Negative polarity items in embedded constituent questions

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This paper investigates how the distribution of negative polarity items can inform our understanding of the underlying semantic representation of questions. The overarching goal is to argue that the distribution of negative polarity items in questions is governed by the same logical properties that govern their distribution in declarative constructions. Building on an observation due to Guerzoni and Sharvit (2007) that strength of exhaustivity in questions correlates with the acceptability of negative polarity items, I propose a revision of the semantics of questions that can explain this link in already familiar terms from the literature of negative polarity, namely the availability of a local downward entailing environment.

The paper is organized as follows. We begin with some brief background on NPIs and show why questions pose a problem. We then turn to NPIs in questions and observe that even here we see some variation. Some of the questions that arise are following. How is this variation analyzed within the current framework on questions, and why is this analysis not enough to account for the distribution of NPIs. At that point I will introduce a new take on questions and in particular, the weak/strong ambiguity. We will see how this explains why question strength correlates with NPI acceptability and how it furthermore explains other contrasts related to NPIs in the domain of questions. Finally, I will argue that we are not losing anything in terms of predictive power and that this proposal can be used as a tool for re-exploring a host of open issues in the area of questions.

1. Layout of the problem

The observation that negative polarity items (henceforth NPIs) are acceptable in questions is not new. In fact, it dates back to Klima (1964) who noted that interrogative sentences should be analyzed on par with negative sentences as constituting the prototypical environments able to support NPIs. Much advancement has been made since then in the analysis of NPIs on the one hand, and interrogatives on the other. However, while our understanding

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of these two phenomena has become much more thorough, no account to date has been able to provide a satisfying analysis that can deal with the occurrence of NPIs in questions.

The currently dominating analysis of NPIs on the market is one which accounts for their distribution en masse by stating that, for one reason or another, NPIs are sensitive to the ability of their environment to support entailment reversals; more crudely, that NPIs are licensed in Downward Entailing (DE) contexts (Fauconnier (1975, 1979) and Ladusaw (1979)). Consider, for example, the distribution of *ever*, the prototypical NPI.

(1) a. Negation
   (i) I don't think that Mary ever liked pizza.
   (ii) *I think that Mary ever liked pizza.

   b. Negative Quantifiers
   (i) Few/no/at most 10 people have ever heard of linguistics.
   (ii) *Many/most people have ever heard of linguistics.

   c. Left argument of *every*
   (i) Everyone who has ever taken a math class passed the admission test.
   (ii) *Everyone who has taken a math class ever passed the admission test.

   d. Antecedent of conditionals
   (i) If she ever wants to visit us, she should give us a call.
   (ii) *If she wants to visit us, she should ever give us a call.

   e. Scope of *only*
   (i) Only John_{F} has ever failed this class.
   (ii) *John_{F} has ever failed this class.

   f. Questions
   (i) Who has ever failed this class?
   (ii) *John has ever failed this class.

What unifies (most of) these environments is the fact that they can be shown to give rise to inferences from sets to subsets, namely downward entailing inferences, of the sort in (2a).

(2) a. left argument of *every*: set $\Rightarrow$ subset
   (i) Everyone [who has taken a math class] [passed the test].
   $\Downarrow$
   (ii) Everyone [who has taken a calculus class] [passed the test].

   b. right argument of *every*: subset $\Rightarrow$ set
   (i) Everyone [who passed the test] [has taken a calculus class].
   $\Downarrow$
   (ii) Everyone [who passed the test] [has taken a math class].

While this approach has been able to unify, for the most part, the environments capable of sustaining NPIs, to date it has proved unable to bring interrogatives under the umbrella of possible NPI licensors since questions can be shown not to support the kinds of entailments assumed to be responsible for the licensing of NPIs. The goal of any semantic theory for

NPIs should, however, be able to provide a unifying account for why we see NPIs surviving in run of the mill DE contexts such as those in (1a-e), as well as in interrogatives, (1f).

The first issue that needs to be addressed then is why NPIs are acceptable in questions given that questions do not give rise to DE environments, as has convincingly been argued by Guerzoni and Sharvit (2007). Given the ultimate goal of unification, it appears that an approach to NPIs that analyzes them as being licensed in DE contexts would have to be re-evaluated since this approach can not only not account for the data in (1f), but would in fact make the opposite predictions, lumping interrogatives with positive declaratives as non-DE environments. Furthermore, Guerzoni and Sharvit (2007) note that when we turn to embedded questions, the distribution of NPIs is no longer clear-cut. That is, a contrast in acceptability arrises depending on the verb embedding the question, as can be seen by the contrast in acceptability between the embedded questions in (3) and those in (4).

