References


6

Pseudogapping Puzzles

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In this chapter, I explore some of the properties of the so-called pseudogapping construction. This construction is in important respects reminiscent of VP ellipsis, except that it leaves behind an element of the VP as a remnant. I begin by summarizing the analysis of Lasnik (1995c), which is based on the important proposal of Jayaseelan (1990) that pseudogapping is simply VP ellipsis, with the remnant having moved out of the VP. I argue that Jayaseelan's basic proposal is correct, except for the specific movement rule he invokes, heavy NP shift. I argue, instead, that the movement rule involved is "object shift," overt raising to Spec of Agr. In the course of the presentation, I deal with a number of puzzles that arise, among them certain cases of apparent overgeneration. Finally, I consider the proposal of Bouton (1970) and Lappin (1992) that "antecedent-contained deletion" is derived via pseudogapping, and argue, along with Fienko and May (1992), that the proposal is only half right, accounting for some ACD instances but not others. I conclude by discussing alternative hypotheses for the latter type of ACD.

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6.1 General Properties of Pseudogapping

The ellipsis phenomenon in (1) displays some properties of gapping (there is a right side remnant) alongside some properties of VP ellipsis (there is a finite auxiliary):

(1) John will select me, and Bill will you.

Sag (1976) presents a number of instances, suggesting that they relate to VP deletion, and tentatively concluding that VP deletion must therefore be formulated as
a rule deleting a variable (rather than specifically a VP), since a portion of the VP survives the deletion. The following are all from Sag (1976), with (4) and (5) cited from Halliday and Hasan (1973):

(2) John could pull you out of a plane, like he did Ø his brother.
(3) Mary hasn’t dated Bill, but she has Ø Harry.
(4) Is she suing the hospital? She is Ø the doctor.
(5) Has he sold his collection yet? He has Ø some of his paintings; I’m not sure about the rest.
(6) Gee, I’ve never seen you on campus before. Yea! Neither have I Ø you.

Levin (1978, 1979/1986) provides an extensive examination of this type of ellipsis, and employs the name it is now standardly associated with: pseudogapping. Among her many examples are the following, all from Levin (1978), and all marked ? by her:

(7) If you don’t believe me, you will Ø the weatherman.
(8) I rolled up a newspaper, and Lynn did Ø a magazine.
(9) Kathy likes astronomy, but she doesn’t Ø meteorology.

By and large, the best instances of pseudogapping involve an NP or PP remnant. Levin (1978) cites the following unacceptable examples with adjectival remnants:

(10) *You probably just feel relieved, but I do Ø jubilant.
(11) *Rona sounded annoyed, and Sue did Ø frustrated.
(12) These leeks taste terrible.
    *Your steak will Ø better.

6.2 Toward an Analysis

With this much as background, I turn now to a consideration of just what pseudogapping is. While in many instances it might appear that the process is simply elision of the main verb, there is considerable evidence that more is involved. There are clear instances in which far more than just the main verb is elided:

(13) The DA proved Jones guilty and the Assistant DA will prove Smith guilty.
(14) ?John gave Bill a lot of money, and Mary will give Susan a lot of money.

Examples (2) and (6) above also display elision of more than the verb.

Rejecting the possibility of an ellipsis rule affecting a discontinuous portion of the structure (as seen in (13) and (14), for example), Jayaseelan (1990) proposes that pseudogapping constructions result from VP ellipsis, with the remnant having moved out of the VP by heavy NP shift. I will argue that this proposal is correct in its essentials, though wrong in certain details. In particular, I will begin by providing evidence that pseudogapping does not entirely correlate with the possibility of heavy NP shift. I have already illustrated pseudogapping with the first object in a double object construction as remnant. But the first object in a double object construction is resistant to undergoing HNPS:

(15) ?John gave Bill a lot of money, and Mary will give Susan a lot of money.
(16) *John gave t a lot of money the fund for the preservation of VOS languages.

Conversely, the second object is a poor pseudogapping remnant, but freely undergoes HNPS:

(17) *John gave Bill a lot of money, and Mary will give Bill a lot of advice.
(18) John gave Bill t yesterday more money than he had ever seen.

Jayaseelan’s core idea, that pseudogapping involves VP ellipsis with prior movement of the remnant out of the VP, is very attractive, but an alternative to HNPS must be found if it is to be preserved. Note that in all the acceptable examples considered so far the remnant is accusative: either the direct object in a simple transitive construction, or the first object in a double object construction, or an exceptionally Case-marked subject of a complement. Given this, it is very tempting to posit raising to Spec of Agr, as first suggested for Accusative Case checking by Chomsky (1991), as the sought-after alternative to HNPS.

Under standard assumptions (though ones I will question shortly), raising of accusative NP to Spec of Agr, is covert, taking place in the LF component. Given Jayaseelan’s goal, adopted here, of analyzing pseudogapping as affecting a constituent, this ellipsis process must then be analyzed as copying in the LF component, rather than deletion in the PF component. Consider (13), repeated as (19):

(19) The DA proved Jones guilty and the Assistant DA will prove Smith guilty.

