# New Approaches to Brittonic Historical Linguistics 

## Abstracts

## Gwen Awbery <br> Aberystwyth University / University of Wales Trinity St David Historical dialectology and Welsh churchyards

Memorial inscriptions on gravestones are an important source of evidence for dialect variation in Welsh in the past. They exist in truly enormous numbers, are found throughout the country, commemorating people from all walks of life, and the tradition of using Welsh in this context goes back to the mid-eighteenth century. Most revealing are the poems which form part of the inscription. Some have rhyme schemes which work only with very specific features of dialect; others are slightly garbled versions of poems by well-known writers, where the influence of dialect features can explain the changes made to the original. Since the location and date of each inscription is known, it appears possible to build up a picture of where and when these dialect features were in use. The situation is not totally straightforward, however, and there are inevitably problems which arise in dealing with this material, ranging from the need for extensive and timeconsuming fieldwork, to the difficulties of reading inscriptions on worn and damaged stones, and the disconcerting tendency of some poems to show up in unexpected locations.

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Bernhard Bauer
Maynooth University
Close encounters of the linguistic kind: the Celtic glossing tradition
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The project Languages in Exchange: Ireland and her Neighbours (LeXiN) aims for a better understanding of the linguistic contacts between British Celtic and Irish in the early medieval period. The focal point of the investigation forms the "Celtic glossing tradition", especially the vernacular glosses on the computistic works of Bede and on the Latin grammar of Priscian. The main research question is: how much and what kind of linguistic contact and exchange is evident in these glosses?
In this paper I want to give an overview of my approach to this question. The data is collected and analysed in a database, which hosts all British Celtic and Old Irish glosses on Bede and Priscian. Of high importance are the glosses in parallel transmission, i.e. glosses in the vernaculars and Latin onto the same lemma transmitted in different manuscripts. Furthermore, selected examples of parallel glosses, language contact, and ad-hoc borrowings (hapax legomena in the glosses) will be discussed in the paper. Preliminary conclusions will be drawn and the next steps for future research will be explored.

Robert D. Borsley
University of Essex
More on the Welsh of Jesus and Job: an HPSG approach to Middle Welsh finite clauses
Theoretically informed work in diachronic syntax has been based almost exclusively on the Chomskyan Minimalist framework, and this is true of work on Middle Welsh (see especially Willis 1998 and Meelen 2016). There are arguments that other theoretical frameworks, e.g. Head-driven Phrase Structure Grammar (HPSG), provide a superior account of the syntax of natural languages, but they have not generally been applied in a diachronic context. In this talk I will outline HPSG analyses of Middle Welsh finite clauses. They differ from Modern Welsh finite clauses in a number of ways. Most notably, they commonly have the verb in second position with a preceding topic in a way that is not possible in Modern Welsh, and when the topic is understood as a subject the following verb normally agrees with it. HPSG is very different from Minimalism. Whereas Minimalism is a procedural approach with multiple levels of representation, in which the properties of lexical elements are crucial, HPSG is a declarative approach with a single level of representation, in which the properties of phrases are as important as those of words. Unsurprisingly, the analyses that I will outline will differ in some important ways from the minimalist analyses of Meelen (2016). I will propose an account of the verb-second property of Middle Welsh, which is rather like that of Meelen (2016), but I will outline a different approach to sentences where the initial topic is a subject with which the following verb agrees and a rather different account of so-called mixed sentences with a focus constituent in initial position.

## References

Meelen, M. (2016), Why Jesus and Job Spoke Bad Welsh: The Origin and Distribution of V2 Orders in Middle Welsh, Utrecht: LOT.
Willis, D. (1998), Syntactic Change in Welsh: A Study of the Loss of the Verb-second. Oxford: Oxford University Press.

## Stefan Dedio

University of Zurich

## Establishing verbal domains in early Brittonic

It has become clear from recent typological work that the distinctions between particles, clitics, and morphology is not as clear cut as it may seem (Haspelmath 2011). An important factor in the description of a bound morph and its development in a language is its phonological and morphological integration into its host.
The current study aims to establish the relevant phonological and morphological domains of the verbal complex of the medieval Brittonic languages that may be used to determine the degree of phonological integration of morphological pieces which may be used in subsequent studies of the development of Brittonic (and/or IC) verbal morphology. As phonological and prosodic domains are not universal categories but rather emergent language specific structures (Bickel, Hildebrandt, and Schiering 2009; Gijn and Zúñiga 2014; Bickel and Zúñiga 2016; contra Nespor and Vogel 2007; Vogel 2009), this study aims to determine which phonological and prosodic domains exist in the medieval Brittonic verbal complex by following a bottom-up approach: the scope of all phonological and prosodic processes that are known to operate inside the verb are mapped onto the maximum verbal form including all possible formants. From this, the domains emerge as clusters of the respective processes.
The emergent picture displays a striking uniformity in all three languages (and, for that matter, Early Irish) with only minor differences - especially in the possible mismatches between phonological and morphological domains.

