

Reconstructing the Brittonic Future/Present Subjunctive

Nicholas Zair
Cambridge University

Abstract

This article discusses the phonological and analogical developments of the inherited subjunctive/desiderative suffix **-āse/o-* in the Brittonic languages, which formed the Welsh and Cornish present subjunctive and the Breton future. It is demonstrated that, once the treatment of intervocalic **s > *h* is understood, many of the forms of the future/present subjunctive can be explained by regular sound changes. Middle Breton is more conservative than Middle Welsh in preserving *h* only in the plural endings: Welsh generalized the characteristic plural *h* into the singular endings as well. The verb ‘to be’ differs from the regular verb both in reflecting originally separate subjunctive and desiderative stems, and in tending to have the British accent on its initial syllable. As a result of sound change and the different developments of the verb ‘to be’, allomorphy within the future/present subjunctive paradigms and between ‘to be’ and other verbs was extreme, and this led to a large number of by-forms created by paradigmatic levelling.

1. Introduction

In this article¹ it will be assumed that Proto-Celtic inherited a subjunctive of the formation **CeR-āse/o-*² and a future **Ci-CR-āse/o-*³ (McCone 1991: 85–113, 137–82; Schumacher 2004: 49–58).⁴ These continued into Irish, where they gave subjunctives and futures of the type OIr. *·cela* ‘would hide’ < **kel-āse/o-*, *·céla* ‘will hide’ < **ki-kl-āse/o-*. In British Celtic, however, these two formations fell together semantically and morphologically to give a future/present subjunctive marked by adding a suffix **-āse/o-* to the general verbal stem. The resolution of the allomorphic suffixes **-āse/o-* and **-āse/o-* may have occurred at the Insular Celtic stage, but the Irish forms provide no evidence on this count. The starting point of the forms attested in the future/present subjunctive formations of the Brittonic languages is therefore agreed upon. However,

the intermediate stages are not yet clear, despite various attempts at explanation. The purpose of this article is to discuss the possibilities for the development of the endings of this paradigm, and to clarify what we can reasonably assume to have occurred, with special reference to the evidence of Breton, which has tended to be forgotten.

2. Paradigms

It is hardly possible to discuss the endings of the Brittonic future/present subjunctives without setting them out at an early stage. The Old South-West British⁵ forms are based on Schrijver (2011: 62–3, 70–1), the Middle Welsh forms on Simon Evans (1964: 115, 128–9, 137–8) and the Breton on Hemon (1975: 173, 187–91, 208–9). Forms from Middle Cornish are not included here because, *mutatis mutandis*, they agree with the Breton forms except where they have obviously innovated by analogy. They will be discussed in the text where appropriate. The forms in the right-hand column are from the verb ‘to be’. Forms marked with † are transparently due to paradigmatic levelling: more details of this are given in the conclusion.

Old South-West British future/present subjunctive

2sg. <i>-i</i>	
3sg. <i>-oi, -i</i> (to stems ending in <i>a, o</i>)	<i>bo</i>
1pl. <i>-om, -hum</i>	
3pl. <i>-hont, -int</i> ⁶	<i>boint</i> [†] (or OW)

Middle Breton future

1sg. <i>-iff</i>	B <i>bin</i> ⁷
2sg. <i>-i</i>	B <i>bi</i>
3sg. <i>-o, -i</i> (to stems ending in <i>a, o</i>)	B <i>bo</i>
1pl. <i>-homp, -himp</i> [†]	MB <i>bihomp</i>
2pl. <i>-het, -hot</i> [†]	MB <i>bihet, bihot</i> [†]
3pl. <i>-hont, -hint</i> [†]	B <i>bint</i> [†]

Middle Welsh subjunctive

1sg. -(h)wyf, -of [†] , -oef ^{†8}	<i>bwyf, bof[†]</i>
2sg. -(h)ych, -(h)wyr	<i>bych, bwyr</i>
3sg. -(h)o, -(h)wy [†] , -(h)oe	<i>bo, abs. boet</i>
	OW <i>boi</i> , abs. <i>boit</i>
1pl. -(h)om	<i>bom</i>
2pl. -(h)och	<i>boch</i>
3pl. -(h)ont ⁹ , -(h)wyn [†] , -(h)oent [†]	<i>bont, bwynt[†], boent[†]</i>

3. Preliminaries I: Absolute and Conjunct

Like Irish, the Brittonic languages inherited absolute and conjunct forms of each verb. The absolute forms are attested in Old Welsh and Old South-West British, and in Middle Welsh proverbs such as *chwaryit mab noeth, ny chware mab newynawc* ‘a naked boy plays, a hungry boy does not play’. Later in Welsh and in Breton and Cornish the distinction was lost; in the main the conjunct forms seem to have been generalized, but, at least in the subjunctive, sometimes absolute forms were retained, as will be seen below.

The usual explanation (e.g. Cowgill 1975; Schrijver 1994, 1997: 147–58; McCone 2006, all with literature) for the creation of the absolute-conjunct system in Insular Celtic is the presence of an enclitic which took second place in a clause. When the verb was in absolute initial position in a clause, it was followed by the enclitic. When a preverb or negation preceded the verb, these were followed by the enclitic.

Final **-i* was lost early in Insular Celtic (McCone 1978, 2006: 174) and perhaps Gaulish (Schrijver 2007b: 360–9) after a voiceless obstruent, in practice **s* and **t* (Schrijver 1994: 159–65). However, when followed by the enclitic, this early apocope did not occur, since **-i* was not in word final position. In verbs with primary endings characterized by the ‘*hic et nunc*’ particle **-i* this led to a distinction between forms followed by an enclitic, in which final **-i* was preserved, and those, not followed by an enclitic, in which it was lost.

According to Schrijver, the enclitic was the conjunction **eti*, which became an obligatory clitic present in all non-relative clauses. This underwent the early apocope to give **et*, and was further changed in Irish to **es* by a rule whereby final **-t* after early apocope of **-i* gave **-s*.

According to McCone, there was no obligatory enclitic particle, but any enclitics were required to take second place in the clause, thus providing the same protection against the early *i*-apocope. These forms with retained **-i* were then generalized in all verbs in absolute initial position, as against those preceded by a preverb or negation, which had uniformly lost the **-i*.

I am inclined to follow Schrijver's explanation, but which is correct is not important for the following discussion. At the earliest stage, before early *i*-apocope, the forms which would go on to be absolute will be marked with a +: thus (later) abs. **bereti+*, (later) conj. **bereti*.

In secondary forms, without final **-i*, final postvocalic **-t* had fallen together in Proto-Indo-European with **-d*, and was then lost. Although Schumacher (2004: 39–40, 51–2) seems to assume that this change to **-d* and subsequent loss also affected conjunct forms after the early loss of **-i*, the loss of final **-d* in fact occurred before the loss of **-i*, as noted by McCone (2006: 173–4) and Schrijver (2007b: 366–9). The question of secondary forms without **-i* will be taken up when discussing forms of the future/subjunctive of the verb 'to be' below.

4. Preliminaries II: British **h < *s*

As will become clear, the derivation of the Brittonic future/present subjunctive forms is closely bound up with the development of intervocalic **s* in British. The approach followed here will be that of Schrijver (1995: 383–5; 2007a: 315–16).

