Minimal Semantics

*Minimal Semantics* asks what a theory of literal linguistic meaning is for—if you were to be given a working theory of meaning for a language right now, what would you be able to do with it? Emma Borg sets out to defend a formal approach to semantic theorizing from a powerful contemporary opponent—advocates of what she call ‘dual pragmatics’. According to dual pragmatists, rich pragmatic processes play two distinct roles in linguistic comprehension: as well as operating in a post-semantic capacity to determine the implicatures of an utterance, they also operate prior to the determination of truth-conditional content for a sentence. That is to say, they have an integral role to play within what is usually thought of as the semantic realm.

Borg believes dual pragmatic accounts constitute the strongest challenge to standard formal approaches to semantics since they challenge the formal theorist to show not merely that there is some role for formal processes on route to determination of semantic content, but that such processes are alone sufficient for determining content. *Minimal Semantics* provides a detailed examination of this dual pragmatic position, introducing readers who are unfamiliar with the topic to key ideas like relevance theory and contextualism, and looking in detail at where these accounts diverge from the formal approach.

Borg’s defence of formal semantics has two main parts: first, she argues that the formal approach is most naturally compatible with an important and well-grounded psychological theory, namely the Fodorian modular picture of the mind. Then she argues that the main arguments adduced by dual pragmatists against formal semantics—concerning apparent contextual intrusions into semantic content—can in fact be countered by a formal theory. The defence holds, however, only if we are sensitive to the proper conditions of success for a semantic theory. Specifically, we should reject a range of onerous constraints on semantic theorizing (e.g., that it resolve epistemic or metaphysical questions, or that it explain our communicative skills). So Borg’s answer to the question of what a semantic theory is for has a particular, minimal slant.
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Minimal Semantics

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For Anne Borg
Preface and Acknowledgements

Certain sections of this book are marked with a star (*). This indicates that the section contains introductory material which may be skipped by readers already familiar with the topics to be discussed. The reasons for including this kind of material are three-fold: first, I hope the book may be of some interest to readers outside philosophy (for example, those working in cognate disciplines, like linguistics or cognitive science), not all of whom will be familiar with the core philosophical notions and terminology in play. Secondly, philosophy of language has an (often deserved) reputation for being an exceptionally hard subject. However, although this is a research book, I don’t think the subject matter is beyond the understanding of an interested (and perhaps relatively advanced) undergraduate. So I wanted to make the book as accessible as possible to those just starting out on their own exploration of the nature of language. Finally, abstract philosophical discussions can sometimes seem a bit like card tricks—you can see that the conjuror has located the card he was supposed to, but you’ve really no idea how he did it. By ‘showing the working’ I hope to make it clear that I didn’t have anything up my sleeves to begin with; but readers who are happy to take this on trust are well advised to ignore ‘*’ sections.

Many people deserve thanks here and I’m afraid the following list is far from exhaustive. To start at the beginning, however, although this book isn’t my PhD thesis (nor is it anything like my PhD thesis), still the people who helped with that project deserve thanks here—that includes Marcus Giaquinto, Paul Horwich, Matthew Nudds, Gabe Segal, Matthew Soteriou, and especially Mike Martin. I’m greatly indebted to all my colleagues at Reading, especially those who came to the reading group I ran on this material. The many suggestions and objections made by colleagues and graduate students in those meetings have much improved the book. Thanks also to Jean Britland and Sarah Nolan, without whose outstanding secretarial support this research would never have been possible. Many people have made extremely helpful comments on bits of the book, either in the form of earlier papers or at conferences. These include Kent Bach, Alex Barber, Jonathan Berg,
Jessica Brown, Robyn Carston, Eros Corrazza, Ray Elugardo, Maite Ezcurdia, Sandy Goldberg, Peter Ludlow, François Recanati, Jennifer Saul, Jason Stanley, and Ken Taylor. Attendance at certain of these conferences was made possible by the University of Reading Research Travel Fund and the British Academy. Special thanks must go to Stefano Predelli and Rob Stainton, both of whom commented at length on the manuscript and whose comments have much improved the book—if I could have found answers to all their objections, it would have been even better. My greatest philosophical debt is to Ernie Lepore, and all aspects of this book owe a debt to discussions with him. Peter Momtchiloff at Oxford University Press has been an exemplary editor and I’m grateful to him, Susan Beer, and the rest of the team at Oxford. Finally, on a personal front, I’d like to thank Jim for pretty much everything, and my Mum, for, among so many other things, recognizing the educational value of programmes for schools.


E. G. N. B
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In this book I want to consider the question of what a semantic theory (that is, a theory of literal linguistic meaning) is for—if I were to give you a good, working theory of meaning for a language right now, what would you be able to do with it? Prima facie, there are some minimal things anything deserving the title of ‘theory of meaning’ must be able to do—say, tell you the meaning of primitive lexical items, and explain how to move from the specification of the bits of a sentence and their relationship to one another (the sentence’s logical or syntactic form) to a specification of the meaning of that sentence (its semantic assignment). Equally obviously, there are a vast range of things for which having a semantic theory won’t be much direct help—things like seeing, or digesting, or walking to Timbuktu. But in between these two extremes a vast penumbra opens up, containing issues which we may or may not expect a semantic theory to address, and it is this penumbra which forms the territory for this book. I want to explore where we should place the boundary between tasks that fall under the remit of semantics and tasks which fall elsewhere (either in entirely different domains, or emerging at the points of interface between semantics and other kinds of knowledge).

So, as an initial sketch of the geography, here are some of the things we might expect a semantic theory to do for us:

1. We might require an adequate semantic theory to reveal how the meanings of complex expressions are determined given the meanings of their component expressions, together with those expressions’ mode of composition (thus we might expect a semantic theory to account for properties like systematicity and productivity, to be discussed in Chapter 1).

2. Furthermore, we might expect a semantic theory dealing with complex expressions to help reveal or capture the relations which pertain between those complex expressions, for instance revealing the inferential relations between sentences.
(3) Alternatively, or in addition, we might be concerned that a semantic theory be sufficient for explaining our communicative abilities—how it is that we communicate our thoughts and feelings, or facts about the world, to one another through the use of language. Of course, it seems that everyone will agree that a successful semantic theory must have something to do with the explanation of linguistic communication, but the extent to which it accounts for our communicative endeavours may differ: for instance, at one extreme a semantic theory may merely provide the initial input for a theory of communication, while at the other a semantic theory and a theory of communication may be one and the same thing. Or, alternatively, a theorist may adopt some point between these two extremes.

(4) Again, we might require our semantic theory to be sensitive to the kinds of epistemic relations we bear to objects, perhaps by containing a special class of expressions whose meaning is, in part, constrained by the ways in which we know about the objects the expressions purport to talk about. This was a constraint on semantic theories which Russell, for instance, was very taken by.¹

(5) As yet a further condition, we might also expect our semantic theory to reveal our metaphysical commitments, so that, not only do some expressions reveal our privileged epistemic relationship to certain objects, they also allow us to ‘read off’ from our language what objects there are in the world. This idea, that we can approach metaphysics via language, is seen in works like Strawson’s Individuals.² An even stronger version of this idea would be to hold that our language practice itself plays a part in individuating objects (on one construal, such an idea might be thought to be found in Goodman’s Ways of Worldmaking, or, more recently, in Schiffer’s introduction of ‘pleonastic propositions’ in The Things We Mean).³

(6) Finally, we might wonder whether a successful theory of meaning has to give us an analysis of the concept of meaning itself—telling us, in non-semantic terms, what (and how) it is for a word or sentence

¹ Russell 1911.
² Strawson 1959. A more recent example of the move to draw metaphysical commitments from the structure of language can be found in Ludlow 1999. An excellent discussion of some of the difficulties involved in drawing ontological commitments from a semantic theory, with reference to Ludlow’s work on tense and time, can also be found in Gross forthcoming.
³ Goodman 1979 (see also the papers in McCormick 1996); Schiffer 2003.
to mean anything. Adopting this constraint might entail that a successful semantic theory must show how the complex phenomenon of linguistic meaning finds a place in our ordinary, physical description of the world.

Clearly, then, there are a wide range of constraints we may or may not choose to place on an acceptable semantic theory, but I’m going to suggest that the constraints we want are pretty minimal. In fact, I want to suggest that a successful semantic theory should really only be required to meet the first two conditions above. It is, I think, a mistake to expect a theory of linguistic meaning to answer metaphysical or epistemic questions, and it is also a mistake to tie such a theory too tightly to communicative concerns. The take-home message will thus be that a certain kind of semantic theory—namely a formal theory—can provide us with a successful semantic theory, so long as we are clear that a successful semantic theory may do much less for us than we might initially have envisaged.

Formal semantic theories will be introduced properly in Chapter 1, but we might offer a provisional characterization as follows: 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 that sentence, that is, over the lexical items it contains and their mode of composition.⁴ They have their roots in the work of Frege, Russell, and the early Wittgenstein, and find contemporary expression in, among other accounts, the model-theoretic semantics of Montague and the truth-conditional approach pioneered by Davidson. In Chapter 1 I’ll sketch this last kind of account, whereby semantic content for a natural language sentence is delivered via the canonical derivation of a truth-condition for that sentence, and it will be this type of approach

⁴ There is clearly a question to be addressed in this initial characterization concerning whether the account deals with sentence-types or sentence-tokens. Formal theories, as I conceive them, would like to offer an analysis at the type-level; however, certain linguistic phenomena force the formal theorist to shift from here to a more fine-grained notion—like that of a sentence-type relativized to a context of utterance. Obviously this move somewhat blurs the boundary between formal accounts and use-based approaches (which take the level of the utterance as their starting point), since the distinction can no longer be that one accords a semantic role to context while the other does not. Instead, then, as we will see, the distinction comes in the role each accords contextual features, and the kind of contextual features taken to be semantically relevant. However, this is a substantial point which I will leave for discussion below.
which will form the paradigm version of the formal approach in what follows.\(^5\)

Traditionally, formal semantic theories can be seen as lying in opposition to what we might broadly label ‘use-based’ approaches to linguistic meaning. At a very general level of description, these kinds of account state that the right point at which to offer a semantic analysis is the level of the utterance, and not some more abstract notion of a sentence-type. Meaning will depend in some quite fundamental way upon the use to which linguistic expressions are put. In this way, to get to the level of semantic content we need to appeal to the context in which an expression is used, so determining the meaning of a complex linguistic item will no longer simply be a matter of the formal properties of that item. Now, clearly, the precise kind of account we pursue in this area will depend to a large extent on the kind of phenomenon which we take use to be. For instance, we will end up with very different accounts depending on whether we take use to be primarily a personal notion—so that we concentrate initially on the role that a particular speaker assigns to a given linguistic item—or if we take it to be more of a social phenomenon—so that we concentrate on the use of a type expression in a community.\(^6\) Obviously, there is much more to be said about the general characterization of use-based accounts offered here, but even given this very rough outline the tension between the formal approach and use-based accounts of linguistic meaning should be easy to appreciate. According to formal accounts, we should begin our analysis at the level of a formal description of a sentence-type and recover content via formal operations on this syntactic description. Whereas, according to use-based accounts, we should begin our analysis at the level of the utterance and recover semantic content via an examination of the role that that utterance is playing.

Now, one point which we should be clear on from the outset concerns the question of the kind of content which deserves the label ‘semantic content’; for, as we will see in Chapter 1, the label can be used

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\(^5\) See Larson and Segal 1995 for an extended introduction to the kind of truth-conditional project I have in mind here. I should note that, although the project is Davidsonian in conception, it diverges in substantial respects from the Davidsonian project as a whole. For instance, key notions in the Davidsonian account, such as radical interpretation, have no place in the kind of cognitive construal of the project I’ll adopt below.

\(^6\) An example of the former approach might perhaps be thought to be found in Horwich 1998; while an example of the latter can be seen in Brandom 1994.
to refer to very different things. However, I’m going to take it as pretty much constitutive of formal theories of meaning that they aim to deliver a complete meaning for each and every well-formed sentence of some natural language. That is to say, the semantic content they promise to deliver is truth-conditional or propositional—something which (given a context of evaluation) is truth-evaluative in its own right. It seems, at least prima facie, that the assumption that sentences encode propositional content is quite reasonable. For instance, ordinary speakers seem happy to judge that the sentence ‘Snow is white’ in English expresses something true, while the sentence ‘Grass is white’ expresses something false, or that the sentences ‘Snow is white’ and ‘La neige est blanche’ have the same meaning and are thus true or false together. Furthermore, on at least some conceptions, it is more or less definitive of a proposition that it be the kind of thing which can be expressed via a declarative sentence in a natural language. So the claim that sentences are capable of expressing complete propositions or truth-evaluable content seems uncontroversial.

Besides this intuitive pull towards the idea that sentences encode truth-evaluable content, it looks as if such an assumption is also embedded in the kinds of claims we want to make about validity. It seems that we can assess arguments in natural language as valid or invalid, yet such assessments only make sense if the sentences which form the argument can themselves be the bearers of truth-values. To claim that ‘All men are mortal. Socrates is a man. Therefore Socrates is mortal’ is a valid argument seems to presuppose that each of the sentences making up the argument encodes truth-evaluable content. So, it seems clear that at least some natural language sentences are capable of encoding complete propositions and the assumption I see the formal theorist as making is that these sentences provide the model for all natural language sentences. To capture the literal meaning of a natural language sentence it is necessary and sufficient to determine its truth-conditional or propositional content, and, the formal theorist claims, this content can be recovered via syntactic trails alone.

However, this assumption about the nature of formally recoverable semantic content has been challenged recently by a particular variety

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7 As David Lewis 1972: 169 contends “semantics with no treatment of truth conditions is not semantics”.
8 Though exactly how we spell out the notion of validity here is a somewhat delicate matter; see Gross forthcoming.
of use-orientated semantic theories, which (for reasons which will become clear below) I will call ‘dual pragmatic’ theories. As we will see in Chapter 1, dual pragmatic theories differ from paradigm varieties of use-based theory since they take features from both the formal and the use-based side of the divide. So they claim that formal theories have a role to play en route to the determination of truth-evaluable semantic content but also that formal approaches are (very often) incapable of determining such content, since not all natural language sentences are capable of expressing complete propositions in isolation from serious consideration of the use to which that sentence is being put. So, despite embracing certain aspects of the formal enterprise, dual pragmatics rejects the idea that truth-conditional or propositional content can (usually) be recovered via formal methods alone. However, because of the somewhat hybrid nature of dual pragmatic accounts, it seems to me that they provide the strongest contemporary challenge to formal approaches, for they challenge the formal theorist to show not merely that there is some role for the formal approach en route to meaning, but rather to show that formal features alone can suffice for determining meaning. Thus it is this opposition between formal approaches and dual pragmatic theories (rather than the already very well-rehearsed debate between formal theories and paradigm use-based approaches) which will be the primary focus of debate in this book. The dual pragmatic challenge to formal theories will be introduced in Chapter 1 and the formal theorist’s response will be taken up in Chapters 3 and 4.

However, if formal approaches and dual pragmatic accounts share, to some extent at least, a common outlook, we might well wonder why, from the outset, I want to defend formal approaches. What reason could we have for preferring the formal account to the dual pragmatic picture if the two accounts share so many basic assumptions? Well, one reason, as I’ll argue below (Chapters 3 and 4), is that I believe the dual pragmatists’ assumption that many sentences fail to encode truth-conditional content is mistaken. However, a second reason turns on the way in which formal semantic theories cohere with a modularity account of our cognitive architecture (this point is explored in Chapter 2). One aim of this book, then, is to explicitly unite two big theoretical pictures—the formal, truth-conditional, approach to semantics and the modular...

⁹ To advertise in advance, the dual pragmatic approach will be seen to be embodied by such accounts as Sperber and Wilson’s relevance theory, Recanati’s contextualism, and Kamp’s dynamic representation theory.
picture of the mind, and show how nicely they fit with one another.\textsuperscript{10} Since, as I’m going to argue, we have good reasons for holding on to each of the big pictures independently, the fact that they go together so well gives us an added reason for embracing the two accounts in tandem.\textsuperscript{11} The two big pictures will be introduced properly in Chapters 1 and 2, but I think even from the outset we can see broadly why they might be so well suited to one another.

On the one hand, what formal semantics tells us, roughly, is that we can hope to deliver something which will serve as a theory of linguistic meaning based solely on the formal aspects of language (perhaps together with a formal description of the context in which linguistic items are produced). For any sentence of the natural language in question, our theory will take a formal description of that linguistic item and, on the basis of a finite set of axioms and recursively specified rules of composition, yield a specification of the meaning (for instance, in terms of the truth-conditions) of that sentence. So, once we’ve got the basic axioms and the rules of composition, and got some formally described input for the system, the meaning theory is pretty much ready to start generating analyses of linguistic meaning, in a way which is autonomous from the non-formal aspects of utterances; most crucially, I’ll claim, in a way which is independent from speaker intentions. Now, on the other hand, what the modularity of mind claims is that the mind is composed (at least in part) of discrete, relatively autonomous modules, each with their own specialized bodies of information and rules of operation. These modules thus have access to something less than the full range of information which the cogniser as a whole possesses. The claim of the modularity theory with respect to linguistic understanding is then that there is a distinct module in the minds of competent language users (namely, the language faculty) which is responsible for the fast, automatic, autonomous generation of linguistic understanding; a process of linguistic understanding which does not require access to the complete range of information possessed by the individual.

\textsuperscript{10} This isn’t a new idea, for instance, see Larson and Segal 1995. What may be newer (and more controversial) is the connected claim that modularity of mind mitigates against certain other approaches to (truth-evaluable) semantic content, specifically against dual pragmatics. This suggestion is particularly controversial since many advocates of dual pragmatics have stressed the close connections between their account and modularity; this topic is explored at length in Chapter 2.

\textsuperscript{11} Of course, as is the way with big pictures, this combination of views could actually turn out to get the basic geography completely wrong; as is probably to be expected, this book doesn’t contain anything like a demonstrative proof that the combination of views I prefer is the only way to go in philosophy of language.
Even at this level of very broad brushstroke, then, we can see what unites the modularity theory of linguistic understanding and the formal, truth-conditional, approach to semantics. For on the latter kind of semantic approach, grasping meaning is a properly computational process. The truth-conditional semantic theory is governed, not by rich non-demonstrative inferential processes, but rather by formally triggered, deductive operations. So, from the start this looks good for someone who wants to see linguistic understanding as the result of processing in some distinct, compartmentalized language faculty, governed by computational processes and appealing to something less than the full range of information possessed by the agent. According to the modularity theory, the language faculty doesn’t have access to general information, such as hypotheses about speaker intentions, which the cogniser as a whole has access to. So if the language faculty is to succeed in generating specifications of linguistic meaning, then those specifications had better be available independent of appeal to stuff like speaker intentions. Yet this is just the kind of picture of literal linguistic meaning delivered by the formal approach. Prima facie, formal semantics and modularity about linguistic understanding seem to be a match made in heaven (or at least, so I’m going to try to convince you).

Furthermore, a major benefit for the truth-conditional semanticist who hitches her wagon to modularity is that this tandem approach allows her to dissipate what is perhaps the biggest challenge levelled at the truth-conditional approach by communication- or use-based theories of linguistic meaning. Namely that the truth-conditional account fails to capture the communicative aspects of language—that it fails to capture our intuitive judgements of meaning in most communicative situations. The problem is that, on the formal, truth-conditional approach sometimes (maybe even a lot of the time) the predictions made by the theory for the literal meaning of a linguistic item simply don’t match what we, as interlocutors, intuitively take to have been said by the utterance of that item. But surely, the use-based theorist objects, it’s a mistake to allow the output of a semantic theory (that is, the analyses of literal linguistic meaning) to be divorced in this way from intuitive judgements of communicated or conveyed meaning. However, I’m going to argue that, armed with a compartmentalized, modular theory of mind, this is precisely what we should expect. For judgements made at the point of communication will depend on a vast range of information
located beyond the reach of the language faculty. To get to assessments of what is communicated we need to know a whole lot more than just the meaning of our language, we also need to know about social behaviour, folk-psychology, commonsense physics, and much, much more; but that’s no reason to think that what’s in the language faculty itself need have access to all this additional information. If the modularity of mind thesis is right, I’m going to suggest, then it is no wonder that analyses of literal meaning are out of kilter with judgements of what is communicated, for the two are the results of radically different processes. So, as I said above, I’m going to try to convince you that a formal truth-conditional theory can work as a successful semantic theory, just so long as we recognize the fairly minimal constraints on success for a semantic theory. However, I’m also going to try to convince you that recognizing the limitations of a successful semantic theory shouldn’t be disheartening, as they are just the limits we would expect if the semantic theory belonged to a modular language faculty which, \textit{ex hypothesi}, had access to less information than the agent as a whole possessed.

It may sometimes seem, and it is often put to me in conversation, that all this is going to turn out to be a mere matter of terminology; there are lots of different things, lots of different levels of meaning, which we might choose to call ‘semantics’ and which one we ultimately choose to bear this label is pretty arbitrary, just a matter of taste.\footnote{This sort of suggestion is considered, though not fully endorsed, in Berg’s 2002 distinction between ‘strict’ and ‘loose’ semantics.} However, there are substantial issues here which will be obscured if we think of this as a merely terminological dispute. For instance, one thing that is at stake is the issue of whether meaning—literal linguistic meaning—is compositional or not. That is to say, can we account for the semantic content of every natural language sentence simply in terms of the meanings of its parts and their mode of combination? Or, on the other hand, does semantic content involve more than this? Specifically, is it also a function of speaker intentions? The formal-semantics-plus-modularity picture claims that it is the former, that compositionality is indeed a constraint which is met by linguistic meaning; while use-based theories (apparently) claim that the latter picture is right.\footnote{This is too sweeping a claim, for at least one use-based approach, that of Paul Horwich in \textit{Meaning} (1998), explicitly claims to respect compositionality (see the debate between Horwich and Fodor and Lepore in Borg, ed., 2002). However, it is at the very least fair to say that use-based approaches in general find compositionality concerns far less compelling than do their more formal opponents.} I’m going to try and convince you that the former position is the one we should adopt, but
whoever gets things right here, this is surely a dispute about more than mere labelling. Whether or not natural languages are compositional seems to be a fundamental question about the nature of language itself.

Or again, on the picture I’m going to push, understanding a language is fundamentally a process of decoding that anyone (or indeed anything) with the right kind of formal decoding mechanism could enter into. For advocates of use-based approaches, on the other hand, although there may be an element of decoding on the path to semantic understanding, proper or full linguistic understanding requires much more than this. It fundamentally requires appeal to non-demonstrative inferential processes as well. Since understanding a language on this account is precisely as complex as, say, predicting what an agent will do next in a given situation or reasoning about why they uttered the words that they did, it seems likely that no system significantly less complex than a complete human being stands much chance of mastering a natural language. Again, you and I may ultimately disagree about who is right here, but it seems to me that this disagreement has to be more than merely terminological. Trying to convince you that the formal-semantics-plus-modularity model is right is going to require some fairly detailed discussion of issues in syntax, semantics and pragmatics, but I think it will be worth keeping half an eye on the prize here—remembering that what is at stake really is the nature of natural language, together with the best account of the structure of the cognitive architecture which underpins linguistic understanding, and not some peripheral debate about labelling.

Finally, a brief word about the overarching philosophical methodology of the book. It stems, in fact, from a conversation with a friend who worked for the Environment Agency in the United Kingdom. My friend’s job there was as part of the ‘rapid response’ team: given any kind of environmental accident his team got called out as the first line of defence. To this end, they were all supplied with very fast cars by the Agency and, when the telephone rang to tell them something had gone wrong, my friend would leap in his car and drive as quickly as possible to the scene of the disaster. Leaping from his car and surveying the chemical spillage, or the oil leak, or whatever, my friend would make his initial evaluation of the situation, and he told me that all these initial evaluations, somewhat surprisingly, took exactly the same form. They all involved my friend, having surveyed the scene, saying, “Right, I’ve assessed the situation and I’m sorry to say that this is in fact a local council problem. We are a national body and so this isn’t in our jurisdiction. That means that
I’m afraid I can’t actually help”. With that he would leap back in his fast
car and drive, more slowly this time, back to the office. My friend (I hope)
was joking, but I think the idea, at least as far as philosophy of language is
concerned, is a really good one. Overall, what I’m going to try to do in
this book is not to show you that certain well-entrenched problems
surrounding natural language don’t exist, but rather that solving them isn’t
the task of semantics. Though there undoubtedly are the kind of complex
and difficult problems which my opponents have raised in this area, what
I want to try and convince you of is that a successful semantic theory is not
constrained to solve them. Now, I can quite see that this strategy may well
be less than entirely satisfying to readers (there are clear overtones of beat-
ing down the lump in the carpet in one place only to watch it re-emerge
further down), but I do think that unless we can get a clearer understand-
ing of the demarcation of certain domains of understanding, we will never
be able to offer a successful account of those areas. By clearing the wood
from the trees, I hope to be able to show that a successful semantic theory
is achievable, and that by seeing how such a theory properly relates
to other bodies of knowledge, we can hope to make headway even on
problems which don’t, I claim, fall directly under the remit of semantics.

So, in the rest of this book, I want to present the case for adopting a
minimal picture of the role and limits of a semantic theory. I will contend
that all we should ask of an adequate semantic theory is that it explain and
underpin a range of what I will describe as ‘low-level’ semantic data, of
the kind stressed in much recent linguistics and cognitive science, and
that a semantic theory which can do this should be accepted as adequate
to the job. Specifically, we should not expect our semantic theory to tell
us very much about successful communication, nor about our epistemic
or metaphysical contact with the world, nor indeed about the kind of
thing which meaning per se is. Though all these things need exploring, my
argument will be that we shouldn’t look to semantics to explain them (to
push the analogy, many of these issues turn out to be the responsibility of
a National Authority, whereas semantics is just a kind of local council).

¹⁴ Two readers have expressed concern about the way the analogy goes here—to be really explicit, the
idea will be that a semantic theory is part of an encapsulated, modular system, a ‘local council’ responsible
for basic linguistic interpretation. Whereas more complex issues concerning what is communicated by the
utterance of a linguistic item are the subject matter for a more wide-ranging system—the ‘general intelli-
gence’, which forms a kind of domain-general ‘national authority’. On my account, communication turns
out to be a truly global process, not just in terms of the inter-personal connections it forms, but in terms
of the intra-personal systems it exploits. Communication involves the whole agent in a way that issues of
linguistic meaning do not; this point is taken up in Chapter 5. However, if the analogy in the text doesn’t
help here, please feel free to ignore it—I hope this is a point which will get clearer as we go along.
To put matters another way, on one conception, this book turns out to be a denial of the bunch of views often labelled ‘the linguistic turn’. For the intuitive stance I seek to defend here is that, while knowledge of language is an extremely useful—indeed vital—kind of knowledge to have for a great many enterprises, it does not, on its own, answer the kinds of questions about the nature of thought or the nature of the world which some theorists have taken it to. A semantic theory is a good thing to have, but it’s far from the only thing worth having.

The structure of the book is as follows: this (as they say in footballing circles) is a game of two halves. In the first half (Chapters 1 and 2) I set up the positive account that I want to defend, and introduce the opposition. The positive account is a combination of a formal approach to the study of meaning together with a modular perspective on the cognitive structure which might realize an agent’s understanding of language. The opposition are advocates of a dual pragmatic approach to meaning, together with a non-modular approach to the cognitive architecture underpinning grasp of semantic content. Chapter 1 introduces formal approaches and looks, first, at the good points of the formal enterprise, and then, more crucially, at its bad points. It will be suggested that the main reason for rejecting a formal approach to the study of language comes from the existence of contextual intrusions into specifications of semantic content. It is this general worry which pushes us to introduce the dual pragmatic position and the problem will, in all its various guises, occupy us throughout the second half of the book. However, before we get there, Chapter 2 introduces the second main element of the positive view, namely the modular theory of the mind. In this chapter I look at the reasons for thinking semantic understanding is modular, while arguing that our use of language to communicate should be seen as a non-modular or global process.¹⁵ Chapter 2 closes with a rejection of the first concrete objections to the formal-semantics-plus-modularity view (concerning speech acts, ambiguity, and word learning).

Chapter 3 introduces the mother of all contextual objections to formal theories, namely the existence of overtly context-sensitive expressions in natural language. I argue that, contrary to the claims of

¹⁵ One reader objected that, on my view, at least literal communication should be seen as modular; however I think this is a mistake. Even determining that a speaker means to convey nothing over and above the literal meaning of the sentences she utters requires access to information beyond that contained in the modular language faculty.
the dual pragmatist, there is a way for the formal theorist to accommodate context-sensitive expressions within a formal account, though to do so satisfactorily requires a certain minimal perspective on the role of a semantic theory and on what is required to entertain a singular thought. Then, in Chapter 4, I address the new challenges from context which emerged from the dual pragmatist's account in Chapter 1, concerning what might be thought of as covert appeals to context in specifications of literal meaning. I argue once again that, armed with our minimal perspective on the aims of semantic theorizing and our division between an explanation of meaning and a theory of communication, the formal theorist can again avoid this contextual challenge. Ultimately, the conclusion I will reach (to be spelt out in Chapter 5) is conciliatory: there is a place in an overall explanation of our linguistic capacities for both formal, modular accounts (underpinning our grasp of the semantic content of types of words and sentences) and use-based, non-modular accounts (underpinning our communicative skills, both linguistic and non-linguistic). Yet, for this conciliatory approach to work, both the formal theorist and the dual pragmatist need to be very clear on their own domains of explanation.
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A Tale of Two Theories

How, we might ask, do ordinary speakers succeed in using elements of a natural language (like English or Japanese) to convey meaning and communicate about the world and themselves? What kind of thing must an agent know to be a competent language user and what kind of cognitive architecture might lie behind our linguistic abilities? The answer I want to give (at least as far as questions of meaning are concerned) is not, perhaps, especially fashionable at the moment. For I want to argue for a kind of formal approach to the study of language, which has its roots in the work of Frege, Russell, the early Wittgenstein, and Carnap, and continues through into such approaches as the truth-conditional theory of meaning of Davidson et al., and the model-theoretic approach championed by Kaplan and others. (As we will see below, a more fashionable approach to the study of meaning in language is to focus on the phenomenon of language in use.) Although, of course, there are substantial differences of detail between opposing formal accounts, all such accounts share a fundamental ethos. According to formal theorists, the point at which to study language is, at least initially, in terms of the formal features of linguistic expressions. Thus we can talk about the meanings of words and sentences, where these are items assessed in terms of their formal features, prior to, or abstracted from, questions about the ways in which these expressions are used on a particular occasion or the communicative aims of the speakers who utter the words and sentences in question. For formal theorists, literal linguistic meaning is something which attaches to language independent, to some extent at least, of the use to which the language is being put. I’ll say a bit more about what I take to be characteristic of formal approaches in general in §1.1, and we will look at one particular kind of approach which clearly demonstrates a commitment to the formal
outlook, namely the truth-conditional approach to meaning first instigated by Davidson.

However, formal accounts of the kind to be introduced in §1.1 have a tendency, I think, to look somewhat old hat in the current context. This is due to a new kind of awareness of the role that context plays in providing specifications of meaning for linguistic items. It has come to seem to many theorists that there is simply no way to offer a satisfactory account of linguistic content which does not recognize the central role of the speaker (and, perhaps in particular, his or her intentional states) in accounts of linguistic meaning. The challenge that I want to concentrate on in this essay is thus a challenge that can be levelled at all versions of the formal approach, namely that they face insurmountable problems arising from the role of the context of utterance in specifications of semantic content. In §1.2 these context-based challenges will be seen to break down into two distinct kinds: what we might think of as overt challenges from context (namely ambiguity, the role of speech act operators, and the existence of indexical and demonstrative expressions) and what I will classify as covert contextual challenges (stemming from arguments surrounding so-called ‘unarticulated constituents’, as well as challenges to the motivation for formal semantics). This latter, covert version of the challenge from context will lead us, in §1.3, to consider a kind of account which is, prima facie, much better equipped to deal with the role of context in specifications of linguistic meaning, which I will label ‘dual pragmatic’ accounts. It is these dual pragmatic accounts which will form the major opponent to formal accounts throughout the remainder of the book; but, though they pose a significant and serious challenge to formal theories of meaning, my conclusion will

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¹ As noted in the introduction, although the truth-conditional project stems from the work of Davidson, the form it takes in the following essay is really quite removed from the Davidsonian account of semantic theorizing in general. The current account will treat a formal semantic theory as part of an agent’s innate cognitive endowment, with truth-conditions stated in terms of a language of thought.

² The theories I have in mind as ‘dual pragmatic’ theories include Sperber and Wilson’s 1986 ‘relevance theory’, Recanati’s 2004 ‘contextualism’, and his 2002a ‘truth-conditional pragmatics’, and Kamp’s 1981 ‘dynamic representation theory’ or Heim’s 1982 ‘file change semantics’; these positions are discussed further in §1.3. I have coined the term ‘dual pragmatics’ as an overarching label for these positions since the key characteristic of all the accounts I have in mind is that they allow pragmatic processes to operate twice: once prior to an analysis of semantic content, or proposition expressed, by the utterance of a given sentence, and once, post-semantically, to yield the implicatures of the utterance. Cole 1981 introduces the term ‘radical pragmatics’ for an apparently similar stance, while the most common term currently in use seems to be ‘contextualism’. However, to avoid any confusion about the defining characteristics of the position under discussion, I have decided to introduce my own term.
be that, ultimately, the formal account can meet this challenge and that it remains the most viable approach to the study of semantic content.

My reasons for supporting formal semantics, even in the face of powerful challenges from the dual pragmatists, will be explored in §1.4, where we will also look more closely at what I take a semantic theory to be a theory of. For, I will argue, part of the background motivation for a move away from formal semantics has been an expectation that a successful semantic theory will explain a range of interesting data concerning our use of language (such as how we succeed in communicating with one another using language, or how it is that we know about, and thus can talk about, various objects in the world around us). Seeing that a formal semantic theory cannot play all the roles traditionally assigned to it might lead us to abandon the formal approach itself, or it could lead us to define more carefully the role of a semantic theory in explaining certain broadly linguistic phenomena. I will argue for the latter position, suggesting that we adopt a quite stripped down, or minimal, conception of the aims and limits of a semantic theory. The primary aim of this book is to show that a formal semantic theory is still both possible and desirable in the face of challenges from the role of the context of utterance in analyses of meaning, but the formal theorist will have to admit that when her semantic theory is delivered it will do less than might initially have been expected of it.

Finally, as a kind of appendix to our introduction of the two competing approaches in this chapter, I want to turn to explore an idea which both formal theories and dual pragmatic accounts agree on, viz. the idea that behind the surface form of a sentence there lies a deeper level of representation or structure, a logical form, and that it is this which gives the initial input to theories of linguistic meaning. Since this notion has a key role to play whichever kind of approach to linguistic meaning we adopt, I think it will be useful from the outset to have some idea of what exactly logical forms are thought to be and how they are thought to relate to ordinary natural language expressions; thus these questions will be explored in §1.5. Before all this, however, let’s start by introducing the star of this show: formal semantic theories.
1.1 Formal Semantics

A semantic theory is a theory of one aspect of language, namely the literal meaning of words and sentences in that language. So not all linguistic properties are semantic properties, but neither are all meaning properties semantic properties. For instance, linguistic properties like spelling or pronunciation are not themselves semantic properties, while meaning properties like the correct metaphorical or ironic interpretation of an utterance are often thought not to be properly semantic properties (rather they are often held to occur post-semantically, once the literal semantic interpretation has been settled). So a semantic theory is a theory of a certain kind of meaning—the conventional, standard or literal meaning of the words and sentences of a language. A fairly standard picture of the divisions in linguistic understanding then emerges as follows:

Linguistic understanding:
phonetics/orthographics ⇒ syntax ⇒ semantics ⇒ pragmatics

Say an addressee is faced with an uttered sentence, she must first identify the words involved (phonetic interpretation), then identify the structural properties of the sentence (syntactic interpretation, yielding a logical form), then analyse the meaning of this syntactic item (semantic interpretation), and finally work out what the speaker of this sentence is aiming to convey by her utterance of the sentence in this particular context (pragmatic interpretation). On this sort of model, it is natural to think that semantic interpretation occurs before pragmatic interpretation, and that it provides an autonomous, context-independent level of meaning. The assumption embodied here (which we will have reason to question later on) is that the literal meaning, or semantic analysis, of a sentence provides the input to analyses of what is communicated by an utterance of that sentence. Though what an addressee takes to have been communicated by a speaker may be very different to the semantic interpretation of the sentence uttered, there is nevertheless held to be a level of (context-independent) literal

³ This position is sometimes labelled the ‘standard pragmatic model’, in contrast to the ‘direct access model’, which claims that non-literal interpretations may be accessed directly (i.e. without an agent first entertaining the literal interpretation); cf. Gibbs 1994, 2002, Giora 2002. Soames 2002: 69 might also be read as endorsing a somewhat related view.
meaning which is a necessary precursor to analyses of communicated meaning (so-called ‘utterer’s-meaning’ or ‘speaker-meaning’). So, to take an extremely familiar example, originally from Paul Grice: say I respond to a request for a reference for one of my students, Jones, who has applied for a lectureship in philosophy, simply by uttering “Jones has nice handwriting”. In this case, we can talk about what the sentence means (analysing it, say, simply as the claim that \textit{Jones has nice handwriting}), even though what I communicate by my utterance of this sentence is doubtless very different (e.g. that I don’t think much of Jones’ \textit{philosophical talent}). Grice labelled this distinction the difference between ‘what is said’ and ‘what is implicated’ and, though we will have reason later to question the exact terminology involved here, it does seem that it marks a useful distinction on the path to determining the proper subject of semantics. A semantic theory will be interested in what a sentence means, not all the things it may be used to communicate (it will seek to explain sentence meaning and not necessarily speaker meaning).

Given this kind of picture, it looks prima facie as if semantic interpretation (unlike, say, the interpretation of implicatures) could be a (fairly) formal matter: to give the meaning of a sentence it looks as if we want to look to the meanings of the words it contains (where words are individuated by formal properties like their orthographic or phonetic features) and the way in which those words are put together (the syntactic or logical form of the sentence), where this can be recovered by simple operations on the surface form of the sentence. Now, whether or not this claim is correct (that is, whether or not semantic interpretation is a purely formal matter) is the main subject of the rest of this book, but to begin with let’s consider the formal approach in this strong form, that is, as the claim that we can offer an analysis of the semantic content of sentences, where these are linguistic items typed solely on the basis of the words they contain and their mode of composition, completely independent of considerations of the context in which such sentences might be uttered. The strong formal theorist wants to claim that a proper semantic theory should deal with the literal

\footnote{Grice 1989: 33.}

\footnote{This strong version of formal semantics, whereby literal meaning is held to be context-invariant, might be thought to reflect the position of Katz 1977. Katz develops the notion of a ‘null context’ where one is able to assess the content of a sentence in abstraction from the vagaries of particular contexts of utterance.}
meaning of type-level sentences, rather than some more context-based notion like speaker-meaning (for example, the communication of Gricean implicatures). Furthermore, they suggest that the way to deliver such an account is to pay attention to the formal features of the sentences in play: the input to a semantic theory will thus be a formal description of a type of object-language sentence (arrived at simply through the formal features of the sentence-type, like its orthographic or phonetic presentation), and the output will be some formal description of the meaning of the sentence, which may later become subject to pragmatic processing (to yield any implicatures). On this strong version of the formal semantics approach, then, semantic content is a context-invariant notion: no matter when or where a type-sentence is tokened, its meaning will remain the same. The precise kind of formal theory which is thought to play this intermediary role between syntax and pragmatics can, of course, differ; however, to get a flavour of formal accounts in general let us sketch one particularly well-known type of account, namely the truth-conditional approach to meaning.⁶

1.1.1* Truth-conditional semantics

The starting point for a truth-conditional approach to meaning is the idea that we cannot hope to provide a formal theory of meaning which simply pairs sentences of the object-language (the language under study) with their meanings, in the form of instances of the schema: ‘*s* in *L* means that *p*. This sort of move, which treats meanings as entities to which natural language sentences can attach or refer, is unable to accommodate certain features of our linguistic comprehension, namely that it is productive and systematic. Linguistic understanding is productive in that elements within a sentence can be iterated time and time again, to produce more and more complex sentences, but the agent who is capable of understanding or producing the initial sentence will also be in a position to understand or produce the more

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⁶ Two things to note here: first, although I’ll initially present the truth-conditional account in the guise of a strong formal semantic theory, this is not how Davidson himself proposed the account (rather he presents a version of what I’ll below term ‘moderate formal semantics’). Secondly, it is the formal approach to semantics per se that I want to defend in what follows. Thus, though it will be helpful to have a concrete version of the formal approach before us, and though I do think that the truth-conditional account provides the most promising version of the formal enterprise in the current domain, still we should recognize that the question of the validity of the truth-conditional approach to semantics is not the same question as the validity of the formal approach in general.
complicated linguistic item.⁷ So, the agent who understands the sentence ‘The father of Aristotle was Greek’ will also understand the sentence ‘The father of the father of Aristotle was Greek’, and the sentence ‘The father of the father of the father of Aristotle was Greek’. Yet it seems that no simple list-like theory pairing sentences with meanings could explain this (for the meaning of the first sentence would be given by one entity, m₁, while the meaning of the second and third would be given by different entities, say m₂ and m₃, and there would be no reason to suppose that an agent grasping one of these meaning entities should also grasp any of the others).

Furthermore, our linguistic understanding is systematic: the grasp of the meaning of a whole sentence seems to be systematically related to the grasp of the meaning of its parts. Thus, among agents with a normal linguistic competence, if someone understands the sentence ‘Bill loves Jill’ they will also understand the sentence ‘Jill loves Bill’. Yet again no theory which simply pairs sentences with their meanings will be able to predict or explain this systematicity of linguistic understanding. These properties of systematicity and productivity seem to point to a key fact about linguistic meaning, namely that it is *compositional*. That is to say, the meanings of complex linguistic items, like sentences, are a function of the meanings of their parts together with the mode of composition of those parts. It is this property which explains the fact that our understanding of meaning is productive and systematic. We can understand any novel sentence we come across, just so long as we are familiar with the elements which go together to make up that sentence, and those elements are put together in a way we understand, since every sentence in natural language has a meaning which is exhausted by the meanings of its parts and their mode of composition.⁸

To respect the constraints of compositionality, then, it seems that what we want is not a simple, indefinitely long list pairing sentences and meanings, but rather a finitely axiomatized and recursively specified semantic theory. That is to say, what we want is a theory which, from

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⁷ The claim has to be that the agent will be *in a position* to produce or comprehend the iterated sentence, since, at some point of iteration, the agent may no longer actually be able to comprehend/produce the sentence. For instance, given too great a number of iterations the agent may run out of time or memory for processing the sentence; however, the claim is that this limitation emerges from features *external* to the agent’s linguistic competence itself.

⁸ There is a substantial question here about the kind of constraint compositionality places on a semantic theory for a natural language; this is discussed in §1.4.
some basic rules and a finite set of data reveals how an agent is able to produce and understand an indefinite range of linguistic items.

The positive response which Davidson proffered in answer to this challenge was to switch his attention from questions of meaning per se to questions of truth.⁹ Although this move might seem initially surprising, there does seem to be a quite intuitive sense in which the meaning of a sentence is intimately bound up with the conditions in which it is true. For instance, we attribute grasp of meaning of a given sentence to a foreign speaker or a language learner just in case she judges utterances of the sentence true in conditions in which we would also judge it true, and that she judges it false otherwise. So Davidson takes what might be thought of as a pre-existing connection between meaning and truth, and develops it further, suggesting that we might analyse the meaning of a sentence entirely in terms of the conditions under which it is true.

The theoretical background for this move is Tarski’s groundbreaking work on the notion of truth. Very roughly, Tarski showed us how, by taking the notion of meaning (translation) as primitive, one could deliver a formal axiomatization of the truth predicate for any natural language. In a reversal of matters, then, Davidson suggested that, while taking the notion of truth as primitive, one might deliver a formal theory capable of giving the meaning of every sentence of a natural language. Tarski had suggested that a characterization of a predicate would be adequate for the role of the truth predicate for a language if it entails, for every object-language sentence, a biconditional of the form:

\[(T) \ s \text{ is true iff } p\]

where ‘s’ stands for a structural description of the object-language sentence and ‘p’ is a place marker for its meta-language translation.¹⁰ This is Tarski’s ‘Convention T’ and the biconditionals it gives rise to are usually known as ‘T-sentences’, e.g.:

(a) ‘Snow is white’ is true iff snow is white.

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⁹ The idea that to understand a sentence is to grasp the conditions under which it is true can also be found in the work of Frege and Wittgenstein. For instance, Wittgenstein writes in the *Tractatus* 4.022 that: “A sentence in use (satz) shows how things stand if it is true. And it says that they do so stand … To understand a sentence in use means to know what is the case if it is true”. Wittgenstein 1961; this translation is due to Wiggins 1997: 5. See also Frege 1884.

¹⁰ The importance of the entailment constraint, i.e. that the theory should be materially adequate in addition to being formally correct, is stressed by McDowell 1980.
(a) is a homophonic T-sentence; that is to say, the mentioned sentence on the left-hand side is simply disquoted to provide the sentence being used on the right-hand side. Disquotational T-sentences are possible where the meta-language contains the object-language as a proper part. However, the homophonic nature of (a) should not disguise its explanatory power, which becomes evident when we consider T-sentences where the object-language and the meta-language diverge, e.g.:

(b) ‘La neige est blanche’ is true iff snow is white.

Here the explanatory force of the T-sentence is more transparent, it seems that (b) could serve to capture something like the meaning of the French sentence on the left-hand side of the theorem. Tarski ensured that, although the notion of truth is extensional, the theory pairs object-language sentences with just the particular state of affairs which would make that sentence true by explicitly introducing the notion of translation into the statement of Convention T (that is, allowing the unexplained intensional notion of translation to act as an external condition of adequacy on the acceptance of any formally adequate theory of truth).

Davidson’s pivotal move at this juncture was to suggest that, by using the form of a Tarskian T-theory, yet freeing our account of all semantic notions (specifically, dropping the constraint of translation), we could construct an account which would yield the same object-language/meta-language pairings as an account using the intensional connective ‘means that’. If we had such a theory then we would, it seems, have something fitting the title of a ‘theory of meaning’.¹¹ Davidson suggests:

The theory will have done its work if it provides, for every sentence $s$ in the language under study, a matching sentence (to replace ‘$p$’) that, in some way yet to be made clear, ‘gives the meaning’ of $s$. One obvious candidate for the matching sentence is just $s$ itself, if the object language is contained in the meta-language; otherwise a translation of $s$ in the meta-language. As a final bold step, let us try treating the position occupied by ‘$p$’ extensionally: to

¹¹ Though, as Davidson acknowledges, such a theory would not offer us a (reductive) analysis of the notion of meaning itself. Thus it would play the role of a theory of meaning in only one of the two ways outlined by Davies 1981: 3–5.
implement this, sweep away the obscure ‘means that’, provide the sentence that replaces ‘p’ with a proper sentential connective, and supply the description that replaces ‘s’ with its own predicate. The plausible result is

\[(T) \ s \textit{ is } T \textit{ if and only if } p. \]

So the idea is that we can capture the meaning of any natural language sentence by providing a theory which generates a correct T-sentence for that (and every other) sentence, along the lines of:

‘snow is white’ is true iff snow is white
‘grass is green’ is true iff grass is green

We here specify the meaning of our natural language sentences by specifying the conditions in the world under which they are true. As noted above, an acceptable T-theory might generate homophonic T-sentences (that is, the sentence described on the left-hand side might be disquoted and thereby used on the right-hand side) whenever the object-language forms a proper part of the meta-language. However, an acceptable T-theory could also generate non-homophonic T-sentences if the language in which the theory was stated differed from the language under study. This would be the case where both languages were natural languages (for instance, where a T-theory for German is given in English), but it would also be the case if the languages differed more fundamentally; for instance, if the language to be studied was a natural language while the language in which the theory was stated was held to be some more fundamental ‘language of thought’ (to borrow the Fodorian label). Traditionally, T-theories have been stated for natural languages in (extensions of) other natural languages; however, as will become clear in later chapters, I think it will prove more helpful to envisage a formal theory which gives the meaning of a natural language, and which specifies what any competent speaker who understands that language knows, in terms of the move from a natural language to a language of thought.\(^{13}\) Thus the kinds of T-sentences I will envisage take a description of a natural language sentence on the left-hand side and pair it with a meta-language description in some kind of Mentalese, or language of thought, on the right-hand side.

Now, whether we view the meta-language proper to a T-theory here as (an extension of) a natural language or as some more fundamental

\(^{12}\) Davidson 1967: 23.  \(^{13}\) This move isn’t, of course, novel; see, e.g., Larson and Segal 1995.
language of thought, there remain lots of problems to be faced by the T-theoretic approach to linguistic meaning. For instance, the account faces a range of what I would call ‘theory internal’ objections. These are problems which emerge due to the specific kind of formal theory sketched here. So, for instance, there has been much discussion surrounding the issue of how viable it really is to seek to replace an intensional notion like meaning with an extensional notion like truth. This problem emerges in the fact that we can envisage a perfectly true truth theory for a natural language (a theory which delivers, for every well-formed sentence of the object-language, a true biconditional pairing it with a meta-language sentence) which may nevertheless fail to be genuinely interpretative. ¹⁴ Clearly, for a truth-conditional approach to semantics to be acceptable, it must show how it can overcome such theory internal worries; for instance, by succeeding in placing enough external conditions of adequacy on a truth theory to select from among the range of true truth theories just those that are genuinely interpretative. However, the problems I want to concentrate on in this essay are those we might think of as ‘theory external’ problems, in the sense that they can be levelled at the truth-conditional approach to meaning but also at any version of the formal approach to semantics, no matter what precise form it takes. So, let’s turn to these problems now.

The heart of the truth-conditional approach is the claim that analyses of literal linguistic meaning can be delivered in terms of a (canonically derived) specification of the conditions under which a sentence will be true, and that this specification itself can be delivered solely through attention to the formal features of the linguistic items in play.¹⁵ In this way we can determine the meaning of a sentence independently of the uses to which that sentence is being put. However, the opponent of truth-conditional theories of meaning (and formal accounts in general) has a fundamental objection to make here. For she will object that without a thorough-going sensitivity to features of the context in

¹⁴ So, for instance, we need to rule out theories generating true but uninterpretative T-theorems like: “Snow is white” is true iff grass is green. This was the problem raised initially by Foster 1976. See also Davidson 1976, Davies 1981, and Larson and Segal 1995.

¹⁵ Thus, I take a formal theory to be committed to formality in two respects: first, the theory itself must include only formal operations (such as those involved in the canonical derivation of truth-conditions). Second, the input to the theory must be limited to that which is formally given in a sentence-type. This latter aspect will come to the fore in the next section and in Chapter 4.
which a sentence is produced semantic content (where this involves anything truth-evaluable) is generally not recoverable. Contrary to the claims of truth-conditional semantics, there is no way of specifying the correct truth-conditions of a sentence based solely on the formal features of that linguistic item; rather one must look to an utterance of that sentence and the role it plays in a communicative exchange.¹⁶

There are a range of features of natural language which the opponent of formal semantics might point to in order to show the ineliminable role for a context of utterance in specifications of literal meaning. On the one hand, she might appeal to quite explicit or overt contextual appeals. These obvious points of contextual contact with linguistic meaning include the resolution of ambiguity, the determination of referents for overt indexicals and demonstratives, and the role of different kinds of speech act. On the other hand, she might appeal to more implicit types of appeal to contextual features, such as we find stressed in the work of theorists like Sperber and Wilson, Recanati, and Travis. So, for instance, she might note the need for a context of utterance to provide the ‘missing constituent’ in an utterance of ‘Jill can’t continue’ (what can’t she continue?), or the location of the rain in an utterance of ‘It’s raining’. All these kinds of appeal to the context of utterance look ominous for the advocate of our strongest form of formal semantics, since she wants to claim that specifications of literal meaning can be given in some entirely context-invariant way. So, let’s begin by considering the first set of contextual challenges to (strong forms of) formal semantics.

1.2 The Challenge from Context

1.2.1 Overt contextual challenges to formal semantics

As noted above, formal theories of linguistic meaning claim that the semantic content of sentences can be arrived at simply through sensitivity to the formal features of the linguistic expressions in question. However, if, as the strong formal theorist of the last section claimed,

¹⁶ Note that this is a theory external worry since it doesn’t claim that truth-conditions cannot provide specifications of meaning per se, but rather that, however we analyse meaning, formal features of expressions alone will underdetermine meaning.
we are talking about sentences typed in an entirely context-invariant way (through their superficial orthographic or phonetic features) we seem to face an immediate problem. I’ve talked above about the semantic analysis of sentences but it only takes a moment to see that sentence-types, described in a way which makes no appeal to a context of utterance, are certainly not the right kinds of things to try and run a semantic theory directly off. The problem with trying to run our semantics off such type-sentences comes to the fore with the recognition that two sentences, typed together by surface features alone, may nevertheless have very different meanings. For instance, take (1):

(1) Many farmers took a pen from the wall.

Here it seems that we cannot specify a meaning for the sentence until we know, first, what kind of pen is in question (is it a cage for animals or a writing instrument?), and, second, did each farmer take the same pen from the wall (did they collectively move a single pen) or did each farmer take a different pen? Clearly these kinds of question can’t be settled by appeal to context-invariant, surface-type features alone, yet until these issues are settled we cannot specify a meaning for (1). Or again, consider the question:

(2) Can you pick up an elephant with one hand?

Here we have an issue of ambiguity, as we did in (1), but we also have an ancillary issue concerning the kind of speech act a speaker producing (2) would be engaged in.\(^\text{17}\) The formal theorist, as we saw above, tended to concentrate on declarative sentences (for example, ‘snow is white’, ‘grass is green’), where it may seem intuitively quite compelling to analyse meaning in terms of truth-conditions (after all, such sentences attempt to tell us something about the way the world is, they describe a state of affairs in the world). Yet natural languages allow a plethora of types of utterance alongside the assertion of declarative sentences; they also make possible the expression of questions (as in (2)), commands, requests, promises, and so on and so forth. It seems that a proper account of linguistic meaning should accommodate these different types of speech act as well (yet the intuition that the meaning of such utterances can be captured in terms of a specification of their truth-conditions

\(^{17}\) The ambiguity emerges in the envisaged reply “No, because elephants don’t have hands at all”.
seems much less compelling here). Furthermore, the kind of speech act being performed (often) cannot be traced to any formal element in the sentence, since one and the same sentence-type may appear in a variety of different types of speech act (thus the utterance “You can come in now” may be a simple statement of fact, a request or a command). So, the existence of lexical and structural ambiguity, together with the range of different speech acts which exist in natural language, conspire to push us away from the idea that the right point at which to offer an account of semantic content is at the level of sentence-types (where such typing is insensitive to any contextual features). This thought is reinforced by considering perhaps the strongest explicit challenge to formal theories of meaning, namely the existence of overtly context-sensitive expressions.

Overtly context-sensitive expressions exist in every natural language; for instance in English, we have words like ‘I’, ‘you’, ‘here’ and words like ‘this’ and ‘that’ (often called, respectively, ‘indexical’ and ‘demonstrative’ expressions), plus temporal indicators like tense. In all these cases, it seems clear that an entirely context-invariant analysis of sentence meaning will prove inadequate—though when A and B utter the type-sentence ‘I am hot’ they both produce the same words in the same combination, clearly what A means is that $A$ is hot, while what B means is that $B$ is hot. Or again, concentrating on the truth-theoretic approach to meaning, it seems that a T-sentence like:

‘I am hot’ is true iff I am hot

runs the risk of being uninterpretable (any time the producer of the first token of ‘I’ is not the same as the producer of the T-sentence). Yet this realization just highlights the fact that the contribution which ‘I’ makes to the semantic content of a complex expression differs on different occasions of use. That is to say, contrary to the claim of the strong formal theorist, the semantic content of a sentence-type like ‘I am hot’ does not seem to be context-invariant. Rather it requires an appeal to a specific context of utterance in order to determine the truth-evaluable content: we need to know who uttered the sentence and when they said it. Yet, if this is right, it is tantamount to admitting that it is not (at least in this instance) the surface-type sentence which is the bearer of truth-conditional content, but the sentence as uttered in this context (in other words, that context of utterance has a crucial role to play in questions of meaning).
Now one obvious move for the formal theorist faced with these kinds of worry is to somewhat refine her position. Though it seems the hope of offering a semantic analysis of sentence-types *simpliciter* is undermined (so that the proposal of the ‘strong formal theorist’ looks less than viable), the formal project *per se* may survive this challenge. If we could make the input to our formal theory more fine grained than sentence-types *per se*, this might ameliorate the initial problems of context-sensitivity. One way in which to refine the input to the semantic theory, and thus create a more moderate version of the formal approach, would be to introduce the notion of *sentence types relativized to contexts of utterance*.¹⁸ Now, clearly, this kind of move raises a fundamental question for the formal theorist, namely ‘what kinds of appeal to a context of utterance are licensed from within a formal semantics approach?’ For an opponent may object at this point that if literal meaning can be shown to be *in any way* context-sensitive then the formal approach to semantics will have been shown to be unworkable. However, on reflection, it seems clear that this claim is in fact far too strong, for it may well be that a formal theorist can accommodate certain kinds of context-sensitivity within her theory. To see this we need to distinguish two questions, and two different answers to each question:

(I) When are appeals to the context of utterance admissible in specifications of literal meaning?
   (a) syntactically mandated vs. (b) not syntactically mandated.

(II) What kind of features of context of utterance are appealed to in specifications of literal meaning?
   (a) objective vs. (b) perspectival/intentional.¹⁹

Now, moderate formal theorists are, I believe, *constrained* to answer (Ia): on a formal account the only time that features of the context of

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¹⁸ For a discussion of various forms of refinement to the strong formal stance see Ariel 2002.

¹⁹ DeRose 1992: 916 labels this distinction ‘objective’ versus ‘subjective’; while Bach 1999: 72 labels the two different types of feature I have in mind ‘narrow’ versus ‘wide’ context. I have not adopted Bach’s terminology for several reasons: first, the different notions of wide and narrow *content* are well established in the literature, and I want to avoid any confusion with this distinction. Secondly, Perry 2001: 59 uses the terms ‘wide context’ and ‘narrow context’ in a somewhat different way from Bach. Finally, it seems to me that the terms ‘objective’ versus ‘perspectival/intentional/subjective’ somewhat better highlight the distinction I am interested in, i.e., a distinction between features of the context which don’t require access to a speaker’s state of mind and features of the context of utterance which do require such access. Of course, the terminology I’ve chosen may still be thought unsatisfactory (for instance, it may well be objected, and not only by those of a materialist bent, that intentional states are every bit as much an ‘objective’ part of the world as physical objects); however, whatever labels one prefers, I hope at least that the fact that such a distinction exists is itself relatively non-question-begging.
utterance can become relevant to a specification of the literal meaning of a sentence is when such an appeal is triggered by some formal (e.g. syntactic) constituent of the sentence.\textsuperscript{20} This clearly has to be the case, for if the idea is that we can run an analysis of meaning off the formal features of linguistic items, then there must be nothing to be found at the level of meaning which is not contributed by an element at the formal level. So, the suggestion of our more moderate formal theorist with respect to question (I) is that we can allow that features of the context of utterance may be relevant to semantic interpretation just in case appeal to those features is triggered by something in the syntax. Thus, to take account of the behaviour of these syntactic elements, the right point at which to proffer semantic analyses is at the level of the sentence-type relativized to a context of utterance. Given this answer to (I), however, moderate formal theorists then clearly face question (II): which features of a context of utterance can be appealed to, when syntactically demanded, from within a formal semantic theory?\textsuperscript{21}

According to (IIa), the kinds of contextual features which are within the reach of a formal semantic theory are quite limited. Specifically, though ‘objective’ features of the context of utterance, like who is speaking, when they are speaking and where they are located, are admissible, richer features, which require access to the speaker’s mental state, are not similarly admissible. On this kind of approach, we might envisage a context as an ordered set of formally describable parameters, against which a sentence-type may be assessed for meaning. Now, it would seem clear that this sort of account of the role of context would be fine from a formal perspective. Though semantic content is no longer held to be context-invariant, we have a formal notion of context which

\textsuperscript{20} Thus our refined formal approach (modulo concerns about the semantic status of the notion of ‘what is said’ to be raised in the next chapter) might be thought to be a version of what Recanati 1993: 255 terms ‘minimalism’; ‘Minimalism is the doctrine according to which a pragmatic, contextual aspect of meaning should not be considered part of what is said \textit{praeter necessitatem}. In other words, it is only in the case of necessity that we must incorporate something contextual into what is said’. See also Recanati 2004: 7–8. King and Stanley forthcoming refer to this kind of contextual appeal as a ‘weak pragmatic effect’.

\textsuperscript{21} Given moderate formal semantics, the distinction between formal semantics and use-based theories is of course no longer that the latter accords a role to context and the former does not; rather the difference must come in the kind of role each ascribes to features of the context and perhaps in the kinds of features which can be appealed to. Though, in introducing the distinction between formal semantics and dual pragmatics below, I will sometimes continue to speak as though formal semantics assigns no role to context (i.e. as though we are still operating with strong formal semantics) it should be borne in mind that this is an oversimplification. The more complex moderate formal semantics account will come properly into focus in ensuing chapters.
would seem entirely in keeping with the general ethos of formal semantics. Grasp of literal meaning would not, as it does on a use-based account, require reasoning about the use to which a given linguistic item is put or consideration of the mental states of the speaker.

What then of the second answer above (IIb)? Well, many moderate formal semanticists clearly feel there is not a problem with a formal theory appealing to speaker intentions (just so long as such an appeal is syntactically triggered). However, it seems to me that there are problems involved in such a move and thus that moderate formal semanticists should, in fact, limit their appeals to those features of a context of utterance which are non-perspectival or objective (i.e. that they should hold (Ia) and (IIa) only). My reasons for thinking this are two-fold: first, it seems to me that admitting speaker intentions as semantically relevant runs counter to the general aims of formal semantic theorizing. Secondly, and most importantly, admitting speaker intentions as semantically relevant runs counter to the claims of modularity for semantic processing.

Turning to the first point initially: if we ask why we might be interested in pursuing a formal approach to semantics in the first place, the answer seems to be that we are interested in capturing the repeatable, code-like, normative aspects of linguistic meaning. Yet speaker intentions by their very nature do not fit well within this kind of enterprise—for speaker intentions are variable, changing and nebulous. The speaker who says “I’m hungry” may do so because she wants to request food, or because she wants to bring a meeting to an end, or to issue a complaint about an on-going occupation, or for a myriad of other reasons, none of which results in changes to the formal features of the sentence produced. Thus working out which intention a speaker has when she makes some utterance is clearly a task that goes way beyond any grasp of formal, repeatable, code-like features. We simply lack the kind of sufficiently formal way to model grasp of speaker intentions which might make an appeal to intentional states admissible from within a formal semantic theory.²²

²² It may be objected here that it is not grasp of speaker intentions in general that is in question for the moderate formal semanticist, but only grasp of some special, select set of speaker intentions—say those relevant to the determination of a referent for an indexical or demonstrative. However, I don’t think this move takes us very far: first, we need some principled reason for thinking that there is such a set of distinct referential speaker intentions, which can be separated from the complex web of other things that a speaker takes to be relevant in the context of utterance. Yet, in many cases (e.g. where there is no ostensive gesture) to work out that, say, Darren intends to refer to Brett, not Shane, by his utterance of “He’s quick” we need to know quite a lot about how Darren sees the current situation. Secondly, we would need a reason to
Furthermore, admitting speaker intentions as semantically relevant seems to me to begin to blur the distinction we sought to draw at the outset between formal approaches and use-based accounts. For instance, according to some moderate formal semanticists (i.e. Stanley and Szabo 2000) every common noun of a natural language turns out to cohabit syntactically with (one or more) indexical item(s), and determining the value of this indexical item will require access to speaker intentions. So, it turns out that, on this kind of account, recovering the truth-conditional content of any sentence containing a common noun, relativized to a context of utterance, requires reasoning about the way in which the speaker is using the sentence—determining what she intends to convey. Yet one might well feel, I think, that this move comes quite close to the kind of account I earlier attributed to use-based approaches. At the very least, it seems that a formal approach which appealed only to a formal, objective description of a context of utterance (in terms of an ordered set of parameters including, say, speaker, time of utterance, and location of utterance), without any appeal to rich, intentional features like the aims and objectives of the speaker in producing her utterance, would be more in keeping with the formal enterprise than one which included these kinds of use-based features in her account of a context of utterance. Thus it should provide the starting point for the moderate formal semanticist—the position she moves from only if it is shown to be untenable.

Secondly, as I will argue in the next chapter, it seems clear that an appeal to speaker intentions from within a formal theory would make such an account unsuitable for incorporation within a modular account think that grasping members of any such privileged set of intentions is somehow easier than reasoning about other intentions the speaker has (that is, that working out that a speaker intends to refer to A is easier than working out why they said what they did), yet we have little reason to think this is the case. Finally, we would need to be convinced that the role of speaker intentions could be properly limited just to referential intentions, but this is an assumption which is called into question by many of the examples raised by the dual pragmatists.

²³ I have a similar qualm with King’s 2001 account of complex demonstratives, where they are treated as quantified phrases with a lexical entry which contains slots to be filled by properties determined by the speaker’s intentions. Once again, it seems to me that building in at a semantic level an appeal to the way a speaker is using an expression runs the risk of collapsing the clear distinction between use-based and formal approaches.

²⁴ In fact, as we will come to see in Chapter 3, there are problems to be faced by the idea that we can treat indexicals and demonstratives via a limited number of formal parameters. I’ll argue, however, that these problems still should not push the formal semanticist into embracing speaker intentions as semantically relevant.
of linguistic understanding. Yet, since I think there are reasons to assume that linguistic comprehension is a properly modular process, so I also think that there are reasons to resist any incorporation of appeals to speaker intentions at the semantic level. At least prima facie, then, it seems to me that it is answer (IIa) which truly respects the formal semantics approach and thus it is the answer which I will pursue in what follows. I will try to show that there is a level of semantic content which can be recovered simply on the basis of the formal features of the expressions produced together with a formal description of the context in which they are uttered, without any appeal to the use to which the speaker is putting those expressions (specifically, without any appeal to her mental, or intentional, states). However, let’s leave this debate about the kinds of features of a context of utterance to which a formal semanticist may appeal to one side for the moment, for it seems that the opponent of formal semantics has a more fundamental challenge to make at this point. This concerns the answer to question (I) above (on which both versions of moderate formal semantics agreed): the claim that features of a context of utterance could become semantically relevant just so long as they were syntactically mandated (that is, just so long as such an appeal was demanded by a syntactic element of the sentence in question). However, the opponent of formal semantics may well object that this answer is insupportable, for the points of pragmatic (contextual) intrusions into literal linguistic meaning are not confined merely to the settling of ambiguity, the determination of a speech act type, and the delivery of a referent for any overt indexical or demonstrative expression. For, as has been stressed by many theorists, once you start thinking about context-dependence it seems to crop up all over the place. What this new challenge suggests is that literal meaning is saturated throughout by pragmatic features—linguistic meaning is radically context-dependent. If this is right, then clearly even a moderate version of the formal approach is going to turn out to be woefully inadequate since not all appeals to context will be triggered by formal, syntactic items (that is to say, not all context-sensitivity in natural language is overt context-sensitivity).