(3) a. Mary knows which boys brought her any gifts.
b. John wonders who has ever been Paris.
c. Chris asked me who took any linguistics classes.
d. Jenny discovered who has ever participated in that competition.

(4) a. *It surprised Mary which boys brought her any gifts.
b. *It amazed her which girls had ever participated in a dance competition.
c. *Jay was disappointed by who sold any antique books.
d. *Ben realized which students had ever been to Paris.

The split correlates with an independently noted ambiguity in questions, namely the fact that a question can receive either a weakly exhaustive or a strongly exhaustive reading, depending on the predicate that embeds it (cf. Heim 1994, Beck and Rullmann 1999, among others). In a nutshell, different strength amounts to different answers, that is, predicates differ with respect to which answer to the embedded question they make reference to. The embedded questions in (3) receive a strongly exhaustive (SE) interpretation, while those in (4) a weakly exhaustive (WE) interpretation. For Mary to know who brought her gifts, she needs to know for every boy who brought her gifts that he did, and for every boy who didn't bring her gifts, that he didn't. This holds true of all other predicates in (3). On the other hand, for Mary to be surprised by who brought her gifts, she must be surprised by the boys that brought her gifts (that is, someone she didn't expect to bring gifts ended up bringing gifts); she can't be surprised by someone who didn't bring her gifts. This too holds true of all other predicates in (4).

Returning to NPIs, Guerzoni and Sharvit (2007) observe that these indefinites are acceptable in embedded constituent questions only if the question receives a strongly exhaustive interpretation. Since the predicates in (3) embed strongly exhaustive questions, NPIs are acceptable in their scope, while they are not when embedded under the predicates in (4) which embed weakly exhaustive questions. How can we account for the correlation between the strength of the question and the distribution of NPIs? That is, what is it about being interpreted strongly exhaustive that allows NPIs to be licensed in these embedded questions. Guerzoni and Sharvit claim that there is no way to account for this correla-

tion in terms of the familiar property of downward-entailingness; namely, that strongly exhaustive questions are no more DE than weakly exhaustive questions. Based on this observation, they conclude that in order to account for the varying acceptability of NPIs in questions we must appeal to a "multi-layered approach in which both entailment reversal and strength of exhaustivity of the hosting linguistic environment must play a crucial role" (Guerzoni and Sharvit 2007, p. 5).

In the remainder of this paper I argue for a re-evaluation of the semantics of questions from the perspective of NPIs on the basis of the claim that a uniform account of NPIs in both declarative and interrogative contexts is possible.

2. A new semantics for strength

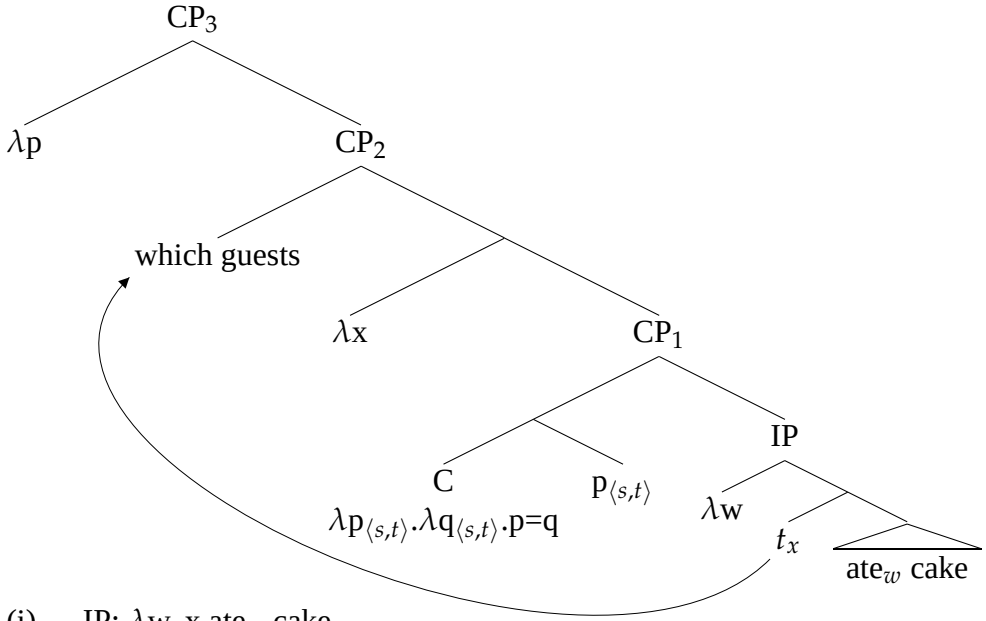
2.1 Exhaustive answers or exhaustive questions?

