

# NEW TRENDS IN FORMAL SEMANTICS

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## Free choice, simplification, and Innocent Inclusion – *Bar-Lev & Fox (2020)*

Bar-Lev & Fox (2020)'s account of FC argue that FC should be treated as a particular of **scalar** implicature. This view is part of the so-called grammatical view of scalar implicatures, according to view the latter arise from an operation of exhaustification.

Bar-Lev & Fox (2020) improves Fox (2007) original account of FC in several ways. On the hand, it resorts to a **global** derivation of FC which can handle several problematic cases for Fox (2007) account. On the other hand, it acknowledges the **behavioural** literature on the robustness and acquisition of FC, whereas the original account of Fox (2007) did not pay attention to such data.

Some broad-level shortcomings are also quite noticeable. On the hand, while the paper seems to defend a global account of FC, it raises the possible that a **local** derivation is possible after all, without giving tenable explanations of why this is the case. Moreover, it does not discuss the problem of **wide scope free choice** and **deontic vs epistemic** free choice in general, which any serious theory of FC should be able to account for.

### LORENZO'S THESIS IDEAS

- (1) You may take the apple or the pear, but I do not know which.
- (2) You may take the apple or the pear, but I do not care which.

The examples in (1) and (2) are a case of **sluicing**, where the FC inference in the first clause seems to be cancelled by the *but* continuation. The cancellation, however, seems different. While the *know* case seems to have a modal component (I do not know which you *may* eat), the *care* case is by contrast a claim about the actual state of affairs (I do not know which you eat).

Lorenzo's idea to capture the cancellability of FC would be to assume that the *wh*-item *which* triggers a uniqueness presupposition, but at different levels: 'may take x' for know and 'take x' for care.

**Floris** noticed that this account may face some problems with regard to the fact that uniqueness presupposition in interrogatives might not apply globally (as in Dayal), and he referred to a recent work by **Schwarz & Hirsh** (I think their recent SALT 30 talk: <https://saltconf.github.io/salt30/files/Schwarz-handout-final.pdf>) and examples like (3), which cast some doubts on the global uniqueness presupposition of *which*. (Even though IMHO, sentences like (3) seem to trigger two different sets of alternatives with possibly two different uniqueness presuppositions. A similar observation was raised in SALT question time by, if I remember correctly, Kai von Fintel.)

- (3) Which letter is missing in fa\_m or was replaced with a dollar sign in t\$st?

On this, see also pages 7-9 of [https://www.dropbox.com/s/9xrp4d98v9qg88u/handout\\_salt2020.pdf?dl=0](https://www.dropbox.com/s/9xrp4d98v9qg88u/handout_salt2020.pdf?dl=0)

Lorenzo also raised a problem for Bar-Lev & Fox (2020) account, considering sentences like (4):

- (4) May I have coffee or tea (without prosodic marking)?
- (5) Yes, but I do not remember which one.

While the account of Bar-Lev & Fox (2020) do not predict a free choice reading for **questions** like (4) (since in their account *exh* operates at the level of the assertion). However, an answer like (5) seems to suggest that a FC inference is indeed present, even without prosodic marking (i.e. covert only).

Bar-Lev & Fox (2020) do not mention the case of sluicing or wide-scope free choice, but the dissertation of Bar-Lev (2018), according to **Maria**, discusses this. In particular, there is apparently a footnote about this:

59 It may seem that FC and SDA inferences can be cancelled as in (i), which would disprove (107):

- (i) a. We are allowed to have ice cream or cake, but I don't know which.
- b. If you eat ice cream or cake you will feel guilty, I don't know which.

However, (i) can be argued to involve wide scope disjunction. In fact, the conditions on ellipsis (sluicing) require this assumption. And within implicature accounts of FC a wide scope disjunction construal is not expected to give rise to FC to begin with (we attend to the issue of apparent FC readings with wide scope disjunction in §2.3). So we can still maintain that (107) holds: whenever deriving FC or SDA is possible, it is obligatory.

