

Fragment answers and the Question under Discussion*

Andrew Weir

University of Massachusetts Amherst

1. Introduction

This paper considers fragment answers, as in (1).

- (1) A: What did John eat?
B: Chips.

There are two main views concerning the correct analysis of answers such as B's in (1). One view is that such answers consist of 'bare', base-generated phrases, as shown in (2a); call this the 'bare fragment' view. The other view is that fragment answers contain covert, elliptical clausal structure, as in (2b); call this the elliptical view.

- (2) a. [DP Chips]
b. [_S John ate [DP chips]]

Proponents of the 'bare fragment' view, in various forms, include Ginzburg and Sag (2000), Stainton (1998, 2005, 2006a,b), Jacobson (2013); proponents of the elliptical view, in various forms, include Stanley (2000), Merchant (2004), Krifka (2006), Reich (2007). While the proponents of the elliptical view have syntactic evidence on their side (amassed largely by Merchant (2004)), the proponents of the bare fragment view have reason to be skeptical of an elliptical analysis. In particular, in recent work, Polly Jacobson has pointed out (Jacobson 2013) that certain fragment answers do not seem to receive the same interpretation as clausal variants.

*I would like to thank Kyle Johnson, Ellen Woolford, Jeremy Hartman, and Jason Merchant for their help and comments on this material. Thanks also to the NELS 44 participants, three anonymous NELS reviewers, and audiences at the University of Massachusetts Amherst and the *Identity in Ellipsis* workshop at Leiden University in September 2013. All errors are of course mine. This work is drawn from chapters 2 and 3 of my University of Massachusetts Amherst doctoral dissertation (Weir 2014).

- (3) (Jacobson's (28), adapted)
Which math professor left the party at midnight?
- a. Well, Jill left the party at midnight, but I don't think she's a math professor.
 - b. Well, Jill, #but I don't think she's a math professor.

(3b) does, but (3a) does not, commit the speaker to Jill's being a math professor, as the relative felicity of the continuations shows. This is unexpected if the short answer in (3b) is elliptical for the clausal answer in (3a). Moreover, verb phrase ellipsis patterns with the clausal answer, not the short answer:

- (4) Well, Jill did, but I don't think she's a math professor.

Such issues present a challenge for the elliptical account of fragment answers. In this paper, I will present further evidence which suggests, at first glance, that the elliptical approach to fragments is in danger. However, I will argue that what this evidence tells us is not that fragments are not elliptical. Rather, a refinement needs to be made concerning the semantic antecedence condition on clausal ellipsis. Concretely I will follow Reich (2007) and (the spirit of) AnderBois (2010) in arguing that clausal ellipsis makes reference to the Question under Discussion (QUD; Roberts (2012/1996)). I will show that this, combined with other independently motivated assumptions, can account for data which have been argued to be problematic for the elliptical view. Given the syntactic evidence in favor of an elliptical view of fragment answers, I conclude that an ellipsis account is indeed an accurate one.

The paper proceeds as follows. In section 2, I review some arguments for and against elliptical analyses of fragments. In section 3, I develop arguments for a QUD-based antecedence condition on clausal ellipsis, and show that it suffices to combat the counterarguments to an elliptical analysis. Section 4 considers how this condition, combined with independently required mechanisms of domain restriction, suffices to explain Jacobson's problematic examples, suggesting that a clausal ellipsis analysis of fragments is tenable even in light of her data. Section 5 concludes.

2. Fragments: covertly clausal or not?

Merchant (2004) provides a number of diagnostics for covert clausal structure in fragment answers. I mention here only the most important: the P-stranding generalization, originally discussed in Merchant (2001). Languages which allow preposition stranding also allow prepositions to be omitted in fragment answers. However, languages which do not allow preposition stranding – languages in which prepositions are obligatorily pied-piped under movement – also do not allow the omission of prepositions in fragment answers. (5) shows two examples Merchant gives of English (allowing P-stranding) and German (not allowing P-stranding), but Merchant provides many more.

