

Old and Middle Welsh
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1 INTRODUCTION

The Welsh language emerged from the increasing dialect differentiation of the ancestral Brythonic language (also known as British or Brittonic) in the wake of the withdrawal of the Roman administration from Britain and the subsequent migration of Germanic speakers to Britain from the fifth century. Conventionally, Welsh is treated as a separate language from the mid sixth century. By this time, Brythonic speakers, who once occupied the whole of Britain apart from the north of Scotland, had been driven out of most of what is now England. Some Brythonic-speakers had migrated to Brittany from the late fifth century. Others had been pushed westwards and northwards into Wales, western and southwestern England, Cumbria and other parts of northern England and southern Scotland. With the defeat of the Romano-British forces at Dyrham in 577, the Britons in Wales were cut off by land from those in the west and southwest of England. Linguistically more important, final unstressed syllables were lost (apocope) in all varieties of Brythonic at about this time, a change intimately connected to the loss of morphological case. These changes are traditionally seen as having had such a drastic effect on the structure of the language as to mark a watershed in the development of Brythonic. From this period on, linguists refer to the Brythonic varieties spoken in Wales as Welsh; those in the west and southwest of England as Cornish; and those in Brittany as Breton. A fourth Brythonic language, Cumbric, emerged in the north of England, but died out, without leaving written records, in perhaps the eleventh century.

Brythonic is known to linguists through comparative reconstruction of Welsh, Breton and Cornish. The phonological development of the language can also be corroborated by the evidence of place names, both those borrowed into English at an early date and those attested in Latin sources, and by the development in Brythonic languages of Latin loanwords, whose original form in Latin is generally known with a fair degree of accuracy.

There are no written records of Welsh from the first two hundred years or so of its existence, from the mid sixth to the mid eighth century. The language at this time is conventionally referred to as Primitive or Archaic Welsh. As with Brythonic, Primitive Welsh is known through place names in Latin sources, through place names borrowed into English and through internal reconstruction. Internal reconstruction based on later attested stages of Welsh can also be attempted.

Old Welsh (OW.) is the period from the mid eighth century down to the middle of the twelfth century. The earliest extant written Welsh comes from the memorial inscriptions on the eighth-century Tywyn Stone (Williams 1972 [1949]). The oldest continuous text is the Surexit Memorandum. This is one of eight additional entries (mostly memoranda of gifts and similar records) added to the Latin Book of St Chad, currently in the cathedral library in Lichfield. It records the settlement of a land dispute between Tudfwlch son of Llywyd and Elgu son of Gelli. Jenkins and Owen date the text to the period 830–50 (Jenkins and Owen 1983/84). Other instances of Old Welsh in contemporary manuscripts survive in glosses on other Latin texts such as the notes on weights and measures (*De mensuris et ponderibus*) in the Oxonienis Prior (Ox. 1) manuscript (edited in Williams 1930), dating to around 820 (Williams 1935); the glosses on Martianus Capella's *De nuptiis Philologiae et Mercurii* in Corpus Christi College, Cambridge ms. 153 (see Lemmen 2006, Stokes 1873); and glosses on Ovid's *Ars Amatoria* book 1, also in the Oxoniensis Prior manuscript.

The Juvencus manuscript contains glosses in Welsh on Latin texts and two poems in Old Welsh amounting to twelve stanzas (the Juvencus poems or englynion) (edited by

Haycock 1994, Williams 1980 [1933]). The main manuscript dates from the second half of the ninth century. Glosses in Latin, Welsh and Irish were added in the tenth century.

The longest piece of continuous Old Welsh prose is the *Computus* fragment, dealing with calculations concerning the calendar, perhaps dating from around 920 (Williams 1927).

Welsh names in Latin sources, such as Gildas's *De Excidio Britanniae*, Bede's *Historia Ecclesiastica Gentis Anglorum* and various Latin saints' lives, continue to be of use, but the names tend to appear in Latinized forms that obscure phonological developments in Welsh.

The charters in the twelfth-century Book of Llandaff (*Liber Landavensis*) also fall into the Old Welsh period, traditionally marking its endpoint. They were probably composed in the 1120s to bolster the claims of the bishop of Llandaff in various land disputes (Davies 1973, 1979: 2). Although charters purporting to date from the sixth century are actually much later compositions, many appear to have been compiled using earlier material with orthography reflecting phonological features going back to the mid sixth century (Sims-Williams 1991).

Mention must also be made of the extensive poetry of the *Cynfeirdd* ('the earliest poets'), which, although surviving only in manuscripts from the Middle Welsh period, contains material that must have been composed during the Old Welsh period. This work includes poetry attributed to the poets Aneirin (*Canu Aneirin* or the *Gododdin*) and Taliesin (*Canu Taliesin*), the poetic cycle *Canu Llywarch Hen* and the prophecy *Armes Prydain*.

Middle Welsh (MW.), the language from the mid twelfth century onwards (Evans 1964: xvi), is richly attested in a large body of texts, including both native and translated tales and romances, legal codes, chronicles, saints' lives and other religious texts, medical and scientific works, and an extensive corpus of fixed-metre poetry.

The native narrative tradition is attested primarily through the collection of tales and romances known as the *Mabinogion*. These tales survive in the two great manuscript compilations of Middle Welsh literature, the Red Book of Hergest (compiled in Glamorgan, 1382–c. 1410, the chief scribe named as Hywel Fychan ap Hywel Goch) and the White Book of Rhydderch (compiled c. 1350) (Huws 1991). Their composition in written form is somewhat earlier. The first to be composed was probably *Culhwch ac Olwen* ('Culhwch and Olwen'), which shows linguistically archaic features and whose original composition has been dated to c. 1100 (Bromwich and Evans 1997: xxvii).

Translated tales include those relating to Charlemagne now known as *Ystorya de Carolo Magno*, the prose Arthurian romance *Ystoryaeu Seint Greal*, the account of the Trojan wars in *Dares Phrygius* and *Ystorya Bown de Hamtwn*, amongst others. These are mostly fairly free translations or adaptations of works in French (*Otinell*, *Le pèlerinage de Charlemagne*, *Le chanson de Roland*, *La Queste del Saint Graal*, *Perlesvaus*, *La Geste de Boun de Hamtone* etc.) or Latin (the Pseudo-Turpin Chronicle *Historia Caroli Magni*).

In terms of sheer quantity of material, the largest body of Middle Welsh comes from various versions of the medieval Welsh laws, with some 36 Welsh law manuscripts surviving from before 1500 (Charles-Edwards 1989: 99–102). Law manuscripts tend to be linguistically more innovative than native literary texts, probably because they were constantly copied, updated and re-edited. The laws exist in three main, partly regionally based redactions, the northern *Llyfr Iorwerth*, the southern *Llyfr Blegywryd*, and the *Llyfr Cyfnerth*, associated with the south and the midlands. Although individual manuscripts may not show regional affiliations in the way that these broad divisions suggest, regional associations of the laws do allow us more direct access to dialect variation than Middle Welsh texts generally offer.

The native poetic tradition, which continued to develop with the poetry of the *Gogynfeirdd* ('the fairly early poets', also known as *Beirdd y Tywysogion*, 'Poets of the Princes'), is useful for the study of initial-consonant mutation, since patterns of alliteration demonstrate mutations (such as /d/ > /ð/) that were never or only inconsistently marked in the orthography. The linguistic conservatism of this poetry has also been useful for reconstructing

earlier stages, particularly in verbal morphology (Rodway 2002 [1998]). The later *cywyddwyr* poets (Beirdd yr Uchelwyr ‘Poets of the Gentry’), from the fourteenth century onwards, are linguistically more innovative while remaining faithful to a strict poetic tradition, and their work provides some evidence for linguistic change in progress.

The most striking difference between Old and Middle Welsh is the introduction of radically new orthographic conventions for Middle Welsh. However, recent research has shown that the assumption of a radical shift in orthographic practice in the twelfth century is too simplistic and that regional differences also play a significant role. Some phonological changes from Old to Middle Welsh are also striking: loss of the voiced velar fricative /ɣ/, for instance. In morphology and syntax, the transition between Old and Middle Welsh, in so far as we can tell from the limited access to Old Welsh syntax in particular, involves mostly changes in preferences rather than absolute innovations. The system of absolute and conjunct verbal inflection, already obsolescent in Old Welsh, is more or less dead by the start of the Middle Welsh period; patterns found with the verb ‘to be’ shift in frequency; and certain nominal and verbal inflections are replaced.

The end of the Middle Welsh period is harder to define than the beginning. Simon Evans defines Middle Welsh as running to the end of the fourteenth century (Evans 1964: xvii), making a further distinction within Middle Welsh between early Middle Welsh, c. 1150–c. 1250, and late Middle Welsh, c. 1250–1400. Current usage generally regards 1500 as an arbitrary convenient cut-off point for Middle Welsh (Russell 1995: xviii). Early Modern Welsh, from 1500 to 1700, marks a transitional period in which various innovations begun at the end of the Middle Welsh period reach their full effect.

The overview presented in this chapter is necessarily selective. For fuller overviews of specific aspects of Old and Middle Welsh, see Evans (1964) and Morris-Jones (1913) (general), Jackson (1953) and Schrijver (1995) (phonology) and Borsley et al. (2007: 286–337) (syntax).

2 PHONOLOGY

2.1 Vowels

2.1.1 *The Brythonic system*

Late (West) Brythonic is reconstructed with the following system of vowel phonemes:

	FRONT		BACK
HIGH	i: i	ɥ:	u
	e: e	(ə ɚ)	o
	ɛ:	ɔ:	
LOW		a	

Examples are given below. Most of the vowels continue unchanged into Welsh. Note, however, that there is no correlation between original vowel length in Brythonic and that in Modern Welsh due to the reorganization of vowel length known as the ‘new quantity system’. On /ə/ and /ɚ/, see section 2.1.6 below. Note that reconstructions given in the course of this chapter are generally to (earlier) (Common) Brythonic and do not necessarily reflect this vowel system.

Long vowels

- /i:/ ModW. *cig* ‘meat’ (cognate with OIr. *cícce* ‘flesh’), *gwin* ‘wine’ (loan from Latin *vīnum*), *cil* ‘corner’ (OIr. *cúl*) (/i:/ arises from inherited /i:/ and /u:/, plus Latin loans with -ī-);
- /e:/ (diphthongizes to /ui/) *llwyd* ‘grey’ (the first element in Brythonic *Letocetum* /le:tokɛ:tum/ ‘Lichfield’);
- /ɛ:/ (diphthongizes to /oɨ/) *coed* ‘trees’ < *kɛ:to- (second element in *Letocetum*), *hoedl* ‘life’ < *sɛ:tlo- (< *saitlo-);
- /ɔ:/ (diphthongizes to /au/ in stressed syllables) *llawn* ‘full’ < *lɔ:no- (OIr. *lán*), *mawr* ‘big’ < *mɔ:r- (OIr. *már*), *caws* ‘cheese’ (Latin *cāseus*) (arises from diphthongization of earlier /a:/);
- /ʊ:/ *Llun* ‘Monday’ (Latin (*dies*) *Lūnae*), *ffurf* ‘form’ (Latin *fōrma*), *budd* ‘use, value’ < *boud- (OIr. *búaid*), *cul* ‘narrow’ < *koilo- (OIr. *cóil*) (arises from monophthongization of various diphthongs, plus Latin loans with -ō- or -ū-).

The vowel /ɔ:/ shortened to [ɔ] in pretonic syllables, for instance, Latin *Nātālicia* > Primitive Welsh */nɔdɔlig/, shown by the short vowel in the first syllable when this word is loaned into Old Irish as *Notlaic*. With diphthongization of /ɔ:/ and subsequent allophonic reallocation of length (see below), this led to the creation of a new phoneme /ɔ/ (secondary split).

Short vowels

- /i/ or /i:/ *sych* ‘dry’ (Latin *siccus*), *byd* (OIr. *bith*), *gwyn* ‘white’ (OIr. *find*) (also arises from i-affection, see below);
- /e/ *ebol* ‘foal’ (OIr. *ech* ‘horse’), *hen* ‘old’ (OIr. *sen*);
- /a/ *anadl* ‘breath’ (OIr. *ánál*), *aradr* ‘plough’ (OIr. *arathar*);
- /o/ *rhod* ‘wheel’ (OIr. *roth*);
- /u/ *ffrwd* /fru:d/ ‘stream’ (OIr. *sruth*).

The vowel /i/ was originally a high front unrounded vowel, but backed to /i:/ in Welsh. Both symbols will be used according to historic context. New instances of /u/ arise from raising of /o/ before a nasal plus stop, a single nasal or a liquid plus stop, for instance, ModW. *mwng* ‘mane’ (OIr. *mong*). Similar raising occurs with front vowels before a nasal, such that /e/ raises to /i:/, for instance, ModW. *myfyr* ‘meditation’ (Latin *memoria*).

2.1.2 The new quantity system

Although vowel length was contrastive in the Brythonic system just described, a reorganization of the vowel system redistributed long and short vowels in an allophonically predictable way. This redistribution, termed the ‘new quantity system’, has been dated to the late sixth century by Jackson, or slightly earlier, to the first half of the sixth century, by Sims-Williams (1990) (also McCone 1996: 145–65). As a result, all vowels could be allophonically long or short according to context.

In stress-bearing monosyllables, vowels became long before single consonants (except /m/) and short before clusters or /m/:

- (1) [ɯ:] > [ɯ] in *ffurf* ‘form’ (Latin *fōrma*)
 [ɯ:] > [ɯ] in *clust* ‘ear’ (OIr. *cluas*)
 [i:] > [i] in *sych* ‘dry’ (Latin *siccus*)
 [e] > [e:] in *hen* ‘old’ (OIr. *sen*)

Long /nn/ and /rr/ counted as clusters. In inherited vocabulary, full words could not end in a voiceless stop; however, when word-final voiceless stops emerged later, vowels before them were short, as today. It is unclear whether vowels were short or long before /ɸ/.

The result of the new quantity system was to make vowel length in early Old Welsh predictable from context, and therefore non-phonemic, although allophonic differences in vowel length nevertheless existed.

2.1.3 Diphthongizations

The long mid vowels /e:/, /ɛ:/ and /ɔ:/ diphthongize to /uɨ/, /oɨ/ and /au/ in early Welsh (sixth to eighth century (Jackson 1953: 293–6, Sims-Williams 1991: 47–9)). Diphthongization of the front vowels /e:/ and /ɛ:/ occurs in all environments; diphthongization of /ɔ:/ is witnessed only in final (stressed) syllables, all pretonic instances of /ɔ:/ having already shortened to [ɔ], which does not diphthongize.

Coupled with shortening of pretonic /ɔ:/ to /ɔ/, diphthongization of /ɔ:/ creates alternations between /o/ and /au/. For example, ModW. *llaw* /'ɸau/ 'hand' (OW. /'ɸauβ/ < */ɔ:m/) shows the development of /ɔ:/ in stressed syllables, versus *llofrudd* /'ɸovrið/ 'murderer' (Primitive Welsh /ɸɔv' rɸð/) with the same first element ('hand' plus *rhudd* 'red'), attesting the development of /ɔ:/ in unstressed syllables, where it shortens to /ɔ/, escapes diphthongization giving Modern Welsh /o/. Compare also *brawd* 'brother' ~ *brodyr* 'brothers', *llawr* 'floor' ~ *lloriau* 'floors' and *mawl* 'praise (noun)' ~ *moli* 'praise (verb)'.

2.1.4 A-affection and i-affection

Various vowel harmony sound changes that occurred in Brythonic have significant effects on later Welsh morphology. I-affection causes vowels to raise in syllables preceding a high front vowel, and a-affection causes vowels to lower in syllables preceding a low vowel.

