ELLIPSIS AND NONSENTENTIAL SPEECH

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ELLIPSIS AND NONSENTENTIAL SPEECH

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We dedicate our
work on this volume
to our families,
with much love.
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INTRODUCTION

The papers in this volume address two main topics:

Q1: What is the nature, and especially the scope, of ellipsis in natural language?
Q2: What are the linguistic/philosophical implications of what one takes the nature/scope of ellipsis to be?

As will emerge below, each of these main topics includes a large sub-part that deals specifically with nonsentential speech. Within the first main topic, Q1, there arises the sub-issue of whether nonsentential speech falls within the scope of ellipsis or not; within the second main topic, Q2, there arises the sub-issue of what linguistic/philosophical implications follow, if nonsentential speech does/does not count as ellipsis.

I. THE NATURE AND SCOPE OF ELLIPSIS

A. General Issue: How Many Natural Kinds?

There are many things to which the label 'ellipsis' can be readily applied. But it's quite unclear whether all of them belong in a single natural kind.

To explain, consider a view, assumed in Stainton (2000), Stainton (2004a), and elsewhere. It is the view that there are fundamentally (at least) three very different things that readily get called 'ellipsis', each belonging to a distinct kind. First, there is the very broad phenomenon of a speaker omitting information which the hearer is expected to make use of in interpreting an utterance. Included therein, possibly as a special case, is the use of an abbreviated form of speech, when one could have used a more explicit expression. (See Neale (2000) and Sellars (1954) for more on this idea.) To take one example, when Rob says 'Pass the book', he does not explicitly say to whom it should be passed, or when exactly; nor does he specify linguistically precisely which book he wants. Still, the speech act can easily be more specific than what these words taken alone suggest. One might think of this kind of omission as "pragmatic ellipsis".

Second, there is the phenomenon familiar from theoretical syntax, in which certain structures are present at some "deep" level of representation, but are not pronounced. Examples taken to illustrate this include VP ellipsis, gapping and sluicing:

R. Elugardo and R. J. Stainton (eds.), Ellipsis and Nonsentential Speech, 1–26.

1. *VP ellipsis*: Ray eats meat but Rob doesn't [$_{VP}$_____]
2. *Gapping*: Ray loves to slice meat and Rob [$_{V}$_____] to chop vegetables
3. *Sluicing*: Rob doesn't eat meat, but no one knows why [$_{S}$_____]

There are two different ways of spelling out this second variety of ellipsis. One idea is that while we pre-theoretically think of (1) itself as "the sentence", in reality a sentence is better thought of as an ordered pair, such as (4):

4. <[$_{S}$Ray eats meat but Rob doesn't eat meat], *Ray eats meat but Rob doesn't*>

The first element of the pair provides the underlying syntax, which is input into the semantics. The second element indicates how this complex structure is actually pronounced. Other theories have it that there are special null elements, which are never pronounced no matter where they appear, in the syntax of elliptical sentences. That is, instead of ordinary linguistic material being present but unheard, there is extraordinary linguistic material present. For instance, rather than sentence (1) being captured by (4), on this approach it would be better captured by (5):

5. [$_{S}$Ray [$_{I'}$[$_{I}$*pres., sing., 3rd person*] [$_{VP}$[$_{V}$eat$_1$] meat$_2$]] but Rob [$_{I'}$doesn't [$_{VP}\Delta_1$ [$_{NP}\Delta_2$]]]]

The structure in (5) is pronounced as it is, i.e., with only one overt appearance of 'eat meat', because the two deltas are never pronounced. They do, however, contribute to the content of (5), via what they are co-indexed with: 'eat' and 'meat' respectively. Call the phenomenon of hidden syntactic material, however the hidden parts are theorized, "syntactic ellipsis". (An early "deleted ordinary material" account may be found in Sag (1976). An early "empty element" account can be found in Williams (1977).)

Notice how different this second variety of ellipsis is from what was said about 'Pass the book'. In that case, there was no suggestion of hidden linguistic material — there, the speaker merely left unsaid points which were obvious enough not to need mention. It should be evident that someone who claims that (1)–(3) are syntactically elliptical, employing either of the theories just enumerated, is saying much more than that speakers of these expressions will count upon hearers to fill in omitted information from context. Such a theorist intends to say that there is hidden, covert, syntactic structure in the expression produced. Thus syntactic ellipsis, if it works as suggested above, is a very different beast from pragmatic ellipsis.

A third thing called 'ellipsis', but which Stainton (2004b) insists is not the same as either of the former two, is when an ordinary word or phrase takes on a special conventional meaning. For instance, arguably 'out', as shouted by a baseball umpire, simply has a different context-invariant content than the linguistic particle which appears embedded in 'Steven wrung out the clothes'. 'Out' so used is different from pragmatic ellipsis, because the content conveyed is a feature of English, not just something provided contextually. But it is different from syntactic ellipsis too, because it's highly implausible that the linguistic item which umpires produce has unpronounced syntactic structure. The umpire says a mere word. It has no subject, no verb, no inflection. Not even covert ones. A similar phenomenon appears with conventionalized phrases like 'No shirt, no shoes, no service' — its conventional

meaning is a conditional proposition, despite its syntactically nonsentential form. Think too of 'Congratulations' or 'Happy Birthday'.[1] Call this third phenomenon "semantic ellipsis".[2]

Stainton's view, which sharply contrasts pragmatic, syntactic and semantic ellipsis, illustrates the point that things which are called 'ellipsis' may be treated as very different phenomena, i.e., as not constituting a single natural kind at all. And it serves as a departure point for our larger question, Q1: which cases *really do* belong to the same kind, and how many wholly different phenomena are there, which may with good reason be called 'ellipsis'?

Mary Dalrymple's contribution to this volume, "Against Reconstruction in Ellipsis", makes progress on this broad issue of the nature/scope of ellipsis, i.e., of what things fall together as genuine kind-instances. In particular, she argues that "syntactic ellipsis" as introduced above, is not a real phenomenon at all. This is not to say, of course, that VP ellipsis doesn't happen: it's a datum that (1) is well-formed, for example. But Dalrymple rejects the theoretically loaded account of what is going on. Sag (1976) thinks of VP ellipsis and such as deletion of syntactic material, and Fiengo & May (1994) treat it as reconstruction of syntactic material within the ellipsis site. But, suggests Dalrymple, their general approach is wrongheaded. There is, she thinks, no hidden/covert syntactic material in sentences like (6). The syntax of (6) and the like, is precisely what appears on the surface.

6. John saw the flying saucer, and Bill did too

Most of her paper counters familiar arguments in favor of covert syntax, and provides new evidence against reconstruction accounts.

To explain the *content* of (6) and the like, Dalrymple proposes that "the interpretation for a sentence containing ellipsis is provided semantically, on the basis of sentence interpretations and not syntactic structures . . . " (Dalrymple, this volume) In particular, the meaning of 'Bill did too' in (6) is arrived at by solving for a *property* — not a bit of hidden structure, mind you, but a content — which is predicated of John, and which can also be predicated of Bill. (See Dalrymple, Shieber & Pereira (1991) for the details.) Crucially, if Dalrymple is right about how such sentences are interpreted, then the examples of VP ellipsis, gapping and sluicing, which were called above "syntactic ellipsis", might not be *so* fundamentally different from pragmatic ellipsis after all. The latter, recall, was exemplified by (7), where non-linguistic context helped to fill in unspecified information — i.e., about who was to receive which book.

7. Pass the book

The difference, if Dalrymple is correct, would seem to be not a matter of covert structure, but rather of where the unspecified information is coming from, since it is never contributed by an element of structure. In (1)–(3), it comes from within the sentence itself — so an agent can assign a meaning to the type, outside any utterance context. In (7), it must come from the discourse context, so one cannot assign anything more to the type 'Pass the book' than what that surface provides. But "figuring out", on the basis of available information, is at play in both kinds of case. Thus on a Dalrymple-type view, there may be fewer varieties than what Stainton (2000) and Stainton (2004a) had supposed: where Stainton assumes syntactic and pragmatic ellipsis

to be *wholly* disparate phenomenon, merely having in common that they are called 'ellipsis', Dalrymple's approach suggests that they are actually both examples of information recovery.[3]

Paul Portner and Raffaella Zanuttini's article, "The Semantics of Nominal Exclamations", also bears on the broad issue of the scope of ellipsis. The authors take nominal exclamations to be good examples of what we above labeled semantic ellipsis. According to them, (8) is not clausal *syntactically speaking*.

