Restrictions on Inversion in English: Not the Subject-in-Situ Generalization, but Linear Order

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Abstract

Alexiadou and Anagnostopoulou (2001, 2007) claim that the transitivity restriction on quotative inversion and locative inversion in English is part of a broader generalization, the *subject-in-situ generalization*. This says that only one NP that requires structural case may remain inside the VP. If the subject is in-situ in the VP, an object may not be. This paper shows that this is not a viable account of English inversion constructions: the subject is not in-situ in quotative inversion, and some expletive constructions with the subject in-situ do not ban an object. I show that an object is banned in English just when the subject is to the *right* of both finite Infl and the main verb. This follows, I propose, from a minimality constraint on Agree: a head with unvalued features must value those features prior to another head with unvalued features being merged into the structure. This constraint is violated if the head that will Agree with the object is merged before Infl can value its features against the subject. Linear order is crucial, and so linear order must be specified from the beginning. I spell out a system where structure is built top-down and left-to-right.

Keywords: quotative inversion, locative inversion, subject-in-situ generalization, transitivity restrictions, precedence, linear order, top-down derivation

1 Introduction

Alexiadou and Anagnostopoulou (2001, 2007), henceforth "AA," try to motivate a cross-linguistic generalization that they call the *subject-in-situ generalization*. This says that no more than one NP that needs structural case may remain inside the VP. If the subject remains in-situ and does not move to Spec-IP (or some other position), then there may be no object in the VP in addition. There either may not be an object at all, or the object must move outside of the VP.

Two of the cases that AA examine are quotative inversion and locative inversion in English. Both of these are subject to a transitivity restriction, as shown below:

(1) *quotative inversion*
   a. "Why?" asked Gabrielle (of her neighbor).
   b. "Why?" Gabrielle asked me.
   c. * "Why?" asked Gabrielle me.
   d. * "Why?" asked me Gabrielle.

(2) *locative inversion*
   a. Into the room danced a group of six young men.
   b. * Into the room danced a waltz a group of six young men.
   c. * Into the room danced a group of six young men a waltz.

AA argue that the transitivity restriction on these two postverbal subject constructions follows from their account of the subject-in-situ generalization. (See also Richards 2010 for a different account, but based on the same generalization.)

I show here that any analysis based on the subject-in-situ generalization is not a viable account of these two transitivity restrictions. Section 2 goes through several problems for a subject-in-situ account, including the fact that there are constructions in English where the subject is apparently in-situ, but there is no transitivity restriction. Additionally, quotative inversion actually does not have the subject in-situ in the VP, as is shown in section 3. I show that the actual generalization concerns directionality: if the subject is to the right of both finite Infl and the main verb in English, there may be no other argument NP in the clause. I propose (in section 4) that this follows from a minimality constraint on heads: a head with unvalued features must value those features prior to another head with unvalued features being merged into the structure. This constraint is violated if the head that will Agree with the object is merged before Infl can value its features against the subject. Linear order is crucial, and so linear order must be specified from the beginning. This follows in the system proposed here from the fact that syntactic derivations are built top-down and left to right, rather than bottom-up as in most conceptions. This view of syntax has the potential to explain numerous asymmetries in directionality, like the one explored here. It is also more consonant with what is known about processing than is a bottom-up derivation.

2 Initial Problems with the Subject-in-Situ Account

There are several reasons to doubt AA's claim that the transitivity restriction on quotative and locative inversion is part of the subject-in-situ generalization. First, if it were, an object should be allowed if either it or the subject moves out of the VP. For instance, in French stylistic inversion, moving the object by wh-movement is grammatical, while leaving the object in VP is not (see Alexiadou and Anagnostopoulou 2001 and the references there). In English, however, there is simply no word order that redeems quotative and locative inversion sentences that include an additional NP. Extraction is banned from quotative inversion, but it ought to be possible to extract from an embedded locative inversion clause. For instance, a wh-adjunct seems to be able to extract:

(3) When do you think (that) for this perverted cause were slaughtered thousands of innocents?

This contrasts sharply with extraction of an object:

(4) a. * Which dance steps do you think that across this marble floor danced a large number of celebrities?
b. * What kind of life do you believe that under this bridge was living a troll?

(5) a. At that time was given to the Son of Man dominion and glory and the rule of the kingdom.
b. * At that time was given the Son of Man dominion and glory and the rule of the kingdom.
c. * What gifts did you say that at that time was/were given the Son of Man?

Additionally, the postverbal subject in both quotative inversion and locative inversion has been shown to be mobile. Both constructions permit heavy shift of the subject:

(6) a. "Where to?" asked of us the balding driver with a blond mustache. (Collins and Branigan 1997, (9a))
b. Into the room walked carefully the students in the class who had heard about the social psych experiment that we were about to perpetrate. (Culicover and Levine 2001, (18e))

Since the subject is not in-situ in such examples, another NP should be permitted. This is not the case, however:

(7) a. * "Where to?" asked us languidly the balding driver with a blond mustache.
b. * Into the room danced a waltz in pairs the students in the class who had progressed beyond the simplest steps.

Unlike the other cases discussed by AA, then, simply moving one of the NPs does not redeem an English inversion sentence with an additional NP. In all of the other cases discussed by AA, an object is allowed; only particular word orders are not. In the English cases, no object is permitted, regardless of word order. This casts considerable doubt on the claim that the English restriction is part of the subject-in-situ generalization.

The second major problem is that there are expletive constructions in English that plausibly have the subject in-situ, but are not subject to the transitivity restriction. For instance, expletive constructions with gerunds (which Milsark 1974 and Deal 2009 show may be monoclausal, and not necessarily reduced relatives) allow NPs beyond the one that agrees with the finite verb:

(8) a. There are linguistics professors discussing monster trucks in the hallway.
b. There might have been a troll living the good life under that bridge.
c. There were celebrities dancing waltzes in the breakfast nook.
d. In those days there were numerous aristocrats leaving their pets their money.

In addition, the expletive passive (which can also be monoclausal, see Milsark 1974, Lasnik 1999, Chomsky 2001, Caponigro and Schütze 2003) is compatible with double object constructions, unlike locative inversion:

(9) a. Back in those days, there were pets left money all the time.
b. There were many tourists sold fake pieces of the Berlin Wall.

The expletive passive looks almost identical to the presentational *there* construction, except in the position of the subject (see, e.g., Rezac 2006):

(10) In those days there were sold numerous pieces of the Berlin Wall.

The presentational *there* construction is subject to the transitivity restriction, just like locative inversion (see Postal 2004 on numerous similarities between locative inversion and the presentational *there* construction):

(11) * In those days there were sold many tourists fake pieces of the Berlin Wall.

It would be difficult to maintain that the subject is inside the VP in the presentational *there* construction but is not in the expletive passive construction or the expletive gerund construction. The surface position of the subject in the expletive gerund construction, in particular, appears to be exactly the position that is generally hypothesized to be its starting position. This position seems to be within VP, since it is included in VP ellipsis:

(12) A: There are linguistics professors discussing monster trucks in the hallway.
B: There certainly are.

The postverbal subject in the presentational *there* construction is also included in VP ellipsis:

(13) He said that across the room there will appear a large purple dragon, and across the room there certainly will. (Bruening 2010b, (63a))

This means that some constructions with subjects in-situ (or in VP, if not in-situ, as in the passive sentences here) are subject to a transitivity restriction, but others are not. It is doubtful that the subject-in-situ generalization can distinguish them.

The correct generalization is not about whether the subject is in-situ, but about the *position* of the subject:

(14) The Postverbal Subject Generalization:
If the NP that agrees with finite Infl follows both Infl and the main verb of a clause in English, there can be no other argument NP in that clause.

The constructions that are not subject to the transitivity restriction—expletive constructions with gerunds, and the expletive passive—have the agreeing subject to the *left* of the main verb. Quotative inversion, locative inversion, and the presentational *there* construction have the agreeing subject to the *right*.

The part about the subject following both finite Infl and the main verb can be seen to be necessary with VP fronting:

(15) He said we would discuss monster trucks, and discuss monster trucks we will.

In VP fronting, which permits an object, the subject follows the main verb but crucially precedes finite Infl (see more on this type of word order in section 4.4).