Both go back to late Brythonic and are common to Welsh, Cornish and Breton. The first to occur was a-affection, a change which lowered Brythonic */i/ and */u/ in stressed, penultimate syllables to /e/ and /o/ respectively if the following syllable contained */a:/ or, in Latin loanwords, */a/ or */a:/. For example, */birra:/ > MW. *berr* 'short (fem.)', as against */birros/ > MW. *byrr* 'short (masc.)'; Latin *regula* > Welsh *rheol* 'rule'. Since many feminine nouns and adjectives ended in */a:/, this introduced vowel alternations signalling gender.

I-affection is more complex, occurring in two stages. The first stage, known as final i-affection, affects vowels in penultimate syllables preceding an ending containing /i:/ or /j/. Such vowels raise, becoming either /i/ (mostly) or /ei/. Affection of /a/ before /j/ yields /ei/; affection of /a/ before /i:/ and of /o/ before /j/ may yield either /i/ or /ei/; affection in other cases yields /i/:

- (2) /a/ > /ei/ *bardī > *beirdd* 'bards', *aljos > MW. *eil* 'second'
 /e/ > /i/ *are pennī 'at the end of' > *erbyn* 'against' (but *pen* 'head')
 /o/ > /i/ *kornī > *cyrn* 'horns' (but *corn* 'horn'), *donjos > *dyn* 'man' (Irish *duine*)
 /o/ > /ei/ *korkjo- > *ceirch* 'oats' (MŪr. *coirce*)
 /u/ > /i/ Latin *cuneus* > *kunjus > *cŷn* 'chisel'

Variants with /i/ and /ei/ sometimes co-exist, for instance, Brythonic *alarkī gives both MW. *elyrch* /elɨrx/ and *eleirch* /eleirx/ 'swans'. With diphthongs, more complex results obtain.

Internal i-affection is later, affecting vowels in all syllables. Before a syllable containing /i/ or /i:/, /a/ and /o/ become /e/; before a syllable containing /j/, the vowels /a/, /o/ and /e/ become /ei/:

- (3) /a/ > /e/ Latin *salsĭcius* > *selsig* ‘sausage’, *klamito- > *clefyd* ‘sickness’
 /a/ > /ei/ *kaljākos > *ceiliog* ‘cockerel’ (Irish *cailech*),
 *klamiones > *cleifion* ‘sick people’
 /e/ > /ei/ /heb/ + -/jau/ > *heibio* ‘past’ (*heb* ‘without’)
 /o/ > /e/ Latin *molina* > *melin* ‘mill’, *omijos > *efydd* ‘bronze’ (OIr. *umae*)
 /o/ > /ei/ /mox/ + -/jad/ > *meichiad* ‘swineherd’ (*moch* ‘pigs’, Mlr. *muccaid*)

Any vowel resulting from final i-affection may itself condition internal affection. Hence ‘double affection’, affection in two successive syllables, the first internal affection, the second final affection, may occur. Examples include *anatjo- > *enaid* ‘soul’ and *karantijo- > MW. *kerennyd* ‘relatives’ (*car* ‘relative’).

A-affection destroys the context for (bleeds) i-affection, and hence must have been complete before i-affection occurred (**sabrina* > Welsh *Hafren* ‘River Severn’, not ***Hefren*). Jackson (1953: 573–618) dates a-affection to the first half to middle of the fifth century, final i-affection to late fifth or early sixth century, and internal i-affection to the seventh century. Both a-affection and final i-affection are triggered by vowels in word-final syllables which were lost (apocope), and hence must precede the loss of word-final syllables.

2.1.5 The early Welsh vowel system

The diphthongizations and the new quantity system (plus merger of /o/ and /ɔ/) create the following vowel system, which was reached by the eighth century and basically survived the whole of the Old Welsh period and much of the Middle Welsh period:

	FRONT		BACK
HIGH	i	ɨ ʉ	u
	e	(ə ɘ)	o
LOW		a	

2.1.6 Stress and pitch accent

Late Brythonic had penultimate stress, which became word-final stress as the result of the loss of word-final syllables. In Old Welsh, the stress accent shifted back to the penultimate syllable, although the pitch accent remained word-final, resulting in the dissociation of stress and pitch accent characteristic of Welsh today.

Sound changes that differentiate final syllables, including the only syllable of monosyllabic words, from nonfinal syllables are generally dated to before the Old Welsh accent shift, whereas those which differentiate penultimate syllables and the only syllable of monosyllabic words from other syllables are generally dated to after it. The following changes target syllables according to their stress before the accent shift, hence must predate it:

- (1) Unstressed high vowels /u/ and /ɨ/ weaken in nonfinal syllables, first to [ə] (rounded mid central vowel) and [ɘ] (unrounded mid central vowel, schwa) respectively, ultimately merging as [ə]. That is, /u/ and /ɨ/ survive in stressed monosyllabic words, but reduce in nonfinal syllables of polysyllabic words. Since these are the unstressed syllables before the accent shift, this change must predate it. The sound [ə] already existed as the outcome of /o/ in unstressed prefixes such as *kom- > OW. *com-* /kəβ/, MW. *kyf-* /kəv/ in OW. *cimadas* /kəβaðas/ ‘appropriate’ (ModW. *cyfaddas*). The reduction of /u/ created new instances of it in such words as OW. *celell* /kəɬɬ/ ‘knife’ > MW. *kyllell* /kəɬɬ/ (< Latin *cultellus*). New schwa arose in such words as *dynion* /dənjon/ ‘men’ (singular *dyn* /dɨn/ ‘man’).

(2) Initial /s/-clusters /sp st sk/ develop a prothetic neutral vowel, schwa, as in MW. *yspeil* ‘plunder’, *ystauell* ‘room’ and *yscriennu* ‘write’. This schwa may subsequently become stressed as a result of the stress shift (as it does in *yspeil*). If schwa had developed after the accent shift, the shift would have left the stress on the final syllable in the affected words. This rule remains productive in the Middle Welsh period, and a prothetic schwa is added to loans into Middle Welsh if they begin with an affected consonant cluster.

(3) Old Welsh /ei eʊ/ become /ai aʔ/ in Modern Welsh in stressed monosyllables and in final syllables, that is, in syllables that were stressed before the shift. This is difficult to date, because Middle Welsh spelling is generally traditional and retains spellings with <ei eu> in both shifted and unshifted environments. Jackson (1953: 686–7), assuming phonetically gradual change, dates its beginnings to the late tenth or early eleventh century, with full lowering of the vowel to [ai aʊ] reached in the thirteenth to fourteenth centuries. This gives rise to alternations between /a/ and /e/ as the initial element of diphthongs according to stress, with /a/ occurring in final syllables, and /e/ elsewhere:

- | | | | |
|-----|------|---|---|
| (4) | /ai/ | /sain/ <i>sain</i> ‘sound’ | /seineg/ <i>seineg</i> ‘phonetics’ |
| | /aʔ/ | /haʔ/ <i>haul</i> ‘sun’ | /heʔlog/ <i>heulog</i> ‘sunny’ |
| | | /ken'hedlaʔθ/ <i>cenhedlaeth</i> ‘generation’ | /kened'leʔθol/ <i>cededlaethol</i> ‘national’ |

Two changes are sensitive to stress as it occurs in Modern Welsh, so postdate the accent shift:

(1) Loss of /h/ (or, viewed alternatively, voicing of the voiceless nasals /m^h n^h ŋ^h/ with accompanying loss of aspiration) occurs in all syllables except word-initially in monosyllables, and in the onset of the penultimate syllable. That is, /h/ is lost everywhere except at the beginning of a word and at the beginning of the stressed syllable. Thus we find loss of /h/ in *brenhin* > *brenin* ‘king’, where it is post-tonic, but in the plural *brenhinoedd* ‘kings’ it remains, because /h/ is at the start of the stressed syllable.

(2) Monophthongization of /au/ to /o/ (partly reversing the previous diphthongization, section 2.1.3) occurs in syllables that were post-tonic after the accent shift, that is, in the final syllable of polysyllabic words, such as *achaws* /'axaus/ > /'axos/ ‘cause’ or *parawt* /'paraud/ > /'parod/. This gives rise to alternations where the same morpheme appears in a monosyllabic word and in the final syllable of a polysyllabic word, for instance, *llaw* ‘hand’ : *dwyllo* (< *dwy* ‘two’ plus ‘hand’) ‘hands’. Merger of /au/ and /o/ in post-tonic syllables leads to the loss of contrast in the minimal pair *yscawl* /'əsgaul/ ‘ladder’ ≠ *yscol* /'əsgol/ ‘school’, both now *ysgol* /'əsgol/ (Morris-Jones 1913: 95). The interaction of the diphthongization of /ɔ:/ to /au/ and the monophthongization of /au/ to /o/ means that /au/ arises and survives only in syllables that were stressed both before and after the accent shift, that is, in stressed monosyllables. This is, disregarding certain cases where /au/ has been restored analogically or prescriptively, the modern distribution of /au/. Middle Welsh orthography does not normally indicate this change and represents the vowel as <aw> whether reduced or not, but sporadic examples of spellings with <o> do occur, for example, *diot* ‘drink’ (YSG 3115) for expected *diawt*. Jackson (1953: 298–9) dates the change to the late eleventh century on the basis of examples of spellings with <o> for earlier /au/ in the eleventh-century Book of Llandaff. However, Sims-Williams (1991: 63–71) has shown that the overall distribution of these spellings is consistent with them being archaisms (conservative spellings for earlier /ɔ:/) rather than early indications of innovation. The only secure evidence is relative chronology: since the conditioning environment requires nonfinal stress, this change must postdate the accent shift.

The date of the accent shift has been the subject of dispute. Jackson (1953: 687, 99) dates it to the eleventh century, coincidentally the same time as in Breton and Cornish.

Morris-Jones (1913: 48) thought it occurred in early Middle Welsh (twelfth to early thirteenth century). Conversely, Watkins (1972, 1976) considers it to have occurred much earlier than this, perhaps in the ninth century, this view being supported by McCone (1996: 20). Much depends on whether spellings with <o> in the late Old Welsh Book of Llandaff are archaisms, reflecting the language before /ɔ:/ > /au/, or innovations, early indications of /au/ > /o/. The latter would point to an earlier date for the accent shift, the former to a later date.

Watkins links other reductions to the accent shift. Reduction of /nt/ to /n/ occurs in Welsh word-finally in unaccented monosyllables (*kyn(t)* ‘before’, *gan(t)* ‘with’ and *san(t)* ‘saint’) and in final syllables of polysyllabic words (*dyffryn(t)* ‘valley’ and *arian(t)* ‘silver’), but not in stressed monosyllables. This suggests that it is conditioned by absence of stress after the accent shift. Examples of spellings without <t> occur in the ninth-century Juvenius poems. This supports an Old Welsh (ninth-century) date for the accent shift.

2.1.7 Vowel length

The new quantity system redistributed vowel length in a predictable way. However, a contrast in vowel length subsequently re-emerges in later stages of Welsh as the result of a number of independent changes that alter the conditioning environments for vowel length:

(i) the contrast between /nn/ and /n/ and /rr/ and /r/ is given up. This makes vowel length in monosyllabic words unpredictable, since both short and long vowels now occur before /n/ and /r/, for instance, [penn] > [pen] ‘head’ but [he:n] remains (Hamp 1956: 36);

(ii) loss of word-final /ʏ/ after a consonant (see section 2.2.5) creates new short vowels before single /r/ and /l/, for instance, *dal* /daly/ ‘hold’ > /dal/ but *tâl* /ta:l/ ‘payment’ remains;

(iii) contraction of two syllables creates new long vowels, for instance, MW. *kant* /ka:nt/ ‘they will get’ (< root /ka/ + ending /ant/) (contrast *kant* ‘he, she sang’ /kant/);

(iv) later loans, particularly from English, create further contrasts of the type in (i), for instance, *ton* /ton/ ‘wave’ (< /tonn/) : *tôn* /to:n/ ‘tone’ or *lon* /lon/ (< /lonn/) ‘happy (soft mutation)’ : *lôn* /lo:n/ ‘lane’.

Even after these changes, vowel length is in practice rarely contrastive.

Subsequent sound changes limited to northern varieties lengthen short vowels in monosyllables before /s/ plus a stop and before /ʃt/, for instance, *trist* /trist/ > /tri:st/ ‘sad’ or *swllt* /suʃt/ > /su:ʃt/ ‘shilling’. Before /ʃ/ in monosyllables, vowels are today short in northern varieties (*pell* /peʃ/ ‘far’ and *twill* /tuʃ/ ‘hole’), and variable in southern varieties (/pe:ʃ/ but /tuʃ/). Jackson (1953: 477) suggests that southern varieties have lengthened these vowels and therefore that Old and Middle Welsh had short vowels here, but the evidence is unclear.

2.1.8 Merger of /i/ and /u/

The vowel inventory of stressed syllables remained largely unchanged in Middle Welsh. The most significant development concerns the distinction between /i/ and /u/, which was lost in all contexts during Middle Welsh, the two merging as [ɨ]. Rounding survived longer in stressed syllables than in unstressed syllables. Evans (1964: 2) dates unrounding of /u/ in unstressed final syllables to the ‘late Middle Welsh period’, evidence for which comes from confusion of <u> and <y> from the fourteenth century onwards: <u> for historical /i/ in *euruchweith* ‘work of goldsmiths’ (KAA 66), *vy mrodur* ‘my brothers’ (YSG 2153); <y> for historical /u/ in *gyrry* ‘drive’ (KAA 562).

In monosyllables before /x/, rounding was retained as an off-glide written <w>, so spellings such as *ywch* /iwx/ (*FfBO* 32.2) (earlier *uch*) ‘higher’ indicate that /ɰ/ had merged with /i/ (Hamp 1966). This creates the modern alternation between /i+w/ in stressed monosyllables versus /i/ elsewhere, for instance, *uwch* ‘higher’ and *buwch* ‘cow’, but *uchel* ‘high’ and *buchod* ‘cows’.

2.1.9 Epenthetic schwa

Epenthetic schwa develops in Old and Middle Welsh between two consonants in word-final position in the sequences:

- (1) consonant + /r l n/ (MW. *pobyl* ‘people’)
- (2) /rm rv lm lv/ (*baryf* ‘beard’)
- (3) /ðv/ (*dedyf* ‘law’)

This epenthetic schwa is treated as nonsyllabic in Middle Welsh poetry, although it evidently was syllabic in speech. In some cases the epenthetic vowel assimilates to the vowel in the previous syllable.

2.2 Consonants

2.2.1 Inventory of consonant phonemes

The consonant phonemes of Old and Middle Welsh are given in Table 1. The following points should be noted with respect to the consonantal phoneme inventory:

(1) The Old and Middle Welsh labial fricatives were probably bilabial [ɸ β], in contrast to Modern Welsh, where they are labiodental [f v] (Evans 1964: 9, Morris-Jones 1913: 22). Evidence for this conclusion comes from words with alternations between spellings suggesting [w] and spellings suggesting [v] or [β], for instance, MW. *kywoeth* ‘wealth’ with [w] and *kyfoeth* / *kyuoeth* with [v] or [β] or MW. *diw Ieu* ‘Thursday’ as against *Difyeu*. In some words, there is variation in modern dialects between [w] and [v], for instance, *cawod* (southern) or *cafod* (northern) ‘shower’. This variation is easier to account for assuming earlier variation between [w] and [β] than between [w] and [v]. Middle Welsh /β/ normally arises from lenition of earlier /m/ or /b/, hence the simplest historical development would give rise to a bilabial rather than a labiodental fricative. Adjacent to /u/ and occasionally /ɰ/, the voiced labial fricative sometimes drops in Middle Welsh, as in *dwr* for *dwfyr* ‘water’, *Annwn* for *Annwryn* ‘Annwfn, the Celtic underworld’ or *daru* for *daruu* ‘happen (third person sg. past)’. This development would be more easily motivated if the sequence in question were [uβ] and [βɰ] respectively rather than [uv] and [vɰ]. However, the more familiar symbols /f/ and /v/ will be used where the place of articulation is not at issue.