8. The strange things he says!

Grammatically, (8) is a noun phrase (more exactly, a DP). Nor is it even syntactically elliptical for something clausal. Syntactically, at every level, what appears here is the very DP that appears embedded in (9):

9. [$_{DP}$The strange things he says] surprise me

Nevertheless, Portner and Zanuttini argue that (8) is semantically different from what appears embedded. The meaning of (8) is of the same semantic type as (10).

10. What strange things he says!

A nominal exclamation, then, despite its genuinely nominal syntax, does not have a typical nominal denotation: it is semantically elliptical — just like 'out' said at the baseball game, or 'Congratulations' sent in an e-mail.

In sum, Stainton has supposed that syntactic, semantic and pragmatic ellipsis are all quite distinct. One author in the present volume at least raises a doubt about the supposed difference: Dalrymple proposes, in effect, that paradigm cases of so-called "syntactic ellipsis" aren't so different, in the imagined way, from the things that Stainton has called "pragmatic ellipsis". (This allows Dalrymple to exorcize certain kinds of hidden structure from the grammar.) Portner and Zanuttini, in contrast, provide reasons for thinking that another part of Stainton's tripartite division is on the right track, since there is a distinct sub-variety among the things pre-theoretically labeled 'ellipsis': semantic ellipsis.

B. The Specific Issue: Which Kind Does Nonsentential Speech Belong In?

Let's begin with an example. Suppose Corinne lifts up a letter, and says 'From Spain'. It is agreed on all sides that Corinne may thereby say, of the displayed letter, that it is from Spain. Some theorists take this to be merely pragmatic ellipsis: the speaker means a proposition, but what she produces is a perfectly ordinary prepositional phrase. This has been the view of Ellen Barton, and of the present authors. Others maintain that what Corinne produced was syntactically elliptical, either containing special null elements, or containing ordinary syntactic material which somehow goes unpronounced. Jason Stanley (2000) has suggested this — as has, very recently, Jason Merchant (2003). A major theme of the present volume is the question: Which of these views is correct? Put otherwise, does (apparently) sub-sentential speech fall into the scope of pragmatic, or syntactic ellipsis?[4]

Before considering in detail the various stances on how sub-sentential speech relates to the nature/scope of ellipsis, it will be helpful to do a *prima facie* "compare and contrast". Some of what is suggested immediately below will be questioned by various papers in the volume. But it may help to start with some appearances. Let us begin with (apparent) similarities between sub-sentential speech and paradigm cases of syntactic ellipsis.

B.1. Some Apparent Similarities Between Sub-Sentential Speech and Paradigm Syntactic Ellipsis

First, it's clear that speakers in such cases mean rather more than what is pronounced: what (seems to be) pronounced is a phrase, of semantic type <e, t>, yet the speaker conveys a proposition. Second, what is conveyed is not merely conversationally implicated. Just as a speaker of (1) would *assert* that Rob doesn't eat meat, Corinne asserts of the displayed letter that it is from Spain.

1. Ray eats meat but Rob doesn't

In both cases, it is hard to cancel the proposition meant: to hold up a pen and say 'Purchased in Germany', and then to continue by saying 'Not to say that this thing in my hand was purchased in Germany' would be odd in a way that canceling an implicature is not. And one could not, if it turned out that the pen was known to be purchased in Japan, respond that no lie was committed since nothing was actually said. Thus the speech acts are similar: in both elliptical sentence and sub-sentence use, we have a proposition asserted, despite a phonologically reduced form.

Both paradigm elliptical sentences and sub-sentences have complex meaning properties as well. Both can be ambiguous, stand in entailment relations, admit of subtle semantic contrasts, etc., as the following examples attest:

11. Two packs of cigarettes and a case of beer from Brazil [Can be used to issue an ambiguous order: Do the cigarettes need to be from Brazil to satisfy it?]
12. A case of beer from Brazil [Can be used to issue an order logically entailed by that made using (11)]
13. A case of gin from Brazil [Subtle semantic contrast with the order that would be made with (12), introduced systematically by changing just one word]

Beyond these speech act and semantic similarities, there are grammatical similarities too. Sub-sentences are subject to grammatical constraints, just as syntactically elliptical sentences are. If Rob points at a small dog and says (14), this is grammatically ill-formed in Spanish — because of the gender mismatch between the masculine nominal 'perro' ("dog") and the feminine indefinite article ('una') and modifier ('chica'). The phrase in (14) is ungrammatical just as the full sentence 'Hay una perro chica' ("There is a small dog") is.

14. * Una perro chica
    A-*fem* dog small-*fem*
    "A small dog"

In sum, just as syntactic ellipsis is not some kind of speech error, neither is sub-sentential speech. Both reflect linguistic competence. Indeed, the grammar of sub-sentences recursively generates an unlimited number of in principle useable expressions — just as there exists a potential infinity of syntactically elliptical sentences.

Finally, because both sub-sentential speech and syntactically elliptical speech derive from the specifically linguistic syntactic-semantic competence, it is unsurprising that this shared competence can be damaged by trauma, illness, or what have you, producing damage to both kinds of speech. If, as in a well-attested aphasia, a speaker loses the ability to produce vegetable words, say, she won't be able to make an assertion either with 'That is an awfully ripe tomato' or with 'An awfully ripe tomato'.

This cluster of similarities — pragmatic, semantic, syntactic and psychological — is part of what motivates some theorists to assimilate (apparently) sub-sentential speech to syntactic ellipsis. The idea, applied to an example, is that 'Purchased in Germany' has hidden syntactic material in just the way 'Ray eats meat but Rob doesn't' (supposedly) contains an unpronounced verbal element. In particular, such theorists are wont to deny that 'Purchased in Germany' actually *is* sub-sentential. It is, say such theorists, only apparently so — the appearances coming from the sound heard. What is really produced is either (15) or (16), depending upon how one treats paradigm cases of syntactic ellipsis. Both of these, notice, are syntactically sentences.[5]

15. <[$_S$[This [was [purchased in Germany]]]], *purchased in Germany*>
16. [$_S$[Δ [Δ[purchased in Germany]]]]

Whether such an assimilation is the right approach is precisely one of the key issues of this volume: it is Q1, applied to the special case of nonsentential speech versus VP ellipsis and the like. Before we try to answer Q1 directly, however, let us continue with the "compare and contrast", highlighting some seeming differences between (apparently) sub-sentential speech and paradigm cases of syntactic ellipsis, like VP ellipsis and sluicing.

B.2 Some Apparent Differences Between Sub-Sentential Speech and Paradigm Syntactic Ellipsis

Starting with pragmatic differences, the discourse contexts in which VP ellipsis and sluicing may occur freely and without awkwardness are far more restrictive. Subject to some important caveats, the details of which are discussed in Stainton (2004b), VP ellipsis and the like (generally) need to be licensed by appropriately similar prior linguistic material. In contrast, sub-sentences (or what appear to be sub-sentences) seem to be far more easily licensed by features of the world. To draw an analogy familiar at least since Hankamer & Sag (1976), VP ellipsis is like anaphora of the kind one finds with 'himself' and 'each other', which must be controlled by an element of structure; whereas sub-sentence use is more like the use of deictic pronouns such as 'it', 'that' or 'she', easily controlled by some non-linguistic entity. Sub-sentence use, like the use of a deictic, is odd when it is unclear what object or property is being spoken about. For example, both (17) and (18) would be equally odd where no dress (or anything that could be taken as being a dress) is salient in the discourse context, and

both would be equally false if said of something that is mistakenly taken to be a dress, e.g., a kilt.

17. Nice dress!
18. That is a nice dress

However, either kind of expression can occur *without appropriate prior discourse*. In contrast, (19) sounds awkward, and occurs less easily if there's no appropriate linguistic antecedent, even when a nice dress is salient:

19. Mary's is too

This isn't to say that (19) can never be spoken without a linguistic antecedent. As numerous authors have stressed — most recently, Stanley (2000) and Merchant (2003) — there are ways of rendering (19) felicitous without prior talk. But there remains a difference in pragmatic markedness, of a piece with the use of anaphoric 'so', or 'each other' or 'herself' without prior appropriate discourse. To use the jargon of Hankamer and Sag (1976), it is harder, though not impossible, to "pragmatically control" VP ellipsis and sluicing. In contrast, pragmatic control of sub-sentences is perfectly straightforward.

