

## Spec-to-Head Reanalysis and Labelling in the history of Welsh

In this paper we propose that a number of changes in the history of Welsh can be explained as a sequence of one reanalysis after another, creating functional elements in the C-domain. We argue that the trigger for the Spec-to-Head reanalyses lies in Labelling requirements. We are further able to maintain that the verb moves to Fin in both Middle and Modern Welsh. Combined with the ban on right-adjunction and the idea that heads which are unable to label are morphophonologically weak, we can account for a series of changes in functional particles as well as the emergence of the ‘Abnormal Sentence’ with its V2-like order in Middle Welsh.

Roberts & Roussou (2003) discuss grammaticalisation from the perspective of minimalist syntax and argue that the creation of functional items or reanalysis of lexical items gaining grammatical meaning tends to go in an upwards direction in the tree. For the grammaticalisation examples they discuss (auxiliaries, determiners, etc), this is indeed the case, but there are various examples of grammaticalisation that can better be described as downward reanalysis. Spec-to-Head reanalysis (Van Gelderen 2009), for example, is a form of ‘downwards’ reanalysis because the specifier c-commands the head. Van Gelderen (2018, 2022) and Dadan (2019) have proposed that Spec-to-Head reanalysis is triggered by the Labelling Algorithm (cf. Chomsky 2013, 2015). From the perspective of labelling, {X, YP} is a stable structure while {X, Y} or {XP, YP}, particularly the latter, are unstable and require some form of repair or feature-agreement between the two merged elements. One way to avoid {XP, YP} is to prevent movement of phrasal elements to the specifier of higher (functional) phrases. Diachronically, this can be seen as the loss of movement, examples of which can be seen in the loss of V2, the change from OV > VO, etc (cf. Dadan 2019 for case studies and discussion). Alternatively, phrases in specifiers can be reanalysed as heads, which would equally satisfy the Labelling Algorithm. We will demonstrate that this tendency to optimise Labelling requirements has played a significant role in the history of Welsh.

First, we build on Meelen’s (2020) analysis of the emergence the relative particles *a* and *y* in Middle Welsh as the result of Spec-to-Head reanalysis of originally pronominal phrases. The same particles, however, can be found in ‘Abnormal Sentences’, which convey neutral (non-focused) propositions in Middle Welsh. These ‘Abnormal Sentences’ are further characterised by agreement with both pronominal and nominal subjects, which is not found in the focused ‘Mixed Order’, compare (1) and (2):

- (1) *Mi a ’e heirch.* [Focused ‘Mixed Order’]  
I PRT her search.3S  
‘(it is) I who ask for her’ (Middle Welsh WM 479.24)
- (2) *Gwydyon a gerwys yn y blaen.* [Neutral ‘Abnormal Order’]  
Gwydyon PRT travelled.3SG in the front  
‘Gwydyon travelled in the forefront’ (not: ‘It was Gwydyon who...’). (Middle Welsh, PKM 90.27)

Meelen (2020) proposes these particles end up as C heads in Late Proto-British. Following the proposals for the left periphery in Rizzi (1997), we argue that this Spec-to-Head reanalysis takes place in the Focus phrase in the left periphery, with the resulting particles *a/y* ending up as heads of FocP. In the course of the Old Welsh period, the preferred order for neutral declarative clauses changes from verb-initial to the ‘Abnormal Order’ (a V2-like order, shown in (2), cf. Willis 1998, Meelen 2016). We propose that this change in word order is triggered by the earlier reanalysis of *a/y* as Foc heads combined with the idea that certain morphophonologically weak heads (i.e. clitics or affixes) are unable to provide a label (cf. Oda 2021:137, following Chomsky 2015). After reanalysis *a* and *y* are weak heads in this sense since they are proclitic on the verb and as such they are unable to provide a label for FocP. Therefore an XP bearing a Foc feature has to be merged in what will then be labelled SpecFocP. A further reanalysis of the proclitic particles *a/y* as FamTop heads takes place when there is no XP available bearing a focus feature. This reanalysis results in a distinction between focused and non-focused (neutral) interpretations (i.e. the distinction between the so-called ‘Mixed’ and ‘Abnormal’ shown in (1) and (2) above). In Middle Welsh, therefore, the focused *a/y* are in Foc, while in

the ‘Abnormal Sentence’ they are in the head of FamiliarTopicPhrase situated between FocP and FinP (cf. Hinterhölzl & Petrova 2010). This situation arises from the labelling requirements.

After the Middle Welsh period in the 16<sup>th</sup> century, the subject pronouns *mi* ‘I’ and *fe* ‘he’ were reanalysed as left-peripheral heads. Willis (2007:452) proposes the following Spec-to-Head reanalysis:

(3) [CP [Spec [DP *ef(e)*]] [C *a* + verb] [TP ... ==> [CP [C *fe* + verb] [TP ...