(2) The soft mutation of /m/ is reckoned initially to have been a nasalized voiced labial fricative (probably bilabial) /β̃/. In Old Welsh, the outcome of soft mutation of /m/ is written <m> and distinguished from the outcome of soft mutation of /b/, written . This suggests that /β̃/ remained distinct from /β/ until around 1100, when nasality was lost and both merged as [β] (later [v]). In placenames borrowed into English, /β̃/ always appears as /m/ until the seventh century (*Thames*), from which time both /m/ (*Tamar*, *Frome*) and /β ~ v/ (*Devon*) are found. Jackson (1953: 480–95) interpreted this as meaning that /β̃/ was strongly nasalised before this time, but weakly nasalised thereafter. Another possibility is that nasalization was optional, as in present-day Breton, from that time.

	stop	nasal	fricative	continuant
labial	p b	m m ^h	ϕ β (β̃)	w
dental	t d	n n ^h	θ ð	
alveolar			s	ʃ l r ^h r
postalveolar			ʃ	j
velar	k g (g ^w)	ŋ ŋ ^h	x (ɣ) h	

Table 1. Old and Middle Welsh consonant phonemes.

(3) The consonants /g^w/, /r^h/ and /m^h n^h ŋ^h/, although phonetically sequences of two sounds as in Modern Welsh, often function as single units in the phonological system.

(4) The fricative /ʃ/ is a Middle Welsh innovation, from loanwords such as *siaced* ‘jacket’, *siambr* ‘chamber’ or *siarad* ‘speak’, and later also from the change of /s/ to /ʃ/ before /i/ in some varieties.

(5) Old Welsh had a voiced velar fricative /ɣ/ which was lost by the start of Middle Welsh. It is indicated in some environments in Old Welsh orthography as <g>, for instance, in word-final position after /i/ in *Gelhig* /geɬiɣ/ ‘Gelli (personal name)’ and in *guetig* /gwediɣ/ or *guotig* /gwodiɣ/ ‘after(wards)’ (ModW. *wedi*). It was lost in all contexts over an extended period from the sixth to the ninth century (Jackson 1953: 469–70).

2.2.2 Initial-consonant mutations

Like Modern Welsh, Old and Middle Welsh had a system of initial-consonant mutations, according to which the initial segment of a word, if one of nine mutable consonants, changed in certain morphosyntactic environments. At one time, these changes were phonologically conditioned, a consonant undergoing a change if the preceding word ending in a vowel, a nasal or /s/ or /k/. At word boundaries, the conditioning environments were lost, in many cases with the loss of final syllables. The phonological changes remained, however, and were reinterpreted as having lexical or grammatical triggers, appearing after certain items (prepositions, numeral, pronominal proclitics) or in certain grammatical environments (associated for instance with gender or with various subject or object positions).

Although there are significant historical differences in the morphosyntactic environments in which the mutations are found (see section 4.4 below), the phonological changes that instantiate the mutations are largely the same at all periods. There are three mutations, soft, aspirate and nasal:

(a) under soft mutation:

voiceless stops shift to voiced stops (/p t k/ > /b d g/), for instance, MW. *penn* > *benn* ‘head’, *ty* > *dy* ‘house’, *cath* > *gath* ‘cat’;

voiced stops shift to fricatives (/b d g/ > OW. /β ð ɣ/, MW. /β ð/ and zero), for instance, MW. *bed* /be:ð/ > *ved* /βe:ð/ ‘grave’, *da* /da/ > *da* /ða:/ ‘good’, *glas* > OW. *glas* /ɣla:s/, MW. *las* /la:s/ ‘blue’;

/m/ shifts to a nasalized voiced bilabial fricative /β̃/, which later merges with /β/ (ModW. /v/), for instance, MW. *mab* /ma:b/ > OW. *mab* /β̃a:b/, MW. *vab* /βa:b/ ‘son’;

/ɬ/ shifts to /l/, for instance, MW. *llad* > *lad* ‘kill’;

/r^h/ shifts to /r/, for instance, MW. *rann* /r^hann/ > *rann* /rann/ ‘part’;

(b) aspirate mutation shifts voiceless stops to fricatives (/p t k/ > /ϕ θ x/), for instance, *penn* > *phenn* /ϕenn/ ‘head’ (ModW. /fen/), *ty* > *thy* ‘house’, *cath* > *chath* ‘cat’;

(c) nasal mutation shifts voiceless and voiced stops to the corresponding nasals (/p t k/ > /m^h n^h ŋ^h/ and /b d g/ > /m n ŋ/), for instance, MW. *penn* /penn/ > *uym penn* /və'm^henn/ ‘my head’, *teulu* /teulu/ > *uyn teulu* /və'n^heulu/ ‘my family’, *korf* /korϕ/ > *uyg korf* /və'ŋ^horϕ/ ‘my body’, *brawt* /braud/ > *uym brawt* /və'mraud/ ‘my brother’, *diua* /di:βa/ > *uyn diua* /və'ni:βa/ ‘(to) destroy me’, *gallu* /gaflu/ > *uyg gallu* /və'ŋaflu/ ‘my ability’.

The most significant difference between Old and Middle Welsh is that the result of soft mutation of /g/ is /ɣ/ in Old Welsh, whereas /g/ disappears under soft mutation in both Middle and Modern Welsh. In Old Welsh, the soft mutations of /m/ and /b/ were probably kept distinct as /β̃/ and /β/ respectively. In Middle Welsh, the outcome of mutation was the same for both /m/ and /b/, namely /β/ (corresponding to ModW. /v/).

Mutation caused problems for Old and Middle Welsh orthography. Soft mutation of /d/ and /r^h/ is never marked; soft mutation of other consonants is marked inconsistently. Nasal mutation is marked using several different systems (Watkins 1965, 1968).

Phonetically, the sound changes leading to soft and aspirate mutation are lenitions, that is, weakening of articulation. These lenitions are of one of two types: either changes involving relaxation of the vocal folds (voicing) or changes involving weakening of the manner of articulation from stop to fricative (spirantization). The sound changes leading to nasal mutation are assimilations of stops to preceding nasal consonants.

2.2.2.1 Soft mutation

Soft mutation is the result of lenition of stops in intervocalic position and before /r/ or /l/. In these contexts, Brythonic voiceless stops became voiced stops (intervocalic voicing) and voiced stops and /m/ became fricatives (voiced spirantization) in all varieties of late Brythonic. Latin loanwords into Brythonic are treated the same as native vocabulary. These changes occurred both in word-internal position and across word boundaries:

word-internally:

Latin *catēna* > ModW. *cadwyn* ‘chain’ ([t] > [d] intervocalically);

Latin *vitrum* > *gwydr* ‘glass’ ([t] > [d] before [r]);

Latin *fides* > *ffydd* ‘faith’ ([d] > [ð] intervocalically);

Brythonic **gabros* > *gafr* ([b] > [v] before [r]).

across word-boundaries:

Brythonic **tekos* > ModW. /te:g/ *teg* ‘fair’, but, after a feminine noun, **tabarnā tekā* > /tavarn de:g/ *tafarn deg* ‘fair tavern’;

Brythonic **mammā* > /mam/ *mam* ‘mother’, but, after **esjo* ‘his’, **esjo mammā* > /i vam/ *ei fam* ‘his mother’.

In general, the conditioning environment for soft mutation in word-initial position disappeared with the loss of final syllables in late Brythonic (mid sixth century). The phonological alternations associated with these sound changes were retained and reinterpreted as part of the grammatical system. Hence, for instance, soft mutation originally triggered by the vocalic ending of a feminine adjective became established as a grammatical feature of an adjective after a feminine noun. Reorganization of the morphosyntactic environments for soft mutation continues throughout the history of Welsh, soft mutation spreading analogically to environments that were not originally intervocalic or disappearing from environments that were originally intervocalic. On the syntax of soft mutation, see section 4.4.

2.2.2.2 Aspirate mutation

Aspirate mutation arose as the result of sound changes that turned voiceless stops into fricatives (voiceless spirantization) in the following environments:

(1) voiceless geminates > fricatives, for instance, Latin *cloppus* > ModW. /klo:f/ *cloff* ‘lame’, Brythonic *kattos > /ka:θ/ *cath* ‘cat’, *brokkos > /bro:x/ *broch* ‘badger’;

(2) voiceless stops after /r l/ became fricatives, for instance, Latin *purpura* > ModW. /porfor/ *porffor* ‘purple’, Brythonic *artos > /arθ/ *arth* ‘bear’, Latin *calcem* > /kalx/ *calch* ‘lime’ (this change also affects voiced stops, for instance, Brythonic *bardos > /barð/ *bardd* ‘poet’);

(3) voiceless stops after word-final /s k x/ became fricatives, via the following developments:

/-s p/	>	[-h p]	>	[pp]	>	[ϕ]	>	/f/
/-s t/	>	[-h t]	>	[tt]	>	/θ/		
/-s k/	>	[-h k]	>	[kk]	>	/x/		

In certain environments where a preceding word ended in /s k x/, this last change gave rise to aspirate mutation, for instance:

Brythonic *esjās tegos > ModW. /i θi/ *ei thŷ* ‘her house’ (*tŷ* ‘house’) via the change /-s t/ > /θ/;

Brythonic *sweks tabarnās > MW. /xwe θavarn/ *chwe thafarn* ‘six taverns’ (*tafarn* ‘tavern’) via the change /-s t/ > /θ/;

Brythonic *ak tortā > ModW. /a θorθ/ *a thorth* ‘and a loaf’ (*torth* ‘loaf’) via the change /-k t/ > /θ/.

The original triggering consonant disappeared in the sound change, and the alternation between /p t k/ and /f θ x/ became morphosyntactic, triggered by a range of lexical items including *ei* ‘her’, *chwe* ‘six’ and *a(c)* ‘and’. Aspirate mutation fails to arise in some contexts with a preceding */s/ in Brythonic, for instance, an adjective after a masculine noun does not undergo aspirate mutation: *eskopos tekos > ModW. /esgob te:g/ *esgob teg* ‘fair bishop’ not **/esgob θe:g/ (Isaac 2004: 65–6, Thomas 1990). This is probably because, unlike changes leading to soft mutation, the change leading to aspirate mutation occurs only within a phonological word, between a clitic and a free form, but not between two stressbearing words (Koch 1989: 126–8).

2.2.2.3 Nasal mutation

Nasal mutation arises by sound changes which assimilate stops to a preceding nasal, which itself coalesces with the following word (nasal assimilation). This occurred both word-internally and between proclitics and their hosts and between numerals and their nouns. For instance, in word-internal position, we find *windos > MW. *gwynn* ‘white’ and *santeros > *hanner* ‘half’. After the negative suffix *an-*, we find *an-* + *tec* > *anhec* ‘unfair’ and *an-* + *doeth* > *anoeth* ‘unwise’. With a proclitic, we find Brythonic *men tegos > ModW. *fy nhŷ* ‘my house’ with nasal mutation of *tŷ*.

There were two separate nasal assimilations, and this has an effect on the distribution of nasal mutation. Assimilation of voiced stops to a preceding nasal (/mb nd ŋg/ > /m(m) n(n) ŋ(ŋ)/) occurred earlier than assimilation of voiceless stops to a preceding nasal (/mp nt nk/ > /m^h n^h ŋ^h/). Jackson dated the former to the late fifth century, the latter to the eighth or early ninth century. Evidence comes from items that trigger nasal mutation only with a following voiced (not voiceless) stop. Proclitics, such as *fy(n)* ‘my’ and *yn* ‘in’, were not affected by loss

of final syllables and hence ended in /n/ throughout this time. Stress-bearing numerals, such as *sextan ‘seven’, *nawan ‘nine’ and *decan ‘ten’, however, lost their final syllable, hence ended in /n/ when voiced nasalization arose but not when voiceless nasalization arose. Therefore, in Middle Welsh, only a restricted group of nouns, all beginning with a voiced stop, undergo mutation after these numerals: *seith mu* ‘seven cattle’ < *bu* ‘cattle’, *seith nyn* ‘seven men’ < *dyn* ‘man’.

2.2.2.4 Relative ordering of the sound changes leading to mutation

These lenitions are largely common to all Brythonic languages. Since soft mutation is triggered by vowels in final syllables that were lost in Brythonic, voicing and voiced spirantization must precede the loss of final syllables that served to integrate them into the grammatical system. Latin loans into Brythonic from the Roman period all undergo these lenitions, both word-internally and across word boundaries, for instance, Latin *medicus* with intervocalic [d] > Welsh *meddyg* ‘doctor’ with [ð]. Early loans from Brythonic and British Latin into Irish are subject to Irish lenition ([t] > [θ] etc.) but not Brythonic lenition. For instance, British Latin *Patricius* ‘Patrick’ appears in early Irish as *Cothriche* and Latin *puteus* (> Welsh *pydew*) gives Old Irish *cuithe* ‘pit’ [kuθ¹ə], both manifesting Irish lenition of [t] > [θ], but not British lenition of [t] to [d]. These facts suggest that intervocalic voicing occurred after the end of the Roman administration and after the period of the earliest loans into Irish. Soft mutation appears to have been initially uniform across all the Brythonic languages, whereas the distribution of aspirate mutation was partially different in Welsh as against Breton and Cornish from the start: aspirate mutation occurs after *ma* ‘my’ in Breton, but nasal mutation developed in this context in Welsh. Nasal mutation is unique to Welsh. This all suggests that soft mutation arose first, with aspirate and nasal mutation arising later.

The traditional view of the development of aspirate mutation (Isaac 2004, Jackson 1953, 1960, Koch 1989) is that above: voiceless fricatives arise from former geminate voiceless stops; aspirate mutation arises when the final element of a proclitic (typically one ending in /s/ or /k/) weakened and coalesced with the initial voiceless stop of a following word to form a new geminate voiceless stop, which then underwent voiceless spirantization like an original geminate. Greene (1956, 1966) rejected this, arguing that, after the voicing of intervocalic voiceless stops, the distinction between the remaining voiceless single stops and the voiceless geminates was lost, the two filling what he saw as a typological gap in the phonological system, the slot for single voiceless stops. This amounts to degemination of the geminate member of the opposition, hence, for instance, *brokkos > *brokos ‘badger’ and *kattos > *katos ‘cat’. These remaining voiceless stops underwent another weakening, again in intervocalic position. There were two main ways in which stops could escape early intervocalic voicing but nevertheless be subject to voiceless spirantization:

(i) intervocalic voicing had not affected geminates, hence former geminates remained voiceless stops and were now subject to the change, hence *littera > *litera > MW. *llyther* /ɫəθer/ ‘letter’;

(ii) after certain proclitics that, after the loss of final syllables, ended in a vowel, voiceless stops now found themselves in intervocalic position, for instance, *esjās kattos > *i kat > MW. *y chath* /i xa:θ/ ‘her cat’.

Jackson and Greene agreed that voiceless spirantization followed the loss of final syllables. However, for Jackson, proclitics ending in /s/, /k/ etc. created new geminates before the loss of final syllables (and hence the changes were sensitive to consonants subsequently lost). These new geminates then underwent voiceless spirantization after the loss of final syllables. For Greene, all the relevant changes postdate the loss of final syllables.

Jackson (1960) noted a problem for Greene's approach. After loss of final syllables, many former geminates, having degeminated to single voiceless stops, find themselves in word-final position. They undergo voiceless spirantization, but it is unclear why this should be, since they are not intervocalic. It is also unclear what differentiates them from voiceless stops in absolute initial position, which do not undergo voiceless spirantization unless they are preceded by an appropriate proclitic. Hence, Greene needs the development *kattos > *katos > *kat > kaθ (MW. *cath* 'cat'); however, the final /t/ is not intervocalic, so the development of *kat > *kaθ is unmotivated. If some measure were introduced to enable this [t] to undergo voiceless spirantization, it is unclear why that measure would not apply also to the initial stop, yielding the unwanted form **xaθ. Essentially, the problem here is that voiceless spirantization must apply before loss of final syllables to allow the former geminate to undergo it, but it is only the loss of final syllables that creates new proclitics ending in a vowel. This contradiction cannot be resolved.