## References

Bickel, Balthasar, Kristine A. Hildebrandt, and René Schiering (2009). "The distribution of phonological word domains:
A probabilistic typology". In: Phonological Domains. Universals and Deviations. Ed. by Janet Grijzenhout and Bariş Kabak. Berlin: de Gruyter, 47-75.
Bickel, Balthasar and Fernando Zúñiga (2016). "The 'word' in polysynthetic languages: phonological and syntactic challenges". In: The Oxford Handbook of Polysynthesis. Ed. by Michael Fortescue, Marianne Mithun, and Nicholas Evans. Oxford: Oxford University Press.
Gijn, Rik van and Fernando Zúñiga (2014). "Word and the Americanist perspective". In:
Morphology 24, 135-160.
Haspelmath, Martin (2011). "The indeterminacy of word segmentation1 and the nature of morphology and syntax". In: Folia Linguistica 45.1, 31-80.
Nespor, Marina and Irene Vogel (2007). Prosodic phonology. 2nd ed. Berlin \& New York: de Gruyter.
Vogel, Irene (2009). "The status of the clitic group". In: Phonological Domains. Universals and Deviations. Ed. by Janet Grijzenhout and Bariş Kabak. Berlin: de Gruyter, 15-46.

Pavel Iosad
University of Edinburgh
Bridging the gap: Tenseness and length in Brythonic vowels
I focus on reconstructing the development of vowel quality distinctions in Brythonic and their connection with the history of vowel quantity between the establishment of the 'standard' Brythonic penultimate-stress system and the present day. In the received picture of Modern Welsh phonology, 'tense' quality of non-low vowels ([i u e o]) is strongly associated with length and, conversely, 'lax' quality ([llllll is associated with shortness, at least in contrastive, i.e. stressed, position. The history of this pattern, however, remains understudied. Some important questions that remain to be addressed are as follows:

- When and how did contrastive length in penultimate syllables (characteristic of South Welsh, Cornish and most of Breton) become established? Is it original (and thus preserved following the stress shift), or does it represent a secondary lengthening of vowels that had been shortened in unstressed position? What is the position of North Welsh with its exclusively short vowels in stressed penults (cf. Wmffre 2003)?
- Similarly, does the tense/lax quality of vowels in Welsh reflect tense/lax quality before the stress shift, or does it represent a secondary readjustment? What is the relationship between the pattern in stressed penultimates and in final unstressed syllables (where at least high vowels seem to show an original length conditioning, at least in Welsh)?
- Is the complementary pattern of vowel and consonant length in penultimate syllables, which is practically universal in Brythonic, original, as implied by e.g. the classic account by Falc'hun (1951), or is it a secondary development following stress shift?

I discuss the problems raised for these issues by traditional sources, notably the focus on taxonomic phonemic transcription and the frequent sidelining of consonant duration. I outline what kinds of studies are needed to mitigate these problems. I also draw attention to some evidence for the existence of dialects in Mid Wales that may lack a tenseness distinction in at least some stressed syllables, and discuss whether such systems can be accepted as evidence for the historically secondary status of tenseness in penultimate stressed syllables.

## References

Falc'hun, François. 1951. Le système consonantique du breton. Rennes: Pilhon.
Wmffre, Iwan. 2003. Language and place-names in Wales: The evidence of toponymy in Cardiganshire. Cardiff: University of Wales Press.

Britta Irslinger
University of Freiburg/Humboldt University of Berlin
Middle Welsh ym-verbs in antipassive constructions
In Middle Welsh, the verbal prefix $y m$-, which is commonly described as a marker of reciprocity and reflexivity, actually displays various context-dependent detransitivising functions. Reflexive $y m$-verbs include not only full reflexives, but the whole range of middle situation types such as established by Kemmer 1993. On the discourse-pragmatic level, the $y m$-VERB $a(c)$-construction as discontinuous reciprocal construction demotes untopical participants of reciprocal events. In certain contexts, this construction can be identified as an antipassive, demoting the object of the corresponding transitive verb and shifting topicality to the agent, a function, which has not received much attention so far.
The present paper will give an overview about antipassive contructions in a broader corpus of Middle Welsh texts and discuss the verbs involved, their frequency, and the possible origin of the construction.