²⁵ Bear in mind that, as stressed in the introduction, for something to count as semantic content for me it must reach the level of truth-evaluability. If it turns out that the only level of content which is recoverable on the basis of syntactic features alone fell below this level, then I would take it that formal semantics, as standardly conceived, was not possible. This point is discussed further in §1.4.
1.2.2 Covert contextual challenges to formal semantics

So, what are the grounds for this novel challenge? Why might we think that linguistic meaning is radically context-sensitive? We will need to look in some detail at this question (see Chapter 4), but initially the argument seems clear, for there do seem to be a vast range of examples in natural language where appeals to the context of utterance must be made in order to grasp the meaning of the sentence produced, but where such appeals to context are not apparently required by any formal element of the sentence itself. So, consider the following examples (where only the material outside the brackets forms an explicit, written or uttered, part of the sentence):

(3) Paracetamol is better \text{[than aspirin]}
(4) You won’t die \text{[from that cut]}
(5) I’ve eaten \text{[recently]}
(6) It’s raining \text{[where the speaker is]}
(7) Everybody \text{[who came to the party] had a great time}
(8) Smith weighs 120 pounds \text{[weighed before breakfast and undressed]}
(9) The apple is green \text{[on the outside]}
(10) Holland is flat \text{[for a country]}

In each of these cases we can envisage only the unbracketed material being spoken, yet to grasp what is meant it seems that the hearer must recover the material in brackets as well. Such material can only be recovered through a hearer’s sensitivity to features of the context of utterance, for notice that, in a different context something quite different might be meant (for instance, the speaker of (3) might intend to convey that paracetamol is better than nothing). So the addressee needs to be sensitive to what the speaker is intending to communicate in each case, but such context-sensitivity is not, so the argument goes, marked by any indexical item in the sentence itself. Certainly, there is no overtly indexical item in (3) instructing us to look to the context of utterance to discover what the speaker intends to say Paracetamol is better than, yet nevertheless such an appeal to context will be made by any competent speaker faced with an utterance of (3). Or again, in (4), although there is an indexical item here (‘you’) this can’t help to explain the provision of the qualifier ‘from that cut’ from the context of utterance. Rather this
contextual provision seems entirely syntactically unmarked—no constituent of the sentence instructs us to recover it from the context of utterance. So, then, consideration of the meanings intuitively conveyed by a range of natural language utterances seems to show that they are radically context-sensitive; appeals to a context of utterance are not limited to the syntactically mandated appeals of overt indexicals and demonstratives, rather appeals to context crop up all the time, whether or not they are syntactically marked. This recognition of a kind of radical context-sensitivity in natural language provides a new type of challenge to standard formal theories, one which, as we will see, is hard (though, I’m going to argue, not impossible) for them to meet.

The claim that formal features radically underdetermine semantic content (or as it is sometimes put: that formal semantics underdetermines what is said) provides the main challenge to formal theories from advocates of what I’ll call ‘dual pragmatic’ theories. However, there are also a couple of ancillary challenges posed by the dual pragmatic accounts and I think it will be useful to look at these now as a way to begin to introduce the dual pragmatic accounts themselves.

First, while previous use-based approaches often seemed to neglect entirely the formal features of our natural languages, many of these new use-based accounts do not set themselves up in such total opposition to formal accounts, rather they adopt a kind of hybrid stance. They recognize that language, as a system of repeatable signs, has a formal foundation which may itself admit of independent study. Thus for many dual pragmatic approaches, an utterance can, and indeed should, be analysed initially to reveal its syntactic structure, which might, just as in formal theories of meaning, be rendered in terms of the expression’s ‘logical form’. Furthermore, on some accounts (like Sperber and Wilson’s relevance theory, as we will see below) this formal representation may itself be open to something like a formal semantic analysis; that is to say, there may be aspects of meaning which are recoverable simply via sensitivity to the formal features of the linguistic item produced, just as the formal theorist originally claimed. So, dual pragmatic theories do not, on the whole, reject the formal approach to the study of language out of hand. However, this reconciliatory move goes only so far, for the dual pragmatic accounts are also keen to point out the new limits they impose on their formal brethren, stressing (as we saw above) the radical context-dependence of truth-conditional or propositional content and hence the underdetermination of meaning by any formal analysis.
Secondly, some advocates of dual pragmatic approaches have put forward a slightly different kind of challenge to the formal approach. For, whereas the main challenge, in terms of the underdetermination of linguistic meaning by formal semantics, if successful, shows that formal semantics as originally conceived (that is, as providing complete specifications of linguistic meaning via formal features alone) is not possible (since linguistic meaning is permeated throughout by contextual features), some theorists have argued that, even if possible, such a formal account of meaning would simply be unnecessary.²⁶ That is to say, even if we could have a formal semantic account of sentence meaning it would be theoretically redundant anyway, since everything we want to account for in the study of language can be explained without recourse to the abstract notion of sentence meaning.²⁷

So, dual pragmatic theories in general pose several significantly new challenges to formal theories of meaning. First, and perhaps most crucially, the dual pragmatic theories highlight an apparently thoroughgoing kind of context-sensitivity in linguistic meaning which challenges the attempt by previous formal approaches to treat context-sensitivity as a highly constrained, and perhaps somewhat peripheral, feature of meaning in a natural language. If this is right, then it seems to show that a formal analysis of literal linguistic meaning, where the input from the context of utterance is limited to that which is syntactically mandated, is not possible: there is (often) no genuine level of semantic content which can be recovered without making appeal to the use to which a sentence is being put in a particular context of utterance, even where this sentence contains no overtly context-sensitive items. Secondly, however, dual pragmatic theories seem well-equipped to accommodate any intuitions we have about language being a repeatable system of signs (a formal system) since they acknowledge that there may be some initial level of meaning (a logical form) which remains constant across contexts of utterance (though they of course claim that this level of content is not, in general, a complete—that is,

²⁶ Recanati 2004:86 captures these two alternative types of challenge via two different versions of what he calls ‘contextualism’: contextualism claims that there is no such thing as a complete, truth-evaluable level of content which can be recovered on the basis of formal features alone, while quasi-contextualism claims that, although there may be such a level, it is explanatorily redundant.

²⁷ This kind of move is, it seems, embraced in Stephen Neale’s recent work, where he argues for what he calls a ‘theory of interpretation’ (a pragmatically saturated account) which will explain everything which we want to explain with respect to our understanding of natural language without recourse to such abstract notions as sentence meaning.
propositional or truth-evaluable—level of representation). Thus it will no longer be sufficient for the advocate of a formal approach to show that there must be some formal component to linguistic interpretation. Rather advocates of a formal approach to semantics must show that there is a significant component of linguistic interpretation which is purely formal; that is, that there is a need for a formal semantic theory, not merely, say, a formal syntactic theory.²⁸

Third, and finally, advocates of dual pragmatics may challenge the very motivation for a formal theory of meaning, suggesting that all the important questions in the philosophy of language may be answered without invoking such abstract, non-use-based notions as sentence meaning. Thus, even if we could deliver something like the meaning of a sentence-type, where this is abstracted from questions concerning the use to which an utterance of that sentence is being put, the advocate of this third type of challenge would tell us that such a theoretical posit would be of no practical value anyway. The rest of this book is going to be devoted to trying to show how these challenges (together with the overt contextual challenges raised in §1.2.1) to the formal approach can be resisted. Yet before we jump to the defence of formal semantics, we should first properly introduce the opposition here. We’ve seen some of the motivation the dual pragmatist has for rejecting formal semantics in this section—according to them the radical context-sensitivity of natural language makes a formal approach to semantic content quite hopeless. However, we need to know now what the dual pragmatist puts in place of the formal stance; what does she tell us is the key to a grasp of linguistic meaning?

1.3 Dual Pragmatics

It seems that, at least prima facie, there are very good reasons, stemming from the central role apparently played by the context of utterance in specifications of literal linguistic meaning, to reject the formal approach to semantics; but where might we go from here? What is the positive picture dual pragmatists put in place of the formal account?

²⁸ To anticipate our later debate, formal theorists must show that formal features alone are sufficient for determining a propositional or truth-evaluable entity, something which can genuinely count as the meaning of the sentence.
Well, although just as with the formal approach, there are a range of more specific theories we might choose to adopt which all fall within the dual pragmatics domain, there is a fundamental ethos all accounts share. This is the idea that pragmatic processes are capable of acting twice: once prior to the delivery of a complete proposition expressed (that is, prior to determining the truth-conditional content of the sentence as uttered in a given context) and then once again to yield any implicatures of the utterance (i.e. any further, indirectly conveyed, propositions). So the picture of linguistic processing the dual pragmatist offers us is as follows: say a speaker utters the sentence ‘Courtney will continue.’ In order to grasp the meaning of this utterance the addressee needs to engage in three kinds (or perhaps stages) of interpretation:

(i) Linguistic decoding ⇒ Courtney will continue
(ii) Pragmatic inference (1) ⇒ Courtney will continue bowling.
(iii) Pragmatic inference (2) ⇒ England’s batsmen are in trouble.

The item recovered at stage (i) in the process is an incomplete logical form, a propositional schema or radical. According to the dual pragmatist, this item is not itself genuinely propositional or truth-evaluable, for it stands in need of some pragmatic supplementation or refinement before it is capable of expressing a complete thought. The item recovered at stage (ii) is the result of this completion or refinement: a complete proposition or truth-evaluable item which has been arrived at through the interaction of formal, decoding processes and pragmatic, inferential processes. It is this stage of processing which gives us what is asserted or expressed—what is literally said by the utterance. Finally, at stage (iii) we get the fully pragmatically enhanced item, the indirectly communicated propositions which are the result of pragmatic inferences drawn on the basis of what is asserted (stage (ii) processing) together with the context in which it was asserted. Introducing some labels for each

²⁹ ‘Propositional radical’ is Bach’s (e.g. 1994b) terminology. As we will see below, I take the main proponents of dual pragmatics to be relevance theorists, like Sperber and Wilson, or Carston, and advocates of what is often termed ‘contextualism’, like Recanati (though not all positions labelled as ‘contextualist’ in the literature are equivalent, see next note). However, we should note that, broadly speaking at least, Bach also belongs on the side of the dual pragmatists. For although he is keen to stress that pragmatically completed propositions are not the subject matter of semantics, he also holds that such ‘implicatures’, as he calls these pragmatically enriched items (note the spelling—implicatures are not the same thing as implicatures), are often the first recoverable level of complete content. Thus Bach-style semantics must often deal with sub-propositional, or non-truth-evaluable, items. In my terminology, this is enough to make him a dual pragmatist. This general point will be taken up again in the next section, with respect to the stance of Sperber and Wilson.
stage we then get the following picture:

(i) Linguistic decoding $\Rightarrow$ incomplete logical form

(ii) Pragmatic inference (1) $\Rightarrow$ what is said/stated

(iii) Pragmatic inference (2) $\Rightarrow$ implicature(s)

This, then, is why I’ve chosen to label such accounts ‘dual pragmatic’ accounts, for they cede pragmatic processing a crucial role within semantic processing proper. If we want to get at either the intuitive truth-conditions of an utterance or the proposition expressed by a sentence (in most cases) we must pay serious attention to the context in which that linguistic item was produced. We should note that dual pragmatic accounts hold on to the idea of determinate semantic content, but they relocate the source of this determinacy from the linguistic expressions overtly in play in an utterance to the thoughts of the speaker making the utterance.\(^{30}\) They also (as mentioned in §1.2) hold on to the idea that formal features of linguistic items play a role in derivations of literal meaning. However, their claim is that this level of formal processing very often does not suffice to yield anything genuinely propositional or truth-evaluable; that is to say, the formal processing at stage (i) yields nothing like the complete truth-conditional level of representation envisaged by our paradigm formal theorist. There are, of course, lots of other interesting and important features of the various versions of dual pragmatic accounts (some of which we will touch on below), but this is the key claim I take my opponent to be making: pragmatic, that is, context-sensitive, processes play a constitutive role in the determination of the semantic content of a sentence (i.e. to the truth-conditional content or the proposition expressed), as well as being relevant to the determination of implicatures. These context-sensitive processes can come into play even when they are not syntactically mandated and the features of the context of utterance to which such processes look can include rich, intentional features (thus the advocate of dual pragmatics endorses both (Ib) and (IIb) as outlined in §1.2.1). To see how these claims work in practice I’d like now to sketch briefly three kinds of theory which I take it fall under the general heading of ‘dual pragmatics’: Sperber and Wilson’s relevance theory, Recanati’s contextualism, and Kamp’s dynamic representation theory.

\(^{30}\) Thus dual pragmatic accounts should not be conflated with perhaps more radical kinds of contextualism where the determinacy of semantic content itself is rejected. As we will see in Chapter 4, I take Travis-style contextualism (cf. Travis 1996; 1997) to be of this more radical variety.
1.3.1 Relevance theory

Sperber and Wilson introduce their project as follows:

Ostensive behaviour provides evidence of one’s thoughts. It succeeds in doing so because it implies a guarantee of relevance. It implies such a guarantee because humans automatically turn their attention to what seems most relevant to them. [Our] main thesis . . . is that an act of ostension carries a guarantee of relevance, and that this fact – which we call the principle of relevance – makes manifest the intention behind the ostension.³¹

‘Relevance’ here is a technical term (though its connection to the non-technical homonym is also clearly important): a communicative act is relevant just in case the cost of cognitive processing is outweighed by the amount of cognitive effects which are the result of that processing.³²

To put it crudely, the promise of relevance is the promise that any expenditure you make in trying to understand an ostensive act will be worth your while in terms of what you learn from interpreting it—however much it costs you to process, you are guaranteed that the information you will learn will cross some threshold of usefulness to you. Benefits of cognitive processing vary, but they may include deriving or strengthening new assumptions, and confirming or rejecting previous assumptions.³³ So, for example, consider the following kinds of case (both drawn from Sperber and Wilson):

(11) A and B are sitting together on a bench when A ostentatiously leans back, allowing B to see the panorama behind A. There B sees a complete stranger, C, and a mutual and boring friend D.

(12) B: “Would you like to go the café?”
A: “I’ve eaten.”

In both these cases the question is: how should B interpret A’s behaviour? In the first case, it seems that there are (at least) two options for

³¹ Sperber and Wilson 1986: 50
³² The principle of relevance which Sperber and Wilson propose differs from the Gricean conversational maxims (which include a constraint to ‘be relevant’) in some crucial respects; for instance, agents cannot choose to ‘opt out’ of the machinations of relevance, as they can with the Gricean maxims. Sperber and Wilson 1987: 704 write: “The principle of relevance . . . is a generalization about ostensive-inferential communication. Communicators and audience need no more know about the principle of relevance to communicate than they need know the principles of genetics to reproduce. It is not the general principle but the fact that a particular presumption of relevance has been communicated, by and about a particular act of communication, that the audience use in inferential communication. Communicators do not ‘follow’ the principle of relevance; and they could not violate it even if they wanted to. The principle of relevance applies without exception: Every act of ostensive communication communicates a presumption of relevance.”
what A might have been intending to convey. On the one hand she might have expected B to see the stranger, C; while, on the other, she might have intended her to notice their mutual friend, D. However, it seems that only one of these interpretations, the latter, reaches the standards of relevance. For if B interprets A as intending her to see C it seems this will have little or no cognitive benefits for B—she gains nothing in the way of cognitive effects from adding the assumption ‘C is here’ to her mental model of the context. However, if B interprets A as intending her to see D it is clear that the cognitive effects outweigh the effort expended to reach this interpretation, for knowing that D is approaching may introduce a whole range of new assumptions, such as that A and B should hide or prepare to be bored, etc. Furthermore, it seems that once B has reached this interpretation of A’s action she can stop there. For Sperber and Wilson state that the first relevant interpretation reached (that is, the first interpretation to cross the threshold of relevance, where cognitive benefits outweigh cognitive effort) can be taken as the one the agent intended (since her ostensive action will have been guided by similar relevance-directed mechanisms, producing the ‘cognitively cheapest’ sign capable of getting her intended message across). On this account, an addressee arrives at a grasp of meaning for any ostensive act through engaging in a reasoning process, governed by the constraints of relevance, and directed at articulating the agent’s communicative intentions.

Of course, the sub-group of ostensive actions we are primarily concerned with are linguistic actions, but the processing is very similar here, although in this case, unlike the interpretation of a gesture, there will be an initial level of formal decoding. So, take example (12): here B must first engage in a (purely formal) process of linguistic decoding to yield a logical form for A’s utterance. However, this formal item, generated on the basis of the syntactic constituents of the sentence alone, does not capture anything like the meaning of the utterance. Specifically, if B were to take A as having said simply that *I’ve eaten*, this would not seem to reach the standards of relevance (for instance, it certainly couldn’t serve as an answer to B’s question). Instead, then, what provides the literal interpretation of A’s utterance is some contextually enriched claim, where the formally derived logical form has been supplemented or enriched, such as *I’ve eaten recently*. This pragmatically supplemented item, which does satisfy the principle of relevance since
it can act as the premise for deriving an answer to B’s question, Sperber and Wilson call the explicature of the utterance. The explicature is what a speaker directly communicates and it contrasts with indirectly communicated implicatures (which are arrived at via further pragmatic processing based on applications of the principle of relevance).\(^{34}\) For instance, in this case, B may use the explicature to infer the further, implied proposition: *A is not hungry and so does not want to go to the café.* Thus our two stages of pragmatic interpretation might engage in the following way:\(^{35}\)

U utters ‘s’:

(i) linguistic decoding + pragmatics ⇒ **explicature**  
(what is stated/said)

(ii) what is stated + pragmatics ⇒ **what is implied**

Yet however the two kinds of pragmatically affected interpretation interact for the dual pragmatist, the essential claim remains that contextual supplementation or refinement is endemic throughout the interpretation of natural language, with very few constructions yielding a genuine proposition expressed without any kind of recourse to the context of utterance. For instance, as Sperber and Wilson write of the possessive construction ‘Peter’s bat’:

‘Peter’s bat’ might refer to the bat owned by Peter, the bat chosen by Peter, the bat killed by Peter, the bat mentioned by Peter, and so on indefinitely. It is hard to believe that the genitive is ambiguous, with as many senses as there are types of relationship it may be used to denote, or that all these relationships fall under a single definition which is the only meaning expressed by the use of the genitive on any given occasion. It seems, rather, that the semantic interpretation of a sentence with a genitive from which ambiguities and referential indeterminacies have been eliminated is still something less than fully propositional. Contextual information is needed to resolve what should be seen as the semantic incompleteness, rather than the ambiguity, of the genitive.\(^{36}\)

\(^{34}\) Relevance theorists suggest that it is the very same (in their case, relevance-directed) pragmatic processes which act on both occasions; however, this is not an essential claim of all dual pragmatic theories.

\(^{35}\) Though we should be aware that there is currently a live discussion among dual pragmatists concerning whether or not the explicature must be calculated prior to the calculation of any implicatures, or whether some implicatures might be determined by an addressee even though she never explicitly calculates the content of the explicature; see Recanati 2004: 27–8. Gibbs 1994: 2002 has argued that in some contexts a figurative interpretation may be calculated as fast, or even faster, than a literal interpretation, suggesting that the non-literal interpretation may be arrived at directly, without interpretative processes first going through the literal interpretation.

\(^{36}\) Sperber and Wilson 1986: 188.
And, plausibly, this contextual information will concern speaker intentions: what makes it the case that this utterance of ‘Peter’s bat’ means the bat which Peter owns seems to be the fact that the utterer intends this interpretation. If this is right, then relevance theory cedes a central role to speaker intentions in specifications of meaning. The kinds of contextual factors which are relevant are then rich intentional or perspectival features, and the kind of reasoning processes which are involved in grasp of meaning are rich, non-demonstrative reasoning processes. That is to say, according to relevance theory (and other dual pragmatic accounts) interpreting the literal meaning of some linguistic act is a kind of inference to the best explanation: the speaker produces a piece of evidence for her communicative intentions and the addressee uses this as a basis for constructing a hypothesis about those intentions. This is very different from the account of grasp of literal meaning apparently promised by the formal theorist. For the latter it is nothing more than a kind of brute, computational process, resting on deductive inferences, while for the relevance theorists it is a paradigm example of abductive reasoning.\(^{37}\) (This difference in the kinds of processes which might underpin grasp of literal meaning will come to the fore later on.)

Now, one point which it is important to notice with respect to Sperber and Wilson’s relevance theory is their somewhat non-standard (from a philosophical point of view at least) use of the term ‘semantics’.\(^{38}\) For they reserve this term just for the output of the formal decoding process, despite the fact that this item can’t be anything like the sort of thing the formal semanticist envisages when she talks of ‘semantic content’. For, on the relevance theoretic account, this level of representation is radically incomplete and underdetermines what we might think of as the literal meaning of a token sentence:

What are the meanings of sentences? Sentence meanings are sets of semantic representations, as many semantic representations as there are ways in which

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\(^{37}\) Where ‘abductive inference’ (a term first introduced, I think, by Peirce 1885) is a form of non-deductive, defeasible reasoning, involving reasoning from an observed fact or collection of facts to a hypothesized explanation of them; thus it is a form of inference to the best explanation (see Josephson and Josephson 1994: 27–9). It is the kind of reasoning for which, it seems, the ‘frame problem’ occurs with a vengeance, for there is no principled way to delimit the search space a computational mechanism might explore for a solution to the problem in advance of the delivery of that solution (see §2.1).

\(^{38}\) Kempson 1986: 102, advocating a relevance theoretic approach, notes: ‘The semantic component of a grammar neither completely specifies the propositions to be paired with any given sentence, nor is restricted to specifying such propositions. The semantic component of a grammar indeed does not provide a semantic theory for a language at all in the philosophical sense.’
the sentence is ambiguous. Semantic representations are incomplete logical forms, i.e. at best fragmentary representations of thoughts . . . One entertains thoughts; one does not entertain semantic representations of sentences. Semantic representations of sentences are mental objects that never surface to consciousness. If they did, they would be entirely uninteresting (except, of course, to semanticists). Semantic representations become mentally represented as a result of an automatic and unconscious process of linguistic decoding. They can be used as assumption schemas to identify first the propositional form and then the explicatures of an utterance. It is these explicatures alone that have contextual effects, and are therefore worthy of conscious attention. ³⁹

This use of the term ‘semantic’ to stand for incomplete logical forms may obscure the genuine area of disagreement between the formal semanticist and the advocate of relevance theory, since it looks prima facie as if semantic content remains unaffected in the relevance theoretic picture, being delivered via simple decoding processes prior to pragmatic interpretation. However, if we are clear that by the term ‘semantic’ we mean (as formal semanticists have standardly meant) a level of content which is propositional or truth-evaluable, and which captures the literal meaning of a natural language sentence, then it is clear that relevance theory and formal semantics are fundamentally opposed, since relevance theory claims that this sort of content certainly can’t be arrived at without some kind of (relevance-directed) pragmatic processing, while formal theories, of course, claim that this level of content is delivered solely via sensitivity to the formal features of the expressions involved (thus it would appear to be the result of decoding alone, not inference). This question, of the precise nature of the dispute between dual pragmatics and formal semantics, will be something we need to explore in more detail shortly. First, however, let’s look at a second version of the general dual pragmatic approach, namely Recanati’s ‘contextualism’.

1.3.2 Contextualism

Recanati is in agreement with Sperber and Wilson over what I have suggested is the fundamental claim of dual pragmatics. That is to say, he holds that there is a central role for rich pragmatic processes to play in determining the correct analysis of the literal meaning of an utterance.

of a given sentence (even where this sentence is not overtly context-sensitive), in addition to there being a role for such processes in determining the contextual implicatures of the utterance. Now, once again, with Recanati we find the suggestion that the term ‘semantic’ may be reserved just for the results of decoding. He writes: “[o]n my view semantic interpretation, characterized by its deductive character, does not deliver complete propositions: it delivers only semantic schemata—propositional functions, to use Russell’s phrase”.\textsuperscript{40} So the claim is that, often, to get something truth-conditional or propositional (that is, to get anything which looks like the subject matter of semantics as traditionally conceived) we need first to engage in some pragmatic processing. Indeed, that the proper focus of theorizing here must be the pragmatically enriched ‘explicature’ (not Recanati’s term) is perhaps even clearer on Recanati’s view than on Sperber and Wilson’s, for he stresses that the role of theorizing is to capture our intuitive judgements of the truth-conditions of utterances, and these intuitive judgements clearly concern pragmatically enriched items:

The order ‘Bring me a steak with fried potatoes’ does not count as satisfied if the steak is delivered, encased in concrete, to the customer’s house. It is mutually manifest to both the hearer and the speaker that the speaker intends the ordered meal to be placed in front of him on the restaurant table he is sitting at, etc. Though not explicitly said, that is clearly part of what is meant. Yet one does not want to say that that aspect of utterance meaning is conveyed indirectly or nonliterally (as when one says something and means something else). The utterance ‘Bring me a steak with fried potatoes’ is fully literal. It is a property of literal and serious utterances that their conditions of satisfaction systematically depend upon unstated background assumptions. According to the view we arrive at . . . various contextual processes come into play in the determination of an utterance’s intuitive truth-conditions; not merely saturation—the contextual assignment of values to indexicals and free variables in the logical form of the sentence—but also free enrichment and other processes which are not linguistically triggered but are pragmatic through and through. That view I will henceforth refer to as ‘Truth-conditional pragmatics’ (TCP).\textsuperscript{41}

So Recanati shares the general premise of dual pragmatics, namely that pragmatic processes have an integral role to play in the delivery of a

\textsuperscript{40} Recanati 2004: 56.

\textsuperscript{41} Recanati 2002a: 302. In later work, Recanati prefers the term ‘contextualism’ for apparently the same position. See also Bezuidenhout 2002.
truth-conditional specification of the literal meaning of an utterance. However, his account also differs from Sperber and Wilson’s in several respects. For instance, he has a different view on the kinds of pragmatic processes which play a role pre- and post-semantically: unlike relevance theory, Recanati holds that very different pragmatic processes occur on both occasions. He labels the former ‘primary pragmatic processes’ and the latter ‘secondary pragmatic processes’. For Recanati these processes must be radically different since the pragmatic inferences at stage (1) must be capable of operating on sub-propositional items, while those at stage (2) take complete propositions as input.⁴² However a more substantial difference between the two types of process is marked by what Recanati terms the ‘Availability Principle’, which concerns those elements of an interpretation which are consciously accessible by the agent. A primary pragmatic process operates on an item which is not consciously accessible to the agent and it yields an item which is available to consciousness; whereas a secondary pragmatic process takes an item which is already consciously accessible and yields a further consciously accessible item (together with the information that the latter item is, in some way, grounded in the former).

A paradigm example of a primary pragmatic process is ‘saturation’: this is a syntactically mandated process (that is, it is triggered by formal features of the expressions in play) and involves the contextual provision of those elements which are required in order for an utterance to express a complete proposition. An obvious example of saturation is the provision of referents for overtly context-sensitive expressions, like ‘I’ or ‘that’. However, saturation can also come about in a more subtle way. For instance, faced with an utterance of ‘That is bigger than John’s book’ an addressee must determine what is referred to by ‘that’, but also what the relationship is between John and the book (is it the book he wrote, the book he is carrying, etc.). Both of these contextual supplementations are, for Recanati, instances of saturation (thus saturation comes into play to provide contextual values for both overt and more covert kinds of context-sensitivity), and saturation counts as a primary pragmatic process since it operates on an item which is not consciously accessed by the agent. An addressee who hears an utterance of “That

is bigger than John’s book” will not consciously consider the proposition that *that is bigger than a book* bearing some relation to John; instead the first proposition they consciously consider will be, say, that *the object referred to is bigger than the book* John is carrying.

Saturation, however, is not the only kind of primary pragmatic process which Recanati countenances, for he also allows primary pragmatic processes which add to an already complete proposition, one which has been recovered via decoding processes alone. For instance, consider the so-called ‘bridging inference’ which takes a speaker from an utterance of “Mary took out her key and opened the door” to the proposition that *Mary took out her key and opened the door with it*. For Recanati, although linguistic decoding alone in this instance would yield a complete proposition, he nevertheless claims that the pragmatic process which serves to enrich this formally recovered proposition (which tells us that Mary opened the door *with the key*) is a primary pragmatic process.⁴³ This kind of ‘free enrichment’, unlike saturation, serves to introduce syntactically unmarked information from the context of utterance. Yet both saturation and free enrichment count as primary pragmatic processes since the addressee will not be consciously aware of the un-enriched proposition which is recovered prior to the operation of the pragmatic processes (the addressee hearing ‘Mary took out her key and opened the door’ will consciously entertain only the enriched proposition that *Mary took out her key and opened the door with it*). This is very different from the actions of secondary pragmatic processes (like the inferential moves to recover any Gricean implicatures), where the agent will be consciously aware of the proposition on which the secondary pragmatic processes act, and she will be aware of the fact that there is an inferential relationship between the two propositions. So, imagine that our addressee goes on to infer that Mary went through the door, then this proposition will be recovered via secondary pragmatic processes which operate on the already consciously available proposition delivered by primary pragmatic processes. Furthermore, if the hearer were asked for her grounds for this secondary inference, she would recognize that the inference is (partially) grounded in the consciously available, literally expressed proposition delivered by primary pragmatic processes. So, for Recanati, unlike

Sperber and Wilson, the pragmatic processes taking place at stages (1) and (2) are very different.

Despite these differences, however, there is a further point of similarity between our two dual pragmatic accounts as far as the kinds of inferential procedures appealed to are concerned. For on both Recanati’s notion of primary pragmatic processes and Sperber and Wilson’s appeal to pragmatic inferences in general, the kinds of inferential manoeuvres an interlocutor is thought to engage in are sub-personal. That is to say, they are inferential only in a quite broad sense, familiar from cognitive science. So, for instance, say we are interested in an inferential move from proposition A to proposition B, if this is a sub-personal procedure then it seems that the agent need not be consciously aware of A, nor need she consciously derive B or be aware that B is grounded in A. This is very different from the classical notion of an inferential procedure, where the agent is consciously aware of A and consciously aware of B, and recognizes that B is grounded in A. Recanati 2004: 32 writes of the primary pragmatic processes, like saturation, which lead to a consciously considered proposition (‘what is said’): “the interpretation which eventually emerges and incorporates the output of various pragmatic processes results from a blind, mechanical process, involving no reflection on the interpreter’s part. The dynamics of accessibility does everything, and no ‘inference’ is required. In particular, there is no need to consider the speaker’s beliefs and intentions.”

Now, whether it is entirely accurate to suggest that Recanati’s primary pragmatic processes can operate without any appeal to speaker’s beliefs and intentions is something we will need to return to in Chapter 3, for it seems as if processes like the resolution of reference for utterances containing expressions like ‘this’ or ‘that’ (which would seem to be instances of saturation, that is, a primary pragmatic process, for Recanati) do require access to speaker intentions (in which case, at least some primary pragmatic processes would require consideration of the speaker’s referential intentions). However, the important point to notice for now is simply that, when we talk of the dual pragmatists’ claim that grasp of meaning is inferential, they may well have this broader, sub-personal notion of inference in mind. Now, let us turn to consider one last candidate for the dual pragmatics label, namely the discourse representation theory instigated by Hans Kamp.
1.3.3 Discourse representation theory

The third and final example of an account which apparently endorses what I’ve called the ‘dual pragmatic approach’ can be found in the kind of discourse representation theory (DRT) initiated by Hans Kamp.\(^44\) What Kamp is interested in capturing are the dynamic features of discourse, which seem to have an effect on meaning and yet which do not find a home either at the level of syntax or at the level of standard semantic interpretation. Instead, then, the suggestion is that we need to introduce an intermediary level of representation to accommodate the influence of these features on truth-conditional content—this is the discourse representation structure (DRS). The DRS provides an intermediary or interface between syntax and semantics. So the key idea from formal semantics, whereby it is possible to provide a calculus which directly yields truth-conditions for sentential structures (given some model or relativized to a context), is rejected. Instead, it is replaced by a more indirect procedure whereby sentence structures are first mapped onto a discourse domain, and are only then subject to semantic interpretation.

A DRS is a set of assertions which together encode the information available to the speaker and hearer at any given point in a discourse (thus we might think of it as representing the ideal discourse state). They are built incrementally, each new DRS building on, and incorporating, earlier discourse representations. From a technical perspective, we might think of a DRS as providing additional constraints on the provision of a semantic interpretation for a given sentence. The syntactic features of a sentence on its own rarely, on this picture, provide enough information for a unique mapping to a real-world situation. However, when that syntactic information is processed with reference to the collateral information contained in the DRS, the suggestion is that (for non-ambiguous sentences) all bar one possible mapping from the sentence to the world (represented in model theoretic terms in DRT, following Montague) are ruled out.

Kamp adopts the stylistic device of representing DRSs as boxes, each containing a list of the information contributed by a discourse, up to

\(^{44}\) Kamp 1981. Although I will look only at DRT, there are a number of cognate approaches in this area (including Heim’s 1982 ‘file change semantics’) which may be thought to share the dual pragmatic leanings of DRT.
and including the information from the final sentence to be processed. So, for instance, to take a very simple example, imagine the following short discourse: “John closed the book. He had enjoyed reading it.” This is clearly an easy enough passage to follow, but notice that, without the information from the initial sentence, the second sentence of this discourse looks extremely difficult to interpret, for it is unclear what value should be assigned to the anaphoric pronouns ‘he’ and ‘it’. On the DRT framework, however, these kinds of expression are easily accommodated. For the DRS for the second sentence contains all the information contributed to the discourse by the first sentence. Thus, when we come to “He had enjoyed reading it”, we are able to provide discourse referents for the pronouns, namely those specified as representing the noun phrases ‘John’ and ‘the book’ respectively in the first sentence (note that, in DRT, definite descriptions like ‘the book’ are treated as introducing a ‘discourse marker’, on a par with proper names); see Figure 1.1. So, when we come to interpret the second sentence, although syntactic information is apparently not sufficient on its own to yield truth-conditional content, combined with the information already contained within the DRS, we can arrive at something genuinely truth-evaluable.

Now, the additional level of representation provided by the DRS is in itself sufficient to constitute a rejection of the (static) standard formal approach to semantics, but it might be objected that it is not enough to show that DRT embraces the dual pragmatics picture. For if the additional information captured in the DRS concerns only that

\[
\begin{align*}
  x & \quad y & \quad u & \quad v \\
  \text{John (x)} & \\
  \text{the book (y)} & \\
  x \text{ closed } y & \\
  u = x & \\
  v = y & \\
  u \text{ had enjoyed reading } v
\end{align*}
\]

Figure 1.1. DRS representation for the discourse sentence ‘He had enjoyed reading it.’

This way of representing the DRS follows the abridged form given at the start of Kamp and Reyle 1993: 66–73. Matters become more complex of course, e.g. as logical operators are introduced.
information which is delivered by formal operations over the syntactic constituents of the sentences of the passage, then, it might be objected, there is not really an appeal to pragmatics made prior to the determination of truth-conditional content. Although we need to relativize the interpretation of a sentence to the interpretation of a number of other sentences, if these other sentences have been interpreted in a purely formal way, then this would not in itself suffice for DRT being counted as a form of dual pragmatics. However, it seems fairly clear that it is not simply formal processes which contribute to the determination of truth-evaluable content in the DRT framework.

For a start, it seems as though the DRS itself may contain information above and beyond that to be recovered via appeal to the syntax of sentences alone. For instance, discussing the interpretation of the sentence ‘Mary went to the bank and then to the post office’, Kamp and Reyle 1993 suggest that the definite descriptions would normally be understood as referring to the local bank and post office (that is, they write, to the bank and post office in the town or neighbourhood or vicinity of Mary’s point of departure). Yet, if this information is part of what is available to the speaker and hearer at this point in the discourse, then it might well seem right to treat it as part of the DRS itself; if this is correct, then we would have extra-linguistic information figuring even when not explicitly syntactically introduced.

Furthermore, it is clear that, at the next stage of interpretation in the DRT system — the move to embed a DRS in a model and thus arrive at truth-evaluable content for the sentence—speaker intentions will have a central role to play. For instance, to ascribe an individual to the discourse referent introduced by a proper name we need to know about the ‘external anchoring’ condition in play, which itself will appeal to the way in which the speaker is using the name (that is, to which of all the possible objects which share the proper name ‘Aristotle’ does the speaker intend to refer?). If this is right, then there is a clear role for genuinely pragmatic processes to play en route to truth-evaluable content. This is a point which Levinson (an advocate

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46 Kamp and Reyle 1993: 253. It might be objected that, though this example shows that DRT is compatible with the dual pragmatics perspective, it is not sufficient to show that DRT is a form of dual pragmatics. I have some sympathy with this objection, for there is perhaps not enough evidence concerning how Kamp and Reyle envisage treating extra-linguistic information absolutely to classify DRT as a variety of dual pragmatics. In this case, this section should be read as making a somewhat weaker claim than the previous two.
of DRT) makes clear:

Insofar as we can get from syntactic structures and lexical material directly to a semantic representation (which in the most part, I argue, we cannot), then such semantic representations are only partially specified; templates of partial information far too unspecified to determine truth conditions. . . . There is no scheme of the kind that syntactic structures are mapped onto semantic structures which themselves represent full-fledged propositions, these semantic structures being the input to pragmatics, which yields additional inferences or restrictions on meaning. Rather, pragmatic processes play a crucial role in the correspondence rules mapping syntactic structures onto semantic representations, and again mapping semantic representations onto communicated thoughts and utterance meaning.⁴⁷

If extra-linguistic features really do have a role to play in the determination of truth-conditional content in DRT, then it seems that we again have a version of dual pragmatics here: the formal processing of a sentence alone (on some occasions at least) yields something which falls short of the level of propositional or truth-conditional content. Instead, contextual processes are needed to enrich the formally recovered fragment. Furthermore, these pragmatic enrichments are not always syntactically triggered and the kinds of features of the context of utterance to which they look can include speaker intentions. So, with these examples of the dual pragmatic perspective in mind, let us return now to the debate between formal semantics and dual pragmatics, examining exactly what the dispute amounts to.

1.4 The Dispute between Formal Semantics and Dual Pragmatics

We now have our two opposing theories on the table and we’ve looked (in §1.2) at some of the reasons for rejecting formal semantics in favour of a dual pragmatic account. Now, however, I want to look at some of the reasons we might have for holding on to a formal semantic theory (were it to prove possible) and, while doing so, to clarify the precise

⁴⁷ Levinson 2000: 8–9. See also Spencer-Smith’s (1987: 22) survey article on DRT, where he suggests that pragmatic information, including appeal to real-world knowledge and the intentions of the speaker, can have a role to play in the construction of a DRS.
nature of the debate here. For one thing observant readers may have noticed by now is an apparent divergence in terminology here: on the one hand, advocates of dual pragmatics have a tendency to talk in terms of what an agent *communicates* by an action (Sperber and Wilson), or our judgements of intuitive truth-conditions (Recanati), where these attach at the level of utterances not sentence-types. While, on the other hand, advocates of formal semantics tend to put things in terms of *meaning* (sentence-meanings, or the truth-conditions of sentences relativized to a formally described context). Thus one conclusion which suggests itself at this juncture is that our two accounts—formal semantics and dual pragmatics—are simply concerned with radically different projects, the former dealing with questions of word and sentence meaning at the type-level (with types relativized to contexts of utterance) and the latter with questions of communication (both literal and otherwise). Indeed this is how Sperber and Wilson often suggest they conceive of things:

[The Gricean definition of utterer’s meaning] can be developed in two ways. Grice himself used it as the point of departure for a theory of ‘meaning’, trying to go from the analysis of ‘speaker’s meaning’ towards such traditional semantic concerns as the analysis of ‘sentence meaning’ and ‘word meaning’ … [W]e doubt that very much can be achieved in this direction. However, Grice’s analysis can also be used as a point of departure for an inferential model of communication, and this is how we propose to take it.48

Now, for this conciliatory conclusion to be available (whereby formal semantics explains literal sentence meaning and dual pragmatics explains communication) one repercussion is clear for the formal semanticist: she must drop any pretensions she might have had that her theory can explain our communicative practices. If we are drawing a boundary between talk of linguistic meaning and talk of communicative success, and holding that very different kinds of theories yield proper explanations in each domain, then the role of our formal semantic theory must be more limited than has sometimes been supposed. A theory of meaning, though it must have some connection to a theory of communication is not itself such a theory; our formal theory may tell us little about what a speaker uttering a given sentence might succeed in communicating. If this quite severe limitation on the

48 Sperber and Wilson 1986: 21. Such a conciliatory conclusion is also suggested by Saul 2002: 356.
domain of explanation for a formal semantic theory were to be adopted it would be one instance of a move to construct what we might think of as a minimal semantic theory. A minimal semantic theory, on my terms, is a theory which seeks to give the literal meaning of types of words and sentence-types (relativized to a context of utterance) in a given natural language, and that’s pretty much it. Specifically, such a theory keeps its nose out of a range of related explananda, such as how we succeed in communicating with one another using language, how we come to know about objects in the world around us, and, in general, how properly linguistic information comes to interact with the vast range of other information an agent possesses. Recognizing a clear boundary between literal meaning and communication, and maintaining that a semantic theory owes us an explanation of the former but not the latter, would then be an instance of minimalism.

Notice that this claim is potentially much stronger than the usual distinction between what is said and what is implicated (as introduced in §1.1), where the former is standardly taken to be semantic, while the latter is held to be pragmatic. For it seems that, if we are really to draw our divide between meaning and communication, then it seems possible that both notions will fall on the side of pragmatics, with ‘what is said’ counting as a communicative notion, rather than being concerned with genuine semantic meaning (this is a point we will return to in some detail in the next chapter). If this is right, then any formal theorist who is keen to retain the idea that a semantic theory can give us not just what a sentence means but also some notion of what is (perhaps ‘strictly and literally’) said by an utterance of it must reject the conciliatory conclusion envisaged. For on that conciliatory model, the domain we are left with for a semantic theory turns out to be just too minimal, too restricted, to be satisfactory. According to this version of the formal approach, at least some notions dealing with what a speaker succeeds in conveying by an utterance (for instance, the notion of ‘what is strictly said’ by the utterance of a sentence) must remain within the purview of a formal semantic theory.

However, it is not only the formal theorist who might have a problem with the conciliatory conclusion suggested above; for there are reasons to think that the dual pragmatist will find it unpalatable as well (despite the sentiment expressed by Sperber and Wilson in the above quote). For a start, many of the arguments put forward by dual pragmatists concern
so-called ‘saturation’ or ‘free enrichment’ processes (for example, supplying the constituent ‘bowling’ to an utterance of “Courtney will continue”). The claim made by the dual pragmatist here is that, if we look solely to the formal features of an uttered sentence there is often simply no level of propositional or truth-conditional content we can recover. If this is correct, of course, it shows that the formal semantic project, as traditionally conceived, is doomed to failure (so no conciliatory conclusion there then). Furthermore, even when the arguments about saturation and free enrichment take a back seat, many dual pragmatists stress the irrelevance of an abstract theory of sentence meaning, arguing that a formal semantic theory should simply be side-lined in favour of a proper theory of communication (that is, a theory dealing with those propositions which competent interlocutors take to be literally expressed in a given communicative exchange). Thus we find Recanati writing:

[N]ormal interpreters have intuitions concerning the truth-conditional content of utterances. On my view, those intuitions correspond to a certain ‘level’ in the comprehension process – a level that a proper theory of language understanding must capture. That is the level of ‘what is said’ (as opposed to e.g. what is implied).\(^4^9\)

So, while it may be that some kind of a conciliatory conclusion will ultimately turn out to be possible in this area (a possibility I'll return to in Chapter 5), I think that it would be a mistake to read the dispute from the start as taking this form. For it seems that (at least some) advocates of formal semantics have expected a formal semantic theory to have a relatively extensive role to play in explanations of our communicative prowess (perhaps not explaining implicatures, but certainly as responsible for our intuitions about the literal truth-conditions of utterances). While (at least some) dual pragmatists hold not just that they are offering a theory of communication, but also that any additional idea of a (formal) theory of meaning is either unworkable in practice (that is, when faced with the radical context-sensitivity of natural language) or unnecessary in a complete account of linguistic comprehension. Much of the rest of this book will be concerned with arguing against the claim of unworkability in practice; that is, I will aim to show that it is possible to deliver a genuine (minimal) account of semantic content solely through sensitivity to the formal features of

\(^4^9\) Recanati 2004: 16.
words and sentences. However, before this, I think I need to say something about the second challenge: the objection that a formal semantic theory, even if possible, is pointless. For there is certainly a canute-esque charge to be made here: it seems as if, watching the tide of pragmatic invaders advancing up the shore, armed with the phenomena of ambiguity, indexicality and radical context-sensitivity, our formal theorist, shrieking somewhat hysterically as her feet get wet, simply retreats still further up the sand, trying to defend a little island of ‘pure semantics’ while dry land submerges all around her. And, we might well wonder, what is the point here? Why doesn’t she just jump in and splash about with all the rest? What’s wrong with letting pragmatics soak right in through semantics? Well, I think there is a principled reason to dig our heels in even at this late stage of the day, because there remain very good reasons (in my opinion) for defending a sand-castle of semantics from the sea of pragmatics.

First, I think a formal theory of meaning has a crucial role to play in explaining how we can learn and understand a natural language. On the one hand, it seems that competent speakers simply are capable of making meaning assessments for sentence-types—for example, claiming that that sentence is synonymous with, or different in meaning to, another sentence—and these kinds of facts might well require a theory dealing with meanings for sentences (not just, say, words). Furthermore, as already noted, every natural language provides an indefinitely rich expressive medium, despite the fact that any agent who learns such a language has only very limited cognitive resources to devote to the task of language comprehension. Recall, as stressed in §1.1, the productive and systematic nature of linguistic comprehension—the fact that a competent speaker who understands ‘the father of Aristotle was Greek’ and ‘A loves B’ will also understand ‘the father of the father of Aristotle was Greek’ and ‘B loves A’. The best explanation for the generative nature of our linguistic understanding seems to be that the meaning of complex wholes must be determined by the meanings of their parts and their mode of composition. For if this is the case, then it is no mystery why our understanding of complex linguistic items has an indefinite range—for all we need to know are the meanings of a (finite) set of primitives and recursively specified

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50 Appealing, of course, to the legend of Canute (as a ruler who thought he could stop the tides), rather than the actual story of Canute (according to Brewer’s Dictionary of Phrase and Fable), who apparently went to the seashore to show that even a king’s power could not stop the forces of nature.
rules of composition operating on those primitives. And this is what a formal theory tells us knowledge of meaning is like: it’s a recursively specified theory operating over a finite set of primitives (roughly, words).

Now compositionality remains a highly vexed issue in the philosophy of language; for instance, some advocates of a use-based theory of meaning have argued that compositionality, properly understood, is a property their theory can possess (see Horwich 1998; 2002), while other theorists have objected that natural languages are not, on the whole, compositional anyway (see Sainsbury 2002, who takes this to be the take home message of the kinds of cases raised by Charles Travis, see examples (8) and (9) in §1.2.2). Furthermore, even Jerry Fodor, for whom “compositionality is the sovereign test for theories of lexical meaning” (Fodor and Lepore 2002: 59) also maintains that compositionality is really a constraint only on a theory of thought, not on a theory of meaning in natural language. So, clearly, the recognition that any competent speaker is able to construct and comprehend an indefinite number of novel linguistic items, despite devoting finite capacities to linguistic comprehension, does not entail that formal semantics is the correct kind of approach for natural language. However, it does at least yield a conditional claim here: if compositionality holds for natural languages then a formal theory of meaning is very well disposed to capture this fact. And this, it seems, is already sufficient to distinguish the formal approach from the opposing dual pragmatic account in this respect; for on the latter approach it seems pretty clear that compositionality is not, in general, a property natural languages exhibit.

For, as we have seen, dual pragmatics endorses the idea that part of the literal meaning of a linguistic act may be delivered by the context in which it is produced, yet this means that information may get in ‘for free’, as it were, at the level of the literal proposition expressed. That is to say, the literal meaning of an utterance may well contain more information than is contributed by the formal constituents in play. So, say an

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52 We should be clear about exactly what this charge amounts to: as one reader for this book pointed out, it would be a mistake to say that compositionality does not hold at all for Sperber and Wilson, for they can perfectly well preserve compositionality for that fragment of meaning which they assign to semantic analysis. So, there will be a non-propositional, non-truth-evaluable entity which is recovered simply via the decoding of expression types and syntactic structures. However, the claim here, as it has been throughout, is that if we concentrate on a level of content which is truth-evaluable (i.e. which counts as semantic content from the formal perspective) this will, for the most part, fail to be compositional on the relevance theoretic picture, since it will be the result of contextual expansion or refinement.
addressee knows the contribution of every formally represented expression in a sentence, and understands their mode of composition, it may still turn out, on the dual pragmatic account, that this addressee fails to grasp the truth-evaluable semantic content of this sentence. For instance, an addressee who knows the meanings of all the words in the sentence ‘Courtney will continue’, but who fails to recognize that, on a given occasion of utterance, the speaker intends to convey that Courtney will continue bowling, fails to grasp the literal proposition expressed by the utterance of this sentence. And we should be very clear here that the claim of the dual pragmatist is that the failure in question is one of knowledge of language: what the addressee fails to understand is the literal, semantic content of this sentence-token; it is her knowledge of language which is supposed to let her down here, not merely her knowledge of some related, non-linguistic concern.⁵³ For the dual pragmatist, semantic content is often more than a matter of the meanings of words and their mode of composition. So at the very least, it seems to me, the advocate of dual pragmatics owes us some further account of why it is that every competent speaker is capable of producing and understanding an indefinite range of complex linguistic items. For on the dual pragmatic account, we simply have no reason to predict that a language user, faced with a sentence which they have never encountered before, but which is composed of familiar words put together in a familiar way, will be able to grasp the conditions under which such a sentence would be true (specifically, in most cases, an agent should be unable to grasp the complete literal meaning of a sentence if it is entirely isolated from the context in which it was produced). Thus, although the apparently productive and systematic nature of linguistic comprehension does not necessarily entail that we need a formal theory of linguistic meaning, still the fact remains that positing a formal theory of linguistic meaning provides an excellent explanation of these apparent properties. This is, I think, a strong point in its favour.

A second reason for wanting a theory which deals with sentence-level meaning might be the role literal sentence-meaning plays as a non-cancellable level of content in a linguistic exchange. This is a point we will have to return to later, but even initially the point seems clear enough. Given any pragmatically supplied enrichment or alteration of

⁵³ As Recanati stresses, the subject matter of linguistic comprehension is the intuitive truth-conditions we ascribe to utterances, thus a failure to grasp these is a failure on the part of one’s linguistic competence.
compositional semantic content, a speaker is always able to rescind from such a precisification without explicit contradiction, but this does not seem to be the case with genuine semantic content. A speaker who says “I will get the washing in” does not literally contradict herself if, on being chastised for not getting it in before it rained, she replies “I just said I’d get the washing in, not when I’d get it.” Such a speaker is no doubt unhelpful, pedantic and obscure, but surely she can’t also be accused of failing to understand her own language. Indeed, it seems that precisely what she exploits here is a clear grasp of what her words literally committed her to (rather than what she might have been committed to through other means, for example, opting into social contracts, etc.). Thus it seems that semantic content can specify what a speaker is committed to via the meanings of her words alone, rather than what she is committed to due to background assumptions. Following on from this, it seems that semantic content is important for determining which arguments are genuinely valid, that is, which go through on the basis of their meaning and structure alone, as opposed to those which depend on the provision of background assumptions to go through. Any theory of validity must, it seems, depend on a clear, context-independent specification of literal content, of the kind supplied by a formal semantic theory.

Finally, it seems to me that we have good reason to want to hang on to a formal semantic theory since such an approach allows linguistic meaning to count as part of a modular language faculty. Whereas, on the dual pragmatic approach, since meaning is, in general, highly context-sensitive, it’s much less obvious that it could form a proper part of a truly modular language faculty. Now, this thought needs careful exposition—for one thing, it counts in favour of a formal approach only to the extent that we think that grasp of semantic content should constitute part of a modular language faculty, and this in itself is something of a moot point. For another thing, it counts in favour of the formal approach only given a certain conception of what modularity of mind amounts to (thus, on some conceptions of modularity, the dual pragmatic approach will be seen to cohere perfectly well with modular concerns). Thus modularity,

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54 As Grice stressed, however, cancellability is capable of providing only an indicator of, rather than an inviolable test for, a feature’s pragmatic status; see Grice 1989: 44–7.

55 To advertise one aspect of the minimal semanticist’s position in advance, the suggestion will be that a formal semantic theory can reveal formally valid arguments, though without input from the non-semantic realm it is not (always) capable of identifying a valid argument as also being sound.
and its connection to formal semantics, is an issue I want to defer until the next chapter. The point to notice here then is simply that formal theories of meaning, since they treat the determination of meaning in a broadly computational way, look as though they might be good candidates for incorporation within a modular explanation of our linguistic skills.

So, the claim is that there are good reasons for wanting a formal theory of meaning, should such a thing be possible. It would explain the apparently productive and systematic nature of linguistic comprehension. It would also explain our grasp of literal sentence meaning, even on occasions where we know little or nothing about the context of production for a sentence-token. It would also supply a clear distinction between what a speaker is committed to via the literal meaning of her words and what she may be committed to via non-linguistic features (like the operation of social mores), and thus could underpin a theory of validity for natural language. Finally, as we will see in the next chapter, the formal approach seems well disposed to incorporation within a modular theory of mind. However, wanting a formal semantic theory and being able to have one are of course two very different things, and the point remains that, in the light of the kinds of contextual intrusions into literal linguistic meaning highlighted in §1.2, the chances of offering an account of semantic content which runs off the formal features of linguistic items alone seems remote. We will need to examine each of the challenges in detail in what follows to see what kind of response the advocate of formal semantics can make but, as I’ve already stated, the conclusion I want to reach is ultimately positive, we can and should preserve a formal semantic theory, even in the light of the contextual challenges raised by the dual pragmatists. Yet as suggested earlier, in general, the way for the formal theorist to keep her feet out of the broiling pragmatic waters will be to be very clear about exactly what work she is committed to doing in providing a successful semantic theory.

To repeat: the concession I’m going to suggest that the formal theorist make to the dual pragmatic accounts is that a formal semantic theory may do less work than it has sometimes been thought capable of doing, and that we allow that many of the most interesting features of language use emerge, not directly as a result of the agent’s possession of semantic knowledge, but through the interaction of this semantic knowledge with the vast range of other things that she knows. Thus, to the extent that these aspects of understanding are theoretically tractable
at all, it may well be that the kind of approach championed by the dual pragmatists (who posit a fundamental role for pragmatic reasoning in assessments of what is communicated by the utterance of a given sentence) provides the best account of the interaction of the linguistic and the non-linguistic currently on the table. Grasp of a semantic theory, I’ll argue, though a necessary part of linguistic understanding and thus a crucial element in linguistic communication, doesn’t have the type of constitutive links to the nature of thought, our contact with the world, or, indeed, communication, which have often been assumed to hold. So I’m going to be pushing a minimal approach to semantics. Furthermore, I’m ultimately going to suggest that what I above called a ‘concession’ to the dual pragmatic accounts—namely the recognition that a successful semantic theory may do less work for us than has sometimes been envisaged—is in fact not really a concession at all. In fact, it merely reflects the kind of division of labour we should expect if the kind of modular cognitive architecture which I’m going to suggest underpins our linguistic understanding really is in place. Minimal semantics, the argument will be, is just what we should expect if the mind really is modular and contains a discrete module, including semantic mechanisms, for linguistic processing.

To summarize the debate thus far: in this chapter I’ve introduced the two competing accounts which will concern us in the rest of the book. On the one hand we have formal semantic theories (for example, standard truth-conditional accounts) which tell us that the semantic content of a sentence (or sentence-type relativized to a formally described context) can be determined solely on the basis of its formal features. While on the other hand we have dual pragmatic accounts which hold that features of the context of utterance are relevant throughout, specifically (on most occasions) one must look to the context of utterance to determine the complete proposition an uttered sentence expresses. The former kind of account, I’ve argued in this section, is good because it yields a nice explanation of productivity and systematicity, together with various other features of our linguistic comprehension, such as our ability to grasp literal linguistic meaning even in the absence of information about a context of utterance. However, the formal account faces a fundamental challenge, as we saw in §1.2, concerning apparent pragmatic intrusions into literal linguistic content. This contextual challenge surfaced in a number of ways: ambiguity,
speech act operators, overt indexicality, and, finally, covert indexicality (or radical context-sensitivity, as it was sometimes termed in §1.2). It remains to be seen whether a formal semantic theory can overcome the contextual challenge in all these many guises.

In the next chapter I’ll look in more depth at the final reason given above for wanting a formal semantic theory, viz. its connection to the modularity theory of mind. We will also begin our assault on the contextual summit, starting out in the relatively gentle foothills of speech acts, ambiguity and word learning. However, I want to close this chapter by looking at one point of agreement between formal semantics and dual pragmatics: viz. the initial role played by logical form in specifications of meaning. Formal theories take specifications of logical form to provide the complete input to (minimal) semantic theories, yielding an account of sentence meaning just on the basis of elements to be found at the level of logical form. While dual pragmatic accounts take logical forms to provide partial specifications of the input to a complete account of literal utterance meaning, they provide schemas or templates which require pragmatic completion before a genuinely propositional item can be recovered. Yet clearly both accounts agree that the starting point for a specification of linguistic meaning resides with logical form; so, in the remainder of this chapter, I would like to investigate exactly what is involved in making this kind of assumption.

### 1.5 Logical Form

Assume for the moment that a natural language user is capable of distinguishing from among all the distal stimuli they are exposed to just those stimuli which count as bits of a language. Further, assume that they can identify from among this stream of verbal, visual, or tactile stimuli discrete words, which they can identify as belonging to a given language. What happens next? Well, according to a popular story of linguistic understanding, what happens next is some further form of decoding: the words and phrases, and the sentences they go together to make up, are mapped by the hearer onto some kind of formal representation. Peripheral features like accent or pronunciation fall away, issues of ambiguity are settled (a matter we will return to in the next chapter), and the relationship between the parts of the sentence are regimented. The imposing or uncovering of this kind of structured form beneath the
surface presentation of a linguistic expression is the move from surface form to logical form, and it is, both formal theorists and dual pragmatists agree, crucial to determining the semantic form of bits of our language. This is because it is the description of language at this level which is held to provide the input to the semantic theory itself. Thus we find formal theorists like Larson and Segal advocating what they call the ‘LF hypothesis’:

**LF hypothesis**  The level of logical form is where syntactic representation is interpreted by semantic rules.

and dual pragmatists like Sperber and Wilson using logical form in their definition of an explicature:

An assumption communicated by an utterance U is *explicit* [i.e. an explicature] if and only if it is a development of a logical form encoded by U.

So, logical form provides the initial input to determine semantic content, but we might now ask what kind of thing a logical form is, and what makes any given logical form representation correct for a linguistic item. From a philosophical point of view, the role of logical form has traditionally been to reveal the inferential properties of a natural language sentence, showing us from which other sentences a given sentence can validly be inferred, and, in turn, which other sentences can be inferred from it (possibly in conjunction with other sentences). Taking this as our starting point gives us one possible answer for how logical forms and natural language expressions connect: a logical form representation is correct just in case it captures correctly the inferential profile of a particular sentence. This gives us the following picture of the relationship between logical form and natural language:

(i) LF is *imposed* on a natural language expression e: symbolic representation provides a method of codifying or regimenting certain (formal) properties of e, but LFs are external simplifications only, they do not reflect any unique, internal structure the expression possesses.

This kind of position contrasts with a more ‘essentialist’ view of logical form, whereby logical form representations, rather than being some

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56 Larson and Segal 1995: 105.  
57 Sperber and Wilson 1986: 182.
kind of merely imposed regimentation, instead seek to capture the
genuine structure of our language:

(ii) LF is an inherent feature of a natural language expression $e$: there
is a unique logical structure which $e$ possesses and the task of
symbolic representation is to capture correctly this genuine
structure beneath the surface linguistic form.\footnote{Stanley 2000: 391–2 makes a similar distinction between what he terms the descriptive conception of logical form (akin to (ii) above) and the revisionary conception (akin to (i)). He notes that the traditional conception of logical form in philosophy is the revisionary notion, whereby “[a]ppeals to logical form are appeals to a kind of linguistic representation which is intended to replace natural language for the purposes of scientific or mathematical investigation. Different purposes may then give rise to different regimentations of natural language.”}

This second position comes to the fore in Wittgenstein’s \textit{Tractatus Logico-Philosophicus}, where language is viewed as essentially possessing a logical structure which also reflects and reveals the structure of reality.\footnote{Wittgenstein 1961.} It would also seem to be the kind of view of syntactic structure which is prevalent in linguistics; for instance, Chomsky’s notion of logical form, within his early principles and parameters approach, is of a level of representation derived from the deep structure of linguistic items (by applications of the syntactic rule ‘move $\alpha$’).\footnote{See Chomsky 1975. For discussion of the difference between philosophical and linguistic notions of logical form in general, see Lappin 1991.} On this view, the task of the logician is one of explorer or discoverer: they are seeking to map the genuine form possessed by natural language. According to (i), on the other hand, the task of the philosophical logician is simply to come up with a formal system which is adequate to capture certain behavioural properties of our language. Specifically, she’s in search of a system which will remove or clarify any surface level ambiguity and codify the inferential properties of sentences containing the expression in question. This position on the relationship between natural language and logical form is perhaps most famously associated with Quine.\footnote{Quine 1972.} On (i), then, the task of the philosophical logician is one of auditor: they are seeking to impose simplification and order (bringing in its wake understanding) on the complex phenomenon of natural language.

Now, prima facie, it seems this Quinean stance has much to recommend it. For a start, it introduces a clear condition of adequacy for LF attributions. Furthermore, the condition it introduces seems to be one which fits very well with the way in which we do come to assign such
formulations in practice. For the condition this model introduces is the following minimal constraint:

(MC) For any linguistic item, $e$, an attribution to $e$ of a logical form, LF*, is correct just in case LF* captures all the relevant inferential properties displayed by $e$.

(MC) is attractive as an account of how logical form and natural language sentences connect, for it suggests that correct LF attributions are essentially testable. We can verify whether or not some putative LF attribution is right or wrong through the observable behaviour of the linguistic item; differences in LF representation which would make no difference to the logical behaviour of the token expression cannot make a difference to the correctness or otherwise of the LF attribution. So, the Quinean model gives us a straightforward way of assessing LF attributions as correct or incorrect, and it is a method of assessment which seems to match our actual practice.

However, we should also note that adopting the Quinean perspective gives rise to a degree of indeterminacy: for our criterion of correctness does not also act as a guarantee of uniqueness. Just as Quine’s better known argument for the indeterminacy of meaning apparently shows us that there can be no fact of the matter about which of two translation manuals is correct if they both adequately translate native speakers, thus differing only in assignments of meaning which are too fine-grained to be manifested in behaviour (for example, manuals translating ‘gavagai’ as ‘rabbit’ or as ‘undetached rabbit-part’), so this stance on LF assignment opens the door to a similar indeterminacy. Given two LF translations which adequately capture all the relevant, observable properties of the expression, a choice of LF representation becomes a matter of taste, not correctness.

However, whereas arguments for the indeterminacy of meaning have been met with general concern, indeterminacy of LF seems, initially at least, a much less threatening proposition; indeed, it seems to have much to recommend it. After all it seems entirely plausible that resourceful logicians or syntacticians should be able to devise a number of alternative systems of representation, all of which succeed in capturing adequately the observable, formal properties of our language. Furthermore, the degree of indeterminacy admitted on this
account seems quite constrained. For the requirement that all adequate LF attributions capture the observable logical properties of the expression seems to entail that the only kind of indeterminacy to be permitted here exists between what I will call ‘notational variants’. That is to say, between LFs which ascribe exactly the same logical properties to an expression, but which use a different method of representation to arrive at this characterization. So, for instance, it seems that (MC) will not predict a right or wrong choice between, say, simple referential treatments of proper names (where a language is thought to contain a number of homonyms, like ‘Aristotle₁’ and ‘Aristotle₂’, etc., to accommodate the possibility of multiple referents for a single surface-type name) and referential though indexical treatments of proper names (see Burge 1973; Fitch 1993; Elugardo 2002). For on both kinds of account, the content of a proper name is exhausted by the object it refers to, thus the kinds of claims which sentences containing the expression license will, it seems, be the same, whichever logical form is assigned to the name. (MC) will, however, predict a right or wrong choice between, say, referential and descriptive analyses of names, since, if the meaning of a name is really given by a description, this will impact on the kinds of inferential moves the expression permits (if, along the lines of a Russellian analysis of ordinary proper names, ‘Aristotle’ means the teacher of Alexander then the move from ‘Aristotle was F’ to ‘the teacher of Alexander was F’ is formally valid). So, where we are faced with logical forms which are ‘substantial variants’ of one another, that is, LFs which assign varying logical properties to the expression in question, (MC) will make a choice.

Indeterminacy has been thought to be worrying when it has raised its head in other areas, but we might well feel that the degree of indeterminacy admitted here is relatively unthreatening, concerning as it does mere notational variants. However, in the next section I would like to question the claim that the kind of indeterminacy which results from adopting the Quinean perspective on logical form is only of the
limited kind proposed in this section. For, on the contrary, it seems, once we adopt an externalist model of the relationship between LF and linguistic expressions (whereby the former is simply imposed on the latter), we lose the ability to distinguish between notational variations and substantially different LF attributions.

1.5.1 What kind of indeterminacy is warranted by (MC)?

The worry that I want to consider now is that the kind of indeterminacy admitted by the Quinean perspective on LF attributions (given in (i) above) is much more radical than initially thought. Not only does (i) allow that a choice between notational variants is a matter of taste not objective fact, it also allows that a choice between substantially different LF attributions may be a matter of taste not fact. Yet clearly such a radical degree of indeterminacy in LF attributions would be worrying indeed, entailing that a choice between, say, a logical system positing two different kinds of noun phrase (e.g. both referring terms and quantified phrases) and one positing only a single type of expression for this grammatical category would simply be a question of aesthetic judgement. The reason for thinking that (i) admits of radical indeterminacy of this type is two-fold: first, it simply isn’t clear that in key cases we possess the kind of robust intuitions about the logical behaviour of expressions which the advocate of (MC) needs to hold apart substantial variations in LF attributions. Secondly, even where we have clear intuitions about the intuitively correct readings of key cases, it seems at least open to advocates of substantially different LF attributions to claim that both their accounts correctly capture the logical behaviour of the expression e. For, while one theorist may posit an LF which itself explains the behaviour in question, the other theorist may claim that, while the LF attribution in and of itself does not predict the behaviour in question, the LF attribution in conjunction with some other feature does succeed in capturing correctly the relevant behaviour. The worry is thus that two substantially different LF attributions might agree on the overall behavioural profile of some expression, while disagreeing on which elements of the profile count as logical. In this situation, it seems that (MC) alone turns out to be powerless to choose between them.