Thomas (1990) proposes an account in the spirit of Greene's work, agreeing with Greene that voiceless stops were protected from intervocalic voicing either by being geminate or by following /r/ or /l/. However, he suggests that voiceless spirantization preceded loss of final syllables, occurring in contexts where new instances of single stops in intervocalic position had arisen. For standard cases of aspirate mutation, he proposes that loss of word-final /s/ or /k/ created new instances of intervocalic stops. Hence, he would propose the development *esjās kattos > *ejā katto (loss of /s/) > *ejā kato (degemination) > *ejā xaθo (voiceless spirantization) > MW. *y chath* /i xa:θ/ (loss of final syllables) 'her cat'.

These proposals are summarized in Table 2 (for fuller discussion, see Ball and Müller 1992, Greene 1956, 1966, Harvey 1984, Isaac 2004, Jackson 1960, Koch 1989, 1990, Russell 1985, Thomas 1990).

Jackson	Greene	Thomas
intervocalic voicing voiced spirantization (simultaneous)	voiced spirantization intervocalic voicing	voiced spirantization intervocalic voicing
new geminates (-s t- > -h t- > tt, -k t- > tt etc.)	degemination	loss of final /s/ and /k/ degemination
loss of final syllables	loss of final syllables	voiceless spirantization (t > θ etc. in word-internal position)
voiceless spirantization (tt > θ etc.)	voiceless spirantization (t > θ etc. between vowels and after /r/ or /l/)	loss of final syllables

Table 2. Accounts of the sound changes leading to the development of soft and aspirate mutation in Welsh.

2.2.3 Provection

When a sequence of two obstruents comes together, either through loss of a vowel or through new derivation (typically compounding), the sequence is subject to some changes. With two stops, there is devoicing, either of the entire cluster (sometimes reversing soft mutation), or of the first element, for instance, *lled* 'half' + *tŷ* 'house' > *llety* 'lodging' or *wyneb* 'face' + *pryd* 'appearance' > *wynepryd* 'countenance', *dig* 'angry' + *-der* > *dicter* 'anger', *pob* 'every' +

peth ‘thing’ > *popeth* ‘everything’. These changes began to be active in late Brythonic and remain productive in Middle Welsh, in some cases even across word boundaries.

In clusters before an /h/, a voiced obstruent devoices, for instance, /drug/ ‘bad’ + /hin/ ‘weather’ > *drycin* /drəkin/ ‘bad weather’, /duvr/ ‘water’ + /hɪnt/ ‘course’ > *dyffryn(t)* /dɛfrɪn(t)/ ‘valley’. This devoicing before /h/ occurs regularly in the equative and superlative forms of adjectives and in the subjunctive (see sections 3.3 and 3.4 below).

2.2.4 Loss of word-final voiced fricatives

In word-final position, the two voiced fricatives /v ð/ are subject to loss. The date of the loss varies enormously according to phonetic context and from word to word. In some contexts, loss of /v/ dates to the Old Welsh period and is universal in Middle Welsh: in monosyllables after /u/ (*du* ‘black’, *cu* ‘dear’), in monosyllables after /au/ (*llaw* ‘hand’, *daw* ‘son-in-law’) and in polysyllables after /u/ (for instance, in the third-person plural preposition ending *-uf* /uʋ/. In the verbnoun ending *-if*, final /v/ is attested in Old Welsh, but not in Middle Welsh (OW. *erchim* /erxiv/ ‘ask’ > *erchi*, OW. *molim* /moliv/ ‘praise’ > *moli* ‘praise’) (Jackson 1953: 417, 697).

Loss of word-final /ð/ also goes back to Old Welsh, for instance, *triti* /trədɪ/ ‘third’ (Comp.) corresponding to ModW. *trydydd* /trədɪð/ and *issi* /əsɪ/ ‘is (relative)’ corresponding to ModW. *sy(dd)* /sɪ:/ or /sɪ:ð/. Loss is earliest after high unrounded vowels. In the ending of the second-person singular of the present tense *-yd* /ɪð/, loss of /ð/ is fixed early on, giving the normal Middle Welsh form of the ending *-y* /ɪ/. Forms without indication of /ð/ are found sporadically throughout Middle Welsh, for instance, *eiste* /eiste/ ‘sit’ (*O* 73, 78; *PKM* 10.20, 11.19) corresponding to modern *eistedd* /eisteð/. Variability remains in many of these items to this day. Loss of /ð/ in other positions is also found; for instance, OW. *di* ‘to’ /ði/ develops into MW. *y* /i/ with loss of /ð/ in initial position.

New epenthetic /ð/ develops between two high vowels in southern varieties in the latter half of the Middle Welsh, as in the fourteenth-century example *ydy vrawt* ‘to his brother’ (Hafod 1, 2b, Thomas 1950–2002).

2.2.5 Development of word-final glides

Brythonic word-final /g/ after /r/ and /l/ becomes /x/ in Old Welsh, for instance, Brythonic *selg- ‘hunt’ appears in Old Welsh in *helcha* ‘hunting’. This /x/ became a glide in Middle Welsh, perhaps first [j], then what is usually described as nonsyllabic schwa [ə̯]. In word-final position, this glide either vocalizes to /a/ or is deleted; for instance, *daly* /dalə̯/ ‘hold’ becomes *dala* /dala/ or *dal* /dal/; *hely* /helə̯/ ‘hunt’ becomes *hela* /hela/ or *hel* /hel/; *eiry* /eirə̯/ ‘snow’ becomes *eira* /eira/. Where the vowel in the previous syllable is /u/, the new vowel assimilates to it, yielding /u/ rather /a/, as in *bwry* /burə̯/ ‘throw’ > *bwrw* /buru/. A glide /j/ is retained in inflected forms of these words, for instance, MW. *dalyei* ‘held (third person sg. impf.)’ or *bwryei* ‘threw (third person sg. impf.)’. Vocalization to /a/ belongs to the Middle Welsh period as witnessed by spellings with <a>, for instance, *hela* ‘hunt’ (*PKM* 1.4, 1.5, 1.10), *dala* ‘hold’ (*PKM* 19.19, 58.17, 60.16). More conservative spellings with <y> are common, perhaps reflecting dialect differences rather than mere orthographic conservatism. Spellings suggesting deletion (rather than vocalization) of the final glide are also attested. Middle Welsh poetry almost always treats the glide as nonsyllabic, words such as *daly* and *hely* counting as monosyllabic.

Word-final /w/ vocalizes in monosyllabic words, for instance *cadw* /kadw/ ‘keep’ > *cadw* /kadu/ and *enw* /enw/ ‘name’ > *enw* /enu/. In polysyllabic words, word-final /w/ is lost, for instance, MW. *keuynderw* /kevnderw/ ‘cousin’ > ModW. *cefnder* /kevnder/. Sometimes word-final /w/ is eliminated by metathesis, for instance *gwarchadw* ‘guard (v.)’ > *gwarchawd*

> *gwarchod* (sixteenth century). Morris-Jones dates vocalization of /w/ to /u/ to the fifteenth century (Morris-Jones 1913: 53). Loss of final /w/ in polysyllables is also attested from then.

2.2.6 /xw/ > /hw/

The development of word-initial /xw/ to /hw/ is attested in Middle Welsh, being characteristic of southern texts. Spellings with <chw>, <hw> and <wh> are widely distributed in Middle Welsh texts and are usually interpreted as indicating variability within the language. Forms in /w/ are found today in southern dialects, and it is reasonable to suppose that this is a development from the /hw/ type. Spellings such as <chw> are characteristic of northern Middle Welsh, while spellings with <hw> or <wh> are characteristic of southern texts.

3 MORPHOLOGY

3.1 Nominal morphology

As in Modern Welsh, nouns in Old and Middle Welsh inflect for number but not for case. A full paradigm of five cases (nominative, accusative, genitive, dative and vocative) can be reconstructed for Brythonic. The loss of final syllables would have weakened this system considerably, erasing most case endings. Traditionally it was assumed that loss of final syllables was sufficient to eliminate all case morphology. More recently, a number of linguists have noted loss of final syllables would not have eliminated the case system entirely: distinctions would have survived in the form of vowel alternations, initial consonant mutations and, in some cases, distinct endings. Hence a certain amount of analogical loss of case endings must be posited to reach the attested caseless system of Old and Middle Welsh (Greene 1971, Hamp 1975–6, Koch 1983). Koch has gone so far as to suggest that significant attrition of the case system had already begun before the loss of final syllables.

A few vestiges of the former case system survive. The Old Welsh form *nym* /nɪβ̥/ in *gwas nym* ‘abode of heaven’ (CA 233) is an isolated example, *nym* being a plausible genitive of *nef* /neβ̥/ ‘heaven’. Fossilized case endings remain in such other words as ModW. *erbyn* ‘against’ (*pen* ‘head’), *yfory* ‘tomorrow’ (*bore* ‘morning’), *y llynedd* ‘last year’ and *eleni* ‘this year’ (*blwyddyn* ‘year’), and MW. *bry* ‘up’ and *obry* ‘down’ (*bre* ‘hill’). They are also found in some place names, for instance, *Caerdydd* ‘Cardiff’ < MW. *Kaer Dyf*, with *kaer* ‘fortress’ plus *Tyf*, genitive of *Taf* ‘River Taff’ (Koch 1983: 227).

Plural morphology, on the other hand, is fully productive. As in Modern Welsh, the two major devices for forming plurals involve vowel alternation or the addition of one of various plural suffixes. The vowel alternations are essentially the same as those found in Modern Welsh:

- (5) /a/ > /ei/ *bard* ~ *beird* ‘poets’ (rarely /a/ > /i/)
 /e/ > /i/ *Gwydel* ~ *Gwydyl* ‘Irishmen’
 /o/ > /i/ *corn* ~ *cyrn* ‘horns’, *unben* ~ *unbyn* ‘chieftains’
 /u/ > /i/ *bwlch* ~ *bylch* ‘gaps’ (alongside *bylcheu*)
 /aɪ/ > /ei/ *baed* ~ *beid* ‘boars’
 /oɪ/ > /uɪ/ *croen* ~ *crwyn* ‘skins, hides’

More complex patterns arise in nouns containing sequences of these vowels, for instance, *dafat* ~ *defeit* ‘sheep’ with /a ... a/ > /e ... ei/ or *askell* ~ *eskyll* ‘wings’ with /a ... e/ > /e ... i/. These vowel alternations arise because the most frequent class of Brythonic nouns (o-stems) formed their plural in /i:/, which triggered i-affection of the root vowel in the plural, before

itself being lost with the loss of final syllables. Hence singular *bardos > /barð/ but plural *bardī > /beirð/. The singular therefore generally shows the original root vowel.

The main plural suffixes are the following:

- (6)
- | | |
|------------|--|
| -ed /eð/ | <i>bys</i> ~ <i>byssed</i> ‘fingers’ |
| -(y)eint | <i>ney</i> ~ <i>neyeint</i> ‘nephews’ |
| -(y)eit | <i>mackwy(f)</i> ~ <i>mackwy(f)eit</i> ‘squires’ |
| -et /ed/ | <i>merch</i> ~ <i>merchet</i> ‘girls, daughters’ |
| -(y)eu | <i>clust</i> ~ <i>clust(y)eu</i> ‘ears’ |
| -i | <i>arglwyd</i> ~ <i>arglwydi</i> ‘lords’ |
| -oed /o+ð/ | <i>llu</i> ~ <i>lluoed</i> ‘forces, hordes’ |
| -(y)on | <i>arwyd</i> ~ <i>arwyd(y)on</i> ‘signs’ |
| -ot /od/ | <i>llew</i> ~ <i>llewot</i> ‘lions’ |
| -yd /+ð/ | <i>kors</i> ~ <i>korsyd</i> ‘marshes’ |

These endings are the remains of former noun-class suffixes added outside the nominative singular in Brythonic, for instance, Brythonic *katus ‘battle’ (u-stem) > MW. *kat* /kad/ in the singular, whereas plural *katowes > *kateu* /kadeu/ ‘battles’; cf. also *lukos ‘mouse’ (t-stem) > MW. *llyg*, plural *lukotes > *llygot* ‘mice’.

The variation between endings with -y- /j/ and those without is partially lexical and partially dialectally determined, the forms with /j/ being more characteristic of northern texts for some items (Russell 1990, Thomas 1992, 1993, Willis 2005). This variation extends also to other derivational suffixes and even to some non-suffixed items.

Addition of these endings may result in vowel alternations. These may be triggered historically in any of the following ways (Evans 1964: 29–31, Morris-Jones 1913: 210–13):

(i) by internal i-affection of the stem vowel in the plural, triggered by the /j/ in the ending. This occurs (inconsistently, perhaps only with inherited noun–ending combinations) with the endings -y, (y)on, -yd and -(y)eit, for instance, *mab* ~ *meibyon* ‘sons’, *maes* ~ *meysyd* ‘fields’ and *penkerd* ~ *penkeirdyeit* ‘chief poets’;

(ii) by sound changes linked to a shift in the stressed syllable, for instance, *pwnn* /u/ ~ *pynnau* /ə/ ‘loads, burdens’ or *llawr* ~ *lloryeu* ‘floors’;

(iii) by i-affection of the stem vowel in the singular, but not in the plural, triggered by an original singular ending containing an /i:/. For instance, singular *natrī > ModW. *neidr* /neidr/ ‘snake’ but plural *natrijās > *nadrejās (voicing and a-affection) > *nadredd* /nadreð/ ‘snakes’. Most commonly, this leads to an alternation between singular /ei/ and plural /a/ when an ending is added, for instance, *adein* ~ *adaned* ‘wings’ or *lleidr* ~ *lladron* ‘thieves’.

A few nouns have singulars derived from monomorphemic plural forms by adding the singulative suffix -yn (masculine) or -en (feminine), for instance, *adar* ‘birds’ ~ *aderyn* ‘bird’, *syr* ‘stars’ ~ *seren* ‘star’.

The distribution of the endings does not reflect the inherited system: the ending -(y)eu, in particular, spread analogically to many nouns that did not originally use it. In many cases, the Brythonic singular and plural forms would have fallen together, obliterating any morphological distinction between singular and plural. In these cases, there is always analogical extension of some other pattern. Hence, Latin *medicus* ~ *medicī* would be expected to give the form *medyg* /meðig/ in both singular and plural in Middle Welsh. However, the -on suffix was extended to it to create a new distinct plural form *medygon*.

The distribution of the suffixes is essentially arbitrary, and some nouns shift from one suffix to another or are variable. For instance, contrast MW. *dinessyd* (also *dinassoed*) ‘cities’,

eglwysseu ‘churches’ and *gwlatod* ‘countries’ with ModW. *dinasoedd*, *eglwysi* and *gwledydd*. The ending *-od* has tended to generalize for nouns denoting animals, for instance, Middle Welsh predominantly has *baed* ~ *beid* ‘boars’, *bwch* ~ *bychau* ‘bucks’, *kath* ~ *katheu* ‘cats’ and *iwrch* ~ *yrch* or *ieirch* ‘roedeer’, but Modern Welsh has *baeddod*, *bychod*, *cathod* and *yrchod*. Vowel alternation has been lost more frequently than it has spread. A number of plural forms with vowel alternations only in Middle Welsh have since died out, for instance, *cloch* ~ *clych* ‘bells’ (now *clychau* or *clochau*), *croes* ~ *crwys* ‘crosses’ (now *croesau*), *esgob* ~ *esgyb* ‘bishops’ (now *esgobion*), *maen* ~ *mein* ‘stones’ (now *meini*), *paladr* ~ *peleidr* ‘spear, ray’ (now *peledrau*), *pont* ~ *pynt* ‘bridges’ (now *pontydd*) and *sant* ~ *seint* ‘saints’ (now *seintiau*).