Mélanie Jouitteau
Centre national de la recherche scientifique
Syntactic portrait of an emergent Breton dialect: Standard Breton
The characterisation of Standard Breton with respect to the traditional varieties is a much debated topic. On the one hand, dialectological studies concentrate on prosody, phonology and lexicon, and typically claim that the traditional dialects are too different from one another for crosscommunication, and that Standard Breton is opaque for traditional speakers ('xenolect', Jones 1995, 1998). Syntax is typically not addressed. On the other hand, syntacticians claim that dialectal differences barely affect syntax (Stephens 1982) or fail to address the issue, hence considering it irrelevant.
I adopt the working hypothesis that Standard Breton is one dialect among others (Hornsby 2005) and propose to sketch its syntactic profil by contrast with traditional varieties. I review the syntactic arguments of the debate (Avezard-Roger 2004, Hornsby 2014), and provide new ones from the online syntactic microvariation database ARBRES (Jouitteau 2009-2017). I present some cases of syntactic variation across traditional dialects. These features have never or rarely been reported and described, and are consequently ignored or considered ungrammatical in Standard Breton. Next, I inventory the syntactic features unique to Standard Breton, that are never or seldom represented in the traditional dialects. I conclude by discussing transmission and the potential development of the Standard (Timm 2005, Kennard 2013). I show syntactic evidence of language attrition in the schooling system, but also cross-generational transmission of rare dialectal facts in the speech of young speakers, even in poor contact situations.

Avezard-Roger, C. 2004. Description syntaxique du syntagme verbal en breton: approche dynamique, thesis, U. René Descartes.
Jones, M. 1995. 'At what price language maintenance? Standardization in Modern Breton', French Studies 49 (4): 424-438.
Jones, M. 1998. 'Death of a Language, Birth of an Identity: Brittany and the Bretons', Language Problems and Language Planning 22(2), 129-42.
Hornsby, M. 2005. 'Néo breton and questions of authenticity', Estudios de Sociolingüística 6(2):191218.

Hornsby, M.. 2014. 'The "new" and "traditional" speaker dichotomy: bridging the gap', International Journal of the Sociology of Language 231:107-125.
Jouitteau, M. 2009-2017. ARBRES, site de recherche sur la syntaxe formelle de la microvariation syntaxique de la langue bretonne, http://arbres.iker.cnrs.fr
Kennard, H. J. 2013. Breton morphosyntax in two generations of speakers: evidence from word order and mutation, thesis, U. Oxford.
Stephens, J. 1982. Word order in Breton, thesis, School of Oriental and African Studies, U. London. Timm, Lenora. 2005. 'Language Ideologies in Brittany, with Implications for Breton Language Maintenance and Pedagogy', Journal of Celtic Language Learning 10.

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Anders Jørgensen
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Dialect variation in Middle Breton
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In this talk I will attempt to provide a connection between the modern dialect descriptions and dialect atlases on the one hand and the Middle Breton texts on the other.
First, I will give some examples of isoglosses that can be traced from Modern Breton dialect studies all the way back to the Late Middle Breton (1600-1650)/Early Modern Breton (1650-1800) period. Next, I will try to establish bundles of isoglosses which may be taken as representative of a given area in the Late Middle Breton period. I will use a combination of phonological, morphological and lexical isoglosses. The last step will be to try to take the "leap" into the Classical Middle Breton period (1450-1600).
Particular attention will be paid to a number of features which can likely be labelled "Western". These features are well attested in the Late Middle Breton period and may already turn up in the Classic period here and there. I will discuss the probable reason for the late appearance of these "Western" features, i.e. whether their late attestation is due to a shift in dialect base or rather due to the chronological differences between the texts.

Holly Kennard
University of Oxford
Changes in Breton stress patterns: the case of monosyllabic nouns

This paper examines Breton stress patterns in noun phrases where a monosyllabic noun is preceded by the indefinite article. In most dialects of Breton, stress falls on the penultimate syllable (e.g. ával 'apple'; bolótenn 'ball'), although the Vannetais dialects tend to have stress on the final syllable. Existing accounts of KLT Breton (e.g. Desbordes, 1983) state that when a monosyllabic noun is preceded by the indefinite article, the stress falls on the article, rather than the noun. Thus, the expected pattern would be ún ti 'a house', rather than *un tí, and in contrast to an tí 'the house'. It seems that the words combine to form a single phonological unit, which is then stressed on the penult, like a disyllabic word.

However, data from fieldwork conducted in southwest Brittany suggest that this stress shift rule is not universally maintained. Firstly, younger speakers who have acquired Breton through immersion schooling do not shift stress to the article, and continue to stress the noun. This in itself is not a surprising finding: these speakers are likely to be French-dominant, and have not, for the most part, had much contact with older traditional native speakers. More surprising, however, is the fact that many older speakers are also failing to shift stress in this context.

It might be suggested that the loss of this feature results from language attrition, or is a symptom of wider patterns of obsolescence. Dressler (1991) notes that 'terminal' Breton speakers may show French influence in their stress patterns. Equally, it might be a regional feature of the Breton in this part of Brittany. Closer investigation, however, indicates that this is not such a very recent phenomenon, nor is it confined to a single area. The Banque Sonore des Dialectes Bretons has few examples of stress shift from the monosyllabic noun to the indefinite article, and this is not confined to a single area of Brittany. Equally, data from the Atlas Linguistique de la Basse Bretagne (Le Roux, 1924-1963) indicate that this feature may have been absent from regional dialects of Breton for some time. This suggests that the loss of the stress shift is not a symptom of language attrition, nor a feature of the Neo Breton of younger speakers, but is in fact part of an existing change in Breton, which probably began much earlier in its history.