To see the first of these problems, let’s consider a property that we might intuitively take to be a good indicator of referential, as opposed
to quantificational, logical form, namely the behaviour of an expression in so-called ‘weak crossover’ contexts. ‘Weak crossover’ is the peculiar effect whereby sentences with apparently very similar surface structures, which contain pronoun elements, either prohibit or allow the pronoun to be bound by a co-occurring noun phrase. So take the following three sentences (where the $t$ in example (13) marks a hidden trace resulting from so-called ‘quantifier raising’):\(^6^3\)

(13) Which boy does his mother love $t$?
(14) His mother loves every boy.
(15) His mother loves John.

At the level of surface syntax, it would seem as though (14) and (15) pattern together, as against (13). However, when we come to reflect on the possible semantic interpretations of these expressions, it seems clear that (13) and (14) are related, with (15) differing in potential meaning. For, considering the pronoun ‘his’, it seems possible to interpret (15) as expressing a proposition where the pronoun picks out the same individual as is loved, that is, John. Whereas, in both (13) and (14) this reading seems very hard to achieve; with the reading whereby the pronoun refers to some other individual being far more accessible. Thus:

(13’) *For which $x$, $x$ is a boy, does $x$’s mother love $x$?
(14’) *For every $x$, $x$ is a boy, $x$’s mother loves $x$.
(15’) John’s mother loves John.

Properties such as weak crossover can be explained within the Chomskian approach which allows a quantifier phrase to move, but prohibits it from simultaneously binding its trace and a pronoun which is embedded in another constituent. Thus, in contexts such as the above, containing pronouns which may be bound or referential, the possibility of a co-referential reading of the pronoun reveals the noun phrase in question to be a singular term; whereas the impossibility of such an interpretation reveals we have a quantified noun phrase to hand. Together with any other such purely syntactic behavioural differences which may emerge, weak crossover effects seem able to indicate which LF to assign to which token noun phrases, and this in turn will allow us to map the semantic layout.

\(^6^3\) For further discussion of this point, and the phenomenon of weak crossover in general, see Larson and Segal 1995: 304–5.
However, it seems that this kind of apparently verifiable test for LF faces problems. The worry is whether such syntactic features can really be autonomous enough from our semantic judgements to provide the kind of independent evidence for LF assignments we are in search of. The problem is that our intuitions of well-formedness in these quite complex cases seem tightly bound up with the kind of semantic interpretations we are willing to allow. For instance, consider the weak crossover case of ‘His mother loved the boy’, where we must decide whether the pronoun can be bound or not (that is, whether we can get the reading equivalent to ‘The boy’s mother loves him’). Although the bound reading may seem rather strained, I would suggest that judgements of ill-formedness (as opposed to legitimate, though hard to recover, interpretations) can only be made with the back-up of a theory which predicts such an interpretation as ill-formed. To put matters crudely, the direction of explanation seems to be that if we think ‘the boy’ is here a singular term, then we can get the reading where the pronoun co-refers, while if we think the expression is here appearing as a quantified noun phrase, then the unbound reading, diagnostic of LF movement, will be the only admissible reading we can get; yet it is not immediately evident that we can reverse this direction of explanation.

Our syntactic judgements at this point seem affected by our semantic judgements in a way which might be thought to make the former unsuitable to provide the sole support for the latter. That is to say, the slight unease we feel with the bound reading is not, abstracted from any kind of semantic background, enough to mitigate between rival theories. Though the fact that some readings are harder to recover than others is indisputable, the claim that this kind of fact alone is sufficient to provide independent support for a determinate division between referring terms and quantified noun phrases is questionable. Furthermore, for those theorists who want to admit both a quantificational and a semantically referential kind of definite description, our syntactic judgements will have to be sensitive enough to mark this out: sometimes we will judge the bound reading ill-formed and sometimes (that is, when the token description is referential) we must be perfectly able to recover the co-referential reading.⁶⁴ Yet to make this kind of

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⁶⁴ A similar worry faces those who advocate a referential treatment of some occurrences of demonstrative expressions like ‘that’ (e.g. those used to pick out a perceptually present object) together with a quantificational analysis of other occurrences (e.g. ‘deferred uses’). See Chapter 3 for a fuller discussion of this point.
fine-grained judgement I would suggest that we already need to possess some grasp of the items the syntactic theory is running on. To repeat, we are happy with a bound reading if we think the noun phrase is referential and we are unhappy with it if we think it is a quantified expression, but to try to reverse these conditionals seems to ‘put the cart before the horse’ as it were. Although attributions of logical (or semantic) form can be reinforced by a phenomenon like weak crossover, I would argue that we cannot start with a phenomenon of this kind and hope to generate logical (or semantic) classifications from it. So we seem to lack the strong intuitions concerning the behaviour of certain noun phrases in key contexts upon which (MC) sought to rely.

The second difficulty which advocates of (MC) face in holding apart substantially different LF attributions emerges from the fact that, even if we have strong intuitions about the presence or absence of, say, multiple readings in certain key cases, it seems that there remains the possibility of divergent explanations of this behaviour. So, for instance, it might be thought that we have a clear way to distinguish between referential and quantificational theories of names, since the latter predicts scope ambiguities arising for proper names in complex contexts (for example, in contexts containing other quantifiers, modal or negation operators). However, since intuitively such ambiguities do not occur, we seem to have a clear reason to prefer the referential analysis of proper names. However, as is well known from the debate here, the absence of scope ambiguities is not taken by advocates of a quantificational theory of names to tell against their approach, since they assign this piece of behaviour (the absence of ambiguity) not to the logical form of names but to the pragmatic features associated with our use of names.⁶⁵ ⁶⁶

The worry facing advocates of (MC) now then is that, for any putative logical property, it may always be possible to offer a (possibly

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⁶⁵ So, we find Dummett (an advocate of a descriptive approach to names) agreeing with Kripke’s intuition that in complex contexts proper names behave just like referring terms, since they do not give rise to scope ambiguities. However, Dummett’s explanation for this behaviour is pragmatic—it stems from the conventions surrounding our use of names, not directly from the logical form proper to names. See Dummett 1973: 110–51; 1981: appendix 3.

⁶⁶ This kind of move can also be seen in other debates. For instance, Neale 1993: 108 proposes a disguised description reading of what he calls ‘demonstrative descriptions’ (e.g. phrases of the form ‘that F’). However, he agrees with those who want to treat these expressions as genuine referring terms that in attitude ascriptions, and perhaps other contexts, the behaviour these terms display is akin to that of referring terms. His explanation for the apparently rigid behaviour of demonstrative descriptions is to posit a convention of use requiring them to take wide-scope in complex contexts involving attitude, and other, operators.
complex) non-logical explanation of that behaviour. Though we could choose to treat a given piece of behaviour as part of the logical profile of a given expression, it equally seems that we could decide to treat it as a non-logical piece of behaviour, and thus explain it in some quite other way. So, given what was supposed to be a decisive behavioural feature allowing (MC) to hold apart substantially different LF attributions (like the presence or absence of scope ambiguities), it turns out that our confidence was misplaced: advocates of substantially different LF attributions may agree on all the behavioural properties of some expression $e$ but differ on which ones they take to be genuinely logical properties. In this scenario, (MC) turns out to be impotent—it cannot alone dictate a choice between substantial variations in LF assignment. What MC requires is some independent reason to think one characterization of the logical profile of an expression is better than another—a reason which we might have had were we thinking of LF as capturing something inherent to the nature of natural language expressions, but which we certainly lack if we are thinking of LF simply as any adequate regimentation of certain of the behavioural properties of the expressions in question.

Despite its appeal then, the Quinean perspective on LF attribution seems to face serious problems. On the one hand, in certain crucial contexts, serious questions emerge about our ability, in advance of judgements concerning an expression’s logical and semantic form, to make genuine assessments of which logical properties that expression displays. Yet, given (MC), it is only such intuitions about logical properties which can underpin LF assignments. On the other hand, even where we have strong intuitions about the behaviour of some expression, it remains something of an open question as to how this behaviour should be explained, that is, does it belong to the logical profile of the expression or does it belong elsewhere? The worry is that, in the absence of any kind of logical or formal assumption about the structure of our language, we cannot even take the first step towards an uncontroversial identification of logical properties, for their very status as logical (as opposed to, say, pragmatic or communication-based) is precisely what is at issue. Yet, if this is right, then it seems the moderate indeterminacy of LF attributions which we recognized at the close of the last section (whereby our theory of LF attribution could accept or reject substantially different accounts of the LF of a single linguistic item,
though it was insensitive to notational variations) is not a tenable position.\(^{67}\)

So, where does this leave us? I think it leaves us committed to rejecting the externalist conception of the relationship between logical form and natural language. Instead of seeing logical form as an imposed system of codification or regimentation, as did Quine, we should see logical form as an inherent feature of an expression: there is a unique logical structure which an expression \(e\) possesses and the task of symbolic representation is to capture correctly this genuine structure beneath the linguistic surface form. In this way, though behavioural features can act as good evidence for LF attribution, what we are trying to capture in such an attribution is something essential to, or constitutive of, the expression in question. Though from an epistemic point of view, inferential and other behaviour may be the best evidence we have for our LF attributions, from a metaphysical point of view there is a determinate answer as to which of a range of possible LF attributions gives the correct structure for some part of our language. With this assumption in hand it seems we can avoid the arguments for the indeterminacy of LF attributions: there is a determinate LF which natural language expressions possess and the task of the logician or philosopher of language is to uncover and symbolize this inherent structure. Attributions of LF are determinately right or wrong, they are not a matter of mere taste (what we are left with, it seems, is a notion of LF far more like that commonly found in linguistics than that sometimes proposed in philosophy).\(^{68}\) With this determinate structure in mind, it seems that we can take syntactic structure to provide the initial input to a semantic theory without introducing fears of indeterminacy at the semantic level.

This excursion through the nature of logical form, and its relation to natural language expressions, has taken us some way from the main

\(^{67}\) A reader pointed out that the worry being raised here is perfectly general, applying to any kind of empirical hypothesis where more than one theory may fit the available data. However, in a sense, this is exactly the point I wanted to stress: adopting an externalist perspective on the relationship between logical form and natural language opens the door to precisely the same kinds of indeterminacy which we find elsewhere (so no privileged distinction between notational and substantial variants). Yet if syntax provides the interface to semantics, then it would seem any such indeterminacy at the syntactic level must impact on claims of semantic content.

\(^{68}\) As Carston 2002: 89, n. 26 notes: “Clearly, linguists’ notions of logical form, such as Chomsky’s LF … and the relevance theoretic notion belong to the descriptive conception”, whereby, according to Stanley 2000: 391–2 “the logical form of a sentence is something like the ‘real structure’ of that sentence”.

thrust of this essay. However, it has served to place a number of issues on the table which will be important for the discussions to come; for instance, the difference between referring terms and descriptive phrases, and the kind of evidence we might canvass in support of attributions of LF (for example, the intuited behaviour of an expression in complex contexts involving modal, intentional or negation operators). These issues will return when we come to consider the correct kind of semantic analyses of context-dependent expressions in Chapter 3. As will be seen, these expressions behave in the relevant contexts as though they should be classified as genuine referring terms. However, the fact that such expressions only select a referent relative to a context of utterance means we need to offer a relatively complex referential story for them. Furthermore, and crucially from our perspective, the context-dependence these expressions display can seem to undermine what I have suggested should be an assumption of moderate formal semantics, namely that semantic content can be delivered via purely formal operations over syntactic content (that is, without appeal to rich features of a context of utterance, such as speaker intentions). Thus we will need to look in much greater detail at the kind of analysis of indexicals and demonstratives which is possible within a formal, truth-conditional account and whether or not the kind of context-dependence these expressions display is inimical to the formal approach. However, before we turn to this question I want to return to an issue raised earlier in this chapter (in §1.4). For one of the reasons I gave for wanting to hang on to a formal approach to the analysis of literal linguistic meaning is that such an account fits very well with an independently motivated model of the cognitive architecture of the language user. So in the next chapter I want to introduce the second major player in this book, namely the modularity theory of mind.

69 This question of the precise nature of the debate between minimalism and dual pragmatics, examined here in §1.4, is also taken up again in Borg 2008. The suggestion in that paper is that some ways of framing the debate (for instance, that found in Cappelen and Lepore 2005) actually serve to obscure crucial points of disagreement between the two programmes.
In the last chapter I introduced two opposing approaches to the study of linguistic meaning: on the one hand, we have formal approaches which suggest that there is a level of propositional or truth-evaluable content, namely sentence meaning, which can be delivered through interpretation of the formal features of the expressions in play. On the other hand, this model is challenged by what I termed ‘dual pragmatic accounts’, like relevance theory, which claim that, in general, no such level of formally derived content is attainable. Rather, the results of formal processing must be supplemented by pragmatic information to yield something genuinely propositional. In this chapter I want to explore one reason we might have for pursuing the former approach as against the latter, which stems from its relationship with a modular account of our linguistic abilities. The claim will be that a formal theory of meaning is worth pursuing since it allows linguistic meaning to be treated as a proper part of a modular language faculty. Now, two questions emerge here: ‘why isn’t a dual pragmatic account similarly consistent with (at least a certain kind of) modular account of linguistic understanding?’ and ‘why might we think a modular account of linguistic understanding, up to and including (minimal) semantic understanding, is worth having anyway?’ I want to address these two questions in §2.2 and §2.3 respectively. To begin with, however, I want to start, in §2.1, by saying a little bit more about the kind of modularity account I’m interested in; specifically I’ll distinguish Fodor-style modularity from claims about massive modularity, and stress that it is Fodor-style modularity which is at issue here. The claim of §2.1–2.3 will then be that, because the formal approach treats linguistic meaning as determinable by purely computational processes, it is consistent with the existence of a discrete body of information, and rules operating only over that information, which underpins our linguistic
comprehension up to and including grasp of literal sentence meaning. A formal semantic theory alone can be part of a (Fodorian) modular language faculty.¹

Having established the relationship between formal semantics and modularity, and, I hope, also having established why the two accounts in tandem look like a good position to pursue, I’ll then turn in the second half of this chapter to consider some further benefits of the account. I’ll suggest that the formal-semantics-plus-modularity picture is capable of yielding an attractive resolution of a range of issues connected to the question of the nature of speech acts in natural language. So, I’ll look in §2.4 at speech acts in general, before turning, in §2.5, to the vexed philosophical issue of ‘what is said’ and the distinction between stating and implying. Finally in this regard, I’ll look, in §2.6, at the place of so-called ‘conventional implicatures’ on the current account. The chapter will then close with a couple of initial challenges to the formal-semantics-plus-modularity picture, emerging from word learning (§2.7) and ambiguity (§2.8). However, I’ll suggest that the account is capable of accommodating these putative objections.

2.1* What is Modularity?

At its most general level, the modularity theory of mind claims that within the apparently seamless, united body of the human mind there actually exist a number of discrete, relatively autonomous cognitive units each dedicated to dealing with a smaller, specific task, and each of which ultimately contributes to the intelligent behaviour of the complete organism. For some (e.g. perhaps Chomsky), it seems that a module is primarily a proprietary body of information, possessed innately, which underpins a given human capacity (paradigmatically, linguistic capacities); a capacity for which poverty of stimulus problems would otherwise arise.² An alternative way to understand modularity, however, is in terms of the range of operation of processes: thus, instead

¹ As noted in the introduction, this claim is likely to be controversial given the stress which many advocates of dual pragmatic approaches place on the cognitive nature of their accounts and their coherence with modularity. For instance, Sperber and Wilson are explicit in claiming that linguistic processing is just a small part of a larger module dealing with communication in general (see Sperber and Wilson 2002). However, the thrust of my argument will be that it is a mistake to think that anything like a Fodorian module could cope with the kinds of processes which dual pragmatists take to be involved in grasp of the proposition expressed by an utterance.

of positing a discrete body of knowledge, we might posit operations which are sensitive only to some limited range of all the things an agent knows. This gives us an idea of a module as a constrained, or as we might say ‘encapsulated’, process. Finally, then, it seems that we might recognize a third way in which to understand what a module is, for we might view a module as a combination of our two previous accounts, so that a cognitive module comprises a proprietary body of information together with a proprietary set of rules or processes operating over that information. Again, both the rules and the representations they operate on are usually thought to be given innately; thus we have a model of a module as an innate and dedicated cognitive processor.³ This is perhaps the most common way to think about modules in the contemporary literature, yet it clearly leaves open a range of further questions, concerning, for instance, what (if any) further defining properties modules have, how many modules the ordinary mind contains, the degree of top-down feedback permitted, and whether or not there is some aspect of human intelligence which is essentially non-modular.

The most fundamental difference here seems to be between those, like Fodor, who think that, though the mind may be in part modular, it is also in (large) part non-modular, and those who think the mind is largely, or indeed entirely, composed of modules. On the former picture, we should posit a modular explanation for some facet of human intelligence only if the function which is described is informationally encapsulated, that is, if the processes which compute that function operate only over some limited body of information.⁴ At least at times (e.g. Fodor 1983), the suggestion has been that the only human activities which fit this profile are the so-called ‘input systems’: the five senses plus language (though note that this does not entail that the mind contains only six modules, for it may be that, in coming to satisfy the overall description of seeing or hearing, and so on, a number of modules may be in operation, each one computing some smaller sub-task on the route to perception).

³ The question of innateness here is a vexed one. For a start it is not at all clear what is meant by calling a body of information or a process ‘innate’ in this context (for a useful discussion, see Samuels 2002). Secondly, it is perfectly possible to hold on to a modular view of the mind from a broadly empiricist perspective (see Karmiloff-Smith 1992 for a case in point). Clearly there is much to be said here, but it would take us too far from present concerns to explore this issue properly, thus in what follows I will operate with a relatively intuitive notion of innateness, along the lines of ‘not learnt’.

⁴ Fodor 2000: 61.
Clearly, then, given encapsulation as the key characteristic of a module, there are going to be lots of facets of human intelligence which do not lend themselves to modular explanation, since lots of what we do (indeed, perhaps most of what would count as paradigmatically human doings) don’t have this encapsulated nature. For instance, deciding whether to take the train or the bus to work isn’t a process which has some privileged body of information to appeal to—rather, as we will see below, in principle, anything one knows could (in the right circumstances) turn out to be relevant to the decision one reaches. So, decision processes like this don’t seem to be the right kind of process for explaining via the positing of a specialized, innate module. For Fodor, then, although some bits of the mind may be modular, it’s a key thesis that much of the mind isn’t.

However, other advocates of modularity have seen this claim as far too pessimistic. Advocates of so-called ‘massive modularity’ (MM) suggest that the mind is largely, or indeed entirely, composed of discrete, autonomous modules. Advocates of massive modularity are more relaxed about what is required for something to count as a mental module; specifically, they do not expect that all areas of the mind deserving of a modular explanation will display the kind of encapsulation which Fodor suggests is characteristic of modules. This relaxation on the nature of a module allows advocates of massive modularity to extend the scope of modular explanation from the ‘input systems’ to include more ‘central’ cognitive capacities. Thus Tooby and Cosmides suggest:

[O]ur cognitive architecture resembles a confederation of hundreds or thousands of functionally dedicated computers (often called modules) designed to solve the adaptive problems endemic to our hunter-gatherer ancestors. Each of these devices has its own agenda and imposes its own exotic organisation on different fragments of the world. There are specialised systems for grammar induction, for face recognition, for dead reckoning, for construing objects and for recognising emotions from the face. There are mechanisms to detect animacy, eye direction, and cheating. There is a ‘theory of mind’ module . . . a variety of social inference-modules . . . and a multitude of other elegant machines.⁵

As they put it, on this kind of picture the mind is ‘densely multi-modular’.

2.1.1 Fodorian modularity vs. massive modularity

Here isn’t the place to engage at length in the contentious and on-going debate between modularity Fodor-style and massive modularity. However, I do think two points are worth noting. First, it is a perhaps regrettable feature of the debate thus far that the term ‘module’ has been used to cover both the original Fodorian mechanisms and the really quite radically different kinds of cognitive constructions envisaged by advocates of MM. For, by Fodorian lights, the things posited by MM look far more like non-modular, global processes. For instance, to take one apparent example of a non-Fodorian module: the theory of mind module (often referred to as the agent’s ‘mind-reading’ capacity). It seems clear that embarking on an intentional explanation of some piece of observed behaviour depends upon precisely the kind of non-demonstrative, context-saturated and all-things-considered reasoning which Fodor takes to be characteristic of a global process. Thus, from now on, unless explicitly stated, the term ‘module’ will be reserved for an encapsulated body of information with deductive, computational rules operating only over that information. Any system employing abductive (i.e. non-demonstrative) reasoning processes will not be labelled a module.

Furthermore, and this brings us to the second point worth noting, according to Fodor, it is precisely because of this potential global sensitivity that a modular explanation can’t be given. For global processes are processes where problems like the so-called ‘frame problem’ emerge with full force. That is to say, they are processes where the potential ‘search space’ for features which could be taken into consideration prior to arriving at an interpretation or solution ranges to the full extent of what the agent knows. 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...

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6 Though, according to Fodor, it does belong as an innate feature of the mind; see Fodor 2000: 97 “...the innate intentional theory of mind that many of us nativists think people are probably genotypically endowed with.”

7 For further discussion of what is involved in abductive inference, see Josephson and Josephson 1994; also Chapter 1, n. 36.
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. So a range of contextual factors can matter in determining an intentional attribution and there is no determinate boundary at the outset on which facts could turn out to be relevant (and this is just to note that the process looks distinctly unencapsulated). As Recanati notes:

A distinguishing characteristic of pragmatic interpretation is its defeasibility. The best explanation we can offer for an action given the available evidence may be revised in the light of new evidence. Even if an excellent explanation is available, it can always be overridden if enough new evidence is adduced to account for the subject’s behaviour. It follows that any piece of evidence may turn out to be relevant for the interpretation of an action. In other words, there is no limit to the amount of contextual information that can affect pragmatic interpretation.¹

On the other hand, however, although it is true that there is no limit in principle to the range of evidence that can affect pragmatic interpretation, it is also clear that, in practice, only a very small sub-set of all the things an agent knows are actually brought to bear in any instance of such problem solving.² So, for instance, in determining an intentional description of Sally’s action in the above scenario we don’t have to consider things like the fact that Sally is wearing a blue coat or that she won’t disappear out of existence in thirty seconds; yet, prima facie, this ability to ignore certain bits of information (which might be highly relevant on another occasion), apparently without even considering them, is quite remarkable. To make an intentional assessment of Sally’s actions it doesn’t seem that an agent could or should run through all the things she knows to see which are relevant in this case. Yet in the absence of such a global search it’s not at all clear how she selects just the relevant aspects of the context and her background

¹ Recanati 2004: 54.
² Sperber and Wilson 1996: 531 note: “There is no way for the mind to review all possible combinations of new and contextual information in order to find out which would maximize relevance. Even if there were a way, the effort involved in such a review process would so lower the overall cognitive utility of the process as to defeat the whole enterprise.”
knowledge. This problem, of delimiting an appropriate search space or model, is well known within AI circles, and it emerges whenever we are looking for a computational explanation of an apparently non-demonstrative (paradigmatically human) reasoning process.\textsuperscript{10} On a Fodorian picture, then, MM is mistaken because it seeks to proffer a modular explanation of precisely those abilities (like intentional explanation) which are global and abductive, and which therefore resist an encapsulated, computational explanation.\textsuperscript{11}

Obviously there is more to be said on the debate between limited and massive modularity, but I want to leave this debate to one side now. For at the very least, even if the above concerns about the nature of massive modularity were overcome and the position that the mind is massively modular adopted, still it seems we could usefully ask the question as to whether any of the mind’s numerous modules met the more stringent conditions for being Fodor-style modules. Specifically, we might ask where linguistic comprehension stands with respect to this type of explanation. It is to this issue that I want to turn now, beginning with the question of why formal semantics and (Fodorian) modularity look so well suited.

2.2 Formal Semantics and Modular Explanations

A module then is a probably innate, encapsulated body of information, together with processes operating only over that information, which is responsible for realizing a given cognitive function. Now, given this notion of a module, it looks as if the kinds of processes which take place within a module may be viewed on a computational model (i.e. as purely formal transformations). So, if we were to decide that an agent’s grasp of the literal meaning of natural language sentences was an ability deserving of a modular explanation, then the kinds of processes

\textsuperscript{10} See Fodor 2000: 37–8: “Reliable abduction may require, in the limit, that the whole background of epistemic constraints be somehow brought to bear in planning and belief fixation. But feasible abduction requires, in practice, that not more than a small sub-set of even the relevant background beliefs is actually consulted. How to make abductive inferences that are both reliable and feasible is what they call in AI the frame problem.”

\textsuperscript{11} It is this feature which, it seems, leads Chomsky to be suspicious of the (current) chances of offering any kind of systematic or scientific explanation of global processes. He remarks that a theory of interpretation (or a theory of pragmatics) would have to be ‘a theory of everything’ (Chomsky 2000: 29, 49–50).
which underpin this ability should be computational processes. Now, as should be obvious from our discussion in the last chapter, that is just what a formal theory of meaning tells us grasp of literal linguistic meaning (for sentence-types relativized to a context of utterance) is like. What matters for semantic operations on a formal account just are the (local) syntactic properties of representations. So, on this kind of picture, grasp of meaning would seem to be in principle amenable to a (Turing-style) computational explanation. If, say, we treat grasp of literal linguistic meaning as the canonical derivation of truth-conditions for sentences, for example, along the lines of Larson and Segal 1995, then semantic understanding can form part of a genuine language module, for this is clearly a function which is encapsulated and computational. Knowledge of meaning, on this kind of account, consists of knowledge of a proprietary body of information (the lexicon for the language) and knowledge of a set of rules operating only on that information, rules which consist of formal transformations of the data. Thus modularity and formal semantics, it seems, go very nicely together.

However, things look different from the perspective of dual pragmatics. For here, since semantic content is saturated by contextual factors, it seems that no simple computational explanation can be forthcoming. The point here is not simply that the dual pragmatist’s path to meaning involves global processes (that is, processes which have an unlimited body of data to which they can apply), it is also the kind of global processes involved (for example, abductive reasoning or inference to the best explanation). For notice that a global process per se could still be a formal, syntactically driven process. It is logically possible that what some process requires is sensitivity to more than the local syntactic properties of a given representation, yet still it does not require sensitivity to more than syntactic properties per se. Thus, a global process could be one which is sensitive to the syntactic features of all the agent’s beliefs, rather than the local syntactic properties of a specific representation. Clearly, such a process would still be a genuinely syntactic (computational) process, even though it was a process which looked further than the syntactic properties of a limited number of representations. However, it seems that we already know that abductive processes (that is, the kind of reasoning processes that the dual pragmatist claims underpins grasp of semantic content) can’t be
global syntactic processes, because we know that the totality of one’s beliefs can’t be the relevant search space for any actual abductive inference; this, in part, was the force of the frame problem considered above. As Fodor puts it:

[I]t’s just got to be possible to determine, with reasonable accuracy, the impact of adopting a new belief on one’s prior commitments without having to survey those commitments in their totality. Whole theories can’t be the units of computation any more than they can be the units of confirmation, or of assertion, or of semantic evaluation. The totality of one’s epistemic commitments is vastly too large a space to have to search if all one’s trying to do is figure out whether, since there are clouds, it would be wise to carry an umbrella.¹²

The global yet selective nature of abductive processes (their potential sensitivity to anything one believes, paired with their limited search space in practice) means they cannot be treated as simple computational processes, since they must be sensitive to more than the syntactic properties of representations; neither local syntax (of the specific representation itself), nor global syntax (of the entire belief system), underpins these kinds of processes.¹³ So, the dual pragmatist position, as an approach to the grasp of semantic content which deploys abductive reasoning processes, does not fit with the idea of an encapsulated modular language faculty (responsible for linguistic comprehension up to and including semantic understanding).¹⁴ Thus, it seems formal semantics does, while dual pragmatics does not, yield a semantic account which is easily incorporated within an encapsulated cognitive module.

However, it is clear that this fact only gives us a reason to pursue formal semantics if we think that semantic comprehension is a cognitive function which warrants modular explanation, and many theorists, including (perhaps surprisingly) Fodor himself, hold that it does not.

¹³ The claim that modular systems (alone) cannot underpin abductive reasoning has been rejected by some; for a nice, though I think ultimately unsatisfactory, attempt to provide a modular account of such reasoning, see Tinker 2003.
¹⁴ Of course, as noted at the close of the last section, encapsulation might not be taken to be the hallmark of a modular system; indeed, it seems it won’t be if MM is in the offing. So, for instance, Sperber and Wilson are themselves keen on modularity and take the relevance theoretic approach to meaning to be entirely consistent with a modular view of the mind, but the modularity they have in mind here seems to be massive modularity. See Sperber 1994.
For Fodor, semantic properties belong only at the level of thought not at the level of natural language. He writes:

Assume the standard story according to which speaker/hearers are computational systems whose mental processes are defined over the formulas of some language of thought (call it M[entalese]). Then you can think of understanding natural language expressions as a matter of translating them into M. To understand a sentence of English, on this account, just is to compute its M-translation.

Now, presumably you have to know the syntax of English in order to compute its M-translations because M-translation of an English expression depends not just on its lexical content but on its syntax as well . . . . But it is far from obvious that you have to know the semantics of an English expression to determine its M-translation; on the contrary, the translation algorithm might well consist of operations that deliver Mentalese expressions under syntactic description as output given English expressions under syntactic description as input with no semantics coming in anywhere except, of course, that if it’s a good translation, then semantic properties will be preserved . . . . It is very widely assumed, among cognitive scientists at least, that semantics is a level of linguistic description, just like syntax or phonology; specifically, that the same sort of arguments that suggest that speaker/hearers have to know the syntax of their language also suggest that they have to know its semantics . . . . But, in fact, this is all wrong.¹⁵

So what are we to make of this claim? Well, notice for a start that the standard story was certainly a picture I endorsed in the last chapter: on the version of the formal, truth-conditional approach I like, natural language expressions map to expressions in some more fundamental language of thought, combining to provide representations of the conditions under which a given natural language sentence is true. Furthermore, it seems that we’ve already embraced Fodor’s claim that it is formal (syntactic) properties which are responsible for this mapping. After all, it seems that this is just what the formal semanticist wants

¹⁵ Fodor 1989: 418–19. See also Fodor 1998a, chapter 6. Chomsky’s notion of ‘internalist semantics’ also appears to be a purely syntactic enterprise. He writes 2000: 38–40: “Within internalist semantics, there are explanatory theories of considerable interest that are developed in terms of a relation R (read ‘refer’) that are postulated to hold between linguistic expressions and something else, entities drawn from some stipulated domain D (perhaps semantic values) . . . . I think such theories should be regarded as a variety of syntax . . . . It would seem perverse to seek a relation between entities in D and things in the world—real, imagined, or whatever—at least, one of any generality. One may imagine that the relation of elements of D to things in the world is more ‘transparent’ than in the case of other syntactic representations, as the relation to sound waves is more ‘transparent’ for phonological representation; but even if so, these studies do not pass beyond the syntax of mental representations.”
to insist on: for her, the path to meaning runs exhaustively along syntactic tracks.

So, the question we face is: does this entail that semantic content is not a level of linguistic description? Should we follow Fodor in claiming that there really is no such thing as meaning in natural language, with meaning properties attaching only at the level of mental entities? Well, it doesn’t seem to me that we are forced to abandon the idea that semantic interpretation is a proper level of linguistic description. For it would seem equally possible to claim that natural language expressions certainly do have meanings, namely the expressions in the language of thought (perhaps concepts) to which they attach.¹⁶ The picture would then be something like the following: there is a discrete language faculty, containing specialized bodies of knowledge and operations on that knowledge, dealing with phonetics, orthographics, syntax, and semantics. This last body of knowledge would make use of the common currency of thought (i.e. language of thought expressions) but in a constrained, or encapsulated, way. So, for instance, the lexical information that ‘cat’ means CAT (where the capitalized item here indicates an expression in the language of thought, which I will take to be a concept) would be a proper part of the language faculty, and, since it seems right to think that the content of this concept or language of thought expression is determined by its connection to certain objects, or a certain property, in the world, word–world relations will (somewhat derivatively) be a proper part of the language faculty. It would also fall within the purview of the language faculty to calculate the mental representation of the truth-condition for the natural language sentence ‘The cat is on the mat’, where what is constructed is a language of thought sentence which exhibits connections to the external world just to the extent that the language of thought expressions out of which it is constructed exhibit such relations (to put it crudely, since CAT hooks up to cats, and MAT hooks up to mats, the truth-conditions for the natural language sentence ‘the cat is on the mat’ turns on how things stand with some cat and some mat).¹⁷ What then

¹⁶ This suggestion, and the picture I’ll ultimately be advocating, has clear affinities with that proposed in Laurence 1996.

¹⁷ Of course, there is a whole big question here about the nature of concepts and how these mental representations get their content (just what does ‘hook up with’ mean anyway?), but addressing such fundamental questions is beyond the scope of our present inquiry. See §5.3.3 for some very limited further discussion of this point.
isn’t a part of the language faculty is any further information about the relations between concepts: if the agent thinks that all cats are happy, presumably some mental representation will encode this thought, but this kind of information lies beyond the limited access to the agent’s belief system which the language faculty possesses (which, to repeat, is given by the lexical information, mapping natural language expressions to language of thought expressions, and the rules of composition). On this sort of model, the language faculty makes use of items which derive their content from elsewhere (for example, from their relation to external objects), but it’s not clear that this shows that the language faculty must be treated as devoid of semantic content, being no more than a purely syntactic engine.

Furthermore, there is some initial evidence that semantic understanding does belong as a proper part of a modular language faculty. For instance, lexical information clearly takes us beyond the purely syntactic or orthographic, yet it seems prima facie clear that lexical information should be treated as a genuine part of our linguistic understanding. Or again, intuitively, it seems as though assessments of meaning for natural language sentences are possible, independently of assessments of the thoughts underpinning their production (for example, we unreflectively talk of two sentences as ‘having the same/different meanings’, of ‘knowing the meaning’ of some form of words, and so on). Clearly, however, if the formal approach to semantics is to benefit from its coherence with a modular account of linguistic comprehension, it would be good to see some stronger evidence that semantic understanding itself is an activity deserving of modular explanation (that is, that grasp of literal linguistic meaning is a cognitive function which deserves a modular treatment alongside phonetic and syntactic interpretation). One place we might think to locate this evidence is in the kinds of features which are indicative of modular processes in general. That is to say, if some (minimal) kind of semantic interpretation intuitively displayed the kinds of features which other, paradigmatically, modular processes displayed, then this would seem to be a good reason for treating (minimal) semantic interpretation as itself modular. Thus I want now to turn to examine the kinds of features which have often been treated as hallmarks of modular processes and argue that semantic comprehension intuitively fits this modular profile. Grasp of literal linguistic meaning, I will argue, looks like the
type of cognitive function, like vision or hearing, or grasp of syntactic structure, which deserves modular explanation.

2.3 Modular Properties of Semantic Comprehension

Although, as already noted, encapsulation seems to be the key characteristic of modular domains, there are a number of other characteristics which it seems may help us to isolate genuinely modular systems. A given cognitive capacity deserves a modular explanation, Fodor 1983 suggests, just in case it displays all or most of a number of characteristics of modules in general: they are domain specific, the processing they engage in is mandatory, the agent has limited conscious access to the intermediate representations entertained in the modules, modules are informationally encapsulated, they are fast, they have relatively shallow outputs, they are associated with a fixed neural structure (they are hard-wired) and they exhibit characteristic patterns of breakdown and of acquisition or development. Modularity is also said to be a matter of degree. Thus we might envisage some processes as being highly informationally encapsulated and with representations internal to the module being almost unrecoverable to the conscious mind. Yet we might also allow that other processes, while autonomous enough to count as modular to a degree, are nevertheless more cognitively penetrated than the former kind of module. Thus modularity might be understood on a continuum, shading off into entirely encapsulated, reflex-like modules at one end and an entirely unencapsulated ‘general intelligence’ at the other. Now, it seems clear that paradigm modular activities (like vision or oral word identification) display these kinds of properties, but the question we need to ask now is whether there is any

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¹⁸ Fodor 1983: 72 writes: “Imagine a system that is encapsulated in the way that reflexes are, but also computational in a way that reflexes are not [and] you will have some idea of what I’m proposing the input systems are like.”

¹⁹ Fodor 1983: 37.

²⁰ As will be argued in §2.5, since modularity is a matter of degree, we might expect there to be, in the case of language comprehension, linguistic properties which seem to lie somewhere between literal (word or sentence) meaning and one-off speaker- or utterance- meaning. These properties would not be as modular as literal meaning (they would be less encapsulated), but nor would they be fully global (as one-off speaker interpretation is); this mid-ground might create space for such features of linguistic comprehension as Grice’s ‘conventional implicatures’ and ‘generalized conversational implicatures’; see also Levinson 2000.
level of content recovery which might count as grasp of literal linguistic meaning and which also displays these properties. The answer I want to give is that indeed there is. It seems, intuitively, that speaker/hearers do have access to a level of linguistic content, where that access is domain specific, encapsulated, mandatory, of limited conscious availability, fast, shallow in output, associated with a fixed neural structure, and which exhibits characteristic patterns of breakdown, and of acquisition and loss. Thus there is evidence that grasp of literal linguistic meaning should be viewed as a process which is susceptible to genuine modular explanation. So a form of semantic theorizing which admits of incorporation within a modular framework (the formal approach) is indeed to be recommended. To see this, let us consider each of the putative properties of a module in turn.

2.3.1 Semantic processing is domain specific

The more eccentric a stimulus domain, the more plausible the speculation that it is computed by a special-purpose mechanism.²¹

We should notice initially that there are different ways in which the domain specificity of semantic processing may be understood. On the one hand, semantic understanding can be thought to be domain specific because, as noted in the above quote, the stimulus which triggers semantic interpretation is highly eccentric. Only a tiny fragment of the things we encounter in our day-to-day lives will ‘switch on’ the process of linguistic interpretation. In the normal course of things, we don’t hear mechanical diggers or bus engines as talking to us, nor do we read snail trails as (albeit foreign) writing. Just as we switch on for phonetic and orthographic interpretation in only a very narrowly defined set of circumstances, so it seems that semantic interpretation is similarly specialized. Though it’s right to recognize that we make assessments of meaning for non-linguistic items as well (for example, his buying her flowers meant that he loved her), there seems to be no question of a unique correct interpretation here, as there is in the linguistic case. Did his buying her flowers mean that he would love her forever or just that he really liked her at the moment, that he didn’t

²¹ Fodor 1983: 51.
want her to leave, etc.? Only the agent could possibly be in a position to answer such questions. Whereas, intuitively, for linguistic items there is a level of conventional meaning or content which can be recovered without appeal to the speaker. The competent user of English, being presented with a written sentence of English, will be able to recover the meaning of that sentence (or meanings in the case of an ambiguous sentence) even if she doesn’t know who produced that sentence or when it was produced. This apparently gives us a very special stimulus set for semantic interpretation.

Alternatively, however, it seems that we might understand domain specificity in terms of the range of the processes involved, rather than in terms of the specialized nature of the stimulus set. In this way, a cognitive function would count as domain specific if it were underpinned by processes which have a limited range of applicability. Now, obviously, a full answer as to whether semantic processing displays this property will depend on the precise form of semantic theory we adopt. Yet, prima facie, there is some initial evidence that grasp of literal linguistic meaning fits the bill here. For as just noted, the competent agent faced with a natural language sentence (composed of familiar elements) does seem able to make an assessment of meaning for that sentence, even if she knows little or nothing about who produced it or when. Yet this would seem to show that, whatever processes underpin this kind of recovery of meaning, they need not be sensitive to global features, like the belief set of the producer of the sentence or, indeed, the belief set of the interpreter (since we would expect all competent agents to arrive at the same interpretation of literal meaning for a non-ambiguous sentence, despite no doubt vast differences in their background beliefs). It does seem plausible, then, even prior to the construction of a particular kind of semantic theory, to think, first, that the rules for calculating literal sentence meaning apply only to natural language expressions, and, second, that they are insensitive to further information located outside the language faculty. Thus grasp of literal linguistic meaning does seem to be a domain specific process.

However, things seem somewhat different with respect to general communicative concerns, for lots of different things may count as communicative acts, and whether an act counts as communicative and what it communicates depends crucially on the context in which it is
produced and on the intentions of the producer. A cough may mean everything or nothing, raising one’s arm may be an idle stretch or an auction bid, while dropping a handkerchief may be a meaningless accident or intended to convey the guilt of another. So, since the same type of gesture may count as meaningful in one context and meaningless in another, it seems that there is no specialized class of stimulus which alone suffices for switching on the processes underpinning communicative interpretation. Nor does it seem that the processes which underpin communicative success in general can be viewed as domain specific, since, as already noted, the kind of information these processes must be sensitive to extends potentially as wide as the complete belief set of the agent. Thus, prima facie, while there seems to be some evidence that grasp of literal linguistic meaning is domain specific (stemming from the very specialized stimulus which leads agents to engage in interpretation of literal meaning and from the constrained nature of the rules which underpin recovery of literal meaning—that is, looking to the meanings of words and syntax alone), there seems to be no reason to think that the explanation of communicative skills in general is similarly domain specific.

2.3.2 Semantic processing is informationally encapsulated

[T]he claim that input systems are informationally encapsulated is equivalent to the claim that the data that can bear on the confirmation of a perceptual hypothesis include, in the general case, considerably less than the organism may know.²²

Clearly informational encapsulation holds good for literal semantic interpretation. I will see or hear a sentence as meaning what it in fact does mean regardless of other things I believe or, in general, what I hope a given speaker is going to say.²³ If you, as an interlocutor, decide to come up with the most surprising, most irrelevant utterance you can think of, it will still be the case that any sufficiently competent language user, within earshot and paying attention, could immediately

²² Fodor 1983: 69.
²³ There may be some exceptions to this claim, for instance a kind of wish-fulfilment may lead the hopeful interlocutor to mishear what is said or misread what is written (e.g. perhaps omitting a ‘not’). However, this certainly is not the general case and any such flexibility is ruled out once reception of the input string is fixed. See §2.7 for further discussion of related kinds of case.
interpret what the sentence you produced meant, even if they can find no relevant reason for your having spoken as you do. Yet, if information from outside the language faculty, like relevant expectations, played a role in sentence interpretation, then this would seem to be inexplicable. As Fodor stresses, this sort of autonomy is clearly just what we would want from an input system, for we want it to be possible for that system to convey information about our surroundings to us regardless of the other things we believe. Though I do not expect there to be an alligator in the corridor of my philosophy department, still a cry of “There’s an alligator in the corridor!” means that there is an alligator in the corridor and, though I may have my doubts about the veracity of this report, it can lead me, cautiously, to investigate the matter. Yet, if semantic understanding were susceptible to expectations or to my general view of the world and my current situation, it is hard to see how this could happen. Semantic comprehension seems to be independent of how I expect the world to be; it delivers a judgement of meaning that may confirm or confound my expectations, but which is essentially autonomous from those expectations. Yet this, it seems, is just to recognize that semantic processing is informationally encapsulated.

Interpretation of communicative acts, on the other hand, is about as informationally unencapsulated as you can get. Almost by definition, determining what is communicated by a raise of the eyebrows or a cough, or some such gesture, is a function of what else one believes to hold in the particular situation and in the world at large. Devoid of background information about the participants in a scene, and their relationships to one another, it can be extremely hard for the observer to work out what is meant by a particular look or gesture, yet sentence interpretation can apparently occur without any substantial background context at all. It seems that acts of communication, whether language-based or not, require all-things-considered-reasoning to understand; the data that can bear on the confirmation of a hypothesis about what a speaker means encompasses everything an interpreter knows. Thus, grasping what is communicated by an utterance or a gesture involves the kind of reasoning that is the hallmark of the informationally unencapsulated, while grasping literal meaning for a linguistic item appears to be an encapsulated process extraordinaire.
2.3.3 Semantic processing is mandatory

You can’t help hearing an utterance of a sentence (in a language you understand) as an utterance of a sentence . . . . You can’t hear speech as noise even if you would prefer to.²⁴

In the normal case, when presented with a linguistic item seeing or hearing it as meaningful seems unavoidable. If you listen to an utterance, you don’t hear just phonemes, or syntactic structure (whatever that would be like), you hear meaning; it’s automatic and it’s unavoidable.²⁵ There is no step under conscious control from reading a sentence, consisting of words and structure with which one is familiar, to grasping the meaning of the sentence. Yet this automatic, reflex-like property is a central feature of processes which are taken to be under modular control. The relatively mechanical, incredibly fast move from hearing words to grasping meaning, which requires no conscious control to instigate nor, apparently, to deliver, signals a process that is well explained by positing a dedicated, quite autonomous module to account for it.²⁶ Now, of course, there are exceptions to this claim of immediacy or unavoidability. Faced with a long or very complex utterance, it may take some time to work out the meaning of the sentence, or it may contain elements with which one is not sufficiently familiar, so that determining the meaning of the whole is far from immediate but rather takes some prolonged time. Or again, if the sentence concerns a topic with which one is unfamiliar, one may feel that one doesn’t really know the meaning of the sentence since one is unable to integrate the information recovered from it with other things one knows (I’m grateful to ex-students of mine for pointing out that this is often how they felt with respect to utterances in my philosophy of language class). However, it is not clear that these kinds of cases really undermine the claim of immediacy of semantic interpretation. For, in the first two cases, it is not the immediacy of semantic interpretation which is called into question, but the immediacy of syntactic or lexical assessments. Faced with a very long or complex sentence, determining its syntactic structure may indeed take some time. Yet the point remains, I think,

²⁴ Fodor 1983: 53.
²⁵ As Fodor 1983: 55 puts it: “It’s what’s said that one can’t help hearing, not just what is uttered.”
²⁶ The role of conscious control in (semantic) linguistic processing is something we will return to later, for some may object that there is a role for some such control, e.g. in order to settle cases of ambiguity; see §2.7.
that, once the lexical items and the syntax are known, then there seems to be no prolonged step to take to a grasp of sentence meaning. While, in the third kind of case, although one is clearly lacking something, what is missing seems to be external, as it were, to the meaning of the sentence; what one needs to find out is something about how the linguistic claim made relates to other things one knows—one does not, it seems, need to find out more about the meaning of that sentence itself. If you don’t know much about the new degree structure at my university, the claim made by the sentence ‘All joint honours students must acquire a minimum of forty credits from a single programme of study’ won’t, I suggest, be of much use to you. Yet to get a better grip on the subject here, it doesn’t seem as if you need to find out more about what these words in this construction mean (it’s not your grasp of English that is letting you down, but your grasp of my university’s new course structure). Finally, we should note that the claim here is not that grasp of literal meaning must always be immediate, for all systems can suffer from breakdown or error. Rather the claim is that, in normal situations, when the language faculty is operating correctly, there simply seems to be no gap between hearing an utterance and hearing its meaning. Indeed, cases where this fails to happen simply seem to highlight the mandatory nature of the normal case: in most linguistic exchanges, one simply has no choice about hearing linguistic items as possessing meaning.²⁷

Yet it seems that this lack of choice does not obviously extend to communicative acts in general. An agent does seem able to exert a far greater degree of conscious control over judgements of non-literal meaning than she does over literally conveyed meaning. I may decide, if I’m in an unco-operative mood, only to interpret your utterances to the point of strict and literal meaning, refusing to pick up on any aspects of conveyed, or speaker, meaning; like irony or metaphor. (Furthermore, and perhaps more controversially, I’d suggest that if you hear “Courtney will continue”, though grasping that the speaker is claiming that Courtney will continue something is unavoidable for a suitably competent language user, one may or may not choose to identify what it is the speaker is claiming he will continue; this is a topic we will return to in Chapter 4.) Yet this ability, to decide to hear or see only the minimal semantic interpretation

²⁷ I’m grateful to the seminar group at Reading for discussion of these points.
of some linguistic item, might be thought to indicate that grasping communicated or speaker meaning is not mandatory, and thus does not obviously require positing a distinct module to explain. Finally, as we will see below, there are certain forms of cognitive disorder which seem to disrupt the process of linguistic comprehension at just this point, with grasp of literal meaning apparently being mandatory while grasp of communicated meaning is revealed as truly optional, since the patients in question systematically fail to grasp speaker meaning. For instance, some schizophrenic patients seem perfectly able to understand the literal meaning of sentences and utterances they are presented with, but they are often unable to pick up on further prosodic details. Thus again, there seems to be evidence that there is a difference in status between grasp of literal meaning, which is somehow unavoidable, and grasp of communicated meaning which is, to some degree, optional.²⁸

2.3.4 There is limited conscious access to the intermediate representations of the language faculty

[I]t is easy to show that details of syntax (or the choice of vocabulary) are lost within moments of hearing an utterance, only the gist being retained. (Which did I just say was rapidly lost? Was it the syntactic details or the details

²⁸ We should be clear, however, that the above claim need not be read as a claim about actual on-line processing. That is to say, the claim need not be that a competent language user must always calculate the complete literal meaning of a given sentence or utterance before she goes on to calculate speaker meaning. For there is evidence that interlocutors do not wait until they have interpreted the literal meaning of a complete sentence before embarking on pragmatic processing to determine what the speaker meant by her utterance (rather, processing seems to proceed at a sub-sentential, clausal level, with semantic and pragmatic processes contributing incrementally to a complete interpretation of the communicative exchange); see Gibbs 1994. Rather the thought is that semantic interpretation is guaranteed to be recovered even if attentional resources have moved on. Knowing the parts of the sentence plus knowledge of its structure entails that the language faculty will construct a representation of the literal meaning of a sentence, even if this representation never makes it to conscious consideration (just as the vision module can’t help constructing a representation of a scene even if the agent is consciously oblivious to it). The picture I have in mind, then, is akin to that labelled the ‘Ranked Parallel (RP) Model’ in Bezuidenhout and Cooper Cutting 2002: 444, whereby both minimal and enriched propositions are calculated in parallel, though only one interpretation will normally reach the threshold of activation (i.e. reach conscious consideration), with this interpretation usually being the enriched one. Evidence for this claim might be thought to emerge from the phenomenon of priming, so that interpretation of an ambiguous word or sentence which is consciously heard can be influenced by the interpretation of an unconsciously heard word or sentence; see, for instance, Greenwald et al. 1989; Abrams et al. 2002; Naccache and Dehaene 2001 (the conclusion of the latter paper being that ‘unconscious utilization of semantic information is indeed possible’). However, matters here are delicate, for, as Gibbs 2002: 460–1 stresses, we should be clear that priming effects generated by a single word will not be sufficient to show that the literal meaning of a complete phrase or sentence is calculated in parallel with a richer, communicated proposition(s). Rather what we need to see to support the idea that the minimal proposition is genuinely calculated, even though it may not have attentional resources directed on it, is that larger phrasal elements (up to and including sentences) may also serve as primes.
of the syntax?) Yet it is inconceivable that such information is not registered somewhere in the comprehension process and, within limits, it is possible to enhance its recovery by the manipulation of instructional variables.²⁹

One of the features of modules is that they may operate over representations which themselves are relatively inaccessible to the agent as a whole. This is certainly the case for the language faculty in general, as Fodor argues in the above quote. Access to these module-internal representations may not be ruled out entirely; for instance, an agent can, if given overt instruction or training, come to pay attention to features of the input string which normally are not consciously attended to, such as its phonetic properties. Yet doing so may have a detrimental effect on the speed and accuracy of the interpretation process as whole.

As noted in the last section, this relative inaccessibility seems to be the case for literal, semantic interpretation just as it does for syntactic interpretation, for what agents consciously consider and retain in a communicative act is often not the literal interpretation of the sentence they are exposed to. Rather interlocutors devote conscious resources to some (pragmatically) richer item specifying what the speaker is taken to have said by her utterance, that is, a proposition which captures the gist of what was said. In most contexts, if I hear an utterance of “I don’t drink” it seems I will consciously entertain the idea that the speaker doesn’t drink alcohol, even though this is not the literal meaning of the sentence produced.³⁰ This absence of the minimal semantic interpretations from conscious consideration fits the profile of processing in other cognitive domains which are paradigmatically modular. For instance, consider sight: it seems that any scene involving human beings will be consciously considered by an onlooker under an intentional description. Thus we consciously see the agent as leaving because she disliked the play, as marking Finals scripts, etc., even though such a description surely goes beyond what is delivered by the resources


³⁰ Here and elsewhere, of course, questions may be asked about exactly what the literal meaning of the sentence in play actually is; for example, couldn’t “I don’t drink” be taken to literally mean I don’t drink alcohol? This is an important question, but one I would like to leave to one side until Chapter 4. Throughout this chapter I’ll be operating with a (perhaps crude) intuitive notion of what might count as literal meaning, which is more or less tied directly to the surface constituents of a sentence. If you don’t like the example in the text, a less controversial example would be an ironic utterance of “I’d like that” which the addressee consciously entertains or remembers as the claim that the speaker would not like that.
of the vision module *per se*. It would seem that there must be some non-intentional, more coarse-grained, representation which serves as the genuine delivery of the vision module to the agent’s central cognitive system (that is, a representation which receives its intentional weight only outside the visual system), but it is nevertheless the case that this level of representation rarely surfaces to consciousness and is not what is (usually) retained in memory.

Furthermore, it seems that the absence of conscious sensitivity to the literal meanings of sentences is something which can be overcome by manipulating the situation in which linguistic processing is taking place. Give a competent language user a particularly long or complicated written sentence to read, without supplying any further context for the item, and it seems clear that what will surface to consciousness just is the literal linguistic meaning of the sentence. Or again, in any situation where the addressee is unsure of the kind of pragmatic moves she is licensed in making, it seems that it is the minimal semantic item which will be consciously considered as the result of linguistic processing of the sentence in question. Consider, for instance, Flaubert’s run in with the parrot who incessantly shouted “As-tu déjeuné, Jako?”⁳¹ The parrot here apparently produced a meaningful sentence in French (indeed this would seem to be the reason why the squawking proved so impossible to ignore, and hence so annoying, to Flaubert). Yet we (and Flaubert) may be very unwilling to say the parrot meant anything by it, and thus there will be no pragmatically enriched item to consider consciously.

### 2.3.5 Semantic processing is fast

It . . . bears thinking about that the recovery of semantic content from a spoken sentence can occur at speeds quite comparable to those achieved in the two-choice reaction paradigm. In particular, appreciable numbers of subjects can ‘shadow’ continuous speech with a quarter-second latency (shadowing is repeating what you hear as you hear it) and . . . there is good evidence that such fast-shadowers understand what they repeat.⁳²

As noted above, with respect to fast shadowers, semantic understanding is almost unbelievably fast. For the best practitioners of fast shadowing

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⁳¹ Barnes 1984: 10.  
there is something like a 250 millisecond delay between production of the auditory stimulus and production of the oral response, and this tiny time-lag must include not only the processing of the auditory input string but the processing, and initiating, of the verbal response. Even in the case of ordinary speech comprehension, there is simply no gap to be felt between hearing words and hearing meaningful utterances and it takes a great deal of willpower and training to succeed in inserting any distance at this point (that is, to hear linguistic objects as, say, merely acoustic objects in the first instance). As Fodor notes, it seems that the speed and the mandatory nature of linguistic understanding go hand in hand—we grasp the meaning of sentences so quickly because we don’t have a choice about it (we don’t, in general, have to ‘think about it’ in any kind of non-computational, inferential way). Instead, in the ordinary case, the meaning leaps right off the page, or out of the noise, for us, as it were; it’s a response almost as automatic as the blink of the eye when an object gets too near.

Of course, on the whole, grasp of pragmatically enriched linguistic reports can also be incredibly fast. As noted in the last section, what occurs to consciousness on hearing a given utterance may be very different to the literal interpretation of the sentence produced, yet the relevant, pragmatically enriched reading is immediately recovered. So, appeals to automaticity alone can’t show that minimal semantic comprehension is the result of modular processing while grasp of what is said by a given utterance is not. However, it does seem that there is the option for pragmatic interpretation to take time, in a way which does not hold for minimal semantic interpretation. As Fodor writes:

While there could perhaps be an algorithm for parsing, there surely could not be an algorithm for estimating communicative intentions in anything like their full diversity. Arguments about what an author meant are thus able to be interminable.33

As we noted above, pragmatic interpretation has an ‘open-ended’ nature to it which the decoding processes of minimal semantic understanding do not. So, for instance, given an in-depth knowledge of the context of utterance, one can go on apparently indefinitely, reading more and more into a given utterance (consider the over-analysis of a ‘throw away comment’ by a jealous or suspicious lover, or the dissection of a

33 Fodor 1983:90.
response in a session of psychoanalysis), and this process will clearly not be in any way fast or automatic. Rather it is a slow, unlimited and indefinite occupation. (Compare also the continued interpretation of a visually depicted scene, say a short piece of film, under questioning: a viewer may similarly continue for an indefinite period, offering increasingly complex intentional explanations of the actions she has witnessed, even though there is no novel (objective) aspect of the scene brought into play; that is to say, the new interpretations do not depend on the agent actually seeing anything new. Despite the apparent automaticity of offering an intentional explanation of a viewed scene, the open-ended nature of such intentional explanation is, once again, quite different to the restricted and exhaustively automatic process of visual perception per se.) So, once again, the claim is that when sentence-level semantic interpretation takes place it is necessarily fast and automatic, whereas when pragmatic interpretation takes place it can (though it will not always) be a slow, extended process of conscious deliberation.

2.3.6 Semantic theory has ‘shallow’ output

[T]he more constrained the information that the outputs of perceptual systems are assumed to encode – the shallower their outputs, the more plausible it is that the computations that effect the encoding are encapsulated.³⁴

Fodor suggests that the output of the language faculty is the type-identity of a sentence together with its logical form, with features of interpretation such as metaphor, irony, hyperbole, or other kinds of speaker meaning, treated as post-perceptual comprehension (as undertaken outside the language faculty, probably in the central processing system).³⁵ This division seems essentially right to me, though note that, on the account to hand, (minimal) semantic processing counts as a part of the language faculty. There is an algorithm for determining meaning and it is this semantic interpretation which provides the output for the language faculty. Although it is more than just a logical form, this semantic representation does, I think, possess the required degree of shallowness, for it is computationally arrived at without any appeal to speaker intentions (as initially

indicated in the last chapter, and as we will see more clearly in what follows).

One result of this way of carving things up, however, is that we seem to lose a well-rehearsed distinction sometimes referred to as the difference between what is stated (or what is said) and what is (merely) implied. For notice that, on the current model, linguistic comprehension proper will yield a shallow, minimal semantic interpretation, and this will then become subject to a range of pragmatic processes which will in turn yield a range of propositions more or less tightly connected to the original, literal sentence meaning. So, for instance, consider an utterance by S of “It’s raining” which may be interpreted in any of the following ways by an addressee (given a suitable context of utterance of course):

(1) S said that it’s raining at some location salient to S.
(2) S said that it’s raining in London.
(3) S said that it’s raining in Oxford St, in London, UK, at 10 am GMT on 1/1/03.
(4) S said that the UK drought is over.
(5) S said that S doesn’t want to go out.
(6) S said that S doesn’t think we can play tennis.

It seems intuitively clear that the first half of these interpretations are somehow ‘closer’ in meaning to the original utterance than the latter three. This intuitive difference is often characterized by the claim that, though S asserted (or said) the propositions described in (1–3) (i.e. they form part of what was literally said by S), she only implied the propositions in (4–6). However, on the current model, all six of these reports of what S said apparently have the same status: they are propositions which are arrived at via some kind of pragmatic processing of the original, shallow semantic interpretation of S’s utterance.³⁶ So, one objection to the idea that our semantic theory issues in shallow output might be that it is unable to support distinctions that we intuitively want to draw, like that between what is stated and what is only implied; this is a worry that I will return to below (§2.5). For now, however, the claim is just that

³⁶ Though this somewhat begs the question concerning so-called ‘unarticulated constituents’; see note 28.
what a semantic theory gets us is indeed a shallow, minimal level
of representation, with richer, pragmatically effected interpretations
emerging at some point beyond the confines of the language faculty.

2.3.7 Semantic processing is associated with a fixed neural
structure and exhibits specific patterns of breakdown and
acquisition or development

[We] do find neurological structure associated with the perceptual systems
and with language. Whatever the right interpretation of this finding may be,
it provides yet another reason to believe that the input systems constitute a
natural kind.37

I’ve put together the last two properties Fodor suggests are characteristic
of modules since they seem to be closely related. For it seems that at least
some of the evidence for a specific neurological structure associated with
the language faculty will come from the kinds of patterns of acquisition
and loss, paired with claims about the preservation or loss of neural
structure, which linguistic skills exhibit. So a primary piece of evidence
we will be interested in here is whether semantic competence can be
selectively impaired or lost, leaving other kinds of linguistic or non-
linguistic understanding unscarred; or whether semantic abilities can
remain intact when other (perhaps putatively related) non-linguistic abil-
ities are missing.38 Clearly, if it is possible for semantic understanding to
be singled out for preservation or loss, this would support the idea that
there is a discrete, relatively autonomous module underpinning our
ordinary linguistic (semantic) comprehension.

Recall that the current modular hypothesis concerning linguistic
understanding posits sub-modules within the larger language faculty,
which include sub-modules for syntax and (minimal) semantics. This
modular language faculty as a whole then feeds out into an essentially
non-modular or global body which accounts for the agent’s general
intelligence (for example, her ability to engage in abductive, all-things-
considered thinking, such as problem solving or theory construction). Given this picture, it seems that there are at least eight distributions of

38 Though we should also heed Chomsky’s 2000: 4 warning that “an organ is not something that can
be removed from the body, leaving the rest intact. It is a subsystem of a more complex structure.”
The suggestion I want to make is that, whenever a combination of preservation and loss is predicted by our modular account, if that combination is in principle verifiable at all, then there are existing conditions where patients apparently fit the profile in question. If this claim is correct, if all the combinations of preservation and loss predicted by the theory can be found in practice, then this would seem to lend empirical support to the modular theory of linguistic comprehension which we are currently considering. That is to say, the existence of such conditions would lend support to the idea that linguistic comprehension, up to and including semantic comprehension, should be treated as underpinned by a separate, isolatable module in the language user’s mind. So, let us turn now to consider the kinds of impairments we find with respect to linguistic skills.

<table>
<thead>
<tr>
<th>lower level linguistic skills (e.g. syntax)</th>
<th>semantic skills</th>
<th>non-linguistic, pragmatic skills</th>
<th>resulting condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>×</td>
<td>×</td>
<td>complete impairment across linguistic and pragmatic domains</td>
</tr>
<tr>
<td>(b)</td>
<td>×</td>
<td>×</td>
<td>stroke victims, aphasics</td>
</tr>
<tr>
<td>(c)</td>
<td>×</td>
<td>✓</td>
<td>either: unverifiable or dysphasia/specific language impairments</td>
</tr>
<tr>
<td>(d)</td>
<td>×</td>
<td>✓</td>
<td>either: unverifiable or dysphasia/specific language impairments</td>
</tr>
<tr>
<td>(e)</td>
<td>✓</td>
<td>×</td>
<td>unverifiable</td>
</tr>
<tr>
<td>(f)</td>
<td>✓</td>
<td>×</td>
<td>unverifiable</td>
</tr>
<tr>
<td>(g)</td>
<td>✓</td>
<td>✓</td>
<td>Aspergers patients, certain schizophrenic patients, those with frontal lobe damage (and perhaps Williams syndrome).</td>
</tr>
<tr>
<td>(h)</td>
<td>✓</td>
<td>✓</td>
<td>normal agent</td>
</tr>
</tbody>
</table>

Figure 2.1. Predicted combinations of preservation and loss for syntax, semantics, and non-linguistic abilities.
The combination of conditions given in (a) and (h) can be ignored for present purposes, since, as they predict either total loss or total preservation, they can tell us nothing about the relationship between linguistic and non-linguistic skills. Furthermore, of the remaining positions (b–g), (e) and (f) specify combinations of preservation and loss which are (currently) unverifiable.\(^3\) For instance, (e) specifies preservation of syntactic skills and loss of semantic and non-linguistic skills, yet this combination would leave the putative remaining abilities effectively marooned. Though we might expect such a patient still to be able to make accurate assessments of, say, whether a given sentence was grammatical or not (despite the fact that they would be unable to construct the meaning of the sentence), it is hard to envisage how the conditions for such a test could be explained to someone lacking semantic comprehension, nor how they might convey that they have correctly grasped the test to hand.\(^4\)

So, what of the remaining positions? If the loss of syntactic processing in (c) or (d) is presumed to be total then these positions would also be unverifiable, since the semantic information the patient is hypothesized to have retained would be entirely idle, having no input to deal with. However, partial syntactic damage or loss can be combined with semantic preservation in the way envisaged, and this condition seems to be realized in a range of specific language impairments (SLIs) or dysphasia. As the name suggests, specific language impairments are highly selective pathologies, for instance it is often particular grammatical morphemes, like plurals or past tenses, which are impaired,

\(^3\) Perhaps this claim is too strong, for it might be suggested that evidence for the combination of loss and preservation in (f) could come via, say, finding out that there was a divergent level of interest amongst patients with impaired semantic skills between grammatical and ungrammatical sentences (so that patients who have lost semantic skills, say through stroke or other impairment, look longer at ungrammatical sentences). However, whether this was found to hold or not, the correct interpretation of any such findings would, it seems, remain very much open to question. An alternative suggestion, made by a reader, might be that some form of neurophysiological study could help here (MRI scans, autopsy, etc.) by revealing which regions of the brain were active/impaired. While this is right, it also seems clear that, given our current state of brain mapping, this kind of fine-grained neurophysiological result is going to be hard to come by.

