

## 1 Two Simple Examples

We begin with the following example sentence:

- (1) Midge grins.

What we write in Figures 1 and 2 as

$\llbracket \text{Midge grins} \rrbracket$

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 using intensions. Here we use

$\llbracket \text{Midge grins} \rrbracket$

for the intension of *Midge grins* and we use

$\llbracket \text{Midge grins} \rrbracket^w$

for the result of looking up the value of  $\llbracket \text{Midge grins} \rrbracket$  at world  $w$ . So for example, given the intension computed for the sentence at the top of the tree, we have:

$\llbracket \text{Midge grins} \rrbracket^{w_4} = \text{false}.$

## 2 Exercises

1. Construct the tree showing the compositional semantic treatment for the following sentence:

(2) Midge grins and Biff frowns.

Give an extensional treatment using the extensions in Figure 1 and use the following extension for *frowns*:

$$\llbracket [\text{V frowns}] \rrbracket = \{\text{Biff, Sue, Alice}\}$$

Assume

$$\llbracket [\text{Name Biff}] \rrbracket = \text{Biff}$$

For the compositional semantic treatment of *and*, see the lecture of sense and denotation. Be sure and compute what the extension of the complete sentence is; that is, be sure and determine whether the sentence is true or false with the given extensions.

2. Now construct the tree giving an intensional treatment and using the intensions in Figure 2. Again, give *and* a syncategorematic treatment. Use the following intension for *frowns*:

$$\llbracket [\text{V frowns}] \rrbracket = \begin{array}{|c|c|} \hline w_1 & \{\text{Ned, Hugh, Lisa}\} \\ \hline w_2 & \{\text{Hugh, Tom, Mandy}\} \\ \hline w_3 & \{\text{Fred, Biff, Alice}\} \\ \hline w_4 & \{\text{Biff, Sue, Alice}\} \\ \hline \end{array}$$