Fragment answers and the Question under Discussion

- (5) a. Who was Peter talking with? — Mary. / With Mary.
b. Mit wem hat Anna gesprochen? — Mit dem Hans. / *Dem Hans.
with whom has Anna spoken with the Hans / the Hans
'Who did Anna speak to? — Hans.'

On this basis, Merchant (2004) argues for an analysis of fragment answers in which the fragment undergoes movement to the left periphery, followed by clausal ellipsis, as shown in (6).

- (6) a. Who was Peter talking with?
b. [CP Mary [_{TP} ~~Peter was talking with t~~]]

The failure of P-less answers in languages like German (5b) follows from the inability to move DPs which are complements of Ps in these languages; on a movement analysis of fragments, this contrast is expected. Of course, if fragments are generated by movement, then this implies that there is clausal structure which they are moving out of, and so this account of the P-stranding generalization argues for the presence of covert clausal structure in fragment answers.

This syntactic evidence notwithstanding, there are a number of apparent problems with the elliptical view. A first problem concerns the antecedence condition. A standard view of elliptical phenomena holds that if some linguistic material goes unspoken, then there must be an accessible antecedent. That antecedent might be itself spoken or merely recoverable from context, and the relation which holds between the elided material and the antecedent may be syntactic, semantic, or both. However, the literature is agreed that if ellipsis exists at all, there must be some antecedent.¹

The problem for an elliptical view of fragment answers is that there are many cases in which it looks like an appropriate antecedent should be accessible, but in fact a fragment answer is not licensed. This is particularly mysterious (on an elliptical view of fragment answers) given that the exact same cases *do* license verb phrase ellipsis. Take the example in (7) for example, due to Jeremy Hartman (p.c.).

- (7) A: Why did JOHN go to the party?
a. B: Mary did ~~go to the party~~, and John does everything Mary does.
b. B: *Mary ~~went to the party~~, and John does everything Mary does.

Here, verb phrase ellipsis can pick up the antecedent *go to the party* which is present in A's question. However, the putative clausal ellipsis in (7b) cannot pick up the antecedent *went to the party*. This is mysterious if fragments are created via clausal ellipsis.

It is also impossible for fragment answers to pick up antecedents which are inside parentheticals/appositives, while verb phrase ellipsis can do this. This is exactly parallel to AnderBois (2010)'s demonstration of the same facts for sluicing.²

¹This is essentially the prohibition against non-recoverable deletion discussed by Fiengo and Lasnik (1972).

²However, see Collins et al. (to appear) for some discussion of the empirical facts here. The counterexamples Collins et al. cite are not problematic for the thesis developed in this paper, however. In fact, to the

- (8) (AnderBois 2010, adapted)
- a. John once killed a man, but he can't even remember who ~~he killed~~.
 - b. #John, who once killed a man, can't even remember who ~~he killed~~.
 - c. John, who doesn't look after his sister, thinks Bill should ~~look after his sister~~.³
- (9)
- a. A: John once killed a man.
B: Yeah, Bill ~~he killed~~.
 - b. A: John, who once killed a man, is nice once you get to know him.
B: #Yeah, Bill ~~he killed~~.

The examples in (9) show that fragment answers cannot pick up antecedents in parentheticals. An account of fragment answers which unifies them with ellipsis will have to explain why this is not possible, while verb phrase ellipsis can look inside parentheticals for its antecedent. Elliptical accounts of sluicing, of course, face the same problem, which is one that AnderBois (2010) sets out to solve; we will see that a solution in the spirit of AnderBois's can be adopted for the fragment answer case.