Another pragmatic difference concerns the various non-communicative uses of sub-sentences versus paradigm cases of sentential ellipsis. Ordinary words and phrases can be used in isolation in quite different ways than sentences (typically) can. Words and phrases appear unembedded on labels and business cards, in shopping lists and dictionaries, as book titles, and so on. And, so occurring, they are not used to state anything. Indeed, they don't encode propositions at all. To take an example, the very phrase 'Ripe bananas' can be uttered while pointing at some fruit, possibly to teach someone what bananas look like when ripe. This is a propositional use. But this phrase could also be the title of a book, or it could appear on a shopping list, where it would not encode any proposition. (Granted, it may be that a proposition can be gleaned from this phrase, say, appearing on a shopping list; but this is not to say that 'Ripe bananas' on the list *itself* expresses a proposition. That token doesn't express a proposition.) So, unlike VP ellipsis constructions and the like, the locutionary content of a sub-sentence token — even in isolation — is not inevitably propositional. There is a further semantic difference as well.[6] It is typically thought that full sentences are marked with illocutionary force: declaratives are marked as being "used to assert", interrogatives are marked as being "used to ask", and so forth. We take this to be a difference in content between sentence categories. But there is a still sharper difference in content between (most) nonsentences and sentences: the former are not marked with illocutionary force at all (with the exception of special conventionalized ones such as 'Out!', 'No shirt, no shoes, no service', and such). To take one example, the bare phrase 'Both hands' is not itself marked, in its overt syntax, as being order-prone or assertion-prone, though it can be used to perform either kind of speech act, given the right conversational situation.[7]

This last point about pragmatic differences leads to some reflections about the syntax and semantics of sub-sentences. In paradigm cases of ellipsis, there is something

in the structure itself which "calls out" for contextual completion; that is, there is an (unpronounced) element of the structure, or anyway an aspect of the expression's semantics, which linguistically drives the search for "saturation" to full propositionality. (See Recanati (2002) for illuminating discussion of the different ways that a linguistic item can drive this search.) For example, it's a context-invariant, speaker-independent feature of 'does too' that it triggers the need for a structure or content to fill in — just as it is a context-invariant, speaker-independent feature of 'that' that it triggers the need for contextual slot-filling. In the case of 'does too', either there is hidden ordinary material that needs to get copied in, or there is an unpronounced anaphoric "delta" that needs to be linked to prior material. At the very least, if one follows Dalrymple, the *content* of 'does too' requires completion. But in any case, structure/content drives the search for missing material. Something *in* the syntactic structure, some item in it, or some meaning feature of it, does the work. In contrast, if 'Ripe bananas', that very phrase, is what is used in sub-sentential assertion, then it cannot be the content or the form of that phrase which triggers the hearer to seek out a proposition-meant,[8] since this same structure and content occurs in grocery lists, where no such search is triggered. Indeed, that very structure appears embedded in sentences, and it surely does not there "call out for" completion. (Put another way, genuine sub-sentences do not express propositional characters, functions from context to propositions — for if they did, then barring an implausible lexicalized ambiguity, a proposition is presumably what they would always express in context, whether used in isolation or embedded. In which case, what drives the search cannot be the propositional character of the expression, but instead must be something about the speaker's aims.)

This semantic feature brings with it a psychological difference, at least according to some authors, which has to do with how much of the message conveyed is "decoded", using the language faculty itself. If sub-sentences do not mean propositions, even once all grammatically-driven saturation has taken place, then the computation of the proposition-meant must be performed outside the language faculty. This is precisely the view of Ellen Barton (1990) and of the present authors. Understanding a sub-sentence is as much a pragmatic affair as understanding conversational implicature or sarcasm: neither is carried out by the language faculty itself.

One final difference, again psychological, derives from the kind of structure being processed. Nonsentences are not headed by INFL — this is precisely what makes them nonsentential — and they do not in general even contain inflectional markers (i.e., tense, agreement).[9] As a result, one would predict that language users who have deficits specific to INFL should have trouble with sentence processing, including the processing of elliptical sentences, but should have little or no trouble with nonsentences. This differential pattern is indeed attested in aphasia, whether congenital or induced. (See Elugardo & Stainton (2003) for discussion and references.)

B.3. On The Reality of Sub-Sentential Speech

This completes our survey of *prima facie* similarities and differences. The question now is, are the differences real and deep? In particular, are they real, and deep enough, that we have two kinds of phenomenon here, merely sharing the label 'ellipsis'? Two papers in this volume address directly the issue of whether (apparently) sub-sentential speech really belongs in the same kind as VP ellipsis and such. Peter Ludlow's paper "A

Note on Alleged Cases of Nonsentential Assertion" defends the more traditional take, which treats what we call 'sub-sentences' as sentence fragments. He does this partly by noting "fragments" which seem only to be generable inside sentences. He draws attention to apparently transformed examples like the passive (20), the 'tough'-moved (21), the Q-floated (22), and the idiom-chunk containing (23).

20. Hood sunk
21. Tough watch
22. All in the garden
23. Close tabs

Since these transformations only apply to sentences, it seems that (20)–(23) must be sentential after all, at some level. Ludlow also notes cases which contain elements that need to be licensed by something "above", like (24), which contains an anaphor which, it is said, must be bound by a c-commanding antecedent.

24. From myself

Since no c-commanding licenser is present on the surface, and since the structure is well-formed nonetheless, Ludlow suggests that the licensing item must be covert, as in paradigm ellipsis cases. That is, it's well-known that (24) is well-formed as an answer to 'Where did you get those presents?' The usual explanation given is that the thing produced, in response, is actually, at the level of syntax, either (25) or (26), depending upon one's theory of syntactic ellipsis:

25. $[_S\ [_{NP}\ I]_1\ [_{I'}\ \textit{agr}\ [_{VP}$ got those presents $[_{PP}$ from myself$_1$]]]]
26. $[_S\ [_{NP}\Delta]_1\ [_{I'}\ \textit{agr}\ [_{VP}\Delta\Delta\Delta\ [_{PP}$ from myself$_1$]]]]

Ludlow suggests that something of the same kind must be going on when things like (24) appear to be used on their own. Hence, here again, supposed sub-sentential speech collapses into syntactic ellipsis.

Ludlow also argues, on theory-internal grounds, that Minimalism in syntactic theory simply cannot countenance the base generation of words and phrases. He worries, in his Section 8, that if a grammar were allowed to generate (20) through (24), then it would generate anything at all, so that we would lose our grip on what "crashing" (very roughly, not yielding a grammatical structure) would come to. Ludlow writes:

> As the theory is currently constructed, the derivation crashes if it does not at a minimum yield something that is sentential in structure; if that constraint is yanked out of the theory then the theory collapses like a house of cards. Crucially, the theory requires that grammatical elements must be combined and moved (under economy constraints) until a successful derivation is computed. If success could be won for any arbitrary subsentential element, then the theory would be incapable of blocking anything (105)

This is the second part of Ludlow's attack.

In sharp contrast, Barton and Progovac suggest, in "Nonsententials and Minimalism", that Minimalism actually predicts, in a way that other frameworks do not, that sub-sentences *will* be generated. That is because, in Minimalism, structures are built "from the bottom up", and they must not contain superfluous unmotivated structure.

As a result, adding sentential structure to a phrase created from the bottom up, without necessity, is predicted not to happen. Barton and Progovac write:

> Interestingly, the distinction between sentences and phrases is not a significant theoretical problem in the framework we are adopting in this paper, Chomsky's (1989, 1995) Minimalist Program. Given Minimalism, a clause is simply a phrase whose head is I (short for Inflection). Moreover, the derivation of a structure is built bottom up, by merging words and phrases in a binary function . . . Since both phrases and clauses are derived bottom-up through merger, to say that generation must start with a sentence would be problematic in this framework for two reasons. First, it would be contrary to the minimalist considerations of structure building. Second, it would be pure stipulation, given that there is nothing special about sentence/clause in this framework (74).

The authors also deal at length with several concerns about base-generating sub-sentences. Here is one example. In Minimalism, as in prior frameworks, Case features on NPs — or anyway, on NPs that serve as arguments — must be licensed by other elements of structure. Yet such Case marked NPs occur in isolation, according to those who would base generate them. For example, the Korean (27) is fine as an answer to the unspoken question of who bought the book:

27. Yongsu-ka
    Yongsu NOM

So used, it would mean that Yongsu bought the book. If we are to avoid the conclusion that some *hidden* element of structure is licensing Case marking in such cases — which would support a syntactic ellipsis analysis of (27) and related cases –some account must be given of why bare NPs, unembedded, are exceptions to the need for Case checking. Barton and Progovac propose a single principle which accounts for examples like this, their Case Feature Corollary, and they discuss its application to complex cross-linguistic contrasts.

