

Negative inversion without negation: On *fuck*-inversion in British English*

Craig Sailor
cwsailor@gmail.com
University of Cambridge

August 2017

Published in *Cambridge Occasional Papers in Linguistics 10*, ed. Jim Baker and Chenchen Song, 88–110.
<http://www.ling.cam.ac.uk/COPIL/>

Abstract

I describe and analyze a novel English phenomenon that I call *fuck*-inversion, which conveys emphatic negation despite lacking overt negative morphology: *Am I fuck wearing one of those!* (= “I’m definitely not wearing one of those”). I argue that this phenomenon, which is only attested in varieties spoken in the British Isles, gets its negative semantics from a silent negative operator in the left periphery of the clause. This operator takes widest scope: for example, it scopes over the subject position, exceptionally licensing NPIs there. I claim that this operator is the silent analogue of the initial negative XP involved in canonical negative inversion (e.g. *No way will I be wearing one of those!*). Thus, *fuck*-inversion sheds light on the broader typology of inversion phenomena expressing emphatic polarity, and the status of verb second syntax more generally.

1 Introduction

In colloquial registers of English from all across the British Isles, a particular utterance type expresses emphatic negation despite lacking overt negative morphology. What such utterances have instead is inversion of the tensed auxiliary or modal across the subject, and a conspicuous taboo word – *fuck*, for example – in post-subject position:

- (1) A: John is a nice guy.
B: Is he fuck (a nice guy) – he stabbed my cousin!
= *No he isn't (a nice guy)!*
- (2) They're all wearing kilts, but will I fuck be wearing one of them.
= *I definitely won't be wearing one of those.*

I refer to this phenomenon as *fuck*-inversion (FI) for short. FI is reminiscent of canonical negative inversion (CNI)¹ in Standard English (Lasnik 1972, Rudanko 1982, Haegeman 1995, Collins and Postal 2014, a.o.), but with a different surface profile:

- (3) They're all wearing kilts, but under no circumstances will I be wearing one of those.

*Special thanks to Gary Thoms for extensive data and discussion. Thanks also to Klaus Abels, Theresa Biberauer, Patrick Elliott, James Griffiths, Liliane Haegeman, Jack Hoeksema, Larry Horn, and Jim Wood for helpful data and feedback. Earlier versions of this work have been presented at LAGB (2014), University College London (2015), LSA (2016), and the Rethinking Verb Second workshop at Cambridge (2016).

¹Instances of what I call non-canonical inversion receive mention in §4. I leave aside instances of inversion with non-negative XPs (e.g. *only* phrases); see Collins and Postal (2014: ch. 14) for discussion.

Prior work has shown that vulgar or taboo phenomena can exhibit complex syntactic and semantic behavior with potentially significant implications for formal theories (Dong 1992, McCloskey 1993, Corver 2014, a.o.), particularly with respect to negation (Postma 2001, Postal 2004, a.o.). I argue below that FI is another such phenomenon.

In this paper, I lay out the major properties of FI, as it has not been described previously, and I explore its implications for a theory of emphatic polarity. I show that, perhaps counterintuitively, the negative semantics in FI sentences is not borne by the low taboo element, but rather is a property of a null negative operator in the left periphery, where it takes widest scope. This operator behaves in every respect like the overt negative operator in CNI clauses such as (3). This leads me to propose a typology of emphatic polarity phenomena with inversion, which has implications for the syntax of verb second in English.

2 Some core properties of *fuck*-inversion

As FI has received no prior treatment in the literature before, I begin by sketching its basic properties, including its dialectal distribution and its status as a hyponegative expression.

2.1 Dialectal distribution and variation

An informal survey indicates that FI is ubiquitous throughout the British Isles: it is widely attested all across England, Scotland, Wales, Northern Ireland, and the Republic of Ireland. In all cases, FI is regarded as belonging to a colloquial, informal register, and thus not necessarily in the productive grammar of all speakers; but, all speakers I've consulted across the British Isles recognize it as a local feature.

Outside the British Isles, the picture changes dramatically: FI appears to be completely unattested. I have found no evidence of it in any of the varieties of English spoken in the United States, Canada, South Africa, Australia, New Zealand, or Singapore, informal or otherwise. While this is by no means an exhaustive survey of World Englishes, I tentatively conclude that FI is restricted to the varieties spoken in the British Isles, and unattested elsewhere.

In the varieties that do have FI, there is some variation in the choice of what I will refer to as the *taboo element*, i.e. the post-subject component of the phenomenon exemplified above with *fuck*. For example, there seems to be a preference among speakers from the Midlands and the North of England for *heck* (with a glottalized onset, typically rendered 'eck when written) or *ever*.² A non-exhaustive set of taboo elements attested in FI is below:

(4) A: Apparently John has a new girlfriend.

B: Does he {
 fuck
 hell
 'eck
 ever
 bugger
 bollocks
 balls
 ... } !

²Note that the use of *ever* in FI produces strings that are surface-identical to a type of exclamative in English (perhaps chiefly in American varieties), but they crucially differ in that the latter has emphatic affirmative polarity. For example, the affirmative exclamative with *ever* is licensed in contexts where the speaker emphatically agrees with or confirms a preceding assertion:

- (i) A: These cheese grits are outstanding.
 B: (Boy,) Are they ever!
 = *Yes, they really are!*

Speakers report no difference in meaning among the taboo elements in (4), though the choice is no doubt influenced at least in part by register. In general, the taboo element in an FI clause must appear immediately after the subject;³ no adverbs, auxiliaries, or other material can intervene:

- (5) a. *Has he clearly {fuck/'eck/etc.} (done that).
b. *Should they have {fuck/'eck/etc.} (been doing that).

Note, though, that a proper subset of the varieties of English with FI also allow a variant involving a rather curious continuation with *as like*, typically with 'eck as the taboo element:⁴

- (6) Q: I suppose none of that was reflected in the money?
A: Was it 'eck as like – they pay for one servant and they want the whole bleedin' household thrown in.
(Downton Abbey S06E02)

The regional distribution of this *as like* continuation remains somewhat unclear at this point: while it appears to be freely attested in e.g. Grimsby (p.c. Will Harwood), the speakers I've consulted in various nearby counties (e.g. parts of Yorkshire, Derbyshire, and Lancashire) report that the *as like* continuation sounds familiar, but it is considered archaic or no longer in current use locally. I leave this variation on FI aside for the remainder of the paper.

Despite the variety of choices for the taboo component of the phenomenon given in (4), I continue to exemplify FI in the discussion to come using *fuck*, the most widely attested of these possibilities.⁵

2.2 The (hypo)negative status of *fuck*-inversion

FI is an instance of what Horn (2009) calls *hyponegation*, in which a negative interpretation arises from an utterance lacking overt standard negative morphology. Perhaps the most well-known example in English is the following:

- (7) I could care less.
= *I couldn't care less.*

Despite lacking overt negative morphology, such hyponegative clauses behave in many ways like standard negative (SN) clauses, i.e. clauses containing the marker of sentential (proposition level) negation *not/-n't*. As we will see below, FI behaves similarly.

At the same time, clauses involving canonical negative inversion (CNI) also behave in many ways like SN clauses. Below, I compare SN clauses to both CNI and FI clauses, showing that they all pattern to-

³In certain contexts, some of my consultants allow the taboo element in FI to surface after the predicate. See §4.3, below.

