman alphabet, and *lower case italics* for forms recorded in manuscripts. For ogham inscriptions, I follow Forsyth's conventions, as described in Forsyth 1996: lxxxiii (cf. Forsyth 1995a: 694, n. 6; Forsyth 2000: 267, n. 2): 'Uppercase letters reasonably certain. Lowercase letters doubtful. If a reading is uncertain, alternatives are given in brackets in decreasing order of preference, separated by an oblique stroke, e.g. (t/u), most likely – T, alternative reading – U; (/a/h), most likely – no letter, alternative reading – A, least likely – H. [...] Underline – two letters in one character compendium, e.g. EA, RR. [...] -] portion of unknown length lost at beginning; [- portion of unknown length lost at end.'

² Forsyth 1995a; Forsyth 2000; cf. Forsyth 1996: 160-86, 227-42. On Buckquoy, see now the different, but still Gaelic, interpretation offered by Rodway 2017. On Dunadd, cf. Koch et al 2007: 171.

³ See Padel 1972: 13, 118; Forsyth 1995a: 687; Forsyth 1996: lxxviii, lxxii; Forsyth 1997: 35; Forsyth 1998: 49; Koch et al 2007: 171; cf. Macalister 1940: 189.

⁴ Cf. Zimmer 2006: 373, mentioning 'the negative evidence of a number of inscriptions and proper names from early north Britain that resisted attempts at interpretation'. The few inscriptions from Pictland using Roman letters are mostly in Latin, although there are some potentially vernacular non-onomastic elements which have hitherto defied interpretation (Okasha 1985: 45; Forsyth 1995b: 241; Forsyth 1996: 256; Forsyth 1998: 47-8; Koch et al 2007: 171). Thomas Clancy's Gaelic interpretation of the St Vigean's inscription (Clancy 1993) depends on the reading IRE (i.e. *i ré* 'in the time/reign of') rather than IPE (cf. Okasha 1985: 60), but Katherine Forsyth is firmly in favour of reading IPE (pers. comm., 21 March 2014; cf. the doubts about IRE expressed by Okasha 1985: 47, 60, n. 63; Clancy 1993: 345-6).

⁵ For example Smyth 1984: 46-53; Foster 1997: 7; Koch 2003: 76; Fraser 2009: 52-53; Driscoll 2011: 252.

⁶ The Mains of Afforsk inscription, discovered since the completion of Forsyth's thesis contains the sequence **BR×GAVNECTON**, which Forsyth (pers. comm., 3 July, 2014; round-table discussion at the Fifteenth International Congress of Celtic Studies in Glasgow, 17 July, 2015) is inclined to interpret as 'the hill of Nechton'. **BR×GA** could well stand for **bregā* 'hill' < Celtic **brigā* through *a*-affection (cf. Welsh *bre*), but the **V** remains unexplained. The second part of the inscription ((**O**)**VUAMAS**(.)(**v**⁺)[- or -](**d**⁺)(.)**CAMAUT**(**O**))

has so far defied elucidation. Thus, the Brittonic-looking **BR×GA** *could* be due to what R. W. Chambers called the ‘long arm of coincidence’ (see below).

⁷ Cf. Forsyth 1998: 49: ‘Although one word remains obscure, the Pictish text of the Burrian cross-slab can be tentatively read as “X made this cross”’. Cf. further Koch et al 2007: 170.

⁸ Note that the Latin word CRUX may occur on the weathered Roman-letter inscription at Tarbat on what was once probably the shaft of a cross (Okasha 1985: 62).

⁹ But hardly later than the ‘later seventh century’ according to Jackson 1963: 79; cf. ‘saec. VII^{l/med}’ (Koch 1997: cxxviii, 133; cf. 183).

¹⁰ Lewis 1943: 23, 26, 35-6; Lewis and Pedersen 1961a: 59; *GPC* s.v. *croes*; Zimmer 2000: 61, n. 32; Mac Cana 2001: 25, n. 26. Cf. Middle Welsh *kerygyl* ‘cup, vial’ < Latin *caliculus*, analogically reformed as *caregl* (Lewis 1943: 34); *emys* ‘stallion’ < Latin (*equus*) *admissus*, reformed as *amws* (Lewis 1943: 38; P. Kelly 1997: 54; Jenkins 1997: 71). Note that, according to Dafydd Johnston (1988: 183), all the ‘early’ examples of *crwys* are plural.

¹¹ Its absence may not be as complete as Jackson claimed: see Coates 2006: 56-8; Parsons 2011: 130-1.

¹² Cf. also CROUX (Davies et al. 2000: 225). It could perhaps be argued that here we see the influence of the *Breton* sound-change /u/ > /o/, placed in the sixth century by Jackson (1953: 274-5). The inscriptions in question all post-date the sixth century (Davies et al. 2000: 211, 219, 228).

¹³ Cf., e.g., *scropea* for *scrupea* (McKee 2000: 479; cf. Falileyev 2008: 64; Falileyev 2016: 11), *obtonso* for *obtunso* (McKee 2000: 542) in the ninth-century Cambridge Juvencus. The opposite change occurs (perhaps) in PVMPEIVS for *Pompeius* on a sixth-century monument from Glamorgan (Charles-Edwards 1995: 718; Redknap and Lewis 2007: 440 - for a different explanation, see Sims-Williams 2003: 90, 251, 349), and (more certainly) in APVSTOLI for *apostoli* in a Dark-Age inscription from Whithorn (Thomas 1991-2: 3). For further examples from Dark-Age inscriptions, see Jackson 1953: 191-2; Sims-Williams 2003: 90, n. 458. Cf. *pute* for *pote* in an early twelfth-century Cambro-Latin manuscript (Huws 2000: 111). See further Lapidge 1986: 95 on interchange of *u/o* in Latin manuscripts of the Old Welsh period. On confusion of *s* and *x*, see Rhys 1879: 203-4; Jackson 1953: 35, 37, 522, n. 1, 619, n. 1; Williams 1980: 9; Smith 1983: 919; Sims-Williams 2003: 25.

¹⁴ Cf. Welsh *bloesg* ‘indistinct, inarticulate’ < Latin *blaesus*, or perhaps cognate to it (Lewis 1943: 26; Lloyd-Jones 1944: 194; Jackson 1953: 335; Lewis and Pedersen, 1961a: 58-9; Lewis and Pedersen 1961b: 7; Williams

1990: 676-7); Welsh *prys* ~ *prysg* : Cornish **prys* ~ **prysk* ‘copse’ (Jarman 1982: 98; Padel 1985: 194; Williams 1990: 676; *GPC s.v. prysg; prys*)?

¹⁵ Thus Rhys 1892: 296-7, 300; Rhys 1898: 378; Jackson 1980: 140, 151; Redknap 1995: 774, n. 22; Forsyth 1996: 129, 202; Cox 1999: 12-4; Sims-Williams 2007: 164, n. 180; Koch et al 2007: 170.

¹⁶ There are 33 examples of *cch* for /x/ in thirteenth-century Welsh prose manuscripts, most of them (30) from Peniarth 29 (the Black Book of Chirk, on which see Russell 1995-96: 144) - see the searchable online database of thirteenth-century Welsh prose manuscripts hosted by Aberystwyth University (currently being relocated from the Aberystwyth University digital research repository CADAIR (<http://cadair.aber.ac.uk/dspace/handle/2160/11163>) to PORTAL where it will be findable by searching for ‘Welsh & Celtic Studies’ and ‘Rhyddiaith’). Cf. also *ny chclatude* (Jarman 1982: 17.107) ‘you did not dig’. Note also Middle Irish examples of *chc* for /ɣ/ (Gray 1982: 12). Cf. n. 54 below.

¹⁷ Thus Rhys 1892: 292-3; Padel 1972: 31, 78-9; Cox 1999: 30; Forsyth 1996: 200, 309; Forsyth 2006: 1444; Sims-Williams 2007: 148. On the value of *Ébad* in Irish inscriptions, see MacNeill 1909: 335-6; Padel 1972: 21; McManus 1991: 79, 144-5, 184, n. 46; Forsyth 1996: 223, 275, 432-3; Forsyth 2007: 465; Sims-Williams 2007: 126, 138-48, 152-4.

¹⁸ Some possible Continental Celtic examples are discussed by Patrizia de Bernardo Stempel 2013a: 67; cf. Eska 2015: 142. Celtiberian forms such as *Tiri* ‘three’, *Birikantin* < **brigantīnos* etc. are irrelevant: due to the problems of representing consonant + resonant in the Celtiberian syllabary, /CRi/ is represented as <CiRi>, /CRa/ as /CaRa/ etc. (Meid 1994: 8, 17; McCone 1996: 12; de Bernardo Stempel 1996: 227-8). On word-internal intrusive vowels in Continental Celtic, see Evans 1967: 240; de Bernardo Stempel 2013a: 79; Eska 2013: 57; in early Irish, see Thurneysen 1946: 70-1; Sims-Williams 2003: 122, 186, n. 1135, 218-9, 321; Sims-Williams 2007: 75; Redknap and Lewis 2007: 264; Eska 2010-2.

¹⁹ The text of Llanstephan 1 and Peniarth 29 is available in the Aberystwyth database of thirteenth-century Welsh prose (see n. 16 above). Further examples of this phenomenon can be found at Loth 1910: 145; Parry Williams 1913: 23; Williams 1956-8: 79; Evans 1964: 13; Evans 1978: 83; Isaac 1999: 156; Sims-Williams 2017: II, 89-94. Cf. *kereirhyt* (Jarman 1982: 24.5), if this = *creirydd* ‘relics’ (thus Evans 1906: 133), but note that J. Lloyd-Jones (1931-63: 173) prefers to emend to *kerenhyt* ‘kindred, friendship’. Perhaps also *garanwynyon* for *granwynyon* ‘white-cheeked’ in the Book of Taliesin (Williams 1968: II.20, note on p. 36; cf. Isaac 1998: 65)? Cf. *ac aranwynyon* (variant *ar aranwinion*), emended to *ar ranwynyon* (Haycock 2013: 6.21,

note on p. 120). For another possible example (*chynnes* < *cynes* for *cnes* ‘bosom’), see Lewis 1939-41; cf. Haycock 1994: 119; *contra* Lloyd-Jones 1931-63: 255, s.v. *kynnes*. Note also place-names in *cyn-* < *cn-*, e.g. *Moel Cynwch* < *Moel y Cnwch* (Williams 1945: 28; Richards 1960-2: 100; Richards 1962-4). Some examples may be graphic, e.g. *dyly* for *dly* ‘merits’ in the Book of Taliesin (Williams 1980: 169; cf. Gruffydd 2002: 20); *ddylae* for *ddlae* in a poem by Dafydd ap Edmwnd (Morris Jones 1913: 379); *ffyroyn* for *ffroyn* ‘nostril’ in the third stratum of the Hendregadredd MS (Huws 2000: 225; cf. Parry Owen and Foster Evans 1996: 158), which have to be read as one syllable for metrical reasons. Cf. Williams 1968: 110 on *delideu* in the Book of Taliesin, and, in general, the comments of H. M. Edwards 2013: 11. On the other hand, *ceronigl* < English *chronicle* in a poem by the fifteenth-century poet Ieuan ap Hywel Swrdwal must be trisyllabic (Foster Evans 2000: 30.58, with note on p. 211).

²⁰ But Fynes-Clinton notes colloquial *dle:d*, plural *dledjon* beside *dālad*, *dāledjon* in the Bangor area (Fynes-Clinton 1913: 97-8; cf. *GPC* s.v. *dyled*).

²¹ Parry-Williams 1913: 22-3; Morris Jones 1913: 379; Williams 1938: 235; Jackson 1953: 338; Lewis and Pedersen 1961a: 94; Schumacher: 2011, 122; *GPC* s.vv. *drysi*; *dyled*; *dyrys*; *tyno*¹. For the possibility that the first vowel in the personal name *Ceridfen* is intrusive, see Haycock 2003: 153; Haycock 2015: 319-20.

²² Cf. Vannetais *keneu* ‘nuts’ < Old Breton **cnou* (Jackson 1953: 338; Jackson 1967: 266). According to Ken George (2009: 510), in Cornish ‘An epenthetic vowel developed in [wl-]: *wlas* “land” > *wollaz*’. Oliver Padel (1985: 123), on the other hand, interprets *Pedden an wollas* ‘Land’s End’ as having been ‘corrupted into **pen* (*an*) *wolas* “bottom end”’. Cf. also Old Cornish *Geuedenoc* for *Guedenoc*, if this is not simply a scribal error (Olson and Padel 1986: 55-6)?

²³ See Padel 1972: 34, 49, 110, 158-9; Forsyth 1996: 202-3, 415, 488 for further discussion.

²⁴ Forsyth 1996: 450; Forsyth 1997: 34, n. 129; Clancy 1999: 337; Sims-Williams 2003: 174, 317.

²⁵ On this borrowing, which has been disputed (e.g. by Jackson 1953: 461; Evans 1967: 182, n. 3), see, e.g., Jones 1926-7: 182; Thomas 1938: 34; Hamp 1974-6a: 31; Russell 1990: 115, n. 297; de Bernardo Stempel 1999a: 70; Mac Cana 2001: 25, n. 26; Sims-Williams 2003: 159-61; Sims-Williams 2007: 76-7. Despite Jackson (1980: 163-4), the final syllable of Pictish *Drostan* and *Talorgan* does not necessarily derive from **-agnos* (see Loth 1911: 407; Sims-Williams 2003: 176).

²⁶ Katherine Forsyth credits John Koch with this suggestion (Forsyth 1996: 202; Forsyth 1997: 36, n. 137; cf. Koch 2000: 33; Koch et al 2007: 170). John Rhys vigorously opposed a suggestion that it was ‘a form of the English verb *wrought*’, a cognate of the Brittonic forms discussed here (Rhys 1892: 293).

²⁷ See Lewis and Pedersen 1961a: 336; Evans 1964: 132; Hamp 1972-4: 294-5; Jenkins and Owen 1984: 102; Isaac 1996: 335-6; Schumacher 2004: 709.

²⁸ Jackson 1953: 404, 536; Evans 1967: 76, 242, 364, 406; McCone 1996: 6, 12-3, 43-4; Sims-Williams 2007: 14.

²⁹ Jackson 1980: 164-5; cf. Forsyth 1996: 416-7; James 2013: 37-9; Rhys 2015: 336-8.

³⁰ For this hitherto unpublished inscription, see Forsyth 1997: 35 and Plate 1.

³¹ Cf. Jackson 1980: 145, 164-5; Padel 1972: 32-3; Forsyth 1996: 416-7; Sims-Williams 2003: 179.

³² But note that *rector* could show Latin influence, while Irish influence is not impossible in the case of *rechtur*, cf. *rechtyr* < Irish *rechtaire* ‘steward, administrator’ (Williams 1938: 257)? On <ct> for /xt/ ~ /i.θ/ in British Dark-Age sources, see Jackson 1953: 407-8; Sims-Williams 2003: 178-80. On Old Irish <ct> for /xt/, see Thurneysen 1946: 21; McCone 1996: 30.