By hypothesis, prove guilty is not a constituent in overt structure. However, in the LF component, following raising of Smith, the elided material could form a constituent. If the LF copying process can peer into the LF derivation, a possibility discussed by Hornstein (1994), then potentially there is a relevant stage where the accusative NP has raised out of the “small clause” but the V has not yet raised, as illustrated in (20).
The possibility of pseudopassive with this predicate indicates that reanalysis is available:

(25) The terminal must be signed onto.

The general patternning of data reported by my informants is in accord with Levin's suggestion. Judgments are delicate, since even the best instances of pseudogapping are somewhat degraded, but they find a consistent correlation between pseudogapping and pseudopassive. Their judgments, and my own, are that (26a) and (27a) are more acceptable than (28a) and (29a), in rough accord with the possibility of pseudopassive, as seen in the (b) examples.

(26) a. John spoke to Bill and Mary should Susan.
     b. Bill was spoken to by John.

(27) a. John talked about linguistics and Mary will philosophy.
     b. Linguistics was talked about by John.

(28) a. * John swam beside Bill and Mary did Susan.
     b. * Bill was swum beside by John.

(29) a. * John stood near Bill and Mary should Susan.
     b. * Bill was stood near by John.

(30) Bill was taken advantage of by John.

(31) John took advantage of Bill and Mary will Susan.

None of these structures, either the better ones like (26), (27), (30), and (31), or the worse ones, like (28) and (29), support HNPS:

(32) a. * John spoke to yesterday the man he met at the beach.
     b. * John talked about yesterday the man he met at the beach.
     c. * John took advantage of yesterday the man he met at the beach.
     d. * John swam beside yesterday the man he met at the beach.
     e. * John stood near yesterday the man he met at the beach.

These phenomena thus provide some additional evidence against an HNPS account of pseudogapping and in favor of an A-movement account.
Earlier I indicated that under standard assumptions, the Spec of Agrₐ analysis advocated here would require an LF copying theory of ellipsis, since the structure necessary for ellipsis is not created in overt syntax. However, on the theory of LF movement advocated by Chomsky (1995b), and further defended by Lasnik (1995a,b), the necessary structure would not even be created in covert syntax. On that theory, when movement is triggered by the need for formal features to be checked, all else equal only formal features move. When movement is overt (triggered by a strong feature), PF requirements demand that an entire constituent move, via a sort of pied piping. However, when movement is covert, PF requirements are irrelevant, so economy dictates that movement not be of the entire constituent. But then it is very difficult to see how covert raising of (the formal features of) accusative NP to Spec of Agrₐ could possibly create an ellipsis licensing configuration.

It seems then that if movement creates a configuration licensing ellipsis, the movement must be overt rather than covert. Before I explore how that might be possible in the present instance, I note that if the movement is overt, then the conclusion above, that ellipsis must involve LF copying, no longer follows. If the licensing configuration must be created prior to the LF/IPF split, then ellipsis could just as easily be a PF deletion phenomenon. Interestingly, that sort of analysis of ellipsis has been consistently advocated by Chomsky (1995a,b), or, much earlier, in a 1971 lecture cited by Wasow (1972), where, according to Wasow, Chomsky "suggests that VP deletion and Spliting can be formulated as very late rules which delete unstressed strings."

I have noted that the standard view of accusative Case checking in English is that it is facilitated by covert movement, but for raising to Spec of Agrₐ to be the process making an NP into a pseudogapping remnant, it must be overt. Further, the verb in the pseudogapping construction must remain behind in the VP in overt syntax. This raises an important question: Is the special property of pseudogapping that the accusative NP does raise overtly, or that the verb doesn't? I suggest the latter. Koizumi (1993, 1995), developing ideas of Johnson (1991), proposes that the relevant NP movement is always overt, and that (given the word order of English) the accusative checking V also raises overtly to a still higher position. Koizumi's specific proposal, which he calls the split VP hypothesis, is that V raises to a higher "shell" V position, as shown in (33):

The raising of NP and the raising of V must both be driven by strong features. In Lasnik (1995a,b) I offer several arguments for a Koizumi-type approach, and I suggest that the NP raising is driven by an EPP feature that resides in Agrₐ. Further, following Chomsky, I assume that Agrₐ and Agrₐ are really the same category, the distinction merely mnemonic. Overt object shift and overt subject shift are then the same phenomenon: satisfaction of the EPP.

The question that now arises is why the V need not raise in pseudogapping constructions, given that in nonelliptical sentences it must:

(34) Mary hasn't dated Bill, but she has Harry \( \downarrow_{VP} \text{dated} \downarrow.

(35) *She has Harry dated.

I have not yet discussed the strong feature driving V raising. Suppose that that feature is a feature of the V that raises (rather than of the position it raises to). A promising possibility is that the feature is a \( \theta \)-feature, given Koizumi's theory.
that the subject is base generated in the Spec of the higher VP. Now suppose, following Chomsky (1993) but contra Chomsky (1995a), that an unchecked strong feature is an ill-formed PF object. Then we correctly derive the result that deletion of (a category containing) an item with an unchecked strong feature salvages the derivation. The portion of the structure that would have caused a PF crash is literally gone at that level:

Consider now sentences with two complements. Given a natural extension of Koizumi’s approach, there will be three VPs, one for each of the arguments. The structure for (37), a double object construction, is shown in (38), with the VPs and AgrPs labeled with subscripts for ease of exposition.

