Analyses of English Aux, p. 1
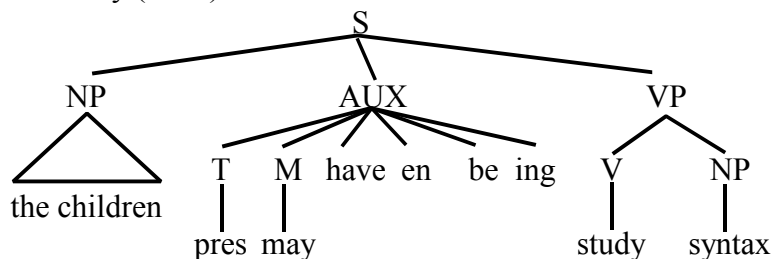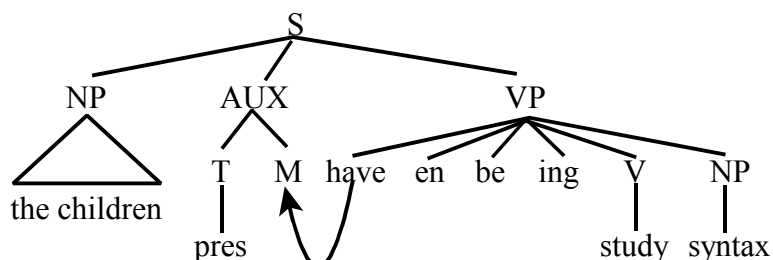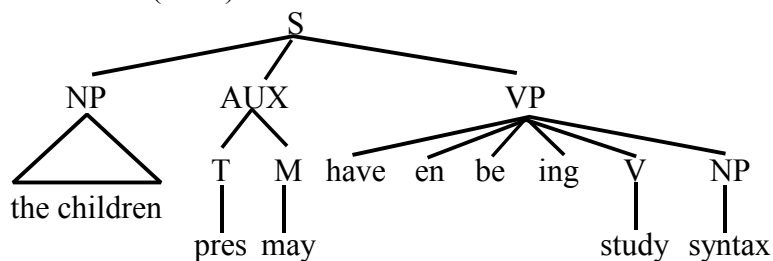
The children will take syntax.

is it:

- **aux-predicate analysis**: *will* is the head of the sentence, and *[take syntax]* is a complement of *will*
- **aux-feature analysis**: *take* is the head of the sentence, and *will* is a "modifier" or morphological marker expressing/realizing future tense

Structural analysis based on aux-feature analysis
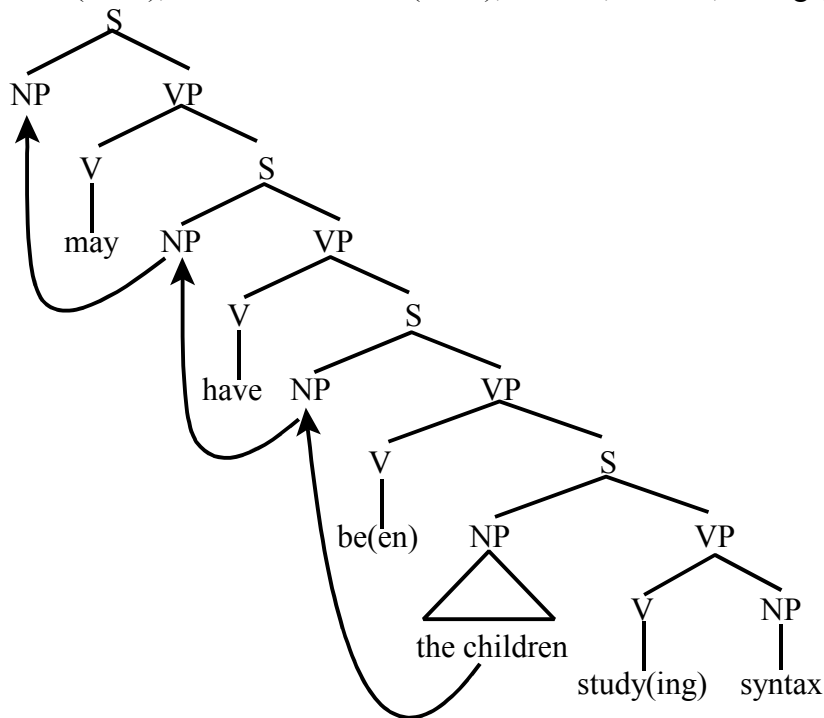
(1)   Chomsky (1965)

(2)   Jackendoff (1972)

Analyses of English Aux, p. 2

## Structural analysis based on aux-predicate analysis

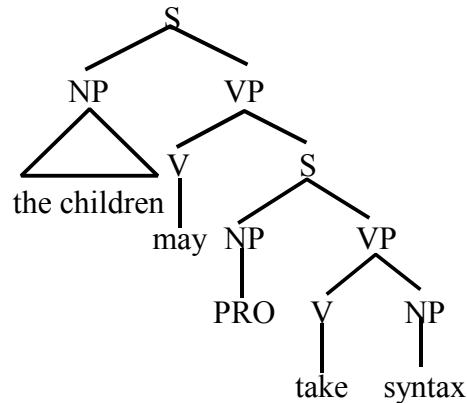(3)   Ross (1969); Pullum & Wilson (1977); Gazdar, Pullum, & Sag (1982)

Some auxiliaries are ambiguous between an epistemic reading (which is raising-like) and a root reading (control-like). This can be captured by an aux-predicate analysis.

