

ON A FAMILY OF WELSH CONSTRUCTIONS

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1. Introduction

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A satisfactory theory of syntax needs to be able to capture these shared properties, but theories also need to be able to capture the properties which distinguish specific UDCs and the properties shared by just some of them.

Sag (2010) shows how an appropriate hierarchy of phrase types allows this to be done within HPSG.

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But it is not difficult to capture the similarities and the differences within HPSG given a slightly expanded hierarchy of phrase types.

The organization of the talk

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2. Basic data

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3. Towards an analysis

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4. Basic HPSG analyses

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5. Types and constraints

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6. Conclusion

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(1) a. Pwy weloch chi?
 who see.PAST.2PL you.PL
 ‘Who did you see?’

b. Pa ddynion cytunodd Gwyn â **nhw**?
 Which men agree.PAST.3SG Gwyn with them
 ‘Which men did Gwyn agree with?’

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The examples show that Welsh is a VSO language with verb-subject order in all finite clauses.

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- (2) Gofynodd Gwyn [beth naeth Megan]
ask.PAST.3SG Gwyn what do.PAST.3SG Megan
'Gwyn asked what Megan did.'
- (3) Gofynodd Gwyn [lle aeth Megan]
ask.PAST.3SG Gwyn where go.PAST.3SG Megan
'Gwyn asked where Megan went.'

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- (4) Gofynnodd Gwyn [pa lyfr i 'w ddarllen]
ask.PAST.3SG Gwyn which book to 3SGM read
'Gwyn asked which book to read.'

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- (5) a. Naeth Gwyn [beth (bynnag) naeth Megan].
do.PAST.3SG Gwyn what ever do.PAST.3SG Megan
‘Gwyn did what(ever) Megan did.’
- b. Mae o ’n gwneud ffrindiau da efo [pwy
be.PRES.3SG he PROG make friends good with who
(bynnag) mae o ’n gweithio efo **nhw**].
ever be.PRES.3SG he PROG work with them
‘He makes good friends with who(ever) he works with.’

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(6) Aeth Gwyn [lle (bynnag) aeth Megan].
go. PAST.3SG Gwyn where ever go.PAST.3SG Megan
'Gwyn went where(ever) Megan went.'

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- (7) *Naeth Gwyn [lle (bynnag) aeth Megan].
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It also has the main properties of the gap like a filler. It is nominal if the gap is nominal and adverbial if the gap is adverbial. Thus, it looks like both a head and a filler.

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(9) *Naeth Gwyn [beth (bynnag) i 'w neud].
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the men see.PAST.3SG dragon
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But there is evidence that the initial constituent is not a filler.

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(11) Fi welodd / *welais ddraig.
I see.PAST.3SG see.PAST.1SG dragon

‘It was I that saw a dragon.’

(12) Gwelais i ddraig.
see.PAST.3SG I dragon

‘I saw a dragon.’

The gap also behaves like a nonpronominal NP, triggering default third person singular agreement in the way that a nonpronominal does, and not the full agreement that appears with a pronoun:

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- (13) Nhw welodd / *welon ddraig.
they see.PAST.3SG see.PAST.3PL dragon
'It was they that saw a dragon.'
- (14) Gwelodd y dynion ddraig.
see.PAST.3SG the men dragon
'The men saw a dragon.'
- (15) Gwelon nhw ddraig.
see.PAST.3PL they dragon
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- (16)a. Dywedodd Gwyn [mai llyfr (a) ddarllenodd Megan]
say.PAST.3SG Gwyn that book PRT read.PAST.3SG Megan
'Gwyn said that it was a book that Megan read.'
- b. *Dywedodd Gwyn [mai llyfr i 'w ddarllen]
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***Wh*-interrogatives**

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As in many languages, *wh*-interrogatives are fairly ordinary head-filler-phrases.

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Other work has analysed the initial constituent as a filler in a construction which somehow shares properties with the filler, possibly by combining with a phonologically empty head (Groos and van Riemsdijk 1981, Grosu 2003).

However, researchers such as Payne, Huddleston, and Pullum (2007: 1.1) have proposed that the initial constituent is both a head and a filler. See also Huddleston and Pullum (2002: 1073) and Citko (2008).

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(17) Whoever's dogs are running around in the garden is in big trouble.

But there are no such examples in Welsh.

At least in Welsh, an analysis in which the initial constituent is both a head and a filler seems the obvious approach.

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Such examples are no problem if we assume that they involve an identity predication since there is no requirement of person identity in identity predications:

(19)a. I am the teacher.
b. You are the teacher.

Welsh clefts can be analyzed as rather like their English counterparts, that is as involving an identity predication but one that is associated with the construction and not with any lexical item (Borsley 2015).

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There is no requirement of person identity in Welsh identity predications:

(20) Yr athro ydw i.
the teacher be.PRES.1SG I
'I am the teacher.'

(21) Yr athro wyt ti
the teacher be.PRES.2SG you.SG
'You are the teacher.'

