JASON MERCHANT

FRAGMENTS AND ELLIPSIS

ABSTRACT. Fragmentary utterances such as 'short' answers and subsentential XPs without linguistic antecedents are proposed to have fully sentential syntactic structures, subject to ellipsis. Ellipsis in these cases is preceded by A′-movement of the fragment to a clause-peripheral position; the combination of movement and ellipsis accounts for a wide range of connectivity and anti-connectivity effects in these structures. Fragment answers furthermore shed light on the nature of islands, and contrast with sluicing in triggering island effects; this is shown to follow from an articulated syntax and the PF theory of islands. Fragments without linguistic antecedents are argued to be compatible with an ellipsis analysis, and do not support direct interpretation approaches to these phenomena.

The situations in (1)–(3) and Ben's utterances that close them pose a fundamental challenge for standard linguistic theories of the form-meaning relation.

(1) Abby and Ben are at a party. Abby asks Ben about who their mutual friend Beth is bringing as a date by uttering: "Who is Beth bringing?" Ben answers:
"Alex."

(2) Abby and Ben are at a party. Abby sees an unfamiliar man with Beth, a mutual friend of theirs, and turns to Ben with a puzzled look on her face. Ben says:
"Some guy she met at the park."

(3) Abby and Ben are arguing about the origin of products in a new store on their block, with Ben maintaining that the store carries only German products. To settle their debate, they walk into the store together. Ben picks up a lamp at random, upends it, examines the label (which reads *Lampenwelt GmbH, Stuttgart*), holds the lamp out towards Abby, and proudly proclaims to her: "From Germany! See, I told you!"

In each of the above three situations, a linguistic utterance is preceded by some discourse context, which may (as in (1)) but need not (as in (2) and (3)) include linguistic material. The linguistic utterance in each case has two properties, which, taken together, give us cause for alarm. First, the phonetic signal that each of the above utterances gives rise to corresponds

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to the lexical content of a DP (as in (1) and (2)) or a PP (as in (3)) – in short, to a node which is syntactically non-sentential. Second, (1)–(3) have the same conversational function as (4)–(6) respectively; they can be used to advance the purposes of the discourse in the same way as fully sentential utterances – that is, they can have the same propositional content and assertoric force as utterances of what are uncontroversially fully sentential syntactic structures.

(4) Beth is bringing Alex.

(5) He's some guy she met at the park.

(6) It's from Germany.

Call linguistic expressions such as those found in (1)–(3) *fragments*. The question that arises with respects to such fragments, then, is the following: how can we account for the semantically propositional character of what appear to be syntactically less than sentential structures? This question arises, of course, on the usual assumption that syntactically sentential objects like TPs give rise to semantic objects of propositional type which can be used to make assertions, but that syntactic objects like DPs and PPs do not. In other words, does the propositional content of (1)–(3) come from (i) the usual mechanisms (an interpreted syntactic structure, i.e., an LF structure), or (ii) a novel method of generating and interpreting such fragments?

The answer to this question has obvious and fundamental consequences for the architecture of the grammar of human languages. If possibility (i) is correct, the grammar must include a new kind of ellipsis operation, one with properties that appear to be quite distinct from the kinds of ellipses that are, at this point, fairly well understood, such as VP-ellipsis and sluicing. If possibility (ii) is right, then we must allow non-sentential syntactic objects either to be able to denote propositions, or we must allow the non-propositional semantic objects to which they give rise to be able to be used to make assertions (further, under some assumptions, we may also need to propose new ways of building syntactic structures).

Of these two possibilities, it seems clear that the first is a more conservative one, in preserving the usual mapping of syntax and semantics and beyond but in placing the burden on the syntax, in particular on the non-pronunciation of certain syntactic structure. Call the first approach the *ellipsis* approach; the ellipsis approach has been pursued since the earliest attempts in generative grammar to account for these phenomena (Hankamer 1979; Morgan 1973, 1989; and more recently Stanley 2000; Reich 2002, 2003; Brunetti 2003a, 2003b; Ludlow to appear).

The second approach is more radical in that it requires a revision of the systems of form-meaning mappings. Call the second approach the *direct interpretation* approach; this approach has been proposed in various forms by a number of researchers (van Riemsdijk 1978; Hausser and Zaefferer 1978; Yanofsky 1978; Carston 2002; Ginzburg and Sag 2000; Jackendoff 2002; and especially Barton 1990; Stainton 1995, 1997, 1998; to appear, the latter of whom introduces data on which the examples in (2) and (3) are modeled). These modern researchers follow a venerable tradition in linguistic theorizing in trying to account for the properties of fragments without relying on ellipsis; in fact, theorists in the early twentieth century were already upbraiding their predecessors for a perceived overreliance on 'ellipsis' as an explicator. Bühler 1934, p. 155, for example, called ellipsis the 'alte crux der Sprachwissenschaftler' ('the linguists' old crutch'), while Sütterlin (1907, p. 9) maintained that 'nach unserer heutigen Betrachtungsweise [liegt] eine wirkliche Auslassung viel seltener vor als nach der Auffassung der früheren Zeit' ('on contemporary views, a true omission occurs much less frequently than was earlier believed'). Jespersen (1924, p. 306) had these choice words for skeptics of his version of the direct interpretation approach to fragments: 'An old-fashioned grammarian will feel a certain repugnance to this theory of one-member sentences, and will be inclined to explain them by his panacea, ellipsis.'

Above and beyond the theoretical qualms that some scholars have about ellipsis, the direct interpretation approach also has enjoyed wide currency for a number of other reasons, the primary one being that it has been thought to have been shown that the ellipsis approach cannot adequately handle the empirical facts. In particular, a number of inadequacies have been identified in extant ellipsis proposals, and a number of discrepancies between the purported fully sentential sources and their fragment counterparts have been claimed to exist.

The goal of the present article is to rehabilitate the ellipsis account of fragments such as those found in (1)–(3) and show that the ellipsis approach correctly accounts for grammatical form sensitivities that are missed or must be stipulated in direct interpretation approaches (thus essentially making good on the promissory note to this effect issued in Merchant (2001, p. 107, fn 12) and vindicating the intuitions of Jespersen's 'old-fashioned grammarian'). The proposed ellipsis account shares some features with its predecessors, but is novel in being compatible with current understanding of the syntax and semantics of ellipsis, especially in requiring that only constituents be deleted. This entails that the fragments be moved prior to ellipsis, which I will show has considerable desirable effects in reducing the constraints on possible fragments in contexts such

as (1)–(3) to known constraints on movements cross-linguistically, capturing for the first time a similarity which has gone unremarked on in the published literature.

The case of fragment, or short, answers such as that found in (1) is the clearest, and I will begin by considering this case before extending the analysis to fragments like (2)–(3) which lack obvious linguistic antecedents. As Hankamer (1979, p. 238) put it,

> An argument that the sentences of (2) [fragment answers like (1), JM] are derived by a deletion rule from (1) [sentential answers like (4), JM] can be constructed along the lines of Ross's argument for the rule of Sluicing. I will not give it here.

In this article, I attempt to give the argument Hankamer alludes to. Several lines of evidence indicate that fragments in fragment answers are syntactically generated as part of sentential constituents, but are subject to movement. In order to make the nature of this evidence clear, it is instructive to begin by reviewing our understanding of the least controversial construction involving movement of a phrase to a clause-external position followed by ellipsis of the host clause, viz., sluicing. Since much of the analysis of fragments will be parallel in the relevant respects to that of sluicing, I start with a brief discussion of how sluicing works, in Section 1, followed in Section 2 by an overview of the theory of ellipsis assumed here. Section 3 presents the evidence for the two strands of the analysis: that fragments involve ellipsis, and that they involve movement. Section 4 incorporates the results of Section 3 into a more general understanding of restrictions on movement in elliptical structures, and Section 5 extends the analysis to fragments that lack linguistic antecedents.

1. Background on Sluicing

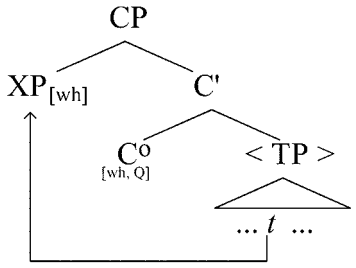
Sluicing is the ellipsis phenomenon illustrated in (7), in which the sentential portion of a constituent question is elided, leaving only the wh-phrase.

(7) a. Jack bought something, but I don't know what.
b. A: Someone called. B: Really? Who?
c. Beth was there, but you'll never guess who else.
d. Jack called, but I don't know {when/how/why/where from}.
e. Sally's out hunting – guess what!
f. A car is parked on the lawn – find out whose.

Sluicing has been extensively discussed since it was first investigated in Ross (1969) (see for a representative sample of past and current analyses

van Riemsdijk 1978; Chao 1987; Lobeck 1991, 1995; Chung et al. 1995; Ginzburg and Sag 2000; Lasnik 2001; Merchant 2001). The discussion here will be based on Merchant (2001), where I concluded that sluicing is best analyzed as involving movement of a wh-phrase out of a TP (there called IP), followed by deletion of that TP; this derivation is schematized in (8), where angled brackets represent deletion (or, more neutrally, enclose unpronounced material).

(8)



One of the primary reasons for believing that this ellipsis involves full, regular syntactic structures which go unpronounced (and not base generation of wh-phrases exclusive of any sentential material, as in van Riemsdijk 1978 and Ginzburg and Sag 2000) are form-identity effects: the form of the wh-phrase in sluicing shows all and only those grammatical sensitivites that are attested for wh-phrases in non-elliptical interrogative structures. Here I will mention only two: case-matching and preposition-stranding.

First, as noted in Ross (1969), the sluiced wh-phrase must bear the case that its counterpart in a nonelided structure would bear. This is illustrated for German below.

(9) Er will jemandem schmeicheln, aber sie wissen nicht,
he wants someone.DAT flatter but they know not
{*wer /*wen /wem}.
who.NOM who.ACC who.DAT
He wants to flatter someone, but they don't know who.

(10) Er will jemanden loben, aber sie wissen nicht,
he wants someone.ACC praise but they know not
{*wer /wen /*wem}.
who.NOM who.ACC who.DAT
He wants to praise someone, but they don't know who.

Compare these to their nonelided counterparts:

(11) Sie wissen nicht, {*wer /*wen /wem} er schmeicheln will.
they know not who.NOM who.ACC who.DAT he flatter wants
They don't know who he wants to flatter.

(12) Sie wissen nicht, {*wer /wen /*wem} er loben will.
they know not who.NOM who.ACC who.DAT he praise wants
They don't know who he wants to praise.

Similar facts are found in all case-marking languages that relevant data is available for: English, Greek, Dutch, Finnish, Hungarian, Russian, Polish, Czech, Slovene, Hindi, Basque, Turkish, and Korean.

Second, there is a correlation between the availability in a given language for preposition-stranding wh-movement and the possibility for sluicing a wh-phrase without a preposition which corresponds to a correlate marked by a preposition. In general, a language *L* will allow preposition stranding under sluicing if *L* allows preposition stranding under regular wh-movement. The relevant facts are given here for the preposition-stranding languages (English, Frisian, and the Scandinavian languages) and for selected non-preposition-stranding languages.

Preposition-stranding Languages

(13) English
a. Peter was talking with someone, but I don't know (with) who.
b. Who was he talking with?

(14) Frisian
a. Piet hat mei ien sprutsen, mar ik wyt net (mei) wa.
Piet has with someone talked but I know not with who
b. Wa hat Piet mei sprutsen?

(15) Swedish
a. Peter har talat med någon; jag vet inte (med) vem.
Peter has talked with someone I know not with who
b. Vem har Peter talat med?

(16) Norwegian

a. Per har snakket med noen, men jeg vet ikke (med) hvem.
Per has talked with someone but I know not with who

b. Hvem har Per snakket med?

(17) Danish

a. Peter har snakket med en eller anden, men jeg ved ikke
Peter has talked with one or another but I know not
(med) hvem.
with who

b. Hvem har Peter snakket med?

(18) Icelandic

a. Pétur hefur talað við einhvern en ég veit ekki (við) hvern.
Peter has spoken with someone but I know not with who

b. Hvern hefur Pétur talað við?

Non-preposition-stranding Languages

(19) Greek

a. I Anna milise me kapjon, alla dhe ksero *(me) pjon.
the Anna spoke with someone but not I.know with who

b. *Pjon milise me?

(20) German

a. Anna hat mit jemandem gesprochen, aber ich weiß nicht,
Anna has with someone spoken but I know not
*(mit) wem.
with who

b. *Wem hat sie mit gesprochen?

(21) Yiddish

a. Zi hot mit emetsn geredt, ober ikh veys nit *(mit) vemem.
she has with someone spoken but I know not with who

b. *Vemen hot zi mit geredt?

(22) Czech
a. Anna mluvila s někým, ale nevím *(s) kým.
Anna spoke with someone, but not.I.know with who
b. *Kým mluvila Anna s?

(23) Russian
a. Anja govorila s kem-to, no ne znaju *(s) kem.
Anja spoke with someone, but not I.know with who
b. *Kem ona govorila s?

(24) Slovene
a. Anna je govorila z nekom, ampak ne vem *(s) kom.
Anna aux spoken with someone but not I.know with who
b. *Kom je govorila Anna s?

(25) Polish
a. Anna rozmawiała z kimś, ale nie wiem *(z) kim.
Anna spoke with someone, but not I.know with who
b. *Kim rozmawiała Anna z?

(26) Bulgarian
a. Anna e govorila s njakoj, no ne znam *(s) koj.
Anna AUX spoken with someone but not I.know with who
b. *Koj e govorila Anna s?

(27) Serbo-Croatian
a. Ana je govorila sa nekim, ali ne znam *(sa) kim.
Ana AUX spoken with someone but not I.know with who
b. *Kim je govorila Ana sa?

(28) Persian
a. Ali ba kasi harf mi-zad, ʔama ne-mi-dan-am
Ali with someone talk PROG-hit.3sg but not-PROG-know-I
*(ba) ki.
with who
b. *Ki Ali ba harf mi-zad?

(29) Hebrew

a. Dani katav le-mishehu, aval ani lo yode'a *(le-)mi.
Dani wrote to-someone, but I not know to-who

b. *Mi Dani katav le?

(30) Moroccan Arabic

a. Driss tkəllem mᶜa ʃi wahəd, walakin ma ᶜraft ʃ *(mᶜa) mən.
Driss talked with someone but not know-NEG with who

b. *Mən tkəllem Driss mᶜa?

(31) Basque

a. Ana-k norbait-ekin hitzegin zuen, baina ez dakit nor- *(ekin).
Ana-ERG someone-with talk.to aux but not know who-with

b. *Nor hitzegin zuen -ekin?

These parallels in distribution are immediately and straightforwardly accounted for by the theory of sluicing discussed above, since the grammatical constraints that regulate case on wh-phrases and the possibility of extracting a wh-phrase from a PP will be operative uniformly in both elliptical and non-elliptical structures.

Any account which eschews syntactic structure internal to the ellipsis site must take a different tack to capturing these regularities. In Ginzburg and Sag's (2000) account of the connectivity effects, sluices like the ones discussed thus far are introduced by the phrasal type *sluiced-interrogative-clause* which is a subtype of *headed-fragment-phrase* (among others). Such phrases are subject to a constraint (Ginzburg and Sag 2000, p. 304 (17)) that they dominate a phrase (the wh-phrase) whose CATEGORY and CONTENT values are the same as the CATEGORY and CONTENT values of a phrase – the correlate – provided by the context. (The grammatical information of the correlate is introduced into the sign of the fragment phrase by a feature designed for this purpose called SAL-UTT.) Since case and φ-features are subsorts of CATEGORY and CONTENT respectively, this constraint will ensure that the case and φ-features of the remnant and the correlate match. This uniformity constraint does not, however, straightforwardly rule out the variants lacking the preposition; nothing prevents *pjon*

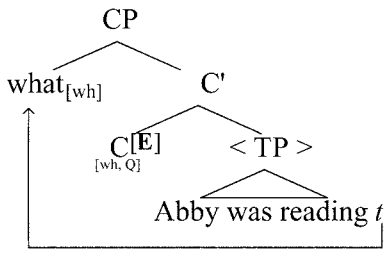
in (19) from being the head of a *hd-frag-ph* whose SAL-UTT value is the *local* value of *kapjon*. There is no obvious way to state the requirement that in some languages (e.g., Greek) but not others (e.g., English), correlates cannot be DPs selected by Ps. Although one can imagine a way of coding this difference in possible correlates, it seems to be missing a generalization, since such a coding on possible values of SAL-UTT would be unrelated to the constraint on unbounded dependency structures that regulates pied-piping in questions.

