ON THE STRUCTURE OF WELSH NOUN PHRASES

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1. Introduction

The structure of Welsh clauses has been a major focus of research since the 1970s. The structure of Welsh noun phrases has had much less attention. Various analytic issues are discussed in Sadler & Butt (1997), Willis (2006), and Borsley, Tallerman & Willis (2007: chapter 5), and analyses of some of the main features are outlined in Rouveret (1994: chapter 3) within Minimalism, and Sadler (2003) within Lexical Functional Grammar, but major analytic questions remain unresolved. In particular, there are questions about possessors, attributive adjectives, and certain NP-initial elements, including the definite article and agreement clitics.

2. Basic data

Welsh is a head-initial language, and unsurprisingly a noun is followed by any complements it takes and also by a possessor. Where both a possessor and a complement are present, they come in that order:

- (1) llyfr am Gymru book about Wales 'a book about Wales'
- (2) llyfr Rhiannon book Rhiannon 'Rhiannon's book'
- (3) Ilyfr Rhiannon am Gymru book Rhiannon about Wales 'Rhiannon's book about Wales'

This is reminiscent of the verb–subject–object order in Welsh finite clauses:

(4) Ysgrifennodd Rhiannon am Gymru. write.PAST.3.SG Rhiannon about Wales 'Rhiannon wrote about Wales.'

Attributive adjectives also follow the noun and precede both possessors and complements:

- (5) llyfr newydd am Gymru book new about Wales 'a new book about Wales'
- (6) llyfr newydd Rhiannon book new Rhiannon 'Rhiannon's new book'
- (7) llyfr newydd Rhiannon am Gymru book new Rhiannon about Wales 'Rhiannon's new book about Wales'

Also important are certain NP-initial elements. These include the definite article and certain agreement clitics:

(8) y llyfr the book 'the book'

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(9) ei llyfr o 3.SG.M book he 'his book'
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A clitic appears when the noun is followed by a pronominal possessor (which may be null in the literary language). There is no indefinite article, as (1) and (5) illustrate.

3. Possessors

Rouveret (1994) and Sadler (2003) analyse possessors as specifiers, but both analyses are problematic. An analysis in which they are extra complements, as proposed in Borsley (1989, 1995), seems more satisfactory. This accounts (a) for the fact that possessors always follow the associated noun, and (b) for the fact that they trigger agreement. Non-finite verbs show agreement in the form of a preceding clitic with a following pronominal object. Thus, the bracketed non-finite verbal constituent in (10) looks rather like the noun phrase in (9):

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(10) Ceisiodd Rhiannon [ei weld o]. try.PAST.3.SG Rhiannon 3.SG.M see he 'Rhiannon tried to see him.'
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Many prepositions show agreement in the form of a suffix with a following pronominal object:

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(11) arno fo on.3.SG.M he 'on him'
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Finally, finite verbs show agreement in the form of a suffix with a following pronominal subject:

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(12) Ysgrifennon nhw am Gymru. write.PAST.3.PL they about Wales 'They wrote about Wales.'
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In all four cases, agreement also occurs with a pronoun which is the first conjunct of a coordinate structure in the relevant position. The following illustrates for nouns:

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(13) ei llyfr [o a hi] 3.SG.M book he and she 'his and her book'
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The agreement in (10) and (11) is clearly with the first member of a COMPS list, and this is also the case for the agreement in (12) given the analysis of finite clauses in Borsley (1989, 1995). If possessors are analysed as optional initial members of a COMPS list, so is the agreement in (9). I assume, then, that a basic noun is [COMPS L], where L is a possibly empty list of ordinary complements, and that a possessed noun is [COMPS <NP $> <math>\oplus$ L]. The latter could be derived from the former by a lexical rule or they could be alternative realizations of a basic noun type.

4. Attributive adjectives

One might suppose that the positioning of attributive adjectives could be accounted for by assuming that they modify a noun with a non-empty COMPS list, but this won't work because many nouns have an empty COMPS list. Instead, I will assume a distinction between [LEX +] expressions, which head head—complement phrases, and [LEX –] expressions, which are typical phrases, and propose that attributive adjectives modify a [LEX +] nominal, creating a larger [LEX +] nominal (which can be modified by another attributive adjective). This will give the following schematic structure for (7):

(14) [[llyfr newydd] Rhiannon am Gymru]

Unsurprisingly perhaps, relative clauses follow both possessors and ordinary complements:

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(15) llyfr Rhiannon am Gymru [a bryniais i] book Rhiannon about Wales PRT buy.PAST.1SG I 'Rhiannon's book about Wales that I bought'
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They can be analysed as modifying a [LEX –] nominal.

5. NP-initial elements

As noted earlier, clitics appear when the noun is followed by a pronominal possessor (or a coordinate possessor whose first conjunct is a pronoun). In contrast, the definite article only appears when there is no following possessor. Hence, the following contrast:

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(16) y llyfr am Gymru the book about Wales 'the book about Wales'
(17) *y llyfr Rhiannon the book Rhiannon
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Thus, there are two dependencies between NP-initial elements and post-nominal elements that need to be accounted for.