Certain plural suffixes attested in Old Welsh or in Middle Welsh poetry have died out. Among these are *-awr* (*bydinawr* ‘armies’, ModW. *byddinoedd*; *llavnawr* ‘blades’, ModW. *llafnau*) and *-ein* (*enuein* (MC) ‘names’, ModW. *enwau*; *cemmein* (Ox. 1) ‘steps’, ModW. *camau*). The ending *-ed* /eð/ has been replaced by *-oedd* /oïð/ in many cases, for instance, MW. *brenhined* ‘kings’, *tired* ‘lands’ and *ynyssed* ‘islands’, as against ModW. *brenhinoedd*, *tiroedd* and *ynysoedd*.

Where a new analogical plural arose, it was not extended to use after numerals. This led to the creation of patterns with a singular after a numeral but a new analogical plural in other contexts, for instance, *dyn* ‘person’, *dynion* ‘people’ (new analogical plural) but *tri dyn* ‘three people’, with the regular development of the former plural, now homophonous with the singular. This pattern was generalized as the norm by the time of Old and Middle Welsh, so that, in general, nouns appear in the singular after numerals.

With a few nouns, an inherited plural distinct from the singular was retained, but used only after numerals, an analogically reformed plural being found in other contexts. This is the case with *mab* ‘son’, where the inherited plural *meib* (< */mapi:/) is used after numerals, whereas a newly formed suffixed plural *meibyon* is found elsewhere. Matters are complicated by the former existence of a dual as well as a plural, limiting use of certain former plural forms after ‘two’.

This results in a subsystem with a small group of nouns, mainly denoting family relations or animals, that have special forms for use after certain numerals. The patterns are regular until the collapse of the system in the sixteenth century. Four patterns are found, varying according to whether the numerative form is the same as the ordinary plural or different, and whether the numerative form is used after ‘two’ or not. Typical examples are given in Table 3.

Old and Middle retain two genders, masculine and feminine. A number of nouns have shifted gender since Middle Welsh. A shift from masculine in Middle Welsh to feminine in Modern Welsh occurs with *braich* ‘arm’, *chwedl* ‘tale, story’, *damwain* ‘case, incident’, *dinas* ‘city’ and *grudd* ‘cheek’. The reverse shift is found with *gwirionedd* ‘truth’, *rhyddid* ‘freedom’, *person* ‘person’, *llyn* ‘lake’ and *llys* ‘court’.

class	singular	numerative form used after ‘two’?	numerative form distinct from plural?	after (m.) <i>dwy</i> ‘two’	<i>dau</i> or (f.) numerals	plural	gloss
I	brawt	+	+	broder	broder	brodyr	‘brother’
II	merch	+	–	merchet	merchet	merchet	‘girl’
III	mab	–	+	mab	meib	meibyon	‘son’
IV	gwr	–	–	gwr	gwyr	gwyr	‘man’

Table 3. Forms of nouns after numerals in Middle Welsh.

	independent	dependent		
		accusative (object)	genitive (possessive)	affixed
first sing.	mi	'm	vy ^N ('m)	i (ui after /v/)
second sing.	ti	'th ^S	dy ^S ('th ^S)	di (ti after /t/)
third sing. masc.	ef	'e (h-), -s	y ^S ('e ^S)	ef
third sing. fem.	hi	'e (h-), -s	y ^A ('e ^A)	hi
first plur.	ni	'n	yn ('n)	ni
second plur.	chwi	'ch	y ^S ch ('ch)	chwi
third plur.	wy(nt)	'e, -s	eu ('e)	wy(nt)

Table 4. Main personal pronouns in Middle Welsh (soft mutation triggers marked as ^S; aspirate mutation triggers as ^A and nasal mutation triggers as ^N).

3.2 Pronominal morphology

Pronouns vary primarily according to strong–weak syntactic position, with some differentiation of case among clitics. Paradigms for the main series (excluding reduplicated and conjunctive pronouns) are given in Table 4.

In ‘strong’ syntactic positions such as topicalized subject position or after an uninflected preposition, independent forms of pronouns appear. These exist in three series, simple, reduplicated (emphatic) and conjunctive (contrastive). In ‘weak’ syntactic positions, such as postverbal subject or direct object position or postnominal possessor position, affixed forms appear. Simple and conjunctive forms of these exist, with reduplicated pronouns being rare here in canonical Middle Welsh.

In later Middle Welsh, the reduplicated pronouns lose much of their emphatic force, and appear in contexts where little emphasis is perceptible. This leads to the situation in informal Early Modern Welsh where reduced forms of the reduplicated pronouns (such as *yfi* for *myfi* ‘I’ or *ynhwy* for *hwynt* ‘they’) are used interchangeably with the simple pronouns. Ultimately the result is the merger of the reduced reduplicated and simple paradigms of pronouns in spoken Welsh. Forms derived from Middle Welsh reduplicated pronouns survive as ordinary pronouns in some person-number combinations. In the third person plural, the reduced reduplicated pronoun *nhw* (< *ynhwy* < *hwynt*) completely ousts the simple pronoun (*h*)*wy(nt)*. Characteristic of northern dialects is the replacement of the simple second person pronoun *ti* by a reduced reduplicated pronoun, *chdi*, a dissimilation in contexts such as *â chdi* < *a thdi* < *a thydi* ‘with you’.

Genitive and accusative object clitics also exist. Genitive clitics are used as the object of a nonfinite verb or as a possessor in a noun phrase. Accusative clitics are used as the object of a finite verb. In both cases, doubling of a clitic with a dependent pronoun is possible, the two possible combinations being clitic alone or clitic ... dependent pronoun. Example (7) shows the use of these pronouns in various contexts. The clause-initial topicalized subject is independent *mi* ‘I’; the object of *rodaf* ‘give’ is expressed as a dependent accusative pronoun and an affixed pronoun *'th ... di* ‘you’; the possessor of the noun *lle* ‘place’ is expressed as a dependent genitive pronoun and an affixed pronoun *'m ... i* ‘me, my’. Usage is largely parallel to conservative Modern Welsh.

-
- (7) ...mi a 'th rodaf di y 'm lle i yn
 1S.IND PRT 2S.ACC put.PRES.1S 2S.AFF in 1S.GEN place 1S.AFF in
 Annwuyn...
 Annwfn
 '...I shall put you in my place in Annwfn...' (PKM 3.8)

3.3 Adjectival morphology

Many Old and Middle Welsh adjectives inflect for gender and number. Plural adjectives are formed using the same means as found with nouns:

- (i) vowel alternation (conditioned by i-affection): *bychan* 'small (singular)' ~ plural *bychein*;
 (ii) the suffix *-(y)on*: *coch* 'red (singular)' ~ plural *cochion*.

The suffix *-(y)on* often causes a vowel alternation, either triggered by the stress shift, as in *tlawd* ~ *tlodion* 'poor', or by internal i-affection *dall* ~ *deillyon* 'blind'.

Gender is indicated by vowel alternation. Adjectives with root vowels /i/ or /u/ substitute /e/ and /o/ respectively in the feminine, for instance, *byrr* ~ *berr* 'short' or *trwm* ~ *trom* 'heavy'. This alternation is due to a-affection caused by a Brythonic feminine ending *-ā*.

Adjectives inflect for three degrees of comparison: equative ('as quick'), comparative ('quicker') and superlative ('quickest'). The respective endings are *-(h)et* /hed/, *-ach* /ax/ and *-(h)af* /hav/, for instance, *coch* 'red', *cochet* 'as red', *cochach* 'redder' and *cochaf* 'reddest'. The /h/ of the equative and superlative triggers devoicing of a preceding stop or cluster containing a stop, for instance, *kalet* /kaled/ 'hard' ~ *kalettet* /kaleted/ 'hardest', *budr* 'dirty' ~ *butraf* 'dirtiest'. This does not occur in the comparative, hence MW. *kaledach* /kaledax/ 'harder'. Devoicing from the equative and superlative spreads to the comparative in Modern Welsh, examples being found in late Middle Welsh (Evans 1997: 180).

3.4 Verbal morphology

Verbs inflect for four tenses, present, past, imperfect and pluperfect. The subjunctive mood exists in two paradigms, present and imperfect. There is also an imperative mood. Example paradigms for a regular verb, *caru* 'love', are given in Table 5.

	present	past	imperfect	pluperfect
first sg.	caraf	kereis	carwn	carasswn
second sg.	kery	kereist	carut	carassut
third sg.	car	(carawd)	carei	carassei
first pl.	carwn	carassom	carem	carassem
second pl.	kerwch	carassawch	carewch	carassewch
third pl.	carant	carassant	kerynt	carassynt
impersonal	kerir	carwyt	kerit	carassit

	present subjunctive	imperfect subjunctive	imperative
first sg.	car(h)wyf	car(h)wn	–
second sg.	ker(h)ych	car(h)ut	car
third sg.	car(h)o	car(h)ei	caret
first pl.	car(h)om	car(h)em	carwn
second pl.	car(h)och	car(h)ewch	kerwch
third pl.	car(h)ont	ker(h)ynt	caent
impersonal	car(h)er	ker(h)it	carer

Table 5. Middle Welsh paradigm of the regular verb *caru* ‘love’.

A number of forms show vowel alternation (historically due to i-affection) where the verb stem contains an appropriate (low or mid) vowel. Productive vowel alternation due to i-affection is subject to analogical levelling. MW. *menegi* ‘show, indicate’ has underlying stem /manag/ alternating with /meneg/ in contexts that trigger i-affection, hence *managaf* ‘I show’ but the verbnoun *menegi* and *menegwch* ‘show!’ (second plural imperative). Here, the i-affected stem generalized to give *myneg-* /māneg/ throughout the paradigm (ModW. *mynegaf* ‘I will show’). In most other cases, levelling is to the stem with the non-affected vowel.

3.4.1 Innovation in the present tense

Certain present-tense endings found in Old Welsh are given up entirely in Middle Welsh. In the first person singular, some verbs in Old Welsh have an ending *-if*, for instance, *gwelif* ‘I see’ (*CLIH* 1.4a) or *gwneif* (*CA* 11). In the second person singular, the ending was originally *-yd* /ið/, found sporadically in Old and early Middle Welsh. By Middle Welsh, the normal form is *-y* /i/. Later, there is anticipatory assimilation of the final vowel to the vowel of the following subject pronoun *di*, hence MW. *kery di* /keri di/ ‘you love’ > ModW. *ceri di* /keri di/. The same anticipatory assimilation happens in the imperfect in the second person singular, for instance, MW. *karut ti* ‘you loved’ becomes *carit ti*. A third person singular present or perhaps future suffix *-(h)awt* occurs largely in Old Welsh poetry, dying out thereafter (Isaac 1996: 368–71).

The most significant developments are those in the third person singular. Here the inherited system had a form identical to the stem, with, in many cases, a vowel alternation (i-affection caused by original /i:/ in a lost ending). This gives us familiar i-affection alternations as illustrated in (8) (nonfinite and third person singular present tense forms given).

(8)	/a/ > /ei/	<i>galw</i> ~ <i>geilw</i> ‘calls’, <i>seuyll</i> (stem <i>saf-</i>) ~ <i>seif</i> ‘stands’
	/e/ > /ei/	<i>dywedut</i> ~ <i>dyweit</i> ‘says’
	/e/ > /i:/	<i>gwelet</i> ~ <i>gwyl</i> ‘sees’
	/o/ > /i:/	<i>colli</i> ~ <i>cyll</i> ‘loses’, <i>torri</i> ~ <i>tyrr</i> ‘breaks’
	/au/ > /eɨ/	<i>tewi</i> (stem <i>taw-</i>) ~ <i>teu</i> ‘is silent’
	/au/ > /i:/	<i>adaw</i> ~ <i>edy</i> (also <i>edeu</i>) ‘leaves’

These alternations are found only in verbs containing relevant vowels. Many verbs with a stem vowel /a/ fail to alternate, hence *caru* ~ *car* ‘loves’ or *talu* ~ *tal* ‘pays’. In a few cases, the alternation spreads analogically, hence earlier *parhau* ~ *par(h)a* ‘continues, lasts’ and *bwyta* ~ *bwyta* ‘eats’ without the alternation are replaced in literary texts by *pery* and *bwyty*, with it. In *gallu/gallael* ‘be able’, the vowel alternation is lost, with MW. *geill* ‘is able’ giving way to variation between *geill* and *gall* in Early Modern Welsh.

This formation meant that a number of verbs had third person present tense forms ending in *-a*. For instance, *gwneuthur* ‘do’ had stem *gwna-* /g^wna/ and hence conjugated in the present tense as *gwnaf*, *gwney*, *gwna* etc. Denominal verbs formed using the suffix *-ha-* all followed this pattern, for instance, *bwyta* ‘eat’ (< *bwyd* ‘food’ plus *-ha*), conjugating *bwytáf*, *bwytéy*, *bwyta*. Paradigms such as these gave rise to a morphological reanalysis in the third person whereby *-a* was treated not as part of the stem, but as an inflection marking third person singular. By Middle Welsh, this ending had already spread, particularly to other denominal verbs. Examples include *gwassanaethu* ‘serve’ ~ *gwassanaetha*, *kerddet* ‘walk’ ~ *kerda* and *damunaw* ‘wish’ ~ *damuna*.

The present-tense paradigm has shifted semantically to become modal future in sense in modern spoken Welsh. In Middle Welsh, it covers both present and future reference, including the modal range that it is restricted to today. The specialization to a modal meaning is due to the innovation of aspectual periphrases that have replaced the present-tense forms in their former core uses (Haspelmath 1998, Poppe 1996).

In the modal-future sense, a new ending *-iff* emerges in the third-person singular. This arises from a reanalysis of the paradigm of the verb *caffael* ‘get’ (stem variably *caff-*, *cah-*, *ca-* as a result of the merger of two different verbs (Hamp 1954)), conjugated *caf* / *caffaf*, *keffy* / *key*, *keiff*. In varieties where a paradigm of the form *caf*, *key*, *keiff* predominated, the stem could be treated as *ca-* /ka/, with endings *-af*, *-y*, *-iff* (the last two inducing vowel alternation). Initially this reanalysis gives rise to need forms of *mynet* ‘go’ (*eiff* ‘he, she will go’ instead of *a*) and *gwneuthur* ‘do’ (*gwneiff* ‘he, she will do’ instead of *gwna*). In Middle Welsh, only the conservative system limited to *keiff* is found, but innovative *aiff* (1 Samuel 26.6, 1588 Bible) and *gwnaiff* (*PMA* 41.12, 1595) are common by the late sixteenth century. Later *-iff* spread to almost all verbs in colloquial Welsh. A shift to *-ith* has taken place in northern Welsh dialects. This appears to be based on a dissimilation in verbs containing a labial fricative, for instance, *tyfiff* ‘he, she will grow’ > *tyfith*, followed by generalization of *-ith* to verbs not containing a labial.

3.4.2 The absolute–conjunct system of verbal inflection

Remnants of an earlier system, shared with Old Irish, that distinguished ‘absolute’ and ‘conjunct’ verbal endings can be found in Old Welsh prose and poetry (Isaac 1996: 354–8) and in some archaizing Middle Welsh poetry. The present-tense absolute endings in the third person singular are *-it*, *-yt* and *-(h)awd* (the last perhaps future); in the past, we find *-essid*. The original syntactic distribution can be seen clearly in example (9). The absolute verbal form *pereid* ‘continues’ appears in sentence-initial position, whereas after a particle, in this case the negative marker *ny(t)*, the conjunct form of the same verb, *para* (with aspirate mutation to *phara*) appears.

