

# Verbal Ellipsis in the Nominal Domain\*

LURC / Syntax C – 2009

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June 12, 2009

## 1 Introduction & Background

In this paper, I present data from a scarcely documented kind of ellipsis occurring in some registers of English (see Vahedi 2008 and Anderson 2007 for some more background). In this type of ellipsis, a VP within a POSS-ing DP is elided under identity with a VP elsewhere in the structure. The problem is that not all VPs are valid antecedents. Surprisingly, VPs that are not also DP-internal cannot serve as antecedents. In this paper, I investigate this restriction. While this is still work in progress, the discussion still gives rise to some interesting implications for ellipsis in general.

To begin, I will give some general background on DPs and Ellipsis, and establish VP ellipsis within the gerundive. In §2, I present the basic problem and data, and show that though VP ellipsis is restricted in these constructions, NP ellipsis is not. In §3, I argue that the impermissible ellipses cannot be the result of morphological mismatches, and additionally I show that VP ellipsis is only blocked in the immediate complement to POSS. In §3.3, I investigate Morphological Anchoring (van Craenenbroeck 2008) as a method of explaining the data, but show that it is not feasible. In §4, I summarize the material presented up to that point, and provide some discussion and analysis. In §5, I turn to some questions that the analysis raises and some of the more difficult data surrounding these questions. Finally, in §6, I conclude.

### 1.1 TPs & DPs

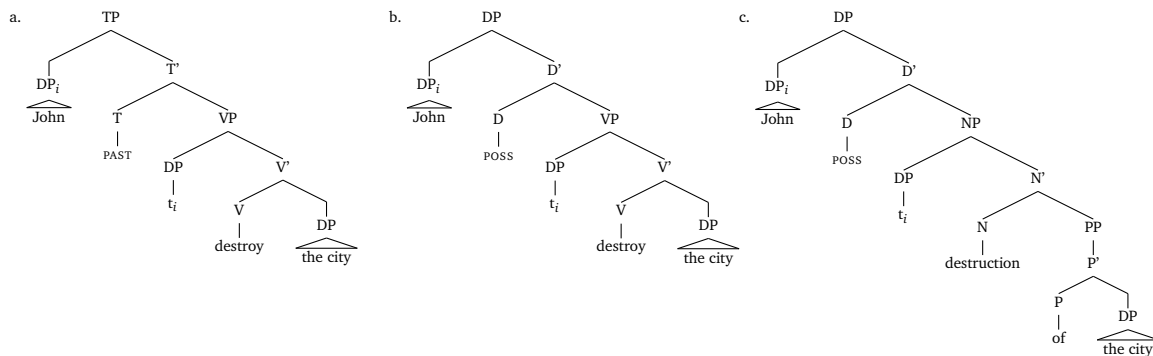
Following Abney (1987), nominal phrases in English are believed to be very similar to full clauses. The model which he introduces, the DP, is analogous to the TP in structure. His model is designed to account for the great similarity between the following examples (see Chomsky 1970 for background):

- |     |    |                                   |                  |
|-----|----|-----------------------------------|------------------|
| (1) | a. | John destroyed the city.          | <i>Sentence</i>  |
|     | b. | John's destroying the city...     | <i>Gerundive</i> |
|     | c. | John's destruction of the city... | <i>Nominal</i>   |

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\*I owe innumerable thanks to Jorge Hankamer for his input and guidance at all stages of the research presented here. I am also in debt to Scott AnderBois for furnishing me with the initial data that spurred my investigations. Thanks to Jim McCloskey for the insightful conversations regarding some of the more bewildering data points. Many more thanks to the students of Syntax B and C, 2009, for their help and comments, and to those non-linguists that helped me with the data judgments presented here.

Abney’s conjecture is that the structures of each of these phrases—the sentence in (1a), the possessive nominal in (1c) and the *POSS-ing* gerundive phrase in (1b)—are all of the same general form, deviating only in the actual constituents in each phrase.:



Notice that, following Vahedi (2008), I assume the internal subject hypothesis obtains in *POSS-ing* DPs. Here, the external argument of the VP raises to the *SPEC*DP position, receiving genitive Case from *POSS* D head. For the sake of discussion later on, I will also assume it for certain deverbal nominals where the “possessor” is the Agent of the action. This will not be a focus of the majority of the analysis, so I leave it aside until §5.

