

Syntax of negation in corrective *but* sentences*

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1. Introduction

This paper provides a syntactic analysis of corrective *but* sentences with the following consequences: there is a use of negation that must be adjacent to conjunction. In this use, negation is also a focus-sensitive operator. My analysis of negation in corrective *but* contributes to the generalization that all focus-sensitive operators have two positions in a sentence.

But in English has at least three uses: counterexpectation, semantic opposition and correction (e.g., Toosarvandani's (2014) taxonomy). This paper focuses on the corrective use of *but*. Each use of *but* requires contrast of some sort. In the counterexpectational use, the first conjunct creates an expectation that is rejected by the second conjunct (e.g., *Max eats spinach but hates it*). In semantic opposition, the conjuncts contrast with each other in two positions (e.g., *John is tall but Bill is short*). Corrective *but* requires presence of negation in the first conjunct and absence of negation in the second conjunct (1). Absence or presence of negation in both conjuncts is not possible (2)–(3).

(1) Max doesn't eat spinach but chard.

(Toosarvandani 2013:828)

(2) #Max eats spinach but chard.

(3) #Max doesn't eat spinach but *not* chard.

Vicente (2010) and Toosarvandani (2013) argued that (1) must involve ellipsis. Specifically, the *remnant* (the phrase that survives ellipsis; *chard*) moves out of the ellipsis site, which then gets deleted.

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(4) Max does [_{VP} *not* eat spinach] but [_{VP} chard_i [~~eat~~ *t_i*]].

Toosarvandani also discussed a type of corrective *but* sentences that is a minimal pair with (1), but puts negation before *spinach*:

(5) Max eats *not* spinach but chard.

He argued that (5) cannot involve ellipsis, and must be analyzed as coordination of two DPs, where the first DP is a negated DP.

(6) Max eats [_{DP} *not* spinach] but [_{DP} chard].

I agree with Toosarvandani on the analysis of (1), but not on the analysis of (5). In section 2, I will provide evidence that suggests that in addition to the analysis without ellipsis (7a), (5) can also be analyzed as underlying coordination of larger phrases (e.g., two vPs, (7b); and two TPs, (7c)) plus ellipsis.

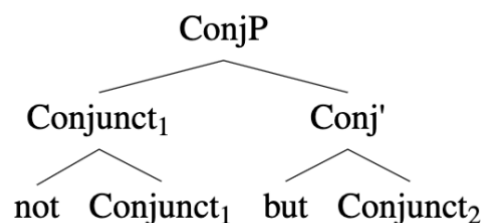
(7) *My analysis of (5)*

- a. Max eats [_{DP} *not* spinach] but [_{DP} chard].
- b. Max [_{VP} eats *not* spinach] but [_{VP} chard_i [~~eat~~ *t_i*]].
- c. [_{TP} Max eats *not* spinach] but [_{TP} chard_i [~~he eats~~ *t_i*]].

I analyze (1) as requiring ellipsis, but (5) as optionally involving ellipsis. This analysis, which assigns a single analysis to (1) but multiple possible analyses to (5), predicts that if the multiple possible analyses can lead to different meanings, then we should be able to observe ambiguity for sentences like (5), but only a single reading for sentences like (1). Section 3 shows that this prediction is borne out: in sentences like (1), negation and conjunction always take scope at their surface positions, but in sentences like (5), negation and conjunction can take scope at higher positions than they appear.

Not only does the evidence from section 3 support the analysis with ellipsis that section 2 argues for, but it also suggests that this ellipsis does not occur freely, but in a systematic way. Furthermore, facts based on scope also suggest that there is a close relationship between the position of negation and *but*-coordination. Negation always takes scope immediately below the conjunction, suggesting that negation is always the sister of the first conjunct. *But* first merges with the second conjunct, and then merges with the merged product of negation and the first conjunct to derive the Conjunction Phrase (ConjP).

(8) *My preliminary analysis of corrective but coordination*



Syntax of negation in corrective but sentences

This analysis can account for all the facts to be presented in this paper, except evidence that sentences like (5) can involve ellipsis (i.e., (5) can be analyzed as (7b-c)). In (7b-c), negation is not the sister of the first conjunct, but deeply embedded in it, contrary to my analysis in (8).