(4)   a.   The children may study syntax.
       b.   epistemic (≈It is possible that the children will study syntax.)
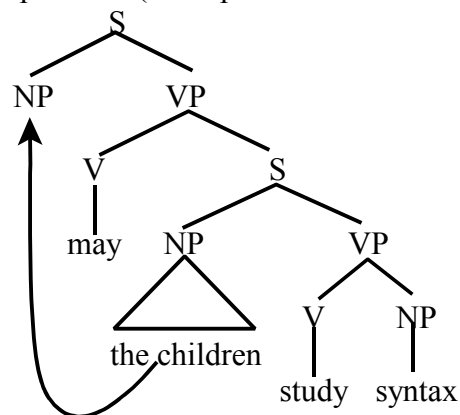
c.   root (≈The children have permission to study syntax.)

```
                        S
                   ┌────┴────┐
                  NP         VP
                 ╱──╲    ┌────┴────┐
                ╱────╲   V         S
              the children │   ┌────┴────┐
                         may  NP         VP
                              │      ┌────┴────┐
                             PRO     V         NP
                                     │         │
                                   take      syntax
```
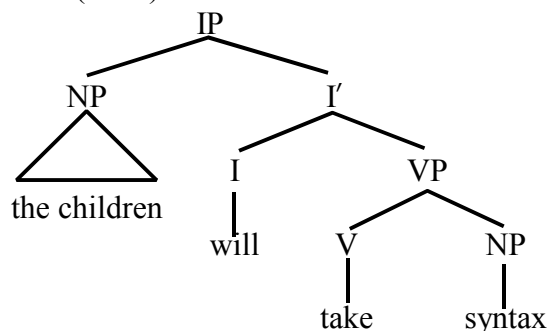
This is the standard analysis in HPSG; Sag (2000) provides the following lexical entry for supportive *do*, in which it syntactically selects a VP complement with which it shares a subject.

(5)
$$
\begin{bmatrix}
\text{HEAD} & \begin{bmatrix} v \\ \text{VFORM} & \textit{fin} \\ \text{AUX} & + \end{bmatrix} \\[4ex]
\text{COMPS} & \left\langle \begin{bmatrix} \text{VP} \\ \text{VFORM} & \textit{base} \\ \text{SUBJ} & \boxed{1} \end{bmatrix} \right\rangle \\[4ex]
\text{SUBJ} & \boxed{1}
\end{bmatrix}
$$

Some variants of the original analysis accept this in part; for example, Jackendoff (1977) considers progressive *be* to be an argument-taking predicate.

IP analysis: aux-predicate analysis + separate category

(6)   hinted at by Chomsky (1981), but the first explicit proposal to this effect appears to be Falk (1984). Current versions are based on Chomsky (1986)

```
                      IP
               ┌──────┴──────┐
              NP             I′
             ╱──╲       ┌─────┴─────┐
            ╱────╲      I           VP
          the children │       ┌────┴────┐
                      will     V         NP
                               │         │
                             take      syntax
```

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Have and *be,* under this analysis, are verbs which become infls when finite (often referred to as V-to-I), either by movement in a transformational framework or lexically in a constraint-based lexical framework.

IP analysis + aux-feature analysis

(7)   Pollock (1989: 385, 386) "[*Have* and *be* and their French equivalents] have a unique status with respect to θ-theory: they arguably fail to assign any θ-role to the constituents they are subcategorized for.… That aspectual *be/être, have/avoir*, and 'passive' *be/être* are not θ-role assigners is not, I think, controversial." This is a necessary element of the analysis as it explains the ability of *have* and *be* to raise to the infl position (or rather its equivalent in his exploded-infl theory).

Chomsky (1995: 198) takes the position that auxiliaries have no semantic features (such as predicate-argument structure).

Radford (1997): "Whereas a typical verb like *want* may take a range of different types of complement…, by contrast auxiliaries typically take a verb expression as their complement, and have the semantic function of marking grammatical properties associated with the relevant verb, such as *tense, aspect, voice, mood*, or *modality*."

Given the structural IP analysis, which we will assume to be correct, this is the approach which is consistent with the structure-function mapping principles.

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