A Grammatical View of Exhaustification with Focus Movement: Evidence from NPI
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The NPI any can be licensed within the c-commanding domain of only, iff any part of the anyP is NOT focused, as in (1). I show that both the F(ocus)-movement theory (Wagner 2006) and the G(rammatical)-view (Krifka 1995 a.o.) have difficulties in accounting for this licensing effect. I argue that those difficulties can be overcome via incorporating F-movement into the G-view.

(1)  
a. Mary only gave any funding to JOHN_F.
   b. *John read only ANY_F paper.
   c. *John read only [any PAPER_F], (he didn’t read every book).
   d. *John read only any PAPER_F, (he didn’t read any book).

Wagner (2006) proposes to address the problem of NPI-licensing within only based on F-movement, because Rooth’s (1985) theory is not obviously compatible with having a DE environment for any. Wagner assumes that the focused constituent moves covertly to the complement position (i.e. the syntactic restrictor) of only. Assuming that the scope of only is S(trawson) DE but the restrictor is not, he concludes that any isn’t licensed if it is moved as (part of) the restrictor, as in (1b-d). Note that the anyP in (1d) is an island and has to be moved as a whole.

Wagner’s proposal, however, has the following problems. P(problem)1, the SDE condition is neither necessary nor sufficient (Crnič 2011, Gajewski 2011). P2. Wagner doesn’t explain why NPI any is bad in non-DE contexts. P3, F-movement isn’t well-motivated. Wagner assumes that F-movement is used to strengthen the 3-presupposition of only. This goal, however, can be achieved simply by stress. P4, moving focus to the complement of only violates the Extension Condition (Chomsky 1995): all movement operations extend the root of the structure that they apply to. P5, in (2), the anyP should be allowed to vacate the VP, and the remnant VP subsequently associate with only (J. Gajewski p.c. to Wagner). P6, to get the correct scope readings for (3), Wagner has to assume that the focused QP is optionally reconstructed below want. However, reconstructing a covertly moved phrase is costly. P7, associating only into an island yields an overly strong reading. For instance in (4), due to the Left-Branch Extraction (LBE) constraint, JOHN’s advisors is moved as a whole, and the F-movement theory predicts the overly strong reading in (4b).

(2)  
   a. Sue only invited JOHN_F’s advisors.
   b. Sue didn’t invite anyone’s advisors except John’s.
   c. Sue didn’t invite anyone except John’s advisors.

The Grammatical View of Exhaustification (Krifka 1995, Lahari 1998, Chierchia 2006 a.o.) explains how any is licensed with only with assumptions compatible with Rooth’s (1985) Alternative Semantics and the standard DE condition (P1 avoided). Chierchia (2006, 2013) proposes that any has a [D] feature that activates D(omain)-alternatives and must agree with a c-commanding exhaustivity operator O_D. This O_D affirms the prejacent and negates all the non-entailed D-alternatives. In a non-DE context like (5a), assessing [D] with O_D negates all the subdomain alternatives, yielding a contradiction to the assertion (P2 solved) and leaving any un-licensed. Chierchia a.o. extend this view to the case of only. They argue that (6a) has the LF in (6b), asserts (6c), and presupposes (6d). The presupposition in (6d) is irrelevant for weak NPI-licensing (Gajewski 2011). The assertion in (6c) creates a DE environment in the unfocused part and gets any licensed.

(5)  
   a. *John read any paper.
   b. O_D [John read anyP paper]
   c. Assertion:  \( \exists x \in D[P(x) \land R(j,x)] \)
   d. D-ALT = \( \{ \exists x \in D'[P(x) \land R(j,x)] | D' \subseteq D \} \)

There are also problems with the G-view. P8, if the LFs in (7) (O_D and only) check [D] and [F], respectively) are well-formed, (1b-c) would be predicted to be grammatical. P9, the G-view also
can not explain the ungrammaticality of (1d). \textbf{P10}, in (6c), the quantificational domain of only can’t be written as a set of propositions like in (8), because the position for $[q]$ in (8) isn’t DE.