We see, then, that in a number of cases, antecedents should be available, but fragments are not licensed. There is also the 'inverse' problem: cases where antecedents are not available, and (e.g.) verb phrase ellipsis is not licensed, but fragments are. Cases of 'antecedentless' fragments, such as *(to) the train station, please* (on entering a taxi) have been discussed at length in work by Robert Stainton (Stainton 1998, 2005, 2006a,b), who argues that they constitute an argument against elliptical analyses of fragments, on the basis that ellipsis requires an antecedent. Indeed, one can construct cases in which both fragments and full clauses are acceptable; however, VP ellipsis is bad due to the lack of antecedent (Hankamer and Sag (1976); although see Miller and Pullum (2013) for some recent discussion of antecedentless VPE).

- (10) [A comes in and discovers that on the kitchen table, where there should be a beautiful roasted leg of lamb, there is only a greasy plate. A looks at B and raises his eyebrows. B explains:]
- a. The dog.
 - b. The dog did it.
 - c. #The dog did.

extent that Collins et al. argue for a Question-under-Discussion-based theory of sluicing, their data support the arguments made here.

³The VPE and sluicing examples here are not completely parallel because there are independent problems with extracting *wh*-words from/leaving variables inside verb phrase ellipsis sites (the MaxElide phenomenon discussed by Takahashi and Fox (2005), Merchant (2008), Hartman (2011), a.o.). That is, **John, who once killed a man, can't even remember who he did* is ungrammatical, but this is independent of the ability of VPE to pick up an antecedent in a parenthetical: note that **John once killed a man, but he can't even remember who he did* is similarly ungrammatical. (8c) clearly shows that VPE can in principle look 'inside' a parenthetical for its antecedent, while (8b) shows that sluicing cannot.

Fragment answers and the Question under Discussion

These observations appear problematic for the view that fragments involve ellipsis: they do not seem to pattern with a clearer case of ellipsis, verb phrase ellipsis.⁴ In some cases, fragments also have different properties from full clauses, which is unexpected if one is an elided version of the other. These are the examples that Jacobson (2013) discusses.

- (11) (Jacobson's (28), adapted, repeated from (3))
Which math professor left the party at midnight?
- a. Well, Jill left the party at midnight, but I don't think she's a math professor.
 - b. Well, Jill, #but I don't think she's a math professor.

Here, the full clausal answer (11a) can deny a presupposition in the NP restrictor *math professor* in the question. However, the fragment answer (11b) cannot do this. A similar example, due to Jeremy Hartman (p.c.), is shown in (12).

- (12) Which Brontë sister wrote *Emma*?
- a. Jane Austen wrote *Emma*, you idiot.
 - b. #Jane Austen, you idiot.

The answerer in (12) cannot correct the incorrect presupposition of the questioner with a fragment, but this is possible with a full clause. This suggests that one is not an elliptical version of the other.

Despite all of this evidence against an elliptical account, I will nevertheless defend the view that fragments are indeed elliptical for full clauses. The differences we have noted in this section can be attributed to the specific semantic condition which must hold of an elided clause. I propose, following proposals by Ginzburg and Sag (2000), Reich (2007), AnderBois (2010), Collins et al. (to appear)⁵, that elided clauses are anaphoric to the Question under Discussion. I will show that this proposal suffices to explain all of the above mysteries.

3. The semantic antecedence condition on clausal ellipsis

Let us first note that one of the 'industry standard' semantic identity conditions on ellipsis, Merchant (2001)'s e-GIVENness, is not sufficient to explain the phenomena discussed above. The definition of e-GIVENness is given below.

- (13) e-GIVENness (Merchant 2001, 2004)
- a. A constituent E may be elided if it is e-GIVEN.

⁴Of course, not all analyses of VPE treat it as 'elliptical' in the sense of involving unpronounced linguistic structure. However, the contrast between VPE and fragment answers does at least show that there is not a unitary phenomenon of 'ellipsis' at work in both VPE and fragment answers, which would be the null hypothesis on a view where fragment answers are created via ellipsis.

