

The diachrony of Brythonic Celtic syntax

David Willis

University of Cambridge

To appear in: Borsley, Robert D.; Tallerman, Maggie O.; and Willis, David W. E. forthcoming.
The syntax of Welsh. Cambridge: Cambridge University Press.

OUTLINE

0. The P-Celtic languages
 1. Structure of main clauses
 - 1.1 Verb-second structures
 - 1.2 Verb-initial patterns
 - 1.3 Long Head Movement and VP-topicalisation
 - 1.4 Negation
 - 1.5 The verb ‘to have’
 - 1.6 Periphrastic verbal forms
 - 1.7 Agreement patterns and null arguments
 - 1.8 Morphological case
 2. Mutations
 - 2.1 Direct object mutation in Welsh
 - 2.2 Syntactic triggering of adjective mutations
 3. Copular constructions and inversion structures
 - 3.1 Inversion structures in Middle Welsh
 - 3.2 Copular constructions
 4. Pronominal systems
 - 4.1 Loss of accusative clitics in Welsh
 - 4.2 Loss of dependent pronouns in Breton
 - 4.3 The effects of phonological reduction of pronouns in Welsh
 5. Subordinate clauses
 - 5.1 Embedded tensed clauses
 - 5.2 Embedded tenseless clauses
 6. *Wh*-constructions
 7. The structure of noun phrases

0 THE BRYTHONIC CELTIC LANGUAGES

The Celtic languages are conventionally divided into the P-Celtic languages (the modern Brythonic languages, Breton, Cornish and Welsh, and the ancient continental Celtic languages, Gaulish and Lepontic) and Q-Celtic (the modern Goidelic languages, Irish, Scottish Gaelic and Manx, plus one continental Celtic language, Celtiberian). The P-Celtic languages are those that underwent the sound change $*k^w > *p$ e.g. Irish *mac* ‘son’ vs. Welsh *mab* ‘son’, Gaulish

Maponos ‘name of a god’. A common stage of the P-Celtic languages separate from Goidelic has been widely hypothesised, although it remains somewhat controversial (the ‘Gallo-Brythonic hypothesis’, Koch 1992 and Schmidt 1990, 1993). The modern P-Celtic (Brythonic, Brittonic) languages are descended from British, the Celtic language spoken across most of Britain in the first century BC and first century AD. Western dialects of this language developed into Welsh. South-western dialects developed into Cornish and, with the migration to Brittany, into Breton. The family tree for P-Celtic is given in Figure 1.

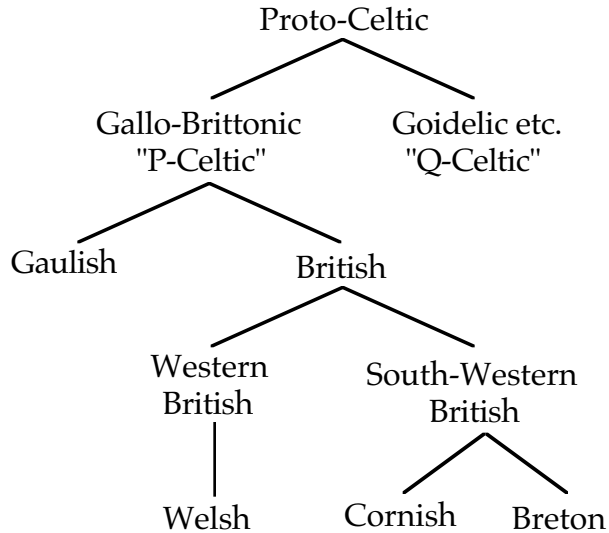


Figure 1. The P-Celtic languages.

The continental Celtic languages are attested primarily from a variety of stone inscriptions from the third century BC onwards. The syntax of Gaulish is still poorly understood and discussion has largely been limited to the establishment of a ‘basic’ word order type. SVO order is the most frequently attested order in the surviving material. It has traditionally been assumed that Gaulish had ‘free’ word order (Lewis 1942), although more recently other views have been proposed, for instance that all the early P-Celtic languages were verb-second (Koch 1991) or that Gaulish had ‘basic’ SVO order (Eska and Evans 1993:40). Celtiberian on the other hand seems to have had dominant SOV word order (Eska and Evans 1993:33). Discussion here will be largely restricted to the much better attested Brythonic languages, Breton, Cornish and Welsh. For more detailed discussion of the syntax of Gaulish see Eska (1990a, 1991–2) and Koch (1983b, 1985), and of Celtiberian Eska (1990b).

For the Brythonic languages, the conventional division of the languages into periods is given in Table 1, and is adopted here (see Jackson 1953:5–6; and Morris-Jones 1913:6–8, Lewis 1931:96–108, and Evans 1964:xvi–xxi for Welsh; Lewis and Piette 1966:1–6 and Hemon 1975:1–2 for Breton; and Lewis 1946:1–6 and George 1993:410 for Cornish). The term ‘Early’ is used to describe the languages after the period of the phonological changes (principally loss of final syllables) that are taken to indicate the splitting up of the Brythonic parent language into the three Neo-Brythonic languages, but before the earliest written records.

Early Welsh	550–800
Old Welsh	800–1150
Middle Welsh	1150–1400
Modern Welsh	1400–present day
[Early Modern Welsh	1400–1600]
Early Breton	550–800
Old Breton	800–1100
Middle Breton	1100–1650
Modern Breton	1650–present day
Early Cornish	550–800
Old Cornish	800–1200
Middle Cornish	1200–1575
Late Cornish	1575–1800

Table 1. Conventional period datings for the Brythonic Languages.

Old Welsh is attested in a number of short prose texts plus glosses on Latin works. There is also a substantial body of poetry whose date of composition is usually located within the Old Welsh period but which is attested largely in later manuscripts. The fact that most of the available material is poetry located within a highly literary and formalised tradition makes the interpretation of the syntactic evidence for Old Welsh exceedingly difficult. Evidence is much more secure for Middle Welsh, surviving in a large number of texts, including tales and romances, legal codes, chronicles, saints' lives and other religious texts, and medical and scientific works.

In Breton, although glosses of whole sentences are found already in Old Breton, substantial continuous texts are available only from the mid-fifteenth century. The Middle Breton corpus consists primarily of saints' lives, mostly written in verse, a fact which presents considerable difficulties for the analysis of certain aspects of syntax, notably word order. Note that the conventional periodisation means that, on the whole, textual evidence from Middle Breton is contemporaneous with that from Early Modern Welsh. Middle Breton will be the primary focus of discussion here. On the syntax of Old Breton, see Fleuriet (1964).

In Cornish, continuous texts are available only from the latter half of the Middle Cornish period, and consist of religious verse plays and poetry, homilies, a folk tale and a few other mainly religious prose texts. Linguistic descriptions have been based mostly on the earliest material, the mystery plays. As with Middle Breton, the use of verse makes them difficult sources for syntactic information about the language. The syntax of the later prose texts has as yet received little attention.

For general overviews of all three languages see Russell (1995) and the articles in Macaulay (1992) and Ball (1993). The standard grammars of the medieval Brythonic languages are Evans (1964) for Welsh, Hemon (1975) for Breton and Lewis (1946) (translated into German as Lewis 1990) for Cornish.

A Principles and Parameters syntactic model is assumed in this chapter, although the model adopted is not crucial for much of the discussion. Good introductions to the model adopted are Haegeman (1994) and Ouhalla (1994).

Unmarked examples are Middle Welsh. Old Welsh examples are marked **OW**; Early Modern Welsh is marked **EMW**; Modern Welsh **ModW**; Middle Breton **B**; and Cornish **C**.

1 STRUCTURE OF MAIN CLAUSES

1.1 Verb-second structures

Pre-modern stages of all the Brythonic languages are characterised by a verb-second (V2) constraint in main clauses. While this constraint survived in Breton and Cornish, the major development in the history of Welsh syntax has been the emergence of dominant VSO word order in main clauses.

1.1.1 The position of subjects

In Modern Breton non-pronominal subjects generally follow negation, whereas in Welsh they generally precede. On the basis of this, it is widely assumed that subjects in Welsh raise to SpecTP, whereas subjects in Breton raise only as far as SpecAspP (Schafer 1994:27). Earlier stages of the two languages are compatible with this. In Middle Breton in (1), the lexical subject follows the negative marker *quet*.. In (2) a pronominal subject precedes the negative.

- (1) Nen deu quet da caquet etabl /En neb faeczon
 NEG is NEG your cackle fair in any way
 na raesonabl /Na conuenabl... **B**
 neither rational nor appropriate
 ‘Your cackle is in no way fair, rational or appropriate.’ (B 326)
- (2) Sellet huy a nendeu hy quet
 look-IMPER you PRT NEG+is it NEG
 Drez voe ordrenet miret mat... **B**
 through was commanded kept well
 ‘Look [to see] whether it isn’t well kept, according to what was commanded...’
 (B 416)

In Middle Welsh the position of the subject is difficult to establish with any certainty, since the status of the negative marker *ddim* is not clear (see section 1.4 below).

1.1.2 The verb-second constraint

The most characteristic syntactic pattern of Middle Welsh is the main clause construction known traditionally as the abnormal sentence. In this construction one constituent precedes a verbal particle and the finite verb. The preverbal constituent is typically one familiar from the preceding discourse, and it is generally accepted that the abnormal sentence is a fronting process that allows topic-comment order to be realised (Fife 1988).¹ Examples are given in (3). The form of the particle, which is common to the abnormal sentence and to relative clauses and *wh*-questions, is determined by the nature of the preverbal constituent. It appears as *a* after a nominal element or nonfinite verb (verbnoun), otherwise as *y(d)*.

¹The topic-comment nature of the word order rule has been demonstrated for a number of Middle Welsh texts. The main studies are Poppe (1989, 1990, 1991a, 1991b, 1993); Watkins (1977–8, 1983–4, 1988, 1990, 1993).

- (3) a. Ruedi mawr o sswydwyr a gyuodasant y uynyd...
 numbers big of officials PRT rose-3P up
 ‘Great numbers of officials got up...’ (PKM 16.18–19)
- b. Ac ystryw a wnaeth y Gwydyl.
 And trick PRT made the Irish
 ‘And the Irish played a trick.’ (PKM 44.11)
- c. Y prenneu ereill a deuei ffrwyth arnunt...
 the trees other PRT grew-IMPF fruit on-3P
 ‘Fruit grew on the other trees...’ (YSG 4387–8)
- d. Yn Harlech y bydwch seith mlyned ar ginyaw...
 In Harlech PRT will-be-2P seven years at dinner
 ‘In Harlech you will be at dinner for seven years...’ (PKM 45.2–3)

The term ‘abnormal’ derives from the fact that the usual word order of Modern Welsh is verb-initial. From a modern perspective, then, this construction is ‘abnormal’. However, as recent studies have shown, it is statistically the most frequent word order pattern in Middle Welsh. Verb-initial main clauses in fact account for an insignificantly small proportion of main clauses, and is largely confined to coordination contexts (see section 1.2 below). The distribution of word order patterns found in affirmative main clauses in studies of a number of Middle Welsh texts is given in Table 2.

	word order pattern					V1 (%)	sample size
	verb-second main clauses clause-initial constituent (%)						
	Adv	S ^{NOM}	S ^{PRO}	O ^{NOM}	V/VP		
<i>Branwen</i>	41	17	16	8	14	4	181
<i>Breuddwyd Maxen</i>	43	5	16	20	8	9	154
<i>Breudwyt Ronabwy</i>	45	12	6	9	26	2	139
<i>Culhwch ac Olwen</i>	25	16	12	12	26	9	253
<i>Ked. Amlyn ac Amic</i>	47	5	7	6	32	3	293
<i>Cyfranc Lludd a Llefelys</i>	39	24	22	4	10	0	67
<i>Manawydan</i>	24	6	31	12	27	0	154
<i>Pwyll</i>	38	11	22	10	17	3	376

Adv	Adverbial phrase/clause (incl. adverbial complement)		
S ^{NOM}	Nominal subject	V/VP	Verbnoun/nonfinite verb phrase
S ^{PRO}	Pronominal subject	V1	Verb in initial position
O ^{NOM}	Nominal object		

Sources: Poppe (1989, 1990, 1991a, b, 1993), Watkins (1977–8, 1983–4, 1988, 1993).

Table 2. Distribution of word order patterns in affirmative main declarative clauses in Middle Welsh.

The status of the abnormal order in Middle Welsh has been controversial. According to the most prominent account of the development of Welsh word order (Mac Cana 1973; Watkins 1977–8; Fife 1988; and Fife and King 1991), topicalisation in the abnormal order was a literary fashion in Middle Welsh, unrepresentative of the spoken language of the period. It is claimed that the order was introduced from south-eastern dialects, which once formed a dialect continuum with Breton and Cornish, and which supposedly formed the basis of the literary language (Mac Cana 1973, 1979, 1991, 1992). This hypothesis is intended to account for a paradox in the history of the language. In Old Welsh both the verb-initial order in (4) and the abnormal order in (5) appear. It has generally been claimed that the verb-initial pattern is the usual one (Watkins 1987) (although the evidence is sparse and difficult to interpret).

- (4) ...prinit hinnoid .iiii. aues... **OW**
 buys that four birds
 ‘That buys four birds...’ (Ox. 234.33)
- (5) Gur dicones remedaut elbid angurit... **OW**
 man created wonder world PRT+1P-ACC+redeems
 ‘The man who created the wonder of the world redeems us...’ (Juv. 5a–b)

Similarly in contemporary Welsh verb-initial orders predominate. It is therefore tempting to believe that the intermediate period must also have seen dominant verb-initial main clause order.

However, there is considerable evidence against this. First the pattern is the dominant main clause order in all medieval Brythonic languages, and its properties are virtually identical in all three. Examples from Middle Breton are given in (6).² Moreover, since similar topicalisation structures are fully productive in Modern Breton, there is no reason to doubt their true productivity in earlier stages of that language.

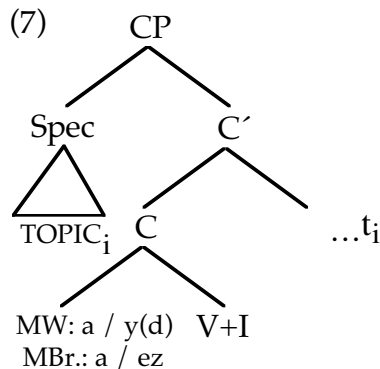
- (6) a. Cesar a respontas deze... **B**
 Cæsar PRT replied to-them
 ‘Cæsar replied to them...’ (Ca. 12)
- b. ...hac an holl doueouse ... a meus an oll dispriset...
 and the all gods-those PRT have-1S the all renounced
 ‘...and I have renounced all those gods...’ (Ca. 8)
- c. ...hac en continant ez aparissas an eal dezy **B**
 and immediately PRT appeared the angel to-her
 ‘...and immediately the angel appeared to her...’ (Ca. 13)
- d. Ma guir cares vizey... **B**
 my true love will-be-2S
 ‘You shall be my true love...’ (B 506)

A similar variety of orders is attested in Cornish (George 1990, 1991).³ Syntactic similarities in points of detail discussed below also lead to the conclusion that the abnormal order in Middle Welsh reflects spoken usage.

²For statistical studies of the distribution of the various word order patterns in a Middle Breton text see George (1987–8, 1990).

³George draws attention to the existence of a number of examples of fronting of two arguments in the Middle Cornish verse play *Beunans Meriasek*. The order is always object – pronominal subject – verb:

These word order patterns have been interpreted as a verb-second (V2) constraint in Middle Welsh (Willis 1998) and Modern Breton (Schafer 1994, 1995), and such a constraint appears to have held for all three medieval Brythonic languages. This V2-constraint is broadly comparable to that in the modern continental Germanic languages, and can be analysed as A'-movement of a topic constituent to SpecCP. Whether the verb also raises to C in these languages as in Germanic is difficult to determine. In the following discussion it is assumed that the verb raises to adjoin to particles in C. The form of the particle is determined by checking with the topic in SpecCP.⁴ The relevant configuration is shown in (7).



A number of other properties are consistent with the claim that V2-topicalisation in the medieval Brythonic languages is A'-movement. Topicalisation from an embedded nonfinite clause is possible in Middle Welsh in (8). Additionally topicalisation from an embedded finite clause is found in Middle Breton in (9). This is exactly the same pattern as that found in relative clauses (see section 6 below), suggesting that A'-movement is involved in these structures.

- (8) Toat y neuad a tebygei y vot yn eur oll.
 ceiling the hall PRT supposed 3SM be-VN PRD gold all
 'The ceiling of the hall he supposed to be all gold.' (BM 3.3)
- (9) ...hoguen domi[n]a a fell diff a gry em
 but rule-VN PRT pleases to-me PRT do-2S in-my
 roantelez euel vn roanes excellant... **B**
 kingdom like a queen magnificent
 '...but I want you to rule in my kingdom like a magnificent queen...'
 (Ca. 23)

Furthermore, reconstruction of anaphoric relations is found in V2-structures, as in (10).

-
- (i) Cryst ha ty me a dhefy... **C**
 Christ and you I PRT defy
 'I defy you and Christ...' (Beunans Meriasek 2475)

George suggests that this reflects natural usage (1991:216), and is therefore a Cornish innovation (1990:22–30, 239–40). This may be so, although in the absence of studies of the later prose texts, the conclusion cannot be a firm one.

⁴Given the rules for adverb placement, a plausible alternative is that the particle and verb form a complex within IP, raising covertly to C at LF to check features with the topic in SpecCP (i.e. 'complementiser lowering', McCloskey 1996).

- (10) A 'e varch a gymerth y marchawc...
and his horse PRT took the knight
'And the knight took his horse...'
(P 12.4)

This V2-system is complicated somewhat by rules of adverb placement. There has been considerable discussion in the literature on 'multiple frontings' in the Middle Welsh abnormal sentence. These are instances where a number of constituents precede the verb, leaving it apparently in third or even fourth position or later. An extreme example is given in (11).

- (11) Ac [o 'r dywed] [gan wuyhaf grym a llafvr] [gwedy
and of the end with greatest power and toil after
kaffael o 'r Brytanyeyt penn e mynyd], [en e
get-VN of the Britons top the mountain in the
lle] [wynt] a dangossasant...
place they PRT showed-3P
'And in the end with the greatest power and toil once the Britons had gained the top of
the mountain in that place they showed...'
(*Brut y Brenhinedd* 784–5, Poppe 1991b:178)

It has been suggested that the multiple frontings are an indication that the abnormal sentence in Middle Welsh is a literary device pursued to extremes (Fife and King 1991:89–90). Tallerman (1996) suggests that these cases motivate an analysis of the Middle Welsh abnormal sentence as multiple adjunction of both arguments and non-arguments to CP.

The most important objection to these analyses is that in cases of multiple fronting, apart from clear instances of left dislocation, all the preverbal elements except one must be non-argument adverbials. At maximum one of the preverbal constituents may be an argument, and this argument must 'count' for the purposes of determining the form of the preverbal particle.

Adverbs may be placed before a topicalised argument as in (12), and between a topicalised argument and the preverbal particle as in (13).⁵

- (12) a. **Hir bylgeint** Guydyon a gyuodes.
Early-morning Gwydion PRT got-up
'Early next morning, Gwydion got up.'
(PKM 82.5–6)
- b. ...ha **goudese** ny a rento dict respond. **B**
and after-this we PRT give-FUT to-you response
'...and after this we shall give you a response'
(Ca. 6)
- (13) a. Gwalchmei **yn ieuentit y dyd** a death y dyffryn...
Gwalchmai in youth the day PRT came to valley
'Early in the day Gwalchmai came to a valley...'
(P 59.9–10)
- b. ...ha neuse an rouanes **dre an carantez he deffoye**
and now the queen through the love had-3SF
cōmeret ouz an guerhes sanctes Cathell, a
taken towards the virgin saint Catherine PRT
yez en nos... **B**
went in-the night
'...and now the queen through the love that she had taken towards the virgin saint
Catherine went in the night...'
(Ca. 19)

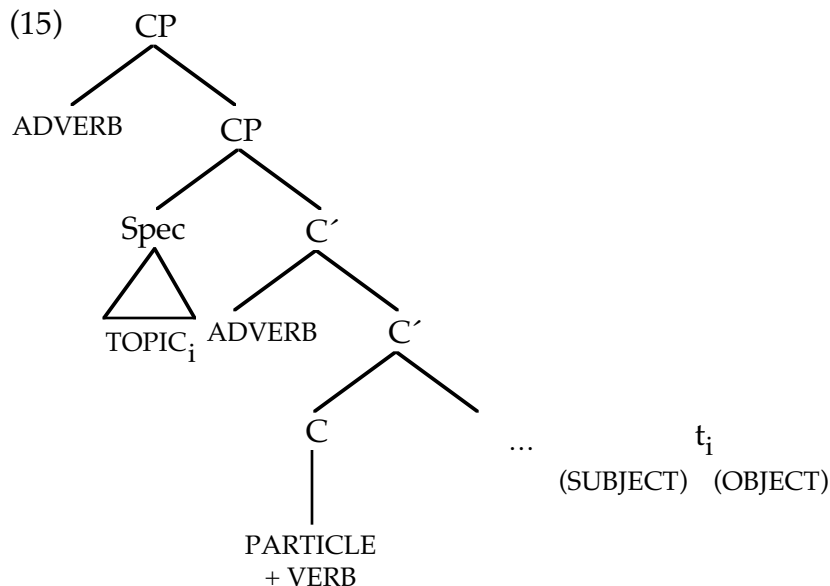
Adverbs preceding the topic can be analysed as adjoined to CP. Since left dislocated elements are generally considered to adjoin to CP, such an analysis predicts that left dislocated

⁵The Cornish data are generally parallel (see George 1991:212).

elements and adverbs will be ordered freely relative to one another. This prediction is indeed borne out:

- (14) Arglwyd ... rac guelet gwr kyuurd a thidi
 lord lest see-VN man of-such-rank as you
 yn y gueith hwnnw, punt a geueis i o
 in the act that pound REL received-1S I from
 gardotta, mi a 'e rodaf it...
 beg-VN I PRT 3S-ACC give-1S to-you
 'Lord ... lest I should see a man of such rank as you in that act, a pound that I received
 from begging, I shall give (it) to you...' (PKM 62.9–11)

Adverbs appearing between the topic may be adjoined to C' (or perhaps adjoined to AgrSP if the verb does not raise to C, see footnote 4). The result is that a unique topic position SpecCP is maintained. Consequently there is only one landing site for movement to a preverbal position, and only one argument may be moved there. Adverbials on the other hand may be freely adjoined to CP or C'. For further details see Willis (1998).