According to Schrijver, when **h < *s* was lost before high vowels, the resulting hiatus was filled with a glide, the quality of which was dependent on the following vowel, e.g. MW *gwiw* 'fit' < **uīu* (apocope) < **uīuu-* < **uīū-*¹⁰ < **uehu-* < **uesu-* (cf. MW *pydew* 'well' < Lat. *puteus*). Although Schrijver never makes this explicit,¹¹ the development of the glide, and hence the loss of **h*, must have occurred prior to apocope (since otherwise **uehu-* > **ueh* > ^x*gwech* or ^x*gwoe*). The conclusion must be drawn that **h* was lost intervocalically before apocope in front of high vowels.

In other environments, however, **h < *s* was retained until after syncope on the basis of forms such as MW *hacraf* 'ugliest' < **hagrhaŋ* < **sakrisamos* against *hagr* 'ugly', OW *hinham* 'oldest' < **hinhaŋ* (internal

i-affection, syncope) < **henihaμ* (apocope) < **senisamos* . These show provection (devoicing) of a preceding voiced stop and retention of *h* after a resonant respectively.

Word final post-apocope Proto-British **-h* had two possible results, depending on *sandhi* environment. Either it was lost with lengthening of preceding vowel, or it was retained, giving **-x* > W *-ch*, B *-c'h* (cf. MW *doe* ‘yesterday’ < **dē* < **deh* < **gdes* versus B *dec'h* < **deh* < **gdes*; Schrijver 2007a: 315–16).

An alternative view was put forward, apparently independently, by Isaac (1996: 365–8) and Schumacher (2004: 51–2), in which the crucial point is the idea of an ‘*h*-metathesis’ in internal syllables in British Celtic. It is observed that in forms such as W *haearn*, OC *hoern*, B *houarn* ‘iron’ < **īharno-* < **īsarno-*, the **h* arising from intervocalic **s* has become word-initial (Jackson 1953: 522). Isaac and Schumacher suppose that a similar process led to the change of word-internal **-āse/o-* to **-āhe/o-* > **-hāe/o-*. No other evidence is put forward for ‘*h*-metathesis’ to any but word-initial position,¹² and in fact there is at least one piece of evidence which argues against such a sound change. This is OW *timuil*, MW *tywyll*, MB *teffoal*, B *teñval* ‘darkness’ < **teμēlo-* (contraction) < **temeēlo-* < **temehelo-* < **temeselo-* < **temHes-elo-* (cf. OIr. *teimel*; Schumacher 2004: 142–3). If *h*-metathesis had occurred we might well find OW ^x*tifuil* (or ^x*tiphuil*, ^x*tipuil*), and would certainly expect MW ^x*tyffwyl*, B ^x*tefal*.

There is one further serious problem with the idea of ‘*h*-metathesis’, which has to do with the lack of *h* in the Breton singular forms of the future/present subjunctive (as given above). ‘*H*-metathesis’ would by definition result in a uniform predesinential **h*. If Breton originally had a formant **h* as part of the subjunctive endings throughout the paradigm, it is impossible to think of a reason why it would have been lost only in the singular.¹³ On the other hand, it is easy to see that **h* could have spread through the paradigm by levelling in Welsh. Consequently, this makes ‘*h*-metathesis’ in non-initial syllables quite improbable (recall that the subjunctive endings themselves are the only evidence given for ‘*h*-metathesis’ occurring anywhere other than word-initially). This difficulty was in fact already noted by Morris Jones (1913: 339), who concluded that ‘the *-h-* belongs to the pl. and impers. only; in the sg. [of Welsh], therefore, it is an intrusion’ (although he was operating with quite a

different conception of the formation of the subjunctive from that which will be discussed below). It will be taken as read from now on that there was no ‘*h*-metathesis’ in non-initial syllables in British Celtic.

The reader may have observed that OW *timuil* etc. is in fact problematic also for Schrijver’s chronology of the loss of intervocalic **h* < **s*. If **h* was not lost intervocalically until after syncope we would expect a development **temeselo-* > **temehelo-* > **temehel* (apocope) > **temhel* (syncope), where instead we find **temeselo-* > **temehelo-* > **temeëlo-* > **temēlo-* (contraction) > OW *timuil*. Griffith (2010) argues that intervocalic **h* < **s* was lost early in British Celtic, resulting in the contraction of like vowels, and the insertion of a glide **j* between other vowels, except adjacent to **u*, where *ụ* was inserted. Further evidence to support Griffith’s proposal comes from the present of the verb ‘to be’ in Welsh, where **esesi + t* (2sg. personal pronoun) gave 2sg. *wyt*, and **eseti* gave 3sg. conj. *-wy*. Lastly, 1sg. MW *tawaf*, MB *tauaff* ‘I am silent’, 3sg. MW *teu*, MB *teu* come from **tauV-* < **tauhV-* < **tasV-* rather than **təV-* < **təhV-* < **tauhV-*, which suggests that **h* was lost before **au* developed to **ā*.

According to Griffith, following Jasanoff (1994: 205–6), attested *h* in superlatives like OW *hinham* is due to reintroduction of **s* on the basis of forms like **trek-samo-* > MW *trechaf* ‘strongest’; this then became secondary **h* intervocalically after original **h* was lost. The same process explains the reintroduction of **h* into the future/present subjunctive paradigm, on the basis of forms such as MW *dy-duch* ‘may bring’ < **do-duk-se-ti*, where the **-se/o-* suffix was added to roots ending in a stop. If this is correct, then the **h* of the British future/present subjunctive is in fact a secondary **h*, the result of reintroduced intervocalic **s* > **h*, after original **s* > **h* was lost. For the reasons given below, Griffith’s version of the development of **s* > **h* will not be followed here. However, secondary rather than primary **h* can be used, *mutatis mutandis*, for the British future/present subjunctive with little effect on the developments proposed below (with the exception that the lack of *-h-* in the singular endings of Breton cannot be explained directly; for a possible analogical proportion, which is compatible with a secondary **h*, but not ‘*h*-metathesis’, see footnote 36 below).

The assumption of analogical restoration of **s* and a second change of intervocalic **s* > **h* adds complexity to the system (note that Griffith requires the same spread of **s* from the superlative into the comparative to explain the British **-ax* and **-ox* comparative endings, for which he follows Schrijver 2007a in deriving them from the acc.sg. **-iosam*), and it is problematic in the light of W *gwiw* < **uesu-*. Griffith is forced to assume that the vocalism of this form derives from the plural, where **uesoues* would give **ueioues*, whence **uiioues* (by falling together of pretonic **iiV* and **eiV*). The vocalism of the plural, subsequently lost, was carried over into the singular.

The assumption of analogical restoration of **s* can be avoided if the apparent examples of early loss of **h* < **s* are in fact phonetically determined. It has already been observed that **h* was lost earlier before high vowels (W *gwiw* < **uiu* < **uei-* < **ueh-*). MW *teu* '(s)he is silent' < **tausi-* < **tause-* has **s* before a high vowel and **s* was also before a high vowel in *tawaf* 'I am silent' before the replacement of inherited **-i* < **-u* < **-o* with generalized **-au* in the 1sg. MW *rhew*, MB *reau*, B *rev* 'frost' are normally reconstructed as **preuso-* (Jackson 1967: 241), but **preusu-* is equally possible, and Skt. *pruṣvā* 'drop of dew, cool drop', Lat. *pruina* 'hoar frost' < **prusuinā* suggest the existence of an original *u*-stem. It is also plausible that **h* was lost earlier between like vowels than between different vowels; phonetically, [h] is simply a voiceless version of adjacent sounds, so it is quite likely that between two identical vowels it would be lost earlier, leading to contraction of the vowels. This environment will therefore be added to that of following high vowel for pre-apocope loss of **h* as supposed by Schrijver, and it will be assumed in what follows that intervocalic **h* < **s* was not otherwise lost until after syncope.