⁴Thanks to Ian Roberts for bringing this to my attention. For descriptive completeness, two minor points regarding the *as like* continuation must be noted.

First, in the varieties where it is still in productive use, the *as like* continuation is apparently compatible with all of the immediately post-subject elements listed in (4) except *bollocks* and *balls*. While its unavailability with these two particular elements is noteworthy, the fact that it can appear with elements other than 'eck indicates that e.g. 'eck *as like* is not simply a fixed expression. This bears mentioning because there is a high degree of metalinguistic awareness regarding the *as like* continuation in and around the regions that allow it, as demonstrated by e.g. comedian Victoria Wood's choice of name for her characters Izzy Eckerslike (cf. *Is he 'eck as like*) and Willie Eckerslike (cf. *Will he 'eck as like*), fictional citizens of the relevant dialect area. Thanks to James Griffiths for bringing this to my attention.

Second, unlike typical FI, realization of the predicate is judged unnatural or somewhat degraded when the *as like* continuation is employed. This might be taken to indicate that the *as like* continuation involves a predicate proform – i.e., a deep anaphor akin to *do so*, in Hankamer and Sag's (1976) terms – rather than the typical predicate ellipsis available to standard FI.
⁵A cursory Google search (conducted 24 Oct 2014) supports this intuition, as e.g. the string "Is he fuck" (enclosed in quotations) returned ≈420,000 results, while the same string involving any of the other taboo elements in (4) (except *ever*, which is confounded: see fn. 2) returned no more than ≈20,000.

gether with respect to standard tests for negation in the literature (Klima 1964, Horn 1989:246, Haegeman 2012:43, a.o.).

First, like SN, both CNI and FI are downward entailing:⁶

- (8) John claims to be a nationalist, but...
- a. He will not vote for independence. ⇒ He will not vote for radical independence. SN
 - b. Never will he vote for independence. ⇒ Never will he vote for radical independence. CNI
 - c. Will he fuck vote for independence. ⇒ Will he fuck vote for radical independence. FI

Second, FI also licenses so-called strong NPIs, e.g. *punctual-until* (Horn 1989, Gajewski 2011):

- (9) My flight is tomorrow, but...
- a. I will not be leaving until they pay me my money. SN
 - b. No way will I be leaving until they pay me my money. CNI
 - c. Will I fuck be leaving until they pay me my money. FI

Third, like SN and CNI clauses, FI can take *neither* tags, but it is incompatible with *so* tags (Klima 1964):

- (10) Q: Are you voting ‘no’ in the referendum?
- a. A: I am not, and {neither / #so} are my friends. SN
 - b. A: Under no circumstances am I doing that, and {neither / #so} are my friends. CNI
 - c. A: Am I fuck, and {neither / #so} are my friends. FI

Fourth, Klima (1964) also notes that only negative clauses are compatible with *not even* continuations—again, CNI and FI both pattern like SN in this respect:

- (11) Q: Did John bring any gear?
- a. A: He didn’t bring any, not even any jellies. SN
 - b. A: No chance did he bring any, not even any jellies. CNI
 - c. A: Did he fuck bring any, not even any jellies. FI

Fifth, the ability to combine with a final *I don’t think* parenthetical clause is another diagnostic for sentence-level negation (Postal 2004:§2.6); CNI clauses have this property, and, for at least some speakers, FI clauses do as well:⁷

- (12) It’s John’s birthday tomorrow, but...
- a. He’s not gonna let anyone give him presents I don’t think. SN
 - b. At no point is he gonna let anyone give him presents I don’t think. CNI
 - c. %Is he fuck gonna let anyone give him presents I don’t think. FI

Sixth, and finally, FI can associate with focus like both SN and CNI can (focal stress represented with SMALL CAPS). This is by no means a property unique to negation, but it is nevertheless a property associated with it:

⁶This (among other things) distinguishes *fuck*-inversion from another class of hyponegative contexts, the *Flaubert triggers* of Horn (2001), which are not downward entailing.

⁷Consultants report varying degrees of acceptability for (12c), which could be due to two different factors. First, these final parenthetical clauses convey some degree of epistemic uncertainty, making their use following an FI clause (and to a lesser extent a CNI clause), which carries strong epistemic certainty, slightly unnatural. Second, as Larry Horn (p.c.) points out, this test otherwise seems to require overt negation, perhaps to an even greater degree than the other tests considered, making it particularly surprising that anyone should accept (12c). Perhaps speakers vary in their sensitivity to these constraints.

- (13) He may have some luck getting Mary to vote for the Tories, but...
- | | |
|--|-----|
| a. He won't be convincing ME. | SN |
| b. No chance will he be convincing ME. | CNI |
| c. Will he fuck be convincing ME. | FI |

Thus, FI clearly bears a negative interpretation and patterns like SN clauses with respect to the relevant tests, just as CNI does.

At this point one might wonder whether *fuck* in FI belongs to the class of so-called *squatitives* of Horn (2001) (see also Postal 2004, de Clercq 2011), namely those “expressions of scatological origin” – *jack shit*, *(diddly) squat*, *fuck-all*, and the like – which have acquired negative force by means of the Jespersen Cycle (i.e. undergoing reanalysis as a negative; cf. French *ne...pas*) (Hoeksema et al. 2001). However, typical squatitives are thought to be undergoing the process currently, and thus can appear both in the absence of and alongside the standard negative marker with no difference in meaning (see Postal 2004):

- (14) John didn't do jack shit to help us. ⇔ John did jack shit to help us.

On the other hand, overt standard negation is impossible with FI (and I am not aware of evidence that it was ever possible), even when negation is present in its antecedent:⁸

- (15) B: *Isn't he fuck (a nice guy)! ⇏ Is he fuck (a nice guy)!

- (16) A: John didn't have a drop to drink last night.

- B: *Didn't he fuck!

(Intended meaning: it's not the case that he didn't)

More conspicuously, canonical squatitives look and distribute like bare nominals of category DP, occur in argument positions, and can be paraphrased as either *anything* or *nothing* (see Postal 2004 for extensive discussion).⁹ The category of the taboo element in FI is not obvious (see §4), but many of those in (4) – e.g. *fuck*, *ever*, *'eck*, etc. – are clearly not DPs. Regardless, even if these taboo elements were DPs, there is no reason to believe that they occupy an argument position in FI clauses. While e.g. *fuck*, *bugger*, etc. occur as subparts of known squatitives (*fuck-all*, *bugger-all*), many of the taboo elements in (4) do not (e.g. *ever*, *'eck*, etc.). Finally, the taboo element in FI cannot be paraphrased as *anything/nothing*, presumably for one or more of the above reasons. Thus, although FI is an instance of hyponegation, it does not appear to involve a squatitive of the sort discussed in Horn (2001), Postal (2004), and elsewhere.

Before concluding the discussion in this subsection, it bears mentioning that while FI, CNI, and SN clauses share the above behavioral characteristics, they are not interchangeable. In particular, FI and CNI have a narrower distribution than SN clauses, by way of (at least) their emphatic character (see Culicover 1991 and Haegeman 2012:§1.5.4 on this property of CNI, and Green 2014 on another type of emphatic negative inversion). For example, while an SN clause can be used as a partial answer to a wh-question (Simons 2007:1042), both CNI and FI are unacceptable there:¹⁰

- (17) Q: Who ate all the Jaffa Cakes?

