

Fragment answers and exceptional movement under ellipsis: a PF-movement account*

Andrew Weir

Ghent University

1. Introduction

This paper discusses the syntax of fragment answers (1a), specifically defending the ‘movement-plus-ellipsis’ view of fragments put forward by Merchant 2004 and illustrated in (1b).

- (1) a. A: What did John eat? B: Chips.
b. A: What did John eat? B: [_{CP} Chips [_{TP} he ate t]]

By a number of diagnostics, fragment answers look like they are created by A'-movement to the left periphery followed by clausal ellipsis, as in (1b). However, focus-fronting of this kind is not otherwise licit in English, i.e. the non-elliptical version of (1b) is degraded.

- (2) A: What did John eat? B: *CHIPS he ate.

A movement analysis of fragments therefore has to explain why the movement appealed to is only *exceptionally* allowed under ellipsis. I will argue for an account of exceptional movement under ellipsis in which the moved element moves only at PF to evacuate an ellipsis site, following recent work by Boone 2014. I argue that this movement is last-resort, explaining its exceptional character. Analyzing the movement as taking place only at PF explains a number of interpretive asymmetries between the putative fronting in fragment answers (1) and fronting in non-elliptical contexts in English. I also investigate some differences between exceptional movement in pseudogapping and in fragment answers, and argue that an account where remnants undergo movement at PF only to escape an ellipsis site as a ‘last resort’ can explain these differences.

*I thank Kyle Johnson, Ellen Woolford, Jeremy Hartman, Liliane Haegeman, Lobke Aelbrecht, and audiences at NELS 45 at MIT and LSA 2015 in Portland OR, for their comments. All errors are mine. This work was partially supported by the Flemish Research Foundation’s project 2009-Odysseus-Haegeman-G091409.

2. Movement and fragments

Both the notion that fragments are created through clausal ellipsis, and the notion that the fragment undergoes A'-movement to the left periphery as in (1b), are not uncontroversial (see, for example, Ginzburg & Sag 2000 and Stainton 2006, among others, for non-elliptical accounts of fragment answers). In this section, I first summarize some arguments in favor of Merchant 2004's movement-plus-ellipsis analysis. I then turn to some apparent problems with the analysis, problems which I will argue in section 3 are addressed by adopting a PF-movement analysis of the movement involved.

2.1 Fragments derived by A'-movement

Merchant 2004, among others, provides convincing arguments that A'-movement is involved in the derivation of fragment answers. For reasons of space, I will discuss only some of these arguments. The most crucial argument is the *P-stranding generalization*, discussed first for sluicing by Merchant 2001. In languages in which prepositions must obligatorily pied-pipe, such as German, prepositions must obligatorily appear in fragment answers (modulo certain exceptions: Almeida & Yoshida 2007, Rodrigues et al. 2009). In P-stranding languages such as English, prepositions may be omitted in fragment answers, as the English translation of (3) shows.

- (3) Mit wem hat Anna gesprochen? — Mit dem Hans. / *Dem Hans.
with whom has Anna spoken with the Hans the Hans.
'Who did Anna speak with? — (With) Hans.' (Merchant 2004:ex. (78))

This is expected on a view in which fragment answers undergo A'-movement. Fragment creation would then be subject to the requirement that prepositions cannot strand in German under A'-movement: **(Mit) dem Hans hat Anna (*mit) t gesprochen*. Non-movement approaches to fragments (e.g. Ginzburg & Sag 2000, Stainton 2006) have difficulty accounting for this crosslinguistic generalization (see Merchant 2004:669f. for further discussion). Other arguments in favor of a movement analysis of fragments include the failure of left-branch extraction (Barros et al. to appear), as shown in (4), and the failure of non-phrases to be fragments as in (5); fragments pattern with A'-movement in this respect.

- (4) Did he hire an *experienced* writer?
a. No, he hired a budding writer.
b. *No, budding. (cf. **Budding, he hired a t writer*)¹
- (5) What will she do with the spinach? (Merchant 2004's ex. (137), adapted)
a. Wash it. (cf. *Wash it, she will t* – VPs can move)
b. *Wash. (cf. **Wash, she will t the spinach* – V⁰ cannot move)

¹An adjective like *budding*, which cannot be in predicative position, is needed to ensure that the elliptical source here is not something like **Budding he-is-t*, as Barros et al. discuss.

2.2 Problems for the movement analysis

The movement analysis therefore has strong arguments in its favor, but it also has two major problems. The first problem, discussed already in the introduction, is that English only very awkwardly (if at all) allows focus fronting of the kind appealed to here outside of elliptical contexts, as shown in (2).² The second problem is that there are a number of elements which cannot undergo A'-movement in English, but which can nevertheless be fragment answers. I discuss each of these in turn.