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(22) Nid/dim nhw welodd ddraig.
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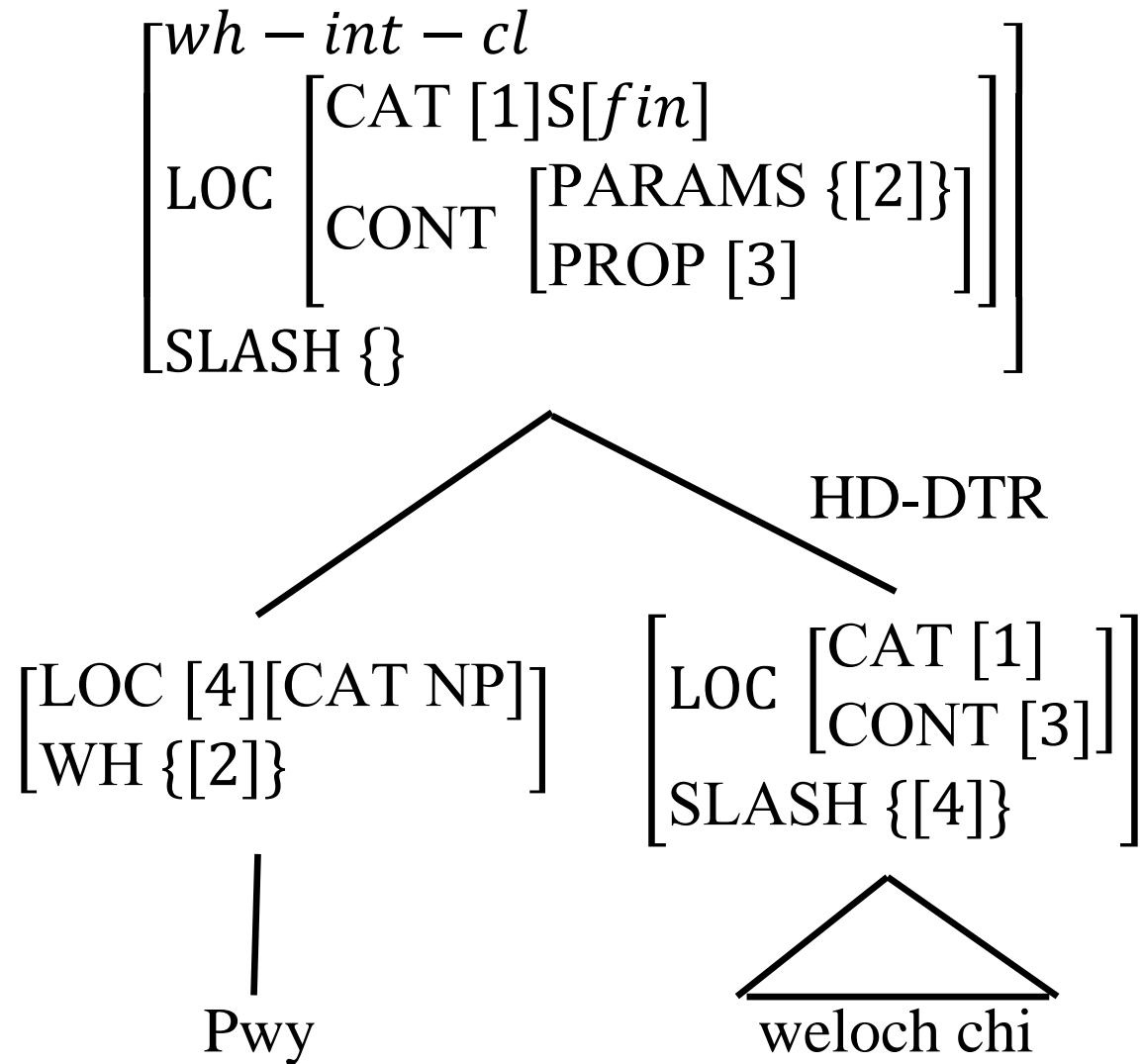
- *Wh*-interrogatives are head-filler-phrases in which a phrase which is a filler is followed by a clause containing a gap or a resumption pronoun, and the clause is a head.
- Free relatives are phrases in which a filler is followed by clause containing a gap or a resumption pronoun, but the filler and not the clause is a head.
- Clefts are clauses in which the initial constituent is followed by a clause containing a gap or a resumption pronoun, and the clause is a head, but the initial constituent is not a filler but one term of a hidden identity predication.

4. Basic HPSG analyses

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***Wh*-interrogatives** can be analyzed essentially as in Ginzburg and Sag (2000: chapter 4). This means an analysis of the following form for (1):

(24)



