The Qualities and the Origins of the Welsh Vowel [ɨ]

Iwan Wmffre

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of the Welsh Vowel [i]

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cyfaill grasol a truw bore oes

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I

Transcription and dialectal limits

§ 1. Orientation

As a result of sustained interest in the transcription of Welsh sounds with IPA symbols (firstly through the transcription of Cardiganshire place-name realisations[1] and, then, with dialect recordings of the Survey of Welsh Dialect Phonology (SWDP)[2] under the direction of Prof. A.R. Thomas) I have come to a number of conclusions regarding printed descriptions of Welsh dialects: firstly, there exists variation in the use of symbols and in the meaning ascribed to identical symbols; secondly, there is an underlying transcriptional discrepancy between the conventions used for transcribing northern Welsh and those used for southern Welsh. This latter discrepancy is due to a real structural contrast, but not one that justifies such variation of symbol conventions as exists at present. As with any instrument of measurement, if the IPA system of transcription is to be used it should attempt to satisfy descriptive conditions, both within the system of the Welsh language, and the international one of the IPA. A large part of this book is devoted to one aspect of the structural differences between northern and southern Welsh, and it is hoped that the conclusions reached will make possible a more uniform approach to IPA transcription of Welsh in the future.[3]

§ 2. Quality and quantity in Welsh vowels

Before attempting to embark upon an understanding of the Welsh vowel phoneme /**iː**/ I must clearly explain the technical terms employed so as to avoid any possible confusion, as well as underline some basic features of Welsh vowels. Vowels can be defined both according to acoustic and to articulatory criteria,

[1] The results of which were published in Wmffre (2003a).

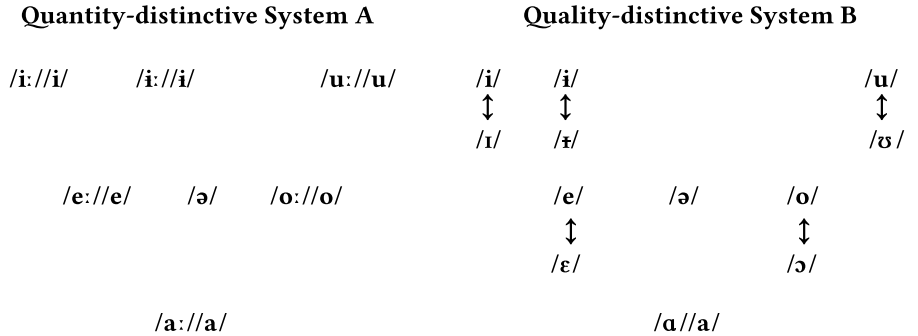
[2] The results of which were published as the *Welsh Dialect Survey* (WDS) in Thomas (2000).

[3] It would do to explain some of the conventions of phonetic transcription from the outset: (1) for clarity's sake, phonetic transcription is always in bold and this is applied to passages cited from other authors irrespective of whether their phonetic transcription was unmarked or in italics; (2) only individual phonetic segments or a sequence of such segments are enclosed in brackets, whenever such phonetic transcription equates with meaningful words brackets are dispensed with (the difference between a phonetic transcription within square brackets [ ] and a phonemic transcription within slashes / / is treated by me as a non-binary difference of emphasis between narrow and broad phonetic transcriptions); (3) phonetic transcriptions in various passages quoted are scrupulously adhered to, but outside quoted passages, the symbol ✍ (= Wingdings 63 ≈ Unicode 0x3F) was prefixed to the phonetic transcription when a retranscription was deemed necessary (see Wmffre 2003a: 13 for a short explanation). The double slashes // // for archiphonemes are explained elsewhere in section § 2 (see also Wmffre 2003a: 13; 2013a: 228–30).

which permit positional plotting on a formant chart (acoustic) or on a vowel trapezoid (articulatory). The position of a vowel is synonymous with its quality, and the conventions of the IPA note certain 'strategic' positions by the use of a separate symbol.[4] Vowel quality can be further specified by the use of diacritics with the symbols to indicate raising, lowering,[5] fronting, backing, centralisation, rounding, unrounding. The length of a vowel—termed its quantity—can be marked by particular symbols to indicate: long, medium, short.

Traditionally, linguistic descriptions of present-day Welsh stated that the salient feature of vowel phonemes was quantity;[6] however, since the 1960s another tradition has established itself which states that the salient feature of vowel phonemes is quality.[7] Both statements are less than the whole truth since both quantity and quality are intimately related, and can be viewed as co-salient features. Either feature of vowel phoneme salience is highlighted in the differences between the two major conventional practices for transcribing Welsh vowel phonemes in IPA, shown below:

FIG. 1. TRANSCRIPTIONAL SYSTEMS FOR WELSH VOWELS



[4] For reference one may refer to the International Phonetic Alphabet (revised to 1993) which can be found in the appendix to 1996 R.L. Trask.

[5] I have refrained from using 'close' vs. 'open' for 'raised' vs. 'lowered', because of the possibility of confusion with: (1) 'open' or 'unchecked' syllables, that is to say final vowels not followed by a consonant; as well as with (2) 'closed' or 'checked' syllables, that is to say final vowels followed by a consonant. Likewise, I have refrained from using 'high' vs. 'low' for 'raised' vs. 'lowered', as these terms can be confused with: (1) the absolute understanding of 'high' as referring to those vowels at the top of the vowel trapezoid i.e. [**i**, **ɪ**, **ɨ**, **ɤ**, **y**, **ʏ**, **ʉ**, **ʊ̟**, **ɯ**, **ɯ̽**, **ʊ**, **u**]; and (2) the absolute understanding of 'low' as referring to those vowels at the bottom of a vowel trapezoid, i.e. [**æ**, **a**, **ɑ**]. For 'tense' vs. 'lax' instead of 'raised' vs. 'lowered', see pages 3–4.

[6] Hamp (1956b: 34) based on Fynes-Clinton (1913) and Sommerfelt (1925) who both described northern dialects.

[7] The phoneme /ə/ (which should be treated as the reduced quality of all vowels) is an exception, and is always short, except when emphasised as /ə:/ in the name of the letter <*y*>.

A few points are worth noting: System A emphasises quantity differences whereas System B emphasises quality differences. System A is usually associated with descriptions of northern Welsh dialects whilst System B is usually associated with descriptions of southern Welsh dialects. However, both systems describe the same general realisations and, whilst both strive for economy of transcription,[8] they disguise, in System A's case, the actual difference of quality between the paired symbols and, in System B's case, the actual difference of quantity as well as the functional relationship between the raised/long and lowered/short members of what may be described, for want of a better term, as 'vowel-pairs'.[9] *Pace* the economy of transcription so beloved of many phonologists, I feel that the transcription of both quantity and quality of vowels is important in IPA transcription, and that this should feature in a single uniform system of IPA transcription capable of describing all varieties of the Welsh language.

In describing Welsh vowel phonemes the concept of 'archiphonemes' is hardly ever invoked. I discuss the concept in section § 6.4. of my book *Dynamic Linguistics* (2013) but, in the present work, for simplicity's sake, I will refer to archiphonemes as 'vowel-pairs' and I find it useful to denote a vowel-pair through the use of double slashes (// //) in relation to a phonetic symbol. The Welsh vowel system is ordered in vowel-pairs, namely /**i**/ and /**ɪ**ː/; /**i̞**/ː/ and /**ɪ̞**/; /**e**ː/ and /**ɛ**/; /**a**ː/ and /**a**/;[10] /**o**ː/ and /**ɔ**/; /**u**ː/ and /**ʊ**/. The convention of the double-slash—e.g. //**i**//, //**i̞**//, //**e**//, //**a**//, //**o**//, //**u**//—is useful: (1) as a convenient short-hand for avoiding needless repetition of this duality; and (2) as convenient when using phonetic symbols to discuss historical pronunciations, when the precise realisation of the vowel is not of the utmost importance. Within a vowel-pair, quantity tends to be intrinsically linked to quality:

> long members being raised vis-à-vis the short member
> short members being lowered vis-à-vis the long member

Note on terminology: Up to this point I have mentioned quality in relation to the opposing terms 'raised' vs. 'lowered', but henceforth I shall prefer the terms

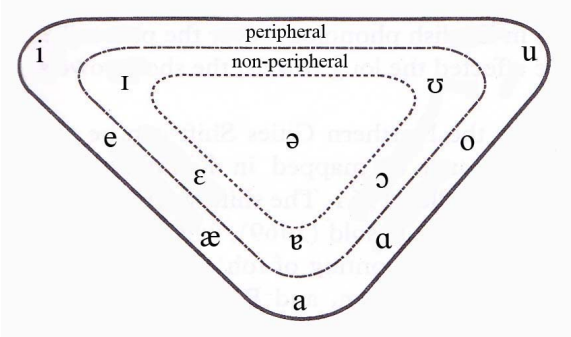
[8] Economy of transcription has led to a misleading use of /**ɑ**/ for [**a**ː] in system B, in order to avoid using a length-mark (the actual realisation /**ɑ**ː ~ **ɑ**˙ ~ **ɑ**/ is sporadically heard only in some areas of southern Wales and is undoubtedly due to English influence).

[9] French *voyelles appariées*, Swedish *vokalpar*.

[10] In the majority of Welsh dialects the vowel-pair /**a**ː/ and /**a**/ is exceptional in that there is no significant quality difference. However there are two dialect areas, one in south-eastern and the other in north-central Wales where the long member /**æ**ː/ or /**ɛ**ː/ contrasts in quality with the short member /**a**/. This is, without doubt, a secondary development in the Welsh of these areas—whereby the usual Welsh quality difference according to length was extended to the vowel-pair //**a**//—when quality differences became more salient sometime within the fork spanning 1300–1800 AD (see Figure 30). Compare the lengthening of the Welsh [**ə**] in the English of southern Wales which led to a concomitant raising of the quality as [**ø**ː] in words such as *girl*, *term*, *purse* (Wmffre 2003b: 252–53).

'tense' vs. 'lax' as their adjectival labels since these latter suggest, respectively, not only raising but non-peripheralisation or peripheralisation, and not only lowering but centralisation (see Wmffre 2013: 54–56). I also prefer the acoustic delineation of vowel space as a triangle to the trapezoidal delineation of vowel space based on the articulation of the highest point reached by the back of the tongue (see Wmffre 2013: 52–54). These insights on the importance of 'tense' vs. 'lax' and on the superiority of a triangular delineation of vowel space to a trapezoidal one I owe to William Labov's *Principles of Linguistic Change: Internal Factors* (1994).

FIG. 2. PERIPHERAL (TENSE) AND NON-PERIPHERAL (LAX) VOWELS IN LABOV'S VOWEL TRIANGLE



It is important to understand that the lax //**i**// is not only lowered but also retracted or slightly centralised in vowel space, and likewise a lax //**u**// is not only lowered but also fronted or slightly centralised in vowel space, and this applies to all vowel-pairs except //**a**// whose longer members in Welsh either tend to show no difference in quality or are fronted and peripheralised to give [**æ**ː] and [**ɛ**ː] as in some Welsh and some northern Irish Gaelic dialects or else are retracted and peripheralised to give [**ɑ**ː] (in other languages such as southern Irish Gaelic and Norwegian).

The actual difference in quality is more noticeable in southern Welsh, than in northern Welsh (G.E. Jones 1984: 57), but not to the point that one can say that quality differences do not exist.[11] The linking of the longer quantity to a tense quality, and a shorter quantity to a lax quality is a common phenomenon in many languages: it certainly is the case in the vowel systems of Irish (De Bhaldraithe 1945: 8), Norwegian[12] etc, though the degree of difference of quality may vary.

[11] Jackson's view—"oppositions are of course found only with the *o* and *e* sounds." (1976: 51)—is inspired by the influential transcriptional scheme given for northern Welsh by S. Jones (1926).