³³ The phonological change /w/ > /f/ had occurred in Irish before 600, according to Calvert Watkins (1966: 71, n. 2; cf. Rhys 1879: 85-6; Thurneysen 1946: 123; Thurneysen 1991: II, 307-8; Sims-Williams 2007: 86; Mac Eoin 2007: 119 (‘probably during the seventh century’)). Perhaps ‘the first direct evidence’ of this change (Sims-Williams 2007: 209) is the ‘late sixth or early seventh’ century inscription NEFROIHI from Cefn Gelli-gaer in Glamorgan, if this is Irish *Nad-Froích* (Redknap and Lewis 2007: 302-5). Note, however, that this sound was still sometimes represented by <u v> in Latin texts as late as the beginning of the eighth century (Rhys 1879: 264-5; Rhys 1892: 277; MacNeill 1909: 335, 344; Harvey 1991: 59-61), and the early Irish glossarians recognized the equivalence of Latin *u* and Irish *f* (Russell 1995b: 170; Russell 2012). For discussion of the value of **V** in Pictish ogham inscriptions, see Forsyth 1996: xxxix-xl, and cf. McManus 1991: 33, 36, on this character in the Irish ogham inscriptions.

³⁴ For the date of the inscription, see Isabel Henderson in Okasha 1985: 61; cf. Padel 1972: 157; Forsyth 1998: 47-8. Clancy’s more precise date of 839 × 842 (1993, 351) depends ultimately on a doubtful reading (see n. 4 above).

³⁵ It may be relevant that Howard Meroney detected in *weorn* (variant *ueron*) from an Old English charm a form of the Irish name (*fern* < **wern*) for the ogham letter **V/F** (Meroney 1945: 179), but that the following ogham-like character looks more like ogham **U** (Sims-Williams 2007: 87).

³⁶ On the date of the manuscript, see Derolez 1954: 175. ‘There seems to be no reason for doubting that the ogam fragment [...] was written at the same time as the rest of the Ms.’ (Derolez 1951: 10). Note that Patrick Sims-Williams (2003: 130, 313; cf. Redknap and Lewis 2007: 244) entertains the possibility that **VV** in the early-sixth-century inscription **ILVVETO** < **Elu-wet-* stands for **UV**, in which case this would be an example of the opposite confusion, but this could equally be a post-syncope form with **VV** for /w/.

³⁷ Note, however, that damage to the beginning of this section allows the possibility that there was originally another letter between the **u** and the **RR** (see Padel 1972: 77; Forsyth 1996: 195).

³⁸ For alternative readings of the final word, see Sims-Williams 2003: 386; Redknap and Lewis 2007: 265.

³⁹ The reading XR[I] CON FILIUS DE(?)TEN FECIT proposed in 1914 for the inscription on the cross-slab from Llanrhaeadr-ym-Mochnant has been rightly rejected (Edwards 2013: 343).

⁴⁰ Macalister gives the tentative reading OROIT DO GILLACRIST DO RINGNE *In* CROSSA from the base of St Martin’s Cross from Iona (c. 800) (*CIIC* 1070), but in 1982 ‘only traces of lettering’ could be seen (*RCAHMS* 1982: 206). Note also **FEC[T]** (for *fecit*?) on a Roman-letter inscription from Camp, Co. Kerry (Okasha and Forsyth 2001: 358-59). The **FECT** detected by Macalister on the Ballymoreagh stone (*CIIC* 170) ‘would appear to be imaginary’ (McManus 1991: 61), but cf. **FICT** (for *fecit*?) on the Roman period Traprain Law silver (Curle 1923: 20; *CIIC* 485; Frere and Tomlin 1991: 36).

⁴¹ Collingwood 1927: 54; Okasha 1971: 48, 88; Page 1973: 152-3, 196, 201; Cramp 1984: 161-2; Higgitt 1986: 126, 134.

⁴² See, e.g., Mac Cana 1973; Mac Cana 1991; Watkins 1987; Isaac 1996: 21-147; McCone 2006: 12; Schrijver 2011a: 72-4.

⁴³ Cf. Lewis and Pedersen 1961a: 245, 267. For Middle Cornish examples, see Lewis 1946: 48.

⁴⁴ See Greene 1971: 8-9, 11; Watkins 1977-8; Haycock 2007: 206; Sims-Williams 2016: 175-6; *contra* Koch 1985; Koch 1987b: 169-71; Koch 1988: 28-35; Koch 1991.

⁴⁵ For **CINGEN CELEN**, however, read **CUNBEN CELEN** ‘?Cun wife of Celyn’ (Williams 1980: 33-6, 37; Evans 1967, 205, n. 1; Sims-Williams 2003: 85, n. 426, 89, n. 449, 128, n. 725, 152, 188, 231-2; Sims-Williams 2007: 185; Haycock 2003: 172, n. 33; Haycock 2015: 215; Edwards 2013: 428; Rodway 2013: 91, n. 292).

Subject-initial constructions are also quite common in Gaulish dedicatory and funerary inscriptions – see, e.g., Thurneysen 1946: 328; Lambert 1994: 69; Russell 1995a: 282-6; Isaac 1996: 113-23; McCone 2006: 66; Eska 2007.

⁴⁶ Mac Cana 1973: 95-6; Lambert 2003: 130; Eska 2007: 219; Rodway 2013: 93.

⁴⁷ But it could have been considerably earlier in the fifth century according to Patrick Sims-Williams (1990: 247-8; cf. Sims-Williams 2003: 282-3).

⁴⁸ Jackson 1953: 606-9, 615-6; Jenkins and Owen 1984: 102, 103, 118, 119; Rodway 2013: 120-1; Koch 2013: 101.

⁴⁹ Jackson 1980: 162; cf. Koch 1982-3: 217; Forsyth 1996: 255; Forsyth 1995b: 240-1; Charles-Edwards 2013: 91; James 2013: 8-17.

⁵⁰ Meid 2015: 79-80 incorrectly glosses *gwrach* as ‘wife’ and erroneously includes it as an example of ‘hypocoristic fortition’ of designations for close personal relationships.

⁵¹ This interpretation is ‘doubtful’ according to Jackson 1953: 386, n. 1.

⁵² Cf. **BEN** in **BENiSES** on the Bressay inscription? See the remarks of Rhys 1898: 379; Forsyth 1996: 133; Koch et al 2007: 170, comparing Old Irish *ben* ‘wife’, but note that BEN ‘wife’ is probably attested in Welsh on the Tywyn stone, as noted above. Cf. Old Cornish *benen* < *ben* + singulative/diminutive *-en* (Campanile 1974: 13); Modern Welsh *benyw*. Thus this element on the Bressay stone could be interpreted in Brittonic rather than Gaelic terms. A less likely possibility, perhaps, would be Hebrew *ben* ‘son’, which is found in a late Irish prose text about Áed Oirdnide (Meyer 1912: 102; cf. Ó Corráin 1985: 90, n. 18) and in a cryptic eleventh-century insular Latin poem, perhaps of Scottish provenance (Dumville 1975-6: 84, n.4; Clancy 2000: 89, n. 2; Sims-Williams 2003: 128, n. 725; cf. Edwards 2013: 428). Cf. the alleged use of Aramaic *bar* ‘son’ in early Irish poetry (Carney 1971: 70).

⁵³ See Sims-Williams 2003: 171-2; Sims-Williams 2007: 185; Williams 1980: 39; Edwards 2013: 422-30. Perhaps also *CIIC* 1068 (Isle of Man) **MALBREN** if this stands for *Máel-Brénaind* (Sims-Williams 2003: 175). Note also **FIL** for **FILI(US/A)** on early Breton inscriptions (e.g. Davies et al. 2000: 177, 216), perhaps continuing earlier Gallic usage (Davies et al. 2000: 175-6). There are late medieval Welsh lapidary examples of **F** or **FIL** for **FILI(US/A)** and of contraction of names, e.g. Gresham 1968: 89, 96, 106, 140, 150, 198, 205, 208, 218, 219 etc.

⁵⁴ Cf. Old Welsh *ht* for /θ/ (Jackson 1953: 572); Old Cornish *hch* for /x/ in *lofgurhchel* (Jackson 1950: 74). Elsewhere Jackson mentions Old Welsh and Cornish ‘freaks like *hc*, *gch*, *gh*, *hch*’ for /x/ (Jackson 1967: 536). For Middle Welsh examples of *hc* for /x/, see, e.g., Lewis 1942: xxxiv; Russell 1999: 86, and note unusual *chwhefris* ‘wild’ from the Book of Taliesin (Haycock 2015: 9.73). Cf. n. 16 above.

⁵⁵ Rhys 1879: 201, 229; Lewis 1931: 31; Jackson 1953: 525-6; Evans 1964: 11; Wmffre 2003: 291-3; Rodway 2004: 116.

⁵⁶ In comparing English *whew*, Kenneth Jackson seems to envisage /hw/ as a possible pronunciation for the initial sound of **HCCVVEVV** (Jackson 1980: 173). Macalister’s ‘sort of glottal catch, such as appears in the Glasgow patois (as in *wa’er* for *water*), sounding more like a hiatus in speech than anything else’ (Macalister 1940: 211) need not be seriously entertained. Cf. Romano-British HVETERIS *vel sim* (perhaps featuring ‘a sound for which there was no equivalent in Latin’ Aldhouse Green and Raybould 1999: 116 – cf. the speculative and unconvincing comments of Ross 1967: 374; Birley 1979: 107-8)?

⁵⁷ MacNeill 1909: 335-6, 364-5; Marstrander 1911a; *CIIC* I: xi; Eska 1990; McManus 1991: 51, 119, 171, n. 13; Ziegler 1994: 163; Forsyth 1996: 433; Schrijver 1997: 78; Swift 1997: 97-111.

⁵⁸ For certain examples of <H> for /x/ in Roman-letter inscriptions from Wales and Ireland, see Rhys 1879: 171, 199-201, 263-4; Jackson 1953: 566; Forsyth 1996: xxxix; Sims-Williams 2003: 26, n. 22, 29; 138-9, 302; Sims-Williams 2007, 107, 137-8. Cf. examples of <h> = /x/ from Old Irish, Welsh, Breton, and Cornish manuscripts (e.g. Thurneysen 1946: 20; Jackson 1967: 535-6; Jenkins and Owen 1984: 96, 119, 120; Schrijver 2011a: 38; Koch 2013: 99; cf. Rhys 1879: 229; Jackson 1953: 403). For Middle Welsh examples, see, e.g., Lewis 1942: xxxiv; Bromwich and Evans 1992: xv; Morgan 1997; Russell 1999: 86 (some of these may, however, be scribal errors according to Rodway 2004: 225, n. 63).

⁵⁹ Note that Forsyth considers the possibility that we have **KOI** in the Newton ogham inscription (Forsyth 1996: 433, 436; cf. Diack 1922: 52).

⁶⁰ Shaw 1968-71: 148-9; O’Rahilly 1972: 31-2; Breatnach 1994: 233; Williams 1994: 449; Sims-Williams 2011: 157, n. 136; 181, n. 284.

⁶¹ Ó Raithbheartaigh 1932: 32; O’Rahilly 1972: 265; cf. McCone 1996: 142; Hickey 2011: 239-40; Hickey 2014: 171.

⁶² Cf. Lewis 1943: 10; Jackson 1953: 84, 192, 335; Evans 1967: 396, n. 2; Smith 1983: 899-900; Sims-Williams 1991: 60-1; Charles-Edwards 1995: 716, for *ae* ~ *e* in Vulgar Latin, and see note 67 below.

⁶³ Cf. Kermodé 1907: 100, ‘our modern “Clague”’, a name which Kneen (1937: 65) derives from **Mac Luathóg* or **Mac Laoghóg*.

⁶⁴ Jacopo Bisagni (2012: 55) dates the ‘vocalization of /ɣ/’ to the ‘thirteenth/fourteenth century’.

⁶⁵ Thus Jackson 1980: 140; Jackson 1977: 222; Padel 1972: 30-1; Smyth 1984: 58; Clancy 1993: 346; Redknap 1995: 774, n. 22; Sims-Williams 2007: 164; Forsyth 2007: 468-9; Koch et al 2007: 170. On this development, see Breatnach 1994: 232. Jackson 1980: 140, terms it ‘late Old Irish’ (cf. Jackson 1977: 222; Harvey 1987: 48; *DIL* s.v. *1 mac (macc)*), but I am not aware of any examples in Old Irish manuscripts. The single example of *meic* in the early (seventh-century?) appendix to Adomnán’s *Vita Columbae* is not diagnostic, as the earliest manuscripts date from c. 1200 (Charles-Edwards 1993a: 135, n. 123; Charles-Edwards 1993b: 68, n. 14). It is not clear that *maicc* > *meicc* is related to the Old Irish examples of *a ~ e* before slender consonants mentioned by Thurneysen 1946: 54, 308; O’Brien 1956: 182-4. Michael Lapidge (*apud* Anderson and Anderson 1991: 237) suggests a tenth-century date for the development of *meicc*, Gerard Murphy (1956: 183, 191) an eleventh-, the latter given some support by Gearóid Mac Eoin’s (1966: 117) observation that all the rhyming examples of the genitive singular or nominative plural of *macc* in *Saltair na Rann* (c. 1000) show the form *maicc* (cf. Carney 1982-3: 208-9 on consistent *maicc* in the work of poets with obits as late as the mid-eleventh century). There is a rhyming example of *meicc* in a poem attributed to Airbertach mac Coissi (d. 1016): if this attribution is incorrect, as argued by Carney, the earliest datable rhyming examples of *meicc* would date from the period 1050 × 1090 (Carney 1982-3: 209; but cf. O’Leary 1999: 55). The lost inscription from Kilmallock, Co. Limerick, cited by Rhys 1892: 273-74, as containing the form **MEIQ**, is irrelevant, as it is a nineteenth-century forgery (*CHIC* I: 256, where Macalister, at any rate, reads **MEICH**).

⁶⁶ McManus 1986: 15-6, 29; McManus 1991: 33, 37; cf. Jackson 1953: 141, n. 1; Sims-Williams 2003: 311-2, 331, 333.

⁶⁷ Note *ēiner* for *óenar* ‘one person’ rhyming with *fēinned* ‘warriors’ (genitive) in a poem attributed to Fland Mainistrech (d. 1056) (*LL* 23374). Note, however, *aesca* in the Karlsruhe Bede for *ésca* ‘moon’ (Stokes and Strachan 1901-3: II, 20) and *dáe* for *dé* ‘God’ (genitive) in the Milan glosses (Stokes and Strachan 1901-3: I, 377), perhaps hypercorrect spellings which would suggest that the sound change had taken place by the ninth century. They could, however, be related to the occasional use in Old Irish manuscripts, as in Late Latin, of *æ* for /e(:)/ (Thurneysen 1946: 18; cf. Rhys 1879: 211). Cf. *ae* for /e/ in Old Breton (Schrijver 1995: 174), and the

opposite hypercorrection in Old English (Campbell 1959: 50-1, n. 2) and in medieval Latin (Lewis 2005: 174). See also note 62 above.