⁸I distinguish standard negation here from constituent negation, the latter being fully compatible with FI:

- (i) A: John says he's able to not drink at parties.
B: Can he fuck (not drink)!

⁹As de Clercq (2011) notes, certain squatitives can also be used in determiner position, e.g. *fuck-all* (as in *John has got fuck-all money*). The arguments against a DP analysis for the taboo element in FI extend to a determiner analysis as well.

¹⁰A possible additional problem with (17c) is that responses to wh- questions require the informative content of the answer to be focused (in this case, the subject), but FI is at least slightly degraded with subject focus:

- [Context: a child is trying to convince his (foul-mouthed) parent to let him to go a party because his friend John is.]
(i) ?John can jump off a bridge for all I care, but are YOU fuck going to that party tonight!

- | | | |
|----|-------------------------|-----|
| a. | A: John didn't. | SN |
| b. | A: #In no way did John. | CNI |
| c. | A: #Did John fuck! | FI |

That CNI and FI are unacceptable as answers to wh-questions follows if their main contribution is emphatic polarity: this would mean that the portion of the utterance that would otherwise answer the question (e.g. *John*) lacks the necessary “main point status” (in the sense of Simons 2007) that felicitous answers to wh-questions require. See §4 below for further important differences between SN on the one hand and CNI and FI on the other.

2.3 Metalinguistic negation, denials, and reversals

FI commonly arises in contexts where it takes another speaker's assertion as an antecedent and emphatically asserts its polar opposite (repeated from (1)):

- (18) A: John is a nice guy.
 B: Is he fuck (a nice guy) – he stabbed my cousin!

In this capacity, FI resembles a *total denial / reversing move* of Farkas and Bruce (2010:§4.1) (cf. *retorts* in Sailor 2014: ch. 3), and appears to behave along the lines of *like hell* (and *bullshit, the hell*, etc.: see Drozd 2001 on “exclamative sentence negation”), a similarly colloquial denial strategy, though with a wider dialectal distribution:¹¹

- (19) A: John is a nice guy.
 B: Like hell he is (a nice guy) – he stabbed my cousin!
 = *No he isn't (a nice guy)!*

However, FI exhibits several properties that distinguish it from *like hell* and other reversing strategies.

First, *like hell* (et al.) involves metalinguistic negation: it “focuses not on the truth or falsity of a proposition, but on the assertability of an utterance” (Horn 1989:363; see also Drozd 2001 and Martins 2014). FI can appear to behave this way, as we saw in (1)/(18), but, crucially, it need not. FI naturally occurs without an explicit linguistic antecedent, and may be used to cancel an implicature, even one introduced by the speaker's own utterance (see also (8) and (9)):

- (20) It's St. Patrick's day tomorrow...
[Implicature: people wear green on St. Patrick's day]
 a. ...but will I fuck be wearing green.
 b. *...but like hell I will be wearing green.¹²

Second, and relatedly, Drozd (2001) notes that as a type of metalinguistic negation, *like hell* is insensitive to the polarity of its antecedent, meaning it can take a negative clause:

- (21) A: You didn't wash the dishes.

It isn't immediately clear why FI should be allergic to subject focus, though trained consultants have speculated that it might be due to a stress clash with the adjacent taboo element, which itself requires a pitch accent. (The prosody of FI warrants study, but must remain for future work.) It should also be noted that the nature of the focus in wh- answers is different than that in (i) above (i.e. presentation/information focus vs. contrastive/identificational focus: É. Kiss 1998).

¹¹ I have not found an informal variety of English lacking such expressions, though other strategies (e.g. FI) may be preferred.

¹² Example (20b) may be bad for more than one reason. In particular, many speakers find *like hell* degraded when the clause it appears in does not contain VP ellipsis. VPE famously prefers a linguistic antecedent (but see Miller and Pullum 2013), making it difficult to test *like hell* in the above way.

- B: Like hell I didn't!
 = *It's not the case that I didn't*

However, we saw above in (16) that FI cannot take a negative antecedent: it seems to require affirmative content, whether implied or asserted, to pick up on.¹³

Third, in an FI clause, the negative context *fuck* appears in requires inversion, whereas many speakers who freely use FI with *fuck*, *'eck*, etc. reject inversion with *like hell* (see also Drozd 2001:57):

- (22) A: John is a nice guy.
 a. B: Is he fuck (a nice guy)!
 b. B: *He is fuck (a nice guy)!
 c. B:%Like hell is he (a nice guy)!
 d. B: Like hell he is (a nice guy)!

This again suggests that FI has a different status than *like hell* (et al.). However, as the judgment mark on (22c) indicates, some speakers do accept inversion with expressions such as *like hell*, including these naturally-occurring examples:

- (23) a. My left bollock is that a relevant issue!
 b. My god is that an issue that affects THEM!

Speakers who allow such expressions to be accompanied by inversion have evidently swapped the metalinguistic character of these initial expressions for true negative XP status (see §3), meaning such examples are in fact instances of canonical negative inversion.

As evidence of this, and as further evidence that the *like hell* without inversion is in fact metalinguistic in nature (unlike FI), consider their behavior as responses to neutral polar questions. As (24) shows, both CNI and FI make suitable (albeit emphatically negative) answers to such questions. Similarly, in (25a), we see that a *like hell* clause involving inversion is also a licit response to a neutral polar question; however, the uninverted form in (25b) is infelicitous:

- (24) Q: Is it sunny outside?
 a. A: In no way is it (sunny outside)! CNI
 b. A: Is it fuck (sunny outside)! FI
- (25) Q: Is it sunny outside?
 a. A: {Like hell / My left bollock / etc. } is it (sunny outside)!
 b. A: #Like hell it is (sunny outside)!

Given the discussion of metalinguistic negation above, the source of the infelicity of (25b) is clear: it objects to the assertability of content that wasn't actually asserted in the first place, namely the question.¹⁴ Given that (25a) is acceptable in the same context, we conclude that it is not metalinguistic in nature, but rather patterns exactly like a regular CNI clause, suggesting expressions such as *like hell*, *my left bollock*, etc., are, for at least some speakers, negative XPs of the same sort as those triggering inversion in CNI clauses like (24a).

It appears, then, that inversion is associated with such initial XPs, not with metalinguistic negation. Of course, this immediately raises questions about the nature of the inversion in FI clauses, in particular whether it is affiliated with a silent left-peripheral negative XP. Affirmative evidence for this non-overt

¹³See Wood (2014) for another emphatic polarity phenomenon involving a similar restriction.

¹⁴To that end, note that upon receiving the unexpected response in (25b), the questioner might follow up by saying *I didn't say it was sunny, I asked if it was sunny!*

operator can be found in §4.1. First, though, prior approaches to both CNI and other polarity-based inversion phenomena bear consideration. A brief account of such work is below, serving as prologue to a theory of FI.

3 Emphatic polarity and inversion

In the late 80s and early 90s, work in generative syntax from several different perspectives converged on a generalized notion of agreement—one that extended beyond strictly phi-featural phenomena, stated instead as a property of a particular tree-geometric configuration, namely Spec(ifier)-Head. This generalization arose from the observation – made on the basis of data from *wh*- questions (May 1985), focus movement (Brody 1990), negative concord (Haegeman and Zanuttini 1991), quantifier interactions (Beghelli and Stowell 1997), etc. – that many scope-taking elements with *A'* properties (*operators*) must bear very local structural relationships with certain privileged heads in the derivation, particularly T and C. This property of “affective” phenomena (Klima 1964, Rizzi 1996) was formalized in a handful of reciprocally-defined criteria enforcing the Spec-Head configuration for the purposes of establishing agreement. The satisfaction of such criteria is typically associated with a (“residual”) verb-second surface profile, as in non-subject *wh*- question clauses in English (Rizzi 1990).