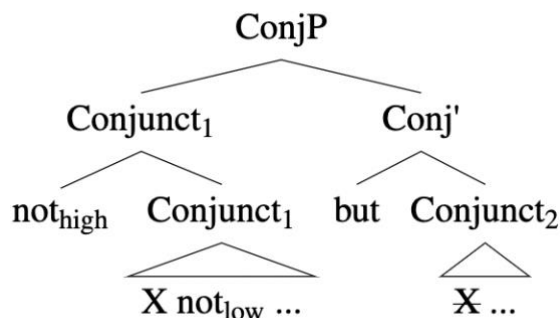
I therefore argue that in addition to ellipsis, there are actually two positions for negation: the higher position (which I call *high negation*) is interpreted, and is the sister of the first conjunct. The lower position (which I call *low negation*) is semantically vacuous, and embedded inside the first conjunct. Either position may be pronounced. When low negation is pronounced (pronounced negation is marked in italics, and silent negation in <>), because we do not see where high negation is, it has the effect that negation takes scope at a place higher than its surface position.

(9) *My analysis of (5) plus positions of negation*

- a. Max eats [DP *not* <not> spinach] but [DP chard].
- b. Max [vP <not> eats *not* spinach] but [vP chard_i [~~eat~~ t_i]].
- c. [TP <not> Max eats *not* spinach] but [TP chard_i [~~he eats~~ t_i]].

My full analysis is laid out below, incorporating both ellipsis (of identical material X) and the two positions of negation:

(10) *My full analysis of corrective but coordination*



There has been a generalization in the literature based on the Question-particle and *only* that all focus-sensitive operators have two instances in a sentence (e.g., [Lee 2004](#), [Cable 2007](#), [Hole 2015, 2017](#), [Hirsch 2017](#), [Quek and Hirsch 2017](#), and [Bayer 2018](#)). I argue that negation in corrective *but* sentences is also a focus-sensitive operator, and that negation has two positions, consonant with this generalization.

This analysis of corrective *but* is identical to [Wu's \(2021\)](#) analysis of *either...or...*, suggesting that negation, like *either*, has a close relationship with coordination. Parallel to the fact that *either* requires *or*, constituent negation requires *but*.¹

¹ In contrast to constituent negation, sentence negation, *neither* and *not a single NP* can occur without *but*.

- (i)
 - a. Max doesn't eat spinach.
 - b. They had neither obsession nor attraction.
 - c. They saw not a single person.

- (11) a. Max eats either spinach *(or chard).
b. Max eats not spinach *(but chard).

Before delving into the data and analysis, I want to introduce some terminology that will aid in understanding the data. If we adopt my analysis that negation is the sister of the first conjunct, then corrective *but* sentences can be divided into two types. Many corrective *but* sentences seem to follow the generalization that negation is the sister of the first conjunct (e.g., (5)). I call these sentences *neg(ation)-seems-normal* because they seem to be the banal cases from the perspective of my analysis. Other corrective *but* sentences seem to challenge my generalization that negation is the sister of the first conjunct (e.g., (1)) because there, negation appears to be higher than the sister of the first conjunct. I call these sentences *neg(ation)-seems-high*. According to my analysis, *neg-seems-high* is an illusion: negation is still the sister of the first conjunct, but this has been obscured by ellipsis.

Following are some examples of *neg-seems-normal* and *neg-seems-high*. They demonstrate that corrective *but* sentences do not require *not*, but can involve other negative elements (e.g., *no* and *neither*). Also, *neg-seems-normal* does not require constituent negation, and *neg-seems-high* does not require sentence negation.

- (12) *Neg(ation)-seems-normal*
a. Max eats [DP *not* spinach] but [DP chard].
b. He was [DP *no* recluse] but [DP a man of the world acquainted with public affairs].

