Ellipsis and EPP repair
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1 Introduction

Merchant (2001) presents an interesting argument from the lifting of Subject Condition effects under sluicing for the idea that ellipsis suspends the requirement that the subject raise to SpecIP (the EPP). Lasnik and Park (2003) have taken issue with that argument, and have called into question a conception of the EPP as a PF condition. Showing first that Lasnik and Park’s objections to Merchant 2001 have no basis, we proceed in these pages to present two novel arguments to the effect that the EPP is indeed suspended under ellipsis, and that, on an approach to the ellipsis phenomena in question that takes them to involve PF deletion (or failure of transmission to PF, with concomitant non-application of spell-out; see note 3), the EPP is hence likely to be a PF condition.

2 The sluicing argument

2.1 The argument

As is well known, extraction from subjects of finite clauses is impossible in English. Thus, the sentences in (1) are ungrammatical. Those in (2), however, are perfectly well-formed (as Chung, Ladusaw, and McCloskey (1995) first noted for similar examples). These are examples of sluicing, featuring ellipsis of the IP following the wh-phrase which (Marx brother). Apparently, sluicing eliminates the Subject Condition effect seen in (1). The question is how it manages to do so.
(1) a. *Which Marx brother, is [a biography of \(t_1\)] going to appear/be published this year?
   b. *Which Marx brother, did [a biography of \(t_1\)] cause a scandal earlier this year?

(2) a. A biography of one of the Marx brothers is going to appear/be published this year—guess which (Marx brother).
   b. A biography of one of the Marx brothers caused a scandal earlier this year, but I don’t recall which (Marx brother).

Merchant’s (2001) answer to this question runs as follows. Assume first of all that the Subject Condition is a constraint barring extraction out of the subject of a finite clause in its derived position, SpecIP, and that there is no ban on extraction from the subject when it is in its VP-internal base position (whether it be the verb’s complement position, as in the ergative/passive a-examples, or the specifier position, \(^2\) as in the b-sentences). Assume in addition that in sluicing contexts, the requirement that the subject raise to SpecIP (the EPP) is suspended. Then the absence of Subject Condition effects in (2) is as expected: which (Marx brother) extracts from its container noun phrase while the latter is inside VP (cf. (3)).

(3) a. a biography of one of the Marx brothers is going to appear/be published this year—guess \([_{CP} \text{ which (Marx brother)}]_{IP} \text{ is } \text{[_{VP} \text{ going to be published [a biography of } t_1 \text{] this year}]}\]
   b. a biography of one of the Marx brothers caused a scandal earlier this year, but I don’t recall \([_{CP} \text{ which (Marx brother)}]_{IP} \text{ Infl } \text{[_{VP} \text{ a biography of } t_1 \text{] caused a scandal earlier this year}]}\]
What is it that allows the subject to stay in VP in sluicing contexts, while such is evidently impossible in constructions in which no IP-ellipsis takes place? Merchant’s answer is that the EPP is a PF condition. Specifically, the requirement that SpecIP be filled is encoded in terms of an uninterpretable feature of Infl that is visible at PF and hence must be eliminated prior to PF, by movement to SpecIP—if, that is, Infl itself remains present in the PF representation. If, on the other hand, Infl is elided at PF, as it is in the sluicing examples, the EPP is not in effect, and the subject will perforce stay inside the VP. For extraction from the subject, this has the beneficial effect of legitimizing it in sluicing contexts.

Lasnik and Park (2003) object to Merchant’s account of the contrast between (1) and (2) by showing that the idea that movement to SpecIP does not take place in sluicing contexts causes trouble in connection with quantification and binding. Specifically, they point to scope and bound variable facts that Merchant himself points out and takes care of, but they argue that Merchant’s way of handling these facts cannot be correct. Let us quickly run through the argument here.