(37) John gave Bill a lot of money.

\[ \text{Agr}_P \]
\[ \text{Agr}_s' \]
\[ \text{NP} \]
\[ \text{TP} \]
\[ \text{Agr}_s \]
\[ \text{T} \]
\[ \text{VP} \]
\[ \text{NP} \]
\[ \text{V} \]
\[ \text{V}' \]

\[ \text{Agr}_P \]
\[ \text{NP} \]
\[ \text{V} \]
\[ \text{V}' \]

\[ \text{strong F} \]
\[ \text{t} \]

1See Balković and Takahashi (in press) for a powerful argument that θ-features are strong formal features in English.

2The V is, of course, still present in the LF component, and in that component is free to raise, checking its feature.

Recall that the first object in a double object construction makes an acceptable pseudogapping remnant, as seen in (15), repeated as (39).

(39) John gave Bill a lot of money, and Mary will give Susan a lot of money.

The analysis of this example is fairly straightforward. The Spec of VP₂, the “first object,” overtly raises to Spec of AgrP₂, and VP₂ undergoes VP deletion in the
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(42) Mary hasn’t dated Bill, but she has Harry [VP dated].

Now the question is whether this example has the predicted status. What is the predicted status? Not that of a standard EPP violation, obviously, since that would cause both a PF and an LF violation. In fact, the only sort of example currently available for comparison is the type that leads Chomsky (1995a) to modify his earlier (1993) theory. Chomsky is concerned to prevent, without stipulation, lexical insertion in the LF component. For a lexical item bearing phonological features, the mechanism is straightforward: The phonological features will cause the derivation to crash at LF. But this will not be the case for a lexical item lacking phonological features. Chomsky indicates that “empirical consequences seem to arise only in connection with functional heads that have ‘strong features.’” The one case he considers (though only in the abstract) is that of C with a strong feature that requires overt wh-movement. If such a C is introduced covertly, it could not constitute an ill-formed PF object. Hence, Chomsky’s modified (1995a) theory, but not his earlier (1993) theory, would provide an account of the unacceptability of (43) as a wh-question.

(43) (*) You read what.

Note that the much more extreme unacceptability of (44) is not at issue, given Chomsky’s requirement that lexical insertion, whether overt or covert, is always at the root.

(44) I wonder you read what.

Example (43) is undoubtedly somewhat degraded. Its exact status is open to question; but the same could be said of pseudogapping examples. Further research is required, but at this point there is no clear basis for rejecting the possibility suggested here that a strong feature that is unchecked in overt syntax potentially causes an LF crash and a PF crash. Example (43) and baseline pseudogapping examples instantiate only the LF crash, though for different reasons. In the former case, the strong feature isn’t introduced until the LF component; in the latter, the strong feature is deleted (along with the VP containing it) on the way to the PF interface.

6.4 Pseudogapping vs. Standard VP Ellipsis

Since I have analyzed pseudogapping as VP deletion, one might wonder how classic VP deletion is then to be treated, particularly with a transitive verb. In fact, the analysis is straightforward. Consider (45) with underlying structure (46).

(45) Mary will hire Susan.
6.5 Potential Problems for the Account

6.5.1 Double Object Constructions

While the account of pseudogapping sketched so far has accounted for a substantial range of facts, and has done so without the need for a new ellipsis rule, it is not entirely unproblematic. In particular, there seems to be significant overgeneration. I turn now to this problem.

Consider first (49), a pseudogapping example with two remnants.

(49) *Mary gave Susan a lot of money, and John will give Bill a lot of advice.

As far as I can tell, all examples with this pattern are seriously degraded. The question is why (49) shouldn't be well-formed with structure (50), with VP₃ elided.

As I have shown, if Susan raises to Spec of Agr₂ and hire remains in VP₂, then deletion of VP₃ results in pseudogapping:

(47) ...Mary will Susan.

Further, note that if Susan does not raise and VP₂ deletes, though “Mary will” would be generated, the resulting structure would have two unchecked strong features, the EPP feature of Agr₂ and the strong (θ-)feature of hire. Given that classic VP ellipsis is completely acceptable (given the appropriate discourse circumstances, etc.), there must be some other derivation for it. And in fact an alternative derivation is readily available. Beginning again with (46), suppose Susan raises to Spec of Agr₂ and hire raises to V₁ via Agr₁. With raising of Mary to Spec of Agr₁, all relevant features are checked. Deletion of VP₁ now yields (48) in a violation-free way.

(48) ...Mary will.
However, as Roger Martin (personal communication) first observed, on the general account of pseudogapping I have given, a rather natural explanation is available. Recall that I explained the general marginality of even the best instances of pseudogapping by proposing that the strong feature driving overt raising of the V to the higher V position causes both a PF and an LF violation, if the overt raising does not take place. Further, I proposed that the strong feature resides in the lexical V itself, rather than in the shell V that it raises to. Deletion eliminates the PF violation, but not the LF one. Now notice that in (50), there are two shell Vs to which give has not overtly raised, hence two strong features that have not been overtly checked, not just one, so plausibly the violation should be more severe.5

Considerably more problematic is (51).