[12] "Norwegian vowels are long and short. Phonetically the same symbol is used for both, but the short vowels tend to be slightly more open and relaxed than the corresponding

> … the Manx vowel system follows in the main a very simple rule not unknown in other languages. It is this: the short vowels are mostly open and the long vowels mostly close. (Rhŷs 1894: 1).

It is often stated that there is no difference of quality (aperture) in northern Welsh between long and short members of vowel-pairs, this is however not strictly true, but is prompted by the fact that there exists less of a difference in quality between long and short members of vowel-pairs in northern Welsh. To demonstrate this in phonetic terms the following table given below—based in large part upon years working with SWDP—attempts to illustrate the difference in corresponding phoneme values between a representative southern dialect (central Cardiganshire) and a representative northern Welsh dialect (Caernarfonshire):

FIG. 3. COMPARISON OF SOUTHERN AND NORTHERN WELSH VOWEL QUALITIES[13]

southern Welsh				**northern Welsh**			
				<*û*, *ŷ*>	/**i**ː ~ **ɪ**ː/		
				<*u*, *y*>	/**ɨ** ~ **ɪ̞**/		
<*î*>	/**i**ː/	<*ŵ*>	/**u**ː/	<*î*>	/**i**ː/	<*ŵ*>	/**u**ː/
<*i*>	/**ɪ**/	<*w*>	/**ʊ**/	<*i*>	/**ɪ̞**/	<*w*>	/**ʊ̞**/
<*ê*>	/**e**ː/	<*ô*>	/**o**ː/	<*ê*>	/**e̝**ː/	<*ô*>	/**o̝**ː/
<*e*>	/**ɛ**/	<*o*>	/**ɔ**/	<*e*>	/**ɛ**/	<*o*>	/**ɔ**/

Generally phoneticians describing northern Welsh dialects transcribed the vowel phonemes as //**i**ː **& i**//, //**i**ː **& i**//, //**e**ː **& e**//, //**a**ː **& a**//, //**o**ː **& o**//, //**u**ː **& u**// whilst phoneticians describing southern Welsh dialects—from the 1960s onwards—transcribed the vowel phonemes as //**i**ː **& ɪ**//, //**e**ː **& ɛ**//, //**a**ː **& a**//, //**o**ː **& ɔ**//, //**u**ː **& ʊ**//. Since the vowel-pair //**ɨ**// did not exist in southern Welsh one had to wait for Glyn E. Jones's attempt in the early 1970s to uniformise the transcription of Welsh vowels with the first example of /**ɨ**/ as the lax counterpart of /**i**ː/ (G.E. Jones 1971: 120; 1984: 64). This symbol is not yet officially recognised by the IPA—it is high time it was.

The diacritics [˖] and [˕] respectively indicate raised and lowered qualities of vowels. If one were to dispense with diacritics, short northern <*i*, *w*> could be transcribed as /**i**, **u**/, and long northern <*ê*, *ô*> could be transcribed as /**ɛ**ː, **ɔ**ː/. That this difference between southern and northern Welsh vowel-pairs existed

long vowels." (Popperwell 1963: 16).

[13] I had already noted this distinction between the 'real' phonetic realisations of southern and northern Welsh vowels in Wmffre (2003a: 7–8), however, regrettably, because of an obvious but unfortunate mistake (the equation <*e*> [**e**] should read <*ô*> [**o**ː]), it was not as clear as it should have been and must be discounted in favour of the present tabulation. One could, of course, just as well transcribe <*i*> as /**ɪ̞**/ rather than /**ɪ̞**/ and <*w*> as /**ʊ̞**/ rather than /**ʊ̞**/, and likewise <*ê*> as /**e̝**ː/ rather than /**e̝**ː/ and <*ô*> as /**ɔ̝**ː/ rather than /**o̝**ː/.

a hundred years ago is demonstrated by Fynes-Clinton (1913: xii–xiv) who described northern Welsh long <*ô*> as the "same sound" as short <*o*> lengthened "but somewhat closer. The difference, however, is only slight, and not so nearly appreciable as I have heard it from some speakers from South Wales." As to quality differences in the nW. vowel-pair <*e*> he refers back to his remarks on long <*ô*>. In the case of the northern Welsh vowel-pairs <*w*> and <*i*>, Fynes-Clinton (1913: xiv) does not note a quality difference between their tense and lax members although he does note that both long and short <*i*> are slightly more lax—"slightly lower (more open)"– than French <*i*>: this is a judgment on the long <*î*> with which I disagree, although it fits the short <*i*> which is more lax than its long counterpart, to the extent that one can write the long counterpart as /**i**ː/ and the short counterpart as /ɪ/ (for that phonetic symbol, see §§ 9–11). Short <*w*> is also more lax than the long <*ŵ*> and can be transcribed /**ʊ**/ although there is reason for transcribing it more narrowly as [**ʊ̟**] since it is slightly more tense than either English or southern Welsh /**ʊ**/. Henry Sweet (1885: 416) noted this when he drew attention to the English loanword *pws* (< E. *puss*) whose sound was identical to E. [**ʊ**], unlike native words which were more raised: "Curiously enough, altho the E. (*u*) is forein to the language, I hav always herd cats calld (*pu*s) with a distinctly wide vowel [i.e. [**ʊ**]]." The degree of quality differentiation of vowel-pair members in northern Welsh dialects is far from obtaining unanimity from observers. For Dyffryn Nantlle (Caerns.), R.O. Jones (1970: 9–10) transcribes qualitative differences in the case of /**ʊ**/ vs /**u**ː/, /**ɔ**/ vs /**o**ː/, /**ɛ**/ vs /**e**ː/, notes that /**ɨ**/ is slightly more lowered than /**i**ː/, but notes that /**i**ː/ and /**i**/ are not differentiated by quality. G.E. Jones (1984: 57) says that the quality difference between vowel-pairs in Anglesey Welsh is slight by comparison with the differences of quality in vowel-pairs noted by R.O. Jones for Dyffryn Nantlle. This lack of unanimity in agreeing on whether there are or are not differences of quality between vowel-pairs in northern Welsh may be related to the apparent phonemic-perceptual fact that northern Welsh speakers distinguish vertical distinctions in vowel space less clearly than do southern Welsh speakers, see Figure 16.A review of the instances of monosyllables containing long /**e**ː, **o**ː/ in northern Welsh in WDS was vitiated by the fact that there were certain signs of transcriptional mismatch between the two transcribers (myself and Robert Déry) which hinted at differences as to where the phonetic boundary lay between realisations in [**e**, **o**] and in [**ɛ**, **ɔ**]. My own threshold for transcribing [**ɛ**, **ɔ**] almost certainly lay lower than Déry's with the consequence that I probably undertranscribed instances whereas Déry probably overtranscribed instances. Notwithstanding this mismatch in transcriptional practice of WDS, some conclusions do impose themselves:

1. northern Welsh does show variation in quality in the long /**e**ː, **o**ː/ phonemes between a tense [**e**ː, **o**ː] and a lax [**ɛ**ː, **ɔ**ː];
2. this quality variation is, in the first instance, intraspeaker variation (see

the variability in *deg* (WDS: 628–29, 631–34) and *chwe(ch)* (WDS: 564, 566, 624));

3. in all instances the tensed variants [**e**ː, **o**ː] were commoner than the lax variants [**ɛ**ː, **ɔ**ː] and, since the WDS's northern Welsh informants' ages represent an age-cohort born between 1910–30,[14] one can suggest that the dominant—but not the only—quality for the long /**e**ː, **o**ː/ in northern Welsh at the beginning of the twentieth century was tense [**e**ː, **o**ː]. But, despite the predominance of the tense quality in northern Welsh, it should be borne in mind that the contrast between the quality of long /**e**ː, **o**ː/ phonemes and the short /**ɛ**, **ɔ**/ phonemes in northern Welsh is likely to extend over less vocalic space than in southern Welsh

4. by the looks of it, the lax variants [**ɛ**ː, **ɔ**ː] are commoner nowadays in Caernarfonshire and Anglesey than elsewhere, but this needs confirming by quantitative and instrumental investigations.[15]

It must be remembered that whilst there certainly exists intraspeaker variation between more tense and more lax variants in the long /**e**ː, **o**ː/ phonemes of northern Welsh and most probably a generational tendency towards the more lax variants, this variation remains wholly subphonemic.

Despite the remaining questions outlined above, what is certain is that the quality variation of the long /**e**ː, **o**ː/ phonemes in northern Welsh stands in contrast to southern Welsh where the long /**e**ː, **o**ː/ phonemes are invariably realised as tense [**e**ː, **o**ː]. What is also certain is that the quality variation in the long /**e**ː, **o**ː/ phonemes also stands in contrast to the almost total lack of quality variation in the long /**i**ː, **u**ː/ phonemes in northern Welsh.[16] In northern Welsh the long phoneme /**u**ː/ gives a few sporadic lax variants, but the long phoneme /**i**ː/ does not (the exceptions given in note 16 are due to confused answers). The reason for this discrepancy is that any lowering of /**u**ː/ is subphonemic, but any lowering of /**i**ː/ is more delicate since it also involves retraction which will merge it with

[14] There were a few outliers who give an extreme range of informants born between 1903–34.

[15] The recordings of the WDS are kept at the Welsh Folk Museum, Cardiff, and are in the process of being digitised.

[16] This is based, in the first instance, on the WDS returns. WDS item numbers: *ci* 1, *min* 8, *cil* 26, *sir* 46, *pris* 58, *gwisg* 66, *Crist* 67, *cig* 85, *chwith* 95, *pridd* 103, *is* 343, *crib* 475, *nith* 526 & 534, *ti* 572, *mis* 592–603, *tri* 619, *mil* 652; *sŵn* 7, *cŵn* 24, *ffŵl* 37, *dŵr* 56, *drws* 64, *cwsg* 76, *swllt* 77, *mwg* 93, *tlws* 387, *llwch* 438.
Those few instances for /**gri**ː/ in WDS are: … **gri**ː**st** (WDS 67: 5), **ni**ː**θ** (WDS 526 & 534: (2x) 5, 17, (2x) 18), **mi**ː**l** (WDS 652: 18, 31) (the latter two words due to confusion with other words *nyth* and *mul*). Those few instances of /**ʊ**ː/ for /**u**ː/ in WDS are: **kʊ**ː**n** (WDS 24: 82), **fʊ**ː**l** (WDS 37: 52), **dʊ**ː**r** (WDS 56: 10), **drʊ**ː**s** (WDS 64: 7, 10, 64), **mʊ**ː**g** (WDS 93: 31), **klʊ**ː**s** (WDS 387: 1), **ɬʊ**ː**χ** (WDS 438: 10, 37). (All examples of /**ʊ**ː/ are sporadic except for point 62 in southern Wales which gave 3 examples).

another phoneme /ɨː/, both long phonemes /iː/ and /ɨː/ in northern Welsh being particularly close in vowel space.