(Toosarvandani 2013:830, 842)

Not {*many/much/all/every*} NP can occur without *but*, but only in the subject position (observed by Klima 1964; Postal 1974):

- (ii) a. {Not many friends/Not all his friends/Not everybody} came to the party.
b. *John invited {not many friends/not all his friends/not everybody} to the party.
(Based on Kayne 1998:157)

No can occur in the object position without *but*, but only as the object of a verb that raises to T (e.g., *be* and *have*). When it is the object of a verb that doesn't raise to T (e.g., *become* and *own*), prosodic focus on the verb is required (observed by Bolinger 1977; Kayne 1998):

- (iii) a. He {was/*became} no recluse.
b. He {has/*owns} no car.

I assume that the negation that can occur without *but* still has another form as a coordinator. The negation that can occur without *but* is the non-coordinator homophone. I leave to future research exactly what types of negation have non-coordinator homophones and the conditions that license them. But I want to point out that the ungrammatical sentences above improve with *but*, suggesting that when negation is a coordinator, it is not subject to the restrictions that the non-coordinator form of negation is subject to.

- (iv) a. John invited not all his friends but only some to the party.
b. He became no A+ student, but an A- student.

- (13) *Neg(ation)-seems-normal*
- a. They had [_{DP} *neither* obsession nor attraction] but [_{DP} real love].
 - b. Max does [_{VP} *not* buy spinach] but [_{VP} grows it].
- (14) *Neg(ation)-seems-high*
- a. Max doesn't eat [spinach] but [chard].
 - b. He met *not* a friend [of a linguist] but [of a philosopher].

Vicente (2010) and Toosarvandani (2013) have already argued that neg-seems-high must involve ellipsis, which I agree with. Due to limited space, this paper focuses on where Toosarvandani and I disagree and novel claims that were not made before: section 2 shows that neg-seems-normal can involve ellipsis (for what we agree on, see Toosarvandani (2013) for evidence that neg-seems-high must involve ellipsis, and Wu (In prep) for additional evidence). Sections 3 and 4 present novel claims: section 3 argues that negation has two positions in a sentence, and section 4 argues that negation is a focus-sensitive operator that needs to c-command the leftmost focus. Section 5 concludes the paper.

2. Neg-seems-normal can be derived by ellipsis

This section presents three arguments that neg-seems-normal can be derived by ellipsis. They are based on constituency, scope and antecedent-contained deletion respectively.

2.1 Argument 1: Constituency

The first argument relies on the assumption that only constituents can be coordinated by *but*. If we find apparent coordination of non-constituents, then ellipsis must have occurred. Following is a baseline, where the conjuncts (bracketed) are constituents:

- (15) *Coordination of apparent constituents (baseline)*
- a. John looked at *not* [the planet with ice caps], but [the star with dark spots].
 - b. Mary played *not* [checkers from Egypt], but [chess from India].

In contrast, what appear to be coordinated in the following sentences are not constituents:²

- (16) *Coordination of apparent non-constituents*
- a. John looked at *not* [the planet with a telescope], but [the star with binoculars].
 - b. Mary played *not* [checkers today], but [chess yesterday].

If we posit ellipsis, then the underlying conjuncts are still constituents:

² The bracketed material in (16a) may be a constituent, if the sentence involves VP conjunction and ATB-movement of the verb (*looked*) and the preposition (*at*) out of the conjunction:

(i) John looked_i at_j *not* [_{VP} t_i t_j the planet with a telescope] or [_{VP} t_i t_j the star with binoculars].

While it is possible that the verb (*looked*) ATB-moves to v, there is unlikely to be another head position below v that the preposition can move to, therefore I consider the bracketed material not to be a constituent.

- (17) *Apparent coordination of non-constituents must involve ellipsis*³
- a. John [looked at *not* the planet with a telescope], but [~~looked at~~ the star with binoculars].
 - b. Mary [played *not* checkers today], but [~~played~~ chess yesterday].