2.2 The problems and their solutions

Merchant’s key claim that the subject stays inside VP in sluicing constructions would lead one to expect that the subject obligatorily takes narrow scope vis-à-vis negation in (4a), and that the pronoun its is not construable as a bound variable in (4b). These expectations, however, are contrary to fact: (4a) does allow the subject to scope over the negation, and (4b) does allow for a bound variable reading.
(4)  a. five pictures of one of the victims weren’t distributed to the press, but I can’t remember which one. [IP weren’t [VP distributed [five pictures of ti to the press]]]

b. [every biography of one of the Marx brothers]i seemed to itsi author to be definitive, but I don’t remember (of) which (Marx brother)j [IP infl [VP seemed to its, author to be [every biography of tj], definitive]]

Merchant presents these potential counterexamples himself, and suggests that they can be accommodated by having the subject of the sluiced IP undergo covert phrasal A-movement to SpecIP. But according to Lasnik and Park (2003), allowing for covert phrasal A-movement would make the wrong predictions in the domain of verb-particle constructions such as those in (5).

(5)  a. The DA made every defendanti out to be guilty during hisi trial.

b. *The DA made out every defendanti to be guilty during hisi trial.

There is nothing wrong, per se, with the word order depicted in (5b): the sentence is grammatical so long as his is not construed as a bound variable. That his cannot be so construed in (5b) while it can in (5a) follows, Lasnik and Park argue, if (i) every defendant in (5a) has undergone Object Shift into an A-position (SpecAgrOP on Lasnik’s (2001a) assumptions) asymmetrically c-commanding the temporal adverbial during his trial (which is assumed to be VP-adjoined), and (ii) the QP in (5b) does not so move—neither overtly (as is evident from the fact that it surfaces to the right of out) nor, crucially, covertly. If we allowed every defendant in (5b) to undergo covert phrasal A-movement to SpecAgrOP, we would fail to predict the
unavailability of a bound-variable reading for *his* in this sentence.

As Van Craenenbroeck (2004:243) points out, however, this argument is undermined by Lasnik’s (2001a) assumptions regarding the word-order freedom in English verb-particle constructions. Lasnik takes the alternation between *They made John out to be a liar* and *They made out John to be a liar* to be a function of the presence or absence of an AgrOP into whose specifier *John* could raise. Thus, with AgrOP radically absent from the structure of *They made out John to be a liar*, movement of *John* into SpecAgrOP could not possibly transpire—neither overtly nor, crucially, covertly. On Lasnik’s own assumptions, therefore, there is no point at which *every defendant* in (5b) could ever come to c-command *his* and bind it. In Merchant’s sluicing examples, by contrast, there is no question about the presence of IP: the elliptical clauses are finite, hence must have a locus for tense, at the very least. With IP present in the structure, its specifier position could be exploited as a landing-site for covert A-movement of the subject. The problems posed by (4) can thus be solved in Merchant’s way without making unwanted predictions about (5b). With those problems out of the way, Merchant’s (2001) analysis of the data in (2) in terms of EPP repair under ellipsis stands.  

3 The NPI-connectivity argument

3.1 NPI-connectivity in specificational pseudoclefs and question-answer pairs

Ellipsis, exploited by Merchant in his account of sluicing, also provides an elegant solution to the otherwise quite intractable problem of NPI-connectivity in specificational pseudoclefs (SPCs) and question-answer pairs (QAPs), illustrated in (6a,b).
(6)  a. What they didn’t buy was any wine.

What nobody bought was any wine.

b. What didn’t they buy? — Any wine.

What did nobody buy? — Any wine.

On the assumption that the postcopular constituent of the SPCs in (6a) and the answers in (6b) are full-fledged, albeit elliptical, clauses (as illustrated in (7)), licensing of the NPI by the negation under c-command is entirely straightforward (cf. Den Dikken, Meinunger, and Wilder 2000). 7

(7) \[ IP \text{Nobody bought They didn’t buy any wine} \]

The fact that, both in QAPs and (somewhat marginally) in SPCs, the NPI can in fact surface in a fully spelled-out clause as well (i.e., the IP in (7) does not have to be elliptical; cf. Ross 1972:89, Kayne 1998:163-164, Schlenker 1998, though Higgins (1979:86) finds SPCs with fully spelled-out postcopular clauses ‘irremediably anacoluthic’) lends further support to the analysis of (6a,b). 8

3.2 NPI-connectivity and the subject

Apparently problematic for an ellipsis-based approach to NPI-licensing in SPCs and QAPs is the fact that it is possible to embed an NPI in a constituent that, in the fully spelled-out IP counterweight/answer, would not be c-commanded by the negation. That the examples in (8) are grammatical while (9) is not is an apparent embarrassment.
a. What didn’t work was any of the printing equipment.
b. What didn’t work? — Any of the printing equipment.