B.4. A General Overview: Four Stances

Having introduced some of the key features of both paradigm ellipsis constructions (e.g., VP ellipsis, sluicing) and (apparent) sub-sentences, and having described two competing takes on whether these belong in the same kind or not, we can now identify four stances towards sub-sentences, arising from two distinct poles of opposition. First, there is the pole of opposition between (a) those who think sub-sentence use belongs in the same natural kind as elliptical speech and (b) those who think they do not belong to the same kind. This, of course, bears directly on Q1: it is the issue of the scope of ellipsis when applied to sub-sentences. Second, within groups (a) and (b), there is also a division between those who think sub-sentential speech is worrisome in some way (i.e., it carries some undesirable theoretical consequences), and those who disagree. This, of course, is the issue of implications, Q2. These oppositions actually cross-cut, yielding the four mentioned stances:

A. Elliptical and sub-sentential speech belong to the same kind, hence the latter is not worrisome.
B. Elliptical and sub-sentential speech belong to the same kind, hence the latter is worrisome.

C. Elliptical and sub-sentential speech do not belong to the same kind, hence the latter is not worrisome.
D. Elliptical and sub-sentential speech do not belong to the same kind, hence the latter is worrisome.

Stance A, exemplified by Ludlow's article in this volume, focuses on the similarities canvassed above, and either downplays or outright denies the (supposed) differences. Finding the similarities to be so important, and being antecedently convinced that paradigm elliptical constructions do not introduce theoretical worries about, for instance, the pragmatic determinants of what is asserted or the centrality of truth conditions to semantics (about which more below), the proponent of stance A shrugs off sub-sentential speech as unthreatening. Stance B, whose spirit can be found in Dalrymple's contribution to this volume, shares the focus on similarities. However, the proponent of stance B sees the direction of similarity as going rather in the other direction, as it were: paradigm ellipsis constructions end up being in certain respects more like the use of ordinary words and phrases to assert, ask, order, etc. Thus any worries which sub-sentence use seems to raise — whether in syntax, semantics, pragmatics, or philosophy of language — are raised already by VP ellipsis and the like.

Stance C draws attention to some key difference(s) between sub-sentence use and paradigm ellipsis cases, and goes on to say that because of this difference, or differences, such-and-such worrisome consequences don't actually follow from the genuineness of sub-sentential speech. Tim Kenyon's paper, "Nonsentences, Implicature, and Success in Communication", provides a nice example of this stance. He urges that sub-sentential speech is subject to indeterminacy of propositional content to a far greater extent than fully sentential speech. According to Kenyon nonsentence use is, in this respect, more like conversational implicature, in which it is often difficult or even impossible to identify "the" proposition which the speaker meant. (For instance, what unique and precise proposition did the letter writer mean when, as in Grice's (1975) delightful case, she wrote 'Mr. X's command of English is excellent, and his attendance at tutorials has been regular'? Surely this is a bad question: there is no one proposition meant.) Roughly speaking, Kenyon then goes on to argue that, given this very substantial difference, sub-sentential speech does not in the end pose worries for those who want propositions to get their logical forms from natural language sentences — for, arguably, there aren't propositions at play in sub-sentential speech. (More on this below.) Jason Stanley (2000) makes a similar move, at least with respect to some cases of sub-sentential speech: he says that many examples do not result in genuine speech acts being performed, and this difference with sentential speech makes such uses of sub-sentences unthreatening. That's another example of Stance C.

Lenny Clapp's "On the Interpretation and Performance of Nonsentential Assertion" resists precisely this move. Clapp raises two key concerns. First, Clapp argues, Stanley's criterion for genuinely having truth conditions — i.e., having a "determinate content" — would rule out far too much. Indeterminacy of the kind that Stanley objects to in sub-sentence cases, Clapp argues, is rampant. Great swaths of ordinary talk, never treated as peculiar by ordinary speakers/hearers, would be treated as lacking genuine truth conditions. It would thus turn out that speakers/hearers are very commonly mistaken about whether an utterance had truth conditions, and about what they were. Related to this, Clapp notes that Stanley and others have sought a compositional semantics that applies to *utterances*, not just to expression types: a theory of semantic performance,

not just semantic competence. This, thinks Clapp, is a hallmark of Davidson-style truth conditional semantics: the truth theory is intended to interpret not abstract linguistic items, but speakers. But to utilize Stanley's pragmatic strategy of setting aside much sub-sentential talk as not really propositional after all, is precisely to argue that, "despite appearances", occurrences of sub-sentences do not actually express truth conditions. The problem is, the theory is supposed to account for the appearances. Being a performance theory, it is intended to explain how hearers in fact interpret utterances, on-line as it were. Put otherwise, unlike generative syntax, truth conditional semantics is by design not insulated from what speakers and hearers actually do. Clapp sums up the difficulty as follows:

> . . . to the extent that the defender of truth-conditional semantics claims that competent speakers make incorrect judgments concerning the truth conditions of utterances, he raises counterexamples to truth-conditional semantics (124).
>
> This model is a theory of *performance*; it alleges to describe, albeit in very general terms, the process whereby speaker-hearers actually determine the truth conditions of utterances. If this model predicts that speaker-hearers are often, perhaps usually, mistaken in their interpretations, then the model, truth-conditional semantics generally, must be rejected (126).

Finally, Stance D is represented by Barton and Progovac, who think that sub-sentences are syntactically quite different from paradigm cases of syntactic ellipsis, and would add that this poses worries for traditional sentence-only grammars. (See also Botterell's contribution, for another example of this stance.)

We can sum up this section on whether sub-sentence use belongs in the same class as familiar cases of syntactic ellipsis as follows. The pattern which emerges is this: if sub-sentence use is to be worrisome, it must be similar enough to elliptical speech in many respects, to be worth paying attention to; yet also different enough that it cannot simply be assimilated to (otherwise non-worrisome) syntactically elliptical speech. To establish whether this is the case, various authors in this volume argue for the reality of, or hotly dispute, the surface appearances.

Talk of being "worrisome" and "being worth paying attention to" leads naturally to the next theme: implications. We turn to that now.

II. IMPLICATIONS OF THE SCOPE OF ELLIPSIS

A. The General Issue

As noted at the outset, this volume has two questions as its foci:

- Q1: What is the nature, and especially the scope, of ellipsis in natural language?
- Q2: What are the linguistic/philosophical implications of what one takes the nature/scope of ellipsis to be?

The focal point of the volume in terms of Q2, implications, is very much on the implications of sub-sentential speech. However, there are some implications that arise with respect to the issue of the scope and nature of ellipsis more broadly.

The paper by Dalrymple carries implications for syntax, and for the syntax-semantics interface. If there is no "hidden structure" in paradigm ellipsis constructions,

as Dalrymple suggests, then the usual syntax for these is incorrect. That is implication enough. In addition, however, it cannot be the case, on a Dalrymple-type view, that the interpretive possibilities of elliptical sentences is accounted for by "hidden syntax", there being none. So, semantics must do more in these cases than has previously been imagined. For instance, the usual explanation for why sentence (1) means, in part, that Rob doesn't eat meat, is that the second clause either contains the words 'eat meat' at some level, or that this second clause contains an empty element that is anaphoric to the first occurrence of 'eat meat'.

1. Ray eats meat but Rob doesn't

Given what 'eat meat' means, and what anaphoric linking means — viz. sameness of content — either story explains why the second clause has this meaning. But, obviously, this explanation of the meaning of (1) is not available, if Dalrymple is correct.[10] For there is no element of structure at all in the second clause, ordinary or null, which expresses EAT MEAT. Since syntax cannot carry this burden, semantics proper must do so. This is precisely what Dalrymple proposes about paradigm ellipsis constructions: there is a semantic rule, which solves higher order equations ranging over *properties* (rather than natural language syntax), which does the work of assigning to (1) the meaning that *Ray eats meat but Rob doesn't eat meat*. Thus the resulting shift in where to draw the syntax/semantics boundary.

Dalrymple's view also has implications for an on-going debate about the semantics/pragmatics boundary. Since this issue crops up in several papers in this volume, and is the focus of Emma Borg's contribution ("Saying What You Mean"), we will discuss it at some length here. An unarticulated constituent is a constituent of the proposition expressed by an utterance, for which there is no corresponding constituent of the expression uttered, neither at the surface nor at any deeper level. The now classic example of this phenomenon is John Perry's (1986) 'It's raining', in which the proposition (often) expressed by the utterer contains a place, though (so it seems) there is no "slot" for location (at any level) in the sentence. Other familiar examples include responding 'I've had breakfast' to 'Are you hungry?', in which the proposition asserted makes reference to the day of speaking, though the sentence contains no "slot" for this, or Robyn Carston's (1988) 'Jane didn't get enough credits and can't continue', where the proposition expressed is that *Jane cannot continue university study*, though there is no element of the sentence that contributes this. (See Emma Borg and Lenny Clapp's papers, and Recanati (2002), for still more cases.)