5. Reconstructing the Brittonic future/present subjunctive: McCone's theory

There are two main schools of thought on the direct prehistory of the Brittonic forms (considering only the endings of the regular verb for the moment). McCone (1991: 101–4) assumes that **-āse/o-* became **-āhe/o-* (with regular **s* > **h*) > **-he/o-* by syncope. Thus 1sg. **-āsumi*¹⁴ > **-āhui* (with regular **ā* > *ā*, **ū* > *ī*, and lenition of intervocalic **m*) >

*-*ḡhíμ* (apocope of final syllables) > *-*híμ* (syncope of pretonic syllables) > MB *-iff* (we shall ignore the question of the lack of Breton *-h-* in the singular endings until later). What McCone envisages for the 3sg. is not clear. He states (1991: 101): ‘the historically regular 3sg. inflection [of the conjunct] will have been an *-(h)* that we may assume to have been lost early in final position, e.g. **karaset* > **karahed* > **karhed* > **karh* > **car* [sic] identical with the [W] 3sg. pres. ind. *car* ‘loves’ < **karāt*. In order to resolve such ambiguities, the *h* appears to have been restored with the help of the substantive verb’s *-oi* to give a type *carhoe*...’

However, this derivation assumes syncope prior to apocope (as noted by Jasanoff 1994: 206–7), against the accepted order of these developments (e.g. Schrijver 1995: 461–2; Sims-Williams 2003: 73, 109–33). Neither conjunct *-*āseti* > *-*āset* (*i*-apocope) > *-*ḡhet* (**s* > **h*) > *-*ḡh* (apocope) nor absolute *-*āseti*+ > *-*ḡhédi* (lenition of **t*, **s* > **h*) > *-*ḡhídi* (*i*-affection) > *-*ḡhéd* (apocope) > *-*héd* (syncope) would give the form assumed by McCone. The only way of explaining the forms given by McCone is to suppose that there was some sort of earlier, irregular, syncope in these forms, which is unappealing. His explanation for the 2sg. is also problematic. According to McCone, 2sg. abs. *-*āsesi*+ gave *-*āsisi* (by a change of unstressed *-*es-* > *-*is-* in Insular Celtic, following Holmer 1947; further discussion in McCone 1978: 31 fn 23)¹⁵ > *-*ḡhíhi* (**s* > **h*) > *-*ḡhíh* (apocope) > *-*híh* (syncope) > MW, MB *-(h)y*, subsequently extended in Welsh by adding *-ch* from the 2pl. to give MW *-(h)ych*. Exceptionally, the absolute form was preferred in this case because conjunct 2sg. *-*āsesi* would have given the same result as 3sg. *-*āseti*. However, Middle Welsh <y> represents **ī*, whereas Middle Breton <y> is an orthographical variant of <i> from **ī*; **ī* is written <e> in Middle Breton. Therefore only one of the Breton and Welsh endings as envisaged by McCone can come from this source (depending on whether *-*híh* is supposed to give *-*hī* or *-*hī*; but see below).

1pl. conj. *-*āsumosi* > *-*āsómos* (*i*-apocope) > *-*ḡhómos* (**s* > **h*) > *-*ḡhóm* (apocope) > *-*hóm* (syncope) > MW *-(h)om*, MB *-homp*,¹⁶ 2pl. conj. *-*āsetesi* > *-*āsétes* (*i*-apocope) > *-*ḡhédéh* (**s* > **h*, lenition) > *-*ḡhéd* (apocope) > *-*héd* (syncope) > MB *-het*, and 3pl. conj. *-*āsonti* > *-*āsónt* (*i*-apocope) > *-*ḡhónt* (**s* > **h*) > MB *-hont*, MW *-(h)ont* (← *-*(h)wnt*) all give the attested forms regularly.¹⁷

McCone's theory explains some of the forms in Welsh and Breton satisfactorily. Note that analogy is required to explain MW 1sg. *-(h)wyf* (due to influence from the verb 'to be', which had *bwyf* regularly from **bāsūmi*; see below) and MW 2sg. *-(h)ych*, which, even if from **-āsesi*, was further remodelled on the 2pl. (itself an analogical form). McCone's treatment of 2sg. abs. **-āsesi* is problematic because it can explain only one of MB *-i* written <i, y> or MW *-(h)ych*, as is his explanation of 3sg. MW *-(h)oe*, *-(h)o*, MB *-o*, which goes against the accepted relative chronology of Brittonic sound changes.

We will go on to discuss an alternative theory of the derivation of the Brittonic subjunctive forms from **-āse/o-*, which avoids some of these difficulties, below. However, it will be seen that, with some necessary alterations, McCone's basic conception will be shown to be correct.

6. Isaac and Schumacher's theory

The disadvantages of Isaac (1996: 365–8) and Schumacher's (2004: 51–2) explanation of the Brittonic future/present subjunctive forms by way of 'h-metathesis' have already been mentioned. However, since their picture of the development of the endings is rather different from that of McCone in other ways, they will be discussed here. Since Isaac does not describe the development in detail, I will focus on Schumacher's proposals.

According to Schumacher, the developments are as follows: 1sg. absolute and conjunct **-āsūmi* > **-āhīmi* (**s* > **h*, lenition) > *-hāīmi* (*h*-metathesis) > late Proto-British **-hōīmu* (apocope and contraction) > MW *-(h)wyf*. 3sg. conj. **-āseti* > **-āset* (*i*-apocope) > **-āhet* (**s* > **h*) > Proto-British **-āhit* (by a falling together of the thematic and **je/o*-conjugations; Schumacher 2004: 38–40) > **-hāit* (*h*-metathesis) > late Proto-British **-hā* (contraction and apocope) > early MW *-(h)oe*, MW, MB *-(h)o*. 1pl. conj. **-āsomosi* > **-āsómos* (*i*-apocope) > **-āhómoh* (**s* > **h*) > **-hāómoh* (*h*-metathesis) > **-hāóm* (apocope) > late Proto-British **-hóm* (by contraction?) > *-(h)om* (shortening of **-ō-* before unlenited *-m*; *ad hoc*) > MW *-(h)om*, MB *-homp*. 2pl. conj. **-āsetesi* > **-āsétes* (*i*-apocope) > **-āhétéh* (**s* > **h*) > **-āhídeh* (lenition of **t* and replacement of **e* by **i*) > **-hāídeh* (*h*-metathesis) > late Proto-British **-hāíd* (contraction and apocope) > MB *-hod*. 3pl. conj. **-āsonti* > **-āsont* (*i*-apocope) > **-āhont* (**s* > **h*) > Proto-British **-āhunt* (raising of **o* to

**u* before **nC*) > **-hǣunt* > late Proto-British **-hōnt* (contraction) > **-hōnt* (shortening before **-nt*) > MW *-(h)ont*, MB *-hont*.

