

Pre-DP *only* is a propositional operator at LF: a new argument from ellipsis*

Itai Bassi
ZAS Berlin

Aron Hirsch
ZAS Berlin

Tue Trinh
ZAS Berlin

Abstract The syntax and semantics of *only* is controversial, in particular in cases where *only* appears off the clausal spine, such as when *only* precedes an object DP. In one view, *only* composes with the DP to form a quantifier. In another view, pre-DP *only* is locally vacuous, and signals the presence in the LF of a covert propositional operator. Based on the scope possibilities of pre-DP *only* relative to modals and their interaction with ellipsis, we provide a new argument (following Benbaji 2022) for a theory according to which the meaning associated with *only* does always come from a propositional operator at LF, despite surface appearances.

Keywords: *only*, modals, ellipsis, scope, focus, concord, quantification

1 Introduction

Only is traditionally taken to encode a propositional operator, as illustrated by the lexical entry in (1). *Only* composes with a preadjacent proposition, p , presupposes that p is true, and quantifies over alternative propositions in its assertive component. This operator associates with focus, and we take the alternative set to be represented by a parameter, C .

(1) *Propositional only*:

$$\llbracket \text{only} \rrbracket^C = \lambda p_{\langle s, t \rangle} . \lambda w : p(w) = 1 . \forall p' \in C [p'(w) = 1 \rightarrow p \subseteq p']$$

Yet, *only* can appear at a range of positions in the linear string, including at a site preceding the pre-vP, as in (2a), and at a site preceding the object DP, as in (2b). This broad surface distribution poses a well known challenge for how to reconcile the syntax and semantics of *only*.

* We are grateful to Ido Benbaji for useful comments and for sharing his work with us. We also thank the audiences at WCCFL 40 and SALT 32, as well as anonymous reviewers for these conferences. Bassi and, in part, Hirsch are supported by the European Research Council (ERC) Synergy Grant No. 856421 (LeibnizDream), and Trinh is supported by the ERC Advanced Grant No. 787929 (Speech Acts in Grammar and Discourse).

Pre-DP *only* is a propositional operator

- (2) a. Jill **only** brought wine. (pre-vP)
 b. Jill brought **only** wine. (pre-DP)

A meaning for *only* as a propositional operator does fit with data like (2a), assuming that the *vP* denotes a proposition, as in (3a). However, the pre-DP appearance of *only* in (2b) raises a question for the theory of the syntax-semantics mapping. Given the meaning in (1), *only* cannot compose in (3b), the transparent structure for (2b). *Only* adjoins to the DP, which denotes a quantifier (or an individual), not a proposition. In response, the literature has put forward two approaches to the analysis of pre-DP *only*. One revises the semantics of *only*, while the other revises its syntax.

- (3) a. $[_{TP} \text{ Jill}_1 [_{vP} [\text{only} [_{vP} t_1 \text{ brought wine}_{Foc}]]]$
 b. $[_{TP} \text{ Jill}_1 [_{vP} t_1 \text{ brought } [\text{only wine}_{Foc}]]]$

The first approach assumes that there is flexibility in *only*'s semantic type. In one analysis, *only* can type-shift from its basic denotation as a propositional operator to one that allows it to compose directly with a DP meaning, as in (4) (Rooth 1985). $[\text{only DP}]$ then forms a single quantifier at the level of Logical Form (LF) (see also e.g. Wagner 2006). The surface syntax for (2b) is (3b), and the LF is (5), where *only* composes with *wine* (understood as 'some wine').¹ We call this the **Q(uantifier)-Approach**.

- (4) *Q-approach – Quantifier only*:
 $[[\text{only}_Q]]^C = \lambda Q_{\langle est, st \rangle} \cdot \lambda f_{\langle e, st \rangle} \cdot [[\text{only}]]^C(Q(f))$

- (5) *LF of (2b) in the Q-approach*:
 $[_{TP} \text{ Jill}_1 [_{vP} [\text{only wine}_{Foc}]_2 [_{vP} t_1 \text{ brought } t_2]]]$

Recent work, however, has pursued a different line of analysis which maintains a rigid meaning as a propositional operator. In the **P(roposition)-Approach**, pre-DP *only* is not itself interpreted, but realizes a semantically inert functional head, whose morphology reflects concord with a covert propositional operator. In Quek & Hirsch 2017 and Hirsch 2017, for instance, (2b) is assigned the LF in (6). The hidden operator, represented as ONLY, has just the basic denotation in (1).²

¹ For concreteness, we adopt the Quantifier Raising (QR) theory of the syntax-semantics of quantification (Heim & Kratzer 1998). The conclusions in this paper, however, are independent of the QR assumption. The argument stays the same also on *in situ* theories of Generalized Quantifier integration (e.g. Jacobson 1999).

² The details of the concord operation are not represented in (6); we return to them in the section 6.2.1 (see also the authors cited below for different implementations). For now, we take (6) as the syntactic structure on the P-approach.