Breton has essentially maintained this system to the present day (see Schafer 1995), although perhaps with less tolerance of adjoined adverbs. In Welsh, however, topicalisation of constituents other than subjects and adverbs became less frequent. The evidence of informal texts suggest that by the seventeenth century the language alternated only between VSO and SVO order in main clauses. The V2-constraint, the requirement that SpecCP be filled, was lost. A crucial role seems to have been played by the phonological erosion of the preverbal particles, omitted (or used interchangeably) in informal texts from the sixteenth century. Omission of *a* after a subject topic is shown in (16); and omission of *y(d)* after an adverbial topic in (17) (see also Evans 1968a:335).

- (16) ...a Jessu gwnnwys y olwe y vynydd... EMW
 and Jesus raised his look up
 'And Jesus looked up.' (RhG i.85.16–17, 1550–75)

-
- (17) Yn vffern peraiſt gyffro... EMW
 in hell caused-2S commotion
 ‘In hell you caused a commotion...’ (TWRP, ‘Y Dioddefaint’ 825, 1552)

Topic-particle agreement provided good evidence in the acquisition of the V2-constraint. Its loss, alongside the decline in the variability of word order, seems to have triggered a reanalysis in the structural position of preverbal adverbs. In Middle Welsh, some of these (like the one in (3d)) would have been the only preverbal constituent, and the preverbal particle would have been *y(d)* in agreement with them. Others, those in multiple fronting constructions like (11), would have been in adjoined positions, and did not trigger topic-particle agreement. With the loss of the particles, all preverbal adverbs seem to have been analysed as extrasentential elements adjoined to CP. Since such elements are typically optional, the innovation of absolute verb-initial main clauses was a natural consequence. These are attested freely from the sixteenth century:

- (18) Gorvüost ar dy elynion... EMW
 overcame-2S on your enemies
 ‘You overcame your enemies...’ (RhG i.22.28–9, c. 1514)

Affirmative SVO orders remained alongside the new VSO patterns. Since the sixteenth century, however, the use of SVO order in Welsh has declined to the extent that it has disappeared entirely from most dialects. This must be partly due to the emergence of affirmative markers from preverbal pronominal subjects (see section 4.3 below), and to the continued spread of periphrastic verb-initial constructions (see section 1.6 below), as well as competition from absolute VSO orders.

On agreement patterns in V2-structures see section 1.7 below.

1.1.3 Expletive subjects in Welsh

Alone amongst the medieval Brythonic V2-languages, Middle Welsh had an expletive construction.⁶ The expletive subject *ef* (the masculine third person singular pronoun) occupies the preverbal topic position when the clause contains no other topic constituent:

- (19) Ef a doeth makwyueit a gueisson ieueinc
 it PRT came squires and lads young
 y diarchenu...
 to+3SM-GEN disrobe-VN
 ‘There came squires and young lads to disrobe him...’ (PKM 4.8–9)

⁶The Breton (embedded) interrogative marker *hag-eñ* may be the grammaticalised form of an earlier expletive construction in which *eñ* was an expletive subject pronoun. Middle Breton examples like the following are superficially ambiguous between the two structures:

- (i) Lauar a te goar ma za Barba / Ac eff so hoaruezet
 tell Q you know where goes Barbara Q it is happened
 netra / Na perac tra eu eza hy? **B**
 anything or why is that-goes she
 ‘Tell me whether you know where Barbara is going, whether anything has happened
 (whether there has happened anything) or why she is going.’
 (B 371)

Expletive subjects are restricted in their distribution in Middle Welsh. They are found with unaccusative verbs in presentational contexts as in (19). In this case the only restriction on the subject is that it should refer to an entity new to the discourse, whether it is definite or indefinite. They also occur as the subject of impersonal forms of the verb:

- (20) ...ac eissoes ef a anet meibon idaw ef...
 and yet it PRT be-born-IMPERS sons to-3SM him
 ‘...and yet sons were born to him...’ (YCM 30.6–7)

A third environment for the expletive subject is in main clauses with an extraposed clausal argument. In (21) the clausal subject of *damweinaw* ‘to happen’ is (obligatorily) extraposed rightwards. An expletive subject appears and is topicalised to preverbal position.

- (21) A gwedy gwascaru y llu dan y coedyd ef
 And after scatter-VN the force among the woods it
 a damweinawd y Ywein ... kyrchu y coet...
 PRT happened to Owain attack-VN the forest
 ‘And after scattering the force among the woods, Owain ... happened to attack the forest...’ (BT 96.28–9)

Most commonly the internal argument (‘subject’) precedes any complements, as in (19). In some cases, however, it follows as in (22).

- (22) Bei na metrut hynny, ... ef a
 if NEG have-skill-IMPF-SUBJ-2S that it PRT
 doy am dy benn cwbyl o ’r gouut.
 come-IMPF on your head all of the trouble
 ‘If you had not had the sense to do that, all the trouble would have come to you.’ (PKM 64.28–65.1)

The expletive subject *ef* is only ever found in preverbal topic position. Where there is some other topic in a main clause, or in a subordinate clause, it is never found.

Although this represents the distribution of the expletive subject in canonical Middle Welsh texts, by Late Middle Welsh (from the end of the fourteenth century at least) the range of contexts in which the expletive subject is found expands to include clauses with transitive verbs:

- (23) Ef a danuon Duw ... taryan itt...
 it PRT send God shield to-you
 ‘God will send a shield to you...’ (YSG 247–8)

There was a sharp increase in the use of this construction in the late sixteenth and seventeenth centuries, evidenced in less literary texts. At this period the expletive subject appears in reduced form as *fe*, *fo* and *e*,⁷ and seems to have been reanalysed as a verbal particle (affirmative main clause complementiser).

⁷*Fo* is a phonologically reduced form of the reduplicated (strong) pronoun *efo* plus preverbal particle *a*; *fe* is a reduced form of a variant of this, *efe*. *E* is the direct descendent of the Middle Welsh expletive *ef a*. The three competed as preverbal particles for a while, with *fe* coming to dominate in late Modern Welsh.

-
- (24) ...vo drôdd dy ateb y lleuad y 'w gwrthwyneb.
 FO turned your answer the moon to its reverse
 '...your answer turned the moon around.' (TCh 10.17–18)

The spread of this construction in Welsh naturally led to a significant increase in the frequency of VSO word orders, and has been a significant factor in the spread of dominant VSO word order in Modern Welsh. See also discussion of inversion (section 3.1) and the phonological reduction of pronouns (section 4.3) below.

1.2 Verb-initial patterns

1.2.1 Absolute and conjunct verbal morphology

Old Welsh shows some survivals of an earlier division between absolute and conjunct verbal endings. Absolute forms were used when the verb stood at the beginning of the sentence, with conjunct forms elsewhere. Although the distinction had largely been lost before Old Welsh, some evidence of the distinction remains. In the third person singular some absolute endings in *-(h)it* and *-yt* are found in Old Welsh. In (25) the absolute form of the third person singular past tense of the verb 'to give' is found, *rodesit*, rather than the conjunct form *rodes*.

- (25) Rodesit Elcu guetig *equs...*
 gave-ABS Elgu afterwards horse
 'Elgu gave afterwards a horse...' (SM)

The existence of absolute verbal morphology points to an earlier stage of the Brythonic languages where VSO was the unmarked order in main clauses. The most likely scenario for the earlier development of Brythonic word order is that VSO word order gave way to a V2-system as a clefting construction became generalised to all main clauses (on the clefting construction, see also section 1.7.2 below).⁸

Even in the later medieval Brythonic languages verb-initial orders do appear, but they are restricted to well-defined environments, most notably in coordination contexts and with the verb 'to be'.

1.2.2 VSO in coordination contexts

In all the medieval Brythonic languages verb-initial orders appear productively in the second of a pair of conjoined clauses (and any subsequent clauses). The preverbal particles provide clear evidence for the syntactic structure involved. Middle Welsh and Middle Breton data are presented here, following the analysis in Willis (1997). For Cornish data see (George 1990:231).

In two clauses sharing a subject in preverbal topic position in both clauses, the second subject may be omitted as in (26). Syntactic effects remain: the particle *a* in the second clause

⁸This is a variant of the earliest view (Richards 1938:104–6) that the 'abnormal' V2-order was the result of the influence of clefts on the SVO order. For other views see Lewis (1942) and Mac Cana (1973). Lewis argues that preverbal particles were inserted into SVO structures to host object clitics. Mac Cana (and following him Isaac 1996) suggests that the abnormal sentence developed from left-dislocation structures.

indicates agreement with a nominal topic. This seems to indicate coordination at a level below the subject but above the verb, that is, at *C'*. An analysis with a null *pro* subject in SpecCP is ruled out since outside coordination structures *pro* is not licensed in the topic position.

- (26) a. ...mi a rodaf Pryderi a Riannon it ac a
 I PRT give-1S Pryderi and Rhiannon to-you and PRT
 waredaf yr hut a 'r lletrith y ar Dyuet.
 remove-1S the spell and the magic from on Dyfed.
 '...I shall give Pryderi and Rhiannon to you and remove the spell and magic from Dyfed.'
 (PKM 64.18–20)
- b. goudese hon saluer Iesus-Christ a aparissas dezy
 after-this our saviour Jesus Christ PRT appeared to-her
 gant vn nompr bras a aelez ha guerheset hac
 with a number big of angels and virgins and
 alauaras dezy... **B**
 PRT+said to-her
 'After this our saviour Jesus Christ appeared to her with a great number of angels and virgins and said to her...'
 (Ca. 21)

In (27) the second clause is apparently verb-initial, but the particle *a* preceding the verb in this clause indicates that there is a nominal topic. In (26) the presence of *a* could be due to agreement with topic of the first clause. However, in (27) the topic in the first clause is adverbial, triggering the particle *y(d)/ez*. The only solution seems to be to posit the presence of a null topic with nominal features in SpecCP of the second clause, this topic having been introduced as an operator in the subject position.

- (27) a. ...ac yna y kyuodes sabot ac ___ a elvis ar
 and then PRT arose Sabot and ___ PRT called on
 bovn...
 Bown
 'And then Sabot arose and called on Bown...'
 (YBH 2825–6)
- b. ...euel maz testify an scriptur sacr, ez cryont
 like as testifies the scripture holy PRT cry-3P
 vengeancz, hac à so alyes dré punition diuin
 vengeance and PRT is often through punishment divine
 castiet en betman...
 punished in-the world-this
 '...as the holy scripture testifies, they cry vengeance and are often punished in this world...'
 (GK 2.96.4–6)

This conclusion is further supported by the fact that in Middle Welsh, at least, there is no restriction on the syntactic position occupied in the first clause by the element corresponding to the gap in the second. In (28) the gap in the second clause has a disjoint antecedent corresponding to no single syntactic element in the first clause.

- (28) Ac yna **Paredur a Bwrt**_i a gymerassant y tal
 and then Peredur and Bwrt PRT took-3P the end
 blaenaf y'r tabyl, a **Galaath**_j ehun a gymerth
 front to-the table and Galâth himself PRT took
 y tal arall, ac _____{i+j} a aethant ac ef tu a
 the end other and _____{i+j} PRT went-3P with it towards
 'r dref.
 the town
 'And then Peredur and Bwrt took the front end of the table, and Galâth himself took the
 other end and (they) carried it towards the town.'
 (YSG 5599–601)

Clauses introduced by *y (d)/ez* + a verb are sometimes analysed as VSO. Examples of the sort of clauses involved are given in (29). In the light of the foregoing discussion, it would be desirable to account for the appearance of *y(d)/ez* rather than *a* in the second conjunct in terms of agreement with a topic. This can be achieved by positing a null topic in the second conjuncts in (29). This topic would be adverbial rather than nominal in nature, hence the particle. Its contribution to the meaning is to provide narrative continuity in the absence of any topic, roughly equivalent to 'and then' (see analyses of verb-initial clauses in V2 languages, for instance Diesing 1990 on Yiddish, and Sigurðsson 1990 on Old Icelandic). This conclusion only serves to confirm the V2-nature of the medieval Brythonic languages.

- (29) a. ...ac ef a death y 'r weirglawd. Ac y death [y]
 and he PRT came to the meadow and PRT came the
 wreic ohen a 'r vorwyn at y gwr llwyt.
 woman very-old and the maiden to the man grey
 '...and he came to the meadow, and the very old woman and the maiden came to the
 grey man.'
 (P 38.9–10)
- b. Neuse ann drouc berger so conuertisset en un men
 now the bad shepherd is turned in a stone
 mabr ... Hac ez lauar Sante Barba... **B**
 marble and PRT says Saint Barbara
 'Now the bad shepherd is turned into a marble stone ... and Saint Barbara says...'
 (B 383)

In Welsh these coordination rules have not survived the loss of verb-second. Since acquisition of the null topic depended on the presence of the particle *y(d)/ez*, the phonological erosion of the particle introduced verb-initial clauses into the language that did not need to be analysed as part of the verb-second system. This in itself probably contributed to its abandonment. For instance in the sixteenth century sentences like (30) are found, where only the form of *a(c)*, *ac* before a vowel, indicates the loss of the particle *y(d)*. Soon afterwards, even this is lost, indicating that the second of conjoined clauses was already being analysed as truly verb-initial.

- (30) ...ef aeth anyssbrydoedd ac ef ... ac yr agores y
 it went evil-spirits with him and PRT opened the
 ddayar, **ac llyngkawdd** y wyr ef oll. **EMW**
 earth and swallowed his men him all
 '...evil spirits took him to eternal torment, and the earth opened and it swallowed all his
 men.'
 (Dff. 162.3–5, 1595)

1.2.3 VSO with 'to be'

In Middle Breton this is confined to one (present tense) paradigm of the verb 'to be', namely the EMAñ-paradigm in (31). In Middle Welsh, verb-initial order is required with the cognate MAE-paradigm in (32), and occurs optionally (alongside verb-second) with the past tense OED-paradigm in (33).⁹

- (31) Ema en he pres... **B**
 is in her hurry
 'She is in a hurry...' (B 371)
- (32) Ie, ... y mae yno ryw ystyr hut.
 yes PRT is there some meaning magic
 'Yes, ... there is some magic meaning there.' (PKM
 10.10, see Watkins 1993:122)
- (33) a. Arglwyd, ... yd oed yn ediuar gennym ni gwneuthur
 lord PRT was PRD sorry with-1P us do-VN
 hynny.
 that
 'Lord, ... we were sorry to have done that.' (YSG 4679–80)
- b. A drws y pebyll a oed yn agoret...
 and door the tent PRT was PRD open
 'And the doorway of the tent was open...' (P 10.11)

In Welsh the MAE- and OED-paradigms were the most frequently used auxiliaries in the periphrastic progressive construction. The spread of this construction therefore helped to generalise verb-initial order (see section 1.6.2 below).

See also discussion of copular constructions below.

1.3 'Long Head Movement' and VP-topicalisation

A widely discussed feature of Modern Breton syntax is Long Head Movement (LHM), movement of a non-finite verb across an auxiliary to the front of a main clause (Borsley, Rivero and Stephens 1996). The feature is widespread in earlier stages of the Brythonic languages. In Middle Breton, either a lone verbnoun (LHM) in (34) or a full VP (VP-preposing) in (35) may be fronted across a finite verb.

- (34) ...[v fezaff] agra en holl tut sauant: **B**
 beat-VN PRT+does the all people wise
 '...she beats all the wise people...' (Ca. 12)
- (35) [VP Gouernn en splann un queffrann didann haff
 govern-VN in splendour a part under-me
 an bet ... euel penn] a mennaff... **B**
 the world as head PRT want-1S
 'I want to govern in splendour a part of the whole world under me as its head...' (B 34)

Past participles may be moved over the auxiliaries *bout* 'to be' and *endevout* 'to have' in the perfect tense:

⁹In both languages, special relative forms (confined to the verb 'to be'), namely MW. *yssyd*, MBr. (a) *so*, can be substituted for the MAE-paradigm in V2-orders.

- (36) ...lequeat em eux ma poan ha ma sourcy, da lauaret
 put have-1S my pain and my worry to say-VN
 dit an traezou man... **B**
 to-you the things this
 ‘...I have put my pain and my worry into saying these things to you...’ (Ca. 5)

As in Modern Breton, the various possibilities are conditioned by the auxiliary in question: verbal heads (but not phrases) may be moved over *bout* ‘to be’ and *endevout* ‘to have’ and either verbal heads or phrases may be moved over *ober* ‘to do’. Only phrases may be moved over fully lexical verbs like *mennat* ‘to want’. There seems to have been virtually no change in this area since Middle Breton.

Middle Welsh has a fully-productive LHM-rule which was lost in Early Modern Welsh. The Middle Welsh rules are essentially identical to those of Middle Breton (allowing for the absence of past participles in Middle Welsh). Movement of a verbal element over *gwneuthur* ‘to do’ may be either of a verbal head (37) or of a whole phrase (38).

- (37) [V Gwyssyaw] a oruc Arthur milwyr yr ynys honn.
 summon-VN PRT did Arthur soldiers the island this
 ‘Arthur summoned the soldiers of this island.’ (CO 922–3)
- (38) [VP Kyrchu tref arall] a wnawn.
 head-for-VN town other PRT do-1P
 ‘We shall head for another town.’ (PKM 54.3)

Movement over *bot* ‘to be’ is restricted to whole VPs in the present progressive as in (39). A parallel construction with the progressive marker *o* is found in Modern Breton.

- (39) ...[AspP mynet ... drwy y wlat honn] yd wyf inheu
 go-VN through the land this PRT am I-CONJ
 yr awr honn, parth a ’m gwlat uy hun.
 the hour this towards my country my own
 ‘...I am going through this land now, towards my own country...’ (PKM 61.27–62.1)

The Long Head Movement type is retained in Welsh texts of the sixteenth century but was lost probably around the same time as the breakdown of the verb-second system. A sixteenth-century example is given in (40).

- (40) Ac estyn a naeth Kollen i ben allan o ’i
 and reach-VN PRT did Collen his head out of his
 gvddigl...
 cell
 ‘And Collen reached his head out of his cell...’ (RhG i.39.20–1, 1536)

Topicalisation of full verbal phrases (AspPs) has remained productive (Thorne 1993:372):

- (41) [VP Darllen y llyfr] a wnaeth hi. **ModW**
 read-VN the book PRT did she
 ‘She read the book.’
- (42) [VP Astudio yn y llyfrgell] y bydd hi heno. **ModW**
 study-VN in the library PRT will-be she tonight
 ‘She’ll be studying in the library tonight.’

The loss of the LHM-construction in Welsh appears to be linked the loss of V2. However, current syntactic analyses of LHM (as movement of a V-head to C) provide no account of why this should be the case.

One development of Long Head Movement within Breton should be noted. Middle Breton allows movement of the verb *bout/bezaff* when it means ‘to exist’ over *ober* or *endevout*:

- (43) a. Bezafu à ra seiz... **B**
 be-VN PRT does seven
 ‘There are seven...’ (GK 2.72.10)
 b. Bezet ez eux iuez fals prophetet entre an pobl... **B**
 been has also false prophets amongst the people
 ‘There have also been false prophets amongst the people...’ (GK 2.114.4)

This is clearly movement of the verb, since as the lexical verb of the sentence it leaves a gap. The verbnoun or past participle in constructions like (43) has since been reanalysed, in a reduced form *bez*, to function as an emphatic marker in SpecCP, or merely as an expletive used when there is no other topic constituent (see Trépos n. d. [1968]:193, 273). The *bez* element leaves no gap lower in the clause, and must therefore in Modern Breton be introduced directly into the derivation in SpecCP.