In the first place, it should be noted that Schumacher assumes several sound changes for which he gives no other evidence, such as the presumed contractions in the 1pl. and 3pl. and the shortening before nasals in these forms. It would be easier simply to assume syncope in these forms, so that **-hǣómoh* > **-hǣóm* (apocope) > **-hóm* (syncope). Schumacher probably operates with these contractions in order to explain the similar process whereby, in the 3sg. **-hǣit* gives **-hǣ́* (presumably via **-hǣ́t*) rather than **-hǣ́*, with loss of the final **-it* by apocope. However, this is still problematic, since if apocope occurred after the contraction of the cluster **-ǣi-* to give a diphthong, we might expect loss of the syllable altogether, leaving just **-h*. Although he is not explicit about it Schumacher must have in mind Jackson's (1953: 356–8) idea that apocope did not affect diphthongs. In which case, **-hǣit* > **-hǣ́* is regular,¹⁸ and there is no need for the other contractions. Presumably Isaac also follows Jackson, since he assumes without comment that 3sg. **-ǣseti* > **-ǣset* > *-ǣhet* (> **-hǣ́et*) would give Middle Welsh *-(h)wy*, *-(h)oe* > *-(h)o*. As will be discussed below, this explanation of the 3sg. forms is probably not correct.

Note that the Breton 1sg. and the Brittonic 2sg. endings are left unaccounted for by these derivations. Isaac does not address the 1sg. and is undecided about the 2sg.; Schumacher derives MB 1sg. *-iff* by analogical levelling from the MB 2sg. *-i*, which he also takes, along with MW *-(h)ych*, as analogical on the verb 'to be', where, as we shall see below, a different (originally subjunctive) form **buesi* had given B *bi*, MW *bych*.

The problematic 2sg. is therefore explained by analogy in both McCone's and Schumacher's approaches. Schumacher also explains the 1sg. in Breton analogically. Isaac and Schumacher's ideas seem to explain the 3sg. more successfully than McCone's, although these also probably require some adjustment (see below). However, they are problematic in relying on the existence of 'h-metathesis'.

7. The development of the Brittonic endings

Since we must do without ‘*h*-metathesis’, as not satisfactorily explaining the observed facts, we should return to at least the broad outlines of McCone’s theory, in spite of its apparent problems. Let us consider in some detail what would be the outcome in Proto-British of a suffix **-āse/o-* > **-āhe/o-* without ‘*h*-metathesis’. In the 1sg., as noted above, we might expect that **-āsūmi* > **-ǣhīmi*, would, after apocope and syncope, give **-hīμ*. This we know not be correct, on the basis of Middle Breton *-iff*, not ^x*-hiff*. However, with the addition of the important rule that **h* was lost before high vowels before apocope, we find that **-āsūmi* > **-ǣhīmi* > **-ǣīμ* (apocope) > **-īμ*¹⁹ (syncope) gives exactly MB 1sg. *-iff*.²⁰ For MW *-(h)wyf* see below.

Schumacher is no doubt correct in seeing the 2sg. forms as being analogical on the 2sg. of the verb ‘to be’. Moreover, the shape of the 2sg. absolute of the regular verb would have encouraged the spread: **-āsési+* > **-āhéhi* (**s* > **h*) > **-ǣhihi* (*i*-affection) > **-ǣīīi* (**h* > **i*) had given **-ǣīī* (apocope). One way or another (see below), the 2sg. of ‘to be’ was **bih* at this stage. Since the 1sg. and 3sg. conjunct endings of ‘to be’ and the regular verb were identical, all that was required to achieve uniformity was a remodelling of **-ǣīī* to **-ǣīh*.²¹

In order to understand the further developments it must be remembered that word final post-apocope Proto-British **h* could be lost with lengthening of preceding vowel, or give **-x* > W *-ch*, B *-c’h*. In the case of **-ǣīh* Welsh kept the **h*, whence, after apocope and syncope, **-īh* > *-(h)ych*, while South-West British lost the final *-h* with lengthening of the preceding vowel to give **-ī* > MB *-i*.

The absolute form was probably preferred in this instance because 2sg. conj. **-āsési* > **-āses* (*i*-apocope) > **-ǣheh* (**s* > **h*) > **-ǣh* (apocope) > ^x*-o* (for the last stage see below) would have been identical with the result of the 3sg. conj. **-āseti* after apocope, as noted by McCone.

MW 2sg. *-(h)wyr*, apparently originally from a deponent (Ellis Evans 1964: 128) cannot be a regular development (*pace* Isaac 1996: 366); **-āsérV* would have given ^x*-hér*. It may be the analogical result of the spread of *-wy-* through the Welsh paradigm (cf. 3sg. *-(h)wy*, 3pl.

-(h)wynt), or from the verb ‘to be’ if 2sg. **buāsérV* > **bǣhér* gave *bwyr* regularly (i.e. the same result as **ǣhī*; compare 1sg. *bwyf*).²²

The development of the 3sg. from **-āseti* > **-āset* is not as obvious as it at first appears. It is generally believed (Morris Jones 1913: 113; Isaac 1996: 366–7; Schumacher 2004: 52)²³ that the MW, MB *-o* comes from an original **-oi* attested once in MW as *-(h)oe*, and in OSWBr. as *-oi*, and in OW *boi*.

If this is correct, then we must assume a stage **-āsit*, whence **-ǣhit* > **-ǣit* (**h* > **i*) > **-ǣ* (apocope). The presence of the **i* would then require explanation. As mentioned above, Schumacher (2004: 38–40) explains that **ie* became **i* in Proto-Celtic; thus 3sg. abs. **-jeti+* > **-iti+* > **-idi*. After British *i*-affection, some forms of **e/o*-verbs would also appear to have a ‘thematic’ *i*-vowel: 3sg. abs. **-eti+* > **-idi*. This was the basis for a generalization of **-i-* as the theme vowel in place of **-e-* in both original **ie/o-* and **e/o-*verbs. Schumacher’s theory is not unconvincing, but it does not necessarily follow, as assumed by Schumacher, that in the future/present subjunctive, where there was no suffix other than **-āse/o-*, the forms with **-i-* would also be generalized. Alternatively, one might suppose that the conjunct acquired by analogy the **i* that had arisen by *i*-affection in the absolute **-ǣhidi* < **-āseti+*. However, this is cumbersome and should be avoided if possible. The simplest scenario is therefore that there was no stage **-āsit*.

These are objections at an early reconstructed stage, but the attested forms argue against the later supposed development of OSWBr. *-oi* > MB *-o* and OW *-oi*, early MW *-(h)oe* > MW *-(h)o*. In the first place, Welsh *-oe* is never lost in monosyllables (W *noe* ‘basin’, *doe* ‘yesterday’, MW *moe* ‘more’).²⁴ So its loss in OW *boi* > MW *bo* is exceptional. Since the 3sg. of the verb ‘to be’ in OSWBr. is also already *bo*, a similar change would have to be assumed for OSWBr., which is unlikely on the basis of OC *doy* ‘yesterday’, and the existence of OSWBr. 3sg. *-oi* in the regular verb seems to suggest that in polysyllabic words the change had not yet taken place.²⁵ It could be argued that the reduction to *bo* is due to its use in unstressed environments. Apart from the fact that none of the other Brittonic forms of the future/present subjunctive of the verb ‘to be’ show signs of changes caused by lack of stress, we would then expect *-o* already in the regular verb in OSWBr. Furthermore, although all the Brittonic

languages tended to reduce *oi* in final syllables to *o*, this development is not found in the Vannetais dialect of Breton, which apparently retained the original Old British final stress after the stress shift in the rest of the Brittonic languages (Jackson 1967: 79).²⁶ In the future 3sg., however, Vannetais also shows *-o* (Hemon 1984: 188).²⁷ In short, the idea that forms like OSWBr. *bo*, MW *bo* come from *boi* is at the very least problematic.