I will propose an explanation for (14) in section 4. First, I turn to quotative inversion, and show that the subject is not actually in-situ; rather, quotative inversion subjects are in the typical subject position, Spec-IP. This is yet another reason to reject the subject-in-situ account of the transitivity restriction on English inversion constructions.

3 Quotative Inversion Subjects are Not In-Situ

AA adopt the analysis of quotative inversion in Collins and Branigan (1997), according to which the subject stays low, inside the VP. The transitivity restriction on quotative inversion is then part of the subject-in-situ generalization, as described above. However, as I show here, the subject in quotative inversion actually appears to be outside of VP, and so the subject-in-situ generalization cannot be behind the transitivity restriction.

Collins and Branigan (1997) give two arguments that the subject is low. First, it can undergo heavy shift (see 6a). Subjects in the preverbal subject position (here, Spec-IP) cannot undergo heavy shift. This, Collins and Branigan suggest, indicates that the subject is not in Spec-IP. However, as Alexiadou and Anagnostopoulou (2001) note, the subject in quotative inversion acts like a direct object as far as word order is concerned: it cannot be separated from the verb by an adverb, but it may be separated from the verb by a particle. Alexiadou and Anagnostopoulou (2001) suggest that the subject in quotative inversion is subject to the same case adjacency requirement as direct objects in English. Regardless of how one should account for this theoretically, the point is that the subject in quotative inversion acts like a direct object in many respects. It is therefore not surprising that, like a direct object, it can undergo heavy shift. Moreover, in an ECM analysis of *believe*-type verbs in English (Chomsky 1973), the embedded subject is in Spec-IP, yet these NPs can also undergo heavy shift (Postal 1974). If the ECM analysis of *believe*-type verbs is correct, then it is not true that subjects in Spec-IP cannot undergo heavy shift. It appears that the generalization is about word order again: NPs that are to the left of the verb or Infl that licenses them may not undergo heavy shift, while NPs that are to the right may. The subject in quotative inversion is to the right of the verb, and so may undergo heavy shift.

The second argument that Collins and Branigan (1997) give for thinking that the subject is low is that floating quantifiers are not allowed in quotative inversion:

(16) * “We must do this again,” declared the guests all to Tony. (Collins and Branigan 1997, (11c))

There is an alternative explanation for this restriction, however. Below I will suggest that what moves to the left of the subject is a whole phrase that includes the verb, not just the verb by itself. PPs must move out of this phrase before it fronts. The example above could only be derived by moving the quantifier with the PP, but this is not permitted, as (17a) shows. In fact, floating quantifiers may never form any sort of constituent with PPs like the one in (16):

(17) a. * The guests declared "Yes!" yesterday all to Tony.
b. The guests (all) declared "Yes!" (*all) to Tony (*all) yesterday.

The floating quantifier may not front along with the constituent that includes the verb, either:

(18) * "We must do this again," all declared the guests to Tony.

It is well-established that floating quantifiers must *follow* the NP with which they associate (with some caveats; see Baltin 1978, Bobaljik 1995). This means that there is simply no grammatical option for such floating quantifiers in quotative inversion.

Where a floating quantifier *can* form a constituent with a PP or some other constituent, it actually can appear in quotative inversion (see Bobaljik 1995 on floated quantifiers with these types of phrases):

(19) a. "We must do this again," declared the guests all at the same time.
b. "Happy New Year!" shouted the guests all punctually at 12 o'clock.
c. "Thank God," whispered Sam and Isaac, both dead tired.

It is just not true that floating quantifiers are ungrammatical in quotative inversion. I assume that in these examples, the floating quantifier forms a constituent with the phrase to its right, and that constituent moves out of the VP and adjoins on the right (see below).

Additionally, even if the analysis given below in terms of phrasal movement is not correct, and the verb moves by itself, there is another constraint that rules out floating quantifiers like that in (16). If the verb has moved alone in (16), then the floating quantifier must be adjoined to a phrase whose head is not pronounced within that phrase (VP, say), since the quantifier could not be adjoined to PP. But adjoining a floating quantifier to a phrase whose head is not pronounced within that phrase seems to be disallowed. Consider VP ellipsis examples like the following:

(20) a. The guests have all wished Tony happy birthday.
b. The hostess has not.
c. * His co-workers have all too.

The example in (20b) shows that adverbs can in principle be stranded at the left edge of an elided VP. In (20c), a floated quantifier cannot be so stranded. The following examples make the same point, including an instance of pseudogapping that is comparable to Collins and Branigan's example above (22b):

(21) a. Sam and Isaac have both been collecting stamps.
b. * Fred and Gil have both too.

(22) a. The travelers have all declared their belongings to the customs officials.
b. * The flight attendants have all to the airport police.

Note that it will not do to try to account for the ungrammaticality of examples like (22b) by saying that the VP that the floated quantifier adjoins to must delete in its entirety, taking the quantifier with it. This is because the auxiliary *have* is generally assumed to move when it is the highest (tensed) auxiliary, and so in (22b) it must have moved to its surface position. There is then a parse where *all* has adjoined to the

phrase headed by *have*, and not to the elided VP, and *have* has then moved across the quantifier. Since this is ungrammatical, there must be a constraint banning floated quantifiers from adjoining to phrases whose heads are not pronounced within that phrase. This ban includes non-pronunciation due to both ellipsis and movement:

(23) A floating quantifier may not adjoin to a phrase the head of which is not pronounced within that phrase.

This means that floated quantifiers are expected to be ungrammatical in quotative inversion on any analysis, whether the subject has moved or not. If only the verb has moved, they will be ungrammatical because of the constraint in (23); if a whole phrase has moved, they are ungrammatical because they cannot move out of this phrase with the kinds of PPs that appear in Collins and Branigan's examples. When they can move with a PP or AP, they actually *are* grammatical (19).

Note that floated quantifiers are also allowed in cases of VP ellipsis when they occur with the kinds of phrases that they can appear with in quotative inversion:

(24) (Did anyone shout, "Happy New Year!"?)
  a. The guests did all at the same time.
  b. The guests will all punctually at 12 o'clock.
  c. Sam and Isaac did too, both dead tired.

As described above, I assume that these floated quantifiers are possible because they adjoin to the PP or AP, and not to a VP. They therefore do not violate (23).

So, floated quantifiers do not actually constitute an argument that the subject is low. Some floated quantifiers are grammatical in quotative inversion, and the ones that are ungrammatical seem to be ungrammatical for a different reason (or possibly several reasons).

The two arguments that Collins and Branigan (1997) give that subjects are low in quotative inversion are not compelling, then. Additionally, there are several arguments that the subject is actually high, in the ordinary preverbal subject position (Spec-IP). The first comes from tag questions. Tag questions have a pronoun that generally must correspond to what is in Spec-IP in the main clause (e.g., Culicover 1992). Consider the following cases of pre- versus post-verbal subjects:

(25) a. That that theory is wrong and that it is overly complicated are (both) generally acknowledged, aren't they?
  b. It is generally acknowledged that that theory is wrong and that it is overly complicated, isn't it? (*aren't they?)

(26) a. Afterwards, violent earthquakes and floods occurred, didn't they?
  b. Afterwards there occurred violent earthquakes and floods, didn't there? (*didn't they?)

(27) a. A fire-breathing dragon stormed out of the cave, didn't it/ ?one?
  b. Out of the cave stormed a fire-breathing dragon, didn't there? (*didn't it/ ??didn't one?)

Conjoined sentential subjects in preverbal position may have the pronoun *they* in the tag, but with *it*-extraposition, only *it* is permitted in the tag (25). In an existential sentence with *there*, only *there* can appear in the tag (26). In locative inversion (27), the tag is also *there* (Bowers 1976, 236–237 cites an unpublished manuscript by Elliott and Kelly for this observation; see Bruening 2010b for discussion). I take this to mean that in locative inversion, a null *there* occupies Spec-IP (Lawler 1977; Postal 1977, 2004; Bruening 2010b); see the analysis in section 4.