- (44) Bez’ e kaver c’hoazh tier-soul e Breizh. **B**
 BEZ PRT find-IMPERS still thatched-cottages in Brittany
 ‘Thatched cottages are still found in Brittany.’ (Trépos n. d. [1968]:193)

1.4 Negation

In Middle Welsh negation is marked by the negative marker *ny* preceding the verb, which is most frequently in initial position as in (45). Its Modern Welsh equivalent has been analysed both as a negative complementiser (Rouveret 1994:130–1; Tallerman 1996:105) or the head of NegP raising to adjoin to the verb in C (Rouveret 1991:379 fn. 49; Borsley, Rivero and Stephens 1996:67) or as the head of NegP to which the verb adjoins on its way to C (see Schafer 1995:149 for Breton).

- (45) Ny welei ef y twrwf rac tywyllt y nos.
 NEG saw-IMPF he the commotion for so-dark the night
 ‘He could not see the commotion because the night was so dark.’ (PKM 22.23)

Negative main clauses are optionally verb-second. A constituent may be moved to precede the negative marker and the verb, although this is not compulsory as (45) demonstrates. In fact in a large majority of cases, there is no topicalised constituent in negative main clauses in Middle Welsh (Watkins 1990). An example of a subject preceding a negative main clause is given in (46).

- (46) A hynny ny thygywys idaw.
 and that NEG availed to-him
 ‘And that didn’t work for him.’ (PKM 11.2)

Fronted objects (and fronted nonfinite verbs) in negative main clauses optionally induce the appearance of an object agreement clitic *-s* on the negative marker. This possibility is shown in (47). The optionality of the clitic is shown in (48).

- (47) ...a hynny nys gallei.
and that NEG+3S-ACC could
'...and that he could not do.' (YSG 1780–1)
- (48) ...ac attep ny chauas ef genthi hi yn hynny.
and answer NEG received he with-3SF her in that
'...and he received no answer from her in that (respect).'

Main clauses like the one in (47) have been analysed as left dislocation structures (Isaac 1996:58–9), with the fronted object in an extracausal position and the *-s* object clitic licensing a null element in object position. However, non-referential quantified noun phrases may precede the verb in this construction as in (49). These are cross-linguistically resistant to left dislocation, suggesting that sentences like (47) involve topicalisation rather than left dislocation.

- (49) ...eissyoes dim o Seint Greal nys gweles ef.
however none of Holy Greal NEG+3S-ACC saw he
'...however, he did not see the Holy Greal at all.' (YSG 1335)

A'-movement of an object in negative relative clauses induces similar agreement (see section 6 below).

The availability of optional topicalisation across negation is also a feature of Middle Breton and Cornish (George 1990:231, 234), although there is no equivalent to the agreement clitic construction in (47) and (49).

Middle Welsh also has negative polarity items *dim* 'anything' and *neb* 'anyone, any' (cognate with Breton *neb* 'any'). These occur in negative (50) and interrogative (51) contexts, and also independently with a 'free choice' interpretation in (52):

- (50) Ny wnn i dim y wrth honno...
NEG know-1S I DIM about her
'I know nothing about her...' (PKM 54.9)
- (51) ...a dywedy di ymi dim o 'th negesseu?
Q tell-2S you to-me DIM of your errands
'...will you tell me anything of your errands?' (PKM 12.18–19)
- (52) ...goathrist yw genhyf i guelet neb yn lle
very-sad is with-1S me see-VN NEB in place
Bendigeiduran uy mrawt
Bendigeidfran my brother
'...I am very sad to see anyone in the place of Bendigeidfran my brother...' (PKM 49.13–14)

Dim may also be part of a larger noun phrase (see section 4.2 below). Both *dim* and *neb* have become negative quantifiers (see Rouveret 1994:128–9), used in negative sense in the absence of the negative marker *ny* or other mark of negation. Evans cites the following example from as early as the fourteenth century:

- (53) ...y neb a wybu wneuthur pob peth o dim...
anyone REL knew make-VN every thing from DIM
'...he who knew how to make everything from nothing...' (Llyvyr
Agkyr Llandewivrevi 60.13–14, Evans 1964:107)

More recently the mutated form *ddim* has become a negative marker in own right, initially as a marker of emphatic negation, where it generally appears in sentence-final position. This

position is typically that of adverbials, and suggests that at this stage *ddim* functioned as a negative adverbial right-adjoined to VP or IP.

- (54) Nef a daear a ânt heibio, eithr fy ngeiriau
 heaven and earth PRT go-3P past but 1S-GEN words
 i nid ânt heibio ddim. **EMW**
 me NEG go-3P past DDIM
 ‘Heaven and earth will pass, but my words will never pass.’
 (Matthew 24.35, 1620 translation)

By the eighteenth century at the latest, *ddim* had acquired the status of an unemphatic marker of negation, positioned between the subject and the aspect markers:

- (55) Ni buasai rai ddim yn derbyn y trydydd...
 NEG would-have some DDIM PROG accept-VN the third
 ‘Some wouldn’t have accepted the third...’ (HLITN 67.27)

It appears to have undergone reanalysis from an adverbial to a simple marker of negation, presumably in the specifier of NegP, analogous to French *pas*. This reanalysis would also account for the fact that by this time it is virtually obligatory in negative sentences in informal texts. The preverbal marker *ni(d)* has itself been eroded, surviving only as a soft or aspirate mutation on verbs in negative sentences and in special negative forms of the verb ‘to be’ (*nid ydw* ‘I am’ > *dydw*) and, in some dialects, of other verbs also. As a result *ddim* is the primary marker of negation in contemporary spoken Welsh.

Breton has experienced a broadly similar, but independent, series of developments. A negative marker has developed from *quet*, used in Middle Breton as in (56) in negative and interrogative contexts.

- (56) ...rac me ya ... da gouzout a den an
 for I go to know-VN whether person the
 menez en quarter se he guelse quet... **B**
 mountain in-the area this 3SF saw-IMPF QUET
 ‘...for I shall go ... to find out whether the mountain-dwellers in these parts may have seen her at all...’ (B 365)

In contrast to Middle Welsh *dim*, *quet* does not occupy an argument position in Middle Breton. A number of other items are used in addition to *quet* as negative polarity items in Middle Breton, for instance, *pas* ‘step’, *poent* ‘point’, *barr* ‘twig’, *banne* ‘drop’ (Hemon 1975:285). The most common is *tam* ‘piece’, illustrated in (57).

- (57) a. Me ne cretaff tam an traman... **B**
 I NEG believe-1S TAM the thing-this
 ‘I do not believe this...’ (B 345)
 b. ...noz em doutet quet tam. **B**
 NEG+REFL-2P doubt-IMPER QUET TAM
 ‘Don’t have any doubts.’ (B 59)

Cornish has been the most conservative of the Brythonic languages with respect to negation, preserving the preverbal negative marker *ny* alone (Lewis 1946:48–9; Poppe 1995:103). On negation throughout Brythonic see also Poppe (1995).

1.5 The verb ‘to have’

The Celtic languages characteristically have no verb ‘to have’. Within Brythonic, this is true of Middle (and Modern) Welsh. Breton and Cornish, however, have undergone a common innovation, forming a verb ‘to have’ from a sequence of object clitic plus a form of the verb ‘to be’, for instance, MBr. *am eux* ‘I have’ < particle *a* + *-m* first person singular object clitic + *eux* ‘is’. By Middle Breton and Middle Cornish this had already grammaticalised as a simple verb (see Morgan 1958). This can be seen from the fact that it allows an overt subject in addition to the ‘object’ pronoun as in (58), and that it may function as an auxiliary for the periphrastic perfect in (59).

- (58) Ha mar guet quen mil uileny diouz tut
 and if do-2P otherwise thousand insult from people
 an bro ouz bezo huy. **B**
 the land 2P-OBJ be-FUT-3S you
 ‘And if you do otherwise, you shall have a thousand insults from the people of the land.’ (B 766)
- (59) me a meus sebeliet corff an roanes **B**
 I PRT have-1S buried body the queen
 ‘I have buried the queen’s body.’ (Ca. 28)

However, the Middle Breton verb ‘to have’ also retains some properties of the earlier construction. In Middle Breton and still in most modern dialects it lacks an infinitive. In the Vannes dialect an inflected infinitive had been innovated by the start of the eighteenth century (Hemon 1975:217, see the inflected infinitives of reflexive verbs below). It also lacks an independent past participle. In addition, unlike other Middle Breton verbs it has a full imperative paradigm, formed from an object pronoun plus the second person imperative forms of *bout* ‘to be’:

- (60) Ham bezet... **B**
 1S-OBJ be-IMPER
 ‘Let me have...!’ (B 395)

Although this was developed fully only in Breton and Cornish, there is evidence from Welsh that an embryonic form of the verb was at one time present there too. In Middle Welsh the imperative of the verb *rodi* ‘to give’ is *moes*, which derives historically from a first person singular object pronoun *’m* plus the form *oes* of the verb ‘to be’ (Katz 1994). There are also occasional instances of a construction parallel to the Breton in early Welsh poetry (Lewis and Piette 1966:50–2):

- (61) Car a ’m oet ny ’m oes.
 kinsman REL 1S-ACC was NEG 1S-ACC is
 ‘I do not have the kinsman that I had.’ (*Llawysgrif Hendregadredd* 24.8)

1.6 Periphrastic verbal forms

Although the early stages of the Brythonic languages expressed virtually all tenses, moods and voices synthetically, the modern languages are characterised by extensive use of periphrastic verbal forms. Particularly noticeable is the emergence of periphrastic forms for the perfect, the

passive and the progressive, using different syntactic material, throughout the Brythonic languages.

1.6.1 Periphrastic perfect and passive in Breton and Cornish

Middle Breton has a fully developed set of periphrastic perfect and passive constructions formed from auxiliary ‘have’ or ‘be’ and a past participle in MBr. *-et*. Traces are found in Welsh, where the relevant morphology appears in the suffix *-edig*, used primarily to form deverbal adjectives (Lewis and Pedersen 1937:311–12), and also in Cornish, where a periphrastic stative passive is formed from the verb ‘to be’ + past participle in *-es/-ys* (Lewis 1946:49–50). In Old Breton deverbal adjectives in *-et* and *-etic* are found, although there is no indication that they were used to form periphrastic tenses (Fleuriot 1964:313–14; Hemon 1975:245–6). Examples of the periphrastic passive are given in (62).

- (62) a. ...ha pa ez vezo laqueat mat euez ouz an
and when PRT be-FUT put-PP good attention to the **B**
traezou-man...
things-this
‘...and when good attention has been paid to these things...’ (Ca. 5)
- b. me yw gylwys duk bryten **C**
I is call-PP Duke Brittany
‘I am called the Duke of Brittany...’ (*Beunans Meriasek* 1, Lewis 1946:49)

In Middle Breton the internal argument must precede the past participle if it is a pronoun, but generally follows if it is a lexical noun phrase. See also section 4.2 below.

The Breton periphrastic perfect is modelled on French. A group of unaccusative verbs (e.g. *arriuaff* ‘to arrive’, *bout* ‘to be’, *coezaff* ‘to fall’, *donet* ‘to come’ etc.) and reflexive verbs require the auxiliary *bout* ‘to be’ as in (63), whereas the majority of verbs use forms of ‘to have’ (64).

- (63) a. ...dre œourou mat pe dre heny ez eo pig[n]let
through works good through-which PRT is climb-PP **B**
bede a[n] eff...
as-far-as the heaven
‘...through good works through which she climbed up to heaven...’ (Ca. 2)
- b. ...euel maz eo bezet e nem offret euydoff... **B**
like as is be-PP REFL-3SM offer-PP for-me
‘...as he had offered himself for me...’ (Ca. 24)
- (64) Eiz, peré en deueux roet IesusChrist en menez
eight which has given Jesus Christ in-the mountain **B**
en fæczon-man.
in-the way-this
‘Eight, which Jesus Christ gave on the mountain in this way.’
(GK 2.106.10–11)

The subject may follow the past participle as in (64), or precede it as in (65).

-
- (65) ...goudé ma en deueux an beleg legitim consecret
 after that has the priest legitimate consecrated
 an bara hac an gwin... **B**
 the bread and the wine
 ‘...after the legitimate priest has consecrated the bread and the wine...’
 (GK 2.80.3–4)

1.6.2 Periphrastic aspectual constructions

All three languages have innovated periphrastic progressive constructions of the form ‘to be’ + subject + aspect marker + verbnoun. In all cases the aspect marker has arisen historically from prepositions, which in analyses of the modern languages are generally treated as aspectual heads (Hendrick 1991). In Welsh the marker developed out of *yn* (+ nasal mutation) ‘in’ with loss of nasal mutation; and in Breton and Cornish it developed from MBr. *ouz*, C. *orth*. However, constructions involving both prepositions before a verbnoun are found in all the languages. In Breton *ouz* was reduced to *oz* then *o(c’h)* + mixed mutation (for details see Hewitt 1990) and in Cornish *orth* was reduced to *ow(th)*. An example of the Middle Breton progressive is given in (66).

- (66) ...yuez ez guelsont anaelez ouz onygnamentaff he
 also PRT saw-3P the-angels OUZ anoint-VN her **B**
 gouliou...
 wounds
 ‘...also they saw the angels anointing her wounds...’ (Ca. 20)

The development has gone furthest in Welsh, where the periphrastic construction has lost its progressive meaning and replaced the present tense verbal forms, which can now only be used as future (see Poppe 1996). It appears that this involved a reanalysis of the construction in Welsh. In Middle Welsh, the most frequent use of *yn* + verbnoun is as an adjunct, often to a nominal phrase, as in (67).

- (67) ...ef a welei varchawc yn dyfot yn y erbyn...
 he PRT saw-IMPF knight YN come-VN towards-him
 ‘...he saw a knight coming towards him...’ (P 61.17–18)

In cases where this construction appeared after the verb ‘to be’ as in (68), there was potential ambiguity as to whether the prepositional phrase headed by *yn* was an adjunct or an aspectual complement of ‘to be’. At some point the second option seems to have been chosen over the first and the construction was generalised.

- (68) ...wythnos y bu yn bwrw marchawc beunydyd...
 week PRT was-PERF YN throw-VN knight every-day
 ‘...for a week (there) he was, unseating a knight every day...’
 or ‘for a week he unseated a knight every day...’ (P 41.12)

The reanalysis is difficult to date accurately, although the appearance of the construction with stative verbs like *gwybod* ‘to know’ in (69) may be an indication that it had taken place by the sixteenth century.

- (69) ...Jr wyf J yn dyalld ac yn gwybod yn
 PRT am I YN understand-VN and YN know-VN PRD
 sickyr mae chychwi ... a beris vy magu ... **EMW**
 certain CLEFT you PRT caused 1S raise-VN
 ‘...I understand and know for certain that it was you who had me raised...’ (RhG
 i.22.22–3, c. 1514)

Welsh has at least one other aspect marker used in this way, namely the perfect marker *wedi* which has emerged from the preposition *wedi* (MW. *(g)wedy*) ‘after’. As shown in (70), this is present already in Middle Welsh, where, however, it is extremely rare. Again, it seems likely that a reanalysis of *wedi* from preposition to aspectual head has contributed to its status as the unmarked perfect construction in Modern Welsh.

- (70) ...yny doeth rybudyau idaw, a menegi uot y
 until came warnings to-him and indicate-VN be-VN the
 crydyon wedy duunaw ar y lad.
 shoemakers WEDY conspire-VN on 3SM-GEN kill-VN
 ‘...until warnings came to him, indicating that the shoemakers had conspired to kill him.’
 (PKM 58.17–19)

1.6.3 The periphrastic *cael*-passive in Welsh

The Brythonic languages have no inherited passive forms, although impersonal (subjectless) verbal forms fulfil much the same function. As seen above, Breton and Cornish have developed a new periphrastic passive using a past participle on the model of French and English. Middle Welsh also developed a periphrastic passive, this time using the verb *caffael* (ModW. *cael*) ‘to get, receive’ as an auxiliary. The internal argument raises to subject position leaving a genitive object clitic (but no overt object) accompanying the verb. A Middle Welsh example is given in (71) (from Evans 1964:164). Although rare in Middle Welsh, the construction is extremely productive in Modern Welsh and has become more usual than the impersonal verbal forms.

- (71) ...ni a gawn yn goganu gan yr unben...
 we PRT get-1P 1P-GEN disgrace-VN by the chieftain
 onys guahodwn.
 if+NEG+3S-ACC invite-1S
 ‘...we’ll be disgraced by the chieftain ... if we do not invite him.’
 (PKM 84.26–7)

1.7 Agreement patterns and null arguments

1.7.1 Empty categories and the Complementarity Principle

The medieval Brythonic languages all have verbal paradigms manifesting rich subject-verb agreement licensing null subjects. There are also object clitics which may co-occur with overt pronominal objects or with a null object (see section 4 below). Prepositions show agreement with their objects and similarly allow either overt or null objects. In most respects the properties of the agreement system are identical to those of the modern literary languages.

With the exception of subject-verb agreement in V2-structures (see section 1.7.2 below), rich agreement is found with a (null or overt) pronominal subject, and default third person singular

agreement is found with a nominal subject. This is illustrated with Middle Breton data in (72) and (73). In (72) rich agreement with a (null) pronominal subject is shown; in (73) default singular agreement occurs with a plural lexical subject.

- (72) Guir a **leueret** a fet plen... **B**
 truth PRT say-2P indeed
 ‘You tell the truth indeed...’ (B 48)
- (73) Aman e **can** an mecherouryen. **B**
 here PRT sing-3S the workers
 ‘Now the workers sing.’ (B 78)

In the case of inflected prepositions the default form is entirely uninflected.

This phenomenon in the modern languages is usually analysed as the result of incorporation, following Anderson (1982). ‘Rich’ agreement is considered to be the result of a pronoun incorporating into a head. Lexical subjects do not incorporate, hence default agreement results.

It is not clear that this analysis should be extended back to earlier stages of the Brythonic languages. Preverbal subjects in Middle Welsh require rich verbal agreement (see example (3a)), even if they are lexical, and this agreement is not obviously the result of incorporation. There are also instances in Middle Welsh of postverbal lexical subjects co-occurring with full agreement as in (74) (Evans 1971), although these have generally been attributed to foreign influence (Morris-Jones 1931:191 and Evans 1971, but contra this Lewis 1942:16–17).

- (74) ...kymryt eu gwledeu ... a orugant Pryderi a
 take-VN their feats PRT did-3P Pryderi and
 Manawydan.
 Manawydan
 ‘...Pryderi and Manawydan had their feast...’ (PKM 37.7–8)

Finally, there are cases in Middle Welsh where pronominal subjects are not adjacent to the heads into which they would have to incorporate (see copular constructions, section 3.1). A possibility is that agreement in Welsh (at least) was once genuine agreement, but has more recently been reinterpreted as incorporation of a pronoun into its head. This view is perhaps supported by the tendency for the boundary between verb + subject sequences to become blurred (see section 1.7.3).

A difficulty advanced even for the modern languages (see Borsley and Stephens 1989; Rouveret 1991) is the optional presence of overt pronominal arguments in the presence of rich agreement in Modern Welsh. Such arguments are also freely attested in Middle Breton, although their use appears to have become somewhat more restricted in the course of time. Examples are given in (75) (with a subject), (76) (with the object of a preposition), and (77) (with a possessor noun phrase).

- (75) Mar he leset euel ma edy / Effiet **huy**
 if 3SF leave-2P like that is PRT+will-be-2P you **B**
 louuidien...
 blockheads
 ‘If you leave her as she is, you will be blockheads...’ (B 481)

- (76) Non obstant se ez vihe dereat / Dezaff **eff** ...
 nevertheless PRT would-be appropriate to-3SM him
 goulen quenyat / Ouz an tut mat... **B**
 ask-VN permission from the people good
 ‘Nevertheless it would be appropriate for him to ask for permission from the good people...’ (B 209)
- (77) nen deu gou hon doeu **ny**... **B**
 NEG is false 1P gods we
 ‘...our gods are not false...’ (B 122)

1.7.2 Subject-verb agreement in V2-structures and the ‘mixed’ sentence

In Middle Welsh affirmative V2-structures the verb generally agrees in person and number with a subject in topic position (see also (3a)). In Middle Breton and Middle Cornish the verb remains in the ‘default’ third person singular form if the subject is preverbal:

- (78) Ac ar hynny y deu urehin a **nessayssant**
 and on that the two king PRT drew-near-3P
 y gyt am perued y ryt e ymgyuaruot.
 together at middle the ford to meet-VN
 ‘And then the two kings approached one another in the middle of the ford to meet.’
 (PKM 5.19–20)
- (79) Aman an bourreyen a **diuisq** Barba. **B**
 then the executioners PRT undress-3S Barbara
 ‘Then the executioners undress Barbara.’ (B 454)

In the negative the verb agrees with a preverbal subject even in Middle Breton and Cornish in (80). In Breton and Cornish this is exactly the same pattern as that found in relative clauses and other A’-constructions (see section 6 below).