Let us consider the question of what the regular result of 3sg. conj. **-āseti* > **-āset* would be without a stage **-āsit*. We would expect **-āhet* > **-āh* by apocope. What this would give in the Brittonic languages is not yet, I think, clear. In general **ā* > **ā̄* in Proto-British stressed syllables gave OW *au*, MW *aw* (**plāno-* > MW *llawn* ‘full’), becoming later MW *o* in newly unstressed syllables. It gave OB *o*, *u*, MB *eu* and OC *o*, *ue*, MC *u*, *e*, *ey* etc., which became MB *e*, MC *e* in newly unstressed syllables (Schrijver 1995: 195–210). Clearly, if **-āh* underwent this process, 3sg *-o* cannot come from it. However, these developments were not the same in all environments: **ā̄u* gave OW *ou*, MW *o*, OB *ou*, MB *ou*, OC *ou*, MC *ow* (MW *clo*, OB, MB *clou* ‘lock’; Zair 2010/11 [2012]).²⁸ It could be that **ā* > **ā̄* > *o* in Brittonic also occurred before **h*, i.e. before consonants which were vowel-like and involved very little frication.²⁹ This is admittedly *ad hoc*, since I do not know of any other examples of post-apocope **-āh*, but since the evidence does not support a derivation of *-o* from *-oi*, it seems at least a plausible supposition.

All the other forms of the subjunctive of the regular verb can be easily acquired from **-āse/o-*: 1pl. conj. **-āsomosi* > **-āsómos* (*i*-apocope) > **-āhómoh* (**s* > **h*) > **-āhóm* (apocope) > **-hóm* (syncope) > MW *-(h)om*, MB *-homp*. 2pl. conj. **-āsetesi* > **-āsétes* (*i*-apocope) > **-āhédeh* (**s* > **h*, lenition) > **-āhéd* (apocope) > **-héd* (syncope) > MB *-het*.³⁰ 3pl. conj. **-āson̄ti* > **-āson̄t* (*i*-apocope) > **-āhónt* (**s* > **h*) > **-hónt* (syncope) > MB *-hont*, MW *-(h)ont* (← **-hwnt*).

8. The verb ‘to be’

The verb ‘to be’ was a special case in Insular Celtic. Regular verbs had inherited only a single suffix **-āse/o-*, the descendant of both the original future and subjunctive formations. But ‘to be’ had inherited, beside the regular future **bi-buāse/o-*, a different type of subjunctive, based on a so-

called root-aorist. This was formed by adding only the thematic vowel *-e/o- to the root, giving Insular Celtic **b_ue/o-*. As with the regular verb, these categories remained separate in Irish, giving e.g. OIr. *beith* ‘may be’, *bieid* ‘will be’ (McCone 1991: 115–35; Schumacher 2004: 48–9, 241–56). All the forms in the Brittonic languages can therefore be traced back to either **b_uāse/o-* (future) or **b_ue/o-* (subjunctive). In Proto-British, since the future and the subjunctive fell together semantically, the forms came together in a single suppletive paradigm. However, Welsh and South-West British seem to have generalized some different forms (compare 1sg. B *bin* and MW *bwyf*, 1pl. MB *bihomp* and MW *bom*, and see below), so this probably was not complete until after the Brittonic languages had separated.

MW 1sg. *bwyf* goes back to **b_uāīμ* (apocope) < **b_uāīμi* (**h* > **i*) < **b_uāīμi* (**s* > **h*) < **b_uā_sūmi* (cf. MW *mwy* ‘more’ < **māiūs*; Schrijver 2007a: 312–13). This is the source of MW-(h)*wyf* in the regular verb, which has spread from ‘to be’. B *bin* (= MB **biff*) is found in modern literary texts, and could therefore be late and analogical. If so, the only model for the creation of *bin* would be the regular verb. Thus MB 2sg. -i : 1sg. -iff :: 2sg. *bi* : X, where X would be MB **biff*, B *bin* (3pl. *bint* must be secondary). It is also possible that it is a genuine archaism, in which case it would come regularly from the subjunctive 1sg. **b_uūmi* > **bīμ*. The 1sg. subjunctive in Middle Cornish is *byf*, so it is likely that, even if it is due to analogy, the 1sg. form goes back to South-West British.

MW 2sg. *bych* is regular from originally absolute³¹ **bīh* (apocope) < **bīhi* (*i*-affection) < **behi* (**s* > **h*) < **b_uesi+*. B *bi* reflects the alternative *sandhi*-variant **bī* < **bīh*. It is assumed that abs. **bīi* was remade to **bīhi* after conj. **beh* < **bes* < **b_uesi* (note that the *i*-affection in **bīhi* was not phonemic prior to apocope). The choice of the absolute in this form is for the same reason as in the regular verb: conjunct **b_uesi* > **b_ues* (*i*-apocope) > **beh* > **bē* > **b_uā* would have been identical with the 3sg. (see below), at least in some *sandhi* environments. Schumacher’s approach is also possible: he supposes that 2sg. abs. **behi* > **bīhi* led to the creation of analogical conj. **bīh* ← *beh*, whence MW *bych* and B *bi*. The version suggested here is preferred because it better motivates the spread of the final *-*h* to the regular verb: from absolute to absolute. Furthermore, the same spread of *-*i*- to the conjunct from absolute did not

occur in the 3sg., as already noted. However, these are minor points, and Schumacher may be correct.

MW 3sg. *bo*, OSWBr. *bo*, B *bo* is quite possibly the regular result of **bǫh* (apocope) < **bǫhet* (**s* > **h*) < **būāset* (*i*-apocope) < **būāseti* (see above). OW 3sg. absolute *boit*, MW *boet*, would come from **būāseti*+ > **bǫhedi* (**s* > **h*, lenition) > **bǫhidi* (*i*-affection) > **bǫid*³² (apocope).

Old Welsh 3sg. *boi* still requires explanation. It is possible that the difference in the apparent stem of absolute **bǫd* and conj. **bō* was adjusted by creating a by-form **bǭ*. Alternatively, *boi* may perhaps be a regular form. So far I have assumed, following McCone (2006: 109), that the Celtic subjunctive forms generalized the primary endings which were characterized by final **-i*, and which were inherited in the future forms. However, it is not clear whether or not subjunctives originally had primary endings or whether secondary endings could also be used (literature in McCone *loc. cit.*, and see also Meier-Brügger 2003: 166). Schrijver (2007b: 367–9) has argued that the Celtic *s*-subjunctive was originally characterized by secondary endings, and that this is the origin of 3sg. forms such as OIr. *-té* ‘may go’ instead of expected ^x*-téis*, if from **teigseti*. According to Schrijver, the preform is **teig-se-t*, with secondary ending. After loss of final **-t* > **-d* (which is a development shared with Gaulish according to Schrijver 2007b: 357–60),³³ this would result in **teigse*. Schrijver (2007b: 360–5) argues that absolute final **-e* fell together with **-i*, and underwent the same apocope, whence **teigs* > OIr. *-té*. In the other persons, primary endings were reintroduced. The same sequence of events applied to a 3sg. **būet* would give British Celtic **be* > **bē* (lengthening in hiatus) > **bǭ* > OW *boi* quite regularly.³⁴

Whether it came about in this way or by analogy, the existence of the pair of forms abs. **bǫd* ~ conj. **bǭ* was evidently enough to result in a certain amount of productivity, spreading through the paradigm of the verb ‘to be’ (OSWBr. or OW 3pl. *boint*, MW *boent*) and then into the regular verb as well (OSWBr. 3sg. *-oi*, MW *-(h)oe*, MW 1sg. *-(h)oef*, 3pl. *-(h)oent*).³⁵ Such a spread of forms occurred again in Welsh, whence 3sg. *-(h)wy*, 3pl. *-(h)wynt* from 1sg. *-(h)wyf*. In all the Brittonic languages, with the exception of Vannetais, these *-oe-* forms were subsequently lost again by the tendency of *oe* in final syllables to give *o*, thus falling back together with the inherited 3sg. *-o*, 3pl. *-(h)ont*. The overall generalization

of *bo* over *boe* in all the Brittonic languages, where reduction of the diphthong would not have occurred, is no doubt due to the preponderance of *-o* in the 3sg. of the regular verbs after this reduction.

