LING 721 "Advanced Seminar 1: Questions, focus, and friends"

Assignment 3

Due: November 5, before 1:30pm

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For problems (1) and (2) below, assume the following denotations for *only* and *also*:

- adverb *only*:
  $\left[\!\left[\overset{\frown}{only \quad \alpha_t} \right]\!\right] = 1 \iff \forall \phi \in [\![\alpha]\!]^f \left(\phi \neq [\![\alpha]\!]^o \rightarrow \phi \text{ is false}\right)$
  presupposes: $[\![\alpha]\!]^o$ is true

- two-place *only*:
  $[\![only]\!]_{\langle e,\langle\langle e,t\rangle,t\rangle\rangle} = \lambda x_e.\lambda P_{\langle e,t\rangle}.\forall y_e \in D_e.\, (y \neq x \rightarrow P(y) \text{ is false})$
  presupposes: $P(x)$ is true

- adverb *also*:
  $\left[\!\left[\overset{\frown}{also \quad \alpha_t} \right]\!\right] = 1 \iff [\![\alpha]\!]^o$ is true
  presupposes: $\exists \phi \in [\![\alpha]\!]^f \left(\phi \neq [\![\alpha]\!]^o \wedge \phi \text{ is true}\right)$

- two-place *also*:
  $[\![also]\!]_{\langle e,\langle\langle e,t\rangle,t\rangle\rangle} = \lambda x_e.\lambda P_{\langle e,t\rangle}.P(x)$ is true
  presupposes: $\exists y \in D_e\, (y \neq x \wedge P(y)$ is true$)$

(1) Give a detailed derivation for the meaning of the following sentence. Assume that the associate of adverb *only* is interpreted in-situ, without movement. This should include a tree structure with ordinary and focus semantic values for each node.

Mary *only* speaks [English]$_F$ in Montreal.

(Assume "English" and "Montreal" are of type e and "in" is of type $\langle e, \langle et, et\rangle\rangle$. Don't worry too much about the denotation of "in.")

(2) Next consider the sentence:

Mary *also only* speaks [English]$_F$ in [France]$_F$.

This sentence is grammatical, with *only* associating with "English" and *also* associating with "France," if read after the sentence in (1) above, with pitch accent on "France" but no pitch accent on "English." (Assume "English" here is nonetheless F-marked.)

Can you compute the truth-conditions and presupposition for this sentence, using the following assumptions?

a. with "English" and "France" interpreted in-situ;
b. with "English" interpreted in-situ and "France" moved to be the first argument of *also*;
c. with "English" moved to be the first argument of *only* and "France" interpreted in-situ.

For problem (3), use the following denotation for *only*, based on Rooth (1992):

$$[\![\textit{only}]\!] = \lambda C_{\text{set of propositions}}.\lambda p_t.\,(\forall q \in C\,(q \neq p \rightarrow q \text{ is false}))$$

(3) Consider the following sentence:

Mary *only* doesn't speak [English]$_F$.

Following Rooth (1992), there must be a squiggle operator in this structure which constrains the set of alternatives C. But we can't "see" the squiggle operator. Let's hypothesize that the LF is as follows:

Mary λx [[*only* C] [NEG [[$\sim$ C] [x speak [English]$_F$]]]]

Give a set C which satisfies the presuppositions introduced by $\sim$. Then compute the truth conditions for this LF. What went wrong?