(51) *Mary gave Susan a lot of advice, and John will give Bill a lot of advice.

Example (51) is somewhat similar to (49) except that the violation should have been remedied. The verb give has overtly raised to its correct ultimate destination, passing through the intermediate shell V in transit, as illustrated in (52).

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5 A range of “degree of grammaticality” phenomena can be similarly analyzed. For example, Bošković (1997) considers the contrast between the very bad (i) and the even worse (ii).

(i) *John is likely to sleep often.
(ii) **It is likely that John sleeps often.

Bošković observes that while (ii) violates both the Inverse Case Filter and the EPP, (i) violates only the first of these conditions. The Inverse Case Filter is the requirement that a Case licensor actually license a Case, thus discharging its Case feature. If the EPP is also the requirement that a feature be checked, perhaps the D-feature suggested by Chomsky (1995b), the situation at hand is strikingly parallel to the one in the text: Inf has one unchecked feature in (i), and two in (ii).

Epstein (1990) provides another instance in a classic study of degrees of grammaticality. Epstein argues against the “Visibility” reduction of the Case Filter to the Theta Criterion on the grounds that speakers systematically distinguish between examples that violate both the Case Filter and the Theta Criterion (iii), on the one hand, and those that violate only the Case Filter (iv), on the other hand.

(iii) **I hope John to be likely that John left.
(iv) *I hope John to think that Bill left.

If, as proposed in the text, arguments have theta features that need to be checked, in (iii) John has two unchecked features (Case and theta), while in (iv) John has only an unchecked Case feature. So once again, there is reason to think that two unchecked features cause more extreme deviance than one. I am grateful to an anonymous reviewer for pressing me to make this connection more explicit, and to Cedric Boeckx for extremely helpful discussion.
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Note that it is the intermediate VP, $VP_2$, that has been deleted. If $VP_3$ had been deleted instead, the absence of a *lot of advice* in the phonetic output would entail that that NP had not overtly raised to SPEC of Agr$_3$. But then the EPP feature of Agr$_3$ would not be checked in overt syntax, causing both an LF and a PF violation (and the latter would not be remedied, since the deletion site would not include Agr$_3$). However, with $VP_2$ deleted, a *lot of advice* could have raised to SPEC of Agr$_3$, evidently avoiding all strong feature violations. Yet the result is clearly bad. What is responsible?

Descriptively speaking, the situation is somewhat perverse. When the verb remains in VP, the VP can delete, as in standard VP ellipsis, and its pseudogapping alternate. But when the verb has raised out of VP, the VP it has left behind apparently cannot delete. One might hypothesize a constraint to this effect (though almost immediately we will be forced to reject it):

(53) VP ellipsis constraint: VP ellipsis is prohibited if VP has lost its head.

Intriguingly, another ellipsis process seems to obey a similar constraint. Sluicing, a process first investigated by Ross (1969), is standardly (and plausibly) analyzed as wh-movement followed by IP deletion:

(54) Speaker A: Mary saw someone.
    Speaker B: I wonder who Mary-saw.

Sluicing is also possible in the matrix:

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6Such matrix sluicing instances raise an interesting question. If the source of (i) is (ii), then what is deleted must be C$^\ast$ rather than IP, since $I$ has raised to $C$.

(i) Who?

(ii) Who did Mary see?

This is problematic under the fairly standard assumption that rules of grammar don't target intermediate projections. If, on the other hand, $I$ has not raised, the mystery is why the hypothesized source is unacceptable:

(iii) *Who Mary saw.

Further, the phenomenon is independent of do-support:

(iv) Mary will see someone.
    Who?

(v) *Who Mary will see?

This state of affairs is strikingly reminiscent of what we saw earlier with the hypothesized source of simple pseudogapping:

(iv) John saw Bill and Mary did/will Susan (*see).

The same solution might also be possible. It is standardly assumed that there is a strong feature forcing the movement of $I$ to $C$ in matrix wh-questions. Suppose, contrary to the standard assumption, that the strong feature resides in $I$ rather than in $C$. (That is, there is something special about matrix $I$ in an interrogative.) Then, raising will be necessary unless ellipsis eliminates the offending feature. Still unexplained, though, is the fact that while pseudogapping is marginal sluicing is perfect.
(55) Speaker A: Mary saw someone.
Speaker B: Who?

Surprisingly, though, if Inf has raised to C, sluicing is blocked:

(56) Speaker A: Mary saw someone.
Speaker B: *Who did Mary see?

This is abstractly parallel to what we just saw with pseudogapping, suggesting a generalization of (53):

(57) XP ellipsis is prohibited if XP has lost its head.

However, there is evidence even against the more limited version of the constraint (53). A number of languages with overt V raising to I nonetheless allow VP ellipsis, with the effect that everything in the VP except the V is deleted. Doron (1990) shows this for Hebrew:

(58) Q: Salaxt et ha-yeladim le- beit ha-sefer
you sent Acc the kids to school
Did you send the kids to school?
A: Salaxt
I sent.
I did.