Now consider quotative inversion:

(28) a. "Aaargh!" screamed a woman, didn't she/one? (*didn't there/it)
b. "Yes," said John, didn't he? (*didn't there/it)

If Spec-IP is simply empty in quotative inversion (Collins and Branigan 1997), or it is occupied by a quotative operator (Collins 1997), we would not expect the pronoun in the tag question to correspond to the postverbal subject. In other cases of postverbal subjects, the pronoun in the tag question does not correspond to the postverbal subject, it corresponds to an expletive, even when there is no visible expletive in the surface subject position (27). Yet, in quotative inversion, there is no option besides a pronoun corresponding to the postverbal subject; in particular, an expletive is sharply ungrammatical.

For completeness, it should be noted that a pronoun corresponding to the postverbal subject is permitted in locative inversion with a definite postverbal subject (*Into the room stepped Archie, didn't he?*). This is probably due to a definiteness restriction on *there*: *there* is not permitted with a definite postverbal subject, only the null expletive is (see Bruening 2010b for discussion). Therefore, the important comparison involves indefinites, as in (28a). In locative inversion with an indefinite, the tag pronoun is most naturally *there* (27). In contrast, in quotative inversion the tag pronoun most naturally corresponds to the postverbal subject (28a). In fact, there is no other option. I take this to indicate that the subject is actually in Spec-IP in quotative inversion.

The second argument that quotative inversion subjects are in Spec-IP is related to the tag question argument. This second argument is that the subject in quotative inversion may never be included in VP ellipsis, unlike other postverbal subjects. Consider the following exchanges:

(29) a. A: "Yes," said a woman. B: She/one certainly did.
b. A: "Yes," said a woman. B: *Certainly did.

(30) a. A: Into the room stepped a large purple dragon. B: There certainly did.
b. A: It was obvious that Bush was lying. B: It certainly was.
c. A: Afterwards there occurred violent earthquakes and floods. B: There certainly did.

On an analysis like that of Collins (1997), where there is a quotative operator in Spec-IP and the subject is inside the VP, (29b) ought to have a parse with the null operator in Spec-IP and the VP, including the subject, elided. As Collins and Branigan (1997) show, the quote does not actually have to precede the inverted verb: *Said Simple Simon to the pieman: "Let me taste your ware.*"

However, it is also the case that most auxiliaries are banned from quotative inversion (Quirk *et al.* 1985), and so (29b) might be ungrammatical for that reason. We might then turn to inversion with *so*, which Collins and Branigan (1997) suggest is very similar, if not identical, to quotative inversion (they suggest that *so* is an overt instantiation of their quotative operator). Inversion with *so* seems to allow the auxiliary *have* (such examples can be found on the web):

(31) a. A: Or so has said an anonymous Obama official. B: One certainly has.
b. A: Or so has said an anonymous Obama official. B: *So certainly has.

B's responses in (31b) could not be ungrammatical because the auxiliary is not allowed, because the auxiliary *is* allowed in A's sentence. Nevertheless, VP ellipsis cannot include the postverbal subject. The subject must be pronounced outside of the elided VP (31a). Now, one *could* argue that inversion with *so* here is *not* the same as quotative inversion, and so dismiss this evidence. This would ignore the numerous similarities between *so* and quotative inversion documented by Collins and Branigan (1997), like the fact that inversion with *so* is also subject to the transitivity restriction:

(32) a. Or so an anonymous Obama official has told the press corps.
b. * Or so has told the press corps an anonymous Obama official.

If one wished to argue that subjects in *so* inversion are outside of VP, in order to maintain the subject-in-situ analysis of quotative inversion, then one would have no account of the transitivity restriction on *so* inversion.

Moreover, it remains the case that quotative inversion contrasts strikingly with other cases of postverbal subjects in VP ellipsis. Other postverbal subjects are included in VP ellipsis, while the subject that is pronounced in the elided clause is an expletive. This holds even when the antecedent clause has no visible expletive, as in (30a). This never happens with quotative inversion: any attempt at VP ellipsis in a clause that has a quotative inversion clause as its antecedent must pronounce the postverbal subject or a pronoun referring to it. This discrepancy between quotative inversion subjects and other postverbal subjects indicates that the former, unlike the latter, are not inside the VP, they are in Spec-IP.

In addition, the subject in quotative inversion can control into an adjunct clause with ease:

(33) "Indeed," said Branson$_1$, without PRO$_1$ appearing to notice the insult.

In contrast, other postverbal subjects only marginally control:

(34) a. [That his theory is wrong]$_1$ is generally acknowleged without PRO$_1$ being taken as a strike against it.
b. * It is generally acknowledged [that his theory is wrong]$_1$ without PRO$_1$ being taken as a strike against it.

(35) a. [A little house]$_1$ stands in the clearing without PRO$_1$ attracting notice.
b. ?? In the clearing stands [a little house]$_1$ without PRO$_1$ attracting notice.

(36) a. [Violent earthquakes and floods]$_1$ occurred without PRO$_1$ causing any damage.
b. ?? There occurred [violent earthquakes and floods]$_1$ without PRO$_1$ causing any damage.

Floating emphatic reflexives also seem to distinguish subjects in quotative inversion from other postverbal subjects:

(37) a. "Well done," said the governor to me himself.
b. The governor danced across the floor with a flourish himself.
c. * Across the floor danced the governor with a flourish himself.
d. Elias and Moses appeared unto me on that day themselves.
e. * There appeared unto me Elias and Moses on that day themselves.

As do absolute clauses:

(38) a. "Yes," mumbled Gil, being only half awake.
b. The governor waltzed into the room, being a man of flamboyant flair.
c. ?? Into the room waltzed the governor, being a man of flamboyant flair.
d. Elias and Moses appeared unto them, being venerated prophets of old.
e. ?? There appeared unto them Elias and Moses, being venerated prophets of old.

Control, emphatic reflexives, and absolute clauses are often taken to associate with the surface subject position, Spec-IP. The contrasts given above all therefore suggest that the subject in quotative inversion, unlike other postverbal subjects in English, is in Spec-IP.

If all of the arguments presented in this section are on the right track, then the subject in quotative inversion is actually high, in Spec-IP. This means that the transitivity restriction on quotative inversion cannot be an instance of the subject-in-situ generalization, because the subject is not in situ. We must look elsewhere for an explanation for the transitivity restriction.

4 An Account of the Postverbal Subject Generalization

Since the subject in quotative inversion is not in-situ, the subject-in-situ generalization is not a viable account of the transitivity restriction on quotative inversion. Additionally, expletive passives and expletive constructions with gerunds plausibly have the subject in-situ, but are not subject to a transitivity restriction. It therefore appears that the subject-in-situ generalization does not hold in English, and cannot form the basis of an account of the transitivity restriction on English inversion constructions.

The correct generalization is the following, repeated from above:

(39) The Postverbal Subject Generalization:
If the NP that agrees with finite Infl follows both Infl and the main verb of a clause in English, there can be no other argument NP in that clause.

I propose an account of this generalization in this section. The basic idea is that the features of Infl must be valued by an NP before any other head is merged into the structure with features that also need to be valued by an NP. This is a type of minimality effect. It is important, though, that minimality has to be defined in terms of linear order and not hierarchy alone, as I will show. This derives the important directionality aspect of the Postverbal Subject Generalization.

4.1 Analysis of Quotative Inversion

In quotative inversion, what moves above the subject seems to be phrasal, and not just a head (the verb). Most auxiliaries are ungrammatical, but *have* seems to be marginally allowed:

(40) a. ? "Yippee!" has said Gil on more than one occasion.

As we saw above, *have* is also permitted with *so* inversion, which patterns with quotative inversion in numerous ways (Collins and Branigan 1997).

Additionally, adverbs can appear before the verb, where they are not allowed before the subject without inversion (Collins and Branigan 1997, Alexiadou and Anagnostopoulou 2001):

(41) a. "Let's find our mittens!" then said the kittens. (Jerry Pinkney, *Three Little Kittens*)
b. "Let's find our mittens!" the kittens then said.
c. * "Let's find our mittens!" then the kittens said.

(42) a. "I'm leaving!" abruptly shouted John.
b. "I'm leaving!" John shouted abruptly.
c. * "I'm leaving!" abruptly John shouted.

If the quote (or a quotative operator, or both) has moved to Spec-CP, and the subject is in Spec-IP, there is nowhere for the adverb to adjoin to in (42a), since it apparently cannot adjoin to IP, as (42c) shows. *Abruptly* must therefore have moved with the verb in (42a).