2. ELLIPSIS IN MINIMALISM

Given the above results, we now face the question of how to implement the analysis. I will follow here the proposal made in Merchant (2001), with the modifications below. An example of sluicing like (32) has the structure in (33), in which the C head bears the E feature.

(32) Abby was reading something, but I don't know what ⟨Abby was reading *t*⟩.

(33)



The E feature serves as the locus of all the relevant properties that distinguish the elliptical structure from its non-elliptical counterpart. First, the variety of E that occurs in sluicing, henceforth E_s, has the following syntactic requirement:

The SYNTAX of E_s

(34) E_s [*u*wh*, *u*Q*]

This part of the lexical entry for E_s captures what is traditionally known as the licensing requirements on ellipsis sites. Lobeck (1995) demonstrated that only certain heads have the ability to license the ellipsis of their complements – in the present instance, she proposed that only the null C of constituent questions does. I recast her analysis in terms of feature-feature

matching requirements in the lexical entry for E_s, which ensures that E_s can only co-occur with a C bearing [wh, Q] features appropriate for checking the uninterpretable [*u*wh*, *u*Q*] features on E_s; these features are, furthermore, strong (sometimes called 'having the EPP property') – indicated by the * – necessitating their checking in a local (head-to-head, here) phrase-structural relation. The varieties of E found in VP-ellipsis, NP-ellipsis, and elsewhere, as we will see below, simply have slightly different syntactic requirements, and are subject to cross-linguistic variation of the usual kind (e.g., German has an E_s feature equivalent to the English, but lacks the E_v feature that is found in English VP-ellipsis: in other words, the fact that English but not German has VP-ellipsis is a fact which is captured in the lexicon, a garden-variety kind of cross-linguistic morphosyntactic lexical variation.)

While varieties of E have varying syntactic properties, its phonological and semantic properties appear to be uniform, at least for the class of ellipses that Chao (1987) dubbed 'headed' ellipses and which includes sluicing (the question of the proper analysis of traditionally conceived 'non-constituent deletions' such as gapping and right-node raising is too complex to address here; see Johnson 1996, Postal 1998, and Hartmann 2000 for recent discussion from various standpoints).

E's effect on the pronunciation is equally simple to state; here I will merely use a traditional rule-based formalism for clarity of exposition. The rule is given in (35), where φ_{TP} is the phonological representation of the material dominated by the TP node.

The PHONOLOGY of E:

(35) $\varphi_{TP} \rightarrow \varnothing / E \_\_$

In essence, E instructs the post-PF phonological interpretative component not to parse its complement (how this should be implemented in current models of phonology is not germane to my interests here). The effect, in other words, is a familiar kind of morphologically triggered syncope: here the morphological trigger is E and the syncopated element is TP. This is the entirety of 'PF-deletion' – there is no transformation or operation of deletion on this view, no 'Delete α' or other *syntactic* process of deletion or structure-destruction etc. The non-pronunciation is entirely controlled by the *actual* phonology (that component which takes a PF structure as its input), in ways familiar from studies of morphologically determined syncope phenomena, here merely applied to a larger prosodic unit. Deletion as a notion is completely eliminated from the syntax.

The semantics of E is equally straightforward: it ensures that the deleted constituent satisfies what is traditionally known as parallelism or

identification of the elided material. E is a partial identity function over propositions, one that is defined only if the proposition it combines with has an appropriate semantic antecedent. Technically, I employ e-givenness as the relevant semantic relation (roughly, an expression E is e-given iff there is an antecedent A which entails E and which is entailed by E, modulo ∃-type-shifting; see Merchant (2001) for the full definition, and Tomioka (2003) for a refined version).

The SEMANTICS of E:

(36) $[\![E]\!] = \lambda p$: e-GIVEN(p) [p]

Semantic composition can succeed only if the complement TP of E is e-given.

Localizing the syntactic, phonological, and semantic effects of ellipsis structures in one lexical item, E, represents, it seems to me, a great simplification of the theory of ellipsis, and the only one compatible with the strong lexicalist nature of most current theorizing (in the Minimalist, LFG, CCG, and strict HPSG traditions, in particular). No separate 'ellipsis construction' or 'ellipsis module' in the grammar is needed. Usually, ellipsis is not thought of as comprising a separate 'module' in the sense of the Binding Theory, Control Theory, Theta-theory, etc., but in a commonly encountered way of thinking about ellipsis, it has something of this character. Under this conception, ellipsis is regulated by a global, late (perhaps even post LF), well-formedness condition that is imposed just on the structures containing ellipsis: call this condition the ellipsis condition (EC). Such an EC has the further defect of having no direct connection to the syntactic and phonological effects attested in elliptical structures. Of course, it may be objected to this criticism that an EC is not a theory of these effects, but this is not an objection to the criticism; it *is* the criticism (a point made particularly well in Winkler (2003)).

The present approach avoids these common pitfalls, while maintaining the lexicalist advantage of directly linking the licensing (the local featural requirements of E) and identification (the semantic condition E imposes on its complement) requirements on ellipsis with the phonological effect of non-pronunciation. This is further consonant with the hypothesis that cross-linguistic variation is restricted to the lexicon (perhaps the functional lexicon); it is possible that languages may vary in what syntactic features are present on E, and what semantic requirements are imposed. A further advantage over conceptions like that outlined above is that 'look ahead' is also eliminated: C is Merged with the E feature, so the information that deletion occurs (on the PF side) is available in the syntax (as it must be, if syntax alone feeds the semantics). Other approaches are generally entirely

silent on the mechanisms of syntactic licensing and on the nature of the 'deletion'.

With this background in sluicing and a general theory of ellipsis, we are now in a position to confront the first subclass of fragments: fragment answers.

3. Fragment Answers

Fragment answers are answers to questions such as those in the (a) examples below which consist of a non-sentential XP like the (b) examples, which nevertheless convey the same propositional content as a fully sentential answer like the (c) examples.

(37) a. Who did she see?
b. John.
c. She saw John.

(38) a. When did he leave?
b. After the movie ended.
c. He left after the movie ended.

(39) a. What does Bush want to do to Iraq?
b. Attack it.
c. Bush wants to attack it.

(40) a. What's that?
b. A dish.
c. It's a dish.

(41) a. What's left for me to eat?
b. Some turkey.
c. There's some turkey.

The two possibilities introduced above for analyzing these assign varying analyses to the fragment answers: either the complete syntax of a fragment such as (37b) is just the categorial phrase projection of the fragment itself, as in (42), or there is the usual syntax of declarative answers, part of which is unpronounced, as in (43).

(42) $[_{DP}$ John]

(43) $[_{CP}$ ⟨she saw⟩ $[_{DP}$ John]]

The first analysis is defended at most length in Ginzburg and Sag (2000) and in Barton (1990) and Stainton (1998) for related constructions, while the second is proposed and defended in Hankamer (1979) and Morgan (1973).[1]

The first tack has the conceptual disadvantage of apparently requiring that a proposition arise from a DP, and hence a revision of the usual mappings. While, in the absence of compelling argument, the theoretical choice of complicating the syntax-semantics mapping versus complicating the syntax (by positing unpronounced structure) may simply be a matter of aesthetics, I will present evidence below that gives good reason to believe that there is unpronounced structure in fragment answers.

The second tack, in which the fragment is generated as usual and the rest of the sentence in which it occurs is deleted, has the conceptual advantage of adhering to the usual syntax-semantics mapping mechanisms. Two proposals along these lines have been made in the literature, in Hankamer (1979) and in Morgan (1973). Hankamer (1979) proposes a deletion transformation over multiple variables in the structural description, which reduces the material analyzed by these variables to the null string (parallel suggestions are made in Sag (1976, p. 300, fn 21) and in Reich (2002, 2003)). Morgan (1973) is not so explicit in giving an actual transformation; instead, he identifies the desired properties, and attributes them to an operation of ellipsis he calls General Ellipsis. Both of these approaches make use of non-constituent deletion, in other words. This is a serious defect, given that the majority of more recent approaches have eschewed non-constituent deletions. Worse, nonconstituent deletion is not possible at all on the theory advocated here, on principled grounds – since 'deletion' is the result of the E feature, and this feature occurs on a head, the target of deletion will always be the complement of a head and hence a constituent in a strictly binary-branching theory of phrase structure like the one assumed here.[2]

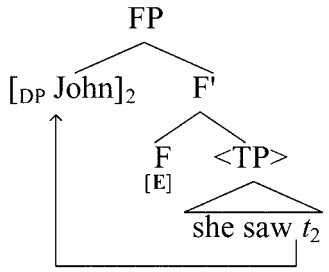
For this reason, I instead propose to assimilate fragment answers to sluicing by analyzing the fragment as having moved to a clause-peripheral

[1] Some recent accounts of pseudoclefts (den Dikken et al. 2000; Ross 2000; Schlenker 2003) also assume the correctness of the ellipsis analysis for fragment answers, but don't directly argue for it.

[2] I will remain agnostic here about whether non-constituent deletions exist at all; if they do (in particular, the 'left-edge' or 'initial material' deletions studied by Napoli (1982) and Wilder (1997)), they have properties significantly different from constituent ellipses like VP-ellipsis, N′-deletion, and sluicing – the class studied by Lobeck (1995) and termed H^+ ellipses in Chao (1987). In particular, as we will see, fragments share crucial properties with the moved wh-phrases in sluicing.

position, followed by ellipsis of the clause itself. Schematically, I propose that the derivation of (37b) is that given in (44).[3]

(44)



In this structure, the pronounced fragment DP *John* moves to a clause-peripheral specifier position of a functional projection, here agnostically called FP (though we may suspect that FP is to be identified with Rizzi's 1997 FocusP). The crucial E feature that triggers non-pronunciation of the clause TP is on F; this E's lexical entry, therefore, will differ minimally from the one observed in sluicing – this E (call it E_f) will be [*u*F*]. The derivation, then, is parallel to that of sluicing, modulo the difference in moved item, its landing site, and the featural requirements of the E_f trigger.

This derivation of fragment answers, in addition to being compatible with a restrictive theory of ellipsis, furthermore captures the 'major constituent' constraint discussed by, among others, Hankamer (1979) and Morgan (1989, p. 239, fn 2). As we will see, the movement involved here has the properties independently identified for focus-movements and similar left-peripheral movements like clitic-left dislocations.

I begin in Section 3.1 by laying out the evidence in favor of an ellipsis analysis. In general, the evidence for ellipsis in fragment answers is of the same general form that we saw above in sluicing: the fragment shows grammatical dependencies – also known as connectivity effects – on missing linguistic material which are non-trivially similar to those exhibited by the fragment's correlate in a non-elliptical sentential structure. Section 3.2 takes up a range of evidence for the other component of the proposed analysis, namely movement. There it is shown that movement correctly predicts some surprising new facts, and furthermore accounts for a range of data that have been discussed in the literature as objections to an ellipsis analysis; all of these objections, it turns out, do apply to an ellipsis analysis like (43), but not to the one proposed here in (44).

[3] A parallel derivation of fragment answers was assumed independently in Brunetti (2003a,b).

3.1. *Evidence for Ellipsis in Fragments*

A number of connectivity effects point to the conclusion that ellipsis is involved in fragments. The facts presented in this section make this point in a quite general way, I believe, and are compatible with almost any version of the ellipsis approach, including in situ approaches such as (43) as well as a derivation including movement such as (44).

3.1.1. *Case-matching Connectivity Effects*

First, as seen for the wh-phrase in sluicing above, the morphological case form of a fragment DP is always exactly the same as the case we find on the corresponding DP in a fully sentential answer. This is illustrated for Greek, German, Korean, English, Hebrew, Russian, and Urdu below. Only for Greek is the full paradigm with sentential controls given, but the facts are exactly parallel in the other languages.

Greek

(45) Q: Pjos idhe tin Maria?
who.NOM saw the Maria
Who saw Maria?
a. A: O Giannis.
the Giannis.NOM
b. A: *Ton Gianni.
the Giannis.ACC

(46) a. A. O Giannis idhe tin Maria.
the Giannis.NOM saw the Maria.ACC
Giannis saw Maria.
b. A: *Ton Gianni idhe tin Maria.
the Giannis.ACC saw the Maria.ACC
(Giannis saw Maria.)

(47) Q: Pjon idhe i Maria?
who.ACC saw the Maria
Who did Maria see?
a. A: *O Giannis.
the Giannis.NOM
b. A: Ton Gianni.
the Giannis.ACC

(48) a. A. *I Maria idhe o Giannis.
the Maria.NOM saw the Giannis.NOM
(Maria saw Giannis.)

b. A: I Maria idhe ton Gianni.
the Maria.NOM saw the Giannis.ACC
Maria saw Giannis.

German (parallel to examples in Hankamer (1979, p. 394)

(49) Q: Wem folgt Hans?
who.DAT follows Hans
Who is Hans following?

a. A: Dem Lehrer.
the.DAT teacher

b. A: *Den Lehrer.
the.ACC teacher

(50) Q: Wen sucht Hans?
who.ACC seeks Hans
Who is Hans looking for?

a. A: *Dem Lehrer.
the.DAT leader

b. A: Den Lehrer.
the.ACC leader

Korean (from Morgan (1989))

(51) Q: Nu-ka ku chaek-ul sa-ass-ni?
who.NOM this book.ACC bought
Who bought this book?

a. A: Yongsu-ka.
Yongsu.NOM

b. A: *Yongsu-rul.
Yongsu.ACC

(52) Q: Nuku-rul po-ass-ni?
who.ACC saw
Who did you see?
a. A: *Yongsu-ka.
Yongsu.NOM
b. A: Yongsu-rul.
Yongsu.ACC

English

(53) Q: Whose car did you take?
a. A: John's.
b. A: *John.

Hebrew (from Ginzburg and Sag (2000, p. 299))

(54) Q: Et mi shibaxt?
DEF.ACC who you.praised
Who did you praise?
a. A: Et Moti.
DEF.ACC Moti
b. *Moti.

Russian

(55) Q: Komu pomogla Anna?
who.DAT helped Anna
Who did Anna help?
a. A: Ivanu.
Ivan.DAT
b. A: *Ivan/Ivana.
Ivan.NOM/Ivan.ACC

Urdu

(56) Q: Kis-ne Gautam se baat kii thii?
who.ERG Gautam with talk do.PFV PAST
Who talked to Gautam?

a. A: Samira-ne.
Samira.ERG

b. A: *Samira.
Samira-ABS

These facts are expected under the ellipsis analysis, since the distribution of case morphology on DPs will be regulated by the same mechanism in both elliptical and non-elliptical contexts. A direct interpretation approach is forced to supplement the usual, sentence-internal mechanisms for case assignment by a second, independent mechanism that operates only in fragments, but which has exactly the same effects (as Barton (1990, p. 91) does, for example).

3.1.2. *Other Connectivity Effects*

A number of other kinds of connectivity hold between fragment answers and their in situ correlates in sentential structures, many of which were first presented and discussed in Morgan (1973). I review those facts here, and present several new ones.