## 1.2 Ellipsis

Ellipsis is a process whereby syntactic material in an utterance fails to be pronounced<sup>1</sup>. It is a well known fact that phonologically realized T heads,  $\Sigma$  heads, and auxiliary verbs in English license verb phrase ellipsis (henceforth VPE), and that the *POSS* head allows for noun phrase ellipsis (henceforth NPE) (Ross 1967, Lobeck 1995 for VPE; Jackendoff 1974, Chisholm 2001 for NPE). Examples of each are given here<sup>2</sup>:

- (2) Mary will buy a car, and John might<sub>T</sub>  $\Delta$ , also. VPE
- (3) I like Sally’s car, and I like Tom’s<sub>POSS</sub>  $\Delta$ , too. NPE

Abney’s analysis of gerundive phrases places the VP as the complement of the head of DP, as it is complement to T in TPs. This is exactly the domain of ellipsis that we see in the examples above. Given the structural isomorphism that obtains in the structures as Abney describes them, we should expect that VPE can occur in the DP as well, which it does:

- (4) Erik’s buying a car came as a surprise, and Bud’s  $\Delta$  came out of nowhere.

## 2 Problems & Antecedence

In the previous section, I established that the *POSS* determiner head licenses an ellipsis of a complement VP. Importantly, these ellipses are restricted with regard to which antecedents they are allowed

<sup>1</sup>I remain agnostic as to whether the elided structure remains unpronounced at PF or gets deleted. However, I have argued that null pronominal accounts of VPE (see, for instance, Lobeck 1995) are unfeasible in light of some of the data presented here. I leave this argument aside here.

<sup>2</sup>In my examples, I underline to indicate an antecedent, and I employ a  $\Delta$  to show the site of an ellipsis.

to take. Where the antecedent is the complement of a T, Aux, or  $\Sigma^3$  but the ellipsis site is complement to POSS, the ellipsis is ungrammatical. A particularly interesting fact about these structures is that they permit the elision of a NP but not a VP where we expect ambiguity between the two options. This is surprising because the syntactic structure is identical in these cases, and the restrictions on VPE and NPE are largely the same (Chisholm 2001).

## 2.1 VPs & NPs

It appears that in order for this kind of ellipsis to be able to apply, the antecedent VP must be the complement of a POSS as well. Compare the examples in (5) with the unelided equivalents in (6):

- (5) a. \* He hesitated to gesticulate wildly because of Sally's  $\Delta$ .  
 b. \* I thought John would leave early, and I knew about Mary's  $\Delta$ .
- (6) a. He hesitated to gesticulate wildly because of Sally's gesticulating wildly.  
 b. I though John left early, and I knew about Mary's leaving early.

As we see in (5), the ellipses fail to find antecedents, and the sentences are ungrammatical. Crucially, (6) shows that these sentences are completely grammatical when no ellipsis has occurred.

To put it succinctly, this is weird. This problem is not attributable to the well-known restrictions on ellipsis antecedents, documented originally by Ross (1967). Ross claims that an ellipsis antecedent cannot be c-commanded by the ellipsis site, as in examples like (7)<sup>4</sup>:

- (7) \* I will  $\Delta$ , if I can work on it. (Ross 1967)

The other restriction on ellipsis is that the ellipsis cannot precede the ellipsis if the antecedent is in a different conjunct of a coordinate structure:

- (8) \* I will  $\Delta$ , and Mary will work on it too.

The examples in (5) are not subject to either of these restrictions. In neither case is the ellipsis in a position to C-command the antecedent, and in (5b), where there is a coordinate structure, the ellipsis clearly follows the antecedent. Therefore, the fact that the ellipsis cannot find an antecedent in these instances is not predicted by the typical syntactic restrictions on ellipsis.