Additionally, particles can move with the verb (Collins and Branigan 1997):

(43) a. "No!" shouted out the man.
b. "What?!" blurted out Jill without thinking.

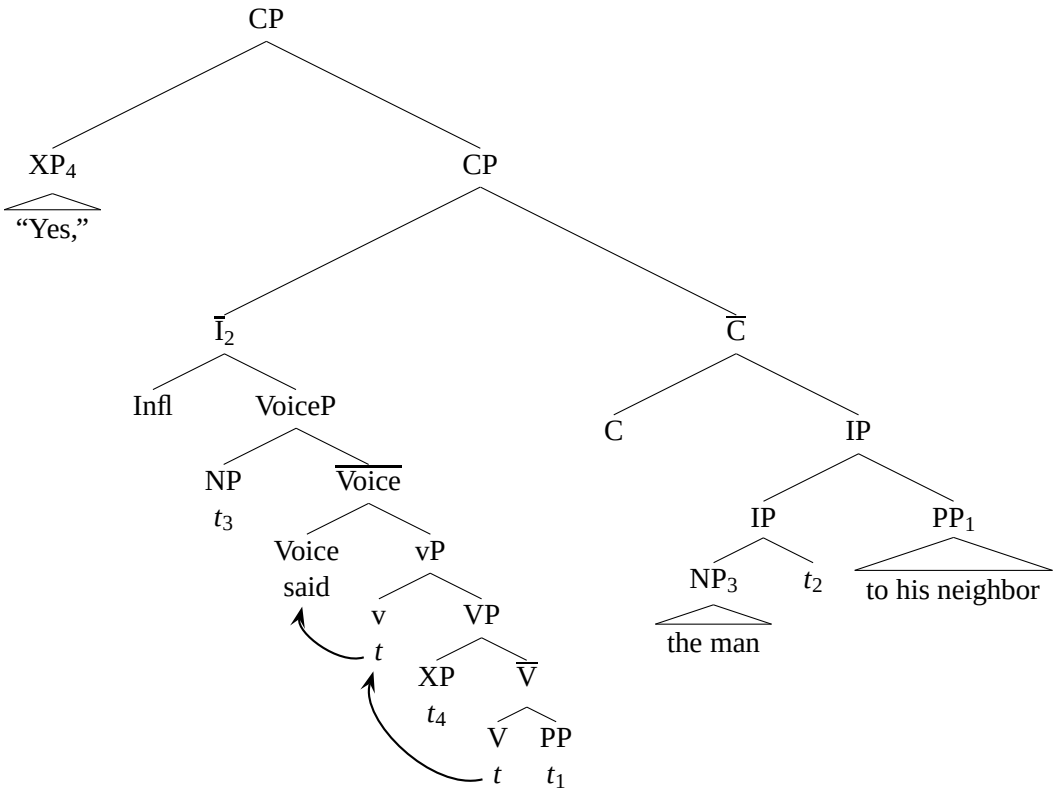
One might think that the particle is moving with the verb as a single head (Collins and Branigan 1997). However, in all the Germanic languages, particles *never* move with the verb as high as C. They are always stranded in verb second clauses. They never even move with the verb as high as Infl; this is particularly apparent in older stages of English, where the verb can move to Infl, but it never takes a particle with it. For instance, Shakespeare has examples like the following:

(44) Why ring not out the bells aloud throughout the town? (Henry VI Part 1)

But there are no examples like **ring out not*. The same is true of the King James Bible and other sources that permit main verbs to precede negation. It therefore appears that particles may not actually undergo head movement with the verb.[1]

I take the above facts to indicate that quotative inversion involves not head movement, but phrasal movement. A constituent consisting of the verb and optionally a particle, and marginally the auxiliary *have*, moves to a position before the subject in Spec-IP. PP arguments and adjuncts must move out of this constituent before it moves, as does the quote. I assume that this constituent includes Infl and V, and so is therefore $\overline{\text{I}}$. The subject moves from Spec-VoiceP to Spec-IP, while any PPs within VoiceP move and adjoin to IP. The quote (or a quotative operator) moves to Spec-CP, and the whole $\overline{\text{I}}$ moves to another specifier of CP:

(45)



I assume that V moves through v to Voice. (I have three verbal projections in every verb phrase, but this is actually not crucial to this paper. Voice is the head that projects the external argument, while objects in an active transitive clause move to Spec-vP, where they Agree with and are licensed by Voice. More on this below.)

This seems to capture the word order and salient facts about quotative inversion. However, there are several restrictions on quotative inversion that do not follow from this analysis. These include the fact that most auxiliaries and negation are not permitted, and the fact that the actual pronounced content in the fronted $\overline{\text{I}}$ must be quite minimal: only particles and some adverbs can move along with the verb itself. Additionally, as described above, the subject in Spec-IP must be adjacent to the verb (modulo particles). I will not attempt to explain these restrictions here, since my main concern is the transitivity restriction. This analysis does permit an account of the transitivity restriction, in concert with some other other assumptions, which I now enumerate.

[1] I owe this observation about V movement and particles to Darrell Larsen.

First, I assume that the syntactic derivation proceeds not bottom-to-top, as in most generative theories, but top-down and, most crucially, left-to-right. This requires that the basic operation of structure building be not Merge, but *Divide*. Merge and Divide are two sides of the same coin, and have the same result: they both create a two-membered set with the label of one of their members. Merge starts with two elements and unifies them; Divide starts with one, and divides it into two. One of the two members of the division bears the same category label as the category that was divided. Crucially, the set is ordered from the beginning: linear order is specified in Divide.

So, the structure above is put together by beginning with a CP and dividing it into XP (the quote) and CP. XP comes before CP. XP is then divided into whatever structure makes up a quote (not important here). Once that is finished, the lower CP is divided into two constituents, $\overline{\text{I}}$ and $\overline{\text{C}}$. Divide then splits $\overline{\text{I}}$ into Infl and VoiceP; then VoiceP into NP and $\overline{\text{Voice}}$; and so on. In this way Divide expands a syntactic object by dividing it, and then dividing one member of that division. This can go on iteratively until no more division is possible.

In this system, most instances of movement will actually be lowering. So, in the tree above, the arrows should actually be reversed. I take movement to be the merger of unpronounced copies of the moved element in lower positions as they are constructed (notated as a trace, but understood to be a copy), and from now on will indicate this with the direction of the movement arrows.

Going back to the unfolding of the above derivation, the lower CP was split into $\overline{\text{I}}$ and $\overline{\text{C}}$. However, because the derivation proceeds left-to-right, nothing is done with $\overline{\text{C}}$ until the entire $\overline{\text{I}}$ node is completed. $\overline{\text{C}}$ remains a single syntactic object, with no content that could be visible to the derivation other than the label. This is an important feature of the derivational, left-to-right approach adopted here: material is not present or visible until it has actually been merged into the tree (by Divide).

In the same way, VoiceP is split by Divide into an NP trace (an unpronounced NP) and $\overline{\text{Voice}}$. Now, in most cases, the head of a chain will precede all lower links in a movement chain. The actual content of a moved XP will be merged into the tree in the highest position, and then copied into lower positions. In the case at hand, however, a lower link in a chain precedes the highest link. I make the following hypothesis about when in the derivation syntactic material is merged in a chain:

(46) The actual syntactic content of a chain is only merged at the position of the highest link in the chain.

In most cases, as just stated, the highest position precedes all lower positions, and so copies can be merged into all lower positions. In case a lower link in a chain precedes the highest link, the above principle requires that the lower link not have any content yet. In such a case it will only consist of category information (NP, in this case), with an index to indicate that it will get its content filled in later by some other NP. Importantly, since the NP consists only of a category label, it does not have phi-features or any other features at this point, and will only get those features once the actual content of the chain is merged in the position of the head of the chain. At that point, the index on the empty NP will ensure that the empty NP is filled in with the full syntactic content of its antecedent. However, this will not take place until the second IP node is divided, which will not happen until after the entire $\overline{\text{I}}$ has been constructed. The NP node prior to that point is simply a placeholder, having categorial features and nothing else. In this way, linear order becomes crucial in the derivation, and will have real consequences for agreement and other syntactic phenomena.

