

Problem Set 3

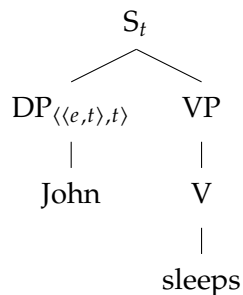
Due February 2 before class. Submit on IVLE > Files > Student Submission > PS3.

Note: Whenever you're asked to "compute the truth conditions for [complex structure with tree]", for each node in the tree, you need to give (a) its semantic type, (b) its denotation, and (c) the rule that you used (TN, FN, NN, etc.). Show your work.

1. **Higher-type DPs:** So far we have treated proper name DPs as being type e .

(a) Give a semantics for "John" of type $\langle\langle e, t \rangle, t\rangle$.

(b) Compute the truth conditions for "John sleeps" using this new semantics for "John":¹



2. **Conjunction(s):** For each example, draw its tree and compute its truth conditions.² Use type e meanings for the names, "John," "Mary," "Kara," and "Tama."

- (1) John sits and Mary stands.
- (2) Kara sleeps and likes Tama.
- (3) Kara and Tama sleep.
- (4) John likes Kara and Tama.

For (1), use the denotation for "and" from H&K p. 44 (4iv). For (2–4), define different denotations for "and" if necessary. (Hint: start by computing types using the triangle method.)

¹We ignore the internal syntax of the DP "John."

²The syntax can be simple as in class with sentences as S nodes (no need for T/Infl) with subject and VP daughters. Don't worry too much about syntactic category labels.