Martins (1994) shows the same thing for Portuguese and McCloskey (1990) does for Irish:

(59) A Martas deu um livro ao Joao? Sim, deu.
the Martha gave a book to the John yes gave
Did Martha give a book to John? Yes, she did.

(60) Q: Ar chuir to isteach air
INTERRU COMP put [PAST] you in on it
Did you apply for it?
A: Chuir
put [PAST]
Yes.

It seems clear, then, that ellipsis of a VP whose head V has raised away is not generally prohibited. The explanation for (51) must lie elsewhere.

In order to pursue this problem further, I would like to briefly examine the licensing condition for VP ellipsis. Zagona (1982, 1988),\(^7\) it has been assumed that there is an ECP-like constraint on VP ellipsis: The ellipsis site must be governed by an appropriate head. I will adopt this assumption as well, though how to capture the effects of such a constraint within a minimalist framework is a difficult and important question that I will have to put aside here.\(^8\) Saito and Murasugi (1990) explicitly argue that not just any head, even any lexically realized one, can function as a proper governor in this sense. Martin (1992, 1996)\(^9\) provides very strong evidence that in the instance of VP ellipsis, the licensing head is a particular sort of Inf, with tense being the crucial feature. Consider then the licensing configuration in grammatical instances of VP ellipsis, first a simple case as in (61).

(61) Mary left, and John did too.

(62)

\[
\begin{array}{c}
\text{NP} \\
\text{John} \\
\text{Agr}
\end{array}
\]

\[
\begin{array}{c}
\text{TP} \\
\text{T} \\
\text{Past} \\
\text{VP} \\
\text{V} \\
\text{t} \\
\text{leave}
\end{array}
\]

Here, under any imaginable notion of government, the Tense head governs the VP that is to be deleted.

Next consider a baseline instance of pseudogapping, a process I have analyzed as VP ellipsis.

(63) Mary hired Susan, and John did Bill.
This time the licensing head, Past, is the same, but the syntactic connection is considerably more remote, with two maximal projections intervening. Yet deletion of the lower VP is reasonably acceptable. At this point, a comparison of this structure with that of the completely unacceptable (51), slightly modified here, is necessary.

(65) *Mary gave Susan a lot of advice, and John gave Bill a lot of advice.
Once again, two maximal projections intervene between Past and the target VP, VP₂. Further, the maximal projections appear to be the same as they were in (64), VP and AgrP. However, there is one difference: In the more-or-less acceptable (64) the intervening V head is empty, while in the unacceptable (66) the intervening V is the lexical verb give, which has raised from the lowest VP. I speculate that this is, in fact, the relevant difference, and I suggest that it is some version of relativized minimality that states this difference.

I tentatively offer two possible ways to instantiate this intuition. First, under the assumption that Agr lacks substantive content, in (64) the nearest potentially governing substantive head is the crucial governor Tense. In (66), on the other hand, the nearest potentially governing substantive head is the verb give, and that head is not (for whatever reason) an appropriate governor for VP ellipsis.

The second possibility, more speculative (but perhaps more in keeping with recent trends in syntactic theorizing), would put the relativized minimal requirement on the head licensing the ellipsis. Suppose the head licensing VP ellipsis does so by attracting (in the sense of Chomsky 1995b) a feature of the head of the VP. As a consequence of having “lost” this feature, the VP would now be PF defective unless it deleted. Chomsky argues that attraction seeks the nearest c-commanded item with a feature of the appropriate type. In standard simple VP ellipsis, that feature resides in the immediate complement of the licensing head. And in the ill-formed (65), attraction has “skipped” the V heading the complement of the licensing head and instead attracted a feature of the initial trace of that V, in violation of relativized minimality. Alternatively, a feature of the raised lexical V has been attracted, but that V has not been deleted, resulting in a PF crash. Finally, in the reasonably acceptable pseudogapping example (64), even though hire is geographically rather remote from the licensing Tense, there is no nearer V with a feature for Tense to attract, so, in the spirit of relativized minimality, it can attract a structurally distant feature.

At this point, I return briefly to consideration of the Hebrew, Portuguese, and Irish examples in (58) to (60). Recall that in those examples, VP ellipsis was possible even though the head V that had raised out of VP. This property of the constructions necessitated the rejection of the hypothesized ellipsis constraint (57) repeated here as (67).

(67) XP ellipsis is prohibited if XP has lost its head.

While a detailed examination of the ellipsis phenomena in the three languages mentioned would take us too far afield, the alternative account I offered as a replacement for (67) seems compatible with the facts. Assuming that, as in English, the licensing head for VP ellipsis is Tense, a suitable licensing configuration does exist, even though the V head of VP has raised. This is so since, unlike the situation in the ill-formed English (52), the V has raised to the Tense licenser, so that it does not intervene between licensing T and target VP. ¹⁰

¹⁰See Lasnik (in press) for the outlines of a theory of features and ellipsis with roughly this character.

¹¹With (57) rejected as a constraint on ellipsis, the sluicing effect in (56), repeated as (i), remains unexplained.

(i) Speaker A: Mary saw someone.
Speaker B: *Who did Mary see?