Consider a specific case. Building on earlier work promoting the relevance of Spec-Head for negative concord (Haegeman and Zanuttini 1991), Haegeman (1995) and Rizzi (1996) argue that canonical negative inversion should be understood as a negative operator – i.e. a fronted negative XP – undergoing movement to a high position in the clause in order to participate in a Spec-Head agreement relation with a functional head bearing a negative feature, i.e. the inverted modal or auxiliary (see also Rizzi 1996:§5). Thus, the syntax of CNI is parallel to that of non-subject *wh*- questions in English, and is therefore said to obey the NEG-criterion (Haegeman and Zanuttini 1991):

(26) **The NEG-criterion**

- a. A NEG-operator must be in a Spec-Head configuration with an $X_{[NEG]}$.
- b. An $X_{[NEG]}$ must be in a Spec-Head configuration with a NEG-operator.

For root CNI clauses, Haegeman (1995) and Rizzi (1996) essentially stipulate that the $X_{[NEG]}$ is T (i.e. that T can bear a negative feature); however, we can take a brief moment to motivate this claim on the basis of some crosslinguistic evidence (see also Laka 1990 and Zanuttini 1991).

Looking across languages, we see evidence of negation interacting with properties typically associated with the T head, including the expression of tense/finiteness, subject phi-agreement, nominative case assignment, etc. For example, in Lezgian (Northeast Caucasian: Dagestan), the past tense is expressed with entirely distinct morphemes in negative contexts versus non-negative ones:

(27) *Lezgian* (Haspelmath 1993:245)

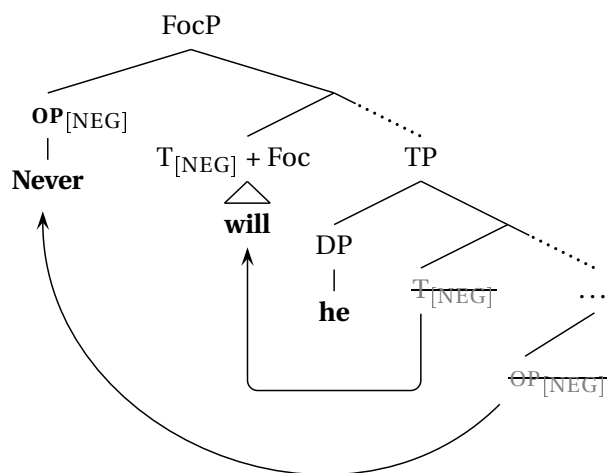
- a. fi-zwa-**j**
go-IMPF-PST
'was going'
- b. fi-zwa-č-**ir**
go-IMPF-NEG-PST
'was not going'

Many further examples of this sort are laid out in detail in Miestamo (2005:§3.3), and suggest a deep connection between negation and T—one that also manifests in the inversion phenomena associated with the NEG-criterion. This supports the claim by Haegeman, Rizzi, and others that T bears a negative

feature in the context of negation, helping us to understand why it undergoes movement to C when a negative operator occupies a left peripheral position.

Haegeman (2000, 2012: §1.5.4) updates earlier analyses of CNI, making use of the articulated left periphery of Rizzi (1997). Extending the aforementioned parallel with *wh*- questions, she argues that the necessary Spec-Head configuration between the negative operator and the head bearing the [NEG] feature is established in the left periphery of the clause, requiring movement of both elements. Specifically, the negative operator fronts to a high focus position, namely the specifier of FocP, while the inverted modal or auxiliary associated with T_[NEG] raises into the head of FocP (see also Green 2014). This is consistent with the high scope that negation takes in CNI, as well as with the emphatic (focal) nature of the phenomenon and its non-canonical (residual verb-second) surface word order. It also accounts for aspects of the phenomenon's distribution, e.g. its status as a main clause phenomenon and its inability to co-occur with certain other operator-based phenomena due to intervention (for extensive discussion, see Haegeman 2012: ch. 3). A simple case is illustrated below, with head adjunction and other details omitted for simplicity:

(28) Never will he vote for independence.



Wood (2008, 2014) takes a similar approach to the syntax of *so/neither*-inversion, exemplified below:

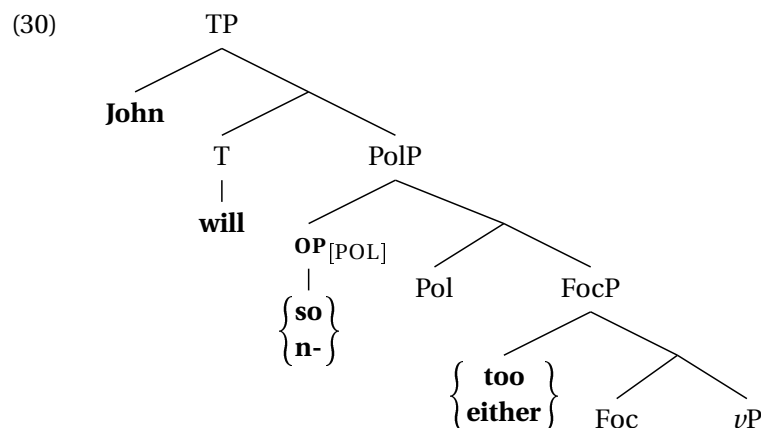
- (29) a. John is planning to buy an SP-1200, and so (too) is Mary.
 b. Mary can't stand trap music, and neither can John.

Like CNI, the inversion phenomena in (29) also involve a fronted polarity operator in the left edge of the clause,¹⁵ moving from the specifier of the clause-internal polarity projection PolP, which, following Laka (1990), Zanuttini (1991), and many others, is located just below TP in English.

Further, building on the logic of Kayne (1998), Wood argues that such sentences are also characterized by the presence of a focus particle particular to the polarity of the clause it appears in. These focus particles are generated local to polarity, in the specifier of a low Foc(us) projection selected by Pol⁰ at the left edge of the verbal domain (see Jayaseelan 2001 and Belletti 2004). Thus, in the affirmative case – i.e. *so*-inversion – the polarity operator is *so*, and its accompanying focus particle is *too* (which can be non-overt: see Wood 2014:102). For its negative counterpart, Wood takes a decompositional approach to *neither*, arguing that *either* is the negative focus particle analogue of *too*, leaving *n-* as the polarity operator, analogous to *so*. A rough sketch of the underlying structure for *so/neither*-inversion sentences is

¹⁵In Wood's account, the relevant Spec-Head configuration is established in a left-edge polarity projection rather than a focus projection. As this will not be important for us, I leave it (and several other details from his analysis) aside.

below (leaving aside certain details of Wood’s analysis that will not be critical to the present discussion):



For Wood (2008, 2014), the polarity operator and the focus particle together drive the syntax and emphatic interpretation of *so/neither*-inversion clauses.

In the next section, I extend the above proposals for both CNI and *so/neither*-inversion to FI.

4 The syntax of *fuck*-inversion

As described above, the analytical intuition behind the NEG-criterion and the polarity-based inversion phenomena that obey it is that there is an operator that moves to take a high scope position in the clause, while also requiring a very local agreement relationship with a particular head associated with polarity in the clause. Does this state of affairs have any applicability to FI?