To begin with, DPs in fragments show a distribution regulated by the Binding Theory parallel to their correlates in non-fragmentary sentential equivalents, as illustrated for Principles C, B, and A below.

Principle C requires that a name or epithet like *the bastard* not corefer (simplifying somewhat) with a c-commanding name or pronoun. Thus the (b) examples are ruled out; similarly, the (a) fragments are equally impossible as answers to the relevant questions.

(57) Where is he_2 staying?

a. *In $John_2$'s apartment.

b. *He_2 is staying in $John_2$'s apartment.

(58) What does $John_1$ think?

a. *That the $bastard_1$ is being spied on.

b. *$John_1$ thinks that the $bastard_1$ is being spied on.

Principle B effects are also observed: the pronoun *him* cannot be co-indexed with *John* in (a) or (b).

(59) Who did John$_1$ try to shave?
  a. *Him$_1$.
  b. *John$_1$ tried to shave him$_1$.

Reflexives and reciprocals also show parallel behavior in fragment answers:

(60) Who does John like?
  a. Himself.
  b. John likes himself.

(61) Who does John think Sue will invite?
  a. ?? Himself.
  b. ?? John thinks Sue will invite himself.

(62) Who do they like?
  a. Each other.
  b. They like each other.

Finally, more complex anaphoric dependency principles are observed as well: the Greek anaphor *o idhios* (lit. 'the same') can be bound across a finite clause-boundary, but cannot itself c-command a co-indexed DP. It is thus fine as an embedded subject in the sentential answer in (63c) to the question in (63a); it is equally fine as a fragment answer in (63b). In contrast, *o idhios* cannot occur as a matrix subject in a sentence like (64c); it is likewise impossible as a fragment answer over that position in (64b).

(63) a. Pjos nomizi o Giannis oti tha pari tin dhoulia?
  who thinks the Giannis that FUT gets the job
  Who does Giannis think will get the job?

  b. O idhios.
  the same
  Him. (= Giannis$_1$ thinks that he$_1$ will get the job.)

  c. O Giannis$_1$ nomizi oti tha pari tin dhoulia o idhios$_1$.
  the Giannis thinks that FUT gets the job the same
  Giannis$_1$ thinks that he$_1$ will get the job.

(64) a. Pjos nomizi oti tha pari tin dhoulia o Giannis?
who thinks that FUT get the job the Giannis
Who thinks Giannis will get the job?

b. *O idhios.
the same

c. *O idhios$_1$ nomizi oti tha pari tin dhoulia o Giannis$_1$.
the same thinks that FUT gets the job the Giannis

This set of binding theoretic parallels are entirely expected on the ellipsis analysis, but would seem to require considerable nontrivial supplements to the grammar on direct interpretation approaches (such as a wholesale revision of the binding theory's level of application, as Barton (1990) proposes).

An additional set of connectivity effects is found in the distribution of scope and bound pronouns in fragment answers. Again, the possibilities found in fragment answers are those found in fully sentential answers, as expected. Thus for scope, we find the fragment answers allow for the relevant ambiguities; in (65a), B's answer has both the scopal possibilities attested in (65b): $\forall\exists_3$, $\exists_3\forall$ (parallel facts hold in German, as reported in Reich (2003, p. 25)).[4]

(65) A: How many diplomats did every translator greet?
B: a. Three.
b. Every translator greeted three (diplomats).

We find a similar parallel in the distribution of bound pronouns, which are found in fragment answers as well:

(66) A: Who does every Englishman$_1$ admire?
B: a. His$_1$ mother.
b. Every Englishman$_1$ admires his$_1$ mother.

As before, these parallels are expected under an ellipsis account which assimilates fragment answers to sentential structures with the usual syntactic properties.[5]

[4] Note that the movement involved in (65a) does not preclude a subject wide-scope reading, contrary to what is sometimes claimed: *Every class I took that quarter, a certain admirer of mine took too* allows for the $\exists\forall$ reading as a consequence of the nature of the subject; likewise for an example like *At least one of the courses from the required list, each prospective major took*.

[5] It is sometimes claimed that there are also scope non-parallelisms. Ginzburg (1999), for example, presents data from Hebrew (a strong negative concord language), in which a

Finally, there is a very telling set of apparent *non*-connectivity effects in the area of the binding theory between forms possible in fragment answers and the corresonding forms in full sentences. One such non-parallel pair is given in (67) and (68). While the (b) examples are Principle C violations of varying severity, no corresponding deviance is found in the parallel fragment answers in the (a) variants.

(67) Who did you tell *t* about Bill_2's raise?
  a. Him_2.
  b. *I told him_2 about Bill_2's raise.

double negative ($\neg\exists\neg\exists = \forall\exists$) reading appears to emerge for negative fragment answers which is not attested in the corresponding fully sentential answer. The data from Greek, which is also a strong negative concord language, appears on first inspection to be exactly parallel:

(i) A: Se pjon dhen edhose tipota o kathigitis?
to whom not gave n-thing the teacher
(Who didn't the teacher assign anything to?)
B: Se kanenan.
to n-person
(To no one = The teacher assigned something to everyone.)

It is usually reported in the literature (e.g., in Giannakidou (1998)) that a Greek example like (ii) does not permit a double negative reading:

(ii) Se kanenan dhen edhose tipota o kathegitis.
to n-person not gave n-thing the teacher
The teacher didn't give anyone anything.
NOT: The teacher gave no one nothing
(= The teacher gave everyone something).

However, it turns out that Greek exceptionally *does* allow a double negative reading for fully sentential, non-elliptical structures, just in case the sentence in (ii) is in response to A's question in (i), and if the answer has the same focal structure as the question, here necessitating a low-flat intonation on the entire clause following 'Se kanenan'. This surprising judgment is problematic for the usual approaches to the meaning of such n-words in negative concord languages, but the parallelism is expected here. Crucially the judgment of (ii) relies on a particular intonational contour and discourse context; it remains to be investigated whether such factors affect the data from other languages that have been discussed in the literature.

(68) Who did you tell *t* about Bill_2's raise?
a. Bill_2.
b. ?? I told Bill_2 about Bill_2's raise.

Unlike (57) and (58) above, in these cases the DP that violates Principle C is not part of the fragment. It appears that names in the unpronounced part of the answer fail to trigger Principle C effects as do their counterparts in non-elliptical structures. This discrepancy can be attributed to the presence of ellipsis: this effect is that dubbed 'vehicle change' in Fiengo and May (1994), and which is also observed in clausal ellipses like sluicing, as shown in Merchant (2001):

(69) The police arrested Alex_3, but he_3 didn't know why ⟨the police arrested him_3⟩.

In these cases, I claim, the elided clause contains not a name (which would correspond strictly in form to the correlate DP in the antecedent clause), but rather a pronoun. This deviance from form identity is licit under the semantic theory of ellipsis assumed here (and should not, in my view, require an actual operation or definition of 'vehicle change' along Fiengo and May's lines, its effects following instead directly from a semantic theory of ellipsis licensing). That vehicle change effects are found in fragment answers is a welcome, and expected, outcome on the proposed theory that ellipsis is involved.[6]

It is not the case, however, that simply anything goes in fragments. For instance, reflexives that correspond to subject correlates remain ungrammatical in fragment answers:

(70) A: Who will punish Bill if he fails?
B: *Himself. (*Himself will punish Bill if he fails.)

[6] A final piece of evidence for ellipsis in fragment answers that is sometimes adduced comes from the fact that sentential adverbs may co-occur with fragments, as in (i):

(i) Q: Who did they pick?
A: {Probably/Unfortunately/Maybe} Ben.

If such adverbs can be adjoined to FP, their presence in fragment answers is expected. This argument is inconclusive, however, since such adverbs may also sometimes occur in what appears to be a clearly DP-adjoined position, as in (ii):

(ii) Alex, Ben and {probably/maybe} Charlie would make the best team.

As such, I think the data in (i) is inconclusive.

(71) A: What caused the computer to break down?
B: A power surge?
A: Perhaps, but the most intriguing answer is: *itself.
(*Itself caused the computer to break down.)

The bare reflexive fragment answers in (70) and (71) are reported by Ginzburg and Sag (2000, p. 297) to be grammatical, but this judgment was disconfirmed in an experiment with thirteen speakers of English. The speakers were presented with the sentences and asked to rank them on a gradient acceptability scale of 1 to 4, with 1 indicating complete acceptability and 4 complete unacceptability. The scores for the two examples are given in Table 1, where N gives the number of speakers assigning the respective score; 11/13 (85%) of speakers found (70) unacceptable (either fairly or completely) and 13/13 (100%) found (71) unacceptable. No speakers shared Ginzburg's and Sag's reported judgment of completely acceptable for either example.

TABLE I

Aggregate judgments assigned to examples (70) and (71) by thirteen speakers

	Example (70)				Example (71)			
Score:	1	2	3	4	1	2	3	4
N:	0	2	9	2	0	0	5	8

Similar results were found for Ginzburg and Sag's (2000, p. 297) example involving a reciprocal.[7]

While these results are expected under an ellipsis analysis, it is less clear how the full range of the parallels discussed in this section are to be accounted for in direct interpretation approaches, which eschew assigning any unpronounced syntactic structure to fragments.

[7] Ginzburg and Sag also claim that substituting a nominal+emphatic reflexive such as *he himself* in (70) and *the computer itself* in (71) results in full acceptability, a claim substantiated by the same thirteen speakers who rejected (70) and (71) (the scores for these variants were ⟨3, 8, 2, 0⟩ and ⟨9, 2, 1, 0⟩ respectively). Such variants were determined not to be germane, however, since the addition of the emphatic reflexive in the repetition context of the examples voids the Principle C effect for the same speakers: *He himself will punish Bill if he fails* and *The computer itself caused the computer to break down* were judged to be acceptable on a par with the emphatic-containing fragments in these contexts.

3.2. *Evidence for Movement in Fragments*

This section presents and examines evidence which indicates that the fragment has been moved prior to the application of ellipsis. This entails that in many domains, the evidence will be overlapping with evidence for ellipsis: connectivity effects like the ones above will go hand in hand with properties known from movement structures.

3.2.1. *Preposition Stranding*

The first important fact in favor of incorporating a movement component into the analysis of fragments comes from the distribution of fragment DP answers to questions in which the wh-phrase is preceded by (and pied-pipes, in the languages exemplified here) a preposition. In languages like English and the Scandinavian languages, which allow preposition-stranding wh-movement in questions, 'bare' DP answers to such questions are permissible, as seen in (72)–(76).[8]

(72) English
  a. Who was Peter talking with?
  b. Mary.

(73) Swedish
  a. Vem har Peter talat med?
     who has Peter talked with?
  b. Mary.

(74) Norwegian
  a. Hvem har Per snakket med?
     who has Per talked with?
  b. Mary.

(75) Danish
  a. Hvem har Peter snakket med?
     who has Peter talked with?
  b. Mary.

[8] Note that these languages also allow pied-piping in questions to varying extents such as *With whom was he talking?*: the 'bare' DP answer to such a question is also possible, indicating again that syntactic identity between the form of the question and the form of the fragment answer is not required (subject perhaps to some inter-speaker variation: Ginzburg and Sag (2000, p. 301, fn 9) report that for them, 'bare' DP answers to pied-piping questions are infelicitous, a judgment I do not share).

(76) Icelandic
a. Hvern hefur Pétur talað við?
whom has Petur talked with?
b. Mary.

In non-preposition-stranding languages such as Greek, German, Yiddish, Czech, Russian, Bulgarian, and Hebrew, on the other hand, such 'bare' DP answers are impossible, as seen in (77)–(83).

(77) Greek
a. Me pjon milise i Anna?
with whom spoke the Anna?
b. Me ton Kosta.
c. * Ton Kosta.
with the Kostas

(78) German
a. Mit wem hat Anna gesprochen?
with whom has Anna spoken?
b. Mit dem Hans.
c. * Dem Hans.
with the Hans

(79) Yiddish
a. Mit vemen hot zi geredt?
with whom had she spoken?
b. Mit Moshe.
c. ??Moshe.

(80) Czech
a. S kým mluvila Anna?
with whom spoke Anna?
b. S Jindřichem.
c. *Jindřichem.

(81) Russian
  a. S kem ona govorila?
  with whom she spoke?
  b. S Ivanom.
  c. *Ivanom.

(82) Bulgarian
  a. S koj e govorila Anna?
  with who AUX spoken Anna
  b. S Ivan.
  c. *Ivan.

(83) Hebrew
  a. Le-mi hixmeta? (Ginzburg and Sag (2000, p. 299))
  to-who you.flattered
  b. Le-Moti.
  c. *Moti.

This parallelism is expected on the present approach, which takes fragment answers to involve leftward A′-movement, since the grammatical constraints that govern preposition-stranding will be operative in these structures as well. For the direct interpretation approach, these facts seem mysterious at best.

3.2.2. *Islands*

If fragments are to be analyzed as A′-movement followed by clausal deletion, then it is reasonable to expect that island constraints will be obeyed. Testing for island sensitivities in fragment answers is not simple, however, since the simple questions that would test for them are themselves island violations. This limitation can be at least partially overcome in two ways, both involving questioning an element in an island without moving that element.

The first strategy to test for islands in fragment answers is to examine fragment answers to implicit salient questions (Morgan 1973; cf., Hankamer 1979's 'wrong' transformation). Asking a yes-no question with an intonation rise on a particular constituent, as in (84a), can give rise to an implicit constituent question where the appropriate wh-phrase replaces the accented constituent. In (84), the answerer can take it that the questioner may be interested in the answer to the question *What language(s) does*

Abby speak?, in addition to the narrower answer to her yes-no question, hence the felicity of either continuation in (84b) or (84c). (This is only a partial characterization of the conditions on these dialogs, but sufficient for present purposes.) This is also possible across a clause-boundary, as seen in (85) and (86).

(84) a. Does Abby speak *Greek* fluently?
b. No, *Albanian*.
c. No, she speaks *Albanian* fluently.

(85) a. Did Abby claim she speaks Greek fluently?
b. No, *Albanian*.
c. No, she claimed she speaks *Albanian* fluently.

(86) a. Did Abby think *Ben* wrote the letter?
b. No, *Charlie*.
c. No, Abby thought *Charlie* wrote the letter.

Because the accented constituent may be embedded in an island, as in (87a), this can give rise to implicit questions in which the constituent corresponding to the informative part of the answer is itself inside an island, as in (87c). Under these circumstances, the fragment version of the answer is impossible, as (87b) shows.

(87) a. Does Abby speak the same Balkan language that *Ben* speaks?
b. *No, *Charlie*.
c. No, she speaks the same Balkan language that *Charlie* speaks.

The following data show this effect in other islands.

(88) a. Did Ben leave the party because *Abby* wouldn't dance with him?
b. *No, *Beth*.
c. No, he left the party because *Beth* wouldn't dance with him.

(89) a. Did Abby vote for a *Green Party* candidate?
b. *No, *Reform Party*.
c. No, she voted for a *Reform Party* candidate.

(90) a. Did Abby get '*The Cat in the Hat*' and 'Goodnight Gorilla' for her nephew for his birthday?
b. *No, '*The Lorax*'.
c. No, she got '*The Lorax*' and 'Goodnight Gorilla' for her nephew for his birthday.

The second strategy is to use question-answer pairs in multiple questions. Notice that multiple fragment answers can be used to answer such questions, as in (91).

(91) a. Who's more likely to be influencing who? The CIA John Foreman, or John Foreman the CIA?
b. Which lawyer said he was representing which war criminal?
Cochran Milosevic, and Dershowitz Sharon.

In certain contexts, the second wh-phrase in multiple questions (and third, etc.) can be located in an island (but see Kuno and Robinson (1972) and Fiengo et al. (1988) for important caveats), as in (92a). In these cases, while fully sentential answers are possible, as in (92b), multiple fragment answers like (92c) are impossible.