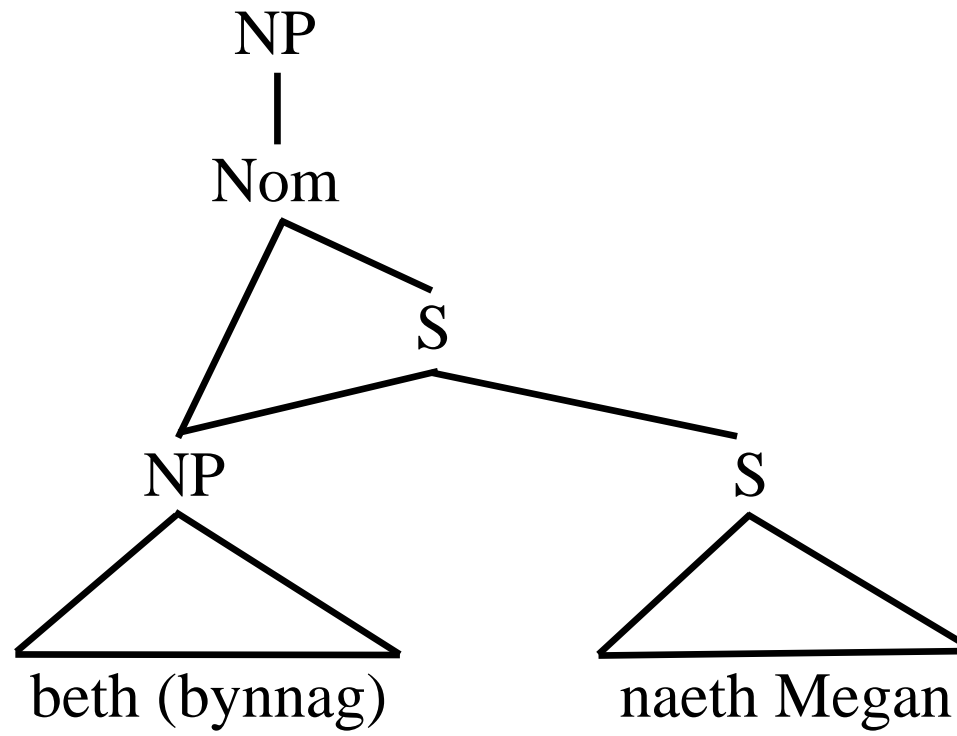
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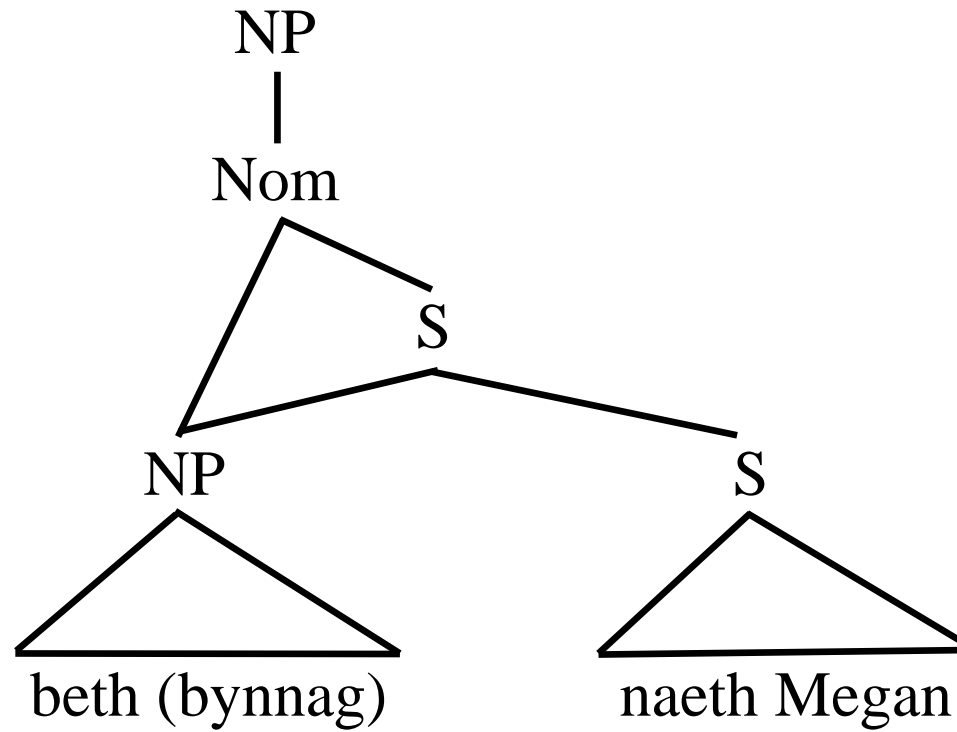
The semantic analysis is that of Ginzburg and Sag.

For **free relatives**, Payne, Huddleston, and Pullum (2007: 1.1) capture the dual nature of the initial constituent by proposing an analysis in which it has two mothers:

(25)

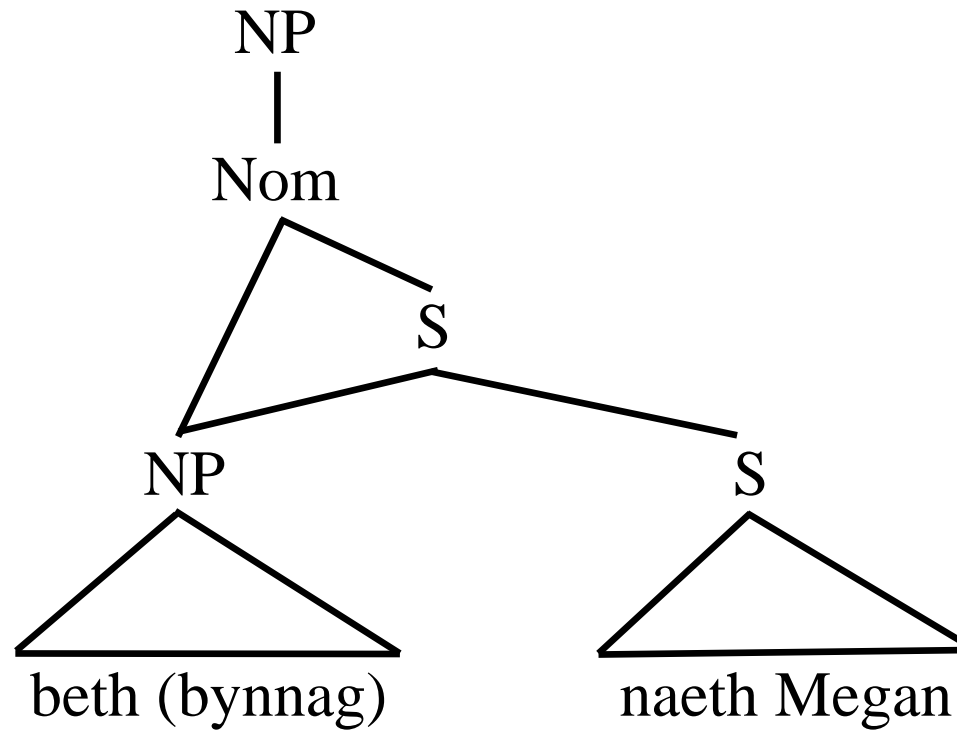


(25)



There is no need to assume such an analysis within HPSG.