§ 3. The problem of [ɨ]

The Welsh vowel-pair transcribed //ɨ// (composed of the phonemes /ɨː/ and /ɨ/)[17] is a peculiarly complicated one to discuss, and this for three main reasons:

(1) The difference between //ɨ// and //i// is notably less than is usual between Welsh phonemes, that is to say, in acoustic terms, the vowel-pairs //iː ~ i// and //ɨː ~ ɪ// are exceptionally near to each other. This is confirmed by Magne Oftedal's *formant charts* (1969: 261–62; figs. 5–6) compiled from spectographic data recording speakers from Bala and Amlwch. The actual realisation of //ɨ// is therefore not an easy task for non-speakers of northern Welsh—whether they be southern Welsh speakers or English speakers—as was noted by H. Sweet (1885: 415): "This is the most difficult of the North Welsh vowels for South Welshmen as wel as Englishmen." Likewise, E.R. Jones, an Anglesey man, upon noting that the sound generally did not exist in southern Wales, reflected:

> It seems that the letter *u* is the most difficult in the Welsh alphabet for the Englishman to pronounce. I know of Englishmen who have overcome the *ll*, *ch*, *r*, *o*, and *e*; yet, who fail utterly to master the *u*. They are constrained to replace it with *i*.
>
> Tebyg yw mai'r llythyren 'u' yw'r anhawsaf yn y wyddor Gymraeg i'r Sais ei seinio. Gwn am Saeson wedi gorchfygu 'll', 'ch', 'r', 'o', ac 'e'; eto, yn methu'n glir faes â chael y goreu ar yr 'u'. Rhaid yw rhoddi 'i' yn ei lle. (E.R. Jones 1914: 138).

Southern Welsh speakers, who have had contact with northern speakers, in attempts to 'improve' their Welsh, have fallen into the trap of pronouncing [ɨ] everywhere, even where [i] is demanded, both in northern speech and in orthography. T. Gwynn Jones noted:

> This conclusion is borne out in the case of adults, preachers and other public speakers, natives of what may be described as the Welsh *i*-territory, when they endeavour to produce the *u* (**ɨ**) sound. Out of an extensive record, the following instances may be serviceable as showing the misplacing of the acquired sound: – **kɨ** (**ki**), **mɨ** (**mi**), **nɨ** (**ni**), **prɨð** (**prið**), **trɨ** (**tri**), **beɨrð** (**beirð**), **blɨno** (**blino**), **hɨraiϴ** (**hiraiϴ**), **ɨsod** (**isod**), **ɨϴel** (**Iϴel**), **honnɨ** (**honni**), **torrɨ** (**torri**). (T.G. Jones 1929: 47–48).

[17] I also recognise /ɪ/ as a variant of /ɨ/, see section **§ 4**.

This hypercorrection was also a characteristic of the speech of the poet D.J. Jones alias Gwenallt (1899–1968) of Pontardawe (Glams.) who lectured at the Welsh Department of the University in Aberystwyth, as it was of southern preachers, which could convey to northern Welsh speakers that Jesus's miracle of *porthi'r pum mil* 'feeding the five thousand' was in fact a hitherto unsuspected miracle of *porthu'r pum mul* 'feeding the five asses' (p.c. H.Ll. Humphreys).

(2) The vowel-pair //**ɨ**// is represented by two graphemes, namely <*u*> and 'clear' <*y*>, which can respectively be described as stable //**ɨ**// and alternating //**ɨ**//. As A.R. Thomas (1984: 105–07) has noted, these two varieties of //**ɨ**// were originally two wholly distinct phonemes, which explains the morphophonological complications affecting //**ɨ**//, for though //**ɨ**// does represent both <*u*> and 'clear' <*y*>, the "structural relationships" within the language keeps differentiating between them, though this differentiation is only made clear in derivatives when syllabic suffixes are added, so that in a penultimate syllable //**ɨ**// representing <*u*> remains //**ɨ**//, whilst //**ɨ**// representing <*y*> becomes [**ə**]:

> The surface phonetic segment [**ɨ**] seems to represent two distinct underlying forms; the case for making a distinction between them rests not on their history, nor on the orthographic practice of writing the invariant one as u and the alternating one as y but on the distinct places which they occupy in the structure of the contemporary language. (A.R. Thomas 1984: 108).

(3) In the southern part of the Welsh-speaking area //**ɨ**// has lost its distinctive realisation, becoming //**i**// or [**ə**] in penultimate syllables. Nevertheless, in some parts of southern Wales the distinction between the historical <*u*, *y*> and historical <*i*> can still be arrived at: (1) from a realisation [**ə**] for historical <*u*, *y*> as opposed to a realisation //**i**// for historical <*i*>, e.g. central Cardiganshire **tən**, **hən** for *tun*, *hyn* against **pɪn** for *pin*, and eastern Carmarthenshire **kəbɪð**, **skəbɛ** for *cybydd*, *ysgubau* against **piˑbɛ** for *pibau*; and (2) by the behaviour of historical <*s*>, which remains [**s**] when adjoining historical <*u*, *y*>, but becomes [**ʃ**] when adjoining historical <*i*>, e.g. southern Welsh **iːs**, **siːr** for *us*, *sur* against **iːʃ**, **ʃiːr** for *is*, *sir*.

§ 4. Dialectal limits

An appraisal must be made of the boundary between those northern areas which have //**ɨ**// as distinctive phonemes and those southern areas which lack //**ɨ**//. The difference between areas that had //**ɨ**// and those that did not was clear to northern Welsh speakers who had occasion to travel southwards, as is graphically portrayed by the description of the speech of Tywyn area (Mers.):

Let us try to keep in mind the slender language which is spoken in these areas. The letter *u* has been exiled from here, everyone has *i*, and that was the reason why Owen Williams in Caernarfonshire said, to someone who asked him where he was from: 'I come,' he said, 'from a neighbourhood where there is never mention of *Duw* ['God'] nor of *dyn* ['man'] by any of its natives.' 'How peculiar,' said the innocent enquirer, 'what do they talk about there?' 'Of *Diw* ['God'] and *din* ['man'],' said the witty old patriarch.

Ceisiwn gadw mewn ystyriaeth yr iaith fain a leferir yn y cymydogaethau hyn. Mae y llythyren 'u' wedi ei halltudio oddiyma, 'i' sydd gan bawb, a hyn oedd y rheswm i Owen Williams ddweyd yn Sir Gaernarfon, wrth rywun a ofynodd iddo o ba le yr oedd yn dod,—'Yr wyf yn dod,' ebai yntau, 'o gymydogaeth nad oes dim son am Dduw na dyn un amser gan neb o'i brodorion.' 'Rhyfedd iawn,' ebai yr ymofynydd diniwed, 'am ba beth y maent yn siarad yno ynte?' 'Am *Ddiw* a *din*,' ebai yr hen batriarch ffraeth. (D.S. Thomas 1907: 122).[18]

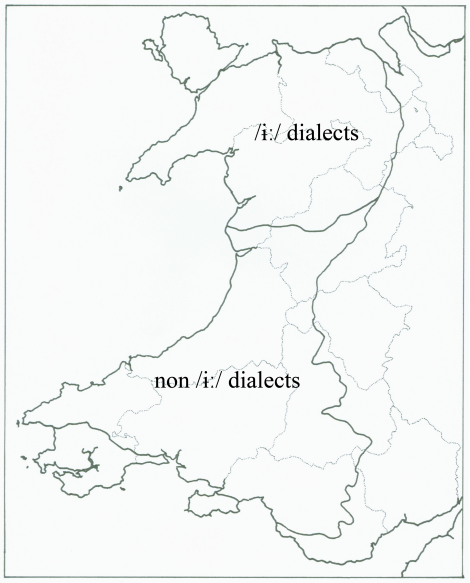


FIG. 4: MAP OF i: AND NON-i: DIALECT AREAS

The border between areas with //i:// phonemes, and those without was mapped in Thomas Darlington (1901) 'Some dialectal boundaries in Mid Wales: ...', and somewhat elaborated upon by A. Sommerfelt (1925) *Studies in Cyfeiliog Welsh*.

Alf Sommerfelt in his investigations of the Welsh dialects of the Dyfi basin (Monts.) concluded upon the limits of //i:// (or [y:] as he wrote it):

> Moreover, the investigation has shown that North Welsh *y* does not finish suddenly with a high front vowel opposed to it. There is an intermediate type and *y* does not disappear in all positions at the same time. (Sommerfelt 1925: 134).

The intermediate sound (which he wrote [ÿ]) was found by him in the northern part of Llanbryn-mair parish (Monts.), and at Dinas Mawddwy (Mers.). Upon its quality he wrote:

[18] The "slender language" is a reference to the typical slender (*main*) [ɛ:] of Pywys as opposed to the broad (*llydan*) [a:] of north-western Welsh (Wmffre 2003a: 199).

III

Historical development

*§ 12. The development of //**i**//*

HISTORICALLY, I assume that the medieval Welsh graphemes <*i*>, <*u*>, <*y*> originally—that is to say about the year 1200—represented //**i**//, //**ʉ**//, //**ɪ**// (each comprising a long and short phoneme).[107] However, soon after this period the merging of //**ɪ**// onto //**i**// occurred in a number of restricted contexts throughout all Middle Welsh dialects (see GMW 2–3; Wmffre 2003a: 267–68). This has led to a disjunction between modern orthography and pronunciation still evident in northern Welsh, and so *tebyg*, *barrug*, *rhugl*, *sugno*, *cyfyng*, *rhyw* etc. and the affections, *dibyn*, *dwybig*, *union*, *blaenio*, *hoelion*, *hwylio* etc are pronounced as if written *tebig*, *barrig*, *rhigil*, *signo*, *cyfing*, *rhiw*, *dibin*, *dwibig*, *inion*, *bleinio*, *hoilion*, *hwilio* etc. In some cases affection worked the other way so that original pn. *Griffudd*, *eilun*, *ufydd* are pronounced—and written—*Gruffudd*, *eulun*, *ufudd*. These changes, attested in later Middle Welsh, affected only a restricted number of items but were probably the initial step for the merging of the vowels (Baudiš 1924: 51).

By 1550 at the latest in southern Welsh, historical <*u*> and <*y*> had not only become merged sounds as in northern Welsh dialects, but had also merged the morphological derivational patterns. Thus historical <*u*> was treated in all respects as historical <*y*> throughout the central parts of southern Wales, i.e. historical *hufen* had become *hyfen*, whilst, conversely, the south-western and the south-eastern dialects had abandoned the morphological derivational pattern of <*y*> and treated it as if it were <*u*>, i.e. historical *ffynnon* had become **ffunnon*. The abandonment of morphological derivation in the case of historical <*y*> was extended to historical <*w*> in south-western Welsh by 1700 at the latest, so that *trymach*—the comparative degree of *trwm* 'heavy'—had become *trwmach*. During much of the early Modern period historical <*u*, *y*> had remained distinct from historical <*i*>, but by 1800 at the latest, the southern Welsh <*u*, *y*> had merged onto //**i**//.[108]

[107] This is confirmed by one of the oldest Middle Welsh manuscripts, the *Black Book of Carmarthen* (BBC) which was probably written in south-west Wales around 1250. BBC clearly differentiated <*u*> /**ʉ**/ from <*y, i*> (/**i**/ and /**ɪ** ~ **ə**/ were not yet transcribed differently). In it, MnW. <*y*> is mostly written <*i*> although a significant amount of examples with <*y*> were found.

[108] The conclusions of this and the preceding paragraphs are based on an extended discussion in Wmffre (2003a: 220–85).

*§ 13. Comments on //***y ~ ʉ***//*

Many Welsh phonologists have written the original sound of <*u*> as [**ʉ**][109] or as [**ü**],[110] and it is possible that the sound should be written [**y**]. I am not entirely convinced either way whether [**y**] or [**ʉ**] is to be preferred, and henceforth what I write as [**ʉ**] is generally to be understood as [**y ~ ʉ**], unless the context makes clear it is not.

It is [**y**] which is the only variant securely attested in Breton. In Welsh the situation is not as clear cut, mainly because such a sound is obsolete in the language. One might suppose that [**y**], as a high-front-rounded vowel, better explains Bede's *Dinoot* (MnW. *Dunod*) (WG 1913: 14) and OW. *scipaur*[111] (MnW. *ysgubor*), than [**ʉ**] a high-medial-rounded vowel. However, I, for one, can vouch that [**ʉ**] can easily be misconstrued as [**ɪ**] in the perception of the speaker of a language which does not have it for in the last six years in northern Ireland I have often heard the northern Irish-English **ʃʉd** for *should* sounding as **ʃɪd** which then sounds uncomfortably close to the rather pragmatically unpalatable *shit* **ʃɪt**.[112] The equation of the medieval Welsh vowel /**ʉ**/ with MF. [**y**] in Welsh loanwords, invariably written as <*u*>, only means that the sounds are similar, but does not prove they are identical.

