

# On Different Sizes of Predicate Phrase Ellipsis in English: Towards a Principled Analysis\*

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This paper examines predicate phrase (PredP) ellipsis in English, identifying the exact constituent(s) affected by the ellipsis in the articulated structure of a clause projected by modal, perfect, progressive, and voice/copula auxiliary verbs in addition to the little *v* (Chomsky 1995). In particular, we note that the phrases projected by all these auxiliary verbs, except for modals that project the highest category TP, can undergo PredP ellipsis. However, there are two factors that come into play in influencing sizes of PredP ellipsis. One is dialectal variation, which distinguishes British English from American English in that only the former allows elision of PerfP via PredP ellipsis. The other is structural difference, which tells apart coordination from subordination in that PredP ellipsis applies to *v*P or the constituent bigger than that in the former structure, but it can apply to the smaller constituent VoiceP in the latter structure. We provide an explanation for how each of the two factors can be understood in the general theory of ellipsis.

**Keywords:** predicate phrase (PredP) ellipsis, VP ellipsis, size of ellipsis, optional *be* raising, dialectal variation, elision of PerfP, tag question, *v*P, voice mismatch, coordination, subordination

## 1. Introduction

In English, a verb or predicate phrase can undergo ellipsis, as in (1), taken from Akmajian and Wasow (1975:206) with some modifications:<sup>1)</sup>

- (1) a. Obama might come out looking clean, but I don't know of anyone else who will ~~come out looking clean~~.

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\* I wish to thank three anonymous reviewers for their helpful and valuable comments and suggestions. All remaining errors are, of course, mine.

1) Struck-through expressions in (1) indicate that they undergo ellipsis.

- b. Although the Attorney General has ordered a new phone, we don't know whether the President has ~~ordered a new phone~~.
- c. John was crying in court, and James was ~~crying in court~~, too.
- d. Bush was examined by the doctor, and Clinton was ~~examined by the doctor~~, too.
- e. The CIA guards our freedoms, and the FBI does ~~guard our freedoms~~, too.

In these examples, the VP complement of the modal auxiliary verb as in (1a), the perfect as in (1b) or the progressive aspectual auxiliary verb as in (1c), or the passive voice auxiliary verb as in (1d) can be phonologically suppressed and thus null in surface form. Without any of these auxiliary verbs, the auxiliary verb *do* is inserted to support the stranded T after the elision of the complement VP as in (1e). This clearly points to the fact that an auxiliary is required to occur at the left edge of verb/predicate phrase (PredP) ellipsis.

There are some peculiar distributional features of verb/PredP ellipsis in English. First, as a complement of the modal or the perfect auxiliary, the copula/the passive/the progressive *be(en)*/the British English (BrE) possessive *have* can optionally occur, as in (2) and (3), taken from Thoms (2011:5) and Aelbrecht and Harwood (2012:12):

- (2) a. Rab should be red/a good teacher, and Morag should (be) ~~red/a good teacher~~, too.
  - b. Ted will be arrested, and Barney will (be) ~~arrested~~, too.
  - c. Ted will be questioning our motives, but Robin won't (be) ~~questioning our motives~~.
  - d. Rab might have a copy of Lolita, and Morag might (have) a ~~copy of Lolita~~, too. [OK in BrE]
- (3) a. Rab has been red/an idiot for years, and Morag has (been) ~~red/an idiot for years~~, too.
  - b. Ted has been arrested, and Barney has (been) ~~arrested~~, too.
  - c. Ted has been questioning our motives, but Robin hasn't (been) ~~questioning our motives~~.
  - d. Rab has had an unread copy of Lolita on his shelf for as long as Bill has (?had) ~~an unread copy of Lolita on his shelf~~. [OK in BrE]

In other words, the auxiliary *be(en)* can be either inside or outside of the elided verb/PredP ellipsis.<sup>2)</sup> Incidentally, in British English where the main verb *have* meaning ‘own/possess’ displays syntactic behaviors similar to those of auxiliary verbs in regard to verb raising, it can also survive optionally outside PredP ellipsis, as in (2d) and (3d).

Second, the copula or passive voice auxiliary verb *be* cannot be elided when it is inflected with the progressive aspectual morpheme *-ing*, as in (4) and (5), taken from Akmajian and Wasow (1975:226-227):

- (4) Sam was being examined by a psychiatrist at that time and Bill was ~~\*(being) examined by a psychiatrist at that time~~, too.
- (5) a. Sam is noisy and Bill is ~~noisy~~, too.  
b. Sam is being noisy and Bill is ~~\*(being) noisy~~, too.