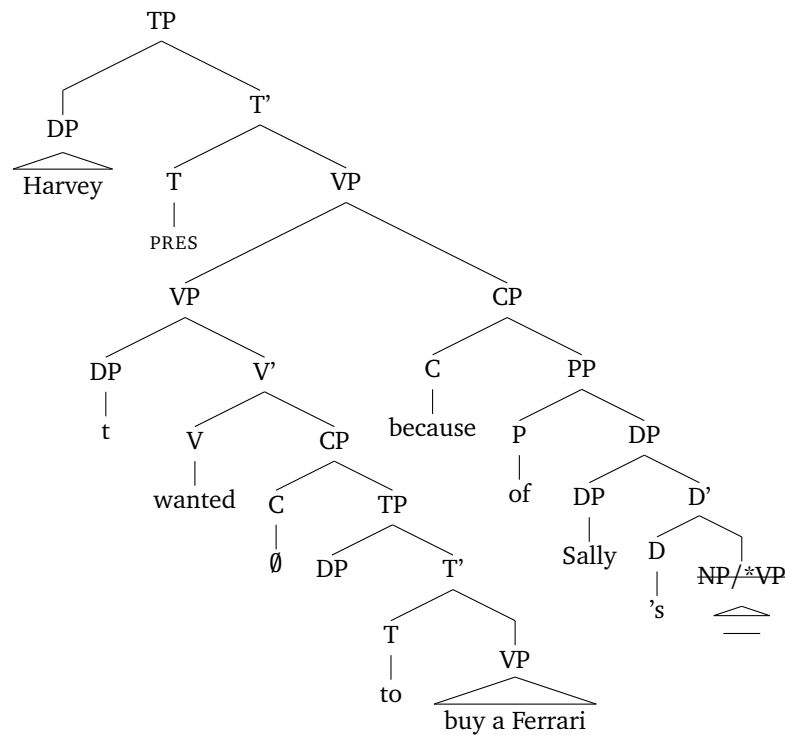
An even more perplexing fact is exemplified in example (9):

- (9) a. \* Harvey wanted to buy a Ferrari because of Sally's  $\Delta$ .  
 b. Harvey wanted to buy a Ferrari because of Sally's  $\Delta$ .

In these cases the ellipsis *can* find an antecedent, but that antecedent must be nominal as in (9b)—the antecedent cannot be a VP. This is a particular problem because one type of ellipsis is allowable in a domain where we would expect another to be equally licit; that is, this sentence should be ambiguous, but it is not. The structure of each sentence is identical with the exception of the elided constituent:

<sup>3</sup>I will generally refer to all of these by the less-specific term “TP-internal”, noting, of course, that each ellipsis-licensing head may each have its own individual properties.

<sup>4</sup>This assumes, of course, that the CP headed by ‘if’ is in fact modifying VP. Ross doesn’t provide any evidence that this phrase does not adjoin to TP (though to his credit, this is not easy to show). This issue is tangential to my main point, but it is at least worth noting that the restrictions on antecedents could be more stringent than typically presented.



This is especially unusual given that the restrictions on VPE and NPE are largely the same. Chisholm (2001) notes that the only real difference seems to be that VPE can take so-called split antecedents while NPE cannot (see Fiengo & May 1994 for some discussion), so the fact the VPE is not allowable here while NPE is perfectly licit is a real problem for syntactic accounts of ellipsis.

## 2.2 Invalid Antecedents

As I noted, there are cases where we expect the apparent elision of a VP in a POSS-ing to be able to find an antecedent but where this does not happen. In (10) below, I show examples in which the antecedent lies in and out of a DP, and where the ellipsis also lies in and out of the DP. This results in four different contexts for VPE.

- (10) a. Sven played the guitar and Jan did  $\Delta$  also.  
 b. Sven's playing the guitar inspired me and Jan's  $\Delta$  depressed me.  
 c. % Sven's playing the guitar convinced me that Jan should  $\Delta$ .  
 d. \* Sven played the guitar because of Jan's  $\Delta$ .

While the other examples are generally acceptable, sentences of the form in (10d) are categorically disallowed. One observation is that VP ellipses in the gerundives are only possible when the antecedent is also in a gerundive. We need some sort of constraint, schematized in (11), that prohibits this pattern from occurring.

- (11) \* [<sub>TP</sub> T VP] ... [<sub>DP</sub> POSS VP]

This is, of course, an *ad hoc* constraint meant only to describe the observation. There needs to be a more principled basis supporting it.

There is a difficult issue here regarding (10c). Grammaticality judgments vary with regard to examples such as this. A minority of speakers reject them as completely impossible. This means that

for a majority of speakers, the reverse of (11) does not hold. Whatever the analysis arrived at may be, it needs to account for this (partial) asymmetry.

The first step here is to show that the VP-internal syntax is not the cause of the badness of (10d). It could be argued that the ungrammatical cases are the result of the deletion of the verb with the *-ing* suffix. In this case, the badness of the ellipses in cases like (10d) above would result from morphological differences existing between the elided constituent and the antecedent. I turn to this possibility immediately, arguing that it does provide a satisfactory account of the given data.