To repeat the problem: the writing of [**y**] presupposes a high-*front*-rounded vowel, whilst [**ʉ**] presupposes a high-*medial*-rounded vowel. A sound on the borderlines of both, could be written either as [**y̟**] or [**ʉ̟**], and one could denote the ambiguity of such a realisation by [**y ~ ʉ**], but for reasons of economy, as I have already stated, I have begun this discussion with [**ʉ**].

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[109] T.A. Watkins (1961), A.R. Thomas (1967), G.E. Jones (1982) etc. Morris-Jones (1913: 13): "… in O. and Ml. W. **u** had the sound of French *u*, that is, an *i* pronounced with rounded lips." T.J. & P. Morgan's (1985: 6) description: "In Medieval Welsh the vowel represented by *u* was like French *u*, the 'roundness' coming from the pouting lips as it were."

[110] Jackson (1953), Hamp (1956b), D.S. Evans (1964).
Jackson stated: "[**ü**] = *u* in French *une*, but retracted" (LHEB: 7) and again (LHEB: 305–06) but in 1967 he was less assured: "The exact phonetic nature of this is uncertain. It was derived from an older high-back round [**u**], and this passed through a Late Brit. central round [**ü**] as it was advanced (see LHEB: 305). In Mod.B. however the sound is high-front round [**y**], as in Fr. *une*. There is no means of telling just what it was in Pr.Br.; it will be treated in this book as [**y**], but these doubts should be borne in mind." (Jackson 1967: 140 § 216).

[111] However, one must note Loth's opinion (1919: 17) concerning OW. *scipaur*: according to him this was the original form of the word which should have given MnW. **ysgibor* (cf. MnB. *skiber*) but that it had been remodelled after *ysgub* by the Middle Welsh period. An alternative opinion is that of Sims-Williams (1991: 25) who explained the form of OW. *scipaur* as due to a hibernicising scribe.

[112] Just recently I heard another example of this when a middle-aged speaker from County Armagh pronounced *collusion* as *collision*.

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In favour of high-*medial*-rounded [ʉ], rather than high-*front*-rounded [y], is the fact that it finally gave the high-*medial*-unrounded vowel [ɨ]:

> The sound in OW., MW. was a central [ü*]*, not a front one as with Fr. *u* or AS *y*; this is shown by the fact that when it became unrounded (in late MW. and early MnW., see WG.: 13) the result was the MnW. [ï*]*, not [i], (LHEB 1953: 305–06 § 18).

Also it appears as a symmetrical counterpart to the postulated appearance of [ɨ][113] in the Jackson schema of the development of Welsh vowels (see Figure 34), though I argue that this schema is not the most economical and that they are not symmetrical in origin.

That [ʉ] survived in northern Wales to 1600 seems assured, from the detailed descriptions of William Salesbury and Siôn Dafydd Rhys:

> The sound of *u* being a vowel.
> But *u* written after this manner *u*, is a vowel, and soundeth as the vulgar English people sound it in these words of English: *trust*, *bury*, *busy*, *Huberden* … Also the sound of *n* [sic for *u*], in French, or *u* with two pricks over the head in Dutch [i.e. German], or the Scottish pronunciation of *u* alludeth somewhat near unto the sound of it in Welsh, though yet none of them all, does so exactly (as I think) express it, as the Hebraic kubuts doth. For the Welsh *u* is none other thing, but a mean sound, betwixt *u* and *y* being Latin vowels. And therefore whosoever will distinctly learn the Welsh sound of *u* let him once give ear to a northern Welshman, when he speaketh in Welsh, the words that signify in English obedient or chaff singularly: which be these in Welsh, *uvudd*, *usun*. And this vowel *u* alone among all the letters in Welsh, swerveth [i.e. deviates] in sound from the Latin pronunciation. / This *u* is more in use with us of North Wales than with them of the South parts whose writers abuse it, when they write, *un yn* for *yn un*. (Salesbury 1567: *A Playne and Familiar Introduction …*: 33, (English modernised), quoted in T.A. Watkins 1961: 82 and J.J.G. Davies 1934a: 91)[114]

> The Welsh produce this letter [i.e. <*u*>] with the tongue brought forward or *stretched*,[115] lying against the lower jaw, and pushed firmly up against its own tip in the front and against the lower row of teeth; with lips projecting, and compressed to form a small round shape; from this a thin sound is produced, not unlike some slender wailing. (S.D. Rhys 1592: 34, translated in G.E. Jones 1982: 48)

[113] Cf. also Awbery (1986: 83).

[114] T.A. Watkins (1961: 82) takes this as proof that southern Welsh had mixed <*y*> and <*u*> "in every phonetic position / ymhob safle seinegol") by this time, which seems quite likely.

[115] G.E. Jones proposes an alternative translation of *tightened* for *stretched*.

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Since [**ʉ**] survived in Welsh until the sixteenth century, it is not surprising to find the occasional spelling <*ou*> for MW. <*u*> in thirteenth-century official Latin records of the conquerors of Ceredigion (1280 Ext.: 116, 118), e.g. *weysenteylu*, *weysonteulou* (MW. *gweissawn teulu*), another demonstration that the pronunciation of <*u*> was more akin to [**ʉ**] than to [**ɨ**];[116] as do spellings of the diphthong <*eu*> as <*ew*> by documents of similar provenance, e.g. *Iewan* (*c.* 1191 Gir.IK: 104), *Jewan* (1199 Cartae Glam.: 2.240; *c.* 1203 Cartae Glam.: 2.275), *Yewan* (1199 Cartae Glam.: 2.247; 1247 Cartae Glam.: 2.544) and *Lewke* (1293 Mers SR) for MnW. *Ieuan*, *Lleucu*. The toponym *Ewyas* on the Herefordshire-Monmouthshire border (in Welsh *Euias* or *Euas*) was transcribed, late OW. *Euyas* (1000¼ *c.* 1130 Lib.Land.: 279), and *Ewyas*, *Evwias* (1300¼ Lib.Land.: 247), and *Lanndougarth* (*c.* 1130 Lib.Land.: 164) is E. *Doward* (SO 54–16, Heres.); *Lann Loudeu* (*c.* 1130 Lib.Land.: 163) is E. *Llancloudy* als. *Llanloudy* als. *Llanlowdy* (SO 49–20, Heres.). In Pembrokeshire, *Llanhuadain*'s anglicised form of *Lawhaden*, dating to the early twelfth century when the Anglo-French arrived in numbers, preserves echoes of the [**ʉ**], whilst the local Welsh pronunciation **ɬaniˈaːdɛn** is the result of the expected regular evolution of <*u*> in Modern Welsh.

Henry Lewis's (1931: 66, 68–69) opinion that OW. <*ou*> meant //**oj**// in late Old Welsh is certainly incorrect; a better interpretation is that of Morris-Jones (WG 1913: 32) who believed OW. <*ou*> to stand for //**oɥ**//. Cursory comparison with Breton and Cornish probably establishes that in Primitive Welsh it stood for //**ow**//, which K.H. Jackson (LHEB: 370–72) and Hamp (1956b: 32) have developing to late OW. //**oɥ**// about 800 AD—on an incorrect premise.[117] In LHEB's dating scheme (372), the existence of //**ow**// as late as *c.* 650 AD "is by no means impossible". However, the much later survival of //**ow**// seems assured from the coequivalence of OW. <*ou*> with the English diphthong <*ow*> in the Welsh forms of *Bristol* (Gloucs.), namely MnW. *Brysta* or *Bryste*, MW. *Brysteu* (GBGG s.v. *Brysteu*). The origin of the Welsh forms lies in an Old Welsh form such as *Bristou* (BBCS 1929: 5.20)—which corresponds exactly to the older English forms of *Bristol*, namely *Brycgstow* 1063, *Bristou* 1086, *Bricstou* 1169, *Bristoll* 1200 (Ekwall 1960: 66). Since Bristol is thought to have become an important sea-port only in late Anglo-Saxon times replacing the role held until then by Chester of being the sea-port that gave England access to the Irish Sea,[118] it seems likely that the Welsh

[116] The <*y*> in the first example of <-*teylu*> seems to reflect the original form *teilu* that preceded the affected form *teulu*.

[117] See my forthcoming article 'Gwyriadau'r deuseiniaid Cymraeg'.

[118] Bristol is first mentioned in historical sources in 1063, and lay on the border of Gloucestershire and Somerset, the Wiltshire border being near to the south-east. Smith & Ralph (1972: 25, 28) believe it is suggestive of the late development of Bristol's importance that it lay astride the boundary of two Anglo-Saxon shires, shires usually being centred on major towns or strategic military sites. Manco (2007/^{rev}2009) postulates the creation of a *burh* at the site of Bristol shortly before 900 AD and its rise as an economic hub during the tenth century. The earliest indication for Bristol holding the status of a market town

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adopted its name from English no earlier than this period, i.e. 850 AD–1050 AD, demonstrating that at the time the realisation of OW. <*ou*> was similar enough to E. <*ow*> for it not to have been //**oj**// at the time.

Another demonstration of the late survival of [**ʉ**] is in the spelling <*uw*> before [**χ**], where the [**w**] preserves the rounding quality of <*u*> (D.S. Evans 1964: 2). The diphthongisation is first attested in the fourteenth century.

It is interesting to note that a realisation [**y ~ ʉ**] has been heard as an occasional allophone at the extreme limits of the domain of south-eastern Welsh. Morgan Watkin (a native of Clydach in western Glamorganshire and who was a professor of French at Cardiff University) reported hearing [**y**] in the Welsh of the environs of Cardiff: "*ü* … the labial sound which was formerly heard widely in Wales and which endured until recently in the Cardiff area (Llysfaen, Groeswen, etc.) / *ü* … y sain wefusol a glywid gynt ar raddfa eang yng Nghymru ac a arhosodd hyd yn ddiweddar yn ardal Caerdydd (Llysfaen, Groeswen, etc.)" (M. Watkin 1958: clxxxiii). Ceinwen H. Thomas (1976: 351) wrote of "… the rounded close front vowel [**y**] that was a feature of the Welsh of Nantgarw until well into the present century, and that resembled the [**y**] of French in quality."[119] Peter Wynn Thomas, during his researches into the dialect of Glynogwr (Glams.) and the surrounding area recollects that the realisation [**y**] was not a wholly uncommon occurrence, a specific example he remembers being the emphasising of the interjection **dy**:**r** ! by an inhabitant of Glynogwr (p.c. P.W. Thomas) (this being a by-form of *Duw* 'god'; realised as ✍ **di**:**r** in Nantgarw (C.H. Thomas 1993: 2.310)).[120] and Glyn E. Jones reported [**y**] in Llanwrtyd (Brecs.) (see pages 20–23). In those cases where a rounded sound was recorded—as was the case in Llanwrtyd—no one has thought of noting the references of the actual recordings in which the rounded [**y**: **~ ʉ**:] realisations occur. I am indebted to my father Humphrey Humphreys for calling my attention to a visit of his to C.H. Thomas's Welsh Language Unit at the University of Wales, Cardiff, in the early 1970s in which he was presented with a tape by a speaker from the Nantgarw or Caerffili area in which [**ʉ**:] was the realisation. I trust his judgment concerning his perception of the differences between [**ʉ**] and [**y**], since he knew the latter intimately through being a linguist and phonetician specialising in Breton and French. Notwithstanding this testimony, if one could ascertain in a more secure fashion the survival of the realisations [**y**] or [**ʉ**] to within the last hundred years in south-eastern Wales, this would represent, potentially, a very important clue as to the history of <*u*> and <*y*> and their merger.

comes from a coin of Aethelred the Unready minted there, dating to 1010 AD.