- (6) *LF of (2b) in the P-approach:*
 [TP Jill₁ [**ONLY** [_{VP} t₁ brought **wine**_{Foc}]]]

Various considerations have been previously put forth to support aspects of the P-approach, and we will not review them here; see the works of Bayer (1996, 1999, 2018, 2020), Kayne (1998), Lee (2004), Horvath (2007), Cable (2010), Barbiers (2014), Hole (2015, 2017), Hirsch & Wagner (2019), Sun (2020, 2021), Hirsch (2022), Branen & Erlewine (2022), among others.

The aim in this paper is to provide a new argument for the P-approach. The argument is essentially an elaborate version of a point made recently in Benbaji 2022, using data from Hebrew. Benbaji's primary concern was with the syntax of ellipsis in Hebrew question-answer pairs. Our modest goal will be to extend Benbaji's observations to English, and to turn them into an explicit argument in opposition to the Q-approach. We will also explore possible extensions of the argumentation to other data, including to concord phenomena involving a different operator (negation).

The discussion will proceed as follows. Sections 2-3 present the relevant facts and generalizations. Section 4 spells out the argument against the Q-approach in light of these generalizations. Finally, Sections 5-6 consider extensions to further data with and beyond *only*.

2 Data: *only*, modals, and ellipsis

Pre-DP *only* is known to scopally interact with modals. As observed by Taglicht (1984), the sentence in (7) allows either of the readings in (7a) or (7b). The crucial puzzle comes when a continuation with ellipsis is added. In (8), VP ellipsis results in a curious scope disambiguation effect, where just the surface scope reading is available.³

- (7) Jill **may** bring **only** wine. (may > *only*, *only* > may)
 a. **may** > **only**: Jill is allowed to not bring anything other than wine
 b. **only** > **may**: Jill is not allowed to bring anything other than wine

- (8) Jill may bring only wine. Bill may Δ , too. (may > *only*, ***only** > **may**)

This disambiguation is a consequence specifically of ellipsis. If the VP is overtly repeated, and merely gets deaccented, the ambiguity remains. Like (7) in isolation, (9) is compatible with both scope readings.

- (9) Jill may bring only wine. Bill may bring only wine, too.

³ (8) may also allow for ellipsis of just *bring wine*, with *only* absent from the ellipsis clause. This possibility, however, is irrelevant for the following.

Pre-DP *only* is a propositional operator

The effect is not confined to modal auxiliaries, but replicates with modal verbs, as shown with *allow* in (10), and with *have to* in (11). Modal verbs differ from modal auxiliaries in their syntax.

- (10) Jill is allowed to bring only wine. Bill is allowed to Δ , as well.
(*allowed* > *only*, **only* > *allowed*)
- (11) Jill has to bring only wine. Bill has to Δ , as well.
(*have* > *only*, **only* > *have*)

Why does ellipsis impact scope? As we will see over the following sections, the effect follows from independently established constraints under the P-approach, but not the Q-approach.

3 An independent constraint

Following Benbaji (2022), we will suggest to tie the puzzle with pre-DP *only* to another interaction between *only* and ellipsis, one observable in baseline data with pre-vP *only*. In particular, Beaver & Clark (2008) (henceforth B&C) show that pre-vP *only* cannot associate with focus into ellipsis sites. The generalization is motivated by data like those in (12).

- (12) A: I **only** know he brought **WHITE** wine. What about you?
- a. B: I **only** know he brought **WHITE_{Foc}** wine, too.
 - b. * B: I **only** know he did bring **WHITE_{Foc}** wine, too.
 - c. B: I do ~~only know he brought~~ **WHITE** wine, too.
 - d. B: I know he did ~~bring white~~ wine, too.

In (12a), *only* attaches in the matrix clause, and associates with (second-occurrence) focus on *white*, which is in the embedded clause. In (12b), the embedded VP is elided, and the result is ungrammatical. (12c) shows that there is no problem with eliding a higher constituent which also includes *only*. (12d) shows that eliding the embedded VP is grammatical if *only* and focus association are removed. The generalization that emerges from (12) can be stated as in (13). In the unacceptable case, (12b), *only* is outside the ellipsis site, while its associate is inside, violating the constraint.

- (13) **Beaver & Clark's Constraint:** *only* and its associated *Foc* cannot be separated by a node targeted for ellipsis. (cf. B&C, pp.177)⁴

We will not offer any deep explanation for B&C’s constraint. Instead, we will assume it, and trust that it could follow from more general principles (see Section 6 for a possible direction). In the next section, we show, building on [Benbaji 2022](#), that the scope restriction with pre-DP *only* is predicted from B&C’s constraint — only on the P-approach.

4 The argument

With B&C’s constraint in hand, we turn back to pre-DP *only*. The core data are repeated in (14), where a continuation with VP ellipsis disambiguates to a surface scope reading, with *only* scoping over the modal. We illustrate the argument with an example involving the auxiliary *may*, but the reasoning generalizes to the modal verb data in (10)-(11) in kind.