(7) a. $O_D$ only$_F$ [John read ANY$_{D,F}$ paper]  
   b. $O_D$ only$_F$ [John read [any$_D$ PAPER]$_F$]

(8) Only($p$) = $\forall q \in \text{ALT}(p)[q \rightarrow p \subseteq [q]$

\textbf{My Proposal} incorporates features of both the F-movement theory and the G-view. I assume that features that activate alternatives (e.g. [F] and [D]) are of the same type and can all be checked by the alternative-sensitive operator only. LFs in (7) are thus excluded because only checks off both [F] and [D]. My assumption has the following two consequences. First, associating only with any yields a contradiction and anti-licenses any: no matter whether anyP is interpreted in-situ, as in (9a), or with QR, as in (9b), its [D] feature is evaluated in a UF context (P8 solved).

(9) a. Only [John read [any$_D$ PAPER]$_F$] \hspace{1cm} \bot 
   b. $O_D$ [any$_D$ PAPER]$_F$ [only [John read x$_{i,F}$]] \hspace{1cm} \bot

\textbf{Second}, the requirement of avoiding contradictions motivates F-movement. In (1a) and (6a), if the focused constituents were interpreted in-situ, as in (10a) and (11a), then due to the Relativized Minimality (Rizzi 1990) and the Focus Intervening Effects (Beck 2006), only would check off [D], yielding contradictions. To avoid those contradictions, I assume that the focused constituents in (1a) and (6a) are moved to the specifier of only, as in (10b) and (11b) (P3&4 solved). If interpreting focus in-situ doesn’t yield a contradiction, for instance in (12) where any can be licensed in-situ by negation, focus isn’t moved. Similarly in (3), since F-movement isn’t motivated, there is no need to resort a reconstruction (P6 avoided). If a contradiction can’t be salvaged by exercising F-movement, then NPI any isn’t licensed; for instance in (1d), any is in the same island as focus, therefore its [D] feature is always checked by only no matter whether focus is moved (P9 solved).

(10) a. $O_D$ only [Mary gave any$_D$ funding to JOHN$_F$] \hspace{1cm} \bot 
   b. $O_D$ [only$_P$ JOHN$_{F,i}$ only [Mary gave any$_D$ funding to ti]] \hspace{1cm} \checkmark 

(11) a. $O_D$ [only [JOHN$_F$ read any$_D$ paper]] \hspace{1cm} \bot 
   b. $O_D$ [only$_P$ JOHN$_{F,i}$ only [ti read any$_D$ paper]] \hspace{1cm} \checkmark 

(12) a. Mary only didn’t give any$_D$ funding to JOHN$_F$
   b. Only $O_D$ not [Mary gave any$_D$ funding to JOHN$_F$] \hspace{1cm} \checkmark

As for (2), the only syntactically well-formed way to move anyP is (13a), which is still untenable, because interpreting anyP under the immediate scope of $O_D$ yields a contradiction (P5 solved). Cf. (13b), where any is licensed if (2) is uttered as the antecedent of a conditional.

(13) a. $O_D$ [any$_D$ vegetable$_i$ [only$_P$ only [VP John CUT$_F$ ti]]] \hspace{1cm} \bot 
   b. If John only CUT any vegs (and didn’t STEAM any vegs), his wife would be unhappy.

The operation of F-movement also affects focus interpretations especially the meaning of only. I assume that the quantificational domain of only is equal to the focus value of the c-commanding domain when focus is in-situ (à la Rooth 1985), and to the focus value of the moved phrase when focus is moved, as defined in (14) (P7&10 solved). Take (15a) for example, the quantificational domain of only is the focus value of JOHN’s advisors, as in (15d).

\begin{align*}
(14) \quad & [\text{only}] = \lambda f < \alpha, \beta > \lambda g \alpha, g' \in [g] / f(g') \rightarrow g' \subseteq [g]_0 \\
(15) \quad & a. \text{Mary only gave funding to JOHN$_F$’s advisors.} \\
   & b. O_D [only$_P$ [JOHN$_F$’s advisors] only $\lambda i$ [Mary gave any$_D$ funding to ti]] \\
   & c. [JOHN$_F$]$_f = D_e \\
   & d. [JOHN$_F$’s advisors]$_f = \{A(x) : x \in D_e\}
\end{align*}

\textbf{References}