Third, the perfect aspectual auxiliary verb *have* cannot be included within PredP ellipsis, though this is subject to dialectal variation, as in (6) and (7), taken from Thoms (2011:5):

- (6) Rab might have finished the essay by now, but Morag won’t ~~\*(have) finished the essay by now~~.
- (7) Sam might have been at the scene of the murder, but Bill might ~~\*(have) been at the scene of the murder~~.<sup>3)</sup>

In particular, in American English the perfect auxiliary always survives outside PredP ellipsis. In contrast, in British English it can optionally survive outside PredP ellipsis. Thus, in the latter language, the following pattern is attested, as in (8) and (9), taken from Akmajian and

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2) Henceforth, we’re going to use PredP ellipsis instead of the more widely used term VP ellipsis, since as noted in (2a) and (3a), other categories like AP and DP than VP can be affected by the ellipsis in question.

3) It has often been argued that the following sentence in (i) is unacceptable, as the perfect auxiliary cannot be included within the PredP ellipsis.

(i) \*If Bill had been using drugs, then his brother Sam must ~~have been using drugs~~.

However, there is an alternative account for the unacceptability of this example: the mismatch in form between the two perfect auxiliaries in the antecedent and the ellipsis VPs results in violating the identity condition on ellipsis (Lasnik 1995, Potsdam 1997, *inter alia*).

Wasow (1975:226-227):

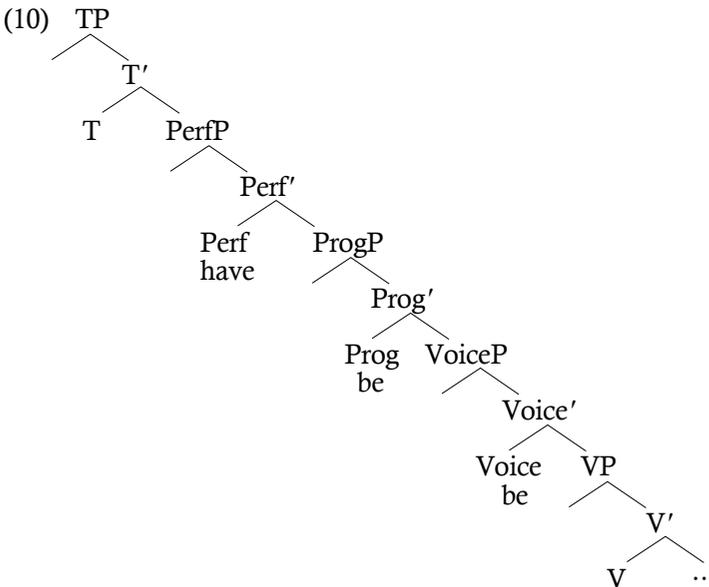
(8) Sam could have been using drug, but could Bill (have (been))  
using ~~drug~~?

(9) Rab might have been red, and Morag might (have (been)) red, too.

This paper examines different sizes of constituents affected by PredP and attempts to provide a principled analysis of them. In particular, we will see that clausal structure, verb movement, dialectal variation and structural difference come into play in displaying apparent different sizes of ellipsis for PredP's.

## 2. Clausal Structure of English

To account for the distributional features of PredP ellipsis in English, it is important to provide a well-elaborated structure of a clause in this language. Abstracting away from the detailed discussion of it, however, we assume the following structure, which is the one that is widely assumed recently (cf. Johnson 2004):



In this structure of (10) the perfect/the progressive/the voice auxiliary verb each projects its own phrase, along with the separately projected Tense where the modal auxiliary, if any, is also presumably base-generated.

One more word is in order regarding the inflection of the (auxiliary) verb immediately following T or an auxiliary verb. As is well-known, there are morphological restrictions on the forms the verbs take in a sequence of auxiliary verbs and a main verb. The (auxiliary) verb after T takes an infinitival form; the one after the perfect auxiliary takes a past participle form *-en*; the one after the progressive auxiliary takes a progressive form *-ing*; the main verb after the passive voice auxiliary verb takes a past participle form *-en*. We propose, following the lead of Chomsky (2000), that it is the head-to-head relation (i.e., the relation that a head enters into with the head of its complement) or the Agree relation that one verbal head enters into with the head of its complement to determine the appropriate form of inflection for the latter. In the case of *could have been being arrested*, for example, the perfect *have* enters the syntactic derivation along with the uninterpretable infinitival feature [u Infn], which is checked off by the higher modal *could*. Along the same line the other auxiliary verbs in this instance undergo checking relations with the heads of their complements.<sup>4)</sup>

### 3. Optional Deletion of 'be'

Given the clausal structure for English in (10), it is right to say that the locus of PredP ellipsis in American English is VoiceP. The conclusive evidence in favor of this thesis is found in the examples in (4) and (5) that we saw above, repeated below as (11) and (12), respectively:

- (11) Sam was being examined by a psychiatrist at that time, and  
Bill was \*(being) examined by a psychiatrist at that time, too.