⁶⁸ Dr Fernando Fernandez independently made a similar suggestion about **HE** on the Dyce inscription in his contribution to the Pictish workshop in Aberystwyth (21 March 2014).

⁶⁹ Cf. the comments of Russell 2011: 149; Koch 2013: 140.

⁷⁰ The early nineteenth-century Irish ogham inscription from Ahenny, Co. Tipperary which begins **FA AN LIG SO** ‘under this stone’ is hardly relevant, despite Raftery’s contention that it is a continuation of a much older tradition (Raftery 1969). It was probably inspired by the infamous Mount Callan forgery which begins **FAN LICSI** (McManus 1991: 131). Literary examples include: *fo leic ne rīgh at reileic* ‘under the flagstone of the kings in thy cemetery’ (Best 1905: 166, 167); *gnúis Derbforgaill fo licce leirg* (Marstrander 1911b: 212) ‘the face of Derbforgaill under a broad stone’ (Bourke et al. 2002: 206); *Atamne .vi.er segainn/ sunn fo leccaib Mochaimhe* (Flower 1926: 480) ‘Under Mochaimhe’s flags we lie,/ Six goodly warriors dead’ (Flower 1947: 68); *Atáid uaisle Chloinne Cuinn/ fán reilig leacda leargdhuinn* ‘The nobles of Clann Chuinn are [buried] under the brown-sloped flagstoned cemetery’ (McManus 1991: 156); *Atá táobh ar sáormheic sunn/ fá áoinleic risan ndáol ndonn* ‘The body of my good son is here under the same grave-stone with the brown beetle’ (Breatnach 1941-2: 172-3); *agus úrnaígh síos fó lioghaibh ar nuaithne mor* ‘and pray for our great Uaithne who lies under flags’ (Ó Murchú 2004: 344, 348); *Agus mo chorpán fán lic/ Fá dtá Pádraig is Brighit* ‘And my body beneath the stone/ Under which are Patrick and Brighid’ (Dinneen 1908: 104-5); *’S gun do chàireadh fo lic thu* ‘At your being laid under a slab’; *go leapuibh fa lic san uaigh* ‘unto flagstoned beds in the grave’; *ase h-agart úir fa lic* ‘your pillow is earth beneath a flagstone’; *Dh’adhlaic an t-Uan fo lic* ‘They buried the Lamb beneath a slab’ (Black 2001: 14.66, 18.62, 18.83, 25.69).

⁷¹ A possible example of the prefix *wo-, apparently realised as /wu/, is **VURUDDRANN** (*CIIC*, no. 255). Damian McManus (1991: 105), however, takes this to be a variant of **VORUDRAN** = ‘*Furudrán*, OI *for* + *odor* “dun” + -*án* dim. suffix’.

⁷² I am only aware of a handful of potential examples of this phenomenon in initial position in Gaelic, e.g. the obscure Scottish Gaelic word *daolong*, *dilong* ‘blow’ (?), which, it has been suggested, may be related to Old Irish *dlongid* ‘splits, cleaves away’ (Zall 2010: 238, n. 72). This is far from certain. Cf. Scottish Gaelic *Cairistine*, *Cairistiona* < *Christine*? See also *gonóithi* for *gnótha* ‘jibes (lit. ‘businesses’)’ in a sixteenth-century Irish manuscript (O’Grady 1926: 111). Manx has examples of an intrusive vowel in initial *mn-*, e.g. *myráyn*

‘women’ (Thomson 1960: 120), but this phenomenon seems to be isolated to this combination, Rhys’s *gylaghty* being based on a faulty transcription (MS *ghlaghty*) (Thomson 1960: 116).

⁷³ In her PhD thesis she very tentatively suggested that this sequence contained ‘Brittonic’ (i.e. Old Welsh) *ir* ‘the’, but judged this to be ‘unlikely’ (Forsyth 1996: 113).

⁷⁴ Cf. also Middle Welsh *araf* for *a’r haf* ‘and the summer’ (Morris Jones 1913: 25).

⁷⁵ Padel 1972: 32-3; Forsyth 1996: xxix, lvii, 18, 37, 90, 283; Forsyth 1997: 34; Forsyth 2007: 465-6; Sims-Williams 2007: 106-7; cf. McManus 1991: 36-7; McCone 1996: 113.

⁷⁶ Jackson 1953: 184-5; Ziegler 1994: 125-6; Swift 1997: 90; Sims-Williams 2003: 52.

⁷⁷ A potential comparandum is the Dark-Age inscription from Tintagel, Cornwall, which was read by Charles Thomas as PATER/ COLI AVI FICIT/ ARTOGNOV ‘Artognou, father of a descendant of Coll, has had (this) made/built/constructed’ (Morris et al. 1999: 214). However, this is now read as PATERN(.)[/ COLIAVIFICIT [/ ARTOGNOV[‘...[inscribed stone] of Paternus [and] of Coliau, Artognou made...’ (Hale 2006: 1669; cf. Koch et al 2007: 175).

⁷⁸ For example Steer 1968-9; Okasha 1971: 88, 147; Davies et al 2000: 197; Sims-Williams 2007: 183; Edwards 2013: 55, 214, 241-3, 244, 278-9, 401 (?).

⁷⁹ Cf. Oswald 1931: 229-30, 411 for Gallo-Roman potters called *Pater*.

⁸⁰ Cf. Old Breton *Ta(i)tal* (Bromwich and Evans 1992: 69)?

⁸¹ Schmidt 1957: 276; Billy 1993: 143; Luján Martínez 2003: 233; Meid 2005: 291-2; Falileyev 2007: 141, 142; Falileyev 2013: 135-6; Raybould and Sims-Williams 2007: 68-9; Delamarre 2007: 176, 179; Matasović 2009: 46. Cf. also Gaulish personal names in *Ater-* ‘father’ (Delamarre 2001: 50: cf. Old Irish *Aithirne*), or containing **atta* ‘father’ (Falileyev 2007: 46-9; Falileyev 2013: 16-7, 62).

⁸² See Williams 1926-7: 261; Thurneysen 1946: 497; Lewis and Pedersen 1961a: 260; Hamp 1974-6b; Hamp 1988; Lambert 1984: 29; Haycock 1994: xx, 84; Falileyev 2000: 3; McKee 2000: 465, 552; Wodtko 2013: 220.

⁸³ Schmidt 1957: 60; Evans 1967: 42-8, 56-7, 128-31, 204-6; Delamarre 2007: 209; Falileyev 2007: 30-1; Falileyev 2013: 1, 17; Wodtko 2013: 220-2. Note also Gaulish forms in *ad-* for *and-* (Evans 1967: 136-37, n. 10, 138, 140, 408).

⁸⁴ Forsyth, on the other hand, considers the possibility ‘that OA is a form of the verb “to be” in Pictish, cognate with Breton *oa* “was”’ (Forsyth 1996: 113), i.e. 3 sg. imperfect. This does not seem at all likely. The Old Breton form was *oi* (Schrijver 2011a: 70). While aspects of the prehistory of this form in Brittonic are disputed

(discussion by, e.g., Jackson 1953: 350; Hamp 1974; McCone 1991: 89; Isaac 1996: 371-80; Zimmer 1999: 553; Wmffre 2003: 381-2; Schrijver 2011a: 70), Old Welsh (*h*)oid (Jenkins and Owen 1984: 96; Zimmer 1999: 553-4; Falileyev 2000: 158-9; Falileyev 2008: 74; Falileyev 2016: 18; McKee 2000: 539; Schrijver 2011a: 70) confirms that /oi/ was the diphthong here at least from the ninth century. The development of this diphthong to *oa* is confined to Breton, and is reflected in the written record ‘barely before the 14th century’ (Jackson 1967: 185; cf. Schrijver 2011b: 375).

⁸⁵ In Old Welsh we have no certain examples of loss of *g* /ɣ/ after a back vowel before the ninth century (Jackson 1953: 454, 697; Dumville 1976-7: 348, n. 20; Davies et al 2000: 190; Sims-Williams 2003: 280, 287, 291; Koch 2013: 44), and Kenneth Jackson surmises (1953: 458-9, 470) that Breton would have lost this sound at around the same time, although the evidence is sparse.

⁸⁶ Cf. Haycock 2015: 341 on the uncertain date of the development of Welsh *yma* < *ymān*. Perhaps we have two forms here, one containing **mandu*- ‘spot, place’, the other **mag*- ‘field’ (cf. the comments of Zimmer (2000: 370, 572) on the Welsh suffix *-fa*, and Graham Isaac’s response (2001b: 75)). This would not save a putative Old Breton *ema*, however - we would expect **emag vel sim*.

⁸⁷ None of the extant Old Breton texts seem to pre-date the ninth century, although it is likely on orthographical grounds that the written tradition extended beyond this horizon (Jackson 1973-4: 19; Dumville 2005: 54-6; Padel, 2009-10: 208).

⁸⁸ Fleuriot 1970: 648-50; cf. Williams 1980: 36-7, 109; Mac Cana 1995; Zimmer 2000: 12-5 on this category of compounds. Note that Zimmer (2000: 72) classifies *pridwerth* differently.

⁸⁹ Thus, e.g., Williams 1938: 288; Henry 1966: 84; Jackson 1969: 145; Jackson 1971: 298; Jarman 1982: 152; Jarman 1988: 184; Rowland 1990a: 336; Haycock 1994: 158; Isaac 1996: 80; Koch 1997: 113; Thomas 2012: 97. See Zimmer 1990: 376-83; Zimmer 2000: 35-53 for formal comparanda. Cf. *glasfedd*, *rhuddfedd*, and note also *beteu ir* ‘fresh graves’ (Jones and Parry Owen 1995: 6.176). For the topos of the freshly dug grave in Welsh elegies, see Jones and Parry Owen 1991: 310; Bramley et al. 1994: 361, 553.

⁹⁰ For other possible Gaelic interpretations of **RAT**, see Forsyth 1996: 113-5. Cf. Middle Irish *rath in talmuin* (Dillon 1970: l. 104) = ‘grave’ (cf. Dooley and Roe 1999: 6)? For ancient Celtic forms in *rat*-, see Evans 1967: 87, 240-1; Sims-Williams 2006: 98; Falileyev et al 2010: 28. John Koch (Koch et al 2007: 171) apparently tentatively considers **I RAT** as comprising (?Brittonic) Pictish cognates of Gaelic *i* ‘in’ *rath* ‘goods, gift’.

⁹¹ But this is really just a guess. Rhys, followed by Allen, rendered it **O**, whereas Macalister tentatively transliterates it as **Y** (Macalister 1940: 211).

⁹² Jackson 1953: 671; Jackson 1967: 145; Koch 1985-6: 49-50; Sims-Williams 1991: 36-47; Sims-Williams 2003: 146; Sims-Williams 2007: 235.

⁹³ But note the Cornish inscription CVMREGNI or CVMRECINI, if < **Comreginos* ‘perhaps “Very-Proud-one”’ with ‘equative or intensive prefix’ **com-* (Thomas 1994: 278, 300, n. 4). However, Patrick Sims-Williams doubts this etymology ‘in view of the spelling CVM-’ (Sims-Williams 2003: 92, n. 469, 101, 129, 170, noting Kenneth Jackson’s unpublished etymology ‘*Coimoregini*, “Dear Stiff One”’; cf. Cane 2003: 235). Elizabeth Okasha pronounced this name ‘certainly Latin’ and, elsewhere, ‘presumably Latin’ (Okasha 1993: 46, 266), but I am unaware of such a name in Latin (cf. Sims-Williams 2003: 170, n. 1015). Jackson cites *cu-* < **kom-* in Old Cornish, and *cum-* and *cun-* in Old Breton (1953: 659).

⁹⁴ Note also CVNAIDE on an inscription from Cornwall, possibly to be identified with Welsh *Cynaethwy*, the first element of which could derive from **kintu-* rather than from **kuno-* (Sims-Williams 2003: 192). It could, however, be an Irish name in *áed* (Jackson 1953: 329, n. 1; Uhlich 1993: 210; Thomas 1994: 193, 207, 237-8; Sims-Williams 2003: 306; Cane 2003: 233; Koch et al 2007: 174). If Patrick Sims-Williams’s tentative etymology of CVLIDOR[?] < **Kö-llið-o-rīks* < **Kon-slii-*’ is correct, then this would be another example, but this is far from the only possible explanation of this form (Sims-Williams 2003: 23, 46-7, 71, n. 325, 146, n. 871, 315, 318; Edwards 2013: 199). Gaulish names with *cum* for *com* probably show Latin influence, and are hardly relevant here (see Evans 1967: 50).

⁹⁵ See, e.g., Rhys 1879: 208-9, 239-40; Jackson 1953: 191, 193, 283, n. 2, 355, 373; Williams 1980: 35-6, 39, 108, 114; Watkins 1982: 33; Charles-Edwards 1995: 716; McKee 2000: 480; Sims-Williams 2003: 42, 44, 103-5. The second <e> in Old Breton *cehet* shows the Breton sound change /ɛ/ > /ɪ/ (Jackson 1953: 284-5; Jackson 1967: 91-3; Schrijver 1995: 25-6; Schrijver 2011a: 21, 22; Sims-Williams 2003: 41).

⁹⁶ But for a Middle Welsh comparandum, note *kynmwyd* for *kymmwyd* ‘equal’ (?< *cyn-* + *bwyd*) in both the White Book of Rhydderch and Red Book of Hergest versions of *Culhwch ac Olwen* (Bromwich and Evans 1992: l. 1), and note peculiar *hamner* < English *hammer* (Johnston 1995: 547). Cf. Gaulish *Conbogi*, perhaps for *Combogi* (Evans 1967: 153, n. 7, 185, n. 10). For Middle Irish *mn* for *nn*, see O’Rahilly 1967: 308.

⁹⁷ Cf. also *Comaria* (Conway et al 1933: I, 326).

⁹⁸ In which case, the first element could be compared to the first element in [-]ETORIGAS from Dingle, Co. Kerry (*CHC* 179) which is probably from **ianto-* ‘jealousy, emulation’ (Gaulish *Iantu-*; Old Irish *ét* ‘jealousy’; Old Breton *Iant-*, on which see Evans 1964-6: 8-9; Evans 1967: 211-5). Cf. ETTORIGI from Llanbabo, Anglesey (Edwards 2013: 153-6), if this is an Irish name – otherwise it could contain a Brittonic reflex of **aito-* ‘epoch’, cf. Gaulish *Aetorius*, Old Breton *Oedri* (Sims-Williams 2003: 121, 196, 313; Edwards 2013: 155). The forms **Ethyr*, **Ethri* mentioned by Rhys (1879: 363), Jackson (1953: 456, n. 1, 566) and Williams (1980: 21) are unattested.

⁹⁹ For the evidence for Pictish **mōr*, *mor-* (in *mormaer* ‘lord’, borrowed into Gaelic), see Jackson 1972: 103-9; Jackson 1980: 176; Hamp 1983-8. David Stifter (2009: 294) suggests that the first element in *mormaer* is Gaelic *mór*, comparing the apparent shortening of the vowel in composition in the name *Mor-rigain*, but note that Graham Isaac, following John Rhys and others, derives the first element of the latter name from **morā* ‘demon’ *vel sim* (Isaac 2001a: 17; cf. O’Rahilly: 1967, 296; Evans 1967: 103, for references to Rhys’s comments and earlier accounts).

