

# Three kinds of ellipsis\*

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## Abstract

The term ‘ellipsis’ can be used to refer to a variety of phenomena: syntactic, semantic, and pragmatic. In this article, I discuss the recent comprehensive survey by Stainton 2006 of these kinds of ellipsis with respect to the analysis of nonsententials and try to show that despite his trenchant criticisms and insightful proposal, some of the criticisms can be evaded and the insights incorporated into a semantic ellipsis analysis, making a ‘divide-and-conquer’ strategy to the properties of nonsententials feasible after all.

## 1. Introduction

A character in Carlos Fuentes’s 2002 novel *The Eagle’s Throne* (trans. Kristina Cordero; Random House: New York, 2006) says with self-disdain and melancholy (p. 93):

Did you know I’ve learned to speak like an Anglo-Saxon, without articles or context?  
“Exactly.”

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\*This paper owes an enormous debt to a large number of people over the years since I first began working on it, but special mention must be made of Rob Stainton, whose work was the original impetus for it and whose comments at Rutgers and in Paris in 2007 led to numerous improvements. Thanks also to Ernie Lepore, François Recanati, Jason Stanley, and the participants in the Leverhulme Foundation workshop organized by Laurence Goldstein at Canterbury in 2008.

“Done.”  
“Nothing.”  
“Careful.”  
“Perfect.”  
“Warned.”  
“Face consequences.”  
I say these things, nothing else.

As it turns out, such seemingly telegraphic speech is by no means limited to the Anglo-Saxon world. The question is just what such utterances could and do mean ‘without context’ and with, and what exactly a speaker who utters such phrases says, means, and conveys.

Speakers convey information by a variety of means: the one studied most by those of interested in language and meaning is the content conveyed with linguistic means, a content whose nature is determined by the context of an utterance and the meaning of the elements used in the utterance, by virtue of their form and other factors. One of the most interesting current questions regarding this fact is where and how to draw the boundary line between pragmatics and semantics. A standard approach is to distinguish between speaker’s meaning and sentence meaning, but the latter term—sentence—has a number of uses (and the former isn’t simple either) that must be distinguished.

A very salutary typology of things we call ‘sentences’ is provided by Stainton 2006, as in (1):<sup>1</sup>

- (1) Three senses of ‘sentence’ (Stainton 2006:31)
  - a. sentence<sub>syntactic</sub>: an expression with a certain kind of structure/form
  - b. sentence<sub>semantic</sub>: an expression with a certain kind of content/meaning
  - c. sentence<sub>pragmatic</sub>: an expression with a certain kind of use

We standardly conceive of an utterance of for example (2a) as consisting of a 4-tuple of the form in (2b), which follows the general pattern given in (2c), where the first member of the 4-tuple is the phonological representation *P*, the second the syntactic *S*, the third the semantic *M*, and the fourth the ‘speech act content’ *C<sub>SA</sub>* (the particular representations used here for illustrative purposes are of course in their details immaterial).

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<sup>1</sup>See also Bloomfield 1914 for a tracing of the notion ‘sentence’ in ancient and 19th c. grammarians and for critical discussion.

- (2) a. Abby left.  
 b.  $\langle /æbi\ lɛft/, [{}_S [{}_{NP}\ \text{Abby}] [{}_{VP}\ \text{left} ] ], \text{left}(\text{abby}), \llbracket \text{left}(\text{abby}) \rrbracket^{M,g,w,i} = 1 \rangle$   
 c.  $\langle P, S, M, C_{SA} \rangle$

In the standard case, the three final members of the 4-tuple correspond to sentences in the syntactic, semantic, and pragmatic sense intended, and have characteristic types: for sentences<sub>syntactic</sub>, this type is S (or its modern descendants in some theories, TP, IP, or CP), for sentences<sub>semantic</sub>, the type is  $\langle t \rangle$  (or  $\langle s, t \rangle$ ), and for speech acts, the type has no standard name known to me (nor representation, for that matter—that in (2b) is just roughly sketched as the kind of thing that could be the argument of an ‘assertion’ operator), but it ranges over things like assertion, command, question—call it type SA.

The main task of natural language theorists is to give a general account of how the four members of such tuples are related to one another. One widely adopted view takes it that there are mappings between the representations as follows (other views have also been proposed, that allow direct interactions between the phonology and semantics, for instance):

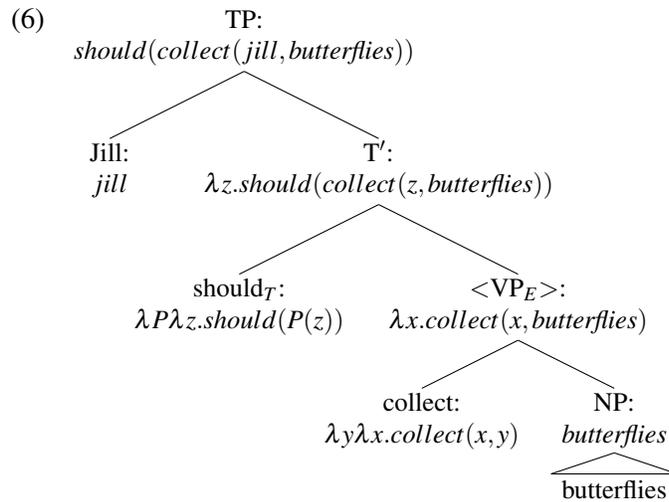
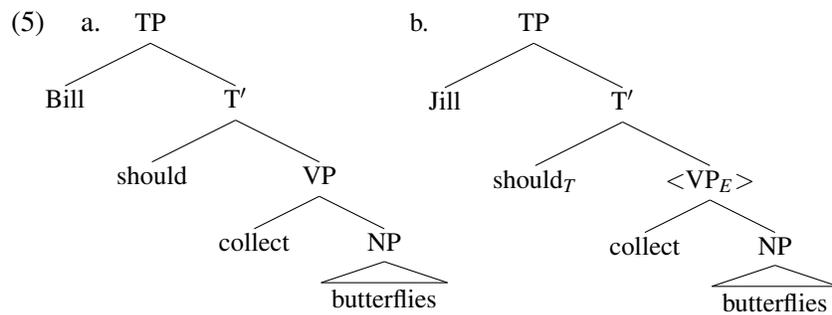
- (3) a.  $P \Leftrightarrow_{\text{phon}} S$   
 b.  $S \Leftrightarrow_{\text{sem}} M$   
 c.  $M \Leftrightarrow_{\text{prag}} A$

On this view, the equivalence between both the propositional content and illocutionary force of (4a) and those of (4b) gives rise to various analytical options, all of which have the common goal of capturing the fact that a speaker can use (4a) to assert that Jill should collect butterflies, just as much as she could use (4b), and that this is a contingent fact about English.

- (4) VP ellipsis in English  
 a. Bill should collect butterflies. Jill should, too.  
 b. Bill should collect butterflies. Jill should collect butterflies, too.

The first possibility is what Stainton perspicuously calls *ellipsis<sub>syntactic</sub>*, which involves positing an unusual mapping between the syntax and phonology, but claims that otherwise (4a) and (4b) are identical. In particular, the phrase structure and lexical insertion rules of English work in both cases as usual (illustrated with the structures in (5a,b), the semantic combinatorics

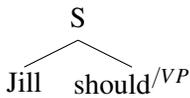
work as usual (say, via functional application, as in (6)), but there is something special about the pronunciation of the unheard VP. One (lexicalist) way of cashing this out is the following: posit a special feature, E (for Ellipsis), which, when added to a phrase's feature matrix, triggers the special pronunciation rule in (7c). (For present purposes, we could equally well suppose that the mapping algorithm itself were sensitive to some aspect of the structure, or that there were a 'construction' where this special phonology is stated.) On this approach, the speaker who utters (4a) has produced a sentence<sub>syntactic</sub>, a sentence<sub>semantic</sub>, and a sentence<sub>pragmatic</sub>.



(7) Rules

- a. Syntactic combinatoric rules: *should* [ \_ VP ] (equivalently,  $T' \rightarrow \textit{should VP}$ ), etc.
- b. Semantic combinatoric rules: ( $\beta$ -reduction /  $\lambda$ -conversion) If  $f$  is an expression of type  $\tau$  containing one or more instances of a free variable  $h$  of type  $\sigma$  and  $g$  is an expression of type  $\sigma$  and  $h$  is free for  $g$  in  $f$ , then  $\lambda h_\sigma[f_\tau](g_\sigma) \rightsquigarrow f_\tau^{g/h}$ .
- c. Phonological interpretation rules:  $\llbracket \textit{should} \rrbracket^P \rightsquigarrow /s\Delta d/, \llbracket X_E \rrbracket^P \rightsquigarrow \emptyset$ , etc.

A second possibility, which Stainton calls *ellipsis<sub>semantic</sub>*, posits no unpronounced syntactic structure at all. This view is compatible with complicating the mapping  $S \leftrightarrow_{sem} M$  in the appropriate way. One specific proposal along these lines is given in Culicover and Jackendoff 2005: they posit syntactic representations such as (8a) for examples like (4a), as part of their program for ‘Simpler Syntax’. This is simpler in the sense that there are no syntactic nodes that lack pronunciation. It is more complex, however, in that the subcategorization requirements of auxiliaries like *should* must be modified by some rule, presumably operating on the lexical entry of *should* to produce a new lexical item *should*<sup>VP</sup>, indicated in (8a). (Equivalently, the phrase-structure rules for expanding S or VP, which normally require that a clause contain a VP, could be suspended or altered. Their hypothesis is compatible with either route.) The semantic representations for the nonelliptical (4a) and elliptical (4b) would be equivalent, given in a standard notation in (8b).

- (8) a. 
- b. *should*(*collect*(*jill*,*butterflies*))

Culicover and Jackendoff 2005 use a slightly different semantic representation, called *conceptual structure* (CS) (see their work for details). Culicover 2008 uses a representation of CS which is similar to predicate logic formulae supplemented by thematic role annotations on the arguments of certain predicates. The usual mapping between a nonelliptical syntactic structure and its corresponding CS is given in the lower half of Figure 1. Each arrow represents a mapping rule, and it is clear that there is no necessary connection between the hierarchical structure in the semantics and that in the syntax; for this clause, four mapping rules are needed. The resulting rule system is

given in (9); they give a rule for Bare Argument Ellipsis (BAE), which I return to in much more detail below, not for VP-ellipsis, but the mechanism (so-called ‘Indirect Licensing’ plus pragmatic establishment of the value for *f*) is presumably the same in both cases. (Their system is merely the most recent and well-worked-out of a range of similar proposals; cf. Hardt 1993, Dalrymple et al. 1991, Ginzburg and Sag 2000, and Schlangen 2003.) On this approach, a sentence<sub>semantic</sub> is produced without a correspondingly complete sentence<sub>syntactic</sub>.

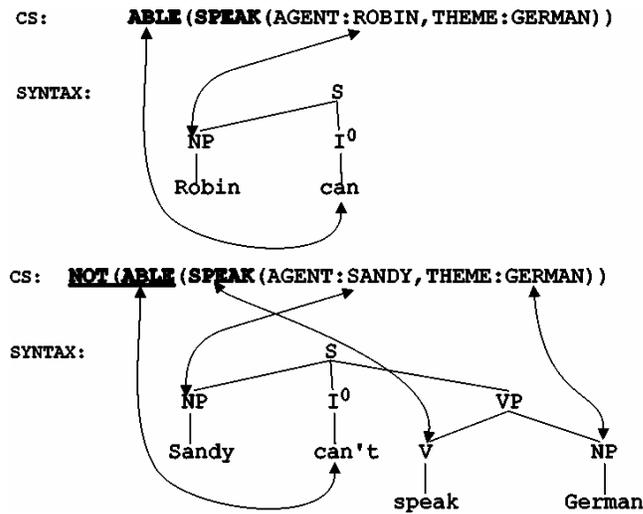


Figure 1. A ‘missing’ VP and its antecedent for Culicover and Jackendoff

(9) Rules

- a. Syntactic combinatoric rules:  $S \rightarrow NP I^0 (VP)$ , etc.  
*should* [  $\_ (VP)$  ], etc.

- b. Semantic combinatoric rules:

- i. **Argument/Modifier Rule**

CS:  $[F \dots X_i \dots] \Leftrightarrow_{default} \text{Syntax: } \{\dots, YP_i, \dots\}$

- ii. R1': If *X* is the meaning of the NP-daughter-of-S whose predicate meaning is PRED, then let  $\text{PRED}(\text{AGENT:}\_, \dots) = \text{PRED}(\text{AGENT:}X, \dots)$

- iii. **Bare Argument Ellipsis** (C&J 2005:265)  
 Syntax:  $[_U XP_i^{ORPH}]^{IL}$  Semantics:  $[f(X_i)]$
- iv. If  $f$  is an expression in  $CS_a$  and  $f$  cannot be determined from  $SYNTAX_a$  by application of Rules  $R_1 \dots R_n$ , then “ $f$  amounts to the presupposition of the antecedent, constructed by substituting variables for the [necessary elements] in the CS of the antecedent” (Culicover and Jackendoff 2005:276)
- c. Phonological interpretation rules:  $[\text{should}]^P \rightsquigarrow /j\Delta d/$ , etc.

Finally, one could imagine that the speaker who utters the sounds corresponding to *Jill should, too* has produced a defective syntactic structure and something with a non-type- $\langle t \rangle$  meaning (perhaps something of type  $\langle et, t \rangle$ ), and the hearer arrives at the assertion made and the proposition meant by means of a pragmatic process. On such an approach, only a sentence<sub>pragmatic</sub> is produced.

The picture that emerges can be conveniently viewed in the following diagram adapted from Stainton 2006:37; the various types of ellipses can be seen as operating at various levels or mappings.

