

# Contextualism in the Philosophy of Language

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A word is dead, when it is said,  
some say;  
I say it just begins to live,  
that day.

Emily Dickinson

## 1. Contextualism vs. semantic minimalism

Different things go by the name 'contextualism'. Even when we focus on contextualism in the philosophy of language we will find that there is no single characterization accepted by all those who claim (or are said) to be contextualists. To a very rough first approximation, one may characterize the contextualist as someone who is sympathetic to pragmatically oriented, usage-based approaches to meaning. She will take sides with Robyn Carston when she claims that:

[a] major development in pragmatics since Grice's work is the recognition that linguistically decoded information is usually very incomplete and that pragmatic inference plays an essential role in the derivation of the proposition explicitly communicated. (Carston 2002a: 133)

Her opponent, on the other hand, will advocate a formal semantic approach to meaning and insist that deriving the proposition expressed by a sentence is a purely syntactic-semantic enterprise. He will, therefore, tend to agree with Emma Borg that:

in general, formal theories can be characterized as fundamentally syntax-driven theories, which claim that it is possible to deliver an account of the propositional or truth-conditional content of a sentence in natural language simply via formal operations over the syntactic features

of the sentence, that is, over the lexical items it contains and their mode of composition. (Borg 2004b: 3)

More specifically, the contextualist and his opponent, the formal semanticist, negotiate what was traditionally taken to be key semantic notions: the notion of what is said in an utterance of a sentence, the notion of the proposition expressed by a sentence, the notion of a sentence's truth-conditions, and – at the most basic level – the notion of meaning itself. Semanticists try to save one or another of these notions from pragmatic intrusion. Kent Bach argues for a semantic notion of what is said. Herman Cappelen and Ernie Lepore defend the notion of the proposition semantically expressed by an utterance. Emma Borg tries to show that there is a level of semantic content free of contextual effects. Jason Stanley argues that the (intuitive) truth-conditions of an utterance are the result of purely syntactic-semantic interpretation. And they all presuppose a viable notion of linguistic meaning.

In the remainder of the section, I will briefly review some of the more detailed characterizations of contextualism and its chief rival, also known as *semantic minimalism*. Semantic minimalism can be taken to be the 'natural descendant of formal theories of meaning' (Borg 2007: 355). Emma Borg, Herman Cappelen and Ernie Lepore all defend one version or another of semantic minimalism; and they also give more or less detailed characterizations of their opponent, the contextualist.

Cappelen and Lepore, for example, distinguish between moderate and radical contextualists. Among the radical contextualists they count philosophers such as Charles Travis, John Searle, François Recanati, Anne Bezuidenhout and relevance theorists such as Dan Sperber, Deirdre Wilson and Robyn Carston. Their views can be traced back to the work of Ludwig Wittgenstein and John Austin, according to Cappelen and Lepore (see Cappelen and Lepore 2005: 5–6). 'Moderate contextualism', on the other hand, is Cappelen and Lepore's label for all other opponents of semantic minimalism. The problem with this label is that, as Cappelen and Lepore acknowledge, most of the so-called moderate contextualists wouldn't call themselves such (see *ibid.*: 7). So this label is bound to cause confusion. Charles Travis, for example, takes the moderate contextualists to be:

in essence, followers of Carnap. Carnap's idea was this: if an expression's contribution to what is said in speaking it varies from speaking to speaking, find a variable with different values for those speakings; postulate a (tacit) device in the expression, referring, on a speaking, to the value of that variable for that speaking, find a function from that value to the contribution of the expression, on that speaking, to what was then said. (Travis 2006: 39)

This view is more akin to the moderate version of a formal semantic approach put forward by Jason Stanley. He claims that any truth-conditional context sensitivity a sentence may exhibit can be resolved by assigning values to elements in the logical form of the sentence uttered. In all cases in which a sentence's truth-conditions are affected by (extra-linguistic) context, this can be explained by pointing to an indexical, a demonstrative, a pronominal element or a variable in the logical form of the sentence. To the extent that context affects the truth-conditions of a sentence, this can be traced back to something like an open slot in the logical form of the sentence. Yet there need not be a corresponding open slot in the surface grammatical structure, as the logical form might differ from the surface structure. The logical form is the sentence's 'real structure', though (Stanley 2000: 399–400). The effects of context on the truth-conditional interpretation of an assertion are restricted to assigning values to elements in the logical form of the expression uttered. And each context-sensitive element in logical form 'brings with it rules governing what context can and cannot assign to it' (ibid.: 396). Truth-conditional interpretation is purely syntactic-semantic interpretation, in that it is syntactically triggered and governed by semantic rules.

While Cappelen and Lepore's characterization of moderate contextualism is a bit off target, their characterization of radical contextualism is more to the point. The radical contextualist, they say, holds that 'no English sentence S ever semantically expresses a proposition' (Cappelen and Lepore 2005: 6). It is only utterances that can semantically express a proposition and, hence, have a truth-condition. The semantic minimalist disagrees; he endorses *Propositionalism*, the claim that every non-indexical sentence expresses a proposition (Borg 2007: 347–50). Emma Borg takes *Propositionalism* to be one of the defining features of semantic minimalism.<sup>1</sup> And according to François Recanati, who holds a contextualist view, the basic question in the debate is:

whether we may legitimately ascribe truth-conditional content (the property of 'saying' something, of expressing a thought or a proposition) to natural-language sentences, or whether it is only speech acts, utterances in context, that have content in a basic, underived sense. (Recanati 2004: 83)

The contextualist holds that natural language sentences are context-sensitive through and through. It is utterances in contexts, not sentences that have determinate and truth-evaluable content (ibid.: 154).