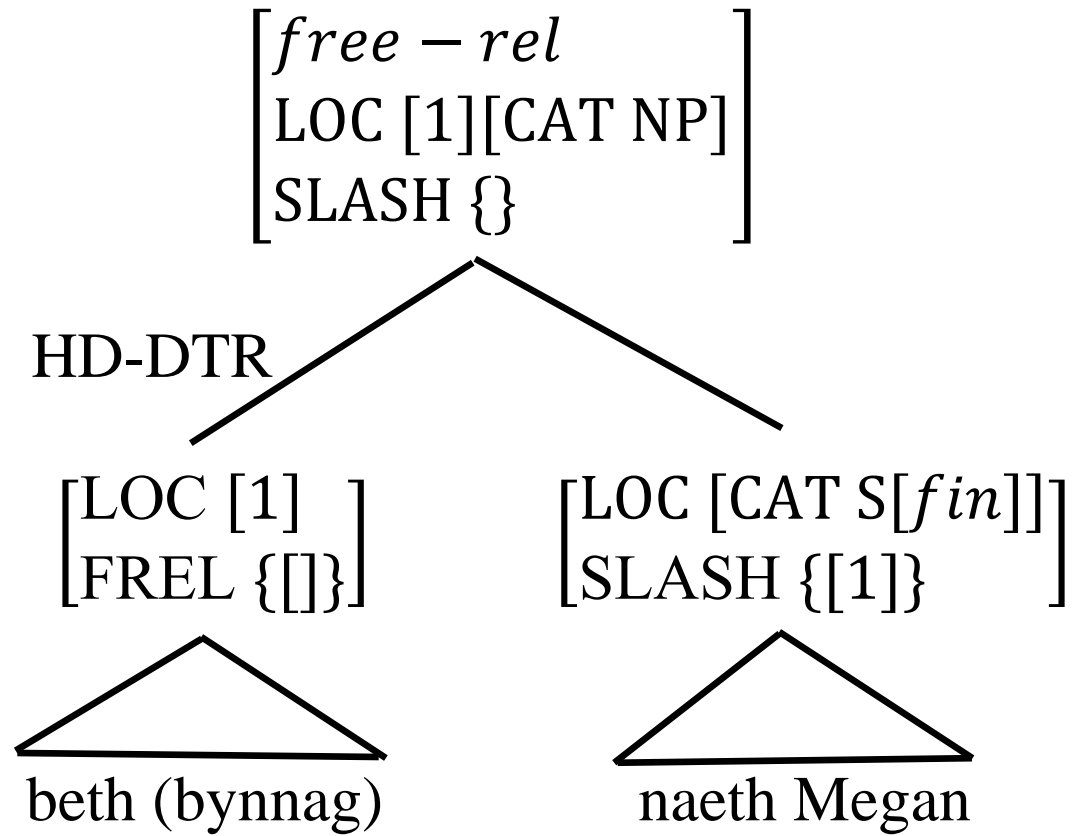
(25)



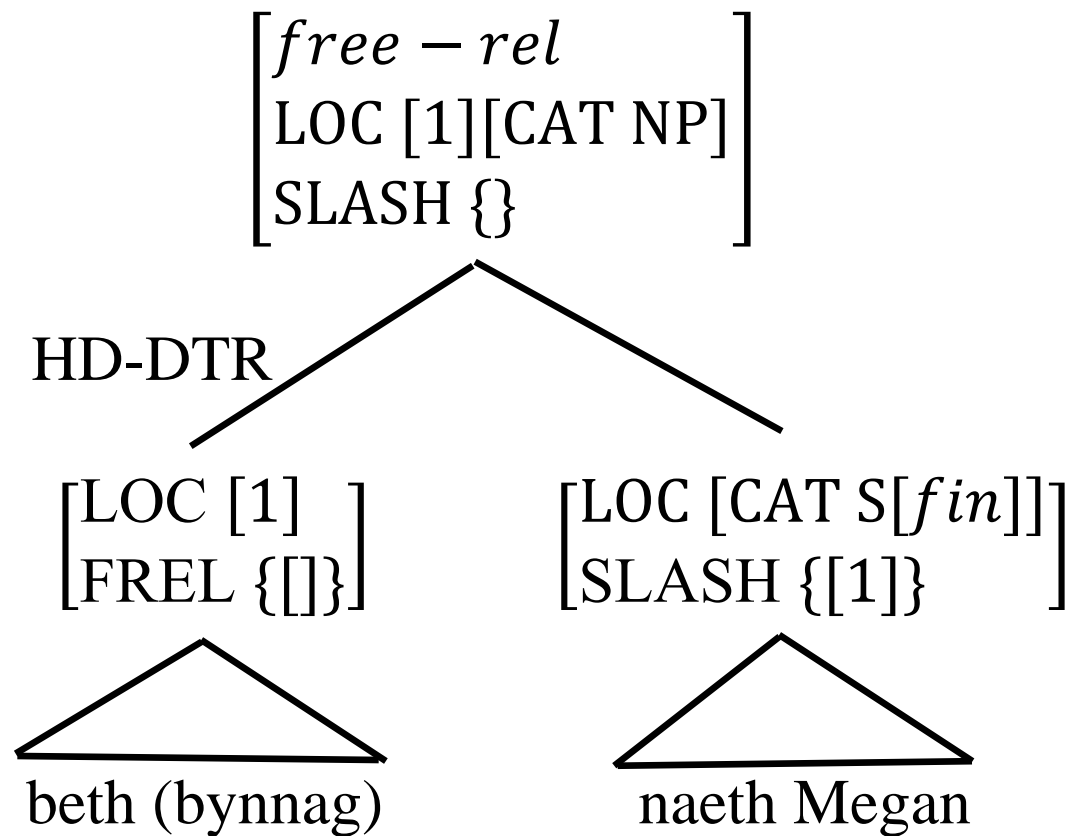
There is no need to assume such an analysis within HPSG.