MW 1pl. *bom* is regular from **būomosi*, although it could also reflect spread of the regular subjunctive endings onto the stem of the verb ‘to be’. MB *bihomp* (with *h* generalized from the regular verb) may reflect **b̄om* < **b̄ōm* (**h* > \emptyset) < **b̄hom* (apocope) < **b̄homoh* (**s* > **h*) < **būāsomosi* (*i*-apocope) < **būāsomosi*, with unrounding and raising of *o* in hiatus in Breton and Cornish (Schrijver 1995: 180; Schrijver 2011: 71). It is unlikely to be analogical, because it is not clear what the source for the analogy would be: neither 1sg. **biff* nor 2sg. *bi* provide any equation for the creation of *bi* + *homp* (rather than *b* + *homp*). *Mutatis mutandis*, the same goes for MB 2pl. *bihet*. MW 2pl. *boch* reflects the same remodelling as *-(h)och* in the regular verb.

MW 3pl. *bont* may be regular from **būonti*, with the same remodelling as in the regular verb, or be analogically created on the basis of the regular verb. Both *bwynt* and *boent* are analogical. B *bint* is the result of paradigmatic levelling from 1sg. *bin*, 2sg. *bi*. B *boint* is similarly analogical on the 3sg.: *bo* + *int*.

9. Conclusion

No derivation of the attested forms from the original **-āse/o-* suffix which assumes ‘*h*-metathesis’ can be correct. Therefore, the Breton future endings of the regular verb, with no *-h-* before the endings in the singular forms, probably represent the original Brittonic state of affairs,³⁶ the *-h-* in the singular forms of the Welsh subjunctive having been generalized from the plural. Once this becomes clear, by applying known sound rules to the reconstructed forms we can reach the attested forms efficiently and with the minimum amount of analogical remodelling. A summary of the origins of the British Celtic future/subjunctive form follows.

Regular Verb

- 1sg. **-āsūmi* > MB *-iff*
 MW *-(h)wyf* ← *bwyf*
 MW *-(h)oef* ← *-(h)oe*
 MW *-(h)of* ← *-(h)o*
- 2sg. abs. **-āsesi+* > MB *-i*, MW *-(h)ych*
- 3sg. **-āseti* > MB *-o*, MW *-(h)o*
 OSWBr. *-oi*, MW *-(h)oe* ← *boi*
 MW *-(h)wy* ← *-(h)wyf*
- 1pl. **-āsomosi* > MB *-homp*, MW *-(h)om*
- 2pl. **-āsetesi* > MB *-het*
 MB *-hot* ← *-o*, *-homp*, *-hont*
 MW *-(h)och* ← prepositions
- 3pl. **-āsonti* > MB *-hont*, MW *-(h)ont*
 OSWBr., MB *-hint* ← *-iff*, *-i*
 MW *-(h)wynt* ← *-(h)wyf*
 MW *-(h)oent* ← *-(h)oe*

The verb ‘to be’

*Future

- 1sg. **buāsūmi* > MW *bwyf*
 MW *bof* ← *bo*
- 2sg.
- 3sg. conj. **buāseti*
 > OSWBr. *bo*, MB *bo*, MW *bo*
- 3sg. abs. **buāseti+* > OW *boit*, MW *boet*
- 1pl. **buāsomosi* > MB *bihomp*
- 2pl. **buāsetesi* > MB *bihet*
 MB *bihot* ← *bo*, *bihom*
 MW *boch* ← prepositions
- 3pl.

*Subjunctive

- **buūmi* > B *bin*, MC *byf*
- **buēsi+* > B *bi*, MW *bych*
- **buēt* > OW *boi*
- **buomosi* > MW *bom*
- **buonti* > MW *bont*
 B *bint* ← *bin*, *bi*
 B *boint* ← *bo*
 MW *bwynt* ← *bwyf*
 MW *boent* ← *boe*

Notes

1. An earlier (and radically different) version of parts of this article was presented at the 2008 Tionól at the School of Celtic Studies in Dublin. I am grateful for the helpful questions and comments I received from many people there, and especially to Graham Isaac. Peter Schrijver kindly discussed the contents of this article with me at some length, and his close reading of earlier drafts has improved it immensely; any mistakes are of course my own. The research was carried out while in receipt (successively) of a Doctoral Competition grant from the Arts and Humanities Research Council of Great Britain and a Rhys Studentship in Celtic Studies at Jesus College, Oxford.
2. *C* stands for any consonant, *R* for any resonant (*r, l, m, n*) and *H* (see below) for any laryngeal.
3. Both these suffixes were due to misanalysis of the results of a suffix *-*se/o-* added to roots ending in a laryngeal, with **CeRH-se/o-* > **CeRǎ-se/o-* → **CeR-ǎse/o-* and **Ci-CRH-se/o-* > **Ci-CRǎ-se/o-* → **Ci-CR-ǎse/o-* respectively.
4. Jasanoff (1994) has a different view; he argues that an Italo-Celtic ‘*ǎ*-optative’ is the origin of the Irish and Italic ‘*ǎ*-subjunctives’, and that the Brittonic forms reflect a secondary *-*ǎse/o-* suffix. Although his approach will not be followed here, his perceptive points about the development of the Brittonic future/present subjunctive will be referred to below where appropriate.
5. I follow Schrijver (e.g. 2007a: 309 fn. 7) in using Old South-West British for the oldest stages of Breton and Cornish, which cannot be distinguished linguistically.
6. Probably analogical on (unattested) 1sg. **-im*, 2sg. **-i*; cf. MB *-iff*.
7. Most forms of the future of ‘to be’ in Breton are secondary, by addition of the regular subjunctive endings to the consuetudinal present stem *bez-* (1sg. *beziff* etc.). The forms given here, including those from Modern Breton literary sources, are those which may reflect the original forms.
8. The lack of *-h-* in these forms is no doubt an accident of attestation rather than a fact of the language: *-h-* is not always written in Middle Welsh.
9. Analogical on the 3sg., 1pl. The regular result of *-(*h*)*ont* would be W ^x-*wnt* (Schrijver 1995: 27–8).