¹⁰⁰ Cf. Gaulish *Connos* (Rhys 1911: 22; Evans 1967: 337, 442)?

¹⁰¹ Cf. Cunningsburgh 3 xTTEC[-, Gurness EITTE (see Forsyth 1996: 330), Inchyra ETT- (see Forsyth 1996: 356), and, perhaps, ETTE (the reading favoured by Rhys 1898: 361-2; Diack 1922: 12; Padel 1972: 154; Cox 1999: 99, 101) at the beginning of the obscure non-ogham inscription from Newton. None of these sequences contains H. ([E]TT on the St Vigeans stone is probably Latin *et* ‘and’ (Padel 1972: 159; Okasha 1985: 60; Clancy 1993: 346)).

¹⁰² I am grateful to Professor Koch for confirming this, and for supplying me with the references to the Cartulary of Redon and the Book of Llandaf cited above (personal communication, 27 May 2014).

¹⁰³ Cf. Thurneysen 1946: 548; Murphy 1956: 282; Lewis and Pedersen 1961a: 202; *DIL* s.v. 2 *os*.

¹⁰⁴ But note poetic *Ot é cnámacha cáela/ ó do-éctar mo láma* (Murphy 1956: 76), literally ‘And they bony and thin, when my arms are seen’.

¹⁰⁵ Lewis and Pedersen 1961a: 323; Zimmer 1999: 552; Falileyev 2000: 157; Falileyev 2008: 74; Falileyev 2016: 18; Schrijver 2011a: 70.

¹⁰⁶ Pokorny 1950; Sims-Williams 1999: 472-3; Sims-Williams 2000: 6; Sims-Williams 2003: 297; Sims-Williams 2007: 19; Repanšek 2016: 248. Patrizia de Bernardo Stempel offers a different etymology for this form, however, and does not accept that this sound change had occurred in Irish by Ptolemy’s time (de Bernardo

Stempel 2000: 103, 104; cf. Isaac 2004: Brit. Inss. Comments). It had certainly occurred by the time of the earliest Irish ogham inscriptions, however (MacNeill 1909: 352; Jackson 1953: 138; McManus 1991: 84; McCone 1996: 108). Jackson (1953: 142) gives a date-range ‘between the first and early fifth centuries’, while McCone (1996: 77) labels it ‘roughly third-century’, which leaves open the question of whether it post-dated Dio Cassius or not.

¹⁰⁷ Warren Cowgill (1970: 133) stated that Old Irish ‘é “they” probably does not correspond directly to M[iddle] W[elsh] wy, which lacks a plausible explanation anyhow’, but the two forms are explained as exact cognates by, e.g., McCone 1994: 187; Schrijver 1997: 60-1 (cf. Lewis and Pedersen 1961a: 216).

¹⁰⁸ Sims-Williams 1990: 253-60; Sims-Williams 1991: 37, 48-9, 59; Sims-Williams 2003: 286-7; McCone 1996: 161-3; cf. Rhys 1901: 522. *Contra* McCone 2008: 11 ‘in the course of the seventh century’ (cf. Jackson 1953: 333-5, 340, n. 2, 697, favouring the second half of the seventh century).

¹⁰⁹ See, e.g., Watkins 1960-2: 302; Watkins 1982: 31; Haycock 1994: 13; McKee 2000: 520-1; Falileyev 2000: 97-8; Falileyev 2008: 75, 114; Falileyev 2016: 19; Thomas 2015: 30; Sims-Williams 2015: 289.

¹¹⁰ For discussion of the etymology of this particle, see Lewis and Pedersen 1961a: 243; Hamp 1979; Hamp 1980-2: 84; Schrijver 1995: 256; Schrijver 1997: 162-3; Isaac 1996: 392; Lambert 2003: 132-3; Schumacher 2004: 96, n. 98; McCone 2006: 231-2, 240; Sims-Williams 2007: 235; Sims-Williams 2015: 289. *Yt* is infrequent, but not unattested, at the beginning of clauses (Isaac 1996: 391; Haycock 2015: 195).

¹¹¹ Williams 1938: ll. 795, 1266; see Isaac 1996: 231; cf. Lewis and Pedersen 1961a: 206; Evans 1964: 56.

¹¹² Cf. McKenna 1990: 269-70; Bramley et al 1994: 27, 69, 239; Haycock 2013: 80.

¹¹³ Cf. *teruyn tir a charrec* (Bramley et al 1994: 26.147, n. on p. 471) ‘the limit of [the] territory with a stone’ in Gwynfardd Brycheiniog’s poem to St David. But contrast Williams 1951: 262; Johnston 1988: 196, who take *maenor/maenol* to originally refer to the stone house of an aristocrat.

¹¹⁴ Charles-Edwards 1976: 84-5; Charles-Edwards 1993a: 261-2; McManus 1991: 165; F. Kelly 1988: 204; F. Kelly 1997: 409; cf. Swift 1997: 47.

¹¹⁵ Handley 1998; Edwards 2001; Edwards 2007: 34; Edwards 2013: 48, 49, 161.

¹¹⁶ As mentioned above, I cannot see any grounds for suggesting that it is a reduced form of Irish *so* or of a cognate of Breton *-se*.

¹¹⁷ Unless the final letter of this form is to be read as **N** (Forsyth 1996: 408, 416).

¹¹⁸ Is it, perhaps, a Gaelic name of the pattern *Cú X*, with the **H** standing for /x/ (**Cú Cheit* < personal name *Cet*??)? For lenition after *cú*, see Bergin 1938: 218; Thurneysen 1946: 143; Lewis and Pedersen 1961a: 135; Joseph 1990: 126, n. 2. Or could the first element be Brittonic *cu* < **koimo-* ‘dear’, cf. Welsh *Cuhelyn*, in which case the *h* could derive from lenited *m* (Sims-Williams 2011: 301, n. 91)? The second element could be **aito-* > **ε:t-* (> *oed*) ‘epoch’, but no such name is attested, as far as I know.

¹¹⁹ It is tempting, for instance, to see UORET from the St Vigeans inscription as a cognate of Old Welsh *guorit* ‘delivers, saves’ : Old Irish *fo:reith*, but from the context it is far more likely to be a personal name, cf. *Uurad* from the Pictish king-lists, Old Breton *Uuoret* (Rhys 1892: 270; Rhys 1901: 217-8; Jackson 1980: 140; Padel 1972: 34, 159; Okasha 1985: 45, 60; Clancy 1993: 346; Forsyth 1996: 314; Forsyth 1997: 33; Koch et al 2007: 171). For other Celtic personal names containing the element **woreto-*, see Evans 1967: 126-7; Jenkins and Owen 1984: 98; Sims-Williams 2003: 127; Zimmer 2007: 455; Wodtko 2013: 228. On the vocalism of *guorit*, see Rodway 2013: 52.

¹²⁰ For the application of this principle to the field of Celtic onomastics, see Sims-Williams 2006: 27-37; Sims-Williams 2009: 463-5; Falileyev 2012: 82-90; Falileyev 2013: v; Falileyev 2014: 34-9.

¹²¹ Damian McManus (1999) expresses similar sentiments.

¹²² Cf. Smyth 1984: 58: ‘The case for a pre-Celtic language lurking behind these inscriptions is not proven’.

¹²³ See Padel 1972: 39-40; Evans 1991: 9; Trask 1997: 390-2; Forsyth 2006: 1444.

¹²⁴ See, e.g., Evans 1983: 951-4; Evans 1986: 106-8; Thomason and Kaufman 1988: 111-2; Trask 1997: 364-5; Sims-Williams 1998: 508-9; McCone 2006: 18; Matasović 2007: 108; Matasović 2009: 443; Mac Eoin 2007: 115; Mallory 2013a: 33-6; Mallory 2013b: 281-6.

¹²⁵ Versions of this paper were read at the Centre for Advanced Welsh and Celtic Studies in Aberystwyth on 21 March 2014, and to a meeting of the Datblygiad yr Iaith Gymraeg project at the British Academy in London on 8 May 2015. I am grateful to all who commented on these occasions, and in particular to Dr Alexander Falileyev, Dr Katherine Forsyth, Professor John Koch, Professor Erich Poppe, Professor Patrick Sims-Williams and two anonymous reviewers for their helpful comments on various aspects. I absolve them of any responsibility for my conclusions, and for any errors or misrepresentations – this is, of course, conventional, but in this case, I think, particularly important.

Abbreviations

CIIC = Macalister, R. A. S. (1945-9). *Corpus Inscriptionum Insularum Celticarum*. Dublin: Stationery Office.

DIL = Quin, E. G. (ed.) (1983). *Dictionary of the Irish Language Based Mainly on Old and Middle Irish Materials*. Compact edition. Dublin: Royal Irish Academy. Available online at <http://edil.qub.ac.uk>.

GPC = Thomas, R. J., G. A. Bevan and P. J. Donovan (eds.) (1950-2002). *Geiriadur Prifysgol Cymru: A Dictionary of the Welsh Language*. Cardiff: University of Wales Press; online at: <http://www.geiriadur.ac.uk/>.

LEIA = Vendryes, E., Bachellery, E. and Lambert, P.-Y. (eds.) (1959-). *Lexique étymologique de l'irlandais ancien*. Paris & Dublin: Centre National de la Recherche Scientifique & Dublin Institute for Advanced Studies.

LL = Best, R. I., Bergin, O. and O'Brien, M. A. (eds.) (1954-67). *The Book of Leinster*. Dublin: Dublin Institute for Advanced Studies.

References

Adams, J. N. (2007). *The Regional Diversification of Latin 200 BC – AD 600*. Cambridge: Cambridge University Press.

Aldhouse Green, M. J. and Raybould, M. E. (1999). Deities with Gallo-British Names Recorded in Inscriptions from Roman Britain', *Studia Celtica* **33**, 91-135.

Anderson, A. O. and Anderson, M. O. (eds) (1991). *Adomnán's Life of Columba*. Second edition. Oxford: Clarendon Press.

Barnes, M. P. (1999). Review of Cox 1999, *Northern Studies* **34**, 129-39.

Bartrum, P. C. (1962-63) Tri Thlws ar Ddeg Ynys Brydain, *Études celtiques* **10**, 434-77.

-
- Bergin, O. (1938). Varia I, *Ériu* **12**, 215-35.
- Best, R. I. (ed.) (1905). The Graves of the Kings at Clonmacnois, *Ériu* **2**, 163-71.
- Billy, P.-Y. (1993). *Thesaurus Linguae Gallicae*. Hildesheim, Zurich & New York: Olms Weidmann.
- Birley, A. (1979). *The People of Roman Britain*. London: B T Batsford Ltd.
- Bisagni, J. (2012). *Leprechaun: A New Etymology*’, *Cambrian Medieval Celtic Studies* **64**, 47-84.
- Black, R. (ed.) (2001). *An Lasair: Anthology of 18th Century Scottish Gaelic Verse*. Edinburgh: Birlinn.
- Bollard, J. K. (1990). Myrddin in Early Welsh Tradition. In: P. Goodrich (ed.), *The Romance of Merlin*. New York & London: Garland Publishing, Inc, 13-54.
- Bourke, A., Kilfeather, S., Luddy, M., Mac Curtain, M., Meaney, G., Ní Dhonnchadha, M., O’Dowd, M. and Wills, C. (eds.) (2002). *The Field Day Anthology of Irish Writing, IV, Irish Women’s Writing and Traditions*. Cork: Cork University Press.
- Bramley, K. A., Jones, N. A., Owen, M. E., McKenna, C., Williams, G. A. and Williams, J. E. C. (eds.) (1994). *Gwaith Llywelyn Fardd I ac Eraill o Feirdd y Ddeuddegfed Ganrif*. Cardiff: University of Wales Press.
- Breatnach, L. (1994). An Mheán-Ghaeilge. In K. McCone, D. McManus, C. Ó Háinle, N. Williams and L. Breatnach (eds.), *Stair na Gaeilge*. Maynooth: Department of Irish, St Patrick’s College, Maynooth, 221-333.
- Breatnach, R. A. (ed.) (1941-2). Marbhna Fhearchoir Í Mháoil Chíaráin, *Éigse* **3**, 165-80.
- Bromwich, R. and Evans, D. S. (eds.) (1992). *Culhwch and Olwen: An Edition and Study of the Oldest Arthurian Tale*. Cardiff: University of Wales Press.

-
- Broun, D. (1998). Gaelic Literacy in Eastern Scotland between 1124 and 1249. In H. Price (ed.), *Literacy in Medieval Celtic Societies*. Cambridge: Cambridge University Press, 183-201.
- Byrne, F. J. (2008). The Inscriptions in the Main Passage Tomb at Knowth. In F. J. Byrne, W. Jenkins, G. Kenny and C. Swift (eds), *Excavations at Knowth 4: Historical Knowth and Its Hinterland*. Dublin: Royal Irish Academy, 89-119.
- Campanile, E. (1974). *Profilo etimologico del cornico antico*. Pisa: Pacini.
- Campbell, A. (1959). *Old English Grammar*. Oxford: Clarendon Press.
- Cane, M. (2003). Personal Names of Men in Wales, Cornwall and Brittany, 400 – 1400 AD. Unpublished PhD thesis, University of Wales, Aberystwyth.
- Carney, J. (1971). Three Old Irish Accentual Poems, *Ériu* **22**, 23-80.
- Carney, J. (1982-3). The Dating of Early Irish Verse Texts, 500 – 1100, *Éigse* **19**, 177-216.
- Chambers, R. W. (1959). *Beowulf: An Introduction to the Study of the Poem with a Discussion of the Stories of Offa and Finn*. Third edition with a supplement by C. L. Wrenn. Cambridge: University Press.
- Charles-Edwards, T. M. (1976). Boundaries in Irish Law. In: P. H. Sawyer (ed.), *Medieval Settlement: Continuity and Change*. London, Edward Arnold, 83-7.
- Charles-Edwards, T. M. (1993a). *Early Irish and Welsh Kinship*. Oxford: Clarendon Press.
- Charles-Edwards, T. M. (1993b). The New Edition of Adomnán's *Life of Columba*, *Cambrian Medieval Celtic Studies* **26**, 65-73.
- Charles-Edwards, T. M. (1995). Language and Society among the Insular Celts AD 400-1000. In: M. Green (ed.), *The Celtic World*. London & New York: Routledge, 703-36.
- Charles-Edwards, T. M. (2013). *Wales and the Britons 350 – 1064*. Oxford: Oxford University Press.