When Infl is merged by Divide, it has unvalued phi-features that it needs to value, by the operation of Agree (Chomsky 2000). However, it cannot value its features with the NP copy in Spec-VoiceP, because this NP has no features other than category yet. It is only when the NP *the man* is actually merged into the structure that an Agree relation can be established between Infl and an NP.

The basic constraint behind the transitivity restriction is then that the features of Infl must be valued before any other heads with unvalued features are merged into the tree. In the tree above, intransitive Voice has no unvalued features, and the derivation can proceed. If transitive Voice is merged instead, with

unvalued phi-features to value against an object, the derivation will crash. If intransitive Voice is merged, with no unvalued features, and then an object is merged, the derivation will also crash, because the object will not be licensed.

4.2 The Constraint

Here is the constraint I am proposing for English, the **2UH constraint* (for "*two unvalued heads"):

(47) *2UH:
A head with unvalued phi-features must value those features before another head with unvalued phi-features is merged into the structure. (The derivation crashes if it ever contains two heads with unvalued phi-features.)

I consider this to be a type of minimality effect: two heads with unvalued features interfere with each other. I will discuss the nature of this constraint more below; for now I leave it as stated, in order to show how it works and accounts for the transitivity restriction.

Consider a violation of the transitivity constraint on quotative inversion like the following:

(48) a. "Yes," the man told me.
b. * "Yes," told me the man.
c. * "Yes," told the man me.

Where there is no inversion, $\bar{\text{I}}$ has not moved. The subject is in Spec-IP. When Infl is merged (when Divide applies to $\bar{\text{I}}$), I assume that valuation of its features can take place immediately, through Agree with its specifier. Alternatively, a copy of the subject is merged into Spec-VoiceP, and Agree takes place at that point. The choice between these two alternatives makes no difference here. In contrast, in (48b), $\bar{\text{I}}$ has moved, and the phi-features of the subject are not available until *after* the entire $\bar{\text{I}}$ has been built. Before Infl can value its features, transitive Voice is merged with unvalued phi-features. This violates the *2UH constraint. It does not matter if the object has moved out of $\bar{\text{I}}$, as in (48c); the *2UH constraint will still be violated. If intransitive Voice is merged instead, without unvalued phi-features, the *2UH constraint will not be violated, but the object will never be licensed. I assume, following Chomsky (2000) and much other work, that NPs are only licensed by virtue of Agreeing with functional heads that have unvalued phi-features.

This accounts for the transitivity constraint on quotative inversion. Unlike the subject-in-situ generalization, it accounts for the fact that word order does not matter: it is simply impossible to have another NP when quotative inversion takes place.

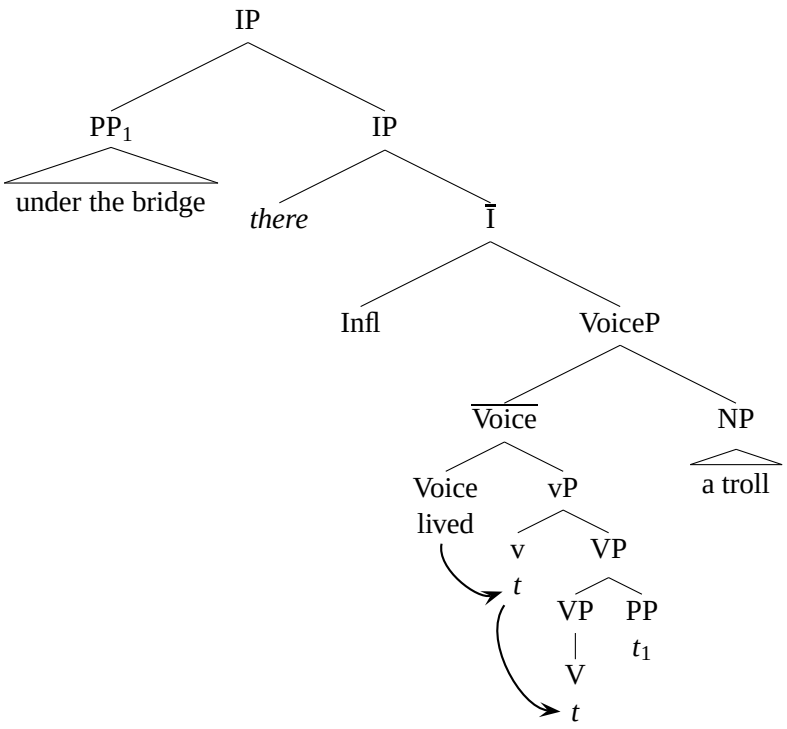
I now turn to locative inversion, and go into more details of the analysis.

4.3 Locative Inversion

The structure I propose for a simple locative inversion example with an unergative verb is the following:[2]

[2]Verbs like *live* and *dance* are clearly unergative, not unaccusative. They can undergo pseudopassivization, for instance: *This house has not been lived in in years*. On unergative verbs in locative inversion, see Levin and Rappaport Hovav (1995).

(49)

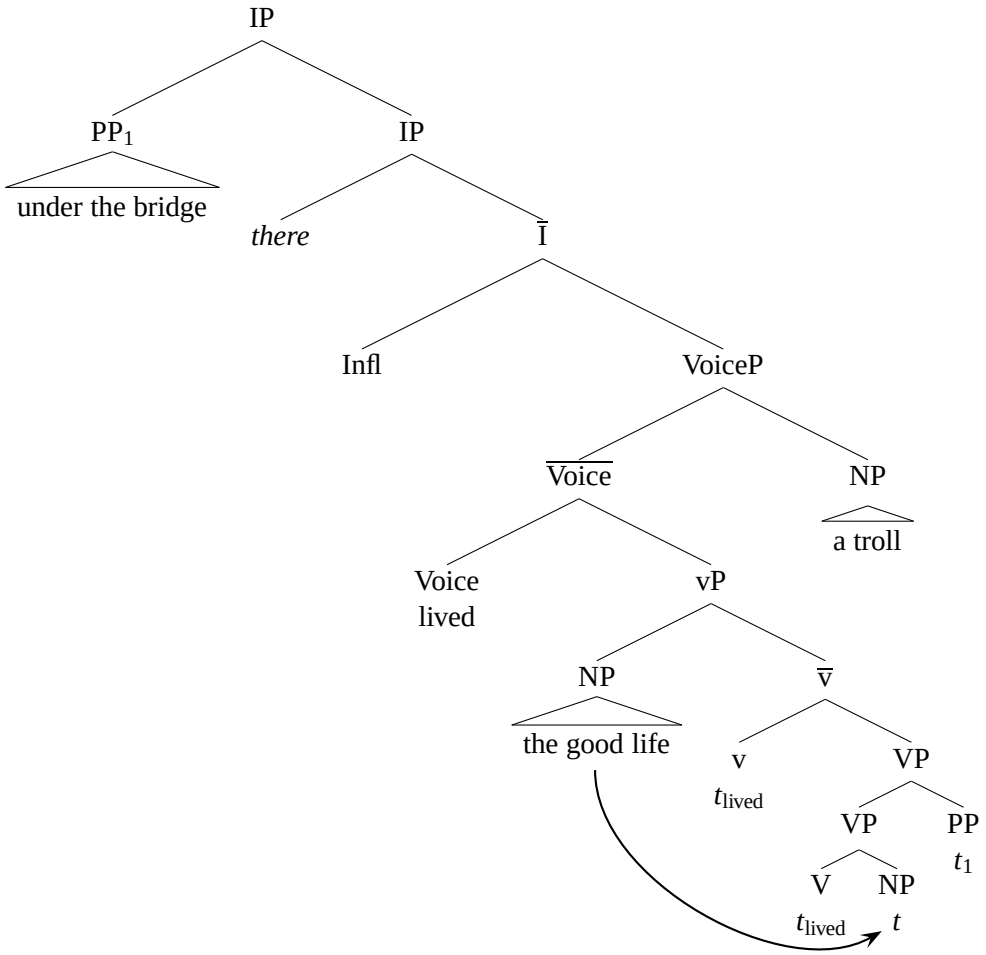


This is also the structure for presentational *there*; the only difference between the two is whether *there* is pronounced or not (see Bruening 2010b). As can be seen, the verb moves through v to Voice (actually, it starts in Voice and is copied into v and then V). The PP fronts to adjoin to IP (again, it starts there, and then is copied into the trace position inside the VP). The postverbal subject is projected in a rightward specifier of VoiceP, and remains there. This rightward projection of the specifier of VoiceP requires special licensing, and is not generally available. In this case, what licenses it is the presence of an expletive in Spec-IP. Leaving the expletive unpronounced also requires licensing; it is the presence of the fronted PP that licenses non-pronunciation of the expletive (see Bruening 2010b for discussion and more restrictions).