- (80) ...rac me ne **desiraff** quen tra nemet offruff da
 for I NEG desire-1S other thing except offer-VN to
 doue ma quic ha ma [goat]... **B**
 God my flesh and my blood
 ‘...for I do not desire anything except to offer my flesh and my blood to God...’
 (Ca. 24)

The agreement in Welsh in (78) is problematic, given the fact that in other A’-constructions there is no subject-verb agreement when subjects are extracted.¹⁰

A related construction in Middle Welsh shows absence of agreement parallel to Breton and Cornish. This is the mixed sentence, similar in appearance to the abnormal sentence, but having a cleft interpretation, and lacking agreement between a fronted subject and the verb:

¹⁰This agreement is not always observed in Middle Welsh (see Evans 1971), a fact that may suggest an early period where both patterns were productive:

- (i) Y gwyr a wisawd amdanunt...
 the men PRT dressed-3S around-3P
 ‘The men got dressed...’ (PKM 29.22)

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

Unlike the abnormal sentence the mixed sentence may be embedded, using one the cleft markers *panyw* and (*y*) *may*, illustrated in (82), or (*y*) *taw*.¹¹

- (82) ...menegwch ydaw ... [p]an yw o 'm anuod
 indicate-IMPER to-3SM PANYW of 1S unwillingness
 inheu y gwnaethpwynt hynny; ac y may brawt un
 I PRT made-IMPERS that and Y MAY brother same
 uam a mi a wnaeth hynny...
 mother as me PRT did that
 'Tell him that it was against my will that that was done; and that it was my brother who did it...' (PKM 33.21–3)

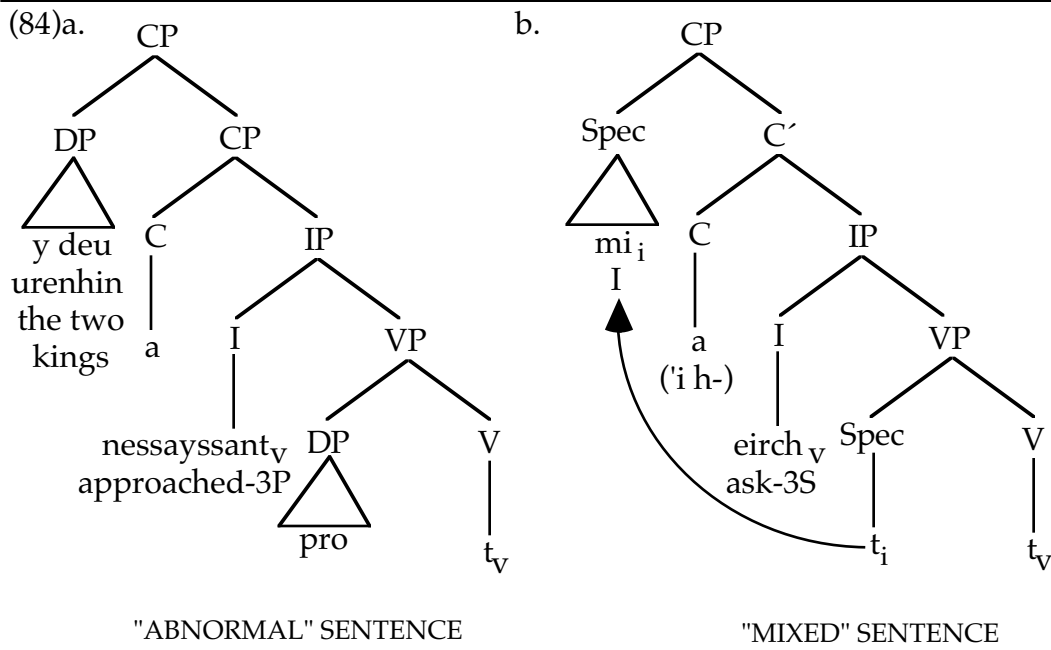
These cleft markers are reasonably transparent as sequences of complementiser *pan* or *y(d)* + part of the verb 'to be'. It seems that a reanalysis took place reducing the construction from two clauses, an existential copular clause plus a relative clause, into a single clause, with *panyw* (etc.) being reanalysed as a clefting particle taking a CP-complement in the process (Tallerman 1996:117–18):

- (83) ...[CP [C pan yw_v] [AgrSP t_v o'm anuod [CP Op_i [C y gwnaethpwynt t_i]]]]
 that is against my will PRT was-done
- ⇒ ...[CP [C panyw] [CP o'm anuod_i [C y gwnaethpwynt t_i]]]
 CLEFT against my will PRT was-done

The fact that in Middle Welsh the particle *y* may be omitted, resulting in *may*, suggests that the reanalysis may already have taken place by this time, since otherwise the particle is not optional in the language.

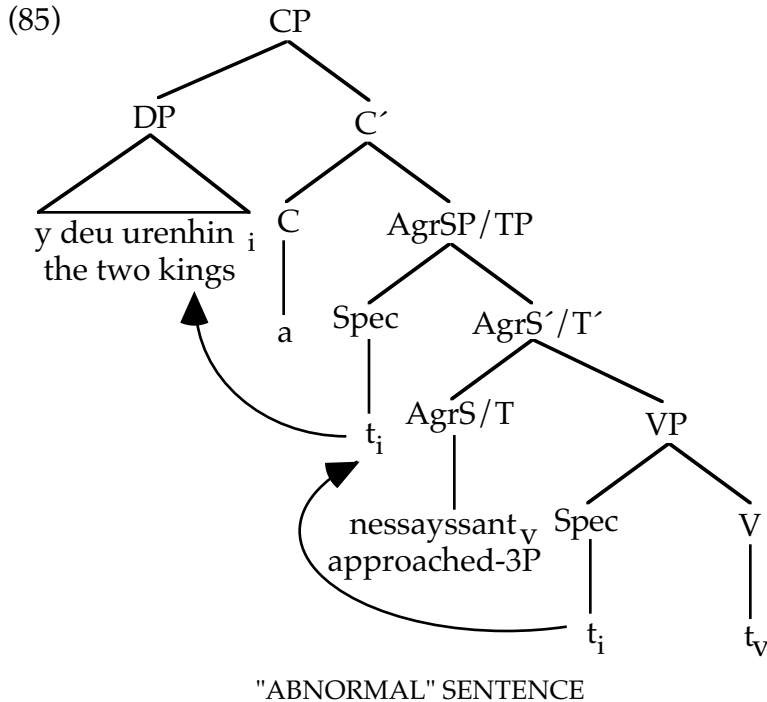
Two accounts of the agreement phenomena have been suggested. Tallerman (1996:115–17) suggests that agreement occurs in the abnormal sentence because the topicalised constituent adjoins to CP. In subject-initial abnormal sentences, the canonical subject position is occupied by *pro*. The advantage of this account is that it allows the Modern Welsh division of rich and poor agreement to be maintained for Middle Welsh: rich agreement is found because the subject position contains a pronominal constituent. Default agreement is reserved for lexical phrases. The mixed sentence on the other hand involves A'-movement leaving *wh*-trace, which acts as a referential expression for agreement purposes, inducing default agreement. The structural contrast is illustrated in (84).

¹¹There are further syntactic differences between the mixed and abnormal sentences; see Evans (1964:179–81); Fife and King (1991:83ff.); and Tallerman (1996).



(adapted from Tallerman 1996:108, 111)

An alternative account is proposed in Willis (1998). Under this account, subjects in the abnormal sentence undergo A-movement to SpecCP. This movement is subject to Relativised Minimality, hence proceeds stepwise via the specifier of the agreement projection AgrSP as in (85), whereas in the mixed sentence they undergo A'-movement directly to SpecCP (as in the previous account). Subject-verb agreement is then the reflex of Spec-Head agreement within AgrSP, occurring in the abnormal sentence but not in the mixed sentence. This provides a way of connecting two contrasting properties of Middle Welsh and Middle Breton. Since there is no agreement in Middle Breton, it must be assumed that all topicalisation in Breton V2 is A'-movement. A'-movement of expletive elements is ruled out (it would involve vacuous quantification), and expletive subjects should be ruled out in such a language. We therefore have an explanation of the facts outlined in section 1.1.3, namely why Middle Welsh has an expletive subject, whereas Middle Breton and Cornish do not.



1.7.3 The decline of null arguments in Welsh and Cornish

Null arguments have been declining for some time in Welsh and Cornish, primarily it seems through reanalysis of the word division between inflectional endings and pronouns. In some dialects of Welsh the ending of the preposition or verb has been reanalysed as part of the following pronoun and consequently a morphologically poorer inflected form has been generalised, see Jones (1988:143–5). Consider the following potential colloquial paradigms for the preposition *gan* ‘with’ and the past tense of the verb *gweld* ‘to see’:

(86)	1S	gynno fi	weles i
	2S	gynno chdi	weles ti
	3SM	gynno fo	welodd e
	3SF	gynno hi	welodd hi
	1P	gynno ni	welso ni
	2P	gynno chi	welso chi
	3P	gynno nhw	welso nhw

Null arguments are not licensed with the ambiguous forms in such dialects. Evidence of a move away from null arguments is found as early as the sixteenth century (cf. their relative rarity in the slander cases in Suggett 1983). George (1993:458) has argued that (phonologically although not orthographically) ‘rich’ verbal morphology became severely eroded also in Late Cornish, so that only two forms remained in the present tense. For instance, the verb *gweles* ‘to see’ conjugated as *gwel* in third person singular and *gwela* in all other persons. Null subjects were lost as a result.

1.8 Morphological case

The continental P-Celtic languages exhibit a full system of six cases. A similar system of morphological case marking had already been lost by the time of the earliest records in all three Brythonic languages (see Koch 1983a). Pronominal object clitics are the only exception (see section 4). A rare attested productive instance of morphological case in the Brythonic languages is the following example from Old Welsh, where the genitive form *nyf* (spelt *nym*) of *nef* ‘heaven’ appears (cf. OIr. *nem* ‘heaven’, gen. *nime*):

- (87) Ath uodi gwas nym gwerth na thechut... **OW**
 PRT+2S be-SUBJ+you abode heaven-GEN because NEG flee-2S-IMPF
 ‘May you have the abode of heaven because you did not flee...’ (CA 233)

Traces of an earlier case system remain, however, in certain fossilised forms, such as W. *erbyn*, C. *erbyn* < ar ‘on’ + dat. of *pen* ‘head’; W. *heddiw*, Br. *hiziv* < dat. of demonstrative + dat. of *dydd/deiz* ‘day’; MW. *dywieu* etc. ‘Thursday’ < dat. of *dyd* ‘day’ + *Ieu* ‘Jupiter’; and W. *eleni*, Br. *hevlene* ‘this year’ and MW. *yrllyned*, Br. *warlene* ‘last year’ from an oblique case form of the word for ‘year’ (Morris-Jones 1913:414, 436; Lewis and Pedersen 1937:162, 164, 171; Fleuriot 1964:238–41). In MBr. *pemde*, MW. *beunyd* ‘every day’, the nasal consonant shows the effect of an earlier accusative inflection.

2 MUTATIONS

Characteristic of all Celtic languages are initial consonant mutation, changes in word-initial consonants triggered by the lexical or syntactic environment. A summary of the phonological changes involved is given in Table 3. The changes given are for Middle and Modern Welsh. Where the other Brythonic languages differ, this is noted separately. Henceforth mutation triggers are marked with superscript S, N or A.

Breton and Cornish also have a mixed mutation, the result of overlaying the soft mutation with provection. The mixed mutation and provection are innovations in Breton and Cornish. They are the result of the sound change found in Breton as [z] > [h] > ∅ as in *hoz bro* ‘your country’ > *ho pro*. In all other cases the phonology of the mutations has, insofar as can be determined from the textual record, remained constant in the attested historical period.

	SOFT	NASAL (WELSH ONLY)	ASPIRATE	PROVECTION (BRETON AND CORNISH ONLY)
/p/	/b/	/m ^h /	/f/	–
/t/	/d/	/n ^h /	/θ/ (/z/ in Br.)	–
/k/	/g/	/ŋ ^h /	/x/	–
/b/	/v/	/m/	–	/p/
/d/	/ð/ (/z/ in Br.)	/n/	–	/t/
/g/	ø (/γ/ in Br.)	/ŋ/	–	/k/
/m/	/v/	–	–	–
/r ^h /	/r/ (not in Br./C.)	–	–	–
/ʎ/	/l/ (not in Br./C.)	–	–	–

Table 3. Mutations in the Brythonic languages.

Although once predictable from the phonological environment, specifically the final segment of the preceding word, by the time of the medieval Brythonic languages, mutations can be predicted only by reference to a list of arbitrary triggering environments. The overwhelming majority of mutations are triggered by individual lexical items on the initial consonant of the word immediately following them. For instance many prepositions trigger a mutation on the first word of their object. Discussion will be limited here to those mutations triggered by a particular syntactic structure. For details of lexically-triggered mutations see Ball and Müller (1992) (on Welsh) and George (1993:435–8) (on Cornish). For details of mutations within the noun phrase, see section 7 below.

Mutations are indicated sporadically in Middle Welsh texts, and extremely rarely in Middle Breton and Cornish. In general, if mutation is indicated orthographically that can be taken as evidence that a particular context was a mutation trigger, but absence of mutation is inconclusive. Investigation of mutation rules therefore has to be done by generalising from cases where mutation is indicated. Absence of mutation can be inferred only from larger numbers of cases where it is not indicated in the orthography or from cases of alliteration in poetry.

2.1 Direct object mutation in Welsh

In Middle Welsh soft mutations on subjects and objects occur if the immediately preceding word is a mutation trigger. If a noun phrase immediately follows a verb and that verb is a mutation trigger, it mutates irrespective of whether it is a subject or an object. Verb forms triggering mutation include imperfect and pluperfect verbs in *-ai* and the past tense of the verb ‘to be’ and its compounds (*bu* and *-fiu*) and other forms of the verb ‘to be’. Other verbs (including present tense verbs, the present subjunctive in *-(h)o* and past tense verbs in *-odd*, *-s* and *-th/-t*) leave the radical of the following noun phrase (Morgan 1952:182–233). For instance, imperfect forms of the verb trigger soft mutation on the subject in (88), and on the object in (89).

- (88) Ny angassei Uendigeituran eiryoet ymywn ty.
 NEG contained-IMPF Bendigeidfran ever in house
 ‘Bendigeidfran had never fitted inside a house.’ (PKM 31.12)
- (89) Ac ef a welei lannerch yn y coet...
 and he PRT saw-IMPF glade in the forest
 ‘And he saw a glade in the forest...’ (PKM 1.13–14)

In the sequence verb – *pro* subject – lexical object, the null subject is transparent to mutation. If, however, the subject is overt in a VSO sequence, the mutation of the subject depends on whether the verb is a mutation trigger, and whether the object mutates depends upon the nature of the subject. Objects after personal pronouns mutate. Mutation after lexical subjects is variable. *Wh*-trace may, like *pro*, be transparent to mutation.

The mutation of subjects triggered by a preceding verb was lost in Early Modern Welsh. Evans (1968b) finds that the mutation of the subject of the verb ‘to be’ was on the decline by the late sixteenth century, although mutation of the subject of imperfect and pluperfect tense verbs remained usual. On the other hand mutation spread to the objects of those verb forms that had not originally triggered it. There is some evidence of this spread already in Middle Welsh. The result is the modern situation in which the direct object of a tensed verb mutates, whereas the subject does not.¹²

Morgan suggests that the crucial factor in these developments was the fact that objects mutated after subject pronouns, whereas there was no parallel context in which subjects mutated frequently.¹³ Consequently a high proportion of objects mutated, but a much lower proportion of subjects. This set the scene for the development of direct object mutation in Modern Welsh.

2.2 Syntactic triggering of an adjective mutation

In Middle Welsh, adjectives modifying masculine or plural nouns do not normally undergo mutation. However, if a comparative adjective modifies a noun in a negative or interrogative clause, it must undergo mutation, whatever the gender and number of the noun it modifies:

- (90) Ny weleis ansyberwyt uwy ar wr...
 NEG saw-1S arrogance greater on man
 ‘I have never seen greater arrogance in a man...’ (PKM 2.14–15)

This seems to be another case where a mutation is triggered syntactically. In this case the relevant trigger environment is that a comparative adjective must be c-commanded by a negative or interrogative operator to undergo mutation. This mutation survived into Early Modern Welsh but no further (Morgan 1952:66–7).

¹²This is usually interpreted as indicating that all noun phrases trigger mutation on the following phrase, see Borsley (1984); Borsley and Tallerman (1996); Harlow (1981, 1989); and Tallerman (1990).

¹³This argument of course presupposes that null subjects were already declining in use in Middle Welsh, see section 1.7.

3 COPULAR CONSTRUCTIONS AND INVERSION STRUCTURES
3.1 Inversion structures in Middle Welsh

Subject inversion is relatively common in Middle Welsh (at least compared to Modern Welsh, where it is virtually banned).¹⁴ The term inversion is here used to mean a structure in which the subject occurs after the complements of the verb rather than before them. There seem to be two types of inversion in Middle Welsh. In the first, exemplified in (91), either a heavy noun phrase is postposed or the clause is strongly presentational. The noun phrase may not be a pronoun, and there are no restrictions on the verb. This type remains in Modern Welsh.

- (91) ...kanys ny wisgawd arueu eiryoet uarchawc urdawl
 since NEG wore arms ever knight honourable
 well noc ef.
 better than he
 ‘...since a better knight than he never bore arms.’ (YSG 3972–3)

The second type is restricted to unaccusative verbs, but allows pronominal subjects. It is also pragmatically neutral:¹⁵

- (92) a. A drwc yd aeth [PP ar senedwyr Rufein] hynny.
 and bad PRT went on senators Rome that
 ‘And the senators of Rome were sorry at that.’ (SDR 540–1)
- b. ...ac yn y deudecuet dyd wedy Calan Mei yd aeth [PP o
 and in the twelfth day after May Day PRT went from
 ’r byt hvn] ef y tragywyd[avl] teyrnas wlat nef...
 the world this he to eternal kingdom land heaven
 ‘And on the twelfth day after May Day he went from this world to the eternal kingdom
 of the land of heaven...’ (BD 207.22–3)
- c. Pa neges y dodyvch [AP yma] chwi?
 what mission PRT come-PERF-2P here you
 ‘On what mission have you come here?’ (CO 476–7)

Object inversion, that is, where the direct object appears after other complements of the verb, is also found in Middle Welsh as in (93). Again this seems to be pragmatically-neutral and may apply to any noun phrase.

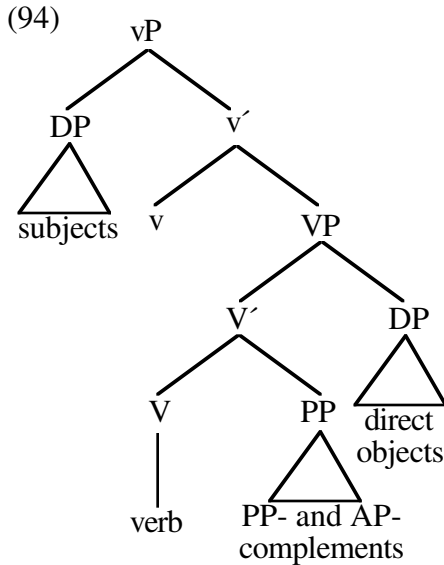
- (93) Gellwng [AP y mywn] wy...
 let-IMPER in them
 ‘Let them in...’ (PKM 81.27)

Object inversion and subject inversion (except of the presentational/heavy NP-shift type) have both been lost in the transition to Modern Welsh. With a double VP-shell (Larson 1988) they can be assimilated to the same structure, namely that in (94). This assumes that subjects are

¹⁴For further discussion of inversion in Middle Welsh, see Evans (1965).

¹⁵There is of course potential for ambiguity between the two types, especially since some unaccusative verbs (notably *dyuot* ‘to come’) are frequently used in a presentational context. I have concentrated on unambiguous examples here.

generated in the specifier of an upper verbal projection vP and internal arguments (direct objects and subjects of unaccusatives) in the specifier of the lower verbal projection VP. Other arguments are generated as sisters to the verb. In (94), Middle Welsh has a rightward-projecting SpecVP.¹⁶ The loss of both these constructions can be reduced to a move to a left-branching SpecVP in Modern Welsh. Below the analysis is extended to the loss of certain copular constructions also.