- (10) a. Sound pattern ( $P$ )  $\Leftrightarrow_{phon}$  Syntax ( $S$ )  $\Leftrightarrow_{sem}$  Encoded content ( $M$ )  
 $\Leftrightarrow_{prag}$  Speech act content ( $A$ )
- b.  $P \Leftarrow_{ellipsis_{syntactic}} S \Leftarrow_{ellipsis_{semantic}} M \Leftarrow_{ellipsis_{pragmatic}} A$

Stainton’s project in his 2006 book and in a great many articles leading up to it is to defend the following premises:

- (11) Premise 1: Speakers genuinely can utter ordinary words and phrases in isolation, and thereby perform full-fledged speech acts.  
 Premise 2: If speakers genuinely can utter ordinary words and phrases in isolation, and thereby perform full-fledged speech acts, then such-and-such implications obtain. (Stainton 2006:3)

Premise 1 (P1) can also be stated in the terms introduced above:

- (12) “ordinary words and phrases, with the syntax of words and phrases, are not [always, JM] sentences<sub>syntactic</sub> or sentences<sub>semantic</sub>, but they are [sometimes, JM] nevertheless sentences<sub>pragmatic</sub>.” (Stainton 2006:32)

Stainton has set the bar very high for anyone who wishes to dispute him in his carefully argued and excellent (in many senses—methodological, exegetical, analytical, and empirical) book. Here I wish mostly to concentrate on the data he adduces to establish P1 and his discussion of it and of the various responses to it. The reason he is so persuasive in his claiming of P1 is exactly because of the wide range of data he considers, the kinds of sophisticated views he has of it, and of the ecumenical nature of the data sources he brings to bear on the question.

He is primarily interested in three sets of cases (all examples except the ones from Mason's novel are from Stainton 2006 in various places, occasionally slightly modified; a convenient listing of them can be found on p. 83), depending on what kind of phrase gets pronounced.

The first group consists of the pronunciation of sounds corresponding to predicates which denote properties. (Stainton is admirably careful about his phrasing of these things, which I'll try to emulate, though I may fall into sloppy ways at times when the details shouldn't matter.)

(13) Properties applied to a manifest object

- a. Sanjay and Silvia are loading up a van. Silvia is looking for a missing table leg. Sanjay says, 'On the stoop.'
- b. Anita and Sheryl are at the cottage, looking out over the lake. Watching a boat go by, Anita says, 'Moving pretty fast!'
- c. Jack holds up a letter and says, 'From Spain!'
- d. A car dealer points at a car and says, 'Driven exactly 10,000km.'
- e. On a bottle of cold medicine: 'Recommended for ages 6 and older.'
- f. She looked up at Nok Lek, who watched the forest nervously. "I told you, one of Anthony Carroll's best men." (Daniel Mason, *The piano tuner*, Vintage: New York, 2002, p. 159)

In this first case, consider (13a). In it, Stainton claims (and I concur) that Sanjay can be taken as having asserted of the table leg a *de re* proposition, namely that it, the table leg, is on the stoop. The criterion used for judging whether an assertion of a proposition has occurred is whether or not we have an intuition that Sanjay can be right or wrong, whether the proposition expressed can be true or false, and hence whether or not Sanjay can lie. Here, Stainton rightly claims that we have the strong intuition that if Sanjay

knew that the table leg was not on the stoop, his utterance of (13a) would count as a lie. Stainton claims that Sanjay makes his assertion by virtue of the meaning of the phrase uttered, which has the syntax merely of a prepositional phrase PP, not embedded in further, unpronounced, syntactic structure, and has the meaning of a property of type  $\langle e, t \rangle$ . This property is semantically unsaturated, but needs an argument to be the content of an assertion. This argument is provided by the actual table leg, here *manifest* in Sperber and Wilson's 1986 sense (though not necessarily the object of direct perception), combined with the content of the uttered phrase. This 'combining' is by function-argument application not to items of particular types in the type-theoretic sense of (7b) above, but of mental representations (in Mentalese). These mental representations come about, in this case, through two different mechanisms: the representation of the property comes about through the decoding of the linguistic signal and is the output of the language faculty; the representation of the object comes about through other faculties of the mind, be they memory, vision, systems that regulate planning, goal-setting, understanding intentions of agents, etc.

The second subcase is that of the pronunciation of sounds corresponding to noun phrases which denote individuals, such as names and definite descriptions as in the following.

- (14) Individuals as arguments of a manifest property
- a. A woman is coming through a door, and a linguist turns to her friend and identifies the new arrival by saying, 'Barbara Partee.'
  - b. A girl is doling out jam and says, 'Chunks of strawberries.' Her mother nods and says, 'Rob's mom.'
  - c. After some weeks one summer of unusually cold weather in Manitoba (a part of Canada where the summers are usually warm), Alice, looking at the sky, says to Bruce (who has just returned from a trip to Spain), 'Nova Scotia.'
  - d. Edgar didn't have time to ask what this was, for at that instant, from behind the stage rose a plaintive wail. He caught his breath. It was the same tune he had heard that night when the steamer had stopped on the river. He had forgotten it until now. "The *ngo-gyin*, the song of mourning," said Nash-Burnham at his side. (Daniel Mason, *The piano tuner*, Vintage: New York, 2002, p. 140)

In these cases, the relevant property may be something like ‘(is) the identity of the person coming through the door’, ‘(is) the person responsible for there being chunks of strawberries in the jam’, or ‘(is) the song being heard’. These properties, in their Mentalese representations, are combined by function-argument application to the Mentalese representation which is generated by an understanding of the linguistic phrase used. The only difference with the previous subcase is that here the linguistic material supplies the argument, not the function.

The final subcase discussed at some length (for two other more marginal, but important cases, see section 5 below) comes from the pronunciation of sounds corresponding to noun phrases which denote quantifiers:

- (15) Quantifiers as arguments of a manifest property
- a. I’m at a linguistics meeting, talking with Andy. There are some empty seats around a table. I point at one and say, ‘An editor of *Natural Language Semantics*’. (p. 209)
  - b. At a bar: ‘Three pints of lager.’
  - c. He continued to walk, the children following at a distance. ... At the side of the road, a pair of men [who are Shan, and know no English, –JM] sat... One of the men pointed to the group of children and said something, and Edgar answered, “Yes, quite a lot of children,” and they both laughed although neither understood a word the other had said. (Daniel Mason, *The piano tuner*, Vintage: New York, 2002, p. 235)

As in the second subcase, the quantifier combines with a property supplied by nonlinguistic means, but as in the first subcase, the linguistic material supplies the functor (quantifiers being type  $\langle et, t \rangle$ ).

Before criticizing this account, let us take stock of its advantages. First, it has the virtue of simplicity. The pragmatic-inferential mechanisms are already in place, and they are merely put to a somewhat new use here. And the syntax and semantics of words and phrases seem to survive intact, with no unpronounced structures or hidden variables or type-shifters necessary.

Second, it plausibly decouples the act of assertion from particular linguistic types, claiming that assertions can be performed with semantic expressions of non-propositional (non- $\langle t \rangle$ ) types. To the extent that I understand what is meant in the technical sense of ‘assert’, I would agree that assertions can be made without declarative sentences<sub>syntactic</sub> being involved. In fact, they

can be made without linguistic material on the part of the asserter being employed at all. For example, imagine that someone asks me ‘How many children do you have?’. If I then hold up three fingers, what is communicated—and, I would think, asserted—is that I have three children, in this context. What is *said*, in Grice’s and others’ sense, however, is nothing. (The fact that ‘I have three children’ could be claimed to have been ‘said’ by theorists who use this term to mean ‘what is asserted, stated, or claimed’ (Stainton 2006:225) just seems to me to point up the unnecessary use of the verb ‘say’ for these other notions. Keeping them apart is necessary and useful.)

We can also imagine a severe Broca’s aphasic who has retained some ability to understand questions, but none at all to speak. Such an individual, nonetheless, may be able to answer questions in a nonverbal and presumably nonlinguistic way (that is, not merely by pointing to cards with English words on them). For example, if asked how many children he has, he can raise three fingers and thereby assert that he has three children (accordingly to my intuitions about what assertion is). Did he access some dormant and otherwise unusable part of his mind to formulate this answer in English, thinking of the proposition denoted by the English sentence<sub>syntactic</sub> *I have three children*, then applying ellipsis to all but *three*, then using this word as his guide to raise the equivalent (and, by the way, iconic) number of fingers? One might imagine this as a pathway, but it is less likely in the case of deaf children at the age of two who have not been exposed to any sign language (the ‘home-signers’ studied by Susan Goldin-Meadow and others) but who nonetheless perform age-nominal on conservation of number tasks and who communicate entirely nonverbally in a non-conventionalized code of their own devising. It seems ludicrous to me to claim that such individuals are incapable of assertion by virtue of their linguistic inabilities. Such examples show that assertion is an act *tout court*, not necessarily a *speech* act; this isn’t to deny that linguistic means can’t be brought to bear in performing this act—of course they are the prototypical cases we think of when we think of assertion.

This concession must come with a large caveat, however: it’s not clear to me that the basis of this debate rests on much more than different theorists’ interpretations of the word ‘assert’ and the kinds of things they’re willing to use it with—the attempted definitions of assertion on p. 214 and p. 215, from Dummett 1973, are roundly criticized (as being based too closely on declar-

ative sentences<sub>syntactic</sub><sup>2</sup>), but nothing is put in their place. So I simply don't know if I can agree that a speaker employing a bare utterance of 'Chunks of strawberries' *asserts* that the jam contains chunks of strawberries.

I certainly can't agree with Davidson 1979, who writes that 'It is easy to see that merely speaking a sentence in the strengthened mood cannot be counted on to result in an assertion; every joker, storyteller, and actor will immediately take advantage of the strengthened mood to simulate assertion' (quoted in Stainton 2006:217). In fact, it's easy to see that Davidson has missed the crucial point of the conventionalist element of assertion, namely that it can occur only in conventionally specified circumstances. Within these circumstances the assertion of an actor speaking the line, 'Jack is dead!' *does* assert, in the fictional circumstances of the play, that Jack is dead. The fact that this assertion fails to hold in the larger set of circumstances in which the fictional circumstances of the play take place is irrelevant: successful assertion is relativized to circumstances, just as successful acts of naming, handing down verdicts, marrying, and the like. Second, Davidson is simply wrong (or, to put it more mildly, using the word 'assert' in some way that I cannot) to suggest (1979:110, cited in Stainton loc.cit.) that someone who says 'Did you notice that Joan is wearing her purple hat again?' can assert that Joan is wearing her purple hat again. The speaker of such a sentence *presupposes* (by virtue of the factivity of *notice*) that Joan is wearing her purple hat again, but doesn't assert it, at least not as I am accustomed to using the word 'assert'. Again, I'm willing to ascribe these differences in opinions to different lexical semantics for this verb, but that just makes it all the more urgent for

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<sup>2</sup>Stainton expresses a worry that there is no way to identify declarative sentences<sub>syntactic</sub> but by their use in assertions, and rightly points out that if this were true, Dummett's definition would be circular. But this worry is misplaced: there is certainly a way to identify declaratives in terms of their form (the fact that these ways differ across languages is irrelevant). Declaratives, interrogatives, imperatives, and exclamatives are all different in their syntax and other features, and these sentence<sub>syntactic</sub> types are often marked with language-particular morphology as well. In English, imperatives use a special verb form, interrogatives have a fronted wh-phrase with subject-auxiliary inversion, a non-fronted wh-phrase, or just subject-auxiliary inversion, exclamatives have a subset of fronted wh-phrases without subject-auxiliary inversion, and declaratives are the rest (no wh-phrase, no auxiliary-initial subject-aux inversion, no special imperative morphology). And examples in other languages are abundant: interrogatives are marked in Japanese with clause-final *-ka* or *-no*, polar interrogatives in Albanian are marked with clause-initial *a*, declaratives in Hidatsa are marked by clause-final *-c*, etc. All such categorizations are based purely on language-internal alternations, just as the difference between the phonemes /t/ and /d/ in English is; the fact that we *name* this difference [+/- voice] is irrelevant, of course, just as the label 'declarative' is.

a definition to test our intuitions against which doesn't make use the word itself. Until such is forthcoming, we may just be talking past each other while agreeing on essentials. So if this expansive use of 'assert' is what is at issue, we don't need recourse to nonsententials to establish this point.

Stainton's real goal here is to show that at least 'moderate' contextualism is correct: to put it in terms most familiar to linguists, this is the claim that context (and pragmatics) determines at least part of what is *said* (or 'sentence meaning') in addition to what is *meant* (or 'speaker meaning'). This is a highly contentious claim, of course, with ongoing debates in the literature, and Stainton has succeeded in putting nonsententials and their properties at the front lines of this debate.

A fully successful account of the phenomenon needs two ingredients: first, to show that alternatives that deny P1 ('Speakers genuinely can utter ordinary words and phrases in isolation, and thereby perform full-fledged speech acts') are false, and second, to produce an analysis that captures the facts. Additionally, as Stanley 2000 points out, it is not enough merely to show that any given alternative cannot account for all the phenomena: it must be shown that the union of all alternatives cannot account for all relevant data. In what follows, I first examine critically Stainton's proposal as I understand it, then turn to the alternatives, and what it would take to resurrect them from Stainton's criticisms.

## 2. The 'representational-pragmatic' view

Recall Stainton's basic proposal, in general terms: a speaker produces a word or phrase whose content is combined with 'an appropriate "completing entity" ... to yield a proposition' (p. 156); this 'completing entity' is given by the context and it is 'never "translated into" natural language format' (loc.cit.). 'Interpreters grasp worldly objects, properties, and so on ... and combine these, by function-argument application, with the contents of the phrase uttered.' (p. 173). To see what this means, some examples are worked through in chapter 8, which presents the heart of the proposal (I return below to the third main example in that chapter, which has different properties).