⁵Not all of these authors hold to ellipsis-based accounts (i.e. unpronounced, but present, syntactic structure) of the phenomena (sluicing/fragment answers) which they investigate. However, they all propose, in one way or another, that the phenomena show sensitivity in some way to the Question under Discussion or some other similar 'inquisitive' formulation.

- b. E is e-GIVEN if there is an antecedent A such that $F\text{-clo}(A) \Leftrightarrow F\text{-clo}(E)$.
- c. The focus closure (F-clo) of a constituent is the denotation of that constituent with all focused elements replaced by variables, and all variables (that is, traces as well as focused elements which have been replaced) having been existentially closed.

However, this condition is both too liberal and too conservative. The problem is the clause ‘if there is an antecedent A’ in (13b). This is too liberal, because as we have seen above, not just any antecedent will do. But it is also too conservative; as we have seen from Stainton’s examples, fragments do not need linguistic antecedents at all.⁶

If fragments are generated via clausal ellipsis, then it seems to be neither necessary nor sufficient for clausal ellipsis that a linguistic antecedent be present. With that in mind, we might suggest that elided clauses do not have to stand in any semantic relation with a *linguistic* antecedent, but rather with a pragmatic object – the Question under Discussion of Roberts (2012/1996). This proposal has already been made by Reich (2007), who proposes the following condition:

- (14) The non-focused parts of a clause E can be elided only if:
 $QUD = \llbracket E \rrbracket^F$

Here, $\llbracket E \rrbracket^F$ is the *focus value* of E in the sense of Rooth (1992); the set of all alternatives to E. To see how this works, consider the below examples. We assume the Question under Discussion to have a Hamblin semantics, that is, a question is the set of all propositions which are possible answers to that question.

- (15) Who left? — $[_F \text{ John}] \text{ left}$.
- (16) $QUD = \llbracket \text{Who left?} \rrbracket = \{ \text{John left, Mary left, Bill left, ...} \}$
- (17) $\llbracket [_F \text{ John}] \text{ left} \rrbracket^F = \{ \text{John left, Mary left, Bill left, ...} \}$

Here, identity between the QUD and the focus value of the elided clause licenses ellipsis.

Moving from a condition which looks for a linguistic antecedent to a condition which is sensitive to the QUD correctly predicts a number of the effects that were discussed in section 2. For example, the below dialogue is correctly predicted to be infelicitous, because the Question under Discussion does not match the focus value of the elided clause.

- (18) A: Why did John go to the party?
 B: *Mary went to the party, and John does everything Mary does.
- (19) $\llbracket \text{Why did John go to the party?} \rrbracket = \{ \text{John went to the party because he likes parties, John went to the party because he fancies someone there, John went to the party because he does everything Mary does, ...} \}$

⁶Merchant attempts to address this problem by arguing that the antecedent need not be linguistic and might rather be recovered from context (2004:sec. 5). Strictly speaking, however, the definition of e-GIVENNESS requires that the antecedents be linguistic. The operation of focus closure is one which is defined over objects containing focus marks, that is, syntactic phrase markers.

Fragment answers and the Question under Discussion

- (20) $\llbracket [F \text{ Mary}] \text{ went to the party} \rrbracket^F = \{ \text{Mary went to the party, Bill went to the party, John went to the party, ...} \}$

Similarly, we can explain why parentheticals do not provide antecedents for clausal ellipsis. The explanation is essentially that given by AnderBois (2010), although without being couched in the Inquisitive Semantics model which he uses.⁷ Assume that parentheticals, by definition, only contain backgrounded, not-at-issue content. They therefore do not have the power to set the Question under Discussion.⁸ It follows that clausal ellipsis, which is anaphoric to the QUD, cannot find its antecedent inside a parenthetical.