Drawing on data in Borsley (1989), Pollard & Sag (1994: section 9.3) propose that clitics are nominal prefixes, and one might propose the same for the definite article. This would account for the fact that both must be repeated in coordination:

```
*ei
                                 thad
(18) a.
                   fam
                            and father
          3.SG.M mother
    b.
                  fam
                                 'n
                                          dad
                            and 3.SG.M
         3.SG.M
                  mother
                                          father
(19) a.
             bachgen a
                            geneth
         *y
          the boy
                       and girl
    b.
              bachgen a
                            'n
                                eneth
             boy
                       and the girl
         the
```

It would also make (9) and (10) very similar to (11) and (12). However, this can't be right, among other things because numerals and other elements may intervene between clitic and noun:

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(20) y tair gwahanol iaith the three.F various language 'the three different languages'
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One might propose instead that the article and the clitics are edge inflections realizing certain properties of nominal phrases (and also non-finite verbal phrases in the case of clitics). However, it is not obvious how this would work. One might propose that the article appears at the left edge of a nominal phrase which is [DEF+]. But it is clear from the distribution of nominal phrases containing a definite possessor that they are definite. Such phrases cannot appear after *oes*, which is a present tense form of the copula appearing in interrogative and conditional clauses with an indefinite subject:

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(21) a. Oes llyfr ar y bwrdd. be.PRES.3.SG book on the table 'Is there a book on the table?'
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b. *Oes llyfr Rhiannon ar y bwrdd. be.PRES.3.SG book Rhiannon on the table

Thus, the definite article doesn't appear with all [DEF +] elements. There are also two other NP-initial elements, pob 'every, all' and pa 'which', which like the definite article cannot co-occur with a following possessor:

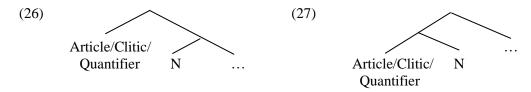
(22) *pob llyfr Dafydd every book Dafydd
(23) *pa lyfrau Dafydd which book Dafydd

These seem to be words, and they do not need to be repeated in each conjunct:

(24) pob mam ac thad (25) pa fachgen a geneth every mother and father which boy and girl 'every mother and father' 'which boy and girl'

Hence, it seems reasonable to assume that the definite article and the clitics are also words.

Assuming all these elements are words, an important question is: are NP-initial elements high in the structure, as in (26), or low in the structure (as part of a complex head), as in (27)?



Sadler & Butt (1997) propose an analysis of clitics within LFG, in which they are low in the structure, but Sadler (2003) assumes that the article is high in the structure. A second question is: are NP-initial elements selected by the expression with which they combine as specifiers or do they select the expression with which they combine as markers? Standardly both specifiers and markers are high in the structure combining with a constituent containing a head and its complements, but this does not seem to be a necessary property of the two types of element. In effect, then, there are four possible analyses.

A number of considerations argue against an analysis in which NP-initial elements are low in the structure. Firstly, the variety of elements that can appear between an NP-initial element and the noun casts some doubt on the idea that there is a complex head here. Secondly, examples like the following are relevant:

(28) pob llyfr am Gymru every book about Wales 'every book about Wales'

This refers to every member of the set of books about Wales. Thus, both *llyfr* and *am Gymru* are within the scope of *pob*. This is unsurprising given a structure like (26), but a complication for the structure in (27). Finally, both the article and the clitics may be realized as enclitics when following certain vowel-final words, especially prepositions:

(29) i 'r dre to the town 'to the town'
(30) i 'w dŷ to 3.SG.M house 'to his house'

It is not clear whether these involve special syntactic structures or special phonological processes. However, it seems likely that it will be easier to offer a satisfactory account if the article and the clitics are high in the structure.

If a low analysis is rejected, the various NP-initial elements should be analysed as either markers or specifiers high in the structure. A high marker analysis seems problematic both for the definite article and for clitics. It is not obvious how to exclude the definite article from NPs that contain a possessor. It is also not clear how to ensure that an appropriate clitic appears when there is a pronominal possessor. In formal Welsh, the clitics, like other realizations of agreement, are obligatory. It looks, then, as if a high specifier analysis should be preferred.

6. Some constraints

It is not too difficult to provide a high specifier analysis of the various NP-initial elements. Following Borsley (2009), I assume that nouns, non-finite verbs, prepositions, and finite verbs have a feature AGR, whose value is an index or *none*, which I assume is the default value. I will also assume that pronouns and coordinate structures whose first conjunct is a pronoun have an AGR-TRIGGER feature, whose value is the index of the pronoun, while other nominals are [AGR-TRIGGER *none*]. Given this feature, AGR will have an index as its value in just the right situations if we assume the following constraint:

(31) [AGR [1], COMPS
$$\langle$$
 [AGR-TRIGGER [2]], ... \rangle] \Rightarrow [1] = [2]

To ensure that a noun with a pronominal possessor or a coordinate possessor with a pronominal first conjunct is preceded by an agreeing clitic, we can propose the following constraint:

(32) [HEAD noun, AGR [1]index]
$$\Rightarrow$$
 [SPR <[AGR [1]>]

Finally, to ensure that a noun with a non-pronominal possessor is not preceded by an article, clitic or quantifier, we can propose the following:

(33) [HEAD noun, AGR none, COMPS
$$\langle NP \rangle \oplus L$$
] \Rightarrow [SPR $\langle \rangle$]

This will rule out (17), (22) and (23). It is also necessary to rule out examples like (18a) and (19a). This could be done by stipulating that a coordinate nominal can only take a quantifier as a specifier.

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