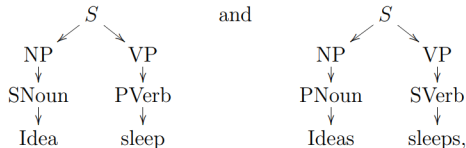**Example 1.15.** The rules in the generative grammar for Chomsky's example sentence "Colourless green ideas sleep furiously" from Example 1.14 is context-free, since all production rules have a single variable on the left-hand side. This is not in general true for production rules of natural language. Suppose we have variables SNoun for "singular noun", SVerb for "singular verb", PNoun for "plural noun", and PNoun for "plural verb". Then the context-free rules

$$\text{NP} \to \text{SNoun}, \ \text{NP} \to \text{PNoun}, \ \text{VP} \to \text{SVerb}, \ \text{and} \ \text{VP} \to \text{PVerb}$$

would allow us to derive the ungrammatical sentences "Idea sleeps" and "Ideas sleep" by the derivations

so we need to replace them with the context-sensitive production rules

$$\text{NP VP} \to \text{SNoun VP}, \qquad\qquad \text{NP VP} \to \text{PNoun VP},$$
$$\text{SNoun VP} \to \text{SNoun SVerb, and} \qquad \text{PNoun VP} \to \text{PNoun PVerb}.$$