I argue below that it does. Specifically, I suggest that the derivation of FI involves a silent counterpart of the overt negative operator seen in CNI. I provide empirical arguments for such an operator in FI clauses first; then, I describe how FI fits into the typology of operator-induced inversion phenomena. A complete analysis of FI follows—one in which FI has mixed properties of both CNI (a fronted negative operator inducing inversion) and *so/neither*-inversion (a low-peripheral focus particle, i.e. *fuck*).

4.1 Overt and non-overt polarity operators in the left edge

In both CNI and FI clauses, negation scopes very high—higher than in normal SN clauses. This is illustrated below on the basis of several different diagnostics.

First, in declaratives involving standard sentential negation, there is a well-known ambiguity between negation and *because*-clauses:

- (31) John didn’t cry because he feared violence. SN
- a. **NEG > B/C:** If John cried, it’s not because he feared violence.
 - b. **B/C > NEG:** John didn’t cry, and that’s because he feared violence.

Let us assume that this scope ambiguity reflects an attachment ambiguity: the attachment site for *because*-clauses is either construed higher in the clause than sentential negation, or lower. Importantly, this scope ambiguity disappears in the context of CNI—only the high reading for negation is possible:¹⁶

¹⁶Unsurprisingly, the (b) reading becomes available with a strong intonational break between the CNI clause and the *because*-clause, indicating highest (clause-level) attachment for the latter (see e.g. Haegeman 2012:§4.4 on the central vs. peripheral distinction in adverbial clauses). In most cases, this break is orthographically represented with a comma; though, as Jack

- (32) At no time did John cry because he feared violence. CNI
 a. NEG > B/C
 b. #B/C > NEG

This disambiguating effect is not surprising: it follows from the left-edge status of the negative scope-taking operator *at no time*. From its high surface position, this fronted negative operator unambiguously scopes over the attachment site for *because*-clauses (and see Horn 2014 for a review of other scopal properties of negation in CNI).

Importantly, negation in FI exhibits this same disambiguating effect, i.e. it takes highest scope:

- (33) John is a sensitive guy, but did he fuck cry because he feared violence. FI
 a. NEG > B/C
 b. #B/C > NEG

By parity of reasoning with the CNI data in (32), we might conclude from the data in (33) that FI also involves a left-edge negative operator, albeit one which is not pronounced.

As further support of this conclusion, note that NPIs in subject position are licensed in both canonical negative inversion and FI, but are impossible in standard negative clauses:

- (34) We might have gotten a bit lairy at the football match, but...
 a. #...any of us didn't throw flares onto the field. SN
 b. ...at no time did any of us throw flares onto the field. CNI
 c. ...did any of us fuck throw flares onto the field. FI

Again, this follows from the especially high scope of negation in these inversion phenomena: the subject position falls within the scopal domain of the negative operator in both CNI and FI, but not within the domain of the negative marker in SN clauses.

Likewise, in both CNI and FI, disjoined subjects are interpreted conjunctively. That is, the negative proposition expressed by the CNI and FI clauses holds for each member of the disjunction. English disjunction only behaves this way under the scope of negation, and disjoined subjects in SN clauses do not receive a conjunctive reading. This indicates that subject position in both CNI and FI falls within the scopal domain of the negative operator in these clause types, a domain whose upper bound is higher than that of SN clauses:¹⁷

- (35) It's St. Patrick's day tomorrow, but...
 a. ...John or Mary won't be wearing anything green. SN
 =*John won't wear green* or *Mary won't wear green*
 #*John won't wear green and Mary won't wear green*
 b. ...no way will John or Mary be wearing anything green. CNI
 =*John won't wear green* and *Mary won't wear green*
 c. ...will John or Mary fuck be wearing anything green. FI
 =*John won't wear green* and *Mary won't wear green*

Hoeksema (p.c.) informs me, naturally-occurring examples lacking commas can be found on the internet that nevertheless have the B/C > NEG reading:

(i) At no time did we underestimate the opponent because we never underestimate anyone.
 (Source: <http://www.sportinglife.com/football/news/article/256/7995694/del-bosque-pleased-with-display/>)

However, I find this example infelicitous without an intonational break between the CNI clause and the *because*-clause.

¹⁷This also holds for disjoined subjects in *neither*-inversion clauses, as expected: see Wood (2014:81).

CNI and FI continue to pattern alike in their special negative properties: the negative operators in these phenomena, whether overt or non-overt, take higher scope than the negative marker in SN clauses.

Finally, as further evidence that the negative operators in both CNI and FI clauses take scope over the subject position (unlike in SN clauses), consider examples involving quantified subjects.¹⁸ In the context of both CNI and FI, the interpretation is uniformly NEG > QP; the quantified subject evidently cannot outscope negation. This is in contrast to SN clauses with quantified subjects, which generally only yield a QP > NEG interpretation (Hornstein 1984:51).¹⁹

- (36) a. Everybody didn't wear green. SN
 = *Everybody is such that they didn't wear green*
 # *It's not the case that everybody wore green*
- b. No way did everybody wear green. CNI
 # *Everybody is such that they didn't wear green*
 = *It's not the case that everybody wore green*
- c. Did everybody fuck wear green. FI
 # *Everybody is such that they didn't wear green*
 = *It's not the case that everybody wore green*

Negation in both CNI and FI is once again seen to take scope over the subject position. We must conclude that FI involves a non-overt negative operator in the same position as the negative XP in the left periphery of CNI clauses.

4.2 A typology of emphatic polarity with inversion

The above observations reflect the high (pre-subject) position of the negative operator in CNI clauses. The fact that FI clauses behave exactly the same way with respect to these diagnostics indicates that they involve a high negative operator as well, only one which happens to be non-overt (see Haegeman 1995:185 on other non-overt negative operators).²⁰

Regardless of their overt/non-overt status, these negative operators both trigger inversion. This straightforwardly captures the similarities between CNI and FI that we saw above: they are two phonological sides of the same syntactic coin, by overtly or non-overtly instantiating a single negative operator with an emphatic interpretation requiring a left-edge surface syntactic position. The overt vs. non-overt status of the negative operator determines the verb-second vs. verb-initial surface profile of the inversion phenomenon (see Horn 2014 on this distinction), though both are of course verb-second in the syntax, owing to the NEG-criterion.

Importantly, this directly parallels existing assumptions in the literature regarding question operators. Following Klima (1964), Haegeman (1995:§2.2.4) argues that the inversion seen in matrix polar

¹⁸See Potsdam (2013:679) for related observations about the high scope of contracted negation in inversion contexts.

¹⁹Exceptions are attested, however:

- (i) Everybody can't rap, so most hustle and shoot. (*Jeru the Damaja, "Return of the Crooklyn Dodgers"*)
 = *Not everyone can rap*

Regardless, QP > NEG is also possible in such SN sentences, whereas it is evidently never possible in CNI and FI clauses.