## Marieke Meelen <br> University of Cambridge <br> Towards a historical Welsh treebank

This paper presents a newly developed procedure for annotating a historical corpus of Welsh. It builds on previous work on a chunk-parsed corpus of Middle Welsh (cf. Meelen 2016). We aim to standardise decisions that have to be made at each stage of building a new treebank: preprocessing (including tokenisation and normalisation), part-of-speech tagging, chunk-parsing and, finally, creating a fully parsed corpus. These decisions will be extensively documented so that future texts can be easily added to the corpus by any linguists interested in working with historical Welsh texts. This first fully parse treebank of Welsh forms an important contribution to the fields of Welsh linguistics and historical syntax.

Silva Nurmio
Dublin Institute for Advanced Studies
Hybrid controllers and agreement in Welsh

This paper looks at noun types which present challenges to the analysis of the morphosyntax of Welsh. Most nouns have consistent agreement patterns in either singular or plural. Some nouns, however, are hybrid controllers (Corbett 2000, 2006), i.e. they can optionally govern syntactic or semantic agreement. English nouns such as committee are a well-studied example of hybrid controllers, which can (depending on the variety and register of English) govern both singular (syntactic) or plural (semantic) agreement, e.g. the committee has/have discussed the problem. I suggest that Welsh has two such noun types: (i) nouns which are like E committee, e.g. byddin 'army' (discussed by Dedio 2015) and (ii) mass nouns denoting aggregates, e.g. gwenith 'wheat'.

I focus on mass nouns in this paper and look at a diachronic sample, arguing that these nouns appear to be hybrid controllers in all periods of the language. This accords with the findings on English committee-type nouns (e.g. Levin 2001, 2006) which show register variation in different periods, with a difference between written and spoken registers in particular, as well as considerable variation between different lexemes. Crucially, however, there is no clear diachronic trend suggesting that either syntactic or semantic agreement is becoming the preferred option. The Welsh data adds to our typological knowledge of hybrid controllers and agreement, suggesting that such nouns do not present problems to acquisition, since their agreement patterns seem to persist diacronically.

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Elena Parina
Philipps-Universität Marburg
Syntax of adjectives in Middle Welsh religious texts
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Adjectives preceding nouns and/or agreeing in number with plural nouns have often been considered to be a distinctive feature of translationstyle, influenced by Latin (see examples from editions in Luft 2016: 171-172, also Nurmio 2015: 161-163), although these features also occur in native prose. On the other hand, plural forms of adjectives in -edic were found by Nurmio (2015: 174-179) in her Middle Welsh corpus to occur almost exclusively in translated texts. All these features can be seen in the phrase anneiryfedigyon bennev y ssarff ('the uncountable heads of the serpent' for innumeris hydrae capitibus, Ystoria Lucidar, LlA 45v), with an -edic-adjective in the plural and preceding the noun. My paper will investigate the behaviour of adjectives in collocation with plural nouns in the representative collection of religious texts contained in Llyfr Ancr Llanddewibrefi (Oxford, Jesus College MS. 119, dated 1346) - using for the first time all its texts (a corpus of about 60,000 words) tagged with an extended PoS-tagger in cooperation with Marieke Meelen (on the tagger see Meelen 2016: 21-53, 325-337). Thus all instances of a given syntactic phenomenon can be found, in this instance all cases of noun phrases with plural noun. When compared with the data from the Mabinogi corpus used by Meelen in her study, this data gives valuable insights into how specific, in fact, the features mentioned above (position, number, morphology) are for translated texts and how such texts differ between one another. For Welsh versions of the Historia Regum Britanniae, Nurmio (2015: 175) has shown that some of these features have become markers of a specific "style of translated prose", since many of the attestations are not mere calques on the Latin texts. Analysis of texts from Llyfr yr Ancr adds another genre to the picture, thus allowing us to see similarities and differences between historiographic and religious texts - this attention to genre being an emerging topic in Welsh linguistics. Due to a better understanding of Latin sources achieved in the project Translations as language contact phenomena: studies in lexical, grammatical and stylistic interference in Middle Welsh religious texts (lead by Prof. Erich Poppe at the PhilippsUniversität Marburg, supported by Fritz Thyssen Stiftung), we can also compare many of the Welsh instances with their Latin models (which is a new approach in linguistical studies of these texts), which enables us to improve our understanding of the translators' strategies.