\(^4\) One thought might be that we could teach, say, a monolingual speaker of English the grammar, but not the semantics, of another language (say, teaching them the grammatical rules of some restricted portion of French and giving them a list of some elements from each syntactic category). If such an agent could then make correct assessments of well-formedness without any knowledge of linguistic meaning, this would seem to show that syntactic representation could exist without semantic processing (the combination predicted by (e) or (f)). However, we should note that this would only show that syntactic representation is possible without semantic representation for that language. The agent would clearly possess semantic information, namely that required to understand English; thus she would not demonstrate the presence of syntactic abilities in the absence of semantic comprehension in toto.
with other cognitive skills apparently untouched. So dysphasics are usually of normal intelligence, and the pragmatic aspects of their speech are usually unaffected (they tell jokes, tease, respond to implicit information, etc.). Furthermore, their semantic abilities seem in general unimpeded, with adult speakers often engaging in a full and correct use of language (though under test conditions it can be revealed that their underlying grammar remains impaired, with this fact being masked at a surface level through the development of coping strategies). Thus as Gopnik and Crago note:

A primary question that has been raised with respect to explanations of dysphasia is whether the underlying rules that are impaired are specific to language or whether it is more accurate to say that dysphasics are cognitively impaired and that their problems with language are a secondary effect of this more general cognitive deficit . . . Because those parts of language that are unimpaired are at least as complex as those that are impaired, it is not clear that this deficit could be caused by a more general cognitive problem. The damage dysphasics suffer seems to be contained entirely within their knowledge of the grammar of their language, with this selective impairment not impacting further on their knowledge of meaning or their non-linguistic skills. Thus such subjects seem to realize the combination of loss and preservation captured by (d) above.

However, the most important cases from our current point of view (which, remember, is interested in drawing a distinction between the language faculty proper, up to and including minimal semantic information, and other, global cognitive skills) concern those cases where the language faculty is lost while other, non-linguistic skills are retained, or where the language faculty is retained while other, non-linguistic skills are lost. It seems clear that the former combination, given by (b) above, can occur; indeed it seems that there are a range of patients who display such a pattern of loss. For sufferers of certain types of aphasia, including some stroke victims, show clear evidence of social and communicative abilities, even when their entire language faculty seems to be fundamentally damaged. It is often a source of much apparent frustration to such patients that they are

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41 Evidence for the pattern of loss and preservation in (c), of course, would be patients with SLIs together with other forms of (non-linguistic) impairment. However, since on the current model the two types of loss are quite independent of one another, it would be something of a coincidence to find them together; there is thus no expectation that a given condition would systematically result in this pattern of loss.

unable to ‘put what they want into words’, to state accurately via language what they want, instead being thrown back on an imperfect system of mimes, gestures and guesses. Cases where the language faculty seems to be lost while global, communicative skills are retained, thus give us one part of the evidence for a separation between the language module and the cognitive underpinnings of communication. However, we should be clear that on its own it doesn’t show us that linguistic and non-linguistic skills are underpinned by entirely different modules/cognitive mechanisms. For it might be (as, say, Sperber and Wilson have argued) that linguistic comprehension is a sub-module of a broader, communicative competence. This would allow linguistic comprehension to be selectively lost while wider communicative skills are preserved, since the former ability is subsumed within the latter. Thus to show that genuinely different modules are involved here we would also need to see that there are cases where semantic skills are retained while other, non-linguistic or communicative skills are lost (position (g)).

Now, clearly any such cases are going to be pretty controversial, since it will be difficult to ascertain that a patient genuinely retains semantic information if other cognitive skills are missing. However, at least prima facie, there do seem to be patients who exhibit this combination of deficit and preservation. For instance, certain types of patients with frontal lobe damage, as well as autistic and schizophrenic patients, appear perfectly normal in their comprehension of literal meaning and yet they are often unable to move beyond this level of interpretation; for instance, they often fail to pick up on a speaker’s implicatures, irony, and metaphor. As Langdon et al. write:

[I]t has been known for many years that patients with frontal lesions exhibit pervasive pragmatics deficits including (a) difficulty with formulating hints . . . (b) impaired ability to provide adequate information (e.g. when explaining a board game to a novice . . .) (c) failure to take account of

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44 Perhaps the most well documented of these kinds of cases involves sufferers of Aspergers syndrome, a form of autism where the patients retain a high level of function in a range of cognitive skills, including literal language comprehension. Such patients acquire a normal vocabulary and syntax, but are highly literal, speaking, as Asperger himself put it, like “little professors”. The question of what autistic speakers can show us about the nature of linguistic comprehension is discussed further in Glüer and Pagin 2003. For experimental evidence that certain kinds of frontal lobe damage result in loss of pragmatic, communicative skills while leaving grasp of literal meaning intact, see McDonald and Pearce 1992 (though for an objection to the methodology used see Gibbs 2002).
a listener’s interest when conversing . . . and (d) literal misinterpretations of sarcastic utterances . . . More recently it has been found that patients with frontal lesions also demonstrate general mind-reading deficits on story and cartoon versions of traditional theory-of-mind tasks and on a less traditional perspective-taking test of general mind-reading ability. Finally there is evidence from within the psychiatric literature that individuals who become poor pragmatic communicators later in life due to some form of late on-set neuropathology also turn out to be poor mind-readers. The primary example here . . . is schizophrenia.⁴⁵

The key point to notice here, however, is that the cognitive impairment these patients apparently display with respect to intentional explanation of others’ behaviour does not seem to affect adversely their handling of literal sentence meaning. Though patients fail on a range of communicative tests, their grasp of literal linguistic meaning seems normal. This kind of failure to move to a richer, more contextually sensitive interpretation of some linguistic input/output would be well explained on the assumption that language users have a discrete faculty for computing meaning up to and including bare literal meaning, but which then requires the operation of a quite different kind of comprehension process to move to a grasp of what is communicated by that utterance in any particular case (further kinds of processes which may well have become disordered or degraded in the schizophrenic or damaged mind). As Caplan notes:

The difficulties schizophrenic adults have presenting the listener with a clear and coherent message have been described by clinical terms, such as formal thought disorder . . ., and by linguistic terms, such as aphasia . . . and discourse deficits . . . These different approaches in the past led to a debate on whether the communicative impairments of schizophrenic adults reflected a thought disorder or a language disorder . . . Numerous clinical . . . and linguistic studies . . . over the past four decades have demonstrated, however, that schizophrenic adults have a thought disorder rather than a language disorder.⁴⁶

It may also be that sufferers from Williams syndrome are relevant here. Patients with this rare genetic disorder display extremely high linguistic functioning coupled with high degrees of impairment across a range of other abilities. Williams syndrome sufferers are, by all usual measures, significantly mentally retarded; they are unable to lead independent

lives, require a high degree of supervision, often have difficulties dressing themselves, remembering routines, and producing spatial representations or orderings. Yet, despite the severity of their impairment in so many other areas, linguistic ability not only remains unaffected but is often unusually advanced for the patient’s age.⁴⁷ For instance, Steven Pinker describes a case from the psychologist Richard Cromer, where a girl called ‘Denyse’ talked in detail about the problems with her joint bank account, despite the fact that cognitive disability meant that she had never had a bank account, could not read or write, or handle money, and clearly lacked most of the non-linguistic knowledge usually associated with possession of the concept ‘joint bank account’.⁴⁸

In further case studies, Bellugi et al. note that, in spontaneous speech, Williams syndrome children use an advanced and unusual vocabulary, displaying a proper understanding of their words, both through explicit definition and correct use. For instance, in describing her experience at the hospital to her father, one seventeen-year-old Williams patient spoke as follows:

There is a huge magnetic machine. It took a picture inside the brain. You could talk but not move your head because that would ruin the whole thing and they would have to start all over again. After it’s all done they show you your brain on a computer and they see how large it is. And the machine on the other side of the room takes pictures from the computer. They can take pictures instantly. Oh, and it was very exciting!⁴⁹

Yet these are children who are severely cognitively impaired (the above seventeen-year-old, for instance, had an IQ of just 50). They fail, as Bellugi et al. show, simple tasks of spatial arrangement, such as ordering a set of rods in terms of their length or drawing a representative picture of a given object (like a bicycle or an elephant). Sufferers from Williams syndrome are extremely unusual in that the high levels of cognitive impairment across a range of other areas seems to have left linguistic understanding (including semantic comprehension) relatively untouched.⁵⁰ If this is the correct interpretation of their condition

⁴⁷ Rossen et al. 1996: 377 write “[Williams syndrome] individuals typically fail conservation tasks and cannot add two columns of numbers yet can correctly pick out from an array the correct pictures relating to words denoting such concepts as ‘abrasive’ or ‘solemn’.” They also contend that in tests for knowledge of semantic category Williams syndrome patients perform at the level of chronological, not mental, age (379).


⁵⁰ There is, however, recent work which seems to show that both the grammar and the semantic processing of Williams syndrome patients is subtly impaired. See Rossen et al. 1996; Volterra et al. 2001.
then it seems to provide further evidence for the existence of a separate and separable language faculty which includes semantic processing; a separate faculty which is preserved in Williams patients, Aspergers sufferers, schizophrenic patients, and some patients with frontal lobe damage, in the face of varying degrees of damage to other cognitive mechanisms.\textsuperscript{51} As Bellugi \textit{et al.} conclude:

Cases of selective impairment in development are rare, since mental retardation generally results in similar depression of cognitive functions across domains. The Williams syndrome disorder results in an uneven profile of cognitive abilities; linguistic performance far outstrips other cognitive domains and often appears \textit{decoupled} from purported cognitive prerequisites. Co-occurring with marked cognitive deficits, the children’s expressive language is complex and often grammatically correct – an island of sparing of linguistic capacities.\textsuperscript{52}

2.3.8 Conclusion: semantic understanding is modular

So, then, examination of the properties Fodor originally suggested as characteristic of a cognitive module apparently reveals that grasp of literal linguistic meaning possesses the majority of them. There does seem to be a level of content which agents can recover on presentation of a natural language sentence which is domain specific (both in terms of the range of stimulus which leads to such interpretations and in terms of the scope of the rules which underpin the interpretation), informationally encapsulated, and mandatory. We grasp literal sentence meaning in a vacuum as it were, free from the vast range of other things we know. To grasp the literal meaning of a sentence it no more matters whether it is the most predictable one possible in some context or whether it is the most surprising, its meaning, and competent

\textsuperscript{51} Of course, there are other ways to interpret the condition of Williams patients; for instance, it has been suggested to me that such patients in actual fact do not possess a proper semantic understanding of their language (rather they merely ‘parrot’ other speakers). However, the coherence and length of these patients’ spontaneous dialogues, and their accuracy in question and answer sessions, makes this proposal, I think, difficult to sustain. A better suggestion, which would also be problematic for my interpretation but which would lend support to Sperber and Wilson’s division of cognitive labour here, is that part of the cognitive sparing in these patients includes a theory of mind module; see Karmiloff-Smith \textit{et al.} 1995. If this is right, then the focus of my argument would rest with Aspergers, schizophrenic, frontal lobe damage, and other patients where it is clearer that pragmatic, theory of mind skills are lost or damaged. It might also be noted that Karmiloff-Smith 1992 does herself apparently endorse the division of skills envisaged here, though for non-Williams cases; for instance, she contends that in hydrocephalus with associated myelomeningocele exceedingly proficient language output can co-exist with serious deficits in both face processing and theory of mind tasks.

\textsuperscript{52} Bellugi \textit{et al.} 1993: 189.
addressees’ ability to grasp this meaning, remains unchanged. Furthermore, this kind of content recovery is, in the normal case, incredibly fast; indeed, phenomenologically, there often seems to be simply no gap at all between hearing an acoustic linguistic object, or seeing a written sentence, and recovering its meaning. Also, assessments of literal meaning, just like minimal perceptual representations of a scene, are open to consciousness in a relatively limited way: it is representations of the gist of what is asserted, or of what was seen, that surface to consciousness and are retained in memory in most cases. Finally, while recognizing that the more empirical issues of patterns of acquisition and loss, paired with patterns of physical (brain) development and loss, require much further study, still it seems that initial evidence does tend to support the idea that semantic understanding may be selectively impaired or spared. So, it seems, the literal interpretation of words and sentences does show all the hallmarks of a genuinely modular process.

Where then does this leave us with respect to our search for a specific kind of semantic theory? Well, in §2.2 I argued for a conditional claim: if we thought that grasp of literal linguistic meaning was a modular process, then the right kind of theory to account for semantic understanding would be a formal theory. For on this kind of approach to semantics, grasp of literal linguistic meaning is a purely computational process; it can be calculated by processes which are sensitive only to the local properties of syntactic representations, rather than via sensitivity to global features, like the agent’s entire belief set. In this section I have tried to suggest that there is good reason to think that the antecedent of the above conditional claim is true: there intuitively does seem to be a level of content which can be recovered by competent language users when faced with a sentence of a natural language, the grasp of which displays all the properties which are taken to be characteristic of genuinely modular activities. If this is right, it lends strong support to the idea that a formal semantic theory provides the right kind of approach to the understanding of linguistic meaning, and it argues against the idea of a use-based approach to semantic content. For a use-based approach, with its reliance on rich, abductive reasoning processes, can find

53. Indeed Sperber and Wilson 1986: 177 are in agreement with this claim: “The linguistic decoding system has all the hallmarks of automatic, reflex perceptual systems such as hearing and vision. In the terms of Fodor (1983) . . . it is an input system rather than a central processing system, and this is one reason why it has been relatively amenable to study.” Though recall that, for them, linguistic decoding does not (often) reach the propositional level.
no place within a computational, syntactically driven language faculty. Now I’d like to turn to consider some additional benefits of adopting the formal-semantics-plus-modularity picture, for it seems that the account is able to deliver a good explanation of a range of phenomena surrounding speech acts.

2.4 Semantic Modularity and Speech Acts

Say that it is right to posit a language module underpinning our linguistic comprehension (a module which includes phonetic/orthographic information and rules, syntactical information and rules, and semantic information and rules) and that this genuinely linguistic comprehension is distinct to, and separable from, more general or global cognitive abilities, like the ability to interpret communicative acts or mind-reading skills in general. We might then wonder what this way of dividing up our cognitive resources does to the distinction between literal (semantic) and conveyed (pragmatic) meaning. That is to say, if we divide semantics and pragmatics in this way (primarily in terms of the different kinds of processes which underpin each domain: computational in the former, abductive in the latter) what does this do to the relationship between sentences and speech acts? I think this issue surfaces in three ways: first, where do speech act operators in general come into play? Second, what happens to the difference between stating and implying? Third, what do we do about aspects of linguistic meaning, like Grice’s conventional, or generalized conversational implicatures, which seem to fall between the semantic and the pragmatic domains?

54 We need to be clear here about exactly what these arguments establish. I take it that what concerns of modularity per se show is that the only kind of semantic processing which could take place within the language faculty would involve formal processes. They do not on their own suffice to show that those semantic processes must also involve the derivation of truth-conditional or propositional content; that is to say, they allow that the language faculty could contain a formal fragment of a semantic theory, like the decoding component in relevance theory, even though derivation of truth-conditional content would then be relegated to a point outside the module. The push towards the stronger claim that the module itself contains a complete semantic theory (that is, a theory capable of yielding literal meaning for sentences) must then come from elsewhere (for example, from claims raised in the introduction concerning competent speakers’ ability to assess natural language sentences for truth/falsity, together with the arguments of subsequent chapters that there is no reason to think well-formed natural language sentences do not express truth-conditional content).
Turning first to the question of speech acts in general, it has long been recognized that a single type-sentence may play very different roles in a communicative exchange depending on the force with which it is produced. For instance, the sentence ‘You can come in now’ can be uttered as an assertion, a request or a command, and an addressee may behave very differently depending on which type of speech act is performed. However, since it is one and the same (formally described) sentence in each case, this does not seem to be an aspect of meaning which falls within the purview of a formal semantic theory. This is often seen as a problem for formal semantic approaches; though formal semantic theories, the objection goes, may be able to deal with simple declarative sentences, they are revealed as hopelessly inadequate once we turn our attention to the rich realm of natural language use and appreciate the range of different speech acts that agents may engage in. However, given the modular theory of linguistic comprehension outlined above, I think the idea that speech acts fall beyond the purview of our semantic theory should no longer be held to be either odd or problematic. It seems obvious that judgements concerning the kind of speech act performed by uttering a given sentence will depend on information far beyond that concerned with knowledge of language per se (at least where the type of speech act is not syntactically marked). To know whether S is commanding or requesting one to enter, one needs some pretty complex knowledge of relative power structures and a refined appreciation of social situations; on the modular theory advocated here there is simply no chance that a proper grasp of a natural language could furnish one with that kind of global information. So there is no hope of a modular explanation of speech act operators in general from within the language faculty. Yet this seems just as it should be, for grasping literal meaning seems a very different project from grasping kinds of speech act. The claim is, then, that sentences have a literal content, which can be specified via formal, computational methods, and which remains static across different types of speech act involving that sentence. Questions, commands, requests, and so on, are thus thought of as contextual operations on the kind of simple

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55 As Fodor 1983: 90 writes: “It is implicit in this proposal that [the language-input system] . . . doesn’t recover speech-act potential (except, perhaps, insofar as speech-act potential may be correlated with properties of form, as in English interrogative word-order).”
declarative sentences for which the language faculty is equipped to deliver assessments of literal meaning (see McDowell 1976).

This brings us to the second point, alluded to in Chapter 1, concerning the difference between stating and implying, and thus the vexed philosophical notion of ‘what is said’. Since this term has received a great deal of attention in the philosophical literature to date, I’d like to explore it at some length in what follows. I’ll argue that ‘what is said’ is best treated as a non-semantic matter, but that this does not leave our account unable to preserve the difference between what is said and what is (merely) implicated. The suggestion will be that the difference should be viewed, not as a distinction in kind (that is, semantically expressed propositions versus pragmatically conveyed propositions), but as a distinction of degree (that is, opposite ends on a scale of pragmatically conveyed propositions). Yet it will be seen that treating the distinction as one of degree in this way fits very well with our intuitions on the matter: there is, just as the formal-semantics-plus-modularity picture envisages, no determinate cut-off point between what we might take a speaker to have actually asserted by some utterance and what we take her to have merely implied.

2.5 The Semantic Relevance of ‘What is Said’

The notion of ‘what is said’ has received a great deal of attention in philosophy of language, primarily since Grice introduced the notion as a contrast to the notion of ‘what is implicated’:

[T]he total signification of an utterance may be regarded as divisible in two different ways. First, one may distinguish, within the total signification, between what is said (in a favored sense) and what is implicated; and second, one may distinguish between what is part of the conventional force (or meaning) of the utterance and what is not. This yields three elements – what is said, what is conventionally implicated, and what is nonconventionally implicated – though in a given utterance one or more of these elements may be missing.

Leaving aside conventional implicatures for the moment, we have a contrast between what is said or stated by an utterance of a sentence and what is merely implied. Turning to implicatures first: these are

kinds of pragmatic, secondary effects—propositions a speaker may convey via her utterance but which are not relevant to the semantic interpretation of the sentence produced. This is easiest to see with an example (in this case, of what Grice termed ‘conversational implicature’, perhaps the best-known form of non-conventional implicature): imagine I say “It’s a lovely day”, when all parties to the conversation can see that it is windy and wet outside. Now, what is said by the sentence is simply that it is a lovely day, and it seems we might think of this as giving the literal meaning of the utterance. Yet, assuming that I am a competent speaker and given that there is no contextual evidence to show that I, non-standardly for someone who lives in Britain, consider rain to be an attractive feature of a day, attributing this literal meaning to me as the proposition I want to convey will require treating me as saying something obviously false. Yet this would be to see me as flouting some general principle of good communication, such as ‘do not say things which are obviously or trivially false’. So, in situations like this, where attributing the literal interpretation of a sentence to a speaker would entail seeing them as explicitly flouting a maxim of good communication, a hearer is licensed in inferring some further, alternative proposition as the one the speaker really means to communicate (i.e. as the implicature). In this case, the hearer should infer that I am being ironic and what I really mean to communicate is that it is a horrible day.

Implicatures, then, contrast with the notion of ‘what is said’, the former being a pragmatic notion and the latter semantic. For Grice, ‘what is said’ is a technical term: it is exhausted by the literal meaning of the constituents of the sentence (the words), together with the contextual processes of disambiguation and reference assignment. However, it seems that there is also a more intuitive way in which the notion may be understood, where it relates to an audience’s grasp of what is asserted; ‘what is said’ intuitively seems to be the kind of thing which could be captured by instances of the locution ‘In uttering s, U said that p’. ⁵⁷ Furthermore, it seems that there is a prima facie reason for thinking that this second, less technical way of interpreting the notion of ‘what is said’ might be of semantic relevance, just as is its more technical Gricean cousin. For if a speaker, U, who utters

⁵⁷ Cf. Saul 2002a, who is very clear that, despite certain tendencies to read the notion of ‘what is said’ in this way, such a notion should not be confused with Grice’s own account.
a sentence, \( s \), can be correctly reported by a claim of the form ‘U said that \( p \)’ (where ‘\( p \)’ supplies the content sentence of an indirect speech act), then it does indeed seem plausible to claim that we have learnt something about the meaning of \( s \).

It is this intuitive notion of ‘what is said’, which connects to indirect speech reports, that I want to concentrate on now, for it seems to have given rise to a certain sort of stance on semantic theorizing. The idea is that a successful semantic theory needs to respect the connection between what is said by the utterance of a sentence and the literal meaning, or semantic content, of that sentence. Specifically, it may be thought that an adequate semantic theory should only assign a given content, \( p \), to some sentence, \( s \), if in uttering \( s \) a speaker says that \( p \). I will label this kind of view the ‘standard view’ and it is to this view that I want to turn now. For it seems from the outset that the formal, modular approach to semantic theorizing that I have recommended above is in tension with this intuitive picture. It is not clear how the kind of account I’m recommending could capture this intuitive relationship between correct semantic analyses and correct indirect speech reports; nor, following on from this, is it clear how the account can capture the distinction between stating and implying. I do not think either of these worries hold; however seeing why they do not will require a quite lengthy exploration of the relationship between a semantic theory and our intuitive notion of ‘what is said’.

2.5.1 The relationship between a semantic theory and ‘what is said’

Initially, at least, the idea that a semantic theory should tell us what information an utterance of a given sentence conveys seems quite unobjectionable; indeed it seems a mainstay of much formal semantic theorizing. It seems entirely plausible to maintain that, if U can be reported as having said that \( p \) by her utterance of \( s \), then \( p \) in some way gives the meaning of \( s \). However, recently such a view has come under attack, perhaps most notably in Cappelen and Lepore 1997, where it is objected that facts about reported speech in ordinary language do not support the claim that an intuitive notion of ‘what is said’ has any significant role in influencing the construction of a semantic theory. They write: “That a semantic theory should specify
what is said by utterances of sentences seems innocent enough, but, when this assumption is embodied by MA [the principle that an adequate semantic theory for a language L should assign p as the semantic content of a sentence S in L iff in uttering S a speaker says that p], semanticists both misconstrue the aim of semantics and unreasonably constrain the semantics for indirect speech”.

Ultimately, I want to side with Cappelen and Lepore as against what I have called the ‘standard view’, but to begin to get clear on what is at stake in the debate here, it seems that we need to start by establishing exactly what is being embraced by the former view and rejected by the latter—what is the relationship between a semantic theory and indirect speech reports that is under dispute?

I think there are (at least) five ways in which we might construe the relationship here (these are illustrated in Figure 2.2):

(a) One-way dependency—semantic analyses of a sentence, s, are dependent on the content of indirect speech reports concerning s. On this approach the content of a correct semantic clause for s is constituted (at least in part) by the content of correct indirect speech reports for an utterance of s.

(b) Two-way dependency: semantic analyses of a sentence, s, are dependent on the content of appropriate indirect speech reports (‘what is said*’) concerning s, but which indirect speech reports are appropriate is itself a matter which is influenced by the semantic theory in play.

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\(^{58}\) Cappelen and Lepore 1997: 279.
It may be objected that there is room for manoeuvre here between the original claim of there being ‘some kind of connection from indirect speech reports to semantic assessments’ and the claim made here that that connection is that one of ‘fixing the facts’. Perhaps instead, we might claim that the relationship is a merely evidential one, so that indirect speech reports are informative, but not constitutive, as far as semantic assessments are concerned. (I’m grateful to Rob Stainton for stressing this point.) I think this is fair enough, and I don’t want to object to the evidential picture per se (though I do have some questions, to be raised below, concerning exactly how helpful such an evidential picture could turn out to be in practice). However, we should note that such a claim does not seem to be strong enough to be of help to those who sign up to a principle like Cappelen and Lepore’s MA, quoted above.

(c) One-way dependency: semantic analyses of a sentence, $s$, are dependent on the content of *appropriate* indirect speech reports (‘what is said’), and which indirect speech reports are appropriate is determined by non-semantic features.

(d) One-way dependency—semantic analyses to indirect speech reports. Judgements concerning correct indirect speech reports are affected by the semantic analysis of the original sentence, but not vice versa.

(e) No dependency: judgements of correct indirect speech reports and the output of a correct semantic theory are independent of one another—one concerns communication and the other linguistic meaning, and these are distinct domains.

What unites (a–c), as against (d–e), is that there is held to be some kind of connection from (certain) judgements of what a speaker has said by her utterance of a given sentence to a correct semantic theory. This supports the idea that claims about what is said can be genuinely semantically informative or significant, for we can use the former to determine in some way the content of the latter. This is the claim made by the standard view; so is any such stance plausible?

Well, it seems fairly clear that the simplest construal of the standard view, given by (a), whereby fixing the facts about indirect speech reports fixes the facts for our semantic theory, is not plausible. For it is clear from even a momentary survey of the facts concerning reported speech in ordinary language that they diverge wildly from the kinds of features which can plausibly be taken to be the concern of semantics. To see this, imagine that Jim utters:

(7) Blair lives at No. 10.

(7) is a simple subject–predicate sentence, containing no overt indexicals, and thus would seem one of the most elementary cases for the advocate

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59 It may be objected that there is room for manoeuvre here between the original claim of there being ‘some kind of connection from indirect speech reports to semantic assessments’ and the claim made here that that connection is that one of ‘fixing the facts’. Perhaps instead, we might claim that the relationship is a merely evidential one, so that indirect speech reports are informative, but not constitutive, as far as semantic assessments are concerned. (I’m grateful to Rob Stainton for stressing this point.) I think this is fair enough, and I don’t want to object to the evidential picture per se (though I do have some questions, to be raised below, concerning exactly how helpful such an evidential picture could turn out to be in practice). However, we should note that such a claim does not seem to be strong enough to be of help to those who sign up to a principle like Cappelen and Lepore’s MA, quoted above.
of the semantic significance of indirect speech reports to deal with. Yet even here the problem is immediately obvious, for the utterance of (7) does not stand in a single, one : one relationship with some indirect speech report, but rather explodes into a plethora of possible indirect speech acts, all of which may be licensed by Jim’s production of (7). For instance, given the right sort of context of utterance and report, any of the following (among an indefinite number of others) may be acceptable:

(8) Jim said that Tony Blair lived at No. 10 Downing St, London, UK.

(9) Jim said that the current Prime Minister lives at No. 10.

(10) Jim said that that man lives there.

(11) Jim said that Baby Leo’s father lives in No. 10.

(12) Jim said that the most right-wing Labour leader to date secured power where other, more left-wing, predecessors had failed.

(13) Jim said that he knows about British politics.

Clearly, even in a basic case like (7), then, there are a vast range of potentially correct acts of reported speech, but intuitively we don’t want to countenance all of them as semantically informative as to the meaning of the original sentence.

For one thing, allowing all indirect speech reports to be semantically relevant would mean rejecting the idea that a single proposition provides the content of a simple (non-indexical and non-ambiguous) sentence. On the current view we would have to allow that any such sentence-type has a vast number of meanings, each one relating to something the sentence could be used to say. Such multiplying of meanings is an anathema to any kind of generalized semantic theory and would make entirely opaque how we ever learn or use a language. Secondly, however, it seems pretty clear that at least some of the above reports pick up not on what we might think of as the meaning of the antecedent sentence produced, but instead depend, at least in part, on features quite external to that sentence, like the conversational context in which it is produced and the (shared) background assumptions of speakers and hearers. Some of these indirect speech reports, though (potentially) perfectly acceptable, seem to be reporting things only tangentially connected with the meaning of the sentence produced.
For instance, it is easy to imagine a context in which (12) is acceptable: say Jim produced (7) in an argument about the relative merits of right-wing versus left-wing Labour leaders, where it was mutual knowledge that Blair was the most right-wing leader to date. Then (12) might well be an accurate report of what Jim conveyed to his audience on this occasion by his utterance. Yet, although it is relatively easy to find a context in which (12) is acceptable, this does not seem to lead us towards taking the content sentence of (12) to tell us anything much about the meaning of the sentence Jim originally produced. (12) may well give us what Jim meant by his utterance of (7), but this seems a very different thing to what the sentence itself means.

The problem we are recognizing here is that some perfectly legitimate indirect speech reports pick up not on sentence meaning but on what Grice termed ‘utterer’s meaning’ or what we’ve called ‘speaker meaning’. If this is correct, then there can be no general move from facts about indirect speech reports to facts about the correct content of our semantic theory. If we group together all the ordinarily correct instances of indirect speech reports (that is, acceptable occurrences of the ordinary language locution ‘U said that p’) then we get a rag-bag class of cases, polluted by an array of non-semantic features. What we need, it seems, is some way to select from this nebulous set some more refined class—to rule out, at the very least, acceptable indirect speech reports, like (12) or (13), which report not on the meaning of the original sentence, but merely on what the speaker who uttered it succeeded in conveying to their audience. It is no job of a successful semantic theory to tell us everything which a sentence may be used to say on a given occasion of utterance, and to adopt (a) is to overlook this basic fact.

So (a) is untenable. Yet we have no reason to saddle an advocate of the standard view with anything so unappealing, for both (b) and (c) above capture the claim that there is a way to move from indirect speech reports to semantic analyses, without falling prey to the objection above. For both these more moderate views hold that the construction of a correct semantic theory for some language L will be affected by indirect speech reports, but also that which indirect speech reports are relevant is itself something which is constrained in some way. So, let us turn now to these more refined versions of the standard view.

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2.5.2 A privileged notion of ‘what is said’?

The problem faced by advocates of a refined, semantically relevant, notion of ‘what is said’ is how they will select from among the entire set of ordinarily acceptable instances of indirect speech reports just those which are genuinely semantically informative. That is to say, faced with a set like (8–13) what principle can we use for selecting the semantically relevant sub-set, the ‘what is said*’ cases? A natural first move in answer to this question is to re-introduce the Gricean notion of ‘conversational implicature’. A proposition may be conversationally implied if it can be inferred from the meaning of the sentence produced together with the context of utterance, plus knowledge of some general principles of good communication. For instance, the speaker who utters “Someone hasn’t done their homework again”, in a context where it is clear to all parties that the recalcitrant student is Smith, might be taken to flout the maxim of quantity (by failing to convey the amount of relevant information which she possesses); thus her audience may be licensed in inferring some non-literal proposition as the one actually communicated, namely that Smith hasn’t done his homework again. For Grice, what is required to arrive at a conversational implicature is first to grasp the literal meaning of the sentence produced, then to see that this literal meaning flouts some quite general principle of good communication, and finally to infer that the literal proposition can’t be the one the speaker meant to convey and therefore it should be replaced with a more suitable proposition which no longer flouts the communicative principle in question.

Relying on this inferential aspect of conversational implicatures, then, we might claim that an indirect speech report can be semantically informative just in case it reports a proposition which can provide the basis for an inference to a further conveyed proposition, but which is not itself inferentially arrived at. Although this principle is roughly sketched, let us assume for the sake of argument that it (or something similar) does indeed hold good, providing us with a clear way of individuating speech reports picking up on conversational implicatures from those which do not. The question then is: is this enough? Is the

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62 Though this need not be taken as a claim about the actual cognitive procedures employed by a given interlocutor; cf. the debate over the ‘Availability Principle’ in Recanati 1989; Nicolle and Clarke 1999; Bach 2001; and Taylor 2001.
class of acceptable indirect speech reports *sans* those which pick up on conversational implicatures a class which we can take to be semantically relevant? Consider again Jim’s utterance of (7), and the small sample of acceptable indirect speech reports (8–13). Certainly some of these fit the model of conversational implicature reports, as just sketched. For instance, (12) and (13) might well be thought to arise as acceptable reports just in case Jim’s original utterance, if understood literally, does not meet the requirements of some Gricean principle of good communication (say, relevance) in the context in which (7) was uttered.

However, it is not at all clear that any of the other reports fit this model of conversational implicature reporting, yet nor is it clear that we want to count all of the remaining reports as semantically informative. Take (11) for instance (‘Jim said that Baby Leo’s father lives in No.10’). Here the proper name ‘Blair’ has been replaced by the possessive ‘Baby Leo’s father’, while the relationship ‘living at No.10’ has been changed to ‘living in No.10’. Now we can easily imagine (11) being an acceptable report of what Jim said—say if the speaker of (11) wants to report Jim’s utterance to a fellow worker in Leo’s nursery, who is unaware that Leo’s father is Blair. Here the case seems very different to one of straightforward conversational implicature; it is not as if the speaker of (11) had to work out the literal meaning of Jim’s utterance, see it as somehow conversationally improper (after all, we are imagining that Jim’s utterance was perfectly proper in the context in which it was uttered, it is only that, in the context of reporting, the expressions used would not be so apt), and infer her way to the content sentence of (11). Yet, on the other hand, it seems simply wrong to think that any part of the meaning of the sentence in (1) is given by the expression ‘Baby Leo’s father’ (after all, one could perfectly well understand the sentence in (1) without any grasp of the predicate ‘__ is the father of __’).

If this is right then the refined notion of ‘what is said∗∗’ in play at the moment (that is, one which rules out only conversational implicature) is not strict enough: there are some perfectly acceptable indirect speech reports, which are not instances of conversational implicature reporting, which do not serve to dictate the correct semantic analysis of the original sentence. What we need is a more restricted version of ‘what is said∗∗’, and again the question is ‘how is this to be arrived at?’ At this point, it seems to me that there are two broad approaches the advocate
of semantic significance for certain indirect speech acts might pursue: either our theorist may take the appropriate cases of indirect speech to be delivered through their relationship to the correct semantic theory (position (b)), or she may take the appropriate set of cases to be delivered via some non-semantic (e.g. perhaps syntactic) route (position (c)). On the former approach, the idea is roughly that lurking behind the everyday notion of ‘what is said’ is a semantically informed notion – something like ‘literally said’—and it is this semantically informed notion which is to play the key role in construction of our semantic theory. On the latter approach, the everyday notion is thought to be redundant for semantic theorizing, and instead what is introduced is an independent, technical definition of ‘what is said*’, which can play precisely the semantically informative notion envisaged for it. In what follows I want to explore both these types of approach, but the claim will be, to the extent that either of them can deliver something semantically informative, the additional trip through ‘what is said’ is theoretically redundant.

So, let us begin with approaches of type (b), where we come to judgements of what is said already armed with some independent conception of semantic content. We do not expect judgements of indirect speech reports to dictate semantic analyses (to be made in a semantic vacuum, as it were), but instead see them as already informed by semantic evaluations. Thus advocates of (b) are unscathed by the fundamental objection to (a) above, for the crucial notion of ‘what is said*’ is not co-extensive with the ordinary language locution (which may pick up on speaker meaning rather than literal sentence-meaning) but is instead itself a semantically informed notion. The important idea now is something like ‘literally said’ or ‘strictly said’, where this isolates the peculiarly semantic information conveyed by the utterance of a sentence.⁶³

Now, initially at least, it seems that there is something of an air of circularity here: ‘what is said*’ is supposed to be a semantically informative notion, yet it itself is to be semantically informed, and this may seem worrying. However, advocates of this position can dissipate the perceived problem by distinguishing between epistemic and metaphysical claims. For it may be that the special relationship between

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⁶³ Cf. Richard 1998: 606, “A literal utterance of S literally says p just in case (according to [a correct semantic theory for English]) the semantic content of S (in the utterance) is p.”
privileged indirect speech reports and the semantic theory is a matter of *metaphysics* (for example, facts about ‘what is said’ in this privileged sense supervene directly on semantic facts), while the sense in which facts about ‘what is said*’ are semantically informative is an *epistemic* one (they don’t, as (a) would have it, supply the raw data for our semantic theory, but can act as a guide or indicator of the contents of a correct semantic theory). In this way, judgements about what is said* are thought to be more accessible or intuitively obvious than direct reflection on the contents of a semantic theory; thus they are available to provide an initial epistemic guide. This idea of epistemic immediacy is, for instance, endorsed by Reimer, who defines ‘what is said*’ as ‘the meaning of the sentence uttered, relativized to a context of utterance’ (a definition she attributes originally to Grice), and suggests:

This seems to be a ‘pre-theoretic phenomenon’. For one could easily explain to a non-philosopher (of language) what is meant by Grice’s notion of ‘what is said’ and then ask her to evaluate (for truth or falsity) statements of the form: In uttering S, a speaker ‘says that’ p.

The intuitions to which such a person would appeal would be ‘pre-theoretical’ in the relevant sense. For (by hypothesis) our speaker is not committed to any particular theory as to the meaning (the semantic content) of the contextually relativized S . . . For such reasons, her intuitions are properly regarded as potential *evidence* for semantic theories.\(^6^4\)

Now, although it seems correct to assign a degree of semantic immediacy or intuitive access to our ordinary judgements of ‘what is said’ (since competent speakers of a language have, in general, little difficulty in deciding whether to accept or reject putative reports of a given speech act), I think we must query Reimer’s suggestion that the more refined notion of ‘what is said*’ is one to which interlocutors in general have any such intuitive or unmediated access. For consider the range of putative counterexamples to the semantic relevance of what is said, as raised by Cappelen and Lepore 1997. They point out that, to take just a selection of cases, on occasion we may license the exchange of synonyms from the original sentence to the indirect speech report

\(^6^4\) Reimer 1998: 602. Recanati 1989: 309, also endorses the claim of epistemic immediacy for judgements of what is said: “I [have] made two related claims: first, that sentence meaning is something more abstract and theoretical than what is said; second, that we have ‘intuitions’ concerning what is said that serve as a starting point in the process of determining what the linguistic meaning of the sentence is’ (though we should note that he also denies that there is a purely semantic notion of ‘what is said’).
(for instance, allowing ‘bachelor’ to be reported via ‘unmarried male’),
or we may allow the exchange of co-referring terms (e.g. ‘Blair’ and
‘that man’), or exchange of descriptive phrases or relational properties
(e.g. ‘the Prime Minister’ for ‘the father of Baby Leo’). We may also
allow reports to pick out elements of the original utterance (e.g. an
utterance of ‘p and q’ reported by ‘q’), logical entailments (‘if p then q,
and p’ reported with ‘A said that q’), and paraphrases of the original
utterance (for instance, reports of a long fiscal statement with ‘A said
that inflation will fall’).

I would suggest that, faced with a range of cases like this, we have very
little reason to expect interlocutors to have any strong or consistent
intuitions about which ones count as literal reports and which ones do
not. Furthermore, to the extent that interlocutors are able to come to
judgements in this area, it seems that they must surely be secondary
to semantic judgements—we don’t, it seems, take \( s \) and \( p \) to mean
the same because we judge a report of ‘A said that \( p \)’ as a literal report
of some sentence \( s \), rather we judge a report as a literal report just in case
we think \( s \) and \( p \) mean the same thing. Consider a report of ‘that
man lives at No.10’ by ‘A said that the man over there lives at No.10’.
We will count this as a literal report only if we think that ‘that man’ and
‘the man over there’ mean the same (have the same semantic value); to
assume that we can make an assessment of literal reporting prior to this
kind of decision seems to put the cart before the horse. Or again, take
the report of (7) (‘Blair lives at No.10’) with (8) (‘Jim said that Tony
Blair lived at No.10 Downing St, London, UK’): does this count as an
instance of literal reporting? It seems to me that this is something we
simply lack any generally agreed intuitions about—in lieu of any

\[ \text{See Nicolle and Clarke 1999 for some experimental findings which apparently support the variability of our reporting practices, even when asked to report ‘what is said’}. \]

\[ \text{The same sort of problem, I think, undermines Richard’s 1998 response to Cappelen and Lepore. Richard suggests that we will ultimately be able to construct a set of individually necessary and jointly sufficient conditions which yield all and only the semantically informative instances of the commonsense locution ‘what is said’. Yet, even if we agreed on the feasibility of such a project, it seems clear to me that to so much as get started on this kind of rule construction we already need some pretty robust semantic intuitions. That is to say, to decide that we will accept or reject a case as an instance of literal saying, we already need to have decided what we think the original sentence literally means. What drives the introduction of any of the necessary conditions is not, I would suggest, an intuition about what is literally said by a literal utterance of \( s \), but simply a prior view about what \( s \) means.} \]

\[ \text{Reimer 1998: 602, fn. 9, notes this and suggests that the notion of ‘what is said’ might remain silent on difficult cases like replacing names with definite descriptions; but, if this is the case, then the key claim of the standard view—that there is a genuinely semantically informative notion of ‘what is said’ which ties to intuitive judgements of speech reports—seems to me to have been significantly weakened.} \]
claims about the meaning of \( s \) who knows whether \( p \) in this case counts as a literal report? The attempt to avoid circularity here fails—for either we simply lack any intuitions concerning indirect speech reports like these, or those intuitions we can get hold of seem much better accommodated as direct semantic intuitions, concerning the meaning of the original sentence, as opposed to intuitions about some nebulous notion like ‘literal reporting’.

Perhaps instead then we should look to non-semantic features to deliver the relevant set of indirect speech reports; this is the stance taken by (c) above. On this view there is still a move from appropriate indirect speech reports to the content of a semantic theory, but our earlier charge of circularity is avoided, since we are not appealing to semantic features in spelling out the notion of ‘appropriateness’. Now, obviously, for this to be a substantial position, the theorist owes us an account of which non-semantic factors come into play. Yet there seems to be a good candidate here, in the form of an appeal to syntactic features. For instance, such a theorist might think to adapt something like Bach’s ‘syntactic correlation constraint’ (SCC):

According to which what is said must correspond to ‘the elements of [the sentence], their order, and their syntactic character’ [Studies in the Ways of Words, p. 87]. So if any element of the content of an utterance, i.e. of what the speaker intends to convey, does not correspond to any element of the sentence being uttered, it is not part of what is said.\(^{68}\)

Now, we should be clear that Bach himself rejects what I have called the standard view, for he denies that (certain) indirect speech reports can be used to dictate semantic content.\(^{69}\) But the pressing issue from our current perspective is whether something like SCC could be of help to the advocate of the standard view. Could we use such a principle to deliver a semantically informative notion of ‘what is said*’?

Well, I think the answer to this question really depends on how exactly the technical definition itself is to be interpreted. For the

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\(^{68}\) Bach 2001: 15. A somewhat similar approach can, I think, be found in Reimer 1998: 599: “The technical aspect of Grice’s notion lies in the fact that he uses ‘says’ in such a way that ‘what is said’ is very tightly constrained by the conventional meaning of the words uttered—considerably more so than it is in our ordinary, non-technical, sense of that locution.” The problems to be raised above carry over to this approach.

\(^{69}\) Thus, since he wants to hold on to a semantically significant (Gricean) notion of ‘what is said’, he would resist my identification of ‘what is said’ with what hearers judge speakers to have said, i.e. with indirect speech reports.
syntactic correlation constraint (as deployed by the advocate of the standard view) tells us that to fix on the privileged class of speech reports, we need to limit our attention to just those cases where the content sentence of the indirect speech report matches the original sentence in the above respects (that is, there is a one:one correspondence between the elements of each, their order and their syntactic character). Yet spelling out what exactly SCC itself amounts to remains, it seems, less than straightforward: it requires, first, an understanding of exactly what elements count as constituents of the original sentence, and, second, it requires that the notion of ‘correlation’ be spelt out. Bach himself concentrates on the first question—determining when an element counts as a constituent of a sentence and when it is better handled as a pragmatic introduction capturing speaker meaning instead of sentence meaning. For instance, he stresses that not all genuine syntactic constituents are voiced constituents. Thus in the exchange:

A: Has Jim left?
B: Yes, he has.

A proper report of B’s utterance could include the verb phrase ‘left’, since this is taken to be a syntactically present but unspoken element of the sentence B produced (on the grounds that it is recoverable from the immediate linguistic context of B’s utterance). On the other hand, something like the implicit restriction to alcohol in an utterance of “I only drink Scotch” is thought to be the result of pragmatic reasoning on the part of the hearer, rather than being supplied by a genuine syntactic constituent of the sentence produced.\textsuperscript{70} Clearly, this issue—of when an element can be traced to a syntactic but unvoiced constituent, and when it is a novel element introduced by pragmatic processes—is one which requires a great deal of attention and thus we will return to it in Chapter 4. However, the issue I want to concentrate on here is the second one noted above, namely how should we understand the key notion of ‘correlation’? For even if we have succeeded in determining the precise syntactic constituents of the original sentence, it remains an open question what constraints the correlation relationship puts on the elements of an indirect speech act.

\textsuperscript{70} Bach 1981: 238.
For instance, in some sense at least, the phrase ‘Baby Leo’s father’ in (11) correlates to the proper name ‘Blair’ in (7): both expressions play the role of determining an object—a person—as the subject of an ensuing predicative act, and both expressions turn out (given the way the world actually is) to deliver the very same object, but as we have already conceded (11) is not easily treated as semantically informative as to (7). Now of course an advocate of SCC may object that these two expressions—‘Blair’ and ‘Baby Leo’s father’—do not share a syntactic character, since the latter is (on most accounts) a quantified noun phrase and the former is (on most accounts) a referring term, but this move hardly seems to help. For what now is to stop an utterance of:

(14) The British Prime Minister lives at No. 10

being reported with:

(15) A said that the father of Leo lives at No. 10.

Here we have two descriptive phrases in subject position (indeed two descriptive phrases containing the same number of words), so intuitively two expressions of the same syntactic character, which are co-extensive (in the actual world), and which stand in a correlation relationship in the sense of ‘playing the same role in the sentence’, yet still it seems we don’t want to take part of the meaning of (14) to be given by (15).

The problem emerging is that, as yet, we can’t have an informative notion of ‘what is said*’ because the technical terms involved in the definition of ‘what is said*’ themselves have to be spelt out. Yet of course it is still open to the advocate of a syntactic constraint on ‘what is said*’ to tell us more about the notion she has in mind here. For instance, it might be held that whether or not an item in the original sentence genuinely correlates to an item in the content sentence of the indirect speech report is itself a matter which can be settled by intuitions (say about whether the two items count as ‘meaning the same’); however, on this approach we run the risk of collapsing back into the kind of direct appeal to semantic intuitions which we rejected above. Though we might end up with an indirect speech report which coincides with the semantic analysis assigned to the original sentence,

Furthermore, appeal to the extension of an expression across possible worlds can’t help either. Consider an utterance of “Blair is a cordate” reported with “Jim said that Blair is a renate.”
this would be entirely parasitic on prior semantic judgements, and thus the key idea that judgements about what is said can help specify the contents of a correct semantic theory would be lost. So, then, a more appealing move would be to adopt a very tight correlation relationship, one which, say, demanded \textit{type identity}—it is not enough that there be a one-to-one isomorphism between elements of the content sentence of the reported speech act and elements of the original sentence, what has to get mapped in each case is \textit{tokens of the very same type}.\footnote{This may seem too strong a constraint, since certain accommodations will have to be made for indexicals and demonstratives. An utterance of “I am cold” should not (usually) be reported with ‘U said that I am cold’. In these cases, the syntactic character of the expressions will (help to) determine a semantic value (e.g. the speaker of ‘I’) which should then be referentially indicated in the content sentence of the indirect speech report; see Recanati 1989: 297. Bach, however, wants to argue that even this move (at least in the demonstrative case) takes us too far from the semantically relevant (Gricean) notion of ‘what is said’, requiring as it does, appeal to speaker intentions to determine the referent of ‘that’; see Bach 2001: 31–3. In this case, the syntactic correlation constraint would indeed require something like type identity (so that an utterance of “That is G” must always be reported with ‘U said that that is G’). In personal correspondence, Bach has indicated that the notion of an interpreted logical form might be used to spell out his correlation relationship: thus, since ‘Baby Leo’s father’ contains constituents and structure that ‘Blair’ does not, ‘they do not really correlate’, that is, they don’t share a logical form. Yet, though this move may help Bach (concerned as he is with a Gricean notion of ‘what is said’ which is divorced from indirect speech reports, that is, divorced from an audience’s assessment of what the speaker of the sentence has said), as we will see below, such a move cannot be of assistance to any advocate of the standard view.}

Now, one consequence of this view, I think, is that we no longer have anything which approximates to the notion we first started with, that is, the notion of \textit{indirect} speech. We have in effect traded in \textit{oratio obliqua} for \textit{oratio recta}: the only kind of speech acts which will count as semantically informative are those which actually repeat the terms used in the original utterance. More worryingly for the advocate of the standard view, however, is that it is simply no longer clear what role the additional move through ‘what is said*’ is supposed to be playing. For the work of dictating the contents of a semantic theory is now being done by an independent principle relating syntax to semantics. What we have now is the claim that the contents of a semantic analysis for some sentence \(s\) are given by the \textit{syntactic contents} of that sentence—semantic meaning is extremely tightly tied to syntactic features. But \textit{this} is a principle we could simply apply directly to those sentences themselves. The extra trip through ‘what is said*’ seems theoretically otiose. The point here is not so much that such appeals to syntax fail to deliver a notion which will pick out all and only the semantically relevant instances of ‘what is said’, but rather that delivering this set now seems entirely \textit{secondary} to claims about how the syntactic features of our language map to semantic features. Yet, if this is the case, it seems
that we have failed to deliver a genuinely semantically informative notion. It’s the determination of the relationship between syntax and semantics that is informative, and it is merely a by-product of this that we can then isolate certain instances of the locution ‘A said that p’ where p matches the semantic content of the original sentence s.

So, the claim is that neither of the accounts of the privileged notion of ‘what is said’ provides us with the semantically informative notion we were after. On the one hand, there are accounts which take the set of privileged indirect speech reports to be constrained by semantic features (position (b)). Yet, to avoid circularity here, we need it to be the case that we have immediate, intuitive access to the set of semantically constrained indirect speech reports, that is, intuitively judging whether ‘A said that the man there was happy’ counts as a literal report of ‘that man is happy’. It seems, however, that ordinary speakers are not in general able to make this kind of fine-grained judgement, and, to the extent that they are willing to make assessments of this kind, such judgements are parasitic on prior judgements about the meaning of the original sentence. Yet if this is the case, then we might as well look to these intuitions about the meaning of the original sentence as the basis for our construction of a semantic theory. On the other hand, we have accounts which seek to constrain the semantically relevant set of indirect speech reports by appeal to non-semantic features, such as syntax (position (c)). Here, however, even if the privileged, syntactic relation can be adequately spelt out, the appeal to what is said once again becomes otiose; for the work in semantic theorizing is now being done by the relationship posited between syntax and semantics. Though the introduction of such a principle allows us to arrive at a set of (direct or indirect) speech reports which coincide with the content ascribed to a sentence by our semantic theory, the whole process is once again entirely secondary to the fundamental processes involved in construction of that semantic theory.

The path to delivering a semantically informative notion of ‘what is said’, where this connects to our assessments of indirect speech reports, seems fraught with difficulties; so why not simply reject the claim that judgements of ‘what is said’ by an utterance of a given sentence are in any way semantically relevant, that is, why not reject the semantic significance of the notion of ‘what is said’? Well, one reason to resist this kind of move might be the thought that we need to preserve some
kind of intimate connection between the two domains—correct reports of what is said must have something to do with the content of a semantic theory. That is to say, it might seem initially that the only alternative to the standard view is a position like (e) above, whereby there is thought to be no relationship between indirect speech reports and a semantic theory. In the final section I want to argue that, were this the case, it might well throw us back to the so far fruitless search for a way to delimit a semantically significant notion of ‘what is said’, but this is not the case, for opponents of the semantic significance of indirect speech reports have another option open to them.

2.5.3 The proper connection between a semantic theory and judgements of ‘what is said’

To reject the standard view we must hold that there is no route from indirect speech reports to the content of a semantic theory; that is, we must reject positions (a–c). Now, of course, one way to deny this claim is simply to deny that there is any relationship between the two realms at all; this is the claim made by (e). On (e) indirect speech reports and semantic theories belong to different domains of inquiry and each can proceed without any regard for the other. Yet it seems clear that (e) is not a very attractive position—it might not be logically impossible that there be a correct theory of meaning for some language L which plays no role at all in specifying the content of communicative acts involving the use of L (perhaps if L were a language used by a race who had direct, unmediated access to one another’s communicative intentions, so that language played for them some other, non-communicative role), but this certainly doesn’t seem plausible for our own cognitive condition. We simply cannot allow that there is no connection at all between what a correct semantic theory states for a given sentence and (correct) judgements of what that sentence may be used to say. It is perhaps the desire to avoid such an obviously unattractive position as (e) that motivates the search for a semantically relevant notion of ‘what is said’. However, as has been evident since §2.5, (e) is not the only position available to those who want to deny the standard view. Instead they might pursue position (d), whereby there is a one-way connection between the two realms, but it runs only from semantic analyses to judgements of what is said by the utterance of a given sentence. It is this position which I wish to advocate.
The claim I want to make is that the output of a semantic theory is relevant to determining acceptable or correct indirect speech reports, but that this is just because the output of such a theory provides the starting point for working out what given speakers communicate by an utterance of a given sentence. Since the semantic analysis of linguistic items like words or sentences provides the initial input to constructions of indirect speech reports, these latter reports are clearly dependent on the output of a semantic theory, but what is important to note is that this does not entail that there is any clear or accessible route back from judgements about what is said to the output of a semantic theory. What precludes this is that, on the model I would like to promote, by the time we reach any judgement of what is said by a given utterance in a given context the peculiarly semantic contribution will have been swamped beneath the influence of a vast range of other (non-semantic) factors. Finding out what is said is always, I would argue, finding out what someone said, sometime, someplace; it is, at heart, a notion which subsumes much more than mere semantic information, and this is why we should not expect a semantically informative notion to emerge from such essentially pragmatic considerations. The proper domain of semantics is the meaning of simple and complex linguistic items, and shifting our focus from this to the tangential relation of ‘what is said’ serves only to confuse matters—indirect speech reports supervene in part on the output of a correct semantic theory, but it is a mistake to think such speech reports can reveal anything about the proper content of a semantic theory.

Theorists like Recanati are, then, I believe, right when they suggest that pragmatic processes are necessary prior to any analysis of what is said. Thus, as Recanati writes:

There is a single notion of what is said, and that is a pragmatic notion: saying, as Grice claimed, is a variety of non-natural meaning, characterised by the role which the conventional meaning of the sentence plays in the hearer’s intended recognition of the speaker’s communicative intentions . . . There is . . . no purely semantic notion of what is said.⁷⁵

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⁷³ Though it might be objected that the notion of ‘what is said’ appealed to here is an illocutionary notion, whereas it is still possible to isolate a purely locutionary notion; see Bach and Harnish 1979: xv; Bach 1994b.

⁷⁴ Where I part company with Recanati and others, then, is with respect to their contention that this shows that the correct form for a theory of semantic content must be one which is pragmatic ‘all the way down’ as it were, that is, that there is no complete level of linguistic content which does not require appeal to speaker intentions to determine.

This recognition is at odds with the claims of a formal semantic theory (that is, the claim that we can deliver accounts of sentence meaning via appeal to formal features alone) only if ‘what is said’ is thought to be semantically relevant. Yet, as I have tried to argue, we have no reason to think this is the case. The facts about indirect speech reporting do not, from the start, support the idea that there is any intuitive notion of ‘what is said’ which is semantically significant. Furthermore, if we try, in the light of this, to replace the ordinary locution with some technical notion, ‘what is said*’, which delimits all and only the semantically relevant cases of reported speech, things do not seem to improve at all. For it seems the only option for yielding this refined notion of ‘what is said’ is to appeal either to semantic properties or to syntactic properties. However, as I have argued, the first move is unable to avoid the charge of circularity, while the second approach makes the appeal to ‘what is said’ theoretically otiose. Thus we simply cannot deliver the technical notion necessary to support claims of semantic significance for indirect speech reports, but nor, I have suggested in this section, should this finding worry us. For so long as we can preserve the connection from semantic analyses to judgements of what is said by the utterance of a given sentence we avoid collapse into the unpalatable position (e), yet without embracing the idea that indirect speech reports are semantically informative, that is, without holding that there is a semantically significant notion captured by the locution ‘By uttering s, U said that p.’

One last point: it may be objected that, on the model I want to advocate, we’ve lost the intuitive difference between stating and implying. Since all assessments of what is said are pragmatic assessments, it now seems as if all acts of reported speech have the same status. So, considering our original example of an utterance of “Blair lives at No.10”, all of the reports in (8–13) apparently have the same status, as pragmatic renditions of what was said by the utterance of this sentence in a given context. Yet, as we noted at the outset, this seems wrong, for some of the reports seem to be much more closely connected to the original utterance than others. We do want to be able to maintain, it seems, that some of (8–13) were genuinely asserted by the speaker of (7), while others were merely implied. Or again, consider A’s utterance of “It’s raining”, do we now have to claim that both of the following reports have exactly the same status?
The problem is that the above account seems to lack any way of distinguishing between ‘what is said’, or ‘what is stated’, and ‘what is implied’. We just have a whole bundle of propositions arrived at through some kind of pragmatic processing of the original semantic item.

However, I want to suggest that in fact this objection is misplaced, for though it is right to claim that the formal-semantics-plus-modularity picture advocated here does treat all assessments of what is said by the utterance of a sentence as propositions of the same kind, this does not entail that the account is unable to recognize any distinctions among them. For instance, it might be held that divergent assessments of what a speaker conveys by a given utterance can be ranked in terms of their ‘closeness’ to the original semantic item (that is, via the amount or kind of pragmatic processing required to arrive at them). In this way, rather than there being some neat and clean line between stating and implying, it would be a matter of a continuum, with a perhaps vague border between what a speaker genuinely asserts and what she merely conveys. All these interpretations can, on the current model, lie on a single continuum because they all have, fundamentally, the same status; they are all, if we want to stick with the usual terminology, instances of pragmatically conveyed propositions (instances of speaker meanings) rather than what is literally meant by the sentences in play. Yet the recognition of a range of propositions, some of which count as asserted by the speaker, some of which count as merely implied, and some of whose status is open to debate, seems to fit very well with our intuitions on the nature of the distinction between stating and implying; there doesn’t seem to be a concrete border here. Furthermore, it seems that in some contexts one kind of development might count as something stated by the utterance, while in another it counts as something implicated. Yet this all points to the relatively fluid, context-sensitive nature of the distinction, which the formal-semantics-plus-modularity model is well disposed to capture.

To recap: I have tried to argue in this section that, contrary to a well-entrenched view, there is no semantically informative notion captured by the locution ‘By uttering s, U said that p.’ ‘Saying’ or ‘asserting’ are pragmatic notions—they are fundamentally sensitive to much more
than mere linguistic meaning. This doesn’t mean that there is no connection between the two realms, but it does mean that we should not expect any direct way of moving from the existence of a correct report of the form ‘in uttering u, S said that p’ to the claim that p gives the literal meaning of the sentence uttered in u. This, then, is one more instance of the minimal nature of the semantic processing which the current account envisages, for it is no longer (if it ever was) thought to be the job of a semantic theory to explain different speech acts or what a speaker says by a given utterance. The task of semantics is to capture the literal meaning of words and sentences, nothing more. Finally, however, we should note that this way of carving up the semantic and the pragmatic does not prohibit our theorist from maintaining a distinction between ‘what is said/asserted’ and ‘what is implied’, even though she treats both notions as fundamentally pragmatic and therefore to be explained not through an agent’s knowledge of language per se, but rather through her knowledge of non-linguistic facts concerning the context of utterance. However, this brings us on to a final point I’d like to consider with respect to speech acts, for it may seem that there are aspects of linguistic meaning which are not well accommodated either as parts of a modular, computational language faculty or as parts of a global, pragmatic interpretation of communicated meaning. These are features like Grice’s conventional implicatures, or his generalized conversational implicatures. Thus it will be interesting to see whether the current model can offer any kind of explanation of these types of feature.

2.6 Conventional Implicatures and Generalized Conversational Implicatures

So, ‘what is said’, or ‘what is asserted’, and the notion of speech acts in general, belong outside the linguistic realm according to the current account. For they appeal to global, intentional features of explanation. Thus it is no task of our modular (formal) semantic theory to accommodate judgements of ‘what is said’. One third, and, for our purposes, final, positive feature of our current way of carving up the semantic and non-semantic concerns the ability of this account to respect not merely
a bifurcation between sentence-meaning and speaker-meaning, but also to allow for a staging-post between these two. The reason we might think we need something intermediate between sentence and speaker meaning lies with the Gricean notions of ‘conventional implicature’ and ‘generalized conversational implicature’. Conventional implicatures involve communicated meanings which form no part of the literal meaning of the expressions involved, yet which are also too general to count as merely conversationally implied. For instance, Grice suggested that we should understand the natural language expression ‘and’ as having its meaning given by the logical conjunction operator ‘&’. However, there is often a temporal ordering aspect to the use of the natural language expression which is not part of the meaning of the logical operator. Thus the following do not seem equivalent in English: ‘John took his employers to court and got made redundant’ and ‘John got made redundant and took his employers to court.’ Grice’s explanation of this temporal element (which is not present in all cases, ‘Mary got an “A” in maths and she got a “B” in history’ seems to invoke no such temporal ordering) was to treat it as a conventional implicature; it is ‘part of the conventional force (or meaning) of the utterance’, even though it is not strictly speaking part of the semantic content of ‘and’, since this is given just by the rule for logical conjunction. This sort of intermediary ground is also seen in his notion of generalized conversational implicatures (or ‘GCIs’). GCIs occur where “the use of a certain form of words in an utterance would normally (in the absence of special circumstances) carry such-and-such an implicature or type of implicature”. GCIs, like conventional implicatures, occupy a somewhat tenuous position, having to carve out for themselves a territory between that of literal meaning and that of particularized conversational implicatures (arrived at via the speaker’s overt flouting of one of the conversational maxims), and the tendency may well be for them to slide off into these opposing camps on either side. Yet Grice himself was very clear on the need to preserve an intermediate position and recently Stephen Levinson has argued at length that the distinction which Grice gave voice to should be preserved:

According to the standard line (more often presupposed than justified), there are two levels to a theory of communication: a level of sentence-meaning

(to be explicated by the theory of grammar in the large sense) and a level of speaker-meaning (to be explicated by a theory of pragmatics, perhaps centrally employing Grice’s notion of meaning) . . . This view, although parsimonious, is surely inadequate, indeed potentially pernicious, because it underestimates the regularity, recurrence, and systematicity of many kinds of pragmatic inferences. What it omits is a third layer, what we may call the level of statement- or utterance-meaning . . . or, as I will prefer below, utterance-type meaning. This third layer is a level of systematic pragmatic inference based not on direct computations about speaker-intentions but rather on general expectations about how language is normally used.\(^78\)

Although I don’t want to take a stance here on whether Grice and Levinson are right to envisage such a third, intermediate level of meaning (that is, whether there genuinely are such things as conventional implicatures or generalized conversational implicatures), it is worth noting that the current model can create the space for just such a grey area between literal sentence meaning and speaker meaning.\(^79\) For recall that a key feature of modularity is that it is a property of degree, not an all-or-nothing affair. With this in mind, it seems that the current account can allow a distinct staging post on the way to a final analysis of speaker meaning (with its appeal to all the relevant features of some particular context of utterance); a stage in analysis which, though non-deductive and beyond the confines of the language faculty \textit{per se}, nevertheless occurs prior to the full-blown operations of the general intelligence. Calculations of conventional implicatures and GCIs on this kind of picture would occur after the calculation of literal meaning and would come about when the output of the language faculty becomes sensitive to certain background information the agent possesses, concerning the ways in which such sentences or expressions are typically used. Clearly, any such processing will need access to features beyond those which I have suggested belong to the language faculty itself, concerning not formal features of the linguistic code but richer features of the way in which those coded messages have been used in the past. Furthermore, the reasoning processes underpinning any such calculations will be pragmatic inferences of a kind suggested as alien to the mechanisms within the language faculty proper. However, the processes in question might still be thought to be more

\(^{78}\) Levinson 2000: 22.

\(^{79}\) For further discussion of conventional implicatures/GCIs, see Saul 2002b; Carston 2002.
modular than those of the agent’s general intelligence per se, since they do not need to appeal to specific features of the token context of utterance, such as the speaker’s intentions.

So, for instance, faced with an utterance of “Some of the delegates came to the talk” the competent language user will be capable of processing the literal meaning of the sentence produced utilizing just the formal decoding processes of the language faculty (to yield, say, the truth-conditional clause that this sentence is true iff some of the delegates came to the talk). Yet this literal interpretation might be modified or strengthened prior to the agent’s conscious consideration via (non-formal) processes which are not themselves genuinely linguistic (that is, concerning the common state of affairs when ‘some’ is used, considerations of usual levels of informativeness on behalf of co-operative speakers, etc.), to yield the GCI ‘not all of the delegates came to the talk’. Based as they are on past regularities of use, it seems that understanding conventional implicatures or GCIs is not a matter of mind-reading and this in itself may be sufficient to mark out an intermediary process (or processes) between literal sentence-level comprehension and entirely context-bound utterance interpretation. They are processes which are less cognitively penetrated than assessments of speaker meaning but which nevertheless depend on knowledge from outside the language faculty to appreciate.

In principle, then, I think there is nothing to stop an advocate of the kind of model I’ve been outlining from accepting the existence of an intermediary processing stage (or a range of such stages) between the assessments of sentence meaning (semantic judgements not subject to the totality of an agent’s knowledge or beliefs) and assessments of speaker meaning (pragmatic judgements potentially subject to the whole body of an agent’s knowledge). So, the suggestion of §2.3–2.5 has been that our current model, which posits a modular language faculty, containing orthographic, phonetic, syntactic, and semantic information and rules (where the processes underpinning semantic comprehension are mechanistic decoding processes, of the kind

80 This implicature is, of course, cancellable, as in “Some of the delegates came to the talk; in fact, all of them did.”

81 Of course, determining whether or not a speaker asserts a particular GCI in a given context will be a matter of mind-reading, but this is just an aspect of the claim that all reasoning about what a speaker says (as opposed to what a sentence-type relativized to a context of utterance means) is a question of mind-reading.
predicted by a formal theory of linguistic meaning), can offer us a good explanation of a range of phenomena surrounding speech acts. First, it accommodates the idea that a single type-sentence may appear in different kinds of speech acts, and thus convey different things, by making the point of access to semantic interpretations sentence-types relativized to a context of utterance, but then placing the responsibility for speech act assessments in general beyond the language faculty proper (the argument of §2.3). Secondly, and on a closely related point, it takes the notion of ‘what is said’, or ‘stated’, to be an essentially pragmatic notion (though I argued that this does not stop us drawing a distinction, albeit a distinction of degree rather than kind, between what is stated and what is implied). Thus we return again to the idea that the proper job description for a semantic theory is minimal: on this occasion, because it is no longer held to be the task of a semantic theory to account for assessments of what is said by the utterance of a token sentence. Finally, I’ve argued in this section that the account is also amenable to the idea of there being intermediary ground between the entirely encapsulated modular account of literal, semantic comprehension and the non-modular account of our ability to assess one-off speaker meaning.