10. Schrijver demonstrates that *e was raised to *i before a back vowel in hiatus caused by loss of *h, followed by lengthening (in fact, Schrijver concludes that lengthening and raising occurred before loss of *h, but comparison of W *doe* 'yesterday' with Breton *dec'h* shows that the lengthening is associated with loss of -h. For more on these words see below).
11. It is implied by his relative chronology at Schrijver (1995: 398), and in passing at Schrijver (2007a: 313).
12. The existence of *h*-metathesis in one environment does not guarantee it in another. In Greek, for example, it did occur in εὔω 'burn' < *e_usō, but not in πῆος 'penis' < *pesos (*h*-metathesis would have given *^hφέος); Lejeune (1972: 95).
13. Middle Breton had no rule governing loss of *h* according to the position of the accent, as in Modern Welsh (Jackson 1967: 574–7 for Breton; Morris Jones 1913: 63–5, Jackson 1953: 684–5 for Welsh).
14. From **-āsō* > **-āsū* → **-āsū* + *mi*, where **-mi* is the original 1sg. athematic ending. Note that the final **-i* would not have been lost by early *i*-apocope as it did not follow a voiceless obstruent.
15. And see footnote 21 below.
16. The lack of expected lenition of **m* (which occurs in all tenses and moods) in the 1pl. is perhaps generalized from the preterite, where athematic *s*-aorists would have had **-s-mosi* > **-mmos* (Morris Jones 1913: 336, 339; but see McCone 1991: 78–9, where it is argued that this had already been thematized to **-s-o-mosi* in Insular Celtic), or on the basis of the present of the verb 'to be', where 1pl. **es-mosi* gave **emmos* > MW *ym*.
17. One might expect that conjunct **-āsonti* > **-āsont* would lose the final syllable by apocope. Since all 3pl. forms in the Brittonic languages end in *-Vnt* it must be assumed either that syllables ending in **-nt* did not undergo apocope (compare OIr. 3pl. conj. *-at* < **-onti*), or that the absolute **-nti* was uniformly generalized.
18. In fact, rather than the preservation of diphthongs, it is more likely that in a cluster of the type **-V.i-* a glide developed, whence **-Vji-* > **-Vj-* after apocope (Schrijver 1995: 384–5); see above.
19. In principle, the resulting **Cj* ought to have been retained (cf. OC *chelioc*, B *kilhek* 'cock' < **kaliāko-*; Schrijver 1995: 321–4). There are two

possible reasons why it was not; firstly, because the glide was purely phonetic, and when the environment for its creation was removed, so was the glide (but note that it was retained, i.e. phonemicized, when apocope changed the environment, as in *pydew* < *puteus* etc.). Alternatively, it had already been lost; British Celtic inherited a phonemic $\underset{\cdot}{j}$ which was retained after $\underset{\cdot}{i}$ ($\underset{\cdot}{i}V > \underset{\cdot}{i}dV$; $\underset{\cdot}{i}j\acute{a} > \text{MW } aea, wya$) but was otherwise lost (Jackson 1953: 346–62; Schrijver 1995: 280–1). If we assume that the loss of $\underset{\cdot}{j}$ after vowels other than $\underset{\cdot}{i}$ occurred after the creation of hiatus-filling glides before $\underset{\cdot}{i}$ and $\underset{\cdot}{u}$, i.e. after apocope (since these glides were retained regardless of the quality of the preceding vowel), but before syncope, then $\underset{\cdot}{j}$ in $\underset{\cdot}{-}\tilde{\underset{\cdot}{i}}\mu$ would have already have disappeared before the development to $\underset{\cdot}{-}\tilde{\underset{\cdot}{i}}\mu$.

20. This explanation is more straightforward than Schrijver's (2007a: 313) suggestion that an Old Breton/early Middle Breton 1sg. $\underset{\cdot}{-}uiff$, equivalent to MW $\underset{\cdot}{-}(h)wyf$, became $\underset{\cdot}{-}iff$ by a general reduction of rounded vowel + unrounded vowel diphthongs that took place during the course of Middle Breton (and Middle Cornish, where the ending is $\underset{\cdot}{-}yf$). There is no evidence that such a form ever existed.
21. In fact, if McCone (1978: 31 fn 23; 1996: 99–100) is right in assuming that $\underset{\cdot}{*}es$ became $\underset{\cdot}{*}is$ in Proto-Celtic, the absolute forms could be based on the conjunct of the regular verb. Since before apocope the absolute was usually distinguished from the conjunct only by the addition of final $\underset{\cdot}{*}i$, $\underset{\cdot}{*}\acute{a}ses\acute{t} > \underset{\cdot}{*}\acute{a}sis\acute{t} > \underset{\cdot}{*}\acute{a}h\acute{i}hi$ ($\underset{\cdot}{*}s > \underset{\cdot}{*}h$) > $\underset{\cdot}{*}\tilde{\underset{\cdot}{i}}\tilde{\underset{\cdot}{i}}i$ ($\underset{\cdot}{*}h > \underset{\cdot}{*}j$) could have been remodelled to $\underset{\cdot}{*}\tilde{\underset{\cdot}{i}}\tilde{\underset{\cdot}{i}}hi$ after conj. $\underset{\cdot}{*}\acute{a}sesi > \underset{\cdot}{*}\acute{a}sisi > \underset{\cdot}{*}\acute{a}sis$ ($\underset{\cdot}{i}$ -apocope) > $\underset{\cdot}{*}\acute{a}h\acute{i}h$ ($\underset{\cdot}{*}s > \underset{\cdot}{*}h$) > $\underset{\cdot}{*}\tilde{\underset{\cdot}{i}}\tilde{\underset{\cdot}{i}}h$ ($\underset{\cdot}{*}h > \underset{\cdot}{*}j$). But the evidence for such a rule is doubtful (Schumacher 2004: 138–53).
22. But $\underset{\cdot}{*}\acute{a}h\acute{i}$ gave MW *oe* ($\underset{\cdot}{*}\acute{b}\acute{a}h\acute{i} > \text{MW } boet$; see below).
23. McCone, of course, considers the $\underset{\cdot}{*}oj$ to be analogically created on the basis of the verb 'to be'.
24. Morris Jones' (1913: 113) derivation of W *clo* 'lock, bolt' from OW $\underset{\cdot}{*}cloe$ is incorrect; as demonstrated by MB *clou*, it comes from $\underset{\cdot}{*}kl\acute{a}uV$.
25. In principle <oi> could represent /ui/, equivalent to W <wy> (Fleuriot 1964: 73–4), which in Welsh spread from the 1sg. $\underset{\cdot}{-}(h)wyf$ (itself taken over from the verb 'to be'; see below). But there is no proof that $\underset{\cdot}{*}uij$ made it as far as Old South-West British at all. For the Breton forms see below. MC *byf*, *beyf*, *beu* can reflect $\underset{\cdot}{*}b\acute{i}\mu$ and perhaps also $\underset{\cdot}{*}bo\mu$,