Standard theories of questions take questions to denote sets of propositions, namely the set of possible answers to the respective question (also known as the Hamblin set). There are two crucial ingredients in deriving this set: (i) *wh*-words are existential quantifiers that furthermore bear a [WH] feature and (ii) the interrogative C head, which takes as a complement the question nucleus, carries a [WH] feature that drives the *wh*-movement of the *wh*-phrase, and furthermore takes us from a proposition, the question nucleus, to a set of propositions (cf. Hamblin 1973, Karttunen 1977). Consider, for example, the underlying representation of the question in (5a).

(5) a. Which guests ate cake?

b. {**Bill ate cake**, Mary ate cake, Bill and Mary ate cake}

c.



(i) IP: λw. x ate$_w$ cake

(ii) CP_1: p = λw. x ate$_w$ cake

(iii) CP_2: $\exists$x[person(x) & p=λw. x ate$_w$ cake]

(iv) CP_3: λp. $\exists$x[person(x) & p=λw. x ate$_w$ cake]

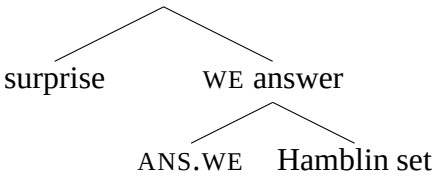
The usual take on questions is that strength is represented by means of two answer-hood operators (cf. Heim (1994)) that combine with the set of possible answers, namely adjoin to CP_3, and derive either the weakly exhaustive answer, (6a), or the strongly exhaustive answer, (6b).

(6) a. ANS.WE(Q)(w_0) = Bill ate cake
= λw. $\forall$p$\in${p: $\exists$x$\in$[[person]]^{w_0} $\wedge$ p = λw. x ate$_w$ cake} $\rightarrow$ [p(w_0)$\rightarrow$p(w)]

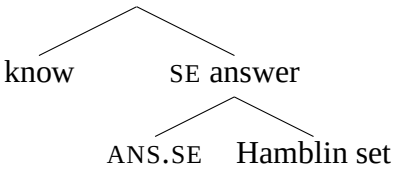
b. ANS.SE(Q)(w_0) = Only Bill ate cake. $\sim$ Bill and nobody else ate cake
= λw. $\forall$p$\in${p: $\exists$x$\in$[[person]]^{w_0} $\wedge$ p = λw. x ate$_w$ cake} $\rightarrow$ [p(w_0)=p(w)]

In this system, the divide between SE and WE-embedding predicates is couched in terms of different predicates subcategorizing for a certain ANS operator, with *surprise* subcategorizing for ANS.WE and *know* for ANS.SE, with the resulting meaning in (8).

(7) a.



b.



(8) a. John was surprised at who ate cake.
$\xrightarrow{\text{WE}}$ John was surprised that Bill ate cake.

b. John knows who ate cake.
$\xrightarrow{\text{SE}}$ John knows that Bill ate cake and that nobody else ate cake.

Note now that replacing *cake* with *any cake* results in unacceptability, for both answers.

(9) a. *Bill ate any cake.

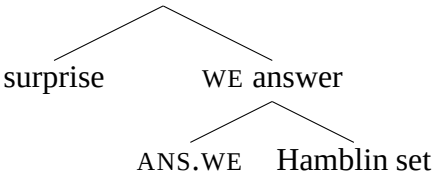
b. *Bill and nobody else ate any cake.

Neither answer creates a DE environment and thus there is no way to account for the correlation between strength and NPI licensing, at least not by appealing to the idea that NPIs are acceptable only in DE environments. Guided by the premise that NPIs are sensitive to the same logical properties in both declaratives and questions, I propose a different way to analyze the weak/strong ambiguity such that we can show that DE-ness is relevant in the licensing of NPIs in strongly exhaustive questions as well. The goal is to switch from two ANS operators to an ambiguity within the question nucleus itself, such that questions, and not answers, are ambiguous between a weakly and a strongly exhaustive construal.