A second defining feature of semantic minimalism is what Borg calls *The Basic Set Assumption*, the assumption that there is only a small set of context-sensitive expressions (Borg 2007: 350–51). Cappelen and Lepore agree with Borg's characterization:

The most salient feature of semantic minimalism is that it recognizes few context sensitive expressions, and, hence, acknowledges a very limited

effect of the context of utterance on the semantic content of an utterance. (Cappelen and Lepore 2005: 2)

Competent speakers can easily be made to agree that what expressions such as 'I', 'you', 'here' or 'that' refer to is subject to contextual variation. But they won't as easily agree that the same holds for expressions such as 'black', 'flat' or 'ham sandwich'. And, as Borg emphasizes, the minimalist is anxious to 'preserve this intuition' (Borg 2007: 350). He takes an expression to be context-sensitive only if that is obviously so. The basic set of context-sensitive expressions comprises only obviously context-sensitive expressions – and they are few in number. According to Cappelen and Lepore, for example, the set comprises only personal and demonstrative pronouns, adverbs such as 'here' and 'now' and a handful of other expressions (Cappelen and Lepore 2005: 144; they devise a couple of tests in the attempt to distinguish genuine context-sensitive expressions from 'pretenders', see ibid.: chapter 7). Bach is even more restrictive and allows only indexical expressions to contribute to what is said. Stanley, on the other hand, is less restrictive as he promotes hidden indexicality. The contextualist, finally, 'argues for the radical context-dependence of what is said' (Bezuidenhout 2002: 106). She will happily agree that

there is in principle no limit to the effects of contextual information on propositional content: not only are all expressions context-sensitive, but context may also add constituents to propositional content which are entirely unrepresented in syntax. (Carston and Powell 2006: 350)

Emma Borg's account of what is distinctive of semantic minimalism is similar to (though more detailed than) that of Cappelen and Lepore. Yet her characterization of the opponent position differs somewhat from their account. She contrasts semantic minimalism with a view she calls *Dual Pragmatics* (Borg 2004b). The dual pragmatist is so called because he allows pragmatic processes to play a double role in utterance interpretation. They are required not only in order to work out implicatures of a given utterance, but also in order to get at the truth-conditional content, i.e. the proposition expressed in the utterance of the sentence in question. She attributes this view to relevance theorists such as Sperber and Wilson or Carston, to Recanati (whom she calls a contextualist) and also to proponents of discourse representation theory such as Hans Kamp. But Borg doesn't count Travis among the contextualists or even among the dual pragmatists. She sees him as advocating a much more radical view according to which meaning is essentially indeterminate. And while she is right that Travis's views invite a more radical departure from traditional semantic views than more moderate versions of contextualism, I would nonetheless like to classify Travis as a contextualist, albeit a radical one. So I suggest we think of all these positions as ordered on a scale, with more moderate positions at one end and more radical positions at the other.

Borg discusses another important difference between contextualism (or dual pragmatics) and minimalism. First she points out that 'the contextualist is committed to rich pragmatic effects throughout what is said by a sentence, or throughout the proposition expressed, or throughout semantic content'. (Borg 2007: 340) These pragmatic effects have to be pragmatically inferred. That is what makes them pragmatic in the first place. And they may not be syntactically triggered (see, for example, Carston 2002b: 23). Also, these inferences are, like pragmatic inferences in general, defeasible. In contrast, Borg sees the semanticist as being committed to *Formalism* – 'the idea that there is an entirely formal (i.e. syntactic) route to semantic content' (Borg 2007: 355):

After all, it seems that this is just what it is to pursue a formal account: to think that everything which can be found at the semantic level can be traced to the syntactic level (that we don't get anything 'for free', as it were, at the semantic level). (Borg 2004a: 217)

Yet the commitment to *Formalism* can be understood in two ways, she says. First, it could be understood to require that in order to get at the semantic content of the sentence uttered, appeal is to be made to the context of utterance only if it be *syntactically triggered*. Secondly, it could be understood to require that contextual contributions to semantic content be *formally tractable* (Borg 2007: 355). That in turn requires, according to Borg, that the contextual features in question be objective (non-perspectival) features of the context, for only objective features of context are formally tractable. Intentional states she takes to be non-objective features of context. They are not formally tractable, on her view. And:

the main reason for rejecting appeals to speaker intentions from within a formal semantic theory concerns the clash between the deductive, computational nature of a formal theory [...] and the abductive nature of inferences concerning speakers' intentions. (Borg 2004a: 218–19)

The emphasis is on the deductive, computational nature of a formal semantic theory, which is contrasted with the abductive nature of pragmatic inferences. Inferences concerning speaker intentions in particular and pragmatic inferences more generally are liable to be defeated by new information. And in pragmatic inference any piece of information may turn out to be relevant (Borg 2007: 356). So 'there is no limit to the amount of contextual information that can affect pragmatic interpretation' (Recanati 2004: 54). More fully, these inferences are non-monotonic in the following sense. It may be the case that although conclusion C intuitively follows from a set of premises P, it no longer follows from a set M, such that  $M \supset P$ . This feature of pragmatic inferences obviously doesn't square well with the

allegedly deductive character of semantic interpretation. Here is an example of Borg's to illustrate the abductive nature of intentional interpretation:

So, imagine that you see Sally filling a glass of water from the tap. Then you might reason as follows: 'Sally is getting a glass of water from the tap. The best explanation for this action is that Sally is thirsty and wants a drink; therefore Sally is thirsty and wants a drink'. Clearly this is a non-demonstrative piece of reasoning and it is susceptible to the influence of an open-ended range of contextual factors. For instance, say that you know that Sally has just come in with Sourav and that Sourav is wearing running gear and looks out of breath, then the best explanation for Sally's action might be that Sourav is thirsty and Sally is getting a drink for him. Or imagine that Sally has just glanced at her potted plant, then the best explanation might be that she wants to water her plant. (Borg 2004b: 78–9)

Yet the nature of pragmatic inferences which often seem to take the form of an inference to the best explanation not only conflicts with the deductive, but also with the computational nature of formal semantic theories. The semanticist is subscribing to something like the following (admittedly somewhat simplified) picture of how semantic interpretation proceeds. In a first step, the logical form of the sentence uttered has to be figured out. Then the elements of the logical form are each assigned a value in accordance with the respective linguistic conventions or assignment functions. In a third step, these values are combined in accordance with certain combination rules to yield the proposition expressed by the utterance of the sentence and its truth-conditions. Here is a somewhat lengthy quote from Stanley:

First, a speaker makes an utterance, and her linguistic intentions uniquely determine a certain syntactic structure, or 'logical form', as it is known on syntax. [...] Successful interpretation involves assigning denotations to the constituents of the logical form, and combining them in accord with composition rules that do not vary with extra-linguistic context. The denotations that successful interpreters will assign to constituents of a logical form will be constrained by the linguistic conventions governing those elements. In the case of certain elements, which wear their context-dependent nature on their sleeve, the linguistic conventions governing them are rather lax. [...] What results from a successful application of this first stage of interpretation is a unique proposition, a fully truth-evaluable entity. (Stanley 2002: 149–50)

More specifically, what the semanticist is looking for is a procedure that yields for every well-formed sentence (of finite length) of the language in question its meaning, i.e. the proposition expressed or the truth-conditions,

after finitely many steps. But if in intentional interpretation 'there is no determinate boundary at the outset on which facts could turn out to be relevant' (Borg 2004b: 79), then there can be no such algorithmic procedure for pragmatic interpretations, as there is no guarantee that the task can be completed after finitely many steps.