- generalized from 3sg. *bo*, but not **buiþ* (forms from Lewis-Zimmer 1990: 56).
26. OW *henoid*, *henoeth* > W *heno* ‘tonight’ (Morris Jones 1913: 113), B *henozh*, but V. *hinoah*, *hineah*, *heneah* (Jackson 1967: 203–4).
 27. In e.g. the Christmas Hymns, and beside a mysterious *-ou*, which cannot come from OSWBr. *-oi*, as suggested by Hemon.
 28. Jackson is wrong to allow MW *eu* as a possible reflex; his only example which is not a Latin loan-word is MW *geu* ‘lie’, which can, and probably does, go back to **gǫŷā*, despite the continuing tradition of reconstructing **gāŷā* (see Uhlich 1995: 37 fn. 137 for discussion and literature).
 29. Presumably therefore also before **i*, as demonstrated by the 3sg. abs. of the verb ‘to be’, where **bŷāseti* > **bǷīdi* gave MW *boet*. For [h] as a voiceless version of adjacent sounds see Ladefoged (2001: 102).
 30. MW *-(h)och* is due to the importation of the ending of the conjugated prepositions (McCone 1991: 101; Isaac 1996: 367).
 31. These forms cannot come from the conjunct, since **beh* < **bes* < **bŷesi* would have given MW **bech*, B **boa*.
 32. Note the different development of **Ƿīl* > MW *wy* in MW *bwyf*.
 33. However, note that McCone (2006: 172–4) dates the loss of **-d* from **-t* and subsequent early *i*-apocope as Insular Celtic.
 34. I am grateful to Prof. Schrijver for drawing his article to my attention, and pointing out that **bŷet* could give OW *boi*.
 35. Graham Isaac (p.c.) tells me that the pronunciation of the *wy* diphthong varies in onset tenseness in the modern dialects. If this was the case also in Old/Middle Welsh, then a spelling <oi, oe> for <wy> might be introduced initially by mistake, but then become somewhat common as a convenient way of avoiding confusion for the reader in a long sequence of minims. In that case the *-oi-*, *-oe-* forms need not have any phonetic reality at all, and could all represent *-wy-* forms (paradigmatically levelled from the 1sg. and 3sg. abs., I would argue, since I do not follow Dr Isaac in deriving 3sg. *-oi*, *-oe*, *-wy* directly from **-āset*). Of course, if there was a nucleus of forms with *-oi-*, *-oe-* beside *-wy-* that would no doubt help to foster the usage of <oi, oe> for <wy>. But see Schrijver (2007a: 310–11) for doubts about this sort of argument.
 36. However, if Griffith is right that **h* in the future/present subjunctive is secondary, and retained in all intervocalic environments until after

syncope, the Breton lack of *h* in the singular forms must be explained analogically on the basis of the verb 'to be' according to the following proportion, after apocope and syncope: 3sg. **b̄āh*: 1sg. **b̄īμ* : 2sg. **bih* :: 3sg. -*āh* : 1sg. X : 2sg. Y, where X is *-*īμ*, and Y is *-*ih*, replacing regular *-*hīμ* and *-*hih*. This explanation would not be available if 'h-metathesis' had occurred, since otherwise we would find 3sg. **bh̄ā* and 2sg. **bhi*, unless it was assumed that metathesis occurred in the environments #*VhV*- and -*CVhV*-, but not #*CVhV*-. This is too *ad hoc* in a sound change for which there is anyway no evidence (except in #*VhV*-), and for which there is counterevidence in the form of OW *timuil* etc.

References

- Cowgill, W. (1975) The origins of the Insular Celtic conjunct and absolute verbal endings. In Rix, H. (ed.), *Flexion und Wortbildung. Akten der V. Fachtagung der Indogermanischen Gesellschaft. Regensburg, 9. -14. September 1973*. Wiesbaden: Dr. Ludwig Reichert Verlag.
- Evans, D. S. (1964) *A Grammar of Middle Welsh*. Dublin: Dublin Institute for Advanced Studies.
- Fleuriot, L. (1964) *Le Vieux Breton. Éléments d'une Grammaire*. Paris: Librairie C. Klincksieck.
- Griffith, A. (2010) British Celtic intervocalic **s*. In Josephson, F. (ed.), *Celtic Language, Law, and Letters: Proceedings of the 10th Symposium of Societas Celtologica Nordica in Gothenburg, 2008*. Gothenburg: Meijerbergs institut for svensk etymologisk forskning.
- Hemon, R. (1975) [1984] *A Historical Morphology and Syntax of Breton*. Dublin: Dublin Institute for Advanced Studies.
- Holmer, N. (1947) Postvocalic *s* in Insular Celtic. *Language* **23**, 125–36.
- Isaac, G. R. (1996) *The Verb in the Book of Aneirin. Studies in Syntax, Morphology and Etymology*. Tübingen: Max Niemeyer.
- Jackson, K. H. (1953) [2000] *Language and History in Early Britain: a Chronological Survey of the Brittonic Languages, First to Twelfth Century A.D.* Edinburgh: Edinburgh University Press.
- Jackson, K. H. (1967) *A Historical Phonology of Breton*. Dublin: Dublin Institute for Advanced Studies.

- Jasanoff, J. (1994) The Brittonic subjunctive and future. In Rasmussen, J. E. (ed.) *In honorem Holger Pedersen. Kolloquium der Indogermanischen Gesellschaft vom 26. bis 28. März 1993 in Kopenhagen*. Wiesbaden: Ludwig Reichert.
- Ladefoged, P. (2001) *Vowels and Consonants. An Introduction to the Sounds of Languages*. Malden, MA/ Oxford/Victoria: Blackwell.
- Lejeune, M. (1972) *Phonétique Historique du Mycénien et du Grec Ancien*. Paris: Éditions Klincksieck.
- Lewis, H. and Zimmer, S. (1990) *Handbuch des Mittelkornischen*. Innsbruck: Innsbrucker Beiträge zur Sprachwissenschaft.
- McCone, K. (1978) The dative singular of Old Irish consonant stems. *Ériu* **29**, 26–38
- McCone, K. (1991) *The Indo-European Origins of the Old Irish Nasal Presents, Subjunctives and Futures*. Innsbruck: Innsbrucker Beiträge zur Sprachwissenschaft.
- McCone, K. (1996) *Towards a Relative Chronology of Ancient and Medieval Celtic Sound Change*. Maynooth: The Department of Old Irish, St. Patrick's College.
- McCone, K. (2006) *The Origins and Development of the Insular Celtic Verbal Complex*. Maynooth: The Department of Old Irish, National University of Ireland, Maynooth.
- Meier-Brügger, M. (2003) *Indo-European Linguistics*. Berlin/New York: Walter de Gruyter.
- Morris Jones, J. (1913) *A Welsh Grammar. Historical and Comparative*. Oxford: Oxford University Press.
- Schrijver, P. (1994) The etymology of the Celtic adverbs for 'against' and 'with' and related matters. *Ériu* **45**, 151–89
- Schrijver, P. (1995) *Studies in British Celtic Historical Phonology*. Amsterdam/Atlanta: 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. (2007a) Notes on British Celtic comparatives and their syntax. In Nussbaum, A. J. (ed.), *Verba Docenti. Studies in historical and Indo-European linguistics presented to Jay H.*

Jasanoff by students, colleagues, and friends. Ann Arbor/New York: Beech Stave Press.

- Schrijver, P. (2007b) Some common developments of Continental and Insular Celtic. In Lambert, P.-Y. and Pinault, G.-J. (eds), *Gaulois et Celtique Continentale*. Droz: École Pratique des Hautes Études.
- Schrijver, P. (2011) Old British. In Elmar Ternes (ed.), *Brythonic Celtic – Britannisches Keltisch. From Medieval British to Modern Breton*. Bremen: Hempfen Verlag.
- Schumacher, S. (2004) *Die keltischen Primärverben: ein vergleichendes, etymologisches und morphologisches Lexikon*. Innsbruck: Innsbrucker Beiträge zur Sprachwissenschaft.
- Sims-Williams, P. (2003) *The Celtic Inscriptions of Britain: Phonology and Chronology, c. 400–1200*. Oxford: The Philological Society.
- Uhlich, J. (1995) On the fate of intervocalic *-y- in Old Irish, especially between neutral vowels. *Ériu* **46**, 11–48.
- Zair, N. (2011/12 [2012]) British *-āy- and *-āg-, and the Celtic words for ‘sun’. *Die Sprache* **49**, 194–216.