*Any of the printing equipment didn’t work.

Den Dikken, Meinunger, and Wilder (2000:section 2.4) argue, however, that a solution readily presents itself if it is assumed that the subject of a clause whose Infl undergoes ellipsis is not attracted to SpecIP (cf. (10); see Wilder 1997 for detailed discussion of the kind of ellipsis at work here).

\[
\begin{array}{c}
[\text{IP Infl Neg} [\text{VP any of the printing equipment work}]]
\end{array}
\]

Thus the hypothesis that the EPP is not in effect when Infl undergoes ellipsis provides a straightforward account, based on an ellipsis approach to NPI-connectivity in SPCs and QAPs that can be shown independently to be a necessity, for the grammaticality of the examples in (8) and the contrast between them and (9).

4 The clitics and agreement argument

The third argument revolves around the fact that clitics and complementizer agreement endings are disallowed to the right of sluiced wh-phrases. Given that the occurrence of both these phenomena crucially depends on the subject occupying the highest available subject position, their absence under sluicing suggests that when IP is elided, the subject does not raise to that position. This line of reasoning is corroborated by a previously undiscussed type of elliptical
construction, in which the elided subject is base-generated in the high subject position and subject clitics and agreement endings are allowed.

4.1 The argument

As was pointed out by Lobeck (1995:58-60) and Merchant (2001:72-74), neither subject clitics nor complementizer agreement endings can occur to the right of sluiced _wh_-phrases, as is shown by the contrast between (11a)/(12a) on the one hand and (11b)/(12b) on the other.\(^9\)

   John knows not who that-\textit{AGR} we seen have
   ‘John doesn’t know who we have seen.’

   b. Wiej hebt ‘r ene ezeen, en Jan weet niet wie(\textit{-e}).
   we have there someone seen and John knows not who-\textit{AGR}
   ‘We have seen someone, and John doesn’t know who.’  [Hellendoorn Dutch]

(12) a. Ik weet nie wou dat-n aai gezien eit.
   I know not who that-he-\textit{CLITIC} he-\textit{STRONG} seen has
   ‘I don’t know who he saw.’

   b. Jef eid iemand gezien, mo ik weet nie wou(\textit{-n}).
   Jeff has someone seen but I know not who-he-\textit{CLITIC}
   ‘Jeff saw someone, but I don’t know who.’  [Wambeek Dutch]
Lobeck suggests that the ungrammatical variants of (11b) and (12b) are an indication that sluicing is not the result of PF-deleting IP, but rather of merging a null IP-proform. Given that such an empty pronominal has no internal structure (in particular, no Infl), there is no source for either the clitic or the agreement ending. Merchant (2001:69-72) presents a detailed critique of this approach, and discusses ample independent evidence in favor of a PF-deletion analysis of sluicing. As far as the data in (11) and (12) are concerned, he suggests that $I^0$-to-$C^0$ movement (which he assumes to be at the heart of both clitic placement and complementizer agreement) is bled by the ellipsis of IP.

Elegant though such an analysis is at first sight, however, the idea that head movement is responsible for complementizer agreement is one that has recently been challenged by a number of researchers (cf. Ackema and Neeleman 2001; Carstens 2003; Van Craenenbroeck and Van Koppen 2002; Van Koppen 2005). Particularly problematic for movement approaches are instances of so-called first conjunct agreement, such as (13) (from Van Koppen 2005:40).

(13) Ich dink $de\text{-s}$ doow en ich $\dot{o}\text{s}$ treff-e.