2.2 Argument 2: Scope interactions with a subject quantifier

The second argument relies on sentences with a quantifier in the subject position, and negation and conjunction in the object position (18). Example (18) has multiple readings. Toosarvandani (2013) used one of them as an argument that neg-seems-normal does not have to involve ellipsis. Here I focus on the other reading, spelled out below, where conjunction takes scope above the subject quantifier. This reading may not be the most obvious one, but this context highlights it: the caterer is deciding what alcohol to serve at colloquium parties, and wants to eliminate the drink that is drunk by at most five students because it is not economical. The speaker can say (18) to argue for the elimination of gin but not whiskey.

- (18) At most five students drank *not* the whiskey but the gin.
(Toosarvandani (2013):838)
 $\checkmark \wedge > \neg >$ *at most five*: ‘It’s not the case that at most five students drank the whiskey, but it is the case that at most five students drank the gin.’

This reading follows naturally from ellipsis, but might be puzzling without ellipsis:

- (19) *Analysis with ellipsis of (18)*
 [At most five students drank *not* the whiskey] but [~~at most five students drank~~ the gin].

2.3 Argument 3: Antecedent-contained deletion (ACD)

The third argument is based on ACD. I will show that an analysis without ellipsis runs into problems with sentences involving ACD, while an analysis involving ellipsis avoids these issues.

ACD often involves a relative clause that attaches to a DP, and VP-ellipsis in this relative clause (20a). Common analysis of ACD posits quantifier raising (QR) of the DP above the main verb (i.e., of *every philosopher that Mary did*, as in (20b)) in order to construct an antecedent VP (i.e., A in (20b), *talked to trace*) that is parallel to the elided phrase (i.e., E in (20b), *talk to trace*; Sag 1976, May 1985, Kennedy 1997, Fox 2002):

- (20) a. John talked to every philosopher that Mary did.
 b. John [every philosopher that Mary did [E ~~talk to t~~]]_i [A talked to t_i].

³ I assume that in (17a-b), the remnants move out of the ellipsis separately, like what we see in gapping:

- (i) a. John [looked at **not** the planet with a telescope], but [the star]_i [with binoculars]_j ~~looked at t_i t_j~~.
 b. Mary [played **not** checkers today], but [chess]_i [yesterday]_j ~~played t_i t_j~~.

Kennedy (1994) observed that if the DP that the relative clause attaches to is embedded in another DP, only the embedded DP can QR, but not the larger DP. I will apply this key observation to neg-seems-normal sentences that contain ACD:

(21) *ACD in neg-seems-normal*

John talked to *not* some linguist but every philosopher that Mary did.

According to Kennedy's observation, we can only QR the universal quantifier in (21), but not the larger DP conjunction. If we do not posit ellipsis for (21), then just QRing the universal quantifier would violate Coordinate Structure Constraint. Even if Coordinate Structure Constraint could be violated, it would lead to non-identical antecedent and elided phrase (22), where the antecedent is *talked to not some linguist but trace*, and the elided phrase is *talk to trace*.

(22) *Analysis without ellipsis creates non-identical antecedent and elided phrase*

John [every philosopher that Mary did [_E talk to _t]]_i [_A talked to [*not* some linguist] but _{t_i].}

If (21) can involve ellipsis, we can avoid these problems simply by positing larger underlying coordination, and movement of only the universal quantifier in the second conjunct:

(23) *Analysis with ellipsis*

John [_{VP} talked to *not* some linguist] but [_{VP} [_{DP} every philosopher that Mary did [_E talk to _t]]_i [_A talked to _{t_i]].}

3. Scope

According to my analysis, neg-seems-normal sentences have multiple possible analyses (i.e., analyses with ellipsis, see section 2, and analysis without ellipsis, see Toosarvandani (2013), but neg-seems-high sentences only one (i.e., analysis with ellipsis, see evidence from Toosarvandani (2013) and Wu (In prep)). This makes a prediction: neg-seems-normal sentences should be able to have ambiguity, but neg-seems-high sentences cannot have ambiguity. This section shows that this prediction is borne out. Furthermore, I will argue based on the ambiguity of neg-seems-normal that there are two positions for negation in a sentence, though we only hear one, and only the higher position is interpreted as true negation.