Furthermore, a QUD-based condition on clausal ellipsis helps us understand the genesis of ‘antecedentless’ fragments such as those discussed by Stainton; in such cases, the antecedent should be understood not as a spoken question, but rather as a contextually implicit one (as suggested by Stanley (2000)).⁹

I wish, however, to propose a small refinement to Reich (2007)’s proposed condition: there is a subset of cases in which it does not deliver quite the expected results. Consider dialogues such as the below.¹⁰

- (21) How many people came to the party?
a. Only Mary.
b. John and Mary. (No-one else.)
c. John, Paul, George, Sarah, Mary and Helen.

In these cases, the question ranges over degrees/numbers, but the answers range over people. Fragment answers in these cases are not predicted to be felicitous given Reich’s condition, as the below shows.

- (22) $\text{QUD} = \llbracket \text{How many people came to the party?} \rrbracket = \{ \text{one person came to the party, two people came to the party, three people came to the party...} \}$
- (23) $\llbracket [F \text{ John and Mary}] \text{ came to the party} \rrbracket^F = \{ \text{John and Mary came to the party, Bill came to the party, George came to the party, ...} \}$

Here, the QUD and the focus value of the answer are not identical, predicting (on Reich’s condition) that a fragment answer should not be licensed. However, fragment answers are possible here. To solve this problem, I propose a revision to the ellipsis condition: equality is not required between the two sets of propositions (the QUD and the focus value of the elided clause), but rather mutual entailment is required between the proposition created by taking the *disjunctions* of these two sets. I show this in the condition below, which I dub QUD-GIVENNESS (after Merchant’s e-GIVENNESS).

⁷I remain agnostic about whether an Inquisitive Semantics model is the correct one to cash out these facts; see Collins et al. (to appear) for some discussion.

⁸Again, see Collins et al. (to appear) for some discussion of this.

⁹I gloss over a large number of issues of implementation here for reasons of space. For the full story, the reader is referred to Weir (2014).

¹⁰Thanks to Jeremy Hartman for bringing examples like this to my attention.

- (24) QUD-GIVENness
 The non-focused parts of a clause E can be elided only if:
 $\forall \text{QUD} \Leftrightarrow \forall \llbracket \text{E} \rrbracket^F$

To see how this works, consider the below example.¹¹

- (25) Who left? — John left.
- (26) a. $\llbracket \text{Who left?} \rrbracket = \{ \text{John left, Mary left, Bill left, } \dots \}$
 b. $\forall \llbracket \text{Who left?} \rrbracket = \forall \{ \text{John left, Mary left, Bill left, } \dots \}$
 $= \text{John left or Mary left or Bill left or } \dots$
 $= \exists x.x \text{ left.}$
- (27) a. $\llbracket \llbracket \text{F John} \rrbracket \text{ left} \rrbracket^F = \{ \text{John left, Mary left, Bill left, } \dots \}$
 b. $\forall \llbracket \llbracket \text{F John} \rrbracket \text{ left} \rrbracket^F = \forall \{ \text{John left, Mary left, Bill left, } \dots \}$
 $= \text{John left or Mary left or Bill left or } \dots$
 $= \exists x.x \text{ left.}$

As there is mutual entailment between (26b) and (27b), ellipsis is licensed here. It is also licensed in the degree question/entity answer case, as shown below.

- (28) a. $\llbracket \text{How many people came to the party?} \rrbracket = \{ \text{one person came to the party, two people came to the party, three people came to the party. } \dots \}$
 b. $\forall \llbracket \text{How many people came to the party?} \rrbracket = \text{one person came to the party or two people came to the party or three people came to the party or } \dots$
 $= \exists d.d\text{-many people came to the party}$
- (29) a. $\llbracket \llbracket \text{F John and Mary} \rrbracket \text{ came to the party} \rrbracket^F = \{ \text{John and Mary came to the party, Bill came to the party, George came to the party, } \dots \}$
 b. $\forall \llbracket \llbracket \text{F John and Mary} \rrbracket \text{ came to the party} \rrbracket^F = \text{John and Mary came to the party or Bill came to the party or George came to the party or } \dots$
 $= \exists x.x \text{ came to the party}$

If there is a degree d such that d -many people came to the party, then there exists a (possibly plural) individual x such that x came to the party;¹² and if there exists a (possibly plural) individual x such that x came to the party, then there exists a degree d such that d -many people came to the party. So mutual entailment holds between (28) and (29), and ellipsis is licensed.