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4) Lasnik (1995) argues that there is a distinction between auxiliary and main verbs in terms of the nature of inflection. The former enter the syntax being inflected, but the latter do not. In other words, the former involve featural inflection, but the latter involve affixal inflection. If this is right, the passive voice *be* comes into the syntactic derivation along with the affix *-en*, which undergoes Affix Hopping to the main verb *arrest*.

- (12) a. Sam is noisy and Bill is noisy, too.  
 b. Sam is being noisy, and Bill is \*(being) noisy, too.

The passive auxiliary/the copula *be* when it is inflected with the progressive form is always included within PredP ellipsis. This clearly points to the fact that PredP ellipsis cannot apply to a category smaller than VoiceP.

What is then the biggest category that is subject to PredP ellipsis? The following example in (13), taken from Aelbrecht and Harwood (2012:4), shows that ProgP is the biggest category that can undergo PredP ellipsis in American English:

- (13) Betsy must have been being hassled by the police, and...  
 a. \*Peter must ~~have been being~~ hassled by the police, too.  
 b. Peter must have ~~been being~~ hassled by the police, too.  
 c. Peter must have been ~~being~~ hassled by the police, too.  
 d. \*Peter must have been being ~~hassled by the~~ police, too.

The examples in (13) are the ones where the longest sequence of auxiliaries is realized in English. In this sequence, the progressive form of passive auxiliary *being* cannot be outside PredP ellipsis, which corroborates the thesis just above about the smallest category of PredP ellipsis. Note that in (13), the progressive auxiliary *been* can be included within the PredP ellipsis, but the perfect auxiliary *have* cannot be inside it, which clearly points to the fact that the biggest category of PredP ellipsis is ProgP, but it cannot be PerfP in American English.

Now the question is whether the copula or passive auxiliary *be* that is presumably generated inside VoiceP can survive outside PredP ellipsis. The following examples in (a) and (b) of (14) and (15), taken from Aelbrecht and Harwood (2012:12), show that in fact it can:

- (14) a. Ted has been in the garden, and Robin has (been) ~~in the garden~~, too.  
 b. Ted will be in the garden, and Robin will (be) ~~in the garden~~, too.  
 c. Ted was being noisy, and Robin was \*(being) ~~in the garden~~, too.

- (15) a. Ted has been arrested, and Barney has (been) arrested, too.
- b. Ted will be arrested, and Barney will (be) arrested, too.
- c. Ted was being arrested at that time, and Barney was \*(be-  
      ing) arrested, too.

We argue that these behaviors of the copula or passive auxiliary *be* follow from the clausal structure in (10) we assumed for English. In (a)-examples of (14) and (15), the copula or passive auxiliary *be* can optionally raise to the higher functional head position otherwise occupied by the progressive auxiliary verb *be*. In (b)-examples of (14) and (15), the copula or passive auxiliary *be* can also optionally raise to the higher functional head position otherwise occupied either by the perfect *have* or the progressive auxiliary verb *be*. However, note that this raising is not allowed in the case of the progressive form of copula or passive auxiliary *be* as in (14c) and (15c), because the immediately higher position (i.e., Prog) is filled with the progressive auxiliary *be*. In a nutshell, the copula or passive auxiliary *be* can optionally raise to the higher position, if the latter is empty.

One thing to consider is the contrast between PredP ellipsis and fronting. As noted by Akmajian and Wasow (1975), Zagana (1982) and Johnson (2001), the latter PredP fronting preposes no bigger and no smaller constituent than the one projected by the progressive form of verb, as shown in (16)-(19):

- (16) If Sebastian says he was being cooked alive, then ...
  - a. [being cooked alive]<sub>i</sub> he was t<sub>i</sub>.
  - b. \*[cooked alive]<sub>i</sub> he was being t<sub>i</sub>. (from Harwood 2013:15)
  
- (17) If Jasmine says that Aladdin was being obnoxious, then ...
  - a. [being obnoxious]<sub>i</sub> he was t<sub>i</sub>.
  - b. \*[obnoxious]<sub>i</sub> he was being t<sub>i</sub>. (from Harwood 2013:15)
  
- (18) They swore that John had been taking heroine, and ...
  - a. \*[been taking heroine]<sub>i</sub> he had t<sub>i</sub>.
  - b. [taking heroine]<sub>i</sub> he had been t<sub>i</sub>.  
(from Akmajian, Steele and Wasow 1979:23)
  
- (19) If Scrooge McDuck says he'll be working late, then ...