[119] It was present in the speech of the older generations of Nantgarw Welsh speakers up to 1950 (J.T. Bevan 1971: 355; C.H. Thomas 1976: 351; 1993: 1.139). C.H. Thomas (1993: 1.139) began her systematic study of the Nantgarw dialect too late to be able to ascertain whether it was a phoneme or an allophone of /**i**/.

[120] This testimony enables us to refute C.H. Thomas's statement (1993: 1.139) on the realisation [**y**]: "It seems that it did not extend to the Vale of Glamorgan / Ymddengys nad oedd yn ymestyn i Fro Morgannwg."

§ 14. Comments on //ɪ//

I have assumed [ɪ] for the original quality of <*y*> in Old Welsh, though others have assumed [ɨ], namely Jackson (LHEB 1953: 284) (although it is transcribed <*ï*> in his convention): "It was, however, not yet *ï* when W. and CB. diverged over this matter since Brit. *ĭ* gave *į*, not *ï*, in Pr.CB. perhaps in the first half or not later than the middle of the sixth century (see below)."[121]

That <*y*> in Middle Welsh was closer to [ɪ] than [ɨ] seems more than probable on account of its continual transcription—or indeed realisation—as //**e**// from the time of Old Welsh to the present. Examples of <*e*> in Old Welsh for W. <*y*> are: *cefel*, *celmed*, *leder* (MnW. *ceffyl*, *celfydd*, *llythyr*) (Falileyev 2000: 24, 25, 101), *cen* (MnW. *cyn*), *Res*, *Artbeu* (MnW. *Rhys*, **Arthfyw*) (LHEB: 283). The grapheme <*e*> is quite common for historical W. <*y*> in Latin documents of the eleventh to fourteenth centuries, a convention derived from Anglo-French traditions, e.g. *Bren*, *Brennedui* 1086 for *Rhyl* (< W. *yr* + E. *hill*, with the English element being a translation of the original toponym *Bryn*), *Brynhedydd* (Flints.) (K.Ll. Gruffydd 1993: 19); *Resus* (*c.* 1191 Gir.IK: 111), *Reso Coh*, *Reso Coch* (including Latin suffixes) (1190s Cartae Glam.: 203.2, 239), *Res* (1320 Cartae Glam.: 3.1083) (MnW. *Rhys*); *Penres* (1304 Cartae Glam.: 3.980) (MnW. *Penrhys*, Gower, Glams.);[122] *red* (*c.* 1191 Gir.IK: 62) (MnW. *rhyd*); *Kembre* (*c.* 1191 Gir.IK: 127) (MnW. *Cymry*).[123]

The spelling of <*e*> for clear <*y*> is not confined to Latin sources, but was also at times adopted in a piecemeal fashion by some Welsh texts, e.g. *The Black Book of Carmarthen* (BBC) (*c.* 1250), or wholesale in others, such as *The Black Book of Chirk* (BBCh) (*c.* 1240).[124] This feature is found in a number of scribal hands that wrote BBCh, e.g. *hynne* (MnW. *hynny*), *ecch* (MnW. *ych*), *ken* (MnW. *cyn*) in hand

[121] The [ĭ] was described by Jackson (1953: 283) as "a retracted short *i*", this was still his view in 1967 (HPB: 91) "… British *ĭ*, which became ɪ in SW.British probably in the first half of the sixth century, whereas in W. British it gave a retracted *i*-sound, whence W. *y*." K.H. Jackson later explained (1967: 91) that the *į* with the left half-ring in LHEB was to be written [ɪ] by him.

[122] The form *Ris* (*c.* 1147 Cartae Glam.: 2.347) is also evidenced.

[123] Other attestations can only be construed as proofs that ANF. <*e*> = [ə], e.g. *Enis-* (MnW. *ynys*) (*c.* 1191 Gir.IK: 92, 131), *Estrat-* (*c.* 1191 Gir.IK: 10,59) (MnW. *ystrad*); *Nanhever* (*c.* 1191 Gir.IK: 111) (MnW. *Nhyfer*); *Lanamdeveri* (*c.* 1194 Gir.DK: 172) (MnW. *Llanddyfri*); *Kairmerdhin* (*c.* 1194 Gir.DK: 172) (MnW. *Caerfyrddin*); *Penhechen* (1230–40 Cartae Glam.: 2.473) (MnW. *Penychen*); *Remni* (*c.* 1170 Cartae Glam.: 1.149), *Rempny* (1316 Cartae Glam.: 3.1037) (MnW. *Rhymni*).

[124] M. Watkin's contention (1920: 194–95; 1958: xiv–xv) that the orthography of these texts is inspired by Middle French conventions—disputed to some extent in a review by Loth (1922), as well as by P. Russell (1995: 129–76)—is likely to be true as far as the use of <*e*> for historical <*y*> is concerned. However, the examples of <*e*> for historical <*y*> from Old Welsh proves beyond a doubt that the writing of <*e*> for historical <*y*>, cannot simply be dismissed as the result of bad interpretation of a difficult sound by foreigners unused to the Welsh language, but was also an interpretation shared at times by Welsh speakers.

A (the main hand) (Russell 1995: 139); *guestel* (MnW. *gwystl*) in hand D (Russell 1995: 149); *hene* (MnW. *hynny*) in hand H (Russell 1995: 155). A manuscript closely connected with BBCh also has the spellings, *den* (2x) (MnW. *dyn*), *heruet* (MnW. *herwydd*), *hene* (MnW. *hynny*), *eu*, *euu* (MnW. *yw*) (BL Add MS 14931 in Russell 1995: 171).

One subclass of correspondences of <*e*> for <*y*> concern a reduced form of the diphthong <*wy*>, e.g. *namen* (MnW. *namyn*) in hand F of BBCh (Russell 1995: 153) from an original **namwyn* (GPC s.v. *namyn*); MnW./MW. *halen*, *maharen* from OW. *haluin*, *maharuin* (GPC s.v. *halen*, *maharen*) MnW. *awen* from MW. *afwyn* (< L. *habēna*) (GPC s.v. *awen*).

Morris-Jones (1913: 15) had noticed that: "In some early MSS. the sounds of *y* were represented by **e**; see the passage in ancient orthography in A.L. ii 36–8 [i.e. BBCh], where *y lle*, *y dyn* appear as *elle*, *eden* 'the place', 'the man'." He concluded that: "In Early Middle Welsh *ɥ* [i.e. /**ɨ**/] and *y* [i.e. /**ə**/] were probably nearer *e* than at present" and demonstrated survivals of this quality of <*y*> in later medieval literature, and in spoken forms of certain words and place-names such as *Mercher*, *hwde* etc. (Morris-Jones 1913: 16). I have noted a significant number of instances in toponymy where one finds irregular <*e*> instead of <*y*>[125] which are indubitably due to the older proximity of historical <*y*> to historical <*e*>.[126]

§ 15. The diphthongs and disyllables <ae, oe, wy>

The Neo-Brittonic diphthongs /**aɟ**, **oɟ**, **uɟ**/ (with the consonantal counterpart of the lowered high medial unrounded [**ɪ**] and the high medial unrounded [**ɩ**]) derived from either late Ancient Brittonic sequences such as /**aɣ**, **oɣ**/ for /**aɟ**, **oɟ**/ or diphthongs such as /**ɛj**, **ej**/ for /**oɟ**, **uɟ**/.[127] The development of the original

[125] Examples given in Wmffre (2003a: 231–35). Schrijver (1995: 276–77) also notes *hennydd*, *menwyd* (derivatives of *hynt* and *mynw*), as well as noting that the medial vowel in *eleni*, is of the same origin as the initial vowel in *blynedd*.

[126] Since use of <*e*> for [**ə**] derives from French conventions it does not change anything in the quality of the 'dull' <*y*> of Modern Welsh in medieval times (see Charles-Edwards & Russell 1994: 425, 431–32).

[127] A word about the linguistic labels I employ. Brittonic is the P-Celtic language spoken in mainland Britain from about 200 AD onwards. It can usefully be divided between Ancient Brittonic spoken into the C5 and Neo-Brittonic spoken from the C6 onwards. Although a common language for some centuries, in the wake of the English takeover of lowland Britain Neo-Brittonic appears in its dialect form in widely separate areas from southern Scotland to Galicia. From the C9 onwards extant written documentation in Neo-Brittonic appear as Old Welsh, Old Cornish, Old Breton. These being Neo-Brittonic dialects which in the longer term were to become recognised languages although they were still mutually intelligible into the C12. Common Brittonic is a rather vaguer description of late Ancient Brittonic and early Neo-Brittonic whenever a particular linguistic feature is common to all Brittonic dialects.
Irrelevant to this book is the fact that I consider the term Brittonic inapplicable to the

diphthongs //**aj**, **oj**// in Old Welsh, Old Cornish and Old Breton to disyllabic //**aɪ**, **oɪ**// and thence //**aɛ**, **oɛ**// seems assured from the spellings <*ae*, *oe*> common to all Brittonic languages, as well as the fact that they became merged with words which were disyllabic in origin, e.g. *maes*, *iaen*, *troed*.[128] Furthermore, the disyllabic nature of <*ae*, *oe*> is evidenced in the present day pronunciation of [**u·ɛ ~ we**:] for <*oe*> in south-western Welsh, and [**a·ɛ**, **o·ɛ**] for <*ae, oe*> in the coastal regions of central Cardiganshire. A development in the Neo-Brittonic languages of the diphthongs //**oj**, **aj**// into the disyllables //**oɪ**, **aɪ**//, later //**oe**, **ae**//, before the year 1100 might also go some way to explain the loss of the final syllable in certain classes of words in southern Welsh and Cornish, e.g. sOW. *daer* (< PrW. ***dajar**) and OC. *hoet* 'duck' (< PrC. ***hojat**).[129]

Under the Old Welsh and Old Cornish accentuation the last syllable tended to be the best preserved; however its loss in sOW. *daer* and OC. *hoet* might be due to an unorthodox sequence of three vowels (stages 2 or 3) which was resolved by eliding the final <*a*> which was preserved in most Welsh dialects, as well as in Breton.

FIG. 25. PROPOSED DEVELOPMENT OF PRW. *dajar AND PRC. *hojat

	stage 1		stage 2		stage 3		stage 4
Welsh	//**dajar**//	>	//**daɪar**//	>	//**daear**//	>	//**daer**//
Cornish	//**hojat**//	>	//**hoɪat**//	>	//**hoeat**//	>	//**hoet**//

A criticism by Graham Isaac (2004) of my treatment of the evolution behind the Modern Welsh digraphs <*ae*, *oe*> in Wmffre (2003a: 149–51, 162–67), was based on an interim cursory survey carried out by himself on late medieval Welsh texts, in which he concluded, convincingly, that the <*ay*, *oy*> and <*ae*, *oe*> graphemes were not respectively associated with northern and southern Welsh texts, but that the former represented a more archaic spelling convention and the latter a later spelling convention. Although I had actually only suggested a spatial northern-southern difference behind the graphemic differences as "a wholly tentative hypothesis" (Wmffre 2003a: 149) I nevertheless allowed that 'hypothesis' to become reified as an apparent 'fact' in two tables charting the

pre-Roman Celtic language of Britain (the term *Brittones* is after all a Latin derivation from Celtic *Pritania*) and that the most appropriate term for the language then before influences from Latin became common is Pritanic. Pritanic is of course the adjective by which the Celtic Picts were known and one can assume linguistically as the Romans did ethnically that both the inhabitants of northern Scotland and the rest of Britain were all Pritanic before the Roman conquest. I subscribe to the Gallo-Brittonic hypothesis but the more appropriate terminology is Gallo-Pritanic.