¹¹We exploit here the fact that long disjunctions are equivalent to existential statements. Note that $\forall \llbracket \text{E} \rrbracket^F$ is very similar in effect to taking the focus closure of E in e-GIVENness.

¹²This is not true if d is allowed to take the value 0. To avoid this, I have to assume that 0 is not a possible value which d can take, and that in a sentence such as *Zero people came to the party*, *zero* is to be treated not as a degree expression but rather as a quantifier which is decomposable into a negative component and an existential component, as has been proposed in the literature on so-called ‘split scope’ (see Penka (2012) for an overview and references). *Zero* does show split scope effects (De Clercq 2011), but space precludes a complete discussion of this here.

4. Fragments and domain restriction

The last issue we need to consider is the problem raised by Jacobson (2013).

- (30) (Jacobson's (28), adapted, repeated from (3))
Which math professor left the party at midnight?
- Well, Jill left the party at midnight, but I don't think she's a math professor.
 - Well, Jill, #but I don't think she's a math professor.

I argue that the QUD-based ellipsis condition, combined with independently needed assumptions, can deliver these results. First let us consider a case which looks similar, (31).

- (31) [Context: Milling around in the quad are some American faculty, some American students, some German faculty, and some German students. The German students start dancing, although the German faculty refrain.]
- A: Which students were dancing in the quad?
B: The Germans.

Here, the definite description *the Germans* picks out the German *students* in the context only. It *cannot* pick out all of the Germans, that is, B's utterance in (31) has no false reading. This is essentially the same effect as that in (30). But now note that the full clausal answer (32) in fact allows two readings. One is 'corrective'; that is, B is telling A that all the Germans, students or not, were dancing in the quad. But, importantly, the full clausal answer also has the 'only students' reading which the fragment answer in (31) has.

- (32) A: Which students were dancing in the quad?
B: The Germans were dancing in the quad.

What we learn from this is that the reading on which the NP restrictor in the question is 'inherited' by the answer is possible in full clausal answers; what is special about fragments is that they *enforce* this reading, to the exclusion of the corrective reading.

The source of the 'inheritance' of the restrictor in full clausal cases like (32) is well understood: contextual domain restriction (von Stechow 1994, Stanley and Szabó 2000, Martí 2003, Kratzer 2004, a.m.o.). We independently need a device to ensure that the definite description *the Germans* is usually understood not to refer to the totality of all Germans in the world, but rather only the sum of Germans in a particular situation or context. This is usually done by introducing a contextual restrictor *C* in the semantic translation of such expressions.¹³

- (33) $\llbracket \text{the Germans} \rrbracket = \iota x. \text{german}(x) \ \& \ x \in C$
where *C* is a contextually supplied domain variable.

¹³I remain agnostic here about the choice between the various ways in which this has been implemented in the literature; see references cited above for specifics.

The reading of (32) in which *the Germans* is understood only as meaning the German students can be analyzed by letting the contextual domain restriction C contain only students. The ‘corrective’ reading of (32), in which *the Germans* refers to all the Germans in the quad, can be analyzed by letting the contextual domain restriction C contain all the entities in the quad, whether students or not.

Now let us consider the elliptical case, and specifically, the requirement that mutual entailment hold between the disjunction of the QUD and the disjunction of the focus value of the elided clause.