It has been controversial whether there really are unarticulated constituents. Some theorists have denied that there are, by urging that there is more "hidden material" in the syntax than what has been supposed. Stanley (2000) and Stanley and Szabo (2000) take this approach. Others have denied that the proposition expressed does actually go beyond what the surface form suggests, so that there is no need for such hidden syntax. This can be done by simultaneously appealing to a more liberal notion of what the "proposition expressed" can be (so that, for instance, *that it is raining* or *that Jane can't continue* tout court can count as such), and by stressing the contrast between what is conveyed and what is strictly and literally expressed by the utterance. Herman Cappelen and Ernie Lepore, in series of papers (Cappelen & Lepore (2002), Cappelen and Lepore (2003)), have explored just this two-pronged strategy. Emma Borg pursues it further in her contribution to this volume. Crucially, however, if Dalrymple is right,

then unarticulated constituents are absolutely ubiquitous because every utterance of a VP ellipsis construction will provide an example. On her sort of view, though the proposition expressed by an utterance of (6), 'John saw the flying saucer and Bill did too', contains two occurrences of the relational property *see the flying saucer*, the sentence produced contains only one occurrence of a syntactic constituent corresponding to this content. At every level. (And, one feels, "the proposition expressed" by the second clause can't be *that Bill did too*, on pain of utterly trivializing that notion.)

To illustrate the point, consider the usual take on paradigm syntactic ellipsis constructions, VP ellipsis or otherwise. It is exemplified, as Borg notes, by the standard treatment of (28) and (29):

28. A: Has Bill gone? B: Yes, he has.
29. A: Whose dog is that? B: It's Bill's.

As Borg writes: "In both of these cases, B's utterance appears to express a proposition containing a constituent not found at the vocalised, surface form level. However, because the additional material *is* present in the immediate linguistic environment of the utterance, and can be simply recovered from here, it is often assumed that the unvocalised material can be treated as a genuine constituent of the sentence B produces. The material is present at the syntactic level, it is suggested, but elided at the surface level" (239). But it is just this last step that Dalrymple's work calls into question; and if (28) and (29) *are* cases of unarticulated constituents, then the aim of avoiding them is pretty much doomed from the start: if Darlymple is on the right track, attempts to avoid unarticulated constituents in 'It's raining' and 'Jane can't continue' seem like courageous battles in a war already lost. On the other hand, if the Sag or Williams account of ellipsis is correct after all, then there are no unarticulated constituents in such cases — every element of the proposition expressed will correspond to either an ordinary (but possibly unpronounced) bit of syntax, or it will correspond to an (always unpronounced) "empty element".

In addition, Marga Reimer's paper, "The Ellipsis Account of Fiction-Talk", highlights the importance of Q1, and in particular of contrasting the various notions of 'ellipsis'. As she explains, both David Lewis (1978) and Michael Devitt (1981) have urged that sentences like (30) are actually elliptical. What such a sentence really means, they both suggest, is explicitly captured only by the paraphrase (31) — because the corresponding pre-clausal material is elided in (30):

30. Sherlock Holmes lives at 221B Baker Street
31. According to the Conan Doyle stories, Sherlock Holmes lives at 221B Baker Street

The advantage of taking (30) to be elliptical is that we can understand how that sentence can be true, even though 'Sherlock Holmes' does not refer to any actual person: sentence (30) can be true in just the way that (31) can be, namely, if the relevant fiction contains or implies the (matrix) sentences in question. Now, several authors — including especially Bach (1987) and Bertolet (1984) — have criticized this means of explaining how this kind of sentence can be true, on the grounds that it is not plausible that the sentence in (30) is itself elliptical. What might be plausible, goes this critique, is merely that *users* of (30) "speak elliptically", such that *they* assert something whose content is close to

(31). But, if that's what is going on, then the *expression* these users produce does not itself express this content, even in the context of a discourse about a fictional story. Undoubtedly, the speaker may convey something true, in uttering (30); but the sentence itself does not thereby become true.

Put in terms of the contrasts drawn at the outset, Lewis and Devitt may be criticized on the grounds that, while it might be plausible that "pragmatic ellipsis" is going on in fiction-talk, it's not especially plausible that either semantic or syntactic ellipsis has occurred. And, it seems, for the sentence in (30) to itself be true, it is not enough that pragmatic ellipsis occurs during discussions of Holmes: sentence (30) must, as a matter of context-invariant semantics, have just the same meaning as (31). It seems, then, that Lewis and Devitt cannot get the result that they want, if uses of (30) don't belong either to the same kind as uses of the syntactically elliptical (1), or to the semantically elliptical (8).

1. Ray eats meat, but Rob doesn't
8. The strange things he says!

Thus does the debate about the nature and scope of ellipsis intersect with issues about fiction-talk.

Reimer's idea, put in present terms, is that fiction sentences themselves, of the sort in question, can be true, when interpreted relative to the appropriate context — even if these unrestricted character-describing sentences are neither syntactically nor semantically elliptical. In particular, she argues that sentence (30), the type that is, does not have to be synonymous with (31) in order for (30) itself to be true. Thus one can grant that uses of (30) do not belong in the same kind as either syntactic or semantic ellipsis, and yet still obtain the desired result that the sentence itself — and not just the proposition which the speaker means — can be true.

B. The Specific Issue: Implications of Nonsentential Speech

Numerous implications have been argued for on the basis of nonsentential speech. Some of these implications will be described at length in this volume: what must be base-generated by syntax, the province of logical form, whether quantifier phrases are meaningful in isolation, what the evidence-base should be for lexical semantics, whether there are unarticulated constituents which pragmatically add to what is asserted, etc. We also note here some implications that are less directly addressed in the papers included in this volume, to further motivate interest in the question of whether that phenomenon is genuine or not. (Moreover, it will be useful to have a wider array of implications in mind, when we revisit the issue of what "genuineness" amounts to at the end. As will emerge, what counts as "genuine" nonsentential speech actually may depend upon what implication one has in mind.)

Numerous implications arise, or seem to, because the supposed "primacy of the sentence" seems to conflict with sub-sentence use. The relevant slogan here is Frege's "context principle": that words only have meaning in the context of a sentence. (Though it's very unclear whether Frege himself is committed to the various ways of implementing his dictum.) In semantics, taking the sentence to be primary has led some to maintain that the sentence is the minimal unit of meaning. This shows up especially clearly in truth-theoretic semantics, in which the meaning-giving theorems are

exhausted by statements of the truth conditions of whole sentences. In meta-semantics, the sentence is often taken to be the minimal unit from which meaning flows: sentences are primary because they have meaning fundamentally, goes the idea; words have meaning only in terms of meaning patterns that emerge within sentences. Put in truth-theoretic terms, the idea is that the theorems entailed make the reference axioms (and other base axioms) true, not vice versa: the source of the axioms' correctness is that they generate the right truth theorems. (Semantic holism is sometimes held to follow.) Even assuming that these Frege-inspired doctrines are not *falsified* by the use of sub-sentences, at a minimum it calls for a careful examination of what exactly is being claimed by proponents of sentence primacy, in the guise of the just-presented semantic and meta-semantic doctrines. For, if words and phrases can be used and understood on their own, why think that they do not genuinely have meaning? And why suppose that they must "get" all of their meaning from sentences? It's agreed on all sides that lexical axioms will need to be consistent with the meanings of whole sentences. Equally, it would be a serious methodological mistake to ignore the contribution of words/phrases to complete sentences — which, it seems to us, is the only point Frege himself needs to insist upon. Granting these two points, however, if sub-sentential speech is genuine, shouldn't the axioms also have to be consistent with the unembedded use of words and phrases?

Even more directly, the use of sub-sentences calls into question doctrines about the primacy of the sentence in speech acts. For example, Michael Dummett (1973) once analyzed assertion as, roughly, the production of a declarative sentence in conventionally specified circumstances. This analysis has been challenged, in Stainton (1997), on the grounds that assertions can be made without employing sentences: given the right speech context, and the right speaker's intentions, an assertion can be made with a mere word, or lexically-headed phrase. Thus it may be, if the phenomenon in question is genuine, that sentences are less central both in context-invariant semantics/meta-semantics and in communication.