- a. [working late]<sub>i</sub> he will be t<sub>i</sub>.
- b. \*[be working late]<sub>i</sub> he will t<sub>i</sub>. (from Harwood 2013:16)

We can propose, as in Park (1999), that the locus of PredP fronting is VoiceP. Given the size of PredP fronting, it is instructive to note that PredP fronting requires copula and passive auxiliary verb *be* to be raised out of the VoiceP to be fronted, as follows:

- (20) They said Sebastian was to be cooked alive, and so ...
  - a. [cooked alive]<sub>i</sub> he has been t<sub>i</sub>.
  - b. \*[been cooked alive]<sub>i</sub> he has t<sub>i</sub>. (from Harwood 2013:15)
- (21) I told the children to be very good, and ...
  - a. [very good]<sub>i</sub> they have been t<sub>i</sub>.
  - b. \*[been very good]<sub>i</sub> they have t<sub>i</sub>. (from Harwood (2013:16))
- (22) If Sebastian says he is going to be cooked alive, then ...
  - a. [cooked alive]<sub>i</sub> he will be t<sub>i</sub>.
  - b. \*[be cooked alive]<sub>i</sub> he will t<sub>i</sub>. (from Harwood 2013:15)
- (23) John said he was going to be obnoxious, and ...
  - a. [obnoxious]<sub>i</sub> he will be t<sub>i</sub>.
  - b. \*[be obnoxious]<sub>i</sub> he will t<sub>i</sub>. (from Roberts 1998:117)

This clearly points to the fact that both PredP ellipsis and fronting apparently behave in the similar fashion, but closer inspection of them reveals that the latter is more restricted than the former, in that it affects the only one category VoiceP and it is fed by mandatory raising of the copula or passive auxiliary out of the constituent to be fronted, if it can.<sup>5)</sup>

One question that can be raised about the size of PredP ellipsis is whether in fact the locus of PredP ellipsis is not both VoiceP and ProgP, but the single category, ProgP. When we take the latter option, we can capture the fact that PredP ellipsis always includes the pro-

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5) Alternatively we can say that raising of the copula or passive auxiliary out of VoiceP is obligatory both in PredP fronting and ellipsis, but the latter case of PredP ellipsis that allows ellipsis of a constituent bigger than VoiceP, makes it apparently look optional for the copula or passive auxiliary to undergo raising out of VoiceP.

gressive form of copula or passive auxiliary *be*. However, this option cannot capture the optionality of the progressive auxiliary *be* in the longest sequence of auxiliaries in examples such as in (13). One possible solution to this problem is to assume, as Aelbrecht and Harwood (2012:11) argue, that the progressive auxiliary *be* can be optionally raised out of the ProgP to be elided. It seems, however, that such a solution is not warranted by any empirical evidence. Rather, it is right to say that different constituents are subject to PredP ellipsis, which will gain more empirical support in the next section.

#### **4. American vs. British English in Regard to Elision of Perfect ‘have’**

American English allows either VoiceP or ProgP to undergo PredP ellipsis, but British English allows the next bigger constituent PerfP on top of them to do so. In the following examples where the longest sequence of auxiliaries is realized, it is possible to elide PerfP in addition to VoiceP or ProgP in British English.

(24) Sam could have been using drug. but could Bill (have (been))  
using ~~drug~~?

(25) Rab might have been red, and Morag might (have (been)) red  
too. (Thoms 2011:5)

The asymmetry between American English and British English in the size of PredP ellipsis can also be found in the tag question, which has been argued to derive from PredP ellipsis (cf. den Dikken 1995, Sailor 2009, inter alia). The following examples in (26)-(28), taken from Harwood (2013:15), show that the progressive form of copula or passive *be* cannot be outside PredP ellipsis, but the infinitival or perfect form of *be* can optionally survive outside of it in the tag clauses of both American and British English:

- (26) a. Cinderella was being made to eat spinach, wasn't she?  
b. \*Cinderella was being made to eat spinach, wasn't she being?  
c. Cinderella will be made to eat spinach, won't she (be)?

- d. Cinderella has been made to eat spinach, hasn't she (been)?
- (27) a. Popeye was being obnoxious, wasn't he?  
 b. \*Popeye was being obnoxious, wasn't he being?  
 c. Popeye can be really obnoxious at times, can't he (be)?  
 d. Popeye has been really obnoxious, hasn't he (been)?
- (28) a. Cinderella will be eating spinach in tomorrow's spinach-eating competition, won't she (be)?  
 b. Cinderella has been eating spinach, hasn't she (been)?