As in quotative inversion, Infl has unvalued phi-features that it needs to value. Because the derivation takes place left-to-right, as described above, Spec-VoiceP is not actually merged into the structure until after $\overline{\text{Voice}}$ is complete. I assume that the way this works is that VoiceP is split by Divide into $\overline{\text{Voice}}$ and NP, but the actual content of the NP is not merged until later, as described above. That is, at this point, Spec-VoiceP consists only of category features, not phi-features. Infl has nothing to Agree with. $\overline{\text{Voice}}$ is then split into Voice and vP; at this point, a head that could potentially have unvalued phi-features is merged into the structure. In the example at hand, this does not lead to any trouble, because this is intransitive Voice, which does not have unvalued phi-features. Once the actual NP is merged into the structure in Spec-VoiceP, complete with its phi-features, Agree between it and Infl takes place, and the derivation converges.

Consider now what would happen if there were another NP in the structure. I assume that objects undergo A-movement to Spec-vP, but this is not crucial:

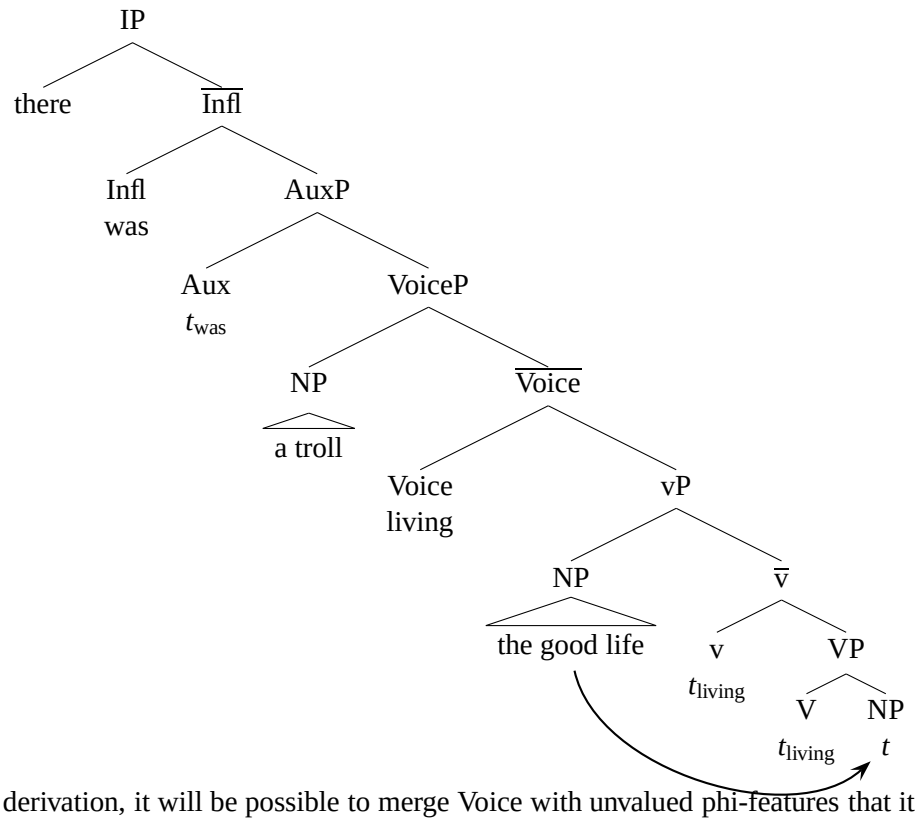
(50) *



Once again, Infl has unvalued phi-features, and once again, the NP that it will Agree with is not actually present in the structure until after $\overline{\text{Voice}}$ is constructed. This time, transitive Voice has to be merged, and transitive Voice has unvalued phi-features. This violates the *2UH constraint, and the derivation crashes. If Voice is merged without unvalued phi-features, the derivation will crash again, because the object will not be able to enter into an Agree relation with any head, and will remain unlicensed.

Contrast this now with an expletive gerund construction. I suggest that this has the following structure (cf. Deal 2009), where what is crucial is that the specifier of VoiceP is on the left:

(51)



In this derivation, it will be possible to merge Voice with unvalued phi-features that it will value against the object in Spec-vP. This is because the unvalued phi-features of Infl will be valued before Voice is merged. VoiceP will be split into an NP and $\overline{\text{Voice}}$, as before, but this time, the NP is on the left, and it will be constructed *first*, before $\overline{\text{Voice}}$. NP will be split into Det and N at least (and whatever other material is present in an NP node); crucially, this N will have phi-features, and Agree can value the features of Infl. Only after the NP is finished and Agree has taken place will $\overline{\text{Voice}}$ be divided and Voice merged with its unvalued phi-features. These will be valued against the NP in Spec-vP, and the derivation will converge.

Turning back to locative inversion, as with quotative inversion, simply changing the word order does not help:

(52) a. * Under the bridge was living the good life a troll.
b. * Under the bridge was living a troll the good life.

The actual position of the object does not matter; what matters is that Voice is merged into the structure *before* the subject is. Simply to be concrete, I assume that the word order in (52b) could only be derived by moving the object rightward and adjoining it higher than VoiceP. This makes no difference, though, because it is the relative positions of Voice and the subject that matter, not the object. This also accounts for why wh-movement does not help (examples repeated from 4):

(53) a. * Which dance steps do you think that across this marble floor danced a large number of celebrities?
b. * What kind of life do you believe that under this bridge was living a troll?

I assume that unpronounced copies of a moved wh-phrase are merged into phase edges as the derivation unfolds. When the wh-phrase is merged into its highest A-position, Agree will be triggered. In the cases above, this will be when the wh-phrase is copied into Spec-vP. Again, this makes no difference to the *2UH constraint: Infl will not have had its features valued at the point where Voice is merged with unvalued features.

In passive and unaccusative locative inversion sentences, I assume that no thematic argument is projected in Spec-VoiceP. However, VoiceP can have a non-thematic specifier, projected on the right, into which an underlying object can and in fact must move. From this position it Agrees with Infl. A couple of examples are the following:

(54) a. In the town square rose a gigantic statue.
b. In the town square was constructed a huge and imposing gallows.

This movement to rightward Spec-VoiceP explains why underlying objects must follow a particle in passive locative inversion sentences (Doggett 2004):

(55) a. In the notebook were written down some figures.
b. * In the notebook were written some figures down.
c. In the notebook we wrote some figures down.