Meelen, Marieke. 2016. Why Jesus and Job spoke bad Welsh: The origin and distribution of V2 orders in Middle Welsh (Utrecht: LOT)
Nurmio, Silva. 2015. 'Studies in Grammatical Number in Old and Middle Welsh' (unpublished PhD thesis, University of Cambridge)
Luft, Diana. 2016. 'Tracking ôl cyfieithu: Medieval Welsh translation in criticism and scholarship', Translation Studies, 9.2: 168-82

Kerstin Plein
Philipps-Universität Marburg

## The interaction of verbal agreement, semantics and information structure in Middle Welsh subject initial main clauses

Both the abnormal sentence ( V 2 or $(\mathrm{X}) \mathrm{XV}(\mathrm{X})$ ) and the mixed sentence (cleft sentence) are familiar categories in Middle Welsh syntax. The former is said to form 'neutral statements' (or topic-comment structures), and the latter to form 'emphatic statements' with 'emphasis' on the preverbal constituent (or focus structures). Already in the 1970s Proinsias Mac Cana expressed his criticism of this dichotomy:
'The basic error here, I would suggest, is that emphasis is considered solely in terms of contrastive emphasis relating to a specific element in the sentence, whereas [...] a change of word-order may convey various nuances of emphasis affecting the substance of the whole statement.' (Mac Cana 1973: 104)
He further developed his idea in Mac Cana 1991. However, his proposal of Middle Welsh noun-initial sentences (in his terminology) where emphasis affects 'the substance of the whole statement' was until very recently only received outside of Celtic Studies (Sasse 1987, Sasse 2006, Sornicola 2006). In newer works on Middle Welsh (Meelen 2016) and Modern Irish (Eshel 2015) corpora the category alluded to by Mac Cana, namely that of sentence focus (thetic or presentational sentences), received some attention.
Based on a sample of formally identifiable cleft sentences (main clauses with preverbal plural subjects and the 3 sg default form of the verb) from an extensive corpus of prose texts, I will show that cleft sentences are indeed also a formal means of expressing theticity (or sentence focus) in Middle Welsh. I will give a quantitative analysis of the interaction of agreement patterns with semantic features of the subject (definiteness, animacy) and the verb (e.g. existential verbs, main verbs) and relate these features to different types of thetic statements using some of Sasse's categories of discourse functions and narrative functions of thetic sentences.

## References

Eshel, Orit. 2015. Narrative Grammar and Narrative Modes in Modern Irish (unpublished PhD thesis). Hebrew University of Jerusalem, Israel.
Mac Cana, Proinsias. 1973. On Celtic word-order and the Welsh rabnormak sentence. Ériu 24, 90-120.
Mac Cana, Proinsias. 1991. Further Notes on Constituent Order in Welsh. In: James Fife \& Erich Poppe (eds.), Studies in Brythonic Word Order (Current Issues in Linguistic Theory 83), 45-80. Amsterdam: John Benjamins.
Meelen, Marieke. 2016. Why Jesus an Job spoke bad Welsh. The origin and distribution of V2 orders in Middle Welsh. Utrecht: LOT.
Plein, Kerstin. Forthcoming. Verbalkongruenz im Mittelkymrischen. Hagen: Curach Bhán Publ.
Sasse, Hans-Jürgen. 1987. The thetic/categorical distinction revisited. Linguistics 25, 511-80. Sasse, Hans-Jürgen. 2006. Theticity. In: Giuliano Bernini \& Marcia L. Schwartz (eds.), Pragmatic Organization of Discourse in the Languages of Europe (Eurotyp 20(8)), 255308. Berlin: Mouton de Gruyter.

Sornicola, Rosanna. 2006. Interaction of syntactic and pragmatic factors on basic word order in the languages of Europe. In: Giuliano Bernini \& Marcia L. Schwartz (eds.), Pragmatic Organization of Discourse in the Languages of Europe (Eurotyp 20(8)), 357544. Berlin: Mouton de Gruyter.

Iwan Rees
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## Length and quality in Welsh mid vowels: new data from Mid-Wales and some possible implications for historical linguistics

General overviews of Welsh dialects (e.g. Awbery 1984, 2009; G. E. Jones 1984; Ball \& Williams 2001; Hannahs 2013) distinguish between northern and southern phonological systems, and report that systematic differences are found between the vowels of these two main varieties of Welsh. For example, a fuller inventory is found in the northern system due to an absence of high central vowels in southern varieties of Welsh. Consequently, pairs of contrastive long and short vowels are found in only five positions in south Wales, as opposed to six in north Wales, together with the short mid central [ə] (which has no equivalent long vowel) in both regions.

Some complications arise however when we look more closely at the quantity-quality interaction, i.e. the relationship between vowel length and vowel quality in these pairs of vowels. Broadly speaking, previous reports on Welsh phonology have claimed that clear differences exist between long and short vowels in south Wales in terms of their quality, but that these qualitative differences are minimal in north Wales (e.g. G. E. Jones 1984: 57; Ball \& Williams 2001:36). Some earlier sources (e.g. Sweet 1882-4; Fynes-Clinton 1913) went even further by maintaining that no qualitative differences whatsoever existed between long and short vowels in parts of north Wales. However, a more recent acoustic analysis of simple vowels in parts of north and south Wales (Mayr \& Davies 2011: 18) is at odds with these auditory-based interpretations, and proposes that northern Welsh, as well as southern Welsh, 'distinguish[es] pairs of vowels on the basis of both spectrum [i.e. quality] and duration'.