However, British English diverges from American English, in that in the former language, the perfect auxiliary *have* can be included within PredP ellipsis, but not in the latter language, as in (29), taken from Sailor (2012:9):

- (29) a. Boober should have eaten, shouldn't he have?  
 b. #Boober should have eaten, shouldn't he \*AmE [~~have eaten~~]/<sup>OK</sup>BrE [~~have eaten~~]?

Taking a stock of PredP ellipsis in the two dialects of English, we have the following generalization:

- (30) a. The progressive form of *be*, i.e. *being* cannot survive outside PredP ellipsis.  
 b. The auxiliary *be(en)* optionally survives outside PredP ellipsis.  
 c. The perfect *have* obligatory survives in American English but optionally survives outside PredP ellipsis in British English.

Given this generalization, the question to be raised is why it is the case that PredP ellipsis can apply to the constituent projected by the voice, progressive, or perfect auxiliary in British English, but it can apply to the constituent projected by the first two types of auxiliaries, but not by the last type of auxiliary in American English? We submit that the asymmetry between the two languages lies in the explicitness of encoding the information that undergoes ellipsis. For example, the following sentence without the perfect auxiliary before the ellipsis site can be construed ambiguously, either as *have called* or *call*.

- (31) John might have called, and Bill might [AmE] \*(have)/ [BrE] (have) called), as well.

To avoid ambiguity in this kind of sentences, American English requires the perfect auxiliary *have* to be explicitly present outside the PredP ellipsis site.<sup>6)</sup> However, British English does not do so. In the latter language, the omission of the perfect auxiliary *have* will do, since it can be recovered from the antecedent clause through the identity relation.<sup>7)</sup>

## 5. Licensing Condition for PredP Ellipsis

Possessive *have* raises to T and licenses the following PredP ellipsis in British English, but it does not in American English, as in (32)-(33), taken from Thoms (2011:6). Cliticization to the subject, given in (32a), provides an additional test to those above.

- (32) a. I've a copy of Lolita you can borrow. <sup>OK</sup>BrE, \*AmE  
 b. I haven't any money left. <sup>OK</sup>BrE, \*AmE  
 c. Have you any money left? <sup>%</sup>BrE, \*AmE

6) Aelbrecht (2010) distinguished licensor from trigger in giving rise to ellipsis. In finite clauses, finite T functions as a licensor, which enters into Agree relation with an auxiliary verb that functions as a trigger to make its complement (i.e., PredP) undergo ellipsis. Given Aelbrecht's distinction, it can be said that T in American English cannot be an ellipsis trigger, but the one in British English can be. More specifically, in the former language T as an ellipsis licensor cannot function as an ellipsis trigger at the same time, but in the latter language it can do so.

7) The proposed notion of explicitness in the text is also at work language-internally. As noted by Lasnik (1995), the progressive *-ing* (which is not identical to the affix of the verb in the antecedent PRedP) cannot be included inside PredP ellipsis as in (ic-d), but the infinitival affix and the perfect affix *-en* can be as in (ia-b):

- (i) a. Ted is eating a dolphin sandwich, but at least Robin won't [eat-a---].  
 b. Ted may be eating a dolphin sandwich, but Robin hasn't [eaten-a---].  
 c. \*Ted might eat a dolphin sandwich but Robin won't be [eating-a---].  
 d. \*Ted may have eaten a dolphin sandwich, but Robin hasn't been [eating---].

We ascribe this contrast to the fact that the auxiliary *be* can take either the progressive *-ing* or the passive *-en*, but the modal and the auxiliary *have* always take the infinitive or the perfect *-en*, respectively. In other words, since the auxiliary *be* is ambiguous, being either progressive or passive, the following affix morphologically selected by the relevant auxiliary *be* has to survive, when it is not identical to that in the antecedent PredP.

- d. Rab has a copy of Lolita, hasn't he? <sup>OK</sup>BrE, \*AmE
- (33) a. Rab has a copy of Lolita, and Morag has, too. <sup>OK</sup>BrE, \*AmE  
 b. Rab should have a copy of Lolita, and Morag should have, too. <sup>OK</sup>BrE, \*AmE  
 c. Q: Do you think Martin Amis had a copy of Lolita when he wrote Money?  
 A: I think he must have had. <sup>OK</sup>BrE, \*AmE

In contrast to possessive *have*, *have* (meaning 'eat') as in (34) behaves in the different way:

- (34) I have steak for dinner on special occasions.