Within HPSG the initial constituent can be a head and filler without having two mothers. (2) can have the following structure:

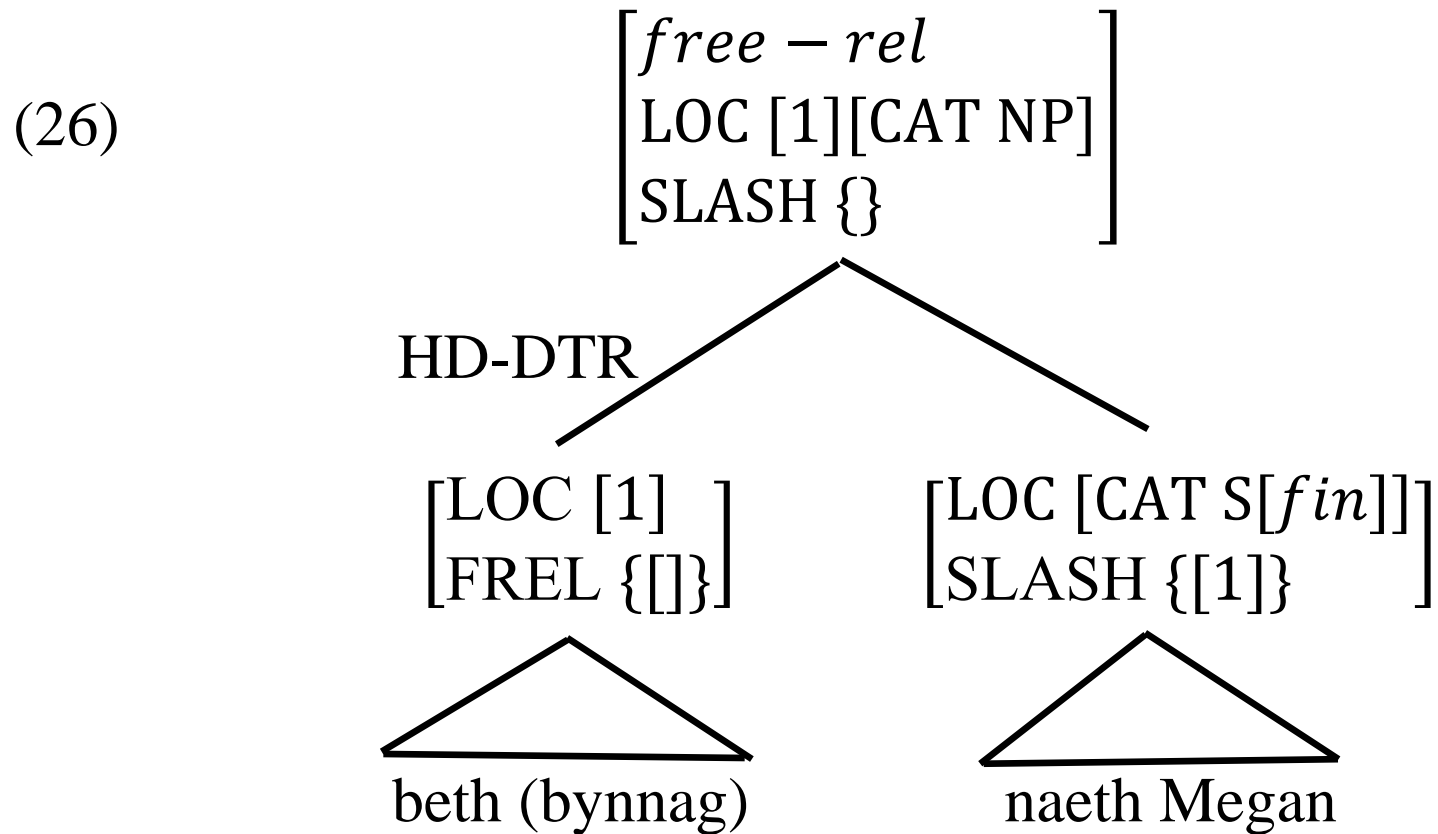
(26)



(26)



The first daughter is both a filler and a head.