First, the following neg-seems-normal sentence (24) is ambiguous. The key difference between the readings is in the scope interaction between negation, conjunction and the intensional verbs (underlined). Negation and conjunction take scope below both verbs (reading 1), between them (reading 2), or above them (reading 3).

(24) Sherlock pretended to be looking for *not* a burglar but a thief. *Neg-seems-normal*

✓Reading 1: Sherlock acted like he tried to find someone who is [*not* a burglar but a thief].

✓Reading 2: Sherlock acted like [he didn't try to find a burglar, but he tried to find a thief].

✓Reading 3: [Sherlock didn't act like he tried to find a burglar, but he acted like he tried to find a thief].

In contrast, neg-seems-high only has one reading, where the scope of negation is frozen at negation's surface position (also observed by Kayne 1998):

(25) *Neg-seems-high that only has reading 2*
Sherlock pretended *not* to be looking for a burglar but a thief

(26) *Neg-seems-high that only has reading 3*
Sherlock didn't pretend to be looking for a burglar but a thief.

The only reading of neg-seems-high sentences follows from ellipsis, once we recover the elided material:

(27) *Analysis of neg-seems-high (25)*
Sherlock pretended [TP *not* to be looking for a burglar] but [TP ~~to be looking for~~ a thief].

(28) *Analysis of neg-seems-high (26)*
Sherlock did [VP *not* pretend to be looking for a burglar] but [VP ~~pretend to be looking for~~ a thief].

Reading 1 of neg-seems-normal (24) follows from the analysis without ellipsis:

(29) *Analysis without ellipsis of neg-seems-normal (24) → Reading 1*
Sherlock pretended to be looking for [DP *not* a burglar] but [DP a thief].

Readings 2 and 3 of neg-seems-normal (24) follow from ellipsis, giving us higher scope of conjunction than its surface position:

- (30) *Analysis with ellipsis of neg-seems-normal (24) → higher-than-surface scope of conjunction*
- a. Sherlock pretend [to be looking for *not* a burglar] but [~~to be looking for~~ a thief].
Reading 2
 - b. Sherlock [pretended to be looking for *not* a burglar] but [~~pretend to be looking for~~ a thief].
Reading 3

Ellipsis can only give us the correct scope of conjunction in readings 2 and 3, but negation also takes scope at a higher position than its surface position. This suggests that in addition to ellipsis, there must be an instance of unpronounced negation (in <> in (31a-b)) at the left

Syntax of negation in corrective but sentences

edge of the first conjunct. The unpronounced negation is interpreted as actual negation, and the pronounced negation is semantically vacuous.

- (31) *Analysis with ellipsis of neg-seems-normal (24) → high-than-surface scopes of conjunction and negation*
- a. Sherlock pretend [~~<not>~~ to be looking for *not* a burglar] but [~~to be looking for~~ a thief]. *Reading 2*
 - b. Sherlock [~~<not>~~ pretended to be looking for *not* a burglar] but [~~pretend to be looking for~~ a thief]. *Reading 3*

Here I discuss an alternative analysis that does not posit two positions for negation. A possible alternative (recalling Penka and Zeijlstra's (2005) analysis of negative indefinites in Dutch and German) is that there is no ellipsis at all, but just DP-conjunction *not a burglar but a thief*. This DP-conjunction QRs to above *looking for* (for reading 2) or *pretended* (for reading 3), and then each conjunct (the indefinites) is reconstructed.

- (32) *Alternative analysis without ellipsis of neg-seems-normal (24) → Reading 2*
Step 1 (QR): Sherlock pretended [*not* a burglar but a thief]_i to be looking for t_i.
Step 2 (reconstruction): Sherlock pretended [*not* a burglar but a thief]_i to be looking for t_i [a burglar] [a thief].

This analysis fails to account for the evidence for ellipsis in section 2, and it also fails to account for neg-seems-normal with VP-conjunction (33), which can also have ambiguity, but VPs are usually assumed to not be able to QR:

- (33) Sherlock pretended to be *not* singing but dancing.
✓Reading 1: Sherlock acted like he was doing something that was not singing but dancing.
✓Reading 2: Sherlock didn't act like he was singing, but he acted like he was dancing.