In both American and British English, it does not raise, as in (35). This verb does not license the following PredP ellipsis, either, as shown in (36), contrasting strikingly with possessive *have*.

- (35) a. \*I've steak for dinner on special occasions.  
 b. \*I haven't steak for dinner on special occasions.  
 c. \*Has Rab steak for dinner on special occasions?  
 d. \*Rab has steak for dinner on special occasions, hasn't he?
- (36) a. \*I have steak for dinner on special occasions, and Rab has, too.  
 b. \*I will have steak for dinner on special occasions, and Rab will have, too.  
 c. \*Nabokov would have had steak for dinner on special occasions, but Percec wouldn't have had.  
 ((35) & (37) from Thoms 2011:7)

The lesson we learn from the contrast between possessive *have* and 'eat' *have* is that since the ellipsis clauses in (33) and (36) are finite ones, there is no difference between them in regard to the availability of the ellipsis licenser. However, the difference lies in the head that triggers its complement that undergoes ellipsis.<sup>8)</sup> In (33), the head is the possessive *have* that underwent verb raising, but in (36), it is the

'eating' *have* that did not.

The requirement that an auxiliary verb be present to license PredP ellipsis can also be found in the following sentences. As Gergel (2007) reported, the epistemic use of *must* cannot license the following PredP ellipsis, as in (37):

- (37) Bob must wash his car every day, and Peter must, too. \*on epistemic reading

However, as Thoms (2011:19) notes, when the epistemic *must* is followed by an auxiliary verb, the latter can now license the following PredP ellipsis, as in (38)-(40), taken from Thoms (2011:19):

- (38) Bob must have washed his car every day, and Peter must have, too. <sup>OK</sup>on epistemic reading

- (39) Bob must be late for work, and Peter must be, too. <sup>OK</sup>on epistemic reading

- (40) Bob must have been red ten times last year, and Peter must have been, too. <sup>OK</sup>on epistemic reading

The similar pattern to what is observed in (39)-(40) can also be found in infinitival clauses as in (41), taken from Thoms (2011:22):

- (41) a. I expect Rab to be fired, and I expect Bill to \*(be), as well.  
b. I want to be promoted, and Bill wants to \*(be), as well.  
c. I would have expected Rab to have been promoted by now, and I would have expected Morag to ?\*(have been), as well.  
d. Q: For this interview, do you think I will need to have prepared a presentation?  
A: I'm guessing they will expect you to \*(?have), yes.

Thoms notes that the ellipsis trigger here is an auxiliary verb. Furthermore, he also notes that the copula verb *be*, the possessive *have*, and the British English *do* (unlike perfect, progressive, and voice auxiliary)

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8) Recall that Aelbrecht (2010) distinguished licensor from trigger in giving rise to ellipsis.

cannot license the following PredP ellipsis in infinitival clauses as in (42), taken from Thoms (2011:23):

- (42) a. ??I expected Rab's friends to be fools, and I expected Morag's friends to be, as well.  
 b. ??I expected Rab's car to be red, and I expected Morag's car to be, as well.  
 c. ?\*I would have expected Rab's friends to have been wise, and I would have expected Morag's friends to have been, too.  
 d. I expected Rab to have a red car, and I expected Morag to (\*have), as well.  
 e. I expected Rab to buy a red car, and I expected Morag to (\*do), as well.

The gerundive clause shows more peculiar behaviors. Despite the presence of the auxiliary verb, PredP ellipsis cannot be licensed, as shown by the contrast between the infinitive clause in (43) and the gerundive clause in (44), taken from Akmajian and Wasow (1975:234) with some modifications:

- (43) For Obama to be examined by a psychiatrist would be no more unreasonable than for Bush to be \_\_\_\_\_.  
 (44) \*Obama's being examined by a psychiatrist would be no more unreasonable than Bush's being \_\_\_\_\_.

However, when one more auxiliary is added, the sentences involving PredP ellipsis in gerundive clauses improve in acceptability, as in (46) and (47), taken from Akmajian and Wasow (1975:236):

- (46) a. Which bothers you more: John's having been arrested for drug dealing, or Bill's having been \_\_\_\_\_?  
 b. \*Which bothers you more: John's having been arrested, or Bill's having \_\_\_\_\_?  
 (47) a. Which would bother you more: for John to have been arrested for drug dealing, or for Bill to have been \_\_\_\_\_ ?

- b. \*Which would bother you more: for John to have been arrested for drug dealing, or for Bill to have \_\_\_\_\_?