(92) a. Which committee member wants to hire someone who speaks which language?
b. Abby wants to hire someone who speaks Greek and Ben wants to hire someone who speaks Albanian.
c. *Abby Greek, and Ben Albanian.

This is expected if the second fragment (*Greek* and *Albanian* in (92c)) must move out of the island prior to ellipsis.

While one could imagine various ways to make sense of an *absence* of island violations in fragment answers like these, the *presence* of such island effects seems to be a remarkable piece of evidence in support of taking the derivation of fragments to involve an A′-movement that feeds ellipsis.

3.3. *Complementizer Deletion*

Another piece of evidence for movement in fragments comes from the conditions under which an embedded complementizer may be absent or null, in traditional terms, complementizer deletion. Morgan (1973) showed that when a speaker of a CP fragment answer is not responsible for that

CP's content in the relevant sense (i.e., does not believe or subscribe to it, in (93) below), the embedded *that* cannot be omitted. This is most clearly seen in examples where the speaker cannot believe the embedded proposition, given standard assumptions of consistent cognitive agents (excluding contradictory beliefs). As Morgan noted, this is a puzzle for his *in situ* ellipsis approach, since no contradiction arises when *that* is omitted in fully sentential structures such as (94).

(93) A: What does no one believe?
B: #(That) I'm taller than I really am.

(94) No one believes (that) I'm taller than I really am.

Importantly, this effect is a property of left-dislocated CPs, however; it is well known that displaced CPs cannot omit the complementizer (see Stowell 1981):

(95) *(That) I'm taller than I really am, no one believes.

A further mismatch is found in (96), noted by Morgan (1973). The puzzle is that the presumed underlying structure, (97), is ungrammatical (again, see Stowell 1981).

(96) A: What are you ashamed of?
B: *(That) I ignored you.

(97) *I'm ashamed of that I ignored you.

On the current account, however, this effect is expected, given the surprising possibility of (98); the only thing that needs to be noted is that certain prepositions can take propositional arguments, but only if the latter are dislocated (see Webelhuth (1992) for one theory of this alternation). It is the dislocation structure that the fragment tracks, supporting again the posited derivation for these.

(98) *(That) I ignored you, I'm ashamed of.

Homologous facts are found with CP complements in passive and unaccusative structures:

(99) What was believed (at the time)?

(100) *(That) he would resign.

(101) a. *(That) he would resign was believed (at the time).
b. It was believed (that) he would resign (at the time).

(102) What became obvious after the election?

(103) *(That) he opposes us.

(104) a. *(That) he opposes us became obvious after the election.
b. It became obvious (that) he opposes us after the election.

Again, in these structures, the unavailability of the null complementizer in fragment answers tracks its unavailability in displaced CPs in the relevant constructions. While the mismatch between fragments and *in situ* CPs was indeed puzzling under earlier conceptions of the ellipsis hypothesis, it falls neatly into place assuming that movement feeds the ellipsis. It is less clear, again, how a direct interpretation approach would handle these facts.

3.3.1. *Polarity Items*

A fourth piece of evidence for the present approach comes from the distribution of negative polarity items (NPIs) in fragments. The analysis predicts that NPIs that cannot be left-dislocated cannot appear as fragment answers. This holds, as is well known, for English *any* NPIs (see Giannakidou (2000) for an analysis of the contrast in (106) and relevant references):

(105) A: What didn't Max read?
B: *Anything.

(106) a. Max didn't read anything.
b. *Anything, Max didn't read.

Not all NPIs cross-linguistically are unfrontable, however. Greek, for example, has two series of NPIs, known as emphatic and nonemphatic (following Giannakidou (1998)). Both can occur internal to a clause, c-commanded by negation, for example. But only the emphatics can be left-dislocated, as in (107) with a lexical emphatic and in (108) with a minimizer.

(107) TIPOTA dhen idha.
n-thing.emphatic not I.saw
I didn't see anything.

(108) LEKSI dhen ipe!
word not he.said
He didn't say a word!

Giannakidou (2000) shows that it is exactly these emphatic NPIs which can occur in fragments, and she uses these facts as the core evidence for her proposal that n-word undergo movement followed by ellipsis of an IP containing negation.

(109) Q: Ti idhes?
what you.saw
What did you see?

A: TIPOTA.
n-thing.emphatic
Nothing.

(110) Q: Ti egine? Ipe tipota oli tin nixta?
what happened he.said anything all the night
What happened? Did he say anything all night?

A: LEKSI!
word
Not a word!

Similar remarks hold for the Irish data given in McCloskey (1996), who notes that NPIs in Irish can be fronted in certain contexts (data here from J. McCloskey, p.c.; see Giannakidou (2000) for discussion of data from additional languages).

(111) Rud ar bith ní-or cheannaigh mé.
thing any NEG[PAST] bought I
I didn't buy anything.

Expectedly, these items can appear as fragment answers:

(112) Q: Caidé (a) cheannaigh tú?
what C bought you
What did you buy?
A: Rud ar bith.
thing any
Nothing.

3.3.2. *Turkish Generic Objects*
Fifth, Hankamer (1979, p. 395) points out that generic objects cannot appear as fragment answers:

(113) Q: Hasan ne yazıyor?
Hasan what write.PRES
What is Hasan writing?
A: *(Bir) mektup.
a letter
A letter/letters.

This restriction does not apply to generic subjects, however:

(114) Q: Hayvanların en aptalı ne-dir?
animals.GEN most stupid what-is
Of the animals, the most stupid is what?
A: Ayı.
bear
A/the bear.

But, as Hankamer mentions, these restrictions are exactly reminiscent of restrictions on movement: generic ('bare') objects cannot be fronted, while generic ('bare') subjects may be.

3.3.3. *Korean and Japanese Caseless Fragments*
Morgan (1989) presents a set of facts from Korean which he takes to motivate a non-ellipsis analysis of at least some fragment answers. Although Korean case-marked DP fragments must be marked in the appropriate case, as seen in Section 3.1.1 above, fragment answer DPs may also simply fail to bear any case-marker at all, unlike their non-elliptical counterparts generally:

(115) Q: Nu-ka ku chaek-ul sa-ass-ni?
who-NOM this book-ACC bought
Who bought this book?
a. A: Yongsu.
Yongsu
b. A: *Yongsu ku chaek-ul sa-ass-ta.
Yongsu this book-ACC bought
(Youngsu bought this book.)

(116) Q: Nuku-rul po-ass-ni?
who-ACC saw
Who did you see?
a. A: Yongsu.
Yongsu
b. A: *Yongsu po-ass-ta.
Yongsu saw
(I saw Youngsu.)

Similar facts are found in Japanese (thanks to H. Hoji for judgments):

(117) Q: Dare-ga sono hon-o yonda-no?
who-NOM this book-ACC read-Q
Who read this book?
a. A: Keiko.
Keiko
b. A: *Keiko yonda.
Keiko read
(Keiko read it.)

Morgan correctly notes that these non-parallels are a *prima facie* challenge to reducing all fragment answers to ellipsis of the kind he was considering. But this argument fails to go through, for the simple reason that case-marking in Korean and Japanese is variable exactly in focus constructions of the kind I propose underlie fragments. This variability in case-marking in focus constructions, and, by extension, under various kinds of ellipsis (in sluicing and stripping in particular), has been the topic of a substantial literature; see in particular Hoji (1990), Fukaya and Hoji (1999), Hoji and Fukaya (2001), Fukaya (2002), Hiraiwa and Ishihara (2002), and Nakamura (2002) for recent summaries and proposals (see Merchant (1998) for an older review of the relevant literature for Japanese). What is crucial for my purposes is merely that focussed DPs in cleft-like structures and under ellipsis may lack case-marking, as noted for Japanese in Hoji (1990), and many others since, and for Korean by Morgan (1989):

(118) a. I kos-i chaek ita. (Morgan 1989, p. 237)
this-NOM book is
This is a book.

b. *I kos-i chaek-i ita.
this-NOM book-NOM is
(This is a book.)

(119) A: Sensei-ga Bill-ni kogoto-o itteta yo.
teacher-NOM Bill-DAT scolding-ACC was:saying
(modified slightly from
Fukaya and Hoji 1999: (5))
The teacher was scolding Bill.
B: Boku-wa [$_{CP}$ Tom da to] omotteita yo.
I-TOP Tom COP that thought
I thought it was Tom (that the teacher was scolding).

This fact about these languages has led many researchers to pursue an analysis for the caseless DPs in ellipsis environments in which the ellipsis targets a clause like (118a) or the embedded clause in B's response in (119) (or indeed an alternative in which there is no ellipsis at all, as proposed in Fukaya and Hoji 1999, building on the fact that Japanese allows for a null copula in cases like (119) as well[9]). At the very least, it is clear that Morgan's data fail to support his conclusion that ellipsis is not involved in caseless fragments in Korean. Worse yet, the task of building such an argument based on the distribution of case-markers is perhaps fatally compromised by the fact that case-markers in these languages can be omitted even in non-elliptical structures, subject to conditions that are still the subject of investigation (see Fukaya and Hoji 1999 for Japanese, and No 1991 for Korean).

3.3.4. *C-selectional Effects and Raising vs. Control Infinitivals*
An additional set of parallels in other domains of grammatical dependencies comes from simple selectional effects like the following, taken from Morgan (1973).

(120) A: What has John done?
B: Broken the vase.

[9] There is good reason to believe that these non-case-marked DP fragments are not exactly the same as English stripping, to be discussed below, the most obvious being that the Japanese fragments can be embedded, as in (119), while the English ones cannot. As Fukaya and Hoji argue, this follows if these fragments do not involve ellipsis, but are rather simply clauses like 'it was X'; the interpretative behavior of such clauses is similar enough to sentential answers that teasing apart the differences is no easy task.

(121) A: What is John doing?
B: Washing his car.

(122) A: Who was John seen by?
B: By Mary.

(123) A: After John lost his job, what was he like?
B: Hard to live with.

These are, in effect, a derivational residue: Morgan (1973) took all of these to involve prior application of various transformations (affix-hopping, passive, tough-movement), where modern analyses generally take these dependencies to reflect c-selectional lexical requirements (though recent Minimalist approaches have reintroduced a derivational character to, e.g., verbal inflectional form such as those found in (120) and (121)).

Other relevant selectional effects are pointed out in Ginzburg and Sag (2000, p. 300) (judgments theirs; see below):

(124) A: What did you make Bo do?
B: (*To) leave the house.

(125) A: What did you force Bo to do?
B: *(To) leave the house.

(126) A: How did Bo seem?
(*To be) sick.

It should be clear that these effects follow from the proposed analysis given any theory of c-selection and certain constraints on movement which will be discussed more below. So for example, the fragment answers in (120)–(126) might derive from the following structures:

(127) [Broken the vase] ⟨John has t⟩.

(128) [Washing his car] ⟨John is t⟩.

(129) [By Mary] ⟨John was seen t⟩.

(130) [Hard to live with] ⟨John was t⟩.

(131) [Leave the house] ⟨I made Bo *t*⟩.

(132) [To leave the house] ⟨I forced Bo *t*⟩.

(133) [Sick] ⟨Bo seemed⟩.

Some of these derivations – namely the ones that involve fronting a VP predicate ((127), (128), and (131)) – have a property worth commenting on: their non-elliptical variants (given by pronouncing the deleted material in angled brackets in (127), (128), and (131)) are distinctly odd in standard American English. For better or for worse, the reasons for this oddity (as opposed to, say, their status in some British English varieties, where such VP-predicate fronting is fully acceptable) are poorly understood at the moment. One safe conclusion that can be drawn if the present analysis is correct, however, is that the constraints that give rise to their oddity are constraints which can be (perhaps trivially) satisfied by non-pronunciation, similar to a wide range of amelioration effects induced by ellipsis (see Merchant to appear for a baker's dozen of these and references).[10]

These data merit a few other brief comments as well. First, note that the sentential form underlying the fragment answer in (130) is not identical to the form of the question (*What was he like?*); nothing in the current theory requires strict form identity of question and answer: the identity that is required is a semantic one (based on e-givenness), and hence will allow slight deviations in form provided the semantics remains constant. Thus language-particular quirks of syntax (such as the fact that there is no *wh*-form for questioning predicates directly in English) will not preclude semantically appropriate answers, even in reduced forms.

[10] Similar remarks may hold for even simple VP fragment answers like the one in (ia), if the derivation in (ib) underlies it:

(i) A: What did he do then?
  a. B: Left.
  b. [$_{VP}$ Left] ⟨he *t*⟩.

Another possibility is that the underlying structure is that in (ii):

(ii) [$_{VP}$ Left] ⟨he did *t*⟩.

As J. McCloskey reminds me, structures such as (ii) are found in certain British dialects, meaning that the relevant input structure is at least in principle attested. Deciding among these options is further complicated by the possibility that 'left-edge' deletion may be involved in these cases; likewise for some of the examples discussed in the text, especially (136)–(138).

Second, while I agree that the fragment answer in (132) is completely natural, I find an answer that omits *to* equally acceptable. This indicates that for speakers like me, either the CP [to leave the house] or the VP [leave the house] can be fronted, while for speakers who share Ginzburg and Sag's judgments, only the former is possible in this context. I will refrain from speculating on the nature of this difference.

Finally, the pair in (126) raises interesting questions about the availability of fronting for raising TPs. Since *Bo seemed to be sick* does seem to be an appropriate answer to the question, something independent and active in both elliptical and non-elliptical structures must block the movement of the TP to specFP, seen in **To be sick, Bo seemed*. The immobility of raising infinitivals is a familiar fact (see Chomsky's (1981, p. 62) discussion of data due to L. Rizzi); control infinitivals are more displaceable. Compare fragments answers to questions like *What do you want him to do? : (?To) be on time* vs. *What do you believe her to have done? : (*To have) committed the crime*. Similar contrasts are found in subject cases, as the following data illustrate (thanks to J. McCloskey for bringing them to my attention); in (134) we see that a raising infinitival can neither be clefted nor form a fragment answer, while (135) shows that a control infinitival can do both.

(134) a. *It's [to procrastinate] that people tend.
b. Q: How do people tend to behave?
A: *To procrastinate.

(135) a. It's [to get a job in Europe] that she wants.
b. Q: What does she really want?
A: To get a job in Europe.

The contrast between raising and control infinitivals again supports the current analysis incorportating a movement component.

3.3.5. *Predicate Answers*

Fragment predicate answers present an interesting restriction, seen in the following data, which is expected on the present account.

(136) A: What did he do to the car?
B: Totaled *(it).

(137) A: What did she do with the spinach?
B: Washed *(it).

(138) A: What did he do for his sister?
B: Funded *(her).

In these cases, the fragment predicate answer can consist of an entire VP, but not of merely a verb, as pointed out in Hankamer (1979, p. 242). In all cases, the object of the verb is completely recoverable from the context, and these facts pose a difficulty for direct interpretation approaches, which allow for mere words to be used in these contexts, provided an appropriate discourse relation can be established, or which require an explicit stipulation that fragments can only be maximal projections, as in Barton's (1990) treatment of these facts. On the present approach, the above facts follow simply from structure-preservation: A′-movement to specFP is *phrasal* movement, not *head* movement, so the smallest constituent that can be used as a fragment is the VP, not the V.[11]

The examples in (136)–(138) again demonstrate, like (130) above, that the form of the answer need not be completely structurally isomorphic to the form of the question. In each case, the structure of the answer is simply *He totaled it*, *She washed it*, and *He funded her*, respectively, all appropriate answers to the questions. The question-answer relation is independent of the constraints on ellipsis, though obviously similar in some respects. But the present account does not make the availability of fragment answers contingent on the availability of impossible structures like the following.

(139) *He did [total(ed) it] to the car.