[128] The same development seems attested in Irish, cf. Ogam <*ai*>, <*oi*> > OI. <*aí ~ aé*>, <*oí ~ oé*> (McCone 1996: 138).

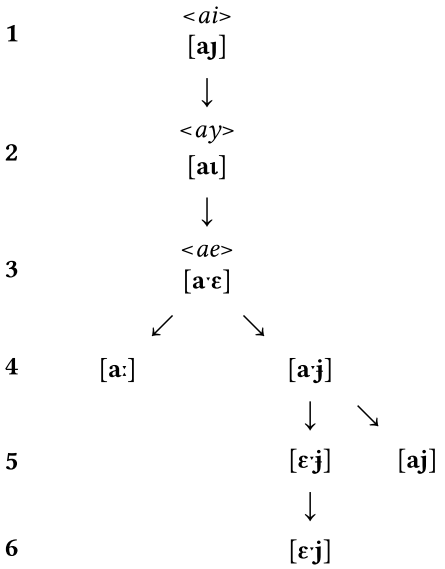
[129] Breton has preserved the final <*a*> in these classes of words, but with the exception of the word *gouiañ* 'winter' in Vannetais dialect, the medial yod has been elided, e.g. MnB. *houad*, *douar*.

evolution of the graphemes (Wmffre 2003a: 150, 162) (these tables are corrected below).

I believe that the earliest attestations of the Old Welsh diphthongs <*ai, oi*> (in *coit*, *cair*) as MW. *caer*, *coed* are found in the roughly contemporary BBCh (*c.* 1240) and BBC (*c.* 1250). Isaac (2004: 167–68) stated that <*ae*, *oe*> had established themselves by the mid-thirteenth century. Nevertheless, the <*ay*, *oy*> graphemes remained common until the Bible translations of the late sixteenth century chose <*ae*, *oe*> (keeping <*ay*, *oy*> in only a few words such as *gwayw*, *gloyw*, *hoyw* although the spellings *gwaew*, *gloew*, *hoew* are attested in medieval Welsh). Since the spelling of these graphemes is quite variable in Middle Welsh, the whole question of their distribution in extant texts and any temporal trends they may show could do with a more rigorous survey. By dint of luck, one such survey which addressed this question has been carried out by Simon Rodway as part of his general comparison of the orthography of the two versions of the tale 'Culhwch ac Olwen' which appeared as 'The Red Book text of 'Culhwch ac Olwen': a modernising scribe at work' (2004: 101–02). Rodway concluded from his survey of the two variant texts that the spellings <*ay*, *oy*> were typical of the White Book 'Culhwch ac Olwen' of *c.* 1350 contrasted with the <*ae*, *oe*> of the Red Book 'Culhwch ac Olwen' of *c.* 1400 (with either manuscript's origin—the former in Ceredigion, the latter in western Glamorgan—irrelevant).

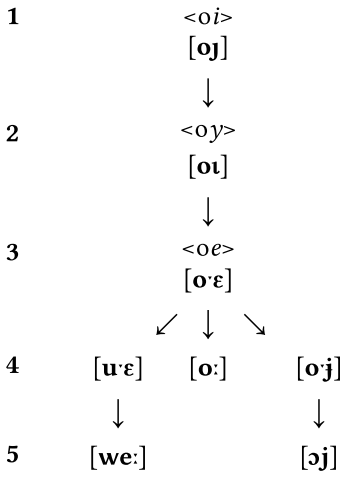
I here rewrite the tables found in Wmffre (2003a: 150, 162) to illustrate the temporal rather than the spatial (geographical, dialectal) difference behind the variation in the digraphs.

FIG. 26. CORRECTED TABLE FOR PAGE 162 OF WMFFRE (2003A)



Graphemes 1–3 represent known orthographic stages in Old Welsh and Middle Welsh respectively; the phonetic renderings in 3–6 represent attested sounds subsequently developed from the Middle Welsh grapheme <*ae*> in their perceived implicational order.

FIG. 27. CORRECTED TABLE FOR PAGE 150 OF WMFFRE (2003A)



Graphemes 1–3 represent known orthographic stages in Old Welsh and Middle Welsh respectively; the phonetic renderings in 3–5 represent attested sounds subsequently developed from the Middle Welsh grapheme <*oe*> in their perceived implicational order.

Having corrected the tables from Wmffre (2003a), I can now turn my attention to the evolution of these graphemes in Welsh. Once the different original sounds of Old Welsh had merged in Middle Welsh, Isaac (2004: 168) argues that, irrespective of the spelling, the graphemes <*ay*, *oy*> and <*ae*, *oe*>, represented "only one diphthong", respectively /**a·j**, **o·j**/. This is patently misleading—as I demonstrated (Wmffre 2003a)—for although the original sounds had merged as one, the result was not "only" the diphthongs /**a·j**, **o·j**/ but also the disyllables /**a·ɛ**, **o·ɛ**/ (I will dispense with accounting for further developments such as monophthongisation etc. as being secondary in nature). I can only suppose that Isaac's dismissal of the disyllables is ascribable to a belief that /**a·ɛ**, **o·ɛ**/ are derivative of the diphthongs preserved in contemporary northern Welsh as /**a·j**, **o·j**/; an interpretation which I contest. It must be remembered that in this work I distinguish the weakly rounded high medial [**ɨ**] (and its corresponding glide [**j̈**]) from the unrounded high medial [**ɪ**] (and its corresponding glide [**ɹ**]). Furthermore, I also argue that the [**ɨ:**], known from contemporary northern Welsh, only made its appearance in the period 1250–1500, and that it owes its rounded quality to a fudge merger between unrounded [**ɪ:**] and rounded [**ʉ:**] (see section § 19). If this scenario in the phonetic evolution of Welsh is accepted, then /**a·ɛ**, **o·ɛ**/ which appears by 1250 cannot be derived from /**a·j**, **o·j**/ which appeared *after* 1250, but *can* and does derive from disyllabic /**a·ɪ**, **o·ɪ**/ which in turn is derived from diphthongal /**a·ɹ**, **o·ɹ**/ (although the dating of the last two developments is disguised by the conventions of OW. <*ai*, *oi*> and MW. <*ay*, *oy*>).[130]

Having accepted Isaac's (2004) view on the historical relationship of the above graphemes to each other, I find that we still disagree on what the <*e*> in <*ae*, *oe*> stands for. The origins of these graphemes lie in two Old Welsh sets which I note

[130] For the value of [**ɹ**], the semivowel corresponding to [**ɪ**], see § 11.

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(1956b: 34) from the studies of Fynes-Clinton (1913) for Bangor and Sommerfelt (1925) for Cyfeiliog that twentieth-century Welsh had a quantitative system of vowels).

§ 18. Comparison with Breton and Cornish

Although the data I give below is generally ascertainable from dictionaries, I have tabulated the phonetic correspondences between Welsh and Breton below in order to demonstrate just how closely the distribution of present-day B. <*e*> concurs with that of present-day W. <*y*> (some of the correspondences in dictionary sources might not be clear since they are masked by orthographical forms due to regional developments, developments subsequent to earlier forms of each language or a difference in initial consonant of the word).[168]

Fig. 40. Correspondences between Breton <*e*> and Welsh <*y*>

Breton	Welsh	Breton	Welsh
bed	*byd*	*gweon*	*gwydn* (& *gwyddn*)
kled	*clyd*	*gwenta*	*gwynto*
ed	*ŷd*	*enez*	*ynys*
hed	*hyd*	*eva*	*yfed*
ledan	*llydan*	*spered*	*ysbryd*
trede	*trydydd*	*kelenn*	*celyn*
trebez	*trybedd*	*kalvez*	*celfydd*
gwez	*gwŷdd*	*danvez*	*defnydd*
menez	*mynydd*	*eno*	*yno*
arlene	*llynedd*	*hent*	*hynt*
beo	*byw*	*Ened*	*Ynyd*
eo	*yw*	*nevez*	*newydd*

... continued on the following page

[168] It will be noted how the feminine forms of the adjectives in Welsh have <*e*>. A distinct vowel quality according to gender is also likely to have existed in early OCB., and, indeed, is seemingly attested in a series of ninth-century Breton personal-names, with *Uuin-* in masculine names, and *Uuen-* in feminine names (some thirty-six personal names with *Uuin-*, of which one was a feminine personal name; some seven personal names with *Uuen-*, of which four were women's names) (Loth in 1887: 168-69; cf. Jackson's concurrence—with reservations—in HPB 1967: 287–88). However, such a distinction is not known to have been functional in the Middle or Modern Breton. Cornish which might have been expected to preserve such a distinction somewhat later than Breton, shows only indiscriminate use of <*y*> or <*e*> in Middle Cornish (Padel 1985: 120), whilst Lhuyd's (1707: 3b) *dama wydn* 'white mother', *syra wydn* 'white father' may indicate such a distinction was not functional at all in Late Cornish (see note 177, below).

Breton	Welsh	Breton	Welsh
kleo	*clyw*	*kelien*	*cylion*
gwerc'h(ez)	*gwyry*	*pesked*	*pysgod*
den	*dyn*	*desk*	*dysg*
gwenn	*gwyn* f. *gwen*	*nez* (& *neiz*)	*nyth*
en	*yn* [**ən**]	*fez* (& *feiz*)	*ffydd*
lenn	*llyn*	*dez* (& *deiz*)	*dydd*
henn	*hyn*	*drez* (& *dreiz*)	*dyrys*
tevenn	*tywyn*	*kelc'h*	*cylch*
raden	*rhedyn*	*kerc'had*	*cyrchu*
c'hwez	*chwys*	*mesk*	*ymysg*
tener	*tyner*	*pleg*	*plyg*
seber (& *seder*)	*syber*	*peg*	*pyg*
kev	*cyff*	*stenn* (*tenn*)	*tynnu*
keveleg	*cyffylog*	*dena*	*dynu*
lez	*llys*	*prena*	*prynu*
re	*rhy*	*krena*	*crynu*
sec'h	*sych* f. *sech*	*leviad*	*llywio*
gleb	*gwlyb* f. *gwleb*	*kere*	*crydd*
gwer	*gwydr*	*glez* (& *gleiz*)	*gwlydd*
her	*hydr*	*haleg*	*helyg*
berr	*byr* f. *ber*	*gwresk*	*gwrysg*
gwer	*gwyrdd* f. *gwerdd*	*streo*	*ystryw*
kleñved	*clefyd*	*leor*	*llyfr*
preñv	*pryf*	*prez*	*brys*
kreñv	*cryf* f. *cref*	*yec'hed*	*iechyd*
tenna	*tynnu*	*brezon(eg)*	*Brython*

There are obvious exceptions to this concurrence in both languages which are due to particular developments, but there are spellings which indicate their former value to have also been <*e*> in Breton or <*y*> in Welsh.

