

Grammar 2

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Parsing strings

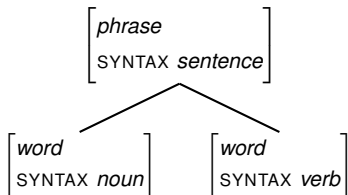
- In Grammar 1, you were able to parse 4 words.
- You were not able to parse additional words, because **the lexicon of Grammar 1 only contains those 4 words.**
- You were also not able to parse multi-word sentences. The reason for this is that **Grammar 1 only contains a lexicon, but does not have a syntax.**
- Clearly, this is not satisfactory! Grammar 1 needs to be improved. For this reason, **our next grammar, Grammar 2, contains our first syntactic rule.**

Note: from here on, our grammars will concentrate on syntax. Unless it is necessary, we will therefore omit phonological and semantic information from words, phrases, and sentences.

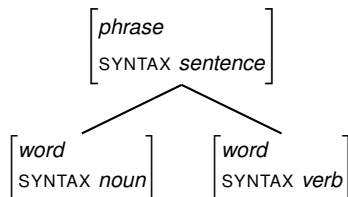
A phrase structure rule for sentences

$$\begin{bmatrix} \textit{phrase} \\ \text{SYNTAX } \textit{sentence} \end{bmatrix} \rightarrow \begin{bmatrix} \textit{word} \\ \text{SYNTAX } \textit{noun} \end{bmatrix} \begin{bmatrix} \textit{word} \\ \text{SYNTAX } \textit{verb} \end{bmatrix}$$

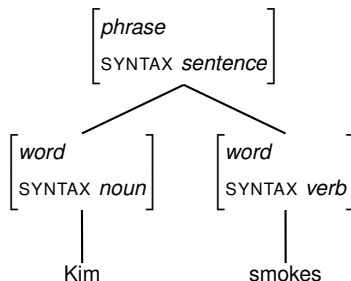
This rule above licenses trees of the following form:



Predictions

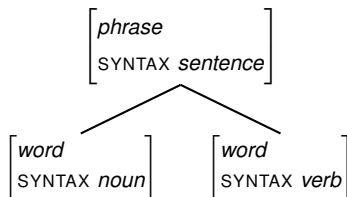


Schematic tree

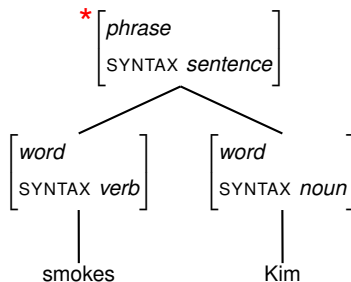


Tree for actual sentence

Predictions, 2



Schematic tree



Tree for test sentence

More precisely: it is the tree schema + two lexical entries that licenses the tree for the actual sentence