Firstly, negative polarity items cannot move under topicalization or clefting, as (6) shows, but can be fragment answers, as shown by (7).³

- (6) a. ??Any wine, John didn't buy t.
b. *It was any wine that John didn't buy t.

- (7) (den Dikken et al. 2000's fn. 3, (i, ii), adapted)
a. John has returned with the shopping for the party. A and B know that he bought cheese, olives, and juice, but suspect that he has forgotten something.
b. A: What didn't he buy? B: Any wine.

Secondly, Merchant 2004 notes that, while 'bare' (NP-less) quantifier phrases cannot undergo fronting (Postal 1993, (8)), they can nevertheless be fragment answers unproblematically (9). (The examples in (8b) are ungrammatical when parsed as *it*-clefts; they have irrelevant grammatical readings.)

- (8) a. ??Everyone, I will talk to t./*Someone, I will talk to t.
b. ??It's everyone I will talk to t./*It's someone I will talk to t.

- (9) A: Who will you talk to? B: Everyone./Someone.⁴

Lastly, particles (as in (10)) cannot A'-move in English (11), but can be fragment answers unproblematically (12).

- (10) He turned the TV on/off/up/down.

- (11) a. *On/off/up/down, he turned the TV t.
b. *It was {on/off/up/down} that he turned the TV t.

²There is a limited set of exceptions discussed by Prince 1981, such as *Macadamia nuts I think they're called*. I do not discuss these here.

³Merchant 2004 argues that NPIs fragments are in fact ungrammatical, but the examples he provides are ruled out for independent reasons; see Weir 2014:167ff. for discussion.

⁴Clearly there is a pragmatic infelicity in answering a question like *who will you talk to* with *someone*, as it is highly uninformative, but I think the grammaticality contrast between (8) and (9) is clear.

- (12) a. Did he turn the TV OFF? — No, on.
 b. Did he turn the TV UP? — No, down.⁵

2.3 The paradox

The results of the preceding sections appear to leave us with a paradox. A number of diagnostics – P-stranding, left-branch extraction, head/phrase distinction – show us that A'-movement is involved in the generation of fragments. However, a number of phrases that can be fragments cannot otherwise A'-move (NPIs, bare quantifiers, particles), and the movement appealed to (focus movement to the left periphery) is not one that seems to be acceptable in English outside of elliptical contexts. To resolve the 'paradox', I propose that there *is* movement in fragment answers, but it is not interpreted: it only takes place at PF.

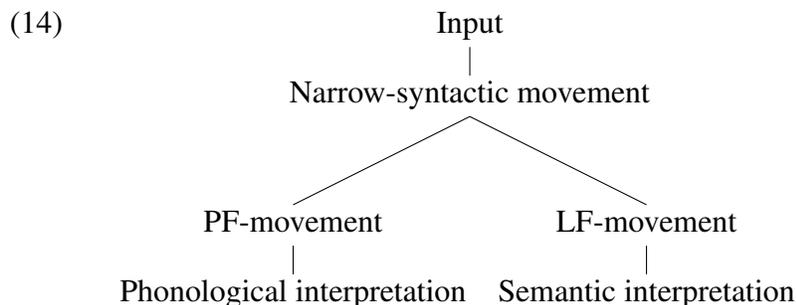
3. A PF-movement solution

3.1 What is PF-movement?

Aoun & Benmamoun 1998 and Sauerland & Elbourne 2002 propose PF-only movement for cases of 'total reconstruction', such as cases where (phrases containing) NPIs appear to have raised past their negative licenser:

- (13) A doctor with any reputation [is likely not to be [t available]]

Sauerland & Elbourne argue that *a doctor with any reputation* has moved only at PF; at LF, it does not move, and is interpreted in its base position (i.e. within the scope of negation). The model being assumed here is one in which there is a stage of 'narrow syntax' (i.e. movements that have effect at both PF and LF), and then two further stages of 'PF-movement' and 'LF-movement', as shown in the Y-model in (14). Importantly, both of these latter stages are syntactic, in the sense that the movement processes involved target syntactically-defined constituents, respect syntactic constraints on movement, and so on.



⁵Particles that form idiomatic compounds with their verbs (such as *let down* = disappoint, *let off* = pardon) cannot be fragments: *Did the judge let the criminal DOWN?* — *No, off. That receives a syntactic explanation on this account, however, if we adopt Wurmbrand 2000's proposal that 'idiomatic' particles are heads that combine with verbs directly (and so could not be A'-moved to the left periphery), but 'transparent' particles (as in *turn the TV down*) head PPs, and those PPs could be moved.