- (34) A: Which students were dancing in the quad?
 B: The Germans ~~were dancing in the quad~~.
- (35) \vee [[Which students were dancing in the quad?]]
 = $\exists x.x$ is a student and x was dancing in the quad
- (36) a. \llbracket [[_F The Germans] were dancing in the quad] $\rracket^F = \{ \text{the Germans in } C \text{ were dancing in the quad, the Americans in } C \text{ were dancing in the quad, } \dots \}$
 b. \vee [[[_F The Germans] were dancing in the quad] $\rracket^F = \exists x.x \in C \ \& \ x$ was dancing in the quad

The disjunction of the focus value of the elided clause still contains a contextual restriction which limits the entities over which it ranges. To ensure that there is mutual entailment between (35) and (36b), we can see that C should only contain students. Any other restriction fails to create mutual entailment. So for clausal ellipsis to be licensed, the contextual restrictor must ‘inherit’ the value of the restriction provided by the NP in the question. This is exactly the result we wanted; it predicts the infelicity of cases like the below.

- (37) Which math professor left the party at midnight?
 Well, Jill, #but I don’t think she’s a math professor.

Here, the fragment answer has to be restricted only to math professors, to ensure that mutual entailment holds between \vee QUD and \vee [[E] \rracket^F (following the logic shown above). This renders the continuation shown above infelicitous. By contrast, in non-elliptical cases, no such mutual entailment condition holds, and the contextual restriction need not limit the clausal answers to only considering math professors.

5. Conclusion

We have seen that a QUD-based condition on clausal ellipsis, similar to that proposed by Reich (2007) and in spirit similar to that proposed by AnderBois (2010), correctly predicts the availability of fragment answers; it correctly predicts which antecedents license clausal ellipsis, and, combined with independently required mechanisms of domain restriction, it explains the problem of inheritance of NP restrictors discussed by Jacobson (2013). Combined with the syntactic evidence for an elliptical account of fragment answers (Merchant 2004), this account bolsters the position that fragments are created via ellipsis, contra the ‘bare fragment’ view.

Fragment answers and the Question under Discussion

One intriguing fact that comes out of this discussion is that clausal and VP ellipsis do not seem to be subject to the same antecedence condition. As shown throughout above, VP ellipsis is not subject to the same constraints as fragments – clausal ellipsis – are. This is especially interesting in the light of recent accounts of the antecedence condition on VP ellipsis which make a link with inquisitive/question/QUD semantics (e.g. Miller and Pullum (2013), Elliott et al. (2014)). While both clausal ellipsis and VP ellipsis may make anaphoric reference to the QUD, further research will hopefully shed light on the precise nature of the difference between these two anaphoric processes.

In the best of all possible worlds, this QUD-based antecedence condition should also extend to cover sluicing, in something like the way suggested by AnderBois (2010). I believe that it does, and explore this possibility in more detail in my dissertation (Weir 2014), but space precludes discussion of it here.

References

- AnderBois, Scott. 2010. Sluicing as anaphora to issues. In *Proceedings of SALT 20*, ed. Nan Li and David Lutz, 428–50. Ithaca, NY: CLC Publications, Cornell University.
- Collins, James N., Daria Popova, Ivan A. Sag, and Thomas Wasow. to appear. Sluicing and the inquisitive potential of appositives. http://www.stanford.edu/~jamesnc/sgg-sluicing_appositives-collins.pdf.
- De Clercq, Karen. 2011. *Squat, zero and no/nothing*: syntactic negation vs. semantic negation. In *Linguistics in the Netherlands 2011*, ed. Rick Nouwen and Marion Elenbaas, 14–24. Amsterdam: John Benjamins.
- Elliott, Patrick D., Andreea Nicolae, and Yasutada Sudo. 2014. VP ellipsis without parallel binding: Towards a QUD approach. Presented at SALT 24, New York University.
- Fiengo, Robert, and Howard Lasnik. 1972. On nonrecoverable deletion in syntax. *Linguistic Inquiry* 3:528.
- von Fintel, Kai. 1994. Restrictions on quantifier domains. Doctoral Dissertation, University of Massachusetts Amherst.
- Ginzburg, Jonathan, and Ivan Sag. 2000. *Interrogative investigations*. Stanford: CSLI Publications.
- Hankamer, Jorge, and Ivan Sag. 1976. Deep and surface anaphora. *Linguistic Inquiry* 7:391–426.
- Hartman, Jeremy. 2011. The semantic uniformity of traces: evidence from ellipsis parallelism. *Linguistic Inquiry* 42:367–88.
- Jacobson, Polly. 2013. The short answer: implications for Direct Compositionality (and vice versa). Ms. Brown University.
- Kratzer, Angelika. 2004. Covert quantifier restrictions in natural languages. Presentation at the Milan Meeting on Covert Variables at Logical Form, Palazzo Feltrinelli, Gargnano. <http://semanticsarchive.net/Archive/mIzMGUyZ/Covert%20Quantifier%20Domain%20Restrictions.pdf>.
- Krifka, Manfred. 2006. Association with focus phrases. In *The architecture of focus*, ed. Valeria Molnar and Susanne Winkler, 105–36. Berlin: Mouton de Gruyter.