The proposal of Saito and Mimasugi (adopted by Martin as well) about the specific way ellipsis is licensed might be relevant here. They suggest that the licensing head must agree with its specifier. In the sluicing example in (i), the licensing head is C. Now the content of C is the raised Inf (T and Agr), which obviously agrees with the subject, but does not obviously agree with the specifier of C. I leave for future investigation the task of making this speculation more precise.

¹²There is, of course, another unanswered question as well: Why can’t the first object in a double object construction undergo HNPS? I will not have anything to say about this here.
deleted. But there is an alternative derivation that must still be considered, one in which all features are checked overtly. Starting again from (72), a *lot of advice* can raise to Spec of *Agr*$_3$, and *give* can raise to V$_1$ via *Agr*$_3$ and *Agr*$_2$. A *lot of advice* undergoes HNPS to a position outside VP$_1$, perhaps adjoined to TP, VP$_1$ itself, or *Agr*$_P$; and finally, VP$_1$ deletes. So far, this appears to be a flawless derivation (illustrated in (73) for the unacceptable (70)).

(73)
I suspect that the violation in this derivation is independent of the considerations of this chapter, stemming, rather, from the (admittedly ill-understood) strong locality constraints on rightward movement. Assuming that the landing site is VP₁, a closer VP, VP₂ has been skipped. Similarly, if AgrP₁ is the landing site, AgrP₃ and AgrP₂ have been skipped. Obviously, if VP and AgrP are both suitable landing sites, numerous closer targets exist. Plausibly, this would render the required longer movement ungrammatical.

One immediate consequence of this line of reasoning is that the shifted heavy NP in (71) is not very high, which entails that the adverb is also not very high. One workable position for the adverb is adjunct to the lowest VP (at least as one option). Given my analysis of pseudogapping, an example like the following provides support for this conjecture:

(74) John saw Bill yesterday and Mary did see Susan yesterday.

On my account, Susan has raised out of the lower of two VPs, and the residual VP, evidently including yesterday, has deleted. Notice that adverbs that, by their semantic character, would be assumed to be very high in the structure do not undergo “small” VP deletion (i.e., pseudogapping), or even large VP deletion:

(75) *John saw Bill, fortunately, and Mary did see Susan, fortunately.

(76) *John saw Bill, fortunately, and Mary did see Bill, fortunately, (too).

Correspondingly, HNPS around such high adverbs seems much less available than around lower ones:

(77) John saw yesterday his old friend from Philadelphia.

(78) *John saw fortunately his old friend from Philadelphia.

Thus, the strict locality on HNPS posited to explain the inability of that rule to create pseudogapping remnants receives some independent support.

### 6.6 Antecedent Contained Deletion

I turn now to antecedent-contained deletion (ACD), a much discussed phenomenon often related implicitly to pseudogapping. Lappin (1992) makes such a proposal, and in this, Lappin follows the earliest investigator of ACD, Bouton (1970). Both these researchers suggest that in a sentence like (79), synonymous with (80), the ellipsis site does not include the position from which the wh-movement involved in relativization took place.

(79) John saw everyone you did.

(80) John saw everyone you saw.

In the terms of the present paper, the wh-trace is a right remnant. This potentially resolves the notorious infinite regress that Bouton (followed by Sag 1976, May 1985, and Lappin 1992, among many others) originally saw in true instances of antecedent-contained pro forms. The initial difficulty of such constructions, ACD among them, is well-known. For example, in the derivation of (80), the antecedent of the missing VP seems to be a larger VP containing that very same missing VP:

(81) John [vp saw everyone [Op [you did [vp e]]]]

\[ vp \text{ saw everyone [Op [you did [vp e]]]] \]

Note that while the issue is most often discussed in terms of LF copying in the recent literature, the problem is symmetric between copying and deletion. Given the tentative conclusions of my discussion above, I will here talk in terms of deletion. Now, observe that if the wh-trace is a remnant, rather than part of the ellipsis site, the regress problem disappears:

(82) John [vp saw everyone [Op [you did [vp e]]]]

This was the proposal of Lappin, and of Bouton before him.

Hornstein (1994) offers what appears to be a radically different account (even though Hornstein, like Lappin, is concerned to present an alternative to the classic QR account of May 1985). What Hornstein proposes is that raising to Spec of Agr is the process moving the object out of the VP, hence moving the null VP contained inside that NP out of its antecedent. Hornstein takes it for granted that this type of ellipsis involves LF copying, presumably based on the assumption that raising to Spec of Agr is covert. But, as noted above, if that raising is overt, PF deletion becomes a viable possibility.

Given the hypothesis that pseudogapping involves raising to Spec of Agr, Hornstein’s proposal can now be seen as quite similar to Lappin’s. And on the face of it, both proposals successfully address a problem, originally pointed out by Wynggaard and Zwart (1991), for QR-based approaches. May (1985) argued that the process removing the null VP from its antecedent in ACD constructions is QR. His argument was based, in part, on contrasts like the following:

(83) Dulles suspected everyone Angleton did.
Fragments

(84) *Dulles suspected Philby, who Angleton did.