- (14) Jill may bring only wine. Bill may \triangle , too. (*may* > *only*, **only* > *may*)

4.1 P-analysis

Under the P-approach, the effect of ellipsis on scope is expected based on B&C’s constraint. But, how? Being a propositional operator, the covert ONLY attaches to the ν P or higher nodes. The basic ambiguity observed without ellipsis can then be generated by adjoining ONLY at different scope positions in the syntax. LFs for the two scope readings are provided below. ONLY adjoins to the ν P in (15), and to the T’ above the modal in (16).

- (15) *LF 1: may* > *only*:
 $[_{TP} \text{ Jill}_1 [_{T'} \text{ may } [_{\nu P} \text{ ONLY } [_{\nu P} t_1 \text{ bring wine}_{Foc}]]]]$
- (16) *LF 2: only* > *may*:
 $[_{TP} \text{ Jill}_1 [_{T'} \text{ ONLY } [_{T'} \text{ may } [_{\nu P} t_1 \text{ bring wine}_{Foc}]]]]$

Importantly, we take B&C’s constraint in (13) to now be a constraint on the relationship between *Foc* and the covert ONLY operator. The updated constraint is formulated in (17).

⁴ B&C’s constraint could in principle be illustrated using simpler structures, as in (i) from [Stockwell \(2020:237\)](#). We use the bi-clausal configuration in (12) instead so as to neutralize a possible objection, namely that (1a) could be unacceptable because it is not very natural for *only* to surface immediately higher than an auxiliary even without ellipsis.

- (i) a. John only eats CHEESE. *BILL **only** does eat ~~CHEESE~~_{Foc}, too.
 b. John only eats CHEESE. BILL does **only** eat ~~CHEESE~~_{Foc}, too.

Pre-DP *only* is a propositional operator

- (17) **Beaver & Clark's Constraint**, *P-approach version*: ONLY and its associated *Foc* cannot be separated by a node targeted for ellipsis.

The disambiguation effect of ellipsis, repeated in (18), then follows from the constraint, as illustrated below. VP-ellipsis targets a node beneath T, shown in the structures below as the complement of T. In (19), both ONLY and its associate are inside the ellipsis site. On the other hand, with ONLY adjoined higher in (20), just the associate is inside the ellipsis. B&C's constraint is respected in (19), but violated in (20).⁵

- (18) Jill may bring only wine. Bill may \triangle , too. (*may* > *only*, ***only** > *may*)

- (19) *High ONLY + ellipsis (respects 17):*
 $[_{TP} \text{Bill}_1 [_{T'} \text{may} [_{VP} \text{ONLY} [_{VP} t_1 \text{bring wine}_{Foc}]]]]$

- (20) *Low ONLY + ellipsis (violates 17):*
 $* [_{TP} \text{Bill}_1 [_{T'} \text{ONLY} [_{T'} \text{may} [_{VP} t_1 \text{bring wine}_{Foc}]]]]$

In more general terms, the constraint in (17) prevents ONLY from attaching higher than the constituent targeted for ellipsis. As a result, if the elided constituent is beneath the modal, ONLY is restricted to attach within that constituent, and obligatorily takes narrow scope.

4.2 Q-analysis over-generates

On the Q-approach, it is unclear why the availability of the inverse scope reading would be impacted by ellipsis. In this approach, recall, pre-DP *only* is itself interpreted, and directly composes with the DP containing its focus associate to form a complex quantifier (see 5). That analysis thus entails that the interpreted *only* cannot be separated from the focus in the derivation. The LFs for the two scope readings are given in (21) and (22). In (21), the [*only* DP] quantifier QRs to a scope position beneath the modal, and in (22), QR targets a position above the modal instead.

- (21) *LF 1: may* > *only*:
 $[_{TP} \text{Bill}_1 [_{T'} \text{may} [_{VP} [\text{only wine}_{Foc}]_2 [_{VP} t_1 \text{bring } t_2]]]]$

- (22) *LF 2: only* > *may*:
 $[_{TP} \text{Bill}_1 [_{T'} [\text{only wine}_{Foc}]_2 [_{T'} \text{may} [_{VP} t_1 \text{bring } t_2]]]]$

⁵ In (19)-(20) and throughout the paper we assume that modals like *may* are base-generated in node T, and that VP-ellipsis targets the complement of T. As far as we can see, other assumptions about the syntax of modals and VP-ellipsis will not make a difference.

Ellipsis is added in (23) and (24), again targeting the complement of T. Because overt *only* itself is the operator, the formulation of B&C's constraint is the original one in (13). In (23), *only* and the DP are both within the constituent targeted for ellipsis at LF, and in (24), they are both outside that constituent. In both cases, then, B&C's constraint is respected.⁶

(23) *High QR + ellipsis:*

[_{TP} Bill₁ [_{T'} may [_{vP} {~~only wine~~_{Foc}]₂ [_{vP} ~~*t*₁ bring *t*₂~~]]]]

(24) *Low QR + ellipsis:*

[_{TP} Bill₁ [_{T'} [~~only wine~~_{Foc}]₂ [_{T'} may [_{vP} ~~*t*₁ bring *t*₂~~]]]]

In order to block the inverse scope reading, some *other* constraint would have to prevent the [*only DP*] quantifier from undergoing QR out of the ellipsis site. Crucially, however, there is no general ban on a quantifier taking wide-scope under ellipsis (see e.g. Sag 1976, Fox 2000). The data in (25) and (26) illustrate with baseline quantifiers. In (25), the object quantifier is elided, but can still freely QR out of the ellipsis site to take scope above the modal. The example in (26) shows that an elided object quantifier can also QR to take wide scope over a pronounced subject quantifier.