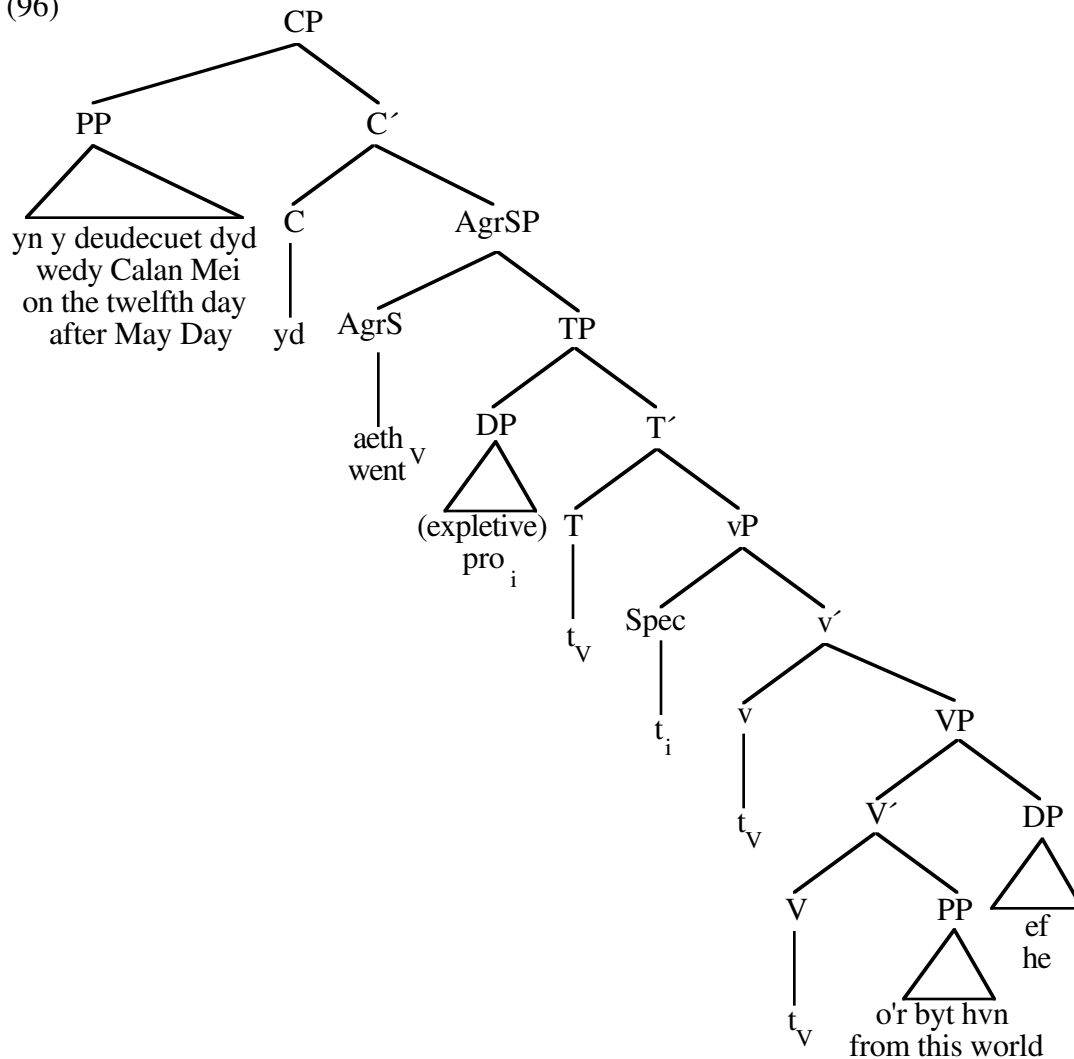
In the subject inversion case (92), the subject of the unaccusative verb is generated as an internal argument in SpecVP. The base subject position SpecvP is occupied by an expletive subject. We already know (see section 1.1.3) that Middle Welsh requires an overt expletive in preverbal position under some circumstances in order to avoid a V2-violation. It seems that this is the same construction, except that in postverbal position, expletive subjects must be null in Middle Welsh. If this is true, Middle Welsh shows a pattern of null and overt expletives identical to that of Modern German (Cardinaletti 1990). In (95), the expletive subject is overt (*es*) if it is in the verb-second topic position, but it is covert in embedded contexts (95b) and in inversion contexts (95c).

- (95)
- a. *Es/*∅ wurde getanzt.*
it was danced
'There was dancing.'
 - b. *Ich weiß, daß (*es) getanzt wurde.*
I know-1S that (it) danced was
'I know that there was dancing.'
 - c. *Gestern wurde (*es) getanzt.*
Yesterday was (it) danced
'Yesterday there was dancing.'

(92b) has the structure in (96):

¹⁶Rightward-projecting specifiers have been proposed to account for similar phenomena in Modern Irish, for instance, in Doherty (1996).

(96)



Similarly, objects are base-generated in this right-branching specifier position.¹⁷

3.2 Copular constructions

The verb 'to be' had four present indicative paradigms in Old and Middle Welsh. These are given in (97) in their Middle Welsh forms. The YW-paradigm functions as the regular negative and interrogative of the MAE-paradigm if the subject is definite. The OES-paradigm fulfils the same function if the subject is indefinite. The YW-paradigm also has its own separate functions (see section 3.2.2 below).

¹⁷Note that postposed objects do not co-occur with object agreement clitics. This is evidence that they do not raise to SpecAgrOP, where object agreement takes place by Spec-head agreement. Raising will of course result in the object appearing before the other complements of the verb.

(97)	YW	MAE	OES	YS	YSYDD
	wyf	wyf	–	–	–
	wyt	wyt	–	–	–
	yw	mae	oes	ys	ysydd
	ym	ym	–	–	–
	ywch	ych	–	–	–
	ynt	maent	–	(ynt)	–

The Middle Breton paradigms for *bout* ‘to be’ are given in (98) (see Hemon 1954b).

(98)	YW	MAE	OES	YS	YSYDD
	ouff	ouff	–	–	–
	out	out	–	–	–
	eo	ema	eux	(is)	so
	omp	omp	–	–	–
	och	och	–	–	–
	int	emahint	–	–	–

Historically, the YW-, MAE- and YS-paradigms have all been used in affirmative copular constructions. The construction requiring *ys* became archaic early on in Breton and Cornish and was replaced by a construction involving the YW-paradigm. In Welsh it was the MAE-paradigm that spread at the expense of *ys*.

3.2.1 Copular constructions in Welsh

Typical of Old Welsh and Early Middle Welsh are copular constructions of the form copula – predicate – subject. The form of the copula is *ys* (imperfect *oed*, preterite *bu*, future *byd*):

(99)	Ys <u>gohilion</u> hwnn ...	
	is remains that-one	
	‘He is what remains...’	(CO 472)

The *ys*-copula is found in Old Breton as *is* (Fleuriot 1964:321) but was lost early.

The negative of *ys* is *nyt* (imperfect *nyt*, preterite *ny bu*) identical in form in the present with the negative marker itself, but presumably a verb in this context:

(100)	Dioer ... nyt <u>da</u> dy gynghor uynet y ’r gaer ...
	certainly NYT good your advice go-VN to the castle
	‘Certainly ... your advice to go to the castle is not good...’ (PKM 56.1–2)

This construction is found also with right dislocation of the predicate noun phrase when the predicate is definite:

(101)	Ys <u>hwy yr rei hynny</u> , Nynhyaw a Pheibyaw...	
	YS they the ones those Nynniaw and Peibiw	
	‘Those are Nynniaw and Peibiw...’	
		(CO 598)

(101) represents an archaic pattern, even in Middle Welsh, in that the pronoun and the right-dislocated element agree. More usually, the masculine singular pronoun *ef* is found with

predicates of all person/number combinations. By the time of most Middle Welsh texts *ys ef* ‘it is he’ has been reduced to *sef* and reanalysed as an expletive element permitting right dislocation of a focused (new) element (Evans 1958):

- (102) Sef a doeth dy nyeint ueibion dy chwaer.
 SEF PRT came your nephew sons your sister
 ‘Your nephews, your sister’s sons, were the ones who came.’
 (PKM 74.10)

In Modern Welsh *sef* has grammaticalised as an adverb meaning ‘namely’.

The Middle Welsh copular construction described above has been replaced by a construction of the form particle + copula – subject – predicate marker *yn* – predicate.¹⁸ In Middle Welsh, a similar construction with the order (particle +) copula – predicate marker *y(n)* – subject is, broadly speaking, required in nonfinite clauses (Watkins and Piette 1962:300).¹⁹

- (103) a. Duw ... a wyr bot yn eu hynny arnaf i.
 God ... PRT knows be-VN PRD false that on-1S me
 ‘God ... knows that that is a wrong against me.’ (PKM 21.2–3)
 b. ...a thebygu y uot yn wannach o hynny ef
 and think-VN 3SM-GEN be-VN PRD weaker from that he
 ‘...and thinking that he was weaker as a result of that.’ (BD 47.27–8)

In finite clauses the older order copula – predicate – subject is still commonly found. Already in Middle Welsh the predicative marker begins to be found in finite clauses. Note that when in finite clauses the subject generally precedes the predicate. In this construction the copula has the forms present *mae* (negative *nyd yw*), preterite *oed* (negative *nyd oed*) etc.

- (104) Kyn kyuyll y ’r ulwydyn, yd oed ef yn holl iach.
 before end to the year PRT was he PRD recovered
 ‘Before the end of the year he was recovered.’ (PKM 90.19–20)

¹⁸The predicative marker *yn* may derive historically either from an earlier oblique (probably instrumental) form of the definite article, or from a construction involving the preposition *yn* ‘in’ (Richards 1934:107–12). The parallel development in Old Irish of a copular construction involving the preposition *i n-* ‘in’ (e.g. *Atá sé i n-a righ* ‘He is a king,’ lit. ‘He is in his king’) has been used to support the second view. However, in Welsh the preposition *yn* requires a nasal mutation, the predicative marker a soft mutation, a fact which argues against their common origin and is consistent only with the first hypothesis (Watkins and Piette 1962:295–9). Most plausible is the suggestion that *yn* spread from functioning as an adverb marker to become also a predicate marker: it is used as the adverb marker, regularly in Welsh, commonly in Cornish (*yn*), and sporadically also in Middle Breton (*en/ez*). The distribution suggests that *yn* was used solely as an adverb marker in the parent language. In Welsh it was generalised into the predicate marker function, in Breton it was (eventually) lost completely, and Cornish retained the conservative pattern (Watkins and Piette 1962:299–301). Presumably this spread could have been the result of reanalysis of verb phrases of the type ‘stand *yn* steadfast’, where ‘*yn* steadfast’ might reasonably be interpreted either as an adverb ‘steadfastly’ or as a secondary predicate.

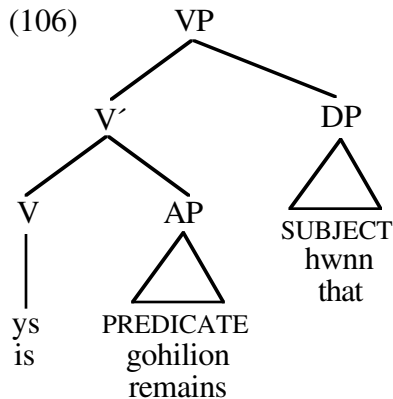
¹⁹A predicate noun phrase must be indefinite after *yn* at all periods of Welsh. The construction used with definite noun phrases is examined in section 5.2.2 below.

Finally in late Middle Welsh and Early Modern Welsh this subject-predicate order spreads to nonfinite clauses:

- (105) ...a dywedut vot **kanmwyaf** y **tir hynny** y[n]
 ...and say-VN be-VN most the land that PRD
gyuanned.
 inhabited
 ‘...and they say that most of that land is inhabited.’ (FfBO 46.13–14)

For further details see Richards (1934) and Watkins and Piette (1962).

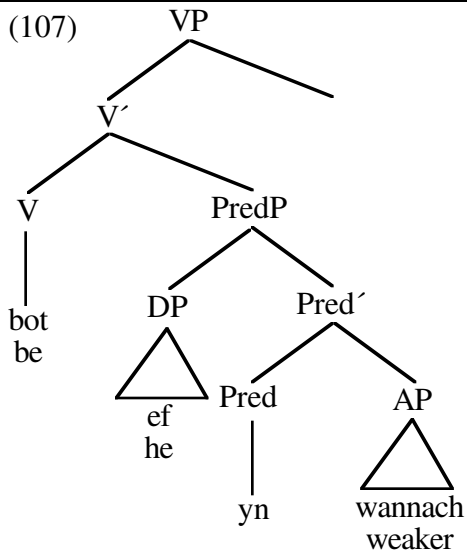
I suggest that Middle Welsh has two verbs ‘to be’. The first *ys* is itself predicational, restricted to the copular construction, projecting a predicate phrasal complement and an internal argument in SpecVP. This verb is defective, not inflecting for person, and having no verbnoun.²⁰ Its paradigm is present *ys* (negative *nyt*), past *oed* (negative *nyt*) etc. The proposed structure is given in (106).



Assuming that *ys* has the ability to check the case of the subject in SpecVP, no movement is required (except perhaps of *ys* itself) and the base order *ys* – predicate – subject surfaces as in (99).

The second verb is characterised by a full paradigm. In particular it has a verbnoun *bot*. Its third person present tense is *mae* (negative *nyt yw*), past *oed* (negative *nyt oed*) etc. It selects a predication phrase (PredP) headed by the predicative marker *yn* as in (107) (see Bowers 1993). *Yn* projects the predicate AP or DP as its complement, and the subject of predication occupies its (left-branching) specifier position.

²⁰ *Ys* becomes increasingly defective. It appears at one time to have inflected for person.



Nonfinite verbs in Middle Welsh license an internal argument (with genitive case) in SpecVP (see section 5.2 below). The verb *bot* ‘to be’ is no exception to this. Therefore if the clause is nonfinite, the subject DP in (107) raises to SpecVP to check case, and the order *be* – *yn* – predicate – subject results as in (103). If the clause is finite, case-checking in SpecVP is limited to presentational contexts (cf. the expletive construction, section 1.1.3). Copular constructions cannot be presentational, hence raising of the subject to SpecTP for case-checking purposes is required. The inflected verb itself raises to AgrS. The result is the order *be* – subject – *yn* – predicate as in (104).

When SpecVP becomes left-branching, as it does in the Late Middle Welsh period, it precedes the predicate phrase. Therefore, when the subject of predication raises to check case it will remain in a position to the left of the predicate, and the order (nonfinite) *be* – subject – *yn* – predicate will be innovated as in (105).

3.2.2 Copular constructions in Breton

In Breton, two copular constructions have become the norm. The first is a Breton innovation involving the extension of the verb-second rule resulting in the order subject – *be* – predicate. The verb ‘to be’ appears in the form MBr. *so* (ModBr. *zo*), the irregular form replacing the particle *a* + ‘to be’.

- (108) *me so Cathell merch vnic dan roue coste...* **B**
 I be-3S Catherine daughter only to-the king Coste
 ‘I am Catherine, the only daughter of King Coste...’ (Ca. 7)

The second has the order predicate – *be* – subject. The verb ‘to be’ appears in the YW-paradigm:

- (109) ...rac ... henez eo ma holl ioya... **B**
 for that-one is my entire joy
 ‘...for ... he is my entire joy...’ (Ca. 18)
- (110) Arch didraha yw honno...
 request reasonable is that
 ‘That is a reasonable request...’ (PKM 16.17)

Adjectival and nominal predicates require these patterns (rather than the parallel of the Middle Welsh MAE-construction) in Middle and Modern Breton. The MAE-paradigm has remained restricted to existential uses and locative predicates (Hemon 1954b:224–7). For discussion of the syntactic structure of these in the modern languages, see Hendrick (1994) and Rouveret (1996) for Welsh, and Hendrick (1994) and Schafer (1994) for Breton. If, as Rouveret (1996) suggests, this pattern involves movement of the predicate to SpecCP, its spread in Breton may be seen as part of the general tendency for verb-second to strengthen in Breton.

4 PRONOMINAL SYSTEMS

Pronouns in the Brythonic languages vary in the main according to syntactic environment rather than case. The four simple series of Middle Welsh are given below. Large-scale homophony means that a number of contrasts operate in only a small number of person-number combinations.

(111)		DEPENDENT		
	INDEPENDENT	ACC	GEN	AFFIXED
	<i>mi</i>	'm	vy ^N ('m)	<i>i</i>
	<i>ti</i>	'th ^S	dy ^S ('th ^S)	<i>di</i>
	<i>ef</i>	'e h, -s	y ^S ('e ^S)	<i>ef</i>
	<i>hi</i>	'e h-, -s	y ^A ('e ^A)	<i>hi</i>
	<i>ni</i>	'n	yn ('n)	<i>ni</i>
	<i>chwi</i>	'ch	ych ('ch)	<i>chwi</i>
	<i>wy(nt)</i>	'e, -s	eu ('e)	<i>wy(nt)</i>

Independent pronouns are used for the subject in preverbal topic position, for the direct object when used without a corresponding accusative agreement clitic and for the object of an uninflected preposition. They are also found in a number of miscellaneous other 'strong' contexts, for instance, standing alone, as predicates and in apposition. They cannot follow a verb showing agreement, and therefore have essentially the same distribution as lexical noun phrases.

The accusative and genitive series are essentially object agreement clitics. The accusative clitics attach to the end of the particle preceding a finite verb; the genitive clitics precede a nonfinite verb. Genitive clitics also attach to nouns, indicating the possessive noun phrase (see section 7). Both series license a null pronoun in the argument position itself. This argument position may be filled. If it is, then pronouns of the affixed series are used. Null subjects are permitted in postverbal position, although they are not obligatory, and once again affixed pronouns may be used in their place. After inflected prepositions, either an overt affixed pronoun is possible or a null pronoun.

Examples of these pronouns in use are given in (112) and (113). In (112), the subject is a first person pronoun, moved to the topic position, where an independent form *mi* is required. The second person singular accusative object agreement clitic *'th* attaches to the preverbal particle *a* in preverbal position. It is doubled by an affixed pronoun *di* in postverbal position. The same doubling is found between the genitive clitic *'m* preceding the noun *lle* 'place' and the affixed pronoun *i*.

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

The possibilities for null arguments are shown in (113). The subject is null, identified as second person singular by the form of the verb *dechreueist*. A genitive agreement clitic precedes the nonfinite verb *llad*, allowing the postverbal object to be null.

- (113) Canys dechreueist uy llad, gorffen.
 since started-2S 1S-GEN kill-VN finish-IMPER
 'Since you have begun to kill me, finish (it).'
- (PKM 5.28)

In Middle Breton the distinction between the accusative and genitive clitics had largely been lost, leaving a single merged dependent series with variant forms conditioned by whether the preceding word ends in a vowel or a consonant (Hemon 1975:76–7). In the masculine third person singular the contrast between accusative *en* and genitive *e* is maintained until the mid-eighteenth century (Hemon 1954a:237). Cornish retains the accusative-genitive distinction much as in Welsh (Lewis 1946:25–7).

Middle Welsh also has a strength distinction manifested on the independent and affixed series of pronouns. In addition to the simple forms given above, there is also a conjunctive paradigm of both independent and affixed pronouns, and a reduplicated paradigm of independent pronouns.

(114)	INDEPENDENT CONJUNCTIVE	AFFIXED CONJUNCTIVE	INDEPENDENT REDUPLICATED
'I'	minheu	inheu	mivi
'you (sing.)'	titheu	ditheu	tidi
'he'	ynteu	ynteu	efo
'she'	hitheu	hitheu	hihi
'we'	ninheu	ninheu	nini
'you'	chwitheu	chwitheu	chwichwi
'they'	wynteu	wynteu	wyntwy

These have the same distribution as their simple counterparts. The conjunctive pronouns are used in contrastive contexts (for instance topic shift, see Mac Cana 1990), and the reduplicated series are emphatic. Examples of conjunctive pronouns are given in (115). The subject in topic position is a first person independent conjunctive pronoun. The affixed conjunctive pronoun *ditheu* occupies the object position where it doubles an accusative agreement clitic *'th*.

- (115) A minheu a 'th rodaf titheu idaw
 and 1S-IND-CONJ PRT 2S-ACC give-1S 2S-AFF-CONJ to-3SM
 ef.
 3SM-AFF
 'And I shall give you to him.'
- (P 50.24)

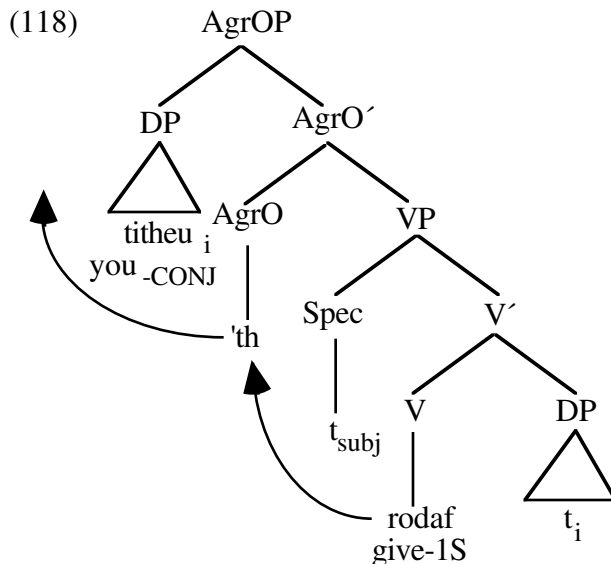
Reduplicated pronouns are shown in (116) in subject and object position. Note that when they occupy object position, reduplicated pronouns may not co-occur with object agreement clitics.

- (116) Miu*i* a rodaf vyg cret ... na charaf i
 1S-REDUP PRT give-1S 1S-GEN oath ... NEG love-1S 1S-AFF
 tidi...
 2S-REDUP
 ‘I give you my word ... that I do not love you...’ (P 36.1–2)

The conjunctive series is not found productively in the other Brythonic languages, although it survives in fossilised expressions in Cornish (e.g. *-ense* in *attense* ‘there he is’, Lewis 1946:28). Cornish has an affixed simple series, and an affixed reduplicated series, exemplified in (117), but no independent reduplicated series (see also George 1991:220). Affixed reduplicated forms remain in the third person in Middle Welsh (Evans 1959). Middle Breton has only a simple affixed series, although remnants suggest the existence of an earlier reduplicated series (Hemon 1975:69).