²⁰Note that whereas CNI is generally taken to be a main clause phenomenon, there are environments in which embedding is possible (Culicover 1991:13). On the other hand, FI can never be embedded (under bridge verbs or otherwise):

- (i) I said that not once had Robin raised his hand. CNI
 (ii) *I said that had Robin fuck raised his hand. FI

This asymmetry is unexpected given the similarities we have seen between the two so far: if the two phenomena make use of the same sort of polarity operator, then under an operator/intervention-based approach to main clause phenomena, we either expect both to be embeddable, or neither. I leave resolution of this to future work. Thanks to Liliane Haegeman for helpful discussion.

questions in English is triggered by the presence of a silent WH-operator in the left periphery, in satisfaction of the WH-criterion (Rizzi 1996, a.o.). The existence of a silent left-edge polar question operator affords non-exceptional status to verb-initial polar questions in languages that otherwise require verb-second surface order (e.g. Dutch).

Thus, canonical negative inversion is simply the negative analogue of a non-subject wh- question (overt OP + inversion), while FI is the negative analogue of a polar question (non-overt OP + inversion)—a state of affairs directly predicted by Haegeman (1995, 2000, 2012) and Rizzi’s (1996) analysis of CNI. This is represented below in (37), with the grey cell reflecting a previously-unattested prediction in the typology (where Neg_[FOC] here indicates a clause with emphatic negative polarity):

(37)

	Question clause	Neg _[FOC] clause
Overt OP	wh- question	canonical negative inversion
Non-overt OP	polar question	<i>fuck</i> -inversion

This operator-based approach to inversion in FI is also consistent with the emphatic interpretation of negation there. OP movement in both negative inversion and FI is focus movement, associated with emphatic interpretations. Indeed, polar exclamatives in English represent a non-negative, non-interrogative inversion phenomenon involving just such an emphatic interpretation, along with an overt focus operator (McCready 2009, Biberauer 2010 a.o.):

(38) MAN is it hot today!
 = *It is surprisingly hot today.*

The focus-fronted operator *man* yields the emphatic interpretation of such sentences, and requires inversion to satisfy the FOCUS-criterion (Brody 1990, Aboh 1993).

Interestingly, polar exclamatives in certain verb second (V2) languages, e.g. Dutch, can be expressed with verb-initial order, suggesting the presence of a non-overt operator there as well:

(39) Heeft JAN een dikke buik!
 has Jan a thick belly
 ‘MAN John has a big belly!’

Thus, we can continue to expand the above typology to include not just inversion phenomena associated with emphatic negation, but with emphatic affirmative clauses as well:

(40)

	Question clause	Neg _[FOC] clause	Aff _[FOC] clause
Overt OP	wh- question	CNI	Polar exclamatives (Eng)
Non-overt OP	polar question	FI	Polar exclamatives (Dut)

We now have an account for many of the properties of FI described throughout this paper, and for its similarity to CNI in particular. However, an important question about FI remains: what’s the *fuck*?

4.3 Polarity-sensitive focus particles and the derivation of *fuck*-inversion

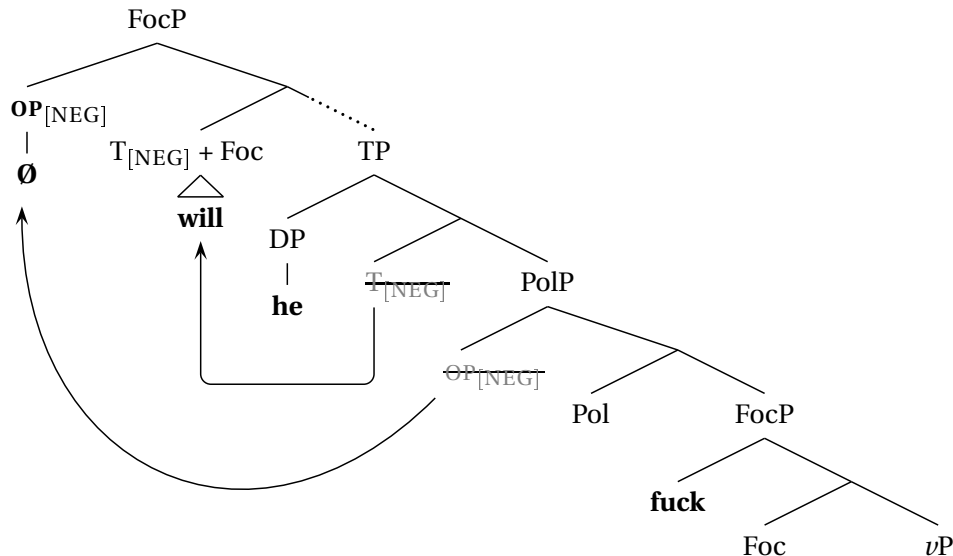
Given its typical post-subject position in the FI clauses (but see below), and given that *fuck* in FI cannot co-occur with a marker of standard sentential negation (see (16)), one may be tempted to analyze *fuck* as an expression of the head of PolP. As mentioned above, PolP is immediately below TP in English, consistent with the taboo element’s immediate post-subject position (following inversion of T). The presence of *fuck* in this position would correctly block the appearance of the standard negative marker (16).

However, this raises some questions of its own. Foremost, if *fuck* is the head of PolP, then the NEG-criterion should be satisfied in-situ: in its first-merge position, the negative operator in [Spec, PolP] would already be in a Spec-Head configuration with an overt Pol head which would presumably bear the [NEG] feature (see Haegeman 1995:§4.1.4). Since FI clauses involve inversion, and by hypothesis operator movement to the high left periphery, it seems that *fuck* and the other taboo elements of FI clauses are not heads of PolP.

I would like to suggest instead that the taboo element in FI is analogous to Kayne's (1998) and Wood's (2008) analysis of *too* and, more to the point, *either* in these cases: it is a polarity-sensitive focus particle generated in the specifier of the low-peripheral FocP, below the polarity operator that characterizes the phenomenon. Put differently, *fuck* (etc.) is a (partial) realization of the emphatic component of FI, rather than of its negative component. This analysis aligns *fuck*-inversion with existing analyses of other polarity-driven inversion phenomena, and provides a straightforward account for the immediate post-subject position of the taboo element in the FI clauses seen to this point: like *too/either*, it occupies the specifier of the low-peripheral FocP.²¹

A derivation for FI is below, built on that of CNI in (28) but incorporating the intuitions above:

(41) Will he fuck (vote for independence).



In his discussion of *so*-inversion, Wood (2008, 2014) points out that the focus particle *too* can surface in preverbal position, as in (29a) (repeated below), or in final position, as in (42b):

- (42) a. John is planning to buy an SP-1200, and so too is Mary.
 b. They play well, but so do we, too.

²¹An alternative analysis (suggested to me independently by Amy Rose Deal and Anders Holmberg) would eschew a null operator completely, and instead appeal to covert movement of the taboo element (a negative scope-taking element under this account) to the left periphery, triggering inversion. While its simplicity is appealing, I reject this analysis based on the following (rather mysterious) observation about V2: as a rule, it seems that covert movement never satisfies the XP-1 requirement in V2 configurations. That is, covert movement evidently cannot trigger inversion (including V-to-C in typical V2 languages). For example, in no V2 languages that I'm aware of can e.g. object QR (or wh-in-situ, etc.) lead to a surface V1 profile. Put differently, there are no V2 languages that feature V1 just in case, say, a quantified object is present (e.g. *John bought the book*, but also *Bought John every book*). Thus, we don't want to say that covert *fuck*-fronting is capable of satisfying (residual) V2 in English, on the grounds that covert movement evidently cannot ever do this in any language. To my knowledge, this has not been mentioned previously in the V2 literature, but it demands further attention.