(25) a. The duke **may** marry **most** commoners.

b. The prince may Δ, too.

(✓ *most* > *may*)

(26) a. A boy is standing on **every** building.

b. A girl is Δ, too.

(✓ *every* > *a*)

As far as we can see, the Q-approach would *over-generate* inverse scope, unless a specific stipulation prohibits high QR of an [*only DP*] quantifier in ellipsis contexts. While we cannot rule out such a stipulation, that would not seem to follow from a general constraint. Hence, we conclude that the scope freezing effect is most directly captured in the P-approach, where it follows as another consequence of B&C's constraint.

5 Scope of *only* correlated with the size of ellipsis

In this section, we aim to substantiate a further prediction of the P-analysis for scope in ellipsis contexts. To re-iterate, B&C's constraint, as rendered in the P-approach,

⁶ For exposition, we assume that B&C's constraint is sensitive to the LF configuration, but this is not crucial. Suppose that the constraint applied in the narrow syntax or at PF. At those points in the derivation, on the Q-approach, the quantifier [*only wine*] is in situ, and so *only* and *wine* are together within the elided constituent, again satisfying B&C's constraint.

Pre-DP *only* is a propositional operator

prohibits the ONLY operator from attaching outside the ellipsis site at the same time that its associate is elided. A prediction arises: the possible attachment sites for ONLY should interact with the *size* of the ellipsis, as shown schematically in (27).

(27) *Predicted interaction between ellipsis size and scope:*

- a. [... ONLY ... M ... [_E ... *only* DP ...]] (✗ ONLY > M)
- b. [... [_E ONLY ... M ... *only* DP ...]] (✓ ONLY > M)

In the preceding section, we considered the configuration in (27a), where VP-ellipsis takes place in the complement of a modal, M. In order for B&C's constraint to be respected, ONLY must attach beneath M, and so pre-DP *only* is perceived to take narrow scope. Suppose, however, that ellipsis instead targets a higher node, which includes the modal. In that case, ONLY can attach above M and still be present within the ellipsis site, as shown in (27b). Because (27b) respects B&C's constraint, *only* should be able to take perceived wide scope with *high* ellipsis.

Benbaji (2022) shows that the prediction is borne out in Hebrew data similar to the English case in (28b). (28a) is repeated for comparison. While (28a) involves VP-ellipsis beneath the modal, (28b) involves stripping above the modal. (28b) contrasts with (28a) in the possible scope of *only*. If Jill and Bill necessarily bring nothing other than wine, (28b) is felicitous, indicating that it does allow a reading where *only* takes wide scope over *may*. The reading derives as in (29), bearing out (27b).

(28) Jill may bring only wine.

- a. Bill may Δ , too. (*may* > *only*, **only* > *may*)
- b. Bill Δ , too. (*may* > *only*, *only* > *may*)

(29) *High ONLY + stripping:*

[_{TP} Bill_I [_T ONLY [_T may [_{VP} *t*_I bring wine_{Foc}]]]]

We observe that the predicted effect of ellipsis size on scope can also be detected in *bi-clausal* configurations. In the baseline example in (30), the scope of *only* relative to *have* is ambiguous. Both of the readings in (30a) and (30b) are attested. As a result of the bi-clausal configuration, there are two VPs, each of which could be targeted for VP-ellipsis.

(30) Jill has to bring only wine.

- a. It has to be that Jill brings nothing else. (*have* > *only*)
- b. Jill does not have to bring anything else. (*only* > *have*)

In (31a), the embedded VP is targeted for ellipsis, beneath the intensional predicate. In (31b), the matrix VP is elided, so the intensional predicate is deleted. In (31a), *only* takes fixed narrow scope, but the ambiguity observed in (30) without ellipsis is preserved in (31b).

(31) Jill has to bring only wine.

a. Bill has to Δ , as well. (*have* > *only*, **only* > *have*)

b. Bill does Δ , as well. (*have* > *only*, *only* > *have*)

The contrast in the availability of wide scope for *only* is again predicted by B&C's constraint in the P-analysis. To derive the reading, ONLY would have to attach at a site above *have*, such as to the matrix *vP*. With low ellipsis in (31a), ONLY would therefore be left outside the ellipsis site while the focus is elided, as in (32), violating B&C's constraint. By contrast, (31b) allows for the derivation in (33), which respects the constraint. With the larger ellipsis in (31b), ONLY can be elided together with the focus.