Having seen my analysis for neg-seems-high and neg-seems-normal, we may wonder why neg-seems-high can't have ambiguity. If it could, then (25) would have reading 3, contrary to fact:

- (34) *Impossible reading 3 of (25)*
Sherlock [~~<not>~~ pretended *not* to be looking for a burglar] but [~~pretended to be looking for~~ a thief].

This derivation is bad because ellipsis cannot apply here. Let us assume that in parallel to the movement of the remnant phrase *a thief, a burglar* moves to the parallel position in the first clause at LF. Furthermore, suppose ellipsis requires syntactic identity between an antecedent and the elided phrase (i.e., *pretended to be looking for trace*).

- (35) *Impossible reading 3 of (25)*
 Sherlock [[a burglar]_i <not> pretended not to be looking for t_i] but [[a thief]_j pretended to be looking for t_j].

Because there is negation between *pretended* and *looking for* in the first conjunct, but no negation in the second conjunct, we cannot find an antecedent that is identical to the elided phrase.

4. Negation's sensitivity to focus

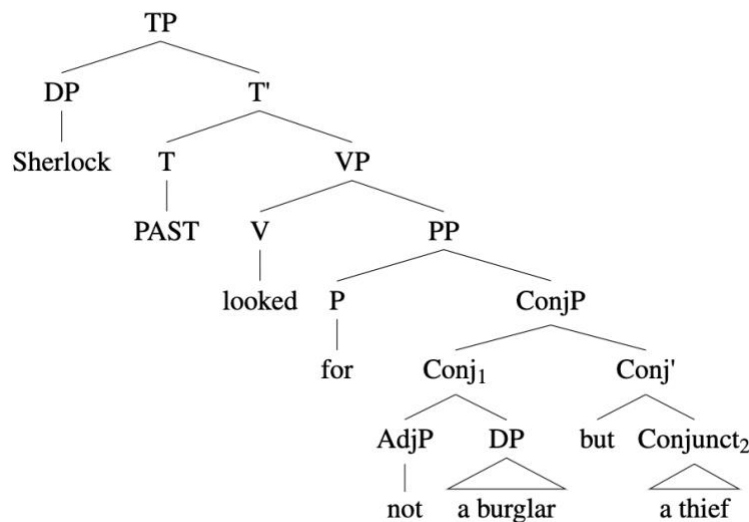
Having argued that negation has two positions in corrective *but* sentences, this section shows that the lower position must c-command focus because it is a focus-sensitive operator. Furthermore, it must c-command the leftmost focus, but does not need to c-command the other foci.

Corrective *but* sentences always involve contrastive foci (e.g., the underlined phrases in *Max doesn't eat spinach but chard*). I will show that negation's lower position must c-command the leftmost focus (*spinach*), but does not have to c-command the other focus (*chard*). As we saw, negation in (24), repeated below, can be low negation:

- (24) Sherlock looked for not a burglar but a thief.

If negation in (24) is low negation, it is embedded in the first conjunct, and thus only c-commands linearly the first focus *a burglar*, but not the second focus *a thief*:

- (36) *Syntactic tree of (24)*

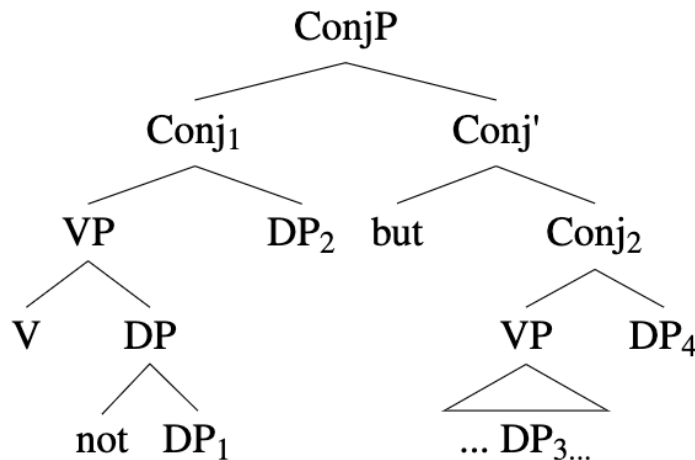


I will now put two foci in each conjunct, and make linearly the first focus structurally lower than the second focus. Then I will show that in this configuration, negation still only c-commands the leftmost focus, but does not need to c-command the other foci, even when the leftmost focus is not the structurally higher one.