-
- Clancy, T. O. (1993). The Drosten Stone: A New Reading, *Proceedings of the Society of Antiquaries of Scotland* **123**, 345-53.
- Clancy, T. O. (1999). Review of Cox 1999, *Peritia* **13**, 332-41.
- Clancy, T. O. (2000). Scotland, the 'Nennian' Recension of the *Historia Brittonum*, and the *Lebor Bretnach*. In: S. Taylor (ed.), *Kings, Clerics and Chronicles in Scotland 500 – 1297: Essays in Honour of Marjorie Ogilvie Anderson*. Dublin: Four Courts, 87-107.
- Coates, R. (2006). The Pre-English Name of Dorchester-on-Thames, *Studia Celtica* **40**, 51-62.
- Collingwood, W. G. (1927). *Northumbrian Crosses of the Pre-Norman Age*. London: Faber and Gwyer.
- Conway, R. S., Whatmough, J. and Johnson, S. E. (1933). *The Prae-Italic Dialects of Italy*. London: British Academy.
- Cowgill, W. (1970). Italic and Celtic Superlatives and the Dialects of Indo-European. In: G. Cardona, H. M. Hoenigswald and A. Senn (eds.), *Indo-European and Indo-Europeans*. Philadelphia, PA: University of Pennsylvania Press, 113-53.
- Cox, R. A. V. (1999). *The Language of the Ogam Inscriptions of Scotland*. Aberdeen: Department of Celtic, University of Aberdeen.
- Cramp, R. (1984). *Corpus of Anglo-Saxon Stone Sculpture, I, County Durham and Northumberland*. Oxford: Oxford University Press.
- Curle, A. O. (1923). *The Treasure of Traprain*. Glasgow: Maclehose, Jackson and Co.
- Davies, W., Graham-Campbell, J., Handley, M., Kershaw, P., Koch, J. T., le Duc, G. and Lockyear, K. (2000). *The Inscriptions of Early Medieval Brittany/Les Inscriptions de la Bretagne du Haut Moyen Âge*. Oakville, CT & Aberystwyth: Celtic Studies Publications.

-
- De Bernardo Stempel, P. (1996). Die Stummvokale: eine Bilanz für das Keltiberische. In: W. Meid and P. Anreiter (eds.), *Die grösseren altkeltischen Sprachdenkmäler*. Innsbruck: Verlag des Instituts für Sprachwissenschaft der Universität Innsbruck, 212-56.
- De Bernardo Stempel, P. (1999a). Zur Methode der Wortbildungsanalyse von Korpusssprachen (anhand keltischen materials). In: P. Anreiter and E. Jerem (eds.), *Studia Celtica et Indogermanica: Festschrift für Wolfgang Meid*. Budapest: Archaeolingua, 61-77.
- De Bernardo Stempel, P. (1999b). *Nominale Wortbildung des älteren Irischen*. Tübingen: Max Niemeyer.
- De Bernardo Stempel, P. (2000). Ptolemy's Celtic Italy and Ireland: A Linguistic Analysis. In: D. N. Parsons and P. Sims-Williams (eds.), *Ptolemy: Towards a Linguistic Atlas of the Earliest Celtic Place-Names of Europe*. Aberystwyth: CMCS Publications, 83-112.
- De Bernardo Stempel, P. (2013a). The Phonetic Interface of Word Formation in Continental Celtic. In: J. L. García Alonso (ed.), *Continental Celtic Word Formation: The Onomastic Data*. Salamanca: Ediciones Universidad, 63-83.
- De Bernardo Stempel, P. (2013b). From Indo-European to the Individual Celtic Languages. In: D. Ó Baoill, D. Ó hAodha and N. Ó Muraíle (eds.), *Saltair Saíochta, Sanasaíochta agus Seanchais: A Festschrift for Gearóid Mac Eoin*. Dublin: Four Courts, 25-42.
- De Courson, A. (ed.) (1863). *La Cartulaire de l'abbaye de Redon*. Paris: Imprimerie Imperiale.
- De Paor, L. (1987). The High Crosses of Tech Theille and Kinnitty and Other Ninth-Century Irish Sculptures. In: E. Rynne (ed.), *Figures from the Past*. Dún Laoghaire: Glendale Press, 131-58.

-
- Delamarre, X. (2001). *Dictionnaire de la langue gauloise*. Paris: Editions Errance.
- Delamarre, X. (2007). *Noms de personnes celtiques dans l'épigraphie classique*. Paris: Editions Errance.
- Derolez, R. (1951). Ogam, 'Egyptian', 'African', and 'Gothic' Alphabets, *Scriptorium* **5**, 3-20.
- Derolez, R. (1954). *Runica Manuscripta: The English Tradition*. Bruges: De Tempel.
- Diack, F. C. (1922). *The Newton Stone and Other Pictish Inscriptions*. Paisley: Alexander Gardner.
- Dillon, M. (ed.) (1970). *Stories from the Acallam*. Dublin: Dublin Institute for Advanced Studies.
- Dinneen, P. S. (ed.) (1908). *The History of Ireland by Geoffrey Keating*, III. London: David Nutt.
- Dinneen, P. S. (1927). *Foclóir Gaedhilge agus Béarla: An Irish-English Dictionary*. Dublin: The Educational Company of Ireland.
- Dooley, A. and Roe, H. (eds.) (1999). *Tales of the Elders of Ireland*. Oxford: Oxford University Press.
- Driscoll, S. T. (2011). Pictish Archaeology: Persistent Problems and Structural Solutions. In: S. T. Driscoll, J. Geddes and M. A. Hall (eds.), *Pictish Progress: New Studies on Northern Britain in the Early Middle Ages*. Leiden: Brill, 245-79.
- Dumville, D. N. (1975-6). 'Nennius' and the *Historia Brittonum*, *Studia Celtica* **10-11**, 78-95.
- Dumville, D. N. (1976-7). On the North British Section of the *Historia Brittonum*, *Welsh History Review* **8**, 345-54.

-
- Dumville, D. N. (2005). Writers, Scribes and Readers in Brittany, AD 800 – 1100: The Evidence of the Manuscripts. In: H. Fulton (ed.), *Medieval Celtic Literature and Society*. Dublin: Four Courts, 49-64.
- Edwards, H. M. (ed.) (2013). *Gwaith y Nant*. Aberystwyth: University of Wales Centre for Advanced Welsh and Celtic Studies.
- Edwards, N. (2001). Early Medieval Inscribed Stones and Stone Sculpture in Wales: Context and Function, *Medieval Archaeology* **45**, 15-39.
- Edwards, N. (2007). *A Corpus of Early Medieval Inscribed Stones and Stone Sculpture in Wales, II, South-West Wales*. Cardiff: University of Wales Press.
- Edwards, N. (2013). *A Corpus of Early Medieval Inscribed Stones and Stone Sculpture in Wales, III, North Wales*. Cardiff: University of Wales Press.
- Eogan, G. and Moore, F. (2008). A Fragment of an Iron-Age Quern and an Ogham Stone, *Peritia* **20**, 297-314.
- Eska, J. F. (1990). The Deictic Pronominal **key* in Celtic, *Celtica*, **21**, 153-5
- Eska, J. F. (2007). On Basic Configuration and Movement within the Gaulish Clause. In: P.-Y. Lambert and G. J. Pinault (eds.), *Gaulois et celtique continental*. Geneva: DROZ, 215-29.
- Eska, J. F. (2010-2). Remarks on Intrusive Vowels in the Ogam Corpus of Early Irish, *Keltische Forschungen*, **5**, 139-56.
- Eska, J. F. (2013). A Salvage Grammar of Galatian, *Zeitschrift für celtische Philologie* **60**, 51-63.
- Eska, J. F. (2015). Review of *Continental Celtic Word Formation: The Onomastic Data*, ed. J. L. García Alonso. Salamanca: Ediciones Universidad, *Journal of Celtic Linguistics* **16**, 140-8.

-
- Evans, D. E. (1964-6). Some Celtic Personal Names in the *Commentaries on the Gallic War*, *Bulletin of the Board of Celtic Studies* **21**, 1-17.
- Evans, D. E. (1967). *Gaulish Personal Names*. Oxford: Clarendon.
- Evans, D. E. (1983). Language Contact in Pre-Roman and Roman Britain. In: H. Temporini and W. Haase (eds.), *Aufstieg und Niedergang der römischen Welt*, II, 29.2. Berlin & New York: Walter de Gruyter, 949-87.
- Evans, D. E. (1986). The Celts in Britain (up to the Formation of the Brittonic Languages): History, Culture, Linguistic Remains, Substrata. In: K. H. Schmidt and R. Ködderitzsch (eds.), *Geschichte und Kultur der Kelten*. Heidelberg, Carl Winter, 102-15.
- Evans, D. E. (1991). Celticity, Identity and the Study of Language - Fact, Speculation and Legend, *Archaeologia Cambrensis* **140**, 1-16.
- Evans, D. S. (1964). *A Grammar of Middle Welsh*. Dublin: Dublin Institute for Advanced Studies.
- Evans, D. S. (1978). *Iaith y Gododdin*. In: R. Bromwich and R. Brinley Jones (eds.), *Astudiaethau ar yr Hengerdd*. Cardiff: University of Wales Press, 72-88.
- Evans, J. G. (ed.) (1906). *The Black Book of Carmarthen*. Pwllheli: private press.
- Evans, J. G. (ed.) (1911). *The Poetry in the Red Book of Hergest*. Llanbedrog: private press.
- Evans, J. G. and Rhys, J. (eds.) (1893). *The Text of the Book of Llan Dâv*. Oxford: private press.
- Falileyev, A. (2000). *Etymological Glossary of Old Welsh*. Tübingen: Max Niemeyer.
- Falileyev, A. (2007). *Celtic Dacia*. Aberystwyth: CMCS Publications.
- Falileyev, A. (2008). *Le Vieux-Gallois*, edited and translated by Tristram, H. L. C. and le Berre, Y. Potsdam: Universitätsverlag Potsdam.

-
- Falileyev, A. (2012). *Selecta Celto-Balcanica*. St Petersburg: Nestor Istoriya.
- Falileyev, A. (2013). *The Celtic Balkans*. Aberystwyth: CMCS Publications.
- Falileyev, A. (2014). *In Search of the Eastern Celts: Studies in Geographical Names, Their Distribution and Morphology*. Budapest: Archaeolingua.
- Falileyev, A. (2016). *Llawlyfr Hen Gymraeg*. E-book. Carmarthen: Y Coleg Cymraeg Cenedlaethol (<https://llyfrgell.porth.ac.uk/media/llawlyfr-hen-gymraeg-alexander-falileyev>).
- Fleuriot, L. (1970). L'inscription de sarcophage de Lomarec, *Annales de Bretagne* **77**, 639-53.
- Fleuriot, L. (1983). Brittonica, *Études celtiques* **20**, 101-17.
- Flower, R. (1926). *Catalogue of Irish Manuscripts in the British Museum II*. London: British Museum.
- Flower, R. (1947). *The Irish Tradition*. Oxford: Clarendon Press.
- Förster, M. (1930). Die Freilassungsurkunden des Bodmin-Evangeliars. In: Bøgholm, A. Brusendorff and C. A. Bodelsen (eds.), *A Grammatical Miscellany Offered to Otto Jespersen*. Copenhagen & London: Levin & Munksgaard/George Allen & Unwin, 77-99.
- Forsyth, K. (1995a). The Ogam-Inscribed Spindle-Whorl from Buckquoy: Evidence for Irish Language in Pre-Viking Orkney?, *Proceedings of the Society of Antiquaries of Scotland* **125**, 677-96.
- Forsyth, K. (1995b). The Inscriptions on the Dupplin Cross. In: C. Bourke (ed.), *From the Isles of the North: Early Medieval Art in Ireland and Britain*. Belfast, HMSO, 237-44.
- Forsyth, K. (1996). The Ogham Inscriptions of Scotland: An Edited Corpus. Unpublished PhD thesis, Harvard University.

-
- Forsyth, K. (1997). *Language in Pictland: The Case against 'Non-Indo-European Pictish'*.
Utrecht: de Keltische Draak.
- Forsyth, K. (1998). Literacy in Pictland. In: H. Pryce (ed.), *Literacy in Medieval Celtic Societies*. Cambridge: Cambridge University Press, 39-61.
- Forsyth, K. (2000). The Ogham Inscription at Dunadd. In: A. Lane and E. Campbell (eds.), *Dunadd: An Early Dalriadic Capital*. Oxford: Oxbow Books, 246-72.
- Forsyth, K. (2006). Pictish Language and Documents. In: J. T. Koch (ed.), *Celtic Culture: A Historical Encyclopedia*. Santa Barbara, CA, Denver, CO and Oxford: ABC Clio, 1444-6.
- Forsyth, K. (2007). An Ogham-Inscribed Plaque from Bornais, South Uist. In: B. Ballin-Smith, S. Taylor and G. Williams (eds.), *West over Sea: Studies in Scandinavian Sea-Borne Expansion and Settlement before 1300*. Leiden: Brill, 460-77.
- Foster, S. M. (1997). The Picts: Quite the Darkest of the Peoples of Dark Age Britain? In: D. Henry (ed.), *The Worm, The Germ and the Thorn: Pictish and Related Studies Presented to Isabel Henderson*. Balgavies: Pinkfoot Press, 5-17.
- Foster Evans, D. (ed.) (2000). *Gwaith Hywel Swrdwal a'i Deulu*. Aberystwyth: Centre for Advanced Welsh and Celtic Studies.
- Fraser, J. E. (2009). *From Caledonia to Pictland: Scotland to 795*. Edinburgh: Edinburgh University Press.
- Frere, S. S. and R. S. O. Tomlin (eds.) (1991). *The Roman Inscriptions of Britain*, II.2. Stroud: Alan Sutton Publishing Ltd.
- Fynes-Clinton, O. H. (1913). *The Welsh Vocabulary of the Bangor District*. London: Oxford University Press.

-
- George, K. (2009). Cornish. In: M. J. Ball and N. Müller (eds.), *The Celtic Languages*. Second edition. London: Routledge, 488-535.
- Gray, E. A. (ed.) (1982). *Cath Maige Tuired: The Second Battle of Mag Tuired*. London: The Irish Texts Society.
- Greene, D. (1971). Linguistic Considerations in the Dating of Early Welsh Verse, *Studia Celtica* **6**, 1-11.
- Gresham, C. A. (1968). *Medieval Stone Carving in North Wales: Sepulchral Slabs and Effigies of the Thirteenth and Fourteenth Centuries*. Cardiff: University of Wales Press.
- Gresham, C. A. (1985). Bedd Porius, *Bulletin of the Board of Celtic Studies* **32**, 386-92.
- Gruffydd, R. G. (2002). 'Edmyg Dinbych': *Cerdd Lys Gynnar o Ddyfed*. Aberystwyth: Centre for Advanced Welsh and Celtic Studies.
- Gwara, S. (2004). *Education in Wales and Cornwall in the Ninth and Tenth Centuries: Understanding De raris fabulis*. Cambridge: Hughes Hall and Department of Anglo-Saxon, Norse, and Celtic, University of Cambridge.
- Hale, A. (2006) Tintagel. In: J. T. Koch (ed.), *Celtic Culture: A Historical Encyclopedia*. Santa Barbara, CA, Denver, CO & Oxford: ABC Clio, 1668-70.
- Hamp, E. P. (1972-4). Gwaudd, *Bulletin of the Board of Celtic Studies* **25**, 293-5.
- Hamp, E. P. (1974). OW *enep* and the Imperfect 3sg., *Ériu* **25**, 268-70.
- Hamp, E. P. (1974-6a). On the Rounded Character of British \bar{q} , *Bulletin of the Board of Celtic Studies* **26**, 30-1.
- Hamp, E. P. (1974-6b). Welsh *at/ar* 'to', *Bulletin of the Board of Celtic Studies* **26**, 138-9.
- Hamp, E. P. (1979). Welsh yr^L , yd , *Zeitschrift für celtische Philologie* **37**, 167-8.
- Hamp, E. P. (1980-2). *GPC ef I* (b), *Bulletin of the Board of Celtic Studies* **29**, 83-4.