### 3 Morphosyntactic Identity & Locality

#### 3.1 Identity & Recoverability

Hankamer and Depiante (2006), writing on sluicing in Spanish, argue that ungrammatical sluices are the result of “una verdadera falta de identidad en el nivel de la sintaxis entre los morfemas que pertenecen al Sintagma de Tiempo antecedente y aquellos que pertenecen al Sintagma de Tiempo elidido en el nivel de la Estructura Morfológica”<sup>5</sup> (p. 6). That is to say, the morphological features of an antecedent and the corresponding sluice must be identical at the level of syntax, before morphology (example from Hankamer and Depiante; my translation and glosses).

- (12) \* *Ayer, María comió carne, pero mañana, no sé dónde [comerá carne].*  
 Yesterday, María eat.3SG.PST meat, but tomorrow, NEG know.1SG.PRES where eat.3sg.fut  
 carne].  
 meat  
 ‘Yesterday, María ate meat, but tomorrow, I don’t know where [she will eat meat].’

In example (12), the antecedent is in the past tense, but the elided material is in the future, and this is ungrammatical. Hankamer and Depiante explain this as a lack of identity at the level of syntax. Tense and aspect heads are inside of the TP, they note, and as such the sluiced TP does not share identity with the antecedent because the identity condition on the T and Asp heads is not met. Eliding the T node effectively deletes unrecoverable information.

Turning back to VPE now, it seems unlikely that there is anything in the VP-internal structure that could prevent an ellipsis from happening. Take for example (5b), reproduced below as (13b). One of the features of VPE in English is that it preserves tense information<sup>6</sup>, or in this case, the licensing head (shown in boxes).

- (13) a. I thought John would leave early, and I knew that Mary had [~~left early~~].  
 b. \* I thought John would leave early, and I knew about Mary ’s [~~leaving early~~].

In the case of DP-internal VP ellipsis, the complement to the elided VP is *poss*, which is not elided because it sits outside of the ellipsis site, and it is morphologically exponed on the subject of the gerundive. It is a requirement that all verbs selected by this head must be in their present participle, or *V+ing*, forms. The verb’s form is the only outward difference between gerundives and normal sentences. Being the result of VP-external factors, the form should be recoverable based on the

<sup>5</sup>“... a true lack of identity at the level of the syntax between the morphemes that belong to the antecedent TP and those that belong to the elided TP at the level of morphological structure.” My translation.

<sup>6</sup>Even where tense is normally spelled out on the verb, *do*-support ensures that the this information is not lost. Thus, the tense information is recoverable

selecting POSS head. Of course, it could be the case that it is simply the verb's form that is interfering with the ellipsis, but if it were, we would not be able to explain the following examples:

- (14) a. Tom has never played chess before, but he is [~~playing chess~~] right now.  
 b. \* I thought John was leaving early, and I knew about Mary's [~~leaving early~~].

Example (14a) is grammatical in spite of the fact that the morphological forms of the verbs are different (and, notice that the elided form is the same as it would be in a gerundive). (14b) is still ungrammatical despite the fact that the morphological forms of the verbs are identical.

All together, there does not appear to be any element or feature in the VP-internal syntax that would cause a mismatch in the identity between a gerundive VP and one that sits within a tense node at the level of syntax<sup>7</sup>. The difference in the VPs appears to be at the level of morphology. However, even where the morphological form is the same, the ellipsis is still bad. Consequently, we should be able to rule out any VP-internal morphological differences preventing an ellipsis from occurring.

### 3.2 Locality

Another fact suggesting a VP-external analysis for (10d) is that ungrammaticality of the type under analysis only occurs when the VP is the immediate complement of POSS. Ellipses after other licensing heads remain perfectly licit, even inside the DP:

- (15) a. John might buy a car, but I didn't know about [Mary's thinking she should  $\Delta$ ]<sub>DP</sub>.  
 b. Mary's attempting to solve the puzzle inspired [John's thinking that he should try to  $\Delta$ ]<sub>DP</sub> also.

