Semantic Theory 2014 – Exercise Sheet 6

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Exercises are due on Tuesday, June 10, 10:15 a.m.

6.1   Cooper Storage: Non-referential arguments

The following sentence has three different scope readings, as indicated in the lecture:

Every student seeks a book (about semantics).

Derive representations that correspond to the three readings using the Quantifier Storage technique.

Hint: Use abbreviations for the NPs during semantic construction, where possible. This will save writing time and make reading easier. You also need not derive the semantic value of simple (i.e., Det+N) NPs. Just start with "$\lambda F \forall x(\text{student'}(x) \rightarrow F(x))$" (or "every-student'", respectively).

6.2   Cooper Storage: Complex NPs

(a) Apply the Quantifier Storage rules to derive all semantic representations for the following sentence:

[Every book [of [a professor]]] is exciting

Assume (just for this exercise) that *is-exciting* is a type $\langle e,t \rangle$ lexical expression under a VP node, translating to is-exciting' (or something shorter), and that the preposition *of* translates to $\lambda Q \lambda F \lambda z[Q(\lambda x[\text{of*}(x)(z) \wedge F(z)])] \in \text{WE}_{\langle \langle et, t \rangle, \langle et, et \rangle \rangle}$.

You should obtain three different representation, one using *in situ* application of the embedded NP *a professor*, and two more of them by storing the NPs, and retrieving them in different order.

(b) If you apply the construction rules from the slides, one of the representations will be inappropriate. Which one is it? What is wrong with it? And, why?