In passive double object constructions, one of the NPs (only the highest, presumably) will have to move to the rightward specifier of (Passive) Voice, since one of the defining properties of locative inversion is that the specifier of Voice is on the right. This NP will Agree with and be licensed by Infl, as described above. The other NP will have to be licensed by something; in a passive double object construction, I assume that that something is Voice. Voice will therefore have to be merged with unvalued phi-features, and again the *2UH constraint will be violated. Infl will have been merged with unvalued phi-features that are not valued before Voice is merged. This leads to the ungrammaticality of examples like (56b) below:

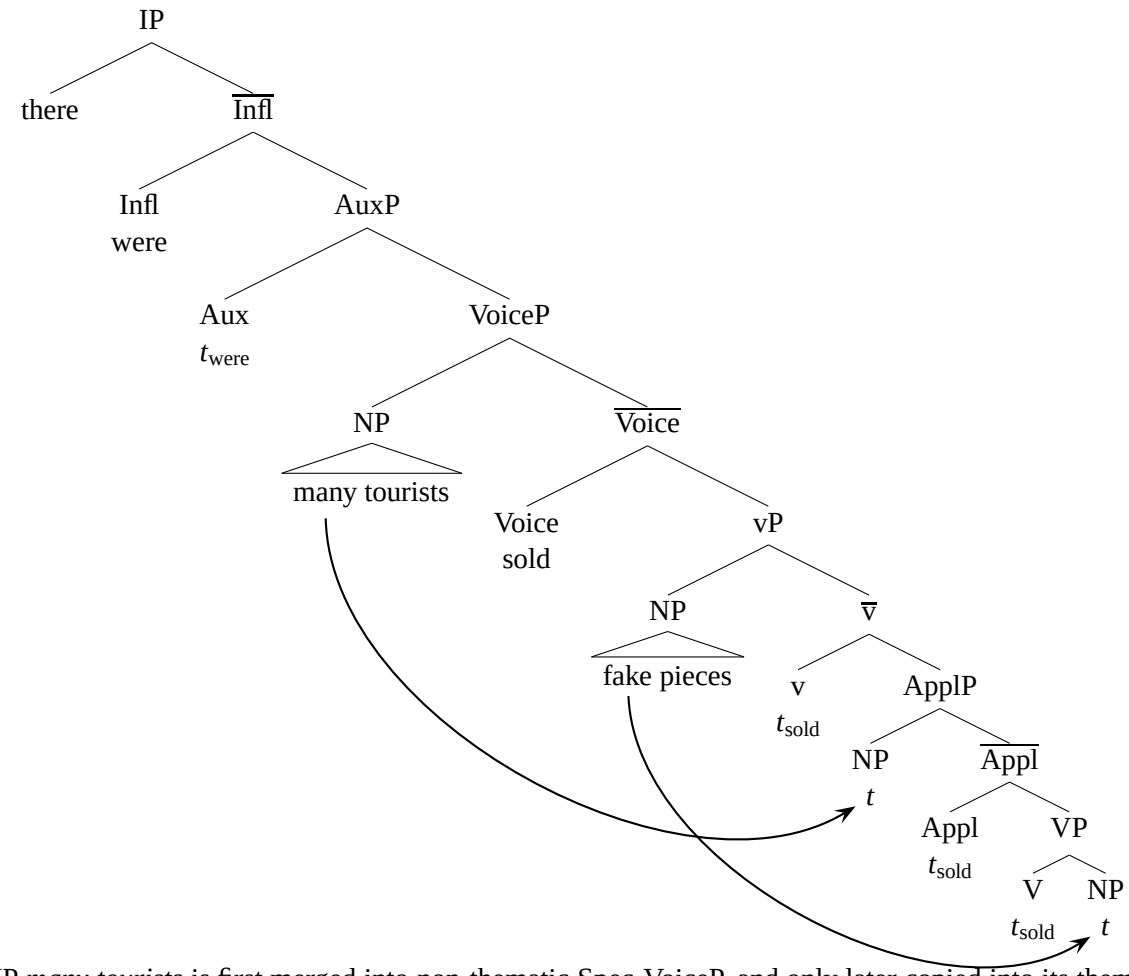
(56) a. At that time was given to the Son of Man dominion and glory and the rule of the kingdom.
b. * At that time was given the Son of Man dominion and glory and the rule of the kingdom.

In contrast, in (56a), the other NP is the complement of a preposition, and PPs do not need to be licensed by agreeing with a head with unvalued phi-features. In (56a), Voice is merged without unvalued phi-features, and the *2UH constraint is never violated.

As for the expletive passive, I assume that it is absolutely identical in structure to the presentational *there* construction. The only difference is that Spec-VoiceP is on the left, rather than the right. This makes all the difference for the *2UH constraint, however, and permits objects to appear. Take an expletive passive formed from a double object construction like the following:

(57) There were many tourists sold fake pieces of the Berlin Wall.

(58)



The NP *many tourists* is first merged into non-thematic Spec-VoiceP, and only later copied into its thematic position lower in the VP (Spec-ApplP, I assume; see Bruening 2010a). (I assume that this movement takes place via Spec-vP, not shown in the tree; both NPs move to multiple specifiers of vP.) When it is merged into the structure in Spec-VoiceP, it can Agree with Infl, already present in the structure. This values Infl's unvalued features, and Voice can then be merged into the structure when Divide applies to $\overline{\text{Voice}}$. Voice can have unvalued phi-features without violating the *2UH constraint, since Infl's features have been valued, and it can Agree with and license *fake pieces of the Berlin Wall*.

The expletive passive and the presentational *there* construction appear to be identical, except for directionality, as was noted above. The account provided here explains why they differ in whether or not they are subject to a transitivity restriction: the transitivity restriction results from the directionality of tree construction.

In summary, the current proposal, incorporating a top-down and crucially left-to-right derivation, explains why some constructions that have subjects in-situ in the VP are subject to a transitivity restriction, but others are not. The distinction is linear order. Note also that hierarchy does not seem to be relevant to the transitivity constraint: in the analyses here, the subject is in Spec-VoiceP in locative inversion and the presentational *there* construction on the one hand, and in the expletive passive and the expletive gerund construction on the other. The empirical facts show that in all four, the subject is inside the VP, and no fact that I know of indicates that they differ in their hierarchical placement. This means that only linear order distinguishes them, and therefore linear order must be a part of the syntax proper. In the theory proposed here, Divide includes linear order, creating an ordered and headed set.

Finally, in the interests of completeness, several counterexamples to the transitivity constraint on locative inversion and presentational *there* have been noted, like the following:

(59) a. In this room took place a meeting between several famous kings. (Levin and Rappaport Hovav 1995)
b. The shape of this theory was blurred, yet, out of it, there took root a kind of wild reasoning,...

These all have a bare N that functions as part of the predicate. In particular, the N cannot passivize, which I take to indicate that it is not an NP that needs structural case and hence licensing by a functional head with unvalued phi-features:

(60) a. * Place was taken in this room by a meeting.
b. * Root was taken in this area by an idea.

As part of the predicate, the bare N does not need licensing, and Voice can be merged without any unvalued phi-features.[3]

4.4 Other Languages and the Nature of the Constraint

In this section, I have proposed a theoretical account of the Postverbal Subject Generalization, according to which a head with unvalued features, like Infl, must have those features valued before another head with unvalued features is merged into the structure.

A natural question concerns other languages, where the Postverbal Subject Generalization does not appear to hold. For instance, in V2 languages like German and Danish, the main verb can appear in C while both the subject and the object follow it. In pro-drop Romance languages like Spanish, VOS is a common word order, as is VSO. There are also VSO languages like Irish, and VOS languages like Malagasy. In none of these languages, it appears, does the Postverbal Subject Generalization hold. The question then arises of why not; if the *2UH constraint is part of universal grammar, we would expect its effects to be found in other languages, as well.

The least satisfying approach to this question would be to just stipulate the *2UH constraint as a language-particular constraint of English. This approach would say that it is simply a feature of English that the *2UH constraint holds of it; no other language has this constraint. This could be correct, but it would be more satisfying to find a reason behind the difference.

A more promising approach to this question is to view the *2UH constraint as a type of minimality effect, as I have suggested at various points. The idea is that two heads trying to search for the same types of features to value them will interfere with each other. For instance, we might posit the following constraint on the Agree operation:

(61) Minimality Condition on Agree:
A head with unvalued features of type F must Agree with the first element with features of type F that it encounters.

The basic idea is that Agree is extremely limited in its visual capabilities: it sets up an Agree relation with anything that has the relevant features, whether they are valued or not. So, in the cases at hand, if Infl is merged with unvalued phi-features, and then Voice is merged with unvalued phi-features, Infl must Agree with Voice. This will not actually value Infl's features, because Voice's features lack values, too. If Voice can then Agree with something with valued phi-features, this will also value Infl's features, since they Agree. If that is an object, however, both Infl and Voice will Agree with the object; the subject will never Agree with a functional head, and it will therefore never be licensed. If Voice is not merged with unvalued phi-features, and then an object is merged, one of the two NPs, the subject or the object, will never be licensed. The

[3]One problematic example has been noted in the literature, with the verb *enter*: *There entered the room a tall dark stranger*. The object of *enter* can become the passive subject, indicating that it is an NP that must enter into an Agree relation. This type of example is truly problematic for the account given here (but note that it is problematic for most other accounts, as well).