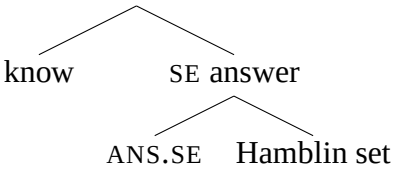
2.2 Displacing the ambiguity from answers to questions

The crux of the proposal is that strength is encoded at the level of the question, not in different answer operators. That is, instead of having two answer-hood operators apply to the same set of propositions, schematically represented as in (10):

(10) a.



b.



We actually have the difference derived internal to the question, giving us two distinct sets of propositions, as in (11) and (12):

(11) The WE answer set, the Hamblin set:
Q_{WE} = {Bill ate cake, Mary the cake, Mary and Bill ate cake}

(12) The SE answer set:
Q_{SE} = {Only Bill ate cake, Only Mary ate cake, Only Mary and Bill ate cake}

The idea is that by encoding the difference within the question nucleus we can now talk about weakly exhaustive questions and strongly exhaustive questions, while before we could only talk about weakly and strongly exhaustive answers.

The role of subcategorization is taken by the semantics in this new framework. Predicates select for either a set of mutually consistent propositions, i.e. Q_{WE}, or a set of mutually inconsistent propositions, i.e. Q_{SE}.

In the following section we will see that we are not losing anything by displacing the ambiguity from the answer-hood operators into the question itself. In fact, I will show that this move allows us to understand why NPIs are acceptable in strongly exhaustive questions and not in weakly exhaustive questions.

2.3 The null *only* hypothesis

In order to derive the different questions, repeated below, I propose we have a null *only* operator optionally adjoin at the level of the question nucleus, that is, at the IP level. The difference between weak and strong exhaustivity would thus boil down to whether or not *only* is present at LF. Weakly exhaustive questions have the same underlying representation as before, (13a), while strongly exhaustive questions have the LF in (13b), giving us the two possible interpretations for the question as in (14).

(13) a. LF-Q_{WE}: [λp [who [λx [C^0 [$_{IP}$ λw [t_x ate$_w$ cake]]]]]]

b. LF-Q_{SE} : [λp [who [λx [C^0 [$_{IP_2}$ *only* [$_{IP_1}$ λw [t_x ate$_w$ cake]]]]]]]

(14) a. Q_{WE} = {Bill ate cake, Mary the cake, Mary and Bill ate cake}

b. Q_{SE} = {Only Bill ate cake, Only Mary ate cake, Only Mary and Bill ate cake}

This null *only* has the same semantics as its overt counterpart (cf. von Fintel 1999), provided in (15), and I assume it associates with the trace of the *wh*-phrase.

(15) $[\![\text{only}]\!](\mathscr{A}lt(p))(p) = \lambda w\text{: } p(w)=1.\ \forall q \in \mathscr{A}lt(p)\ [q(w)=1 \rightarrow p \subseteq q]$

In essence, I take null *only* to be a question-specific exhaustifier; in other words, a dedicated exhaustifier. One could consider an implementation wherein null *only* bears a [WH]-feature. I assume that, among other things, it differs from run of the mill exhaustifiers in that it can, and in fact, must, associate with a trace, setting it apart from what Beaver and Clark (2008) claim to be the case for exclusive particles otherwise. Depending thus on whether the question is interpreted weakly or strongly exhaustive, the question nuclei will have different meanings:

(16) a. $IP_{WE} = \lambda w.\ x\ ate_w\ cake$

b. $IP_{SE} = \lambda w\text{: } x\ ate_w\ cake.\ \forall y \in \mathscr{A}lt(x)\ [(y\ ate_w]) \rightarrow (x\ ate_w) \subseteq (y\ ate_w)]]$

And based on these different questions nuclei we create either a set of WE propositions, (17a), or a set of SE propositions, (17b):[1]

(17) a. Q_{WE} = {*x* ate cake: *x* is a guest}

b. Q_{SE} = {only *x* ate cake: *x* is a guest}

At this point the distribution of NPIs will fall out straightforwardly. NPIs are not acceptable in WE questions because the question nucleus creates an upward entailing environment. NPIs are acceptable in SE questions because the question nucleus creates a (Strawson) downward entailing environment (cf. von Fintel 1999). In its simplest form, the argument is that NPIs are licensed in SE questions for the same reason they are licensed in the declaratives corresponding to the question IP:

(18) Only $John_{[F]}$ ate anything.