FIG. 41. EXCEPTIONS IN THE CORRESPONDENCES BETWEEN BRETON <*e*> AND WELSH <*y*>

Breton	Welsh	Breton	Welsh
pemp	*pump* (MW. *pymp*)	*ti* (OB. *teg-*)	*tŷ*
enk	*ing* (MW. *yng*)	*biz* (MB. *bes*)	*bys*
ne	*ni* (MW. *ny*)	*piz* (MB. *pes-*)	*pys*
bestl	*bustl* (see WG: 112)	*gwiz* (MB. *gues*)	*gwys*
		keid (OB. *cehet*)	*cyhyd*
		bian (OB. *becan*)	*bychan* f. *bechan*
		meskl	*misgl* (*mysgl*)

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Similarly there exists a symmetry in the distribution of present-day Breton <*o*> and present-day Welsh <*w*>:

Fig. 42. Correspondences between Breton <*o*> and Welsh <*w*>

Breton	Welsh	Breton	Welsh
bolc'h	*bwlch* f. *bolch*	*lonk*	*llwnc*
soc'h	*swch*	*yod*	*iŵd* (& *uwd*)[169]
hoc'h	*hwch*	*kelorn*	*celwrn*
torc'h	*twrch*	*sadorn*	*Sadwrn*
dorn	*dwrn*	*öen*	*ychen*
forn	*ffwrn*	*golc'hed*	*cylched*
komm	*cwm*	*moged*	*mwg*
plomm	*plwm*	*karo*[170]	*carw*
kromm	*crwm* f. *crom*	*maro*	*marw*
loc'h	*llwch*	*taro*	*tarw*
troc'h	*trwch*	*dero*	*derw*
son	*sŵn*	*bero*	*berw*
kon	*cŵn*	*c'hwero*	*chwerw*

The fact that many Breton dialects have subsequently tended to raise the <*o*> to <*ou*> (e.g. especially before nasals in Léon Breton *pount*, *dourn*, *fourn*, *koumm*, *kroumm*, *lounk*, *ploumm*, *soun*, *trouc'h*, etc) and <*e*> to <*i*> (in central Breton *id*, *in*, *disk*, *mine* etc, as well as in eastern Breton *din*, *iniz*, *krino* etc), has confused the realisational pattern of Breton for the majority of linguists not *au fait* with Breton dialectal variation.[171]

There are also obvious exceptions to this concurrence in Breton, most of which I cannot explain straightforwardly—such as B. *boud* corresponding to W. *bod*—but seem to be subsequent raisings of //**o**// to //**u**// as well as forms where //**o**// have been affected to //**e**//.[172]

[169] The form *iŵd* 'porridge, gruel' is only found in south-eastern Wales ((Nantgarw, Glams.) C.H. Thomas 1993: 2.490; (Cwmdulais, Glams.) C.B.H. Lewis 1932: 46; (Trecastell, Brecs.) SWDP). It is unknown in south-western Wales, and has developed irregularly to *uwd* in northern Welsh, which is taken as the present Welsh dictionary form of the term; cf. OC. *iot* (Graves 1962: n.845).

[170] B. *karo* W. *carw*, and all the following examples are indubitably in a different class as both <*o*> and <*w*> were non-syllabic [**w**] in older Breton and older Welsh.

[171] The change of <*o*> to <*ou*> has also affected original <*o*> giving *brezouneg* in Léon for *brezoneg* (W. *Brythoneg*).

[172] For the correspondences of B. <*e*> to W. <*w*>, see Jackson (1967: 119, 293).

FIG. 43. EXCEPTIONS IN THE CORRESPONDENCES BETWEEN BRETON <*o*> AND WELSH <*w*>

Breton	Welsh	Breton	Welsh
poull[173]	*pwll*	*droug*	*drwg*
toull	*twll* f. *toll*	*kousk*	*cwsg*
tour	*tŵr*		
dour[174]	*dŵr*	*krec'h* (OB. *cnoch*)	*cnwch*
froud (OB. *frot ~ frut*)	*ffrwd*	*le* (OB. *lu*)	*llw*
broud (OB. *brot*)	*brwd*	MB. *krenn* (OB. *cronn*)	*crwn* f. *cron*
doug (OB. *doc ~ duc*)	*dwg*	*trenk*	MW. *trwnc*

The misunderstanding of the realisations of correspondents of historical W. <*w*> in Breton has contributed to the neglect of noting evidence for the lowering of historical <*w*> in Old Welsh texts, thus whilst McCone (1996: 155) notes lowering of /**i**/ > /**ɪ**/ in Old Welsh, he says nothing of the contemporary and symmetrical lowering of /**u**/ > /**ʊ**/.[175] Jackson's understanding of the distribution of [**u**] and [**o**] reflexes in Breton of late Ancient Brittonic short /**u**/ is bedevilled by an inadequate knowledge of contemporary Breton dialects and is overly dependent on written sources and this explains his assertion that "considerable fluctuation observable at a later stage in the language between /**o**/ and /**u**/" might have existed throughout the history of Breton.[176]

The clear concurrence of C. <*e*> with W. <*y*> is not as obvious as with Breton. This is partly because that language has disappeared, and partly because the merger of //**ɪ**// with //**e**// occurred later than in Breton, so that the main corpus of Middle Cornish texts has spellings wildly fluctuating between <*y*> and <*e*>. By 1700, it is almost exclusively <*e*> that was written by unsophisticated native

[173] The MnB. *poull* was sometimes transcribed MB. *pol*, *poll*, the modern *Pouldavid* (Douarnenez, Finistère), *Poldavid* 16C (Tanguy 1990: 62), has even given—through the medium of a coarse cloth or sacking, originally woven in Brittany, used for sailcloth—the English word *poldavy* (OED s.v. *poldavy*) (cf. C. *poll* (Lhuyd 1707: 18a)).

[174] In eastern Breton *dour* is realised **dawr ~ dɛwr ~ doːr ~ døːr** rather than the commoner **duːr** (p.c. H.Ll. Humphreys), cf. C. *doür* (Lhuyd 1707: 231a), representing something akin to ***dowr**. Welsh *dŵr* is an irregular development: one would have expected the Middle Welsh *dwfr* to have been preserved as **duvur ~ dəvʊr** in the same way as *dwfn* **duvun ~ dəvʊn** and *llwfr* **ɬuvur ~ ɬəvur**.

[175] McCone (1996: 160) only notes a subsequent centralisation of unaccentuated non-final /**u**/ through the intermediary /**ʊ**/ to /**ə**/ (see Figure 36).

[176] Le Dû (2012: 18) testifies that for his only fieldwork description of a Breton dialect (Plougrescant, Côtes-d'Armor), Jackson interviewed Le Dû's grandmother once and otherwise depended upon Le Dû, then a young speaker who had been brought up in Dieppe, Normandy. The result of which was that Jackson completely missed the retroflex /**ɻ**/ typical of the dialect and a number of other features.

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writers, as well as in Lhuyd's own phonetic alphabet.[177] There is no reason at all in favour of A.R. Thomas's unsubtantiated interpretation (1992: 364) that Cornish ever possessed //**ɨ**//: "the typical British 'high mixed' vowel—central with lips spread", e.g. **kresɨ** MC. *kresy*, **pɨmp** MC. *pymp*, **jesɨ** MC. *Jesu*, **moɨ** MC. *moy*, **dɨu** MC. *dyw* (f.) (A.R. Thomas 1992: 361–62, 364–65). Jackson (1953, 1967) and Ken George (1986: 112) are both expressly against this Welsh-based interpretation of Middle Cornish orthography which is also evident from the transcription of **aŋou** for *ankow* (A.R. Thomas 1992: 361).

With Breton and Welsh—apart from the exceptions cited above—it is clear that both languages have kept <*y*> and <*e*>, respectively, separate from words containing <*i*> and <*u*> (in Welsh by separation, I mean that which is evident in the orthography of the literary language).[178]

Fig. 44. Correspondences between Breton <*i*, *u*> and Welsh <*i*, *u*>

Breton	Welsh	Breton	Welsh
ki	*ci*	*du*	*du*
kig	*cig*	*tu*	*tu*
gwir	*gwir*	*pur*	*pur*
hir	*hir*	*pluñv*	*pluf*
gwin	*gwin*	*un*	*un*
pin	*pîn*	*lun*	*Llun*
lin	*llin*	*sul*	*Sul*
tri	*tri*	*ruz*	*rhudd*
c'hwi	*chi* (*chwi*)	*luzia*	*lluddio*
hi	*hi*	*suna*	*sugno*
ni	*ni*	*stumm*	*ystum*
gwisk	*gwisg*	*luska*	*llusgo*
briz	*brith*	*kuz*	*cudd*
gliz	*gwlith*	*luz*	*llus*
		dihun	*dihun*

[177] I believe Lhuyd's C. *guydn* (*gwidden* in late place-names)—cognate with W. *gwyn*, B. *gwenn*—and a small number of other words, must have been exceptionally pronounced [ɪ], their differing pronunciation being probably due to the contextual influences of the adjoining consonants.

[178] Morris-Jones (1913: 13–14) perceptively stated that: "The view that the distinction [between <*u*> and <*y*>] survived in monosyllables down to a late date is corroborated by the fact that out of about 140 monosyllables in use containing either *u* or *y* only one, *crud* 'cradle' … is now commonly misspelt; and even this misspelling is due to Pughe's bringing the word under the same head as *cryd* 'quaking, fever' obviously on a false etymological theory."

There are very few exceptions to the correspondence of <*u*> and <*i*> between Breton and Welsh:

FIG. 45. EXCEPTIONS IN THE CORRESPONDENCES BETWEEN BRETON <*i*, *u*> AND WELSH <*i*, *u*>

Welsh	Breton
dir	*dur*
rusk	*rhisg*(*l*)

A clue as to the origin of W. //**ɨ**// may be present in the Breton and Cornish developments. Contrary to Welsh, <*u*> never merged in those languages with the reflex corresponding to Welsh <*y*>: it remained [**y**] in Breton and became [**i**] in Late Cornish *c.* 1625 (George 1986: 136).[179] As a result I would like to highlight the following facts:

- In Breton and Cornish the reflex corresponding to Welsh <*u*> is never confused with the reflex corresponding to Welsh <*y*>;
- Neither Breton or Cornish can be shown to have ever possessed a vowel of the quality of //**ɨ**//.

In conclusion to the survey of Breton and Cornish sounds cognate with Welsh, one can conclude that [**ɨ**] has only existed as a significant sound in Welsh and that the graphemes <*u*> and <*y*> have totally merged in Welsh, a fact which seems to be more than coincidence. This suggests that the realisation of //**ɨ**//[180] in Welsh is a consequence of its 'parentage' from a fudged merger of //**ʉ**// with //**ɪ**// not evidenced before the fourteenth century. The quality of Welsh [**i**, **ɪ**, **j**] can be interpreted as a halfway fudge between //**ʉ**// and //**ɪ**//, that occurred after //**ʉ**// changed and merged with //**ɪ**//, rather than as an original Neo-Brittonic phoneme, which has been the common assumption of all linguists dealing with Welsh up to the present day. The fact that most words in the merger which had length were from an original <*u*>, whilst most words which were short had an original <*y*> may account for the marked [**ʉ**] or [**y**] quality of the long /**iː**/, and the less markedly rounded quality of the short /**ɪ**/ at the present day (although the nature of lax vowels, no doubt, also contributes).

[179] As [**ɪ**] had become //**e**// about the same time, Lhuyd in 1700 could still distinguish them as phonemes in his Phonetic Alphabet *hêz* (B. *hed*, W. *hyd*) against *tîz* (B. *tud*, W. *tud*).

[180] After all, this sound is only attested in Welsh, in all certainty, with Sweet's 1885 description of the sounds of Nantgwynant (Caerns.).

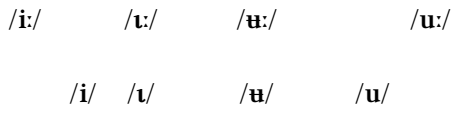
§ 19. The merging of <u> *and* <y>

It is the re-emergence of stronger qualitative differences between long and short vowels—established by at least the twelfth century according to Hamp (1956b: 34–35)[181] – that seems to have set the stage for the merging of the originally distinct phonemes <*y*> and <*u*>. In Figure 39 I highlighted the splitting of allophones of the high vowels into new phonemes, between early Old Welsh and early Middle Welsh:

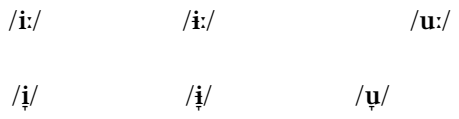
FIG. 46. POSTULATED EMERGENCE OF NEW QUALITATIVE DIFFERENCES IN MEDIEVAL WELSH IN THE HIGH VOWELS (FOLLOWING FIGURE 19)

Stage A: tendency after C8 AD.