-
- Hamp, E. P. (1983-8). Scottish Gaelic *morair*, *Scottish Gaelic Studies* **14-15**, 138-41.
- Hamp, E. P. (1988). *Ad Pontem, Pontibus* as British, *Bulletin of the Board of Celtic Studies* **35**, 52.
- Hamp, E. P. (2003). Gaulish *ci*, -c, Old Irish *cé*, Ogam *KOI*, *Celtica* **24**, 129.
- Handley, M. (1998). The Early Medieval Inscriptions of Western Britain: Function and Sociology. In: J. Hill and M. Swan (eds.), *The Community, the Family and the Saint: Patterns and Power in Early Medieval Europe*. Turnhout: Brepols, 339-61.
- Harbison, P. (1992). *The High Crosses of Ireland*. Bonn: Dr. Rudolf Habelt GMBH.
- Harvey, A. (1987). The Ogam Inscriptions and Their Geminate Consonant Symbols, *Ériu* **38**, 45-71.
- Harvey, A. (1991). Retrieving the Pronunciation of Early Insular Celtic Scribes: The Case of Dorbbēne, *Celtica* **22**, 48-63.
- Haycock, M. (ed.) (1994). *Blodeugerdd Barddas o Ganu Crefyddol Cynnar*. Llandybïe: Barddas.
- Haycock, M. (2003). Cadair Ceridwen. In: I. Daniel, M. Haycock, D. Johnston and J. Rowland (eds.), *Cyfoeth y Testun: Ysgrifau ar Lenyddiaeth Gymraeg yr Oesoedd Canol*. Cardiff, University of Wales Press, 148-75.
- Haycock, M. (ed.) (2013). *Prophecies from the Book of Taliesin*. Aberystwyth: CMCS.
- Haycock, M. (ed.) (2015). *Legendary Poems from the Book of Taliesin*. Second edition. Aberystwyth: CMCS.
- Henry, P. L. (1966). *The Early English and Celtic Lyric*. London: George Allen & Unwin Ltd.
- Hickey, R. (2011). *The Dialects of Ireland: Study of a Changing Landscape*. Berlin: Walter de Gruyter.

-
- Hickey, R. (2014). *The Sound Structure of Modern Irish*. Berlin: Walter de Gruyter.
- Higgitt, J. (1986). Words and Crosses: The Inscribed Stone Cross in Early Medieval Britain and Ireland. In: J. Higgitt (ed.), *Early Medieval Sculpture in Britain and Ireland*. Oxford, BAR, 125-51.
- Hughes, A. J. (1993). Old Welsh *Cunbran/Conbran* < **Kunobranos* ‘Wolf-Raven’, in the Light of Old Irish *Conbran(n)*, *Ériu* **44**, 95-8.
- Huws, D. (2000). *Medieval Welsh Manuscripts*. Cardiff & Aberystwyth: University of Wales Press & The National Library of Wales.
- Isaac, G. R. (1996). *The Verb in the Book of Aneirin: Studies in Syntax, Morphology and Etymology*. Tübingen: Max Niemeyer.
- Isaac, G. R. (1998). *Gweith Gwen Ystrat* and the Northern Heroic Age of the Sixth Century, *Cambrian Medieval Celtic Studies* **36**, 61-70.
- Isaac, G. R. (1999). Review of Koch 1997, *Llên Cymru* **22**, 138-60.
- Isaac, G. R. (2001a). Myrddin, Proffwyd Diwedd y Byd: Ystyriaethau Newydd ar Ddatblygiad ei Chwedl, *Llên Cymru* **24**, 13-23.
- Isaac, G. R. (2001b). Review of Zimmer 2000, *Cambrian Medieval Celtic Studies* **41**, 73-6.
- Isaac, G. R. (2002). *Gwarchan Maeldderw*: A ‘Lost’ Medieval Welsh Classic?, *Cambrian Medieval Celtic Studies* **44**, 73-96.
- Isaac, G. R. (2004). *Place-Names in Ptolemy’s Geography*. CD-ROM. Aberystwyth: CMCS.
- Isaac, G. R. (2005a). A Note on Cormac’s Pictish Brooch, *Journal of Celtic Linguistics* **9**, 73-82.
- Isaac, G. R. (2005b). Scotland. In: J. de Hoz, E. R. Luján and P. Sims-Williams (eds.), *New Approaches to Celtic Place-Names in Ptolemy’s Geography* Madrid: Ediciones Clásicas, 189-214.

-
- Jackson, K. (1950). Brittonica, *Journal of Celtic Studies* **1**, 69-79.
- Jackson, K. (1953). *Language and History in Early Britain*. Edinburgh: Edinburgh University Press.
- Jackson, K. (1955). *Contributions to the Study of Manx Phonology*. Edinburgh: Thomas Nelson and Sons Ltd.
- Jackson, K. (1963). Angles and Britons in Northumbria and Cumbria. In: H. Lewis (ed.), *Angles and Britons*. Cardiff: University of Wales Press, 60-84.
- Jackson, K. (1967). *A Historical Phonology of Breton*. Dublin: Dublin Institute for Advanced Studies.
- Jackson, K. (trans.) (1969). *The Gododdin: The Oldest Scottish Poem*. Edinburgh: Edinburgh University Press.
- Jackson, K. (ed.) (1971). *A Celtic Miscellany*. Second edition. Harmondsworth: Penguin.
- Jackson, K. (1972). *The Gaelic Notes in the Book of Deer*. Cambridge: University of Cambridge Press.
- Jackson, K. (1973-4). Some Questions in Dispute about Early Welsh Literature and Language, *Studia Celtica* **8-9**, 1-32.
- Jackson, K. (1977). The Ogham Inscription on the Spindle Whorl from Buckquoy, Orkney, *Proceedings of the Society of Antiquaries of Scotland* **108**, 221-2.
- Jackson, K. (1980). The Language of the Picts. In: F. T. Wainwright (ed.), *The Problem of the Picts*. Second edition. Perth, Melven Press, 129-66, 173-6.
- Jackson, K. (1983). 'Pictish Languages'. In: D. S. Thomson (ed.), *The Companion to Gaelic Scotland*. Oxford, Blackwell, 224-5.
- Jacobs, N. (ed.) (2012). *Early Welsh Gnostic and Nature Poetry*. London: The Modern Humanities Research Association.

-
- James, A. G. (2013). P-Celtic in Southern Scotland and Cumbria: A Review of the Place-Name Evidence for Possible Pictish Phonology, *The Journal of Scottish Name Studies* 7, 29-78.
- Jarman, A. O. H. (ed.) (1982). *Llyfr Du Caerfyrddin*. Cardiff: University of Wales Press.
- Jarman, A. O. H. (ed. and trans.) (1988). *Aneirin: Y Gododdin*. Llandysul: Gomer.
- Jenkins, D. (ed.) (1986). *Hywel Dda: The Law*. Llandysul: Gomer.
- Jenkins, D. (1997). The Horse in the Welsh Law Texts. In: S. Davies and N. A. Jones (eds.), *The Horse in Celtic Culture: Medieval Welsh Perspectives*. Cardiff: University of Wales Press, 64-81.
- Jenkins, D. and M. E. Owen (1984). The Welsh Marginalia in the Lichfield Gospels Part II: The 'Surexit' Memorandum, *Cambridge Medieval Celtic Studies* 7, 91-120.
- Jesch, J. (1991). *Women in the Viking Age*. Woodbridge: Boydell.
- Johnston, D. (ed.) (1988). *Gwaith Iolo Goch*. Cardiff: University of Wales Press.
- Johnston, D. (ed.) (1995). *Gwaith Lewys Glyn Cothi*. Cardiff: University of Wales Press.
- Jones, G. P. (1926-7). The Scandinavian Element in Welsh, *Zeitschrift für celtische Philologie* 16, 162-6.
- Jones, G. R. J. (1972). Post-Roman Wales. In: H. P. R. Finberg (ed.), *The Agrarian History of England and Wales, I.II, A.D. 43-1042*. Cambridge: Cambridge University Press, 279-382.
- Jones, N. A. and A. Parry Owen (eds.) (1991). *Gwaith Cynddelw Brydydd Mawr I*. Cardiff: University of Wales Press.
- Jones, N. A. and A. Parry Owen (eds.) (1995). *Gwaith Cynddelw Brydydd Mawr II*. Cardiff: University of Wales Press.

-
- Jones, T. (1967). The Black Book of Carmarthen ‘Stanzas of the Graves’, *Proceedings of the British Academy* **53**, 97-137.
- Jones, T. G. (1915). Bardism and Romance: A Study of the Welsh Literary Tradition, *Transactions of the Honourable Society of Cymmrodorion*, 1913-4, 205-310.
- Joseph, L. (1990). Old Irish *cú*: A Naïve Reinterpretation. In: A. T. E. Matonis and D. F. Melia (eds.), *Celtic Language, Celtic Culture: A Festschrift for Eric P. Hamp*. Van Nuys, CA: Ford & Bailie, 110-30.
- Kelly, F. (1988). *A Guide to Early Irish Law*. Dublin: The Dublin Institute for Advanced Studies.
- Kelly, F. (1997). *Early Irish Farming*. Dublin: The Dublin Institute for Advanced Studies.
- Kelly, P. (1997). The Earliest Words for ‘Horse’ in the Celtic Languages. In: S. Davies and N. A. Jones (eds.), *The Horse in Celtic Culture: Medieval Welsh Perspectives*. Cardiff, University of Wales Press, 43-63.
- Kermode, P. M. C. (1907). *Manx Crosses*. London: Bemrose & Sons.
- King, H. A. (2008). An Ogham-Inscribed Antler Handle from Clonmacnoise, *Peritia* **20**, 315-22.
- Kneen, J. J. (1937). *The Personal Names of the Isle of Man*. Oxford: Oxford University Press.
- Koch, J. T. (1982-3). The Loss of Final Syllables and Loss of Declension in Brittonic, *Bulletin of the Board of Celtic Studies* **30**, 201-33.
- Koch, J. T. (1985). Movement and Emphasis in the Gaulish Sentence, *Bulletin of the Board of Celtic Studies* **32**, 1-37.
- Koch, J. T. (1985-6). When Was Welsh Literature First Written Down?, *Studia Celtica* **20-21**, 43-66.

-
- Koch, J. T. (1987a). *Llawr yn asseð* (CA 932) ‘the Laureate Hero in the War-Chariot’: Some Recollections of the Iron Age in the *Gododdin*, *Études celtiques* **24**, 253-78.
- Koch, J. T. (1987b). Prosody and the Old Celtic Verbal Complex, *Ériu* **38**, 143-76.
- Koch, J. T. (1988). The Cynfeirdd Poetry and the Language of the Sixth Century. In: B. F. Roberts (ed.), *Early Welsh Poetry: Studies in the Book of Aneirin*. Aberystwyth: National Library of Wales, 17-41.
- Koch, J. T. (1991). On the Prehistory of Brittonic Syntax. In: J. Fife and E. Poppe (eds.), *Studies in Brythonic Word Order*. Amsterdam: J. Benjamins, 1-43.
- Koch, J. T. (1997). *The Gododdin of Aneirin: Text and Context from Dark-Age North Britain*. Cardiff: University of Wales Press.
- Koch, J. T. (2000). *Ovania* and /wu-/, /wo-/ < Celtic /wo-/, /we-/ (, /wi-/ in Pictish = appendix to K. Forsyth, Evidence of a Lost Pictish Source in the *Historia Regum Anglorum* of Symeon of Durham. In: S. Taylor (ed.), *Kings, Clerics and Chronicles in Scotland 500 – 1297: Essays in Honour of Marjorie Ogilvie Anderson*. Dublin: Four Courts, 19-34 (33-4).
- Koch, J. T. (2003). Some Thoughts on Ethnic Identity, Cultural Pluralism, and the Future of Celtic Studies. In: M. Herbert and K. Murray (eds.), *Retrospect and Prospect in Celtic Studies: Proceedings of the 11th International Congress of Celtic Studies*. Dublin: Four Courts, 75-92.
- Koch, J. T. (2013). *Cunedda, Cynan, Cadwallon, Cynddylan: Four Welsh Poems and Britain 383-655*. Aberystwyth: University of Wales Centre for Advanced Welsh and Celtic Studies.
- Koch, J. T., Karl, R., Minard, A. and Ó Faoláin, S. (2007). *An Atlas for Celtic Studies*. Oxford: Oxbow Books.

-
- Lambert, P.-Y. (1984). 'Thirty' and 'Sixty' in Brittonic, *Cambridge Medieval Celtic Studies* **8**, 29-43.
- Lambert, P.-Y. (1994). *La langue gauloise*. Paris: Editions Errances.
- Lambert, P.-Y. (2003). The Old Welsh Glosses on Weights and Measures. In: P. Russell (ed.), *Yr Hen Iaith: Studies in Early Welsh*. Aberystwyth, Celtic Studies Publications, 103-34.
- Lapidge, M. (1986). Latin Learning in Dark Age Wales: Some Prolegomena. In: D. E. Evans, J. G. Griffith and E. M. Jope (eds.), *Proceedings of the Seventh International Congress of Celtic Studies Oxford, 1983*. Oxford: Oxbow, 91-107.
- Latham, R. E., Howlett, D. R. and Ashdowne, R. K. (eds.) (1975-2013). *Dictionary of Medieval Latin from British Sources*. Oxford: Oxford University Press.
- Le Moing, J.-Y. (1990). *Les noms de lieux bretons de Haute Bretagne*. Kerangwenn: Coop Breizh.
- Lewis, B. J. (ed.) (2005). *Gwaith Gruffudd ap Maredudd II. Cerddi Crefyddol*. Aberystwyth: Centre for Advanced Welsh and Celtic Studies.
- Lewis, H. (1931). *Datblygiad yr Iaith Gymraeg*. Cardiff: University of Wales Press.
- Lewis, H. (1935). *Llawlyfr Llydaweg Canol*. Cardiff: University of Wales Press.
- Lewis, H. (1939-41). Cnes, *Bulletin of the Board of Celtic Studies* **10**, 128-9.
- Lewis, H. (ed.) (1942). *Brut Dingestow*. Cardiff: University of Wales Press.
- Lewis, H. (1943). *Yr Elfen Ladin yn yr Iaith Gymraeg*. Cardiff: University of Wales Press.
- Lewis, H. (1946). *Llawlyfr Cernyweg Canol*. Cardiff: University of Wales Press.
- Lewis, H. and Pedersen, H. (1961a). *A Concise Comparative Celtic Grammar*. Second edition. Göttingen: Vandenhoeck & Ruprecht.