Notice that here the antecedents are complements to non-D heads. If POSS prevented ellipsis everywhere in the DP (i.e. in its c-command domain), we would expect the above examples to be ungrammatical, but they are not. Consequently, one can conclude that POSS does not block ellipsis in deeper parts of the structure. Whatever restriction it imposes, it only applies to the VP that is its complement. Thus, I argue that the presence of the POSS head is at least in part responsible for the badness of (10d).

### 3.3 Morphological Anchoring

I turn now to a recent theory that attempts to explain ungrammatical elisions as the result of constraints on the morphological form of elements extracted from an ellipsis site. As van Craenenbroeck (2008) observes, there are a number of cases cross-linguistically that indicate that an element extracted out of an ellipsis site is subject to certain morphological restrictions, particularly with regard to morphological case. He shows a fair amount of evidence indicating that some sluices must be derived from copular clauses. Paradoxically, in languages that have robust morphological case systems, the element extracted out of these sluices (the WH word) does not receive the case marking that is associated with a copular clause. When it does, the sentences are ungrammatical.

Van Craenenbroeck introduces "Morphological Anchoring" as a means to account for these facts. He defines it as follows:

<sup>7</sup>Furthermore, the attested acceptability of examples such as (10c) suggests that this must be the case. The fact that DP-internal VPs can antecede VPE outside of gerunds lends credence to the notion that the internal structures and morphological features of the VPs are the same. However, it has been pointed out to me that some sort of asymmetrical identity could hold here (Jorge Hankamer, p.c.). It is unclear to me how such a hypothesis would affect the structure, though admittedly I have yet to fully pursue the ramifications of such a hypothesis.

**Morphological Anchoring** (*first version*)<sup>8</sup> A DP is morphologically anchored iff it is morphologically non-distinct in case-marking from its correlate in the ellipsis antecedent.

To summarize a bit, Morphological Anchoring is a requirement that the case-marking on an element extracted from a ellipsis site be the same as its correlate in the antecedent. In other words, one should not be able to tell that a DP raised out from an elided element is in a different morphological case from some element with which it corresponds<sup>9</sup> in the antecedent. He hypothesizes that this requirement could be extended to other forms of ellipsis as well.

Turning for a moment back to DP-internal VP ellipsis, van Craenenbroeck’s proposal looks promising. It is one potential way to capture the constraint proposed in (11). The subject of the gerundive sitting in SPECDP is extracted out of the ellipsis site to receive genitive Case from POSS. If we assume that *-s* is the spell-out of this Case feature, then the DP subject of TP is morphologically distinct from that of the subject of the Gerundive, and van Craenenbroeck’s theory predicts ungrammaticality. This is exemplified in (13b) (reproduced yet again as (16b) below). ‘John’, the subject of the TP in the first conjunct, receives Nominative Case in SPEC-TP. This is opposed to ‘Mary’, the subject of the gerundive in the second conjunct, which receives Genitive Case in SPEC-VP. Compare this to (16a) where it is not possible to tell that the subjects are in different cases.

- (16) a. I thought John<sub>NOM</sub> left early, and I knew that Mary<sub>NOM</sub> would  $\Delta$ .  
 b. \* I thought John<sub>NOM</sub> left early, and I knew about Mary’s<sub>GEN</sub>  $\Delta$ .

Crucially, we can see this Case marking<sup>10</sup> as it appears in the form of the suffixed ‘-s’ morpheme. Under van Craenenbroeck’s hypothesis of Parasitic Licensing, ‘Mary’ is thus not morphologically anchored because, as an element moved out of an ellipsis site, the DP is not morphologically non-distinct from its *correlate* (‘John’, in this case) in the antecedent.

A benefit of this analysis is that we can come to understand examples like (9), reproduced below as (17):

- (17) a. \* Harvey wanted to buy a Ferrari because of Sally’s  $\Delta$ .  
 b. Harvey wanted to buy a Ferrari because of Sally’s  $\Delta$ .

In (17a), ‘Sally’ is not Morphologically anchored because the element is morphologically distinct from its antecedent correlate, ‘Harvey’. However, (17b) is okay because ‘Sally’ is not extracted out of the ellipsis site—the Parasitic Licensing requirement, thus, does not hold of the DP.

### 3.3.1 Problems & Case Marking

There are a few problems that come with applying Morphological Anchoring to the data presented in this paper, and I want to briefly turn to them here. The first issue has to do with sentences like (10c), reproduced below as (18). Notice that the names “Sven” and “Jan” have distinct morphological cases.