Now, as for the first rendering of *Formalism* according to which appeal to context has to be syntactically triggered, that is something all semantic minimalists seem anxious to subscribe to. Bach would happily do so, as the requirement strongly resembles the *Syntactic Correlation Constraint* which he approvingly quotes Paul Grice as endorsing: 'what is said must correspond to "the elements of [the sentence], their order, and their syntactic character"' (Grice 1989: 87). So if any element of an utterance, i.e. what the speaker intended to convey, does not correspond to any element of the sentence being uttered, it is not part of what is said.' (Bach 2001: 15). Stanley would also subscribe to some version of the *Syntactic Correlation Constraint*; he would insist, though, that there are syntactic constituents that cannot be read off the surface grammatical form of the sentence in question. And Cappelen and Lepore too hold that:

[a]ll semantic context sensitivity (i.e., context sensitivity that affects the proposition semantically expressed) is grammatically triggered, i.e., it is triggered by a grammatically (i.e., syntactically or morphemically) articulated sentential component. (Cappelen and Lepore 2005: 144)

The second rendering of *Formalism*, according to which any contextual contribution to what is said has to be formally tractable, is more problematic. If Borg is right – and I think she has convincingly argued the point – that intentional interpretation requires pragmatic (that is, defeasible) inferences and doesn't therefore square well with the deductive nature of formal semantics, a semantic minimalist who wants to subscribe to *Formalism* cannot allow speaker intentions to play a role in the determination of semantic content or the proposition expressed. I will come back to that in the last part of the chapter.

Let us take stock. I followed Emma Borg in characterizing the semantic minimalist as someone who subscribes (at least) to *Propositionalism*, *Formalism* (on at least the first reading) and *The Basic Set Assumption*. The contextualist, on the other hand, is commonly regarded as someone who rejects all three assumptions. In the remainder of the chapter, I will sketch some of the considerations contextualists commonly adduce in order to defend their position. (A full defence of contextualism is beyond the scope of this contribution, though.)

More specifically, I will look at various forms of context sensitivity in natural language and try to clarify what exactly the alleged context sensitivity in these cases amounts to, i.e., which features are sensitive to contextual

variation, and what it takes to resolve the context sensitivity at issue in order to interpret a context-sensitive utterances. I will thereby argue mainly against *The Basic Set Assumption*, but I hope that it will become clear that the argument against *The Basic Set Assumption* also casts doubt on *Formalism*. The assumption of *Propositionalism*, on the other hand, will not be given much attention in what follows. The problem is that no one in the debate has a clear criterion of when something – be it a sentence or an utterance – expresses a proposition, i.e., is fully propositional or truth-evaluable. Consequently, we also lack a clear grasp of what the result of semantic interpretation is supposed to be. Space being limited, I will not go into that here. Instead, let's get down to cases.

## 2. Cast of characters

(1) There are various well-known cases of overt (as opposed to covert) context sensitivity. For a start, there is abundant ambiguity in natural languages. It comes in two varieties. There is lexical and syntactic ambiguity, the most widely discussed instances of the latter being scope ambiguities. Within lexical ambiguity it is common to further distinguish between homonymy and polysemy. The latter is more problematic but also more interesting from a contextualist point of view, and it will be discussed separately below. So for the time being, 'ambiguity' should be read as 'homonymy'. In the resolution of ambiguity, context is often said to play a pre-semantic role:

Sometimes we use context to figure out with which meaning a word is being used, or which of several words that look or sound alike is being used, or even which language is being spoken. These are *pre-semantic* uses of context. (Perry 1997: 593)

Various tests for ambiguity have been discussed in the literature (see, for example, Lakoff 1970; Zwicky and Sadock 1975, 1987; Atlas 1989; Pinkal 1985, 1991; Quine 1960). Ambiguous expressions stand in need of precisification. The speaker has to have a particular reading in mind. The hearer too has to make up his mind as to which reading was the intended one. This relates to another feature of ambiguous expressions: they lack an encompassing reading. Put otherwise, homonymic readings of an ambiguous expression:

strongly resist any kind of unification. Take the case of *bank*. It is hard to think of the different sorts of bank as parts of a whole, or as united into a global Gestalt. We might think of a very general category to which they both belong, such as 'entity', or even 'location', but this is not good enough, because it does not distinguish banks from non-banks. (Croft and Cruse 2004: 115)

Also, ambiguous expressions are said to have only finitely many, discrete, and natural readings – as opposed to stipulated precisifications. The word 'fast' can mean 'faster than 20 mph', but that is not a natural reading of 'fast' (Pinkal 1985). For all that, it is sometimes difficult to decide where homonymy ends and polysemy, metonymy or metaphor begins (Aristotle, *Top. I*, 15).

Note also that ambiguity is not the only case where context has to play a pre-semantic role. Even in order to phonetically recognize what has been said in a given utterance, appeal has to be made to context because:

in normal speech it is physically impossible to hear each segment: speech is just too fast. Twenty segments a second is not unlikely, but the brain cannot distinguish even half that number of separate sounds at a time. (Aitchison 2003: 227)

So word recognition is to a large extent guesswork. And it seems reasonable to suppose that in order to phonetically figure out what has been said, one draws on whatever contextual clue one can get hold of.

(II) Next, there are well-known and much-discussed cases of overt context sensitivity where context is said to play a semantic role, as in the case of indexicality, demonstrative and anaphoric reference, and definite as well as indefinite descriptions. In all these cases one has to accord a role to context in general and, arguably, to speaker intentions in particular, in the resolution of the respective context sensitivity.<sup>2</sup>

By way of illustration, consider the case of anaphoric reference. As is well known, there are interestingly different cases of anaphoric pronouns (see, for example, Geach 1962; Evans 1977, 1980; and Neale 1990). Yet the important point for present purposes is simply that in order to fix the referent of an anaphoric pronoun one has to take speaker intentions, worldly knowledge, contextual clues as to the purpose or point of the conversation, and discourse or linguistic context (also called *co-text*) comprising the previous utterances or the enclosing text, into account. Consider this:

- (1) The city councillors refused to issue the workers a permit for a demonstration because *they* ...  
     feared violence.  
     were communists.  
     were preparing for an election.  
     were from out of town.  
     applied too late. (Pylyshyn 1987: viii)

The pronoun 'they' can be taken to refer either to the city councillors or to the workers. And hearers will have no problem deciding which referent

to choose on any given completion of (1). But they thereby obviously have to draw on their knowledge about linguistic as well as non-linguistic context.

