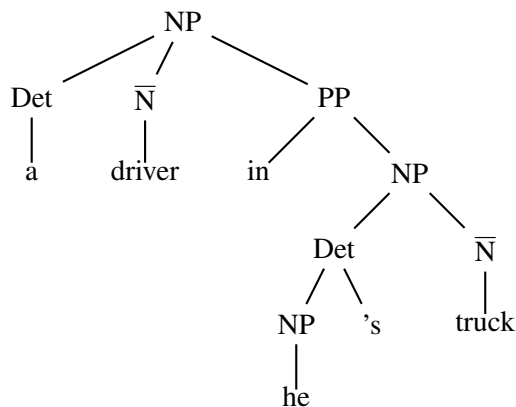


Tree-walking algorithm, continued. We now look at the remainder of Hobbs's algorithm. Note the specific assumptions it makes about syntax, namely that the grammar provides a special non-terminal symbol \bar{N} (pronounced N-bar) between the NP (noun phrase) and noun level. Recall that the following steps are invoked if X was not the highest S node in the sentence.

5. From node X, go up the tree to the first NP or S node encountered. Call this new node X, and call the path traversed to reach it p.
6. If X is an NP node and if the path p to X did not pass through the \bar{N} node that X immediately dominates, propose X as the antecedent.
7. Traverse all branches below node X to the *left* of path p in a left-to-right, breadth-first manner. Propose any NP node encountered as the antecedent.
8. If X is an S node, traverse all branches of node X to the *right* of path p in a left-to-right, breadth-first manner, but do not go below any NP or S node encountered. Propose any NP node encountered as the antecedent.
9. Go to step 4.

The algorithm assumes a difference between structures where a PP (preposition phrase) is an *adjunct* to the noun and structures where a PP is an *argument* of the noun. The respective structures are shown below.

PP adjunct



PP argument