This paper will report on recent fieldwork conducted in two distinctive parts of mid-Wales, and will analyse the variation found in the spoken Welsh varieties of 12 speakers from the older generation (6 from each area) in two specific articulatory positions, namely the front mid vowels $[\mathrm{e}(:)] /[\varepsilon(:)]$, and the equivalent back mid vowels $[\mathrm{o}(:)] /[\rho(:)]$. The empirical quantitative results of this paper will show that the quality of these particular vowels are far from being uniform in these areas; they will also reveal that the quality of these vowels varies not only with length, but that other linguistic factors are also relevant, e.g. the vowel's position within the word (i.e. which syllable) and the precise phonetic context. Consequently, previous assumptions that vowels of the same length behave uniformly across all contexts will be challenged. Furthermore, unexpected differences between the two areas emerge, and the wider geographical and historical implications of these results will be explored.

## References

Awbery, Gwenllian (1984), 'Phonotactic Constraints in Welsh', in Ball, Martin J. \& Jones, Glyn E. (eds), Welsh Phonology: Selected Readings, Cardiff: University of Wales Press, pp. 65-104.
Awbery, Gwenllian (2009), 'Welsh', in Ball, Martin J. \& Müller, Nicole (eds), The Celtic Languages (2 $2^{\text {nd }}$ edition), London and New York: Routledge, pp. 359-426.
Ball, Martin J. \& Williams, Briony (2001), Welsh Phonetics, Lampeter: The Edwin Mellen Press. Fynes-Clinton, O. H. (1913), The Welsh Vocabulary of the Bangor District, Oxford: Oxford University Press.
Hannahs, S. J. (2013), The Phonology of Welsh, Oxford: Oxford University Press. Mayr, Robert \& Davies, Hannah (2011), 'A Cross-dialectal Acoustic Study of the Monophthongs and Diphthongs of Welsh', Journal of the International Phonetic Association 41 (1), 1-15. Sweet, Henry (1882-4), 'Spoken North Welsh', Transactions of the Philological Society, 409-84.

Ricarda Scherschel
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## Agreement in Welsh and Breton: a parallel-text approach

In typological research, parallel texts have recently been discovered as a valuable data source (see e.g. Cysouw \& Wälchli 2007, Mayer \& Cysouw 2014). In these approaches a parallel text is the same text in various translations or adaptations. For diachronic research including many languages the best example of a parallel text is the Bible, a so-called massively parallel text. In the context of the Marburg research project 'Diachrony of Agreement Systems: Breton - Welsh German (and other Germanic languages)', we used one passage, namely Luke 1,5-2,35, from this 'massively parallel text' to establish a diachronic corpus of Breton and Welsh parallel texts (namely four Breton Bibles covering different dialects from 1827, 1893, 1913 and 2010, and five Welsh Bibles of $1567,1588,1804,2004$, and 2013). This corpus is analysed in regard to agreement features (gender, number, person) expressed by the controller and target of the specific agreement relation in the three domains of attributive, predicative and anaphoric agreement, cf. Corbett 2006. This set of data establishes the number of 'multi-representations of agreement features', and this number is then used to define the 'pervasiveness of agreement' in the individual texts. 'Pervasiveness' is calculated from the number of agreement relations in the three domains of agreement relations, attributive, predicative, and anaphoric, in the selected passage. The value of 'pervasiveness' can be used for both tracking and describing diachronic changes of agreement features as well as for the comparison of the relevance of agreement in the linguistic systems of other languages. In my paper, I will present the first results of this analysis of the pervasiveness of agreement in the Breton and Welsh parallel texts. Although the values in the two languages appear to be similar, the agreement constructions underlying this surface value are quite different, as will be discussed. In a final step, the results for the two British languages are compared with the results of the analysis of the same passage in a number of Germanic languages.

## References

Corbett, Greville G. (2006): Agreement. Cambridge: University Press.
Cysouw, Michael \& Bernhard Wälchli (eds.) 2007. Focus on parallel texts. Sprachtypologie und Universalienforschung (Thematic Issue) 60.2.
Mayer, Thomas \& Michael Cysouw (2014): Creating a massively parallel Bible corpus. Proceedings of LREC 2014: 3158-3162.

## Stefan Schumacher <br> University of Vienna <br> The treatment of word-initial s-clusters in early medieval British Celtic languages

It is a well-known fact that during the Old Welsh period a prothetic vowel established before the word-initial clusters ${ }^{*} s t-{ }^{*} s k$ - and ${ }^{*} s p$-; this prothetic vowel was phonemicised after the accent shift (at least in words that had been monosyllabic after apocope). By contrast, it is rarely noticed that Breton and Cornish show related phonetic developments (neutralisation of the difference between word-initial ${ }^{*} s C$ and word-initial ${ }^{*} V s C$ ), which cannot be separated from what happens in Welsh. In my paper, I will investigate the common prehistory of the developments in all three British Celtic languages. Finally, I will also try to show that what happens in British Celtic is closely connected with what happens in Late Latin and Early Romance and that this connection is best explained as an effect of language contact.