Andrew Carstairs-McCarthy's contribution to this volume, "The Link Between Sentences and 'Assertion': An Evolutionary Accident?" raises further questions about the hypothesis of the centrality of the sentence. He maintains that "the primacy of the sentence is illusory" (149). In defense of this view, he presents two hypothetical languages wholly lacking the sentence/noun phrase contrast. He argues that users of such languages could still make assertions, despite not having any sentences at all. (Carstairs-McCarthy is at pains to defend against the complaint that his invented languages smuggle in such a syntactico-semantic contrast implicitly.) His radical alternative to taking sentences to be primary to, say, noun phrases, is that the fundamental contrast for semantics is simply that between fitting and failing to fit the world. The sentence/noun phrase distinction actually exists, he thinks, not because of any communicative imperative — or because of any deep ontological divide between events versus facts, or deep epistemological divide between knowledge by description versus by acquaintance — but simply because of an evolutionary accident. (See Carstairs-McCarthy (1999) for a detailed defense of his view.)

A second important implication of sub-sentential speech has to do with the relationship between language and thought. There are at least three related ways of coming at issues in this domain.

First, if a hearer can understand a sub-sentence as conveying a thought, without having to recover any natural language sentence that encodes that thought, then one can, a forteriori, grasp occurrent thoughts that outstrip the linguistic vehicle employed

in grasping them. This suggests, in turn, that there can be a gap between the "inner speech" processed by the hearer, and the propositional content she grasps. (This is, in a way, a lesson already taught by externalism about speech act content: if externalists are correct, then frequently it is the speaker/hearer's environmental situation, and not just the linguistic items passing through their heads, which partially determines the thought to be grasped. But the nonsententialist view takes externalism about speech act content one step further, since in sub-sentences cases, there is *nothing whatever* in the linguistic item tokened — no indexical, demonstrative nor even any unpronounced structure — which stands for the environmentally-determined element.)

A second, cognitive-science oriented, way of making the point about language-thought relations and sub-sentence use is to reflect upon informational integration in speech processing. Somehow information from memory, inference, vision, olfaction, and so forth gets integrated with information from the language faculty, in speech comprehension: it is seldom the case that the content decoded just is the content expressed, and the gap between the two generally gets filled by information from these and other such non-linguistic sources. But how exactly does this happen? One model has all of the information being built into the uttered natural language representation somehow — integration happens *in* natural language, e.g. by assigning perceived items as contextualized referents for elements of natural language syntax. Arriving at an interpretation, on this view, is a matter of adding more material/content to the signal spoken, until that enriched signal takes into account all that is necessary to yield the proposition expressed.[11] This first pictures comports well with the idea that thoughts are grasped via contextualized natural language expressions. But defending it typically involves saying that, frequently, there are unheard elements in the linguistic structure produced: if this is your preferred model of information integration, you will be prone to deny the genuineness of nonsentential speech. Thus, the story would go, a hearer who has 'In Italy' consciously run through her mind, as a reply to 'Where does the Pope live?', can still be said to have the occurrent thought THE POPE LIVES IN ITALY via a natural language sentence — namely, via the elliptical (32) or (33).

32. <[$_S$ [$_{DP}$The Pope][$_{I'}$ *agr* [$_V$live] [$_{PP}$ in Italy]]], *in Italy*>

33. [$_S$ [$_{DP}\Delta$][$_{I'}$ [$_V\Delta$] [$_{PP}$ in Italy]]]

(Recall that italics, in (32), indicates the part which is actually pronounced.) A wholly different model has the linguistic input converted into a not-specific-to-language format, with the same occurring with information from all other sources, so that integration takes place in these non-natural language representations. Integration happens after translation into Mentalese, say. It is the latter picture that seems to fit better with sub-sentence use and comprehension, taken as a genuine phenomenon, since, if genuine, there is often no proposition-expressing natural language representation arrived at. (For extended discussion of these sorts of implications of sub-sentential speech — i.e., about language and thought, and about informational integration — see Elugardo and Stainton (2003).)

Third, the overarching issue of language-thought relations arises with regard to what sub-sentence use entails for the province of logical form. Some theorists are tempted by the idea that only items of natural language even have logical form. Mental states, and "propositions", do not have form *of the right kind*: goes the idea, such things have ideational content but not the kind of syntactic structure necessary for having

logical form. (Think of theories which take propositions to be sets of worlds; and theories which consider mental states to be neural nets, or holistic properties of whole agents.) Others hold the less radical view that (a) things other than natural language expressions can have logical forms, but (b) these non-linguistic things can have logical form only derivatively, from the logical forms of natural language expressions: a belief/desire, or a proposition, stands in formal/structural entailment relations only because, say, it is expressed by a natural language sentence which stands in just these relations. Roughly, this "derivative logical form" idea is what Elugardo and Stainton (2001) label 'vernacularism', a view which they object to precisely on the grounds that in sub-sentential speech propositions having logical forms are grasped without access to any natural language sentence which encodes them. Steven Davis, in his paper "Quinean Interpretation and Anti-Vernacularism", considers very carefully what vernacularism amounts to. Specifically, taking Elugardo and Stainton (2001) as his point of departure, Davis clarifies at length what "logical form" and "derivative" might be, and he canvasses different ways of spelling out the idea of "derivative logical form": psychologically/descriptively, but also logically/normatively. Having clarified the general terrain, Davis goes on to take issue with the form of argument presented against vernacularism in Elugardo and Stainton (2001): he finds the evidence presented there to be of the wrong kind. Tim Kenyon, in "Nonsentences, Implicature and Success in Communication", also takes issue with Elugardo and Stainton's arguments against vernacularism. Specifically, he takes our claim that premises can be put forward with sub-sentences — a claim crucial to establishing that something with *logical form* is in fact at play — to assume incorrectly that successful communication entails a single "thing-meant". Put otherwise, Kenyon suggests that our arguments, if they worked, would equally entail the propositional determinacy of conversational implicatures — successful communication, surely. Indeed, it would seem that our (implicit) premises would equally entail, quite incorrectly, that a smirk must express a specific proposition, if it is to be successful communication. But, Kenyon argues, it just isn't the case that implicatures, let alone smirks, involve determinate propositions meant.[12] (Lenny Clapp's paper also discusses the issue of content determinacy at length. See especially his Section 4.) Thus Davis and Kenyon both resist this argument for distancing thought from language.

Speaking of kinds of evidence, and of determinacy, consider a third possible implication of sub-sentential speech. It has to do with the evidence-base for linguistics, and for indeterminacy in attribution of tacit knowledge. It has seemed to many philosophers that lexical meaning must be underdetermined by the utterance of whole sentences. That is because, as emphasized especially by Quine and Putnam in various places, it is possible to hold all whole sentence meanings constant, while assigning quite different contents to their lexical parts. Assuming that the linguist's evidence-base must be restricted to what can be manifested in ordinary speech behavior, however, this threatens not just underdetermination but indeterminacy — given the added premise that sentential speech, including the use of syntactically elliptical sentences and semantic ("one-word") sentences, *exhausts* ordinary speech behavior. But the use of genuine sub-sentences to perform speech acts affords (albeit inconclusive) evidence for choosing between otherwise co-extensive theories. See Stainton (2000) for discussion.

So far, in looking at Q2 as applied specifically to nonsentential speech, we have considered three broadly philosophical implications: the primacy of the sentence,

language-thought relations, and the evidence-base for linguistics. We turn now to implications for linguistics proper.

A quite obvious implication, addressed from opposing sides by Peter Ludlow's "A Note on Alleged Cases of Nonsentential Assertion" and Ellen Barton and Ljiljana Progovac's "Nonsententials in Minimalism", has to do with the generative power of the human linguistic competence. If nonsententials are simply "sentence fragments", remnants of full sentences somehow reduced, then natural language grammars do not need to generate them — at least not as underived structures. A grammar for a language can still fundamentally be, as traditionally assumed, a description of the well-formed *sentences* of that language, possibly supplemented by some rules for deleting material from sentences. Since we have addressed this above, we won't say more about it here.

A second, related, implication for linguistics concerns what elements of structure must be assigned a meaning by semantics. If you will, it's the issue of what the semantic theory must generate, not what the syntax must generate. In particular, Andrew Botterell and Alex Barber both consider at length the issue of whether definite descriptions need to be assigned a meaning "in isolation" — that is, whether it is enough to assign meaning to sentences containing definite descriptions, by a syncategorematic rule for 'the F', or whether a meaning must also be generated for 'the F' itself. (Syncategoremata are linguistic items that do not have a meaning relatum, but which nevertheless impact in a regular way upon the meaning of larger expressions. Obvious examples include those prepositions whose semantic impact varies radically according to what complement it takes, as with 'à' in French. Also the logical connectives, like 'if-then'.)