   I think that $2\text{SG}$ you-$\text{SG}$ and I ourselves meet-$\text{PL}$

   ‘I think that you and I will meet.’

   [Tegelen Dutch]

In this example, the complementizer agrees with the first conjunct of the coordinated subject, while Infl agrees with the entire coordination (as can be seen from the plural marking on the verb and the choice of the anaphor). Such data suggest that complementizer agreement should be implemented not via head movement, but through Agree. But if that is the case, Merchant’s account for the absence of agreement endings on sluiced $wh$-phrases cannot hold, as
it is well known that Agree (unlike certain movement operations; cf. for example Richards 2001:131-141 and Lasnik 1999a, 1999b, 2001b) is not bled by ellipsis. Consider in this respect the VP-ellipsis example in (14), where Infl can freely Agree with the associate of *there* inside VP, in spite of the fact that VP has been elided.

(14) I didn’t think there would be many people at the party, but there were many people at the party.

So far we have seen that neither Lobeck’s analysis nor Merchant’s can successfully account for the data illustrated in (11b) and (12b). A solution presents itself, however, from the point of view of this squib. As was first pointed out by Ackema and Neeleman (2001), complementizer agreement is subject to very stringent locality requirements (cf. (15), from Van Craenenbroeck and Van Koppen 2003:67). The same holds for subject clitic placement on C° in the dialects under consideration here (cf. (16), from Van Craenenbroeck 2004:246).

(15) a. … darr-e wiej allichte de wedstrijd winne zölt.
    that-AGR we probably the game win will

b. * … darr-e allichte wiej de wedstrijd winne zölt.
    that-AGR probably we the game win will

c. … dat allichte wiej de wedstrijd winne zölt.
    that probably we the game win will

'… that we will probably win the game.' [Hellendoorn Dutch]
These data show that the presence of subject clitics and agreement endings on the complementizer in Dutch dialects is dependent on the subject occupying the highest available specifier position in the inflectional domain. This implies that in the elliptical examples in (11b) and (12b), where subject clitics and agreement endings are radically absent, the subject never raises to such a specifier — in other words, that the EPP is not in effect in such clauses. Thus, the absence of subject clitics and complementizer agreement endings on sluiced wh-phrases provides an additional argument in favor of the hypothesis that EPP-driven subject movement to SpecIP can be bled by ellipsis (in fact, it must be, in the case at hand), and by extension, that the EPP is a PF-requirement.

4.2 Corroborating evidence

The analysis we have presented in the previous section does not predict — unlike Lobeck’s and Merchant’s — that the occurrence of subject clitics and complementizer agreement endings is a priori incompatible with ellipsis of IP. That this is a desirable result is suggested by the data in (17) (Van Craenenbroeck 2004:224). In several Dutch dialects, the discourse particles for ‘yes’ and ‘no’ can be combined with a subject clitic (and in some cases, as in the example in (17B), an agreement affix as well) coreferential with the subject of the preceding yes/no-question.
(17) A: Èè-n ze gewonnen? B: Ja-n-s.

have-PL they won yes-PL-they-CLITIC

‘A: Have they won? B: Yes, they have.’

On the (uncontroversial) assumption that such discourse particles are not inherently — that is, interpretably — marked for phi-features, such replies constitute elliptical constructions in which (the structure containing) the Goal for agreement has been elided. In light of the preceding discussion, then, a very clear prediction arises: given that the head adjacent to the ellipsis site (arguably C⁰; cf. also fn. 13) is combined with an agreement affix and a subject clitic, the elided subject should occupy SpecIP. Under the hypothesis (defended in this squib) that the EPP is not in effect under ellipsis, this implies that the elided subject in (17B) is base-generated in (rather than moved into) the surface subject position.

This is precisely what Van Craenenbroeck (2004:183-197, 221-238) argues when discussing this phenomenon. He shows (in much greater detail than we have space for here) that it is derived from a particular type of replies found in these dialects, a crucial characteristic of which is that a large part of the clausal structure (including VP and all but the highest layers of the IP-domain) is replaced by a null proform. Given that such a covert pronominal contains no internal structure, it cannot host a subject trace, and the subject has to be base-generated directly in its ‘derived’ position.