There are, then, good reasons for wanting to pursue a formal approach to meaning, not least of which, as we’ve seen in this chapter, is that such an approach fits very well within a modular view of our linguistic abilities. However, this still leaves us facing the fundamental question of whether such an account, even if desirable, is possible. Thus it is time now to return to the overarching problem for the modular, formal approach to meaning: the apparent intrusion of pragmatic information and abductive, all-things-considered, reasoning into semantic understanding. For if there is any part of the grasp of literal meaning which requires appeal to such information, or such reasoning processes, then it seems that the compartmentalized, modular picture of linguistic understanding and the formal approach to literal meaning it entails must be wrong (and, conversely, that a semantic theory which appeals to non-demonstrative inference on the route to truth-evaluable content, as dual pragmatics does, might well be right). As we know, this concern—that there must be more to a grasp of semantic content than can be given by a computational process looking only to the formal properties of linguistic items—comes in many forms.
One form of the challenge states that there must be pragmatic intrusion into linguistic understanding prior to semantic comprehension. This challenge surfaces in the issues of language acquisition, and in the problems of lexical or structural ambiguity in the input string. It is these pre-semantic points of pragmatic intrusion which will be explored in the remainder of this chapter. (However, the points which have come to seem really pressing to the opponents of formal approaches to semantics concern apparent pragmatic intrusions directly into assessments of semantic content and we will turn to these issues in ensuing chapters.)

2.7 Word Learning

A first point we need to consider concerns how the nascent language user acquires their lexicon initially. That is to say, since presumably normal speakers are not born with a dictionary-like body of knowledge, pairing natural language words with their meanings, we need to explain how competent language users come to learn such information. The simplest account of word learning (apparently appealed to, for instance, in the empiricist approaches of Locke and Hume) is some kind of associationist picture. Here the key notion is one of covariation: the name becomes associated with the idea of the object which it names because the agent is initially exposed to the word just when she is thinking about or looking at the object. Thus the mother, noticing her child looking at a dog, says “That’s a dog, Timmy, a dog” and eventually, after many such encounters, Timmy learns that the word ‘dog’ serves as a label for dogs. Recently this associationist picture has been challenged, most extensively by Paul Bloom who argues instead that what matters for word learning is recognition of speaker intentions. The problem which Bloom raises for the associationist picture is simply that it doesn’t seem to fit with the conditions under which novel words are in fact learnt. For a start, words are not only, or indeed usually, produced when their referents are present; as Bloom notes, sometimes when a child hears “Want a cookie?” they will be staring at someone’s face, but ‘cookie’ doesn’t mean face, nor does any child take

82 Bloom 2000: 56.
it to do so. This problem is compounded when we turn our attention from object words to other linguistic items, like verbs. As Lila Gleitman has stressed, in ordinary situations it is highly unlikely that the actions accompanying an utterance are being named by the speaker:

When, every evening, Mother opens the door upon returning from work, what does [the child] hear? I would venture that he rarely hears her say Hello, Alfred, I am opening the door!, but very often hears Hello, Alfred, whatcha been doing all day? . . . In short, any scheme for learning from observation must have some machinery for dealing with the fact that caretaker speech is not a running commentary on scenes and events in view.

In general, then, the associationist picture has a problem with apparent failures of covariation. This is reinforced by considering words for abstract objects, fictional entities, non-existent objects, or anything else which cannot be physically presented to the child learning a language. Finally, the associationist picture seems flawed given the fact that animals, though often extremely good at associationist learning, are nevertheless extremely limited in terms of acquiring a lexicon for a human language—the best-trained chimp still isn’t a patch on the very young child.

In place of the simple associationist picture, Bloom advocates an inferential model of word learning, where what matters is that the child recognize the speaker’s intention of labelling some object or event: “children use their naïve psychology or theory of mind to figure out what people are referring to when they use words. Word learning is a species of intentional inference”. What Timmy needs to recognize is that his mother intends the word ‘dog’ to refer to dogs. Bloom cites a wide range of evidence in favour of this account of word learning, including experimental evidence concerning the conditions in which a child will or will not acquire a new word for a novel object. In the first place, it seems that a child who is attending to a novel object and who simultaneously hears a novel word uttered will not take the novel word as a label for the newly presented object unless the word is produced by an apparent source of intentionality (paradigmatically, another person). Furthermore, they will only take the word to label the

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83 Bloom 2000: 58.  
85 Bloom 2000: 61, emphasis in the original.
object if the speaker is herself paying attention to the novel object. Thus a child will not learn a name for a novel object if, say, the word is simply produced through a loudspeaker while the child is looking at the new object, in the absence of any other interlocutors.\textsuperscript{86} Nor will the child take the word to label the object if the speaker herself is apparently paying attention to some other object, as Bloom writes:

In a fascinating series of studies, Dare Baldwin . . . tested babies in a context in which they were given one object to play with while another object was put into a bucket that was in front of the experimenter. When the baby was looking at the object in front of her, the experimenter looked at the object in the bucket and said a new word, such as “It’s a modi!” This gives rise to a perfect Lockean correspondence between the new word and the object the baby was looking at. But 18-month-olds don’t take modi as naming this object. Instead, they look at the experimenter and redirect their attention to what she is looking at, in this case, at the object in the bucket. And when later shown the two objects and asked to “find the modi”, they assume that the word refers to the object the experimenter was looking at when she said the word – not the object that the child herself was looking at.\textsuperscript{87}

Bloom’s conclusion from these, and other, experimental findings is that the simple associationist model is mistaken and should be replaced with an intention–recognition account.

Yet, as Bloom himself notes, such a move has important repercussions for any kind of modularity view of linguistic understanding:

Under many analyses, systems such as syntax and morphology have a highly modular flavor; they are self-contained, with their own rules and representations, and interact in a highly circumscribed fashion with perceptual and motoric systems, as well as with other aspects of language. In contrast, it is impossible to explain how children learn the meaning of a word without an understanding of certain nonlinguistic mental capacities, including how children think about the minds of others and how they make sense of the external world.\textsuperscript{88}

So, if we did ultimately adopt something like the picture of word learning Bloom suggests, the question we now face is: is this account incompatible with a modular theory of linguistic understanding (like that posited above)?\textsuperscript{89} Fortunately, I think the answer to this question is

\textsuperscript{86} Bloom 2000: 64. \textsuperscript{87} Bloom 2000: 63–4. \textsuperscript{88} Bloom 2000: 2. \\
\textsuperscript{89} It is perhaps too early to claim that Bloom’s account is correct, but I think it would be unfortunate for the modular theory were it to prove incompatible from the outset with such an apparently appealing account of word learning.
‘no’. Any appeal to intentionality as a fundamental element in acquiring a lexicon is, I believe, compatible with a modular theory of linguistic (and specifically semantic) understanding which claims that appeal to speaker intentions is not necessary in order to grasp literal linguistic meaning. This is because the conditions necessary to set up the linguistic system in the first place need not be the same as the conditions subsequently required to be in place for the proper functioning of that system after it has been set up. Even if we ultimately decide that language acquisition is an essentially inferential process requiring sensitivity to speaker intentions, there is no direct move from this idea to the claim that linguistic understanding per se is such an inferential process, appealing to such a sensitivity.

That is to say, in order to learn a language in the first place (for example, to find out which publicly available sign one’s linguistic community has chosen to attach to which object or property) it may well be that a grasp of speaker intentions is necessary. Yet all that the modular theory is committed to claiming is that once this system is in place, that is, once a lexical item has been acquired, then the use of this item no longer need rest on recognition of any kind of speaker intention. Indeed, quite independently of Bloom’s account, it seems clear that the formal theorist must be willing to accord a role for something like speakers’ intentions, and the conventions that exist among members of a linguistic community, at some initial stage in the development or acquisition of a language, for it seems that intentional agents, with a practice of using signs, are a prerequisite for linguistic meaning. To see this, imagine a possible world where there are physical things which share the shape and form of words of English or Japanese, or the acoustic properties of sentences of Norwegian or Arapaho, yet where there are no intentional agents (or where any remaining intentional agents don’t use language). In such a world, it seems clear that these physical objects, which are only superficially language-like, will lack all meaning. Furthermore, it seems that questions of particular meaning are also settled by the conventions of intentional language users: it’s nothing more than convention which makes the concatenation of letters ‘a’^‘p’^‘p’^‘l’^‘e’ mean apple, rather than banana, in English. However, we should be clear that recognizing this kind of preconditional role for the intentional states of agents is not tantamount to admitting that access to a current speaker’s intentional states is necessary to grasp
the literal meaning of a given sentence. It remains open to the formal theorist to claim that, once the linguistic system is in place, where we are concerned with the literal interpretation of the meaning of a sentence, this can proceed without any appeal to the intentional states of the speaker of that sentence.

2.8 Ambiguity

Our overarching aim is to understand how it is that competent language users understand a natural language and thus manage to use it to communicate information about actions and events, hopes and desires, and so on, with one another, and the very first step in this process seems to be understanding how ordinary language users recognize bits of their distal environment as bits of a language (or indeed, as which bits of which language) in the first place. That is to say, we need a theory of phonetics and a theory of orthography—accounts of how a hearer moves from a certain pattern of airwaves or a certain visual or tactile impression to a specification of a word in a particular language. Now, we might think that this is a fairly simple, recognitional issue: presented with a given stimulus an agent just immediately sees or hears it as an utterance or an inscription of, say, the English word ‘cat’. However, things look a bit more complicated on closer inspection. For instance, to borrow Davidson’s nice example, the very same phonetic structure could tell you that \textit{Empedocles leapt} if you took it to be an English utterance, or that \textit{Empedocles loved} if you took it to be in German. So, a decision about which language a phonetic item belongs to may not, it seems, be entirely based on features contained within that phonetic representation. Deciding which language speakers are speaking seems to be a \textit{precondition} of phonetic (or orthographic) interpretation, rather than a result of this interpretation, and such judgements may themselves appeal to certain non-linguistic factors (for example, which country you think you are in, or where you believe your interlocutors have hailed from). Again, however, as with the concern about word learning in the previous section, this input from non-linguistic factors into linguistic understanding may be held to be compatible with an overall modularity model for linguistic
understanding. For once again the appeal to features beyond the purely formal properties of the input string may here be thought to occur prior to linguistic processing proper. That is to say, though we may well need some input from domains of understanding other than the purely linguistic in order to determine precisely what the linguistic input is, this preliminary appeal does not seem to contradict the claim that, once the linguistic input is determined, then it can be processed, up to and including semantic processing, without appeal to information outside the language faculty, such as a speaker’s intentions or their place of origin.

The problems of pragmatic intrusion go on, however, for even once the overarching language has been decided judgements of phonetic interpretation may depend on assessments of one’s conversational partner (adjustments being made for age of speaker, dialect, accent, and so on) and also one’s conversational topic.⁹⁰ Given two words that sound very alike, if only one is relevant to the current topic of conversation, it may be that only the relevant interpretation is entertained. These problems occur less endemically in written language, though even here interpretation of handwriting and spelling may be sensitive to the kind of contextual features just enumerated. Furthermore, even if this kind of phonetic or orthographic ambiguity can be overcome, other issues of ambiguity remain. For a start there are homonyms: words with a single orthographic/phonetic type but with multiple meanings. So even if you manage to fix on a language and recognize a word as a token of the English type ‘bank’ still you need to do more to find out if the bank in question is a riverbank or a financial institution. Then there are the problems of structural ambiguity: even once all the lexical components of a sentence have been identified, questions remain about how they fit together. Does the speaker who says “I shot an elephant in my pyjamas” mean that he or the elephant was wearing the trousers? At all these points (disambiguating the phonetic or orthographic stream, disambiguating the lexical entry for homonyms, and

⁹⁰ Work in psycholinguistics (e.g. Gleitman and Gillette 1999; Gillette, Gleitman, Gleitman, and Lederer 1999) has helped to clarify the kind of range of features which language users may appeal to in order to help overcome this ‘mapping problem’ from surface presentation to internalised linguistic representation. They note that hearers may appeal to formal features (such as stress, prosodic features, syntax and sentence position), as well as ‘rich’ features like speaker intentions and aspects of the context of utterance (like which objects are salient).
disambiguating the structural properties of the utterance) it seems as if an appeal to the context is necessary. Yet the opponent of our segregated, modular picture (with its ascetic formal semantic theory) will object that this kind of appeal to context is not possible on the current account. So, given the existence of all these kinds of ambiguity, and the need to resolve ambiguity before semantic analysis takes place, how can the modular account possibly be right?

I think the first point to note here is that there may well be more than one response to be made to the issue of ambiguity. That is to say, there is no requirement for the advocate of the formal modular account of linguistic understanding to suggest just a single, univocal solution to all kinds of ambiguity; there may be a range of solutions, with different ones operative on different occasions. For instance, on some (perhaps relatively rare) occasions, ambiguous strings are heard as ambiguous. That is to say, two or more readings of the input string make it to the level of conscious awareness and the agent consciously considers which of the multiple interpretations to select. Alternatively, as seen above, disambiguation might be thought to occur prior to the input to the language faculty. For instance, resolution of the phonetic ambiguity which might arise due to a speaker’s accent or age, might again be something which is settled or adjusted for before the reception of the input string by the language faculty. These kinds of ambiguity, then, cause no difficulties for the modular account, for an ambiguous string either has all its possible readings computed by the language faculty, leaving a choice between rival interpretations to post-linguistic procedures (e.g. by the agent’s general intelligence), or the string has already been disambiguated before it reaches the language faculty. The genuine problem cases, then, come only when disambiguation occurs within the language faculty, for this might be thought to show true pragmatic intrusion into linguistic understanding.

Even here, though, a range of options for ambiguity resolution exist which are compatible with the modular approach. On the one hand, for instance, it might be that certain interpretations are habitualized. So that, in the absence of disambiguating features weighting the unusual or hard to recover reading, the system merely produces the standard interpretation. This kind of disambiguation would be a sort of performance effect: though the linguistic system would be capable of generating multiple interpretations of the given string, in practice only
one interpretation would be produced. A second possibility is that ambiguity at the phonetic or orthographic level may sometimes be resolved via appeal to the syntactic, structural properties of the sentence; while ambiguity at the syntactic level may sometimes be resolved by appeal to semantic features of the sentence (or indeed, assuming there is some kind of short-term memory store accessible by the language faculty, disambiguation may occur via appeal to the syntactic or semantic properties of recently interpreted sentences, for example, only one reading may be consistent with the current literal discourse). So, for instance, despite the existence of two lexical entries for ‘duck’ in English (one as a noun, one as a verb), the syntactic properties of the sentence ‘She saw him duck’ eliminates the noun interpretation here. We might then think of this kind of disambiguation as top-down disambiguation: ambiguity at one linguistic level is resolved via appeal to processing at a higher level. What is important to note, though, is that this sort of processing does not in itself require appeal to anything outside the language faculty. That is to say, we need here to hold apart the notions of top-down feedback and genuine cases of pragmatic penetration (that is, the intrusion of information which is not a proper part of the language faculty into our processes of linguistic comprehension). It is the latter which is required to undermine the claims of modularity, but it is the former which is shown by cases where information which we can expect to be stored in the short-term processing store of the language faculty is used to help determine lower-level interpretations. This kind of ambiguity resolution does not, then, seem to be any threat to the modularity of linguistic understanding.

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91 This might be thought to be the case with certain kinds of jokes or word play. For instance, in Groucho’s famous joke, it’s likely that competent interlocutors will not notice any ambiguity in “I shot an elephant in my pyjamas” until they are forced back to reinterpret this sentence by the speaker continuing “How he got into my pyjamas I don’t know!”

92 To recall the discussion of DRT in §1.3.3, it seems that the formal approach per se is consistent with the idea that interpretation needs to appeal to formal features of a set of sentences (a discourse) rather than just a single, stand-alone sentence.

93 Though interestingly ‘He saw her duck’ does not provide sufficient syntactic evidence to rule out such ambiguity.

94 This is a point on which Fodor 1983: 78 is very clear: “To show that the system is penetrable (hence informationally unencapsulated) you would have to show that its processes have access to information that is not specified at any of the levels of representation that the language input system computes.” Though we should also note that, contra my claims in the text above, his discussion continues: “I know of no convincing evidence that syntactic parsing is ever guided by the subject’s appreciation of semantic content or of ‘real world’ background.”
So, the advocate of semantic modularity can allow disambiguation by appeal to non-linguistic factors (like speaker’s region of origin, context, etc.) to occur either pre- or post-linguistic processing (either before or after the operations of the language faculty), and she can allow performance effects to suppress the range of ambiguity her linguistic competence calculates in practice. She can also allow disambiguation by linguistic context to occur within the language faculty via a process of top-down interaction. Finally, however, an advocate of a modular language faculty might also be willing to allow a degree of disambiguation to occur via appeal to non-linguistic properties, even internal to the processes of the language faculty. For remember that the claim of modularity for the language faculty is that its intermediate representations are relatively inaccessible to other cognitive domains, like the agent’s general intelligence, and that, on the whole, semantic judgements can be made without appeal to the vast range of non-linguistic information the agent possesses. Yet it seems to me that this would all be consistent with allowing the agent’s general intelligence to play a role as a selective inhibitor on certain occasions. For instance, imagine that a given string was being processed by the language faculty and it gave rise to two distinct syntactic structures. Furthermore, imagine that, perhaps through a lack of linguistic context, there is no information elsewhere in the language faculty which can help to determine which of these syntactic strings should form the output of the language faculty. In such a case, it seems to me to be consistent with the general claims of modularity to allow that the agent’s general intelligence might get involved to inhibit the progress of one string, stopping processing of it before it left the language faculty. In this way, non-linguistic context could, on certain occasions, be given a role to play within linguistic interpretation. Yet this role, as a simple control or inhibitor, would be very different to the kind of all-pervasive, constructive role for non-linguistic context envisaged by the advocates of dual pragmatics. Non-linguistic properties would have had no role to play in creating either interpretation within the language faculty, but would merely serve to block one such interpretation as contextually (but non-linguistically) anomalous.⁹⁵ As Sperber and

⁹⁵ Note that, for suppression by the general intelligence to be necessary, the interpretation must be only non-linguistically anomalous, for if it is linguistically anomalous as well, we might expect it to be suppressed by features accessible from within the language faculty.
Wilson suggest:

If we assume, with Fodor (1983), that input modules have no access to general encyclopaedic information, examples such as (16) ['The child left the straw in the glass'] seem to imply that the input module has to construct all the semantic representations of an utterance, the wrong ones then being filtered out at a central level after all. However, the relationship between the input module and central processes need not be that simple: for instance, the input module might construct all the linguistically possible interpretations of the first constituent of the sentence, and submit them to the central mechanism, which would, when possible, choose one of them and inform the linguistic module of its choice. As a result, the module’s decoding processes would be partly inhibited; it would retain only those interpretations of the next constituent which are linguistically compatible with the selected interpretation of the first constituent, and so on. With the interaction of input module and central mechanisms so conceived, it remains true that the module has no access to encyclopaedic contextual information; however contextual factors may affect its processes in a purely inhibitory way.⁹⁶

Such a sub-personal inhibiting role for general intelligence processes might be expected to slow down semantic comprehension a little, but it would not result in the inferential, all-things-considered picture of semantic processing advocated by opponents of formal semantics. Thus it seems that even within a fully modular language faculty, some form of disambiguation via appeal to global properties or inferential reasoning processes might be allowed.

To summarize: the argument of this chapter has been that there are good reasons to think that the language faculty, up to and including (propositional or truth-conditional) semantic processing, constitutes a cognitive module. Yet, if this is right, then it lends support to the claim that the right kind of semantic theory is one which permits computational derivations of literal meaning, rather than one which makes use of rich, non-demonstrative reasoning processes en route to grasp of the proposition expressed. That is to say, it lends support to a formal semantic theory rather than the inferential model of processing yielded by dual pragmatics. We then turned to look at some of the benefits of adopting the formal-semantics-plus-modularity model, concerning the account we can then give of certain issues surrounding speech acts. The suggestion

⁹⁶ Sperber and Wilson 1986: 186–7
was that speech act operators in general, and the notion of ‘what is said’ or ‘what is stated’ in particular, be assigned to the pragmatic realm, being treated as aspects of understanding which rely on much more than merely knowledge of the literal meaning of words and sentences. However, the claim was also that this move did not prohibit the formal theorist from preserving a distinction between ‘what is said’ and ‘what is implied’; indeed, it left her able to give an intuitively appealing rendition of the distinction, where it was seen as a difference of degree rather than a difference of kind. This move to treat all varieties of speech acts as the subject matter of pragmatics was seen as one instance of the general move to embrace a minimal conception of the tasks proper to a semantic theory, whereby many of the more complex jobs we might have thought to include under the remit of semantics, such as assessments of what is said or conveyed by a particular utterance, are seen to fall outside the semantic (and indeed the linguistic) domain, emerging at the point of interface between linguistic understanding and other forms of cognitive processing. Thus it seems that the approach to semantic theorizing initially advocated in the last chapter has found a further ground for support. For the kind of minimal semantic theory we outlined there seems to fit very well with the concerns of modularity voiced in this chapter.

Finally, however, we’ve returned to a significant worry for the modular, formal approach: namely, the problem of accounting for apparent pragmatic (context-based) intrusions into linguistic understanding. Two such cases of predominantly pre-semantic contextual input to semantic processing were looked at in the closing sections of this chapter: namely, word learning and ambiguity (though in the case of ambiguity it was held that some, limited kinds of ambiguity resolution might occur within the language faculty). However, the suggestion has been that, although there is evidence for pragmatic information having a role to play in both these areas, this can be handled from the perspective of our modular, formal approach to semantic theorizing. Now, then, it is time to turn to a more serious form of the pragmatic intrusion objection, namely expressions whose very meaning seems to be systematically dependent on the contexts in which they are uttered.⁹⁷

⁹⁷ Perry 2001: 39 puts the problem thus: “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: context helps us to figure out meaning. In the case of indexicals, however, context is used semantically. It remains relevant after the language, words and meanings are all known.”
The picture of linguistic comprehension advocated thus far has two main strands: first, there is the claim (from Chapter 1) that a proper theory of meaning for a natural language will take the shape of a formal semantic theory (that is, it will be available to deliver specifications of truth-evaluable content for sentences via formal operations over the syntactic features of those linguistic items). Our semantic analyses, then, will be, to a greater or lesser extent, context-insensitive; they will look to the relatively static, unchanging elements of linguistic items, rather than the highly context-bound and variable features of utterances. In Chapter 1, this advocacy of formal semantics was also paired with the idea of a minimal job description for a theory of meaning, whereby we might expect the work of a semantic theory to be less than has sometimes been supposed. The second main strand of our account then emerged in Chapter 2, where minimal, formal semantics was united with a modular account of the cognitive architecture of language users. On this approach, radically different kinds of comprehension processes were presumed to underpin grasp of literal meaning and grasp of communicated, speaker meaning (decoding in the former versus some kind of abductive inference in the latter). The picture we have before us, then, is one which posits a fundamental schism between formal linguistic comprehension and context-based comprehension of communicative acts. However, there seems to be a pretty obvious problem with carving things up in the way suggested thus far, for some linguistic expressions seem to have a literal meaning which is itself essentially context-dependent.

For instance, tensed sentences like ‘Tony Blair is Prime Minister’, or sentences containing expressions like ‘I’, ‘that’, or ‘tomorrow’, may be true when spoken by one person or in one context but false when
spoken by another or in a different context. This appears problematic for a theory of meaning which tells us that we can generate truth-conditions for sentence-types based solely on the formal features of those sentences. The exact nature of the problem here is something we will look at in more detail below (§3.1), but prima facie what indexical expressions seem to demonstrate beyond doubt is the existence of some kind of contextual intrusions into specifications of truth-evaluable literal meaning, and our formal theorist owes us an account of how this is possible. Now, the initial suggestion of Chapter 1 was that the formal theorist faced with the problems of indexicality should somewhat modify her position. Instead of claiming that the right point at which to proffer semantic analyses is that of sentence-types *per se*, the suggestion was that she look to sentence-types relativized to a context of utterance. This type of refined or more moderate formal approach is, in fact, the one that most formal theorists adopt (in one form or another);¹ and we will explore one version of the move, due to David Kaplan, in more detail in §3.2, and its implications for the truth-conditional approach to meaning in §3.3. However, a problem, which again was first mentioned in Chapter 1, will then resurface: it looks as if for many, and perhaps all, occurrences of demonstrative and indexical expressions, the features of a context of utterance to which they are sensitive are rich, perspectival or intentional features—namely the intentions of the speaker who uttered the expression. Yet these features lie beyond the reach of the formal, modular account of semantic understanding sketched in previous chapters. The problem is that either Kaplan’s account of context is somewhat less than formal (that is, it allows appeal to pragmatic features like speaker intentions in its construction), in which case it seems out of reach of the kind of modular, formal approach to linguistic comprehension advocated thus far, or it is entirely formal (that is, appealing only to objective, non-perspectival features in its construction), in which case it seems inadequate to deal properly with the phenomenon of indexicality in natural language.

However, I will suggest that there is a way to understand the key Kaplanian notions of both content and character (introduced in §3.2).

¹ For instance, Davidson 1967: 34, in the light of context-sensitive expressions, suggested treating truth as a relation between a sentence, a person and a time, yielding truth-conditions of the following kind: “‘I am tired’ is true as (potentially) spoken by p at t if and only if p is tired at t.”, “‘That book was stolen’ is true as (potentially) spoken by p at t if and only if the book demonstrated by p at t is stolen prior to t.”
from the perspective of a formal, modular approach to linguistic comprehension, that is, that there is a rendition of these notions which makes no semantic level appeal to a speaker’s intentions. Thus we can seek to provide truth-conditions for sentence-types relativized to a context of utterance, without our description of that context of utterance alluding to rich, perspectival features (like the use to which the speaker is putting her utterance). The idea, introduced in §3.4, will be that singular (paradigmatically demonstrative and indexical) content be understood in terms of syntactically triggered singular concepts, where entertaining a singular concept is not a function of, say, how an agent knows about the object in question. The claim will be that one can have a genuinely singular thought about an object even in situations where one cannot identify the object of that thought in any substantial (non-linguistic) way; hence it will be argued (in §3.4.5) that a proper understanding of demonstrative and indexical content reveals one more respect in which the job description of a successful semantic theory is minimal, for it does not sustain the kinds of epistemic judgements some theorists have suggested.

Given these syntactically triggered singular concepts, character then comes into play in integrating this conceptual content with the range of other information an agent possesses (thus character rules do not, contrary to the standard view, map directly to an external object, but instead map to further conceptual content). This view of character will be explored in §3.5. Finally, in (§3.6), a serious question will be raised about the status of the content recovered from token context-sensitive utterances, for it may be objected that our minimal picture of semantic content here does not qualify as genuine semantic content at all. I’ll suggest that this objection does not in fact hold, but a full response to it will have to wait until the next chapter (where we will discuss the problems caused by what we might think of as ‘covert indexicality’). To begin with then let’s start by laying out exactly what the problems of indexicality are.

3.1 The Problems of Indexicality

Every natural language contains some elements whose contribution to the meaning of larger sentences in which they appear depends (in part) on the context in which the sentence-type is produced. So, in English
we have (referential or ‘deictic’) pronouns like ‘I’, ‘you’, ‘he’, ‘she’ and ‘it’, so-called demonstrative terms like ‘this’, ‘that girl’, or ‘those’, together with indexical expressions like ‘tomorrow’, ‘today’, and ‘yesterday’, all of which refer to an object only given a context of utterance. Yet this context-sensitivity is in tension with the idea that we can offer specifications of the meanings of sentences based solely on the formal features of the elements which go together to make up those sentences, for the formal (type-level) features of these expressions remain unchanged whenever or wherever they are uttered. However, as we saw in Chapter 1, it may be possible for the formal semanticist to somewhat refine her position, and thus to avoid the most direct form of conflict with context-sensitive expressions. For though it is sometimes suggested that if natural language can be shown to be in any way context-sensitive, then formal approaches to linguistic meaning must be mistaken, this claim is too strong, for it seems there are certain kinds of context-sensitivity which a formal theorist can accommodate within her semantic theory.

Recall the distinction from §1.2.1 between the two different types of contextual feature to which semantic appeal can be made. On the one hand, there are objectively specifiable (non-perspectival, non-intentional) facts, such as who produced the utterance, where and when; while, on the other hand, there are ‘richer’, perspectival features of context, like the speaker’s intentions. The former, non-perspectival features seem to fit well within an entirely formal description of a context of utterance and thus it seems that this kind of formally described object might well be something which could fall within the purview of a formal specification of meaning. So, the thought would be, although the formal theorist needs to appeal to a context of utterance to specify the meaning of a token indexical expression, the context itself admits of a purely formal description; thus we can talk of the meanings of sentences relativized to formal contexts (that is, a set of objectively determined parameters like speaker, time, and place). If this turned out to be the only kind of semantic level appeal to context which needed to be made then it would seem, contrary to the above suggestion, that demonstratives and indexicals are not fundamentally problematic for formal theories of meaning. The tension would be resolved by talking of truth-conditions for sentences relativized to formal contexts; though clearly context-sensitive to a degree, this would still, it seems, be a formally respectable notion.
Despite this move to make her semantic theory more context-sensitive, however, it seems that our formal, modular theorist still faces a problem, as far as demonstratives and indexicals are concerned. For it is a well-rehearsed point in the contemporary literature that these kinds of non-perspectival, non-intentional features of the context seem too impoverished to cope with most kinds of indexicality in natural language. This can be seen in two ways: first, it seems clear that demonstratives, like ‘this’ or ‘that’, require an ineliminable appeal to speaker intentions in order to determine their referents. Second, it seems as if even expressions like ‘here’ or ‘now’ or perhaps even ‘I’, require a similar appeal to speaker intentions. Let’s look at these points in turn.

An initial move we might make (following Kaplan 1977) is to divide the class of context-sensitive expressions in natural language into two different kinds: on the one hand, we have a group of expressions which seem to select an object in a given context of utterance without any interference, as it were, from the speaker. That is to say, all these expressions need to secure an object is the appeal to certain objective features of the context, like the producer of the token for ‘I’, or the day after the day of utterance for ‘tomorrow’. These kinds of context-dependent expressions, where the linguistic rules associated with them alone contain all the information required to secure a referent in a given context of utterance, were labelled ‘pure indexicals’ by Kaplan. Pure indexicals contrast with the second type of context-dependent expression, the ‘true demonstratives’. These expressions require the provision of some additional contextual feature to determine a referent, namely a demonstration:

The linguistic rules which govern the use of the true demonstratives ‘that’, ‘he’, etc., are not sufficient to determine the reference in all contexts of use. Something else – an associated demonstration – must be provided. The linguistic rules assume that such a demonstration accompanies each (demonstrative) use of a demonstrative.²

Now it seems that ‘demonstration’ is itself a notion which must be understood in intentional terms: α is the object demonstrated in a given context of utterance if it is the object the speaker intends to bring to her audiences’ attention as the referent of her utterance.

² Kaplan 1977: 490.
The appeal to speaker intentions seems necessary since physical gestures (pointings, shifting the direction of eye gaze, etc.) are apparently too coarse-grained to fix reference—the very same physical action (for instance, pointing in the direction of Fido) may be manifestations of the agent’s intention to direct her audience’s attention to Fido, or to Fido’s leg, or to Fido’s fur colour, or Fido’s breed, or innumerable other potential objects of reference. Thus, to pick from among the plethora of objects, an appeal to speaker intentions might well be recommended.³

Against this claim, it can seem that at least some demonstrations are independent of speaker intentions. For instance, on occasion, an object may ‘demonstrate itself’, as it were, as when a soldier dramatically faints in front of us, or a man exits the room noisily slamming the door behind him.⁴ Here it seems an utterance of ‘that man’ or ‘he’ is constrained to refer to the objectively salient object, regardless of the speaker’s intentions. Furthermore, if a speaker’s referential intentions are out of step with the object that is objectively, as it were, determined as the referent of the demonstrative, it can seem that it is the objective features of the context which win out. So, for instance, to lean on an example of Kaplan’s, say I’ve seen a picture of Carnap on the wall behind me, and without turning to look at the picture again, I point behind me and say ‘That is a picture of one of the greatest philosophers of the twentieth century.’ Yet, unbeknown to me, someone has switched the picture of Carnap for a picture of Kylie Minogue. Here it seems that I refer to, and say something false of, the picture of Kylie, despite my clear intention to speak about the picture of Carnap. It is, it seems, the objective properties of my action in this context (that is, the direction of my pointing and the object present where I point) which settles what I refer to, independently of my intentions. However, the putative independence of demonstrative reference from speaker intentions in this kind of case is less clear on closer inspection. For instance, Kent Bach has argued that there is still a relevant speaker intention even in these cases of mistake. For the speaker still has what Bach calls a ‘primary referential intention’, namely the desire to refer to the thing I am pointing at and it is this intention which settles the referent, not the (in this case mistaken) secondary intention to refer to a picture of

³ See Bach 1992a and 1992b; Reimer 1992 opposes such a recommendation.
⁴ This is Kaplan’s notion of an ‘opportune demonstration’, Kaplan 1977: 490, n. 9.
Carnap. It is, Bach argues, these primary referential intentions which are crucial in all cases, thus instances of error like the above do not show us that speaker intentions are genuinely irrelevant in determining demonstrative reference. If Bach and others are right here then the very notion of demonstration itself brings into play an appeal to speaker intentions, which shows that reference resolution for demonstratives cannot be a matter of a simple appeal to objectively described, formal parameters in a context of utterance. Secondly, it seems that even pure indexicals may not be free of the taint of speaker intentions, for as several theorists have stressed, it appears that there is no simple, intention-free rule which can attach to indexicals in order to determine their referents. For instance, in an utterance of ‘here’ or ‘now’ it seems that an appeal to speaker intentions is necessary to determine the length of time or stretch of space referred to by the speaker: if you ask me whether Professor Jones has arrived and I reply ‘Yes, she is here now’, should you understand me as having said that Jones is in my office at this very moment, that she is in my department today, or that she is on my university’s payroll this year? Determining which of these, or other possible precisifications, is correct seems to require an ineliminable appeal to speaker intentions. Again, if this is right then it seems clear that indexicals, just like demonstratives, incorporate an essential appeal to speaker intentions (thus there is no semantical difference between indexicals and demonstratives which can be spelt out in terms of their reliance on speaker intentions; for this reason, unless I indicate otherwise, ‘indexical’ and ‘demonstrative’ will be used fairly interchangeably in what follows, to cover context-dependent expressions in general). The problem of indexicality for formal theories then is not just that such expressions are context-sensitive, but that they are apparently sensitive to the intentions of the speakers who utter

5 Bach 1992a. See also Kaplan’s 1989: 582–4 discussion of a ‘directing intention’.
6 This claim of centrality for speaker intentions is, again, reinforced by the recognition that physical gestures are alone too coarse-grained to determine reference; though care will need to be taken that the individuation of primary referential intentions does not also become too coarse-grained to be of help.
7 As Recanati 2004: 57 writes: “It is generally assumed . . . that the demonstrative refers to the object which happens to be demonstrated or which happens to be the most salient, in the context to hand. But the notions of ‘demonstration’ and ‘salience’ are pragmatic notions in disguise. They cannot be cashed out in terms merely of the narrow context. Ultimately, a demonstrative refers to what the speaker who uses it refers to by using it.”
8 Predelli 1998a; 1998b; Perry 2001: 61–2; Recanati 2002b: 111–12. It is not a core thesis of this essay that reference determination for (most or all) indexicals requires appeal to speaker intentions; though I think this is the case, readers who disagree should read ensuing arguments as concerning true demonstratives alone.
them. If this is right then the formal and modular approach to linguistic comprehension outlined thus far must be wrong, for grasp of truth-evaluable content will be sensitive to speaker intentions (at least in the case of sentences containing indexicals).9

Now, it might seem as if there is a simple solution to the problem indexicals apparently pose for our minimal, modular approach, for it might be suggested that the resolution of reference for indexicals and demonstratives be handled in a way parallel to that suggested earlier (in Chapter 2) for the resolution of ambiguity. If reference resolution could be treated as akin to a form of disambiguation, this would give us three possible avenues to explore: appeals to the context of utterance could be *pre-semantic, inter-semantic, or post-semantic*. Now, one point to notice with respect to this proposal in general is that if the phenomenon of ambiguity and the phenomenon of indexicality could really be dealt with together on all fours, as it were, then it seems that indexicality will not, contrary to the suggestion above, prove problematic for the kind of minimal, modular semantics I’ve been advocating. For if it’s right to think that ambiguity resolution can be accommodated on the account I favour, then reference resolution for indexicals and demonstratives would raise no further difficulties. So, in principle, this is a proposal which is consistent with the minimal, modular picture of semantic processing (though it would, as one reader noted, make the further positive proposal for handling indexicality, which I explore below, otiose).

However, I also think that there remain questions as to the feasibility of this sort of move. For a start, as Perry 2001: 39 points out, indexicals and demonstratives don’t look like ambiguous words in respect of the kind of reliance they have on a context of utterance. For indexicals and demonstratives the context of utterance really is semantically relevant—it remains relevant even once the words have been identified and their lexical entry recovered. Thus we might, I think, be somewhat sceptical

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9 There are two ancillary problems caused by indexicals which may deserve independent mention. First, there is the need for these expressions to have a relatively complex lexical entry—static pairings like: ‘Aristotle’ refers to Aristotle will obviously not suffice for ‘I’ or ‘that’. However, this raises the question of how a more complex lexical entry can be reconciled with the apparently referential status of context-dependent expressions. Secondly, these expressions seem to cause a problem for the simple, disquotational version of a T-theory given in Chapter 1. A disquotational T-sentence like: ‘I am happy’ is true iff I am happy runs the risk of failing to be interpretative since the agent entertaining the T-sentence may not be the same agent as produced the original token of ‘I’ (the disquotational picture ignores the possibility of different referents for the two occurrences of ‘I’). A satisfactory account of indexicals and demonstratives should resolve these related worries, along with the central concerns raised in the text.
from the start concerning the proposed amalgamation of reference resolution and ambiguity. Furthermore, none of the three possible avenues noted above seems to fit the phenomenon of reference resolution properly. To see this, let’s consider each in turn.

First, as we saw at the close of Chapter 2, sometimes sensitivity to speaker intentions can serve to disambiguate an ambiguous expression before the language faculty commences interpretation (for example, it’s because I know that a speaker intends to be talking about her financial affairs that I simply hear ‘bank’ as an unambiguous lexical item meaning financial institution). Similarly, then, it might be suggested that appeals to speaker intentions are important for resolving the reference of a demonstrative expression in a pre-semantic capacity. So, in the case of context-sensitive expressions, pre-semantic reasoning about those objects to which the speaker intends to refer would serve to make available the values for certain lexically coded parameters, and these values would then be utilized by formal semantic processes en route to delivering truth-conditional content. Since appeals to central processes on this picture occur before semantic processing proper gets underway (just as with certain kinds of disambiguation), the thought would be that such a move does not run counter to the claims of modularity for semantic processing.

However, for at least some referential phrases, it seems that their semantic content places a constraint on the objects which may be assigned as their referents. So, for instance, in the simplest case, ‘he’ seems to require a male referent, while ‘she’ requires a female. Or again, to take a somewhat more controversial case, on a common account of complex demonstratives (phrases like ‘this girl’ or ‘that red hat which I bought yesterday’) it is supposed that the predicative content of the expression (‘girl’ or ‘red hat which I bought yesterday’) plays a part in determining the reference of any token of this type. Nothing, on this kind of picture, could be the semantic referent of ‘this girl’ unless the object was a girl.¹⁰ If this kind of account is right, however, it seems to show that semantic processing, determining the literal meaning of the words involved, is required prior to questions of reference determination. The same kind of phenomenon might also be thought to hold for deferred uses of demonstratives, like an utterance of ‘that author’ said

¹⁰ See Braun 1994; Borg 2000.
while pointing at a book. We will look at these expressions in much more detail in §3.4.2, however, at least prima facie it seems clear that it will be impossible to identify the referent of a deferred use of a demonstrative without first knowing the meaning of the sortal term employed by the speaker. These kinds of case, then, seem to show that, unlike pre-semantic disambiguation, determining the reference for an indexical or demonstrative is not merely a question of the central processes acting prior to the operation of the language faculty. Rather it seems that at least part of the output of our semantic theory will have a role to play in helping to determine the reference. Thus appeals to context seem to have a far more central role to play in the case of reference resolution for demonstratives and indexicals.

If this is correct, then it seems reference assignment cannot be a purely pre-semantic phenomenon. However, following our second suggestion, perhaps central processes play a role in a more integral way. Thus linguistic processing (appealing to non-abductive reasoning) would make a start on a given input string, perhaps assigning an interpretation to each of the words in the string, but then, prior to the generation of a truth-condition for the sentence, central processes would come into play to assign a referent to each indexical expression in the sentence. This might be thought to be admissible again in parallel with the treatment of ambiguity. For at the close of the last chapter I allowed that, on some occasions, central processes might be appealed to from within the language faculty to inhibit the continued processing of one or more disambiguations of an expression, prior to the continued construction of an interpretation for the sentence in which that expression occurs. However, although central processes can, apparently, be accorded such a purely inhibitory role in ambiguity resolution without this contravening claims of modularity for linguistic comprehension processes, it does not seem that the role accorded to central processes on the current understanding of indexicality is at all similar.

For, rather than simply acting to bar or inhibit the continued construction of one or more interpretations, here central processes are envisaged as playing a constructive role. That is to say, they contribute to the interpretation itself, by supplying elements which are required for the semantic analysis of the sentence. If we treat reference resolution for indexicals and demonstratives in this way, it seems to me, claims of encapsulation for the language faculty must be rejected. It is no
longer the case that semantic interpretations can be arrived at via simple operations over the formal features of a sentence-type, rather reasoning about the intentions of the speaker turns out to have an integral role to play in arriving at truth-conditional content. Though such an account of indexicality might work, it’s not, I think, an account which is compatible with the model of a formal, modular semantic theory. Thus, once again, the move to treat reference resolution on a par with disambiguation looks problematic from the current perspective.

The third and final move here would be to accept that appeals to speaker intentions are necessary to determine certain parameters for sentences containing indexicals, but to maintain that our semantic theory need not look to speaker intentions since what that theory yields is something which stops short of a complete, truth-evaluable, content for the sentence-type relativized to its relevant parameters. In this way, what our semantic theory would yield would be some kind of sentence-meaning schema, awaiting the supply of precise values for the parameters against which the sentence should be assessed prior to the determination of truth-conditional content. Arriving at the values for the parameters, and thus at the truth-conditional content for the sentence, would then be a post-semantic matter. However, this kind of picture runs counter to what I took at the outset of this essay to be a fundamental tenet of formal semantics: namely, the idea that something genuinely truth-evaluable can be recovered by our semantic theory alone. If what we end up with is something less than this (that is, a sub-propositional schema or a truth-conditional radical—something with places still to be filled by appeal to the intentions of the speaker) then we have in effect given up on the formal semantic project as conceived here. So, given the kind of model of semantic theorizing antecedently advocated in this essay, we cannot treat reference resolution for demonstratives and indexicals as either a pre-semantic, or an inter-semantic, or as a post-semantic matter. It seems to me that context-sensitive expressions remain a real problem for our formal, modular theorist. Thus I want to explore below a different solution to the problem of indexicality, one which is consistent with the idea that formal operations on syntactic features alone are capable of yielding truth-conditional content for sentences in a natural language. On route to this positive proposal, however, let’s start by looking at perhaps the most famous treatment of indexicals and demonstratives—Kaplan’s theory
of direct reference. For certain of the distinctions to which Kaplan draws attention will have a crucial role to play in the account I want to recommend.

3.2* Kaplan’s Theory of Direct Reference

Kaplan’s central suggestion (also independently developed by Perry) is that we need to distinguish between two aspects of meaning for indexicals and demonstratives: content and character.\(^{11}\) To take the notion of character first: this is to be a form of constant, context-independent meaning attaching to context-dependent terms at the type-level. So, there is a meaning which is shared by all occurrences of the English word ‘I’ (something like ‘is the producer of this token’) which is not shared by any occurrence of the English word ‘you’ (where the type-meaning of this expression is something like ‘is the addressee of this utterance’). Or again, despite their similarities in use, it seems that there is a meaning shared by all occurrences of the word ‘that’ not shared by any occurrence of ‘this’ (roughly, it seems that the type-expression ‘that’ means ‘demonstrated object at some relatively large proximal distance to the speaker’, while ‘this’ means ‘demonstrated object at some relatively close proximal distance to the speaker’). The character of a context-dependent expression thus takes the form of a rule or function, attaching at the level of type-expression, and taking us from the expression as produced in a given context of utterance to the object the expression refers to in that context.\(^{12}\) Kaplan writes: “The linguistic conventions which constitute meaning consist of rules specifying the reference of a given occurrence of the word . . . in terms of various features of the occurrence . . . . The rules tell us what is referred to.”\(^{13}\) Character, then, gives us one aspect of the meaning of context-dependent expressions: it is the relatively static, unchanging meaning which attaches at the level of expression-type.

However, there is a second aspect to the meaning of indexicals and demonstratives, one which may vary across every utterance of an expression-type. The ‘content’ of a context-dependent expression attaches at the level of token-expression and gives the contribution

that the token expression makes to the proposition expressed by the larger sentence in which it occurs. Kaplan suggests that this contribution is exhausted by the object the expression picks out; that is to say, context-dependent expressions play the role of referring terms. The evidence which Kaplan cites in favour of this analysis of the content of demonstratives and indexicals primarily concerns our intuitions about the behaviour of utterances containing the terms across other possible worlds, and to appreciate this we need to introduce a second distinction Kaplan brings to bear. This is the distinction between contexts of utterance and circumstances of evaluation.

A context of utterance is, fairly self-evidently, the actual context within which a particular, token demonstrative or indexical is produced, but what Kaplan noticed was that this self-same token utterance might be assessed relative to different contexts. These contexts of assessment, or ‘circumstances of evaluation’, allow us to evaluate the very same token demonstrative or indexical relative to a different set of conditions. Kaplan stresses that across circumstances of evaluation we should not consider the type-expression being uttered again in the new circumstance, rather the question we must ask ourselves is, concerning the original token expression, is the sentence containing it true or false in the new context? So, for instance, imagine a token utterance, call it u, of ‘It is possible that that man might not have been Prime Minister’. Say u is made in context \( c_1 \), where the speaker is pointing at Tony Blair. Kaplan’s claim is that this token utterance refers to that very man, Tony Blair, and it will ‘stick with him’, regardless of the properties he possesses at any other circumstance of evaluation. Intuitively, Kaplan suggests, what is required to make u true is the existence of a possible state of affairs, or circumstance of evaluation, \( c_2 \), where the very man referred to in \( c_1 \) fails to be Prime Minister in \( c_2 \), and this holds regardless of the properties which Tony Blair has in \( c_2 \). Specifically, it doesn’t matter whether Tony Blair is married to Cherie in \( c_2 \), is a member of the Labour party in \( c_2 \), whether he is called ‘Tony Blair’ in \( c_2 \), nor indeed whether he is being pointed at by the speaker in \( c_2 \). This last claim is perhaps the most surprising, but what Kaplan points out is that if we consider an utterance of the type ‘It is possible that that man might not have been Prime Minister’ being made in \( c_2 \), where the object being pointed at by the speaker is, say, John Major rather than Tony Blair, then we are no longer considering the actual utterance u. Rather we
are considering a completely different token utterance, \( u^* \), made in a different context of utterance. That is to say, we are treating \( c_2 \) as a context of utterance in its own right, rather than as a circumstance of evaluation. While doing so would be perfectly permissible, it is not in any way relevant to assessments of \( u \), for \( u \) already has its own context of utterance (wherein Tony Blair is the subject of the demonstration) and it cannot have another. To assess \( u \) we just need to know how things stand with Tony Blair in certain new circumstances of evaluation; we do not need to consider any new contexts of utterance and thus all objects other than the referents from the original context of utterance are irrelevant, for our purposes, at the new circumstance of evaluation.

Kaplan’s point is that, although context-dependent expressions may be variable in extension across different contexts of utterance (so that my utterance of ‘yesterday was hot’, made in context of utterance \( c_1 \), may have a quite different referent to your utterance of precisely the same form of words, where your utterance occurs in a different context, \( c_2 \)), they cannot vary in extension across circumstances of evaluation. To borrow Kaplan’s metaphor, once the context of utterance is fixed, the referent is ‘loaded into the proposition’ and it is carried from the actual context of utterance to all possible circumstances of evaluation.¹⁴ The utterance under consideration does not ‘act again’ to find its referent in the new context, for it has already brought its referent with it from the original context of utterance. This then is the notion of ‘direct reference’: it is not ‘direct’ in the sense of being ‘unmediated by any descriptive profile’, for becoming the referent of a context-dependent expression depends on an object’s satisfaction of the profile of properties contained in the character rule for the expression (for instance, no one can be the referent of an utterance of ‘I’ unless they were the producer of that token, nothing can be the referent of ‘yesterday’ unless it is the day before the day of utterance, and so on). Yet reference is direct in the sense that it is the object alone, and not any descriptive profile, which provides the propositional contribution (the content) of any utterance of a demonstrative or indexical expression.¹⁵ Character, though it determines reference, makes no

¹⁴ Kaplan 1989: 569.
¹⁵ In Kripkean terminology, there may be properties, like ‘being the object pointed at’, which serve to fix the referent in a given context of utterance, but, once the referent is fixed, these properties drop away leaving just the object itself. So, the descriptive profile does not ‘give the meaning’ of the expression; see Kripke 1980: 53–60.
propositional contribution; once it has served to select the referent it simply drops out of the picture.

So, then, how does the Kaplanian framework help to ameliorate the problems of indexicality? Well, clearly the framework shows how we can accommodate the apparently contradictory intuitions, first, that demonstratives and indexicals are simply referring terms, used to talk directly about objects and having a meaning which is exhausted by the objects they select, and, second, that they pick out their referents in some principled way and have an aspect of meaning above and beyond the object referred to on any particular occasion of use. What Kaplan’s framework allows us to see is that both intuitions are correct. The former point concerns the token-level content aspect of the meaning of these expressions, while the latter point concerns the type-level character aspect of meaning. Now, this is all to the good, but we might still wonder to what degree Kaplan’s account furthers the cause of the kind of formal theory adopted in Chapter 1, namely the truth-conditional approach. For there are several differences between Kaplan’s framework and the truth-conditional approach which make it hard to see exactly how the insights of the former may benefit the latter. Thus, in §3.3, we will need to address the question of how an apparently one-dimensional theory of meaning (like the truth-conditional account) can accommodate a dual-aspect theory of meaning for demonstratives and indexicals (like the direct reference model). More fundamentally, however, we also need to examine more closely the kind of thing Kaplan takes a ‘context of utterance’ to be.

3.2.1 Contexts of utterance

One worry we might have concerning the degree to which the Kaplanian account ameliorates the problems of indexicality for the formal theorist concerns the precise nature of a Kaplanian context of utterance. For, as we saw in §3.1, it is far from clear that indexicals and demonstratives can be explained away by appealing only to objective, formal features of the context of utterance. First, it seems that the notion of a demonstration, so crucial to most demonstratives, is itself a fundamentally informal, pragmatic notion making an ineliminable appeal to speaker intentions. What makes an object $\alpha$ the subject of a demonstration is not simply formal features of the context (such as
the object’s spatial relation to the speaker, or the direction of the speaker’s pointing), rather what makes the subject of the demonstration is (at least in part) that the speaker intended to demonstrate. Now, obviously, it is open for a theorist, in the process of constructing a formal context of utterance against which to assess a given utterance for truth or falsity, to include a parameter for the object demonstrated. In this way we might, following Kaplan 1977, envisage the context as an ordered set of parameters, including speaker, time, place, addressee, and demonstrated object. However, we need to make sure that phrasing things in this way does not obscure what’s involved in this move. For a contextual description of this form is no longer, I would suggest, a purely formal description (that is, appealing only to objective, non-perspectival features), instead we have introduced an essentially informal, pragmatic notion into our description—one which is essentially perspectival, appealing as it does to the intentions of the speaker. Indeed, this was a point Kaplan 1989 came to stress in his account of ‘directing intentions’ for demonstratives, claiming that it is speaker intentions alone which determine the referent of a token demonstrative, with pointings, and so on, being (semantically irrelevant) externalizations of these internal states of affairs.

Secondly, questions might also be raised about the nature of our other parameters, such as time or place of utterance. For, again as we saw in §3.1, it seems as if determining these parameters may well be a less than objective matter. For instance, to determine the period of time referred to by an utterance of ‘now’ it again seems that we need to look to the intentions of the speaker (does this mean now this second, now this minute, now this year?). If this worry is well founded then it seems that our initial idea, of a formal description of a context of utterance which can be arrived at via appeal to non-perspectival, non-intentional aspects was illusory; the context of utterance required to grasp the content of a demonstrative or indexical expression is intentional and perspectival throughout. So, the idea that relativizing a sentence containing a demonstrative or indexical expression to a context of utterance can yield a formally respectable way to determine semantic content and thus accommodate context-sensitivity seems misplaced, since constructing the context itself apparently smuggles in rich, inferential features of precisely the kind I’ve suggested the formal theorist should seek to avoid.
Now, whether or not it is possible for a genuine formal theory to admit such intentional features at a semantic level remains something of a moot point. As was suggested in §1.2.1, it seems to me that opening the semantic doors in this way runs the risk of collapsing the distinction between use-based accounts of truth-evaluable content and the approach of formal semantics. Certainly, it seems clear that if it were to prove possible to deliver a formal theory which did not appeal to speaker intentions prior to the determination of truth-conditional linguistic content, this would be a stronger form of formal theory than one which treats speaker intentions as semantically relevant (on at least some occasions). However, be this as it may, one thing which is indisputable is that a formal theory paired with a modular view of our cognitive architecture cannot be so liberal. For recall that, on the modular account, there was a clear division posited between the formal processes (part of the language faculty) and abductive, rich inferential processes (part of the agent’s global capacity, responsible for all kinds of hypothesis formation, including mind-reading). Given this model of the divisions between properly linguistic understanding and other forms of comprehension, it is clear that all appeals to mind-reading must occur outside the language faculty. That is to say, no appeal to speaker intentions can be made from within the language faculty proper; thus an intentionally described context is beyond the reach of a formal theory of meaning encapsulated in an autonomous module responsible for linguistic comprehension. The only notion of context available to an advocate of this picture is a purely formal, objectively described one, yet, as we have already seen, such a notion of context seems woefully inadequate to explain linguistic context-sensitivity. Our modular, formal theorist cannot, it seems, simply adopt the Kaplanian idea of specifying the semantic content for sentences relativized to a context of utterance, since either such a context is purely formally described (and hence is inadequate to explain most context-sensitivity in natural language) or it is intentionally described (and hence introduces rich, abductively arrived at features of the context which are out of the reach of a modular account of linguistic comprehension). Though Kaplan’s framework helps us in certain respects, the fundamental problem of indexicality seems untouched. Thus in §§3.4–3.5 we will need to explore the notions of content and character in far greater depth, seeing if they might be rendered in
a way which proves acceptable to our formal modular theory. Prior to this, however, let’s return to the question of how we might capture the key insight of direct reference (the distinction between content and character) within a truth-conditional approach to meaning.

3.3 A Truth-Conditional Account of Demonstratives and Indexicals

One point which might initially concern us when we try to move from Kaplan’s own account to some form of truth-conditional approach to meaning is the issue of propositions versus truth-conditions. On the one hand, we might think that this distinction is relatively harmless, for we might view propositions as the bearers of truth-conditions, thus allowing that proposition talk could ultimately be resolvable into more fundamental talk of truth-conditions. On the other hand, however, the issue may well seem more fundamental, for it seems that the kind of Russellian, structured propositions envisaged in Kaplan’s account (whereby objects themselves get ‘loaded into propositions’) have no neat counterpart in the truth-conditional picture (talk of objects themselves appearing on the right-hand side of T-sentences seeming somewhat strained). This question, of how we can construe demonstrative or indexical content in the non-propositional framework of truth-conditional semantics is a point I wish to return to at some length in §3.4, but to advertise the conclusion in advance, I want to suggest that we should understand demonstrative content (and referential content in general) in terms of the kinds of concepts these expressions introduce. That is to say, rather than thinking of the content of these expressions directly in terms of the objects they pick out in the world, we should think of such content in terms of the kinds of mental objects entertained in thought when the expressions are understood. In this way, I will suggest, we can capture the insight that the proper content of a referential expression is exhausted by the object to which it refers without requiring that there are specifications of truth-conditions which contain those objects themselves as constituents. The argument of ensuing sections then will be that there is nothing in the non-propositional nature of truth-conditional semantics which places the key insights of Kaplan’s account of direct reference out of reach.
A second worry in the move from Kaplan’s approach to our truth-conditional account, however, is the problem of how to incorporate a dual-aspect theory of meaning, like Kaplan’s theory of direct reference, within an apparently single-aspect theory of meaning, like the truth-conditional approach. The problem is that, if we are claiming that a properly given truth-conditional account can serve as the semantic theory for natural language, then we seem to have no room in our account for an element which is both semantic and non-truth-conditional. If something is a genuine element of the semantic value of an expression then, it would seem, it must make an appearance in our statement of truth-conditions; thus character must be either non-semantic or truth-conditionally present. However, clearly this is a mistake: character is certainly part of the literal meaning of the expressions in question, yet the modal evidence stressed by both Kaplan and Perry shows that character rules do not figure in the propositional, or truth-conditional, contribution the expressions make. So what we need is an understanding of a truth-theory which makes room for a semantic element which does not figure in truth-conditional content, and it seems a solution here can be found in James Higginbotham’s move to conditionalized T-sentences. He writes:

[T]he truth-conditions of sentences with context-dependent elements are themselves conditional, dependent upon the satisfaction of conditions that are not in general represented in utterances of those sentences . . . [e.g.]:

[1] If the speaker of ‘this is red’ refers with the utterance of ‘this’ therein to x and to nothing else, then that utterance is true if and only if x is red.\textsuperscript{16}

The antecedent part of the T-sentence relates the utterance of the context-dependent expression to an object, while the consequent then specifies the correct truth-condition for a referential expression referring to that object. The additional linguistic rules for settling on the referent are, on this proposal, treated as something more akin to a lexical entry; an understanding of parts of our language which is not directly encoded within our knowledge of the truth-conditions of demonstrative sentences. Higginbotham suggests that the ability to arrive at the correct reference for any token demonstrative requires

\textsuperscript{16} Higginbotham 1994: 92–3. This kind of move is clearly very much in keeping with Davidson’s original sketch of an account in ‘Truth and Meaning’; see note 1.
a comprehensive recognition of the role of the information contained in the lexicon and our ability to act on it.

This notion Higginbotham labels ‘sense’ and he takes a competent speaker’s grasp of sense to be reflected in their ability to deploy the term in question in the right way. The idea is that knowing the lexical entry for a context-dependent expression will involve knowing a wealth of information which alone will be sufficient to determine a referent on each occasion of use:

[I]t is to be assumed that the speaker refers to a day with the word ‘tomorrow’ only if he knows that the day to which he is referring is the day following the day of his utterance, whatever that day might be. So knowledge of a sense, a way of keeping track of days in relation to the egocentric coordinate established by his utterance is presupposed. But provided this presupposition is satisfied its content does not enter the knowledge of truth-conditions of the utterance.17

Higginbotham contends that the apparent tension between the unexpressed sense and the single, truth-conditional level of content stems from a misunderstanding about what we take speakers to know or understand about utterances in context. The apparent tension between truth-conditional axioms and demonstrative expressions arises, he suggests, only if we tacitly restrict what speakers know to the bare knowledge of static truth-conditions of sentences. Whereas, if we want properly to accommodate context-dependent expressions, what we ought to think of agents as knowing are the conditional truth-conditions of potential utterances, which appeal to antecedent lexical knowledge of language in their very construction.

So, the answer to the question of how we might accommodate both content and character within an apparently single-aspect semantic theory, such as the truth-conditional approach, lies in the distinction between the lexical entry for an expression and its truth-conditional contribution. Context-dependent expressions have a lexical entry which merely specifies a rule for generating a token expression’s truth-conditional contribution. When a competent hearer hears an utterance of ‘I am F’, she knows that the utterance is true just in case, if α is the producer of that token of ‘I’, then α is F. All that is required for the utterance to be true is that α be F; but the lexical entry for ‘I’ antecedently

17 Higginbotham 1994:94.
ensures that, whichever object $\alpha$ is, it must be the producer of that token of ‘I’. Thus we have, just as we wanted, an aspect of meaning which figures in our semantic theory (at the level of the basic axioms) yet which makes no appearance in the final specification of the truth-conditions of the sentence uttered.

We know, then, from a theoretical point of view, how it might be possible to accommodate both content and character within a truth-conditional theory by adopting conditionalized T-sentences. Now we need to return to the central question of this chapter: how can we specify the content and character of sentences containing demonstrative or indexical expressions without making an ineliminable appeal to the intentions of a speaker? Or does spelling out the truth-conditional contribution of these context-sensitive expressions make ineliminable appeal to the use to which a speaker puts them?

### 3.4 The Status of Content

Following Kaplan, the content of a token demonstrative or indexical expression is to be understood as being exhausted by the object referred to. Specifically, the kind of descriptive profile introduced by the character of the type-expression (that is, the rule associated with the term which takes us from context of utterance to object) makes no propositional or truth-conditional contribution; instead it drops out of the picture as soon as the object itself is secured (thus, it was argued in the last section, it figures as part of the lexical entry for this expression, but not as its truth-conditional contribution). Earlier it was seen that this idea—of demonstrative content as exhausted by an object—could be spelt out in terms of Russellian propositions. The literal proposition expressed by an utterance of ‘that is $F$’, in a context where the demonstrated object is $a$, is just the structured proposition $[a, F]$, where an object, $a$, itself appears directly as one of the constituents of the proposition. Now, however, since the truth-conditional framework does not operate with this kind of object-involving, structured proposition, we need some other way to unpack the claim that the content of a demonstrative is exhausted by the object referred to. For clearly it is not objects themselves which figure on the right-hand side of truth-conditions, but meta-language expressions which themselves may stand
in a particularly intimate relation to an object; that is, meta-language expressions which serve to invoke an object directly, rather than via any kind of descriptive profile. But again, we might ask, what exactly does this mean—what is it for a meta-language expression to invoke an object ‘directly’?

3.4.1 What is special about demonstrative content?

One natural way of spelling out this difference—between meta-language expressions which directly invoke objects and those which do not—concerns the kinds of thoughts which are required to understand the expressions in question. Thus, for instance, ‘that boy is happy’ and ‘some boy is happy’ mean radically different things because, in the first case, the sentence possesses a truth-condition with a referential meta-language expression in subject position which requires the entertaining of a singular thought to understand (a thought involving a singular concept in subject position); while, in the second case, the thought entertained is general or object-independent, since ‘some boy’ contributes only a general concept to the thought entertained. (In what follows, I will use the terms ‘singular concept’ and ‘singular thought’ more or less interchangeably, for all that is meant by a singular thought is a thought with a singular concept in subject position; mutatis mutandis for ‘general concept’/‘general thought’. The assumption being that a singular thought is not an atomic element, but is rather composed of a representation of the object and a representation of the property.)

We should be clear, however, that this move advances our understanding of the characteristic features of demonstrative content only if we have a grasp of the individuating characteristics of singular, as opposed to general, thoughts and concepts. Without this we seem to have furthered our cause not at all—defining demonstrative content

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18 This move from language to thought has been questioned by some readers, yet it seems a fairly uncontroversial point to me. When one grasps a T-sentence for some natural language sentence, it seems that what one entertains must be a mental representation of the conditions under which that sentence would be true. Though, as we will see, we certainly require this representation to be of the external world state of affairs, nevertheless it seems to me that that external world state of affairs must be represented in thought (for example, by a sentence in a language of thought) and be entertained by the agent. Grasping the meaning of a sentence requires grasping the conditions under which it would be true, but grasping these conditions in turn requires entertaining a thought which will be true just in case that situation pertains. The sentence ‘snow is white’ is true iff the thought that snow is white is true, and the thought is true just in case snow is indeed white.
OVERT CONTEXT-SENSITIVITY

(as opposed to the content of a quantified noun phrase) in terms of the thoughts required to entertain or grasp this content, but offering no independent specification of what is characteristic of those thoughts. So, this is the question we need to address now: ‘what is special about singular, as opposed to general, thoughts?’ Initially, it seems that there is an easy answer to this question, resting on the kind of relationship that exists between the thinker and the object thought about. Singular thoughts seem to presuppose some kind of very intimate (say, perceptual) relationship between agent and object, whereas general thoughts seem to demand no such contact. This kind of move, which I’ll classify in general as the move to place epistemic constraints on singular content, has a long philosophical history (probably having its roots in the work of the empiricists), but I’d like here to concentrate on just two of the clearest instances of this move, which are found in the work of Bertrand Russell and, later, in the work of Gareth Evans. Ultimately, however, I’m going to reject wholesale the idea that there are epistemic (or indeed any other substantial) kinds of constraint on singular content. The claim will be that, whatever is special about having a singular thought, it is not to be explained in terms of the kind of relationship an agent has with an object. This, then, will be one instance of the more general advocacy of minimal semantics, for it will thus turn out that it is no job of a semantic theory to tell us, in any substantial way, which objects in the world expressions hook up to, nor indeed whether or not certain expressions succeed in hooking up with an object at all.¹⁹ Finding out this sort of thing is a task which goes well beyond the remit of the language faculty. To see this, however, we need to start by seeing what is wrong with the idea that the correct way to understand demonstrative content is in terms of the relationship an agent has with an object.

A first answer to our question of what is special about singular, as opposed to general, content can be found in the work of Russell and his ‘acquaintance’ constraint. As the title suggests, we have knowledge by acquaintance (which is contrasted with knowledge by description) when we are directly acquainted, or in contact, with a given object. When we actually ‘rub up against’ objects we gain, according to

¹⁹ To return to the job description sketched in the Introduction: this is to reject the fourth constraint, that our semantic theory be sensitive to the kinds of epistemic relations we bear to objects. It might be thought also to undermine the fifth constraint, that semantics reveal our metaphysical commitments.
Russell, a special kind of knowledge of them, a knowledge which can in turn underpin the use of a demonstrative (or other genuinely referential) expression:

I shall say that an object is ‘known by description’ when we know that it is ‘the so-and-so’, i.e. when we know that there is one object, and no more, having a certain property . . . . We know that the candidate who gets the most votes will be elected, and in this case we are very likely also acquainted (in the only sense in which one can be acquainted with someone else) with the man who is, in fact, the candidate who will get most votes, but we do not know which of the candidates he is, i.e. we do not know any proposition of the form ‘A is the candidate who will get most votes’ where A is one of the candidates by name.  