- (9) P_{er}eid y r_{ych}eu. Ny phara a 'e goreu.
 continue.3S.ABS the furrows NEG continue.3S.CONJ REL 3MS.ACC make.PAST.3S
 'The furrows remain. The one who made them does not remain.' (CLIH 11.87b–c)

The absolute–conjunct system is not manifested in Middle Welsh prose, but the poetry of the Gogynfeirdd shows moderately consistent use of old absolute forms for morphologically simple verbs in clause-initial position (Rodway 2002 [1998]). It seems likely that the system was destroyed by the rise of verb-second syntax, since that ensured that all verbs followed a particle, thereby increasing the frequency of contexts requiring conjunct forms. Morphologically, it is the conjunct forms that survive in the third person, while the absolute forms survive in the first and second persons.

3.4.3 The formation of the past tense

In the past tense, the third person singular is characterized originally by an s-ending (the 's-preterite', derived historically from the Indo-European sigmatic aorist), variably *-as*, *-es*, *-is* or *-wys*. The choice is not free, but is determined by the verb, as follows:

- (a) use *-es* if the root vowel is /a/, for instance, *daly* 'hold' > *delis*, *diengyd* 'escape' (stem *dianc-*) > *diengis*, *erchi* 'ask' (stem *arch-*) > *erchis*, *galw* 'call' > *gelwis*, *menegi* 'show' (stem *manag-*) > *menegis*;
 (b) use *-is* if the root vowel is /o/ or /oi/, for instance, *agor* 'open' > *agores*, *anuon* 'send' > *anuones*, *colli* 'lose' > *colles*, *cyuodi* 'rise' > *cyuodes*, *dangos* 'show' > *dangoses*, *dodi* 'put' > *dodes*, *rodi* 'give' > *rodes*, *torri* 'break' > *torres*;
 (c) with a few lexically specified verbs, use *-as*, for instance, *caffael* 'get' > *cauas*, *gwelet* 'see' > *gwelas*;
 (d) otherwise (except for strong verbs and t-preterites, see below) use *-wys*, for instance, *eisted* 'sit' > *eistedwys*, *trigaw* 'live, dwell' > *trigwys*, *gellwng* 'release, drop' > *gellyngwys*, *cysgu* 'sleep' > *cysgwys*, *medylyaw* 'think' > *medylwys*, *treulaw* 'spend' > *treulwys* etc.

A small group of verbs use a dental ending in the third person singular of the past tense (the 't-preterite'). These verbs include *canu* 'sing' > *cant*, *kymryt* (stem *kymer-*) 'take' > *kymmerth*, *diffryt* 'defend' > *differth*, *mynet* (stem *a(g)-*) 'go' > *aeth*, *dyuot* 'come' > *doeth*, *deuth* and *gwneuthur* 'do' > *gwnaeth*.

Another small groups manifests an alternation in the root vowel to form the past third person singular. This is an ablaut alternation, akin to those found in Germanic strong verbs, with a lengthened o-grade in the past tense. Essentially two patterns of alternation are found in Middle Welsh, namely /e/ ~ /aw/ (where /aw/ derives Common Celtic *ā, Indo-European *ō) and /u/ ~ /u̯/. The first pattern is found in MW. *gwaret* 'protect', past tense first person singular *gwaredeis*, third person singular *gwarawt*; and *dywedut* 'say', past tense *dywedeis*, *dywawt*, both with /ed/ ~ /aud/ ablaut alternation. The second pattern is illustrated by *dwyn* 'bring' (stem *dwg-* /dug/), past tense *dugum*, *duc*. Although a very minor pattern in Old Welsh, the first of these alternations forms the basis of a reanalysis that leads to the creation of the most productive pattern of past tense morphology in late Middle Welsh. The second type of alternation has been lost, being replaced by regular formations. Hence MW. *duc* 'he, she brought' is replaced by the regular reformation *dygodd* in Modern Welsh.

Finally, there are a few remnants of old reduplicated past tenses in Middle Welsh. Reduplicated *kigleu* (< *ki-klow) survives as the irregular third person past of *clybot* 'hear'. It is replaced in Early Modern Welsh by an analogical reformation based on the past tense of the verb 'be' (*bu*), namely *clybu*, and, soon afterwards, by a regular past-tense form *clywodd*. On the Indo-European background of the forms mentioned in this section, see (Watkins 1962).

3.4.4 Innovation of *-awd* in the third person singular past

A new ending *-awd* /auð/, later /oð/, emerged in Old Welsh. This is related to verbs originally showing an ablaut vowel alternation in the third person singular of the past tense. The original pattern is attested in *godiwedyt* ‘catch up, overtake’, past tense first person singular *godiwedeis*, third person singular *godiwawd* with /eð/ ~ /auð/ ablaut alternation and no inflection. With some of these verbs, analogical levelling of the root is assumed to have occurred or is attested. An ablaut past tense of *llad* ‘kill’ is reconstructed as (attested) first person singular *lledeis* and (unattested) third person singular **llawd*. Subsequent analogical levelling reintroduces the root *llad* into the third person singular of the past, giving the earliest attested form of the past tense of this verb, namely *lladawd* (CA 196 *ladawd*, CA 372, 427 *ladaut*). Old Welsh uses the *-awd* ending sparingly, but this verb is always found with past tense *lladawd*. It therefore seems likely that the reformation *lladawd* opened the way for a reanalysis of precisely this verb as stem *llad* plus ending *-awd*, this reanalysis giving rise to a new ending *-awd* as a productive way of forming the past tense. Although the verb *godiwedyt* also manifests the right preconditions for the change, namely a past tense, *godiwawd*, in *-awd*, it seems unlikely that this verb is the source of the initial reanalysis, since the irregular past tense *godiwawd* survived longer, the reformed past *godiwedawd* being a Middle Welsh (not Old Welsh) innovation (Isaac 1996: 337–9, Morris-Jones 1913, Pedersen 1909–13: ii. 380, Rodway 1998: 91–4, Watkins 1986). Another verb, *eisted* ‘sit’ may also have fitted the preconditions for the change, possibly once having had a past tense **eistawd*, but this cannot be demonstrably conclusively.

In Middle Welsh, the new suffix *-awd* coexists alongside the other s-preterite formations. In Old Welsh and in earlier Middle Welsh, the s-preterite is the norm, and *-awd* is limited to a small group of verbs. In later Middle Welsh, a dialect split emerges, with southern texts maintaining the traditional pattern, and northern texts showing extensive analogical extension of *-awd* to almost all verbs. In general, where *-awd* spreads, it replaces the suffix *-wys*, which disappears almost entirely of the Middle Welsh speaking area, while the other suffixes *-as*, *-es* and *-is* are considerably more resilient. In the thirteenth century, *-awd* had made little impact, s-preterite forms being the norm everywhere. However, by the second half of the fourteenth century, *-awd* was usual throughout the north. This impression of a fairly rapid transition between the two forms in northern varieties is corroborated by the poetry of the Gogynfeirdd from this period: up to 1300, *-wys* predominates, but falls off sharply thereafter (Rodway 1998). The picture in the south by this time is more complex, with some manuscripts showing full retention of s-preterites, while others show full use of *-awd*. Thomas (1992, 1993) has suggested that this too reflects a dialect division, with *-awd* being characteristic of the southwest and the s-preterite being characteristic of the southeast, roughly corresponding to the modern dialect division. It seems unlikely that things are this straightforward. *Llyfr yr Ancr* (‘The Book of the Anchorite’), written at Llanddewibrefi, Ceredigion in the southern dialect area in 1346, shows the innovative system, that is, with *-wys* having been to a large extent replaced by *-awd*, while *-as*, *-is* and *-es* retain essentially their historical distribution (Evans 1958). On the other hand, *Llanstephan 116*, known to have been written at Llanwenog, some 20 km southwest of Llanddewibrefi, in the mid fifteenth century (Huws 2000: 61), maintains the s-preterite almost entirely. While it is possible that the isogloss between the two forms ran through southern Ceredigion at this time, dividing the two locations, some kind of stylistic variation also seems a plausible hypothesis, with the *-awd* inflection already being regarded as more prestigious and therefore used beyond the boundaries of its dialect base. By the seventeenth century, we can more certain: the evidence of court depositions in slander cases makes it clear that the s-preterites survived in the southeast only, retreating slightly since then (Awbery et al. 1985, Awbery 1988).

3.4.5 Irregularities

The verb *bot* ‘be’ is highly irregular in Middle Welsh. Its paradigms are given in Table 6. It has two additional paradigms not found with most regular verbs, namely the future and the conditional (traditionally termed also ‘consuetudinal present’ and ‘consuetudinal past’ because of their use to express habitual meaning).

The verbs *mynet* ‘go’, *dyuot* ‘come’ and *gwneuthur* ‘do’, and to a lesser extent *caffael* ‘get’, share a series of irregularities, and influence one another analogically. We have already seen that the first three are member of the small group of t-preterite verbs that form their past tense with a dental suffix in the third person singular (hence *aeth*, *daeth* and *gwnaeth* respectively). *Mynet*, *dyuot* and *gwneuthur* also alone in having an additional perfect tense paradigm, formed from the past-tense stem plus the present tense of the verb ‘be’. For instance *dothwyf* ‘I have come’ < *doeth-* (past-tense stem of *dyuot* ‘come’) plus *wyf* ‘I am’.

Further shared peculiarities involve the subjunctive, where a suppletive stem is used (*el-*, *del-* and *gwnel-* respectively) and where the usual *-o* ending in the third person singular present subjunctive is absent (hence the forms are *el*, *del* and *gwnel*). This ending is, however, introduced analogically from other verbs in the sixteenth century, giving innovative forms *elo*, *delo* and *gwnelo*.

	present	past	imperfect	pluperfect	
first sg.	wyf	buum	oedwn	buasswn	
second sg.	wyt	buost	oedut	buassut	
third sg.	yw, mae, oes, ys	bu	oed	buassei	
first pl.	ym	buam, buom	oedem	(buassem)	
second pl.	ywch	buawch	oedewch	(buassewch)	
third pl.	ynt, maent	buant, buont	oedynt	buassynt, buessynt	
impersonal	ys	buwynt	oedit	(buassit, buessit)	

	pres. subj.	impf. subj.	imperative	future	conditional
first sg.	bwyf	bewn	–	bydaf	bydwn
second sg.	bych	beut	byd	bydy	bydut
third sg.	bo	bei	bit	byd	bydei
first pl.	bom	beym	bydwn	bydwn	bydem
second pl.	boch	–	bydwch	bydwch	bydewch
third pl.	bont, bwynt	beynt	bint	bydant	bydynt
impersonal	byther	bythit	(byder)	(bydir)	bydit

Table 6. Paradigm of *bot* ‘be’ in Middle Welsh.

These verbs also share an irregularity in the pluperfect, where they use the past-tense stem plus the imperfect of the verb *bot* ‘be’, for instance, *gwnaeth-* past tense (t-preterite) stem of *gwneuthur* ‘do’ plus *oedwn* ‘I was’ of *bot* ‘be’ > *gwnathoedwn* ‘I had done’. Such forms are normal in Middle Welsh. In late Middle Welsh and Early Modern Welsh, this pattern spreads analogically to *caffael* ‘get’, hence we find *kawsssoed* ‘he had got’ (YSG 1116), and even forms with analogical changes to the stem on the pattern of the other verbs, such as *kassoedit* ‘had been got’ (YSG 5552) and *kathoedd* ‘he had got’ (NLW 13075B: YAL 79v.22). In Modern Welsh, however, these forms are entirely replaced by innovative forms based on the past tense stem + the endings of the imperfect. For instance, *gwnathoedwn* ‘I had done’ is replaced by *gwnaethwn* and *athoed* ‘he, she had gone’ is replaced by *aethai*.

In the past tense of *gwneuthur* ‘do’, there is variation between paradigms with the stem *gwnaeth-* and *goruc-*. The two paradigms are given in Table 7. In practice, most Middle

Welsh text manifest a mixed system. The *goruc*-forms are rare outside of the third person and the impersonal, but in these forms, they dominate in many Middle Welsh texts. A typical actual paradigm is given in the final column of Table 7. The *gwnaeth*-paradigm is innovative, being modelled analogically on the paradigms of the t-preterites (*mynet* ~ *aeth* ‘go’ and *dyuot* ~ *doeth* ‘come’). Old Welsh shows more consistent use of the *goruc*-paradigm than later Welsh.

	past I	past II	typical attested
first sg.	gwneuthum, gwnaethom	gorugum	gwneuthum
second sg.	gwneuthost, gwnaethost	gorugost	gwneuthost
third sg.	gwnaeth	goruc	goruc, gwnaeth
first pl.	gwnaetham, gwnaethon	gorugam	gwnaetham
second pl.	gwnaethawch	gorugawch	gwnaethawch
third pl.	gwnaethant, gwnaethont	gorugant	gorugant, gwnaethant
impersonal	gwnaethpwy	gorucpwy	gorucpwy, gwnaethpwy

Table 7. Past tense of *gwneuthur* ‘do’ in Middle Welsh.

3.4.6 Other developments

Some Middle Welsh verbs have a third person singular imperfect in *-(y)at* /jad/. The forms *gwydyat* ‘knew’ from *gwybot* (stem *gwyd-*) and *adwaenat* ‘knew, recognized’ from *adnabot* (stem *adwaen-*) remain in Middle Welsh, but are replaced by more regular formations, *gwyddai* and *adwaenai* in Early Modern Welsh by the sixteenth century.

A number of verbs show reanalysis of the verbnoun ending as part of the stem. Hence *aros* ‘wait’ was originally stem /arho/ + verbnoun ending /s/, but later the stem was treated as being /arhos/, hence *arhoaf* ‘I wait’ is replaced by *arhosaf*. The same occurs with *darllen* ‘read’ (*darlleaf* ‘I read’ replaced by *darllenf*) and *arwein* ‘lead’ (earlier *arwedawd* ‘he, she lead (past)’ replaced by *arweiniodd*).

3.5 Prepositional morphology

Most prepositions in Old and Middle Welsh inflect for number and person. A sample paradigm is given in Table 8. The inflections are the result of incorporation of an earlier pronominal object into the preposition as an ending. One consequence of this is that prepositions agree only with pronominal objects. The resulting endings resemble person-number endings on verbs in form. Certain endings reform in the course of Middle Welsh by analogy with verbal endings, making the correspondence even closer.

In early Middle Welsh, the third plural ending is *-u* /u/ or *-ud* /uð/. By analogy with verbal paradigms, /nt/ is added in the early Middle Welsh period, creating forms in *-unt* /unt/, such as *arnunt* ‘on them’ or *udunt* ‘to them’.

	singular	plural
first person	arnaf	arnam
second person	arnat	arnawch
third person masc.	arnaw	arnadut, arnunt
third person fem.	arnei, erni	

Table 8. Paradigm of preposition *ar* ‘on’ in Middle Welsh.

Some prepositions have a different stem when inflected, for instance, *am* ‘about’ and *o* ‘of, from’, but, when inflected, *amdan-* (*amdanaw* ‘about him’) and *ohan-* or *ohon-* (*ohanaw*, *ohonaw* ‘from him’) or *onad-* (*onadu*, *onadunt* ‘from them’). In Modern Welsh, *onadunt* ‘from them’ has been analogically replaced by the form *ohonynt*, taking the stem *ohon-* from the third-person singular. The remaining forms have generally survived.

As in Modern Welsh, a number of prepositions add a dental consonant in the third person, hence *yn* ‘in’ and *heb* ‘without’, but *yndaw* ‘in him’ and *hebdaw* ‘without him’ with added /d/ and /ð/ respectively. In two cases, with *gan* ‘with’ and *y rwng* ‘between’, the nature of the dental is dialectally variable, forms with /t/, such as *gantaw* ‘with him’, being characteristic of southern Middle Welsh and forms with /θ/, such as *ganthaw*, being characteristic of northern varieties. *Y rwng* ‘between’ has three stems in the third person, again distributed geographically, with /ð/, /θ/ and /t/. Hence we find variation between *y rydaw* (southeast), *y ryngthaw* (north) and *y ryngtaw* (south) ‘between him...’ in Middle Welsh texts (Thomas 1992, 1993, Willis 2005: 109–11).