[11] Two additional points are of interest here. First, if a language lacked VP-fronting entirely, such VP answers should be impossible, a situation which J. Aissen suggests may hold in the Mayan language Tzotzil. Second, as raised by a reviewer, if a language permitted extraction of objects out of VPs followed by the relevant kind of fronting of the VP, as in typical cases of remnant topicalization widely discussed for German and Dutch (see Müller (1997) for a recent overview), examples like (136)–(138) might arise. Initial experiments suggest that this is not possible in German at least, as seen in (i):

(i) Was hat er für seine Schwester getan?
what has he for his sister done
What has he done for his sister?
a. Finanziell unterstützt hat er sie.
financially supported has he her
He supported her financially.
b. *Finanziell unterstützt
financially supported

Why this discrepancy should exist is unclear to me at this point, though many further factors complicate the empirical picture; thanks to I. Reich for help in exploring these data.

(140) *She did [wash(ed) it] with the spinach.

(141) *He did [fund(ed) her] for his sister.

I mention this here because it is a criticism one might think of leveling against a naïve theory of the ellipsis involved, one where the ellipsis would necessarily be licensed by strict morphosyntactic form identity to the question. This is not an assumption that is warranted for other ellipsis structures, however, and it is one that I have argued against in other work on clausal ellipsis; there is therefore no reason to expect that a different, stronger condition would be operative here, and indeed it isn't. It is especially important to separate out the two claims made here: that elided structures do have syntactic representations which go unpronounced, but that the fact that they can go unpronounced is due to a semantic relation. As I have tried to stress elsewhere, there is no conflict in a theory which posits ellipsis of syntactic structures based on semantic conditions, any more than there is in claiming that there is a syntactic representation of pronouns (which are furthermore subject to a syntactic Binding Theory) but that their distribution is also regulated by semantic considerations. Positing syntactic structure in the ellipsis site does not commit one to claiming that ellipsis is regulated by (morpho)syntactic identity.[12]

3.3.6. *Pronominals*

A variety of languages, such as Greek, French, German, and Dutch, have two series of pronouns, referred to as strong (or tonic) and weak (or nontonic). The full details of their distributions vary from language to language, but of interest here is that only the strong pronouns can be used

[12] This point, of course, is a topic of considerable debate in the literature on ellipsis, though the details won't concern us here. What is clearly not at stake is *surface* morphosyntactic identity; voice, tense, and 'vehicle change' alternations rule that out immediately, as does the fact that ellipsis can operate across languages (a point made also by Stainton (1997)):

(i) A: Evales to potiraki sti tsanda? [Greek]
put.PAST.2sg the cup in.the bag
Did you put the cup in the bag?
B: No, I didn't.

as fragment answers, as seen in the following examples (in these examples the relevant pronoun is an object, but this is generally immaterial).

(142) Pjon idhes?
whom did.you.see?
a. Afton.
him.strong
b. *Ton.
him.weak

(143) Il voulait qui?
he wanted who
a. Moi.
me.strong
b. *Me.
me.weak

(144) Was wolltest du?
what wanted.2sg you?
a. Das.
that
b. *Es.
it

(145) Wie heeft ze gezien?
who has she seen?
a. Jou.
you.strong
b. *Je.
you.weak

The weak forms can, however, appear in the respective clause-internal pronominal object positions:

(146) Ego ton idha.
I him.weak saw
I saw him.

(147) Il me voulait.
he me.weak wanted
He wanted me.

(148) Ich wollte es.
I wanted it
I wanted it.

(149) Ze heeft je gezien.
she has you.weak seen
She saw you.

Obviously, these non-parallels pose a challenge for the *in situ* non-constituent deletion analyses mooted in Hankamer (1979) and Morgan (1973). However, something like the desired contrast is attested in left-dislocation structures in all the languages in question, modulo irrelevant language-particular differences. In Greek we have what is usually known as a clitic left dislocation (CLLD) structure (Cinque 1990; Anagnostopoulou 1994), in French a hanging topic left dislocation (HTLD), and in German and Dutch a V2 structure with a pronoun in the Vorfeld. In each of these cases, only the strong pronouns can occur in the respective left-peripheral position.

(150) {Afton/*Ton}, ton idha.
{*him.strong/weak*} *him I.saw*

(151) {Moi/*Me}, il me voulait.
{*me.strong/weak*} *he me wanted*

(152) {Das/*Es} wollte ich.
{*that/it*} *wanted I*

(153) {Jou/*Je} heeft ze gezien.
{*you.strong/weak*} *has she seen*

In English, a similar set of facts comes from the distribution of case assignment in pronouns (a notoriously problem-ridden area of English syntax). These facts are discussed in Barton (1990, p. 89ff.) and in Barton and Progovac (to appear) (see also Yanofsky 1978 and Napoli 1982), and

form the basis of a standard objection to an ellipsis analysis. The basic fact in English is that fragment answers to subject questions require the accusative form of the pronoun, not the nominative form that is found in subject position in situ, as illustrated by the contrasts in (154) and (155) (though see Barton (1990, p. 224 fn 32) for discussion of some variable judgments).

(154) Who watered the plants?
  a. Me.
  b. *I.

(155) a. *Me watered the plants.
  b. I watered the plants.

But again, a parallel distribution of the case forms is found in a kind of left-dislocation structure, known as 'copying' dislocation (Ross 1967) or 'hanging topic left dislocation' HTLD (Vat 1981). It applies for all grammatical relations, but most germane here, to subjects like the one in (156).

(156) a. Me, I watered the plants.
  b. *I, I watered the plants.

Barton and Progovac to appear argue that the accusative case in (154) is due to the fact that accusative is the 'default' case in English; the notion of 'default' case, however, raises significant theoretical and empirical difficulties, in my view (see Merchant 2004).

In all five languages, the various left-dislocations share a large number of properties, including, most crucially for present purposes, the connectivity effects discussed above (see the papers in Anagnostopoulou et al. (1997) for cross-linguistic evidence). It is therefore reasonable to assimilate the kind of movement found in fragments to the kind of movement found in these cases; perhaps the closest parallel is found in CLLD, an issue which I return to in Section 4. If (156a) underlies the fragment answer in (154), however, it would not be strictly speaking accurate to describe the fragment as moved to specFP; it may in fact be base-generated there and only 'loosely' associated with the pronoun internal to the elided TP, along the lines of Aoun and Benmamoun's (1998) treatment of similar CLLD pronouns in Lebanese Arabic, given the island sensitivities. In particular, as Ross (1967) pointed out, hanging topics as in (156a) are not island-sensitive:

(157) Me, the FBI interviewed everyone I went to school with.

But while fragment answers to implicit questions with such accusative pronouns are possible (*Did they interview* her? *No*, him.), they remain island-sensitive:

(158) [Looking at a photo of a couple, both applicants for intelligence jobs]
A: Did the FBI interview everyone *she* went to school with?
B: *No, him.

Another possibility, therefore, is to capitalize on the focal stress properties of the landing site, which may be said to require the strong form of the pronoun for independent reasons (hence the term 'tonic' for many of these), and to preserve a more canonical movement analysis. Clearly the accusative marking on pronouns in these uses should form part of a more comprehensive theory of English case, whose details remain unclear; for fragment pronouns it could be claimed that the F head itself is responsible, either leaving the clause-internal case unchecked (harmlessly, since the containing structure is deleted at PF in any case), or that English syntactically, if not morphologically, countenances multiple case-assignment as in the Kasusaufnahme found in many languages (Plank 2000), as might be the case for tough-movement constructions.

The analysis of structures like (150)–(153) and (156) is a source of considerable debate in the literature, revolving around precisely the question of whether and if so, what kind of movement is involved. For the English fragment answer cases at least, the question is whether fragments can be entirely assimilated to structures like (156a), or whether a better model for the deleted structure is to be found among (150)–(153). For reasons that we will see in more detail below, I believe CLLD or *Vorfeld* movement structures are more likely candidates. I will assume so here, and hence keep to the strict movement analysis proposed above.

3.4. *Summary*

In sum, there is considerable evidence to support the idea that fragment answers are derived from full sentential structures, subject to ellipsis, and that the fragment moves from its base position. The ellipsis analysis provides the most straightforward account of a range of connectivity effects, including, surprisingly, the anti-connectivity effect of 'vehicle change'.

The movement component in the derivation of fragments proposed here was supported by a variety of different facts. Some of these, like the preposition-stranding facts and island sensitivities, are straightforward.

Many of the other facts have in the past been used by proponents of direct interpretation approaches, who pointed out that there are discrepancies between the behavior of fragments and their *in situ* correlates in nonelliptical sentences. These researchers have taken these latter facts to indicate either that the syntactic argumentation weighs against an ellipsis account, or that the syntactic evidence is at best inconclusive one way or the other. It was my goal in this section to re-examine this data and to show that while it may weigh against some instantiations of the ellipsis analysis (and in fairness to the proponents of direct interpretation, it certainly does so against the published accounts), it is compatible with, and indeed supports the specifics of, the refinement of the ellipsis analysis proposed here, which incorporates a movement component to the derivation in addition to ellipsis.

4. ISLANDS AND PF

The situation with respect to islands and ellipsis is more complicated than the fragment facts would lead us to suspect. As is well known, A′-extraction out of a deleted TP in sluicing is generally insensitive to islands, while A′-extraction out of a deleted VP in VP-ellipsis is sensitive to islands (see Merchant 2001, to appear; Fox and Lasnik 2003; Hoji and Fukaya 2001; Johnson 2001 for discussion and references and Sag 1976, p. 314 for the original observation). This contrast is illustrated in the sluicing example in (159) and the VP-ellipsis example in (160).

(159) They want to hire someone who speaks a Balkan language, but I don't remember which.

(160) *ABBY wants to hire someone who speaks a Balkan language, but I don't remember what kind of language BEN does.

The table in (161) summarizes these results.

(161) A′-extraction in

fragments	is	*sensitive*	to islands
VP-ellipsis	is	*sensitive*	to islands
sluicing	is	*insensitive*	to islands

It is the goal of the remainder of this section to try to make theoretical sense of these results, and to relate the resulting picture of the derivation of

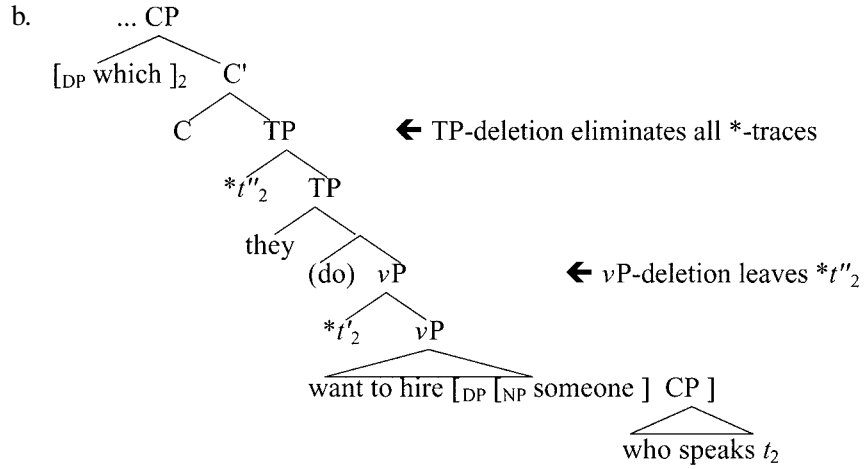
these forms to their counterparts in Japanese, which, as we will see, shows a different pattern.

My point of departure for analyzing the asymmetry documented above will be the PF theory of islands: the idea that island violations are due to properties of pronounced syntactic structure, not to constraints on derivations or LF representations themselves. This idea has a long history in various guises, identifiable in one form or another in the work of Ross (1969), Chomsky (1972), Uriagereka (1999), Kennedy and Merchant (2000), Merchant (2001, 2003a, to appear), Nunes and Uriagereka (2000), Johnson (2002), Fox and Lasnik (2003), Lasnik (2001), and Bošković (2001). I will not attempt to summarize the arguments and implementations of this idea here, instead mostly building on the proposal in Merchant (to appear), which is most similar to Fox and Lasnik's (2003) conception, though details differ.

In this implementation, intermediate traces of island-escaping XPs are defective, marked with *. (The idea that * is a feature of traces is similar to Lasnik and Saito's (1984, 1992) γ-marking and is made explicit in Chomsky and Lasnik (1993) and Kitahara (1999).) The idea is that whatever the correct characterization of the set of islands and how they interact with movement (whether in Empty Category Principle terms, or a Minimal Link Condition, or phases, etc.), the application of Move to an XP that results in crossing an island will also result in a featural alteration to the XP itself, adding a PF-uninterpretable feature, which for convenience we can call *. This * feature must be eliminated from the object interpreted by PF, which in the usual, nonelliptical case does not happen, yielding PF uninterpretability for island-violating extractions.

The picture changes when ellipsis can apply, however. In this case, the structure which contains the * feature(s) can be eliminated from the PF object. Since wh-movement targets every intermediate maximal projection (see Fox 1999), ellipsis of TP and vP will have differing consequences: TP deletion, as in sluicing, will eliminate all *-traces, while vP deletion fails to eliminate the highest *-trace. This captures the asymmetry between sluicing and VP-ellipsis; the two possibilities are illustrated in the following tree.

(162) a. They want to hire someone who speaks a Balkan language, but I don't remember which (*they do).



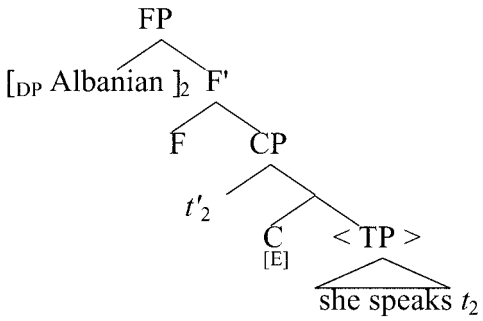
Turning now to fragments, it is apparent that mere clausal ellipsis as assumed so far will fail to make the desired distinction, assimilating fragments incorrectly to sluicing. If the reasoning above is correct, this indicates that there must be a remaining *-trace in fragment structures, persisting after the ellipsis. This conclusion is most easily accommodated by positing an extra layer of structure. For convenience I will assume that this extra layer is CP, selected by F.[13]

In the non-island-violating extractions, then, this yields the following structure, here assuming that movement will proceed through specCP. The E feature is located on C, not on F as assumed above, necessitating a minor revision in the featural characteristics: E must be [*u*C*, *u*F], not [*u*F*] as posited on page 16 above. This new featural constitution of the E in fragments ensures that it must occur local to C, but need not move to F to check *u*F, since Agree can apply. A fragment like (163b), then, will have the structure in (164).

(163) a. Does Abby speak *Greek*?
b. No, *Albanian*.

[13] A reviewer notes that under some conceptions, this would mean that C here would presumably not host an assertoric operator, since the focused element outscopes it.

(164)



This structure makes the connection to clitic left-dislocation (CLLD) stronger, since CLLDed XPs also occur above specCP, as the following examples from Greek show (see Cinque 1990; Anagnostopoulou 1994 for discussion):

(165) a. Ton Gianni, pote ton idhes?
the Giannis when him you.saw
When did you see Giannis?

b. Dhen ksero ton Gianni pote ton idha.
not I.know the Giannis when him I.saw
I don't know when I saw Giannis.

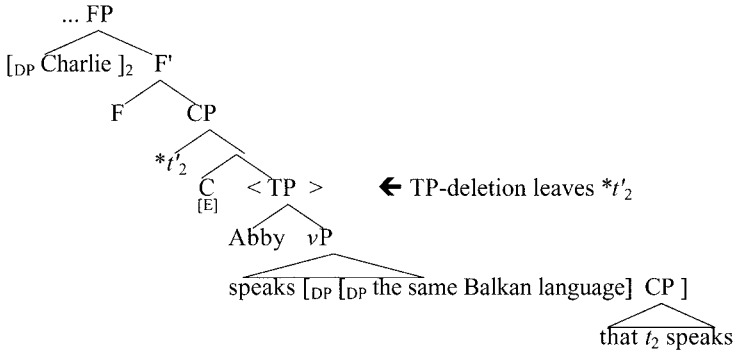
As noted above, CLLD structures share many (perhaps all) the connectivity effects found in fragments, making their structural assimilation at least plausible.