Noting that definite descriptions are sub-sentences, which seem to be usable in isolation in just the way that other sub-sentences can be, Botterell, in his "Knowledge by Acquaintance and Meaning in Isolation", argues that definite descriptions do have "meaning relata", as he puts it. The meaning entry for 'the F', associated with his idea, would look something like this:

34. An expression of the form "the F" stands for a function *h* from the set F and a set G, such that *h* outputs a true proposition for input set G iff F contains exactly one object and every object in F is in G.

Botterell reaches this conclusion as follows: if anyone can grasp or deploy a thing, then that thing must exist; but speakers and hearers can grasp and deploy the meaning in isolation of definite descriptions, since they can assert propositions by uttering definite descriptions unembedded; therefore, the meaning in isolation of the latter must exist. Botterell then considers numerous maneuvers for avoiding this argument — foremost among them, appeal to ellipsis, and denial that a genuine speech act is performed with unembedded definite descriptions.

The implications for linguistics of using definite descriptions unembedded are also discussed at length by Alex Barber, in his "Co-extensive Theories and Unembedded Definite Descriptions". Barber initially takes up two questions: First, what are the implications of this kind of sub-sentential speech for the syntax of definite descriptions? Second, what are the implications for the semantics of definite descriptions? We take these questions in turn.

Barber argues that, despite initial appearances, the unembedded use of definite descriptions actually does not adequately support a restricted quantifier syntax over

a binary syntax for quantifier phrases. Put crudely, the contrasting views of syntax are:

35. Binary syntax: [$_S$ The [$_S$ F is G]]
36. Restricted quantifier syntax: [$_S$ [$_{DP}$ The F][$_{VP}$ is G]]

The problem which Barber identifies is this: arguments for the structure in (36), from the use of things like 'The halibut next to the mackerel' in isolation, make implicit appeal to the generalization that only constituents may be used in isolation. But that generalization, Barber argues, is far too strong. And without it, the use of definite descriptions unembedded cannot be used to argue for (36) over (35). Moreover, Barber notes, theorists who have favored the binary syntax have been interested in syntax in the sense of logical form. Hence it is open to them to maintain that even if the generalization about constituency and use in isolation held, it would at best tell us about surface constituency. Whereas their concern is whether 'the F' is a constituent at the level of logical form. Barber concludes that sub-sentential speech yields inconclusive results, vis-à-vis debates about the syntax of definite descriptions.

Turning to Barber's second question, he considers the idea that a generalized quantifier semantics may be supported by sub-sentential speech of this kind. (As Barber notes, this semantic issue ties back into the syntactic one as well: if 'the F' stands for a generalized quantifier, then this semantics might, in turn, support taking 'the F' to be a syntactic constituent, especially at the level of logical form — roughly on the grounds that the content of 'the F' would be a constituent at the semantic level.) The alternative to the generalized quantifier view, the semantic alternative favored in Russell (1911), is to treat 'the F' syncategorematically, as follows:

37. A sentence of the form, 'The F is G' is true iff there is exactly one F and all Fs are Gs.

In contrast with (34), the generalized quantifier semantics favored by Botterell, this rule does not assign a referent to 'the F'. Indeed, it doesn't provide any semantic rule for this sub-part of the sentence. For precisely this reason, it may seem that (37) can provide no clue as to what the meaning of definite descriptions would be if they were not embedded within a sentence. One might thus infer that (34) is a more adequate semantic clause for definite descriptions because (34) does, but (37) does not, assign a meaning to 'the F' as used in isolation. Hence, it seems (34) is, but (37) is not, compatible with Botterell's datum that we can grasp and deploy the meaning in isolation of definite descriptions. But Barber finds this argument put forward by Stainton as well as by Botterell unpersuasive. According to Barber, it is sufficient for 'the F' to have a denotation — that thing which, as it happens, makes true/false the quantified claim — in order for 'the F' to be used and understood on its own. For instance, 'the halibut next to the mackerel' need only denote, rather than semantically refer to, the intended fish, in order for the hearer to pragmatically search for the proposition meant. (Those unfamiliar with the refer/denote contrast, compare: 'Someone stole my shoes', if true, is made-true by some individual. That person is the denotation of 'someone', in the situation in question. But 'someone' does not semantically refer to said person. Indeed, it does not refer to any individual at all, because it's a quantifier.) Crucially, however, the syncategorematic semantics allows 'the F' to have a denotation.

In sum, with respect to the semantic question, Botterell thinks that the genuineness of sub-sentential speech, including in particular the unembedded use of definite descriptions, demands an addition to linguistic semantics. Phrases of the form 'the F' must, Botterell thinks, be themselves assigned a meaning. It is not enough to syncategorematically assign meanings to all sentences containing descriptions. Barber disagrees. He grants the genuineness of the usage, but thinks that the strictly Russellian syncategorematic semantics can be left untouched regardless, because definite descriptions have denotations that can serve as the departure point for pragmatically arriving at the proposition asserted. If Barber is right, there is no need for one's semantic theory to generate meanings for definite descriptions, in addition to generating meanings for sentences containing definite descriptions.

Before leaving the issue of meaning for definite descriptions, we should highlight yet another apparent implication — for the relationship between semantics and epistemology. Having concluded that definite descriptions do have meaning in isolation, Andrew Botterell turns to the larger philosophical issue of whether Russell himself could have endorsed something like (34) as the meaning rule for 'the F'. That is, as it happens Russell denied that definite descriptions are meaning units — as Botterell nicely puts it, for Russell they no more have meaning-relata than 'and Mary met on' does in (38). But might this have been a minor oversight, easily fixed?

38. Jane and Mary met on Friday

In particular, could Russell have simply agreed that definite descriptions refer to generalized quantifiers, (roughly) functions from sets to propositions, if only this option had occurred to him? Botterell suggests not. Though the generalized quantifier view and Russell's own syncategorematic treatment of 'the F' assign the same truth conditions to whole sentences containing definite descriptions — hence both are acceptable to Russell as far as that goes — the former has the second-order function (from sets to propositions) being a *constituent* of the proposition expressed. The thing is, for Russell, every such constituent must be knowable by acquaintance: "Every proposition which we can understand must be composed wholly of constituents with which we are acquainted" (Russell 1911, 23). Botterell argues that this epistemic constraint on what things can be "part meanings" will not let Russell adopt a generalized quantifier semantics for 'the F', since (as Botterell argues at length) Russell could not, given his foundationalist and empiricist epistemology, have allowed that we can be acquainted with generalized quantifiers. Barber maintains that, as far as sub-sentential speech is concerned, the syncategorematic theory and the generalized quantifier theory are equally viable. Indeed, if anything, the former is pragmatically superior, for reasons explained by Barber. In that case, Russell's "knowledge-by-acquaintance" constraint on the meaning-constituents of sentences of the form, 'The F is G', will not be violated. Russell can therefore avoid Botterell's problem by accepting the syncategorematic view of definite descriptions.

C. An Epilogue On Genuineness and Implications

In the foregoing, we have essentially been discussing, in mutual isolation, the premises of the following simple argument:

Premise 1: If nonsentential speech is genuine, then philosophical/linguistic thesis Φ is true (false).
Premise 2: Nonsentential speech is genuine.

For example, Botterell's paper argues for P1, where the Φs in question are that (a) definite descriptions have meaning in isolation, so that (b) there can be constituents of propositions (namely, generalized quantifiers) that agents can fail to be acquainted with. Barber disagrees about P1, as applied to these cases. He grants that nonsentential speech is genuine, including in particular the unembedded use of definite descriptions. But he remains unconvinced that (a) and (b) follow from this. And, so it seems, Barton and Progovac's paper defends P2, while Ludlow's paper argues against it. In fact, however, treating these premises as mutually independent is actually a simplification. The reason is that what counts as "genuine" varies. We end with this complication.

For some implications, it is enough if words/phrases can be used and understood in isolation: it doesn't actually matter, for those purposes, whether they can be used to communicate propositions. For instance, as far as the scope of syntax goes, even if phrases like (11) and (24) cannot be used assertorically, if they are grammatical at all, and are not derived by simple deletion, then one's grammar surely must account for them.