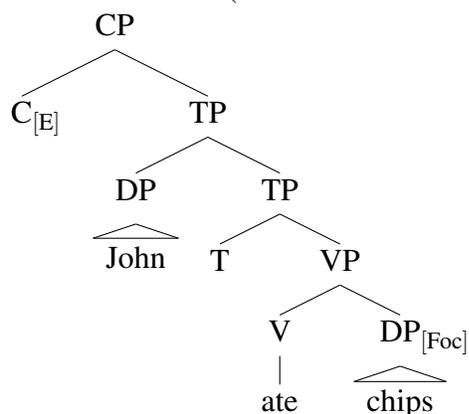
‘PF-movement’ is therefore being used here in a sense parallel to ‘LF-movement’, i.e. syntactic movement that has effects at only one of the interfaces. There may be movement processes that take place at the ‘phonology proper’ (that is, they operate on words, substrings, etc. rather than on syntactic constituents), but I reserve the term ‘PF-movement’ for this syntactic-type movement.⁶

3.2 Last resort movement of focus

Following Yoshida et al. 2015’s analysis of *why*-stripping and Boone 2014’s analysis of pseudogapping, I argue that focused phrases – which, by dint of being focused, require phonological stress/prominence – cannot remain within an elided constituent. If a constituent bearing a focus feature is within a larger constituent marked for ellipsis, I argue with the above authors that these focused phrases undergo an exceptional movement to a position outside the ellipsis site (‘evacuating movement’). More specifically, I argue this movement takes place only at PF.

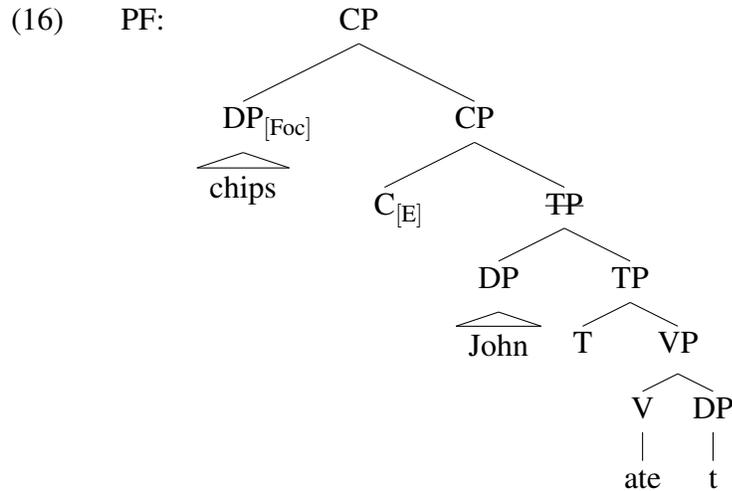
The LF and PF structures for a fragment answer like *What did John eat? — Chips* are shown below. The [E] feature shown here on the C head is the feature borne by an ellipsis-licensing head (Merchant 2001); it enforces deletion of its complement, here TP.⁷

(15) ‘Surface structure’ (structure after narrow-syntactic movement) and LF:



⁶The term ‘PF-movement’ is therefore not being used in quite the same way as Embick & Noyer 2001 use it, for example.

⁷The [E]-feature also imposes a semantic recoverability condition on its complement. I do not discuss here the semantic conditions on the licensing of clausal ellipsis; for discussion see Merchant 2001, Reich 2007, AnderBois 2010, Weir 2014:ch. 3, a.o.



At surface structure and at LF, the focused phrase *chips* is in situ in object position. However, at PF, this focused phrase cannot remain within an ellipsis site. As such, it moves to a position immediately outside the ellipsis site.⁸ This movement is not driven by feature checking, but rather purely to fulfil the needs of the PF interface (Boone 2014). Fragments therefore have the characteristics of movement because they *are* movement: they are A'-movement which takes place only at PF.

3.3 Understanding interpretive differences

I argue that a PF-only movement analysis lets us understand why elements that cannot front in non-elliptical contexts in English – NPIs, bare quantifiers, particles – can nevertheless be fragments even under a movement-plus-ellipsis account of fragments.

If fragments do not move at LF, then this explains why NPIs can be fragments: they are examples of ‘total reconstruction’ in Sauerland & Elbourne 2002’s sense, interpreted in their base position (that is, within the scope of their licenser) at LF.