The presence of the additional specCP through which the fragment must move provides the locus for the *-trace which causes the island violation to persist after ellipsis. The relevant structure is given in (167).

(166) a. Does Abby speak the same Balkan language that *Ben* speaks?

b. *No, Charlie.

(167)



On this conception, it seems to be a property of *traces* (unpronounced copies, on the copy theory of movement) which causes the crash; pronounced material, here the phrasal head of the movement chain in specFP or the wh-phrase in specCP in sluicing, does not itself cause the crash. This raises an interesting technical question about the mechanisms of feature resolution and pronunciation at PF: it seems that the *-feature may not *eo ipso* be responsible for the deviance, since by the above reasoning, the pronounced highest copy bears it as well – it is only in conjunction with the algorithm determining non-pronunciation of copies that deviance arises. This contingent sensitivity to the presence of the *-feature is simple to encode. If the PF algorithm constructing the input to phonology from the PF phrase marker PM_{PF} left-to-right (for the sake of explicitness) is something like "If α is a non-head in a chain C, proceed to the next element of PM_{PF}", the requirement can be stated as "If α is a non-head in a chain C and bears *, output error and abort". (As far as I know, very explicit algorithms for ensuring that copies are not pronounced have not been proposed, so it is unclear at best how such an addendum would change our understanding of the PF $\rightarrow$ phonology mapping.) Another possibility, one which sidesteps these latter questions, is the one pursued in Merchant (to appear), where it is proposed that the E feature itself may be able to check the * feature, a simple matter to encode on the lexical entry of E. In sluicing, where the phrase is in the specifier of the head that hosts E, E can check the offending *, eliminating it as desired; in fragments, the phrase is in specFP, and E is no longer local enough to check the offending *-feature. Either approach has fairly clear implications for the nature of the derivation and of the interface with phonology.

I note in closing that the above island sensitivity does not hold for a range of otherwise similar seeming construction types, such as correctives and multi-speaker cooperative sentence construction and certain confirmatory, clarificational, and elaborative fragments (as noted for elaborative fragments in Hoji and Fukaya (2001, p. 12)). Although space precludes the discussion of these they deserve, I would like to suggest that, like metalinguistic negation (Horn 1989), these are a kind of metalinguistic conjunction: the speaker of the fragment is suggesting a correction of some aspect of the form of the original utterance, but not necessarily denying the original utterance's truth. Of course, it will often be the case that by taking issue with the appropriateness of some expression within the utterance, the speaker thereby is committed to the falsity of the proposition asserted as well. It is this more common use of this strategy that led Hankamer (1979) to dub the transformation that derived these structures 'wrong'.

The distribution of island effects across the varying ellipsis types, and of the differing behavior of different islands (some coordinate structure violations can be repaired in fragments, for example), and in particular the absence of island effects in most sluicing contexts, are only part of the elliptical puzzles that come under the broad rubric of elliptical 'repair' effects: many different kinds of otherwise grammatically deviant structures that appear to underlie grammatical ellipses (see Merchant 2003a for a list of a dozen of these and references to the growing literature on them). While island repair effects are not found in fragment answers, other kinds of repair effects may be. The case mismatch effects in Section 3.2.9 may be a case in point, as well as two movement restrictions that are lifted in fragments, brought to my attention by C. Potts. First, Postal (1993) points out that 'bare' quantifier phrases resist leftward dislocation in English:

(168) ??Everyone, they would have interviewed.

Such quantifiers, however, are perfectly acceptable as fragment answers:

(169) Q: Who would they have interviewed?
A: Everyone.

Second, Postal (1998) claims that names in contexts like (170a) cannot be left-dislocated easily (though other speakers find such extraction fine). Again, a comparable ill-formedness is not found with fragment answers:

(170) a. ??Carla, they named her.
b. Q: What did they name her?
A: Carla.

To the extent that these two movement restrictions are reliably attributed to the workings of the grammar, the lack of parallelism with their fragment answer counterparts suggests that the deviance is one that is repaired by the application of ellipsis.

Multiple fragment answers in languages that do not overtly permit multiple left-dislocations raise similar issues; German is a case in point (thanks to I. Reich and K. Schwabe for raising this):

(171) *Der Mann den Jungen hat gestern gesehen.
the man.NOM the boy.ACC has yesterday seen
(The man saw the boy yesterday.)

Like English and many other languages, however, German permits multiple fragment answers to multiple questions:

(172) Q: Wer hat gestern wen gesehen?
who.NOM has yesterday who.ACC seen
Who saw whom yesterday?
A: Der Mann den Jungen.
the man.NOM the boy.ACC

The ban on multiple fronting in (171) must therefore be due to syntactic factors which are repaired by the ellipsis in (172); the exact nature of this repair effect is the subject of debate (it appears to occur in gapping and multiple sluicing as well), and details depend on how the multiple movement is analyzed (see Richards 2001; Grewendorf 2001; Bošković 2002; and Grohmann 2003 for a variety of representative proposals). Similar remarks hold for the absence of V2 and inversion effects in fragments answers in a variety of Germanic and Romance languages, respectively; this repair (the unexpected lack of head movement to a clause-external position) is fairly well-understood, at least for its manifestation in matrix sluices (see Lasnik 2001 and Merchant 2001).

The existence of repair effects in fragments is expected if fragments arise from elliptical source structures, given the presence of repair effects in other ellipses. Repair effects also complicate considerably any effort to argue against the present proposal on the basis of non-parallels between movement structures in non-elliptical structures and fragments. One can take each such non-parallel, like the four mentioned here, as shedding light on the nature of the grammatical mechanisms involved in the non-elliptical cases, a strategy that has proven fruitful for other repair effects. In a word, the general argument is that parallelisms support a movement and ellipsis analysis, while non-parallelisms reveal repair effects.[14]

[14] Another presumable repair effect is found in negative stripping and its fragment answer congeners:

(i) Abby left, but not Ben.

(ii) A: Who left?
B: Not Ben.

Little secure theoretical understanding has been achieved of the position and analysis of negation in such examples: see McCawley (1991), Johnson (1996), and Merchant (2003b) for discussion and references.

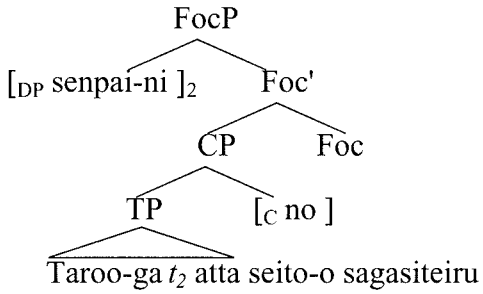
The cross-linguistic picture is interestingly complex. While facts similar to the English ones hold in some languages (such as Greek and German), Japanese presents a different pattern, one that is initially puzzling. In Japanese, only case-marked DP fragments show island effects, while non-case-marked DP fragments do not (an observation apparently due to Saito 1985 and Hoji 1987; see Fukaya and Hoji 1999 for extensive discussion and references, and see (119) above). This difference is illustrated in (173), an example modified slightly from Nakamura (2002, (41)).

(173) A: Taroo-ga [[sensei-ni atta] seito]-o sagasiteiru.
Taro-NOM teacher-DAT met student-ACC looking.for
Taro is looking for a student who met a teacher.
B: Boku-wa [senpai(-*ni)] to omotteita.
I-TOP senior-DAT COMP thought
I thought that (it was) a senior (that Taro is looking for a student who met *t*).

Fukaya and Hoji derive this difference by positing different derivations: for the non-case-marked case, there is no movement, hence no island violation. For the case-marked case, there is movement, with a resulting island violation as in English (they further show that this difference correlates correctly with other properties).

Specifically, we can suppose, following the majority of previous researchers on this topic, that the case-marked fragments are moved out of the nominalized clause headed by the nominalizer – *no*. Consider the particular implementation developed in Hiraiwa and Ishihara (2002) (see Merchant 1998 for references to the many earlier similar proposals), in which *-no* heads a CP and the fragment moves to a higher specFocP (I suppress here the optional realization of Foc as *da*, which they assume):

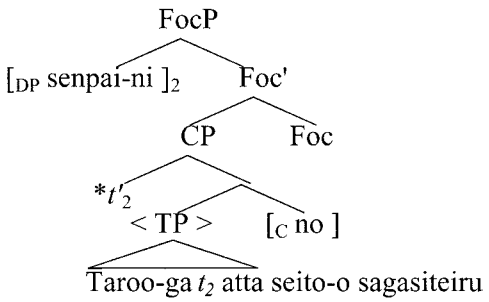
(174)



This structure has exactly the properties of the above structures posited for English, if we apply the assumptions about successive-cyclic move-

ment uniformly – here requiring that the extraction of the DP proceed through specCP. In the case of island-violating movement, as here, this will result in an illicit trace remaining:

(175)



One other adjustment to the usual analyses must be made to achieve the desired results: instead of CP being targeted for deletion, as Hiraiwa and Ishihara and others propose, it must be TP which is deleted, parallel to the English structure, since otherwise $^{*}t'_2$ would be eliminated and the structure should be grammatical, contrary to fact. Since the nominalizer *-no* does not surface in these structures, I must assume either that it has cliticized onto the lower T/V head prior to deletion (as in the complementizer cliticization phenomena found in Hebrew and Irish; see McCloskey (1996)), or that the C is in fact null, selecting some other category headed by *-no*.

This approach gives a structurally uniform analysis to English and Japanese stripping, which is desirable given their shared locality and other properties. What remains is the difference with respect to sluicing, which in Japanese with case-marked DPs remains island-sensitive, unlike English and other languages. This difference, however, can easily be derived from this system if one assumes, as Fukaya and Hoji (1999) and others have argued, that Japanese sluicing is merely a stripping structure with a wh-phrase fragment, and not 'true' sluicing as in English targeting specCP. The structure in (175) then applies to Japanese 'sluicing' as well, capturing its island-sensitivity. The fact that Japanese lacks overt A′-movement with specCP as a final landing site must derive from some other property of the grammar, as is usually assumed (see Richards (2001) for one system that could capture this: let the *wh* features on C and D in Japanese be weak, and the one on Foc be strong, for example; this will permit movement *through* specCP but into a higher specifier position, but not movement that terminates in specCP).

A final puzzle raised by Japanese is the fact that Japanese PPs in stripping and sluicing uniformly do *not* show island effects, like non-case-marked DPs and unlike case-marked-DPs, a discovery due to Nakamura

(2002). This is shown in (176), which contrasts minimally with the case-marked version with *senpai-ni* in (173).

(176) A: Taroo-ga [[sensei-to atta] seito]-o sagasiteiru.
Taro-NOM teacher-with met student-ACC looking.for
Taro is looking for a student who met with a teacher.
B: Boku-wa [senpai-to] to omotteita.
I-TOP senior-with COMP thought
I thought that (it was) with a senior (that Taro is looking for a student who met *t*).

Nakamura suggests that this difference is due to the fact that, while island-violating movement does indeed occur in (176), the island is repaired by deletion; the difference between PPs and case-marked DPs is that only the latter must have case assigned to them, and that in order for case assignment to occur, 'all relevant thematic information must be available' (p. 39). He claims that this latter requirement is only met when reconstruction is available, which, as is well known, is not the case into islands. If the theta-marking of a DP is 'unavailable', then case cannot be assigned, and the Case Filter is violated in (173). None of this reasoning applies to PPs, hence the well-formedness of (176).

Nakamura's account, while cogent and clever, is unavailable to me here given that I have argued that islands may not be repaired in all cases. It also is based on a fundamental syntactic-semantic property (theta-assignment) which I assume to be invariant across languages. This leads to the expectation that stripping of PPs in English should be insensitive to islands, an expectation which is unfulfilled, as Hoji and Fukaya (2001) showed with examples such as the following:

(177) A: Microsoft hired a linguist who is on good terms with Chomsky.
B: *With Bresnan, too.

This is perhaps more clearly seen in cases where a corrective/elaborative reading is more difficult, as in (178) and (179).

(178) *They arrested the guy [who was making obscene calls to Abby] already, but not to Beth.

(179) *Ben left the party because Abby referred to him as an idiot, but not to Alex.
(≠ but Ben didn't leave the party because Abby referred to Alex as an idiot.)

These PP island sensitivies can be seen in fragment answers as well:

(180) a. Did Abby like the candidate who referred to *Chomsky*?
b. *No, to *Bresnan*.
c. No, she liked the candidate who referred to *Bresnan*.

(181) a. Did Ben leave the party because Abby referred to *Kissinger* as a war criminal?
b. *No, to *Milosevic*.
c. No, he left the party because because Abby referred to *Milosevic* as a war criminal.

Given that PPs sometimes *are* sensitive to islands, a case-theoretic reduction of the DP/PP difference in Japanese strikes me as a difficult one to pursue in the form Nakamura proposes. Instead, we could take these differences to reflect a difference in landing site: if PPs land in specCP, then no ill-formed intermediate trace will survive deletion. If this approach is on the right track, we should be able to find supporting evidence for the structural difference, which further research may reveal. Another, conceptually simpler, possibility is to modify Nakamura's proposal slightly by claiming that PPs and non-case-marked DPs can occur in the non-movement structures proposed for the latter in Fukaya and Hoji (1999). Case-marked DPs cannot occur in such structures, by hypothesis, because case assignment fails. Building on Hoji and Fukaya (2001), this latter approach makes the prediction that PP stripping in Japanese should show the same range of effects with sloppy readings and WCO that Hoji has identified for non-case-marked DPs. I leave it to future research to investigate these predictions.

The surprising asymmetry in sensitivity to islands between sluicing, where no island sensitivity is generally found, and VP-ellipsis and fragments, where it is, can be accounted for given a more articulated syntax for fragments. This more highly articulated structure seems to find cross-linguistic support from CLLD structures in languages like Greek and from Japanese. The otherwise surprising differences between English and Japanese seem likewise to be reducible to an independent difference between these languages: in essence, Japanese has only the fragment ellipsis structure available, and not the sluicing one, presumably due to the differing nature of wh-movement in these two languages. These differences, furthermore, can be located in the lexicon, a desirable result in a restrictive theory of cross-linguistic variation.

5. DISCOURSE-INITIAL (?) FRAGMENTS

We have now arrived at a point where it is profitable to reexamine the other set of data that opened the paper. Thus far, I have attempted to show that what might appear to be 'true' fragmentary utterances, like fragment answers, are not what they appear (likewise for other fragmentary phenomena, like stripping and its ilk, though space precludes discussion here). Instead, the fragments found in these contexts are generated with all the usual supporting syntactic structure of their non-fragmentary counterparts, but the clauses they originate in have been subject to ellipsis. This demonstration raises the bar considerably, in my view, for those who would claim that non-sentential utterances with propositional meaning and the force of assertions exist, by significantly reducing the range of possible cases.

What remain as candidates for this distinction are the fragments in (2) and (3), repeated here.

(182) [Abby and Ben are at a party. Abby sees an unfamiliar man with Beth, a mutual friend of theirs, and turns to Ben with a puzzled look on her face. Ben says:]
Some guy she met at the park.

(183) [Abby and Ben are arguing about the origin of products in a new store on their block, with Ben maintaining that the store carries only German products. To settle their debate, they walk into the store together. Ben picks up a lamp at random, upends it, examines the label (which reads *Lampenwelt GmbH, Stuttgart*), holds the lamp out towards Abby, and proudly proclaims to her:]
From Germany! See, I told you!