Alongside Wood, Kayne (1998) argues that the final position for *too* is derived by short movement of the predicate across the FocP whose specifier hosts *too*. If the taboo element in FI is truly parallel to Wood and Kayne's treatment of *too*, then we might expect it to exhibit the same distributional behavior.

To this point, we have seen the taboo element in FI appearing clause-finally, but only when the predicate has been elided. When the predicate is pronounced, the examples thus far have only involved an immediately post-subject construal of the taboo element. However, a post-predicate position for the taboo element is available, to a subset of my consultants from the Midlands and the North of England:²²

- (43) a. A: John says he's gonna steal that car, and I reckon he'll do it.
B: %Will he do it fuck!
b. Q: Do you reckon John will actually ask that girl out?
A: %Will he {do that / ask her} fuck!

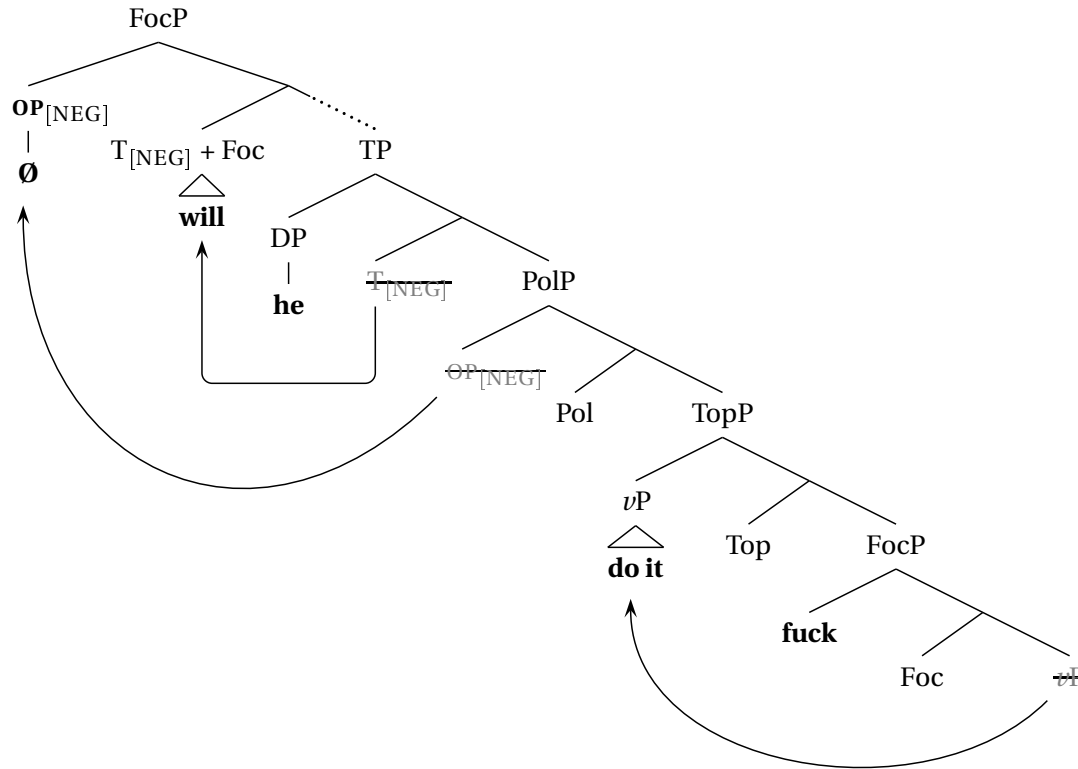
Crucially, this final position for the taboo element is only available when the predicate is entirely given in the discourse, preferentially realized as a predicate anaphor (e.g. *do {it/that}*). It is not possible when the FI clause's predicate is discourse-new, i.e. when the FI clause is picking up on an implicature rather than taking an explicit linguistic antecedent:

- (44) a. *It's John's birthday tomorrow, but is he going to let anyone give him presents fuck. (cf. (12))
b. *It's St. Patrick's day tomorrow, but will I be wearing anything green fuck. (cf. (20))

I argue that this is directly parallel to the aforementioned analyses for clause-final *too* described above. That is, for the speakers that allow them, *fuck*-final FI clauses such as (43) involve predicate movement of a specific type across the low FocP hosting the taboo element. I suggest that the discourse-old constraint on post-predicate taboo elements arises because the predicate movement needed to derive this order is Topic movement. Specifically, the *vP* moves across the taboo element in the low FocP to a low-peripheral TopP projection immediately dominating FocP, consistent with the given predicate's information-structural status.

- (45) %Will he do it fuck!

²²Speakers from elsewhere in the British Isles reject such examples, so further investigation is obviously called for.



See Jayaseelan (2001) and Belletti (2004) for extensive justification of these low-peripheral positions (and Benincà and Poletto 2004 on TopP > FocP order in particular).

5 Conclusion

I have attempted here to lay out some of the basic descriptive properties of *fuck*-inversion, a novel inversion phenomenon in Englishes of the British Isles characterized by an emphatic negative interpretation despite the absence of overt negative morphology.

After situating it within a broader typology of inversion phenomena involving emphatic polarity, I argued that *fuck*-inversion involves a non-overt negative operator in a high scope position within the clausal left periphery, triggering inversion of T^0 in satisfaction of the NEG-criterion. This puts *fuck*-inversion on par with canonical negative inversion, the main difference between the two being whether the negative operator is overt or non-overt.

Finally, I argued that the taboo component of the phenomenon, e.g. *fuck*, is a polarity-sensitive focus particle akin to *too* and *either* in another polarity-based inversion phenomenon, namely *so/neither*-inversion. Thus, *fuck*-inversion fulfills predictions made by existing analyses of related phenomena, requiring no new technology for its analysis, and allowing a clearer overall picture of polarity-driven inversion phenomena to emerge.

References

- Aboh, Enoch. 1993. Wh-movement in Gun. Doctoral Dissertation, University of Geneva.
 Beghelli, Filippo, and Tim Stowell. 1997. Distributivity and negation: The syntax of *each* and *every*. In *Ways of scope taking*, ed. Anna Szabolcsi, 71–107. Kluwer Academic Publishers.