- (18) % Sven’s playing the guitar convinced me that Jan should  $\Delta$ .

<sup>8</sup>Later revisions are meant to deal with verb-stranding ellipsis and PP stranding that have no bearing here.

<sup>9</sup>Van Craenenbroeck does not give a clear definition of “antecedent correlate”. So far as I can tell, this is either the element with which the extracted element is coreferent, or it is somehow syntactically analogous (i.e. sitting in some similar structural position). It is the latter that will be relevant in the coming discussion.

<sup>10</sup>This analysis relies on the assumption that ‘Mary’s’ is the legitimate morphological form of that name in the Genitive. See §3.3.1 for more discussion of this.

The prediction under the analysis just presented is that this should be ungrammatical for all speakers, not just some, as the case marking on each subject is morphologically distinct<sup>11</sup>.

There is a much bigger problem, anyway. If examples such as (17a) are ungrammatical because the subject of the gerundive is not properly morphologically anchored, then changing the Case morphology to one that is indistinct ought to ameliorate the ungrammaticality. Likewise, examples like (18) should not degrade, but improve. Neither of these predictions are born out.

- (19) a. \*Harvey wanted to buy a Ferrari because of Sally  $\Delta_{VP}$ .  
 b. \*Sven's playing the guitar convinced me that Jan's should  $\Delta$ .

As (19a) shows, making 'Sally' morphologically indistinct from 'Harvey' does not permit any ellipsis at all, be it NPE or VPE. Putting both 'Sven' and 'Jan' into the genitive in (19b) causes the sentence to degrade significantly (assuming there is no ellipsis after 'Jan').

My conclusion here is that Morphological anchoring cannot fully account for the data. While it may make good predictions about the distinction in (17), taking the analysis to its logical extent, as with the examples in (19), shows that the notion has some deep flaws.

## 4 Summary

So far, we have seen that there are a number of facts that need to be taken into account when considering this data. There are no VP-internal reasons for the ellipses to be bad. Ellipses deeper in the structure are permitted, but the immediate complement to POSS cannot be elided if the antecedent is not itself an immediate complement to POSS itself. Examples like (19a) show that the presence of the possessive morphology is necessary for there to even be an ellipsis. All of these facts point toward the POSS head. It seems that inasmuch as this head licenses the ellipsis of a VP, it also severely restricts when it can happen.

Stepping back for the moment from the intricacies of the data, it seems appropriate to discuss the ellipsis-licensing heads at this point. It is an accident of English syntax that DP-internal VP ellipsis is even a possibility. POSS-ing gerundives are only known to occur in two languages, English and Turkish (Abney 1987), and Turkish does not permit VPE. This accident, however, gives us a particularly interesting insight into ellipsis as a process. We could think of POSS as a VPE-licensing head in addition to its normal role as a NPE-licensing head, but this, I think, misses a rather important generalization. It would be much superior to think of POSS as simply an ellipsis-licensing head. The fact that it doesn't license sluicing, elision of a DegP, or whatever other phrase, is the result of the head's idiosyncratic selectional properties.

Given such an understanding, names like "verb phrase ellipsis" and "noun phrase ellipsis" are really misnomers. Ellipsis licensing heads are simply heads that permit the elision of their complements, whatever that complement may be. Thus, VPE shouldn't be understood as being licensed by T,  $V_{aux}$ , and  $\Sigma$ ; rather, these heads should be understood as simply ellipsis licensing head. The fact that they only take one kind of complement, a VP, is what results in VPE. Likewise, NPE should be thought of as a variety of Complement-of-D ellipsis. Since some D's select VPs as complements, DP-internal VPE would be another form of Complement-of-D ellipsis.

With this analysis of ellipsis, the fact that the restrictions on gerundive-internal VPE spring from the POSS head are unsurprising. Unfortunately, it is not immediately clear how that helps to explain the problem examined here. There is no obvious reason why POSS should be so restrictive. This analysis

<sup>11</sup>There might be a way around this, specifically involving the finite T stranded by VPE, but due to limitations on space, I do not want to speculate here.

also has several problems which need to be addressed. I turn to those in the following section, as at least some of them warrant discussion here.