Paulus van Sluis
Centre for Advanced Welsh and Celtic Studies
Stops in Early Welsh: phonology and orthography
In Modern Welsh, /p t k/ lenited to /bdg/, and these sounds are exactly the same as radical /b dg/. However, lenited voiceless stops and radical voiced stops go back to different consonants in the Common Celtic stage, and some Breton dialects maintain a distinction between lenited voiceless stops and their radical counterparts based on length (Falc'hun 1951). The existence of a similar three-way stop distinction in Welsh has been argued for by Koch (1990). However, Breton stop phonology has been influenced by Latin, meaning voiceless and voiced stops are distinguished by means of voicing, while aspiration distinguishes Welsh voiceless and voiced stops. Breton evidence alone is therefore insufficient for reconstructing the phonology of the Early Welsh three-way stop distinction.
A phonology distinguishing three series of stops requires at least two binary phonetic variables or one ternary variable. Previously, it was suggested that either voice and aspiration were these two variables in Late Common Brittonnic/Early Welsh (Koch 1990), or voice and length (Schrijver 2011). I argue that this three-way stop distinction was based on the following two phonological variables: length and aspiration. I introduce several methodologies by which this reconstruction may be achieved: irregularities in Old Welsh orthography, patterns of provection in the eleventh- to thirteenth-century cynghanedd, and of course comparative evidence.
I also argue that lenited voiceless stops merged with radical voiced stops as late as the thirteenth century on the basis of developments in Middle Welsh orthography. Knowledge of when and how these series merged may aid us in dating texts found in Middle Welsh manuscripts.

Falc'hun, François. 1951. Le système consonantique du breton, avec une étude comparative de phonétique expérimentale. Rennes: Imprimeries Réunies.
Koch, John T. 1990. ' ${ }^{\text {C Cothairche, Esposito's Theory, and Neo-Celtic Lenition'. In Britain 400-600 : }}$ Language and History, edited by A Bammesberger and A Wollmann, 205: 179-202. Anglistische Forschungen. Heidelberg: Universitätsverlag Winter.
Schrijver, Peter. 2011. 'Old British'. In Brythonic Celtic - Britannisches Keltisch: From Medieval British to Modern Breton, 1-84. Bremen: Hempen Verlag.

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Grammaticalization of mynd \(i^{\prime}\) go to' in Welsh: a corpus linguistic study of historical change
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This paper, reporting on an ongoing analysis conducted in collaboration with Dr Christopher Shank (Bangor University), discusses the historical grammaticalization of mynd/myned $i$ 'go to' in Welsh, whereby the meaning has changed over time from a lexical meaning to a co-occurring 'more grammatical' meaning.

In Early Modern Welsh, mynd $i$ is observed as having only a purely lexical meaning of physical movement towards somewhere or something (e.g. rydw i'n mynd $i$ Fangor 'I am going to Bangor'). However, in later Welsh additional meanings are found, representing intention (e.g. rydw i'n mynd $i$ weithio 'I am going to work') and futurity (e.g. mae Bangor yn mynd i sefyll am byth 'Bangor is going to stand forever' - note that in these latter cases, literal movement is often impossible as an inteprretation).

Corpus analysis of tokens of mynd $i$ and the archaic myned $i$ (as well as the mutated $f$ forms) in several Welsh text corpora, from EME through to the 21st century, reveals that Intentional use of mynd $i$ occurs sporadically in early texts and then becomes more frequent in the 20th century, while 'pure' Future use is also recent; these latter changes have not displaced the original Locational meaning. This pattern parallels the change found in English BE going to, which grammaticalized from locational to futurity by the 19th century. I will present the data and an initial analysis of the Welsh data and then discuss possible reasons for the change found, including whether the Welsh change was influenced by the English change.

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## Using multidimensional scaling to track Middle Welsh dialects

It was traditionally thought to be impossible to identify dialect variation in Middle Welsh, but in the past twenty years significant progress has been made, and several convincing dialect diagnostics have been identified. The problem of securely localizing and dating texts and manuscripts has hampered progress in the past, as have difficulties raised by scribal practice (different approaches to copying manuscripts by scribes of the period). Existing work is based on the idea of extending present-day variation into the past: where two variants still exist today, it is assumed that the current distribution must be based in past patterns. On this basis, geospatial variation of morphophonological variables has been successfully identified (presence or absence of /j/ in suffixes; prepositional inflections in /t/, /d/ or / $\theta / /$; 3sg. past tense in /Vs/ or in /auð/) (Thomas 1993, Willis 2005). Where variation has no present-day correlate, little progress has been made in assigning it geospatial significance. I will investigate the prospects offered by the development of large-scale electronically searchable databases and statistical techniques for this area, using multidimensional scaling to create a space of variation that can be interpreted in part as representing dialect variation. A specific case for analysis will be variation in marking of realis conditional clauses, where this approach suggests that the marker $o(d)$ 'if' should be considered northern and or 'if' southern. Further ahead, the existence of such databases may allow us to locate the source of the innovation that leads to the present-day system, namely the generalization of the focus conditional marker os to all realis conditional clauses. Finally, I will compare where we are with Welsh to progress made for medieval English in the LAEME and LALME atlases (Laing \& Lass 2009) or for medieval German (e.g. Middle Low German negation, Breitbarth 2014).