All in all, in finite clauses, the triggering element for PredP ellipsis is an auxiliary verb. Though infinitive clauses show peculiar behaviors, in these clauses the triggering element for PredP ellipsis is also an auxiliary verb (excluding the copula, possessive *have*, and British English *do*, which behave like a main verb in infinitival clauses in terms of the inability to license PredP ellipsis). Gerundive clauses, by contrast, have to have more than one auxiliary verb in licensing PredP ellipsis.

## 6. The Locus of $\nu$ P from the Discussion of PredP Ellipsis

In the previous sections, we have seen that the VoiceP that is projected from the passive *be* is the smallest constituent that can be elided through PredP ellipsis. Now the question that can be raised is if we assume the clausal structure in (10), where we can place  $\nu$ P, which is now known to be the locus of argument alternation (such as active vs. passive vs. ergative), and house subject XP in its specifier.

In fact, Merchant (2013) used the following examples to argue that the functional category governing verb argument alternation (in his nomenclature, Voice) is not included in the portion to be elided through PredP ellipsis:

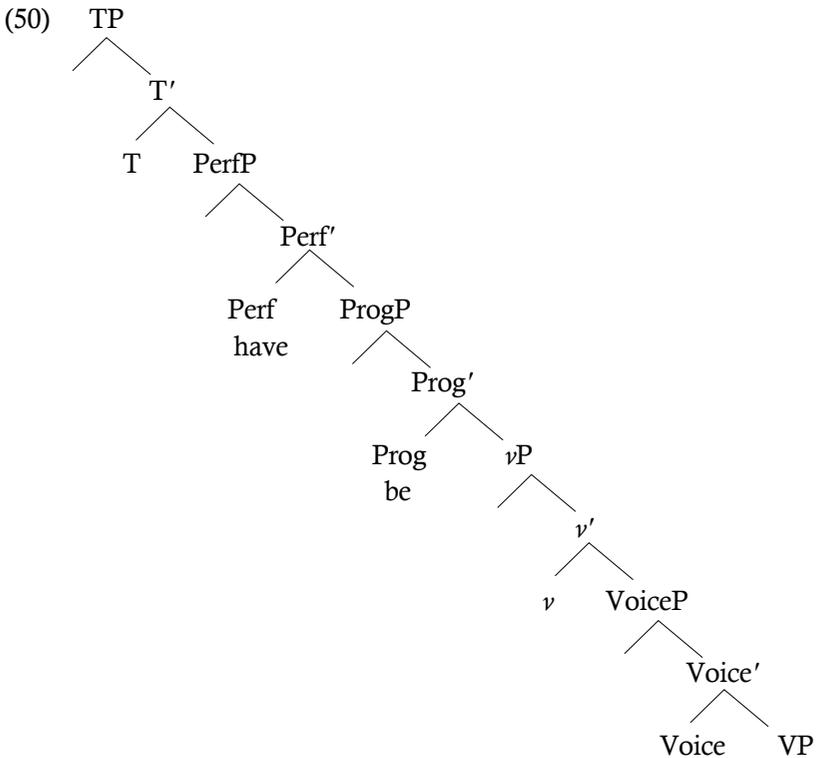
(48) *Active antecedent, passive ellipsis*

- a. [Prison guards deserve their good salaries] Proposing to reduce their numbers to save money would be endangering them even more than they are endangered.  
b. Actually, I have implemented it [= a computer system] with a manager, but it doesn't have to be implemented ~~with a manager~~. Merchant (2013:78)

(49) *Passive antecedent, active ellipsis*

- a. The system can be used by anyone who wants to use it.  
b. A: Has this ever been tested?  
B: There's never been a reason to test it.  
Merchant (2013:79)

Merchant's logic is that since the functional category determining argument alternation carries interpretable features, the voice-mismatching functional categories in the antecedent and the ellipsis clauses as in (48) and (49) will result in violating the identity condition on ellipsis. However, as the examples in (48) and (49) are grammatical, the voice-mismatching functional category in the ellipsis clauses is taken to be outside the ellipsis site. This leads us to modify the clausal structure in (10), putting  $\nu$ P between ProgP and VoiceP, as follows:



In (50), the subject is base-generated in [Spec,  $\nu$ P], and  $\nu$  is a functional category governing argument alternation<sup>9)</sup> and can be under-

9) In other words, we can understand that the little  $\nu$  selects either an active or passive complement, where the passive auxiliary verb *be* can be realized overtly.