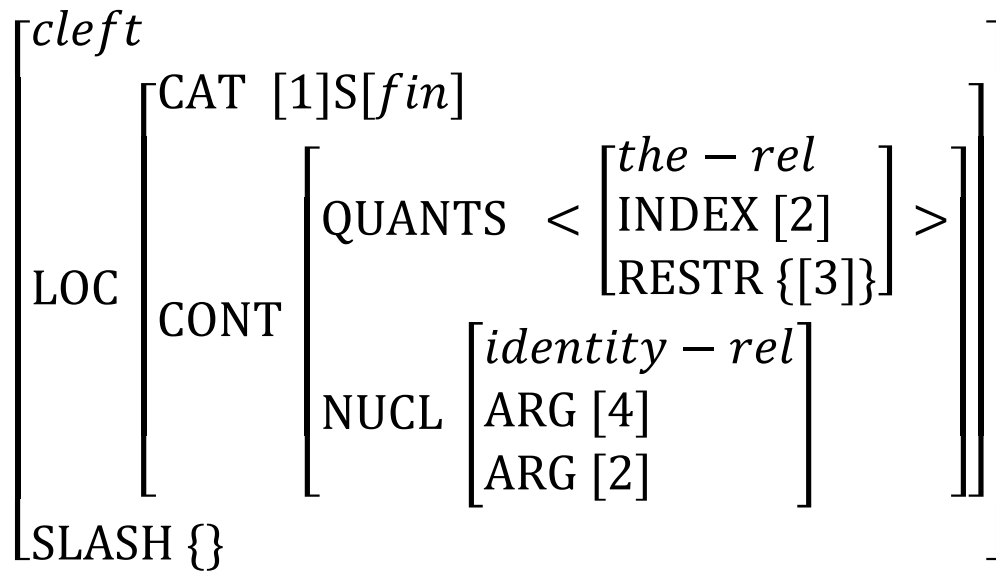


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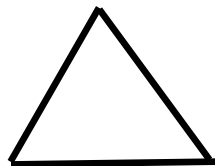
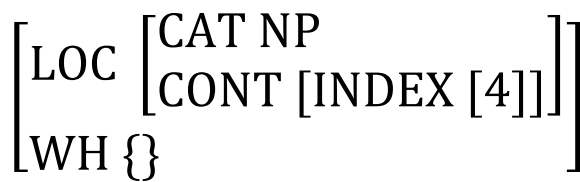
I ignore CONTENT values. Any semantic analysis of free relatives could be included here.

We can propose the following structure for the **cleft sentence** in (10a):

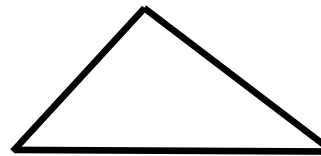
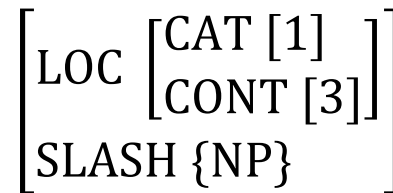
(27)



HD-DTR



y dynion



welodd ddraig

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The CONTENT value of the mother makes it clear that the second daughter is interpreted as a definite description and identified with the first daughter.

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- *Wh*-interrogatives and free relatives are similar in having a first daughter which is a filler.

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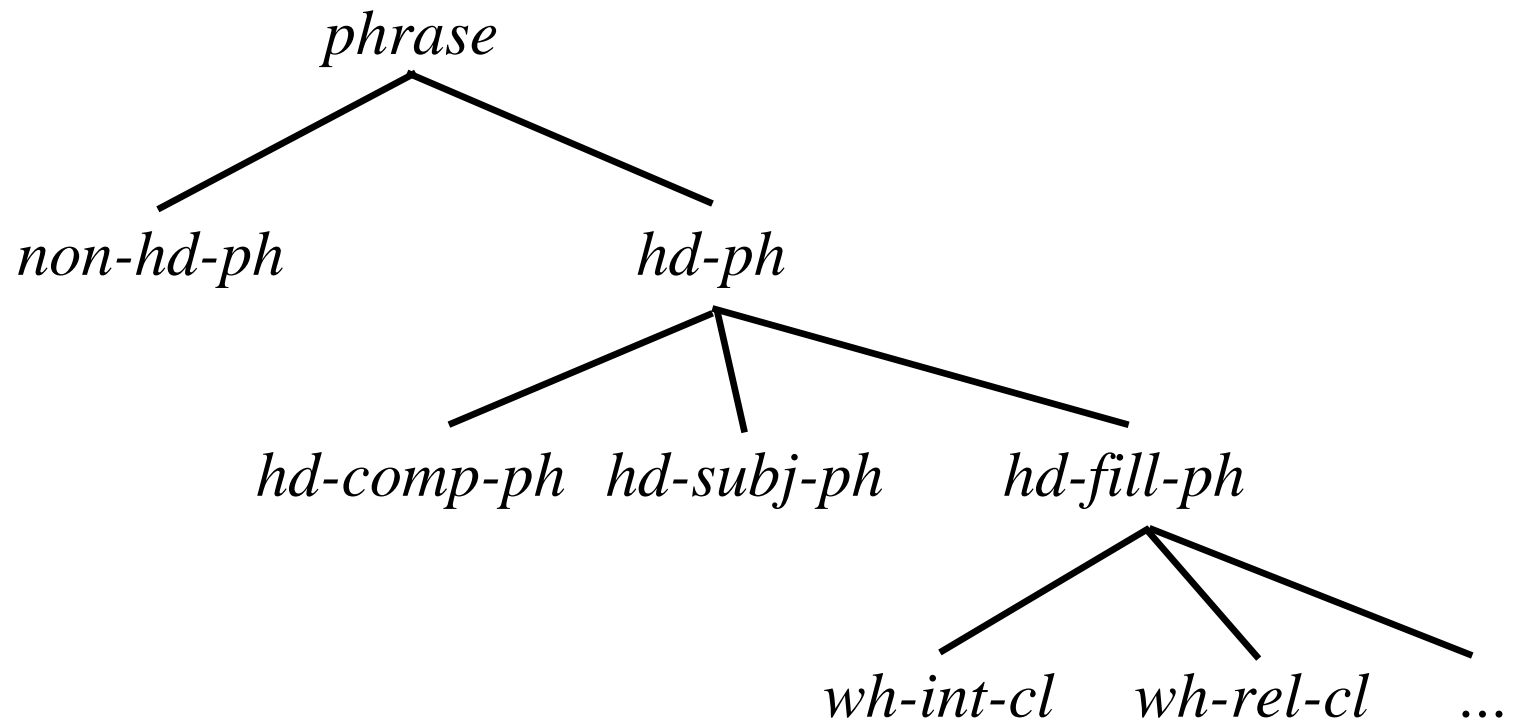
- All three constructions have a gap or resumptive pronoun within the second daughter, whether the second daughter is a head or not.
- *Wh*-interrogatives and free relatives are similar in having a first daughter which is a filler.
- *Wh*-interrogatives and clefts are similar in having a second daughter which is a head.

