

Problem Set 5

Due March 6 before class. Submit on IVLE > Files > Student Submission > PS5.

There is a variety of negation in English which modifies DPs:

- (1) a. [**Not** [every bird]] flies.
- b. [**Not** [only dogs]] bark.¹
- c. [**Not** [a creature]] was stirring.²
- d. [**Not** [many people]] laughed.

Assume the constituency indicated by the bracketing here.

1. Propose a denotation for this *not*.
2. Choose either (1a), (1b), or (1c) and (a) draw the tree, (b) add types, (c) compute the truth conditions for the sentence, giving denotations and rules for each node.
3. Do the examples in (1) mean the same thing as the corresponding examples in (2)? Explain.

- (2) a. Every bird does not fly.
- b. Only dogs do not bark.
- c. A creature was not stirring.
- d. Many people did not laugh.

¹Assume $\llbracket \text{only} \rrbracket = \lambda P_{\langle e,t \rangle} . \lambda Q_{\langle e,t \rangle} . \text{for all } x \in D_e [\text{if } Q(x) = 1, \text{ then } P(x) = 1]$

²From "A Visit from St. Nicholas." Assume $\llbracket \text{was} \rrbracket = \text{Id}$ and $\llbracket \text{stir}(\text{ring}) \rrbracket = \lambda x_e . x \text{ stirs}$.