- (17) What didn’t John buy? — Any wine.
- PF: [_{CP} Any wine [_{CP} C_[E] [~~TP John didn’t buy t~~]]]
 - LF: [_{CP} C_[E] [_{TP} John didn’t buy any wine]]

Bare quantifiers plausibly cannot front (outside of elliptical contexts) in English due to their status as obligatorily quantificational operators (as has often been noted for topicalization of bare quantifiers in Romance: Cinque 1990, 1995, Rizzi 1997, Anagnostopoulou 1997, Arregi 2003). This appears to be a constraint on the denotation of the elements involved, a semantic effect. It is therefore avoided if we assume no LF-movement in fragments,

⁸For an explanation of why the ellipsis remnant has to be *immediately* outside the ellipsis site, see Boone 2014. I remain agnostic here about the precise size of the ellipsis site (and therefore the landing site of the movement), but in Weir 2014:ch. 5 I argue that the ellipsis site is bigger than TP, and that the landing site is very high in the clausal left periphery.

explaining why quantifiers can be fragment answers but cannot front in non-elliptical contexts.

The bar on the fronting of particles in English is somewhat more mysterious. We don't want to say that this sort of movement is ruled out 'in principle', as languages like German do allow these particles to appear in [Spec, CP]:

- (18) (Wurmbrand 2000's (12))
- a. Auf hat er die Tür t gemacht
open has he the door made
'He opened the door'
 - b. Weg hat er den Brief t geschickt
away has he the letter sent
'He sent away/off the letter'

And indeed in English too, it is possible to move a particle under pied-piping, showing that particles are not immobile as such:

- (19) a. How far down should I turn the TV?
b. ?How deeply in should I breathe?

Rather, we might say that fronting of particles (on their own) in English fails for a similar reason to the failure of the fronting of bare quantifiers: there are strict semantic restrictions on what can undergo topicalization and *it*-clefting in English. Particles (for reasons that are unclear) do not meet these restrictions: there is some incompatibility between the semantics of particles and the specific interpretive effects that the operations of topicalization and clefting have. If, however, fragments are generated by PF-only movement which has no interpretive effect, then we predict that particles can be fragments, which is correct:

- (20) Did he turn the TV *on*? — No, off.
- a. PF: [CP Off [CP C_[E] [~~TP he turned the TV t~~]]]
 - b. LF: [CP C_[E] [TP he turned the TV off]]

3.4 Further evidence for uninterpreted movement: Condition C effects

A further argument for the uninterpreted nature of movement in fragment answers comes from the absence of so-called Lebeaux effects (Lebeaux 1990). Movement (in the non-elliptical case) sometimes makes certain interpretations available which are not otherwise present. For example, topicalizing or clefting a DP containing a relative clause bleeds condition C violations for R-expressions inside the relative clause:

- (21) a. *He_i will praise the guy that John_i promoted.
b. The guy that John_i promoted, he_i will praise t.
c. It's the guy that John_i promoted that he_i will praise t.

This has generally been analyzed in terms of the copy-theory of movement (Lebeaux 1990, Chomsky 1993, Fox & Nissenbaum 1999, Fox 2002): the relative clause is late-merged in the high position, and no copy of the relative clause is present in the base position. The R-expression is not c-commanded by the pronoun, and so there is no condition C violation.

- (22) [The guy that John promoted [he will praise ⟨the guy⟩]]
(where ⟨angle brackets⟩ show an unpronounced copy)

Crucially, fragment answers do *not* show these effects. Condition C is bleeded in full clausal answers under e.g. clefting, but not in fragment answers, as (23) shows.

- (23) A: Who will John praise? Will he praise his boss?
a. No, it's the guy that John_i promoted that he_i'll praise.
b. ??No, the guy that John promoted. (OK: No, the guy that he promoted.)

This is unexpected if the fragment in (23b) has undergone an interpreted movement, but can be understood if the fragment is in situ at LF: there is a condition C violation at LF, which late-merge of the relative clause does not bleed.

- (24) a. at PF: [the guy that John_i promoted [~~he_i will praise t~~]]
b. at LF: [he_i will praise the guy that John_i promoted]

Note that this evidence tells us that fragment movement not only *can* be semantically vacuous, but that it apparently *must* be.⁹ If fragment movement could be an optionally interpreted movement, we would expect a parse of examples like (23b) where the relative clause was interpreted in a high position (and would therefore bleed condition C), but this is not in fact possible.

4. Understanding the properties of 'exceptional' movement

In the above section, I have argued that focused phrases can undergo exceptional, uninterpreted movement. In proposing 'exceptional movement under ellipsis', I follow a wide literature: Richards 1997, 2001, Lasnik 1999, Fox & Pesetsky 2003, Thoms 2010, to appear, Boone 2014 a.o. However, proposing exceptional movement under ellipsis raises a number of questions, which I address in the remainder of the paper.