When the null VP is contained in a quantificational expression, as in (83), the result is acceptable, but when it is in the nonquantificational expression (84), it is not. This is precisely predicted if QR is the (only) available mechanism for resolving the regress inherent in these constructions. In (83), but not (84), the object will undergo QR, thus transporting the null VP out of its antecedent. However, Wyngaard and Zwart show that examples indistinguishable from (84) in relevant respects are acceptable:

(85) Dulles suspected Philby, who Angleton did not.

(86) Dulles suspected Philby, who Angleton did as well.

They conclude, as does Hornstein later, that something other than QR must be at work, something that can affect nonquantificational expressions. For Hornstein, that something is raising to Spec of Agr, a possibility nicely consistent with the present analysis of pseudogapping. In addition, a further range of facts is at least roughly in accord. Recall that objects of reanalyzing prepositions constitute somewhat acceptable pseudogapping remnants. Correspondingly, they constitute somewhat acceptable carriers of ACD sites:

(87) ?Dulles spoke to Philby, who Angleton did not.

(88) ?Dulles spoke to Philby, who Angleton did as well.

(89) ?Dulles talked about Philby, who Angleton did not.

(90) ?Dulles talked about Philby, who Angleton did as well.

(91) ??John took advantage of Bill, who Mary will also.

Recall also that objects of nonreanalyzing prepositions constitute very poor pseudogapping remnants. Significantly, they are also unacceptable as ACD site hosts:

(92) *John stood near Bill, who Mary did not.

(93) *John stood near Bill, who Mary did as well.

Even the double object asymmetry found in pseudogapping is approximately paralleled in the ACD constructions under consideration:

(94) a. ??John showed Bill, who Mary did as well, the new teacher.

b. *John showed Bill the new teacher, who Mary did as well.

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Thus, there is considerable support for the reduction of ACD to pseudogapping, and, again, for the reduction of the latter to the combination of raising to Spec of Agr, and VP ellipsis. This is, in essence, in accord with the proposals of Lappin and Hornstein. However, on closer inspection, it becomes evident that the reduction is not complete. Hornstein, like Wyngaard and Zwart, assumes that ACD is a unified process, in particular, that the appositive examples they present (in arguing against a QR account) have just the same analysis as the standard restrictive examples. But, as discussed by Lasnik (1993), this is not correct. In fact, none of the constraints on pseudogapping/(appositive) ACD seen so far hold of the restrictive type traditionally discussed in the literature:

(95) *John stood near Bill, who Mary did as well.

(96) John stood near everyone Bill did.

(97) *John showed Bill the new teacher, who Mary did as well.

(98) John showed Bill everyone Mary did.

This state of affairs strongly supports the claim of Fiengo and May (1992) that while pseudogapping is the sole process responsible for appositive ACD, such is not the case for restrictive ACD. What the alternative source can be is a very complicated question, one that I will only be able to touch on here.

As mentioned earlier, the classic analysis of ACD (as in May 1985) relies on QR to move the carrier of the null VP out of the antecedent VP, under the assumption that ellipsis involves LF copying (rather than PF deletion). Following QR, the source for LF copying in (99) would be (100).

(99) Dulles suspected everyone Angleton did.

(100) {everyone Angleton did [VP e]} {IP Dulles [VP suspected t]}

In this theory, QR obviously moves full quantificational expressions (rather than, say, just the quantificational head). As Fiengo and May (1994, page 296) note, this entails that, at least under some circumstances, binding conditions must be satisfied at S-structure. In this regard, their argument precisely replicates one of Chomsky (1981, page 197). Chomsky observes that (101) exhibits a Condition C effect even though following QR its LF has no A-bound R-expression.

16Fiengo and May do not actually discuss pseudogapping in any detail, but nothing they say is inconsistent with the analysis presented here, as far as I can tell.

17Pseudogapping is, of course, an available source for the restrictive instances that parallel the appositives. But there must be an additional source as well.

18Given my argument that at least some instances of VP ellipsis (those involved in pseudogapping) are PF deletion, such an LF approach would demand that VP ellipsis can be deletion or copying, a possibly problematic consequence.
(101) He liked every book that John read.

Thus, Condition C' must be satisfied (at least) at S-structure. Lasnik (1993) and Hornstein (1994) point out that under minimalist assumptions about the organization of the grammar, this conclusion is untenable, since there is no level of S-structure in that framework. Fox (1995) proposes a sort of minimalist version of QR wherein the rule applies only if it has to. What would make it necessary is resolution of a scope ambiguity, as in (102), or avoidance of an ellipsis regress, as in (99).

(102) Someone loves everyone.

In (101), on the other hand, nothing makes QR necessary, so it is inapplicable. The LF is therefore indistinguishable from the S-structure in relevant respects, so that the Condition C violation is not remediated.

The one other syntactic approach I am familiar with is the extraposition analysis of Baltin (1987). On this analysis, the relative clause containing the missing VP has extraposed (sometimes vacuously) to a position outside the antecedent VP. Thus, when the antecedent is copied, regress can be avoided. Larson and May (1990) point out several difficulties with such an analysis. First, the relative clauses in ACD constructions do not have the outward form of extraposed relatives. As is well known, in situ relatives allow three possibilities, an overt wh-form, an overt complementizer, or neither:

(103) who
I visited a man that John mentioned recently. 