- (117) Ymcysylle gureny ny. C
 consult-VN do-1P+1P-REDUP
 ‘Let us consult one another...’ (*Resurrectio Domini* 561, Lewis 1946:30)

I now turn to discuss some of the developments within this system. I assume that dependent pronouns are agreement markers occupying the head of AgrOP as in (118). The verb moves through this head, picking up the clitic on the way, and raises to AgrS if finite, Asp if nonfinite. Pronominal objects may raise overtly to SpecAgrOP to check agreement. This allows us to account for the absence of strength distinctions amongst dependent pronouns by claiming that only independent elements occupying argument positions may show strength distinctions.



4.1 Loss of accusative clitics in Welsh

In Middle Welsh independent pronouns are required as the objects of imperatives (119), where there is no preverbal particle for an object clitic to cliticise onto. With other forms of the verb, an accusative object clitic (optionally doubled with an affixed pronoun) is more usual (cf. (112)), although the bare independent pronoun is possible (120).

- (119) Ellwng ef.
release-IMPER 3SM-IND
'Release him!' (PKM 62.25)
- (120) kannys heb dy genyat ti y gwnaeth
for without 2S-GEN permission 2S-AFF PRT made
duw di
God you-IND
'...for God made you without your permission...'
(‘Cynghorau Catwn’, *BBCS* ii.23.21, Evans 1964:50)

The pattern with an independent pronoun in direct object position has spread at the expense of the pattern with agreeing clitic and affixed pronoun. In spoken Welsh, the accusative clitics have become largely obsolete. In some varieties they remain at least at an underlying level, since their mutation effects remain. For instance in (121), the verb *lladdodd* does not mutate, even though it is preceded by the particle *mi*, a soft mutation trigger. Absence of mutation here can only be explained as the result of deletion of an accusative object clitic *i*, which blocks mutation.

- (121) ...mi lladdodd Rofar ni o. ModW
PRT killed Rover 1P 3SM
'...our Rover killed him.' (GPB 203)

4.2 Loss of dependent pronouns in Breton

With the (affirmative) imperative in Middle Breton, independent postverbal pronouns are used as objects in the third person (122), and preverbal dependent pronouns are used in the other persons (123).

- (122) Heb respet en bet pilet hy. B
without respect at-all strike-IMPER 3SF-IND
'Without any respect strike her down!' (B 467)
- (123) ma credet B
1S-DEP believe-IMPER
'Believe me.'
(*L'ancien Mystère de Saint Gwénolé* 350, Hemon 1954a:230)

There is evidence that third person pronouns undergo object raising. For instance independent object pronouns generally precede the negative marker *quet* (124). Note that this is the independent pronoun *ef* and not the dependent object agreement clitic *en*. Full lexical objects follow *quet* as in (125).

- (124) Neusé mar lauar nichun deoch. Aman é ma christ
 now if says anyone to-2P here is Christ
 ... na credet ef quet. **B**
 NEG believe-IMPER him not
 ‘Now if anyone says to you, “Here is Christ” ... do not believe him.’
 (GK 2.110.23–5)
- (125) ...Rac nep so haul ouz an re-man, ne
 because any who-is like to the ones-those NEG
 seruichont quet hon autrou Iesuschrist. **B**
 serve-3P NEG our lord Jesus Christ
 ‘...because no one who is like them serves our lord Jesus Christ.’
 (GK 2.114.26–116.1)

Independent object pronouns also precede the past participle in the perfect as in (126) (see Morgan 1958:167–73).

- (126) yuitce oll e meuxy dispriset palamour da
 despite-this all have-1S+3P-IND abandoned because-of
 iesus-christ... **B**
 Jesus Christ
 ‘despite all this I have forsaken them for the sake of Jesus Christ...’ (Ca. 7)

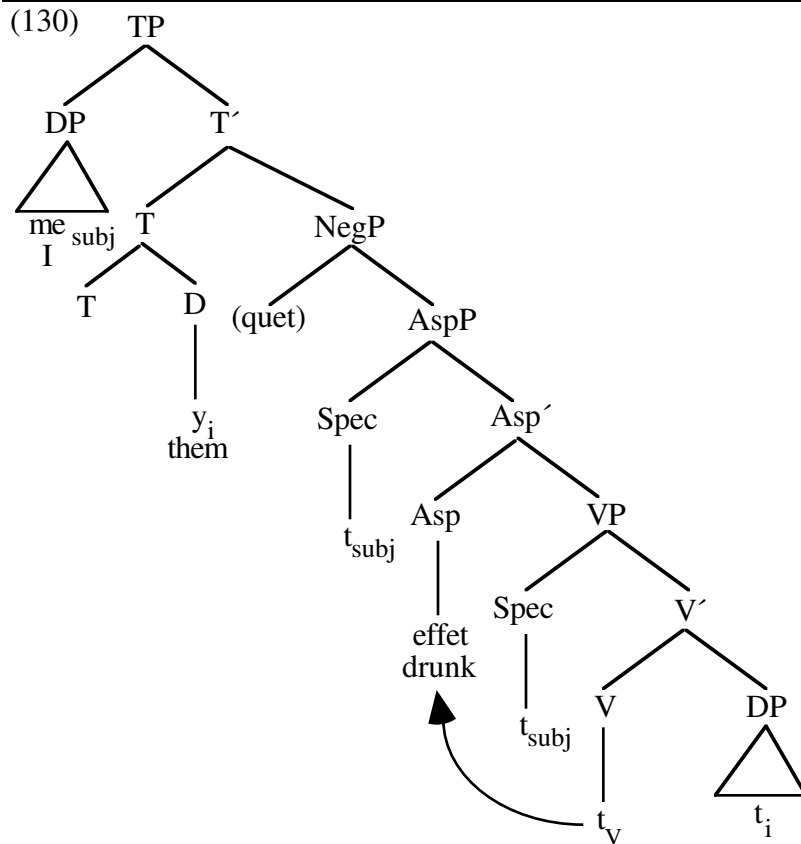
In the passive, pronominal internal arguments precede the past participle (127), full lexical ones follow (128).

- (127) Ret ve gant striff ez ve eff
 necessary would-be with speed PRT would-be 3SM-IND
 achiuet... **B**
 erected
 ‘It should be with haste that it is erected...’ (B 197)
- (128) ...neuse pan oa confermet ha roet couraig dezy... **B**
 now when was confirmed and given courage to-her
 ‘...now when courage was confirmed and given to her...’ (Ca. 27)

The following example with overt subject and object pronouns and negation shows the relative position of all three:

- (129) ...ha ne meus me y quet effet oll? **B**
 and NEG have-1S I 3SF-IND NEG drunk all
 ‘Haven’t I drunk it all?’
 (*Dictionnaire et Colloques François et Breton* 75, Morgan 1958:167)

This behaviour follows if third person object pronouns in Middle Breton are not object agreement markers (AgrO heads) but rather full pronouns (DPs) whose head cliticises to the right of T, thereby raising beyond negation (*quet* in SpecNegP) and past participles (in Asp), but not beyond finite verbs (in AgrS):



Modern Breton has retained a slightly modified version of object shift (without movement across the negative marker) involving its new series of object pronouns (see below). This can be analysed as overt movement of object pronouns to SpecAgrOP (Schafer 1994:37–49).

In the majority of Breton dialects, an entirely new series of unstressed object pronouns has evolved from the conjugated forms of the preposition *a* ‘of’. The preposition is found in object position in Middle Breton, where it appears to have had a partitive function, occurring primarily in negative (131) or hypothetical contexts (132).

(131) Neon pe mirez anezy. **B**
 NEG+know-1S why keep-2S of-3SF
 ‘I do not know why you keep her.’ (B 771)

(132) Rac piu pennac à sell merch ... eguit hé
 for whoever PRT looks girl for 3SF-DEP
 couuoictifu, hac abusifu à Nezy ... En deueux de-ia
 lust-after-VN and abuse-VN of-3SF has already
 comotet ganty aueltriez en é calon. **B**
 committed with-3SF adultery in his heart
 ‘For anyone who looks at a girl ... in order to lust after her and abuse her ... has
 already committed adultery with her in his heart.’ (GK 1.260.6–9)

In Early Modern Breton the forms of *a* become possible in all contexts and are the normal form of object pronouns by 1850 (Hemon 1954a:240–1).

This use of *a* is paralleled by Middle Welsh *o*, which may mark definite direct objects after the negative marker *dim*. Already in Middle Welsh it is found both in partitive senses (133) and in more neutral contexts (134).

- (133) ...heb anuon dim o 'r bwyd udunt...
 without send-VN NEG of the food to-3P
 '...without sending any of the food to them...' (YSG 1823)
- (134) Vy enw i, ... ny elly di wybot dim ohonaw...
 1S-GEN name 1S NEG can-2S you know-VN NEG of-3SM
 'My name, you cannot know it...' (YSG 590)

By the seventeenth century in Welsh, a reduced form of *ddim o* had evolved into a negative marker used before definite objects, subjects of unaccusative verbs and before nonfinite verbs in the periphrastic tenses:

- (135) ...ni chei di yn wir moth neges. EMW
 NEG get-2S you indeed MO+2S-GEN request
 '...you'll never get your request.' (HGC 14.15.4, c. 1640)
- (136) Ni bu ar Fôr moi chystled... ModW
 NEG was-PERF on sea MO+3SF-GEN like
 'There was never its like on the sea...' (ER 1.2.8, 1782)
- (137) ...am ryw negess ni allai mo'i wnevthyd... EMW
 for some errand NEG could MO+3SM-GEN do-VN
 '...for some errand that he couldn't do...' (RhG ii.50.28, 1582)

The emergence of the A-series object pronouns in Breton and the 'definite' negative marker *mo* in Welsh may be linked to the reanalysis of the negative markers *quet* and *dim* from negative quantifiers within the noun phrase to full negative markers (specifiers of NegP) (see section 1.4 above).

4.3 The effects of phonological reduction of pronouns in Welsh

The history of both simple and reduplicated independent pronouns in Welsh has been one of phonological reduction. In Middle Welsh the simple independent series are clearly full pronouns, failing standard tests for clitic status. For instance, in (138) simple independent pronouns may be conjoined to form a complex subject.

- (138) A phan vu barawt bwyd, ef a hi a aethant y
 and when was ready food he and she PRT went-3P to
 eistedd y gyt...
 sit-VN together
 'And when food was ready, he and she went to sit together...' (YSG 3279–80)

They may also be separated from the verb in other ways. For instance, in Middle Welsh emphatic reflexive may intervene between a subject pronoun and the verb (139). By the seventeenth century they were required to follow the verb (140), since nothing could intervene between a subject pronoun and its verb.

- (139) ...ac ef ehun a than a 'e llosges.
 and he himself with fire PRT 3P-ACC burned
 '...and he himself burned them with fire.' (BT 194.8–9)

- (140) Mi wn fy hun, fôd llawer o lwynogod
 I know-1S myself be-VN many of foxes
 cyfrwys ... rhyd y gwledydd...
 cunning across the lands
 'I know myself that there are many cunning foxes ... across the lands.' (*LITA* 29.29–31, 1653) EMW

It seems that by this time, instead of moving as full DPs to the preverbal topic position SpecCP, pronominal subjects were simply cliticising to the front of the verb.

Similar weakening of the reduplicated series was underway too. Reduplicated subject pronouns begin to be found as expletive subjects in the sixteenth century:

- (141) ...y vo a uu y kyuriw dymesdyl ynGymhrv
 3SM-REDUP PRT was the such storm in-Wales
 y dethwn yma...
 the day that
 '...there was such a storm in Wales that day...' EMW
 (*RhG* i.32.16–17, c. 1530)

Furthermore, phonologically reduced forms appear, for instance, in (142) *vo* is a reduced form of the Middle Welsh masculine third person singular reduplicated pronoun *efo*.

- (142) Vo aeth oddiwrth yr holl gythrelid... EMW
 he went away-from the all devils
 'He went away from all the devils...' (*TWRP*, 'Y Dioddefaint' 777, 1552)

The full paradigm of the reduced reduplicated forms is given below.

(143)	EARLY MODERN WELSH FULL FORMS	SEMI-REDUCED FORMS	REDUCED FORMS
'I'	myfi	y fi	fi
'you (sing.)'	tydi	y di thdi ²¹	di chdi
'he'	efo / efe	y fo / y fe	fo / fe
'she'	hyhi	y hi	hi
'we'	nyni	y ni	ni
'you (pl.)'	chwychwi	y ch(w)i	chi
'they'	hwyntwy	ynhwy	nhw

The reduced forms of the reduplicated pronouns were very similar in form to the simple independent pronouns and merged with them. With the loss of preverbal subjects the range of contexts for their use narrowed to include only contexts where the pronoun was not linked to a verb. Variant forms came to be distinguished only stylistically, with descendants of Middle Welsh reduplicated forms (*fi*, *di*, *fo/fe* and *nhw*) being more colloquial, and variants descended from Middle Welsh simple forms (*mi*, *ti*, *ef* and *hwy*) being more formal.

²¹After *a*^A 'and', *â*^A 'with', *gyda*^A 'with' and *efo*^A 'with'.

In the eighteenth century, clitic doubling of subject clitics appears in colloquial Welsh for the first time. A preverbal independent pronoun (by this time a clitic) is doubled by a postverbal affixed pronoun:

- (144) a. *mi dewes i fy spectol gartre* **ModW**
 I left-1S I my glasses at-home
 ‘I left my glasses at home.’ (BLI. 8.22)
- b. *Ti elli di fyn’d lle gwelech di ’n dda.* **ModW**
 you can-2S you go where see-2S-SUBJ you PRD good
 ‘You can go wherever you please.’ (PN 13.19)

This seems to be evidence that by this time the preverbal subject pronouns had undergone further grammaticalisation, this time to become agreeing complementisers. The other possibility, that they had become markers of subject agreement (i.e. AgrS heads) is not tenable. The V2-constraint in Middle Welsh meant that preverbal subject pronouns were confined to main clauses. This restriction remains with clitic doubling in the eighteenth century. While it is reasonable for complementisers to be restricted by clause type, it would be odd for subject agreement to be restricted to main clauses.

Finally in the mid-eighteenth century, agreement between the complementiser and the verb ceases to be enforced consistently. In particular the first person marker *mi* (145) and the masculine third person marker *fe* (146) appear before all person/number combinations and acquire the status of general affirmative main clause complementisers, a status that they have maintained in contemporary Welsh. The doubling construction in (144b) has died out in most dialects of contemporary Welsh.

- (145) *Mi welen yno ffenest...* **ModW**
 MI saw-3P there window
 ‘They saw there a window...’ (Ellis Roberts, *Dwy o Gerddi Newyddion*, 1759, Lloyd 1937:98)
- (146) *Fe fydda fi bôb Boreu yn gorfod*
 FE will-be-1S I every morning PROG have-to-VN **ModW**
gweiddi...
 shout-VN
 ‘Every morning I’ll have to shout...’ (BDaf. 16.25–6)

5 SUBORDINATE CLAUSES

5.1 Embedded tensed clauses

Embedded tensed clauses in all the medieval and modern Brythonic languages are verb-initial clauses of the form complementiser – verb – subject – object:

- (147) *A chyt archo ef yti rodi yr eil...*
 and though implore-SUBJ he to-you give-VN the second
 ‘And though he implore you to give him the second...’ (PKM 3.19–20)

Embedded V2 is found in some contexts. In Middle Welsh it is confined to embedded clefts (section 1.7.2). In Middle Breton, embedded V2 is also found freely with the complementiser *rac* ‘for, since’:

- (148) ...rac en poetet a lauar... **B**
 for the poets PRT say
 ‘...for the poets say...’ (Ca. 10)

A noteworthy feature of Brythonic embedded clauses is that adverbs may precede the general complementisers MW. *y(d)*, MBr. *ez* (and their negative equivalent *na*) and may not intervene between the complementiser and the verb (cf. identical Irish facts reported in McCloskey 1996):

- (149) a. Ac ef a debygei, **ar yr eil neit, neu ar y**
 and he PRT supposed on the second leap or on the
trydyd, y gordiwedei.
 third COMP+3SF-ACC would-overtake
 ‘And he supposed that on the second leap or on the third he would overtake her.’
 (PKM 12.3–4)
- b. Me en goar breff [CP **mar he queff y**] e
 I 3SM know well if 3SF finds her COMP **B**
 lazo yen gant villeny...
 will-kill cold with evil
 ‘I know well that if he finds her he will kill her in cold blood...’ (B 374)

Given the approach above (section 1.1.2) according to which adverbs may adjoin to C’ in V2-structures in the medieval Brythonic languages, it is not surprising that such adjunction should also be possible in embedded clauses, with the result that adverbs adjoined to C’ precede the complementiser in C.²²

5.2 Embedded tenseless clauses

5.2.1 Ergative embedded clauses

In Middle Welsh clausal complements of verbs that take propositions as their complements (declarative and epistemic verbs) must be syntactically nonfinite under certain circumstances.²³ The set of verbs involved includes *clybot* ‘to hear’, *credu* ‘to believe’, *dywedut* ‘to say’, *gwelet* ‘to see’, *gwybot* ‘to know’, *medyliaw* ‘to think’, *mynegi* ‘to indicate’, *ryuedu* ‘to marvel’ and *tebygu* ‘to suppose’. If the complement clause is affirmative and refers to an event preceding the main clause predicate, then it is syntactically nonfinite, as in (150). On the other hand, embedded questions and clefts, embedded negative clauses and conditional and future clauses after these verbs are finite as in (151).

²² Again the same conclusion follows if these adverbs adjoin to AgrSP and the particle+verb raises covertly to C. This is another possibility.

²³ As pointed out for Modern Welsh by Harlow (1992) and Tallerman (1997), these clauses fill a gap in a finite paradigm of clause types, even though they contain a nonfinite verb.

- (150) ...mi a gibleu dyuot y 'r Deheu y ryw
 I PRT heard-1S come-VN to the south the sort
 bryuet ni doeth y 'r ynys honn eiroet.
 creatures NEG came to the island this ever
 '...I have heard that creatures the like of which have never come to this island have
 come to the south.' (PKM 68.16–17)
- (151) ...mi a tebygaf y byd gwr idi yn y lle...
 I PRT suppose-1S PRT will-be man to-3SF soon
 '...I suspect that he will be her husband soon...'
 (P 63.20–21)

These clauses manifest an ergative pattern of argument marking. If the verb is unaccusative, the internal argument behaves as a direct object, following the verb if it is lexical as in (150), or appearing as a genitive object clitic if it is pronominal, as in (152).

- (152) Ac wynteu a dywedasant **eu hanuot** o
 and they PRT said-3P 3P-GEN originate-VN from
 lys Arthur.
 court Arthur
 'And they said that they were from Arthur's court.'
 (YSG 4614–17)

The pattern is identical to that found with the direct objects of nonfinite verbs in other contexts:

- (153) Tranoeth y bore ... y parawd Arthur **eu bedydyaw**.
 next-day the morning PRT caused Arthur 3P baptise-VN
 'The next morning Arthur had them baptised.'
 (P 39.28–30)

If the embedded verb is unergative or transitive, the subject is marked using the preposition *o* 'from, of':^{24, 25}

- (154) a. A gredy di ... gwneuthur o Duw Adaf?
 Q believe-2S you make-VN of God Adam
 'Do you believe that God made Adam?'
 (YCM 30.4–5)

²⁴This is a slight simplification. Under some circumstances, the internal argument of unaccusative verbs is marked using *o*. Manning (1995) suggests that [+human] is the conditioning factor, with [+human] Noun Phrases allowing *o*. A possibility more in keeping with the typology of ergative systems is that it is pronouns that may be marked with *o*. This would make tenseless embedded clauses in Middle Welsh into a split ergative system of a familiar variety. Given that the tenseless clauses in question are restricted to past tense contexts, it may be that the language is independently also split ergative for perfectivity.

²⁵Very occasionally the preposition *i* 'to' is found here:

- (i) Emystynnu idaw ynteu yn y peir, yny dyrr...
 stretch-VN to-3SM him in the cauldron until breaks
 'He stretch out in the cauldron until it broke...'
 (PKM 44.19–20)

This may be a completely different construction, since it does not seem to be sensitive to unaccusativity. It has been claimed that this pattern is the oldest (Richards 1949–51:52).

- b. Yr ymdidan yssyd yn dywedut ... uarchogaeth ohonaw...
 the story is-REL PROG say-VN ride-VN of-3SM
 yny doeth hyt y vanachlawc...
 until came as-far-as monastery
 ‘The story says that he rode ... until he came to a monastery...’
 (YSG 1112)

Tenseless clauses of the type in (150)–(154) are found in two other environments. Firstly they occur as complements to prepositions as in (155). They are also found in main clause contexts, either in series of conjoined main clauses where only the first is specified for tense and person, or independently (the so-called ‘historic infinitive’, Fowkes 1991), as in (156).