Russell’s idea is that we can only genuinely refer, that is, use singular terms about, those objects which we are acquainted with. The motivation behind this ‘principle of acquaintance’ is as follows:

The chief reason for supposing the principle true is that it seems scarcely possible to believe that we can make a judgement or entertain a supposition without knowing what it is that we are judging or supposing about . . . . I shall, therefore, in what follows, assume the principle and use it as a guide in analysing judgements that contain descriptions.

For Russell, the kinds of things with which acquaintance is possible include sense-data, universals, and, perhaps, the self. Yet he does not offer us much in the way of a positive characterization of ‘acquaintance’ itself. One intuitively appealing way to fill in this lacuna would be via appeal to perception—perhaps the proper use of a referring term (and thus the entertaining of a singular thought) requires the agent to be seeing, or otherwise perceiving, the object referred to. While using a descriptive expression (and thus the entertaining of a general thought) requires no such perceptual contact with any object which happens to instantiate the properties in play. (Though we should note that, given Russell’s inclusion of universals and the self among his

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20 Russell 1911: 156.
21 There is an exegetical question here; for instance, Sainsbury 1995 seems to suggest that Russell should be taken as proposing a constraint on thought and not on the analysis of singular terms in a public language. On this reading, Russell would seem to be very close to the position ascribed to Evans below.
22 Russell 1911: 159–60. Cappio 1981 has argued that initially, in ‘On Denoting’, the principle of acquaintance emerged as a consequence of Russell’s theory of descriptions; whereas in later works, for example, ‘Knowledge by Acquaintance and Knowledge by Description’, it is taken as a constraint on an acceptable analysis of definite descriptions.
class of possible objects of acquaintance, such a perception-based rendition of acquaintance would only be acceptable if universals and the self were also deemed possible objects of perception.

Gareth Evans, who embraces the Russellian approach in *The Varieties of Reference*, takes the perceptual paradigm as his starting point in an analysis of demonstratives (and other singular) terms but seeks to extend the proper use of these expressions to certain other cases as well. These include cases which concern memory and testimony: I can, he suggests, properly use a demonstrative expression for an object I once saw but can no longer see, and I can properly use a demonstrative expression for an object I have never seen but which members of my linguistic community have put me in contact with through reliable testimony. For Evans, why these cases constitute a valid extension of the perceptual paradigm is that they, just like immediate experiential knowledge, furnish the agent with a particular kind of knowledge about the object. ¹²³ Specifically, he held that they allow the agent to identify an object non-descriptively. As he writes, “Russell held the view that in order to be thinking about an object or to make a judgement about an object, one must know which object is in question—one must know which object it is that one is thinking about.” ²⁴

What Evans takes from Russell is the motivating idea that what is important in the case of singular thought about an object is satisfaction of an epistemic condition—the idea that the agent has a discriminating conception, a conception which enables the agent to distinguish the subject from all other things. And the suggestion now is that this in turn allows us to discriminate a linguistic category, for we might hold that what is distinctive of the class of demonstrative expressions (or referential expressions in general) is that the thoughts entertained on the basis of sentences where they appear in subject position will be singular thoughts, and what it is to have a singular thought is to have a thought which provides the agent with a discriminating conception of the object.

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²³ Evans 1982: 89: “[T]he knowledge which Russell’s Principle requires is what might be called discriminating knowledge: the subject must have the capacity to distinguish the object of his judgement from all other things ... We have the idea of certain sufficient conditions for being able to discriminate an object from all other things: for example, when one can perceive it at the present time; when one can recognise it if presented with it; and when one knows distinguishing facts about it.” See also Recanati 1993—though note that, since the ‘knowing which’ condition in Recanati’s account attaches to a grasp of what is said by an utterance, his account may not be directly in conflict with the view to be recommended below. For, as argued in the last chapter, ‘what is said’ may not be viewed as a semantic notion, and thus a condition on what is said may itself be non-semantic.

involved.²⁵ One upshot of this is that, where we have an expression which has the superficial form of a demonstrative (a token of ‘this’ or ‘that’) but where there is no possibility of the agent entertaining a genuinely singular thought about the referent of the demonstrative term (for instance, where there is no such referent in existence since the speaker was hallucinating an object to which they attempted to refer), then the token expression in question cannot really be a demonstrative term. At a semantic level, this putatively demonstrative term must, it seems, really be serving as a quantified, descriptive expression (this is an idea that we will return to later in our discussion of deferred demonstratives).

Russell and Evans’ epistemic constraint on singular thoughts is, in many ways, attractive. It is, after all, surely right to think that, in general, a demonstrative utterance can only be of use to an interlocutor if they are in a position to identify the object being referred to. To grasp the communicative import of an utterance of ‘that is mine’ the hearer is certainly required to identify the object being referred to by ‘that’ and the agent claiming ownership of said object through their utterance of ‘mine’. However, I want to suggest that, on closer inspection, such epistemic constraints as are favoured by Russell, Evans, and others, should form no part of a specification of what is special about demonstrative content.²⁶ The problem here emerges when we realize that there are some expressions with the surface form of demonstrative expressions, and which we are required to treat as genuine terms of direct reference, but which flout any such epistemic constraints. If this is right—if there is so much as one (proper) demonstrative occurrence which demands semantic analysis as a term of direct reference but where the putative epistemic conditions are not satisfied—then the epistemic constraint, ubiquitous as it may be among uses of demonstratives, cannot itself be a constitutive feature of demonstrative content. Showing that there are

²⁵ A third advocate of same kind of epistemic constraint on singular content is John Searle in *Speech Acts*. He suggests (1969: 85) that a successful referential act involves identification of the subject and he goes on to develop what he calls the ‘principle of identification’ as one of the conditions of successful reference. He writes 1969: 88: “A necessary condition for the successful performance of a definite reference in the utterance of an expression is that either the expression must be an identifying description or the speaker must be able to produce an identifying description on demand.”

²⁶ This is a point which Kaplan 1990: 45 himself stressed: “The foregoing remarks are aimed at refuting Direct Acquaintance Theories of Direct Reference. According to such theories, the question whether an utterance expresses a singular proposition turns, in the first instance, on the speaker’s knowledge of the referent rather than on the form of the reference. If the speaker lacks the appropriate form of acquaintance with the referent, the utterance cannot express a singular proposition, and any apparently directly referring expressions used must be abbreviations or disguises for something like Fregean descriptions.”
Indeed such cases will be the task of the next section. There I’ll argue that an epistemically constrained notion of demonstrative content is revealed as incorrect, since so-called ‘deferred demonstratives’ require semantic analysis as genuine referring terms, though they do not meet any such epistemic conditions.

In addition to this, however, I want to suggest that such a constrained notion of demonstrative content is not even desirable (that is, even if it had turned out that all uses of demonstratives happened to fit the epistemic profile in play, still we would have reason to resist this account of demonstrative content). This holds for two, related reasons. On the one hand, it is clear that if we have antecedently adopted a modular picture of the input systems of the mind (the senses plus language) then a feature like the way in which an object is identified will fall outside the boundaries of the language faculty (belonging instead to the perceptual system, or the memory store, or some other cognitive domain). However we come to know about the things we talk about, this path to knowledge cannot, on the modular theory, be a proper part of our semantic theory (or the language faculty in general). Secondly, it seems as though epistemic constraints are simply not the right kinds of things to incorporate into a formal semantic theory, for they cross-cut syntactic boundaries (for instance, as we saw above, one utterance of ‘that’ may come replete with discriminating knowledge but another may not, say where speaker and hearer are hallucinating a referent). However, since, as we have seen from the beginning of this book, the input for a formal truth-conditional semantic theory just is syntactically described objects, it’s not clear that something like an agent’s epistemic contact with an object could come to figure in semantic specifications. For such features to be relevant, we should have to assume that they are capable of affecting semantic categorization, for example, allowing that a surface-type like ‘that’ is really ambiguous as between referential and descriptive homonyms, yet there is no evidence that demonstratives and indexicals are syntactically ambiguous. The problem, as I see it, is that the kinds of categorizations required for our semantic theory (formally specified, syntactic groupings) may always cross-cut the kinds of categorizations resulting from concentration on contingent, context-bound features like an agent’s relationship to an object. Epistemology simply seems too variable a notion to fit within the formal machinations of a truth-theory or
other formal account. I want to return to both these points below, when I come to consider the construal of demonstrative content which I think we should adopt from the perspective of our minimal semantic theory. First, however, let us turn to the argument that there are at least some (semantically) demonstrative expressions which cannot be understood on the epistemically constrained account of demonstrative content to hand.

3.4.2 Deferred demonstratives

In both ‘Demonstratives’ and ‘Afterthoughts’ Kaplan concentrated primarily on standard, perceptual occurrences of demonstratives, that is, uses of ‘this’ and ‘that’ to talk about currently perceived objects. However, as many theorists since have noted, paying attention to types of demonstrative occurrences other than this perceptual paradigm is important. For instance, when we come to consider the viability of an epistemically constrained rendering of demonstrative content, it is important to consider the full range of putatively demonstrative occurrences in natural language. For, though it is obvious that many uses of demonstrative expressions satisfy the kind of conditions Russell and Evans had in mind, it is far from clear that all occurrences of ‘this’ and ‘that’ in subject position do. For instance, in situations where speaker and hearer have access to different perceptual environments (say, I overhear your utterance of ‘that’s mine’ from an adjoining room) it’s clear that the hearer lacks perceptual knowledge of the referent, nor is it immediately obvious that in such a case the hearer counts as acquiring identifying knowledge of the referent via some kind of testimonial route. Yet, if the hearer fails both Russell’s and Evans’ epistemic constraints then either we must conclude that she is unable to grasp the meaning of the sentence token uttered or we must conclude that, contrary to surface appearances, the supposed demonstratives are not demonstratives at all, but disguised descriptive phrases.27

27 It seems likely that Evans and McDowell would embrace the former option here, noting, first, that a speaker may produce an expression which they themselves do not properly understand (Evans 1982: 92 writes: “Given the divergence between the requirements for understanding and the requirements for saying, it would be absurd to deny that our primary interest ought to be in the more exigent conditions which are required for understanding”), and, second, that, though the hearer may believe that she is entertaining a genuine singular thought, she may be simply confused about this (McDowell 1986: 145 writes: “[the agent] may think there is a singular thought at, so to speak, a certain position in his internal organisation although there is really nothing precisely there”).
A second much discussed kind of case concerns the use of demonstrative expressions to talk about objects introduced by description, such as future objects. For instance, Kaplan’s example of:

(2) Call the first child to be born in the twenty-second century ‘Newman’. That child will be bald. ²⁸

Clearly, if demonstrative content is to be spelt out in terms of privileged epistemic access to an object, then ‘that child’ in this sentence cannot be treated as a demonstrative, for there is no such privileged relationship between the speaker and a future object. Yet, as Kaplan noted, there is evidence that the expression here should be treated in this way, since its modal performance matches that of other demonstrative terms (for instance, it seems the speaker could instead have said ‘that child might not have been born then’). Of course, exotic examples involving future (or perhaps other abstract) objects are always open to question; however, what is not always noted is that many far more mundane uses of demonstratives also flout the proposed epistemic constraints. ²⁹

The cases I have in mind here are so-called ‘deferred demonstratives’ where a superficially demonstrative expression is uttered whilst pointing at an object, but where some alternative, though related object, is secured as the subject of the statement. For instance:

(3) ‘That is my favourite author’ said while pointing at a book.

(4) ‘This singer is great’ said while pointing at a record. ³⁰

²⁸ Kaplan 1978: 31; Kaplan’s original example makes use of his ‘dthat’ operator and ‘the twenty-first century’.

²⁹ An additional worry, at least with acquaintance constraints understood in terms of that to which an agent has perceptual access, concerns the somewhat vague nature of perception. As Dummett 1973: 480–1 notes when considering an appeal to perception to draw the boundary between abstract and concrete objects, “This makes the distinction relative to human faculties, for it is evidently sometimes a contingent matter whether or not something affects human sense-organs: by such a criterion, light-waves would be concrete but radio waves abstract. Moreover, difficulties would arise, in applying such a definition, as to what counted as, for example, ‘feeling’ something: do we feel the gravitational pull of the Earth, for instance, or do we feel only the pressure of the objects which support us, or, again, do we really feel, not the pressure, but only the objects themselves?”

³⁰ This example might be thought to be especially problematic, involving as it does a complex demonstrative (an occurrence of ‘that’ concatenated with a predicate). However this debate is somewhat tangential to our main concerns and thus I don’t want to enter into it in any detail; suffice it to say that I do not expect complex demonstratives to raise any additional problems here, since they are best analysed as ordinary terms of direct reference (see Braun 1994; Borg 2000). However, this claim is controversial, for this referential status (for both complex and bare demonstratives) has been challenged by some (Neale 1993; Lepore and Ludwig 2000; King 2001).
In both these cases the object actually talked about is not the one pointed at but some other, related object (the author of the book demonstrated, or the singer on the record). Yet we have strong reason to think that these expressions must be treated as semantically akin to ordinary, perceptual demonstratives, for the behaviour deferred demonstratives display in key modal and other contexts mirrors that of other demonstratives (rather than descriptive phrases).

For instance, consider modal claims involving deferred demonstratives:

\[(5) \text{ ‘That teacher could have been my favourite, if I had been better at calculus’ said while pointing at the scheduled mathematics class on a college timetable.}\]

If \((5)\) contains a covert descriptive phrase like ‘the teacher of that class’ (that is, if deferred demonstratives and pronouns are semantically akin to quantified noun phrases), we should expect its extension to involve different objects at other worlds. On this proposal, the worlds which would make the statement made by an utterance of \((5)\) true would be worlds where whichever object has the first property mentioned (that is, being the teacher of that class) also has the second (is my favourite teacher). So, say my actual favourite teacher was Smith and the mathematics class being demonstrated was taught by Jones. \((5)\) should, on the descriptive interpretation, be made true by a world in which mathematics was taught by Smith, but intuitively it is not, it is made true by worlds in which Jones, as opposed to Smith, is my favourite teacher. Contrary to the descriptive interpretation, deferred utterances are not made true by specifying how things stand with individuals other than the ones picked out in the actual world. So, the modal behaviour of deferred expressions reveals them to be akin to ordinary referring terms and not descriptions.

This intuitive evidence that deferred expressions are referential can also be reinforced by recognizing that, unlike descriptions, deferred expressions remain rigid across changes in temporal dimensions, as well as across modal alterations. So, for instance, suppose I point at the Prime Minister’s office and say “He’s married to Cherie”. If this is interpreted as meaning ‘the occupier of that office is married to Cherie’ then this could pick out Tony Blair relative to one time of evaluation and someone else, say Margaret Thatcher, at a different time of evaluation (on the assumption that the room used as the Prime Minister’s office is stable
So, could deferred demonstratives be elliptical for modally and temporally rigid descriptions, like ‘the actual occupier of that office now’? Clearly this manoeuvre avoids the current challenge, though it would still fall prey to other problems (e.g. how this complex description gets selected over and above other fitting descriptions, and guaranteed in common between speaker and hearer). The general worry with such a move, however, concerns the motivation for it: if we accept that deferred expressions are rigid in the way suggested above, then why try to accommodate this fact by constructing some complex description which mimics the rigid behaviour through the special nature of the predicate in play? Such rigidity is very good evidence that what we have, when we are dealing with a deferred expression, is something which, as its surface form indicates, genuinely referential; trying to gerrymander a non-referential explanation for this behaviour, simply in order to preserve an otherwise flawed descriptive theory, seems quite unwarranted. Furthermore, if other demonstrative expressions are still to be treated as terms of direct reference on this view, we will be left with an ambiguity theory, whereby some instances of ‘that’ are quantified noun phrases and some are referring terms. Yet, as we will see below, given the vague boundary between deferred and non-deferred uses, it is hard to see how this position could be viable.

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required for truth is that the singleton set introduced by ‘the author of that’ be a sub-set of the set of insane things. Yet if this is right, then we have expressions which we know must be treated as referential expressions, that is, as giving rise to singular thoughts, but where the putative conditions placed upon entertaining a singular thought are flouted. There is simply no requirement for an agent properly deploying a deferred use of a demonstrative expression to be in the kind of privileged epistemic contact with an object envisaged by Russell or Evans, but this doesn’t seem to undermine the claim of these expressions to be genuine demonstratives.

It seems, however, that this finding should not surprise us for, on closer inspection, it is not at all clear that the proposal to analyse deferred demonstratives as disguised descriptions could be made to work anyway. One problem is that there are multiple, semantically non-equivalent, descriptions which could play the role of the deferred demonstrative in any context, and if the claim that deferred demonstratives are disguised descriptions is genuinely a claim about semantic analysis, then it seems that we need to know which one the deferred expression is supposed to mean. Yet the advocate of the semantically descriptive view can give us no answer to this question. For instance, in ‘This singer is great’ both ‘the singer of this piece of music’ and ‘the singer pictured on this album sleeve’ might be plausible replacements for the demonstrative, and so too might be ‘the singer responsible for this’ or ‘the singer who recorded this beautiful song’; but how are we to choose which one of these semantically non-equivalent descriptions gives the literal, semantic value of the demonstrative?³²

This problem of selecting among the plethora of fitting descriptions also becomes pressing once we realize that the same kind of phenomenon occurs with pronouns. For instance, consider ‘He has big feet’, said while pointing to a pair of boots. Here, since there is even less descriptive material vocalized than in (3–5), the choice of a description to replace the deferred expression seems even more underdetermined: e.g. ‘the (male) owner of those boots’, ‘the man who wears these’, ‘the individual whose feet fit these shoes’ or ‘the person who bought this footwear’. All these seem to be entirely possible descriptive replacements for the

³² This sort of objection, and those in the next paragraph, are similar to those originally raised for semantically elliptical accounts of incomplete definite descriptions given by Wettstein 1981.
original occurrence of ‘he’, and it seems that we are owed an account of how we are supposed to choose among them. The most obvious option for the semantic descriptivist at this juncture might be to appeal to the description the speaker has in mind. Yet such a move seems dubious as we have no guarantee that the speaker who chooses to use a deferred demonstrative is thinking of the object under some one particular description, nor, indeed, that the speaker has any description in mind prior to her utterance. Furthermore, even if she did have one such description in mind, we lack absolutely any way of guaranteeing that the speaker and audience will coincide in their selection for the privileged description which gives the literal meaning of the utterance in question. These kinds of concern reveal, I think, that the idea of incorporating more descriptive information in the semantic analysis of deferred demonstratives than we can find at their surface level, is, in practice, a non-starter (these kinds of worry will return again when we come to look at certain accounts of so-called ‘unarticulated constituents’ in Chapter 4).

So, the move to treat deferred demonstratives as failing some epistemic condition on demonstrative content and thereby forfeiting their status as genuinely demonstrative expressions (and instead requiring a descriptive semantic analysis) should, I think, be rejected. For, on the one hand, deferred demonstratives intuitively behave in all key contexts entirely on a par with standard, perception-based demonstratives; while, on the other hand, the move to replace these expressions at the semantic level with some kind of description looks difficult to spell out convincingly in detail. Finally, it seems that any proposal to treat deferred expressions as radically different in kind to non-deferred uses of demonstratives or indexicals must be doomed to failure since it is simply not clear that there is anything like a class of special, deferred demonstratives which we can isolate from straightforwardly perceptual demonstratives for a special semantic treatment. Once we recognize that I can refer to you by pointing at your arm, or at the part of your head visible over a wall, or at the tail of your coat as you leave the room, or at your reflection in the water, or at your photograph, or at part of your shadow, and so on, the idea of drawing a semantic distinction at any point on this scale comes to seem quite hopeless and ad hoc. Rather, it seems that what we need to recognize is simply that there are lots of ways to draw an object to attention to facilitate the use of
a referring expression, and pointing directly to the object is just one way among others—other ways which include pointing at a related object.

So, there are certain superficially demonstrative expressions in natural language which we are constrained to treat as semantically akin to perceptual demonstratives yet which flout the putative epistemic conditions on demonstrative content. This is sufficient to show us that our current understanding of what is special about demonstrative content is not feasible. However, I want to suggest now that this finding is just what we should have expected all along. For reflection on the kind of semantic theory antecedently accepted reveals that we never should have expected a linguistic category which was individuated in terms of an agent’s relationship to an object in the first place. Although Russell and Evans were undoubtedly right to think that one can construct groupings of thoughts on the basis of the ways in which an agent is related to the object of those thoughts, and indeed that such a grouping is commonly associated with a given semantic category, such a grouping should never have been envisaged as demarcating a linguistic category.

3.4.3 Further objections to epistemic constraints on content

Even if we could get a clear account of what exactly is involved in being ‘acquainted’ with an object (which I think even advocates of acquaintance constraints will admit we lack), and if it happened to turn out that all demonstrative and indexical uses in a natural language like English met this constraint (which, for any substantial notion of acquaintance, I’ve argued they clearly don’t), still I think we would have reasons to resist the claim that an epistemic constraint like acquaintance is a constitutive feature of the meaning of certain natural language expressions. One first point to note is that a kind of ‘Kripke test’ for correct semantic analyses in natural language seems to provide further evidence that epistemic constraints on semantic content are misplaced.³³ So, imagine a linguistic community just like our own, save that they speak English*. In English* it is stipulated that the meaning of demonstrative and indexical expressions is epistemically unconstrained. Yet it seems

that even among English* speakers we would expect the use of indexical and demonstrative expressions to mirror the use of demonstratives and indexicals among English speakers. That is to say, we might expect the majority of occurrences of demonstratives and indexicals in this imagined linguistic community to pick out objects which are currently perceptually (or at least non-descriptively) identifiable by members of the community. Most utterances of English* demonstratives would, it seems, still occur in contexts where the interlocutors do have non-descriptive identifying knowledge of the objects referred to, since it is in these contexts that sentences containing the expressions will be of most use (most informative) to interlocutors. However, we might also expect such a community, on certain occasions, to exploit their ability to say referential things about objects which they are not (yet) in direct perceptual contact with. Thus the community would be able to say something truly referential by an English* utterance of ‘That burglar must be caught’, even where the burglar is known only by their extraordinary modus operandi. Or again, referential utterances concerning as yet unborn, or even unconceived, children, or concerning abstract or possible objects, could nevertheless be perfectly proper, and, in the right context, would be of use to speakers of English*. So, we might well expect this community, where the meaning of demonstrative and indexical expressions is not epistemically constrained, to extend their use of referential expressions from the core perception-based cases to precisely the kinds of cases the English language demonstrative and indexical extends to. Yet (in parallel to Kripke’s argument for a univocal, quantified analysis of definite descriptions) if a community using demonstratives and indexicals, where we have stipulated that the meaning of these expressions is epistemically unconstrained, can be expected to display the very same patterns of use we witness in English, then this gives us good reason to think that the semantic content of demonstratives and indexicals in English in fact matches the semantic content of these expressions in English* (that English actually is English*).

There seems to be every reason to think that a linguistic community might need, on occasion, the kind of linguistic device which expresses a non-descriptive commitment to an object, even where members of that community are not (yet) in a position to uniquely, non-descriptively discriminate that object (indeed, this seems to be just what’s going
on when we overhear an utterance of ‘that man is a spy’ uttered in a different room, or ‘that house will have a great view when it is built’ said indicating nothing more than the roughest indication of foundations for a building). A linguistic community which didn’t have genuinely referential expressions whose semantic content was epistemically unconstrained would, it seems, need to introduce such expressions at some point pretty soon after they came down from the trees or out of the caves (the need would arise just as soon as they wanted to talk in a stable, rigid manner about objects beyond their past and present perceptual horizons). Objects play a crucial role in our lives, and it is important to us to be able to say things directly about specific objects, where what we say will settle on and stick with the same object across any modal, temporal or spatial changes. Of course, generally this is important when we are dealing with the objects of specific perceptual encounters (that is to say, demonstrative and indexical expressions are clearly at their most useful when agents have non-descriptive identifying knowledge of the objects referred to); however, it doesn’t seem so difficult to envisage conditions in which an ability to say things similarly referential about an object not (yet) perceptually encountered would be useful.

Furthermore, it seems that from either the perspective of a modular thesis about linguistic understanding or from the perspective of a formal semantic theory, epistemic constraints are just the wrong kind of thing to warrant semantic inclusion anyway. To see this, let’s consider the modularity point first. Remember that what is being claimed by our current account of linguistic understanding is that there is a discrete module responsible for our linguistic abilities, a module made up of its own privileged body of information and operations on that information, which is not transparently penetrated by other (non-linguistic) kinds of mental operations and which, as a result of this isolation, is responsible for the speed, accuracy, and inescapability which is characteristic of judgements of literal linguistic meaning. This language module, of course, doesn’t exhaust the contents of the mind; in addition to it we are supposing that there are at least five further modules dealing with the sense modalities, together with some form of general intelligence or non-modular understanding, which unites the output of the various modules. It should already be becoming clear, then, that on this approach the idea of modes of object
identification having a role to play in linguistic understanding is a non-starter. Being able to discriminate an object from all other things (say, being able to see it or touch it right now) is something which may emerge from one of the modules dealing with sense perception, but this simply isn’t something which, on the modular theory, the operations of the language faculty has immediate access to. For the language module to count as a module there must be a degree of isolation in place, yet the move to treat epistemic connections to objects as constitutive of certain semantic kinds flies entirely in the face of this independence, suggesting that the meaning of a given linguistic item can only be recovered once a range of non-linguistic information (that is, perceptual information, memorial information, and so on) has been canvassed. But this is to pull down the walls modularity wants to build, it is to claim that, at least with respect to referring terms, no assessments of semantic content can be delivered until the agent has surveyed an extremely wide range of the things she knows. If this is right, then modularity (at least as far as semantic comprehension is concerned) must be wrong. Understanding a language, if we allow epistemic constraints on demonstrative content to stand, must turn out to be a kind of global enterprise.

Of course, this in itself might not be thought to be a good argument against epistemic constraints, for all it shows is that we face a disjunction of views: either we can have modularity, in which case we can’t have an epistemically constrained notion of content, or we can have an epistemically constrained notion of content and reject modularity. Perhaps, an opponent may object, it is the second disjunct which is the one to pursue here. However, as we saw in §3.4.2, the status of epistemic constraints on content is independently doubtful, since it fails to fit with the behaviour of deferred uses of demonstratives and indexicals. Furthermore, as I argued in Chapter 2, there are good reasons to embrace the modularity hypothesis with respect to linguistic (including semantic) understanding. So I take the fact that the kind of epistemic constraints envisaged by Evans et al. fail to fit with a modular view of the mind as one more nail in the coffin of the epistemic approach to content. Though questions of an agent’s epistemic contact with an object undoubtedly come to figure post-semantically (that is, in cognitive operations outside the language faculty) we have every reason to keep the language faculty itself free from such concerns.
A second, closely related reason to resist the move to incorporate epistemic conditions as constitutive of semantic status concerns the kind of semantic theory which was advocated in Chapter 1. For it seems pretty clear that the kinds of groupings of expressions affected by concentration on an agent’s epistemic access to a given object are not the right kinds of groupings to be recognized by the operations of our formal theory. The point is that thoughts, individuated in terms of the agent’s epistemic contact with objects, form too nebulous and variable a category to demarcate a kind for our formal semantic theory. A truth-conditional semantic theory, as we saw in Chapter 1, runs off formal descriptions of object-language sentences; but at least prima facie, it seems features of a context of utterance like the speaker’s epistemic contact with an object do not affect the formal features of the linguistic item produced. Certainly at the surface level this is true. The fact that I am in intimate epistemic contact with an object no more means that I will only use utterances of ‘this’ or ‘that’, and so on, to talk about it than a lack of such contact means I will only use utterances of ‘the’ or ‘some’. So, if we wanted to hang on to the formal semantic approach while allowing that demonstratives and indexicals are semantically ambiguous (as between genuinely referential and non-referential expressions), we would have to maintain that this fact surfaces at the syntactic level. We would need to hold that a univocal surface form like ‘that’ was actually ambiguous as between distinct syntactic items (say ‘that\textsubscript{RT}’ and ‘that\textsubscript{DES}’) and maintain that a speaker’s epistemic access to an object plays a crucial pre-semantic role, disambiguating which of our two homophonic expressions is really in play in an utterance of ‘that is F’. Yet this move seems questionable since there is little evidence for such syntactic ambiguity in natural language.

For instance, it seems that we cannot envisage a situation in which two utterances of ‘that might not have been F’, picking out the same object, nevertheless differ in truth-value. Yet if we have two distinct homonyms here, ‘that\textsubscript{RT}’ and ‘that\textsubscript{DES}’, such a divergence in truth-values ought to be entirely possible (for instance, an utterance of ‘that\textsubscript{RT} might not have been red’ could well be true, while an utterance of ‘that\textsubscript{DES} might not have been red’ could well be false, if the description replacing ‘that\textsubscript{DES}’ were, say, the salient red object). Furthermore, since homophony is an accidental property in a natural language, if we accept that there are two distinct lexical items realized by a single
surface-type in English, we would expect these two items to be realized by distinct words in different natural languages, yet this doesn’t seem to be the case. Thus, although it would not be impossible for a formal theory to include an ambiguity account of demonstratives and indexicals, there is little reason to think that it does.

It seems to me then that the case against imposing epistemic constraints on demonstrative content is over determined. First, and foremost, the constraint fails since not all genuine demonstratives or indexicals in natural language meet such a constraint. Secondly, even if our opponent could come up with a clear and satisfactory definition of what ‘acquaintance’ amounts to, still it seems that such a notion is not necessary to explain the pattern of use of these expressions which we find among ordinary speakers (for ‘Kripke tests’ show that an unconstrained notion of demonstrative content could underpin exactly the same pattern of use). Finally, the imposition of epistemic constraints on demonstrative content runs counter to the assumption of modularity for semantic comprehension and is at least prima facie in tension with a formal approach to linguistic meaning (since there is little evidence for a genuine syntactic ambiguity here). Whatever is special about demonstrative content, it is not that it guarantees some tight epistemic connection between agent and object. So, why, we might ask, have so many theorists in this area been keen to impose some kind of epistemic condition on referential content? I think the answer to this relates back to the question of the various roles a semantic theory might be expected to play for us, which I raised in the introduction. It seems that what prompts a requirement that we must know which object we are referring to is some kind of background assumption about the epistemic and/or metaphysical roles which a successful semantic theory might play. If we think that a semantic theory is capable of yielding interesting conclusions about the kinds of objects there are in the world, or how we know about those objects’ existence, then it is going to be necessary to place some kind of epistemic condition on certain kinds of expression. Rejecting this kind of epistemic perspective on the work of a semantic theory is, then, one more instance of our overarching, minimal perspective on semantic theorizing. If this move towards minimalism is right, however, we are still left with the question of precisely what it is that

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34 I’m grateful to Rob Stainton for this point.
makes demonstrative content special—what sets it apart from other kinds of meaning, like that associated with descriptive phrases? It is to this fundamental question that we now turn.

3.4.4 Demonstrative content without epistemic constraints

The existence of superficially demonstrative expressions which turn out to demand semantic analyses on a par with perceptual demonstratives, yet which flout any epistemic constraint on demonstrative content, reveals, I believe, that the putative epistemic construal of demonstrative content must be rejected. Though on very many occasions demonstrative utterances will be underpinned by thoughts involving concepts which do endow the speaker with discriminating knowledge of the object, such discriminating knowledge is not a constitutive feature of demonstrative content. Rather, knowing how to identify one’s referent—how to single it out from all other things—is a key post-semantic notion. It is the kind of information which comes to figure once we have worked out the literal meaning of the words and sentences (the truth-conditions for a given sentence) and once this output from our formal semantic theory has become subject to the full range of other kinds of information the agent possesses, like the output of the perceptual systems. Exactly how this post-semantic operation comes about will be the topic of §3.5, but for now we still face the question of exactly what demonstrative content is—if we denude demonstrative content of all epistemic import, what is left to distinguish it from general, non-referential semantic content? The worrying thought begins to emerge that, despite all the problems with epistemically constrained content, it (or something like it) simply has to be the correct approach, since it provides the only way to maintain a clear distinction between referential and non-referential talk. However, in this section I want to suggest that this is not the case; there is a way of defining demonstrative and indexical content which does not require an appeal to epistemic notions. The key comes, I think, in recognizing that singular content is simply something which is syntactically encoded.

The suggestion I want to make is that what is special about demonstrative and indexical content resides not with the kind of epistemic contact between speaker and referent, but simply with the mode of
expression of our thoughts. Fundamentally, demonstratives and indexicals differ in meaning from quantified noun phrases because they express a different kind of concept—singular concepts in the former case, general concepts in the latter. These expressions invoke different ways of thinking about objects in the world, differences which manifest themselves in the kinds of commitments someone entertaining such a thought undertakes, and the kinds of judgements speakers will make about counterfactual situations. On this account of what is required to understand a sentence containing a demonstrative expression in subject position it will still be the case that the interlocutor need entertain a singular thought, but singular thoughts will now be no more than a function of the syntax we use to express that thought. To borrow once again Fodor's notion of the language of thought, the idea is that the structure of our thoughts must reflect the syntax of our language to at least this extent: to think 'That is G' just is to think a different kind of thought, involving a different kind of concept, from thinking that 'An F is G'. Singular concepts, on this approach, are cheap: we can, whenever we wish, create a singular concept for a given object, simply by introducing a demonstrative (or other referential) expression for descriptive information we already possess. Entertaining a singular thought,

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35 Perry 2001: 54 introduces the term 'notion' for something very like my idea of a singular concept here. He writes: "Notion is my term for the ideas we have of people, things and places. Notions are concrete particulars, though not necessarily simple ones." Though I want to hold that singular concepts can be considered either as concrete particulars or as more abstract types, there are substantial similarities between the two accounts; for instance, he talks of notions as being 'attached' or 'detached' to perceptions, while I will speak in terms of singular concepts being 'integrated' with perceptual representations. We will look at Perry's account in more detail below. The model I propose also has close affinities to that put forward in Levine 1988. He writes 1988: 223: "[I identify] the cognitive content of a demonstrative with a mental representation—a symbol in the language of thought—that functions as a non-descriptive singular term. Identity statements are informative because they are represented in the language of thought (or 'mentalese') by sentences of the form \( \alpha = \beta \), where \( \alpha \) and \( \beta \) are distinct symbols neither of which is analysable as a disguised description."

36 This is to reject, for instance, Soames' 2002:92 view of what is necessary for naming future or abstract objects, and thus what is necessary for entertaining singular thoughts about such objects: "Two requirements must be met if such a naming is to be successful. First, we must be able to single out a unique, merely future, or merely possible, object \( o \) to be the bearer of the name. Second, we must be sufficiently acquainted with \( o \), prior to the introduction of the name, to entertain de re thoughts about \( o \)—that is, to believe of \( o \) that it is so and so—and perhaps even to assert singular propositions involving \( o \). This second condition, though vague (what counts as sufficiently acquainted?), is not easy to satisfy. Certainly, it is not enough to possess an arbitrary definite description that picks out a unique object. We cannot successfully introduce a new name, \( \text{Newman} \), simply by announcing that its (present) bearer is to be the first child born in North America in the twenty-second century. Since we are not now in a position to have de re thoughts, or make de re assertions, about that individual, and since no linguistic ceremony can change this fact, we cannot use a sentence \( \text{Newman is } F \) to say of that individual that it 'is F.'" See also Recanati 1993: 108: "[I]t may be that someone who says 'Julius is F' [when he knows of Julius only as the inventor of the zip] says of Julius that he is F; thereby asserting a singular proposition. However, we should by all means refrain
where this is individuated syntactically, becomes entertaining a thought which relates in a specific, intimate way to an object, a thought whose truth depends on how things stand with a particular object, but which does not require that the agent is currently in a position to (non-descriptively) identify the object her thought is about.

On this approach, then, when I introduce a demonstrative expression for a future or abstract object, or for an object I lack perceptual knowledge of, I introduce a singular concept for an object (and thereby come to entertain singular thoughts about the external world object), though this syntactically generated mental object still stands in need of connection to other information I possess or may come to possess, like perceptual information or memorial information. Indeed I would suggest that in many cases it is possible to see this distinction between introduction of a syntactically generated singular concept and its integration with perceptually generated information. For instance, if you, looking out of the window, tell me ‘That is the woman I saw yesterday’, and I come over to the window and see the woman you saw, what I acquire is (post-semantic) perceptually identifying knowledge of the referent, but what I don’t get is further knowledge about what the sentence you produced literally meant. This minimal, syntactically driven notion of demonstrative content seems to fit with that Kaplan himself endorsed in ‘Thoughts on Demonstratives’, where he suggests:

There is nothing inaccessible to the mind about the semantics of direct reference, even when the reference is to that which we know only by description. What allows us to take various propositional attitudes towards singular propositions is not the form of our acquaintance with the objects but is rather our ability to manipulate the conceptual apparatus of direct reference.³⁷

‘Manipulating the mechanisms of direct reference’ comes out, on this interpretation, to mean simply the syntactically driven introduction of singular, as opposed to general, concepts. Coming to entertain a kind of thought which is characteristic of singular terms, and which is revealed in the kind of counterfactual judgements the competent user of the term judges to be relevant (namely that the term, once reference

³⁷ Kaplan 1990: 45.
is fixed, sticks with its object, no matter what properties that object later comes to possess).

It might be helpful here to draw a comparison with the kind of account of referential content John Perry has recently elaborated (Perry 2001). Perry suggests that statements involving context-dependent expressions possess (at least) two different kinds, or levels, of content, which he calls ‘reflexive’ and ‘referential’ contents. The latter is exhausted by the object referred to; thus, if we are thinking in terms of Russellian propositions, the referential content of a referring term will be just the object it contributes to a Russellian proposition (rather than any description of that object). On the other hand, reflexive content utilizes the descriptive condition under which the referent is selected; it is reflexive since the condition to be met mentions the token expression itself. So, for instance, imagine an utterance, u, of ‘I am happy’, as said by s. This yields the reflexive proposition that the speaker of u is happy as well as the referential proposition s is happy. However, and this is where things can get tricky, Perry also notes that the descriptive condition appearing in the reflexive proposition can, as it were, get used, rather than being mentioned as part of the content of the proposition. To see this it will help to adopt the notational devices he uses for representing the two different kinds of proposition. He uses bold italics to represent identifying conditions (things like ‘being the speaker of u’) when they appear as part of the content of the proposition, while he uses bold alone for identifying conditions when the objects designated by them form part of the content. So, of the examples

(6) Jim was born in Lincoln

and

(7) The manager of Kinko’s was born in the capital of Nebraska

³⁹ We should note that, although in Chapter 1 and elsewhere, I have spoken of Recanati as a dual pragmatist (i.e. as someone who claims that truth-conditional content is pragmatically saturated throughout), this classification comes with a caveat. For he is willing to embrace reflexive propositions as giving the sole, pragmatically unaffected, semantic level of content. He writes, 2004: 65: “For every utterance, there arguably is a proposition which it expresses in virtue solely of the rules of the language, independent of speaker’s meaning: that is the ‘reflexive’ proposition in the sense of John Perry [2001] (a variant on Stalnaker’s [1999] diagonal proposition) . . . [T]he reflexive proposition is determined before the process of saturation takes place. The reflexive proposition can’t be determined unless the sentence is tokened, but no substantial knowledge of the context of utterance is required to determine it.”
(where Jim is the manager of Kinko’s) he writes as follows:

On the standard account of definite descriptions, (7) expresses what Kaplan calls a general proposition, a proposition that is not specifically about Jim and Lincoln, but about being the manager of Kinko’s, and being the capital of Nebraska. I’ll designate this proposition as follows:

\[ (\text{p}[7]) \] That the manager of Kinko’s was born in the capital of Nebraska.

Here the boldface tells us which things we are thinking of as the subject matter. The italics tells us that [it] is the identifying conditions being the manager of Kinko’s and being the capital of Nebraska that are the subject matter, and not the objects they designate. If we wrote down the same thing but without the italics, we would not designate (\text{p}[7]). We would instead designate (\text{p}[6]), our singular proposition about Jim and Lincoln, in a new way:

\[ (\text{p}[6]) \] That the manager of Kinko’s was born in the capital of Nebraska.

(\text{p}6) will be true just in case the actual manager of Kinko’s (Jim) was born in the actual capital of Nebraska (Lincoln), whereas (\text{p}7) will be true just in case whichever object is the manager of Kinko’s was born in whatever place happens to be the capital of Nebraska.

This difference (as Perry notes) is essentially that between an ordinary description and a description under Kaplan’s ‘dthat’ demonstrative surrogate (where ‘dthat’ acts to take us to the satisfier of the description in the context of utterance and then loads that object, rather than any description of that object, directly into the proposition). Thus the two propositions:

(i) That the speaker of \( u \) is \( F \)

(ii) That dthat (the speaker of \( u \)) is \( F \)

are very different propositions for both Kaplan and Perry. In the former, the descriptive condition actually appears as a part of the content of the proposition; whereas in the latter, the descriptive condition does not supply part of the content (with the content being provided by the

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\text{40} Perry 2001: 26.

\text{41} Kaplan 1978. Note that the interpretation of ‘dthat’ intended here is as a demonstrative surrogate (where the description acts to help secure the content, but does not itself contribute to that content) and not as a rigidifier (where no object is loaded into the proposition, instead the complex term carries instructions to always look for the satisfier of the description relative to the actual context of utterance); see Kaplan 1989: 579–82.
object which satisfies the description in the actual context of utterance alone). Although, in both cases we seem to have a description at the propositional level (‘the speaker of u’), this appearance is deceptive in the latter case. For all we really have at the level of the content of the proposition in (ii) is the object which the description selects in the actual context of utterance; once it has served (using Kripke’s terminology) to fix the referent of the expression, the identifying condition drops out of the picture (it does not also give the meaning of the expression). The claim I would like to make, then, is that for an indexical or demonstrative expression, the content that can be recovered on the basis of an agent’s knowledge of language alone (the genuinely semantic content of the token expression) is a proposition like (ii) or like (P6) above.\footnote{Soames 2002: 49–50 rejects a ‘dthat’ move for singular terms. Although his primary reason for rejecting this move (in the context of his book) is that it does not provide a genuinely descriptive theory for referential terms, he also objects that “coreferential dthat-rigidified descriptions have the same content and the goal of distinguishing coreferential names by associating them with different descriptive contents is thwarted”. However, on the above approach, I think coreferential demonstratives/indexicals can be held apart, for though two tokens of ‘that’ referring to the same object introduce singular concepts with the same content, since these concepts have different characters (in virtue of being associated with different token expressions) an agent may be unaware of this fact; see §3.5.}

Now, this is, I think, somewhat different to the account of indexicals which Perry himself prefers. For he seems to suggest that it is the reflexive content of an utterance of a demonstrative- or indexical-containing sentence (where the identifying conditions themselves form part of the content of the proposition) which gives the content recoverable on the basis of linguistic knowledge alone. He suggests that the ‘indexical content’ or ‘content\textsubscript{M}’ of an utterance corresponds to the truth-conditions of the utterance given the facts that fix the language of the utterance, the words involved, their syntax and their meaning, and this appears to be the reflexive proposition:

Consider:

[8] You were born in the capital of Nebraska.

The reader will quickly grasp that the language is English; the identity of the words is clear, the syntax is unproblematic and there are no relevant ambiguities. So what the reader grasps is just what [the concept of indexical content] fixes. What the reader understands is the content\textsubscript{M}; he will grasp that the truth of [8] requires:

\[(P^x[8]) \text{ That the addressee of [8] was born in the capital of Nebraska.}\] \footnote{Perry 2001: 83.}
The only change I would like to make to Perry’s account here, then, is to claim that the proposition the addressee is capable of recovering on the basis of their linguistic knowledge alone is the one where the identifying conditions themselves act as reference-fixers rather than as genuine elements of the propositional content. Thus, on my account, the competent hearer of (8) is capable of recovering (9), even in circumstances where they are currently unable to perceptually or otherwise identify the object the identifying conditions pick out:

(9) That the addressee of [8] was born in the capital of Nebraska.

To put matters in the truth-conditional framework advocated thus far, I want to suggest that the competent language user, faced with an utterance, u, of ‘That is red’ is capable of recovering the semantic content that α is red (via the conditionalized T-sentence: [If the speaker of ‘this is red’ refers with the utterance of ‘this’ therein to α and to nothing else, then that utterance is true if and only if α is red]). Here ‘α’ is a syntactically generated singular concept, the content of which is exhausted by the object referred to by the speaker in this context (in Perry’s terms, α could also be designated by the object demonstrated by the speaker of u).

Perry’s overall picture appears to be one on which different levels of content are delivered according to the different degree to which the world is allowed to ‘wash through’ linguistic content. Much as we might think of an etching as coming to reveal different intensities of the same outlined picture, according to how many times acid is washed over the surface of the plate, so with content, we can think of different types or levels emerging according to how much linguistic content we allow to be washed out by the world. I like this (pretty abstract) kind of picture (but that might well be because the pretty vague simile is mine, not Perry’s), yet rather than thinking of the difference here in terms of levels or kinds of content, I’d like to think of it in terms of the degree of integration between information in the language faculty and information in other domains. So, information which is isolated from other domains (the purely reflexive content in Perry’s terminology or my ‘dthat(reflexive content)’) gives us our genuinely semantic understanding, while information which has gone any way beyond

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44 See, for example, Perry 2001: 80–4.
the language faculty, becoming sensitive to information from other domains (for example, the perceptual or the memorial) gives us our hold on what has been communicated (‘what is said’ in the pragmatic, non-Gricean sense of Chapter 2).

Possessing a singular concept for an object does not, then, entail that an agent is able to (non-descriptively) identify the object being thought about from all other things. Usually, of course, introducing such a concept will be worthwhile (cognitively useful) only if we have antecedently identified the object we are concerned with in some non-descriptive way, but this doesn’t mean that such identifying knowledge is a necessary prerequisite for concept formation. Though there may be a set of thoughts we wish to classify as special from an epistemic perspective, this can only be a sub-set of those thoughts we recognize as singular from the perspective of language comprehension. This constrained sub-set which meets an acquaintance-type constraint will be highly relevant, for instance, when we try to negotiate our way around the world or theorize about what objects the world contains, but it is not fundamental with respect to linguistic understanding. Thus, as Crimmins notes, though (in general) uses of demonstratives are at their most informative or cognitively useful when we possess prior, non-descriptive identifying knowledge of an object, still features of useful uses of demonstratives are not necessarily constitutive features of demonstratives per se.⁴⁵ This is not to undervalue the non-semantic knowledge I acquire when I do ‘rub up against’ objects, nor to overvalue the semantic knowledge I get from understanding my language; rather it is just to recognize that understanding a language is not the same thing as understanding the world. What is required to understand the latter will far outstrip what is required to understand the former, and this is the case even though linguistic utterances, once inaugurated into a wider body of knowledge than the purely linguistic, form the central method for communicating information about the world among a community. But this fact, namely the role of language in communicating information about the world, should not, I think, lead us to see all the conditions

⁴⁵ Crimmins 1992: 86: “[This] argument makes the following mistake: we canvas typical cases in which beliefs really are about specific individuals . . . and we notice that in each of them the agent stands in a somewhat intimate relation to the individual in question, leading us to suspect that this sort of relation is what makes the belief truly about the individual. All we are entitled to conclude is that we typically form beliefs truly about individuals only when we are related to them in an intimate manner. The right way to think about this fact is as arising from a constraint on the usefulness of forming a notion about an individual.”
which must be in place for such communication to take place as themselves being constitutive of linguistic meaning. Specifically, we have no reason to expect (and many reasons to reject) the idea that epistemic relations between agents and objects are a matter of our language, as opposed to a matter of our relation to the world which cuts finer than the broad-grained categories of a natural language.

We have come, then, to another key point at which the formal semanticist should recognize the minimal nature of her task. Recovering the semantic content from a sentence containing a demonstrative or indexical expression does not guarantee that we can (substantially) identify the object referred to—linguistic understanding of the kind furnished by demonstrative utterances is not the same thing as perceptual understanding. The role of language here is to give us a way to codify and publicize our knowledge of, and commitments to, the world, sharing our knowledge of, and views about, the world with one another, yet understanding a language alone, without all the other kinds of systems which make access to the world and the thoughts of others possible, is understanding very little. We should then think of language as a code and grasping literal meaning as requiring the decoding of formally presented objects. This decoding can take place pretty much in a vacuum—all that is needed is the right kind of formal decoding mechanism(s) and the formally described input to the system. Yet, for any decoded message to be useful, an agent also needs to know how the conveyed message relates to the world around her. And this final mapping, as we will see in more detail in the next section, is not a part of semantics proper. Instead it requires access to information way beyond that contained in the language faculty, calling on perception, memory, theory of mind, and who knows what else.

So demonstrative content (or referential content in general) is special because it, unlike descriptive linguistic items, requires the entertaining of a singular concept or singular thought to understand, and entertaining a singular thought on this model is entertaining a genuinely referential thought in which one recognizes a specific role for an object, and thus a commitment to stay with that object over time, space, and counterfactual situations, regardless of the properties that object comes to possess. But this is all we can get from our language: not a guarantee that a given

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46 We should note that the commitment to track an object over time and space, etc., is here taken to be evidence for a special kind of object-dependent thought (singular thoughts); the claim is that there are two
very different kinds of thoughts, singular and general ones, and the evidence for positing a special class of
singular thoughts emerges from intuitive judgements about modal and other kinds of behaviour.

This point may take us some way in the direction of an explanation of the problems posed by ‘empty’
demonstratives and indexicals. On the present picture, all proper tokens of these expressions (i.e. those
appearing in well-formed sentences) give rise to a syntactically triggered singular concept, possessing a
particular character, but the kind of integration each distinct concept undergoes may ensure either that it
fits only with non-perceptual, memorial knowledge (fictional cases), or that it cannot be integrated with
any information beyond the language faculty (as is perhaps the case with referential terms introduced for
hallucinated objects); see next note.

What, we might ask then, of empty uses of demonstratives or indexicals? For instance, if someone
utters ‘That is red’ while hallucinating a dragon, what are we to say hearers of this utterance understand?
Clearly, since singular concepts are syntactically triggered on my account, I am committed to saying that
the addressee entertains a singular thought, though since the singular concept at the heart of this thought
is not about any object it will lack all content. Of course, just as an addressee may be unable to identify the
object of her thought in any substantial manner, so too she may be unaware that the concept lacks content
(for example, if she is unaware that the speaker was hallucinating). In this way, we have something like the
McDowell view that an agent may be confused about the contents of her own mind (McDowell
1986: 145). However, on my account, the claim is not that the deluded agents believe they are entertaining
a singular thought when in fact they have only descriptive thoughts, rather the claim is that they entertain
a genuinely singular thought (a thought involving a singular concept), but that they are unaware that this
concept lacks content (possessing only the character associated with the linguistic item which gave rise to
it). When they come to try to integrate the linguistically generated concept with perceptual information
they may have, they will find no perceptual object available. Thus, in this situation, though both speaker
and hearer may be unaware of this fact, there will be no truth-evaluable content for their language faculty
to deliver when faced with an utterance of ‘that is F’, since the singular concept introduced for this token
of ‘that’ will have character but no content. This, it seems to me, is simply a consequence of adopting an
externalist account of the content of singular concepts.
We have then, I contend, a notion of demonstrative and indexical content which diverges from the kind of content attaching to non-referential, quantified expressions, but which can nevertheless be recovered by the competent language user merely by considering the sentence-type as relativized to a formally described context of utterance. Faced with an utterance of ‘That is red’, the competent language user needs to recognize that ‘that’ is a singular term, and that it thereby introduces a singular concept into the truth-conditions of the utterance, a singular concept the content of which is exhausted by whichever object is referred to by the speaker in this context. However, identifying which object this is, in any non-descriptive way, will be a task which falls outside the language faculty, requiring integration of the syntactically generated singular concept with other (perceptual) information the agent possesses. However, there has been much talk of ‘integration’ in this section and this is clearly a term which stands in need of explanation. The suggestion is that it is at this point that appeals to character come back into the picture: the role of demonstrative character is to allow the language user to map linguistically generated concepts into the wider cognitive domain.

3.5 The Nature of Character

In §3.2 the dual account of demonstrative meaning, in terms of content and character, was introduced, and in §3.3 it was argued that this dual account could be accommodated even within an apparently one-dimensional semantic theory (like the truth-conditional account) by recognizing a difference between propositional or truth-conditional content and information contained in the lexical entry for an expression. The argument of the last section was then that content, understood in terms of syntactically triggered singular concepts which refer directly to objects in the world, and stripped of any extraneous form of constraint (such as the epistemic conditions introduced by Russell and Evans), can and should be treated as a genuine part of a formal, modular theory of linguistic comprehension. Now, then, we come to the second part of the story, the notion of character. The claim is that character rules should indeed be posited as part of the lexical information associated with demonstrative and indexical terms, and that what this information
primarily concerns is not directly the move from linguistic items straight to external objects, but rather the move to integrate linguistic information with non-linguistic information.

We have an idea of demonstrative content as given by a singular concept, which has been syntactically instigated in the mind of the competent language user, with the content of this syntactically generated singular concept in turn being exhausted by the object in the world to which it refers. Yet how does this syntactically generated concept come to develop into the rich, highly informative notions which form the usual contents of our thoughts? On hearing ‘that’s mine’ we don’t usually entertain merely the thought recovered on the basis of linguistic meaning (that is, the thought that ‘α, whatever it is, belongs to S, whoever that may be’), so how do we move from this minimal semantic understanding to something more recognizable as the common currency of communication? The answer comes in the form of character. On the current picture it is character which is responsible for connecting linguistic content with non-linguistic information, combining purely linguistic understanding with the rich vein of information we have from perceptual, memorial, and other processes. (The difference between this account of character and the original notion from Kaplan and Perry comes, then, I think, in the fact that character is here viewed as providing a bridge between the language faculty and the rest of the cognitive domain, whereas in previous accounts it appeared to provide a direct link between language and the world.)

On the current account, character is to play a role connecting the singular concepts syntactically generated within the language faculty with the conceptual content generated elsewhere in the mind. So, to take a fairly simple occurrence of a demonstrative and an indexical, imagine an utterance of ‘That is mine’, said to Anne by Bob, while he indicates a slice of cake, where both speaker and hearer have direct perceptual access to the same scene. The picture I want to suggest is as follows: the acoustic signal produced by Bob is picked up by Anne and fed through the phonetic, syntactic, and semantic processes of her language faculty, which generates as output a formal representation of the semantic content of the uttered sentence (a truth-condition). This truth-condition contains two singular concepts, say α and β, triggered respectively by the expressions ‘that’ and ‘mine’. Though both are
singular concepts (and thus, as suggested in the last section, share a common kind not shared by the concepts triggered in the minds of competent language users on hearing quantified noun phrases like ‘someone’), there are differences between the two. Specifically, ‘α’ is a THAT concept and ‘β’ is a SPEAKER concept (more on precisely what this difference amounts to below). This information isn’t part of the truth-conditional content entertained by the hearer (which is exhausted by the thought that the utterance is true just in case α is β’s) but it does, to speak metaphorically, affect the shape of the concepts. The syntactic origins of a linguistically generated singular concept are preserved in the form of the concepts themselves. To put it in terms of a Fodorian language of thought, the claim is that the syntax of mentalese mirrors the syntax of natural language in at least this respect. Though utterances of the English words ‘that’ and ‘this’ will both result in a competent hearer (in normal conditions) entertaining a singular concept, the form or syntactic kind of concept will differ in each case. At a more general level of description, of course, both concepts can be classed together (both being singular rather than general concepts), but at a more fine-grained level of discrimination the two will come apart, since they have a different syntactic form or character. (The proposal, then, is to allow expressions on the right-hand side of a T-sentence—expressions which figure in an agent’s mental representation of a semantic theory—to possess both content and character, just as the natural language items on the left-hand side do.)

Once the hearer of ‘That is mine’ comes to entertain the thought that α is β’s, where ‘α’ is a THAT concept and ‘β’ is a SPEAKER concept (where the content of these concepts is exhausted by the objects in the world to which they refer), she has recovered all the information available to her from her comprehension of English.49 Our hearer can tell us the conditions under which the utterance will be true, but she cannot yet tell us whether the utterance is true—that is, whether that truth-condition is satisfied; this is an important point and we will return to it below (§3.6). To proceed to this next stage (assessing whether or not the truth-condition is satisfied), Anne needs to integrate her purely linguistic information with the information she is

49 It seems then that the Chomskian view that the language faculty must operate over internal representations is borne out on this account, though the claim is that these internal representations may still have an object-dependent content.
receiving perceptually. So, for instance, while witnessing the little scene above, our hearer will have registered a range of perceptual information concerning the elements of the scene. That’s to say, it’s not just her language faculty that will be at work trying to interpret the scene, but also some or all of her perceptual mechanisms will be in play. Notably, from our point of view, a correctly functioning visual system will have perceptually parsed the scene on display, generating perceptual concepts for (at least) the piece of cake and Bob. Let’s call these concepts A and B respectively. So, to get to make an assessment of truth or falsity for the utterance in question, what our hearer first needs to do is to combine her four mental concepts into just two—she needs to recognize that the linguistically generated concept α and perceptual concept A can be united, and that linguistic concept β and perceptual concept B are connected.

What affects this integration? Well, since the process unifies information from two distinct modules, the integration process itself must, I think, be non-modular (or, better, must be less modular than the linguistic and perceptual systems themselves). However, this job of integration is, in the case of the interpretation of demonstrative and indexical expressions, made easier than it might otherwise be, for the syntactically generated concepts themselves come with rules of engagement. A concept generated on the basis of a token linguistic expression of ‘you’ will only merge with a perceptual concept of an addressee in the context in question, ‘yesterday’ requires the concept brought out from the agent’s memory store to be that of the day before the day of utterance, while ‘that’ requires a perceptual concept of an object at some proximal distance from the speaker, and so on and so forth. The concepts emerging from the language faculty wear their affiliations on their sleeves, so to speak—it is their syntactic form which dictates the kinds of mergers they will allow with concepts emerging from other modules. We might think of things here as somewhat on a par with the production of antibodies in the immune system. Antibodies come pre-shaped for integration with specific kinds of viruses—if you’re not the kind of virus that the antibody was generated to deal with, then the antibody doesn’t want to know about

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50 Modularity is, as stressed in Chapter 2, a property of degrees not an all-or-nothing state. So the integration system at this stage must be less modular than either the language or the perceptual system, though it may not yet have general access to all the information an agent possesses.
you. But when the right kind of virus comes along, the antibody fits it like a glove. Where we previously had two distinct items, we end up with the union of the two. So with (some) linguistic demonstratives and perceptual concepts, where once we had two distinct items in two distinct modular systems, we end up with just one—the mental object giving the perceptual and linguistic identification of the referent.

Of course, as things stand, this picture is still very simplistic. For one thing, as was noted above, it seems clear that the referents of demonstratives (and indeed many indexicals in general) are only settled via appeal to the intentions of the speaker. To determine precisely what object/aspect of an object is the intended referent of a given utterance of ‘that’, or to settle what counts as ‘here’ we need to appeal to speaker intentions. But on the modular picture embraced so far, we can’t do this, for we are looking only at the language and perception faculties. Appeals to speaker intentions, then, will require appeal to general, non-modular, comprehension processes (which can involve the kind of abductive reasoning required to assess the aims and intentions of others). So, it seems clear that more than merely perceptual information will be needed if the referent of our token of ‘that’ is to be identified in a substantial manner. However, as noted above, since our integration procedure is engaged in mapping the outputs of several distinct modules to one another (language and vision), we already know that it must be a (relatively) global process. Thus, discovering that the integration procedure may also need to appeal to such global, abductive capacities as an agent’s capacity for mind-reading should come as no surprise. If it turns out that, on many or most occasions, an addressee is capable of correctly mapping a linguistically generated that concept to a perceptual concept of some contextually salient object only if she is also sensitive to the intentional states of the speaker, this only reinforces the conclusion urged here, namely that reference identification (in any substantial sense) is a non-modular, non-linguistic matter.

However, one worry we might have concerns the problem of privacy—if we are moving away from the idea of character rules as taking us directly to an object in the world (which gives the content of the token expression), and instead seeing them as rules of integration with an agent’s wider cognitive environment, do we not risk losing the publicity of meaning? If we allow demonstrative content to be given (in the first instance at least) by a singular concept, how do we ensure
that two agents can grasp the same content, and what happens to the intuitive idea that context-dependent expressions provide perhaps the most immediate point of contact between language and the world? To begin with the latter issue, of the kind of contact context-sensitive expressions provide with the world: first, recall that, although demonstrative contents are here syntactically generated mental objects (singular concepts), the content of these concepts is in turn to be exhausted by the object in the world they concern. So, imagine an agent entertaining an utterance of ‘That is that’, where the first token of ‘that’ is associated with a demonstration of a boat seen through one port hole, while the second is associated with a demonstration of a boat seen through another port hole.\textsuperscript{51} Here, then, the idea is that the agent generates two distinct singular concepts, \textsc{that}\textsubscript{1} and \textsc{that}\textsubscript{2}, whose character is given by the reflexive character rule associated with each token expression and whose content is exhausted by the objects they refer to. However, the agent herself may as yet be unable to identify these referents in any substantial way. If the objects seen through the portholes are different boats, then the agent’s linguistically generated thought could never be true, since the content of \textsc{that}\textsubscript{1} is necessarily different to the content of \textsc{that}\textsubscript{2}. Yet this is something that the agent herself may never know unless she comes to integrate these linguistically generated concepts with further information she can gather, such as perceptual information or information from testimony, which leads her to recognize the non-identity of the content of her two concepts, and thus to recognize that the original utterance was false.\textsuperscript{52} It seems to me then that the mental entities which give the content of demonstrative and indexical expressions do not threaten to undermine the idea that these linguistic expressions provide a point of intimate contact between language and the world, since the content of a singular concept is still taken to be exhausted by the object referred to, rather than any description of that object.

\textsuperscript{51} The example is originally from Perry 1977.

\textsuperscript{52} So what saves the agent from irrationality in this kind of case—how come it is okay for an agent to believe ‘that is not that’ even when she is mistaken in this claim? The answer I think lies in the token-reflexivity here—although it’s right that we have just a single lexical character in play, we have two distinct tokens, and, where the expressions are not syntactically anaphoric, establishing that two distinct syntactically generated singular concepts concern a single real world object is obviously something which lies beyond the resources of the language faculty proper. It is this which creates the space for rational mistakes like the above.
Secondly, however, it seems that this recognition also serves to deflate the worry about a loss of publicity here. For although we are inserting a mental intermediary between linguistic items and the objects in the world at this point, since the content of these mental intermediaries is exhausted by the objects in the world they concern, it seems that more than one person can entertain the very same demonstrative or indexical content (that is, have a singular thought about one and the same object picked out in one and the same way, for example, via a THAT concept or a SPEAKER concept, and so on). Clearly, on the current account, singular concepts must be characterizable both as concrete particulars (that is, specific mental entities entertained at a time by an agent) and as abstract objects (that is, mental representations with the same content and character entertained at different times by one agent, or by different agents at the same time). Publicity of meaning is then maintained since what is required to understand an utterance of ‘That is F’, etc., is that one entertains a singular thought of the same type as the speaker, that is, thinking, about the same object in the world, that it is the intended referent of this token of ‘that’ and that it is F (even though, given the absence of epistemic constraints on singular thoughts, the agent may not yet be in a position to verify that she and the speaker are indeed thinking of the same object, requiring further information, for example, perceptual information, to determine that fact).

So, we have an account of the semantic content and character of overtly context-sensitive expressions which does not make immediate appeal to rich features of the context of utterance such as speaker intentions; thus it is an account which is amenable both to the formal and the modular perspectives on linguistic comprehension outlined at the start of this essay. What you need to entertain when faced with an utterance of a sentence containing a demonstrative or indexical expression is a singular thought; furthermore a singular thought involving the right kind of singular concept (that is, a singular concept with the right kind of character and content). Though clearly entertaining such a thought takes us only a very little way towards understanding the full communicative force of the utterance, it does yield the genuinely semantic level of content which can be recovered by the competent language user on the basis of her linguistic understanding alone.\(^\text{53}\) There may, however, be

\(^{53}\) Of course, we could run at things from the other direction as well: imagine being faced with an utterance in a language you do not understand, but where the speaker’s actions make it clear that she is
a residual worry which emerges with respect to this minimal notion of demonstrative and indexical content, for it may be objected that this thin notion of semantic content is not really semantic content at all; that is to say, it doesn’t really reach the standards for meaningful representation.

3.6 Objection: Reflexive Content is not Semantic Content at all

One worry which might be raised concerns the similarity between the notion of demonstrative content deployed in §3.4 and Perry’s notion of reflexive content, for reflexive propositions haven’t found favour with everyone. Indeed, the idea that there is some general content which is embodied by all tokens of sentences containing context-dependent expressions has been rejected by Soames, as follows:

Consider . . . the first-person singular pronoun as it occurs in a sentence I am F. There is no such thing as ‘what the sentence says’ independent of the context of utterance in which it is used. The competence conditions associated with the first-person singular pronoun guarantee that when I assertively utter the sentence, I use it to say something about me, whereas when you assertively utter it, you use it to say something about you. One might be tempted to suppose that there is some more general thing that the sentence ‘says’ in every context – namely, the proposition expressed by the speaker is F (or some such thing). But this will not do. Our notion of ‘what a sentence says’ is tied to what speakers who assertively utter the sentence say. Typically, when I assertively utter I am F, I don’t assert that I am speaking or using language at all. Further, the proposition that I assert when I assertively utter such a sentence may be true in a possible circumstance in which no one is using language, and someone may believe this proposition without believing anything about me being a speaker.⁵⁴

However, whether or not these objections hold against the idea of using reflexive conditions to give the semantic content of tokens of demonstrative- or indexical-containing sentences, it seems that they

referring to a perceptually present object. Then you would have a perceptual concept of the object, which would take you some way towards interpreting the speaker’s communicative action, but you would be unable to interpret fully the communicative act, being unable to recover the semantic content of her utterance. You would be unable to integrate your perceptual identification of the referent with a similar linguistic identification.

⁵⁴ Soames 2002: 104.
do not hold against the suggestion of §3.4. For there the claim was that genuinely singular (object-dependent) thoughts give the content of the token sentences in question, thus we have no reason to think that what is asserted (that is, where, contrary to the suggestion of Chapter 2, we take what is asserted or said to concern genuinely semantic content) has anything to do, say, with speaking a language. The content asserted (on current terminology) by an utterance of ‘I am F’ is just $\alpha$ is F, where ‘$\alpha$’ represents the object picked out by the descriptive condition ‘is the speaker of u’. For the reflexive descriptive condition here serves to fix the referent, not give the meaning (content), of the token of ‘I’. So, just as Soames wants, on the current account it is not the case that the utterer of ‘I am F’ asserts anything about being a language user, and the proposition expressed by such an utterance may be true in a possible circumstance where no one is using a language. Now, it may be that, since the character of the singular concept $\alpha$ is that of an ‘I’ concept (that is, its ‘identifying condition’ or character is ‘is the speaker/producer of the current token’), it is in fact impossible for someone to grasp the content under its current character without believing that $\alpha$ is the speaker of u, but, contrary to Soames’ suggestion in the above quote, this seems quite reasonable to me. After all, if one doesn’t realize that the object referred to by an utterance of ‘I’ must be the producer of that token, then it seems clear that one doesn’t understand the utterance. An addressee may not manage to perceptually (or otherwise) identify the speaker of a given utterance, but to understand the literal meaning of ‘I am F’ it seems to me they had better think of the object in question as the producer of the current token at some level or other (and, on the current proposal, the level at which they must think this is the level of conceptual character not content).