4.1 What restricts the distribution of 'exceptional' movement?

A first question to address is, if an A'-fronting operation with no interpretive effects is in principle available in English, and is available in fragment answer/clausal ellipsis contexts,

⁹Note, though, that this does not necessarily make predictions about the scope of the fragment. If the fragment could otherwise QR (i.e. *independently* undergo LF-movement), we expect all the scope possibilities that would come from that (see Merchant 2004:681 for discussion); the claim here is only that movement to evacuate a fragment from an ellipsis site is semantically vacuous.

why is it exceptional, rather than generally available? That is, why can't it generate the ungrammatical structures in (25), where no ellipsis is involved?

- (25) a. A: What did John eat? B: *CHIPS John ate t.
b. *Everybody, I saw t.

To answer this question, I propose that the fronting operation I have argued for is last-resort and only occurs in construction with ellipsis.¹⁰ This follows Boone 2014 and Yoshida et al. 2015: the movement in question is being driven purely to get a focused phrase outside of an ellipsis site. I propose that it is ruled out in contexts like (25) for reasons of Economy of Derivation (Chomsky 1995 et seq.): movements are ruled out unless there is a 'reason' to do them. I refer to Weir 2014:194ff. for the full exposition, but the basic notion is that in full clauses, the sort of movement (25) represents would be superfluous: as a PF-only movement, it would have no interpretive purpose, and it would also solve no PF 'problem'. As such the movement is ruled out as an Economy violation. However, in elliptical contexts, the need to extract a focused phrase from an ellipsis site provides a 'reason' for the movement, which can therefore take place without being a fatal violation of Economy.

4.2 When does ellipsis fail to license exceptional movement?

If we introduce an operation of 'exceptional', last-resort movement to evacuate focused constituents from ellipsis sites, we need to take care that it does not overgenerate. In this respect, it is instructive to investigate pseudogapping (26a). Pseudogapping is frequently analysed as movement of a focused constituent out of a verb phrase, followed by verb phrase ellipsis (26b):

- (26) a. John would buy the newspaper, but he wouldn't the magazine.
b. ... but [_{TP} he wouldn't [_{XP} the magazine [_{VP} buy t]]]

The type of movement invoked here is contested: various authors (representative citations given here) argue for Heavy NP Shift (Jayaseelan 1990), Object Shift (Lasnik 1999), scrambling (Johnson 2001), or focus A'-movement (Jayaseelan 2002). However, these accounts share the property that the movement involved is exceptional:¹¹ English does not allow the word order shown in (26b) outside of elliptical contexts. We might initially think, then, that pseudogapping represents a case of 'exceptional movement' on a par with the account proposed above for fragment answers.

¹⁰For alternative views on why focus fronting is only licit in English in elliptical contexts, see Richards 1997, 2001, Temmerman 2013. These authors propose that focus movement is generally available in (the narrow syntax of) English but that the movement involved is of a type that will lead to a crash unless the launching site of the movement is deleted by ellipsis. These accounts have the drawback that they predict that the moved fragment should be (at least optionally) interpreted in its moved position at LF (as the movement takes place at the narrow syntax); as I have shown, it isn't.

¹¹Apart from an Heavy NP Shift account, but that has been shown to be insufficient (at least on its own) to capture all the relevant data; for example, Lasnik 1999 points out that indirect objects can't undergo HNPS, but can be pseudogapping remnants.

However, there are interesting differences between the fragment answer case and the pseudogapping case. For example, particles are not good pseudogapping remnants (27), even though they are good fragment answers.

(27) *He would turn the TV up, but he wouldn't down. (Johnson 2001)

In addition, pseudogapping remnants are clause-bounded, while fragment answers are not.

- (28) a. John thinks that Mary read the magazine, *but he doesn't think that Mary read the newspaper. (Johnson 2001)
b. A: Who does John believe that Mary kissed?
B: John believes that Mary kissed Bill.

We therefore need a way to cleave a distinction between the exceptional movement invoked in fragment answers (which allows particles, and is not clause-bounded) with the exceptional movement invoked in pseudogapping (which doesn't allow particles, and is clause-bounded).¹²

4.3 Explaining when exceptional movement is allowed

The differences discussed above between pseudogapping and fragment answers indicate that we need to understand when exceptional movement is allowed and when it isn't. I propose (29).