Examples of this sort have been the focus of extended argumentation in the work especially of Ellen Barton (Barton 1990) and Robert Stainton (Stainton 1995, 1997, 1998, to appear). Stainton, for example, has argued that these examples (i) have all the relevant properties to qualify as propositional objects of the kind usually derived only from sentential syntactic objects (they can be used with determinate assertoric force) and yet (ii) cannot be instances of ellipsis. (Stainton has also discussed another set of data which I return to below.) He has shown convincingly, I believe, that his conclusion (i) holds (at least of this kind of example). If this is so, and if (ii) holds, we are indeed forced to take the radical step that Barton and Stainton have proposed: that the syntax is capable of generating such

fragments by themselves, and that the pragmatic interpretive component must be enriched with devices to yield propositional content for them.

I have already, I hope, shown that there is ample reason for skepticism that this approach should be used for fragment answers (a conclusion endorsed in Stainton 1997, p. 71f.). The null hypothesis is clearly, then, that ellipsis is involved in deriving (182) and (183) when they have determinate propositional content (i.e., in the contexts in which Stainton discusses them). The burden on me, therefore, is to show that Stainton's arguments against the ellipsis analysis do not go through. These arguments come in various guises, most of which, it seems to me, do not apply to the theory of ellipsis presented above. For example, he shows that the putative ellipsis in (182) and (183) cannot be the result of null elements like *pro*, and presents various other technical objections to then extant theories of ellipsis (LF copying and the like).[15] Because the theory presented above does not share the implementations of Stainton's targets, it avoids these objections.

The one argument of Stainton's that remains has the following structure. Premise 1: Ellipsis requires linguistic antecedents. Premise 2: The fragments in (182) and (183) do not have linguistic antecedents. Conclusion: The fragments in (182) and (183) do not involve ellipsis (by modus tollens).

Fortunately for the sake of the present argument, it is fairly clear (though indeed sometimes obscured or even denied) that Premise 1 is false. Ellipses, like other anaphoric devices, indeed are infelicitous (because they cannot be assigned a determinate interpretation) in true discourse-initial contexts (which Stainton calls 'DI_{null}'). Although it is hard to imagine such contexts, perhaps the closest we can get to one is the act of answering a telephone: just about the only information about the caller that the answerer has is that the caller is using a telephone. Imagine picking up the phone and hearing the caller say *She's late* or *I'm leaving next* or *Then she left* or *I won't* or *Bedbugs* and further assume that you recognize that the caller is not someone you know. You will be hard pressed indeed to

[15] One worry that Morgan (1973) raises about a direct interpretation approach is no longer relevant: Morgan points out that under then-current assumptions, grammars were modeled as containing a unique designated start symbol, S. He pointed out that either a multiplicity of start symbols would have to be countenanced (a conclusion accepted by Barton (1990), for example), or the phrase-structure component would have to be enriched with a number of rules like S $\rightarrow$ NP, S $\rightarrow$ PP, etc., raising a number of other problems. This concern does not apply to Minimalist grammars, which operate bottom-up; a direct intepretation approach needs to say nothing new to generate simple DP etc., fragments, as pointed out in Barton and Progovac (to appear). (A similar concern remains, of course, for more recent top-down approaches; see Ginzburg and Sag (2000), who essentially adopt the second possibility.)

understand what propositions the caller intends to convey with utterances like these. (Stainton's own example, taken over without objection also in Stanley (2000), involves a thirsty man approaching a vendor on a street; this is a discourse context rife with context, and clearly is far from any kind of exemplification of DI_{null}; I return to this case below.)

But ellipses are not infelicitous, as would be required for Stainton's argument to go through, in what he calls linguistically discourse-initial ('DI_{lang}') contexts. Contrary to some claims, ellipses *can* occur in DI_{lang} contexts. Stanley (2000) adduces one cogent example, but he has been preceded in this enterprise by Schachter (1977, 1978), who gives a more extensive range of brief non-linguistic contexts that license VP-ellipsis. These are given below in (184a–f); (184g) and (184i) are from Hankamer and Sag (1976), and (184h) is from Stanley (2000):

(184) a. [*Miss Clairol* advertisement]
Does she or doesn't she? Only her hairdresser knows.

b. [John attempts to kiss his wife while driving]
John, you mustn't.

c. [As a response to an offer of a second piece of chocolate cake]
I really shouldn't.

d. [As an invitation to dance]
Shall we?

e. [Mary gets John an expensive present]
Oh Mary, you shouldn't have!

f. [Gesturing toward an empty chair]
May I?
[Responding]
Please do.

g. [Seeing someone about to do a shot of Jenever] (cf. Fiengo and May 1994, p. 191)
If you can, I can, too.

h. [Looking at someone about to jump off a bridge]
She won't.

i. [Seeing someone who has dyed his hair green]
You didn't!

To these, Pullum (2001) adds the following:

(185) a. [Seeing someone about to spray water on you]
You wouldn't!

b. [Sitting next to someone doing something annoying]
Must you?

c. [Asking for 'on-the-spot moral support']
Should I?

d. [as in (c) above]
Dare we?

Likewise for the following all-purpose prohibitive:

(186) [Seeing someone about to light their head on fire]
Don't!

Three attested examples come from movies:

(187) [Harry, alone in a corridor, discovers a classmate in an enchanted paralysis on the floor. Just then, the evil groundskeeper chances upon him, and, assuming Harry has laid the spell, runs to fetch a teacher. In a moment, he returns with the teacher, who shakes her head and turns away. Harry, aghast at being suspected of the evil deed, calls after her:] I swear I didn't! (from *Harry Potter and the Chamber of Secrets*, 2002)

(188) [The Irish mobster Martin Cahill and his crew have recently stolen some gold. In this scene, however, they have only been discussing drug addiction. Cahill turns to one of his cohort and says:] You were a gold bar short on your last run. Where the fuck is it? [Cahill's cohort responds nervously:] Martin, I never would. Jesus, I swear on me mother's life. (from *The General*, 1998; thanks to C. Potts for this example)

(189) [A woman and her husband are arguing inside their house. The argument degenerates into screamed obscenities, at which point the man slaps the woman. The woman freezes, glares at him in disbelief, snatches her coat up, and without a word leaves the house, walking across the lawn. The man, abashed at his despicable behavior, steps out onto the porch and calls after her retreating back:] Honey, I didn't mean to! (from *The Burning Bed*, 1984)

Another two examples come from Thomas Pynchon's *Gravity's Rainbow* (1973, Jonathon Cape, London, pp. 564 and 568 respectively). In the first example, Tchitcherine is planning an attack on Enzian's group, and wondering if Enzian will pre-empt him, roughly. In the second example, Slothrop has arrived in a small village where the children are looking for someone to play the part of a mythical pig-god in an annual celebration. In neither case is there any appropriate linguistic antecedent in the surrounding text.

(190) Oh, he *smells* Enzian ... even now the black may be looking in out of the night. Tchitcherine lights a cigarette, greenbluelavender flare settling to yellow ... he holds the flame longer than necessary, thinking *let him. He won't. I wouldn't. Well ... maybe I would.* [ellipses in the original]

(191) Now the white lanterns come crowding around Tyrone Slothrop, bobbing in the dark. Tiny fingers prod his stomach.
"You're the fattest man in the world."
"He's fatter than anyone in the village."
"Would you? Would you?"

In all cases, I claim, the elided VP is [$_{VP}$ *do it*]. The meaning of this VP is licensed by the discourse relevance of some action; it need not have a determinate propositional content, if by determinate we mean that the hearer can determine precisely what the speaker had in mind (indeed, this is surely too strict a condition on communication or even on internal mental semantic representations, but I put this aside here). What is linguistically relevant is that actions and participants in those actions can be raised to enough salience to resolve the anaphora involved in the VP expression *do it* (whatever 'it' refers to here). Under these conditions, this VP may also be elided, yielding the above examples.

This claim brings me into apparent conflict with the assessment of the data given by Hankamer and Sag (1976) and Pullum (2001). Hankamer and Sag (1976) give the following pair (judgment stigmata suppressed here):

(192) [Harry Houdini, before an audience of thousands, is attempting to escape from a locked safe dangling under a blimp. One spectator says to another:]
a. Do you think he'll be able to do it?
b. Do you think he'll be able to?

The cited authors claim that the (b) variant in (192) is unacceptable, whereas the (a) variant is fine. I side with Stanley (2000)'s assessment of the data: in my judgment, either of (a) or (b) is acceptable in the indicated situation. The fact that there may be some speaker variation in this domain is not at all unexpected, in my view, since it reduces to differences in willingness to perform presupposition accommodation, necessary for both the anaphora in *do it* and, additionally, for the VP-ellipsis; that speakers vary widely in how easily they will accommodate different kinds of presuppositions is well known, though poorly understood.

Notice that this line of explanation *does* allow us to draw a distinction between VP-ellipsis and *do it*. With *do it*, a hearer must accommodate the presupposition associated with the pronoun *it*; in general, this is easily done, and this form of anaphora ('deep anaphora' in Hankamer and Sag's (1976) term) can be (merely) pragmatically controlled, fairly uniformly across speakers. VP-ellipsis, on the other hand, requires satisfaction of a different presupposition (of e-givenness, on the theory assumed here, though one could imagine that the presupposition might be stated over the existence of a linguistic LF object, giving rise to a strict requirement for 'grammatical control'). In the cases above, then, two different presuppositions must be accommodated to arrive at the VP-ellipsis: of the e-givenness of the VP *do it* and of the eventuality antecedent to *it*. Again, speaker variation on this point may be due simply to variation in how easily such multiple accommodations are made, or they may be due to slightly different presuppositions for VP-ellipsis across speakers. Either possibility seems to me to hold promise for a theory that takes seriously the variability in reported judgments.

Similar remarks hold for the differences discussed in the literature on the 'missing antecedent' phenomena and VP-ellipsis vs. *do it*; see Sag (1976, p. 318), who comments that the relevant judgments are 'notoriously labile' and 'vary from speaker to speaker as well as from moment to moment'. In discussing just this purported difference between VP-ellipsis and *do it* anaphora, Sag (1976, p. 319) distances himself from his published assessment in Hankamer and Sag (1976), where this difference is claimed to be crucial, stating 'at this writing, I am not convinced of that crucialness'.

Positing *do it* underlying these DI_{lang} ellipses also accounts for the fact that wh-extraction out of these is impossible, though DI_{lang} ellipses do occur in questions, as the contrast below shows:

(193) [Seeing three contestants about to buzz in]
Who do you think will first?

(194) [Seeing a contestant about to pick among three choices]
*Which (one)/What do you think she will?

Hankamer (1978) objects that Schachter's examples are all have a 'special quality' (where he means that there is no ellipsis involved, but that these expression are learned as 'utterance idioms', presumably, like 'Up yours!'), but this objection is not quite entirely applicable: while many of the contexts have conventional aspects to them, not all do – consider the open-ended set of situations in which (184g) and (184h) can be used. (These latter two examples are also the most important ones to consider when evaluating the claims of Hankamer (1978) and Pullum (2001) that these are all idioms or 'lexically fossilized'.) Although I don't think there is any choice but to recognize the presence of VP-ellipsis in examples like Schachter's, I do believe there is a real truth lurking behind Hankamer's intuition (see Pullum (2001) for further support for Hankamer's general position). That truth essentially is that only the VP *do it* can be made manifest enough to antecede an ellipsis; other linguistic descriptions of pragmatically salient eventualities, with particular lexical items and other structure-specific properties, cannot. This may be due to the general pragmatic fact that any given situation will support a large number of mutually compatible specific linguistic descriptions, and deciding which among these might be intended by a user of ellipsis is simply impossible. The general action description *do it*, however, subsumes enough of the possible descriptions (all of them, in fact, except statives), that it is appropriate in any of the contexts. Note that while I am committed to believing that ellipsis of *do it* is possible without a linguistic antecedent, I am not claiming that this VP gives rise to an unambiguous description, of course; the inherent flexibility in use of *do it* precludes that.

The fact that the semantics of *do it* require that the referred to eventuality be an action (activity, accomplishment, or achievement) and not a stative explains the following judgment as well. Imagine that Abby has a ten-year-old younger sister, who she discovers one day in front of their mother's dressoir. The younger sister has put on their mother's clothes, done up her hair like their mother, put on their mother's jewelry, and in general done everything possible to resemble their mother. She is in the very act of applying their mother's lipstick when Abby enters the room and observes all this. Abby is horrified and shouts *Don't!*, startling her sister. We have a robust intuition that Abby's injunction most likely applies to the application of lipstick, an intuition that extends to the interpretation of *do it*. There is a similarly robust intuition that Abby's injunction cannot be synonymous with *Don't resemble our mother!*. It can be synonymous with

Don't put on that lipstick! only because we can interpret *Don't do it!* in this way, I claim.[16]

This fact would seem to be difficult to account for on the direct interpretation approaches, since pragmatic reasoning should be able to get one to either conclusion. It is similarly problematic, I believe, for the proposal made in Fiengo and May (1994) for cases like Schachter's; although I agree with them that ellipses can occur in DI_{lang} contexts, I part company with them in what is being made manifest.

The restriction to non-statives also underlies the fact that while (195a) is a conventional way to invite someone to dance, this expression cannot be 'conventionalized' as an 'utterance idiom' in Hankamer's sense, as seen in (195b) – though I suspect that its frequency is higher than *Shall we dance?*, and is hence a more liable candidate for idiomaticization (or 'grammaticalization') than (184d) above, the fact that *like/care to dance* is stative precludes this.

(195) [As an invitation to dance]
- a. Would you like/care to dance?
- b. #Would you?
- b′. Would you do it? ≠ Would you like/care to dance?

Now notice that resolution of DI_{lang} deictics and pronominals is similar:

(196) [Pointing at a flying object]
Look at that!

(197) [Responding to a puzzled glance at an unfamiliar person]
He's some guy she met at the park.

(198) [Holding up a cup]
- a. This is from Germany.
- b. It's from Germany.

(199) [Hearing a knock on the door]
- a. It/That must be someone from the neighborhood.
- b. It/That could be the paperboy.

[16] P. Jacobson points out that this example may be less than convincing, if in general statives resist appearing in imperatives, as claimed by Dowty (1979), Potsdam (1998) and Flagg (2001) give several examples of felicitous stative imperatives, however.

(200) [Seeing a student running towards us across the quad and waving at me frantically]
She's from my syntax class, no doubt.

In each case, the discourse context provides some salient entity or event that can be used to resolve the anaphoric element; these entities or events or some property of them are made *manifest*, roughly in Sperber and Wilson's (1986) sense. Note that these utterances are felicitous in DI_{lang} contexts as above, but these contexts certainly do not qualify as DI_{null}. Again, compare the felicity of these in the bracketed contexts with their relative infelicity as the first words said by an unfamiliar caller over a telephone line.

Given this, we are now in a position to see what may be the structure for the DI_{lang} fragments in (182) and (183). The contexts are rich enough to make a certain entity salient (a guy and a cup, respectively), and to make a certain question manifest, namely the question as to the identity or the country of origin of the entity. As we've just seen, this is enough to license anaphoric devices like *he* and *this*. Further, we can be sure that these contexts also make the existence predicate *be* manifest (as a consequence of the more specific domain questions being made manifest). This, I claim, is all that is necessary to license ellipsis as well. The DI_{lang} fragments in (182) and (183) have the following structures:

(201) $[_{\mathrm{FP}}$ some guy she met at the park$_1$ $\langle[_{\mathrm{TP}}$ he's $t_1]\rangle]$

(202) $[_{\mathrm{FP}}$ from Germany$_2$ $\langle[_{\mathrm{TP}}$ this is $t_2]\rangle]$

The linguistic form of the deleted material need not be present in the discourse: an entity or action brought to perceptual salience is enough. This is part of the parallel between DI_{lang} pronoun resolution and ellipsis (both are kinds of anaphoric devices). Of course, this claim is most plausible within a theory of ellipsis that takes the relevant licensing relation to be semantic in nature, such as Merchant (2001), or potentially just semantic, as in Kehler (2002); it can be reconstructed in a theory which takes syntactic structures such as LFs to be required if one assumes that when certain entities and actions and perhaps even propositions are made manifest (giving rise, presumably, to the appropriate semantic objects in the mind of the observer), these objects also make manifest certain syntactic structures. This latter step involves a claim that I am not ready to defend, but see Fiengo and May (1994, p. 191f.) for some pertinent remarks in this direction. (It seems to me to require that perception and thought be conducted for these purposes in language itself, in Chomsky's 'narrow language faculty', and not merely in the language of thought/semantic representations. Needless to say, this

is a contentious question, but one that, for better or worse, doesn't arise on my view of ellipsis.)