(III) Cases of obvious incompleteness give rise to context sensitivity too. Examples are provided by non-sentential and elliptic assertions:

- (2) From Spain (– said while holding up a letter). (Stainton, 1997: 61)  
 (3) Bill likes working and so does Bob. (Bach 1994: 281)

There is an ongoing debate about how to handle these cases, and in particular whether they should be treated semantically or pragmatically. Robert Stainton, for example, argues for a pragmatically oriented approach to non-sentential speech, while Stanley questions the assumption 'that all alleged examples of non-sentential assertion must be treated by the same general strategy' (Stanley 2000: 403; see also, for example, Elugardo and Stainton 2004; Ludlow 2004; Stainton 1995, 1997, 2005).

(IV) More exciting, from a contextualist perspective, are somewhat subtler forms of underdetermination or incompleteness. Here are some examples:

- (4) Steel isn't strong enough. (Bach 1994: 268)  
 (5) You are not going to die (– said by a mother to her son who has cut his finger). (*ibid.*)  
 (6) Mending this fault will take time. (Carston 2002b: 26)  
 (7) Jill can't continue. (Borg 2004b: 228)  
 (8) The girl with the flowers is happy (Atlas 1989: 26)  
 (9) Jack tells Jill, 'I love you too'. (Bach 1982: 593)  
 (10) Every boy (in the class) is seated. (Stanley 2005: 223/224)  
 (11) John is tall (for a fifth grader) (*ibid.*)  
 (12) Sam left Jane and she became very depressed. [and as a result] (Carston 2002a: 135)

The contextualist will claim that these sentences are context-sensitive in that they can be used to say different things given different contexts of utterance. And the truth-conditions of these utterances will differ accordingly. And that is so because they allow (and even ask) for contextual completion. (That is not to deny that some of the sentences have preferred or even default completions.) Sentence (7), for example, can be used to say that Jill can't continue school, or that she can't continue dance classes, or university education, and so on. And sentence (11) can be used to say (as the material in brackets indicates) that John is tall for a fifth grader, or that he is tall for an NBA player, and so on.

Consequently, the contextualist will also be inclined to deny that homophonic truth-conditions and propositions, as advocated by Cappelen and Lepore (see Cappelen and Lepore 2005), serve any theoretical or explanatory purpose. Suppose, for example, that you want to know what we have been talking about and I tell you: 'John said that Tom is ready'. What does the indirect report of John's utterance tell you in this case that I couldn't have told you by directly reporting on John's utterance? Sentences can do all the work homophonic propositions are supposed to do; the latter are therefore theoretically superfluous. Suppose John next says: 'Tom is rich'. If all you know is that John's utterance is true iff Tom is rich, then you won't be able to tell whether John's utterance is true – even if you know all there is to know about Tom's financial situation. You also have to know what it takes for someone to count as reasonably rich in the context of John's utterance, i.e., what the relevant comparison class is. Gilbert Harman gets it exactly right when he says that the fact that 'A is F' is true iff A is F 'is a trivial point about the meaning of "true", not a deep point about meaning' (Harman 1987: 216).

(V) Another interesting and very common form of context sensitivity is metonymy. We often use a term to refer not to its literal referent but to something that is somehow related to the literal referent. Here is François Recanati's favourite example:

- (13) The ham sandwich left without paying. (Recanati 2004: 26)

Of course the waiter didn't complain about the ham sandwich but about the person who ordered or ate the sandwich. One may succeed in referring to a person or thing by using an expression for something only accidentally (but saliently) related to that person or thing. But note also that not just any relation will do, as only some relations between any two given things can be exploited for purposes of deferred reference (see Nunberg 1996 for an example). Metonymical reference usually follows certain patterns – it is not that anything goes. We often use a container for the content, a part for the whole (*pars pro toto*), or an attribute for the possessor of the attribute. These are common forms of metonymy. Here is another example. Think of reading a recipe that says:

- (14) Now throw in a tablespoon full of chopped parsley and cook five minutes more.

Of course you are not asked to throw in the tablespoon itself. (It won't get tender anyway.) But, as has just been said, we often use the container metonymically for the content. Or suppose you overhear someone say:

- (15) They drank a bottle of wine.

Most probably, they did not drink the bottle, but its content. This, again, is a case of a container/content metonymy. Yet not only singular terms but also demonstratives can be used metonymically. Here are two examples due to Emma Borg:

- (16) 'That is my favourite author' said while pointing at a book.  
 (17) 'This singer is great' said while pointing at a record. (Borg 2004b: 175)<sup>3</sup>

The demonstrative 'that' in (16) is not exactly used figuratively. But is it used literally? Also, examples such as these seem to suggest that there is no clear-cut distinction between deferred reference and non-deferred reference: one may refer to someone by pointing to his head in the crowd, or his arm visible over the wall, or to his shadow, or to a photograph depicting him, and so on (see Borg 2004b: 179).

Moreover, the contextualist will emphasize the fact that the deferred referent is truth-conditionally relevant: an utterance of sentence (13) will, arguably, be true only if the customer who stood in the contextually salient relation to the ham sandwich left without paying – not if the ham sandwich itself left without paying. The metonymic referent enters into the truth-conditions of the sentence. Also, whether the expression 'the ham sandwich' is used to refer to the ham sandwich or to someone who ordered or ate it depends on context. This kind of context sensitivity affects all expressions that can be used metonymically. And if someone doesn't understand deferred uses of linguistic expression he can hardly qualify as a competent speaker.

(VI) To my mind, the most interesting examples of context sensitivity are provided by cases of metaphor and polysemy, though. To that I now turn. Suppose a speaker says:

- (18) Sally is a block of ice. (Searle 1993: 83)  
 (19) Robert is a bulldozer. (Carston 2002b: 350)

As various philosophers have pointed out, the properties attributed to Sally or Robert in (18) and (19) respectively are not properties of blocks of ice or bulldozers. Which properties is someone who utters (19) thereby attributing to Robert? She is, presumably, attributing to him such properties as the property of being stubborn and persistent, of not looking left or right, of taking the risk of collateral damage, of egoistically pursuing his own interests, and so on. But none of these properties is a property of bulldozers. That is to say, these properties can be attributed to bulldozers only metaphorically. It should come as no surprise, therefore, that two of the most appropriate

characterizations of metaphor are themselves metaphorical:

Metaphor, it seems is a matter of teaching an old word new tricks (Goodman 1976: 69)

Briefly, a metaphor is an affair between a predicate with a past and an object that yields while protesting. (*ibid.*)

Of course, metaphorical interpretation is context-sensitive and requires that contextual clues be taken into account. But it also requires a lot of background knowledge, knowledge about 'the world'. For all that, metaphorical language use is a central feature of natural language – not just a linguistic deviation. It may even improve understanding:

The good metaphor satisfies while it startles. Metaphor is most potent when the transferred schema effects a new and notable organization rather than a mere relabeling of an old one. (Goodman 1976: 79/80)

Expressions are often used metaphorically in order to conceptualize abstract and mental phenomena. And the expressions we thereby use are often taken from the realm of sense experience. That is why we are feeling *blue*, or complain about someone being *cold*, and so on. And that also allows us to use metaphors in explaining human behaviour. We say that a friend of ours broke down under pressure – thereby exploiting the metaphor of *the mind is a brittle object* (see Lakoff and Johnson 1980: 28). Or we say of a friend that she is feeling up, that her spirits rose, or that, sadly, she sank into a coma. We use orientational metaphors, as George Lakoff and Mark Johnson call them (see Lakoff and Johnson 1980: chapter 4), to conceptualize mental phenomena by giving them a spatial orientation. Abstract phenomena, too, are commonly conceptualized by way of metaphors. We think of love as if it were a journey: Look how far we have come; yet now we are at a crossroad; from here on we have to go separate ways as this isn't going anywhere; we are in a dead-end street. And we talk of theories and arguments as if they were buildings: The theory needs more support, it lacks a foundation; the argument collapsed, it was not solid enough (see Lakoff and Johnson 1980: chapter 10). We commonly use expressions from the concrete realm of sense experience to conceptualize abstract and mental phenomena (see also Keller and Kirschbaum 2003: 36, 99). Consequently, if metaphorical utterances were always strictly speaking false, that would render most of our talk about abstract or mental phenomena false.

Moreover, metaphor is a driving force behind language change. We use language in order to classify things and events. When we encounter a new situation, we usually prefer to conceptualize it by using familiar vocabulary – even if we have to somewhat stretch the word's 'old meaning' so that the word becomes applicable to the new situation. And some of these uses catch on.

(VII) Lexicalizing a metaphorical use of a word yields polysemy, where '[p]olysemy is understood here in a broad sense as variation in the con-strual of a word on different occasions of use' (Croft and Cruse 2004: 109). Consider this:

- (20) (a) The janitor goes from top to bottom of the building.  
 (b) The staircase goes from top to bottom of the building.  
 (c) The river Ganges goes from the Himalayas to the Indian Ocean.  
 (d) The power of prayer goes round the world. (Aitchison 2003: 59)

Does the janitor go in the same way from top to bottom as the staircase does? Is that already a case of metaphor? The river Ganges, on the other hand, rather clearly goes to the Indian Ocean only metaphorically. But polysemy need not be the result of lexicalizing a metaphor. Many expressions can be used to describe different actions or entities without that being necessarily due to a kind of figurative use. They simply allow for different understandings or interpretations relative to different contexts. Compare the following:

- (21) (a) Jane opened the window.  
 (b) Bill opened his mouth.  
 (c) Sally opened her book to page 56.  
 (d) Mike opened his briefcase.  
 (e) Pat opened the curtains.  
 (f) The child opened the package.  
 (g) The carpenter opened the wall.  
 (h) The surgeon opened the wound. (Carston 2002b: 325)

It is something different to open a curtain than to open one's mouth. And a wall is usually opened not in the way one opens a wound. The word 'open' can be used to describe a variety of different actions, and one has to contextually work out the appropriate understanding. Some philosophers take these examples to show that word meanings (or concepts) are not ready-made entities but have to be constructed in context. According to Robyn Carston, for instance, in many of the cases discussed so far, 'an ad hoc concept is constructed and functions as a constituent of what is explicitly communicated' (Carston 2002b: 357). The idea is that words encode concepts which 'provide the starting point for a pragmatic process which results in a different concept, one which is narrower and/or broader than, or, perhaps in the case of some metaphors, different in some way from the lexical concept' (*ibid.*).

And it was also examples such as these that led John Searle to argue for the claim that the literal meaning of a sentence determines its truth-conditions only relative to a set of background assumptions, 'and without some set of background assumptions the sentence does not determine a definite set of

truth conditions at all' (Searle 1978: 220–1). Moreover, a sentence's truth-conditions vary with differences in the respective background assumptions. (To speak of background assumptions is a bit misleading as the background not only comprises assumptions but also practices, according to Searle.) Here is another example to further illustrate the point:

- (22) (a) Bill cut the grass.
- (b) The barber cut Tom's hair.
- (c) Sally cut the cake.
- (d) I just cut my skin.
- (e) The tailor cut the cloth. (Searle 1980: 221)

Searle takes it that the word 'cut' is used literally in these sentences. Yet the word makes different contributions to the truth-conditions of these sentences (see *ibid.*: 222–3). For what one does when one cuts the grass is different from what one does when one cuts the cake. If 'someone tells me to cut the grass and I rush out and stab it with a knife [...] I will have failed to obey the order' (*ibid.*: 223). And the reason why the word 'cut', meaning what it does, fixes different truth-conditions in these cases stems from

the fact that as members of our culture we bring to bear on the literal utterance and understanding of a sentence a whole background of information about how nature works and how our culture works. [...] I understand the sentence "He cut the grass" differently from the way I understand "He cut the cake" [...] because I know a lot of things about grass, e.g. what people have grass lawns for, what they do to their lawns etc. [...] and my knowledge that cutting grass is different from cutting cakes is part of this larger system of knowledge. (*ibid.*: 226–7)

A somewhat similar idea is elaborated by Charles Travis (see also Moravcsik 1998 and Bezuidenhout 2002). He argued in a series of papers and books that whether a word can be used to describe a particular entity (or action) depends not only on how things stand ('objectively', if you like) with that entity but also on the participants' interests, the purpose or point of the conversation and so on. Take the following sentences:

- (23) The kettle is black. (Travis 1985: 196)
- (24) The ball is round. (Travis 1996: 454)
- (25) The leaves are green. (Travis 1997: 89)

These sentences don't wear their context sensitivity on their sleeves. Yet Travis invites us to consider, for example, the following story:

Pia's Japanese maple is full of russet leaves. Believing that green is the colour of leaves, she paints them. Returning, she reports: 'That's better. The

leaves are green now.' She speaks truth. A botanist friend then phones, seeking green leaves for a study of green-leave chemistry. 'The leaves (on my tree) are green,' Pia says. 'You can have those.' But now Pia speaks falsehood. (Travis 1997: 89)