- (29) a. If a certain movement is available 'in principle' in syntax, then that can give rise to an exceptional movement under ellipsis.
b. If a certain movement would not be available even 'in principle', then it cannot give rise to exceptional movement under ellipsis.

This of course relies on understanding what it means for a movement to be available 'in principle', which is most easily shown by example. DPs, for example, can clearly move to the left periphery in English in general, as can particles if they are pied-piped.

(30) That guy, I saw t.

Moving phrases to the clausal left periphery is therefore available 'in principle' in English. As discussed in section 3.3, the failure of fronting bare quantifiers and non-pied-piped particles (in English, outside of elliptical cases) is plausibly ruled out due to a *semantic* problem, to do with the interpretive properties of the movement, rather than the failure of the *syntactic* mechanism of A'-movement. If the failure of fronting bare quantifiers and

¹²Some alternative accounts for this contrast have been proposed in the recent literature, in particular Boone 2014 and Thoms to appear. Space does not allow a comparison of these approaches with the present one; I refer the reader to those papers.

particles is semantic rather than syntactic, then such fronting will exceptionally be allowed under ellipsis, as exceptional movement is PF-only with no LF-level effect.

By contrast, I suggest that constraints like the ban on moving complements of P in non-P-stranding languages, or left-branch extraction in languages that do not allow this, are movements that are not possible ‘even in principle’ in the relevant languages. For example, these movements could be ruled out due to anti-locality constraints of the type discussed by Abels 2003 (for extraction from PP) and Bošković 2005 (for left-branch extraction). Mechanisms of narrow syntax simply cannot establish the relevant kind of movement relation. If a movement is disallowed ‘in principle’ in this sense, then exceptional movement is *not* allowed. Complements of P in non-P-stranding languages therefore cannot be fragments, and neither can phrases in left-branch position:

- (31) a. Mit wem hat Anna gesprochen? — *Hans ⟨[hat Anna mit t gesprochen]⟩
with whom has Anna spoken Hans has Anna with spoken
b. Did you hire an *experienced* writer? — *No, budding ⟨[I hired a t writer]⟩

I argue that the distinctions between fragment answers and pseudogapping stem from this. Johnson 2001 analyzes the behavior of pseudogapping remnants by proposing that they undergo scrambling to reach their VP-external position. Like pseudogapping, scrambling is also finite-clause-bounded, and also cannot target particles, as shown by the below Dutch examples:

- (32) a. *...dat Jan de krant_{t1} beweert [CP dat Sam t₁ leest]
...that Jan the paper claimed that Sam read
(no scrambling out of a finite complement clause; Johnson’s (86b))
b. *...dat Jan de TV uit_{t1} steeds t₁ zet.
...that John the TV out all the time puts
(no scrambling of a particle: Johnson’s (89) from Zwart 1993)

Let us assume that scrambling is indeed the movement that pseudogapping remnants undergo. In our terms, then, scrambling is a form of movement that we can say is available ‘in principle’ in English, but which contingently does not happen, at least not usually overtly. See Lasnik 1999 and Fox & Pesetsky 2003 for suggestions somewhat along these lines for pseudogapping,¹³ and Hinterhölzl 2003 for a proposal that English has covert scrambling; in pseudogapping, this scrambling could be exceptionally overt, as an instance of last-resort evacuating movement.

However, scrambling cannot ‘reach into’ finite clauses, nor target resultative phrases or particles, and it appears that this is impossible ‘even in principle’. As such, scrambling of a pseudogapping remnant out of a clause, or of a particle, can’t take place even ‘exceptionally’, i.e. under ellipsis. By contrast, fragments involve A’-movement to the left periphery, which is much freer; it is not clause-bounded, and it can target particles ‘in principle’ (e.g. if the particles are pied-piped). Note that this requires us to believe either that there is no

¹³Although these authors talk about Object Shift rather than scrambling.

IP-level Focus position in English, contra Jayaseelan 2002, Gengel 2013, Thoms to appear, or that such a position is (for some reason) not a possible landing site for particles (even ‘in principle’). If such an A'-movement were possible then ‘exceptional’ movement of particles should be just as possible under pseudogapping as it is under clausal ellipsis – the particle should be able to A'-move to this IP-level focus position ‘exceptionally’, just as it can move to the CP left periphery ‘exceptionally’ under clausal ellipsis.