A satisfactory analysis needs to capture these similarities.

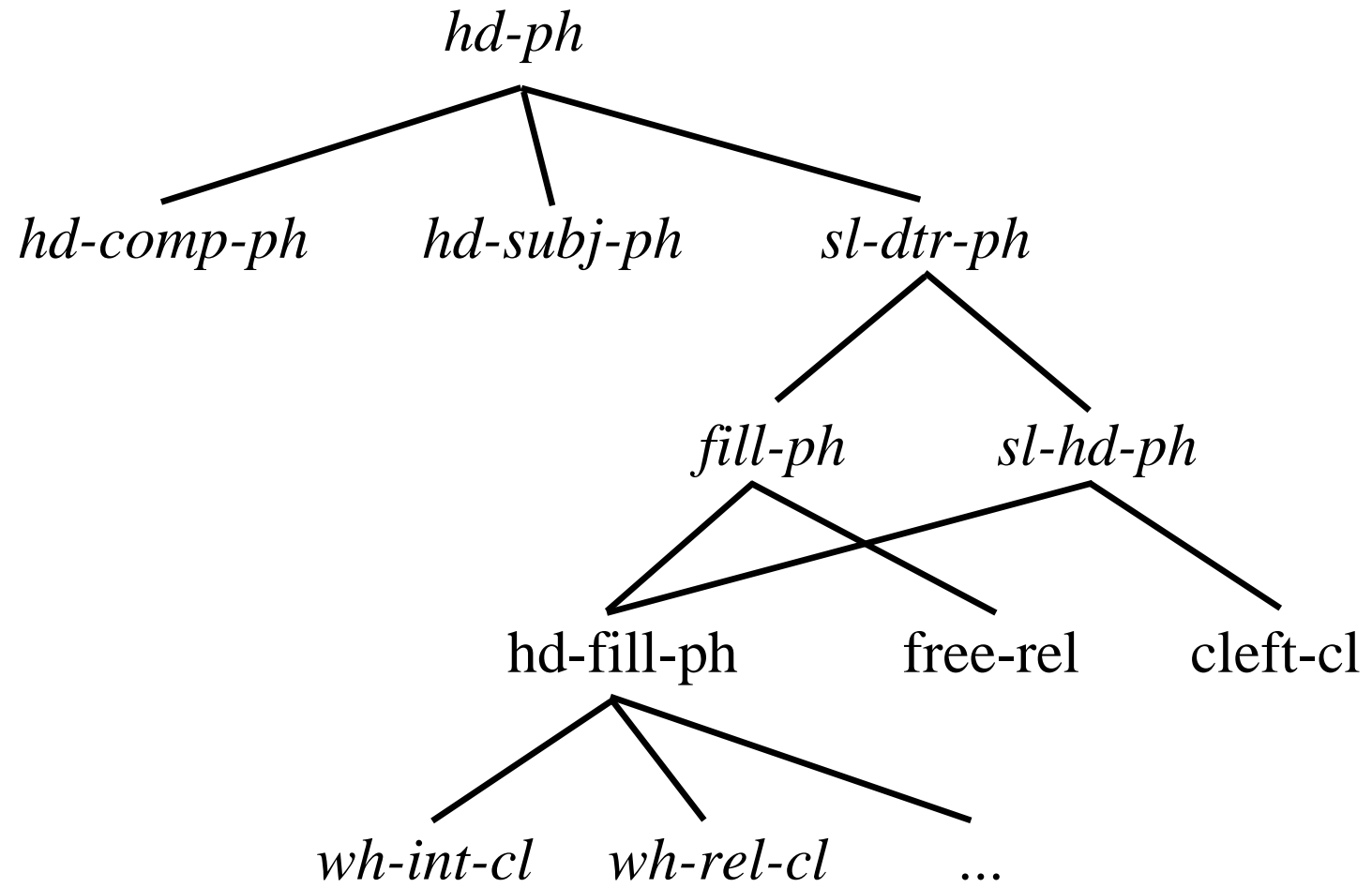
A satisfactory analysis needs to capture these similarities.

The facts can be captured if we postulate a type *slashed-daughter-phrase* with subtypes *filler-phrase* and *slashed-head-phrase* and replace the standard system in (28) with the more complex system in (29).

(28)



(29)



Constraint on *sl-dtr-ph*:

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(30) *sl-dtr-ph* \Rightarrow

$$\left[\begin{array}{l} \text{SS} [\text{SLASH} [1]] \\ \text{DTRS} < [\textit{phrase}], \left[\begin{array}{l} \textit{clause} \\ \text{SS|SLASH} \{[\textit{local}]\} \cup [1] \end{array} \right] > \end{array} \right]$$

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This ensures that the first daughter is a phrase and the second a slashed clause, but does not identify either as the head and does not require the first daughter to be a filler.

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It captures what the three constructions have in common.