- (155) ...gwedy y adnabot o ’r rei
 after 3SM-GEN recognise-VN from the ones
 guarchaedic ef...
 besieged him
 ‘...after the besieged ones had recognised him...’ (BD 146.4)
- (156) Ac yna y gyrchu o ’r marchawc ef
 and then 3SM-GEN attack-VN from the knight him
 yn llityawc...
 PRD angry
 ‘And then the knight attacked him angrily...’ (P 14.18)

For fuller discussion see Lewis (1928:182–4), Morgan (1938), Richards (1949–51), and Manning (1995).

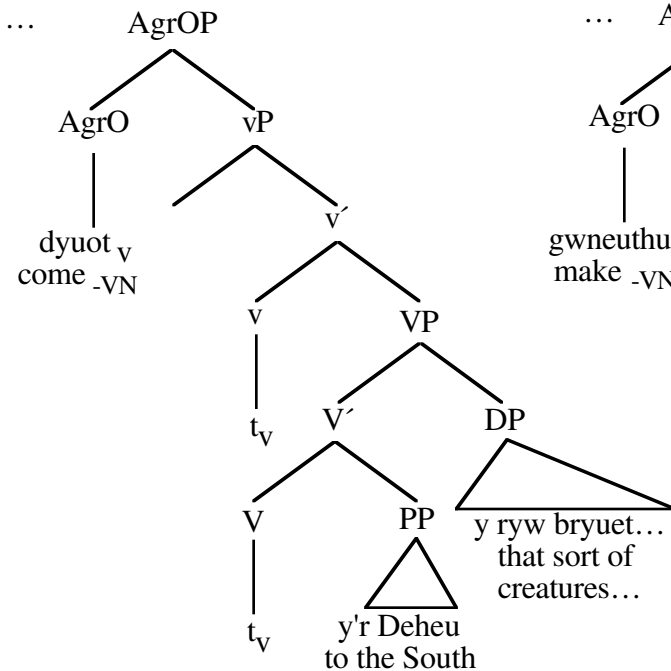
In the transitive construction both subject-object order as in (152a) and object-subject order as in (157) are attested. However, the former outnumbers the latter by a substantial margin, which seems to suggest that the subject-object order is basic, with object-subject order being derived by extraposition of the subject.

- (157) A gwedy adnabot hynny o Ywein...
 and after recognise-VN that of Owain
 ‘And after Owain had recognised that...’ (BT 78)

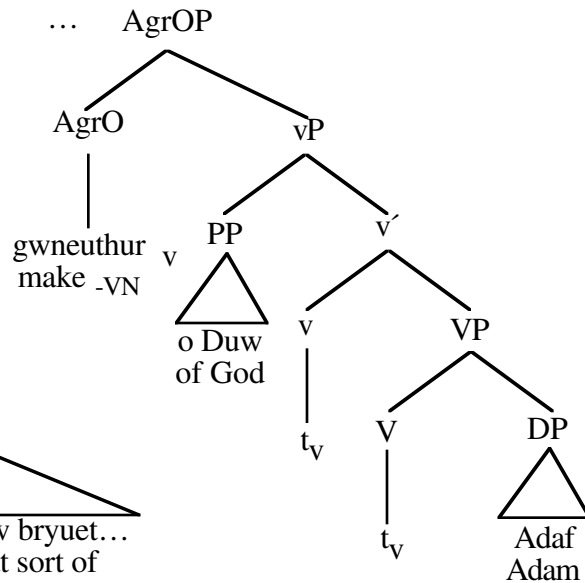
Note also that although the order lexical subject – pronominal object is attested (as in (155) and (156) above), the order lexical object – pronominal subject is not. Assuming that extraposition of pronouns is dispreferred, this suggests that subject – object is the nonderived order.

The observed pattern can be accounted for if internal arguments (‘subjects’) of unaccusative verbs are introduced into the derivation in the canonical object position (using a double VP shell, SpecVP). The nonfinite verb raises overtly to AgrO, with the internal argument (like a direct object) raising covertly to SpecAgrOP to check agreement features. This is illustrated in (158a). If these clauses lack an AgrSP projection, then a subject in the transitive construction will be unable to check case. Middle Welsh allows insertion of the preposition *o* to satisfy the case requirements of the subject. This is illustrated in (158b).

(158)a.



b.



Note that the subject position must be ungoverned unless the preposition is inserted, since PRO subjects are also permitted:

- (159) A phan weles ynteu y vwrw... y 'r poenau
and when saw he 3SM cast-VN to the pains
tragywydawl...
eternal
'And when he saw that he had been cast ... into eternal torment...'
(YSG 2423–4)

Complement clauses of this type have become severely restricted. By the seventeenth century the number of verbs involved in the construction had shrunk to just one, namely the verb *bod* 'to be'. This remains the case in contemporary Welsh. The construction has been largely replaced by embedded *i*-clauses, see section 5.2.2 below.

A parallel construction existed in Middle Breton, but is already far more restricted in its distribution. It occurs with a very narrow set of embedded verbs, consisting perhaps only of three unaccusative verbs *bout/bezaff* 'to be', *donet* 'to come' and *monet* 'to go':

- (160) a. A te na goar ez lauarer e uezaff eff Doe
Q you NEG know COMP say-IMPERS 3SM be-VN he God
an croer...
the creator
'Do you not know that it is said that he is God the creator...?' (B 804)
- b. ...euel ma emoa plen ordrenet ... quent ma monet... B
as that was fully ordered ... before 1S go-VN
'...as I had ordered before I went (away)...' (B 283)

Similar data are found in Cornish, but apparently only with the verb *bos* 'to be'. An example is given in (161) (from George 1993:460).

- (161) yn sur ef a wothfye y bos hy peghadures C
 surely he PRT know-COND 3SF be-VN she sinner
 ‘Surely he would know that she is a sinner.’ (Passio Christi 490)

Cornish followed Breton in eliminating this construction. In Late Cornish, the embedded verb acquired finite-like endings (George 1993:460). Neither Middle Breton nor Cornish has an equivalent to the transitive clauses marked with *o*.

5.2.2 The innovation of *i*-clauses in Welsh

In contrast to Middle Welsh, Modern Welsh complements of declarative and epistemic verbs and of prepositions are tenseless clauses of the form Preposition *i* ‘to’ – subject – verb – object (*i*-clauses):

- (162) Dywedodd Steffan [i Nia baentio ’r llun]. ModW
 said Steffan to Nia paint-VN the picture
 ‘Steffan said that Nia had painted the picture.’

There are two accounts of the origin of this pattern. Lewis (1928:182–4) relates it to the syntax of control verbs. A number of control verbs, such as *erchi* ‘to ask’, *peri* ‘to cause’ and *adolwyn* ‘to ask’ require a PP-complement headed by *i* ‘to’. This indirect object must act as controller for PRO in the embedded clause:

- (163) A chyt archo yti_i [PRO_i rodi yr eil...]
 and though ask-SUBJ to-you give-VN the second
 ‘And though he ask you to give him the second...’ (PKM 3.19–20)

Lewis suggests that it was ‘by analogy’ with this group that the construction with *i* marking the subject in all nonfinite clauses spread.

Richards (1949–51:78–81) notes that a number of predicates, notably *damweinaw* ‘to happen’ allowed an ergative complement clause in (164) and an indirect object followed by a control clause in (165):

- (164) Ynghyfrug hynny y damweinawd [dyuot llu o ’r
 in-means this PRT happened come-VN force of the
 Flemisseit o Ros y Gaer Uyrdin]...
 Flemings from Rhos to Carmarthen
 ‘In this way it happened that a force of the Flemings came from Rhos to Carmarthen.’
 (BT 98.6–7)
- (165) ...ef a damweinyawd [y wynt] [dwyn yr ysgraff
 it PRT happened to wind take-VN the boat
 ymeith odyno hyt yn ynys arall bell].
 away from-there as-far-as island other distant
 ‘It happened to the wind that it took the boat away from there to another distant island.’
 (YSG 4175–6)

He suggests that this alternation spread to other verbs which did not originally have it.

Compatible with both accounts is the suggestion that a reanalysis took place, with one generation of speakers interpreting the *i* – NP sequence as the indirect object of the matrix verb, and the next generation interpreting it (in some cases) as the subject of the embedded clause:²⁶

(166) [PP *i* NP] [IP PRO verb ...] ⇒ [CP [C *i*] [IP NP [VP verb ...]]]

For instance, a natural extension of the Lewis account would be to claim that a verb like *erchi* ‘to ask’ itself acquired a second possible complement pattern. The sentence in (163) might easily have been (mis)interpreted as also having the meaning ‘although he may ask [someone] that you give him the second’, with object of ‘ask’ and subject of ‘give’ distinct. The subcategorisation frame of the verb would be extended to allow for this second possibility and a new type of embedded clause would be created.

(167) Stage I
erchi ‘to ask’ ___ [PP *i* NP] IP

Stage II
erchi ‘to ask’ ___ [PP *i* NP] IP
 ___ [CP [C *i*] [IP ...]]

Once embedded clauses headed by *i* became possible with this verb, their appearance generally in contexts where embedded nonfinite clauses were possible was a natural consequence.

The earliest examples of the spread of *i*-clauses beyond control verbs come from Middle Welsh, although they are extremely rare:

(168) Ny thebygaf i y un o hyn uynet ar dy geuyn di.
 NEG suppose-1S I to one of these go-VN on 2S back you
 ‘I do not think that any of these people will (want to) go on your back.’
 (PKM 25.16)

More general use comes only from the Late Middle Welsh period onwards. At this time *i*-clauses appear as the object of prepositions:

(169) A gwedy idaw disgyn, wynt a barassant
 and after to-3SM dismount-VN they PRT cause-3P
 ystabyl y’w varch...
 stable to-his horse
 ‘And after he had dismounted, they had a stable prepared for his horse...’
 (YSG 525–6)

And as the complements of declarative and epistemic verbs:

(170) Pan wybu bobyl y wlat ymi dyuot odyno
 when knew people the country to-me come-VN away
 yn vyw...
 PRD alive
 ‘When the people of the country realised that I had come away alive...’
 (FfBO 57.1)

²⁶I assume that *i* is reanalysed as a complementiser, following Tallerman (1997). The alternative view would be that *i* in Modern Welsh is an Infl-head (Harlow 1992; Rouveret 1990).

A second problem is why there is a past tense restriction on the interpretation of the complement clauses of declarative and epistemic verbs in Modern Welsh. On the account sketched here, this is a natural consequence of the spread of *i*-clauses (only) to contexts where tenseless clauses were possible. Already in Early Middle Welsh, declarative and epistemic verbs had a past tense restriction on the interpretation of their complement clauses. The difference was that these were ergative clauses. Once *i*-clauses appeared, however, it is natural that they should spread to all contexts in which tenseless clauses were licensed, but there is no reason to expect that they should have spread also to contexts (like conditional, future and negative embedded clauses) where tenseless clauses were already excluded.

6 WH-CONSTRUCTIONS

In most cases, *wh*-constructions in the medieval Brythonic languages have properties identical to the those of topicalisation in the V2-construction discussed above (section 1.1). Examples here are given from relative clauses, but the same properties are found in *wh*-questions and other *wh*-constructions.

The basic distinction is between relative clauses formed using the particle (complementiser) *a* and those formed using the particle MW. *y(d)* (ModW. *y(r)*), MBr. *ez*. The former is obligatory in extractions from subject position (171) and the direct object position of a synthetic verb (172). In relative clauses formed on subject position, the verb does not agree with the extracted subject, but appears in a default third person singular form. Note that although in Middle Breton and Cornish this pattern is identical to that found with V2-structures, in Welsh there is a contrast between relative clauses, where there is no agreement, and V2-structures, where there is full agreement (see section 1.7.2 above).

- (171) a. *y megineu a oed wedy eu gossot yg kylch*
 the bellows REL was-3S PERF 3P-GEN set-VN around
y ty
 the house
 ‘the bellows that were set up around the house’ (PKM 36.15)
- b. *an re a graff enor dan sceuret doueouse* **B**
 the ones REL do-3S honour to-the sort gods-that
 ‘the ones who honour gods of that sort’ (Ca. 8)
- (172) a. *a ’r arglwydiaeth a gaussam ninheu*
 and the government REL received-1P we
 ‘...and the government that we had...’ (PKM 8.15–16)
- b. *an virginité à obseruas hac à miras* **B**
 the virginity REL observed and REL kept
 ‘the virginity that she observed and kept’ (Ca. 1)

With relative clauses formed on other positions, usage is variable in the medieval languages, with both particles generally possible. For instance, (173) shows both particles used in the formation of relative clauses on the object of a preposition in Middle Welsh. In these cases full agreement is generally required at the extraction site. For instance, in (173) the preposition *yndi* agrees with the feminine singular antecedent in both cases.

- (173) a. *ffiol eur a anho llawn diawt y brenhin yndi*
 vial gold REL fit-PRES-SUBJ full drink the king in-3SF
 ‘a golden vial that the king’s fill of drink would fit into’ (LIB 3.22)

- b. Nyt oed long y kynghanei ef yndi.
 NEG was ship REL fit-IMPF-SUBJ he in-3SF
 ‘There was no ship that he could fit into.’ (PKM 40.10–11)

This variability has been removed in the development of Welsh, and in Literary Welsh the particle *y(r)* has been generalised in all cases except clauses formed on subject and object position. The development in non-literary varieties is less clear. Soft mutation is the usual marker of a relative clause there. This may indicate wider use of the particle *a*, which is a soft mutation trigger, rather than *y(r)*. Overt relative pronouns are a feature of literary varieties of all the medieval Brythonic languages (cf. *pere* ‘which ones’ in (176b) and *yr hynn* ‘the one’ and *y rei* ‘the ones’ in (177) below). Their use seems to reflect imitation of the syntax of the dominant neighbouring languages, rather than natural developments in speech.

Relatives formed on adjunct positions require *y(d)* in Middle Welsh. Middle Breton and Cornish use a third relative strategy here, employing the general complementiser MBr. *ma(z)*, C. *ma(y)* :

- (174) y noss y keueist y mab
 the night REL got-2S the boy
 ‘the night that you had the boy’ (PKM 23.25)
- (175) ...dan ty ... maz eu lacaet da miret... **B**
 to-the house REL is put-PP to keep-VN
 ‘...to the house where she has been put to be kept...’ (B 413)

In view of the remarkable similarity in the formation of other relatives, this contrast may be evidence that adjunct relatives of this type were a late innovation in the parent language.

In the negative, relative clauses formed on subject position show full subject-verb agreement, as in (176). The contrast between affirmative and negative clauses here again demonstrates the parallism between relative clauses and V2-structures.

- (176) a. gwaged a meibon a dynyon didraha diwala, ny
 women and boys and men meek contented NEG
 ellynt ... nac ymladeu na ryueloed
 could-IMPF-3P neither battles nor wars
 ‘women and boys and meek, contented men, who could not undertake either battles or wars’ (P 7.13–16)
- b. an heol han planedou pere ne cessont [n]os
 the sun and planets which-ones NEG cease-3P night
 na dez **B**
 nor day
 ‘the sun and the planets, which do not cease night or day’ (Ca. 5)

In negative object relatives an object agreement marker *-s* optionally attaches to the negative marker in Middle Welsh, although not in the other medieval Brythonic languages:

- (177) a. Medylyaw yd wyf ... yr hynn ny medylyut
 think-VN PRT am the that NY think-IMPF-SUBJ-2S
 ti amdanaf i.
 you about-1S me
 ‘I’m thinking what you wouldn’t think about me.’ (PKM 86.10–11)

-
- b. Llawer o betheu enryued ... y rei ... nys credei
 many of things strange the ones NYS believe-IMPF
 neb
 anyone
 ‘Many strange things that no one would believe.’ (FfBO 46.8–9)

Again this parallels V2-structures. In Welsh the negative relative marker MW. *ny(t)*, homophonous with the main clause negative marker, has given way to ModW. *na(d)*, homophonous with the negative marker used in subordinate clauses. The optional object agreement has been lost.

7 THE STRUCTURE OF NOUN PHRASES

All Brythonic languages have a definite article from their earliest attested stages (W. *y(r)*, Br./C. *an*, cogn. OIr. *ind*). Although the article does not itself manifest gender or number, it triggers differential mutations on the following noun, (essentially) triggering soft mutation on feminine singular nouns (178a), no mutation on plural or masculine singular nouns (178b). There is no indefinite article in Welsh or Cornish. In Breton an indefinite article *un* has been innovated from the unstressed form of the numeral *unan* ‘one’ (cf. Welsh *un* ‘one’). The frequency of its use has increased substantially since Middle Breton.

- (178) a. y wreic deccaf a weleist eiroet
 the woman fairest REL saw-2S ever
 ‘the fairest woman that you ever saw’ (PKM 3.9)
- b. y gwas teccaf ... a welest eiroet
 the lad fairest REL saw-2S ever
 ‘the fairest lad that you ever saw’ (P 43.23–4)

Agreement within the noun phrases is indicated by mutation patterns and at some periods also by morphological marking of gender and number. Adjectives after feminine nouns mutate as in (178b). In Middle Welsh many adjectives inflect for gender and number, but use of these forms has generally declined. Plural forms of some adjectives are found in Old Breton (Fleuriot 1964:245) but had virtually all been lost by Middle Breton. There are some remnants of earlier number agreement in Cornish also Padel (1979–80).

In general singular forms of nouns are used with numerals, although the phrases themselves are syntactically plural. In Middle Welsh, however, a few nouns have special numerative forms for use after numerals (*brawd* ‘brother’, num. *broder*, pl. *brodyr*; *blwydyn* ‘year’, num. *blwyd/blyned*, pl. *blynyded*; *llwdn* ‘young animal’, num. *llydn*, pl. *llydnnot*). Some other nouns appear in forms identical to the plural after numerals (*chwaer* ‘sister’ ~ *chwioered*; *gwraig* ‘woman’ ~ *gwraged*; *merch* ‘girl’ ~ *merchet*; *iarll* ‘earl’ ~ *ieirll*; *march* ‘horse’ ~ *meirch*; *tarw* ‘bull’ ~ *teirw*). Four nouns appear in the singular after *deu* ‘two’ (*mab* ‘son’, *gwas* ‘servant’, *gwr* ‘man’ and *dyd* ‘day’) but in numerative forms after other numerals (viz. *meib*, *gweis*, *gwyr* and *dieu*). Most of these forms gave way to the singular in Late Middle Welsh.

Phrases headed by a numeral present particular difficulties of agreement in Middle Welsh. Adjectives are plural if the adjective has a separate plural form, whether the head noun appears in the singular, the numerative or the plural:

- (179) a. deu was ieueinc
two servant-SING young-PLUR
'two young servants' (PKM 81.23)
- b. [y] pump wraged hynny
the five woman-PLUR these-PLUR
'these five women' (PKM 48.2)
- c. [y] pym meib hynny
the five son-NUM these-PLUR
'these five sons' (PKM 48.3)

Remnants of an earlier dual number survive in the mutation patterns in phrases headed by *deu* (m.) or *dwy* (f.) 'two'. Here adjectives in Middle Welsh undergo soft mutation regardless of gender:

- (180) a. dwy genedyl vvdron
two-FEM nation-SING dirty-PLUR
'two foul nations' (BY 36)
- b. deu vilgi vronwynyon vrychyon
two-MASC greyhound white-breasted-PLUR speckled-PLUR
'two speckled white-breasted greyhounds' (P 48.9–10)

In all cases, Modern Welsh has followed Breton and Cornish in generalising singular agreement.

REFERENCES

- Anderson, Stephen R. 1982. Where's Morphology? *Linguistic Inquiry* 13:571–612.
- Ball, Martin J. and Nicole Müller. 1992. *Mutation in Welsh*. London: Routledge.
- Ball, Martin J. (ed.). 1993. *The Celtic Languages*. London: Routledge.
- Borsley, Robert D. 1984. VP Complements: Evidence from Welsh. *Journal of Linguistics* 20:277–302.
- Borsley, Robert D. and Janig Stephens. 1989. Agreement and the Position of Subjects in Breton. *Natural Language and Linguistic Theory* 7:407–27.
- Borsley, Robert D. and Maggie O. Tallerman. 1996. Phrases and Soft Mutation in Welsh. *Journal of Celtic Linguistics* 5.
- Borsley, Robert D; Maria-Luisa Rivero and Janig Stephens. 1996. Long Head Movement in Breton. In *The Syntax of the Celtic Languages*, edited by R. D. Borsley and I. Roberts. Cambridge: Cambridge University Press, 53–74.
- Bowers, John. 1993. The Syntax of Predication. *Linguistic Inquiry* 24:591–636.
- Cardinaletti, Anna. 1990. Es, *pro* and Sentential Arguments in German. *Linguistische Berichte* 126:135–64.
- Diesing, Molly. 1990. Verb Movement and the Subject Position in Yiddish. *Natural Language and Linguistic Theory* 8:41–79.
- Doherty, Cathal. 1996. Clausal Structure and the Modern Irish Copula. *Natural Language and Linguistic Theory* 14:1–46.
- Eska, Joseph F. 1990a. Some Proleptic Pronouns in Gaulish. In *Celtic Language, Celtic Culture: a Festschrift for Eric P. Hamp*, edited by A. T. E. Matonis and Daniel F. Melia. Van Nuys, Calif.: Ford & Bailie, 1–12.
- Eska, Joseph F. 1990b. Syntactic Notes on the Great Inscription of Peñalba de Villastar. *Bulletin of the Board of Celtic Studies* 37:104–7.
- Eska, Joseph F. 1991–2. Syntactic Ways to Etymology: the Case of Gaulish *etic* and *eθic*. *Studia Celtica* 26–7:21–33.
- Eska, Joseph F. and D. Ellis Evans. 1993. Continental Celtic. In *The Celtic Languages*, edited by M. J. Ball with J. Fife. London: Routledge, 26–63.