5. Conclusion

I have argued that exceptional movement under ellipsis is a last-resort PF-movement to evacuate a focused phrase from an ellipsis site, following Boone 2014 and Yoshida et al. 2015. The grammar can make use of any movement which is available ‘in principle’ (A'-movement to the left periphery in fragment answers, scrambling in pseudogapping, etc.) to evacuate a remnant from an ellipsis site at PF. However, this movement has no interpretive effect, explaining some asymmetries between fragment answers and fronting in non-elliptical contexts. If there are constraints at narrow syntax which forbid movement of a constituent in a given language (such as ruling out P-stranding or left-branch extraction), then this constituent cannot be evacuated from an ellipsis site, explaining the inventory of possible fragment answers and pseudogapping remnants.

An obvious extension of this work is to islands. If islands are an interface phenomenon (as in e.g. the PF theory of islands, Merchant 2001), then exceptional movement should be possible out of islands: i.e. ellipsis should void islands, as indeed it often has been taken to do (Ross 1969, Merchant 2001). However, fragment answers have been argued to be island-sensitive (Merchant 2004, Barros et al. to appear). Does this indicate that islands should be taken to be narrow-syntactic phenomena which bar even exceptional movement? I lack the space to take this theme up in detail here (although see Weir 2014:199ff. for discussion). However, the generalization that fragment answers involve movement seems to be secure: and a PF-movement account allows us to understand why that movement should (a) be exceptional and (b) cause no semantic effects.

References

- Abels, Klaus. 2003. Successive cyclicity, anti-locality, and adposition stranding. Doctoral dissertation, University of Connecticut.
- Almeida, Diogo A. de A., & Masaya Yoshida. 2007. A problem for the preposition stranding generalization. *Linguistic Inquiry* 38:349–62.
- Anagnostopoulou, Elena. 1997. Clitic left dislocation and contrastive left dislocation. In *Materials on left dislocation*, ed. Elena Anagnostopoulou, Henk van Riemsdijk, & Frans Zwarts, 151–92. Amsterdam/New York: John Benjamins.
- AnderBois, Scott. 2010. Sluicing as anaphora to issues. In *Proceedings of SALT 20*, ed. Nan Li & David Lutz, 428–50. Ithaca, NY: CLC Publications, Cornell University.
- Aoun, Joseph, & Elabbas Benmamoun. 1998. Minimality, reconstruction, and PF movement. *Linguistic Inquiry* 29:569–97.

Fragment answers: a PF-movement account

- Arregi, Karlos. 2003. Clitic left dislocation is contrastive topicalization. *Penn Working Papers in Linguistics* 9:31–44.
- Barros, Matthew, Patrick D. Elliott, & Gary Thoms. to appear. More variation in island repair: Clausal vs. non-clausal islands. In *Proceedings of CLS 49*. Chicago: Chicago Linguistic Society.
- Boone, Enrico. 2014. Exceptional movement is unexceptionally local. In *Proceedings of NELS 44*, ed. Jyoti Iyer & Leland Kusmer, 55–68. Amherst, MA: GLSA.
- Bošković, Željko. 2005. On the locality of left branch extraction and the structure of NP. *Studia Linguistica* 59:1–45.
- Chomsky, Noam. 1993. A minimalist program for linguistic theory. In *The view from Building 20: essays in linguistics in honor of Sylvain Bromberger*, ed. Ken Hale & Samuel J. Keyser, 1–52. Cambridge, MA: MIT Press.
- Chomsky, Noam. 1995. *The minimalist program*. Cambridge, MA: MIT Press.
- Cinque, Guglielmo. 1990. *Types of A'-dependencies*. Cambridge, MA: MIT Press.
- Cinque, Guglielmo. 1995. *Italian syntax and Universal Grammar*. Number 77 in Cambridge Studies in Linguistics. Cambridge, England: Cambridge University Press.
- den Dikken, Marcel, André Meinunger, & Chris Wilder. 2000. Pseudoclefts and ellipsis. *Studia Linguistica* 54:41–89.
- Embick, David, & Rolf Noyer. 2001. Movement operations after syntax. *Linguistic Inquiry* 32:555–95.
- Fox, Danny. 2002. Antecedent-contained deletion and the copy theory of movement. *Linguistic Inquiry* 33:63–96.
- Fox, Danny, & Jon Nissenbaum. 1999. Extraposition and scope: A case for overt QR. In *Proceedings of WCCFL 18*, ed. S. Bird, A. Carnie, J. D. Haugen, & P. Norquest, 132–44. Somerville, MA: Cascadilla Press.
- Fox, Danny, & David Pesetsky. 2003. Cyclic linearization and the typology of movement. Handout, July 2003. http://web.mit.edu/linguistics/people/faculty/fox/July\19_handout.pdf.
- Gengel, Kirsten. 2013. *Pseudogapping and ellipsis*. Oxford: Oxford University Press.
- Ginzburg, Jonathan, & Ivan Sag. 2000. *Interrogative investigations*. Stanford: CSLI Publications.
- Hinterhölzl, Roland. 2003. Parametric variation and scrambling in English. In *Studies in Comparative Germanic Syntax (Proceedings of CGSW 15)*, ed. Werner Abraham & C. Jan-Wouter Zwart. Amsterdam/Philadelphia: John Benjamins.
- Jayaseelan, K. A. 1990. Incomplete VP deletion and gapping. *Linguistic Analysis* 20:64–81.
- Jayaseelan, K. A. 2002. IP-internal topic and focus phrases. *Studia Linguistica* 55:39–75.
- Johnson, Kyle. 2001. What VP ellipsis can do, and what it can't, but not why. In *The handbook of contemporary syntactic theory*, ed. Mark Baltin & Chris Collins, 439–79. Oxford: Blackwell.
- Lasnik, Howard. 1999. Pseudogapping puzzles. In *Fragments: Studies in ellipsis and gapping*, ed. E. Elabbas & S. Lappin, 141–74. Oxford: Oxford University Press.
- Lebeaux, David. 1990. Relative clauses, licensing, and the nature of the derivation. In *Proceedings of NELS 20*, ed. Juli Carter, Rose-Marie Déchaine, Bill Philip, & Tim