(32) *High ONLY + embedded VP-ellipsis (violates constraint):*

* [TP Bill₁ [_{vP} ONLY [_{vP} have to [_{vP} ~~*t*₁ bring wine_{FOC}~~]]]]]

(33) *High ONLY + matrix VP-ellipsis (respects constraint):*

[TP Bill₁ [_{vP} ONLY [_{vP} have to [_{vP} ~~*t*₁ bring wine_{FOC}~~]]]]]

We can further bring out the intuition by considering an example where pragmatic considerations bias wide scope of *only*. Consider the set up in (34) (after Hirsch 2017). On the natural reading of (34), paraphrased below, *only* takes scope above *have*. If *only* took narrow scope, (34) would convey that the tenure requirement is that Anna publish exactly two papers. This would carry the odd entailment that she cannot publish three or more papers. With *only* taking wide scope, the reading still allows that she could publish more than two papers, if she wishes.⁷

(34) To get tenure, Anna **has to** write **only** [_{DP} **two** papers].

\rightsquigarrow Anna does not have to write more than two papers (*only* > *have* > *two*)

In (35), different continuations with VP-ellipsis are introduced. We note that the natural reading is lost when ellipsis targets the embedded VP in (35a), but is retained when ellipsis targets the matrix VP in (35b).

⁷ The reading is not just an inverse scope reading, but a *split* scope reading. While *only* takes wide scope above *have*, the DP following *only* (*two papers*) is interpreted de dicto, with narrow scope under *have*. Hirsch (2017) builds an independent argument for the P-approach based on the scope split between *only* and the DP.

Pre-DP *only* is a propositional operator

- (35) Anna has to write only two papers.
 a. # Ben has to \triangle , also. (#They're both so lucky!)
 b. Ben does \triangle , also. (They're both so lucky!)

The contrast in felicity makes clear that the availability of wide scope for *only* differs between high and low ellipsis configurations, as predicted. The derivation for the target reading in the P-analysis is shown with embedded VP-ellipsis in (36a) and matrix VP-ellipsis in (36b). Just like in (32) and (33), B&C's constraint is respected only with high ellipsis.

- (36) *High ONLY + embedded vs. matrix VP-ellipsis:*
 a. * [TP Ben₁ [_{VP} ONLY [_{VP} have to [_{VP} ~~t₁ write two~~_{Foc} papers]]]]
 b. [TP Ben₁ [_{VP} ONLY [_{VP} have to [_{VP} ~~t₁ write two~~_{Foc} papers]]]]

Overall, in combination with B&C's constraint, the P-analysis makes fine-grained predictions about when ONLY is confined to take narrow scope in ellipsis contexts, and when wide scope is possible. Whether the wide scope parse is possible depends on the size of the constituent targeted for ellipsis, precisely as the constraint predicts.

6 Conclusion and possible extension: beyond *only*

6.1 Summary

To summarize, in the preceding sections we have compared two approaches to the syntax and semantics of pre-DP *only* based on their ability to directly predict observed restrictions on the scope of *only* in ellipsis contexts. The competing approaches are recapitulated below.

- **Quantifier-approach:** assumes flexibility in *only*'s semantic type, so that *only*+DP compose to form a generalized quantifier.
- **Propositional-approach:** posits a uniform propositional operator; pre-DP *only* is not itself interpreted but reflects the presence of a covert propositional operator (ONLY).

We provided an argument, based on Benbaji 2022, against the Q-approach and for LFs such as (37), in accord with the P-approach.

- (37) *LF in the P-approach:*
 [TP Jill₁ [**ONLY** [_{VP} t₁ brought **wine**_{Foc}]]]

When ellipsis occurs within the complement of an intensional predicate, pre-DP *only* is confined to take narrow scope beneath that predicate. We showed that the Q-approach *over-generates* the unattested reading, since quantifiers can in general take wide scope out of ellipsis domains. On the other hand, the P-approach predicted the restriction, given a constraint on the relationship between ONLY and its associate, motivated independently in baseline data with pre-*vP only*. Moreover, we saw that the P-approach correctly predicts that ONLY can take wide scope when ellipsis targets a higher node above the modal. The size effect was supported in both mono-clausal data with stripping, and in bi-clausal data.

6.2 Beyond *only*

We end the paper with a discussion on whether the results for *only* might fit with patterns characteristic of concord phenomena more generally. The discussion will be based on a similarity in the scope behavior of *only* and negative indefinites in ellipsis contexts. The conclusions of this section are tentative, and aim to establish a direction for future research.

6.2.1 *Only* in a system of concord

The P-approach takes pre-DP *only* to be an instance of concord with a covert ONLY operator. To this point, we have ignored some of the details: what is the mechanism by which the abstract propositional ONLY operator comes to be associated with an overt morphological reflex at a pre-DP position? For concreteness, we will present the derivation for *only* concord in [Quek & Hirsch 2017](#) and [Hirsch 2017](#). Consider the basic examples with pre-*vP* and pre-DP *only* in (38a) and (38b).

- (38) a. Jill **only** brought white_{Foc} wine.
 b. Jill brought **only** white_{Foc} wine.

