

Fused Head Analyses in HPSG?

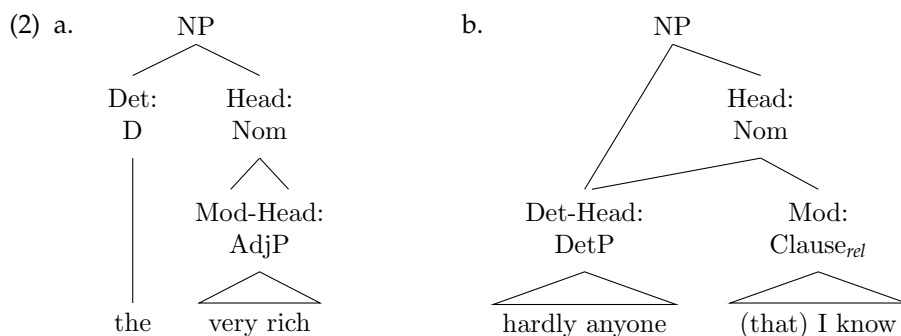
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The syntactic representations assumed in Huddleston and Pullum (2002) (CGEL) are not always conventional trees. In particular, the analyses of Noun Phrases make extensive use of a limited form of multi-dominance, embodied in the notion of a *fused-head*, where a single constituent fulfils two grammatical functions: the head function, and some other dependent function (e.g. determinative or modifier). Payne et al. (2007) extends the approach to some other constructions.

The constructions that are analysed in this way include Free (headless) Relatives (1a), phrases including words like *someone*, *anyone*, etc. that seem to combine a determiner and a noun (1b), uses of adjectives such as that in (1c), and partitive constructions that appear not to contain head nouns, cf. (1d) and (1e):

- (1) a. [What she ate] made her ill. (fused prenucleus-head)
- b. [Hardly anyone] came to the party. (fused determinative-head)
- c. Only [the very rich] will benefit. (=‘very rich people’; fused modifier-head)
- d. [Some/All/None of her friends] came to the party. (fused determinative-head)
- e. They ignored [the most important of her criticisms]. (fused modifier-head)

For example, in (2a) the adjective phrase *very rich* is analysed as being both head of the Nom constituent, and filling the modifier function. In (2b) *hardly anyone* is both the head of the Nom that contains the relative clause *that I know*, and the determinative of the higher NP. As is clear from (2b), the approach involves a form of multi-dominance, where representations do not necessarily respect the ‘single mother’ condition on trees.



The approach has considerable intuitive appeal, especially when compared with alternative analyses involving empty elements. In this paper, I attempt to formalise the approach using the apparatus of HPSG (e.g. Pollard and Sag (1994); Ginzburg and Sag (2001)), and consider whether it would provide a useful addition to the theoretical apparatus. The conclusions are largely negative.

As one might expect, given the extensive use of re-entrance in HPSG analyses, the basic idea can be formalised fairly simply. However, further investigation suggests there are some serious formal difficulties. Moreover, a more detailed consideration of the relevant phenomena suggests that in general construction based analyses of the kind that are widely used in HPSG are preferable.

References

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- Pollard, Carl J. and Sag, Ivan A. 1994. *Head-Driven Phrase Structure Grammar*. Chicago: University of Chicago Press.