The first example was given in (14c) above and is repeated here:

- (16) After some weeks one summer of unusually cold weather in Manitoba (a part of Canada where the summers are usually warm), Alice,

looking at the sky, says to Bruce (who has just returned from a trip to Spain), ‘Nova Scotia.’

Assuming that ‘Nova Scotia’ stands for an object, it must be the argument to a contextually arrived-at function, which is taken to be

something along the lines of THE WEATHER HERE IS SIMILAR TO   . The output of this function, given NOVA SCOTIA as argument, is the proposition that THE WEATHER HERE IS SIMILAR TO NOVA SCOTIA. This is what was asserted. (Stainton 2006:156)

The next example is that of a property applied to a manifest object:

[S]uppose the speaker produces the word ‘Reserved’, pointing at a chair. here, the thing uttered has a propositional function as its content. That is what language proper contributes. The context then provides, as argument to that function, the indicated chair. The hearer applies the function to the indicated chair, and arrives at a neo-Russellian proposition. That is the thing-asserted. (Stainton 2006:157)

Elsewhere, Stainton discusses the example given in (13d) above, repeated here, where he claims that a judge could throw out a contract if the car had in fact been driven 1,010,000km (with the odometer having turned over, a fact known only to the car dealer). This is because what is asserted is that the property holds of the manifest object (the car), which in this situation is a falsehood known to the car dealer.<sup>3</sup>

(17) A car dealer points at a car and says, ‘Driven exactly 10,000km.’

Stainton takes pains to separate his general claims, which could potentially be implemented in a number of ways, from his specific one, which involves positing Mentalese representations (indicated by capital letters) which can combine with each other via function application.

The basic problem with such a general account is overgeneration. It is unclear what the limits on ‘manifest’ objects and properties are, and so it’s unclear how to rein in the power of the proposed mechanisms. For example:

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<sup>3</sup>Note that we would be equally willing to call the car dealer a liar in this context if, in answer to a question like *How many thousands of kilometers has this car been driven?*, he holds up 10 fingers.

- (18) [Abby and Ben are on their balcony looking out over a parade of schoolchildren passing by in perfect marching rhythm. The children’s right hands are at their sides, not visible from the balcony (their left hands are visible, and empty). At the command of the bandleader, every child in synchrony raises their right hand above their head and is revealed to be holding a small flag with the school colors on it. Abby exclaims:] Wow!
- a. Every child has a flag!
  - b. #A flag!
  - c. #Every child has flags!
  - d. Flags!

The puzzle is why (18a) is possible in this situation but (18b) is not. The flip side of the puzzle is why (18c) is odd, but (18d) is not. In this situation, the property of being something that each child has one of (namely,  $\lambda \mathcal{Q}_{\langle et, t \rangle} [\forall x (child(x) \rightarrow \mathcal{Q}[\lambda y (have(y)(x))])]$ ) would seem to be manifest in the requisite sense, and so an utterance of (18b) should lead the hearer to be able to combine this contextually given property with the representation of  $\lambda P \exists z [flag(z) \wedge P(z)]$ —yet (18b) is odd. Stainton makes a suggestive remark about how to rein in the power of the system: ‘[w]hat is asserted when a sub-sentence is used communicatively ... is that proposition (and only that proposition) which results from *minimally* adding to the content of the bare phrase actually uttered’ (p. 161, emphasis added). The crucial part of this statement is the condition that a *minimal* addition be made. What does this mean? One reasonable way of taking it is in the sense of Asher et al. 2001, who compute contextual minimal common denominators for situations. One rough definition would be that a proposition  $p$  is minimal wrt all other propositions  $q$  in a contextually given set  $P$  if all  $q, q$  entails  $p$ . (The obvious problem with this definition is that fact that in an actual situation, many propositions may not stand in any entailment relation to one another.) In the example with flags, perhaps the minimal proposition would be something along the lines of *There are x*, where  $x = flags$ . If the minimal addition is merely the assertion of existence, then the oddity of the singular in (18b) is the same as the oddity of asserting in the same situation *There is a flag!* (it’s not false, it’s just massively underinformative and, well, an odd thing to say<sup>4</sup>).

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<sup>4</sup>This also points up why minimality defined in terms of entailment patterns won’t work: *There are flags* entails *There is a flag*, so the latter should pre-empt the former, on this notion

### 3. Ellipsis<sub>syntactic</sub>

One strategy to avoid the conclusion that P1 ('Speakers genuinely can utter ordinary words and phrases in isolation, and thereby perform full-fledged speech acts') is true would be to analyze some of the cases as involving syntactic ellipsis. The question would be just how would one implement a theory of ellipsis that would be consonant with other properties of elliptical structures and able to capture (at least some of) the data discussed above. The crucial data that are of interest here are all cases in which there is no linguistic antecedent in the discourse. These are exactly the most challenging to any attempt to extend an ellipsis<sub>syntactic</sub> account to these cases.

In order to see what would need to be done, it is instructive to review a case of ellipsis which could serve as a potential model, namely short answers to questions (as analyzed in Merchant 2004a; see also Arregui 2007 for similar arguments from Spanish and Basque; see Johnson 2001, 2004 for the case of VP-ellipsis).

#### 3.1. Short or 'fragment' answers

Short answers to questions have all the properties of fully declarative, propositional, assertoric utterances; in the following example, the speaker who utters (19b) as a response to the question in (19a) will be making a true statement in exactly the same conditions that one who utters (19c) does.

- (19) a. Mit wem hast du gesprochen?  
*with whom.DAT have you spoken*  
'With whom did you speak?'
- b. Mit Hans.  
*with Hans*
- c. Ich habe mit Hans gesprochen.  
*I have with Hans spoken*  
'I spoke with Hans.'

In German, unlike in English, short answers to questions whose *wh*-elements are governed by a preposition cannot omit repeating the preposition (in other

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of minimality).

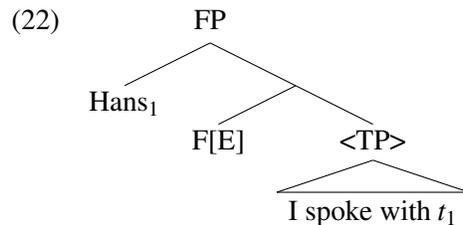
words, the short answer shows a grammatical ‘connection’ to the form of the question; in general such effects are known as connectivity effects):

- (20) a. Mit wem hast du gesprochen?  
*with whom.DAT have you spoken*  
 ‘With whom did you speak?’  
 b. \*Hans.  
*Hans*

This is because German, unlike English, does not permit preposition-stranding under leftwards movement:

- (21) a. \*Wem hast du mit gesprochen?  
*whom.DAT have you with spoken*  
 (lit.) ‘Who did you speak with?’  
 b. \*Hans habe ich mit gesprochen.  
*Hans have I with spoken*  
 (lit.) ‘Hans, I spoke with.’

The correlation between the obligatory presence of the preposition in (19b) and the necessity of pied-piping the preposition in overt movements such as in (21) is directly captured on the ellipsis account in Merchant 2004a, where it’s proposed that the short answer consists of a fragment which had undergone a kind of movement to a clause-peripheral position with concomitant ellipsis of the clausal node under the landing site of the fragment. The resulting sentence<sub>syntactic</sub> is given in (22), where F is a functional head which hosts the E(llipsis) feature which triggers nonpronunciation of its complement, here the clausal node TP.



For such cases, Stainton tends to agree (though he hedges a bit) that ellipsis is involved, writing ‘some of [this] data reinforce my standing view that direct answers to immediately prior interrogatives may well involve genuine syntactic ellipsis’ (2006:137, with similar remarks on p. 144 and in Stainton 1997).

It’s important to note that to date, no-one has even hinted at how to account for these facts without using a theory of preposition-stranding, and no-one has ever proposed a theory of preposition-stranding that distinguishes German from English on anything but morphosyntactic grounds. In other words, whether the grammar of a language makes available preposition-stranding is an irreducibly syntactic fact about the language, not a semantic one, or a pragmatic one. (Whether a speaker in a given context will choose to make use of P-stranding of course is dependent on nonsyntactic factors; but even factors that favor P-stranding will be powerless in a language like German.) There is a language-internal effect of connectivity between the grammatical form of the short answer and some aspect of the form of the question.

Another striking connectivity effect in short answers involves voice: whatever voice is used by the questioner must underlie the answer, determining the form of the short answer. In German, this can be seen in both directions (passive voice in the question, active in the answer and vice versa); in English, in only one direction.

(23) Voice connectivity in short answers

a. English

Q: Who is sending you to Iraq? A: \*By Bush.

b. German

i. Q: Wer hat den Jungen untersucht? A: \* Von einer  
*who.NOM has the boy examined? by a*  
Psychologin.  
*psychologist*

Q: ‘Who examined the boy? A: [intended:] ‘(He was examined) by a psychologist.’

ii. Q: Von wem wurde der Junge untersucht? A: \* Eine  
*by who.DAT was the boy examined a*  
Psychologin.  
*psychologist.NOM*

Q: ‘Who was the boy examined by?’ A: [intended:] ‘A psy-

chologist (examined him).'

It is crucial to note that these effects emerge only when ellipsis is involved, and are not due to more general conditions on felicitous answers or discourse coherence, as the following control cases demonstrate.

(24) No voice connectivity in nonelliptical answers

a. English

Q: Who is sending you to Iraq? A: I'm being sent by Bush.

b. German

i. Q: Wer hat den Jungen untersucht? A: Er wurde von  
*who.NOM has the boy examined? he was by*  
einer Psychologin untersucht.  
*a psychologist examined*

Q: 'Who examined the boy?' A: 'He was examined by a psychologist.'

ii. Q: Von wem wurde der Junge untersucht? A: Eine  
*by who.DAT was the boy examined a*  
Psychologin hat ihn untersucht.  
*psychologist.NOM examined him*

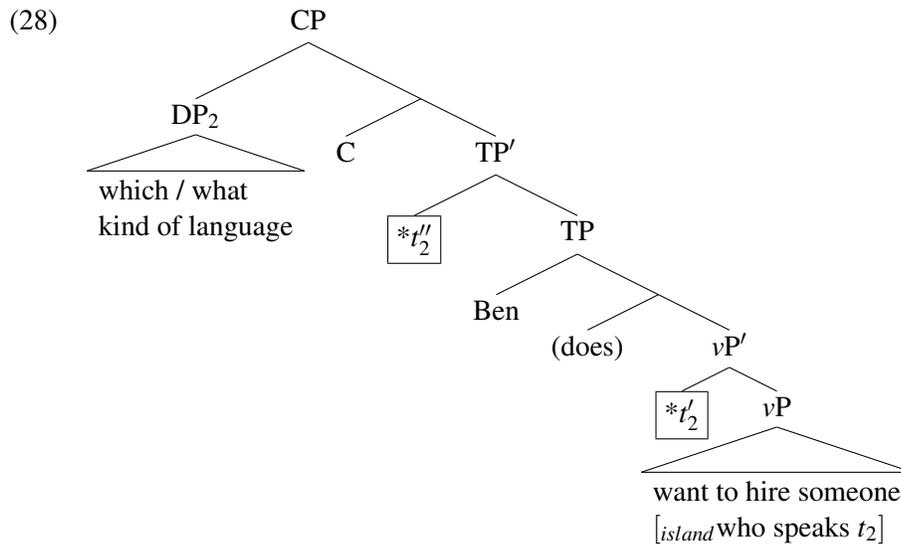
Q: 'Who was the boy examined by?' A: 'A psychologist examined him.'

Such connectivity effects form the best argument that there is syntactic ellipsis involved in fragment answers, and that the unpronounced syntax must be identical in some way to the syntax in the question asked. These effects tell strongly against approaches like Ginzburg and Sag's 2000 and Culicover and Jackendoff's 2005, which posit no syntax internal ellipsis sites at all (see Merchant 2008b for discussion). While this conclusion continues to appear to me to be inescapable, there remain certain issues with fragment answers that have to be addressed on this analysis as well.

The first and in my view most serious issue concerns the lack of island effects in certain contexts. Apparent movement sensitivities to islands are variable under ellipsis. So while (25) shows a standard island effect (namely illicit wh-extraction out of a relative clause), and this effect persists when VP-ellipsis is applied to the higher VP as in (27), it is famously absent in an equivalent sluicing case like (26) (see Merchant 2001 for discussion and

references). In Merchant 2008a I propose to capture this distinction by making reference to the variable amount of structure elided in the two cases: in sluicing, more, in VP-ellipsis, less. If the grammatical mechanisms that trigger island deviancies are encoded along the path of extraction (for example, through the use of illicit intermediate traces, here marked *\*t*), then ellipsis can variably eliminate these from representation that is pronounced. If a higher node is elided (as in sluicing), so will all *\*t*s be; while if a lower node is elided (as in VP-ellipsis), one of more *\*t*s will remain in the structure, triggering deviance. The structure in (28) illustrates these two possibilities.

