Compositional Semantics
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1 Two Simple Examples

We begin with the following example sentence:

(1) Midge grins.

What we write in Figures 1 and 2 as

$$[\![\text{Midge grins}]\!]$$

is called the "semantic value" *Semantic value* is a theory neutral term that means whatever your particular semantic theory is using as the semantics of an expression today.

In the first example, Figure 1, we compute the semantics using only extensions, so the semantic value is always an extension.

In the next example, Figure 2, we compute the semantics of conjoined sentences. Here we use

$$[\![\text{Midge grins}]\!]$$

for the extension of *Midge grins*. So for example, we have

$$[\![\text{Midge grins}]\!] = \text{false}.$$

We need the following semantic rulex

$$\begin{array}{lll} \text{S} \rightarrow & \text{S}_1 \text{ and } \text{S}_2 & \\ & [\![\text{S}]\!] = & \text{true iff} \\ & & [\![\text{S}_1]\!] = \text{true and} \\ & & [\![\text{S}_2]\!] = \text{true} \end{array}$$

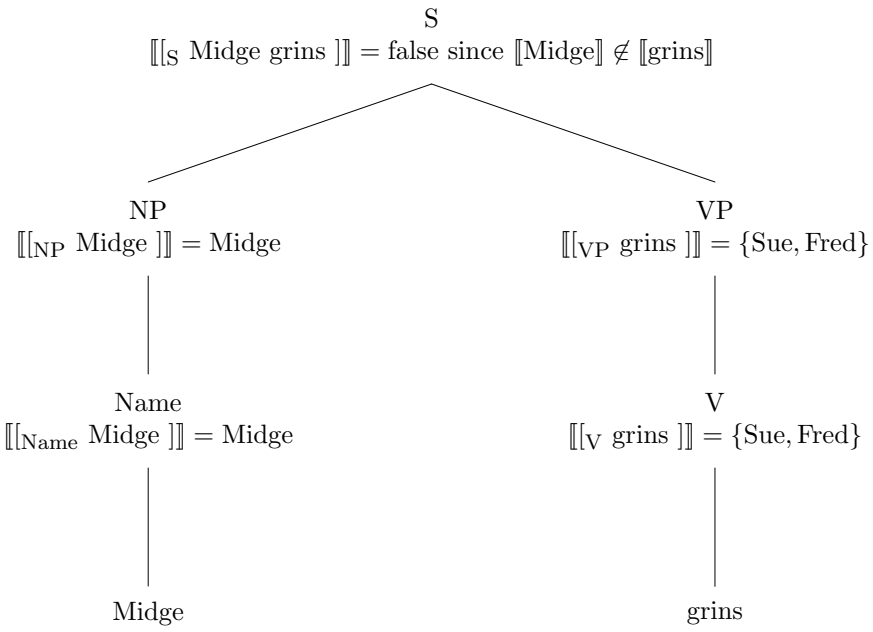

Figure 1: This tree uses only extensions

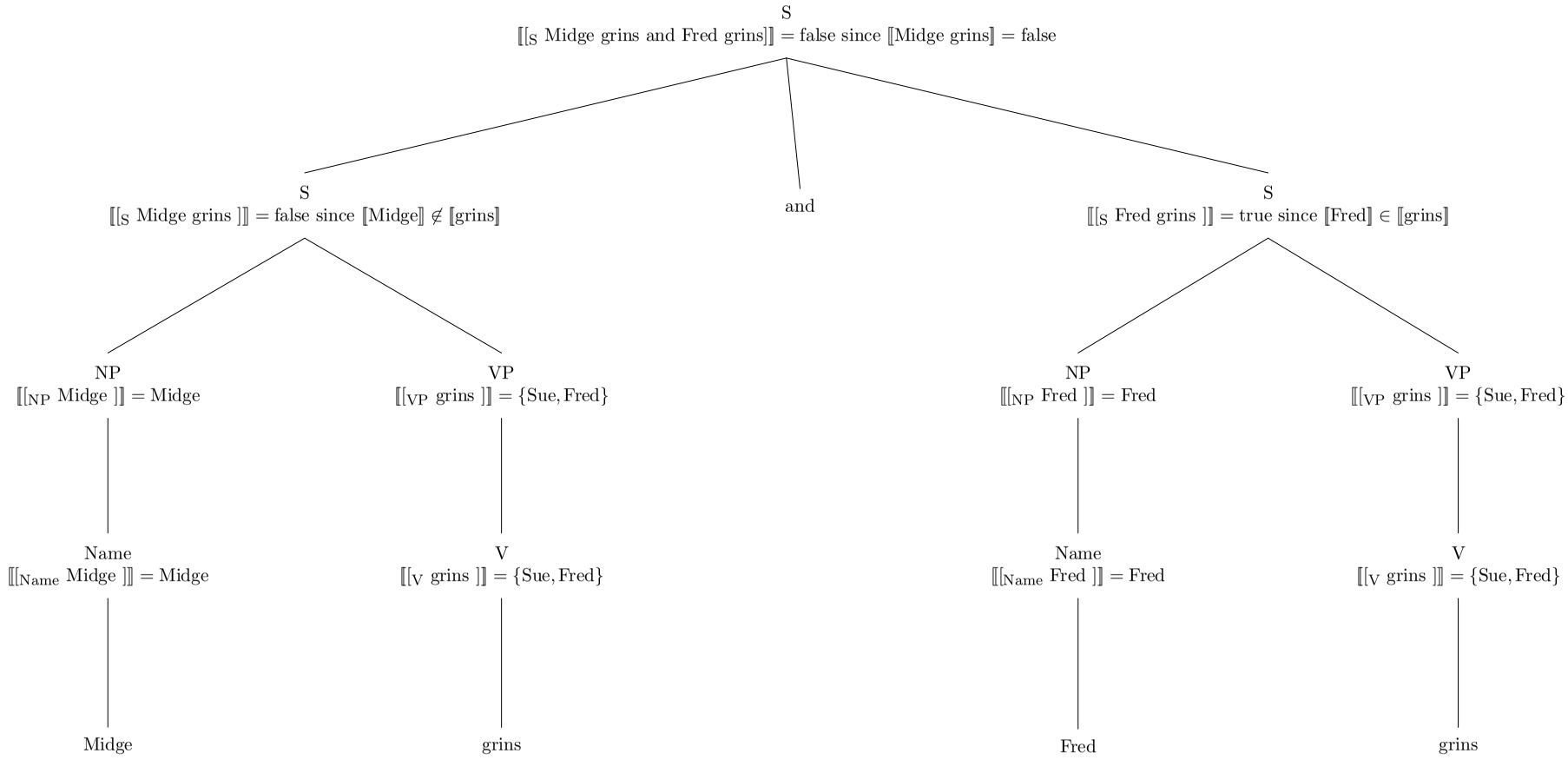

Figure 2: This tree uses extensions