Technically, the manifest question in (182) is 'Who is he?', which provides the appropriate antecedent to entail that *he is x* in (201) is e-given; and since ⟦TP⟧ is e-given, it can be 'deleted' at PF. Likewise for (202), *mutatis mutandis*.

In short, I'm proposing a kind of 'limited ellipsis' analysis, one in which a demonstrative (such as *this/that* or a pronoun in a demonstrative use) or expletive subject and the copula are elided – given the appropriate discourse context, which will be almost any context where the speaker can make a deictic gesture, and where the existence predicate can be taken for granted (and it's hard to imagine a context where this wouldn't be the case); in this respect, the present proposal is an elliptical analog to Fukaya and Hoji's (1999) proposal for non-case-marked fragments in Japanese and can be seen as a way of fleshing out Schwabe's (1994) suggestion that such fragments have an 'indeterminate' syntax structure. Suggestive supporting evidence that these expressions are in fact syntactic predicates and not arguments (i.e., they are not elliptical for 'She brought some guy she met in the park' or 'They got this cup from Germany' or the like) comes again from the fact that in languages with overt morphological case, such as Greek and German, the bare nominals show up necessarily in the case of predicates: nominative case, not the accusative or other case. So in the same contexts as (182) and (183), a Greek or German speaker would utter the following:

(203) a. Greek
Kapjos pu gnorise sto parko.
someone.NOM that she.met in.the park

b. *Kapjon pu gnorise sto parko.
someone.ACC that she.met in.the park

(204) a. German
Ein Typ, den sie im Park kennengelernt hat.
a.NOM guy that she in.the park met has

b. *Einen Typ, den sie im Park kennengelernt hat.
a.ACC guy that she in.the park met has

These are the forms that are required in predicate position, as seen in (205), and are the opposite to what would be required if they were objects, as in (206).

(205) a. Greek
Aftos ine {kapjos/*kapjon} pu gnorise sto parko.
he is someone.NOM/someone.ACC that she.met in.the park

b. German
Das ist {ein/*einen} Typ, den sie im Park kennengelernt hat.
that is a.NOM/a.ACC guy whom she in.the park met has

(206) a. Greek
Efere {*kapjos/kapjon} pu gnorise sto parko.
she.brought someone.NOM/someone.ACC that she.met in.the park

b. German
Sie hat {*ein/einen} Typ mitgebracht, den sie im Park kennengelernt hat.
she has a.NOM/a.ACC guy brought whom she in.the park met has

These linguistic form facts follow from the ellipsis analysis; a direct interpretation analysis would again have to replicate the mechanisms that assign case in sentential structures, allowing them to operate just in fragments like these. (Similar remarks apply to any analysis that would claim that such fragments are 'semantically indeterminate', following Shopen (1972, 1973).)

One or both of the strategies presented above will apply in a further range of cases, in which the DI_{lang} fragment is a PP, not a DP, such as the following:

(207) [Seeing someone trying to pound in a nail with a screwdriver]
No, no – with a hammer!

(208) [Seeing someone with a cut searching for a band-aid]
In the top drawer.

(209) [Seeing a small child jumping and reaching for a set of paints]
After dinner, okay?

(210) [Entering a room and seeing an exasperated mother who's just put her baby down to nap and who's gesturing angrily at the ceiling, where the upstairs neighbor's dog is barking; she whispers:]
For twenty minutes already!

In each of these cases, the context makes manifest either a salient action, licensing ellipsis of *do it* (as in (207), (209) and possibly (210)), or a salient entity, licensing ellipsis of a deictic (as in (208) and possibly (210)).

Stainton (1998) also provides a set of data which purports to show that fragments should not be given an ellipsis analysis because these elided constituents could themselves provide the (he claims necessarily linguistic) antecedents for undeniable cases of ellipsis like VP-ellipsis. He points out that there is a striking contrast in felicity of VP-ellipsis in contexts with full sentential antecedents and those with fragments, in a context where Jason and Mark have just heard a knock on the door.

(211) Jason: The man from Paris is at the door.
Mark: And Betty is, too.

(212) Jason: The man from Paris.
Mark: ??And Betty is, too.

In (211), Mark's response can be understood (and is most easily so understood) as meaning that Betty is at the door, too. In (212), by contrast, such a reading is unavailable (at best, it could mean that Betty is from Paris, too). This follows, according to Stainton, if VP-ellipsis requires a linguistic antecedent like *is at the door*, and Jason's utterance in (211) but not in (212) provides the appropriate one. If (212) were fully sentential along the lines of (211) but with *is at the door* elided, the contrast in acceptability would be mysterious. If Jason's utterance in (212), however, contains no such linguistic material, then the conditions on VP-ellipsis are not met, hence the deviance of Mark's response.

But notice that this contrast follows equally from the limited ellipsis account I've given. The fragment in (212) does not have the same structure

as the sentence in (211), but rather the structure of Jason's utterance in (213). And this kind of sentence does fail to provide a good antecedent to VP-ellipsis (since it would require that Mark was trying to say that Betty is the man from Paris, too – violating the uniqueness presupposition of *the* as well as requiring that Betty be a man). Note again that Mark's utterance is felicitous to the degree we can take him as meaning that Betty is from Paris, too, as expected.

(213) Jason: That's the man from Paris.
Mark: ??And Betty is, too.

Stainton provides another, slightly more challenging example in the same vein:

(214) Jason: Adele is wearing a nice dress.
Mark: And Betty is too.

(215) Jason: Nice dress. [Looking or pointing at Adele and her dress]
Mark: *And Betty is too.

Stainton takes these examples to show the same thing the above example did: the fragment *nice dress* doesn't include any syntax corresponding to '*Adele is wearing a*', hence VP-ellipsis is possible in (214) but not in (215).[17] But this contrast again follows from the limited ellipsis analysis, since the deviance of (215) is found in (216) as well:

[17] The fact that the indefinite article a is missing (though need not be) in (215) requires some comment (and note that this article omission is possible only for *a*); as pointed out especially by Barton (1990, p. 64f.), this is not generally the case in nonellipical contexts and is a prima facie difficulty for the usual ellipsis analyses (she gives a similar example with *old grudge*). Several possibilities are open for accounting for this fact. First, note that there are other contexts in which a predicate *a* in a fronted nominal predicate can be omitted: *careful man though he was, eventually a mistake slipped by him*. Likewise for other nominal predicates in non-canonical positions, such as appositives: *Grandson of a banker, John was always stingy*. So the lack of the article may not be contingent on the ellipsis in the fragment at all. A second possibility is that it is contingent on the ellipsis, in the following way: NP movement out of the DP headed by *a*, normally impossible, is licit just in case the DP is deleted (this assimilates the fact to a wide range of other extraction constraints that are ameliorated by ellipsis; see Merchant to appear for a dozen or so). Third, the lack of the article could be due to Napoli's (1982) 'left-edge' deletion or Barton's (1998) telegram register deletion, here occurring with a fragment with regular ellipsis. Fourth, this fact may be indicating that the *a* in predicate nominals is a purely syntactic reflex, one which is obviated by the ellipsis itself.

(216) Jason: That's a nice dress. [Looking or pointing at Adele and her dress]
Mark: *And Betty is too.

(Again, note that Mark's utterance is felicitous if we take it as meaning that Betty is nice, too; change *nice* to a predicate that applies only to dresses, not to humans, like *denim* or *pleated*, and this confound in the judgment task is eliminated.)

Finally, ellipsis is licit in a follow-up response to Ben's utterance in (183) above as well:

(217) Ben: From Germany! See, I told you!
[Abby then grabs a cup, and upending it, discovers that it was made in Canada, and reports her discovery by saying:]
Abby: OK, but this one isn't!

The moral of these examples seems to be that richer contexts help to provide non-linguistic antecedents to ellipsis. Schachter (1977) was right: ellipsis can occur in DI_{lang} contexts, though, like other anaphoric devices, it fails to be felicitous in DI_{null} contexts.

Much of the above argumentation is in harmony with the conclusions reached in Stanley (2000), who argues that many of Stainton's putative counterexamples do in fact involve ellipsis, and indeed suggests that these ellipses have a form similar to the one spelled out in detail here (see e.g., his comments on the implicit question in (182) on p. 406). There are two main differences between Stanley (2000) and the present proposal. The first is merely a matter of level of implementation: the present proposal is couched in a specific, explicit theory of ellipsis, whose details are supported by linguistic facts, while Stanley understandably leaves it quite open what the nature of the relevant ellipsis is. The second is more substantive. Stanley pursues a 'divide and conquer' approach to dealing with Stainton's data: he claims that all of Stainton's data can be handled with one of three distinct strategies. The first is the ellipsis one outlined above, which he argues, as here, is operative in examples like (182) and (183). The second involves a thirsty man approaching a vendor on a street who utters (218).

(218) water

Stanley claims that 'clearly, this utterance occurs discourse initially in every sense' (p. 407). He then goes on to argue instead that (218) is uttered without determinate assertoric force, or, if it does have determinate assertoric force, then at least it lacks determinate content. Either of these

deficiencies places it, Stanley claims, outside the realm of what must be accounted for by linguistic theory. While it may be the case that there are linguistic actions which lack one or both of these properties (see below), I seriously doubt whether (218) necessarily represents such a case.

In fact, any interaction between a potential customer and a vendor is a discourse context rife with context, and clearly is far from any kind of exemplification of DI_{null}. This has been argued in detail by Schank and Abelson (1977), who developed the notion of script for such contexts, trying to model what participants in such a context can expect from their interlocutors and how this facilitates communication. This intuition is supported by linguistic fact, as well. In the context of a request for an object from a vendor, languages which mark case such as Greek and Russian use the appropriate case (accusative in Greek, partitive genitive in Russian) and may use the intonation of a command, as in (219).

(219) a. Greek
(Enan) kafe (parakalo)!
a *coffee.ACC please*
(A) coffee (please)!

a. Russian
Vody (pozhalujsta)!
water.GEN please
(Some) water (please)!

This is the case-marking we expect from the relevant verb:

(220) a. Greek
Ferte mou (enan) kafe (parakalo)!
bring.IMP me *a* *coffee.ACC please*
Bring me (a) coffee (please)!

b. Russian
Dajte mne vody (pozhalujsta)!
give.IMP me *water.GEN please*
Give me (some) water (please)!

This case, if anything, is the strongest potential candidate for a conventionalized ellipsis in Hankamer's sense, though it may also be derivable from a Napoli/Wilder-style initial material reduction. It is in exactly highly

routine and conventionalized context or situation types (à la Schank's scripts) that *particular* linguistic expressions may become manifest, like the verbs *bring* and *give* in (219) (though of course there may be some small indeterminacy in exactly which verb has been conventionally made manifest: *bring, give, would like,* and *want* all have the property of assigning accusative in Greek and genitive in Russian in these contexts; the difference here is presumably that the set is small enough never to give rise to what Hankamer 1973 called 'unacceptable ambiguity'). One can imagine, in fact, that in particular routines quite complex syntactic structures can be conventionally elided, such as in pre-flight equipment checks and the like.[18] This case, therefore, is somewhat special in not having precisely the same kind of underlying syntactic structure that other fragments do, and in this respect Stanley is correct to distinguish it from the others. (See Schwabe 1994 for extensive discussion of parallel examples in German.)

Third, Stanley claims that there also exists a what he calls 'shorthand' (p. 409) strategy to deal with examples like *nice dress* in (215). Because his discussion is so brief, it is not clear whether he intends this to be something like what Napoli and Wilder have proposed, or something else entirely (see Elugardo and Stainton to appear for critical discussion of this notion). In any case, this example can be accounted for in the present limited ellipsis approach already, as discussed above.

I should end this section by noting that it's important to distinguish the fragments discussed here from a variety of other kinds of non-sentential utterances. These do not have determinate assertoric force, and so the problem they pose is not the same one as the problem under consideration (clearly, they must be generated, but it's not always clear what their interpretation should be – since it's not propositional, there's little motivation for either ellipsis or the kind of pragmatic reasoning employed by Stainton and Barton to arrive at assertions). These other non-sentential utterances fall roughly into the classes in (221)–(225) (see Yanofsky 1978; Klein 1985; and Barton 1990; see potential additional classes in Klein 1985 and Klein 1993).

(221) Short directives: Left! Higher! Scalpel!

(222) Exclamations: Wonderful! Nonsense! Fate! For Pete's sake!

(223) Greetings: Hello. Good-bye. Roger. Over. Out.

[18] This reasoning, I believe, applies also to the taxi driver *Where to?* exophoric sluice discussed by Ginzburg (1992) and Chung et al. (1995).

(224) Utterance idioms: Up yours. 'Gewitter im Mai – April vorbei' (lit. 'storms in May – April over'; from Klein 1985)

(225) Labels/titles: Campbell Soup. Starbucks. And now: the first act of the night: The Rolling Stones! To kill a mockingbird. Der Zauberberg. The dancer from the dance. The last report on the miracles at Little No Horse. Thief! Thief! Fire!

A separate class of utterances are those which can be used to make assertions but whose form is not that of a usual sentence. These include the kinds of 'elliptical' structures characteristic of telegrams, headlines, weather reports, recipes, diary reports, and instructions (such as 'If no paper, turn wheel'). In all of these latter cases, it seems most reasonable to believe, following Sadock (1974), Barton (1998), and many others, that a special register is responsible for generating the relevant structures, where by 'special register' I mean a partially domain-specific grammar (as is usually assumed for headlines, recipes, and telegrams). While it is an interesting question how and to what extent domain-specific grammars rely on and deviate from the grammar of the more general purpose registers, it is an incontestable fact that humans generally command several such grammars (i.e., that most if not all adults have several different, albeit closely related I-languages). The properties of these grammars have generated considerable interest in themselves, but I believe that it is safe to set them aside in answering the question posed at the outset – these structures are not in general plausibly thought of as non-sentential in the same way as the cases under consideration.

Overall, the ellipsis account of fragments, I believe, retains the entirely correct aspects of Barton's and Stainton's treatments, namely the fact that pragmatic knowledge and competence play a large and important role in the interpretation of these utterances, but locates the pragmatic aspect of interpretation on the back-end rather than the front-end, so to speak. It preserves the traditional strict Gricean division of labor by locating the pragmatic computation in the determination of the meaning (in the sense of what is meant, not what is said) of particular linguistic expressions, such as deictics, pronominals, and action-related VPs like *do it*.

6. CONCLUSIONS

I have attempted to show that fragments can be analyzed within a restrictive theory of the syntax-semantics interface, and that the division

of labor between the syntax, semantics, and pragmatics as usually conceived can be maintained in the face of fragments by giving fragments full sentential structures, subject to ellipsis. The ellipsis analysis of fragments was supported with a wide range of facts, the most important being that fragments show connectivity properties associated with movement and ellipsis. A secondary result was to show merely that current restrictive theories of ellipsis can handle fragments. And finally, the boundaries of our understanding of the nature of islands and of cross-linguistic variation in this domain were extended, though these properties remain rich areas for further research.

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Department of Linguistics
University of Chicago
1010 E. 59th St.
Chicago, IL 60637 USA
merchant@uchicago.edu