Syntax of negation in corrective but sentences

The tree in (37) illustrates this configuration. Negation in (37) only c-commands DP₁, but not DP₂. If this configuration is grammatical with double focus on DP₁ and DP₂, then negation only needs to c-command the leftmost focus.

(37) *Double-focus configuration*



I demonstrate with four different constructions, and begin with direct object plus a higher instrumental phrase (38), assuming that the direct object is structurally lower than the instrumental phrase.

(38) *Direct object + a higher instrumental phrase*

John looked at the planet with a telescope, and the star with binoculars.

Examples (39a-c) vary focus in this configuration:

(39) *Direct object + a higher instrumental phrase*

a. *Focus on Phrase₁ & Phrase₃*

John looked at [*not* the planet] with a telescope, but the star.

b. *Focus on Phrase₂ & Phrase₄*

*John looked at *not* the planet with a telescope, but with binoculars.

c. *Focus on Phrase₁, Phrase₂, Phrase₃ & Phrase₄*

John looked at [*not* the planet] with a telescope, but the star with binoculars.

Examples (39a-b) establish the fact that negation here only c-commands the direct object, but not the instrumental DP. Example (39a) only puts the direct object under focus, while (39b) only puts the instrumental DP under focus. Example (39a) is grammatical because negation manages to c-command the focused direct object, but (39b) is ungrammatical because negation fails to c-command the focused instrumental DP. Example (39c) puts both the direct object and the instrumental DP under focus. Its grammaticality suggests that

negation only needs to c-command the direct object, which is the leftmost focus, but not the instrumental DP, which is the structurally higher focus.

I demonstrate this with three other constructions—direct object plus a higher temporal phrase (40), ditransitive (41) and exceptional case-marking (ECM; (42)).

(40) *Direct object + a higher temporal*

a. *Focus on Phrase₁ & Phrase₃*

John played [*not checkers*] today but chess.

b. *Focus on Phrase₂ & Phrase₄*

*John played *not checkers* today but yesterday.

c. *Focus on Phrase₁, Phrase₂, Phrase₃ & Phrase₄*

John played [*not checkers*] today but chess yesterday.

(41) *Ditransitive*

a. *Focus on Phrase₁ & Phrase₃*

John put [*not a book*] on the shelf, but the record.

b. *Focus on Phrase₂ & Phrase₄*

*John put *not a book* on the shelf, but on the table.

c. *Focus on Phrase₁, Phrase₂, Phrase₃ & Phrase₄*

John put [*not a book*] on the shelf, but the record on the table.

(42) *ECM*

a. *Focus on Phrase₁ & Phrase₃*

John considers [*not the president*] a fool, but his wife.

b. *Focus on Phrase₂ & Phrase₄*

John considers *not the president* a fool, but a genius.

c. *Focus on Phrase₁, Phrase₂, Phrase₃ & Phrase₄*

John considers [*not the president*] a fool, but his wife a genius.

5. Conclusion

This paper has proposed an analysis for corrective *but* sentences that involves ellipsis and two positions for negation. Ellipsis creates the illusion that negation is higher than it actually is (neg-seems-high). Neg-seems-normal has multiple analyses, leading to possible ambiguity: an analysis without ellipsis, which derives the surface scope of negation and conjunction, and analyses with ellipsis, which derive higher scope of negation and conjunction than their surface positions. Furthermore, negation has two positions in a corrective *but* sentence. The higher position is a conjunct marker: it is the sister of the first conjunct. The lower position is a focus-sensitive operator: it c-commands the leftmost focus, but it doesn't need to c-command the other foci. Either position of negation can be pronounced, but only the higher position is interpreted as actual negation.