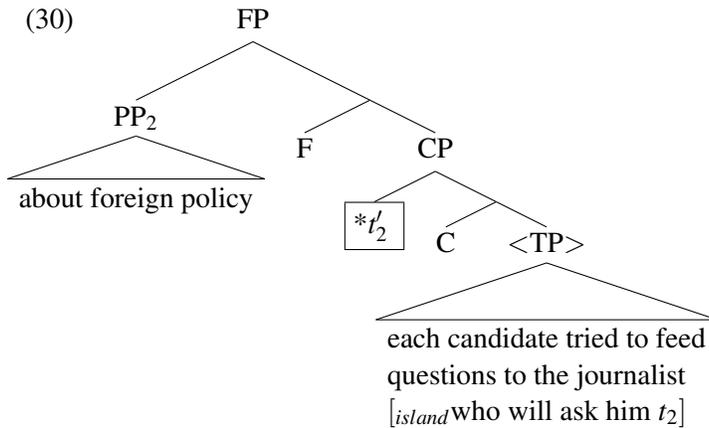
- (25) \* Ben wants to hire someone who speaks a Balkan language, but I don't remember which he wants to hire someone who speaks.
- (26) Ben wants to hire someone who speaks a Balkan language, but I don't remember which.
- (27) \* Abby wants to hire someone who speaks a Balkan language, but I don't remember what kind of language Ben does. (= <want to hire someone who speaks>)



This account can be extended to observed island effects in fragment answers, as in (29) by positing an unelided *\*t* in the final structure, as in (30).

- (29) a. A: Did each candidate<sub>1</sub> try to feed questions to the journalist who will ask him<sub>1</sub> *about abortion* (at the debate)?

- b. B: \*No, [about foreign policy].
- c. cf. B: No, each candidate<sub>1</sub> tried to feed questions to the journalist who will ask him<sub>1</sub> *about foreign policy*.



But the empirical picture appears to be less uniform than the data in Morgan 1973 and Merchant 2004a would indicate. Both Culicover and Jackendoff 2005:244ff. and Stainton 2006:138 produce examples which they judge acceptable. Culicover and Jackendoff's examples include (31a) and (32a), whose putative unelided counterparts (under the movement+deletion analysis) are given in (31b) and (32b) and are unacceptable.

- (31) Is Sviatoslav pro-communist or anti-communist these days?
  - a. —Pro.
  - b. \*Pro, Sviatoslav is [*t*-communist these days.]
- (32) A: John met a woman who speaks French.
  - a. B: And Bengali?
  - b. \*And Bengali, did John meet a woman who speaks French *t*?

For Culicover and Jackendoff, such 'fragments' (or 'Bare Argument Ellipsis') have no clausal syntactic source: instead, such items are generated directly by the syntax as 'orphans' whose properties (such as case, gender, etc.) are determined by an algorithm of 'indirect licensing' and whose meaning is given by the rule in (33b) subject to the algorithm in (33c), repeated from above:

- (33) Bare Argument Ellipsis
- a. Syntax: [<sub>U</sub> XP<sub>i</sub><sup>ORPH</sup>]<sup>IL</sup>
  - b. Semantics: [*f*(X<sub>i</sub>)]
  - c. If *f* is an expression in CS<sub>*a*</sub> and *f* cannot be determined from SYNTAX<sub>*a*</sub> by application of Rules R<sub>1</sub>...R<sub>*n*</sub>, then “*f* amounts to the presupposition of the antecedent, constructed by substituting variables for the [necessary elements] in the CS of the antecedent” (Culicover and Jackendoff 2005:276)

They show that ‘indirect licensing’ is useful for accounting for why an English speaker, pointing at a pair of scissors, will say, ‘Please hand me those’ with a semantically otiose plural demonstrative whose morphological plural form is determined by the fact that the English word ‘scissors’ is pluralia tantum. But they give no account of the form connectivity facts in (20) above (let alone connect such an account to the ill-formedness of (21)) or in (23). While I’m happy to admit that language-specific linguistic aspects of the objects in a context can influence choice of demonstrative (the alternative being that the demonstrative itself contains an instance of NP-ellipsis of *scissors*, as on Elbourne’s 2005 account), doing so does not make sense of the voice or P-stranding facts.<sup>5</sup>

In any event, a closer look at some of Culicover and Jackendoff’s data is in order. First, the fact that (31a) is acceptable seems irrelevant, given that (34) is also acceptable: under some circumstances, even bound prefixes can be used without their usual hosts. Whatever accounts for this fact will allow a maximal projection to be moved in (31a). Second, consider carefully the range of interpretations available to (32a); these are sketched in (35).

- (34) Sviatslav is anti-communist and Derzhinsky is pro-.
- (35)
- a. = Did John meet a woman who speaks French and Bengali?
  - b. = Does she speak French and Bengali?
  - c. = And does she speak Bengali (too)?
  - d. ≠ And did John also meet a different woman who speaks Bengali (in addition to meeting the woman who speaks French)?

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<sup>5</sup>And note that it’s unclear that Stainton would be too happy about their conclusion either, as it seems to require, even for discourse-initial uses, that speakers can make use of peculiarities of linguistic coding for ‘deep’ anaphora as well—Culicover and Jackendoff give examples with nonsemantic gender features in several languages as well. See section 5 below for more discussion.

The crucial thing to notice is that the reading given in (35d) is absent from B's 'fragment' utterance in (32a). On my account, this is because to generate this reading would normally require raising *Bengali* out of the relative clause headed by the existential quantifier (in order to introduce another woman). The mutually equivalent readings in (35a-c) are straightforwardly derived not by extraction out of an island, but by extraction out of a simple clause whose subject (e.g. *she* as in (35c) is assigned the same value as the woman who speaks French (see Merchant 2001:ch. 5 for extensive discussion of such E-type readings under sluicing). Culicover and Jackendoff have no obvious explanation for this pattern of judgments, since their account builds on the intuition that the value of *f* in indirect licensing contexts follows the same route that gives us interpretations for idioms like the following:

- (36) a. And what about Bengali?  
 b. And how about Bengali?

In (36), the interpretation of *what/how about X?* does seem to allow a wider range of possibilities, including, crucially but damningly, a reading like that in (35d). So their proposal, while perhaps appropriate for examples like (36), overgenerates if applied to (32a).

Stainton 2006:138 provides more challenging examples, namely the following (though he doesn't try to address the difference between these examples and the island-sensitive ones like (29) and (32a), I will below):

- (37) Q: The Pope likes beer and what?  
 A: Tomato juice.  
 (38) Q: The Pope sleeps on a hard what in the story?  
 A: Bed.

Short answers to sluicing also void islands:<sup>6</sup>

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<sup>6</sup>To these we can add examples like the following (the first is odd for some speakers; note that in this case, the names *Waxheimer* and *Waxburger* have initial stress in their normal pronunciations, so the extraordinary penultimate stress in (i) is due entirely to the contrastive focus, and overrides the lexical stress):

- (i) Q: Did she say he was going to marry Marsha WaxHEIMer or WaxBURGER?  
 A: HEIMer. (Cf. # HEIM.)  
 (ii) Q: Do you pronounce it Can[kun] or Can[kʌn]? A: kun.

Note that these examples are not merely a speaker practicing his pronunciation or the like. The first involves focus on a subpart of a word (see Artstein 2004 for a semantics for these),

- (39) A: They want to hire someone who speaks a Balkan language.  
B: Really? Which one?  
A: Albanian.

In this latter example, what is voiding the island-violating movement of the fragment is apparently the fact that the question itself involves island-violating wh-movement. One way to implement this would be to encode this difference in the ellipsis in the fragment answer in some way, allowing for deletion of the higher, CP, node just in case the antecedent involved sluicing (making it sensitive to the fact that an E feature was present in the antecedent, in other words). A less mechanical solution would be to follow Fox and Lasnik's 2003 analysis of variable island effects: they claim that island-violating sluicing involves long wh-movement without intermediate traces, and that this is licensed just in case the correlate is an indefinite bound by a choice-function existential closure operator (meaning there are no intermediate traces of QR in the antecedent), satisfying a structural parallelism requirement. For (39), this would mean that *Albanian* could move in one-fell-swoop, violating islands, but only if the antecedent to the ellipsis still satisfies parallelism—and this will only be possible if the antecedent contains island-violating wh-movement itself, as in sluicing. (But see Agüero-Bautista 2007 for important complications in this latter picture.)

If the example in (39) is indicative of what is going on in the Pope examples, then we have to posit that such 'quizmaster' questions (like the 'reprise' questions of Ginzburg and Sag 2000, sometimes called 'echo' questions) can involve covert long movement. Such a conclusion makes most sense on a theory of islandhood which takes it to be primarily a consequence of PF considerations. (Other locality effects of covert movement, such as those found for scoping in QR and for multiple questions as in Dayal 2002, must have another source: they are not merely sensitive to islands, but to stricter locality conditions, in fact.)

The truth is that none of this matters too much for Stainton. He's interested in antecedentless cases, not short answers. The main point of this discussion is to show how a particular theory of ellipsis<sub>syntactic</sub> can be implemented. It

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and the second of an aspect of the linguistic form itself. These examples might be the best candidates for a 'replacive' or 'completive' construction with the properties Stainton seeks. Its use in these contexts would be licensed by the fact that the fragment answer could not have been moved in the regular construction. This seems like the only way to block this construction from overapplying and voiding all sorts of connectivity effects.

is the possible extension of this implementation to Stainton's cases that is of most interest next.

### 3.2. The limits of the 'limited ellipsis<sub>syntactic</sub>' strategy

#### 3.2.1. <That's> X and labels

A syntactic ellipsis analysis could be given of some antecedentless subsentences if one is allowed to elide syntactic structure in certain circumstances with no linguistic antecedent. Merchant 2004a proposes such a 'limited ellipsis' strategy for some examples, claiming that an expletive, deictic, or demonstrative subject (*there/it, he/she/it, this/these/that/those*) and an appropriate form of the verb *be* (appropriate in person, number, aspect, and tense) can be elided if a referent for the deictic or demonstrative is salient enough to resolve it (in other words, in the same circumstances that such elements can be used without linguistic antecedents, period). Representative proposed structures are the following, before movement of the remnant and with the unpronounced material in angled brackets.

- (40) Properties applied to a manifest object
  - a. <It's> On the stoop.
  - b. <That's> Moving pretty fast!
  - c. <It's> From Spain!
  - d. <It's been> Driven exactly 10,000km.
  - e. <It's> Recommended for ages 6 and older.
  - f. <He's> one of Anthony Carroll's best men.
- (41) Individuals as arguments of a manifest property
  - a. <That's> Barbara Partee.
  - b. <It's> Rob's mom.
  - c. <It's> Nova Scotia.
  - d. <It's> The *ngo-gyin*, the song of mourning.

Compare these to uses of the copula with a demonstrative subject like the following:

- (42) That's Max (all right, all over again, for sure, for you).

Such a phrase does not indicate identity, but rather that something in the present context has raised Max to a high degree of salience. (Such an example could be used on seeing walls painted with Max's typical style, a messy bedroom, an extremely neat bookshelf, a special smell, or almost anything thing else that would make Max salient to the speaker.)

Recall next the minimality condition proposed by Stainton to rein in over-generation, discussed on p. 15 above. The difficulty with this absolutely necessary minimality condition is that it brings Stainton's account dangerously close to mine, making it look almost indistinguishable. If the minimal proposition that can be gotten with a property *P* is that *P* is instantiated in some salient object, then it's awfully close to saying that we end up with the equivalent to *<That/It is> P* as in (40).

One possible difference is with respect to individuals. When 'Barbara Partee' is uttered as in (14a) above, I claimed that the sentence<sub>syntactic</sub> that was actually produced was *That is Barbara Partee*, but with *That is* elided, as in (41a). There are good reasons not to think this is a predicative use of the name, but rather an identity statement (or 'specificational', in the common terminology; see Mikkelsen 2005 for an extensive recent treatment). On my account, as long as the reference for *that* can be recovered, ellipsis is possible. For Stainton's account, the question is whether this is the minimal proposition developable. One serious competitor for minimal status would be an existential predicate applied to the individual: *Barbara Partee exists*. But this doesn't seem to be a good parse of (14a). So in this case, the conventional ellipsis of *That is* does a better job of accounting for our intuitions about this example than the grasping of the minimal manifest property and application of it to Barbara Partee.

The major apparent syntactic advantage of this line of analysis is that it straightforwardly accounts for the presence of the nominative case on nominal expressions in case-marking languages. In Greek or German equivalents to (41), we would find only the nominative. If case assignment is effected by an asymmetric agreement relation between the NP (which by hypothesis lacks a case value inherently) and some case assigner (for nominative, typically taken to be the head of the clause itself, T), then T must be present to assign nominative.

The difficulty with taking this line of reasoning at face value is that nominative<sup>7</sup> case is also the case used for all kinds of labeling, from street signs, traffic signs, book and movie titles, store names, product names, etc. In all such cases, the nominative must be available extra-sententially (presumably by virtue of being in such a ‘label’ environment or construction) and there is therefore little deep reason to insist on T as the only source of nominative. (Note that I am not claiming that nominative is a ‘default’ case in these languages: allowing for ‘default’ case assignment would void all Case Filter violations, and make incorrect predictions in structures with resumptive pronouns as well; see Merchant 2004b, to appear for discussion.)

In any event, the above approach, whatever its merits, is difficult to extend to the following examples.

- (43) Quantifiers as arguments of a manifest property
- a. An editor of *Linguistics and Philosophy*
  - b. Three pints of lager.
  - c. <There/they are> quite a lot of children.