4 SYNTAX

4.1 Word order

4.1.1 Verb-second

Middle Welsh prose manifests verb-second word order in affirmative declarative main clauses. This pattern involves some phrase in initial position (pragmatically representing old information / a topic) followed by a preverbal particle, followed by the verb and any other constituents in the order verb – subject – object. The basic template is given in (10).

- (10) phrase (topic) – preverbal particle *a* or *y(d)* – finite verb – (subject) – (object)

The clause-initial constituent may instantiate by any phrasal category (noun phrase, nonfinite verb phrase, adjective phrase) or grammatical function (subject, direct object, object of preposition, possessor, adjunct). A selection of examples is given in (11) to (18).

- (11) A [’r guyrda] a doethant y gyt y wneuthur kynnadeu
and the noblemen PRT come.PAST.3P together to make.INF messengers
at Pwyll...
to Pwyll
‘And the noblemen came together to make a delegation to Pwyll...’ (PKM 21.12–13)
- (12) [Y dyd hwnnw] a dreulwys trwy digrifwch a llywenyd...
the day that PRT spend.PAST.3S through merriment and happiness
‘And he spent that day in merriment and happiness...’ (PKM 7.1–2)
- (13) A [’r pump wraged hynny] ... a anet udunt pum meib.
and the five women these PRT be-born.PAST.IMPERS to.3P five sons
‘And five sons were born to these five women.’ (PKM 48.2–3)
- (14) [Troï yn y hol] a oruc ef...
turn.INF after.3SF PRT do.PAST.3S he
‘He turned after her...’ (PKM 12.1–2)

- (15) [Yskynnu] a oruc Pwyll ar y uarch...
 mount.INF PRT do.PAST.3S Pwyll on 3MS horse
 ‘Pwyll mounted his horse...’ (PKM 11.27)

The choice of preverbal particle is rigidly determined by the nature of the preverbal constituent. The examples in (11) to (15) demonstrate that the particle *a* (with soft mutation of the initial consonant of the verb) is chosen if the topic is one of the following types of constituent: a subject, as in (11); a direct object, as in (12); the object of a preposition, as in (13); a nonfinite verb phrase, as in (14); or a lone nonfinite verb, as in (15). Another particle, *y* (*yd* before a vowel) is used with an adverb, as in (16), or with a prepositional phrase complement of a verb, as in (17).

- (16) [Yna] y doethant wynteu attaw ef.
 then PRT come.PAST.3P they.CONJ to.3MS him
 ‘Then they came to him.’ (PKM 74.22)
- (17) [Y ’r llys] y doethant...
 to the court PRT come.PAST.3P
 ‘They came to the court...’ (PKM 10.11)

Finally, (18) shows the syntax with a preposed predicative adjective phrase (or predicative noun phrase). Here there is no particle, but the verb undergoes soft mutation (*buwyt* > *uwyt* in this case).

- (18) ...a [llawen] uwyt wrthaw...
 and happy be.PAST.IMPERS to.3MS
 ‘...and they were happy towards him...’ (PKM 13.18)

These patterns have been extensively investigated for the canonical Middle Welsh prose texts. It is clear that the verb-second pattern, although traditionally termed the ‘abnormal sentence’, is overwhelmingly the most frequent word-order type for affirmative declarative main clauses in Middle Welsh, accounting for more than 90% of such clauses in all texts studied (Poppe 1989, 1990, 1991a, 1991b, 1993, 2000, Watkins 1977/78, 1983/84, 1988, 1993, 1997).

The origin of the verb-second pattern of Middle Welsh has been the subject of some dispute. It is unlikely to be inherited from Common Celtic, usually reconstructed as verb-initial, and seems to be a Brythonic innovation. It is not even clear to what extent the verb-second pattern was used in Old Welsh. Both Old Welsh prose and poetry contain examples of the verb-second order, using the preverbal particles in the same way as later texts. Examples from *Canu Aneirin* are given in (19) to (22), paralleling the basic Middle Welsh structures given in (11), (12), (16) and (18) respectively.

- (19) Mab Syvno ... a werthws e eneit er wyneb grybwylyeit.
 son Syvno PRT sell.PAST.3S 3MS soul for honour mention
 ‘The son of Syvno sold his soul for the mention of honour.’ (CA 212–14)
- (20) Med a dalhei.
 mead PRT earn.IMP.3S
 ‘He earned his mead.’ (CA 22)
- (21) E am lavnawr coch gorvawr gwrnwn dwys dengyn ed
 along-with blades red great dark-sockets close steadfast PRT
 emledyn aergwn.
 fight.IMP.3P heroes
 ‘Along with red blades, in great dark sockets, in close ranks, steadfastly heroes fought.’ (CA 76–7)

- (22) ...a gwenwyn vu.
and poison be.PAST.3S
'...but it was poison.' (CA 69)

We can therefore be sure that the verb-second syntactic pattern had developed by the Old Welsh period. However, it is not statistically dominant in the way that it is in Middle Welsh. In prose, verb-initial word order is most frequent, with the verb-second pattern in a minority (Watkins 1987). In poetry, the verb-second pattern coexists with a number of other word order patterns: SVO with no particle, OVS with no particle, VOS and SOV.

Lewis (1942) noted that object clitics once intervened between verbal prefixes (preverbs) and the verb as in Old Irish. This is found in early Welsh poetry:

- (23) Deus dy-m-gwares.
God PRT+1S+save.PRES.SUBJ.3S
'May God deliver me.' (BT 41.2)

If the verb lacked a prefix, the particle *a* was inserted to host the object clitic:

- (24) Llawurydet am dwc
sadness PRT+1S seize.PRES.3S
'Sadness seizes me.' (H 111.7)

Lewis suggested that the particle began to be used even when no object clitic was present, giving rise to the order subject – *a* – verb, characteristic of the verb-second order. This seems unlikely for two reasons. First, it assumes that SVO word order already existed as an option before the change took place, but the evidence for this is weak. Secondly, the verb-second pattern does not merely concern fronted subjects. This hypothesis gives no account of how it arose with other types of fronted constituent, nor how *y(d)* and soft mutation came to be possible in place of *a*.

A much more likely hypothesis is that the verb-second order arose from an earlier cleft structure. Clefts with the copula *ys* are occasionally encountered in Middle Welsh:

- (25) ...ys da a gedymdeith [a golleisti].
be.PRES good of companion PRT lose.PAST.2S+you
'...it is a good companion that you have lost.' (PKM 56.27)

The second part of these structures has the form of a relative clause, bracketed in (25). A reduced form of cleft sentences like (25) gave rise to a focus construction traditionally known as the 'mixed sentence'. This construction, illustrated in (26), is very similar to the verb-second pattern, the choice of particle between the focus element and the verb being identical.

- (26) Mi a 'e heirch...
I PRT 3FS.ACC seek.PRES.3S
'It is I who seek her.' (CO 562)

In later Welsh, the focus pattern and the verb-second pattern come to be distinguished by agreement: a fronted subject agrees with the verb in the verb-second pattern, but not in the focus pattern. However, this distinction is observed only rather sporadically in Middle Welsh, suggesting that the two structures actually diverged from a common source. A semantically bleached form of this focus construction may have developed into Brythonic, becoming available both where the initial element was contrastively focused and where it expressed a familiar topic element in the discourse. Once available, the topicalization structure increased

in frequency to the point where it became the normal word order in Middle Welsh. If this is the origin of the verb-second order, then it straightforwardly accounts for why the particle chosen is always the same one that would be found in the equivalent relative clause (Willis 1998: 97–101). This hypothesis (essentially that argued for by Evans 1968: 311–14) is similar to the earliest view of the development of the verb-second pattern, namely that it was the result of the influence of the cleft, focus pattern in (25) and (26) on a preexisting SVO order (Richards 1938: 104–9).

The orders found in Old Welsh poetry have been variously regarded as archaisms pointing to an earlier period of free word order (Lewis 1942), or have been attributed to poetic licence (Greene 1971: 9). Greater importance should clearly be attributed to prose as more likely to reflect spoken usage. Therefore a mixed system should be posited for Old Welsh, with verb-initial and verb-second patterns co-existing. The Old Welsh remnants of a distinction between absolute verb forms for use in initial position and conjunct verb forms for use after particles also suggest that verb-initial word order was at one time possible.

Comparative evidence is also relevant. Middle and Modern Breton and Cornish agree with Middle Welsh on almost every detail of the verb-second pattern. Strikingly they use cognate particles in exactly the same way as Middle Welsh does, and Middle Breton at least allows long-distance fronting of topic phrases in patterns very similar to Middle Welsh (Borsley et al. 2007: 290–3). There is only one significant difference between the languages, namely that, in Middle Welsh, the verb often shows person–number agreement with a topicalized subject, whereas in Breton (of all periods) and in Cornish it does not, appearing instead in a default third person form. Such striking general syntactic similarities are strong evidence that the verb-second pattern should be reconstructed for late Brythonic.

Another important issue is the status of the verb-second order in Middle Welsh. Some linguists have doubted whether the pattern is representative of spoken Middle Welsh at all. This doubt is based on a reluctance to believe that an earlier verb-initial grammar could have been entirely replaced by a verb-second one in Middle Welsh affirmative main clauses only to give way once more to a verb-initial grammar in Modern Welsh. Mac Cana, for instance, has claimed that the verb-second order was introduced from a southeastern dialect of Welsh into the literary language, where it achieved great popularity, dying out when it went out of fashion in Modern Welsh (Mac Cana 1973, 1979, 1991, 1992). Others have taken up this view (Fife 1988, Fife and King 1991). The link with southeastern dialects is intended to account for that fact that remnants of the verb-second order survived in these dialects and to explain why Breton and Cornish manifest the same patterns.

Nevertheless, there is good evidence that verb-second orders were natural in Middle Welsh and were not a literary fashion. All the patterns illustrated above in (11) to (18) have exact parallels in Middle Breton. It seems odd that users of a Middle Welsh literary language could successfully learn such a system and use it flawlessly in almost exactly the same way as Middle Breton writers with whom they had little or no contact. Furthermore, many aspects of the grammar of Modern Welsh presuppose the verb-second order as their starting point (the preverbal particles *mi* and *fe*, grammatical fossils such as *efallai* ‘perhaps’) and the transition from the verb-second system to the verb-initial system of Modern Welsh can be shown to have taken place smoothly from late Middle Welsh into Early Modern Welsh (see below).

4.1.2 Expletive subjects

Middle Welsh had an expletive subject *ef*, roughly comparable to English *there* or German *es*, restricted to the clause-initial topic position of verb-second main clauses. It appears when the clause otherwise lack a syntactic topic:

- (27) Ef a gyhyrdawd ac ef [gwr gwineu mawr]
 it PRT meet.PAST.3S with him man auburn large...
 ‘There met with him a large auburn-haired man...’

(P 52.21)

The distribution of expletive *ef* is restricted in Middle Welsh to contexts typical of expletive subjects in other languages. It appears in presentational contexts, as in example (27) above, where *gwr gwineu mawr* is new information to the discourse and hence not a possible candidate to appear in the leftmost topic position. In this case, the range of verbs used is fairly limited, predominately being change of state verbs (unaccusatives), particularly motion verbs. This same restriction applies to English *there*, and since the restrictions are the similar in the two languages, it is usually possible to translate these cases with English *there*. It also appears as the subject of impersonal forms of verbs, as in (28), and with extraposed clausal subjects, as in (29). These are all common positions for expletive subjects in other languages.

- (28) Ef a **dywetpwyt** idaw...
 it PRT say.PAST.IMPERS to.3MS
 ‘It was said to him...’ (direct speech follows) (PKM 80.9–10)
- (29) ... ac ef a uu agos [bot calaned yn yr ymsag hwnnw].
 and it PRT be.PAST.3S near be.INF corpses in the crush that
 ‘...it was almost [the case] that there were corpses in that crush [i.e. people almost died in that crush].’ (O 546)

In combination with the verb, *gallu / gallael* ‘be able’, on the basis of sentences like (30), the expletive subject has given rise to the adverb *efallai* ‘perhaps’ in Modern Welsh.

- (30) Ef a **allei** ... y eni ef o ’r Wryry...
 it PRT be-able.IMP.3S 3MS be-born.INF he of the Virgin
 ‘I could be that [i.e. perhaps] he was born of the Virgin...’ (YCM 31.2)

There are two significant later developments. First, in late Middle Welsh, the expletive subject appears with a much wider range of verbs, including transitive verbs, where a translation using English *there* is out of the question:

- (31) ...ef a **gyll** llawer gwrda y eneit.
 it PRT lose.PRES.3S many nobleman 3MS soul
 ‘...many a nobleman will lose his life.’ (YSG 372–3)

Secondly, a variety of forms of the expletive pronoun begin to appear, including some based on the strong (reduplicated) form of the masculine third person singular pronoun, *efo*, as in the Chronicle of Elis Gruffudd (c. 1490–c. 1552):

- (32) ...**yvo** a wnaeth ych Gras chwi lwyr gam a myui...
 it.REDUP PRT make.PAST.3S 2P grace you entirely mistake with me.REDUP
 ‘...your Grace wronged me entirely...’ (CEG 318.8–9)

In its alternative form, *efe*, the strong form of the expletive gives rise to the modern affirmative verbal particle *fe* (Willis 1998: 170–5, 2007: 450–4). Reinterpretation of the pattern in (32) as containing a verbal particle followed by the verb rather than as containing a subject pronoun in initial position also creates a new type of VSO-clause, thereby furthering the innovation of verb-initial syntax.

4.1.3 The demise of the verb-second rule

In early Middle Welsh, the particle *a* may be omitted before the imperfect of the verb *bot* ‘be’ (that is, *oed* instead of *a oed*), but is otherwise consistently used. In a few cases, particularly

in later Middle Welsh, *a* is omitted before a verb beginning with /a/, and such cases are common from the end of the fifteenth century. Omission spreads to a position before a consonant slightly later, but is well attested by the mid sixteenth century:

- (33) ...a jessu gwnnwys yolwc y vynydd...
 and Jesus rise.PAST.3S 3MS+gaze up
 ‘...and Jesus raised his gaze...’ (DE 402.10-11, 1550–75)

This has two important ramifications for the history of the language. First, omission of these particles destroys the verb-second system. In particular, omission of the particle *y(d)* before an adverb, in sentences such as (34), obscures the fact that the adverb is in topic position and the verb is necessarily in second position.

- (34) Ac ynna gouynno[dd] hi Jddo ef pa ddelw J gollyngei ef J
 and then ask.PAST.3S she to.3MS him what way PRT release.IMPF.3S he 3MS
 veisdyr ynhydd...
 master PRED+free
 ‘And then she asked him how he would release his master...’ (YT 74.9, 1540s)

From such sentences, it could be inferred that the adverb was a purely optional element, and a grammatical system was abduced in which verbs were freely available in initial position. This seems to be what happened, as attested by the rise of absolute verb-initial clauses, such as (35), which become much more frequent in the sixteenth century.

- (35) Gorvüost ar dy elynion...
 overcome.PAST.2S on 2S enemies
 ‘You overcame your enemies...’ (RhG i.22.28-30, c. 1514)

Secondly, preverbal subject pronouns now appeared directly before the verb, and, once verb-initial orders became common, their status as pronouns was obscured. When compared, to examples like (35), main clauses like the one in (36) could be interpreted as verb-initial if *mi* were treated not as a pronoun, but as a verbal particle.

- (36) Mi vydaf dat ido...
 I be.FUT.1S father to.3MS
 ‘I shall be a father to him...’ (KL1B 8.10, 1551)

This has led to the innovation of *mi* as an affirmative verbal particle, used with any person–number combination of the verb today (Willis 1998, 2007).