## References

Breitbarth, Anne. 2014. Dialect contact and the speed of Jespersen's cycle in Middle Low German. Taal en Tongval 66, 1-20.
Laing, Margaret \& Roger Lass. 2009. Early Middle English dialectology: Problems and prospects. In Ans van Kemenade \& Bettelou Los (eds.), The handbook of the history of English, 417-51. Malden, Mass.: Wiley-Blackwell.
Thomas, Peter Wynn. 1993. Middle Welsh dialects: Problems and perspectives. Bulletin of the Board of Celtic Studies 40, 17-50.
Willis, David. 2005. Lexical diffusion in Middle Welsh: the distribution of $/ \mathrm{j} /$ in the law texts. Journal of Celtic Linguistics 9, 105-33.

## Reflexivity in north-western Europe: A diachronic and areal perspective

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One of the linguistic features often cited as evidence for Celtic influence on English is that the modern languages in the British Isles do not differentiate between reflexives and intensifiers as the languages designated as core Standard Average European do (König and Haspelmath 1999 122-3; for the contact hypothesis see, e. g., Vezzosi 2005, Lange 2007; 185-186; more critical Poppe 2009). With the exception of Irslinger 2014. all current work on the topic has focused on the present-day distribution of this feature and neglected the diachronic developments that led to the pattern observed today - a scenario in which English influence on Brittonic and Goidelic could be equally possible.

In this paper, we aim to provide a deeper understanding of long-term areal developments in the north western European area by means of a holistic approach that combines vertical transmission and areal contact scenarios. To this end, we investigate the development of reflexive constructions in an area comprising 24 Germanic, 14 Celtic, 9 Italic/Romance languages, all belonging to the Indo-European phylum. Our sample languages cover a time depth of approximately 1500 years. We go beyond establishing the mere presence or absence of one single feature and provide a fine-grained analysis of reflexivity markers, based on a set of (partly interdependent) phonological, morphological, and syntactic variables including syntactic dependency, stress, phonological interaction, allomorphy, exponence etc.

With respect to some variables, we observe the emergence of areal grouping in concomitance with changes in vertical transmission (cf. fig. 1): West Germanic, Britannic Celtic, and Goidelic converge over time to form the British Isles area. Other variables such as e.g. number inflection, which is less construction specific, differ fundamentally. Here, it is the entire north western European area that behaves in a rather uniform manner and even attracts the only major sub branch of Celtic left with a different value, while all other languages remain almost unchanged, testifying to the remarkable stability of the presence of number inflection (cf. fig. 2).

We conclude that with respect to properties related to the expression of reflexivity area formation processes and phylogenetic signals don't evolve homogeneously: depending on the variable, they pattern in various ways and a single variable by itself is not as informative as one may think. With respect to Brittonic, we see Welsh and Cornish converge with English while Breton does not take part in the developments.


Table 1: Expandability - left: change in vertical signal in Insular Celtic (Britannic, Goidelic) and West Germanic/English); right: British Isles vs. SAE area formation


Table 2: Inflection for number - left: mostly stable vertical signals; right: stable north western European area

## References

Irslinger, Britta (2014). "Intensifiers and reflexives in SAE, Insular Celtic and English". In: Indogermanische Forschungen 119, 159-206.
König, Ekkehard and Martin Haspelmath (1999). "Der europäische Sprachbund". In: Eurolinguistik. Ein Schritt in die Zukunft. Ed. by Norbert Reiter. Wiesbaden: Harrassowitz, 111-127.
Lange, Claudia (2007). Reflexivity and Intensification in English. A study of Texts and Contexts. Frankfurt: Lang.
Poppe, Erich (2009). "The pragmatics of Middle Welsh word order. Some conceptual and descriptive problems". In: Pragmatische Kategorien. Form, Funktion und Diachronie. Akten der Arbeitstagung der Indogermanischen Gesellschaft vom 24. bis 26. September 2007 in Marburg. Ed. by Elisabeth Rieken and Paul Widmer. Wiesbaden: Reichert, 247-64.
Vezzosi, Letizia (2005). "The development of himself in Middle English. A 'Celtic' hypothesis". In: Rethinking Middle English: Linguistic and Literary Approaches. Ed. by Nikolaus Ritt and Herbert Schindl. Franfurt: Lang, 228-243.