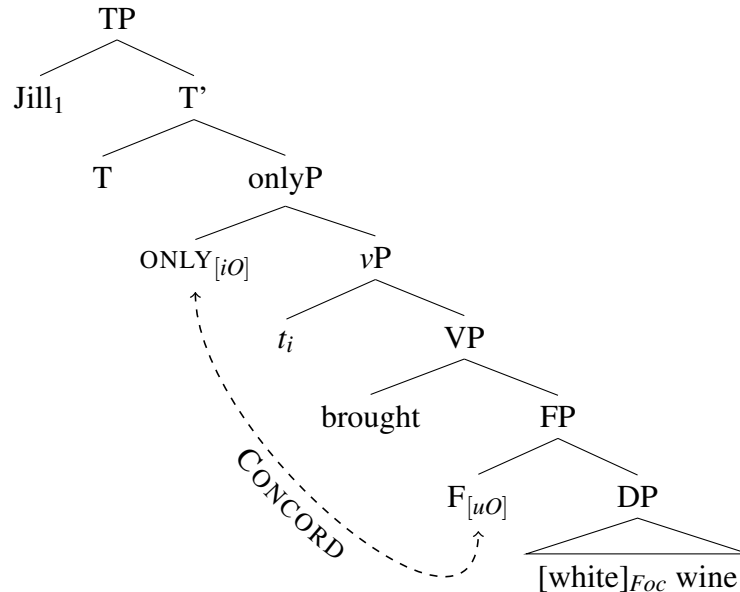
Despite differing in surface phonology, both examples are proposed to share the same underlying structure, as in (39). *Only* is built from *two* syntactic heads. The higher head is the propositional operator, ONLY. The lower head, F, is a semantically inert functional element. F occurs more local to the focused constituent, and is characterized as a focus marker.⁸ The two heads come specified for an operator-specific feature. F bears [*uO*], and Agrees with [*iO*] on ONLY. With respect to pronunciation, overt *only* can optionally realize the [*O*] feature at either site, as per the PF rule in (40). Pre-*vP only* is thus an exponent of ONLY, whereas pre-DP *only*

⁸ [Hirsch \(2017, 2019\)](#) argues that the relation between F and the focused constituent is subject to locality constraints. We will not elaborate on this here.

Pre-DP *only* is a propositional operator

is an exponent of F instead. In this way, overt *only* can appear at the DP-level, as a concord morpheme reflecting agreement between ONLY and F.

(39) *The anatomy of ‘only’ (detailed):*



(40) PF rule (English): Realize ONLY at PF with *only* in exactly one of the linked positions: {ONLY_[iO], F_[uO]}.

The concord derivation may open up a different way to think about B&C’s constraint. Suppose that instead of regulating the relation between ONLY and the focus associate itself (Foc), the constraint in fact regulates the relation between ONLY and the functional head, F. That is, the constraint might restrict the dependency between the operator and the concord item. If so, parallel restrictions might be expected with other concord phenomena. Negative indefinites present a potential further case.

6.2.2 Negative indefinites

Penka (2011) (and other literature) has proposed that negative indefinites reflect concord with a silent sentential negation. On that theory, the sentence in (41a) is analyzed as in (41b). NEG is a semantically contentful covert operator, while the quantifier encodes a regular existential. The quantifier bears a [uNEG] feature, and Agrees with [iNEG] on the covert negation. The negative morphology on *no* thus reflects concord with NEG.

- (41) a. Mary read **no book**.
 b. $[_{TP} \text{ Mary}_1 [_{NEG}_{[i_{NEG}]} [_{vP} t_1 \text{ read } \exists_{[u_{NEG}]} \text{ book}]]]$

One argument for this view comes from split scope readings in which the negation takes scope at a different height than the existential quantifier. Split scope was observed for German in, for instance, [Bech 1955](#) and [Jacobs \(1980, 1991\)](#). The English data point in (42) is due to [Potts \(2000\)](#). On its natural reading, negation takes scope above the modal, while the existential takes scope below. The concord approach allows for the LF in (43), where NEG attaches in the matrix clause, while the existential QRs within the embedded clause, capturing the attested split scope effect.

- (42) The company need fire no employees. $(\neg > \text{need} > \exists)$
 ‘The company doesn’t need to fire any employee.’

- (43) $[_{TP} \text{ the } co_1 [_{NEG}_{[i_{NEG}]} [_{need} [_{vP} \exists_{[u_{NEG}]} \text{ employees } [_{vP} t_1 \text{ fire } t_2]]]]]$

Strikingly, negative indefinites pattern in a similar way to *only* in ellipsis contexts ([Van Craenenbroeck & Temmerman 2017](#)).⁹ In the baseline case in (44), the negation can optionally take scope above the modal, and that reading is the salient one in this example.

- (44) Quentin Tarantino can offer no help. $(\neg > \text{can})$
 ‘It is not possible for Tarantino to offer help.’

With ellipsis, the scope possibilities for negation interact with the size of the ellipsis. Van Craenenbroeck & Temmerman establish the intuition with the contrast in (45). The natural reading, with negation scoping wide, is unavailable in (45a), where the complement of the modal is elided, but is available in (45b), with a larger ellipsis including the modal.