Stage B: result by C13 AD.



Stage C: end-result by C16 AD.



Starting with the Neo-Brittonic vowel system as in Stage A, we find the raising of the long allophone of /**ʊ**/ to /**u**:/ straightforward enough, but any raising of the long allophone of /**ɪ**/ to /**i**:/ was hampered by the fact that the vowel space was already occupied by /**i**:/. The raising of the long allophone of /**ɪ**/ was thus compelled to be a retracted one vis-à-vis /**i**:/, forcing the long allophone of /**ɪ**/ to be realised something like /**ɪ**:/, near the position already occupied by /**ʉ**:/. It will be noted that the result at Stage B is given as simply long and short versions of the high vowels as opposed to the lowered-high vowels. It should be understood that it is not so much that the lowered-high /**ɪ**, **ʊ**/ disappear but that the vowels' quality-distinctiveness is no longer salient with the result that the high vowel symbols /**i**, **ɪ**, **ʉ**, **u**/ are in reality relatively neutral as regards any opposition between high and lowered-high vowels (one might want to note lowered-high /**ɪ**,

[181] Jackson (1953: 340–44, 696) believed the new quantity system was established by 600 AD, whilst Sims-Williams (1990: 260; 1991: 49) believes it was established by at least 550 AD (for criticisms of Jackson's method and conclusions, see Sims-Williams 1990: 219, 248–60). Isaac (2008: 31–32) in turn criticises Sims-Williams's arguments and sides with Jackson. My argument for a later date is developed in section § 16.

/ʊ̟/ alongside /ɪ, ʊ/ but, again, I think this is going beyond the evidence available; the positing of a neutral quality between high and lowered-high does no violence to the extant evidence of the Welsh of the period). We know through textual evidence that the original /ʉ/ and /ɪ/ of Neo-Brittonic began merging with each other in unstressed syllables by the fourteenth century (WG 1913: 13). Figure 46 suggests that the raising-lowering forces that led to the re-emergence of strong quantitative differences brought the two Old Welsh medial vowel phonemes, lax /ɪ/ and tense /ʉː/ and their reflexes, into closer articulatory contact with each other than before.

The fact that the position of the earliest attestations of merger between the once phonemically distinct <*u*> and <*y*> was in final syllables suggests that merging only began in the period after the stress-accentuation became established on the penultimate syllable, which one may confidently state had—at the latest—occurred by the thirteenth century.[182] The continuing link between the long and short phonemes as members of vowel-pairs meant that the merging of short (and presumably slightly laxer) /ɪ/ and /ʉ/ firstly in unstressed syllables, led the way for the merger of the same short vowels in stressed syllables, which in turn led the way for the long (and presumably slightly tenser) /ɪː/ and /ʉː/ to merge together to give the fudged phonemes /i̞ː/ and /i̞/, by which process the loss of distinction between the two originally distinct vowels was generally completed at Stage C in the sixteenth century even if it was not wholly completed by 1600 (WG 1913: 13; G.E. Jones 1982: 49).[183]

The question of what the merger actually entailed in phonetic terms is not an assured one. One may confidently state that generally the original //ɪ// realisation was modified,[184] but we are still faced with the choice of:

1) /ʉ/ converging onto <*y*>.
2) merger of /ʉ/ and /ɪ/ as a fudged sound //i̞//.[185]

[182] See my forthcoming article 'Gwyriadau'r deuseiniaid Cymraeg'.

[183] That the distinction between both phonemes was kept as late as the sixteenth century seems warranted—as was noted by J. Morris-Jones (1913: 13–14)—by the fact that in Welsh dictionaries, out of some 140 monosyllables with <*u*> and <*y*>, practically none are assigned to the wrong class.

[184] It is, however, possible that <*y*> converged onto //ʉ// in those areas of south-western and south-eastern Wales (centred around Pembrokeshire and Glamorganshire) later characterised by anomalous //i// pronunciations (Wmffre 2003a: 244–46). The resultant sound of the merger as //ʉ// would at a subsequent stage have become //i//. This would certainly explain that south-western Welsh pronounces *ffynnon*, *ysgol*, *llygod* as if they were to be written **ffunnon*, **usgol*, **llugod*.

[185] It may be that the present realisation [i̞ː] is a compromise or fudge sound due to the merging of the raised allophone of /ɪ/ (i.e. a retracted /ɪː/) with /ʉː/. A compromise sound is quite feasible as a linguistic phenomenon, cf. the realisation of E. <*u*> in *duck* as [ɤ] in two separate areas of eastern England (King's Lynn and west of Peterborough) straddling the area where the northern English realisation [ʊ] meets the southern English realisa-

That //ʉ// converged onto <*y*>—whether it was already realised //i̞// or not—is favoured: (1) by the present unrounded realisation of <*u*, *y*>; and (2) by the fact that subsequently—certainly by the early Modern period—Welsh orthography tended to write <*y*> more often than <*u*>. It may be that the sound was exactly northern Welsh //i̞// in southern Wales, or it remains possible that it may have been slightly distinctive and remained as //ɪ//, a factor that may have eased the later merging with //i//.

However, there is no strong indication that the development of the merger of //ɪ// and //ʉ// in southern Welsh was any different from that which occurred in northern Welsh. That MnW. <*y*> did change its realisation from something like long [ɪː] to long [i̞ː] in the period between 1250–1500 seems to be reflected in spellings such as *Res* (MnW. *Rhys*) in the twelfth century and *den* (MnW. *dyn*) in the thirteenth century, contrasting with *tuy* (MnW. *tŷ*) by the sixteenth century. A word needs to be said about the spelling convention <*uy*> in Welsh which is in fact a Middle English convention just as <*ck*> and <*th*> found in sixteenth-century place-name forms such as *Pen y Cnwck* (MnW. *Pen-y-cnwc*), *Y Thol Hir* (MnW. *Y Ddôl-hir*). The digraphs <*uy*, *ui*> were a Middle English convention borrowed from the Anglo-Norman French <*uy*, *ui*> for [y] in a long context (Mossé 1952: 23).[186] Unsurprisingly, it is found for medieval Welsh /ʉː/ especially in the common personal epithet *du* 'black' at least as early as the

tion [ʌ], Chambers & Trudgill [1980: 135] explain the appearance of the realisation [ɤ] in such words in the following terms:

"It is, however, very closely related to both of the other phones, being central and unrounded like [ʌ], but higher, midway between it and [ʊ].

Impressionistically, it might seem to be a nearly perfect realisation of (**u**), combining some properties of both the other phonetic realisations. In other words it is a fudge between the contending phone types of this change in progress, a way as it were, of being at neither pole on the continuum or conversely of being at both poles at once."

This is described by Chambers & Trudgill (1980: 135) as being "a more neutral realisation", and is termed by them a *fudged lect* or *fudged variant*.

G.E. Jones (1983: 65, 449–50) puts forward such a motivation to explain Sommerfelt's [ɨ] at Darowen (Monts.), as a fudge between /**i**/ and /**i̞**/. Sommerfelt (1925: 134) noted a transition area between //**i̞**// and //**i**// dialects in northern Llanbryn-mair and Dinas Mawddwy where a fudged pronunciation [ɨ̞ː] was the realisation of long <*u*, *y*> (i.e. a fronted version of [i̞ː], which Sommerfelt wrote as [ÿ]).

Fudged realisations of words are well-attested on boundaries between differing speech areas, e.g. *iafu* (Llanfair Caereinion, Monts.) being a fudge between nW. *iau* and sW. *afu*. Likewise, swW. *nawr ten*, is a fudge between sW. *nawr te* and E. *now then*.

[186] The spelling <*uy*, *ui*> for [y] in Anglo-Norman French derived from the monophthongisation of an original Old French diphthong [**yj**] (Mossé 1952: 31). The monophthongisation of this diphthong is also known in the French of eastern Brittany (*Gallo*) where *fru*, *u*, *pu* represent *fruit* 'fruit' (< L. *fructus*), *huis* 'door' (< vulgL. *ustium* < classL. *ostium*), *puits* 'well' (< L. *puteus*) (E. Vallerie 1995: 1.259]. This monophthongisation was not known in central French, the ancestor of present-day official French, but the hypercorrect use of <*uy*, *ui*> for the pure vowel in French dialects which had lost the diphthong is attested

fourteenth century, e.g. *Willym duy* 1367 (Caerns.) (NLW, Caernarvon Court Rolls 1), *Gwylym duy* 1407 (Cemais, Pembs.) (NLW, Bronwydd 2 MS 1339).

It is sometimes stated that Middle English (1150–1450) did not have a high rounded vowel [**y**] (or a more medial [**ʉ**], not readily distinguishable from front [**y**]); so Ingham:

> The Middle English phoneme inventory did not contain a high front rounded vowel, so the pronunciations attested by the spellings in these examples [of Anglo-Norman] show a tendency to replace the continental French vowel sound by the nearest English ones, either a high back rounded vowel [i.e. [**u**]], or a glide from a central or high front position to high back [i.e. [**ɪw**]]. (Ingham 2012: 59).

However, such statements mislead the unwary since native Old English [**y**] as in *cynn* 'kin', *synn* 'sin', *pytt* 'pit', *cyrice* 'church', *myrige* 'merry', *fȳr* 'fire', *mȳs* 'mice' was actually preserved in Middle English in west-midland and south-western English dialects in contrast with south-eastern Middle English where it developed into <*e*> and also in contrast with east-midland and northern Middle English where it developed into <*i*> (the commonest reflex in present-day English) (Mossé 1952: 23, 25, 30). Ingham (2012: 58–59) notes how rhyming schemes in Anglo-Norman French progressively showed more confusion between [**y**] and [**u**] especially by the late thirteenth century, although in Middle English French [**y**] in long contexts was finally equated with [**ɪw**] (a process attested as early as the late thirteenth century).[187] Welsh loans from English, from at least the fifteenth century (Dobson 1957/1968: 702; Wmffre 2004: xliii), show <*uw*> for the Middle English diphthong—which may have initially stood for [**ʊw**] and certainly by the sixteenth century for [**ɪw**]—a spelling replaced by <*iw*> by the late seventeenth century following a phonetic development of [**ɪw**] to [**ɪw**] in northern Welsh (see Wmffre 2004: xliii).

The short Anglo-Norman French [**y**] "persisted in the West-Midlands where the sound was normal, but it was not merged with *ü* < O[ld] E[nglish] *y* (which was perhaps less tense). Elsewhere O[ld] F[rench] short *ü* was replaced by [**u**]: *jüst*, *jüdge*, became *just*, *judge*." [Mossé 1952: 30]. However, in western midland

in *Pleurtuit* (Ille-et-Vilaine), a French version of a Breton place-name comprising *ploue* 'parish' + saint's name *Restud*. This spelling convention is also found in one instance in *Lanrustuyt* 1304 for *Llanrhystud* (Cards.) in the Welsh version of the saint's name (Wmffre 2003a: 757). It also occurs in an attention-grabbing form of *Llantwit Major* (Glams.), *Laniltwyt* 1348, for the Welsh original *Llanelltud-fawr* (Wmffre 2003a: 757, 1196).

[187] The originally distinct diphthong [**ɛw**] had merged into [**ɪw**] by the fourteenth century in east midland Middle English (Mossé 1952: 29, 31; Dobson 1957/1968: 710, 712) which explains the common <*ew*> spellings of the contemporary English diphthong (along with the variant <*iew*>). The spelling <*ue*> for the same diphthong reflects the French vowel [**y**] rather than any native English diphthong.

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