It is worth noting that Travis's concern here is not with ambiguity in the sense of homonymy (nor with bio-chemical details). Nor is this a case of a metaphorical or otherwise non-literal use. Pia might, arguably, be said to have used the expression 'green' in two different ways in both cases – as might be witnessed by the fact that although she used the words to describe one and the same state of affairs, her words were true in one case and false in the other. Yet if these different ways of using 'green' were readings of a homonymic word 'green', then the list of readings would be very long indeed, for there are many ways to use (and understand) an utterance of 'X is green'. It can be used to say that X is green all over, green only on the outside, painted green, green under normal lighting conditions, green given the particular lighting conditions obtaining now, and so on. And each of these different ways of using and understanding an utterance of 'X is green' would issue in yet another reading of 'green'. So the readings a homonymic expression has differ from the ways a not-homonymic (or disambiguated) expression might be understood in different contexts of its use. Nonetheless, each particular understanding determines a different truth-condition: 'Typically, an (e.g.) English expression is such that, with its meaning (unambiguously) fixed, there are a variety of distinct (perhaps better: distinguishable) things to be said in using it on some production of it or other.' (Travis 1985: 187)<sup>4</sup>

Examples such as this one seem to show that even a non-indexical and non-ambiguous sentence need not succeed in determining all by itself, so to speak, a truth-condition. Trivially, the sentence 'The leaves are green' is true iff the leaves are green. But, again, the point is that even if one knows everything there is to know about leaves and their colour, one won't know whether an utterance of 'The leaves are green', said of a particular tree, is true or false unless one also knows what the point and purpose of the utterance was supposed to be, what interests were operative in the context in question, and so on. So whether any such sentence can be correctly applied to a particular situation depends on the participants' interests, purposes, background assumptions, and so on. Given such and such interests and assumptions, it may be correctly applicable; given different interests and assumptions, it may be not correctly applicable. Of course we could specify further and try to make some of these interests and assumptions explicit. But as Anne Bezuidenhout points out:

There is no sentence that we can produce that can settle all questions about how some original sentence is to be understood, since language

doesn't function that way. It is not self-interpreting. (Bezuidenhout 2002: 113)

Given all these examples of polysemy, one might, echoing John Austin, ask the question: 'Why do we call different things by the same name?' (Austin 1979a, 69). And a sensible answer seems to be that it allows us to use a finite vocabulary to talk about or describe an – in principle – infinite array of situations. That is just a case of what Jon Barwise and John Perry called the efficiency of language. (Barwise and Perry 1983: 5; see also Goodman 1976: 80) And Jonathan Cohen puts the point thus:

Rather, it is an enormous convenience that the same word can often be uttered in one or other of several different though related senses. Instead of having to learn a very much larger number of words, each with fixed and context-independent meanings, we can learn a relatively small number of words with variable meanings and then exploit their verbal or situational contexts of utterance in order to disambiguate their actual occurrences. (Cohen 1985: 132)

Our expressions can be made to fit all the various situations we encounter almost perfectly. They answer to our needs, i.e., they are *context-sensitive*. They can be adjusted, modulated, if need be. And need there is, as we never encounter exactly the same situation twice over. Given that linguistic expressions serve the purpose of classification (a function of language commonly ignored in the formal semantic tradition where the focus is on language's function of describing some state of affairs or of stating facts), it is to be expected that they are context-sensitive and polysemous. So when we encounter a hitherto unknown situation, we are thereby able to conceptually structure it by using familiar vocabulary. That yields polysemy. But in order to be able to classify new situations by using familiar vocabulary, we sometimes have to 'unduly stretch the meaning of a given expression so that it becomes applicable to the case at hand. This commonly results in metaphor.

(VIII) Finally, sometimes we even create words.<sup>5</sup> These nonce words are tailor-made for a particular purpose or situation, as when I want to take a picture of you and say: 'Please do a Napoleon for the camera' (Aitchison 2003: 171). Most likely, you will understand what I want you to do. As Aitchison puts it: 'Humans are amazingly good at extending the application of words' (*ibid.*: 162). And sometimes one of those nonce words catches on, as language is in a constant state of flux.

### 3. Context-sensitive extensions and pragmatic inferences

What do the examples show? They show that there is, in natural language, context sensitivity in abundance. Of course, the semantic minimalist will

be impressed by these examples only if they affect semantics, that is, if the context sensitivity involved affects the expressions' extension, the sentences' truth-conditions or some such thing. And he will be worried only if it cannot be resolved by purely semantic interpretation. But that is exactly the contextualist's point. The context sensitivity involved in these cases affects semantics, and it cannot be resolved by purely semantic interpretation. So there is reason for the semanticist to be concerned.

Let us take the first point first. To what extent does the context sensitivity involved in the above examples affect semantics? In almost all the cases discussed above, it seems that what varies in accordance with contextual variation is something like the expressions' extension or denotation, what the expressions are used to refer to, denote, or talk about. This is obviously so in cases of ambiguity, indexicality, demonstrative and anaphoric reference. But it is, though less obviously, also so in the case of polysemy and metonymy (and maybe even in the case of metaphor, but that depends on what our best theory of metaphor will turn out to be). If John says 'Tom cut the cake' then the verb 'cut' is used to pick out a particular action – an action that differs from the action performed by cutting the lawn. That is the point of polysemic expressions: they can be used to denote slightly different kinds of things, properties, actions or events. (This, again, results from the fact that language serves the purpose of classification.) Moreover, in all these cases context sensitivity seems to affect truth-conditions. Even in the case of metonymy the metonymic referent seems to be truth-conditionally relevant. And John's utterance of 'Tom is rich' is true iff Tom is rich given the standard of richness operative in John's context of utterance. This will be no problem for those semanticists who sever semantics from truth-conditions (as for example Kent Bach does). Yet most semanticists would, I think, agree with David Lewis that '[s]emantics with no treatment of truth conditions is not semantics' (Lewis 1970: 190).