While the ‘limited ellipsis’ analysis gives a reasonable paraphrase for (43c), it is less felicitous with (43a,b): <That’s> *an editor of Linguistics and Philosophy* and <That’s> *three pints of lager*. The latter example is a special subcase I return to in detail in section 5. The problem with the first example is that there is nothing in the context (besides the chair) that could easily be construed as providing a referent for a deictic or demonstrative. The intended assertion, according to Stainton, is something like THIS CHAIR IS FOR [an editor of *Linguistics and Philosophy*]. The problem is fully general: if I am instructing you where to put namecards at a wedding dinner beforehand, I can look at the seating chart, walk around the table and point at successive empty chairs, saying ‘Sam’s mom’, ‘The bride’s best friend’, ‘Laura Skottegaard’, ‘Some random guy Susan is bringing as her date’, etc. and thereby assert that each of the indicated chairs is intended for the named or described person. Such a content is hardly available to equivalent uses of ‘That’s Sam’s

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<sup>7</sup>While I am concentrating on the nominative as found in typical analytic case system languages like those in western Europe, I mean all these remarks about the ‘nominative’ to apply to the least marked case in a given language. In analytic nominative/accusative languages such as Japanese or Korean, an entirely caseless form is the least marked, and is used for labels. In ergative/absolutive languages like Basque, it is the absolutive that appears. See Merchant 2006 for discussion of split languages: I expect that in split languages, the absolutive will be used in the labeling function as well (as it is in Hindi/Urdu, for example, and Georgian).

mom', 'That's the bride's best friend', etc. Instead, I would appeal here to the labeling function: there is some construction in which a situational deixis can be linked to a nominative DP 'label', where the label can be the name of the object so labeled or stand in some pragmatic relation to it (as in 'I-94 Minneapolis/St. Paul' on an interstate highway sign—this sign appearing outside Madison merely indicates that the so-labeled road goes to Minneapolis/St. Paul, of course).

Is this enough to establish Stainton's desired point? It all depends on whether we take the utterance of (43a) to assert that THIS CHAIR IS FOR [an editor of *Linguistics and Philosophy*], or whether this content is merely implicated (perhaps conventionally) as part of the meaning of the labeling-function (assuming the latter is in play here as well). Such considerations apply also to most of the examples in (41). Is the act of labeling something an assertion in the desired sense? If it is, then the debate is over, for me, at least—I have no reason to think that every label has a TP structure subject to elision. (Though even if this debate ends here, the hard work of sorting out the linguistic facts continues). If not, it's not clear just what the debate is about: if I label something conventionally (such as by putting a title on my paper, or wearing a nametag, or pointing at myself and saying 'Tarzan'), but knowingly mislabel, have I lied? What exactly is the difference between lying and misleading when applied to such cases? Imagine a criminal, Sam, who wants to rob a train and whose plan is to make the train engineer stop the train in a field by mounting a sign at the side of the railroad tracks:

(44) End of track

Imagine that in fact the track does not end near where Sam has placed the sign. Does the sign 'lie'? (Intuition says no: lies need intentional agents.) Has Sam thereby 'lied'? Certainly his intent was to mislead, and he used appropriate linguistic means to do this (posting the sign in Greek in Kansas would do little for his schemes). While we have clear intuitions that someone who says or writes an intentional falsehood has lied (committed libel or perjury, etc.), it's less clear that 'lying' applies to (44). This is one of the reasons that laws recognize degrees, and that there are different laws in different jurisdictions.

### 3.2.2. *Other syntactic questions*

Other technical questions arise for a syntactic ellipsis analysis. The first involves the inability of ‘fragments’ to be embedded (unlike for example VP-ellipsis and sluicing, which are not limited to matrix clauses):

- (45) Even though it is obviously true,
- a. no-one noticed that \*(it’s) on the stoop!
  - b. Jack didn’t exclaim that \*(it was) moving pretty fast!
  - c. few mail carriers recognized that \*(it is) from Spain!
  - d. she said that \*(he is) one of Anthony Carroll’s best men.
- (46)
- a. Jenny told us that \*(that is) Barbara Partee.
  - b. Anita hinted that \*(it was) Rob’s mom.
  - c. Katerina complained that \*(it was) Nova Scotia.

On a syntactic account, this fact would have to be captured by positing a feature dependence between the E trigger for ellipsis and the matrix clause, such as [Clause-type:Matrix], using the notation of Adger 2002. The question is whether it is independently plausible to believe that certain operations, rules, or items are restricted in just this way: as Stainton 2006:116 puts it, ‘if these posited expressions really do have sentential structures, they should embed in all sentential frames’. In fact there are many phenomena across languages that are limited in exactly this way, a fact that can be captured in a variety of ways (such as with a lexical featural mechanism, as Adger proposes), but whose existence is in no doubt. The asymmetry between matrix (or ‘root’) clauses and embedded ones traditionally goes under the rubric of the ‘Penthouse Principle’ (so named in Ross 1973; see de Haan 2001 for a recent discussion), whose generalization we can state informally but memorably as ‘the rules are different if you live on the top floor’. Examples of matrix-only phenomena are legion; I list here just a few.

- (47) Phenomena occurring only in matrix clauses
- a. German and Dutch verb second (Vikner 1995):  
Das Buch hat er gelesen.  
*the book has he read*  
‘He read the book.’
  - b. Hidatsa declarative clause marker *-c* (Boyle 2007):

puušíhke-š mašúka-š éekaa-c  
*cat-DET.DEF dog-DET.DEF see-DECL*

'The cat sees the dog.'

- c. Imperatives (in many, perhaps all, languages; Postdam 1998):

Ánikse tin porta! (Greek)  
*open.IMP.2s the door* 'Open the door!'

- d. Subject-auxiliary inversion in English questions (McCloskey 2006):

How many presents did he get? vs. \*How many presents he got?  
We were surprised at { \*how many presents did he get. | how many presents he got. }

- e. Albanian polar interrogative particle *a*:

A je ti të lodhur?  
*Q are you AGR tired*  
'Are you tired?'

- f. Greek dubitative interrogative particle *araje* (Giannakidou to appear):

Tha perasi araje tin eksetasi?  
*FUT pass.3s PRT the exam*  
'Will he pass the exam, I wonder?'

- g. English question-modifying 'so:':

So who came?  
I wonder (\*so) who came?

- h. English tag-questions:

He'll pass, won't he?  
I wonder if he'll pass (\*won't he).

It is at best unclear whether the idiosyncratic syntactic restrictions that the analysis of such phenomena require are the kind that would be naturally extended to capturing the matrix-only nature of fragments. Since there is to my knowledge no overall understanding of what, if any, commonalities such phenomena have, there is no good way to know whether the 'fragment' restriction falls into a natural class with them.<sup>8</sup>

<sup>8</sup>Particularly interesting in this regard is the case of imperatives, which have no good semantic reason for not being embeddable under predicates like 'command' or 'order' (and in some languages—Spanish, Greek, etc.—imperatives can't even be embedded under negation). Most analyses of imperatives take the problem to be one of the morphosyntax; an approach

The second major technical question involves the movement involved. Recall that the movement was entirely motivated by the theory-internal decision to elide only constituents (on a par with VP-ellipsis and sluicing)—maintaining this claim necessitated moving the remnant to a clause-external position so that what remained could be elided as a phrase. The difficulty here comes from mismatches between the kinds of leftward movements seen in nonelliptical structures and the ones needed to make this account work. The asymmetry can be seen in the oddity of the following examples compared to their putatively elliptical descendants in (40) and (41).

- (48) a. On the stoop it is!  
b. Moving pretty fast that is!  
c. From Spain it is!  
d. Driven exactly 10,000km it's been.  
e. Recommended for ages 6 and older it is.  
f. One of Anthony Carroll's best men he is.
- (49) a. Barbara Partee that is.  
b. Rob's mom it is.  
c. Nova Scotia it is.  
d. The *ngo-gyin*, the song of mourning it is.

Stainton correctly points out that these sound like 'Yoda-speak' (p. 141). One response to this objection would simply be to drop the requirement that only constituents be elided: all we'd need is a different implementation of the syntax-semantics interface requirements for ellipsis. (Though Stainton rightly objects that this would make the putative ellipsis less like better understood elliptical phenomena; the question is of course how serious we would like to take this nonparallelism—one can point to other 'elliptical' phenomena such as gapping and possibly Right Node Raising which have very different properties from sluicing and VP-ellipsis.) A second response would be to deny the relevance of the status of the above moved examples to (40) and (41) at all: after all, the argument could run, there are lots of differences in acceptability between apparently optional versions of the same structures (#*There are some*

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that might link the 'fragments' restriction with that on imperatives might seek an answer in their illocutionary force instead, in particular in its syntactic realization (see for example Speas and Tenny 2003).

*men tall* vs. *Some men are tall*; *I saw the book* vs. *?The book was seen by me*, etc.). In the area of ellipsis, in fact, it has been claimed that some movements necessarily feed ellipsis. This claim is best known applied to pseudogapping (see Lasnik 1999, Merchant 2008a), where the remnant movement must co-occur with VP-ellipsis, but it has also been claimed for the obligatory presence of VP-ellipsis in subject-aux-inverted comparatives (Merchant 2003, but see Culicover and Winkler 2007 for a more refined picture).<sup>9</sup>

### 3.2.3. Final problems with syntactic ellipsis

Even if all the above is correct, and one wishes to accept that there is syntactic ellipsis for the above cases, there remains a subset of examples that are problematic (I set aside the ‘ordering’ examples until section 5). The first problematic example is the following, adapted from Stainton 2006:107:

Hans and Franz are playing a boring game one day in which each person takes turns naming an object which reminds him of a particular person. Their conversation consists of sentences such as

- (50) Die Lampe erinnert mich an meinen Onkel Wolfram.  
*the lamp.NOM reminds me on my.ACC uncle Wolfram*  
 ‘The lamp reminds me of my uncle Wolfram.’

They go their separate ways and a few days later, Hans is sitting in a bar when Franz walks in the door. Hans points at a nearby beer-stained old wooden table and says,

- (51) Mein Vater!  
*my.NOM father* (‘My father!’)

In the same context, it would be odd to say either (52a) or (52b):

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<sup>9</sup>Stainton 2006:140 also mentions the utterance of ‘Moronic jerk!’ at a passing motorist as unassimilable to \**<That’s> moronic jerk*, given the lack of an article. I think that the key to understanding such examples is to realize that they occur in a ‘calling’ function (as Stainton mentions in his fn. 17 on p. 140), which requires the vocative case in many languages. As usual, Greek is particularly illuminating, since it always requires a definite article with names used as arguments, but disallows an article when the name is used in the vocative (and it shows a morphological difference): to call to Alexandros, one says, *Alexandre!* (vocative), not *o Alexandros* (nominative); to call someone a jerk, one says, *Vre iliθie!* (*vre* = vocative particle indicating impatience) where *iliθie* is in the vocative, not the nominative *iliθios*.

- (52) a. Das ist mein Vater!  
*that is my.NOM father*  
 ‘That is my father!’
- b. Meinen Vater!  
*my.ACC father*  
 ‘My father!’

Stainton raises this example as a failure of connectivity, since in German, the object of the preposition *an* which is required by the verb *erinnern* (‘re-  
 mind’) must appear in the accusative case. Nonetheless, (52b) is impossible  
 in this situation: instead, we find the nominative as in (51). Stainton posits  
 that what can be asserted by (51) in this context is that same as what (53)  
 would assert in this context (or more strictly speaking, the speaker asserts  
 THAT REMINDS ME OF MY FATHER):

- (53) Das erinnert mich an meinen Vater.  
*that.NOM reminds me on my.ACC father*  
 ‘That reminds me of my father.’

Stainton points out that if the asserted content is generated by German  
 words corresponding to those appearing in (53), we would expect (52b) to  
 be fine, and (51) to be odd. I agree that this example is challenging for the  
 syntactic ellipsis account, but not for the reason stated. The limited syntac-  
 tic ellipsis account does not suppose that the asserted content derives from  
 German words—syntactic connectivity effects are predicted only in short an-  
 swers and the like, where the ‘fragment’ is based on a structure with an acces-  
 sible linguistic antecedent. It is reasonable to suppose that such accessibility  
 to *linguistic* structure in the above game has eroded over the intervening days  
 (in fact, linguistic cues erode much more quickly than that, generally within  
 a clause or two, as the psycholinguistic literature explores; see Arregui et  
 al. 2006). So the puzzle is not that the accusative is unacceptable here (which  
 would also violate the ban on P-stranding in German); the puzzle is why the  
 nominative *can* be used, given the oddity of (52a).<sup>10</sup>

<sup>10</sup>My own investigations with German speakers has led me to believe that the empirical  
 situation is somewhat more complicated than this: for many speakers, (51) and (52a) have  
 approximately the same degree of felicity in the given situation (some report low felicity,  
 others higher, but with no intraspeaker variation). Obviously, for such speakers, there is no  
 problem to be addressed. But for the sake of the discussion, I concentrate on speakers that  
 share the judgments Stainton reports.

The problem is that in German, the demonstrative *das* appears to be less useable for abstract properties of individuals in copular sentences than *that* is in English, apparently. (Though *das* certainly has such property or situational uses in general, as the subject of verbs meaning ‘bother’, ‘surprise’ etc. and in similar nonsubject contexts as well.) Instead, what one would like is something more along the lines of the following:

- (54) Derjenige, der in der gegebenen Beziehung zu dem gerade  
*the.one who in the given relationship to the just*  
angedeuteten Tisch steht, ist mein Vater.  
*indicated table stands is my father*  
‘The one who stands in the given relationship to the just indicated  
table is my father.’

This example has the desired syntactic property of having *Mein Vater* in the nominative case, here as the subject in an inverted specificational copular clause. There is however no hope for a theory that would allow such a syntactic object to be deleted on the basis of the context, linguistic or otherwise. The example therefore stands as a datum that cannot be accounted for under the limited ellipsis account discussed above.

The second problematic example has the same basic difficulty: it simply fails to be equivalent in the given context to any possible reading of *That is X*.

- (55) A father is worried that his daughter will spill her chocolate milk. The glass is very full, and she is quite young, and prone to accident. He says, ‘Both hands!’