So, I don’t think that Soames’ challenge to reflexive propositions per se holds against the current picture. However, there is another, perhaps related, charge which might be made here. The problem is this: semantics is concerned with meaning and meaning is more than mere syntax (hence the common objection to computational theories of the mind, that they might get the syntactic aspects of representation but they miss the semantic story completely).\footnote{See Searle 1984.} However, if the proposal here is for syntactically triggered singular concepts where the agent may as yet be
Of course, a nascent language user could be in the same position with respect to ‘red’ as I am suggesting she may be in with respect to ‘that’; that is, she can introduce a concept but she doesn’t yet know in any perceptual sense which property in the world ‘red’ picks out (e.g. perhaps Mary in her black-and-white room falls into this category, see Jackson 1986). However, once she’s learnt this, once she has united the linguistically introduced concept and the perceptually introduced concept, she will possess just the one concept, RED, which can then be accessed either by exposure to tokens of the word ‘red’ or by exposure to red objects, etc.

Unable to identify the object in the external world to which the concept refers (with this identification being achieved only post-semantically) then what right have we got to call this a genuinely semantic theory? Haven’t we bled all the meaning out of our theory of meaning? The motivating thought here seems to be that, unless an agent can perceptually (or in some other substantial manner) identify the object which she is thinking about then she cannot really be said to be having a (singular) thought about that object at all. Entertaining a syntactically generated singular concept on hearing an utterance of ‘That is red’ is not, in lieu of substantial identifying knowledge of the referent of ‘that’, a thought with semantic content at all. (This point may be reinforced by noting that, on the current picture, an agent may be unaware that the so-called singular thought she is entertaining actually lacks content, for example, where there is no object in the world to provide a content for the lexically introduced singular concept, perhaps because the speaker was hallucinating.)

However it seems to me that this objection is incorrect for two reasons. First, though referential expressions may (when being used deictically) introduce entirely new concepts (or open entirely new files if one prefers talk of mental files to talk of concept integration here), other expressions in the sentence produced will (presuming the agent is a normal, competent language user) attach to concepts the agent has come across before. Thus most words will serve simply as labels for concepts which are fully integrated in the agent’s cognitive architecture and which cannot then be accused of being similarly empty of content. When an addressee hears an utterance of ‘That is red’, though she may not (yet) have an integrated concept associated with this token of ‘that’, she will have a fully integrated concept relating to ‘red’. So a thin, syntactically based approach to demonstrative content may thus be paired with rich non-demonstrative content.56

Secondly, however, although the addressee may be as yet unable to identify the referent of an utterance of ‘that’ this doesn’t, I think, stop

56 Of course, a nascent language user could be in the same position with respect to ‘red’ as I am suggesting she may be in with respect to ‘that’; that is, she can introduce a concept but she doesn’t yet know in any perceptual sense which property in the world ‘red’ picks out (e.g. perhaps Mary in her black-and-white room falls into this category, see Jackson 1986). However, once she’s learnt this, once she has united the linguistically introduced concept and the perceptually introduced concept, she will possess just the one concept, RED, which can then be accessed either by exposure to tokens of the word ‘red’ or by exposure to red objects, etc.
her from grasping the truth condition for utterances containing this expression. To repeat: to grasp the literal content of an utterance of ‘that is mine’ one need only entertain a thought of the form: $\alpha$ belongs to $\beta$. We have already noted that to find out more precisely what belongs to whom, one needs to look beyond the information which is linguistically encoded, yet this does not entail that the language faculty alone is incapable of yielding complete truth-conditions (or ‘fully saturated propositions’, if one prefers proposition-talk). For the truth-conditions of such token sentences can be generated entirely within the language faculty; for instance, as we saw in §3.3, the proper truth-condition for a token of ‘that is mine’ is simply:

(10) If $t$ is a token of ‘that is mine’ uttered by $\beta$, and the token of ‘that’ therein refers to $\alpha$ then $t$ is true iff $\alpha$ is $\beta$’s.

A competent speaker of English can grasp this truth-condition armed only with her knowledge of language. She knows what would have to be the case for this token sentence to be true. What she doesn’t know (without input from non-linguistic processes of understanding) is, in any substantial sense, how to identify the objects $\alpha$ or $\beta$ refer to; though provided the utterance occurs in a normal context (where the speaker and hearer have access to the same perceptual environment) we can expect the ordinary interlocutor to come to a richer understanding, where the purely linguistic information is fleshed out with additional, probably perceptual information, almost instantaneously. The important point here is that there is a difference between grasping the truth condition for an utterance and being able to verify whether or not that condition is met. In the case of novel uses of demonstratives and indexicals, given linguistic information alone, an agent is capable of grasping the truth conditions of utterances containing the terms, though she is not yet in a position to see that they are satisfied (she knows what it would be for the utterance to be true but she doesn’t yet know that it is true). Now it seems to me that this should be sufficient for counting as grasping the literal meaning of the sentence produced (that is, as grasping genuinely semantic content), so I reject the idea that our minimal semantics for demonstratives and indexicals is too minimal to count as truly semantic.

However, it may be objected at this stage that we are now working with too weak a notion of truth-conditions. It may be thought that
a truth-condition which can be grasped without an agent being in a position to verify whether or not that truth-condition is satisfied (say if one hasn’t yet perceptually identified the referent of a demonstrative or indexical) simply does not count as a truth-condition at all. For instance, Recanati suggests:

If I say ‘Oscar cuts the sun’ is true iff Oscar cuts the sun’, without knowing what it is to ‘cut the sun’, then the T-sentence I utter no more counts as displaying knowledge of truth-conditions than if I utter it without knowing who Oscar is (i.e. if I use the name ‘Oscar’ deferentially, in such a way that the right hand side is not really used, but involves some kind of mention).\(^{57}\)

Now, clearly this is a point which requires further discussion; however, I want to leave this objection to one side for the moment, for it will become relevant again in our discussion of covert indexicality in the next chapter. For now, then, let me simply state that, on the current account, what is required for understanding the literal meaning of a natural language sentence containing a demonstrative or indexical in subject position is to relativize that sentence-type to a context of utterance (non-intentionally described) and then to generate a truth-condition for the sentence in that context of utterance by introducing a (syntactically generated) singular concept for the object referred to by the demonstrative or indexical expression. This singular concept has its content exhausted by the object referred to (though the addressee may be in a position to identify this object only via the descriptive character rule in play). Understanding the literal linguistic meaning of context-dependent expressions does not, then, require access to rich features of the context of utterance (like speaker intentions), though such features may well prove crucial when linguistic meaning is integrated with other information the agent possesses. There is nothing to stop a competent language user, faced with an utterance of such a sentence, calculating the truth-conditions for that utterance, even if she is not yet in a position to non-descriptively identify the referent of the context-sensitive expression. Thus overtly context-sensitive expressions, understood on the model to hand, do not provide a counter-example to the formal, modular approach to semantic comprehension.

One final point I’d like to close this chapter with: it might well be objected at this stage that the move to hold apart semantic theories

\(^{57}\) Recanati 2004:93.
which admit of appeals to speaker intentions and semantic theories which do not rely on these features (i.e. formal theories, as I conceive them) has collapsed here. Haven’t I just ended up with a variety of the former kind of account after all, since the claim now is that the thing on the right-hand side of a T-sentence is a sentence in the language of thought? Now, I can see why this objection could be made, but it seems to me that it doesn’t hold (at least not in any pernicious sense).

Grasp of literal meaning is grasp of a truth-condition which is constructed on the basis of the formal features of the expressions in play and, though entertaining this truth-condition is a mental matter, it does not require inferential reasoning about the speaker’s state of mind to recover. Whether a speaker has a perception-based concept of an object or a purely descriptive one (for example, whether she can see the tree or is thinking of it as the biggest tree in the world), an utterance of ‘That tree is over five feet tall’ requires the entertaining of a singular thought to understand, a thought whose content is exhausted by the tree referred to and the property of being over five feet tall. Here the syntactically triggered singular concept of the tree is a THAT concept, so identifying its content in some more substantial (non-linguistic) sense will require appeal to speaker-intentions, but this character-led identification will be something which occurs outside the language faculty. So, there will often be a need to appeal to speaker intentions to recover the full communicative force of an utterance, but, the suggestion is, this is not something which our grasp of language guarantees us. Recovering properly linguistic content is, to put it crudely, a mental matter: it requires having a thought of a certain kind, but this does not, I think, lead us towards a truly intention-based semantics, since recovering truth-evaluable semantic content requires no appeal to the intentions (mental content) of the speaker. Understanding a language, on this account, is not, then, to be conflated with understanding a speaker’s mind.
Chapter 4

Covert Context-Sensitivity: The Problems of Underdetermination, Inappropriateness, and Indeterminacy

We have seen how the advocate of a formal, modular approach to semantic theorizing can address perhaps the most fundamental instance of apparent pragmatic intrusion into literal linguistic meaning, namely the existence of overtly context-dependent expressions (that is, expressions whose meaning depends in a systematic way on features of the context in which they are uttered). I have argued that, while we must treat sentences containing these expressions as relativized to a context of utterance prior to the delivery of a truth-condition (in order to recover referential content), the features of the context of utterance appealed to in a grasp of literal meaning do not include rich, perspectival features such as the intentions of the speaker. Although it is right to think that these expressions require an appeal to speaker intentions at some point in the comprehension process, such an appeal lies outside the domain of semantics. What you gain from an understanding of language falls well short of the ability to identify (in any substantial manner) the referent of a token indexical or demonstrative expression. Thus linguistic abilities alone will not be sufficient to underpin an assessment of the actual truth or falsity of utterances containing demonstrative or indexical expressions, though linguistic knowledge will be sufficient for determining the conditions under which such an utterance would be true. However, even if this move to accommodate overtly context-sensitive expressions is deemed successful, there remains a further problem to be faced by our advocate of minimal, modular semantics. For, as was stressed in
Chapter 1, according to the dual pragmatist, not all context-sensitivity in natural language involves overtly context-sensitive expressions. To see this, I want now to raise three closely related problems for the formal theorist: the charge that formal features of a language underdetermine truth-conditional content, the claim that formal features alone determine the wrong truth-conditional content, and the claim that meaning in a natural language is indeterminate (thus, ex hypothesi, a semantic account like the truth-conditional approach which claims to deal in determinate contents must be mistaken). The first two arguments turn on the need for so-called ‘unarticulated constituents’, while the latter turns on the supposed absence, at the level of natural language or at the level of thought, of any item which could impose determinacy of meaning on natural language sentences.

To take the first two objections initially: formal semantics underdetermines meaning, or at least determines the wrong kind of meaning, for sentence-types relativized to contexts of utterance if there is some additional item which is required for grasping the meaning of tokens of that sentence which is not represented at the level of the formal features of the sentence-type. Thus, for example, imagine a speaker in London who, on looking out of the window, utters the sentence ‘It’s raining’. Here, intuitively, what she asserts is that it is raining in London. However, at least prima facie, there is no formal constituent of the sentence that is responsible for picking out the place at which the speaker asserts it to be raining (that is to say, the sentence is not merely elliptical for ‘It’s raining here’). If this is right, then the suggestion is that the sentence must contain some ‘hidden’, contextually supplied element which contributes to the literal meaning of the sentence—it must contain an ‘unarticulated constituent’. Unarticulated constituents are thus elements that are supposed to be propositionally, or truth-conditionally, relevant, yet which are not presented in the surface form of a sentence, nor explicitly represented at the level of its logical form, rather they are introduced via consideration of the context of utterance. We will look more closely at the precise nature of unarticulated constituents below (§4.1), and the arguments against formal semantics to which they give rise (§4.2 and §4.3); however, to advertise my conclusion in advance, I’ll claim that no such additional elements exist. Formal semantics is able to offer a satisfactory account of literal
linguistic meaning *without* positing additional, contextually supplied unarticulated constituents.¹

However, it seems that the opponent of formal semantics may also have an alternative form of argument in mind here. This alternative argument claims that formal semantics is incapable of delivering a complete proposition or determinate truth-condition, not because of the need for contextual supplementation (for example, the delivery of a value for some unarticulated constituent), but because there is no such thing as a determinate truth-condition or complete proposition for semantics to deliver. The worry here is that meaning is essentially indeterminate; sentences have no fixed or stable meaning for a semantic theory to deliver. This kind of argument is perhaps most familiar from Quine, but its clearest statement from the current perspective is, I think, to be found in the work of Charles Travis. Travis suggests that the fundamental assumption shared by both formal semantic approaches and dual pragmatic approaches, to the effect that meaning can be captured via some determinate proposition, is mistaken. We will look more closely at Travis’ stance in §4.4, but the suggestion will be that, despite the fact that the argument of §4.2 concerns underdetermination, while this objection concerns the stronger claim of indeterminacy, the formal theorist is licensed in taking the two objections together.

Thus, in §4.5, I will turn to consider the formal theorist’s response to these two arguments. The claim will be that a proper grasp of syntactically presented material, together with an understanding of what I will call ‘liberal’ truth-conditions, shows both the allegations of underdetermination and indeterminacy of meaning to be unfounded. Then, in §4.6, I’ll consider the argument (from §4.3) that semantics must incorporate unarticulated constituents in order to deliver the *right* or *intuitive* truth-conditions for an utterance. The response here will be that, although this may be correct, the notion of *appropriateness* is itself a pragmatic notion. Delivering appropriate truth-conditions for some communicative exchange, the argument will be, is not a proper task for a theory of literal linguistic meaning. Thus, I’ll conclude that no argument from what I’ve called ‘covert’ context-sensitivity actually holds.

¹ This position has been independently suggested by Chapman 2001.
4.1 What are Unarticulated Constituents?

To get at what is meant by unarticulated constituents (UCs), it will be helpful to start by considering a quite general principle concerning the way in which syntax and semantics might be thought to relate. At the start of his *Talk About Beliefs*, Mark Crimmins sketches a principle of compositionality he calls ‘full articulation’. This is easiest to state if propositions are viewed as structured entities (containing individuals and properties), then full articulation holds that each element of the proposition literally expressed by an indicative utterance of a sentence must itself be the content of some component expression of that sentence.² To put matters crudely, the idea is that the constituents of the proposition expressed by the sentence are exhausted by the contributions of the component expressions in that sentence and their mode of combination—we don’t get anything ‘for free’ at the propositional level. Now, as Crimmins notes, for this constraint to play a role in practice we need to clarify what counts as a ‘component expression’. One thought might be that component expressions are equivalent to vocalized (or orthographic) words, so that propositional constituents can be read (more or less) directly from surface form. However, there are cases that seem to show that this version of the articulation constraint is too strong. For consider cases such as ‘syntactic ellipsis’, where the proposition a sentence can be thought literally to express contains more constituents than can be traced to the surface form of the sentence itself (emerging instead from the linguistic context in which the sentence is to be found).³ So, consider the following (where the material inside brackets is unpronounced):

(1) A: ‘Has Bill gone?’
   B: ‘Yes, he has \([VP \text{ gone}]\)’

(2) A: ‘Whose dog is that?’
   B: ‘It’s Bill’s \([NP \text{ dog}]\)’

In both of these cases, B’s utterance appears to express a proposition containing a constituent not found at the vocalized, surface form level.

³ See Elugardo and Stainton 2003 for a somewhat more extended discussion of ellipsis, especially with respect to non-sentential cases.
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 unvocalized material can be treated as a genuine constituent of the sentence B produces. The material is present at the syntactic level, but elided at the surface level. Thus such cases do not contravene the principle of full articulation, stated at the level of syntactic form.

It now becomes quite easy to state what is meant by a UC in terms of the denial of this principle of full articulation. An unarticulated constituent is an element which appears at the semantic level but which does not appear anywhere at the syntactic level—it is semantically relevant though syntactically unarticulated. If UCs exist in this form, then they directly threaten standard truth-conditional approaches to semantics, for they figure as an integral part of the literal proposition expressed by an utterance, yet they cannot be found at the formal level. Thus, as well as the contextual processes of disambiguation and reference assignment, the dual pragmatist claims that the output of the formal theory also requires the introduction of novel pragmatically triggered elements (through a process sometimes known as ‘free enrichment’). For the dual pragmatist once again pragmatic mechanisms must come to figure, not just ‘post-semantically’ (as in Gricean implicature), but ‘inter-semantically’, as an inherent part of the literal truth-conditional analysis, supplying the values for these unarticulated constituents.

In a moment we will turn to the arguments which dual pragmatists marshal in favour of the existence of UCs thus defined, but first we should briefly consider, and set aside, an alternative possible definition of ‘unarticulated constituent’. On this definition, unarticulated constituents are pragmatically supplied elements which figure in the thought entertained on hearing the utterance of a given sentence and they are elements which cannot be traced back to the contribution of any syntactic constituent of that sentence, but the thought entertained is held to diverge from the literal meaning of that sentence. Full articulation, mapping syntactic form to semantic form, is endorsed for specifications of the meaning of sentence-types relativized to (formal)

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4 For a dissenting voice see Dalrymple 2004, which denies hidden syntax even in question-and-answer schemas like (1) and (2).
contexts of utterance, though it is explicitly recognized that the thought entertained on hearing an utterance of a sentence may have a content which is richer than (or otherwise diverges from) the literal meaning of that sentence. Specifically, the thought entertained may contain constituents not found in the linguistic item under consideration. On this definition, UCs are not semantically relevant, though they do come into play at a pragmatic level, to explain what is communicated or entertained on hearing a given utterance. It should be clear that this second definition of UCs does not threaten the principle of full articulation nor the project of standard truth-conditional approaches to semantics. It merely highlights the fact that literal, truth-conditional semantic analyses may not be the (only) kinds of analyses of meaning we are interested in in communicative exchanges. Thus this second, unthreatening notion of an ‘unarticulated constituent’ is not relevant at this juncture, though it will be a notion we return to in §4.6.

So, UCs are supposed to be semantically relevant though syntactically unrepresented elements; the question now is ‘why might we think that there are such things?’ There are two distinct forms of argument dual pragmatists give in support of the existence of UCs. First, it may be claimed that without the provision of pragmatically supplied, though non-syntactically triggered, information we do not arrive at anything which is genuinely truth-evaluable. That is to say, formal semantics underdetermines meaning—UCs are needed to take us from the truth-conditional, or propositional, fragment recovered on the basis of the formal features of the sentence alone to the complete truth-condition, or whole proposition, expressed by an utterance of that sentence. Second, it may be claimed that, although a complete proposition can be recovered on the basis of the formal features of the sentence alone, it is in some sense the wrong proposition; that is, it is not the one which we intuitively take to have been expressed by the utterance. Thus UCs are needed to take us from the proposition recovered on the basis of formal decoding alone to the proposition which is actually asserted by the speaker. Each of these arguments for UCs stems from a particular set of examples which seem to show that UCs are needed in the way envisaged, so let us turn to look at these cases now.
4.2 Formal Semantics Underdetermines Meaning

Consider the following examples:

(3) Paracetamol is better [than aspirin].
(4) Brian is too clever [to fall for this trick].
(5) Steel isn’t strong enough [to hold that roof up].

In each of these cases, it seems that we can envisage only the words outside the brackets being spoken, while the content that would have been contributed by the bracketed material in each case is supplied from the context of utterance and acts to ‘complete’ the meaning yielded by the spoken elements alone. Yet, although the material in brackets is not spoken, and does not seem be in any way formally represented in the sentence uttered, still it seems that grasping this bracketed material is necessary for a proper understanding of what has been said. Furthermore, it seems clear that the bracketed material must be understood as (a pragmatically contributed) constituent of the meaning of each utterance, since, if we restrict our attention to just the formally represented elements we fail to arrive at anything propositional at all. That is to say, the formal constituents of each utterance underdetermine meaning—they do not suffice for determining a complete proposition or truth-evaluable entity. For instance, the claim that ‘Paracetamol is better’ simply isn’t evaluable as it stands—we arrive at a complete proposition only given a contextually supplied object which Paracetamol is claimed to be better than. Or again, take the following example from Robyn Carston, where we are asked to consider an utterance of ‘She didn’t get enough units and can’t continue’, in a context where the most plausible interpretation of the utterance is: Jane didn’t pass enough university course units to qualify for admission to second year study and, as a result, she can’t continue with university study. Jane is not feeling at all happy about this. Carston writes that:

The question then is which aspects of this interpretation are explicitly expressed (that is, part of the explicature) and which are implicit (implicated)?

A further kind of case often appealed to in this respect concerns sub-sentential utterances, like ‘New dress?’ or ‘From table 5’, which in an appropriate context could convey, say, the complete question ‘is that a new dress?’ or the assertion ‘this drink is from the gentleman at table 5’. Yet, clearly, any full proposition is underdetermined by the formally articulated elements in such cases; these cases are discussed in §3.3.2.
The disambiguation of ‘get’ and ‘units’ and the referent assignment of ‘she’ are surely part of the explicit content, while the assumption that Jane isn’t feeling happy is surely implicit. But what about ‘to qualify for admission to second year study’, and ‘with university study’ which enrich and complete the two clauses of the conjunction, and the ‘as a result’, linking the two conjuncts. Are these part of what is explicated or what is implicated? Since they are not given linguistically, one might think they must be implicated, but then what is the explication of the utterance? It must be ‘Jane didn’t pass enough university course units and Jane cannot continue (something??)’. It’s not clear that this constitutes a propositional form, that is, it isn’t possible to specify what conditions in the world must obtain for it to be true.\(^6\)

It seems clear that the argument that Carston is invoking here is that without the addition of relevant contextual information (despite the fact that such information is not required by the syntactic form) the utterance is not truth-evaluable, we cannot specify the conditions under which it would be true.\(^7\) So, the suggestion is that only by looking to the context of utterance to supply a pragmatic ‘completion’ of a formally derived fragment of a proposition do we get something genuinely truth-evaluable. Formal semantics alone underdetermines meaning; that is, appeals to syntactic-based decoding processes may fail to deliver a complete proposition or determinate truth-condition.

However, as noted above, not all the examples which seem to support the existence of UCs appeal to cases where there is no proposition to be recovered on the basis of the formal features of the sentence alone. For UCs might also be thought necessary to take us from the proposition recovered on the basis of formal features alone to the proposition which an utterance of a given sentence really expresses.

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\(^7\) See also Bach 1994a: 268–9: “An (indicative) sentence is semantically underdeterminate if it fails to express a complete proposition—determine a definite truth-condition—even after ambiguity and vagueness are resolved and indexical references (including the time of the utterance) are fixed. . . In these cases what the conventional meaning of the sentence determines is only a fragment of a proposition or what I call a proposition radical; a complete proposition would be expressed only if the sentence were elaborated somehow, so as to produce a completion of the proposition.” To repeat a point from Chapter 1: although his emphasis on the pragmatic status of such completed propositions makes Bach’s account similar to the one I favour in one respect, we should also be clear that his claim that semantics often deals with sub-propositional items has been rejected here. In fact, I’ve suggested that any such weakening of semantic content to non-propositional/non-truth-evaluable items is inconsistent with formal semantics as traditionally conceived, thus I would place Bach pretty firmly alongside the dual pragmatists.
4.3 Formal Semantics Fails to Determine Intuitive Meaning

The second argument against formal semantics from apparently covert context-sensitivity claims that, while formal semantics may be able to deliver a determinate truth-condition or complete proposition for some linguistic item, what it delivers is in some sense the *wrong* truth-condition. The problem here is that the formally recovered truth-condition seems just too general, it fails to fit with our intuitive judgements of what the utterances of certain sentences literally express. Thus the cases which are relevant here are those which seem to show a discrepancy between our intuitive assessments of literal meaning and the proposition determined by simple formal decoding processes. So for instance, consider:

(6) You won’t die [from that cut].
(7) I’ve eaten [recently].
(8) Holland is flat [for a country].
(9) It’s raining [where the speaker is].

In each of these cases, a proposition can apparently be recovered just on the basis of the formal features of the sentence alone (for instance, in (6) that the addressee won’t die, in (7) that the speaker has eaten at some time prior to the time of utterance, etc.). However, the thought is that these propositions do not capture what is intuitively (usually) said by any of these utterances. Thus, although concentrating just on the explicitly represented elements of the sentence, we do get something which is truth-evaluable, what we get are the *wrong* truth-conditions.\(^8\) As Sperber and Wilson point out, there is an intuitive difference of meaning in B’s utterances in the following two exchanges, even though, formally speaking, they look identical:

A: What’s the most unusual thing you’ve eaten?
B: I’ve eaten camel.
A: Are you hungry?
B: I’ve eaten breakfast.

\(^8\) Crimmins and Perry 1989 seem to envisage an argument of this form for UCs representing mode-of-presentation-like entities for belief reports.
In the first dialogue, the proposition coinciding just with the obvious formal elements in B’s utterance seems perfectly acceptable. It is natural to read B as asserting simply that she’s eaten camel. However, in the second dialogue, it seems extremely unnatural to read B as asserting simply that she’s eaten breakfast. To serve as an answer to A’s question, B must be interpreted as having said that she’s eaten breakfast recently. Yet, if this is right, then at least on some occasions, it seems that contextually provided values for unarticulated constituents are needed to arrive at the intuitively correct truth-conditions for our utterances.

We should in passing say something about example (9), for it is one of the most discussed examples in this area. Initially at least (9) looks as if it belongs with our previous set of examples, for we may feel that, without a contextually specified location, (9) does not yield anything truth-evaluable at all. The claim that it is raining (simpliciter, as it were) is simply not truth-evaluable. However, as Recanati and others have stressed, there seem to be situations which show that this initial impression is mistaken, that is, which show that a sentence like ‘It’s raining’ can determine a complete proposition without the provision of a contextually specified location. So, for instance, imagine that we are concerned with global warming and have thus constructed a device which sounds an alarm every time there is an instance of rain-fall somewhere in the world. In this case, an utterance of ‘It’s raining’ made on hearing the alarm would seem to convey the proposition that it is raining (tout court), with no adversion to the location of the rainfall being necessary. If this kind of thought-experiment is correct, and ‘rain’ can be used to express just the existence of (unlocated) rain-fall (that is, if ‘rain’ means something like ‘raineth’, rather than ‘rain-at-a-place’), then (9) does indeed belong in this section. For the problem is not that no proposition is recovered on the basis of formal features alone, but that this very general proposition is rarely the one expressed by the speaker who utters ‘it is raining’. In most cases, what is expressed by ‘It’s raining’ is that it is raining in l and to arrive at this proposition what we need are UCs. On this reading, then, (9) does indeed belong with examples purporting to show that formal semantics fails to capture intuitive truth-conditions (rather than under-determining meaning per se).
Examples of this second form of argument for UCs are also evident in the discussions surrounding quantifier restriction. So, for instance, consider the following exchanges:

(10) A: How did the course go?  
    B: Everyone got an ‘A’.

(11) A: I’ve invited my boss for dinner.  
    B: But there is nothing to eat!

(12) A: Can I let Fido in from the garden?  
    B: Yes, the door is closed.

In (10) it seems B’s utterance is true just in case everyone on the course got an ‘A’ (as opposed to, say, everyone in the world); in (11) B clearly doesn’t mean an unrestricted claim concerning the lack of food, but something like ‘there is nothing to eat in the house’ or ‘there is nothing appropriate and available to eat’. While in (12), the special case of quantifier restriction that arises with respect to definite descriptions treated as quantified phrases, it seems B’s utterance may be true in a situation where the door to the street is closed, even if one or more internal doors are open. If we take our T-sentences to be given simply by the overt elements of the sentence, we must treat B in each case as saying something (trivially) false, whereas our intuition in each case is that they have spoken truly.

Another set of cases which seem to lend support to the second argument for UCs can be found in the sort of examples discussed by Barbara Partee, such as:

(13) A: I turned off the oven.\(^9\)

Here, unless there is some implicit reference to a time (and on the assumption that the speaker has turned off the oven more than once in the past) the speaker seems to be saying something trivially true; but this seems wrong. Certainly, the natural way to interpret (13) is along the lines of:

(14) I turned the oven off then.

\(^9\) The idea that domain constraint for quantified noun phrases is simply a specific instance of a more general phenomenon of context-sensitivity is stressed by Stanley and Szabo 2000. However it is not an idea embraced by all. For instance, Pelletier has argued at length for a treatment of domain constraint which is specific to quantified noun phrases; see, for instance, his 2003 reply to Stanley and Szabo.

\(^{10}\) Partee 1989.
The problem illustrated by cases (6)–(13) is not, then, that the sentences uttered entirely lack truth-conditions, but rather that they lack *suitable* truth-conditions. This disparity between our intuitive judgements of truth-conditions and the truth-conditions which could be recovered by purely formal means thus provides further evidence for the existence of syntactically unrepresented but semantically relevant constituents.

These then are the two quite different arguments for the existence of UCs:

(i) For at least some sentences, given just the syntactic constituents of the sentence, no truth-evaluable proposition can be recovered (without UCs the sentence simply lacks truth-conditions).

(ii) For at least some sentences, given just the syntactic constituents of the sentence, the wrong truth-conditions will be recovered (truth-conditions based solely on verbalized constituents do not fit our intuitions about the circumstances in which utterances of the sentence will be true or false).

In what follows I want to reject both these forms of argument for the existence of syntactically unrepresented but semantically relevant UCs. Contrary to (i) I will argue, in §4.5, that even sentences like ‘She can’t continue’ are truth–evaluable, though we need to be clear about exactly what information is syntactically represented in a sentence like this. Furthermore, we must hold apart the truth-conditions a sentence possesses and the actual situation which serves to make an utterance of it true on any given occasion. While contrary to (ii), I will suggest (in §4.6) that we have good reason to take the notion of *appropriateness* as a non-semantic one—one which goes hand in hand with...
determining what a speaker can or could convey in a given context, but not what the sentence-token uttered literally means. Although I do not want to query our intuitive judgements of what is said by the speaker in these cases, I will argue once again that ordinary judgements about what a speaker says are of little help in determining what the sentence produced literally means. Once again, then, the claim will be that the proper conception of semantic theorizing is minimal; it is concerned with the literal meaning of words and sentences, and not what is sometimes, or even often, conveyed by an utterance of that sentence. Before this, however, we need to set out the final, somewhat different, argument against the formal semanticist from the existence of covert context-sensitivity, namely the objection that meaning is itself indeterminate.

4.4 Meaning is Indeterminate

This final argument against formal semantics runs as follows: it is an assumption of any formal semantic approach (an assumption which is shared with dual pragmatic approaches) that there is some determinate meaning to be recovered for a given linguistic act. The difference between our two approaches then comes down to how this content is to be recovered, with the formal semanticist (as I’ve construed her) advocating a formal recovery process in which the context of utterance has only a limited role to play and the dual pragmatist advocating a part-formal, part-non-formal process in which the context of utterance has an integral, constitutive role to play. However, one might now question the fundamental assumption both accounts share, for perhaps there is no such thing as the determinate content of any linguistic act. Perhaps the problem is not merely that formal features underdetermine meaning (or truth-conditions), but rather that meaning itself is indeterminate. This, as I read him, is the charge made by Charles Travis.²²

Travis’ reasons for doubting the claim that there is a determinate content for linguistic acts stem from cases which initially appear very

²² Some readers have suggested that this reading of Travis is not accurate. If they are right, then the ensuing challenge should be read (with apologies to Travis) as attaching to “Travis*”—a fictional character who deploys the same kind of arguments as Travis.
similar to those raised in §4.2 (as arguments in favour of the need for UCs). So consider utterances of the following sentences:

(15) Murali is tall.
(16) The apple is red.
(17) The table was covered with coffee.
(18) Smith weighs 120 pounds.

Imagine an utterance of (15) in a context in which Murali has just been measured at school and has proven to be within the tallest one per cent of primary school children. In this context, an utterance of (15) clearly seems to be true. Now, however, imagine an utterance of (15) made while the coach of the national basketball team is considering whom he should select to replace an injured player, where a prerequisite for any replacement is that they be tall. Here it seems that an utterance of (15) is intuitively false: though Murali is tall compared to primary school children, he is not tall with respect to adult basketball players. So we seem to have a change in the truth-value of the two utterances yet without there being any parallel change in Murali’s height (he does not magically grow or shrink between contexts); thus it would seem that our two utterances must mean different things (i.e. have different truth conditions), despite their apparent formal identity. Or again, take (16): if I am sorting apples according to outer skin colour, my utterance of (16) will be true if the skin of the apple is red (but perhaps not if it has been painted red on the skin). Yet, if I am interested in sorting apples according to the colour of their flesh, then an utterance of (16), talking about the very same red-skinned apple, would seem intuitively to be false.¹³ So, if we try to deliver truth-conditions just on the basis of the formally represented elements of these sentences, it would seem that we must fail, for exactly the same (formally individuated) sentence-type can be true relative to one context of utterance and false relative to another.

Initially, then, the thought might be that, just as with the examples looked at in §4.2, this apparent context-sensitivity (not traceable to any overt context-sensitive item) should be accommodated by positing

¹³ It should be clear that similar thought-experiments can be constructed for a plethora of further cases (for example, is the table covered with spilt liquid coffee, or coffee grounds, or a heap of coffee beans? Is ‘Smith weighs 120 pounds’ true just in case he weighs 120 pounds naked before breakfast, or 120 pounds after lunch with his boots on?). Whether the indeterminacy Travis alleges applies to all natural language sentences or only to a large number of them is not an issue we need settle here.
some ‘hidden’ reference to a contextual parameter. In this way, the full interpretation of (15) and (16) would be, respectively:

(15’) Murali is tall relative to some contextually salient comparison class c.
(16’) The apple is red in some contextually salient respect c.

However, the moral Travis suggests we draw from such cases is apparently quite different to this kind of hidden indexical, or UC, view. For he does not think that there will be some contextually supplied parameter which will turn a formally underdetermined, or incomplete, proposition into a fully determinate one; rather he thinks that these cases show that meaning itself should be viewed as indeterminate. As he notes with respect to the UC approach:

There are several respects in which the present phenomena are unlike central cases where the parameters approach seems promising. One difference is this. In the central cases, such as ‘I’ and ‘now’, pointing to given parameters seems to be part of the terms meaning what they do . . . By contrast, it is not part of what ‘green’ means, so far as we can tell, that speakings of it speak of, or refer to, such-and-such parameters. If its contribution, on a speaking, to what is said is a function of some parameters – say, implausibly, the speaker’s intentions – saying so is not part of what ‘green’ means. The parameter approach does not automatically suggest itself as it did with ‘I’.¹⁴

Thus, it seems, we would need a strong argument to the effect that the UC approach was correct in these cases; an argument which Travis suggests we do not have.

For Travis, the problem illustrated by cases like (15) and (16) is not that they show something additional from the context of utterance must be brought into play prior to the recovery of a complete proposition or determinate truth-condition. The problem they reveal is that there is no such thing as the determinate proposition that an utterance conveys. Though we might think of recovering a determinate proposition by appeal to the determinate thought which lies behind a given utterance, such a move is not possible, for, Travis contends, we have no reason to hold that things are any more determinate at the level of thought than they are at the level of natural language.¹⁵

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¹⁴ Travis 1997: 93.

¹⁵ This is a point also stressed by Searle 1980: 231 “All of the arguments for the contextual dependency of [the] sentences . . . are also arguments for the context-dependence of [the] belief.”
Understanding a statement, we may agree, entails grasping well enough how it, and specifically its truth, are to be assessed. One might suppose that such a grasp, or what follows from it, could be made entirely explicit by some specification of an understanding there is anyway for words to bear, and by what follows from bearing that one (for example, that they expressed ‘the proposition thus-and-so’). But perhaps, as Wittgenstein suggested, a proper appreciation of words is not exhaustible in that way. If we do not assume so, then we may see truth, not as selecting from some stock of items each of which relates to the world in an entirely fixed way, but rather as guiding the treatment of words with given content in given circumstances, forming our perceptions of when to be satisfied with the descriptions they gave.¹⁶

The objection here is apparently more radical than that considered in §4.2, for the claim is that there is no determinate proposition to be found via appeal to such features as an agent’s mental state in a given context of utterance. Thus, despite the similarity in the kinds of examples appealed to, we should be clear that Travis himself is not an advocate of what I termed ‘dual pragmatics’ in Chapter 1. For he holds not that an appeal to contextual features like the intentional states of an agent must be made from within a proper semantic theory, but rather that we cannot talk of a semantic theory in this sense at all. There is no such thing as the set of determinate propositions, or meanings, to which given linguistic items attach. Instead, Travis counsels that we should properly appreciate the perspectival nature of both thought and language: there is no such thing as what is meant abstracted from the purposes, or role, to which a thought or utterance is put, there is no such thing as an interpretation which is not an interpretation in a context and for a reason.¹⁷

Now, although this line of argument appears different to that considered in §4.2, concerning UCs, it seems to me that the formal theorist may be licensed in taking the objections together. For note that, if she can show that contrary to the argument of §4.2 it is possible to

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¹⁶ Travis 1996: 460.
¹⁷ Travis 1997: 102–6. So how, we might ask, does this argument for the indeterminacy of meaning relate to the infamous argument for indeterminacy put forward by Quine? Well, although the conclusion reached is apparently the same, the reasons prompting claims of indeterminacy of meaning are quite different in the two cases. For Quine, meaning is indeterminate since there is no behavioural evidence which could serve to rule out certain interpretations: meaning must be manifested in behaviour, and since behaviour underdetermines a unique interpretation, meaning is essentially indeterminate. One way to avoid this sort of argument then would be to deny the kind of behaviourist assumptions with which Quine begins. However, with Travis’ arguments, there are no such behaviourist assumptions: even allowing mental features like the content of a thought to play a role in determining linguistic content, we are still unable to find anything which can shore up the indeterminacy of natural language.
recover a determinate proposition for the cases in question \emph{without} an additional appeal to the intentions of the speaker being made, then the more radical form of contextualism advocated in this section will have been effectively undermined as well. For Travis’ claim is that a determinate proposition cannot be recovered either from formal features alone or from formal features together with contextual features. An argument which showed that the first disjunct was true (that is, that there was a determinate content to be recovered via appeal to formal features alone) would be sufficient to show the whole negated disjunction was false. So, in the next section, I want to return to the first argument for UCs raised above, namely the claim that without them no determinate proposition or complete truth-condition can be recovered, and show that it is in fact mistaken.

4.5 Rejecting the Argument that Formal Semantics Underdetermines Meaning

The initial argument for the existence of UCs claimed that utterances of some sentences are \emph{only} truth-evaluable after the provision of some contextually supplied information—information that is \emph{not} triggered by anything in the syntax of the sentence uttered. The examples supporting this sort of claim were cases like ‘Jill will continue [what?]’, ‘Steel isn’t strong enough [for what?]’, and perhaps examples like ‘the apple is red [on the outside]’, ‘Smith weighs 120 pounds [undressed before breakfast]’, and ‘John’s book [the book which he is carrying] is heavy.’ What all these cases seem to show is that, if we look to just the obvious syntactic constituents of the sentence, we fail to arrive at anything genuinely truth-evaluable; thus, if semantics is supposed to deal with propositional or truth-evaluable items, we \emph{must} allow that pragmatic processes (introducing syntactically missing, or unarticulated, constituents) are necessary prior to semantic evaluation (hence, we arrive at dual pragmatics). However, before we endorse this kind of argument, it seems that we need to revisit our definition of unarticulated constituents, for though it is right to think that some of the additional constituents in the examples to hand are not immediately obvious in the syntax, nevertheless it might be felt that they can still be traced directly to the formal features of the expressions in play. For it
seems that the formal contributions in these cases should include features drawn from the lexical entry for the expressions in question; yet if we look to the lexicon we may well find that some of the elements claimed as unarticulated in §4.2 are, in fact, formally presented.

This point has been stressed by Taylor 2001 and Recanati 2002a, who suggest that a full description of the syntactic constituents of a sentence should include those elements represented at what we might call the ‘sub-syntactic’ level. So, say we have a transitive verb, the lexical entry for which tells us that it possesses ‘slots’ for two arguments. If only one argument place is filled in the surface form of a particular utterance of that expression, the presence of the other argument place is nevertheless guaranteed by the sub-syntactic form. For instance, take the lexical entry for a verb like ‘kicks’, treated as a transitive verb with one argument place for the agent and one for the object (so that the form of the relation is ‘\(x\) kicks \(y\)’). Then, if we get a surface level description of a sentence utilizing this expression, but with only one argument place explicitly filled (e.g. ‘John kicks’), the syntactic level description of that sentence will nevertheless supply the second argument place, with an existentially bound variable acting as a placeholder, yielding ‘John kicks something’ or ‘(\(\exists x\)) John kicks \(x\)’. If this proposal is right, as indeed it seems to be, then many of the examples we looked at above can be defused without positing syntactically unarticulated but semantically relevant UCs, for the required elements are now thought to be syntactically demanded, being delivered via the lexical entry for the expressions invoked. So, for instance, in an utterance of ‘Jill can’t continue’ what is recoverable on the basis of formal features alone is the complete proposition \(\text{Jill can’t continue something}\), with the argument place for the object being syntactically marked at the level of the lexical entry for ‘continue’.\(^{18}\) Clearly, information presented in this form is accessible to the formal theorist and thus it can make an appearance within a formal specification of the meaning of the sentence (though, as we will see, the formal theorist needs to be careful about how this syntactically present material is itself spelt out, see below).

\(^{18}\) With respect to an utterance of the sentence ‘John is small’, Recanati 2002a: 312 writes: “When the relevant parameter—the comparison class in the case of ‘small’—is contextually provided rather than explicit in the sentence, there is an obvious sense in which the parameter in question is not articulated: no word or morpheme in the sentence stands for it. But there is also a sense in which it is ‘articulated’ [as we have seen]: there is an expression in the sentence, namely the adjective ‘small’ itself, that triggers the search for a relevant comparison class, just as an indexical triggers the search for an appropriate contextual value.”
Thus Recanati himself opts for a much more constrained definition of UCs than the one suggested for the dual pragmatists in §4.1; for him, the key to a genuine UC is its *optional* nature:

In *context*, it may be that the unarticulated constituent is ‘required’; but then it is required *in virtue of features of the context*, not in virtue of the linguistic properties of the expression–type. A constituent is mandatory in the relevant sense only if *in every context* such a constituent has to be provided (precisely because the need for completion is not a contextual matter, but a context-independent property of the expression–type). This, then, is the criterion we must use when testing for (genuine) unarticulatedness: Can we imagine a context in which the same words are used normally, and a truth-evaluable statement is made, yet no such constituent is provided? If we can imagine such a context, then the relevant constituent is indeed unarticulated; if we cannot, it is articulated, at some level of linguistic analysis.¹⁹

So, a genuine UC must be *pragmatically* demanded—the felt need for it must come from the context of utterance and not from the linguistic expression itself. For Recanati, then, it would seem that no arguments of the type given in §4.2 for UCs are acceptable. For the argument for the existence of UCs put forward in that section was that without contextually supplied but syntactically unarticulated elements no complete proposition or truth-evaluable item can be recovered. However, the failure of a sentence to express a complete proposition isn’t something which could occur in one context but not in another—if the overt formal constituents of a sentence are insufficient to determine a proposition, it would seem that they must be insufficient whenever or wherever that sentence is uttered. So, in these cases, the need for completion turns out to be context-*independent* (it is something *in the language* which mandates contextual completion, not something in the context of utterance).²⁰

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¹⁹ Recanati 2002a: 316.

²⁰ In Recanati’s terminology, the examples looked at in §4.2 turn out to be instances of ‘saturation’ not ‘free enrichment’. That is to say, they involve the pragmatic provision of a value for a context-sensitive item formally present in the sentence (at the lexical level), rather than the contextual addition of an element not formally represented in that sentence. Recanati’s claim is not that there is a further, contextually introduced, element in the LF which stands for, say, a comparison class, rather the thought is that there is a terminal element in the syntax (e.g. a word) which itself triggers the provision of such a class. As we will see below, this does not entail that examples like (3–5) provide no argument for dual pragmatics over formal semantics, rather the argument they provide is the same as that provided by examples like (6–13); they are all cases where the proposition recoverable from formal constituents alone is not the proposition intuitively expressed by an utterance of the sentence.
Clearly, this move to appeal to lexically presented material is highly appealing to the formal theorist, for, by casting her net wider than the overt syntactic constituents of the sentence, she seems able to defuse the dual pragmatist’s challenge that formal semantics underdetermines meaning (that it underdetermines a genuine level of propositional or truth-conditional content). The presence of a parameter against which something counts as close or local, tall or short, better or worse, if always demanded by the expressions themselves, turns out, on the current suggestion, to be traceable to the formal features of the uttered sentence. However, despite the appeal of this move for the formal theorist, questions remain. First, for Recanati, simply noting that certain words trigger a search for further (contextually supplied) information is not the end of the story, for he claims that the literal meaning in these cases is given not merely by the marking of a requirement for such additional information, but rather by the richer, more informative proposition delivered once the context has acted to determine a specific value for, say, a comparison class or object. This is easiest to see with an example, so take:

(19) Jill can’t continue.

Paying attention to the full range of syntactic features of this sentence, it seems that we can recover a proposition of the form:

(20) Jill can’t continue something

where the transitive nature of the verb ‘continue’ is marked thanks to its lexical entry as a two-place verb. However, according to Recanati, the intuitive truth-conditions for an utterance of (19) are not given by (20) but instead by some more contextually appropriate proposition, where the existentially marked argument place is given a richer interpretation, such as:

(21) Jill can’t continue university education.

If this is right, and, as seems plausible, the only way to recover the value ‘university education’ from the context of utterance is to appeal to the intentions of the speaker (what did she intend to say Jill could not continue?), then it seems we still have a discrepancy between the deliveries of a formal semantic theory and the intuitive truth-conditions of natural language utterances. Yet it would seem (as Recanati himself
So, for instance, I would resist the kind of move recommended in Stanley and Szabo 2000 to treat all
common nouns as cohabiting with ‘covert’ indexical items at the syntactic level (though obviously Stanley
and Szabo would not be entirely happy with the label ‘covert’ for these elements, since they are supposed
to be present in the syntax). One issue might concern the apparent ambiguity which Stanley and Szabo
seem to assign to common nouns—is it really right to think that the meaning of the common noun
‘student’ differs in two utterances of ‘Every student is F’, where the context of the first utterance is students
who are studying philosophy, while the context of the latter is students studying mathematics (see Pelletier
2003 for discussion of this kind of worry). Secondly, the kind of approach recommended by Stanley and
Szabo, where appeals to speaker intentions need to be made to determine the semantically relevant values
of the hidden indexicals for all common nouns, seems to me to blur any distinction between the formal
and use-based semantic enterprises (see §1.2.1).

Secondly, and perhaps more seriously, it may be felt that the move to
appeal to information in the sub-syntactic basement is not sufficient
or appropriate in all cases. The problem is that, while it seems quite right
to think that the lexical entry for a verb like ‘continue’ must mark
two argument places, it is somewhat less clear that adjectives like ‘tall’ or
‘short’, or ‘rich’ or ‘poor’, must similarly lexically mark an argument
place for a comparison class (that is to say, it remains an open question,
to be settled by empirical linguistic inquiry, whether the meaning of
‘rich’ is rich relative to a comparison class c, or whether it is simply is rich),
and it is much less clear that predicates like ‘is red’ or ‘weighs 120 pounds’,
or ‘is covered with coffee’ come complete with such additional argu-
ment places marked at the lexical level. Furthermore, as Travis stresses,
it’s not clear that there would be any end to the number of additional
argument places we would need to introduce to cope with the
phenomenon he has highlighted—if we took ‘red’ to mean red in some contextually salient respect, wouldn’t we also have to add in to some salient viewer, and in some contextually salient light, and so on? It seems to me that, unless it is intuitively obvious that all the cases raised by the dual
pragmatist in this regard have more complex lexical entries than one
might at first have supposed, the formal semanticist who simply assumes
more complex lexical entries runs the risk of begging the question here.
At least prima facie, not all the cases which purport to show that formal
semantics underdetermines meaning can be handled simply by making
the lexical entry for the expressions in question more context-sensitive
than was initially supposed. So, with respect to those cases of
putative underdetermination (or, perhaps, indeterminacy) where the
move to treat the apparent context-sensitivity as genuinely syntactically

²¹ So, for instance, I would resist the kind of move recommended in Stanley and Szabo 2000 to treat all
common nouns as cohabiting with ‘covert’ indexical items at the syntactic level (though obviously Stanley
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Szabo, where appeals to speaker intentions need to be made to determine the semantically relevant values
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and use-based semantic enterprises (see §1.2.1).
That the lexical entry gives the number of argument places a verb takes, which allows these in turn to be marked by existentially quantified variables at the level of syntactic form when they are not filled at the surface level, does not of course mean that the places must be similarly marked when they are filled. So, for instance, when the transitive nature of the verb 'continue' is reflected at the surface level (e.g. 'John continued sleeping' or 'John continued something') there will be no further existentially quantified variable in play, since there will be no empty argument place to mark.

(a) and (c), since they contain singular terms, would (following the discussion of Chapter 3) require a further amendment to make clear that the expression on the right-hand side of the truth-condition was a syntactically triggered singular concept of the object the name referred to. So, for instance, (a) would take the following form in a complete account:

\[(a^*) \text{ If } u \text{ is an utterance of 'Jane can't continue' in a context } c \text{ then } u \text{ is true iff } \alpha \text{ can't continue something.}\]

Finally, when there is no evidence for positing an additional argument place within the sub-syntactic basement, liberal truth-conditions run merely off the explicit syntactic constituents of the sentence (those given by uttered elements together with any genuinely elliptical items). So, the kinds of liberal truth-conditions that our (moderate) formal theorist will suggest are as follows:

(a) If u is an utterance of 'Jane can't continue' in a context c then u is true iff Jane can't continue something in c.

(b) If u is an utterance of 'Steel isn't strong enough' in a context c then u is true iff steel isn't strong enough for something in c.

(c) If u is an utterance of 'Fido is bigger than John's dog' in a context c then u is true iff Fido is bigger than the dog bearing some relation to John in c.

(d) If u is an utterance of 'The apple is red' in a context c then u is true iff the apple is red in c.

22 That the lexical entry gives the number of argument places a verb takes, which allows these in turn to be marked by existentially quantified variables at the level of syntactic form when they are not filled at the surface level, does not of course mean that the places must be similarly marked when they are filled. So, for instance, when the transitive nature of the verb 'continue' is reflected at the surface level (e.g. 'John continued sleeping' or 'John continued something') there will be no further existentially quantified variable in play, since there will be no empty argument place to mark.

23 (a) and (c), since they contain singular terms, would (following the discussion of Chapter 3) require a further amendment to make clear that the expression on the right-hand side of the truth-condition was a syntactically triggered singular concept of the object the name referred to. So, for instance, (a) would take the following form in a complete account:

\[(a^*) \text{ If } u \text{ is an utterance of 'Jane can't continue' in a context } c \text{ and 'Jane' in } u \text{ refers to } \alpha \text{ then } u \text{ is true iff } \alpha \text{ can't continue something.}\]

However, I will omit this additional complication in the text, to allow us to concentrate on the issues currently to hand.
Now one question here might be why we need to introduce the relativization to a context of utterance, first introduced in the last chapter to cope with overtly context-sensitive expressions, since (a)–(d) do not contain any demonstrative or indexical expressions (modulo an account of proper names here). However, it should be remembered that tense is as much an explicit context-sensitive element as demonstratives and indexicals, and thus that the present tense form of these sentences will require relativization to a context of utterance. The question our formal theorist faces now, then, may be put in the following way: what is wrong with ‘liberal’ truth-conditions, like (a)–(d)? If it were to turn out that nothing was wrong with them then it seems to me that the objection to formal semantics envisaged in §4.2, and the stronger version of the problem in §4.4, would turn out to be ungrounded. Contrary to her opponents, the formal theorist would have shown that perfectly determinate, truth-evaluable propositions can be recovered on the basis of formal features of sentences alone (of course, they might still be judged inappropriate truth-conditions, but, as stressed from the outset, this is a different kind of objection). Why then might (a)–(d) be deemed unacceptable?

4.5.1 Liberal truth-conditions are not truth-conditions

One reason we might have for rejecting liberal truth-conditions is that they fail to tie down the world to a unique set of conditions which must pertain in order for a sentence to be true; or, better, they allow a range of more specific conditions each of which would serve to make the sentence true.\(^{24}\) For instance, in the case of (a), we might envisage a range of possible situations, each unilaterally an instance of Jane’s failure to continue; for example, a world where Jane can’t continue sleeping, a world where she can’t continue running, and a world where she can’t continue university education, to name but three. While (b) might be made true by a situation in which steel isn’t strong enough to hold up the roof or a situation in which it will not resist a given impact. Finally, (d) might be made true by a situation in which the apple is red on the

\(^{24}\) Thus Searle 1980: 223 objects: “Though the occurrence of ‘cut’ is literal in utterances of ‘[Bill cut the grass’ and ‘Sally cut the cake’], and though the word is not ambiguous, it determines different sets of truth-conditions for the different sentences. The sort of thing that constitutes cutting the grass is quite different to the sort of thing that constitutes cutting a cake.”
outside, red on the inside, or green with just a little patch of red by the stem. However, prima facie, the fact that liberal truth-conditions don’t specify a unique set of conditions under which the utterance is true doesn’t itself seem to be a problem, since it seems that very few (if any) truth-conditions are that restrictive. For instance, take the sentence ‘Jane is happy’, which, at least superficially, looks as if it expresses a complete proposition (so that it is a less likely candidate for containing UCs than either (a) or (b)). Here, looking just to syntactically determined constituents we arrive at something of the form:

(e) If \( u \) is an utterance of ‘Jane is happy’ in \( c \) then \( u \) is true iff Jane is happy in \( c \).\(^{25}\)

Yet (e), no less than (a), fails to constrain uniquely the range of possible situations in which the object-language sentence will be true. A world in which Jane is happy because it is her birthday but not because she’s broke, or where she is happy now but not five minutes ago, or where she has never been unhappy, are all worlds which serve to make the object-language sentence true. And verifying whether or not the sentence as tokened is in fact true will involve finding out if any one (or more) of these possible situations is actual; that is, it will require determining the precise conditions which, in this instance, satisfy the truth-condition. Yet, I would suggest, this is no different to what happens in a case like (a): determining the truth or falsity of the object-language sentence (a) will require finding out which (if any) of a range of possible situations are actual. Finding out whether Jane is happy, then, involves undertaking exactly the same kind of investigation as finding out whether Jane can’t continue, it is just that we might think (speaking somewhat crudely) that there is a ‘broader’ range of situations which would make it true that Jane can’t continue than there are which satisfy ‘Jane is happy’.

Yet we clearly need much further argument to show that this intuitive difference in range must result in a difference in meaning, that is, that there is some recognizable degree of variation in the possible situations which serve to satisfy a truth-condition, below which no introduced unarticulated constituents are needed, but above which

\(^{25}\) Again, following Chapter 3, the complete truth-condition for this sentence would be: \( ?(e') \) If \( u \) is an utterance of ‘Jane is happy’ in \( c \) and ‘Jane’ in \( u \) refers to \( x \) then \( u \) is true iff \( x \) is happy” where ‘\( x \)’ denotes a syntactically generated singular concept. This detail is omitted in the current discussion to focus attention on the issue of covert context-sensitivity.
the semantic requirement for UCs comes into play. Who, we might wonder, is responsible for setting this line, what exactly are the parameters of difference which it is supposed to be measuring, and what do we do with borderline, disputed or vague cases? To the extent that this proposal can actually be (non-metaphorically) understood, it seems entirely arbitrary and artificial. Of course, one option here would be for the advocate of UCs to deny an initial assumption we made above, viz. that ‘Jane is happy’ is not a good candidate for containing UCs. Perhaps ‘Jane is happy’ is precisely on a par with ‘Paracetamol is better’ or ‘Jane can’t continue’, requiring UCs to specify the location, duration and kind of happiness Jane is enjoying.²⁶ However, it seems to me that any intuitive support for the imposition of UCs, or the claim that the proposition expressed by the sentence is itself not determinate, seems to dissolve when we turn to sentences like ‘Jane is happy.’ Although a multitude of different situations (perhaps an infinite number) can satisfy the T-sentence:

(e) If \( u \) is an utterance of ‘Jane is happy’ in \( c \) then \( u \) is true iff Jane is happy in \( c \)

this does not, I suggest, in any way encourage us to enrich the semantic content of the sentence in order to narrow down this number of situations. What is becoming clear here is that, although it might be suggested that if a putative truth-condition allows a range of more specific conditions then it itself must be providing only a truth-conditional schema, or propositional radical, this claim is in fact unwarranted. For no (contingent) proposition graspable by the human mind could be maximally specific about the world, thus every proposition will allow some more specific conditions to be provided. The idea that liberal truth-conditions fail to be genuine truth-conditions since they do not tie the world down to a completely unique state of affairs thus turns out to be ungrounded. For this move launches us on a slippery slope which can only end with the requirement that the literal meaning of every sentence be exactly as precise as the particular worldly conditions used to verify it on a given occasion of utterance. Even if we had a good grasp of what it would be for a proposition to be ‘maximally specific’,

²⁶ In this case, since presumably an utterance of ‘A is happy’ would always be considered semantically incomplete, we would have to hold that the lexical entry for ‘happy’ was something along the lines of ‘_ is happy about _ at _’.
we certainly don’t want to be driven to the conclusion that these are the kinds of meanings natural language sentences possess. However, this brings us to the second form of objection to liberal truth-conditions, for although it may be right that *uniqueness* is not what is required of genuine truth-conditions, still it may be argued that a genuine truth-condition must still be somehow *more determinate* than the very liberal ones envisaged above. For instance, perhaps what is needed is to incorporate background conditions, or some kind of ‘normality constraints’.

On this objection the problem with liberal truth-conditions is that they do not tie the world down to a range of normal situations. For instance, if I say ‘I want a steak’ while sitting at a table in a restaurant, what I literally mean, it seems, is that I want a steak in the normal fashion salient for ordering food in a restaurant. So I want it delivered to my table, not to my home, I don’t want it encased in concrete, or frozen, or painted purple, or put on my head. What’s wrong with the liberal truth-condition here is that it would be satisfied by any one of these states of affairs pertaining, and this seems wrong. As Searle objects:

Another difficulty with this account is that if it were true then all kinds of crazy misunderstandings would be literally correct interpretations of the sentence. For example, if I have a contract with you to cut your grass weekly and on successive weeks I stab it with a butcher knife, gouge a hole in it with a buzz saw, and make incisions with my finger nail, have I literally complied with the letter of the contract? I am inclined to say no.

Now, clearly, there are different kinds of objection which might be made here. On the one hand, the claim might be that the liberal truth-conditions simply fail to capture the appropriate truth-conditions for this communicative exchange. However, as I’ll argue at length in §4.6, I think appropriateness here should be viewed as a pragmatic matter. Certainly, the objection construed in this way doesn’t show us that there is anything inconsistent in the very idea of liberal truth-conditions, which is the objection we are after at the moment. A stronger way to take the objection, then, is as showing us that liberal truth-conditions, because they ignore normality conditions, fail as genuine truth-conditions since

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28 Searle 1980: 226. While I don’t want to disagree with Searle that there are some crazy misunderstandings going on here, the question remains, are they misunderstandings of a linguistic variety? If Searle was responsible for your lawn and behaved in this way, would you want him to learn more about English or more about being a gardener?
they don’t tell us when an utterance should be, or should not be, taken as true. This seems to be the objection Recanati has in mind when he writes:

The abstract condition we associate with [a sentence isolated from background conditions] is, precisely, too abstract to enable us to tell the worlds in which the condition is satisfied from worlds in which it is not. It is not determinate enough to give us specific truth-conditions or obedience conditions.²⁹

The thought here seems to be that liberal truth-conditions fail to reach the standards of genuine truth-conditions because they do not allow the language user who grasps such a liberal truth-condition to tell worlds in which it is satisfied from worlds in which it is not. Yet, at least in the normal case, it seems quite unclear that this objection holds. The liberal truth-conditions given in (a)–(d) seem to serve perfectly well to determine worlds where the truth-condition is satisfied, as opposed to worlds where it is not. In the case of (a), for instance, any world where there is something which Jane can’t continue will be a world in which the truth-condition is satisfied, while it will fail to be satisfied in any world where there is not something which she cannot continue (that is, where every state she currently realizes can be continued by her). Now admittedly there will be very few worlds where such a liberal truth-condition fails to be satisfied (in fact, whether there are any such worlds is something we will need to return to below), but this recognition in itself seems to show that we have a reasonable grasp on which worlds will, and which worlds won’t, satisfy the condition in question (and if the worry is just that there are very few situations ruled out by the liberal truth-condition, then this is again to object to its appropriateness; an objection we will return to in the next section). Or again, with respect to (d), it seems clear that any world where the subject possesses the property of being red in any respect is a world satisfying (d), while a world where the apple does not possess the property of being red is a world which does not satisfy (d).

So, the need to incorporate background conditions prior to the delivery of a genuine truth-condition seems, in most cases, quite unclear. However, Searle and Recanati argue that this appearance is deceptive. We can tell, they suggest, that background conditions are

²⁹ Recanati 2004: 91.
required in order for a putative truth-condition to reach the standards of a genuine truth-condition because, in cases where such background conditions are not available, we arrive at something which is not truth-evaluable. That is to say, the liberal truth-conditions recovered where background conditions do not exist obviously fail to be genuine truth-conditions. So to take Searle’s famous example (which was the particular example Recanati was actually discussing in the above quote), consider the sentence ‘John cut the sun’. Here the suggestion is that, since there is no background condition we can supply, the sentence lacks meaning, we cannot say what it would be for an utterance of such a sentence to be true or false. Yet it is not clear to me that knowledge of the meanings of the parts of the sentence and their mode of composition does fail to add up to knowledge of the condition under which such an utterance would be true. If the competent language user understands all the parts of the sentence (she knows the property denoted by the term ‘cut’, she grasps the meaning of the referring term ‘John’ and she understands the definite description ‘the sun’) and she understands this construction of parts, then she knows that the utterance of this sentence is true just in case John cuts the sun, that is, just in case John stands in the cutting relation to the sun. Now clearly any world which satisfies this condition is going to be pretty unusual (and there may be some vague cases where it is not clear whether or not John does count as cutting the sun in those cases; I’ll return to this point in a moment) but there will be, it seems, some pretty clear cases on either side of the divide. For instance, any world where John’s actions do not have any effect on the physical status of the sun is clearly going to be a world where the truth-condition is not satisfied. While any world where John’s actions do result in some kind of severing of the physical unity of the mass of the sun is a world where the truth-condition is satisfied. So, prima facie, it’s just not obvious to me that someone who knows that ‘John cut the sun’ is true just in case John cuts the sun is unable to partition worlds into those which satisfy and those which fail to satisfy this condition. Certainly, in central cases it seems simply obvious that the truth-condition is or is not satisfied, even though there may be a vague boundary where we are

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³⁰ So that the first sentence of the quote from Recanati 2004: 91 should have read: “The abstract condition we associate with that sentence (involving some form of linear separation affecting the integrity of the sun) is, precisely, too abstract to enable us to tell the worlds in which the condition is satisfied from worlds in which it is not.”
unsure whether a situation counts, or does not count, as John cutting the sun (that is, there will be cases where John has some effect on the sun, but we are simply unsure whether to categorize this as an instance of cutting or not).

Yet, perhaps there is something problematic in this recognition that liberal truth-conditions do not allow us to tell whether or not a truth-condition is satisfied in all situations. This brings us on to a third version of the argument that liberal truth-conditions fail to reach the standards of genuine truth-conditions. On this analysis, a truth-condition counts as a genuine truth-condition only if a grasp of it allows an agent to tell whether or not it is satisfied in all possible situations. Certainly liberal truth-conditions don’t do this; yet, prima facie, it is quite unclear that this is something truth-conditions in general should be required to do. The constraint simply seems far too strong: lots of truth-conditions which are apparently perfectly acceptable don’t allow us to decide their satisfaction in all situations. For instance, this is certainly the case with any sentence containing a vague predicate. More fundamentally, however, it seems that a constraint this strong is not even met by the kind of contextually enriched truth-conditions we get by adding in an appeal to background conditions. So, for instance, take the sentence ‘John cut the cake’ which, it would seem, is familiar enough to have a definite sense supplied by background conditions, so that the contextually enriched truth-condition is something along the lines of John cut the cake in the normal sense of cutting associated with cakes. Yet even with the inclusion of this kind of condition it’s quite unclear that the truth-condition will suffice to tell us, for a range of possible situations, whether that is a situation which satisfies the condition or not. Say that John uses a knife but slices only the icing, or only half way through the sponge, does he count as cutting the cake (in the relevant respect) in this situation? How about if, in the absence of a knife, he uses a spoon to carve out portions of his birthday cake, must we say that John didn’t cut the cake in this situation, or perhaps that he did if he used the edge of the spoon in a knife-like way? Or with ‘cut the grass in the normal sense for grass-cutting’: are we to presume that this is literally false if John severs every single blade with nail scissors, while it’s true if he shortens a clump with a scythe, or how about if he shortens the majority of blades on the lawn but with shears rather than with a mower, or if he mows just some small part of the
lawn? Though there may be a background set of normality conditions against which ‘cut the grass’ operates it again simply doesn’t seem clear that such an appeal to normality conditions can tell us, for each and every possible situation, whether that situation counts as an instance of grass-cutting or not. Rather, much as with the liberal truth-conditions, our restricted truth-condition serves to make a ruling on a range of clear cases (so that, say, shortening one blade of grass with one’s fingers does not count as cutting the grass in the normal sense, while mowing all or most of the lawn does), but leaves some intermediary cases open. Yet, I would suggest, this just serves to show that the requirement that a truth-condition specify, for every possible situation, whether it is satisfied by that situation or not, is far too strong a constraint to take as constitutive of being a genuine truth-condition. Yet if we weaken this constraint at all (that is, if we allow that a putative truth-condition counts as a genuine truth-condition just in case it makes a ruling in a range of clear-cut possible scenarios), then the argument that the liberal truth-condition [‘John cut the sun’ is true iff John cut the sun] is not a genuine truth-condition seems to me to be fundamentally undermined.