- (45) A- Who can offer no help?
 a. # B- Quentin Tarantino can! $(\ast \neg > \text{can})$
 b. B’- Quentin Tarantino! $(\checkmark \neg > \text{can})$

From the perspective of the concord analysis, the contrast in (45) can be taken to motivate a direct counterpart of B&C’s constraint. As stated in (46), the underlying NEG morpheme cannot be separated by ellipsis from its concord item, the existential realized as *no*.

⁹ We are grateful to Ido Benbaji (p.c.) for drawing our attention to [Van Craenenbroeck & Temmerman \(2017\)](#)’s paper.

Pre-DP *only* is a propositional operator

(46) **Constraint on negative indefinites:**

NEG_[iNEG] and a concord item ($\exists_{[uNEG]}$) cannot be separated by a node targeted for ellipsis.

A high scoping NEG would be separated from the existential by ellipsis in (45a), with low ellipsis, but not in (45b), with high ellipsis. The derivations in (47) and (48) illustrate how the contrast follows from (46).

(47) *High NEG + low ellipsis (violates 46):*

* [TP Mary₁ [NEG_[iNEG] can [VP ~~t_I offer~~ $\exists_{[uNEG]}$ help]]]

(48) *Low NEG + low ellipsis (respects 46):*

[TP Mary₁ [NEG_[iNEG] can [VP ~~t_I offer~~ $\exists_{[uNEG]}$ help]]]

So, pre-DP *only* and negative indefinites in English may be unified as concord phenomena, and both obey a parallel constraint in ellipsis data. In principle, then, it is possible to subsume the constraint on ONLY in (17) and the constraint on NEG in (46) under a more general principle such as (49). (49) prohibits *any* operator from being separated from a concord item by ellipsis, regardless of the operator and concord item. As formulated, the constraint restricts the mechanism that establishes concord.

(49) **A general constraint?**

OP_[iOP] and X_[uOP] cannot be separated by ellipsis.

If this is on the right track, an immediate question that arises is to what extent (49) is viable with concord phenomena cross-linguistically. We leave a detailed investigation for future research.¹⁰

¹⁰ One obvious prediction of (49) is that languages *overtly* exhibiting negative concord, like Italian, Polish, Spanish and Hebrew, will not allow ellipsis to intervene between the (overt) negation marker and (an elided) negative indefinite. At least in the latter two languages, this prediction does not seem to be borne out. A Hebrew example is in (i).

(i) Ani raiti miSehu, ve-ata lo raita ~~af~~ exad
I saw someone, and-you not saw ~~N~~ one
'I saw someone, and you didn't see anyone' (Hebrew)

It seems relevant that, as opposed to in English, the negative marker which licenses object neg-DPs is overt in transparent negative concord languages. However, at present we are unsure what to make of this fact, and we hope to resolve it on a later occasion.

References

- Barbiers, Sjef. 2014. Syntactic doubling and deletion as a source of variation. In M. Carme Picallo (ed.), *Linguistic Variation in the Minimalist Framework*, 197–223. Oxford: OUP.
- Bayer, Josef. 1996. *Directionality and logical form: on the scope of focusing particles and wh-in-situ*. Dordrecht: Kluwer. doi:<https://doi.org/10.1007/978-94-017-1272-9>.
- Bayer, Josef. 1999. Bound focus in German or how can association with focus be achieved without going semantically astray? In G. Rebuschi & L. Tuller (eds.), *The Grammar of Focus*, 55–82. Amsterdam: John Benjamins. doi:<https://doi.org/10.1075/la.24>.
- Bayer, Josef. 2018. Criterial freezing in the syntax of particles. In J. Hartmann, M. Jäger, A. Kehl, A. Konietzko & S. Winkler (eds.), *Freezing: Theoretical Approaches and Empirical Domains*, 225–263. Berlin: de Gruyter. doi:<https://doi.org/10.1515/9781501504266-007>.
- Bayer, Josef. 2020. Why doubling discourse particles. In J. Hartmann, M. Jäger, A. Kehl, A. Konietzko & S. Winkler (eds.), *Linguistic Variation: Structure and Interpretation: Contributions In Honor of M. Rita Manzini*, 47–72. Berlin: de Gruyter. doi:<https://doi.org/10.1515/9781501505201-005>.
- Beaver, David Ian & Brady Clark. 2008. *Sense and Sensitivity: How Focus Determines Meaning*. Wiley-Blackwell.
- Bech, Gunnar. 1955. *Studien über das deutsche Verbum infinitum*. Munksgaard.
- Benbaji, Ido. 2022. Focus particles in verb-echo answers: An argument for argument ellipsis. In Eva Neu Özge Bakay, Breanna Pratley & Peyton Deal (eds.), *North East Linguistic Society (NELS) 52*, 67–80. Amherst, MA: GLSA. lingbuzz.net/lingbuzz/006926.
- Branan, Kenyon & Michael Yoshitaka Erlewine. 2022. Anti-pied-piping. National University of Singapore.
- Cable, Seth. 2010. *The grammar of Q: Q-particles, wh-movement, and pied-piping*. Oxford University Press. doi:<https://doi.org/10.1093/acprof:oso/9780195392265.001.0001>.
- Fox, Danny. 2000. *Economy and semantic interpretation*, vol. 35. MIT press.
- Heim, Irene & Angelika Kratzer. 1998. *Semantics in generative grammar*, vol. 13. Blackwell, Oxford.
- Hirsch, Aron. 2017. *An inflexible semantics for cross-categorical operators*: MIT PhD dissertation.
- Hirsch, Aron. 2019. Only as a concord phenomenon. Talk at UCLA.
- Hirsch, Aron. 2022. How scope reveals 'only' concord. Talk at the University of Geneva.