In this context, one cannot say, ‘That’s both hands!’ or ‘Those are both hands!’ and expect the child to understand this as a command to use both hands to hold her glass. Nor, as Stainton points out, does it help to think that there is an elided verb ‘use’ here—doing so is equivalent, he shows, to abandoning the *limited* syntactic ellipsis account for one that is unconstrained and ultimately untenable. For Stainton, the property needed here (namely USE) is given by the context, and *both hands* supplies its argument, but there is no syntactic or semantic representation of USE present.<sup>11</sup>

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<sup>11</sup>I merely note that in a language like Russian that has instrumental case, such an example appears necessarily in the instrumental, which is also the case assigned by the Russian verb

In sum, there are simply some examples that the syntactic ellipsis analysis cannot accommodate.

#### 3.2.4. Summary

The above discussion has shown that for almost every kind of example, some more or less plausible syntactic ellipsis story can be told. But at the end of the day, I feel like the boy with his thumb in the dike: the dike is going to keep springing leaks, and while I may not run out of theoretical thumbs, one can't help but feel tired trying to plug all the leaks. Theorists with more syntactic leanings than I have may feel this strategy is worth pursuing to more extremes than I do. I'm willing to concede that syntactic ellipsis is required only when connectivity effects are observed, and that this holds only in two subcases: first, when there is a linguistic antecedent as in short answers, and second, when there is a syntactic slot to be filled, as discussed in section 5 below. For the rest, including the many 'bare nominative' examples, a syntactic solution seems to me to be less attractive on the whole than the alternatives.

This means that the syntactic conclusions of Shopen 1972 and Barton 1990 cannot be escaped: 'bare' phrases must be generable on their own, with no local syntactic embedding of any kind. Once we accept this conclusion, we must begin to explore its consequences for the models of grammatical competence we construct (see the papers in Progovac et al. 2006 for several relevant proposals). The urgent task becomes what to make of the mechanisms for handling what otherwise look like syntactic dependencies, in form (case, number, gender, person, anaphoricity, aspectual marking, etc.). Only some, not all, of the cases of interest can even possibly be handled under a syntactic ellipsis analysis.

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*pol'zovat'sja* ('use'):

- |      |                    |                    |
|------|--------------------|--------------------|
| (i)  | <i>dvumja</i>      | <i>rukami!</i>     |
|      | <i>two.INSTR</i>   | <i>hands.INSTR</i> |
| (ii) | <i>*dve</i>        | <i>ruki!</i>       |
|      | <i>two.NOM/ACC</i> | <i>hand.GEN</i>    |

This may be a case where the case itself contributes some semantic restriction on the kinds of predicates it can be combined with; such a strategy fails in general for structural cases, however, and so can't be used to account for accusatives, as discussed in section 5.

#### 4. Ellipsis<sub>semantic</sub> as ‘slot-filling’

The question, then, given a *divisa et impera* strategy, is whether the remaining cases can be handled with a semantic ellipsis analysis. In this section, I concentrate in particular on the three main subcases: phrases that pick out individuals, properties, and quantifiers. There is a way of construing the semantics of such expressions which I believe is fully consonant with Stainton’s points about their interpretations in context, but which makes use solely of commonly assumed, independently posited, semantic combinatorics. The basic idea is to let the semantic value of these expressions (what they ‘say’) include a variable over the relevant kind of object, and to let this variable receive its value in the usual way, namely by an assignment function (or its equivalent in variable-free treatments) whose content is of course itself entirely determined by context in the Gricean pragmatic way.

The core of the debate seems to come down to whether Stainton is right when he writes that “what is asserted ... is fully propositional; but what is metaphysically determined by slot-filling and disambiguated expression-meaning is something less than propositional” (2006:228) and that ordinary words and phrases used in isolation “don’t have ‘slots’ that yield something propositional when they are used in context” (2006:158). Here I think that there is a reasonable reading of slot-filling under which the large majority of examples adduced can be handled as propositional after all.

By ‘slot-filling’, Stainton means the contextually determined values of items like indexicals and pronouns, as well as other elements whose semantic value is generally taken to be a variable. As usual, the paradigm case is that of a pronoun. An example like (56a) has the semantic value in (56b) (setting aside the number and gender contributions of *he*), which, under the variable assignment in (56c), has the truth conditions in (56d).

- (56) a. He<sub>2</sub> left.  
b.  $leave(x_2)$   
c.  $g = [ x_2 \mapsto \text{sam} ]$   
d.  $\llbracket leave(x_2) \rrbracket^g = 1$  iff Sam left

The case of pronouns is the simplest one, especially when these pick out individuals, type  $\langle e \rangle$ . On widespread conceptions of the semantic component of the grammar, such variables are put to a variety of uses. Consider the following expressions:

	expression	type
	a. <i>sick</i>	$\langle e, t \rangle$
(57)	b. <i>sick(john)</i>	$\langle t \rangle$
	c. <i>sick(x<sub>3</sub>)</i>	$\langle t \rangle$
	d. $\lambda x_3[sick(x_3)]$	$\langle e, t \rangle$

In (57a), we posit that a predicative expression like *sick* denotes the characteristic function of a set of individuals. When applied to an individual such as *john* in (57b), we have a proposition of type  $\langle t \rangle$ . This holds equally if the property is applied to a variable like  $x_3$  as in (57c): in this case, the truth of the proposition is evaluated relative to the value of  $x_3$  in the context-determined assignment function  $g$ . But crucially the expression itself is of the same type, namely  $\langle t \rangle$ , that (57b) is. Last, we can bind the variable with a  $\lambda$ -operator as in (57d), yielding again a characteristic function of a set. These expressions are interpreted in a model theory using a model  $M = \langle U, I \rangle$  and a denotation function.

The above represents a typical way of modeling meanings in a typed system, using standard definitions such as the following (from Bernardi 2002:16):

(58) DEFINITION [Typed  $\lambda$ -terms]. Let  $VAR_a$  be a countably infinite set of variables of type  $a$  and  $CON_a$  a collection of *constants* of type  $a$ . The set  $TERM_a$  of  $\lambda$ -terms of type  $a$  is defined by mutual recursion as the smallest set such that the following holds:

- i.  $VAR_a \subseteq TERM_a$
- ii.  $CON_a \subseteq TERM_a$
- iii.  $(\alpha(\beta)) \in TERM_a$  if  $\alpha \in TERM_{\langle a, b \rangle}$  and  $\beta \in TERM_b$ ,
- iv.  $\lambda x. \alpha \in TERM_{\langle a, b \rangle}$ , if  $x \in VAR_a$  and  $\alpha \in TERM_b$ .

A common practice in work in natural language semantics is to assign  $\lambda$ -terms as the translation of lexical items, such as the following.

- (59)
- a.  $\llbracket every \rrbracket = \lambda P_{et} \lambda Q_{et} [\forall x_e (P(x) \rightarrow Q(x))]$
  - b.  $\llbracket boy \rrbracket = \lambda x_e [boy(x)]$
  - c.  $\llbracket see \rrbracket = \lambda x_e \lambda y_e [see(x)(y)]$

But this use of the  $\lambda$ -operator is not a necessary one. Imagine instead that  $\lambda$ -abstraction occurs in the course of or as part of the semantic composition, not as stipulated in lexical entries. This is in fact a common view:

Carpenter 1997 for example uses a system that can apply variables and  $\lambda$  binders separately to terms, and systems like Heim and Kratzer’s 1998 introduce  $\lambda$ -binders as the result of certain movement operations. On this view, then,  $\lambda$ -abstraction occurs as necessary to enable semantic composition, but not otherwise. It is a possible precursor to function application (other systems are conceivable, of course: see Chung and Ladusaw 2004 for an explicit proposal for other semantic composition operations in addition to function application, and recall that Heim and Kratzer 1998 also use an operation of function ‘identification’ as well as application). The result of this view of the semantics is that predicates have a variable in them, but no  $\lambda$ -binder. When used in isolation, they will therefore have a free variable.

This is all that needs to be said to account for two of Stainton’s three main subcases. Stainton assumes that the semantic value of a phrase like *on the stoop* or *quite a lot of children*, used in isolation, will be either what the interpretation function  $I$  returns or an appropriate  $\lambda$ -translation: in either case, *on the stoop* will be  $\langle e, t \rangle$  (as in (57a,d) above) and *quite a lot of children* will be  $\langle et, t \rangle$ , as follows, for example (assuming for simplicity that the PP denotes a predicate and that *quite a lot*\* $_C$  is predicate true of plural individuals  $x$  iff the cardinality of  $x$  exceeds some contextually given amount  $C$ ):

- (60) a.  $\lambda x_2[on.the.stoop(x_2)]$   
 b.  $\lambda Q_{et}[\exists z[quite.a.lot^*_C(z) \wedge children(z) \wedge Q(z)]]$

And if introduction of variables—here  $x_3$  and  $P$ , with  $\beta$ -reduction—is an available option, conceived of as a rule such as in (61), then there is a further possibility, given in (62) below.

- (61) Type-shifting rule (Free variable introduction):  
 Let  $(\alpha(\beta)) \in TERM_a$  if  $\alpha \in TERM_{\langle a, b \rangle}$  and  $\beta \in VAR_b$
- (62) a.  $on.the.stoop(x_3)$   
 b.  $\exists z[quite.a.lot^*_C(z) \wedge children(z) \wedge P(z)]$

These expressions have free variables— $x_3$  and  $P$ : ‘slots’, in other words. What the values of these variables will be is determined by the assignment function. So Stainton is right that the pragmatics is crucial, and that our intuitions require that it be the context that determines what individual or property is used, but once we admit that the assignment function is responsible for ‘slot-filling’ of unbound variables, we already have in place the semantic mechanism needed.

One additional assumption is needed to account for the third major sub-case, that of individual-denoting phrases like *Barbara Partee*. For such expressions, we have to assume, with Partee and Rooth 1983, Jacobson 1999, Barker to appear, and many others, that an individual-denoting expression can lift into a generalized quantifier type (whether freely so or due to requirements of the context is immaterial: this seems necessary for the interpretation of conjunctions like *John and every woman*, etc.). Given this option, *Barbara Partee* can lift into the expression in (63a), to which variable introduction and  $\beta$ -reduction apply, yielding (63c).

- (63) a.  $\lambda P_{et}[P(\textit{partee})]$   
 b.  $\lambda P_{et}[P(\textit{partee})](Q_{et}) \rightsquigarrow$   
 c.  $Q(\textit{partee})$

(63c) is an expression of type  $\langle t \rangle$ , whose truth will be evaluated relative to what the assignment function gives for the value of the variable  $Q$ .

One might object that this is asking too much of the assignment function. But such complex semantic objects determined by the assignment function are not needed merely in the cases at hand. They are also required to account for the meaning of anaphoric elements like *that* and *it* and their null counterpart in the following kinds of examples:

- (64) a. Every patient<sub>1</sub> was told that he<sub>1</sub> was sick. But then most of them forgot it.  
 b. Most reservists<sub>2</sub> found out by mail that they<sub>2</sub> were being sent to Iraq and that pissed them<sub>2</sub> off.  
 c. Everyone<sub>3</sub> remembered to bring their<sub>3</sub> swimtrunks. No-one forgot.  
 d. Everyone<sub>4</sub> remembered that they<sub>4</sub> wanted to marry their<sub>4</sub> cousin. No-one forgot.

These have readings that are equivalent to the following.

- (65) a. Every patient<sub>1</sub> was told that he<sub>1</sub> was sick. But then [most of them]<sub>5</sub> forgot that they<sub>5</sub> were sick.  
 b. Most reservists<sub>2</sub> found out by mail that they<sub>2</sub> were being sent to Iraq and the fact that they<sub>2</sub> found out by mail pissed them<sub>2</sub> off.  
 c. Everyone<sub>3</sub> remembered to bring their<sub>3</sub> swimtrunks. No-one<sub>6</sub> forgot to bring their<sub>6</sub> swimtrunks.

- d. Everyone<sub>4</sub> remembered that they<sub>4</sub> wanted to marry their<sub>4</sub> cousin.  
No-one<sub>7</sub> forgot that they<sub>7</sub> wanted to marry their<sub>7</sub> cousin.

For these and similar cases, we seem to need the assignment function to be able to assign pronouns like *it* values like  $[x_5\_was\_sick]$ , allowing the variable  $x_5$  to be bound by a higher quantifier to capture the attested covariance with the quantificational elements. So it seems plausible that such objects in the semantic representation are available to the assignment function, and can therefore serve as possible values for higher-type variables in ‘slot-filling’.

Stainton anticipates something like this account in a paragraph on p. 185 (and also on p. 55), where he discusses the idea that Alice holding up a pen and saying ‘Red’ to Bruce can be translated as  $Red(x_3)$ , where, assuming an assignment function  $g$  where  $g(x_3) = the\ pen\ Alice\ held\ up$ ,  $Red(x_3)$  does express what Alice asserted. To this idea he writes that ‘it is absurd to suggest that the thought Alice got across is grasped via  $[Red(x_3)]$ , since Bruce, *qua* ordinary English speaker, could not have used the latter to understand the proposition—this being a made-up language.’ But this is precisely what’s at issue: on the claim pursued here, the English word *red* can have the semantic value  $red(x)$ , where the variable  $x$  can be bound or not. If free, the assignment function (whose values *are* determined by pragmatics) must yield a value.