Furthermore, we suppose, as argued in Park (1999), that given the clausal structure for English in (50), the constituent that undergoes PredP fronting is in fact  $\nu$ P that contains a trace or PRO associated with the base-generated subject (cf. Huang 1993). Refer to Park (1999) for the reason why this constituent is targeted by PredP fronting.

stood as not morphologically selecting any particular form. The postulation of the category hosting the subject in the clausal structure as in (50) will lead us to the discussion in the next section about how coordination and subordination are different in allowing PredP ellipsis.

## **7. Is it Always Optional to Delete One of the Predicate Constituents?**

In the detailed structure of a clause as in (50), there can be four phrases that can count as a predicate and that can possibly be a target of PredP ellipsis: (i) VoiceP; (ii) vP; (iii) ProgP; and (iv) PerfP. As the title of this section raised a question, is it optional to delete one of these four constituents freely? As we saw in the preceding section, in the case of PerfP there is a dialectal variation between British English and American English.

On top of this dialectal difference, we will examine the difference between coordination and subordination in regard to the size of PredP ellipsis affected. The case in point relates to the following contrast cited from Hestvik (1995:217):

- (51) a. Someone spoke to everyone, and then Bill did [ e ].  
b. Someone spoke to everyone before Bill did [ e ].

Sag (1976) and Williams (1977) discovered that whereas the universal quantifier in sentences like (51a) cannot have wide scope, this is possible in (51b).

The standard explanation for this difference is that if the creation of wide scope by Quantifier Raising (QR; May 1985) of the universal quantifier in (51) is followed by reconstruction, this results in an unbound trace in the copied VP, since quantifiers normally don't have scope over a conjoined clause (Williams 1977, Sag 1976, See also Chierchia and McConnell-Ginet 1990). Expressed in terms of syntactic reconstruction, this is illustrated in (52a), where the illicit trace is underlined. In (52b), on the other hand, VP-copying into the ellipsis site after wide-scope QR will result in binding of the copied trace, since the raised quantifier c-commands the elliptical clause and therefore the trace in the reconstructed VP, as shown in (52b):



and that PredP ellipsis is governed by structural parallelism. Note that scope economy prohibits QR or QL from undergoing semantically vacuous movement. If either QR or QL applies, its semantic effects are required to be achieved. Given this requirement for QR or QL, the QL of the subject in the second conjunct clause of (54a) is not allowed. Consequently, structural parallelism mandates that the QL of the subject in the first conjunct clause of (54a) is not allowed, either, correctly accounting for the lack of wide scope the universal quantifier has over the existential quantifier in (51a).

Note that our analysis hinges on the thesis that the domain of PredP ellipsis in coordinate structure as in (53a) is  $\nu$ P. If the domain of PredP ellipsis in subordinate structure as in (53b) were  $\nu$ P, it would wrongly predict that in this example, the universal quantifier cannot take wide scope over the existential quantifier. In contrast to coordinate structure, suppose that in subordinate structure, the domain of PredP ellipsis is VoiceP rather than  $\nu$ P. Note that now, QL occurs outside of ellipsis and can circumvent such constraints as scope economy and structural parallelism. In fact, if the subordinate clause in (54b) is adjoined to the matrix VoiceP as in (55) (as assumed in (52b)), the universal quantifier QRed to the matrix  $\nu$ P takes wide scope over the QLed existential quantifier and can also bind the variable in the *before* clause that is converted from another instance of universal quantifier there via vehicle change (Fiengo and May 1994), as follows.

- (55) Someone T<sub><past></sub> [ $\nu$ P everyone [ $\nu$ P t<sub><someone></sub> [[VoiceP speak to t<sub><every-</sub>  
one>]]] before
- QL
- Bill did [ $\nu$ P everyone [ $\nu$ P t<sub><Bill></sub> [VoiceP speak to t<sub><everyone></sub>]]]].
- QL

This section has showed that there is an asymmetry between coordination and subordination in regard to scope interpretation, which in turn renders compelling evidence in favor of the distinction between them in terms of sizes of PredP ellipsis.

## 8. Conclusion

We have seen that in English, different constituents can undergo PredP ellipsis in the middle field of clausal structure where modal, aspectual, voice and copula auxiliaries in addition to the covert form of  $\nu$  that determines the argument structure of a main verb are assumed to project their own maximal projection. We have also seen that though PredP ellipsis apparently displays free variation in terms of sizes of constituents elided, it can differ in size, which is affected by dialectal and structural factors. In particular, on the one hand, American English does not allow the elision of PerfP formed by the perfective auxiliary *have*, but British English does. On the other hand, subordinate structure allows the elision of VoiceP formed by the passive auxiliary *be*, but not a constituent bigger than that. In contrast, coordinate structure allows the elision of the constituent including the base-generated subject and the one bigger than that, but not of the one smaller than that.

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