Let us turn to the second point, the point about how to resolve the context sensitivity at issue. In all cases discussed above, appeal has to be made to context in order to properly interpret the respective utterances. One traditional approach to meaning and interpretation takes it that this is best explained on the assumption that the meaning of an expression provides us with an assignment function that delivers for any given context the value of the expression in that context. So the idea is that meanings are something like intensions, functions from Montague-style indices to extensions. Yet in light of the examples just discussed, it becomes questionable whether contextual interpretation can be semantically controlled in such a way. In many of the cases discussed, pragmatic inferences are required in order to figure out an expression's extension and consequently the truth-conditions (or the proposition expressed) of the sentences containing the expression. A pragmatic inference is a sort of inference to the best explanation. It is non-monotonic, defeasible. Consequently, as Emma Borg has rightly pointed

out, the need for pragmatic inferences clashes with the allegedly deductive nature of semantic interpretation. Moreover, in performing pragmatic inferences one draws on contextual information concerning the circumstances of utterance, speaker intentions (to the extent that they are manifest), the participants' interests and background assumptions, the purpose or point of the conversation, and so on. A formal characterization of an index as an n-tuple of contextual features will, therefore, hardly be available. Rather, context should be thought of as providing information but not as determining anything (a point Kant Bach and others have emphasized before). To think of context as a neat list of contextual features that determine the semantic values of context-sensitive expressions is to employ a metaphor, and a bad one at that. David Lewis, for example, was well aware of the difficulty:

I emphasized that the dependences of truth on context was surprisingly multifarious. It would be no easy matter to devise a list of all the features of context that are sometimes relevant to truth in English. In [General Semantics, N.K.] I gave a list that was long for its day, but not nearly long enough. (Lewis 1980: 30)

To sum up: I argued on behalf of the contextualist that there is ample context sensitivity in natural language. And what varies from context to context in these cases is the expression's extensions and the sentence's truth value. So *The Basic Set Assumption* has to be given up. Moreover, since the contextually appropriate extension of a given context-sensitive expression has to be pragmatically inferred, *Formalism* has to be given up, too. There is no purely syntactic-semantic route to extension and content. Pragmatic inferences are indispensable if one wants to figure out an expression's extension. Yet the process of interpretation thereby performed hardly deserves to be called (purely) semantic interpretation. I take that to be one of the basic contextualist insights.

## Notes

1. Kent Bach rejects *Propositionalism* and thereby distinguishes his own position which he calls *Radical Semantic Minimalism* (or *Radicalism*), from semantic minimalism. According to Bach, even indexical free sentences sometimes fail to express a complete proposition but express only a propositional radical, as he calls it.
2. The latter claim is contested. Christopher Gauker (2008), for example, holds that the referent of a demonstrative is the object that best satisfies certain wholly non-intentionally specifiable accessibility criteria. See also Marga Reimer (1991) and Kent Bach (1992) for two contrasting views on 'intentionalism'.
3. Geoffrey Numberg also discusses cases of deferred reference: 'You can point at a girl child to identify her father ("He is in real estate"). You can point at a book to identify its author ("She was my chemistry teacher"), or at an author to identify a

book ("That is a wonderful autobiography")' (Nunberg 1993: 26; see also Kaplan 1977: 490, footnote 10).

4. Here is another example due to Anne Bezuidenhout: 'My son comes into the kitchen from the backyard and when I ask him what he has been doing he replies: "I've been playing baseball." Is what he says true? Well, the game he was playing resembles standard league baseball games only rather remotely. There certainly is no baseball diamond in a our backyard. In the game my son plays with his father and our dog in our backyard, the bases are marked by three trees that stand in a very rough diamond shape with respect to "home plate", which is itself a rather poorly defined place somewhere at the fourth point of the rough diamond. The game is played only with a pitcher and a batter. When the batter makes it to the base, he leaves an "invisible man" on base and returns to bat. The dog plays in the outfield. Sometimes he returns the ball to the batter and sometimes he chases the runner round the base with the ball in his mouth, but not in any predictable way. Yet this joint activity counts as playing baseball, as playing baseball is understood in this context. So if my son was in fact playing baseball on this understanding, then what my son says is true. (This example is loosely inspired by Moravcsik 1998.)' (Bezuidenhout 2002: 106)

5. The list of examples is not meant to be exhaustive. There are other interesting examples of context sensitivity. And of course there is vagueness. Yet I would like to distinguish vagueness from the various forms of context sensitivity just discussed, because the hallmark of vagueness, I think, is that even if all features of context were fixed, that is, even if all interests, purposes, background assumptions etc. were made explicit and agreed upon, two equally rational speakers may still disagree about whether a given vague predicate is applicable to a given object or not.

## References

- Aitchison, J. (2003) *Words in the Mind: An Introduction to the Mental Lexicon*, 3rd edn. (Oxford: Blackwell).
- Aristotelis Opera*, ed. by Immanuel Bekker (1831–1870) Preußischen Akademie der Wissenschaften, Berlin.
- Atlas, J. (1989) *Philosophy Without Ambiguity* (Oxford: Oxford University Press).
- Austin, J. L. (1979a) The meaning of a word. In Austin (1979b), pp. 55–75.
- Austin, J. L. (1979b) *Philosophical Papers*, 3rd edn (Oxford: Oxford University Press).
- Bach, K. (1982) Semantic nonspecificity and mixed quantifiers. *Linguistics and Philosophy*, 4: 593–605.
- Bach, K. (1992) Intentions and demonstrations. *Analysis*, 52: 140–6.
- Bach, K. (1994) Semantic slack. In S. L. Tsohatzidis (ed.) *Foundations of Speech Act Theory: Philosophical and Linguistic Perspectives* (London and New York: Routledge), pp. 267–91.
- Bach, K. (2001) You don't say. *Synthese*, 128: 15–44.
- Barwise, J. and Perry, J. (1983) *Situations and Attitudes* (Cambridge, MA and London: MIT Press).
- Bezuidenhout, A. (2002) Truth-conditional pragmatics. *Philosophical Perspectives*, 16: 105–34.
- Borg, E. (2004a) Formal semantics and intentional states. *Analysis*, 64: 215–23.
- Borg, E. (2004b) *Minimal Semantics*. (Oxford: Oxford University Press).
- Borg, E. (2007) Minimalism versus contextualism in semantics. In G. Preyer and G. Peter (eds.), *Context-Sensitivity and Semantic Minimalism: New Essays on Semantics and Pragmatics* (Oxford: Oxford University Press), pp. 339–59.

