Only explorations

Chris Potts, Ling 230b: Advanced semantics and pragmatics, Spring 2016

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(1) For \( \varphi : (\sigma_1, \ldots, \sigma_n, t) \), \([\text{only}_{(\sigma_1, \ldots, \sigma_n, t)} \varphi]^0 = [\text{only}_{<\text{st},t>} \varphi]^0 = \lambda x \forall \psi \in [\varphi]^t : \psi(x) = \psi = [\varphi]^0 \)

or (with no commitment to \( \varphi(x) \)):

\([\text{only}_{<\text{st},t>} \varphi]^0 = \lambda x \forall \psi \in [\varphi]^t : \psi(x) = \psi = [\varphi]^0 \)

could consider making \( \varphi(x) \) a presupposition

(2) a. Sandy only ran\textsubscript{FOC}.

\([\text{only ran}]^0 = \lambda x \forall \psi \in [\text{ran}_{\text{FOC}}]^t : \psi(x) = \psi = [\text{ran}_{\text{FOC}}]^0 \)

\([\text{Sandy only ran}]^0 = \forall \psi \in [\text{ran}_{\text{FOC}}]^t : \psi([\text{Sandy}]^0) = \psi = [\text{ran}_{\text{FOC}}]^0 \)

= For all alternatives \( \psi \) to running, if Sandy did \( \psi \), then \( \psi \) is running.

= If Sandy did anything relevant, it was running.

b. # Sandy only ran. (no accent anywhere)

Avenues to explore for blocking this kind of example:

* All sentences have at least one FOC-marked constituent.

* Only presupposes that the focus value of its argument has more than one member.

* Where only gets an argument that has a focus value with only one member, the resulting meaning is either equivalent to the meaning without only or strictly weaker than it, depending on how only is analyzed – both outcomes arguably clash pragmatically with using the particle.
(3)  

a. Sandy only met\textsubscript{FOC} Jesse.
\[
[\text{only met}]^O = \lambda x \lambda y \forall \psi \in [\text{met}\textsubscript{FOC}]^f : \psi(x)(y) \Rightarrow \psi = [\text{met}\textsubscript{FOC}]^O
\]
\[
[\text{Sandy only met Jesse}]^O = \forall \psi \in [\text{met}\textsubscript{FOC}]^f : \psi([\text{Jesse}]^O)([\text{Sandy}]^O) \Rightarrow \psi = [\text{met}\textsubscript{FOC}]^O
\]
≈ If any salient relation holds between Sandy and Jesse, it is the meeting relation.
Alternative derivation where \textit{only} is assumed to adjoin to the VP \textit{met}\textsubscript{FOC} Jesse, rather than to just the verb:
\[
[[\text{met}\textsubscript{FOC} Jesse]^f = \{R([\text{Jesse}]^O) : R \in \text{ALT}(\text{met})\}
\]
\[
[\text{only met}\textsubscript{FOC} Jesse]^O = \lambda x \forall \psi \in [\text{met}\textsubscript{FOC} Jesse]^f : \psi(x) \Rightarrow \psi = [\text{met}\textsubscript{FOC} Jesse]^O
\]
\[
[[\text{Sandy only met}\textsubscript{FOC} Jesse]^O = \forall \psi \in [\text{met}\textsubscript{FOC} Jesse]^f : \psi([\text{Sandy}]^O) \Rightarrow \psi = [\text{met}\textsubscript{FOC} Jesse]^O
\]
≈ If Sandy has any salient property of the form \( R(Jesse) \), it is the property \( \text{met}(Jesse) \).
(These two readings are identical. Seeing that the first entails the second is straightforward. For the second entailing the first: assume the second is true, i.e., that \([\text{met}(Jesse)]\) is the only member of the focus value of the VP that holds of Sandy, and suppose that another salient relation \( R \neq [\text{met}] \) holds between Sandy and Jesse. Then, by the logic of alternative semantics, \( R \) is in the focus set for the VP. This contradicts our assumption.)

b. Sandy met only Jesse\textsubscript{FOC}.

Names have to be modeled as quantifiers. That is, we need to lift them to \textit{<et,t>}.
\[
[[\text{only Jesse}\textsubscript{FOC}]^f = \lambda g \forall \psi \in [[\text{Jesse}\textsubscript{FOC}]^f : \psi(g) \Rightarrow \psi = [[\text{Jesse}\textsubscript{FOC}]^f
\]
\[
[[\text{met only Jesse}\textsubscript{FOC}]^O = \lambda x \forall \psi \in [[\text{Jesse}\textsubscript{FOC}]^f : \psi(\lambda y [\text{met}]^O(y)(x)) \Rightarrow \psi = [[\text{Jesse}\textsubscript{FOC}]^O
\]
\[
[[\text{Sandy met only Jesse}\textsubscript{FOC}]^O = \forall \psi \in [[\text{Jesse}\textsubscript{FOC}]^f : \psi(\lambda y [\text{met}]^O(y)([\text{Sandy}]^O)) \Rightarrow \psi = [[\text{Jesse}\textsubscript{FOC}]^O
\]
≈ If Sandy met any salient alternative to Jesse, then it was Jesse.

c. Sandy only met Jesse\textsubscript{FOC}.

\[
[[\text{met Jesse}\textsubscript{FOC}]^f = \{\lambda x P(\lambda y [\text{met}]^O(y)(x)) : P \in \text{ALT(Jesse)}\}
\]
for proper names = \{[[\text{met}]^O(y) : y at alternative to Jesse}\}
\[
[[\text{only met Jesse}\textsubscript{FOC}]^O = \lambda z \forall \psi \in [[\text{met Jesse}\textsubscript{FOC}]^f : \psi(z) \Rightarrow \psi = [[\text{met Jesse}\textsubscript{FOC}]^O
\]
\[
[[\text{Sandy only met Jesse}\textsubscript{FOC}]^O = \forall \psi \in [[\text{met Jesse}\textsubscript{FOC}]^f : \psi([\text{Sandy}]^O) \Rightarrow \psi = [[\text{met Jesse}\textsubscript{FOC}]^O
\]
≈ If Sandy met any salient alternative to Jesse, then it was Jesse. Same outcome as in (b)!
(4)  

a. \[ \text{[introduce]}^0 = \begin{bmatrix} w_1 & \rightarrow & \{\langle a, b, c \rangle, \langle a, d, c \rangle \} \\
               w_2 & \rightarrow & \{\langle a, b, c \rangle, \langle a, b, d \rangle \} \end{bmatrix} \]

b. \( \alpha \) only introduced \( b_{\text{FOC}} \) to \( c \)

True in \( w_2 \), where \( \alpha \) introduced exactly one entity to \( c \), namely \( b \)
False in \( w_1 \), where \( \alpha \) introduced both \( b \) and \( d \) to \( c \)

c. \( \alpha \) only introduced \( b \) to \( c_{\text{FOC}} \)

False in \( w_2 \), where \( \alpha \) introduced \( b \) to both \( c \) and \( d \)
True in \( w_1 \), where \( \alpha \) introduced \( b \) to exactly one entity, namely \( c \)
Adapted from (Beaver & Clark 2008:§10):

(5)  a. I really expected a suite but only got a single room with 2 beds.
    b. # I really expected a single room with 2 beds but only got a suite.

(6)  a. Issue: What celebrity signatures did Brady get at the Philosophy of Language party?
    b. Brady only got a Soames
    c. Ranking (highest to lowest): ⟨Lewis, Putman, Soames, Beaver, Clark, Chomsky, Potts⟩

Some recent and foundational work on only