- Belletti, Adriana. 2004. Aspects of the low IP area. In *The structure of CP and IP*, ed. Luigi Rizzi, volume 2 of *The Cartography of Syntactic Structures*, 16–51. Oxford University Press.
- Benincà, Paola, and Cecilia Poletto. 2004. Topic, focus, and V2: Defining the CP sublayers. In *The structure of CP and IP*, ed. Luigi Rizzi, volume 2 of *The Cartography of Syntactic Structures*, 52–75. Oxford University Press.
- Biberauer, Theresa. 2010. MAN is that weird! Exclamative V2 in Modern English and beyond. Presented at LAGB 2010.
- Brody, Michael. 1990. Some remarks on the focus field in Hungarian. In *UCL Working Papers in Linguistics*, 201–225.
- de Clercq, Karen. 2011. Squat, zero, and *no/nothing*: Syntactic negation vs. semantic negation. In *Linguistics in the Netherlands*, ed. Marion Elenbaas and Rick Nouwen, 14–24. John Benjamins.
- Collins, Chris, and Paul M. Postal. 2014. *Classical NEG raising: An essay on the syntax of negation*. Cambridge, MA: MIT Press.
- Corver, Norbert. 2014. Recursing in Dutch. *Natural Language & Linguistic Theory* 32:423–457.
- Culicover, Peter. 1991. Topicalization, inversion, and complementizers in English. In *Going Romance and beyond*, ed. Denis Delfitto, Martin Everaert, Arnold Evers, and Frits Stuurman, 1–43. Utrecht University: OTS Working Papers.
- Dong, Quang Phuc. 1992. English sentences without overt grammatical subject. In *Studies out in left field: Defamatory essays presented to James D. McCawley on the occasion of his 33rd or 34th birthday*, ed. Arnold M. Zwicky, Peter H. Salus, Robert I. Binnick, and Anthony L. Vanek, 3–10. John Benjamins.
- Drozd, Kenneth F. 2001. Metalinguistic sentence negation in child English. In *Perspectives on negation and polarity items*, ed. Jack Hoeksema, Hotze Rullmann, Víctor Sánchez-Valencia, and Ton van der Wouden, 49–78. John Benjamins.
- É. Kiss, Katalin. 1998. Identification focus versus information focus. *Language* 74:245–273.
- Farkas, Donka, and Kim Bruce. 2010. On reacting to assertions and polar questions. *Journal of Semantics* 27:81–118.
- Gajewski, Jon. 2011. Licensing strong NPIs. *Natural Language Semantics* 19:109–148.
- Green, Lisa. 2014. Force, focus, and negation in African American English. In *Micro-syntactic variation in North American English*, ed. Raffaella Zanuttini and Laurence R. Horn, 115–142. Oxford University Press.
- Haegeman, Liliane. 1995. *The syntax of negation*, volume 75 of *Cambridge Studies in Linguistics*. Cambridge University Press.
- Haegeman, Liliane. 2000. Negative preposing, negative inversion, and the split CP. In *Negation and polarity: Syntactic and semantic perspectives*, ed. Laurence Horn and Yasuhiko Kato. Oxford University Press.
- Haegeman, Liliane. 2012. *Adverbial clauses, main clause phenomena and the composition of the left periphery*. Oxford University Press.
- Haegeman, Liliane, and Raffaella Zanuttini. 1991. Negative heads and the NEG criterion. *The Linguistic Review* 8:233–251.
- Hankamer, Jorge, and Ivan Sag. 1976. Deep and surface anaphora. *Linguistic Inquiry* 7:391–426.
- Haspelmath, Martin. 1993. *A grammar of Lezgian*. Mouton de Gruyter.
- Hoeksema, Jack, Hotze Rullmann, Víctor Sánchez-Valencia, and Ton van der Wouden. 2001. Introduction. In *Perspectives on negation and polarity items*, ed. Jack Hoeksema, Hotze Rullmann, Víctor Sánchez-Valencia, and Ton van der Wouden, vii–xi. John Benjamins.
- Horn, Laurence. 1989. *A natural history of negation*. University of Chicago Press.
- Horn, Laurence. 2001. Flaubert triggers, squattive negation and other quirks of grammar. In *Perspectives on negation and polarity items*, ed. Jack Hoeksema, Hotze Rullmann, Víctor Sánchez-Valencia, and Ton van der Wouden, 173–202. John Benjamins.

- Horn, Laurence. 2009. Hypernegation, hyponegation, and *parole* violations. In *Proceedings of the Thirty-Fifth Annual Meeting of the Berkeley Linguistics Society*, ed. Iksoo Kwon, Hannah Pritchett, and Justin Spence, 403–423. Berkeley Linguistics Society.
- Horn, Laurence. 2014. Negative inversion(s) and conspiracy theory. Presented at the 88th Annual Meeting of the Linguistic Society of America.
- Hornstein, Norbert. 1984. *Logic as grammar: An approach to meaning in natural language*. Cambridge, MA: MIT Press.
- Jayaseelan, K.A. 2001. IP-internal topic and focus phrases. *Studia Linguistica* 55:39–75.
- Kayne, Richard. 1998. Overt vs. covert movement. *Syntax* 1:128–191.
- Klima, Edward. 1964. Negation in English. In *The structure of language*, ed. Jerry Fodor and Jerrold Katz, 246–323. Prentice Hall.
- Laka, Itziar. 1990. Negation in syntax: On the nature of functional categories and projections. Doctoral Dissertation, MIT.
- Lasnik, Howard. 1972. Analyses of negation in English. Doctoral Dissertation, MIT, Cambridge, MA.
- Martins, Ana Maria. 2014. How much syntax is there in metalinguistic negation? *Natural Language and Linguistic Theory* 32:635–672.
- May, Robert. 1985. *Logical form*. Cambridge, MA: MIT Press.
- McCloskey, James. 1993. A crude test for unaccusativity in English. In *Syntax at Santa Cruz*, ed. Geoffrey Pullum and Eric Potsdam, volume 2, 21–24. Santa Cruz: Linguistics Research Center.
- McCready, Eric. 2009. What *man* does. *Linguistics and Philosophy* 31:671–724.
- Miestamo, Matti. 2005. *Standard negation: The negation of declarative verbal main clauses in a typological perspective*, volume 31 of *Empirical Approaches to Language Typology*. Mouton de Gruyter.
- Miller, Philip, and Geoffrey Pullum. 2013. Exophoric VP ellipsis. In *The core and the periphery: Data-driven perspectives on syntax inspired by Ivan A. Sag*, ed. Philip Hofmeister and Elisabeth Norcliffe, 5–32. CSLI Publications.
- Postal, Paul. 2004. The structure of one type of American English vulgar minimizer. In *Skeptical linguistic essays*, chapter 5, 159–172. Oxford University Press.
- Postma, Gertjan. 2001. Negative polarity and the syntax of taboo. In *Perspectives on negation and polarity items*, ed. Jack Hoeksema, Hotze Rullmann, Víctor Sánchez-Valencia, and Ton van der Wouden, 283–330. John Benjamins.
- Potsdam, Eric. 2013. CP-negation and the domain of quantifier raising. *Linguistic Inquiry* 44:674–684.
- Rizzi, Luigi. 1990. Speculations on verb second. In *Grammar in progress*, ed. Joan Mascaró and Marina Nespó, 375–386. Walter de Gruyter.
- Rizzi, Luigi. 1996. Residual verb second and the wh-criterion. In *Parameters and functional heads: Essays in comparative syntax*, ed. Adriana Belletti and Luigi Rizzi, 62–90. Oxford University Press.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In *Elements of grammar*, ed. Liliane Haegeman, 281–337. Springer.
- Rudanko, Juhani. 1982. Towards a description of negatively conditioned subject operator inversion in English. *English Studies* 63:348–359.
- Sailor, Craig. 2014. The variables of VP ellipsis. Doctoral Dissertation, UCLA.
- Simons, Mandy. 2007. Observations on embedding verbs, evidentiality, and presupposition. *Lingua* 117:1034–1056.
- Wood, Jim. 2008. ‘So’-inversion as polarity focus. In *Proceedings of WECOL 38*, ed. Michael Grosvald and Dianne Soares, 304–317. UC Davis.
- Wood, Jim. 2014. Affirmative semantics with negative morphosyntax: Negative exclamatives and the New England *So AUXn’t NP/DP* construction. In *Micro-syntactic variation in North American English*, ed. Raffaella Zanuttini and Laurence R. Horn, 71–114. Oxford University Press.
- Zanuttini, Raffaella. 1991. Syntactic properties of sentential negation: A comparative study of Romance

languages. Doctoral Dissertation, University of Pennsylvania.