Negation...*but*... has identical behavior to *either...or*..., and my analysis is identical to Wu's (2021) analysis of *either...or*.... My analysis is also strikingly similar to previous proposals for focus-sensitive operators such as the Question-particle and *only* (e.g., Lee 2004, Cable 2007, Hole 2015, 2017, Hirsch 2017, Quek and Hirsch 2017, and Bayer 2018), which posit two positions for the operator. This suggests that all focus-sensitive operators, as is exemplified by negation, might have two occurrences in a sentence.

References

- Bayer, Josef. 2018. Criterial Freezing in the syntax of particles. In *Freezing: Theoretical Approaches and Empirical Domains*, eds. Jutta Hartmann, Marion Jäger, Andreas Kehl, Andreas Konietzko, and Susanne Winkler, 225–263. Berlin: De Gruyter Mouton.
- Bolinger, Dwight. 1977. *Meaning and Form. (English Language Series II.)* London: Longman.
- Cable, Seth. 2007. The grammar of Q. Doctoral dissertation, MIT, Cambridge.
- Fox, Danny. 2002. Antecedent-contained deletion and the copy theory of movement. *Linguistic Inquiry* 33(1):63–96.
- Hirsch, Aron. 2017. An inflexible semantics for cross-categorial operators. Doctoral dissertation, MIT, Cambridge.
- Hole, Daniel. 2015. A distributed syntax for evaluative ‘only’ sentences. *Zeitschrift für Sprachwissenschaft* 34(1):43–77.
- Hole, Daniel. 2017. A crosslinguistic syntax of scalar and non-scalar focus particle sentences: The view from Vietnamese and Chinese. *Journal of East Asian Linguistics* 26:389–409.
- Kayne, Richard. S. 1998. Overt vs. covert movement. *Syntax* 1:128–191.
- Kennedy, Christopher. 1994. Argument contained ellipsis. *Linguistics Research Center Report LKC-94-03*, University of California, Santa Cruz.
- Kennedy, Christopher. 1997. Antecedent-contained deletion and the syntax of quantification. *Linguistic Inquiry* 4(28):662–688.
- Klima, Edward E. 1964. Negation in English. *The Structure of Language*, ed. by Jerry A. Fodor, and Jerrold J. Katz, 246–323. Englewood Cliffs, New Jersey: Prentice Hall.
- Lee, Youngjoo. 2004. The syntax and semantics of focus particles. Doctoral dissertation, MIT, Cambridge.
- May, Robert Carlen. 1985. *Logical Form: Its Structure and Derivation*. Cambridge, MA: MIT Press.
- Penka, Doris, and Hedde Zeijlstra. 2005. Negative indefinites in Dutch and German. Ms., The University of Tübingen.
- Postal, Paul M. 1974. On raising. *One Rule of English Grammar and its Theoretical Implications*. Cambridge, MA: MIT Press.
- Quek, Yihui, and Aron Hirsch. 2017. Severing focus form and meaning in Standard and Colloquial Singapore English. *Proceedings of NELS* 47(15):15–24.
- Sag, Ivan. 1976. Deletion and logical form. Doctoral dissertation, MIT, Cambridge.
- Sag, Ivan, Gerald Gazdar, Thomas Wasow, and Steven Weisler. 1985. Coordination and how to distinguish categories. *Natural Language and Linguistic Theory* 3:117–171.

Danfeng Wu

- Toosarvandani, Maziar. 2013. Corrective *but* coordinates clauses not always but sometimes. *Natural Language and Linguistic Theory* 31:827–863.
- Toosarvandani, Maziar. 2014. Contrast and the structure of discourse. *Semantics and Pragmatics* 7:1–57.
- Vicente, Luis. 2010. On the syntax of adversative coordination. *Natural Language and Linguistic Theory* 28:381–415.
- Wu, Danfeng. 2021. Syntax of *either* in *either... or...* sentences. *Natural Language and Linguistic Theory*. Online. doi.org/10.1007/s11049-021-09523-0.
- Wu, Danfeng. In prep. Syntax and prosody of coordination. Doctoral dissertation, MIT, Cambridge.

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