## 5 Implications & Problems

If we are to adopt an analysis where restrictions on ellipsis are derived from the head that licenses the elision, then we might be able to explain some of the facts above. However, there are some odd facts that need to be accounted for before such an analysis can become fully tractable. There are also some more general implications that the above hypothesis makes with regard to what gets elided. In this section, will look first at the stranding of other ellipsis licensing heads and then at the elided constituents themselves. The data in this section are very murky, and as such much of the discussion will devolve into speculation. With hope, this speculation will be somewhat enlightening.

### 5.1 Auxiliaries in Poss-ing DPs

An unusual fact about ellipsis in POSS-ing DPs is that it seems to be licit immediately after the POSS head. Elision after auxiliary verbs in the DP is severely marked:

- (20) John's having eaten a turtle was strange, but...
- a. ...Mary's [~~having eaten a turtle~~] didn't faze me.
  - b. \*...Mary's having [~~eaten a turtle~~] didn't faze me.

- (21) Sally's being upset was understandable, but...
- a. ...Harvey's [~~being upset~~] was incomprehensible!
  - b. \*...Harvey's being [~~upset~~] was incomprehensible!

The reason for the ungrammaticality of the examples in (20b) and (21b) is not immediately apparent, but there are some things to be said about them.

One problem that exists in the data above is quite possibly morphological. Johnson (2001) notes that as far back as Ivan Sag's (1976) dissertation, it has been observed that "VPs elide quite badly when the Aux governing them has *ing* suffixed to it" (Johnson 2001:3). This seems to be a general constraint on VPE:

- (22) \* Doc Golightly is being discussed and Sally is being  $\Delta$  too. (Johnson 2001)

Provided that the generalization above is always true, it could be considered in tandem with constraint MaxElide, which requires that the biggest possible constituent be deleted (Takahashi & Fox 2005 and references therein). Together, these would seem to require that the biggest VP complement to POSS always get deleted, which is what is observed in (20b) and (21b).

There are some conflicting pressures here, though. Johnson (2001) also notes that it is difficult to elide the auxiliary "have". Typically, it is not easy to recover this auxiliary when it is elided, as (23) is meant to show:

- (23) Sally might have eaten rutabagas, but Holly shouldn't  $\Delta$ . (Johnson 2001)

Given this, it is unusual that eliding the VP headed by "have" in (20a) is allowable when stranding it is not, as in (20b).

The data in (21) are somewhat unusual too. Typically speaking, ellipsis of "be" is restricted when it has a DegP complement:

- (24) a. \* Sally is upset, and Harvey should [~~be upset~~] also.  
 b. \* Sally will be upset, and Harvey might [~~be upset~~] also.  
 c. \* Sally should have been upset, and Harvey should have [~~been upset~~] also.

However, it may be that when there is a certain amount of symmetry between the antecedent and the ellipsis site, the ellipsis becomes grammatical:

- (25) a. Sally has been upset, and Harvey has [~~been upset~~] also.  
 b. ? Sally should be upset, and Harvey should [~~be upset~~] also.  
 c. ?? Sally should have been upset, and Harvey should have [~~been upset~~] also.

My judgments here are shaky; however, this could be indicative of the sort of parallelism that seems to exist in DP-internal ellipses and antecedents. This sort of data would probably benefit from analysis in an experimental setting.

A final note is that, at least for some people, stranding of multiple auxiliaries after the *poss* head is markedly better than the examples in (20b) and (21b):

- (26) ?? John's having eaten a turtle was strange, but Mary's having been [~~eating a turtle~~] didn't faze me.

The fact that the ellipsis in examples like (26) is not licensed by an auxiliary in with the *-ing* suffix may have something to do with the more favorable judgments ascribed to it. Again, this is something that needs more detailed investigation and testing.

All together, there seem to be a lot of forces at work in the data here. The interplay between them seems to be responsible for the murkiness of the data, but to untangle these interactions does not seem a hopeless task.

## 5.2 Negation

Ellipsis after negation in *poss-ing* DPs is subject to a great deal of variation between speakers.

- (27) a. % Sally's buying us lunch was a nice gesture, but Mary's not [~~buying us lunch~~] told us how she felt.  
 b. % I understand Harvey's arriving early and Murphy's not [~~arriving early~~].

Some speakers reject the examples in (27) as ungrammatical while others accept them. There are a few things worth saying about these sorts of examples.