On this approach, then, there really are more ‘slots’ to be filled: these slots, by design, cover exactly the same ground that Stainton’s three subcases cover. This is no accident: this account is quite close to previous versions, which differ however from this in introducing the variable as part of the ellipsis resolution algorithm (Dalrymple et al. 1991, Culicover and Jackendoff 2005). Here the variables are already there, as parts of the meaning of the items used. What their *values* are is determined by context, just as the actual content of the assignment function or accessibility relation is. So this has precisely the same effect as Stainton’s account in this way, since it is the pragmatics that does this. But it ‘semanticizes’ the variables in a familiar way. The difference between this account and Stainton’s is pretty tiny indeed: the only real difference is that by having the semantic ‘slots’ in the meaning (semantic value) of the phrase uttered, they can all be type  $\langle t \rangle$ , propositional. The pragmatics does its work in the same way it does in determining the denotations in a context of other kinds of variables, nothing more.

This proposal comes very close in spirit to that of Culicover and Jackendoff 2005; it differs in its implementation. For them, the variable over contextually specified meanings (which they posit is part of the semantic represen-

tation ‘Conceptual Structure’ of the utterance, as here and pace Stainton) is introduced by a special rule that is the grammatically specified interpretation rule for the Bare Argument Ellipsis construction. In the present view, on the other hand, no special or construction-specific rules are employed: only the regular semantic mechanisms independently needed.<sup>12</sup>

With the appropriate semantic analysis, then, it seems that no extraordinary appeal to pragmatics is necessary beyond what we already assume: namely that the assignment function is set by the context, not the semantics, but is used to determine the semantic value of an expression in a context. Having seen that there is at least one interpretation of ‘slot-filling’ which does seem to satisfy the requirements for reaching a proposition without the representational-pragmatic view Stainton proposes, we have slain most of the dragon, I think. Nevertheless, there still remains a small minority of left-over cases, which appear somewhat heterogeneous. The question then becomes whether, on the basis of at least one of these examples, Stainton’s conclusion can be established. It is to these, then, that I now turn at last.

## 5. Scripts, contexts, and syntactic ‘slots’

Every account needs to say something special about the following kind of data (from Merchant 2004a, and parallel to the *Three pints of lager* case in English above). In many languages, objects of certain verbs are marked with particular cases: in Greek, the object of most transitive verbs is accusative, and in Russian, the object of certain transitive verbs in certain circumstances appears in the genitive (in its ‘partitive’ use). This is in particular the case in

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<sup>12</sup>And unlike Culicover and Jackendoff, I emphatically do not intend for the present account to also apply to syntactic ellipsis structures. Doing so I believe overgenerates. If there is no syntax internal to an ellipsis site (and its meaning is the product of a special interpretation rule), there is no explanation for the ill-formedness of pseudogapping in (iii) on a reading where it’s synonymous with (ii) (compare the well-formed (i), and the nonelliptical (ii)):

- (i) Some met Susan, and others did Jessica.
- (ii) Some met a man who knows Susan, and others met a man who knows Jessica.
- (iii) \*Some met a man who knows Susan, and others did Jessica.

For Culicover and Jackendoff, there’s no particular reason why the meaning of the missing VP in the pseudogapped second clause of (iii) can’t be filled in to mean, on their rule for interpreting *f*, as *meet a man who knows*. This absence follows from a structural theory of pseudogapping and VP-ellipsis (see Merchant 2008a for references) on the assumption that *Jessica* has to move to a VP-external position, and in (iii), such movement would violate an island. See also Lasnik 2007 for further arguments against Culicover and Jackendoff 2005.

ordering food and drinks. In Greece or Russia, to order a coffee or water, one could say the following:

- (66) a. Ferte mu (enan) kafe (parakalo)! (Greek)  
*bring.IMP me a coffee.ACC please*  
'Bring me (a) coffee (please)!'

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

In exactly the same circumstances, a Greek or Russian speaker could just as well use the following:

- (67) a. (Enan) kafe (parakalo)! (Greek)  
*a coffee.ACC please*  
'(A) coffee (please)!'

b. Vody (požalujsta)! (Russian)  
*water.GEN please*  
'(Some) water (please)!'

The very real question in these cases is, where does the case come from? What determines that the speaker uses the accusative here in German, and the genitive in Russian? Whatever the vocabulary of Mentalese might look like, if it is to be plausible as a candidate for the language of thought independent of language, it is very unlikely to have anything like the partitive genitive in it. Instead, a plausible manifest property may be something like  $\lambda x$ [I WANT  $x$ ], as Stainton suggests on p. 157. Such properties in Mentalese do not contain the actual Russian verb *xoču* 'I want' or the like, however. But it is only such particular verbs that assign (or govern, or determine) this case in this context—without the actual verb, there's no obvious reason the speaker should choose the case she does, especially over the nominative, which is the case used in all the above instances of nonsentential assertion in these languages. Therefore, there is no way on Stainton's analysis to account for the accusative and partitive genitive in (67). What makes these contexts special is their formulaic, conventional character, in which particular *linguistic* elements are made manifest and license ellipsis. Exactly because they are limited in number and kind, learned explicitly (a competent foreign learner of Greek for example, who had never been in a Greek restaurant, may mistakenly use

the nominative here), and seem to reflect syntactic properties of particular lexical items in the languages, it seems most likely that this is an instance of syntactic ‘slot-filling’, where the ‘slot’ here is the item being ordered, and there is a context-dependent linguistic construction that employs the relevant verb with its case-assigning properties. Whether this verb has been uttered (though unpronounced) by a speaker is a different question—this is the question of whether such syntactic slot-filling is to be analyzed as ellipsis<sub>syntactic</sub>.

Two other such cases can also be mentioned briefly. The first comes from Dutch: in Dutch, when you answer a ringing phone, you pick it up and say ‘Met’ (lit. ‘with’) followed by your name. So I answer phones in Holland by saying, ‘Met Jason’. This is short for ‘U spreekt met Jason’ (‘You are speaking with Jason’). The preposition *met* is simply part of the conventionalized means of answering a phone, but the whole phrase contains a variable (over names) and is short for something else (which a pedantic or otherwise garrulous person is free to use as well). There’s no way to predict this behavior or interpretation on general principles, linguistic or otherwise. The second such case comes from Greek, where the names of addressees on envelopes appear in the accusative, not nominative, case; a letter to my father-in-law is labeled as in (68a), not (68b):

- (68) a. Dimitri Giannakidi (accusative)
- b. #Dimitris Giannakidis (nominative)

This is not because the accusative carries some inherent directional meaning (recipients and the like are marked with the genitive, in fact), but because there is a conventional ellipsis of the preposition *pros* ‘to’, which assigns the accusative. Again, this preposition could be written on the envelope as well, but need not be.

A final such example is the taxi example, which Stainton gives in (69a)<sup>13</sup>, and which is similar in its properties to the exophoric sluice in (69b) discussed by Ginzburg 1992 and Chung, Ladusaw, and McCloskey 1995.

- (69) a. Marco gets into a taxi and says, ‘To Segovia. To the jail.’
- b. A passenger gets into a cab and the driver turns and asks, ‘Where to?’

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<sup>13</sup>Stainton gives this example with the subject ‘Benigno’, but this is clearly a typo for ‘Marco’, since Benigno was in the jail and it was his friend the Argentinian journalist Marco who was going to visit him, as fans of Almodóvar will recall.

The main point I wish to make with respect to such examples is that their form, again, is determined entirely by linguistic elements in what Schank and Abelson 1977 called the ‘script’ of the situation. In following a script, the participants know and can anticipate the actions (including the utterances) of the others following the same script, and can plan accordingly (the notion of script was developed for artificial intelligence purposes, but is familiar from automated phone booking systems etc.). In such a context, certain particular linguistic phrases can be expected: they are ‘given’, though not by the immediate actually spoken linguistic precedents, but rather by mutual knowledge of the script being followed. If Marco stands in the middle of a square and shouts ‘To Segovia!’, we have a hard time construing his utterance (as hard as we try, it is difficult to construe this as an instruction that we take him to Segovia); the same phrase on entering a taxi is perfectly understandable. This is why, in exactly such constrained, scripted circumstances, we also find regular elliptical structures such as sluicing, as in (69b).<sup>14</sup> The sluicing case is illuminating, and raises the same set of questions: does it make sense to claim that there is syntactic ellipsis in such cases? If so, can it be determined exactly what it being elided, and why is such ‘surface’ anaphora (in Hankamer and Sag’s 1976 sense) licensed with no linguistic antecedent? If not, what *is* going on? The idea behind the use of the script is that there is a conventionally determined (syntactic) sentential expression which is used in some reduced form, but where the reduction is not licensed by regular grammatical mechanisms for (syntactic) ellipsis (such as E or its equivalent), but is more similar to just reading ‘prompts’ for lines to an actor. If both parties aren’t familiar with the script, the prompt will fail. No general mechanism is used in these cases, and that’s why they can and do have sensitivities to linguistic form: those forms found in the (linguistic part of the) script.

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<sup>14</sup>Note that while much rarer than their antecedentless VP-ellipsis cousins, antecedentless ‘bare’ wh-phrases as in sluices do seem occasionally to be found:

- (i) The real problem of the presidential succession is not who, but how.

Do such examples call entirely into question the idea that sluicing structures are syntactically elliptical, as Ginzburg claims they do? No. They simply show that even in English, wh-words can sometimes be used (or coerced) as indefinite restrictions on implicit definites, as they are regularly in many languages (Chinese, German, etc.: see Giannakidou and Cheng 2006). This can be seen clearly by the fact that (i) could equally well be expressed as (iia) or (iib):

- (ii) a. The real problem of the presidential succession is not the who, but the how.  
 b. The real problem of the presidential succession is not the person, but the manner.

Is this idea incoherent? Stainton claims that the notion of script is irrelevant since ‘surely it is the speaker, not her grammar, that determines which script is in play’ (p. *n*). But this is equally true for the choice of words themselves, and it is the grammatical features of particular words that can determine properties of even antecedentless anaphoric elements, such as those discussed by Culicover and Jackendoff 2005:261:

- (70) a. Viltu réttá mér hana? (Icelandic)  
*will.you hand me.DAT it.FEM.ACC*  
 ‘Will you hand me that?’ [pointing at a book = *bókina* (fem.acc)]
- b. Vy mogli by mne dat’ ètu? (Russian)  
*you could conditional me.DAT give.inf that.FEM.ACC*  
 ‘Could you give me that?’ [pointing toward a herring = *seljetku* (fem.acc)]

A similar effect can be seen in English when a choice can be made between two equivalent descriptions of the same object, whose linguistic coding however differs in grammatical number, as is the case with the pair (grammatically plural) *swim trunks* and (the grammatically singular) *swimsuit*. Culicover and Jackendoff 2005:262 fn. 20 point out that either of the following is possible:

- (71) a. That looks good on you.  
 b. Those look good on you.

All these data point to the fact that particular peculiarities of linguistic form can influence the form of an antecedentless anaphoric element. So even if the entirely ‘pragmatic’ story is correct, it appears that Mentalese (in which the speaker presumably formulates such thoughts) must have access to language-particular facts to choose the correct form. (Obviously, one may also simply take this as a reductio.) But if that’s the case, then that fact that the speaker ‘chooses’ a script to follow in a given situation, and has concomitant access to particulars of the linguistic forms of the elements in the script, is no more challenging for this view than the examples in (70) and (71) are.

Besides, no workable alternative seems available. Stainton discusses cases like (67) briefly on pp. 108-109, where he claims that ‘case marking *plays a semantic role*’ (emphasis his). Applied to (67a), he says that such an example ‘exhibits the accusative marking because of the content of the speech act’.

Working backwards, in other words, he wants to maintain the position that the content of the speech act consists in asserting a proposition, not doing something with some syntactic object. This forces him to conclude that the accusative case in Greek has some semantics, and is not merely a reflection of an object standing in a certain syntactic relation to a certain verb. Instead, the predicate or property that the verb denotes must be such that it can only combine with arguments whose denotations arise from NPs marked in a certain case. But this idea is well known to be false: structural cases, as they are called, in particular the nominative and accusative (and certain genitives in languages like Russian) cannot be assigned a consistent semantics. The most obvious semantics to assign is something like Nominative=Agent and Accusative=Theme, but this fails in passives, in which the semantics is the same but the case assignment reversed (*She saw him* = *He was seen by her*). So the claim that ‘this alternative story about case can explain the facts’ (p. 109) is wrong.<sup>15</sup>

If anything deserves the name ‘shorthand,’ it is probably such examples. But they are shorthand for particular syntactic configurations (‘constructions’ if you will), with language-specific properties that must be learned individually. They are not the result of general purpose mechanisms, which would in fact produce the wrong result here (namely nominative) and must be blocked by an elsewhere principle.

## 6. Ellipsis<sub>pragmatic</sub>

The third and last kind of ‘ellipsis’ that Stainton discusses in describing the lay of the land is ‘pragmatic ellipsis’. He is appropriately hesitant to use this phrase (p. 38), and its use is mostly for rhetorical balance: we have syntactic, semantic, and therefore also pragmatic ‘ellipses’. But Stainton makes quite clear that there is no sense of the word ‘ellipsis’ which applies in the pragmatics, so to speak: it only describes his own proposal by process of elimination, and doesn’t add any clarity. Just the opposite, in fact: the term denotes nothing at all, and I also have no use for it. To say that one of the cases of interest here is just ‘pragmatic ellipsis’ (whatever that might mean) is to con-

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<sup>15</sup>Worse, the only uses of apparently ‘free’ accusative (without obvious governor) in Greek (as in German and Russian) are in time expressions, indicating time at or during (for example, in *Imastan eki tin Kyriaki/oli tin proigumeni evdhomadha* (lit.) ‘We.were there the Sunday<sub>acc</sub>/all the last week<sub>acc</sub>’).

cede Stainton's point, and is not a coherent alternative to it.