Similarly, we can account for their unacceptability in WE questions by noting their unacceptability in (19), the declarative counterpart of (17a).

(19) *John ate anything.

In the remainder of this subsection I will briefly outline the analysis of NPI licensing that I adopt in this paper (cf. Krifka 1995, Chierchia 2013, among others). NPIs are existential quantifiers (over individuals/times) that furthermore activate sub-domain alternatives, (20b).[2] Active alternatives are represented in the grammar by means of a feature on the NPI, call it [D], that needs to enter into an agree relation with an operator, $\mathscr{E}xh_{[D]}$. This op-

[1] Observe that the SE question denotes a set of partial, i.e. presuppositional, propositions. For a detailed account on how to deal with these presuppositions I refer the reader to Nicolae 2013.

[2] An easy way to think about it as follows: existential quantifiers are disjunctions over the members of a domain ($a \vee b \vee c$). The sub-domain alternatives are the individual disjuncts ($a \vee b, a \vee c, b \vee c, a, b, c$).

erator not only checks the feature on the NPI, but also has a semantic contribution, namely that of negating all the non-entailed alternatives, (20c).

(20) a. anything = λP. $\exists$x$\in$D [thing(x) $\wedge$ P(x)]

b. anything$^{\mathscr{A}lt}$ = {λP. $\exists$x$\in$D' [thing(x) $\wedge$ P(x)]: D'$\subseteq$D}

c. $\mathscr{E}xh$ = λp. λw. p(w) $\wedge$ $\forall$q$\in\mathscr{A}lt$(p) [q $\rightarrow$ p$\subseteq$q]

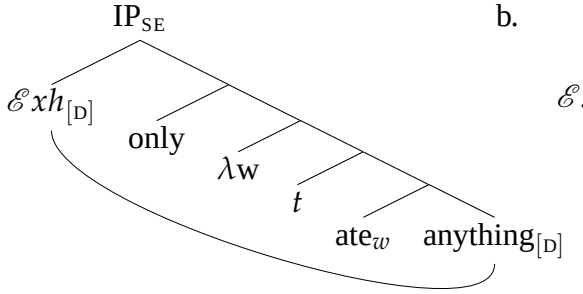
In a nutshell, the idea is that NPIs, by virtue of having active alternatives, need to be exhaustified, and due to the type of alternatives they activate, this exhaustification is felicitous only in DE environments, as schematically represented below.

(21) a. *$\mathscr{E}xh_{[D]}$ [$_{UE}$ ... anything$_{[D]}$ ...] contradictory

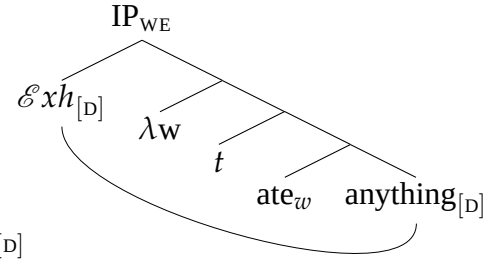
b. $\mathscr{E}xh_{[D]}$ [$_{DE}$ ... anything$_{[D]}$ ...] felicitous

Carrying this over to the current proposal, we have the following possible LFs for the nucleus of a question containing an NPI:

(22) a.



b.



Syntactically they are both good since the feature checking between the NPI and its exhaustifier can take place. Semantically, however, only (22a) is felicitous since (22b) gives rise to a contradiction given that the NPI is exhaustified in an upward-entailing environment, similarly to (21a).

2.4 Summary and prediction

Outlining what we have discussed up to this point, we saw that embedded questions are ambiguous between two possible interpretations: a weakly exhaustive and a strongly exhaustive reading. I proposed to encode this ambiguity at the level of the question nucleus, via an optional null *only*, so as to derive the following two possible sets of propositions:

(23) a. Q_{WE} = {Bill ate cake, Mary ate cake, Mary and Bill ate cake}

b. Q_{SE} = {Only Bill ate cake, Only Mary ate cake, Only Mary and Bill ate cake}

I claimed that this switch, moving the ambiguity into the questions, allows us to maintain a uniform account of NPI licensing, both in declaratives and questions (contra Guerzoni and Sharvit's claim). The idea is that NPIs end up in the scope of *only*, which we know

independently to be a good NPI licensor from their behavior in declaratives. Although we didn't discuss this in the previous subsections, I follow the literature on questions and assume that root/non-embedded questions are always interpreted strongly exhaustive, hence their ability to always license NPIs.