11. Two packs of cigarettes and a case of beer from Brazil
24. From myself

That we can distinguish between the grammaticality of (11), and the ungrammaticality of 'Cigarettes beer a and', without embedding either in a sentence, already seems to have implications for syntax. Similarly for the scope of semantics. It seems clear that agents can understand words and phrases in isolation: in grocery lists, in dictionaries, on business cards, on posters, and so on. (In particular, they can do this with quantifier phrases and definite descriptions.) This alone seems to suggest that our semantic competence can do more than assign contents to complete sentences.

In contrast, the implications about language-thought relations would seem to require more than the bare grammaticality and interpretability of sub-sentences. For the cases of interest are precisely ones in which a proposition is meant, and understood, even though the linguistic items produced do not encode propositions. What these language-versus-thought implications do *not* require is that the proposition be asserted. It is enough that it be meant or grasped. On the other hand, the thesis of the primacy of the sentence in speech acts requires more than conveying propositions. One can, given the right circumstances, convey a proposition by waving a handkerchief, or by purposely vomiting on someone's expensive fur coat. But this is neither here nor there, with respect to the thesis that genuine full-blown speech acts must be sentential, since one cannot strictly speaking *assert* by either of those means. To falsify the primacy thesis, one does need it to be the case that sub-sentences can be used to make assertions (or to ask questions, issue orders, etc.) And insofar as the primacy of the sentence in semantic and metasemantics is held to derive from the primacy of the sentence in speech acts — a view endorsed by Dummett, for instance — these latter theses too can only be falsified by cases of nonsentential assertion.

So, is the idea that the anti-primacy implications set a higher standard of genuineness than the language-versus-thought implications, which in turn set a higher "genuineness"

standard than implying changes for syntax and semantics? Actually, no. The anti-primacy implications are arguably established even if, in making an assertion sub-sententially, speakers have a sentence in mind, and hearers do too. To say that assertions must be sentential is not to say merely that sentences are involved somehow; it's to say that one must *utter* a sentence to make a genuine assertion. In contrast, the language-thought implications — about grasping thoughts, about integrating information, and about non-derivative logical forms for mental states — all require that no sentence was used at all. Stranger still, it's unclear whether problems for sentence primacy and language-thought relations even require that words and phrases be base-generated: it's not how words and phrases get generated, but that they do, and that they are used assertorically or communicatively, which would seem to matter for these two debates. For instance, even if it's the case that the bare phrase 'All in the garden' is generated in a process that at some stage involves a sentential frame, if what speakers produce, and hearers understand, is this very phrase *without any accompanying sentential frame*, then more is grasped in thought than what is encoded linguistically, and assertions are really being made sub-sententially.

In reality, then, there are various aspects of "genuineness" vis-à-vis sub-sentence use:

- Being generated and used at all;
- Being generated directly, not via transformation;
- Being used and understood in isolation, not embedded in any sentential frame;
- Being used unembedded to communicate something propositional;
- Being used unembedded to perform a genuine speech act;
- Being used unembedded, to either convey or even assert a proposition, when no complete sentence can be accessed by the speaker/hearer.

In light of this, one might suppose that the argument form should really be:

*Premise 1**: If nonsentential speech is genuine in respects R, then philosophical/linguistic thesis Φ is true (false).
*Premise 2**: Nonsentential speech is genuine in respects R.

Strictly speaking, that's right. And some authors have taken this to heart. What many authors choose to do instead, however, is to stick with the original P2 — 'Nonsentential speech is genuine' — with 'genuine' interpreted so that it implicitly includes *all* of the aspects noted just above. If that very strong reading of P2 can be established, then that would, of course, be enough for any of the implications. Alternatively, authors who wish to avoid the implications have attempted to argue that the original P2 is false even on the weakest reading of 'genuine'. So that none of the implications follow.[13]

NOTES

[1] Ray Jackendoff makes a similar point in his discussion of 'Hello', 'Abacadabra', and the like. See Jackendoff (2000), pp. 239–240.

[2] To be sure, all expressions, including sentences, can acquire special conventional meanings. Thus, it might seem that our label, "semantic ellipsis", is just another name for the category of idioms. In which case, one might well wonder if we are making the true but uninteresting point that sentences and sub-sentential expressions can have idiomatic uses. By "semantic ellipsis", we mean something more than just idioms — we also mean to include the idea of one expression being a conventional *abbreviation* for a longer, more

complex, expression. We mention this third category of ellipsis because some have suggested that a case in which a speaker performs a sub-sentential speech-act that has a definite propositional content and a definite illocutionary force, but where the speaker is not using a syntactically elliptical sentence, is really a case in which the speaker is using a sub-sentential expression as "shorthand" for a sentence, cf. Stanley (2000). In Elugardo and Stainton (2004), we argue that those cases are not semantic ellipses in any plausible sense. See also Portner and Zannutini's novel extension of the notion.

[3] This isn't to say that Dalrymple must conclude that VP ellipsis is *exactly* like inferring information omitted by the speaker as obvious. To find an unnoticed similarity between two things is not necessarily to reduce one to the other. Indeed, a seeming difference remains: for Dalrymple, there is a special-purpose semantic rule for finding the content of "ellipsis sites"; whereas "obvious information" from context, being thoroughly pragmatic, is presumably not found and deployed by a dedicated language-internal algorithm.

[4] A third option, not yet endorsed in print so far as we know, is that 'From Spain' and the like have a special content, despite having ordinary syntax: that is, that 'From Spain' is semantically elliptical in the way that Portner & Zanuttini take 'The strange things he says!' to be. We ignore this option here. See Stainton (1995), however, for critical discussion of this approach.

[5] It will be noticed that what goes unpronounced in (15) is not a syntactic constituent. This is a problem, since most theories of ellipsis assume that only constituents may be elided. Jason Merchant (2003) has cogently argued for an alternative underlying structure, within this general framework, which allows the derivation of the sound pattern via the omission of a syntactic constituent. He proposes that the pronounced part, 'Purchased in Germany', is first moved into a focus position, and then the whole clause out of which it was moved goes unpronounced. The source structure is thus something like [[Purchased in Germany]$_1$ [$_s$This was t_1]], with the embedded sentence being elided.

[6] We don't want to overstate this difference. In particular, we're happy to grant that sentences can be used as names for bands or pubs, or as titles of books. Our point, rather, is about how central and unmarked the non-propositional use of sub-sentences is, as compared to non-propositional uses of complete sentences.

[7] One could argue that some sentences do not have their illocutionary force marked either. For instance, 'I will be there' is not marked as promise-prone or prediction-prone. We contend, however, that many simple declarative sentences, e.g., 'Rob was born in 1964', are marked as assertion-prone, whereas very few sub-sentences are so marked. (The exceptions are precisely those cases that are plausibly treated as semantically elliptical, e.g., 'Congratulations'.)

[8] Alternatively, if a search is triggered, then the trigger is some contextual feature of the utterance or a use of the bare phrase. For example, suppose you find a slip of paper on your desk with the words 'ripe bananas' written on it, and you then ask the author of those words what she meant by them. Notice that your inquiry is not triggered by some formal or semantic feature of 'ripe bananas' that calls out for some completion, as in the case of 'does too', since there is no such feature: you know, implicitly, that it is a phrase and that it means *ripe bananas*. What you don't know, and what prompts your inquiry, is the author's intended meaning of 'ripe bananas' on that occasion, e.g., whether the author meant to remind you to buy some ripe bananas, to tell you that the bananas you bought yesterday were too ripe, to ask you to add to the list of fruit to buy, etc.

[9] The exception, of course, is when a lexically headed phrase contains a sentence as a sub-part, as in 'The book which John bought at auction'. This is a nonsentence, but it contains INFL.

[10] A related implication of Dalrymple's take on VP ellipsis is that (1) does not structurally entail that *Rob does not eat meat*. Instead, the whole sentence (1) has this entailment as a matter of lexical semantics, because of what 'does' means in English. That is, (1) entails that *Rob fails to eat meat* in a way not traceable to logical structure, in the same fashion that 'Rob knows that Ray eats meat' entails that *Ray eats meat* by virtue of the lexically marked meaning of 'know'.

[11] Though they do not explicitly embrace it, it seems to us that the "integration in natural language" picture fits quite well with recent work by Jeff King & Jason Stanley (forthcoming). Theorists who would link grasping occurrent thoughts quite closely to grasping natural language vehicles for them include Carruthers (1996) and Ludlow (1999).

[12] In several papers in this volume, work by one or both of the editors is specifically addressed. As editors, we have not insisted that authors respond to "what we had in mind" in writing, but only to what we actually wrote. We therefore issue the following reminder: a description that appears in this volume labeled as "Elugardo & Stainton's" view should not be taken to imply that it captures what we believed then or believe now.

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