Throughout this paper, I have made the assumption that  $\Sigma$  is itself a licensing head, and as per the discussion in §4 one would reasonably expect it to have licensing characteristics of its own. This may well be the case. At this point, it remains unclear to me whether examples like (16b) and (17a) get better when there is a negation in the ellipsis site:

- (28) ?? Harvey wanted to buy a Ferrari because of Sally's not [~~buying a Ferrari~~].  
 (29) ?? I thought John would leave early, but I knew about Mary's not [~~leaving early~~].

If these are in fact better, then it lends some credence to the notion that individual licensing heads determine the validity of ellipses. As for the interspeaker variation, I have no good explanation of it.

### 5.3 The Category of Elided Constituents

When presented with the data examined here, many linguists ask how one can tell whether it is actually a VP that is elided after the *POSS* head. Perhaps the most bizarre fallout from the discussion in §4 is that it becomes difficult, if not impossible, to determine the category of the elided constituent within DP. Consider the following examples:

- (30) a. Godzilla’s destroying Tokyo was scary, but Gamera’s destruction of Tokyo was horrifying.  
 b. Godzilla’s destruction of Tokyo was scary, but Gamera’s destroying Tokyo was horrifying.
- (31) a. Godzilla’s destroying Tokyo was scary, but Gamera’s  $\Delta$  was horrifying.  
 b. Godzilla’s destruction of Tokyo was scary, but Gamera’s  $\Delta$  was horrifying.

If ellipses are simply the deletion of the complement of a licensing head, then the relationship between the respective examples in (30) and (31) becomes a relevant issue. Provided that the verb “destroy” and the noun “destruction” in these uses are logically equivalent, having the same argument structure and the same meaning, it does not seem entirely possible to tell whether a VP or an NP is elided in the examples in (31) (see Sag 1976 on logical form and VPE). Chomsky (1970) notes correctly that many “derived nominals” have undergone semantic drift and that there is no regular relationship between them and *POSS*-ing DPs. However, this is not the case for all such pairs. For instance, if there is a difference between the propositions “Godzilla’s destroying Tokyo was scary” and “Godzilla’s destruction of Tokyo was scary”, it is very subtle—certainly, it does not seem that one can be false while the other is true.

To be clear, I am not claiming here that a VP can antecede the ellipsis of a DP or vice-versa. I am merely raising the question. The answer depends on the syntactic restrictions on the syntactic requirements for ellipsis and on whether category matters for ellipsis. At the moment, though, I can think of no way to determine whether the sentences in (30) are equivalent. I leave this for later investigation.

## 6 Conclusion

The conditions on ellipsis of a VP inside of a *POSS*-ing gerundive are both complex and fascinating. As I have shown, the typical understanding of ellipsis in the syntax simply cannot account for all of the data presented. DP-internal VP ellipsis is much more restricted than VPE in other domains. This cannot be attributed to VP-internal morphosyntax or to conditions outside of the DP. This leaves the licensing head itself to be the source of the restrictions, and locality conditions on the restrictions point to this being the case. However, moving to an account of ellipsis where heads license the deletion of their complements still raises a number of issues that are not fully resolved.

There are a few ways forward here. One reason that *POSS* may not allow an ellipsis to find VP antecedents may have to do with its more usual status as the possessive determiner. The fact that it typically selects for NPs may cause this head to act differently when it selects for a VP. There do not seem to be a great deal of ellipsis-licensing heads in the language that take complements of different categories, but the verb ‘be’ selects for many phrase types and seems to allow for the ellipsis of all of them. One potential course of investigation would be to see if there are any restrictions on ‘be’ and the ellipsis it licenses. The question to ask would be: Does ellipsis after ‘be’ have different properties

depending on the elided constituent? This could help identify reasons why some ellipses are licit while others are not permissible.

Another place for investigation is VPE after other heads. As I have noted many times so far, ellipsis is licensed by  $T$ ,  $V_{aux}$ , and  $\Sigma$ . It would likely be worthwhile to test and see how good ellipses are when the antecedent and the elided constituent are selected by different members of this set of licensing heads to see if there are any restrictions in this domain. If any regularities are discovered, this could help uncover why the mismatch between *poss* and other licensing heads exists. The material in §5 treads in this direction, and all of the data there need serious investigation as well.

In conclusion, there is still a great deal of work to be done. The problems presented here are only a few of many peculiar questions posed by ellipsis in *poss*-ing nominals. The facts, though, point to the ellipsis-licensing head as being the source of a lot of these, and it is these heads that need further investigation.

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