- Cappelen, H. and Lepore, E. (2005) *Insensitive Semantics: A Defense of Semantic Minimalism and Speech Act Pluralism* (Oxford: Blackwell).
- Carston, R. (2002a) Linguistic meaning, communicated meaning and cognitive pragmatics. *Mind & Language*, 17 (1&2): 127–48.
- Carston, R. (2002b) *Thoughts and Utterances: The Pragmatics of Explicit Communication*. (Oxford: Blackwell).
- Carston, R. and Powell, G. (2006) Relevance Theory – new directions and developments. In E. Lepore, and B. C. Smith (eds.) (2006) *The Oxford Handbook of Philosophy of Language* (Oxford: Clarendon Press), pp. 341–60.
- Cohen, J. L. (1985) A problem about ambiguity in truth-theoretical semantics. *Analysis*, 45 (3): 129–34.
- Croft, W. and Cruse, A. D. (2004) *Cognitive Linguistics* (Cambridge: Cambridge University Press).
- Elugardo, R. and Stainton, R. J. (eds.) (2004) *Ellipsis and Nonsentential Speech*. (Dordrecht: Kluwer).
- Evans, G. (1977) Pronouns, quantifiers and relative clauses (I). *The Canadian Journal of Philosophy*, 7, 3: 467–536.
- Evans, G. (1980) Pronouns. *Linguistic Inquiry*, 11 (2): 337–62.
- Gauker, C. (forthcoming) Zero tolerance for pragmatics. *Synthese*, 65: 359–71.
- Geach, P. (1962) *Reference and Generality* (Ithaca: Cornell University Press).
- Goodman, N. (1976) *Languages of Art. An Approach to a Theory of Symbols*, 2nd edn (Indianapolis: Hackett Publishing Company, Inc.).
- Grice, P. H. (1989) Logic and conversation. In P. H. Grice *Studies in the Way of Words* (Cambridge, MA: Harvard University Press), pp. 1–143.
- Harman, G. (1987) (Nonsolipsistic) conceptual role semantics. In E. Lepore (ed.) *New Directions in Semantics* (London: Academic Press), pp. 55–81. Reprinted in G. Harman (1999) *Reasoning, Meaning, and Mind* (Oxford: Clarendon Press), pp. 206–31; quotations are to Harman (1999).
- Kaplan, D. (1977) Demonstratives. An essay on the semantics, logic, metaphysics, and epistemology of demonstratives and other indexicals. In J. Almog, J. Perry and H. Wettstein (eds.) *Themes from Kaplan* (Oxford: Oxford University Press), pp. 481–563.
- Keller, R. and Kirschbaum, I. (2003) *Bedeutungswandel: Eine Einführung* (de Gruyter Studienbuch). (Berlin: de Gruyter).
- Lakoff, G. (1970) A note on ambiguity and vagueness. *Linguistic Inquiry*, 1: 357–9.
- Lakoff, G. and Johnson, M. (1980) *Metaphors We Live By* (Chicago: University of Chicago Press).
- Lewis, D. (1970) General semantics. *Synthese*, 22: 18–67. Reprinted in Lewis (1983) *Philosophical Papers*, Vol. 1. (Oxford: Oxford University Press), pp. 189–232; quotations are to Lewis (1983).
- Lewis, D. (1980) Index, context, and content. In S. Kangar and S. Öhman (eds.) *Philosophy and Grammar* (Dordrecht: Reidel). Reprinted in Lewis (1998) *Papers in Philosophical Logic* (Cambridge: Cambridge University Press), pp. 21–44; quotations are to Lewis (1998).
- Ludlow, P. (2004) A note on alleged cases of nonsentential assertion. In R. Elugardo and R. Stainton (eds.) (2004), pp. 95–108.
- Moravcsik, J. M. (1998) *Meaning, Creativity, and the Partial Inscrutability of the Human Mind* (Stanford: CSLI Publications).
- Neale, S. (1990) *Descriptions* (Cambridge, MA: MIT Press).
- Nunberg, G. (1993) Indexicality and deixis. *Linguistics and Philosophy*, 16: 1–43.
- Nunberg, G. (1996) Transfers of meaning. In J. Pustejovsky and B. Boguraev (eds.) *Lexical Semantics: Problems of Polysemy* (Oxford: Clarendon Press), pp. 109–32.
- Perry, J. (1997) Indexicals and demonstratives. In R. Hale and C. Wright (eds.) *A Companion to the Philosophy of Language* (Oxford: Blackwell Publishers), pp. 586–612.
- Pinkal, M. (1985) *Logik und Lexikon – eine Semantik des Unbestimmten* (Berlin and New York: de Gruyter).
- Pinkal, M. (1991) Vagheit und Ambiguität. In A. von Stechow and D. Wunderlich (eds.) *Semantik: Ein internationales Handbuch der zeitgenössischen Forschung* (Berlin and New York: de Gruyter), pp. 250–69.
- Pyllyshyn, Z. (1987) Preface. In Z. Pyllyshyn (ed.) *The Robot's Dilemma* (Norwood, NJ: Ablex), pp. vii–xi.
- Quine, W. V. O. (1960) *Word and Object* (Cambridge, MA: MIT Press).
- Récanati, F. (2004) *Literal Meaning* (Cambridge: Cambridge University Press).
- Reimer, M. (1991) Do demonstrations have semantic significance? *Analysis*, 51: 177–83.
- Searle, J. (1978) Literal meaning. *Erkenntnis* 13: 207–24.
- Searle, J. (1980) Background of meaning. In J. Searle, F. Kiefer and M. Bierwisch (eds.) *Speech Act Theory and Pragmatics* (Dordrecht: Reidel Publishing Company), pp. 221–32.
- Searle, J. (1993) Metaphor. In A. Ortony (ed.) *Metaphor and Thought*, 2nd edn (Cambridge: Cambridge University Press), pp. 83–111.
- Stainton, R. J. (1995) Non-sentential assertions and semantic ellipsis. *Linguistics and Philosophy*, 18: 281–96.
- Stainton, R. J. (1997) What assertion is not. *Philosophical Studies*, 85: 57–73.
- Stainton, R. J. (2005) In defense of non-sentential assertion. In Z. G. Szabó (ed.) *Semantics versus Pragmatics* (Oxford: Clarendon Press), pp. 383–457.
- Stanley, J. (2000) Context and logical form. *Linguistics and Philosophy*, 23/4: 391–434.
- Stanley, J. (2002) Making it articulated. *Mind & Language*, 17: 149–68.
- Stanley, J. (2005) Semantics in context. In G. Preyer and G. Peter (eds.) *Contextualism in Philosophy: Knowledge, Meaning, and Truth* (Oxford: Oxford University Press), pp. 221–53.
- Travis, C. (1985) On what is strictly speaking true. *Canadian Journal of Philosophy*, 15: 187–229.
- Travis, C. (1996) Meaning's role in truth. *Mind*, 105: 451–66.
- Travis, C. (1997) Pragmatics. In R. Hale and C. Wright (eds.) *A Companion to the Philosophy of Language* (Oxford: Blackwell Publishers), pp. 87–107.
- Travis, C. (2006) Insensitive semantics. *Mind & Language*, 21: 39–49.
- Zwicky, A. and Sadock, J. (1975) Ambiguity tests and how to fail them. In J. Kimball (ed.) *Syntax and Semantics 4* (New York: Academic Press), pp. 1–35.
- Zwicky, A. and Sadock, J. (1987) A non-test for ambiguity. *Canadian Journal of Philosophy* 17: 185–8.