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(31) *fill-ph* \Rightarrow [DTRS < [SS[LOC [1]]], [SS[SLASH {[1]} \cup *set*]] >]

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$$(32) \textit{sl-hd-ph} \Rightarrow \left[\begin{array}{l} \text{HD-DTR} [1] \\ \text{DTRS} < [], [1] [] > \end{array} \right]$$

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$$(32) \textit{sl-hd-ph} \Rightarrow \left[\begin{array}{l} \text{HD-DTR} [1] \\ \text{DTRS} < [], [1] [] > \end{array} \right]$$

This identifies the second daughter, the slashed clause, as a head. It captures what wh-interrogatives and clefts have in common.

Head-filler-phrases are subject to all these constraints, free relatives are subject to the constraints in (30) and (31), and clefts are subject to the constraints in (30) and (32). There seems to be no need for any special constraint on head-filler-phrases.

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Each of the three constructions that we are concerned with here requires a constraint to account for its idiosyncratic properties.

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Constraint on *wh*-interrogatives (essentially combining two of Ginzburg and Sag's constraints):

$$(33) \textit{wh-int-cl} \Rightarrow \left[\begin{array}{l} \text{SS|LOC|CONT} \left[\begin{array}{l} \text{PARAMS } \{[1]\} \cup \textit{set} \\ \text{PROP } [2] \end{array} \right] \\ \text{DTRS } \langle [\text{WH } \{[1]\}], [\text{CONT } [2]] \rangle \end{array} \right]$$

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This ensures that the the first daughter is an interrogative *wh*-phrase and that the clause has the appropriate interrogative semantics.

Constraint on free relatives:

Constraint on free relatives:

(34) *free-rel* \Rightarrow

$$\left[\begin{array}{l} \text{DTRS} < [1][\text{SS}|\text{FREL} \{\ [] \}], [\text{SS}|\text{LOC}|\text{CAT}|\text{HEAD}|\text{VFORM} \textit{fin}] > \\ \text{HD} - \text{DTR} [1] \end{array} \right]$$

Constraint on free relatives:

(34) *free-rel* \Rightarrow

$$\left[\begin{array}{l} \text{DTRS} < [1][\text{SS}|\text{FREL} \{\} \}, [\text{SS}|\text{LOC}|\text{CAT}|\text{HEAD}|\text{VFORM} \textit{fin}] > \\ \text{HD} - \text{DTR} [1] \end{array} \right]$$

This ensures that the first daughter is a free relative *wh*-phrase and a head, and that the second daughter is a finite.

Constraint on free relatives:

(34) *free-rel* \Rightarrow

$$\left[\begin{array}{l} \text{DTRS} < [1][\text{SS}|\text{FREL} \{\ \}], [\text{SS}|\text{LOC}|\text{CAT}|\text{HEAD}|\text{VFORM} \textit{fin}] > \\ \text{HD} - \text{DTR} [1] \end{array} \right]$$

This ensures that the first daughter is a free relative *wh*-phrase and a head, and that the second daughter is a finite.

An appropriate semantic analysis could be added to this.

Constraint on clefts:

Constraint on clefts:

(35) *cleft* \Rightarrow

$$\left[\begin{array}{l} \text{SS|LOC} \left[\begin{array}{l} \text{CONT} \left[\begin{array}{l} \text{QUANTS} < \left[\begin{array}{l} \textit{the - rel} \\ \text{INDEX [1]} \\ \text{RESTR \{[2]\}} \end{array} \right] > \oplus \text{L} \\ \text{NUCL} \left[\begin{array}{l} \textit{identity - rel} \\ \text{ARG1 [3]} \\ \text{ARG2 [1]} \end{array} \right] \end{array} \right] \end{array} \right] \\ \text{DTRS} < [\text{SS|LOC|CONT [INDEX [3]]], \left[\text{SS} \left[\text{LOC} \left[\begin{array}{l} \text{CAT|HEAD|VFORM } \textit{fin} \\ \text{CONT [2]} \end{array} \right] \right] \right] > \end{array} \right]$$

Constraint on clefts:

(35) *cleft* \Rightarrow

$$\left[\begin{array}{l} \text{SS|LOC} \left[\begin{array}{l} \text{CONT} \left[\begin{array}{l} \text{QUANTS} < \left[\begin{array}{l} \textit{the - rel} \\ \text{INDEX [1]} \\ \text{RESTR \{[2]\}} \end{array} \right] > \oplus \text{L} \\ \text{NUCL} \left[\begin{array}{l} \textit{identity - rel} \\ \text{ARG1 [3]} \\ \text{ARG2 [1]} \end{array} \right] \end{array} \right] \end{array} \right] \\ \text{DTRS} < [\text{SS|LOC|CONT [INDEX [3]]], \left[\text{SS} \left[\text{LOC} \left[\begin{array}{l} \text{CAT|HEAD|VFORM } \textit{fin} \\ \text{CONT [2]} \end{array} \right] \right] \right] > \end{array} \right]$$

This ensures that the two daughters are interpreted as the two terms of an identity predication and that the second daughter is finite.

6. Conclusion

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Given an appropriate system of types and constraints, it is not difficult to provide an analysis of Welsh *wh*-interrogatives, free relatives, and clefts which captures the properties which they all have, the properties which two of them have, and the properties which distinguish each from the other two.

6. Conclusion

Given an appropriate system of types and constraints, it is not difficult to provide an analysis of Welsh *wh*-interrogatives, free relatives, and clefts which captures the properties which they all have, the properties which two of them have, and the properties which distinguish each from the other two.

Thus, there is further evidence here that HPSG is well equipped to capture the similarities and differences among families of constructions.

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