Question-embedding predicates subcategorize for one of these sets. This is a semantic type of subcategorization, rather than subcategorization for a certain type of operator. Predicates like *surprise*, which embed only weakly exhaustive questions, would subcategorize for sets of mutually consistent propositions, i.e. (23a). Predicates like *know*, which embed strongly exhaustive questions, would subcategorize for sets of mutually inconsistent propositions, i.e. (23b).[3]

Lastly, this account makes the following prediction regarding the behavior of NPIs in questions. NPIs can survive in strongly exhaustive questions only if they are otherwise acceptable in the scope of overt *only*. Incidentally, there is a class of NPIs, also referred to as strong NPIs, that cannot survive in the scope of *only* (Gajewski 2011).[4] Among these NPIs we find *in weeks* and *either*, which are acceptable in the scope of negation but not in the scope of overt *only*, as shown below.

(24) a. *Only Bill has visited Mary *in weeks*.

b. *Only Mary likes you *either*.

It turns out that these same NPIs are also ruled out from questions, as shown in (25).

(25) a. *Who has visited Mary in weeks?

b. *I know who likes Joanne either.

This prediction, to my knowledge, is not made by any previous accounts of questions.

Some issues that deserve further elaboration but cannot be discussed within the limits of this paper concern the ways presuppositions projection out of the question nucleus, an issue that arises due to the presence of a null presuppositional element. Other issues that come up and can be accounted for regard Dayal's (1996) uniqueness presupposition, as well as matters related to subcategorization and embedding questions. For detailed accounts of these issues I refer the interested reader to Nicolae 2013.

Before concluding consider the data in (26):

(26) a. Who ate anything at the party yesterday?

[3]There is much debate in the literature as to whether or not *know* also allows weakly exhaustive readings of its embedded questions (cf. Spector 2005, George 2011 among others). I have assumed throughout this paper that *know* selects exclusively for strongly exhaustive readings and thus that it subcategorizes for sets of mutually inconsistent propositions. If, however, Spector and George are correct in their assessment of the data, the present account would only have to be changed minimally by dropping the subcategorization requirement on *know* so as to allow it to freely select for any type of question.

[4]Crucially, this class of NPIs is different from minimizers like *lift a finger* or *a red cent* which are also sometimes referred to as strong NPIs (cf. Guerzoni 2003). In the present framework, I use the label strong NPIs to refer exclusively to those NPIs which are disallowed from the scope of weakly negative operators such as *only* and *few*, which *in weeks* and *either* but not *lift a finger* or *a red cent* belong to.

b. *What did anybody eat at the party?

It's been noted that even in root questions NPIs are not acceptable across the board. Since the difference between (26a) and (26b) cannot be due to the weak/strong exhaustive interpretation as all root questions receive a strongly exhaustive interpretation, the answer must lie somewhere else. Han and Siegel (1997) propose that the difference lies in whether or not the *wh*-phrase c-commands the NPI. In the following section I outline an account of this contrast that falls out straightforwardly from the analysis of strongly exhaustive readings of questions I proposed above.

3. Intervention in questions

Han and Siegel (1997) have shown that NPIs cannot survive in all root questions. They note a contrast depending on the relative position of the *wh*-trace and the NPI, shown below.[5]

(27) a. Who ate anything at the party yesterday? *wh*>NPI

b. *What did anybody eat at the party? NPI>*wh*

c. Who did Jeff introduce to anyone at the party? *wh*>NPI

d. *Who did Jeff introduce anyone to at the party? NPI>*wh*

Based on such data the following generalization emerges: NPIs are acceptable in a question if and only if the question is interpreted strongly exhaustive and furthermore the NPI is c-commanded by the *wh*-trace. The goal is to show how this generalization falls out under the present account. I claim that the contrast in (27) falls out arguably nicely under the present account as it ends up being an interplay between (i) a semantic requirement (the need to exhaustify NPIs in DE environments) and (ii) a syntactic requirement that dependencies not cross. Recall the crucial pieces of the account. Null *only* associates with the *wh*-trace while the NPI associates with a corresponding exhaustifier, with the semantics of this exhaustifier, $\mathscr{E}xh_{[D]}$, requiring it to occur above a DE operator; in this case, above *only*. Consider the following LFs:

(28) Who ate anything?

a. only$_{[F]}$ [$\mathscr{E}xh_{[D]}$ [$t_{[F]}$ ate anything$_{[D]}$]] crossing dependencies

b. $\mathscr{E}xh_{[D]}$ [only$_{[F]}$ [$t_{[F]}$ ate anything$_{[D]}$]] nested dependencies

(29) *What did anyone eat?

a. $\mathscr{E}xh_{[D]}$ [only$_{[F]}$ [anyone$_{[D]}$ ate $t_{[F]}$]] crossing dependencies

[5] I use a star to indicate that the question cannot receive a non-emphatic interpretation. Note also that *anyone* in these cases could be construed as a free-choice element, in which case both (27b) and (27d) could receive generic-like interpretations. The switch from an NPI to a FCI use is governed by the same principles as in declaratives. (c.f. Dayal 1996, Chierchia 2013, a.o.).

b. only$_{[F]}$ [$\mathscr{E}xh_{[D]}$ [anyone$_{[D]}$ ate $t_{[F]}$]] nested dependencies

Since crossing dependencies are ruled out by the grammar, namely (28a) and (29a), we need only consider the LFs in the (b.) examples, repeated below.

(30) a. Who ate anything?
$\mathscr{E}xh_{[D]}$ [only$_{[F]}$ [$t_{[F]}$ ate anything$_{[D]}$]] nested dependencies

b. *What did anybody eat?
only$_{[F]}$ [$\mathscr{E}xh_{[D]}$ [anyone$_{[D]}$ ate $t_{[F]}$]] nested dependencies

Syntactically, both (30a) and (30b) are well-formed given that the dependencies are nested. Semantically, only (30a) is felicitous since in (30b) the NPI ends up being exhaustified in an upward-entailing environment, namely below *only*. In a nutshell, this fails for the same reason an NPI in a positive declarative is ruled out (cf. (21a) versus (21b)).

Putting these observations together, as in (31), we can see straight away why NPIs give rise to unacceptable questions when not c-commanded by the *wh*-trace: of the four possible LFs, only one of them satisfies both the syntactic and semantic constraints discussed above.

(31) a. Who ate anything?
i. only$_{[F]}$ [$\mathscr{E}xh_{[D]}$ [$t_{[F]}$ ate anything$_{[D]}$]]
ii. $\mathscr{E}xh_{[D]}$ [only$_{[F]}$ [$t_{[F]}$ ate anything$_{[D]}$]]

b. What did anyone eat?
i. only$_{[F]}$ [$\mathscr{E}xh_{[D]}$ [anyone$_{[D]}$ ate $t_{[F]}$]]
ii. $\mathscr{E}xh_{[D]}$ [only$_{[F]}$ [anyone$_{[D]}$ ate $t_{[F]}$]]

SYNTAX	SEMANTICS	OVERALL
✗	✗	✗
✓	✓	✓
✓	✗	✗
✗	✓	✗

4. Summary

We began this discussion by showing that the distribution of NPIs in questions poses a problem for both the semantics of questions and the theory of NPIs. NPIs are acceptable in questions despite the fact that questions do not *prima facie* share anything in common with the other environments in which NPIs surface. Specifically, there is no way to argue that questions give rise to downward-entailing inferences, which is what unifies all other NPI environments. Furthermore, Guerzoni and Sharvit (2007) have observed that not all questions allow NPIs in their scope, and noted that there is a correlation between the acceptability of NPIs and the strength of the question. Namely, that only questions that are construed exhaustively support NPIs in their scope. In this paper I argued that through a conceptually minimal switch in the semantics of questions, a move from encoding strength not in answer-hood operators but within the question, we can maintain a unified account

for the distribution of NPIs in both declaratives and interrogatives. The crux of the proposal was to show that shifting the locus of ambiguity from the answer-hood operators (cf. Heim 1994) into the question nucleus allows us to see why questions that are construed exhaustively create (locally) downward entailing environments. The consequences of this proposal are far-reaching, particularly with respect to the distribution of NPIs, which up to this point had been a major problem for all theories.

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