Minimality Condition on Agree therefore accounts for the *2UH constraint, and explains the transitivity restriction on inversion in English.

One might now approach other languages by examining whether they might have ways of getting around the Minimality Condition on Agree. For instance, perhaps in English the features on Infl and Voice are not distinct; they are simply unvalued phi-features, as assumed above. Hence, they interfere with each other, due to the Minimality Condition on Agree. In other languages, however, they could be distinct, such that Infl has features of type F and Voice has features of type F′. One could attempt to correlate this with other features of these languages that are distinct from English: for instance, case and/or agreement morphology. Perhaps features are arranged hierarchically, such that the phi-features on Infl and Voice are dependents of a Case feature. In English, the Case feature on Infl is non-distinct from the Case feature on Voice; it is only the identity of the Agreeing head that triggers distinct morphology on pronouns. In German or another language, however, Infl might have Case feature α and Voice Case feature β; then the unvalued phi-features depending on these case features are distinct, and do not interfere with each other according to the Minimality Condition on Agree (cf. Richards 2010).

Another approach (more promising, in my view) is to examine the nature of the derivations involved. There are constructions in English where the subject can follow the main verb, in apparent violation of the Postverbal Subject Generalization. For instance, VP fronting has the subject linearly to the right of the main verb, but an object is permitted:

(62) He said he would dance a waltz, and dance a waltz he did.

Note, however, that while the subject follows the main verb of the clause, it is to the *left* of finite Infl. This was an important part of the Postverbal Subject Generalization. The reason the order in VP fronting is allowed is that, within the fronted VP (which I assume is a VoiceP, since V raises to Voice), Voice values its phi-features against the object, before Infl is ever merged into the structure. Once Infl is merged, it can be valued against the subject. So, particular derivations can have the subject to the right of the verb. Some VOS languages have been argued to have a derivation very similar to English VP fronting: the predicate is fronted, exactly as in English VP fronting (e.g., Rackowski and Travis 2000, Chung 2006, Cole and Hermon 2008). Such languages, if they are indeed derived this way, do not actually violate the *2UH constraint (or the version formulated as the Minimality Condition on Agree).

Now consider a V2 clause, or one where V-to-Infl-to-C movement has taken place. To illustrate, I will use earlier English, but a German clause would be perfectly parallel:

(63) Seest thou this sweet sight? (A Midsummer Night's Dream)

The verb, *seest*, is first merged as C, creating a $\overline{\text{C}}$ (or CP) with IP. But suppose that unvalued features of heads are not actually activated in the structure until the base position of that head is merged. This is similar to the treatment of wh-movement, above, where a wh-phrase does not enter into an Agree relation until it is copied into its highest A-position. The idea is that there are A-positions for heads, too, and it is only in A-positions that Agree and feature valuation is activated. So *seest* in C has the features of both Infl and Voice, but these are not activated, meaning that they do not require valuation and do not trigger Agree yet. So, IP is split into *thou* and $\overline{\text{I}}$, then $\overline{\text{I}}$ is split into Infl and VoiceP. At this point, an unpronounced copy of *seest* is merged as Infl, and now the unvalued features of Infl are activated and must be valued. They can be valued against the subject. When Voice is then merged, and another copy of *seest* is merged as Voice, and then the unvalued phi-features of Voice are activated and must be valued against the object. The *2UH constraint, now the Minimality Condition on Agree, is never violated.

The object can also precede the subject, which follows the finite verb:

(64) What seest thou there? (Henry VI, Part 2)

The object has moved to its surface position by A-bar movement. As described above, it will not actually enter into an Agree relation until an unpronounced copy of it is merged into its A-position. In this case, this will be Spec-vP. Infl will have had its features valued upon merger, as described above, and Voice will then have its features valued when the copy of the wh-phrase is merged into Spec-vP. Again, the Minimality Condition on Agree is never violated.

This hypothesis says that what is different about Modern English is that there is no head movement to or through Infl. It says that languages that have V movement to Infl will not evince the Postverbal Subject Generalization. This encompasses both V2 languages and, possibly, VSO languages like Irish. Other languages, like some VOS languages, will also not show effects of the *2UH constraint, because of the particular way that they are derived. There might be other features of other derivations that also get around the constraint; for instance, Alexiadou and Anagnostopoulou (2007) discuss the role of pronominal clitics in getting around their subject-in-situ generalization. Something similar might be at work in the *2UH constraint (the Minimality Condition on Agree).

In this subsection, I have presented two ideas about why only Modern English seems to show any effect of the *2UH constraint. Both ideas have the *2UH constraint as a part of universal grammar, but languages other than English get around it in particular ways, as did earlier stages of English. I will not attempt to decide between these two alternatives here, or other possibilities. It is important to note, though, that both make predictions about what to expect in other languages. We might expect effects of the *2UH constraint to appear in particular contexts in other languages. I will leave it to future work to see whether this is true.

5 Conclusion

I have shown in this paper that the subject-in-situ generalization is not a viable account of the transitivity restriction on quotative inversion, locative inversion, and presentational *there* constructions in English. I have argued that the right generalization is the Postverbal Subject Generalization. I have also presented a way of explaining this generalization, relying crucially on linear order. To the extent that this account is successful, then, it argues for the approach taken here: linear order has to be specified from the beginning of the derivation, and derivations are built left to right. This account explains why there would be linear asymmetries in syntax. It also has the advantage of interfacing more naturally with theories of language processing, since sentences are processed left to right (see Phillips 2003). In other work, I have also used a linear derivation to explain features of syntax, like the configurational properties of the Binding Principles (Bruening 2012), and the lack of subject-auxiliary inversion with subject extraction (Bruening 2010b). Others have also explored the possibilities of a top-down or a left-to-right derivation (Phillips 1996, 2003; Richards 1999; Zwart 2009, 2010; Osborne, Putnam, and Gross 2011).

One might ask about alternative explanations of the transitivity restriction. Other than ones based on the subject-in-situ generalization (AA, Richards 2010), the only other accounts that I am aware of, Collins (1997) on quotative inversion, and Doggett (2004) on locative inversion, have as an important feature of their account that Spec-IP (or Spec-TP) is occupied by the quotative operator in quotative inversion, and the fronted PP in locative inversion. This explanation cannot be correct, then, because the postverbal subject in quotative inversion is in Spec-IP, not the quotative operator, and a null expletive is in Spec-IP in locative inversion, not the PP. The same transitivity restriction also holds of the presentational *there* construction, which clearly has an expletive in Spec-IP. The only existing accounts are therefore inadequate, and it would be incumbent upon anyone who wished to reject the account presented here to produce a viable alternative. In particular, if one wishes to reject the claim that linear order is specified from the beginning of the syntactic derivation, then one must come up with an alternative explanation for directional asymmetries like the Postverbal Subject Generalization, one that does not actually involve directionality. As shown above, all the evidence points to hierarchically *identical* structures for expletive passives and passive presentational *there* sentences; a theory that wanted to do without linear order would have to deny this hierarchical identity. I am

aware of no data that would support a different treatment, other than the linear asymmetry that needs to be explained.

Finally, a question naturally arises about the subject-in-situ generalization. As shown here, this generalization does not appear to hold in English. Additionally, English quotative inversion and locative inversion were two of the main cases that Alexiadou and Anagnostopoulou (2001) used to try to motivate the existence of the generalization in the first place. One should ask, then, whether the subject-in-situ generalization is real. This is a question that I am unable to answer here definitively, but it is suspicious that there are more counterexamples to the subject-in-situ generalization in Alexiadou and Anagnostopoulou (2001) and Alexiadou and Anagnostopoulou (2007) than there are examples of it. With English gone, the only examples that remain are stylistic inversion in French, one particular word order in Icelandic transitive expletive constructions (example 19 in Alexiadou and Anagnostopoulou 2001), one particular word order in Irish (example 21b in Alexiadou and Anagnostopoulou (2001)), and Japanese ga-no conversion. I suggest that these cases be re-examined, to see if they, like English, have alternative explanations. If the subject-in-situ generalization turns out not to be real, then theoretical accounts of it, like those in Alexiadou and Anagnostopoulou (2001, 2007) and Richards (2010), will need to be re-evaluated.

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