While we agree that there is Spec-to-Head reanalysis of the pronouns, we propose instead that the reanalysis takes place at the FamTop level with the newly-reanalysed particles *fe/mi* in the head of FamTopP effectively replacing the particles *a/y*. This allows us to maintain that the verb moves to Fin without having to postulate right-adjunction of the verb, consistent with Kayne (1994).

In addition to *fe/mi*, Modern Welsh features several sentence-initial particles, including a particle *y/yr/r-*, which immediately precedes forms of *bod* ‘to be’, as in (4).

(4) Y mae Gwyn yn yr ardd.  
AFF be.PRES.3S Gwyn in the garden  
‘Gwyn is in the garden.’ (Modern Welsh - Borsley et al 2007)

Roberts (2005:165) suggests that *y/yr/r-* are in fact prefixes and the resulting combination of *y/yr/r-* form of *bod* is in the Fin head (cf. Breton *emañ* which is the exact cognate of *y mae*). Since our analysis allows us to maintain that the verb continues to move to Fin in Modern Welsh (pace Roberts 2005, 2019) we can now account for examples like (5) that combine the particle *mi* with the particle *r-* before *oedd* ‘was’. As (6) shows, with this analysis we are furthermore able to maintain that the subject raises to SpecTP in Modern Welsh.

(5) Mi (r)oedd Gwyn yn yr ardd.  
PRT (AFF)be.IMPF.3S Gwyn in the garden  
‘Gwyn was in the garden.’ (Modern Welsh - Borsley et al 2007)

(6) [FamTopP [FamTop *mi*] [FinP [Fin (*r*)*oedd*] [TP [DP *Gwyn*] <sub>t<sub>verb</sub></sub> [<sub>v</sub>P <sub>t<sub>subject</sub></sub> <sub>t<sub>verb</sub></sub> [VP [V <sub>t<sub>verb</sub></sub>] [PP *yn yr ardd*]]]]]]]]]]

In conclusion, we propose that a number of well-known changes in the history of Welsh can be explained by the combination of the extended Left Periphery, the Labelling Algorithm, the ban on right-adjunction and, most importantly, Oda’s proposal that heads that are weak for labelling are also morphophonologically weak.

Borsley, R. D., Tallerman, M., & Willis, D. (2007). *The syntax of Welsh*. Cambridge: CUP.

Chomsky, N. (2013). Problems of projection. *Lingua*, 130, 33-49.

Chomsky, N. (2015). Problems of projection: Extensions. in *Structures, strategies and beyond: Studies in honour of Adriana Belletti*, 223, 1-16.

Dadan, M. (2019) *Head Labeling Preference and Language Change*. University of Connecticut PhD Dissertation.

Van Gelderen, E. (2009). *Cyclical change* (Vol. 146). John Benjamins Publishing.

Van Gelderen, E. (2018). Problems of projection: The role of language change in labeling paradoxes. *Studia Linguistica*, 72(1), 113-127.

Van Gelderen, E. (2022). *Third Factors in Language Variation and Change*. Cambridge University Press.

Hinterhölzl, R., & Petrova, S. (2010). From V1 to V2 in West Germanic. *Lingua*, 120(2), 315-328.

Oda, H. (2021) *A More Fine-grained Distinction of NP/DP-languages and Parameters in Minimalism*. University of Connecticut PhD Dissertation.

Meelen, M. (2016). *Why Jesus and Job spoke bad Welsh: The origin and distribution of V2 orders in Middle Welsh*. Utrecht: LOT.

Meelen, M. (2020). Reconstructing the rise of V2 in Welsh. in *Rethinking Verb Second*, Woods-Wolfe (eds), 2020, 426-454.

Rizzi, L. (1997). The fine structure of the left periphery. In *Elements of grammar* (pp. 281-337). Springer, Dordrecht.

Roberts, I. (2005). *Principles and parameters in a VSO language: A case study in Welsh*. Oxford: OUP.

Roberts, I. (2019). *Parameter hierarchies and universal grammar*. Oxford University Press.

Roberts, I., & Roussou, A. (2003). *Syntactic change: A minimalist approach to grammaticalization* (Vol. 100). Cambridge: CUP.

Willis, D. W. (1998). *Syntactic Change in Welsh: A Study of the Loss of the Verb-second*. Oxford: OUP.

Willis, D. (2007). Specifier-to-head reanalyses in the complementizer domain: evidence from Welsh. *Transactions of the Philological Society*, 105(3), 432-480.