One striking piece of evidence showing that the ellipsis site in an example such as (17B) does not contain a full clausal structure and that, as a result, the subject that serves as the Goal for agreement has to be base-generated in the high subject position concerns yes/no-questions.
containing a *there*-expletive. In such constructions the expletive occupies the high subject position, while the thematic subject remains in the VP. If, however, the lower half of the clausal domain is replaced by a proform without any internal structure, *there*-expletives should be disallowed on the discourse particles ‘yes’ and ‘no’: the radical absence of an associate for the expletive in such a situation should lead irrevocably to a violation of the Principle of Full Interpretation. The example in (18) (Van Craenenbroeck 2004:228) shows this prediction to be borne out.

(18) A: Staan ter twee venten in den hof? B: Ja(*-r).

stand there two men in the garden yes-there-CLITIC

‘A: Are there two men standing in the garden? B: Yes, there are.’ [Waregem Dutch]

Summing up, the fact that subject clitics and agreement endings can only show up on C⁰ when the elided subject can be independently shown to be base-generated in SpecIP suggests that EPP-driven subject movement to SpecIP does not take place when IP is elided.

5 Conclusion

In this squib we have discussed three independent arguments in favor of the hypothesis that the EPP is suspended when IP is elided. With the ellipsis phenomena in question involving PF deletion (or non-application of late spell-out), this implies that the EPP is likely to be a PF condition.
References


Notes

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1 In recent work, Chomsky (2004) has claimed that subjects of finite clauses are not always islands for extraction, adducing examples involving adnominal wh–PPs (Of which Marx brother {did a biography appear/was a biography published} this year? versus *Of which Marx brother did a biography cause a scandal?) to support the idea that derived subjects are transparent. Our example in (1a) involves derived subjects as well, but it fails. The difference between Chomsky’s examples and ours is that the latter must involve extraction from out of the subject while the former are amenable to an analysis not implicating subextraction from NP at all: adnominal PPs can often be ‘extraposed’ from derived subjects (more specifically, from subjects of VPs expressing ‘no more than the appearance of the subject in the world of the discourse’; Guéron 1980:663 — cf. A biography appeared/*fell about one of the Marx brothers); since ‘PP–extraposition’ arguably does not involve movement but base-generation of PP in an NP–external position (see e.g. Rochemont and Culicover 1990), it seems unlikely that Chomsky’s examples will bear on the question of whether subextraction from (derived) subjects is possible or not.

2 It is immaterial for our purposes here whether one takes the base position of subjects of unergative and transitive verbs to be SpecVP or the specifier position of a light verb v.

3 Perhaps a more straightforward way of thinking about ellipsis is one that holds that elliptical material is morphosyntactic material that fails to be shipped to PF (i.e. does not undergo PF spell-out). If an elliptical Infl-node is never shipped to PF, it can never be the cause of a PF violation; with the EPP
being a PF condition, the desired result then follows directly. Thanks to Idan Landau (personal communication) for discussion of this matter; see also Landau 2005.

4 If the Subject Island were itself a PF-condition, the question of whether or not the EPP is satisfied in sluiced IPs would become moot: if the Subject Condition loses its force under ellipsis, extraction of a sluiced wh-phrase out of the subject should be legitimate even if that subject occupied SpecIP. Lasnik and Park (2003:651) claim that Merchant (2001:162) suggests that the Subject Condition is indeed a PF-effect; but although he does consider this possibility, he ends up setting it aside as “a route I will not pursue here” (Merchant 2001:186). Accordingly, we will stick to the implementation as outlined in the main text. A possible way to tease the two options apart would be to look at island-sensitive types of ellipsis (such as fragment answers, see Merchant 2004) and to test whether they nonetheless allow extraction out of subject islands. If they do, that would suggest that it is not the subject island violation itself that is being repaired in (2), but rather the lack of EPP satisfaction. Since there are a number of issues clouding the picture, however, we leave this as a topic for future research.