With extraposed relatives, on the other hand, the third possibility is apparently excluded:

(104) a. who
b. I visited a man recently that John mentioned.

c. ?

Larson and May allude to Stowell’s (1981) proper government analysis of null complementizers to explain this contrast. Whatever the precise nature of the constraint, under Baltin’s account it would be predicted that the null form is excluded from ACD constructions. In direct conflict with this prediction, the null form is freely allowed. Many of the ACD examples cited thus far display the null form. Example (99), repeated as (105), is representative.

(105) Dulles suspected everyone Angleton did.

It should be noted, though, that the null complementizer constraint is not ironclad. The following example, of a type pointed out to me by Mark Baltin, possibly involves extraposition, yet it is quite acceptable:

(106) I threw something out I had no further use for.

Even more similar to (104c) is (107), but the latter is considerably better.

(107) ?I visited a man yesterday John had told me about.

The null complementizer phenomenon is, as Larson and May argue, potentially of great relevance to the issue at hand, but it clearly demands further investigation.

In addition to the null complementizer paradigm, Larson and May point out a further difficulty for an-extraposition account of ACD. Consider the LF structure of (96) following extraposition:

(108) John [VP[VP stood near everyone] [CP Op [Bill did [VP e]]]].

LF copying of the VP (which Larson and May call reconstruction), results in a structure that appears to be completely incorrect, lacking a variable to be bound by Op, the relative operator:

(109) John [VP[VP stood near everyone] [CP Op [Bill (did) [VP stood near everyone]]]].

Curiously, in ACD constructions, it is the overt operator that is degraded, as illustrated in (i):

(i) Dulles suspected everyone ?that Angleton did.

Larson and May attribute to Stowell the claim that the trace of a deleted complementizer must be properly governed. In fact, Stowell does not claim that deletion leaves a trace at all. Rather, for him, it is a base-generated null complementizer that must be properly governed.

21Larson and May actually used an example involving a direct object:

(i) John saw everyone that you did.

I use a slightly more complicated example to avoid the possibility, discussed extensively above, of raising to Spec of Agr.
Thus, QR is needed regardless, they argue. With everyone in (109) raised, the variable it leaves behind is correctly copied as a variable:

(110) everyone [IP John [VP [VP stood near t] [CP Op [Bill (did) [VP stood near /

Note, though, that this kind of QR would not run afoot of the minimalist binding theory problem, since here, just a simple quantifier is raised. There is no pied-piping. If even in ACD constructions QR can be limited in this way, one of the major difficulties disappears.

There is one other approach to Larson and May's missing variable problem that might also be worth considering. As Larson and May observe, what is needed in the elided VP is a trace. But this leaves open exactly what a trace is. Chomsky (1993) provides discussion bearing on this question. Considering a variety of factors, and in particular reconstruction effects, Chomsky suggests that a trace is initially a copy of the moved item. Chomsky shows how this provides the basis for an account of the grammaticality of (111):

(111) Mary wondered which pictures of himself Bill saw.

The structure of (111) following w-h movement and prior to other operations is as in (112):

(112) Mary wondered [w-h which picture of himself? Bill saw [w-h which picture of himself]].

Himself is assigned an appropriate antecedent by virtue of its position in the trace. Now note that the same reconstruction effects show up in relative clauses:

(113) Mary mentioned the pictures of himself that Bill saw.

Thus, the trace in this instance also is presumably a copy of the head:25

(114) Mary mentioned the pictures of himself that Bill saw the pictures of himself.

But given this analysis, Larson and May's example (109) is not, after all, incorrect: The trace is precisely a copy of the head, at the relevant point in the derivation.

References


Gapping, PF Merger, and Patterns of Partial Agreement

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7.1 Introduction

Two types of partial agreement arise in the context of subject-verb agreement in Standard Arabic (SA), Lebanese Arabic (LA) and Moroccan Arabic (MA). The first type of partial agreement exclusive to SA is characterized by the fact that in the context of postverbal simple plural NPs the verb agrees with the subject in gender and person only. The second type of partial agreement is present in all three varieties of Arabic and is characterized by the fact that, when the postverbal subject is a conjoined NP, the verb may agree with the first conjunct only.

In this chapter, we discuss two major issues that arise in the context of these types of partial agreement. The first one concerns the interaction of partial agreement and interpretation. In SA, partial agreement does not seem to have any effect on interpretation. In particular, elements that usually require a plural subject are allowed in the VS order in SA. In LA and MA, on the other hand, elements that require a plural antecedent cannot occur in the context of partial agreement. We suggest that the difference between SA, on one hand, and LA and MA on the other, is to be traced back to the existence of a postsyntactic (PF) process in SA incorporating the verb and the postverbal subject. The second issue concerns the context in which partial agreement occurs: In LA, MA, and SA, first conjunct agreement is only available in the VS order. We show that a gapping (biclausal) structure for first conjunct agreement accounts for the limited distribution of partial agreement. Lack of first conjunct agreement in the SV order is traced back to the lack of backward gapping in Arabic.