There is also a subsection of the dissertation (pp. 65 -70), where Bar-Lev tries to argue that wide-scope disjunction contains actually a covert *or else* element.

The role of *either* was also discussed (see last section of this document below).

**Milica** suggested that the presupposition Lorenzo wants to account for can be captured by assuming different exhaustification operators (à la Fox 2007 account however) present before each disjunct.

#### LOGICAL FORM OF $\Diamond \forall x(Px \vee Qx)$

What is the correct logical form of sentences like (51)?

(a)  $\Diamond \forall x(Px \vee Qx)$  or (b)  $\Diamond \forall x Px \vee \Diamond \forall x Qx$  ?

(51) John allowed every kid to eat ice cream or cake.

While the account of Bar-Lev & Fox (2020) argues for (a), **Maria** suggested that (b) would be preferable (also because it is then easier for her account of FC if the LF is indeed (b)). As a possible test, **Dean** suggested that one might try to test cases of the form 'Px or not-Px'. In such circumstances, a sentence like (51') would sound trivial and therefore odd, but it seems fine after all.

(51') John allowed every kid to attend live or online.

A similar sentence with *either* was also discussed, in case of possible non-surface scope of *or*:

(53) The teacher is OK with every student either talking to Mary or to Sue. [displaced]

(53') The teacher is OK with every student talking either to Mary or to Sue [undisplaced]

(53'') The teacher is OK with every student either attending live or online.

This sentence led to a discussion concerning the role of *either*.

## THE ROLE OF EITHER

According to Larson when *either* occurs displaced from its associated *or*, then its overt surface syntactic position explicitly 'marks' the scope of disjunction. On the other hand, when it occurs undisplaced and adjacent to its disjunction in surface form, then its potential surface positions delimit the potential scopes for *or*'. See Larson (1985, pp. 219 -225). This means that in the undisplaced case in (53') we only get wide-scope reading, whereas the displaced has potentially two readings (narrow and wide). Larson's original account discusses possibly three cases (de re vs de dicto disjunction + wide-scope reading).

Other sentences with possible elided material of *either*:

- (6) You may eat **either** the apple or the pear.
- (7) You may **either** eat the apple or the pear.  
You may either [eat the apple or ~~eat~~ the pear]
- (8) You **either** may eat the apple or the pear.  
You either may [eat the apple or ~~may eat~~ the pear]
- (9) **Either** you may eat the apple or the pear.  
Either you may [eat the apple or ~~you may eat~~ the pear]

The syntactic literature about the role of *either* and its focus sensitivity seems to be quite substantial, and it might be particularly relevant for semantic theories which look at possible relationships between semantics and deep syntactic structures (e.g. Cable 2007). A recent (syntactic) paper on this: <https://ling.auf.net/lingbuzz/004430>

Consider the Italian correlative *o ... o*:

- (10) Tu puoi mangiare o la mela o la pera.
- (11) ? Tu puoi o mangiare la mela o la pera.  
Tu puoi o mangiare la mela o mangiare la pera.
- (12) ? O puoi mangiare la mela o la pera.  
O puoi mangiare la mela o puoi mangiare la pera.

The contrast in Italian seems to be even stronger, but different from the English case. Since a correlative construction *o ... o* presumably blocks the ability of disjunction of taking non-surface scope, as the oddity of examples in (10) and (11) suggests.

- (13) Tu puoi mangiare la mela o la pera, ma non ricordo quale.
- (14) (?) Tu puoi mangiare o la mela o la pera, ma non ricordo quale.

This might indicate that while dislocated *either* in English admits only a wide-scope reading, *o ... o* allows only for narrow-scope interpretations. Example (14) needs however further inspection. Since the *o ... o* requires narrow-scope free choice, we would indeed expect (14) to be odd. But other speakers might have different judgments.