Pre-DP *only* is a propositional operator

- Hirsch, Aron & Michael Wagner. 2019. Only reconstruction and backwards association. In J. Schlöder, D. McHugh & F. Roelofsen (eds.), *Amsterdam Colloquium*, 161–170.
- Hole, Daniel. 2015. A distributed syntax for evaluative ‘only’ sentences. *Zeitschrift für Sprachwissenschaft* 34(1). 43–77. doi:<https://doi.org/10.1515/zfs-2015-0002>.
- Hole, Daniel. 2017. A cross-linguistic syntax of scalar and non-scalar focus particle sentences: the view from vietnamese and chinese. *Journal of East Asian Linguistics* 26(4). 389–409. doi:[10.1007/s10831-017-9160-2](https://doi.org/10.1007/s10831-017-9160-2).
- Horvath, Julia. 2007. Separating focus movement from focus. In S. Karimi, V. Samiian & W. K. Wilkins (eds.), *Phrasal and clausal architecture: Syntactic derivation and interpretation*, 108–145. John Benjamins. doi:<https://doi.org/10.1075/la.101.07hor>.
- Jacobs, Joachim. 1980. Lexical decomposition in Montague grammar. *Theoretical Linguistics* 7. 121–136. doi:<https://doi.org/10.1515/thli.1980.7.1-3.121>.
- Jacobs, Joachim. 1991. Negation. In A. von Stechow & D. Wunderlich (eds.), *Semantik–Ein internationales Handbuch zeitgenössischer Forschung*, 560–596. de Gruyter. doi:<https://doi.org/10.1515/9783110126969.7.560>.
- Jacobson, Pauline. 1999. Towards a variable-free semantics. *Linguistics and philosophy* 22(2). 117–185.
- Kayne, Richard. 1998. Overt vs. covert movements. *Syntax* 1. 128–191. doi:<https://doi.org/10.1111/1467-9612.00006>.
- Lee, Youngjoo. 2004. *The syntax and semantics of focus particles*: MIT PhD dissertation.
- Penka, Doris. 2011. *Negative indefinites*. Oxford University Press.
- Potts, Christopher. 2000. When even no’s neg is splitsville. URL: <http://ling.ucsc.edu/Jorge/potts.html> 1–4.
- Quek, Yihui & Aron Hirsch. 2017. Separating focus meanings and focus forms in standard and colloquial singapore english. In A. Lamont & K. Tetzloff (eds.), *North East Linguistic Society (NELS) 47*, 285–298.
- Rooth, Mats. 1985. *Association with focus*: University of Massachusetts, Amherst PhD dissertation.
- Sag, Ivan A. 1976. *Deletion and logical form.*: Massachusetts Institute of Technology PhD dissertation.
- Stockwell, Richard. 2020. *Contrast and verb phrase ellipsis: Triviality, symmetry, and competition*. University of California, Los Angeles.
- Sun, Yenan. 2020. *Only*-concord in vietnamese: support for a bipartite analysis and undermerge. In M. Asatryan, Y. Song & A. Whitmal (eds.), *North East Linguistic Society (NELS) 50*, 183–192.
- Sun, Yenan. 2021. A bipartite analysis of zhiyou ‘only’ in chinese. *Journal of East Asian Linguistics* 30(4). 319–355. doi:<https://doi.org/10.1007/s10831-021->

- 09228-w.
- Taglicht, Josef. 1984. *Message and emphasis: On focus and scope in English*. London: Longman. doi:<https://doi.org/10.1075/sl.9.3.10oeh>.
- Van Craenenbroeck, Jeroen & Tanja Temmerman. 2017. How (not) to elide negation. *Syntax* 20(1). 41–76. doi:<https://doi.org/10.1111/synt.12131>.
- Wagner, Michael. 2006. Association by movement: evidence from np_i-licensing. *Natural Language Semantics* 14(4). 297–324. doi:<https://doi.org/10.1007/s11050-007-9005-z>.

Itai Bassi
ZAS
Schützenstrasse 18,
Berlin 10117, Germany
bassi@leibniz-zas.de

Aron Hirsch
ZAS
Schützenstrasse 18,
Berlin 10117, Germany
hirsch@leibniz-zas.de

Tue Trinh
ZAS
Schützenstrasse 18,
Berlin 10117, Germany
trinh@leibniz-zas.de