- Evans, D. Simon. 1964. *Grammar of Middle Welsh*. Dublin: Dublin Institute for Advanced Studies.
- Evans, D. Simon. 1968a. The Sentence in Early Modern Welsh. *Bulletin of the Board of Celtic Studies* 22:311–37.
- Evans, D. Simon. 1968b. The Verbal Predicate in Early Modern Welsh. *Études Celtiques* 12:236–60.
- Evans, D. Simon. 1971. Concord in Middle Welsh. *Studia Celtica* 6:42–56.
- Evans, Emrys. 1958. Cystrawennau ‘sef’ mewn Cymraeg Canol. *Bulletin of the Board of Celtic Studies* 18:38–54.
- Evans, Emrys. 1959. Y Rhagenw Ategol Dwbl mewn Cymraeg Canol. *Bulletin of the Board of Celtic Studies* 18:173–6.
- Evans, Emrys. 1965. Gohirio’r Rhagenw mewn Cymraeg Canol. *Bulletin of the Board of Celtic Studies* 21:141–5.
- Fife, James. 1988. Functional Syntax: A Case Study in Middle Welsh. Lublin: Redakcja Wydawnictw Katolickiego Uniwersytetu Lubelskiego.
- Fife, James and Gareth King. 1991. Focus and the Welsh “Abnormal Sentence”: A Cross-linguistic Perspective. In *Studies in Brythonic Word Order*, edited by J. Fife and E. Poppe. Amsterdam: John Benjamins, 81–154.
- Fleuriot, Léon. 1964. *Le Vieux Breton. Éléments d’une Grammaire*. Paris: Librairie C. Klincksieck.
- Fowkes, Robert A. 1991. Verbal Noun as ‘Equivalent’ of Finite Verb in Welsh. *Word* 42:19–29.
- George, Kenneth J. 1987–8. Quelques Réflexions sur l’Order des Mots dans la Pièce en Moyen Breton: Buhez Santez Nonn. *Bretagne Linguistique* 4:175–87.
- George, Kenneth J. 1990. A Comparison of Word-Order in Middle Breton and Middle Cornish. In *Celtic Linguistics*, edited by M. J. Ball, J. Fife, E. Poppe and J. Rowland. Amsterdam: John Benjamins, 225–40.
- George, Kenneth J. 1991. Notes on Word Order in *Beunans Meriasek*. In *Studies in Brythonic Word Order*, edited by J. Fife and E. Poppe. Amsterdam: John Benjamins, 205–50.
- George, Kenneth J. 1993. Cornish. In *The Celtic Languages*, edited by M. J. Ball with J. Fife. London: Routledge, 410–68.
- Haegeman, Liliane. 1994. *Introduction to Government and Binding Theory*. 2nd edn. Oxford: Blackwell.
- Harlow, Stephen J. 1981. Government and Relativisation in Celtic. In *Binding and Filtering*, edited by F. Heny. London: Croom Helm, 213–54.
- Harlow, Stephen J. 1989. The Syntax of Welsh Soft Mutation. *Natural Language and Linguistic Theory* 7:289–316.
- Harlow, Stephen J. 1992. Finiteness and Welsh Sentence Structure. In *Structure de la Phrase et Théorie du Liage*, edited by H. Obenauer and A. Zribi-Hertz. Saint-Denis: Presses Universitaires de Vincennes, 93–119.
- Hemon, Roparz. 1954a. The Breton Personal Pronoun as a Direct Object. *Celtica* 2:229–44.
- Hemon, Roparz. 1954b. On Some Forms of the Verb “to be” in Breton. *Celtica* 2:217–28.
- Hemon, Roparz. 1975. *A Historical Morphology and Syntax of Breton*. Dublin: Institute for Advanced Studies.
- Hendrick, Randall. 1991. The Morphosyntax of Aspect. *Lingua* 85:171–210.
- Hendrick, Randall. 1994. The Brythonic Celtic Copula and Head Raising. In *Verb Movement*, edited by D. Lightfoot and N. Hornstein. Cambridge: Cambridge University Press, 163–88.
- Hewitt, Steve. 1990. The Progressive in Breton in the Light of the English Progressive. In *Celtic Linguistics*, edited by M. J. Ball, J. Fife, E. Poppe and J. Rowland. Amsterdam: John Benjamins, 167–88.
- Isaac, Graham R. 1996. *The Verb in the Book of Aneirin*. Tübingen: Max Niemeyer Verlag.
- Jackson, Kenneth. 1953. *Language and History in Early Britain*. Edinburgh: Edinburgh University Press.
- Jones, Dafydd Glyn. 1988. Literary Welsh. In *The Use of Welsh*, edited by M. J. Ball. Clevedon: Multilingual Matters, 125–71.
- Katz, Joshua T. 1994. Welsh *moes* ‘Give Me!’. *Studia Celtica* 28:109–16.
- Koch, John T. 1983a. The Loss of Final Syllables and Loss of Declension in Brittonic. *Bulletin of the Board of Celtic Studies* 30:201–33.

- Koch, John T. 1983b. The Sentence in Gaulish. *Proceedings of the Harvard Celtic Colloquium* 3:169–216.
- Koch, John T. 1985. Movement and Emphasis in the Gaulish Sentence. *Bulletin of the Board of Celtic Studies* 32:1–37.
- Koch, John T. 1991. On the Prehistory of Brittonic Syntax. In *Studies in Brythonic Word Order*, edited by J. Fife and E. Poppe. Amsterdam: John Benjamins, 1–44.
- Koch, John T. 1992. “Gallo-Brittonic” vs. “Insular Celtic”: the Inter-relationship of the Celtic Languages Reconsidered. In *Bretagne et Pays Celtiques: Langues, Histoire, Civilisation*, edited by G. Le Menn. Rennes, Saint Briec: Presses Universitaires Rennes, Skol, 471–95.
- Larson, Richard K. 1988. On the Double Object Construction. *Linguistic Inquiry* 19:335–91.
- Lewis, Henry. 1928. Y Berfenw. *Bulletin of the Board of Celtic Studies* 4:179–89.
- Lewis, Henry. 1931. *Datblygiad yr Iaith Gymraeg*. Cardiff: Gwasg Prifysgol Cymru.
- Lewis, Henry. 1942. *The Sentence in Welsh*. London: Humphrey Milford Amen House.
- Lewis, Henry. 1946. *Llawlyfr Cernyweg Canol*. Cardiff: Gwasg Prifysgol Cymru.
- Lewis, Henry. 1990. *Handbuch des Mittelkornischen*. Edited by S. Zimmer. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck.
- Lewis, Henry and Holger Pedersen. 1937. *A Concise Comparative Celtic Grammar*. Göttingen: Vandenhoeck & Ruprecht.
- Lewis, Henry and J. R. F. Piette. 1966. *Llawlyfr Llydaweg Canol*. Cardiff: Gwasg Prifysgol Cymru.
- Lloyd, D. Myrddin. 1937. Casgliad o Hen Faledi. *Journal of the Welsh Bibliographical Society* 5:93–9.
- Mac Cana, Proinsias. 1973. Celtic Word-Order and the Welsh Abnormal Sentence. *Ériu* 24:90–120.
- Mac Cana, Proinsias. 1979. Notes on the “Abnormal Sentence”. *Studia Celtica* 14–15:174–93.
- Mac Cana, Proinsias. 1990. On the Uses of the Conjunctive Pronouns in Middle Welsh. In *Celtic Linguistics*, edited by M. J. Ball, J. Fife, E. Poppe and J. Rowland. Amsterdam: John Benjamins, 411–33.
- Mac Cana, Proinsias. 1991. Further Notes on Constituent Order in Welsh. In *Studies in Brythonic Word Order*, edited by J. Fife and E. Poppe. Amsterdam: John Benjamins, 45–80.
- Mac Cana, Proinsias. 1992. On the Early Development of Written Narrative Prose in Irish and Welsh. *Études Celtiques* 29:51–67.
- Macaulay, Donald (ed.). 1992. *The Celtic Languages*. Cambridge: Cambridge University Press.
- Manning, H. Paul. 1995. Fluid Intransitivity in Middle Welsh: Gradience, Typology and “Unaccusativity”. *Lingua* 74:171–94.
- McCloskey, James. 1996. On the Scope of Verb Movement in Irish. *Natural Language and Linguistic Theory* 14:47–104.
- Morgan, Rita. 1958. Y Gystrawen ‘Am Eux’ mewn Llydaweg Canol. *Bulletin of the Board of Celtic Studies* 18:157–73.
- Morgan, T. J. 1938. Braslun o Gystrawen y Berfenw. *Bulletin of the Board of Celtic Studies* 9:195–215.
- Morgan, T. J. 1952. *Y Treigladau a’u Cystrawen*. Cardiff: Gwasg Prifysgol Cymru.
- Morris-Jones, John. 1913. *A Welsh Grammar*. Oxford: Oxford University Press.
- Morris-Jones, John. 1931. *Welsh Syntax: an Unfinished Draft*. Cardiff: University of Wales Press.
- Ouhalla, Jamal. 1994. *Introducing Transformational Grammar*. London: Edward Arnold.
- Padel, Oliver J. 1979–80. Miscellanea Cornica. *Studia Celtica* 14–15:232–45.
- Poppe, Erich. 1989. Constituent Ordering in Breudwyt Maxen Wledic. *Bulletin of the Board of Celtic Studies* 36:43–63.
- Poppe, Erich. 1990. Word-order Patterns in Breudwyt Ronabwy. In *Celtic Linguistics*, edited by J. Fife, M. J. Ball, E. Poppe and J. Rowland. Amsterdam: John Benjamins, 445–60.
- Poppe, Erich. 1991a. *Untersuchungen zur Wortstellung im Mittelkymrischen*. Hamburg: Helmut Buske Verlag.
- Poppe, Erich. 1991b. Word Order in Cyfranc Lludd a Llefelys: Notes on the Pragmatics of Constituent-Ordering in MW Narrative Prose. In *Studies in Brythonic Word Order*, edited by J. Fife and E. Poppe. Amsterdam: John Benjamins, 155–204.

- Poppe, Erich. 1993. Word Order in Middle Welsh: The Case of Kedyndeithyas Amlyn ac Amic. *Bulletin of the Board of Celtic Studies* 40:95–118.
- Poppe, Erich. 1995. Negation in Welsh and ‘Jespersen’s Cycle’. *Journal of Celtic Linguistics* 4:99–107.
- Poppe, Erich. 1996. Convergence and Divergence: The Emergence of a ‘Future’ in the British Languages. *Transactions of the Philological Society* 94:119–60.
- Richards, Melville. 1934. Yr yn Traethiadol yn y Pedair Cainc. *Bulletin of the Board of Celtic Studies* 7:96–112.
- Richards, Melville. 1938. *Cystrawen y Frawddeg Gymraeg*. Cardiff: Gwasg Prifysgol Cymru.
- Richards, Melville. 1949–51. The Subject of the Verb Noun in Welsh. *Études Celtiques* 5:51–81, 293–313.
- Rouveret, Alain. 1990. X-bar Theory, Minimality, and Barrierhood in Welsh. In *The Syntax of the Modern Celtic Languages*, edited by R. Hendrick. San Diego: Academic Press, 27–79.
- Rouveret, Alain. 1991. Functional Categories and Agreement. *Linguistic Review* 8:353–87.
- Rouveret, Alain. 1994. *Syntaxe du Gallois*. Paris: CNRS Éditions.
- Rouveret, Alain. 1996. *Bod* in the Present Tense and in Other Tenses. In *The Syntax of the Celtic Languages*, edited by R. D. Borsley and I. Roberts. Cambridge: Cambridge University Press, 125–70.
- Russell, Paul. 1995. *An Introduction to the Celtic Languages*. London: Longman.
- Schafer, Robin. 1994. Nonfinite Predicate Initial Constructions in Breton. Doctoral dissertation, University of California, Santa Cruz.
- Schafer, Robin. 1995. Negation and Verb Second in Breton. *Natural Language and Linguistic Theory* 13:135–72.
- Schmidt, Karl Horst. 1990. Gallo-Brittonic or Insular Celtic. In *Studia Indogermanica et Palaeohispanica in Honorem A. Tovar et L. Michelena*, edited by F. Villar. Salamanca, Vitoria: Ediciones Universidad de Salamanca, Universidad del País Vasco, 255–67.
- Schmidt, Karl Horst. 1993. Insular Celtic: P and Q Celtic. In *The Celtic Languages*, edited by M. J. Ball. London: Routledge, 64–98.
- Sigurðsson, Halldór Ármann. 1990. V1 Declaratives and Verb Raising in Icelandic. In *Modern Icelandic Syntax*, edited by J. Maling and A. Zaenen. San Diego: Academic Press, 41–69.
- Suggett, Richard F. 1983. An Analysis and Calendar of Early Modern Welsh Defamation Suits. Social Science Research Council Final Report (HR 6979).
- Tallerman, Maggie O. 1990. VSO Word Order and Consonantal Mutation in Welsh. *Linguistics* 28:389–416.
- Tallerman, Maggie O. 1996. Fronting Constructions in Welsh. In *The Syntax of the Celtic Languages*, edited by R. D. Borsley and I. Roberts. Cambridge: Cambridge University Press, 97–124.
- Tallerman, Maggie O. 1997. The Uniform Case-licensing of Subjects in Welsh. Ms. University of Durham. To appear in *Linguistic Review*.
- Thorne, David A. 1993. *A Comprehensive Welsh Grammar*. Oxford: Blackwell.
- Trépos, Pierre. n. d. [1968]. *Grammaire Bretonne*. Rennes: Imprimerie Simon.
- Watkins, T. Arwyn. 1977–8. Trefn yn y Frawddeg Gymraeg. *Studia Celtica* 12–13:367–95.
- Watkins, T. Arwyn. 1983–4. Trefn y Constitwentau Brawddegol yn Branwen. *Studia Celtica* 18–19:147–57.
- Watkins, T. Arwyn. 1987. Constituent Order in the Old Welsh Verbal Sentence. *Bulletin of the Board of Celtic Studies* 34:51–60.
- Watkins, T. Arwyn. 1988. *Constituent Order in the Positive Declarative Sentence in the Medieval Welsh Tale "Kulhwch ac Olwen"*. Innsbruck: Institut für Sprachwissenschaft der Universität Innsbruck.
- Watkins, T. Arwyn. 1990. Constituent Order in the Negative Declarative Sentence in the White Book Version of Kulhwch ac Olwen. In *Celtic Language, Celtic Culture*, edited by A. T. E. Matonis and D. F. Melia. Van Nuys, Calif.: Ford & Bailie, 247–52.
- Watkins, T. Arwyn. 1993. Constituent Order in Main/Simple Clauses of Pwyll Pendeuc Dyuet. *Language Sciences* 15:115–39.

- Watkins, T. Arwyn and J. R. F. Piette. 1962. Ffuriant a Chystrawen y Geirynnau Adferfol/Traethiadol mewn Cymraeg, Cernyweg a Llydaweg. *Bulletin of the Board of Celtic Studies* 19:295–315.
- Willis, David W. E. 1997. Clausal Coordination and the Loss of Verb-second in Welsh. *Oxford Working Papers in Linguistics, Philology and Phonetics* 2:151–72.
- Willis, David W. E. 1998. *Syntactic Change in Welsh: A Study of the Loss of Verb-second in Welsh*. Oxford: Oxford University Press.

TEXT ABBREVIATIONS

- B* *Le Mystère de Sainte Barbe*. Ed. É. Ernault. 1888. Paris: Libraire du Collège de France.
- BD* *Brut Dingestow*. Ed. H. Lewis. 1942. Llandysul: J. D. Lewis a'i Feibion.
- BDaf*. Jones, Hugh and John Cadwaladr. ?c. 1765. *Enterlut, neu Ddanghosiad o'r Modd y Darfu i'r Brenhin Dafydd Odinebu efo Gwraig Urias*. Caerlleon: W. Read a T. Huxley.
- BLI*. *Y Brenin Llyr*. c. 1700–50. National Library of Wales, Cwrtmawr MS 212A.
- BM* *Breuddwyd Maxen*. Ed. I. Williams. 1908. Bangor: Jarvis a Foster.
- BT* *Brut y Tywysogyon or The Chronicle of the Princes. Red Book of Hergest Version*. Ed. T. Jones. 1955. Cardiff: University of Wales Press.
- BY* *Y Bibyl Ynghymraec*. Ed. T. Jones. 1940. Cardiff: Gwasg Prifysgol Cymru.
- CA* *Canu Aneirin*. Ed. I. Williams. 1938. Cardiff: Gwasg Prifysgol Cymru.
- Ca*. La Vie de Sainte Catherine. Ed. É. Ernault. 1887. *Revue Celtique* 8:76–95.
- CO* *Culhwch ac Olwen. An Edition and Study of the Oldest Arthurian Tale*. Ed. R. Bromwich and D. S. Evans. 1992. Cardiff: University of Wales Press.
- Dff*. Kyffin, Maurice (Morys). 1595. *Deffyniad Ffydd Eglwys Loegr*. Ed. W. P. Williams. 1908. Bangor: Jarvis & Foster.
- ER* Roberts, Ellis and Robert Gruffudd. 1782. *Dwy o Gerddi Newyddion...* Trefriw: Dafydd Jones.
- FfBO* *Ffordd y Brawd Odrig*. Ed. S. J. Williams. 1929. Cardiff: Gwasg Prifysgol Cymru.
- GK* Le Breton de Gilles de Keranpuil. Ed. É. Ernault. 1928–30. *Revue Celtique* 45:202–71, 47:72–159.
- GPB* Davies, E. Tegla. *Gŵr Pen y Bryn*, 1923. Hughes a'i Fab.
- HGC* *Hanes-Gerddi Cymraeg*. 17th–18th c. Ed. Anon. *Casgliad o Hanes-Gerddi Cymraeg*. 1903. Cardiff: William Lewis.
- HLITN* Edwards, Thomas (Twm o'r Nant). 1789, 1799–1806. *Hunangofiant a Llythyrau Twm o'r Nant*. Ed. G. M. Ashton. 1948. Cardiff: Gwasg Prifysgol Cymru.
- Juv*. Juvencus Englynion. Ed. Marged Haycock. 1994. *Blodeugerdd Barddas o Ganu Crefyddol Cynnar*, 3–16. Llandybïe: Cyhoeddiadau Barddas.
- LIB* *Cyfreithiau Hywel Dda yn ôl Llyfr Blegywryd*. Ed. S. J. Williams and J. E. Powell. 1961. Cardiff: Gwasg Prifysgol Cymru.
- LlTA* Llwyd, Morgan. 1653. *Llyfr y Tri Aderyn*. Ed. Anon. 1974. Cardiff: Gwasg Prifysgol Cymru.
- Ox*. Oxford Glosses. Ed. I. Williams. 1930. Glosau Rhydychen: Mesurau a Phwysau. *Bulletin of the Board of Celtic Studies* 5:226–48.
- P* *Historia Peredur vab Efwrc*. Ed. G. W. Goetinck. 1976. Cardiff: Gwasg Prifysgol Cymru.
- PKM* *Pedeir Keinc y Mabinogi*. Ed. I. Williams. 1930. Cardiff: Gwasg Prifysgol Cymru.
- PN* Jones, Hugh. 1783. *Enterlute Newydd; ar Ddull Ymddiddan rhwng Protestant a Neilltuwr...* Mwythig: T. Wood.
- RhG* *Rhyddiaith Gymraeg*. Vol. i: 1488–1609. Ed. T. H. Parry-Williams. 1954. Vol. ii: 1547–1618. Ed. T. Jones, 1956. Cardiff: Gwasg Prifysgol Cymru.
- SM* The Surexit Memorandum. Ed. Dafydd Jenkins and Morfydd E. Owen. 1983–4. The Welsh Marginalia in the Lichfield Gospels. *Cambridge Medieval Celtic Studies* 5:37–66, 7:91–120.
- TWRP* *A Study of Three Welsh Religious Plays*. 16th c. Ed. G. Jones. 1939. Bala: R. Evans & Son.
- YBH* *Ystorya Bown de Hamtwn*. Ed. M. Watkins. 1958. Cardiff: Gwasg Prifysgol Cymru.
- YCM* *Ystorya de Carolo Magno*. Ed. S. J. Williams. 1930. Cardiff: Gwasg Prifysgol Cymru.

David Willis

Department of Linguistics
University of Cambridge
Sidgwick Avenue
Cambridge CB3 9DA
United Kingdom

dwew2@cam.ac.uk