-
- Lewis, H. and Pedersen, H. (1961b). *Supplement to a Concise Comparative Celtic Grammar*. Göttingen: Vandenhoeck & Ruprecht.
- Lloyd-Jones, J. (1931-63). *Geirfa Barddoniaeth Gynnar Gymraeg*. Cardiff: University of Wales Press.
- Lloyd-Jones, J. (1944). Review of Lewis 1943, *Transactions of the Honourable Society of Cymmrodorion*, 1942, 194-8.
- Loth, J. (1910). Remarques et additions a l'*Introduction to Early Welsh* de John Strachan, *Revue celtique* **31**, 129-81.
- Loth, J. (1911). Contributions a l'étude des Romans de la Table Ronde, *Revue celtique* **32**, 407-41.
- Luján Martínez, E. R. (2003). Gaulish Personal Names: An Update, *Études celtiques* **35**, 181-247.
- Macalister, R. A. S. (1940). The Inscriptions and Language of the Picts. In: J. Ryan (ed.), *Féil-sgríbhinn Eóin Mhic Néill: Essays and Studies presented to Professor Eoin MacNeill*. Dublin: Sign of the Three Candles, 184-226.
- Mac Cana, P. (1973). On Celtic Word Order and the Welsh 'Abnormal' Sentence, *Ériu* **24**, 90-120.
- Mac Cana, P. (1991). Further Notes on Constituent Order in Welsh. In: J. Fife and E. Poppe (eds.), *Studies in Brythonic Word Order*. Amsterdam: J. Benjamins, 45-80.
- Mac Cana, P. (1995). Composition and Collocation of Synonyms in Irish and Welsh. In: J. F. Eska, R. G. Gruffydd and N. Jacobs (eds.), *Hispano-Gallo-Brittonica*. Cardiff: University of Wales Press, 106-22.

-
- Mac Cana, P. (2001). *Croesaniaid and Crosáin: Literary Outsiders*. In: G. H. Jenkins (ed.), *Cymru a'r Cymry 2000/Wales and the Welsh 2000*. Aberystwyth: University of Wales Centre for Advanced Welsh and Celtic Studies, 19-39.
- McCone, K. R. (1991). *The Indo-European Origins of the Old Irish Nasal Presents, Subjunctives and Futures*. Innsbruck: Institut für Sprachwissenschaft.
- McCone, K. R. (1994). An tSean-Ghaeilge agus a Réamhstair. In: K. McCone, D. McManus, C. Ó Háinle, N. Williams and L. Breatnach (eds.), *Stair na Gaeilge*. Maynooth, Department of Irish, St Patrick's College, Maynooth, 61-219.
- McCone, K. R. (1996). *Towards a Relative Chronology of Ancient and Medieval Celtic Sound Change*. Maynooth: The Department of Old Irish, National University of Ireland, Maynooth.
- McCone, K. R. (1997). *The Early Irish Verb*. Second edition. Maynooth: An Sagart.
- McCone, K. R. (2006). *The Origins and Development of the Insular Celtic Verbal Complex*. Maynooth: The Department of Old Irish, National University of Ireland, Maynooth.
- McCone, K. R. (2008). *The Celtic Question: Modern Constructs and Ancient Realities*. Dublin: Dublin Institute for Advanced Studies.
- Mac Eoin, G. (1966). A Poem by Airbertach mac Cosse, *Ériu* **20**, 112-39.
- Mac Eoin, G. (2007). What Language Was Spoken in Ireland before Irish? In: H. L. C. Tristram (ed.), *The Celtic Languages in Contact*. Potsdam: Potsdam University Press, 113-25.
- McKee, H. (ed.) (2000). *The Cambridge Juvenius Manuscript Glossed in Latin, Old Welsh, and Old Irish: Text and Commentary*. Aberystwyth: CMCS Publications.

-
- McKenna, C. A. (1990). Twin Mystery Verbs of the *Canu i Gadfan*. In: A. T. E. Matonis and D. F. Melia (eds.), *Celtic Language, Celtic Culture: A Festschrift for Eric P. Hamp*. Van Nuys, CA: Ford & Bailie, 267-72.
- McManus, D. (1986). Ogam: Archaizing, Orthography and the Authenticity of the Manuscript Key to the Alphabet, *Ériu* **37**, 1-31.
- McManus, D. (1991). *A Guide to Ogam*. Maynooth: An Sagart.
- McManus, D. (1999). Review of Forsyth 1997, *Cambrian Medieval Celtic Studies* **38**, 108-10.
- MacNeill, J. (1909). Notes on the Distribution, History, Grammar, and Import of the Irish Ogham Inscriptions, *Proceedings of the Royal Irish Academy, Section C*, **27**, 329-70.
- Mallory, J. P. (2013a). The Indo-Europeanization of Atlantic Europe. In: J. T. Koch and B. Cunliffe (eds.), *Celtic from the West 2: Rethinking the Bronze Age and the Arrival of Indo-European in Atlantic Europe*. Oxford: Oxbow, 17-39.
- Mallory, J. P. (2013b). *The Origins of the Irish*. London: Thames & Hudson.
- Marstrander, C. (1911a). Ogam *xoi*, *Ériu* **5**, 144.
- Marstrander, C. (1911b). The Deaths of Lugaid and Derbforgaill, *Ériu* **5**, 201-18.
- Matasović, R. (2007). Insular Celtic as a Language Area. In: H. L. C. Tristram (ed.), *The Celtic Languages in Contact*. Potsdam: Potsdam University Press, 93-112.
- Matasović, R. (2009). *Etymological Dictionary of Proto-Celtic*. Leiden: Brill.
- Meid, W. (1994). *Celtiberian Inscriptions*. Budapest: Archaeolingua.
- Meid, W. (2005). *Keltische Personennamen in Pannonien*. Budapest: Archaeolingua.
- Meid, W. (ed.) (2015). *The Romance of Froech and Findabair or the Driving of Froech's Cattle: Táin Bó Froích*. Innsbruck: Institut für Sprachen und Literaturen der Universität Innsbruck.

-
- Meroney, H. (1945). Irish in the Old English Charms, *Speculum* **20**, 172-82.
- Meyer, K. (1912). Mitteilungen aus irischen Handschriften (Fortsetzung), *Zeitschrift für celtische Philologie* **8**, 102-20.
- Morgan, G. (1997). *Mehyr* – ‘blades’, *Journal of Celtic Linguistics* **6**, 137-9.
- Morris, C. D., Batey, C. E., Brady, K., Harry, R., Johnson, P. G. and Thomas, C. (1999). Recent Work at Tintagel, *Medieval Archaeology* **43**, 206-15.
- Morris-Jones, J. (1913). *A Welsh Grammar*. Oxford: Clarendon Press.
- Morris Jones, J. (1918). Taliesin, *Y Cymmrodor* **28**.
- Morris-Jones, J. and Parry-Williams, T. H. (eds.) (1933). *Llawysgrif Hendregadredd*. Cardiff: University of Wales Press.
- Murphy, G. (ed.) (1956). *Early Irish Lyrics*. Oxford: Clarendon.
- Nash-Williams, V. E. (1950). *Early Christian Monuments of Wales*. Cardiff: University of Wales Press.
- O’Brien, M. A. (1956). Etymologies and Notes, *Celtica* **3**, 168-84.
- O’Brien, M. A. (ed.) (1962). *Corpus Genealogiarum Hiberniae*, I. Dublin: Dublin Institute for Advanced Studies.
- Ó Corráin, D. (1985). Irish Origin Legends and Genealogy: Recurrent Aetiologies. In: T. Nyberg, I. Piø, P. M. Sørensen, A. Trommer (eds.), *History and Heroic Tale: A Symposium*. Odense: Odense University Press, 51-96.
- Ó Dochartaigh, C. (1999). Breaking the Runes (review of Cox 1999), *Scottish Language* **18**, 95-104.
- O’Grady, S. H. (1926). *Catalogue of Irish Manuscripts in the British Museum*, I. London: British Museum.

-
- Okasha, E. (1971). *A Hand-List of Anglo-Saxon Non-Runic Inscriptions*. Cambridge: Cambridge University Press.
- Okasha, E. (1985). The Non-Ogam Inscriptions of Pictland, *Cambridge Medieval Celtic Studies* **9**, 43-69.
- Okasha, E. (1993). *Corpus of Early Christian Inscribed Stones of South-west Britain*. Leicester: Leicester University Press.
- Okasha, E. and Forsyth, K. (2001). *Early Christian Inscriptions of Munster: A Corpus of the Inscribed Stones*. Cork: Cork University Press.
- O'Leary, A. M. (1999). The Identities of the Poet(s) Mac Coisi: A Reinvestigation, *Cambrian Medieval Celtic Studies* **38**, 53-71.
- Olson, B. L. and Padel, O. J. (1986). A Tenth-Century List of Cornish Parochial Saints, *Cambridge Medieval Celtic Studies* **12**, 33-71.
- Ó Máille, T. (1910). *The Language of the Annals of Ulster*. Manchester: Manchester University Press.
- Ó Murchú, L. P. (2004). D'Uaithne Ó Mórdha a Thit i gCath 17ú Lúnasa 1600. In: J. Carey, M. Herbert and K. Murray (eds.), *Cín Chille Cúile: Texts, Saints and Places - Essays in honour of Pádraig Ó Riain*. Aberystwyth, Celtic Studies Publications, 334-53.
- O'Rahilly, C. (ed.) (1967). *Táin Bó Cúalnge from the Book of Leinster*. Dublin: Dublin Institute for Advanced Studies.
- O'Rahilly, T. F. (1946). *Early Irish History and Mythology*. Dublin: Dublin Institute for Advanced Studies.
- O'Rahilly, T. F. (1972). *Irish Dialects Past and Present*. Second edition. Dublin: Dublin Institute for Advanced Studies.
- Ó Raithbheartaigh, T. (ed.) (1932). *Genealogical Tracts I*. Dublin: The Stationery Office.

-
- Oswald, F. (1931). *Index of Potters' Stamps on Terra Sigilata 'Samian Ware'*. East Bridgford: privately published.
- Padel, O. (1972). The Inscriptions of Pictland. Unpublished M.Litt. thesis, University of Edinburgh.
- Padel, O. (1985). *Cornish Place-Name Elements*. Nottingham: English Place-Name Society.
- Padel, O. (2009-10). Review of Falileyev 2008, *Zeitschrift für celtische Philologie* **57**, 206-11.
- Padel, O. (2015). Celtic, Pictish and Germanic Onomastics in the Work of H. M. Chadwick. In: M. Lapidge (ed.), *H. M. Chadwick and the Study of Anglo-Saxon, Norse and Celtic in Cambridge*, ed. M. Lapidge = *Cambrian Medieval Celtic Studies*, **69-70**. Aberystwyth, CMCS Publications, 157-70.
- Page, R. I. (1973). *An Introduction to English Runes*. London: Methuen.
- Parry Owen, A. and Foster Evans, D. (eds.) (1996). *Gwaith Llywelyn Brydydd Hoddnant, Dafydd ap Gwilym, Hillyn ac Eraill*. Aberystwyth: University of Wales Centre for Advanced Welsh and Celtic Studies.
- Parry-Williams, T. H. (1913). *Some Points of Similarity in the Phonology of Welsh and Breton*. Paris: Librairie Ancienne Honoré Champion.
- Parsons, D. N. (2011). Sabrina in the Thorns: Place-Names as Evidence for British and Latin in Roman Britain, *Transactions of the Philological Society* **109**, 113-37.
- Plummer, C. (1923). On the Meaning of Ogam Stones, *Revue celtique* **40**, 387-90.
- Pokorny, J. (1915). Ogom CI 'hier', *Zeitschrift für celtische Philologie* **10**, 403.
- Pokorny, J. (1950). The River Name Argita, *Journal of Celtic Studies* **1**, 130.
- Pryce, H. (2010). *The Acts of the Welsh Rulers: 1120-1283*. Second edition. Cardiff: University of Wales Press.

-
- Raftery, B. (1969). A Late Ogham Inscription from Co. Tipperary, *Journal of the Royal Society of Antiquaries of Ireland* **99**, 161-4.
- Raybould, M. E. and Sims-Williams, P. (2007). *A Corpus of Latin Inscriptions of the Roman Empire Containing Celtic Personal Names*. Aberystwyth: CMCS Publications.
- Raybould, M. E. and Sims-Williams, P. (2009). *Introduction and Supplement to the Corpus of Latin Inscriptions of the Roman Empire Containing Celtic Personal Names*. Aberystwyth: CMCS Publications.
- RCAHMS (1982). *Inventory of the Ancient and Historic Monuments of Argyll, IV, Iona*. Edinburgh: RCAHMS.
- Redknap, M. (1995). Early Christianity and Its Monuments. In: M. J. Green (ed.), *The Celtic World*. London: Routledge, 737-78.
- Redknap, M. and Lewis, J. M. (2007). *A Corpus of Early Medieval Inscribed Stones and Stone Sculpture in Wales, I, Breconshire, Glamorgan, Monmouthshire, Radnorshire, and Geographically Contiguous Areas of Herefordshire and Shropshire*. Cardiff: University of Wales Press.
- Repanšek, L. (2016). Review of Falileyev 2014, *Journal of Celtic Linguistics* **17**, 241-59.
- Rhys, G. (2015). Approaching the Pictish Language: Historiography, Early Evidence and the Question of Pritenic. Unpublished PhD thesis, University of Glasgow. Available online: <http://theses.gla.ac.uk/6285/7/2015RhysPhD.pdf>.
- Rhys, J. (1879). *Lectures in Welsh Philology*. Second edition. London: Trübner & Co.
- Rhys, J. (1892). The Inscriptions and Language of the Northern Picts, *Proceedings of the Society of Antiquaries of Scotland* **26**, 263-351.
- Rhys, J. (1898). A Revised Account of the Inscriptions of the Northern Picts, *Proceedings of the Society of Antiquaries of Scotland* **32**, 324-98.