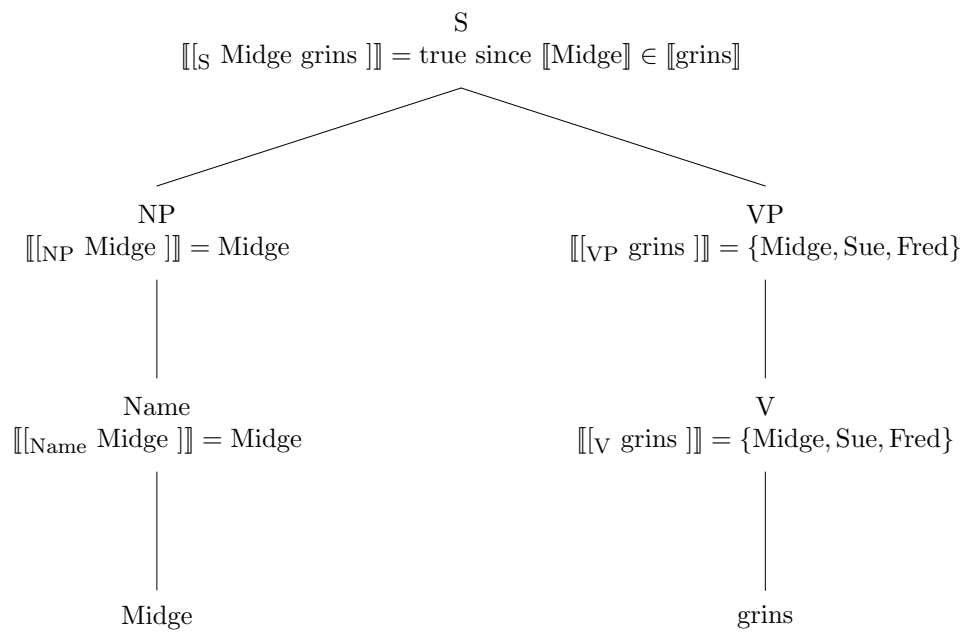


Figure 1: This tree uses only extensions

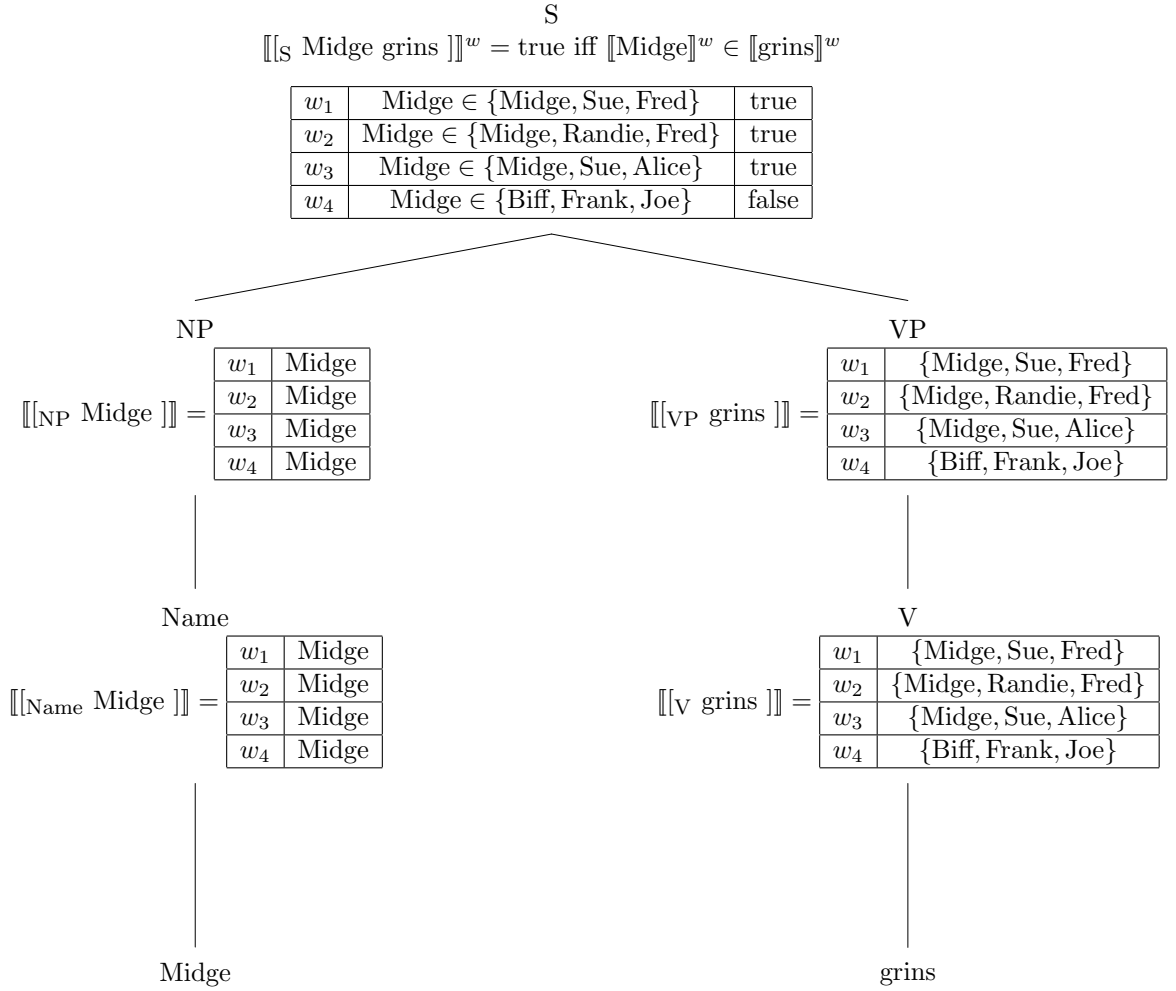


Figure 2: This tree uses intensions