Andrew Weir

- Martí, Luisa. 2003. Contextual variables. Doctoral Dissertation, University of Connecticut.
- Merchant, Jason. 2001. *The syntax of silence*. Oxford: Oxford University Press.
- Merchant, Jason. 2004. Fragments and ellipsis. *Linguistics and Philosophy* 27:661–738.
- Merchant, Jason. 2008. Variable island repair under ellipsis. In *Topics in ellipsis*, ed. Kyle Johnson, 132–53. Cambridge, England: Cambridge University Press.
- Miller, Philip, and Geoffrey K. Pullum. 2013. Exophoric VP ellipsis. In *The core and the periphery: data-driven perspectives on syntax inspired by Ivan A. Sag*, 5–32. Stanford: CSLI Publications.
- Penka, Doris. 2012. Split scope of negative indefinites. *Language and Linguistics Compass* 6:517–32.
- Reich, Ingo. 2007. Toward a uniform analysis of short answers and gapping. In *On information structure, meaning and form*, ed. Kerstin Schwabe and Susanne Winkler, 467–84. Amsterdam: John Benjamins.
- Roberts, Craige. 2012/1996. Information structure in discourse: towards an integrated formal theory of pragmatics. *Semantics & Pragmatics* 5:1–69.
- Rooth, Mats. 1992. A theory of focus interpretation. *Natural Language Semantics* 1:75–116.
- Stainton, Robert J. 1998. Quantifier phrases, meaningfulness “in isolation”, and ellipsis. *Linguistics and Philosophy* 21:311–40.
- Stainton, Robert J. 2005. In defense of non-sentential assertion. In *Semantics versus pragmatics*, ed. Zoltán Gendler Szabó, 383–457. Oxford: Oxford University Press.
- Stainton, Robert J. 2006a. Neither fragments nor ellipsis. In *The syntax of nonsententials*, ed. Ljiljana Progovac, Kate Paesania, Eugenia Casielles, and Ellen Barton, 93–116. Philadelphia: John Benjamins.
- Stainton, Robert J. 2006b. *Words and thoughts: subsentences, ellipsis, and the philosophy of language*. Oxford: Oxford University Press.
- Stanley, Jason. 2000. Context and logical form. *Linguistics and Philosophy* 23:391–434.
- Stanley, Jason, and Zoltán Gendler Szabó. 2000. On quantifier domain restriction. *Mind and Language* 15:219–61.
- Takahashi, Shoichi, and Danny Fox. 2005. MaxElide and the re-binding problem. In *Proceedings of SALT 15*, ed. Efthymia Georgala and Jonathan Howell, 223–40. Ithaca, NY: Cornell University.
- Weir, Andrew. 2014. Fragments and clausal ellipsis. Doctoral Dissertation, University of Massachusetts Amherst.

Department of Linguistics
226 South College
University of Massachusetts
150 Hicks Way
Amherst MA 01003
USA

aweir@linguist.umass.edu