4.2 Negation

Main-clause sentential negation is marked in Middle Welsh using the particle *ny* (*nyt* before a vowel), which appears in preverbal, usually sentence-initial position:

- (37) Ny welei ef y twrwf rac tywylllet y nos.
 NEG see.IMPF.3S he the commotion before dark.EQ the night
 ‘He could not see the commotion because the night was so dark.’ (PKM 22.23)

In embedded clauses, the negation marker is clause-initial *na* (*nat* before a vowel):

- (38) A phan welas na thygyei idaw y hymlit...
 and when see.PAST.3S NEG avail.IMPF.3S to.3MS 3FS pursue.INF
 ‘And when he saw that it was no use pursuing her...’ (PKM 9.23–4)

Another particle *na* (this time *nac* before a vowel) is used to negate imperatives and in negative responses to questions.

In late Middle Welsh a reinforcing negative adverb *dim* emerges from the indefinite pronoun *dim* ‘anything’ (Willis 2006):

- (39) A Lawnslot a dywawt nat arhoei ef dim.
 and Lancelot PRT say.PAST.3S NEG wait.IMPF.3S he at-all
 ‘And Lancelot said that he would not wait at all.’ (YSG 1259)

Its frequency remains fairly low throughout Middle Welsh. However, it has generalized to become the main marker of negation in Modern Welsh, having completely ousted the preverbal marker in the spoken language. This same pronoun also participates in another development, the grammaticalization of *dim o* (originally ‘anything of’, as a quantifier ‘any’) in late Middle Welsh. Whereas in early Middle Welsh, *dim o* is fairly infrequent and usually has a partitive sense (‘any of’), in later Middle Welsh, it is more frequent and often appears in contexts such as (40) where a partitive use seems improbable. It may also be used to reinforce negation of a nonfinite verb, as in (41).

- (40) A mi a wnn na wrthyt ef dim ohonat ti...
 and I PRT know.PRES.1S NEG refuse.PRES.3S he any of.2S you.S
 ‘And I know that he will not refuse you...’ (YSG 1423)
- (41) Ny elleis i yr ys deng mlyned dim o ’r kerdet.
 NEG can.PAST.1S I since ten years any of PERF walk.INF
 ‘I have not been able to walk for ten years.’ (YSG 5608)

These innovations represent the first stages of a development that has led to the innovation of a new negative marker *mo* (reduced form of *ddim o*), used to negate definite objects and, to a lesser extent, nonfinite verbs in Modern Welsh.

4.3 Subordinate clauses

Finite complement clauses are generally marked using the particle *y(d)*:

- (42) ...mi a tebygaf y byd gwr idi yn y lle...
 I PRT suppose.PRES.1S PRT be.FUT.1S man to.3FS in the place
 ‘I think that he will be her man soon’ (P 63.20–1)

Word order in finite subordinate clauses is generally verb – subject – object. As in Modern Welsh, if a complement clause expresses an affirmative past-tense event, it is formally nonfinite even though it expresses a finite sense. Hence, the embedded clause in (43) contains a nonfinite verb *dyuot* ‘come’ rather than a finite past-tense verb.

- (43) pa bryd y tybygy di dyvot Gereint yma?
 what time PRT suppose.PRES.2S you come.INF Geraint here
 ‘...when do you think that Geraint came here?’ (G 465–6)

4.3.1 Case marking in nonfinite clauses

Nonfinite clauses also occur as the complements to prepositions such as *gwedy* ‘after’ and *kyn* ‘before’, and as free-standing narrative main clauses in certain circumstances. In all of these contexts, they exhibit ‘ergative’ patterns of case-marking that differ radically from anything found today. The relevant ergative characteristic is that a single device is used for marking the direct object of transitive verbs and the subject of certain intransitive verbs, with a different device being used for subject of a transitive verb. In (44), the verb in the embedded clause is transitive *adnabot* ‘recognize’. Its subject, *y urawt* ‘his brother’ is marked using the preposition *o* ‘of’; its object receives no special marking.

- (44) pan wybu ef adnabot o 'y urawt y uedwl...
 when know.PAST.3S he recognize.INF of 3MS brother 3MS thought
 ‘...when he realized that his brother had read his mind...’ (PKM 68.9)

If the object is pronominal, it appears as a genitive clitic, *y* in (45), as is normal for the object of a nonfinite verb:

- (45) Ac yna y gyrchu o 'r marchawc ef yn llityawc...
 and then 3MS.GEN attack.INF of the knight him PRED fierce
 ‘And then the knight attacked him fiercely...’ (P 14.18)

Contrast this with the pattern in (43) above. In (43), the verb in the embedded clause is intransitive *dyuot* ‘come’ and its subject, *Gereint*, is not marked in any special way. If the subject is a pronoun, it appears as a genitive clitic, just like the transitive object in (47):

- (46) A phan wybuwyt eu medwi wynteu...
 and when know.PAST.IMPERS 3P.GEN become-drunk.INF 3P.CONJ
 ‘And when it became know that they had become drunk...’ (PKM 36.13)

Intransitive verbs in fact split into two groups: unaccusative (change-of-state) verbs follow the pattern just described, whereas unergative (action) verbs, such as *marchogaeth* ‘ride’, follow the pattern for transitives:

- (47) A gwedy marchogaeth onadunt mwy no hanner milltir ohonei...
 and after ride.INF of.3P more than half mile of.3FS
 ‘And after they had ridden more than half a mile away...’ (YSG 25–6)

Which of the two patterns is used can sometimes depend on the degree of agentivity ascribed to the subject: if a subject is viewed as actively carrying out the action of the verb, then the transitive/unergative pattern is used, whereas a non-active subject will be marked using the intransitive pattern (Lewis 1928: 182–4, Manning 1995, Morgan 1938, Richards 1949–51).

4.3.2 I-clauses

Late Middle Welsh sees the rise of a new type of nonfinite clause. Here, the subject is marked with what was originally the preposition *y* ‘to’ (ModW. *i*):

- (48) A gwedy udunt vwyta...
 and after to.3P eat.INF
 ‘And after they had eaten...’ (FfBO 49.2–3)

Such clauses are attested but rare in earlier texts. They are found in late Middle Welsh as the complements of prepositions and epistemic verbs, and therefore compete with the pattern described in section 4.3.1 above. For instance, example (48) could also have been expressed as *gwedy bwyta ohonunt* (after eat.INF of.3P), using the preposition *o* to mark the (agentive) subject. This type of *i*-clause, which expresses a real action in the past, seems likely to have arisen via omission of a verb such as *darfod* ‘happen, finish’, which is used frequently in Middle Welsh in similar contexts, and which probably became bleached of any original perfective sense (Morgan 1938, Richards 1949–51):

- (49) ...a chynn daruot idaw ymgueiraw yn y gyfrwy...
 and before happen.INF to.3MS settle.INF in 3MS saddle
 ‘...and before he had finished settling himself into his saddle...’ (PKM 10.26–7)

Another type of *i*-clause is found in Modern Welsh. This types express a generic or future action which has not actually taken place. In Middle Welsh, clear examples of this are rarer than the first type, but some are found:

- (50) ...a thi a wediwn ar yt ateb ynni a uyd byw hwnn
 and you PRT pray.PRES.1P on to-you answer.INF to-us PRT be.FUT.3S alive DEM
 ‘...and we pray to you for you to answer us whether he will live...’ (FfBO 45.26–7)

It appears to have emerged from a reanalysis of the complement of such predicates as *peri* ‘cause’, *erchi* ‘ask’ or *reit* ‘necessary’. These typically took a prepositional phrase headed by *y* ‘to’ as a complement followed by a nonfinite control clause, as illustrated for *peri* in (51) and for *reit* in (52).

- (51) A minheu a baraf [idaw ef] [uynet y sseghi y bwyd...]
 and 1S.CONJ PRT cause.pres.1s to.3s him go.inf to trample.INF the food
 ‘And I will make him go and trample down the food...’ (PKM 15.11–12)
- (52) ...reit yw [in] [gerdet yn bryssur].
 necessary be.PRES.3S to-us walk.INF PRED quick
 ‘...it is necessary for us to walk quickly.’ (PKM 71.1)

Example demonstrates for *reit* that the prepositional phrase headed by *y* is a constituent and can be used independently of the nonfinite clause that follows:

- (53) Reit oed [im] [wrth gynghor]...
 necessary be.IMPF.3S to-me at advice
 ‘I needed advice...’ (PKM 49.16–17)

In environments such as (51) and (52), the prepositional phrase headed by *y* was reanalysed as the subject of the embedded nonfinite clause, creating a new type of nonfinite clause which spread to contexts, such as that in (50), where the preposition was not selected by the verb in the main clause (Lewis 1928, Miller 2004).

4.3.3 Embedded focus clauses

Embedded focus (cleft) clauses are marked with one of three embedded focus markers, *panyw*, *y may* or *taw*, and manifest verb-second order. This variability is not well understood, although it is clear that *taw* is rare and southern and that *panyw* dies out in the sixteenth century, leaving only *mai* and *taw* in Modern Welsh. Example (54) shows two embedded focus clauses. The first is marked by *panyw* followed by the focused element *o’ m anuod*

inheu ‘against my will’ followed by a particle and the verb; the second is marked with *y may*, again with the focused element in initial position and the verb in second position.

- (54) *menegwch ydaw ... [p]an yw o ’m anuod inheu y*
 indicate.IMPER.2P to.3S FOCUS of 1S disagreement 1S.CONJ PRT
gwnaethpwynt hynny; ac y may brawt un uam a mi a wnaeth
hynny
 do.PAST.IMPERS this and FOCUS brother one mother as me prt do.PAST.3S this
 ‘...convey to him that it was against my will that this was done and that it was my
 half-brother that did it.’ (PKM 33.21–3)

Focus is also marked in ‘if’-clauses, where a focus complementizer *os* alternates with a non-focus complementizer, variously *o(t)* or *o(r)*.

4.4 The syntax of mutation

The distribution of the three initial consonant mutations, soft, nasal and aspirate, had largely been determined by the Old and Middle Welsh period. Most mutations are triggered by specific lexical items and this list has remained fairly stable since the Middle Welsh period. Grammatical mutations associated with gender have also remained stable: feminine singular nouns are associated with receiving and triggering soft mutation in largely the same environments as in Modern Welsh.

There are a few areas, however, where Middle Welsh operates substantially differently from Modern Welsh. The most important concerns direct object mutation (Morgan 1952: 182–233). In Modern Welsh, the direct object of a finite verb undergoes soft mutation in most contexts, while, in straightforward cases, the subject does not. This rule did not operate in Middle Welsh. Instead, certain verb forms trigger soft mutation on an immediately following noun phrase, irrespective of whether it is a subject or an object. So, for example, imperfect and pluperfect verbs ending in *-ei* trigger soft mutation on both an immediately following subject, in (55) (*Bendigeituran* becomes *Uendigeituran*) and on an immediately following object, in (56) (*marchauc* becomes *uarchauc*). On the other hand, past tense verbs in *-awd* or *-wys* do not.

- (55) *Ny angassei Uendigeituran eiryoet ymywn ty.* (/b/ > /v/)
 NEG contain.PLUPERF.3S Bendigeidfran ever inside house
 ‘Bendigeidfran had never fitted inside a house.’ (PKM 31.12)
- (56) *...ef a welei uarchauc...* (/m/ > /v/)
 he PRT see.IMP.3S knight
 ‘...he saw a knight...’ (PKM 2.3)

Where both subject and object are overt in VSO word order, the mutation of the object is determined by the nature of the subject, with a pronominal subject triggering soft mutation on the subject, even with a verb that does not otherwise trigger mutation:

- (57) *hyt nat edewis ef wr byw* (/g/ > ∅)
 until NEG leave.PAST.3S he man alive
 ‘...until he did not leave any living man...’ (PKM 42.24)

These rules represent a reorganization of the system that would be expected on the basis of Brythonic phonology, since these mutations do not straightforwardly occur in environments where the previous word once ended in a vowel. The shift to Modern Welsh represents a further reorganization, making mutation subject more regularly to syntactic factors.

Other differences concern adjectives. As in Modern Welsh, Middle Welsh adjectives normally undergo soft mutation after a feminine singular noun. However, they also mutate in two other contexts. A comparative adjective mutates after any noun if the clause is negative, as shown in (58); and an adjective mutates if the noun is preceded by the numeral ‘two’, as shown in (59) (*march* ‘horse’ is masculine).

- (58) Ny wydwn i varch **gynt**... (/k/ > /g/)
 NEG know.IMPF.1S I horse faster
 ‘I never knew a faster horse...’ (PKM 10.8–9)
- (59) deu varch **vawr** (/m/ > /v/)
 two horse big
 ‘two big horses’ (YSG 3094–5)

The former mutation is the result of the reduction of an earlier relative clause in this context (Evans 1964: 43–4). The latter is the regular development of the Brythonic dual endings. Both mutations disappeared in Early Modern Welsh.

4.5 Copular constructions

Use of the copula shows significant change through the Old and Middle Welsh periods. Typical of the Old and early Middle Welsh period is use of the copula (present *ys*, imperfect *oed*) in the order copula – *predicate* – **subject**:

- (60) Oed *melynach* **y** **fenn** no blodeu y banadyl.
 be.IMPF.3S yellower 3FS head than flowers the broom
 ‘Her head was more yellow (blond) than the flowers of the broom.’ (CO 490)

In embedded nonfinite clauses, a different pattern is used from the outset. Brythonic had developed a predicate marker *y(n)*, probably from an oblique (dative or instrumental) form of the definite article (Richards 1934: 107–12, Watkins and Piette 1962: 295–300). By Old and early Middle Welsh, this had become obligatory to mark the predicate in nonfinite clauses (as well as to mark adverbs and secondary predicates). The order found is copula – *predicate* – **subject**, as in finite clauses:

- (61) ...a gwedy bot y *barawt* **yr** **ystauell**...
 and after be.INF PRED ready the room
 ‘...and after the room was ready...’ (PKM 36.8–9)

In finite clauses, both main and embedded, there is variation between the older pattern in (60) and an innovative pattern with the predicate marker. However, when the predicate marker is used in finite clauses, the order is reversed, as copula – **subject** – *predicate*:

- (62) ...ac y mae **y** **enw** yn *parawt*.
 and PRT be.PRES.3S 3MS name PRED ready
 ‘...and his name is ready.’ (PKM 76.18–19)

The pattern in (62) increases in frequency in the Old and Middle Welsh periods, ousting the pattern in (60) by the end of Middle Welsh. Later in Middle Welsh, the word order from finite clauses with *yn*, namely, copula – **subject** – *predicate*, is generalized over to nonfinite clauses, giving the order found today:

- (63) Ac yr bot y **bobyl** yn anifeilyeid...
 and although be.INF the people PRED animals
 ‘And although the people are animals...’ (FfBO 41.16)

5 CONCLUSION

We have seen how Old Welsh emerged from the ancestral Brythonic language via a series of wide-ranging sound changes, largely shared with Breton and Cornish, that had a profound impact on the phonology of the language. These changes includes the loss of final syllables, the reorganization of vowel length and stress and the innovation of initial consonant mutations. Substantial morphological changes, including the loss of case and an absolute–conjunct distinction in verbal inflection, accompanied these changes. At the later period, Middle Welsh phonology goes through a period of relative stability, with innovation shifting to the realms of morphology, and especially syntax, with the break-up of verb-second word order and significant reorganization of nonfinite and copular clauses having a profound effect on the structure of the language.

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- CA* *Canu Aneirin*. Ed. Ifor Williams. 1938. Cardiff: Gwasg Prifysgol Cymru.
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- CLIH* *Canu Llywarch Hen*. Ed. Ifor Williams. 1935. Cardiff: Gwasg Prifysgol Cymru.
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