-
- Rhys, J. (1901). *Celtic Folklore: Welsh and Manx*. Oxford: Oxford University Press.
- Rhys, J. (1911). The Celtic Inscriptions of Gaul: Additions and Corrections, *Proceedings of the British Academy* **5**, 1-100.
- Richards, M. (1960-2). Rhai Enwau Lleoedd, *Bulletin of the Board of Celtic Studies* **19**, 91-101.
- Richards, M. (1962-4). Cnydfa, *Bulletin of the Board of Celtic Studies* **20**, 125.
- Rodway, S. (2004). The Red Book Text of ‘Culhwch ac Olwen’: A Modernising Scribe at Work, *Studi Celtici* **3**, 93-161.
- Rodway, S. (2013). *Dating Medieval Welsh Literature: Evidence from the Verbal System*. Aberystwyth: CMCS Publications.
- Rodway, S. (2016). Review of *Saltair Saíochta, Sanasaíochta agus Seanchais: A Festschrift for Gearóid Mac Eoin*, ed. D. Ó Baoill, D. Ó hAodha and N. Ó Muraíle. Dublin, Four Courts, *Cambrian Medieval Celtic Studies* **71**, 79-83.
- Rodway, S. (2017). A Note on the Ogham Inscription from Buckquoy, Orkney, *Journal of Celtic Linguistics* **18**, 103-15.
- Ross, A. (1967). *Pagan Celtic Britain*. London: Routledge and Kegan Paul.
- Rowland, J. (1990a). Notes on *The Gododdin*. In: M. J. Ball, J. Fife, E. Poppe and J. Rowland (eds.), *Celtic Linguistics*. Amsterdam & Philadelphia, PA: John Benjamins Publishing Company, 333-42.
- Rowland, J. (1990b). The Orthography of the Exemplar of *Canu Aneirin* Awdl XLV, *Bulletin of the Board of Celtic Studies* **37**, 119-20.
- Russell, P. (1990). *Celtic Word Formation: The Velar Suffixes*. Dublin: Dublin Institute for Advanced Studies.

-
- Russell, P. (1995a). *An Introduction to the Celtic Languages*. London & New York: Longman.
- Russell, P. (1995b). Brittonic Words in Irish Glossaries. In: J. F. Eska, R. G. Gruffydd and N. Jacobs (eds.), *Hispano-Gallo-Brittonica*. Cardiff: University of Wales Press, 166-82.
- Russell, P. (1995-6). Scribal (In)competence in Thirteenth-Century North Wales: The Orthography of the Black Book of Chirk (Peniarth MS 29), *National Library of Wales Journal* **29**, 129-76.
- Russell, P. (1999). What Did Medieval Welsh Scribes Do? The Scribe of the Dingestow Court Manuscript, *Cambrian Medieval Celtic Studies* **37**, 79-96.
- Russell, P. (2011). Latin and British in Roman and Post-Roman Britain: Methodology and Morphology, *Transactions of the Philological Society* **109**, 138-57.
- Russell, P. (2012). *Fern do frestol na .u. consaine*: Perceptions of Sound Laws, Sound Change, and Linguistic Borrowing among the Medieval Irish. In: P. Probert and A. Willi (eds.), *Laws and Rules in Indo-European*. Oxford: Oxford University Press. 17-30.
- Russell, P. (2015). *Gwas*, *Guos-*, *Gos-*: the Reflexes of Brittonic *wo. In: G. Oudaer, G. Hily and H. le Bihan (eds.), *Mélanges en l'honneur de Pierre-Yves Lambert*. Rennes, Tir, 76-89.
- Schmidt, K. H. (1957). Die Komposition in gallischen Personennamen II, *Zeitschrift für celtische Philologie* **26**, 161-301.
- Schrijver, P. (1995). *Studies in British Celtic Historical Phonology*. Amsterdam: Rodopi.
- Schrijver, P. (1997). *Studies in the History of Celtic Pronouns and Particles*. Maynooth: The Department of Old Irish, National University of Ireland, Maynooth.

-
- Schrijver, P. (2011a). Old British. In: E. Ternes (ed.), *Brythonic Celtic – Britannisches Keltisch*. Bremen: Hempen Verlag, 1-84.
- Schrijver, P. (2011b). Middle and Early Modern Breton. In: E. Ternes (ed.), *Brythonic Celtic – Britannisches Keltisch*. Bremen: Hempen Verlag, 359-429.
- Schumacher, S. (2004). *Die keltischen Primärverben*. Innsbruck: Institut für Sprachen und Literaturen der Universität Innsbruck.
- Schumacher, S. (2011). Mittel- und Frühneukymrisch. In: E. Ternes (ed.), *Brythonic Celtic – Britannisches Keltisch*. Bremen: Hempen Verlag, 85-235.
- Shaw, J. (1968-71). L'évolution de 'vieil-irlandais *áe, óe, aí, oí*' dans les dialectes gaéliques, *Études celtiques* **12**, 147-56.
- Sims-Williams, P. (1990). Dating the Transition to Neo-Brittonic: Phonology and History, 400 – 600. In: A. Bammesberger and A. Wollmann (eds.), *Britain 400 – 600: Language and History*. Heidelberg: Carl Winter, 217-61.
- Sims-Williams, P. (1991). The Emergence of Old Welsh, Cornish and Breton Orthography, 600 – 800: The Evidence of Archaic Old Welsh, *Bulletin of the Board of Celtic Studies* **38**, 20-86.
- Sims-Williams, P. (1998). Genetics, Linguistics, and Prehistory: Thinking Big and Thinking Straight, *Antiquity* **72**, 505-27.
- Sims-Williams, P. (1999). Old Irish *feda* (gen. *fedot*): A 'Puzzling' Form in the *Cambrai Homily* and Its Implications for the Apocope of /i/. In: P. Anreiter and E. Jerem (eds.), *Studia Celtica et Indogermanica: Festschrift für Wolfgang Meid*. Budapest: Archaeolingua, 471-4.
- Sims-Williams, P. (2000). Degrees of Celticity in Ptolemy's Names: Examples from Wales. In: D. N. Parsons and P. Sims-Williams (eds.), *Ptolemy: Towards a Linguistic Atlas*

-
- of the Earliest Celtic Place-Names of Europe*. Aberystwyth, CMCS Publications, 1-15.
- Sims-Williams, P. (2003). *The Celtic Inscriptions of Britain: Phonology and Chronology, c. 400 – 1200*. Oxford: Blackwell.
- Sims-Williams, P. (2006). *Ancient Celtic Place-Names in Europe and Asia Minor*. Oxford: Blackwell.
- Sims-Williams, P. (2007). *Studies on Celtic Languages before the Year 1000*. Aberystwyth: CMCS Publications.
- Sims-Williams, P. (2009). Celto-Iranica. In: W. Sundermann, A. Hintze and F. de Blois (eds.), *Exegisti Monumenta: Festschrift in honour of Nicholas Sims-Williams*. Wiesbaden: Harrassowitz Verlag, 463-7.
- Sims-Williams, P. (2011). *Irish Influence on Medieval Welsh Literature*. Oxford: Oxford University Press.
- Sims-Williams, P. (2012a). Bronze- and Iron-Age Celtic-Speakers: What Don't We Know, What Can't We Know, and What Could We Know? Language, Genetics and Archaeology in the Twenty-First Century, *The Antiquaries Journal* **92**, 427-49.
- Sims-Williams, P. (2012b). Celtic Personal Names. In: T. Meissner (ed.), *Personal Names in the Western Roman World*. Berlin, Curach Bhán, 151-66.
- Sims-Williams, P. (2015). The Four Types of Welsh *yn*, *Transactions of the Philological Society* **113**, 286-304.
- Sims-Williams, P. (2016) Dating the Poems of Aneirin and Taliesin, *Zeitschrift für celtische Philologie* **63**, 163-234.
- Sims-Williams, P. (ed.) (2017). *Liber Coronacionis Britanorum: A Medieval Welsh Version of Geoffrey of Monmouth*. Aberystwyth: CMCS Publications.

-
- Smith, C. (1983). Vulgar Latin in Roman Britain: Epigraphic and Other Evidence. In: H. Temporini and W. Haase (eds.), *Aufstieg und Niedergang der römischen Welt*, II, 29.2. Berlin & New York: Walter de Gruyter, 893-948.
- Smyth, A. P. (1984). *Warlords and Holy Men: Scotland AD 80 – 1000*. Edinburgh: Edinburgh University Press.
- Steer, K. H. (1968-69). Two Unrecorded Early Christian Stones, *Proceedings of the Society of Antiquaries of Scotland* **101**, 127-9.
- Stifter, D. (2009). Review of K. Forsyth (ed.) (2008). *Studies on the Book of Deer*. Dublin: Four Courts Press, *Keltische Forschungen* **4**, 290-5.
- Stifter, D. (2014). The History of the Old Irish Preverb *to-*. In: E. Roma and D. Stifter (eds.), *Linguistic and Philological Studies in Early Irish*. Lewiston & Lampeter: Edwin Meller, 203-46.
- Stokes, W. and J. Strachan (eds.) (1901-3). *Thesaurus Palaeohibernicus*. Oxford: Oxford University Press.
- Swift, C. (1997). *Ogam Stones and the Earliest Irish Christians*. Maynooth: The Cardinal Press.
- Thomas, C. (1991-2). The Early Christian Inscriptions of Southern Scotland, *Glasgow Archaeological Journal* **17**, 1-10.
- Thomas, C. (1994). *And Shall These Mute Stones Speak? Post-Roman Inscriptions in Western Britain*. Cardiff: University of Wales Press.
- Thomas, G. (trans.) (2012). *Gododdin: The Earliest British Literature*. Llandysul: Gomer.
- Thomas, G. (trans.) (2015). *Hen Englynion: Diweddariadau*. Llandybïe: Cyhoeddiadau Barddas.
- Thomas, R. J. (1938). *Enwau Afonydd a Nentydd Cymru*. Cardiff: University of Wales Press.

-
- Thomason, S. G. and Kaufman, T. (1988). *Language Contact, Creolization, and Genetic Linguistics*. Berkeley, CA, Los Angeles, CA and London: University of California Press.
- Thomson, R. L. (1960). Svarabakhti and Some Associated Changes in Manx, *Celtica* **5**, 116-26.
- Thurneysen, R. (1946). *A Grammar of Old Irish*, trans. D. A. Binchy and O. Bergin. Dublin: Dublin Institute for Advanced Studies.
- Thurneysen, R. (1991). *Gesammelte Schriften*, ed. P. de Bernardo Stempel and R. Ködderitzsch. Tübingen: Niemeyer.
- Tomlin, R. S. O. (2009). Roman Britain in 2008, III: Inscriptions, *Britannia* **40**, 313-63.
- Trask, R. L. (1997). *The History of Basque*. London: Routledge.
- Uhlich, J. (1993). *Die Morphologie der komponierten Personennamen des Altirischen*. Witterschlick/Bonn: Verlag M. Wehle.
- Vendryes, J. (1900-1). Notes de phonétique dialectale, *Annales de Bretagne* **16**, 301-7.
- Wade-Evans, A. W. (ed.) (1909). *Welsh Medieval Law*. Oxford: Clarendon Press.
- Wagner, H. (1958). *Linguistic Atlas and Survey of Irish Dialects*. Dublin: Dublin Institute for Advanced Studies.
- Watkins, C. (1966). The Origin of the *f*-Future, *Ériu* **20**, 67-81, 93.
- Watkins, T. A. (1960-2). Ffuriant a Chystrawen y Geirynnau Adferfol/Traethiadol mewn Cymraeg, Cernyweg a Llydaweg, *Bulletin of the Board of Celtic Studies* **19**, 295-304.
- Watkins, T. A. (1977-8). Trefn yn y Frawddeg Gymraeg, *Studia Celtica* **12-13**, 367-95.
- Watkins, T. A. (1982). Englynion y Juvenius. In: R. G. Gruffydd (ed.), *Bardos: Penodau ar y Traddodiad Barddol Cymreig a Cheltaidd*. Cardiff: University of Wales Press, 29-43.

-
- Watkins, T. A. (1987). Constituent Order in the Old Welsh Verbal Sentence, *Bulletin of the Board of Celtic Studies* **34**, 51-60.
- William, A. Rh. (ed.) (1960). *Llyfr Iorwerth*. Cardiff: University of Wales Press.
- Williams, G. J. (1956-58). Cerddi'r Nant, *Bulletin of the Board of Celtic Studies* **17**, 77-89.
- Williams, I. (ed.) (1926-7). The Computus Fragment, *Bulletin of the Board of Celtic Studies* **3**, 245-72.
- Williams, I. (ed.) (1935). *Canu Llywarch Hen*. Cardiff: University of Wales Press.
- Williams, I. (ed.) (1938). *Canu Aneirin*. Cardiff: University of Wales Press.
- Williams, I. (1945). *Enwau Lleoedd*. Liverpool: Gwasg y Brython.
- Williams, I. (ed.) (1951). *Pedeir Keinc y Mabinogi*. Second edition. Cardiff: University of Wales Press.
- Williams, I. (ed.) (1968). *The Poems of Taliesin*, English version by J. E. C. Williams. Dublin: Dublin Institute for Advanced Studies.
- Williams, I. (1980). *The Beginnings of Welsh Poetry*, ed. R. Bromwich. Second edition. Cardiff: University of Wales Press.
- Williams, J. E. C. (1948-50). *Dē yn y Gymraeg, *Bulletin of the Board of Celtic Studies* **13**, 1-10.
- Williams, J. E. C. (1990). Wysg (River Name), wysg, hwysgynt, rhwysg, *Celtica* **21-22**, 670-8.
- Williams, N. (1994). Na Canúintí a Theacht chun Solais. In: K. McCone, D. McManus, C. Ó Háinle, N. Williams and L. Breatnach (eds.), *Stair na Gaeilge*. Maynooth: Department of Irish, St Patrick's College, Maynooth, 447-78.
- Wmffre, I. (2003). *Language and Place-Names in Wales: The Evidence of Toponymy in Cardiganshire*. Cardiff: University of Wales Press.

-
- Wmffre, I. (2007). Post-Roman Irish Settlement in Wales: New Insights from a Recent Study of Cardiganshire Place-Names. In: K. Jankulak and J. M. Wooding (eds.), *Ireland and Wales in the Middle Ages*. Dublin, Four Courts, 46-61.
- Wodtko, D. (2013). Preverbs and Personal Names. In: J. L. García Alonso (ed.), *Continental Celtic Word Formation: The Onomastic Data*. Salamanca: Ediciones Universidad de Salamanca, 215-34.
- Zall, C. (2010). Variation in Gaelic Storytelling, *Scottish Studies* **35**, 209-43.
- Ziegler, S. (1994). *Die Sprache der altirischen Ogam-Inschriften*. Göttingen: Vandenhoeck & Ruprecht.
- Zimmer, S. (1990). The Welsh Bahuvrīhis. In: M. J. Ball, J. Fife, E. Poppe and J. Rowland (eds.), *Celtic Linguistics/Ieithyddiaeth Geltaidd*. Amsterdam & Philadelphia, PA: John Benjamins Publishing Company, 375-402.
- Zimmer, S. (1999). The Verb ‘to be’ in Old Welsh. In: P. Anreiter and E. Jerem (eds.), *Studia Celtica et Indogermanica: Festschrift für Wolfgang Meid*. Budapest: Archaeolingua, 547-57.
- Zimmer, S. (2000). *Studies in Welsh Word-formation*. Dublin: Dublin Institute for Advanced Studies.
- Zimmer, S. (2006). Celtic Languages. In: J. T. Koch (ed.), *Celtic Culture: A Historical Encyclopedia*. Santa Barbara, CA, Denver, CO & Oxford, ABC-CLIO, 371-5.
- Zimmer, S. (2007). Onomastique galloise et traditions gauloises. In: P.-Y. Lambert and G.-J. Pinault (eds.), *Gaulois et celtique continental*. Geneva: Droz, 447-69.