## 7. Conclusions

The proposed semantic ellipsis account here shares, by design, both the strengths and weaknesses of Stainton's insightful discussions—the primary difference being in where the labor is situated. For the primary cases of interest, the predictions are identical; in other words, a 'slot-filling' approach with appropriate semantic objects seems to work just as well in precisely the same manner as Stainton's 'pragmatic-representational' account. By the same token, it inherits the weaknesses of the latter as well: questions about what kinds of elements or representations the assignment function really assigns to the values of variables (a variant on the internal-representations of Mentalese or something else?), and runs risks of overgeneration in the same cases (the 'flags' example). It seems to me, therefore, an empirical draw. At such a point, the predilections of the theorist are determinative: those who wish to maintain the Gricean division of labor between semantics and pragmatics will favor my account and presumably feel comfortable positing the requisite variables in the semantic representations, while those analysts who favor other accounts of meaning will opt for Stainton's approach.

For both accounts, there remains a matter of division of labor: for some data, a direct semantic ellipsis analysis applies to a 'bare' DP which appears in the unmarked nominative case by virtue of some sentence<sub>syntactic</sub>-independent mechanism of case determination, but for other data, we need access to a linguistic antecedent (overt, as in sluicing and fragment answers, or implicit, as in the syntactic slot-filling cases of section 5.) If both strategies are in principle available, how does one decide? What leads to the attested judgments, in other words? The experimental results are that speakers of e.g. German reject and do not produce the 'wrong' (nonaccusative) case on sluiced wh-phrases or fragment answers when they occur in contexts like the following:

- (72) a. Sie hat jemanden eingeladen, aber ich weiss nicht, {  
she has someone.ACC invited but I know not  
wen | \*wer }.  
who.ACC who.NOM  
'She invited someone, but I don't know who.'

- b. Q: Wen hat sie eingeladen? A: { Einen | \*Ein } Freund.  
*who.ACC has she invited a.ACC a.NOM friend*  
 Q: ‘Who did she invite?’ A: ‘A friend.’

But by the same token, there seems to have to be some way for their grammars to generate and accept (73) as well.

- (73) Mein Vater!  
*my.NOM father*  
 ‘My father!’

One possibility is to resurrect the notion of ‘sentence grammar’ vs. ‘discourse grammar’ (Williams 1977; see Fiengo and May 1994, Clifton and Frazier 2006 and others for recent variants). The ‘sentence grammar’ takes the narrow option of matching the antecedent, leading to the grammatical connectivity effects like case when there is an antecedent. As Culicover and Jackendoff 2005 point out, categorial features of linguistic expressions can sometimes be accessed by anaphoric devices in the absence of explicit linguistic mention of the objects denoted (as discussed in section 5 above).

I think the basic intuition is that when there is a parallel syntactic antecedent available, it must be used (leading to the case and voice effects discussed). When a script is available, its modes must be used. When none is available, then and only then can other mechanisms (for case assignment, etc.) be used, and then and only then is the semantic ellipsis device triggered.

This reasoning patterns after the ‘semantic economy’ story of Kennedy 2007, who proposes a principle of Interpretive Economy: ‘Maximize the contribution of the conventional meanings of the elements of a sentence to the computation of its truth conditions.’ If such a principle is extended to the present cases, it would be stated to require that one maximize the conventional aspects of a context, where ‘conventional’ includes linguistic antecedents.

In sum, I think that Stainton is right in his basic claims, and that theories of linguistic structure should take these data as explicanda, but I think there is a way of construing the semantic composition rules that permits his account to be accommodated in a semantic ellipsis approach.

## References

- Adger, David  
2002 *Core syntax*. Oxford University Press: Oxford.
- Agüero-Bautista, Calixto  
2007 Diagnosing cyclicity in sluicing. *Linguistic Inquiry* 38:413–444.
- Arregui, Ana, Charles Clifton, Jr., Lyn Frazier, and Keir Moulton  
2006 Processing elided verb phrases with flawed antecedents: The recycling hypothesis. *Journal of Memory and Language* 55:232–246.
- Arregui, Karlos  
2007 Ellipsis in split questions. Ms., University of Illinois at Urbana-Champaign.
- Artstein, Ron  
2004 Focus below the word level. *Natural Language Semantics* 12(1): 1–22.
- Asher, Nicholas, Daniel Hardt, and Joan Busquets  
2001 Discourse parallelism, ellipsis, and ambiguity. *Journal of Semantics* 18.1.
- Barker, Chris  
To appear Parasitic Scope. *Linguistics and Philosophy*.
- Barton, Ellen  
1990 *Nonsentential constituents*. John Benjamins: Amsterdam.
- Bernardi, Raffaella  
2002 *Reasoning with polarity in categorial type logic*. Doctoral dissertation, Utrecht University.
- Bloomfield, Leonard  
1914 Sentence and word. *Transactions of the American Philological Association* 45:65–75. (Reprinted in *A Leonard Bloomfield anthology* [abridged edition], Charles Hockett, ed., University of Chicago Press: Chicago, 1987, pp. 38–46.)
- Boyle, John  
2007 *Syntactic morphology in Hidatsa clause structure*. Doctoral dissertation, University of Chicago.
- Carpenter, Bob  
1997 *Type-logical semantics*. MIT Press: Cambridge, Mass.
- Chung, Sandra and William Ladusaw  
2004 *Restriction and saturation*. MIT Press: Cambridge, Mass.
- Chung, Sandra, William Ladusaw, and James McCloskey  
1995 Sluicing and Logical Form. *Natural Language Semantics* 3: 239–282.
- Culicover, Peter W.  
2008 *Natural language syntax*. Oxford University Press: Oxford.
- Culicover, Peter W. and Ray Jackendoff  
2005 *Simpler Syntax*. Oxford University Press: Oxford.
- Culicover, Peter W. and Susanne Winkler  
2007 English focus inversion constructions. Ms., The Ohio State University and Eberhard-Karls Universität Tübingen.
- Dalrymple, Mary, Stuart M. Shieber, and Fernando Pereira  
1991 Ellipsis and Higher-Order Unification. *Linguistics and Philosophy* 14:399–452.
- Davidson, Donald  
1979 Moods and performances. In A. Margalit (ed.), *Mind and language*. Oxford University Press: Oxford.

- Dayal, Veneeta  
 2002 Single-pair vs. multiple-pair answers: Wh in-situ and scope. *Linguistic Inquiry* 33.3:512-20.
- Dummett, Michael  
 1973 *Frege: Philosophy of language*. Harvard University Press: Cambridge, Mass.
- Elbourne, Paul D.  
 2005 *Situations and individuals*. MIT Press: Cambridge, Mass.
- Fox, Danny and Howard Lasnik  
 2003 Successive cyclic movement and island repair: The difference between sluicing and VP ellipsis. *Linguistic Inquiry* 34: 143–154.
- Fiengo, Robert and Robert May  
 1994 *Indices and identity*. MIT Press: Cambridge, Mass.
- Frazier, Lyn and Charles Clifton Jr.  
 2006 Ellipsis and discourse coherence. *Linguistics and Philosophy* 29:315–346.
- Giannakidou, Anastasia  
 To appear On the temporal properties of mood: The subjunctive revisited. *Lingua*.
- Giannakidou, Anastasia and Lisa Cheng  
 2006 (In)Definiteness, polarity, and the role of wh-morphology in free choice. *Journal of Semantics* 23:135–183.
- Ginzburg, Jonathan  
 1992 *Questions, queries, and facts: A semantics and pragmatics for interrogatives*. Doctoral dissertation, Stanford University.
- Ginzburg, Jonathan and Ivan Sag  
 2000 *Interrogative investigations*. Center for the Study of Language and Information: Stanford.
- de Haan, German  
 2001 More is going on upstairs than downstairs: Embedded root phenomena in West Frisian. *Journal of Comparative Germanic Linguistics* 4.1:3–38.
- Hankamer, Jorge and Ivan Sag  
 1976 Deep and surface anaphora. *Linguistic Inquiry* 7.3:391–428.
- Hardt, Daniel  
 1993 *Verb phrase ellipsis: Form, meaning, and processing*. PhD thesis, University of Pennsylvania. (Distributed as IRCS Report 93-23.)
- Heim, Irene and Angelika Kratzer.  
 1998 *Semantics in generative grammar*. Blackwell: London.
- Jacobson, Pauline  
 1999 Towards a variable free semantics. *Linguistics and Philosophy* 22: 117–184.
- Johnson, Kyle  
 2001 What VP-ellipsis can do, what it can't, but not why. In Mark Baltin and Chris Collins (eds.), *The handbook of contemporary syntactic theory*, 439-479. Blackwell: Malden, Mass.  
 2004 How to be quiet. Presented at the 40th annual meeting of the Chicago Linguistics Society. (To appear in the *Proceedings*. Chicago Linguistics Society: Chicago, Ill.)

- Kennedy, Christopher  
 2007 Vagueness and grammar: The semantics of relative and absolute gradable adjectives. *Linguistics and Philosophy* 30:1–45.
- Lasnik, Howard  
 1999 Pseudogapping puzzles. In *Fragments: Studies in ellipsis and gapping*, ed. Elabbas Benmamoun and Shalom Lappin, 141–174. Oxford: Oxford University Press.  
 2007 On Ellipsis: The PF Approach to Missing Constituents. University of Maryland Working Papers in Linguistics 15: 143–153. College Park, Md.
- McCloskey, James  
 2006 Questions and Questioning in a Local English. In *Crosslinguistic research in syntax and semantics: Negation, tense, and clausal architecture*, 87–126. Raffaella Zanuttini, Héctor Campos, Elena Herburger, Paul H. Portner, eds., Georgetown University Press: Washington, DC.
- Merchant, Jason  
 2001 *The syntax of silence*. Oxford University Press: Oxford.  
 2003 Subject-Auxiliary Inversion in comparatives and PF output constraints. In Kerstin Schwabe and Susanne Winkler (eds.), *The interfaces: Deriving and interpreting omitted structures*, 55–77. John Benjamins: Amsterdam.  
 2004a Fragments and ellipsis. *Linguistics and Philosophy* 27: 661-738.  
 2004b Resumptivity and non-movement. *Studies in Greek Linguistics* 24, 471-481. Aristotle University of Thessaloniki: Thessaloniki.  
 2006 Polyvalent case, geometric hierarchies, and split ergativity. In Jackie Bunting, Sapna Desai, Robert Peachey, Chris Straughn, and Zuzana Tomkova (eds.), *Proceedings of the 42nd annual meeting of the Chicago Linguistics Society, Volume 2: The Parasessions*, 47-67. Chicago Linguistic Society: Chicago, Ill.  
 2008a An asymmetry in voice mismatches in VP-ellipsis and pseudogapping. *Linguistic Inquiry* 39:169-179.  
 2008b Variable island repair under ellipsis. In Kyle Johnson (ed.), *Topics in ellipsis*, 132-153. Cambridge University Press: Cambridge.
- Mikkelsen, Line  
 2005 *Copular clauses: Specification, predication and equation*. Amsterdam: John Benjamins.
- Morgan, Jerrold  
 1973 Sentence fragments and the notion ‘sentence’. In B. B. Kachru et al. (eds.), *Issues in Linguistics: Papers in honor of Henry and Renée Kahane*, 719–751. University of Illinois Press: Urbana, Ill.
- Partee, Barbara Hall  
 1987 Noun Phrase Interpretation and Type-Shifting Principles. In Groenendijk, J., D. de Jongh, and M. Stokhof (eds.), *Studies in Discourse Representation Theory and the Theory of Generalized Quantifiers*, 115–143. Dordrecht: Foris.
- Partee, Barbara H. and Mats Rooth  
 1983 Generalized conjunction and type ambiguity, in R. Bäuerle, C. Schwarze, and A. von Stechow (eds.), *Meaning, Use, and Interpretation of Language*, 361–383. Walter de Gruyter, Berlin.

- Potsdam, Eric  
 1998 *Syntactic Issues in the English imperative*. Garland Publishing: New York.
- Progovac, Ljiljana, Kate Paesani, Eugenia Casielles, and Ellen Barton (eds.)  
 2006 *The syntax of nonsententials: Multidisciplinary perspectives*. John Benjamins: Amsterdam.
- Ross, John R.  
 1973 The penthouse principle and the order of constituents. In C.T. Corum, T.C. Smith-Stark and A. Weiser (eds.), *You Take the High Node and I'll Take the Low Node*, 397–422. Chicago Linguistic Society: Chicago, Ill.
- Sag, Ivan  
 1976 *Deletion and Logical Form*. Doctoral dissertation, MIT.
- Schank, Roger and Robert Abelson  
 1977 *Scripts, plans, goals, and understanding: An inquiry into human knowledge structures*. Lawrence Erlbaum Associates: Hillsdale, NJ.
- Schlangen, David  
 2003 *A coherence-based approach to the interpretation of non-sentential utterances in dialogue*. PhD Thesis, School of Informatics, University of Edinburgh.
- Shopen, Timothy  
 1972 *A generative theory of ellipsis: A consideration of the linguistic use of silence*. Doctoral dissertation, University of California, Los Angeles.
- Speas, Peggy and Carol Tenny  
 2003 Configurational properties of point of view roles. Ms., University of Massachusetts, Amherst and Carnegie Mellon University.
- Stainton, Robert J.  
 1997 Utterance meaning and syntactic ellipsis. *Pragmatics and Cognition* 5: 51–78.
- Stainton, Robert J.  
 2006 *Words and thoughts: Subsentences, ellipsis, and the philosophy of language*. Oxford: Oxford University Press.
- Stanley, Jason  
 2000 Context and Logical Form. *Linguistics and Philosophy* 23:391–434.
- Vikner, Sten  
 1995 *Verb movement and expletive subjects in the Germanic languages*. Oxford University Press: Oxford.
- Williams, Edwin  
 1977 Discourse and Logical Form. *Linguistic Inquiry* 8.1:101–139.