The issue which becomes pressing here, I think, is the dual pragmatist’s move from talk of truth-conditions per se to talk of ‘telling whether a truth-condition is or is not satisfied’ (recall Recanati’s objection above that liberal truth-conditions are “too abstract to enable us to tell the worlds in which the condition is satisfied from worlds in which it is not”). It is indisputable, I think, that if truth-conditions really do run only off the syntactic constituents of our sentences then we will be left with a vast range of truth-conditions whose actual satisfaction we cannot, in practice, verify. Is the sentence ‘it’s raining’, as uttered by S at t, literally true or false, we might ask? Well, without a relativization to a place, it can turn out to be extremely hard for an addressee to tell. Once again, however, it’s not clear that the advocate of liberal truth-conditions should be unduly worried by this claim. For it seems that the claim made by our formal, modular approach to semantics is that grasp of meaning is grasp of truth-conditions, not knowledge of whether those truth-conditions are satisfied; to think otherwise is, I believe, to fall prey to a kind of creeping Verificationism. What we are allowing is that the competent interlocutor can grasp the truth-conditions of the sentence, she knows how the world would have to be for the sentence to be true.
To think that, in addition to this, the agent must be in a position to ascertain whether or not that condition is satisfied in order to count as understanding the literal meaning of the sentence is to run together notions of meaning and verification which (the history of Verificationist approaches to meaning tells us) are best kept apart. What matters for understanding a sentence is that it have a truth-condition, that it be (in principle) truth-evaluable, and that the interlocutor grasp that truth-condition, and this is not at all the same thing as requiring that, at any given time, we must be in a position actually to determine the sentence’s truth-value, that is, to tell, of a given situation, whether that situation satisfies the condition. (It should also be borne in mind that any such failures to verify concern only the proposition literally expressed by a sentence. It is perfectly possible that speakers of these sentences will convey some more precise proposition through their utterance of the sentence in question, and that the truth-value of this pragmatically conveyed proposition will be easily verifiable by interlocutors; a point returned to in §4.6.)

We need to hold apart knowing the truth-conditions of a sentence (a semantic matter) and knowing whether or not those truth-conditions are satisfied on some particular occasion of utterance (a non-semantic matter). What is obviously the case, given our limited cognitive resources and the speed of communicative exchanges, is that we simply don’t have the time or ability to check all possible situations satisfying the conditions on any given occasion; but we should also note that very often we don’t have to. Take the sentence ‘John went for a walk’, which can be made true by a world in which he went for a quick walk by a lake half an hour ago, or by a world in which he went for a slow walk over a bridge two weeks ago (and countless many other worlds as well). To find out if this sentence is true, I will begin by investigating those circumstances which are most likely to have provided the evidence for my interlocutor’s production of the sentence. If I discover, among these relevant alternatives, a situation which makes the sentence true, then I can simply stop there; if my interlocutor is speaking truly, then I can usually expect to find a confirming situation fairly quickly, say discovering that John did indeed go for a quick walk by a lake a short time ago.\(^3\)\(^1\) Clearly, then, attempts to verify covert context-sensitivity

\(^3\)\(^1\) Notice, however, that despite the confirming situation containing elements like being by a lake or ten minutes ago, there is, I would suggest, no temptation to see the literal meaning of the sentence produced as making implicit appeal to these further elements.
whether or not a given truth-condition is satisfied may well be something of a limited or curtailed endeavour. Specifically, we may confine ourselves to what seem to be the relevant possibilities here. We may decide that, even though a world in which Jane can’t continue sleeping is a world in which ‘Jane can’t continue’ is true, it is not a very relevant circumstance for us to investigate. Rather, from the conversational exchange in which the sentence is embedded, it seems that we can figure out a much more relevant set of circumstances to devote our attention to; namely, whether or not Jane can continue university education. But, to repeat, unless we think that meaning is to be located in our methods of verification, there is simply no argument from the role of a particular place, speaker, type of footwear, and so on, in our verification of an utterance’s truth-value to the necessary inclusion of such elements in a specification of semantic content.

However, this kind of move (in defence of liberal truth-conditions) to hold apart knowledge of truth-conditions and knowledge that those truth-conditions are satisfied has been rejected by Recanati, as follows:

This move strikes me as an unacceptable weakening of the notion of a truth-condition. The central idea of truth-conditional semantics (as opposed to mere ‘translational semantics’) is the idea that, via truth, we connect words and the world. If we know the truth-conditions of a sentence, we know which state of affairs must hold for the sentence to be true; and that means that we are able to specify that state of affairs. T-sentences display knowledge of truth-conditions in that sense only if the right-hand side of the biconditional is used, that is, only if the necessary and sufficient condition which it states is transparent to the utterer of the T-sentence. If I say ‘Oscar cuts the sun is true iff Oscar cuts the sun’, without knowing what it is to ‘cut the sun’, then the T-sentence I utter no more counts as displaying knowledge of truth-conditions than if I utter it without knowing who Oscar is (that is, if I use the name ‘Oscar’ deferentially, in such a way that the right-hand side is not really used, but involves some kind of mention).³²

Here, then, the link back to the position of the previous chapter is made explicit, for of course I want to argue that one can possess knowledge of the correct truth-condition for an utterance like ‘Oscar cut the sun’ even if one doesn’t know (in any substantial, non-descriptive sense) to whom this token of the name refers (for example, if one can’t

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perceptually identify the referent). So the two claims seem to be on all fours together: either it’s enough for knowledge of truth-conditions that one know that Oscar (whoever or whatever he is) stands in the cutting relation to the sun (however the general property of cutting may be realized on this occasion), or, to count as genuinely knowing the truth-condition one must know something much more robust, one must know of that perceptually or otherwise (non-descriptively) identified object that, for some contextually definite sense of ‘cut’, that identified person stands in this particular cutting relation to the sun. If what is required is the latter then, it seems clear, we have no option but to abandon modular formal semantics, for meaning turns out to be context-saturated throughout (in a way which exceeds the context-sensitivity we can reasonably assign to the syntax of our language and which exceeds the kinds of formal features of context to which I have argued a formal theorist’s appeals are limited). While, if all that is required is the former, then the modular formal approach to literal linguistic meaning can be preserved.

Yet it seems to me that all the evidence we have looked at thus far points to knowledge of language as delivering minimal, liberal truth-conditions rather than the kind of substantial, restricted truth-conditions Searle and Recanati envisage. For we have seen that there are expressions which demand analysis as genuine referring terms, yet which flout any substantial (epistemic) constraint on singular content (that is, the deferred uses of demonstratives and pronouns examined in Chapter 3). Furthermore, we have seen (in Chapter 2) that there are good reasons to embrace a modular account of semantic understanding, carving off object identification to the integration of linguistic and non-linguistic knowledge which occurs outside the language faculty. Finally, in this chapter, we have seen that, once one accepts the idea that, for many sentences, something extra must be added from the context to the formal constituents of the sentence, prior to the recovery of a determinate or genuine truth-condition, one seems to be launched on a slippery slope: every element which is introduced will itself be open to further precisifications, and those precisifications to further precisifications, and so on, until we end up with specifying the meaning of each sentence as being somehow ‘maximally specific’ about the situations which satisfy it. Yet we have no reason to think that natural language sentences express such massively complex propositions, nor
indeed, as I have tried to argue in this section, that the kinds of ‘liberal’ truth-conditions which we get merely through paying attention to the obvious syntactic features of natural language sentences somehow fail to reach the standards of genuine truth-conditions. So it seems to me that what the dual pragmatist needs now is not a simple disjunction of views: either we have liberal truth-conditions and modular formal semantics, or we have restricted truth-conditions and non-formal, non-modular semantics. Rather what the dual pragmatist needs is an argument that the liberal truth-conditions are indeed, as alleged, unacceptably weak. Yet I can see nothing in the ‘cut the sun’ example which forces this conclusion on us. Unless it can be shown that there is something inconsistent in the very idea of liberal truth-conditions, then, I submit, we have no reason to abandon the idea that what we get from knowledge of language per se will be something which is genuinely truth-evaluable/propositional, though something which is significantly less informative than the rich, pragmatically enhanced truth-conditions envisaged by the dual pragmatist.

Perhaps, however, there is still a problem with liberal truth-conditions which reveals them as unacceptable, for it seems that some liberal truth-conditions are so liberal that they will be satisfied in every possible situation, while some are so restrictive that they will be satisfied by no possible situation. Yet a proposition which is true in every situation is a necessarily true proposition, while one which is false in all is a contradiction; so, our final challenge goes, don’t liberal truth-conditions make what look like contingent sentences express necessary truths/contradictions?³³ To see this consider again:

(a) If u is an utterance of ‘Jane can’t continue’ in a context c then u is true iff Jane can’t continue something in c.

It looks as if there will always be something which Jane can’t continue: in any world with time, she can’t continue being exactly the age she is at the time of utterance, in any world with motion, she won’t continue being in exactly the same spatial relation to all other objects, and so on. It seems that there is no world which will fail to satisfy this truth-condition, thus we seem to have made what is expressed by this sentence both too trivial (the speaker certainly didn’t mean to be asserting

³³ I’m grateful to Jonathan Dancy and Hanjo Glock for stressing this point.
something which was trivially true in all situations) and too strong (the speaker certainly didn’t mean to be asserting a necessary claim).

To take the triviality point first: notice that, although it’s quite right to think that the speaker didn’t mean to be asserting (and indeed would almost never be taken to have asserted) the meaning captured by the liberal truth-conditions, this is not an objection to liberal truth-conditions per se. For it has been a fundamental tenet of this essay that literal, linguistic meaning (attaching to sentence-types relativized to contexts of utterance) and what a speaker says or communicates by an utterance of a sentence are radically different notions (and note that the claim is not, as it sometimes is with arguments about the semantics/pragmatics boundary, that what is pragmatically conveyed is somehow less important or of a lower status than what is captured semantically; rather the claim is that the two kinds of interpretation are simply very different kinds of activity, underpinned by very different kinds of processes). Thus the formal, modular semanticist at this point is in no way committed to claiming that liberal truth-conditions are what are communicated in these cases, nor even that the liberal truth-conditions are likely to be the subject of much interest to interlocutors in these cases. Rather the thought is simply that, if we are really interested in finding out what the words and sentences we use literally mean, then we have no need to look further than the meaning which can be recovered via sensitivity to formal features alone. Recall also that there is evidence that speakers can grasp this very liberal, literal meaning when they want to: children and philosophers, I often find, have a very acute sense of what they have literally committed themselves to by a given utterance and this fits entirely with the liberal truth-conditions specified above. So, as I will go on to argue in the next section, it doesn’t seem to me that the recognition of a divergence (however wide) between what the speaker has literally committed herself to and what she believes she has expressed shows that liberal truth-conditions are unacceptable; though finding out that the speaker who utters ‘Jane can’t continue’ means that Jane can’t continue university education is a fundamental part of any successful communicative exchange of this type, the point remains that it need be

³⁴ An academic (though a non-philosopher) of my acquaintance was asked, in December 1999, to deliver a book review he had been working on by January. Being something of a slow worker, he went on to deliver his book review in January 2001, and remarked to me that he hoped the publishers were impressed with his ability to work to a deadline. I don’t suppose the publishers were particularly impressed, but it seems clear that they couldn’t have faulted his grasp of English.
no part of grasping what these words, in this construction, literally mean. So the objection of triviality for very many analyses of the literal meaning of sentence-types relativized to contexts of utterance is not one I think we should be overly concerned with; it is really just an instance of the general claim made throughout this book, that knowledge of language is a good thing, but it is far from the only thing worth having, and, abstracted from everything else that a competent agent knows, it may well look a very meagre creature indeed.

So, what of the claim that liberal truth-conditions turn contingent utterances into expressions of necessary truths? Well, I think a first point to notice is that this isn’t the case for all liberal truth-conditions. Though such truth-conditions are, by their nature, pretty liberal in the range of situations they will accept as satisfying them, nevertheless many still succeed in sorting situations into those which do, and those which do not, satisfy them. So, take the appropriate liberal truth-conditions for ‘The apple is red’, ‘Mary can continue’, ‘It’s not raining’ or ‘Paracetamol is better’—all of these may fail to be satisfied in certain situations. If the apple is not red in any respect, if Mary suddenly goes out of existence, if it’s raining somewhere, or if Paracetamol is not better than anything, all of the relevant liberal truth-conditions will fail to be satisfied. Yet, it does seem that in some cases what we are left with if we choose to run our truth-conditions directly from the syntactic constituents of our sentences alone will be truth-conditions which are met by all possible situations (or by none). In these cases, I think the advocate of liberal truth-conditions should simply embrace them: if it is held that the proposition expressed by ‘Jane can’t continue something’ is necessary, then why should it be of any further concern to the advocate of liberal truth-conditions that the proposition expressed by ‘Jane can’t continue’ is similarly necessary (especially since, in both cases, what will be communicated by an utterance of the sentence is likely to be a far richer, contextually salient proposition)? If the speaker wanted to assert

³⁵ I’m fairly often asked questions like “would the truth-condition for ‘It’s raining’ be satisfied if there was liquid falling from the sky on Mars, or H₂O on some distant planet no one knows about?” However, in answer to this kind of worry, it seems to me that some boundaries probably get built in simply via the meanings of our words. It’s just not clear that liquid falling from the sky on Mars would count as an instance of rainfall, nor that H₂O appearing from the sky on an alien planet in an alternative solar system would make an utterance of ‘it’s raining’ in an earth-bound context true. That is to say, although the precise extension of our predicates is not something we can always settle in advance (see Wilson 1982), still it would seem a mistake to think that they don’t come equipped with some kinds of in-built limits.
something which further constrained the set of circumstances which
would make her sentence true, then she could and should have done
this; but knowing how communication proceeds, she was right to feel
that she did not have to.

It seems, then, that the advocate of liberal truth-conditions (based
solely on syntactic constituents) can claim that they are adequate for
determining semantic content, while admitting that the conditions
interlocutors look to to verify whether a given truth-condition is
satisfied or not are severely curtailed, that is, that the kinds of features
dual pragmatists want to add to the semantics actually figure outside
semantics in the realm of how agents go about verifying the truth or
falsity of a given utterance. In this case, utterances of sentences like ‘The
apple is red’ or ‘Jane can’t continue’ are perfectly truth-evaluable (all
we need to do is to grasp the appropriate liberal T-sentence), though
verifying the truth-value of an utterance of the sentence, that is, deter-
mining if its truth-condition is satisfied in the actual world, may well
advert to the kind of contextual information appealed to by advocates
of UCs. So, I want to suggest that liberal T-sentences, like (a)–(d), are,
contrary to the arguments of Searle and Recanati, perfectly acceptable:
first, though they do not pin the world down to a unique state of affairs,
we have no reason to expect or require them to do so. Secondly, though
this entails that the propositions literally expressed by many sentence
tokens will not be verifiable by addressees in many communicative
exchanges, this only constitutes a problem if we lose sight of the fact
that knowledge of meaning is knowledge of truth-conditions, not
verification of truth-values. Third, though this may mean that some
sentences end up with truth-conditions which are satisfied in all
possible situations, this is simply to recognize the minimal nature of
what is gained via semantic understanding alone and the discrepancy
between what is said by an utterance and what the sentence uttered
itself literally means. It seems to me, then, that liberal truth-conditions
are perfectly acceptable and thus that the first argument against formal,
modular semantics from covert context-sensitivity fails: contrary to
the argument of §4.2 formal semantics does not underdetermine
meaning, for perfectly determinate, truth-evaluable propositions can
be recovered simply through paying attention to the syntactic con-
nstituents of sentences and the formal features of the context in which
they are uttered.
Yet, if the above arguments are correct, and there is nothing constitutively wrong with liberal truth-conditions for natural language sentences, then it seems that the stronger form of argument, attributed to Travis in §4.4 above, is also undermined. While it is right to think that the very same arguments which appeared to show that there is no such thing as determinate content at the level of natural language can be applied to the realm of thought, so that it can come to seem that meaning itself is indeterminate, if the arguments fail at the level of natural language then, it seems, they will fail at the level of thought as well. Furthermore, all that is needed to show that meaning is not indeterminate is an argument to the effect that meaning at the level of natural language is determinate and that is what I have tried to provide in this section. Though the truth-conditions we end up with on the liberal, minimal picture may not be the ones we take to be communicated on most occasions, this does not show that those truth-conditions themselves are fundamentally improper. Finally, however, this brings us back to the second kind of argument for UCs (looked at in §4.3). For much has been made in this section of the idea that appropriate truth-conditions are a non-semantic, pragmatic matter, and this claim may well be disputed. Perhaps the real problem all along has not been that there is something inherently wrong with the very idea of liberal truth-conditions, but rather it’s that they don’t look anything like the kinds of things we want here. Truth-conditions like (a)–(d), though not ill-formed, are not suitable; they fail to capture our intuitive judgements about when the sentence should be taken to be true or false. So, let us now turn to this objection that, without the proposed presence of UCs, the only kinds of truth-conditions we can deliver for sentences like ‘It’s raining’ or ‘There’s nothing to eat’ are ones which fail to capture our judgements about when sentences like these are true or false.

4.6 Rejecting the Argument that Sentences without UCs are not Appropriately Truth-Evaluable

To recapitulate: the second argument dual pragmatists may adduce in support of the existence of semantically relevant, though syntactically unrealized, constituents (UCs) is that truth-conditions based solely on the syntactic contents of (at least some) sentences fail to capture our
intuitive judgements of literal meaning in most (maybe even all) cases. What a speaker says when uttering the sentence ‘Everyone got an ‘A’’ is that every person in some relevant group got an ‘A’, and what the speaker who says ‘It’s raining’ means is that it is raining in some particular place. To treat the sentences as possessing the more liberal truth-conditions delivered by their syntactic constituents is to fail to capture what the speaker means, and to make predictions about the circumstances in which the sentence will be true or false which do not fit with our intuitive view of the subject matter. For instance, it is to hold that ‘Everyone got an ‘A’’ is false in a situation in which everyone taking the course under consideration got an ‘A’, but where some irrelevant individual, on a course no one was thinking or talking about, got a ‘B’. Or that ‘It is raining’ is true when it is bone dry for hundreds of miles around the interlocutors, but, unbeknown to all participants in the conversation, it is raining in a small corner of Timbuktu. This result, the advocates of dual pragmatics (among others) object, is unacceptable.

Initially, then, the claim seems to be that someone who utters, say, ‘Jane can’t continue’, can or must be viewed as meaning that Jane can’t continue university education, etc. However, as we all know thanks to Grice, because a speaker means a proposition, p, by her utterance of a sentence, s, this does not necessarily mean that the sentence uttered should be treated as having the semantic value that p. The speaker who says, ironically, ‘It’s a nice day’ when it’s raining, means it’s a nasty day, but this isn’t the literal meaning of the sentence uttered. While the speaker who says pointedly some one hasn’t handed in their essay again may mean, and may be taken to mean, that the recalcitrant Jones has failed to turn in work once again, but this isn’t what she literally expresses. So, the advocate of a minimal (non-UC) view of semantics might wonder why the cases to hand are any different. Why should we think that, because it is often uncontentious to say that the speaker uttering ‘It’s raining’ means it’s raining here (or wherever) that this more informative proposition must give the literal, semantic content of the sentence produced?

I think there are probably three factors at play in the advocate of UCs assumption that the richer proposition must give the literal meaning of the sentence. First, the kinds of cases which the advocates

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of UCs appeal to intuitively look pretty different to typical cases of Gricean speaker-meaning. In the latter, we have an intention on the part of the speaker to say something non-literal (they intend to be ironic, hyperbolic, metaphorical, etc.), whereas in the kinds of ‘underdetermined’ utterances focused on for UCs any such non-literal intent is absent. Why, then, think speakers are knowingly uttering literal falsehoods or trivial truths on these occasions, even when they are in possession of a range of perfectly simple sentences which would convey the substantive thoughts they really wish to communicate (that is, why don’t they say ‘It’s raining here’ as opposed to just ‘It’s raining’)? This thought seems especially pressing since our intuitions in these cases tell us that the speakers are in fact doing fine—producing fitting utterances and (often) asserting truths. So, even if the Gricean distinction is right in certain cases, still, the advocates of UCs contend, there is no reason to think these cases are (and every reason to think they are not) instances of speaker-meaning rather than semantic-meaning.

This connects to a second reason to treat the richer propositions as giving the literal meaning (as opposed to being Gricean implicatures or some such), for it often seems both natural and correct to report a speaker who produces a (putatively) underdeterminate utterance using a ‘completed’ content sentence. For instance, the speaker who says ‘It’s raining’ will usually be reported as having said that it’s raining here (or wherever). Finally, as we saw at the close of the last section, it seems that when we look at the conditions appealed to in order to make judgements of truth or falsity for sentences as uttered on a given occasion, they are the states of affairs picked out by the richer propositions recovered via paying attention to the intentions of the speaker. If I want to find out whether A’s utterance of ‘It was raining’ is true or false I need to consider, not how the weather is with me now, but how the weather was with A then (even though finding out the latter state of affairs is a much harder task than the former). Yet if this is right, then it seems undeniable that the statement A made must have contained elements picking up on

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³⁷ Searle 1980: 227 writes: “[I]t seems most implausible to suppose that in understanding [sentences like ‘Bill cut the grass’ or ‘Mary cut the cake’] we go from a common literal meaning of ‘cut’ by a process of unconscious inference to different speaker meanings, on analogy with the processes by which we understand, e.g. ironical utterances or indirect speech acts.” As we will see below, I would agree with Searle that the direct analogy to irony is implausible, but this does not entail that there is no move from literal meaning to speaker meaning taking place (the mistake is to think that being ironic, etc., is the only model for being non-literal).
the particular location where he intended to claim it was raining, that is, that the semantic content of the sentence uttered contained UCs.

Let’s take these three points in order: first, the claim that these cases are radically different to paradigm Gricean examples of speaker-meaning (where the speaker consciously flouts some principle of good communication and thereby succeeds in communicating a pragmatically conveyed proposition (see §2.5)). The cases we are concerned with in this chapter look very different from such instances of speaker meaning since, first, it doesn’t seem as though the speaker must have formed an explicit intention to speak non-literally, and, second, it seems that neither speaker nor hearer need be consciously aware of the literal proposition the sentence expresses (where this is taken not to contain UCs). However, this recognition of a divergence between the cases in question in this chapter and the standard variety of Gricean speaker meaning only entails that the cases in question in this chapter are not instances of non-literality (that is, of the conveying of a proposition which diverges from the literal meaning of the sentence uttered) if the standard Gricean cases are held to exhaust non-literality. Yet it seems that we have reason to reject this further assumption, since the phenomenon of non-literality apparently ranges much wider than this, stretching to include cases where the speaker lacks any explicit intention to speak non-literally, and cases where neither speaker nor hearer are consciously aware of the literal meaning of the sentence uttered.

Looking to the first kind of case: the lack of an explicit intention to speak non-literally need not, it seems, prohibit a speaker from speaking metaphorically (where metaphorical speech is clearly one instance of non-literality). For one thing, since metaphor is such a pervasive feature of our language, it seems quite possible that on at least some occasions speakers will use metaphorical expressions without being aware of their metaphorical status. Thus one who speaks of a sad painting, or threatening clouds, or dry conversation, may be quite oblivious to the metaphorical status of her speech and thus lack any explicit intention to speak non-literally. If this is correct, then it seems that non-literal speech can occur regardless of whether or not the speaker has explicitly formed an intention to speak non-literally. Secondly (and perhaps more controversially), it seems that non-literal speech can occur even in situations where neither speaker nor hearer is consciously aware of the literal meaning of the sentence in
question. For instance, consider a perfectly standard type of pragmatic explanation in this area, namely the pragmatic explanation of the communication of referential propositions by utterances containing (quantificationally analysed) definite descriptions. So, when A points at the man in the dock and says ‘The murderer is insane’, the claim is that A may intend to convey (and may succeed in conveying) the proposition that that man is insane, despite the fact that the proposition literally expressed is simply that the unique satisfier of the predicate ‘is a murderer’ also satisfies the predicate ‘is insane’. It seems that in such cases neither A nor her audience needs consciously to consider the literal meaning of the sentence uttered prior to arriving at the pragmatically conveyed proposition; the audience need not, for instance, explicitly reason that ‘A expressed the proposition that the unique satisfier of the predicate ‘is a murderer’ also satisfies the predicate ‘is insane’, A expressed this proposition while pointing at that man, thus A must believe that that man is the murderer and therefore I should believe that A believes that that man is insane’. Yet if non-literality is allowed to extend to cases where neither speaker nor hearer must be consciously aware of the non-literal status of a given speech act, as these cases seem to show, then it seems that there is no bar to treating the kinds of cases looked at in this chapter as instances of non-literal speech. Thus we would be agreeing with Bach when he writes:

[T]here are many sentences which are almost always used non-literally as elliptical for other sentences. For example, “Ed doesn’t look tired, he is tired” would likely be used with a suppressed “merely” before “look” to be inferred by the hearer, since the speaker would not be stating that Ed does not look tired but is tired anyway. Similarly, if I say “I drink only Scotch”, I would not be stating that I drink nothing but Scotch but merely that the only liquor I drink is Scotch . . . The phenomenon of elliptical speech is commonplace; indeed, it often seems stilted not to suppress words that can easily be inferred as expressing part of what one means, as opposed to what the uttered sentence means.

Furthermore it seems that there is at least some evidence that treating the cases raised in this chapter as instances of non-literal speech is the right way to go, for there is evidence that interlocutors are willing to hold apart literal sentence-meaning and speaker-meaning even in these cases. For instance, in an utterance of “I will get the washing

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38 Such an assumption would not, it seems, be controversial to advocates of the ‘direct access’ model; see Chapter 1, n. 3.

39 Bach 1981: 238. See also the discussion of ‘S-(sentence)-non-literality’ in Bach 1994b.
in” it always seems open to the mischievous speaker, on being quizzed as to why the washing is still on the line and getting wet in the rain, to reply that she did not say when she would fetch it in and that she merely meant to express the claim that at some time in the future she would get the washing in. No doubt such a speaker contravenes all sorts of communicative or conversational constraints, but it doesn’t seem that she explicitly contradicts herself (as must be the case if her original sentence literally meant that, for some specific value of t, she would get the washing in at t).⁴⁰ Or again, take the cynical response to ‘Everyone is coming to my party’ of ‘Oh really? Will the Queen be there?’—the respondent here may be charged with being pedantic and uncharitable, but surely not with failing to understand the literal meaning of the English sentence. The retreat to the general proposition acquired from the surface contents of the sentence may be pedantic, and a speaker who insists on such unhelpful interpretations will quickly prove an exasperating interlocutor, but the mere fact that we allow such retreats, without charging the speaker with inconsistency or failure to grasp the meaning of the sentence, seems to demonstrate that we have here precisely the kind of sensitivity to speaker-meaning versus sentence-meaning outlined by Grice.⁴¹ So, the first argument against treating the richer propositions as non-literal can, it seems, be deflated.

⁴⁰ The advocate of UCs might of course respond here that, while it is right to think that the speaker does not contradict herself, this is simply because a more general UC was actually in play than the one attributed by the hearer. So, for instance, though the conversationally salient value of a UC in an utterance of ‘I will get the washing in’ is something like within some relatively short period of time following the time of utterance, it seems perfectly possible that the speaker may on occasion intend the UC to take a very different value, like at some point after the time of utterance. While this would avoid charges of inconsistency, I wonder how acceptable such a move would be to most advocates of dual pragmatics. For instance, it is not clear that this kind of interpretation would cross the threshold of relevance, in which case it could not be assigned as the explicature of the utterance for Sperber and Wilson. We also seem to have moved quite some way from the idea of capturing intuitive truth-conditions, which Recanati advocates as the central task of semantics, since the intuitive truth-condition in this situation is precisely the one the hearer assigns. In general, I suppose that there is an issue here about the interaction of speaker intentions and publicity constraints: can a speaker intend a UC to take any value, regardless of a hearer’s ability to recognize this intention, or are speaker’s restricted in the intentions they can have for the values of UCs by what a conversational partner can reasonably take to have been intended?

⁴¹ To pick up on a case from Perry 1986, imagine that you are confused about the current conversational setting and think your son, in uttering “It’s raining, wants to say something about Palo Alto, when in fact he is continuing a conversation about how things stand with your other son in LA. Here the intended proposition is not that it is raining in Palo Alto but that it is raining in LA. Something has gone wrong, but is it really a semantic failure? Have you failed to understand what your child’s words, in that particular concatenation, meant? The suggestion I want to make is that you have not—though there has undoubtedly been a breakdown in communication, this isn’t due to your inability to understand English, that is, to grasp the literal meaning of the uttered sentence, but because you’ve failed in some other respect, such as keeping up-to-date on which are the relevant objects in the current context.
Moving to the second point, concerning indirect speech reports, it seems that the shared intuition—that, for instance, an utterance of ‘It’s raining’ can often be reported using the richer content sentence ‘A said that it’s raining at l’—can be accommodated without embracing semantically relevant UCs. For it seems that this intuition may be best viewed as concerning not the literal meaning of linguistic expressions in natural language, but speaker’s exploitation of these signs in successful communication, as highlighted in reported speech. That is to say, just because, in many contexts, it is entirely natural to report a speaker utilizing a content sentence which is richer than the sentence originally uttered, this does not mean we need refine our semantic evaluation of the original sentence to incorporate every element present in an acceptable content sentence of an indirect speech report. As we saw in Chapter 2, a single utterance can always be adequately reported by a number of indirect speech acts. So, ‘It’s raining’ as uttered by S, at time t and location l, may be reported in (at least) the following ways:

S said that it is raining.
S said that it is raining where she is.
S said that it is raining at l.
S said that it was raining at l on t.

Furthermore, given the right context of reporting, the utterance may support a range of more ‘liberal’ indirect speech reports, like:

S said that it was raining 50 miles south of the Grand Canyon.
S said that it was nice weather for ducks at t in l.
S said that the drought was over.

So, if we were to assume that facts about indirect speech limn facts about semantic content, we would have to allow that a single (unambiguous) sentence possesses an indefinite number of distinct semantic contents, depending on the range of acceptable ways in which it may be reported. Yet, with concerns surrounding the systematicity and creativity of natural language (and the constraints on language learning) in mind, this seems totally unacceptable. It simply seems wrong to think that part of the semantic content of ‘It’s raining’ could include reference to droughts or ducks. Of course, the natural move for the advocate of UCs here is to claim that it is not every indirect speech
report which is informative as to semantic content, but only some sub-set of them (for example, those which capture what the speaker ‘really’ said, in some sense). Yet, as I argued in Chapter 2, this move does not seem to be successful, for there is no semantically informative way to render the locution ‘By uttering u S said that p’. Thus, there is no direct move from the intuition that an utterance of ‘It’s raining’ may be reported with ‘A said that it is raining at l’, or that what is said by an utterance of ‘Jane can’t continue’ is sometimes that Jane can’t continue university education, to the theoretical claim that the latter gives the correct semantic analysis of the former.

To summarize the argument of this section thus far: it seems that the first and second motivations for assigning UCs semantic relevance in order to arrive at appropriate truth-conditions can be dissipated. For, on the one hand, there is evidence that the cases in question do fit the speaker-meaning/sentence-meaning divide (since we are willing to take the speaker’s rejection of assigned, richer propositions—like it is raining here—and their retreat to the more general proposition yielded by syntactic constituents alone—for example, it is raining—as non-contradictory and legitimate, although almost certainly conversationally improper and pedantic). While, on the other hand, it seems that the data here properly resides with facts about reported speech (viz. the unarguable fact that speakers can be correctly reported using content sentences which overtly appeal to such elements as speaker, location and time); but, as I have tried to show, for this undisputed fact to be relevant here, we need to assume an extremely close connection between how a speaker can be reported (that is, what the speaker succeeded in communicating) and the literal meaning of the sentence uttered, a connection which in general does not seem to hold. However, the advocate of UCs is not to be silenced yet, for as noted at the start of this section, there is a third argument she may appeal to in rejecting the pragmatic explanation of appropriate truth-conditions in these cases. For perhaps the motivation for ceding the richer propositions semantic relevance can be found in consideration of the conditions under which we seem willing to judge the sentences in question true or false. As noted above, it seems that the speaker saying ‘It’s raining’, in a context where the relevant location is X, will be judged to have spoken truly if it’s raining at X and falsely even if it’s raining elsewhere (and not at X). While the speaker who says ‘There is nothing to eat’ may
be judged to have spoken truly, despite the absence of global famine. So, how can we claim additional contextual information is irrelevant to sentence-meaning when the conditions under which utterances of these sentences are held true or false are just the kind of constrained conditions delivered by the incorporation of UCs? It is not only that the kind of information appealed to by UCs figures in correct indirect speech reports, but also that it figures in our assessments of the truth and falsity of the original utterance; what more evidence could we need, the advocate of UCs will object, to grant the information a semantic role?⁴²

I think there are two points to notice in respect of this argument: first, we need to bear in mind the distinction between knowledge of truth-conditions and the verification of those truth-conditions, and, secondly, we need to ask ourselves which proposition interlocutors will be most interested in verifying the truth of in any given context—will it be the literal, semantic content expressed, or will it be the proposition (or propositions) the speaker wants to (and succeeds in) communicating? On the first point: as we saw in the last section, we need to be very clear that the conditions interlocutors appeal to to verify a sentence are not necessarily identical to the truth-conditions of the sentence produced. I may verify the truth of ‘John went for a walk’ by finding out that he went for a slow walk over a bridge, or a fast walk beside a lake, but neither the speed of the walk nor the route taken (need) figure as part of the semantic content of the sentence. Similarly, I may verify an utterance of ‘It’s raining’ by seeing that there is a downpour outside my window, or being told by a reliable source that there is a light drizzle in Palo Alto, but, I contend, this gives us no reason to think the weight of water-fall or the place where it is falling figures in the literal meaning of the sentence produced.⁴³ To think otherwise would be to demand the literal meaning of the sentence produced be precisely as fine-grained as the particular condition used to verify it; but we have no reason to think every sentence we produce must specify a completely unique way the world must be in all its myriad detail. Furthermore, such a position would run roughshod over any principle

⁴² This point apparently returns us to the basic worry both Searle and Recanati have with liberal truth-conditions.

⁴³ On the assumption, which may be rejected, that the lexical entry for ‘rain’ is not ‘rain at _’, but something more akin to ‘raineth’.
of ‘semantic innocence’ we might have, by seeing the contents of sentences like ‘John went for a walk’ as containing concepts like bridges and lakes, strolls and wanderings. Rather it seems that verifying the truth of a sentence is simply not the same thing as understanding the truth-conditions of that sentence, and it seems that the final argument for UCs is guilty of running together these two notions: maintaining that just because we appeal to a specific condition in determining the truth-value of the utterance, this condition must be part of the semantic content of the sentence produced.

Or again, take an utterance of ‘Jane can’t continue’, this may be verified by finding out that Jane can’t continue university education or that she can’t continue drinking alcohol, or that she can’t continue sleeping, though none of these may match what the speaker wanted to convey. Yet this is just to notice that what the addressee will be most interested in assessing for truth or falsity in any given communicative exchange will most probably not be the literal meaning of the sentence uttered but rather it will be the truth of some richer communicated proposition. We need to keep firmly in mind that the question here is not ‘does contextual information have a role to play or not?’ (a question to which all parties will answer in the affirmative), but ‘does this information have a peculiarly semantic role to play?’ (the issue is one of division of labour). The opponent of UCs (and the advocate of minimal semantics) can grant relevant contextual information a crucial role to play in understanding and verifying the truth of what is said (non-semantic) by the utterance of the sentence in the given context, even while denying it a semantic role in the literal meaning of the sentence produced. That is to say, they can explain why we may judge ‘It’s raining’ as false when it is not raining here, though it is raining (at some irrelevant) there; or why we judge ‘There is nothing to eat’ true, even when there is a well-stocked food shop nearby, for in these cases we are judging not what is literally expressed but what is communicated. Contextual information is of crucial importance for understanding what speakers mean, but this is not to say that it must have an inherent role in the literal meaning of those sentences speakers use to communicate what they mean. What advocates of semantically

44 By ‘semantic innocence’ I mean some quite general principle requiring the elements we posit within a semantic analysis for a given sentence to be constrained by the syntactic elements we can find in that sentence.
relevant though syntactically omitted elements should recognize, I think, is that there is a perfectly standard discrepancy between sentence-meaning and speaker-meaning, and that features vital for determining both the truth-conditions and the truth-value of the latter need not be in any way relevant for determining the former.

So I believe we should reject all three of the proposed reasons for treating the richer propositions resulting from the inclusion of (syntactically unmarked) contextual material as semantically relevant, treating the examples instead as quite ordinary cases of speaker meaning (as opposed to sentence meaning). Yet if this is right, then the second argument for UCs fails: appropriate truth-evaluation is a pragmatic matter, thus the fact that UCs are required for this goes no way towards establishing their semantic relevance. Combined with the rejection of the first argument for UCs (namely, that formal semantics underdetermines meaning), and thus the rejection of the stronger, indeterminacy version of that argument, it seems that we are left with no compelling argument against what I have called ‘liberal truth-conditions’. Perhaps contrary to initial appearances, there are perfectly determinate truth-conditions, or truth-evaluable propositions, which can be recovered on the basis of the formal features of our language alone. Yet this is to reject the dual pragmatist’s key claim (that, in many or most cases, formal semantics cannot deliver anything propositional or truth-evaluable) and show that formal semantic theories are indeed feasible. The arguments of ‘covert’ context-sensitivity can be deflated; literal linguistic meaning can be treated as a function of the formal features of a sentence-type, relativized to a context of utterance to cope with overt instances of context-sensitivity.

It seems to me that the background motivation for the dual pragmatist’s arguments throughout this chapter stem at heart from a rejection of the minimal stance on the role of semantics which, I have argued, the formal, modular theorist should deem appropriate. For the arguments in this chapter turn on the indisputable fact that, to grasp what

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45 Recall that, as argued in Chapter 2, this does not prohibit the advocate of minimal semantics from retaining a distinction between notions like ‘what is stated/asserted’ versus ‘what is (merely) implied’. However the distinction now becomes one on a scale of pragmatically conveyed propositions. Propositions asserted have the same status as propositions implied (all being pragmatically effected versions of what is literally meant by the sentence uttered), but they are in some way ‘closer’ to the literal meaning of the sentence uttered (for example, they are recovered via less pragmatic processing, or via processes which appeal to a more restricted range of contextual information).
is communicated by an utterance, one very often needs to know an awful lot of things. Yet the question remains, are these the same sorts of things one needs to know to know the meanings of one’s words and sentences? The minimal semanticist holds that the answer to this question is ‘no’: grasp of literal meaning should be divorced from grasp of communicated meaning. To understand what is literally meant by ‘It’s raining’ all we need to know, the (minimal) formal theorist claims, is the meaning of the syntactic parts of the sentence and their mode of combination, however to know what is communicated by an utterance of this sentence we need to know so much more. For a start, we need to understand some crucial facts about language-based communication, such as that when a speaker comes to conveying a particular idea in a given context she may choose to use words and phrases which do not entirely match her thought. This may be because the thought is (for her) inexpressible—she simply cannot find the right words for it; or it may be because she wishes to flout some conversational rule to a given end—perhaps she wishes to be ironic or metaphorical; or it may be because at least some of the information she wishes to convey is already in the public domain, as it were, so that she can use a short-hand linguistic version of what she means to communicate. In addition, given that her grasp of communicative practices tells the interlocutor that information from the wider context of utterance, or background information she possesses about objects or people, will be relevant for determining what thought the speaker means to convey, she needs to know which non-semantic features of the context and her background knowledge are relevant for determining what is said, that is, that in an utterance of ‘It’s raining’ it is more useful to determine which location the speaker has in mind than the kind of rainfall she believes to be occurring, though sometimes determining factors like the speaker’s attitude to the rainfall may be equally important. Furthermore, we need to know non-semantic information about the concepts deployed in the literal meaning itself, such as that two drops of water probably don’t constitute an instance of rain, or that if it is raining in an area of drought then the drought is over;⁴⁶ and we need to know non-semantic information about how agents usually

⁴⁶ Some theorists might object that all this information should be construed as genuinely semantic, since the concepts deployed in semantic theorizing are to be individuated by their inferential role, and thus all such inferential relations should be located within the domain of the semantic theory. This point is taken up in §5.3.3.
act in response to rain, for example, that if it is raining then any picnics will be cancelled, or that in the rain people tend to use umbrellas. Yet the processes by which agents come to possess and reason about such information go way beyond the information and processes which bear on purely linguistic comprehension.

It seems, however, that a number of questions about the nature of the minimal project in semantics may emerge now. For instance, it is a common assumption that treating a feature as part of pragmatics entails treating it as somehow less important or less significant than treating it as a semantic feature. The inhabitants of the pragmatic domain have often been seen as rather second-class citizens from the perspective of the semantic arena. However, given our very minimal characterization of what counts as semantic, we might now wonder whether this conception of the distinction is warranted. Furthermore, we may question the assumption made throughout this chapter on behalf of the minimal semanticist, namely that there is a sharp divide to be drawn between semantic knowledge (like the meaning of ‘rain’) and collateral information (like the knowledge that if it is raining then any drought is over). It is to these kinds of question, and the debate between minimal semantics and dual pragmatics in general, that I want to turn in the final chapter.
The aim of this book has been to defend what I have suggested is an independently attractive approach to semantic theorizing—namely the syntactically driven, formal approach (personified here by a truth-conditional theory)—from a range of challenges stemming from putative points of pragmatic intrusion into semantic content. The general methodology in the face of these problems has been to adopt a minimal perspective on the aims of semantic theorizing. Though rich contextual features have an essential role to play in route to determining what a speaker conveys by a given utterance in a particular context, or in identifying (in any substantial way) what objects a speaker refers to by her use of a context-sensitive term, I have suggested that we can still identify a minimal, truth-conditional element free of such contextual effects. Furthermore, I have argued that it is only this much more constrained item which could be delivered by a semantic theory if this theory is taken to be embedded in a (Fodorian) module underpinning our linguistic comprehension. And since there is, I have argued, good reason to treat semantic comprehension as a modular activity, so there is good reason to think these minimal semantic items exist and constitute a genuine level of linguistic processing (even where they do not surface to consciousness).

However a number of questions may now emerge concerning the nature of this minimal project in semantics. For instance, it has traditionally been assumed that assigning a feature to the pragmatic realm signifies that it is somehow less important or significant than a genuinely semantic fact. Yet this sort of value judgement hardly seems appropriate on the current model; so in §5.1 I’d like to draw attention to exactly how the semantics/pragmatics debate gets framed from the
perspective of minimal semantics. This will also lead us to revisit a point first raised in Chapter 1, concerning the precise nature of the debate between formal semantics and dual pragmatics, exploring the possibility of a conciliatory conclusion to our debate. Then, in §5.2, I want to recap on the findings of previous discussions concerning the role of the context of utterance within formal semantics. For this topic really lies at the heart of the current essay and I think it will be useful to summarize explicitly the final position here. Finally, in §5.3, I will close by highlighting a number of topics which emerge from, or are connected with, the current debate but which unfortunately lie beyond the scope of this work.

5.1 Minimal Semantics and Pragmatics

The claim of the minimal semanticist all along has been that semantic judgements form just a tiny fragment of a much bigger picture and that without the bigger picture semantic meaning is an impoverished thing.¹ To know a language, if one doesn’t know about the world or one another, is not yet to know very much. From this perspective, then, non-linguistic knowledge must be just as important as linguistic knowledge (if not more so). Thus to position contextual elements as necessary to understanding communicative acts, though not necessary to understanding semantic content, is not to undervalue these additional elements, rather it is just to recognize that they are playing a different role in coming to understand what a speaker means by her utterance of a given sentence. So we have here a somewhat different conception of the traditional semantic/pragmatic divide: to classify something as pragmatic is not to treat it as somehow less important than genuinely semantic information, rather it is to see it as falling into a different domain, underpinned by different kinds of cognitive processes. For the minimal semanticist, something counts as a semantic feature if it lies within the reach of a formal semantic theory. Furthermore, if this formal semantic theory is construed as embedded

¹ Sperber and Wilson 1986: 177 agree with this point: “if comprehension is defined as a process of identifying the speaker’s informative intention, linguistic decoding is not so much part of the comprehension process as something that precedes the real work of understanding, something that merely provides an input to the main part of the comprehension process.”
within a modular account of our linguistic capacities (as was recommended in Chapter 2) then what lies within reach of our formal semantic theory must involve only those features which can be recovered by simple deductive operations on the syntactic content of a sentence. Specifically, nothing which requires abductive reasoning (like mind-reading) can be treated as a proper part of the semantic theory. So the semantics/pragmatics divide becomes a division between information in, or generated by, our purely formal, computational language faculty and information in, or generated by, other cognitive domains. Thus we have a processing account of the semantics/pragmatics divide. Clearly any pejorative overtones associated with calling a feature ‘pragmatic’ will be misplaced given this kind of definition.

Of course, this difference of origin may be obscured at the level of conscious access by the fact that it is both natural and immediate to move from understanding the sentence to understanding what the speaker of the sentence conveys in a given context, together with the fact that, once we have arrived at this latter meaning, it is extremely difficult to retrace our steps to discover the purely semantic contribution to the communicative act (a point stressed in §2.5.3). Yet the minimal semanticist’s claim remains that literal meaning (the domain of semantics) and utterance meaning (the domain of pragmatics) can and should be held apart, and, if this distinction is properly observed, then the arguments against the formal approach to literal linguistic meaning from context-sensitivity (both overt and covert) fall away.

Drawing the distinction between semantics and pragmatics in this way opens the door to the possibility of a conciliatory conclusion to our debate between formal semantics and dual pragmatics. Initially it seemed that formal semantics and dual pragmatics must be viewed as direct competitors since they disagreed on the fundamental question of the nature of (truth-evaluable) semantic content. For the dual pragmatist (in many or most cases) it is not possible to recover anything genuinely truth-conditional simply on the basis of formal operations over syntactic content. Rather, formal processes can yield only a truth-conditional fragment (or a part of a proposition), with this fragmentary item being completed by pragmatic processes. Yet this claim is in direct opposition to that of the formal semanticist, for whom it precisely is the case that the truth-conditions for well-formed natural language sentences are recoverable on the basis of formal operations over syntactic
features alone. The basic tension between our two approaches could also, I suggested, be seen with respect to the notion of ‘what is said’, or our intuitive judgements of truth-conditions for utterances. For dual pragmatists claim that these are pragmatically infected notions, while at least some formal semanticists have held that a semantic theory should explain these notions.

Yet now I think we are in a position to see that it is not anything in the formal semantic perspective or in the dual pragmatist position per se which leads the two into conflict. Rather the conflict emerges from additional assumptions about the proper scope of a semantic theory. The dual pragmatist’s main argument (concerning unarticulated constituents) is really, it seems, an argument about intuitive truth-conditions, hence it holds against the enterprise of formal semantics only on the assumption that the subject matter of formal semantics must be intuitive truth-conditions. However, if, as was suggested above, we characterize the subject matter of semantics in terms of what lies within the reach of a modular language faculty (containing a formal semantics constituent) then we will reject this conflation of intuitive truth-conditions with semantic content. On this picture, judgements of intuitive meaning for an utterance emerge only at the point of interface between the output of our language faculty (which may not surface to consciousness in a given linguistic exchange) and a vast range of other information available to the agent. Furthermore, since many dual pragmatists (for example, relevance theorists) stress that what they are concerned with are communicative acts (rather than some more abstract notion of sentence meaning), it seems that their positive account in itself does not commit them to any claims about the nature of semantic content. It is perfectly compatible with the essential features of their account that there be the kind of liberal truth-conditions, determined on the basis of syntactic features alone, churned out by a modular language faculty, even though what is communicated by an utterance of a sentence semantically possessing such a liberal truth-condition is always a much richer, pragmatically enhanced item. So, from this perspective, the minimal semanticist and the dual pragmatist can be viewed as explanatory partners: the former explaining the syntax-driven, computational grasp of literal meaning (in terms of truth-conditions or complete propositions) and the latter offering us a model of how linguistic utterances, and intentional gestures in general, serve to communicate ideas.
Similarly, it seems that the formal semanticist who views the dual pragmatist as an over-acquisitive opponent—one who seeks to annex properly semantic notions (like ‘what is said’) and treat them as pragmatically infected—is led to adopt this stance only through a misguided view of the proper extent of semantic explanation. Again, armed with our processing account of the semantic/pragmatic divide and thus our minimal stance on what counts as part of the semantic domain, it seems that there is no reason to expect there to be a semantically relevant notion of ‘what is said’ (at least where this bears any connection to our intuitive judgements of what a speaker says by producing a given sentence). Thus, from the perspective of the minimal semanticist, once again the tension between formal semantics and dual pragmatics seems to have dissolved. Dual pragmatists were right to treat judgements of the intuitive truth-conditions of speech acts (intuitive judgements of ‘what is said’) as a pragmatic matter.

Knowledge of the simple and complex meanings encoded by the linguistic system is simply not tantamount to grasping what goes on in a communicative exchange. For the minimal semanticist, communication is a global art, not only at the inter-personal level, but, crucially from the current perspective, at the intra-personal level. To communicate, an agent needs not just the information and rules captured within an encapsulated language faculty, she also needs information and rules from her global cognitive territory: communication goes beyond the borders of the merely modular, stretching out to include information from across the entire cognitive domain. On the one hand, then, semantic knowledge is important and special—without it we would be robbed of the ability to interpret the meanings of words and sentences and thus linguistic communication would be impossible. Yet, from another perspective, semantic knowledge is quite unimportant and peripheral—without all the other kinds of knowledge we have, semantic understanding would be pretty much worthless. As I suggested at the outset, I think it is right and possible to preserve a sand-castle of formal semantics from the pragmatic hordes, but we shouldn’t forget that it’s a piece of property you wouldn’t want to own in isolation.

² Remember this does not entail that we must treat all communicated propositions on a par, rather the required distinction between ‘what is asserted’ and ‘what is merely implied’ becomes a distinction between propositions of the same kind; it is a matter of grading pragmatically conveyed propositions, not switching from semantically to pragmatically conveyed propositions.
5.2 Minimal Semantics and the Role of Context

This essay began with a (hopefully) clear distinction between two opposing approaches to semantic theorizing: on the one hand, we had strong formal theories which told us that an account of the semantic content of every natural language sentence could be given simply via formal operations over the syntactic constituents of that sentence. On the other hand, we had what I loosely termed ‘use-based’ theories which told us that the first port of call for questions of meaning was the utterance (not some more abstract notion of a sentence-type) and that meaning depended in some fundamental way on the use to which a sentence was being put by a speaker. This distinction (whereby one approach accorded no role to context in questions of literal meaning, while the other accorded it a central role) became somewhat blurred, however, when it was recognized that, to determine the truth-conditional content of at least some natural language sentences, some kind of appeal to context had to be made. For instance, to recover the semantic content of any tensed sentence, like ‘It was raining’, or any sentence containing an indexical or demonstrative, like ‘I am hot’ or ‘That is mine’, we must be allowed to make some sort of appeal to the context in which the sentence-type is produced. Considered as abstract sentence-types such sentences simply seem to lack truth-evaluable content.

The suggestion was, however, that the idea of a syntactic path to meaning could be preserved even if it were allowed that some syntactic elements made an ineliminable appeal to the context in which they were uttered in order to acquire a semantic content. Thus, for the moderate formal semanticist, we should take the subject matter of semantics to be sentence-types relativized to a context of utterance, for in this way overtly context-sensitive expressions might be accommodated. However, if we follow the moderate formal semanticist in this move, we obviously face the question of what kind of appeal to context is admissible from within the formal approach. As we saw in §1.2.1, this question emerges in two ways: when can we look to contextual features and what kinds of contextual features can we look to?

In answer to the first question, it was seen that the formal account demands that we only look to a context of utterance when such an appeal is syntactically triggered. It is this recognition which places the
phenomenon of covert context-sensitivity at odds with the formal approach. The solution I suggested for this problem (in Chapter 4) was to deny that there is such a thing as covert context-sensitivity. Either the context-sensitivity in question really is triggered by something in the syntax (as in the recognition that the sentence ‘Jill can’t continue’ contains a transitive verb and so should be syntactically recorded as *Jill can’t continue something*) or it relates to the pragmatically conveyed proposition(s) which a speaker conveys by her utterance. If the arguments of Chapter 4 hold, then, there is no reason to assume that appeals to a context of utterance range wider than those which are explicitly syntactically mandated and thus we have no reason to reject the moderate formal semantics model.

The answer to the second question—what kind of contextual features can a moderate formal semanticist appeal to—is somewhat more complex. Initially, I answered the question by dividing contextual features into the objective/non-perspectival and the intentional/perspectival. I noted that the former features certainly lie within the purview of moderate formal semantics, for we can envisage treating the context of utterance in this respect as a simple set of formally described parameters (like speaker and time) against which a sentence-type can be assessed for truth or falsity. However, there seemed to be a problem with treating context in this way (raised in §3.1), since the kinds of features appealed to by overtly context-sensitive expressions seemed to range wider than the merely objective; indeed, it seems to be inherent to the nature of many context-sensitive expressions that the contextual features to which they look include speaker intentions. Now, it was suggested that an appeal to speaker intentions fits somewhat uncomfortably with the general perspective of formal semantics, for this kind of theory is concerned with capturing the code-like, repeatable, normative aspects of linguistic meaning, while speaker intentions, by their very nature, are nebulous and variable. Furthermore, if we think that it is essential to a formal theory that the route to meaning travels exclusively along formal lines then speaker intentions again look problematic, since we lack any sufficiently formal way to model grasp of such items.

This, however, brings us to the real point of tension between appeals to speaker intentions and the kind of semantic theory proposed here: for, since grasp of speaker intentions is an informal, abductive process, it cannot form part of a deductive, computational module. That is to
say, as argued in Chapter 2, there is no way that mind-reading can form a proper part of a formal semantic theory if that theory is construed as embedded within a discrete (Fodorian) module underpinning linguistic comprehension. Yet, since I think there are good reasons to want to hang on to the idea that semantic comprehension is underpinned by a Fodor-style module, then it is imperative from my point of view that the moderate formal semanticist finds a way to accommodate overtly context-sensitive expressions *without* appealing to speaker intentions. The way that I suggested she do this, as outlined in Chapter 3, did not, however, revert to the idea of treating the context of utterance as a limited set of formally describable parameters. Rather I suggested that all we need to do is treat the sentence-type as being produced; that is, that we concentrate on a token of the type, not the sentence-type in abstraction. A sentence-type must be thought of as being tokened in order to get a specification of its truth-conditional content (so that, for instance, the time registered by the tense, or the object picked out by a referring term, is provided), but this doesn’t lead us towards a use-based theory of meaning since no further facts about that context of utterance are required. Rather the language faculty serves simply to introduce appropriate singular concepts for the referring terms in question, with further identification of the contents for those concepts being a non-semantic matter. So, when I talk of moderate formal semantics dealing with sentence-types relativized to a context of utterance this is what I mean: not that there is some formal description of a set of parameters against which the sentence-type can be assessed for truth or falsity, but that we need to concentrate on a given instance of the sentence-type to recover its truth-conditional content.

So I have tried to argue that the two strongest challenges to the modular, formal approach to semantics—overt and covert instances of context-sensitivity—can be dealt with without ceding context (up to and including speaker intentions) the kind of integral, constitutive role assumed by use-based theories. Though it is wrong to think of formal semantics as able to ignore contexts of utterance entirely en route to semantic content, still I think it is possible to maintain a clear distinction between moderate formal semantics and other kinds of account. For on the former kind of approach the role accorded to context is extremely limited (that is, look to context only when such an appeal is syntactically mandated) and the kinds of features which are taken to be
semantically relevant are similarly limited (that is, no appeal to any elements which require abductive reasoning to recover). I have tried to argue that even with these limitations on the semantic role of context in place it is still possible to recover truth-conditions for natural language sentences. Thus the formal, truth-conditional account (which is independently attractive given its ability to explain linguistic productivity and systematicity, validity in natural language, agent’s assessments of the literal meaning of sentences, and the existence of non-cancellable linguistic content) can be preserved, even while we recognize the rich role of contextual features in determining intuitive truth-conditions for linguistic utterances.

5.3 Future Directions

There are several issues that I would have liked to take up in this book, if it hadn’t got so long already. So, by way of amends, I thought I might at least flag some areas where I think further discussion might pay off.

5.3.1 Contextualism in epistemology

The debate in Chapter 4 concerning covert context-sensitivity has come to the fore recently in the arena of epistemology, with theorists like Keith DeRose and Stewart Cohen proposing that epistemic terms are, in fact, context-sensitive.³ So, take the following scenario: we are debating whether to go into town or not. You have a cheque you would like to deposit, so I say:

(1) I know there is a bank in town you can use.

In the current context my utterance of (1) is intuitively true just in case there is a bank you can use in town and I have some (possibly quite weak) justification for making this claim (for example, I know that we both bank with the same company and that I’ve deposited cheques in the bank in town before). However, it seems that we can alter the intuitive truth-value of (1) by altering the context. So imagine that it is crucial that you pay in your cheque today and you point out that today is

Saturday and not all banks open on Saturdays. Now it seems that my claim to know that there is a bank you can use is undermined—unless I know the opening hours of the bank it seems that if I utter (1) again my claim will now be false. This change in intuitive truth-value comes about because the epistemic standards have been raised in the second situation and I don’t meet the more exigent conditions required for a claim of knowledge in this context. Yet what this seems to show is that there is some kind of hidden context-sensitivity in (1): claims to knowledge, epistemic contextualists hold, are sensitive to the epistemic standards in play in a given context of utterance.

Now, obviously, since I have argued against claims of covert context-sensitivity in general, I would also suggest that contextualism in epistemology is mistaken. I would argue that terms like ‘know’ have a definite sense (so that the claim that *I know (at t) that there is a bank you can use*, where ‘t’ is the time of utterance, is true or false *simpliciter*) and I would seek to explain the appearance of a change in truth-value across the two contexts of utterance by appeal to what a speaker may convey in each context. So, for instance, take our intuition that the proposition literally expressed by sentence (1) in the first context is true. This intuition may be mistaken. Rather, it might be argued that the semantic content expressed by this sentence is false (since claims of knowledge require higher standards than those I meet here), though a speaker may nevertheless convey something true by the utterance (that is, I may successfully convey the weaker claim that I have some evidence for their being a usable bank in town, and, in the current context, this is all that is really at issue). So, the aim would be, in response to epistemic contextualism, to offer a pragmatic explanation of the phenomena, precisely on a par with that pursued for terms like ‘red’ in the last chapter.

Of course, contextualists in epistemology are fully aware of the possibility of a pragmatic move in this area and they think there are good reasons to resist it. For instance, DeRose has objected that pragmatic explanations only succeed where the speaker utters something literally true but thereby conveys something false, but never the other way round, that is, speakers never wilfully utter literal falsehoods in the hope of conveying something true. Yet, as above, a pragmatic explanation of our intuitions concerning terms like ‘know’ would require

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speakers to do precisely this—to utter literal falsehoods in the hope of conveying pragmatic truths. As I hope will be clear from preceding discussions, I would reject DeRose’s claim here. It seems to me that what we are concerned with in communication is what the speaker means, and succeeds in conveying, and the mechanisms by which contextual features are exploited to allow that speaker to get her message across may well involve the production of sentences the semantic content of which is not true. However, contextualist debates in epistemology are on-going and to address the topic properly would take us a long way from the main concerns of this book. So I will merely note here that the topic touches very closely on the debates in Chapter 4 and since, as I tried to argue there, we should be suspicious of contextualist positions in general, I would also suggest that we be suspicious of contextualist stances in epistemology.

5.3.2 Non-sentential speech

It has been a central tenet of this book that the proper subject of semantics is sentences—that the semantic system is designed to determine the meaning (i.e. the truth-conditions) of any well-formed sentence in natural language. However, it is obvious from a brief survey of actual language use that only a fraction of our linguistic productions reach the sentential level. So we find shouts of ‘Fire!’ and signs advertising ‘Sale!’, speaker’s commenting ‘Good film’, or ‘From Jim’, and requesting ‘Come here’ or ‘To me’. Prima facie, there is no such thing as the truth-condition to be generated for these sentence-fragments, but equally clearly such expressions can play a crucial communicative role. So what might the current account say of such utterances?

A first thing to note is that, if we spell out the context of utterance more fully for at least some of these examples, it may be that they do turn out to encode syntactically complete sentences. This could be the case for ‘one-word sentences’, like ‘Fire’, which might be taken standardly to abbreviate the claim ‘There is a fire.’ It would also hold for any instances of ellipsis (as discussed in §4.1). So, for instance, if you ask me ‘Where did those flowers come from?’ and I respond with ‘From Jim’, it seems that we may take my overt sentence-fragment actually to encode

5 For a detailed discussion of this kind of response, see Brown manuscript.
the complete sentence ‘Those flowers are from Jim’, since the ‘missing material’ is syntactically present in the immediate context of utterance. Of course, this explanatory move depends on the phenomenon of syntactic ellipsis being independently motivated and some have rejected this. Furthermore, even if some of the cases in question can be handled as instances of ellipsis, it seems pretty clear that not all of them can.⁶ If this is correct, then we still need some account of the remaining cases.

I think the best account of the remaining cases, from the perspective of the kind of formal, modular account proposed thus far, would be to recognize that these are cases where there is no truth-conditional content to be recovered for the sentence-fragment produced. Thus sub-sentential utterances would fail to reach the level of genuine semantic content—though as recognized lexical items they could be processed for lexical content and whatever fragmentary syntactic form the string possessed, this would be the end of processing within the language faculty. If asked for the literal meaning of a sentence fragment, or the conditions under which such a fragment might be true, competent speakers would be unable to supply an answer. So, the language faculty would be forced, due to what we might think of as ‘corrupted input’ to stop processing before anything like a sentence-meaning had been produced; it would, however, still be able to output lexical meaning and (some) syntactic structure. This could still be passed to the general intelligence and it would then be up to the abductive processes involved there to guess at what the speaker might be trying to convey. In this way, the final outcome of producing a sentence-fragment might not be very different to the outcome of producing a complete sentence, it would simply be a case of there being less linguistic evidence for the general intelligence to go on in the former case.⁷

⁶ Although, again, this is open to question; for instance, Stanley 2000 defends the claim that ellipsis can extend not merely to syntactically present material in the conversational context, but also to material which is contextually relevant but unspoken. In this case, many, and perhaps all of the genuinely communicative cases, can be treated as ellipsis. See also Hankamer and Sag 1976.

⁷ This picture is very close to that given in a number of papers by Ray Elugardo and Rob Stainton. There is, however, one difference, I think, between the above picture and theirs. For it seems that on their account they expect the general intelligence to complete the sentence-fragment, so that the agent comes to entertain a complete proposition. Yet, on my account, it is not clear that this ‘completion at the level of thought’ needs to occur. There are substantial issues to be considered here about the nature of thought, but while I think that it is the aim of linguistic processing to account for the meaning of well-formed sentences it’s at least unclear that this entails a similar position on thoughts. That is to say, it need not entail that all thought content must be truth-conditional or propositional—perhaps sometimes thoughts are genuinely fragmentary. If this is possible then the ‘guess’ the general intelligence makes on the basis of the sentence-fragment might itself sometimes be fragmentary.
Now this possibility may cause us to reflect on an initial assumption made concerning the nature of semantic processing. For I took it to be constitutive of semantic content, at least as standardly conceived in philosophy, that it reach the level of truth-conditional or propositional content. Yet, if we are now allowing that sometimes the language faculty may yield as output something which is less than a complete proposition, why should we assume that semantic content for natural language sentences is itself propositional in nature? Why not allow that, even when processing a well-formed sentence, the language faculty may yield something sub-propositional? In answer to this I think we need to notice the intuitive difference between well-formed sentences and the kind of sentential fragments under consideration here. For (at least in the case of many natural language sentences) it seems clear that competent speakers are able to specify a complete meaning for that sentence, for example, specifying the conditions under which it would be true. So we need a semantic theory which is at least capable of yielding truth-conditions (or complete propositions) for sentences. Furthermore, if this is the form a semantic theory must take for at least some well-formed sentences, it seems that we would need a positive argument to show that it does not take this form for all syntactically well-formed sentences. Yet it is the existence of any such further argument which I have tried to call into question in this essay. So, despite recognizing that given a sentence-fragment as input the language faculty may yield something fragmentary as output, I think this should not cause us to question the central assumption that semantic content is itself essentially non-fragmentary (that is, that given a well-formed sentence as input the language faculty is capable of yielding a complete truth-condition as output).

5.3.3 Words and thoughts

It has been an assumption throughout this book that there is a clear divide to be drawn between the meanings of words in a natural language and the content of thoughts. So, for instance, on the picture I’ve been assuming one can understand the meaning of a word like ‘dog’ (that is, possess the concept to which this word attaches) without knowing anything much about what dogs are like. Yet this is an assumption which may well be called into question. For instance, many people have
argued that concepts should, in general, be understood along the lines of complex definitions (so that to have the concept dog is to possess a definition like ‘is a mammal, has four legs, barks,’ etc.) or that conceptual content is constituted by the place the concept occupies in an inferential network (so that to have the concept dog is to be willing to infer, from ‘x is a dog’ the further claims that ‘x barks’, ‘x is a mammal’, etc.). Clearly, were either of these more holistic accounts of conceptual content to be adopted, the picture I have assumed, whereby one can possess a concept for an object in isolation from all the other things one may come to learn about that object, would have to be rejected.

So, part of the task in defending the minimal picture I have proposed here would involve defending the kind of atomistic, primitive (and probably innate) account of concepts which underpins it. What is needed is an account which allows that, for instance, when one finds out that a dog is a mammal, one learns something about objects in the world, one does not discover something about one’s own concepts. This kind of account is familiar from the work of Jerry Fodor (e.g., 1998b) and a full-length defence of the account would involve looking at the problems Fodor raises for holistic accounts of conceptual content and how he overcomes the apparently serious objections to his kind of account (for instance, how we can seriously allow that a concept like carburettor might not be the product of learning). It would also involve seeing exactly how the atomistic picture of conceptual content maps on to the claims of modularity for semantic processing. Although these issues clearly impact in serious ways on the claims I have made here for our understanding of language, I think that the journey into the theory of thought which discussion of these issues requires must wait for another occasion.

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8 One problem such holistic theories face concerns how to differentiate the essential, meaning-constituting inferences from the (social or idiosyncratic) inferences people are inclined to draw on the basis of past experience, etc. So, to borrow a favourite example from Fodor, because I am inclined to infer ‘x is dangerous’ from ‘x is a brown cow’, because all brown cows I have run into up till now have been dangerous, this of course doesn’t mean that this inferential move should be taken to be constitutive of the meaning of the expression ‘brown cow’. The suggestion above, then, is that instead we take no such inferences as constitutive of meaning. Agents make conceptual connections, but these connections come into play as part of the wider, non-linguistic cognitive architecture of the agent and they hold between independently individuated concepts. The meaning of the word ‘rain’ is just the concept rain; what inferences someone is willing to draw on the basis of a deployment of this concept is a function of their experience of the world, not a function of their knowledge of language. For some further discussion of this point see Borg 2001.
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