5 Lasnik and Park’s approach differs from Merchant’s in that they focus mainly on the so-called ‘sprouting’ type of sluicing (cf. Chung, Ladusaw, and McCloskey 1995). As far as we can see, this does not affect the argument developed here in any substantial way. In particular, the data they present in support of the claim that the subject in a sluiced IP resides in SpecIP is in all relevant respects identical to the examples discussed by Merchant and in section 2.2 of this squib.

6 We note in passing that, with the identification of the EPP as a PF phenomenon, covert phrasal movement (A or A’) cannot be driven by the EPP. That leaves open the possibility that other factors might trigger such movement, including ones having to do with the establishment of semantically interpretable configurations (see Barbiers 1995 for a concrete proposal to this effect). On such an outlook, Merchant’s approach to (4) is entirely coherent.

7 Den Dikken, Meinunger, and Wilder (2000) address in detail the problems that non-elliptical
accounts of NPI-connectivity in SPCs and QAPs run into. The bottom line is that on such approaches (cf. e.g. Bošković 1997, Heycock and Kroch 1999), the stage in the derivation at which the NPI is eventually c-commanded by its licensing negation comes at too late a point (at LF or even later) to successfully help out the NPI. The ellipsis approach in (7), by contrast, has the NPI c-commanded by the negation throughout the derivation.

8 We refer to Den Dikken, Meinunger, and Wilder 2000 for further discussion of the details of this analysis and for a variety of supporting evidence.

9 Note that, as Merchant (2001:67) already pointed out, the ungrammaticality of the agreement in (11b) and the clitic in (12b) is not due to the (obligatory) absence of the complementizer in sluiced clauses. In particular, dialects that allow agreement endings and subject clitics to occur directly on the wh-phrase (rather than on the complementizer following that wh-phrase) show the same pattern.

10 Merchant’s main objection to Lobeck’s approach is that whatever mechanism is responsible for base-generating the sluiced wh-phrase outside of the ellipsis site (i.e. left-adjacent to the IP-proform) should also be allowed to treat subject clitics and agreement endings in the same way. His two main arguments in favor of a PF-deletion analysis of sluicing involve connectivity effects between the sluiced wh-phrase and the elided IP with respect to Case and preposition stranding.

11 As Van Koppen (2005:198-199) notes, similar data can be constructed for clitic doubling as well (cf. (i)), suggesting that there too, an account in terms of I°-to-C°-movement fails.

(i) Ik venj da-k ik en gou makannere muutn elpen.

I find that-I-CLITIC I-STRONG and you each other must help

‘I think that you and I should help each other.’ [Wambeek Dutch]

12 It is orthogonal to our concerns here how exactly one interprets (or implements) this observation. Specifically, it might be the case that the subject-DP in (15c)/(16b) does not raise to the highest available subject position and remains in a lower specifier of the IP-domain (as was argued by
Haeberli (1999); note that in this case it is arguably the fronted adverb that checks the EPP, cf. among others Holmberg 2000 and Hoekstra & Mulder 1990 for related discussion on non-subjects satisfying the EPP), but it could also be that it occupies the inner specifier of the inflectional head in a multiple specifier configuration. Either way, the argument developed in the main text holds.

13 Note that the agreement occurring on ‘yes’ and ‘no’ is always identical to the agreement occurring on the complementizer in these dialects, i.e. it is clearly the same phenomenon in both cases.

14 Note that we are assuming that the EPP is not responsible for direct Merge in SpecIP: if it were, not just movement into but also direct Merge in SpecIP would be impossible in ellipsis contexts. The idea that direct Merge in SpecIP satisfies the EPP is commonly deemed necessary for the analysis of expletive constructions. But note that there are well-motivated and arguably superior alternatives to direct Merge of expletives in SpecIP (see in particular Moro 1997, Hoekstra and Mulder 1990, Den Dikken 1995, Richards and Biberauer 2005). Expletive constructions thus do not jeopardize our outlook on the relationship between the EPP and direct Merge.