Andrew Weir

- Sherer, 318–32. Amherst, MA: GLSA.
- Merchant, Jason. 2001. *The syntax of silence*. Oxford: Oxford University Press.
- Merchant, Jason. 2004. Fragments and ellipsis. *Linguistics and Philosophy* 27:661–738.
- Postal, Paul M. 1993. Remarks on weak crossover effects. *Linguistic Inquiry* 24:539–56.
- Prince, Ellen F. 1981. Topicalization, focus-movement, and Yiddish-movement: a pragmatic differentiation. In *Proceedings of BLS 7*, 249–64. Berkeley, CA: Berkeley Linguistics Society.
- Reich, Ingo. 2007. Toward a uniform analysis of short answers and gapping. In *On information structure, meaning and form*, ed. Kerstin Schwabe & Susanne Winkler, 467–84. Amsterdam: John Benjamins.
- Richards, Norvin. 1997. What moves where when in which language? Doctoral dissertation, Massachusetts Institute of Technology.
- Richards, Norvin. 2001. *Movement in language: interactions and architectures*. New York: Oxford University Press.
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In *Elements of grammar: handbook of generative syntax*, ed. Liliane Haegeman, 281–337. Dordrecht: Kluwer.
- Rodrigues, Cilene, Andrew Nevins, & Luis Vicente. 2009. Cleaving the interactions between sluicing and preposition stranding. In *Romance Languages and Linguistic Theory 2006*, ed. Danièle Torck & W. Leo Wetzels, 175–98. Amsterdam: John Benjamins.
- Ross, John Robert. 1969. Guess who? In *Proceedings of CLS 5*, ed. Robert Binnick, Alice Davison, Georgia Green, & Jerry Morgan, 252–86. Chicago: Chicago Linguistic Society.
- Sauerland, Uli, & Paul Elbourne. 2002. Total reconstruction, PF movement, and derivational order. *Linguistic Inquiry* 33:283–319.
- Stainton, Robert J. 2006. *Words and thoughts: subsentences, ellipsis, and the philosophy of language*. Oxford: Oxford University Press.
- Temmerman, Tanja. 2013. The syntax of Dutch embedded fragment answers: on the PF-theory of islands and the WH/sluicing correlation. *Natural Language and Linguistic Theory* 31:235–85.
- Thoms, Gary. 2010. ‘Verb-floating’ and VP-ellipsis: towards a movement account of ellipsis licensing. *Linguistic Variation Yearbook* 10:252–97.
- Thoms, Gary. to appear. Pseudogapping, parallelism and the scope of focus. To appear in *Syntax*.
- Weir, Andrew. 2014. Fragments and clausal ellipsis. Doctoral dissertation, University of Massachusetts Amherst.
- Wurmbrand, Susi. 2000. The structure(s) of particle verbs. Ms. University of Connecticut. <http://wurmbrand.uconn.edu/Papers/structure-particles.pdf>.
- Yoshida, Masaya, Chizuru Nakao, & Ivan Ortega-Santos. 2015. The syntax of *why*-stripping. *Natural Language and Linguistic Theory* 33:323–70.
- Zwart, C. Jan-Wouter. 1993. Dutch syntax: a Minimalist approach. Doctoral dissertation, University of Groningen.

Andrew Weir
andrew.weir@ugent.be