*Pragmatics**

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Abstract

This paper considers the implications for philosophy of some recent approaches to pragmatics (with a focus on relevance theory) and makes two main points. First, the widening gap between sentence meaning and speaker's meaning increasingly brings into question a basic assumption of much philosophy of language: that linguistic semantics provides direct insight into the structure of human thoughts. Second, by describing comprehension as a richly context-dependent form of inference, pragmatics provides an illustration of how we might approach central cognitive processes, which have been seen by Fodor as a major mystery for cognitive psychology and philosophy of mind.

1 Introduction

Pragmatics is often described as the study of language use, and contrasted with the study of language structure. In this broad sense, it covers a range of loosely related research programmes from formal studies of deictic expressions to sociological studies of ethnic verbal stereotypes. In a more focused sense (the one we will use here), pragmatics contrasts with semantics, the study of linguistic meaning, and is the study of how contextual factors interact with linguistic meaning in the interpretation of utterances. Here we will briefly highlight a range of closely related, fairly central pragmatic issues and approaches that have been of interest to linguists and philosophers of language in the past thirty years or so. Pragmatics, as we will describe it, is an empirical science, but one with philosophical origins and philosophical import.

References to pragmatics are found in philosophy since the work of Charles Morris (1938), who defined it as the study of the relations between signs and their interpreters; however, it was the philosopher Paul Grice's William James lectures at Harvard in 1967 that led to the real development of the field. Grice introduced new conceptual tools – in particular the notion of IMPLICATURE – in an attempt to reconcile the concerns of the two then dominant approaches to the philosophy of

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language, Ideal Language Philosophy and Ordinary Language Philosophy (on the philosophical origins of pragmatics, see Recanati 1987, 1998, 2004a, b). Ideal language philosophers in the tradition of Frege, Russell, Carnap and Tarski were studying language as a formal system. Ordinary language philosophers in the tradition of the later Wittgenstein, Austin and Strawson were studying actual linguistic usage, highlighting in descriptive terms the complexity and subtlety of meanings and the variety of forms of verbal communication. For ordinary language philosophers, there was an unbridgeable gap between the semantics of formal and natural languages. Grice showed that the gap could at least be reduced by sharply distinguishing sentence meaning from speaker's meaning, and explaining how relatively simple and schematic linguistic meanings could be used in context to convey richer and fuzzier speaker's meanings, made up not only of WHAT WAS SAID, but also of what was implicated. This became the foundation for most of modern pragmatics.

Grice (1967/89: 47) proposed a rather vague general principle (Modified Occam's Razor) for deciding whether some aspect of interpretation is semantic or pragmatic: *Senses are not to be multiplied beyond necessity*. However, judgements about what is 'necessary' have too often been affected by disciplinary parochialism and opportunistic considerations. When the work of Montague and Davidson suggested that natural language semantics could be directly studied as a formal system, Gricean pragmatics offered a rationale for dismissing a variety of hard-to-handle intuitions as irrelevant to semantics. A good example of this is Nathan Salmon's claim that failure of substitutivity in belief contexts is only apparent, and can be explained away in terms of Gricean implicatures (Salmon 1986). However, when formal semanticists feel they have the tools to handle some specific regularity in interpretation, they tend to treat it as *ipso facto* semantic, and to see a pragmatic account as inferior and unnecessary. Thus, the treatment of natural language conditionals has proved a rich field for formal elaboration (e.g. Jackson 1991), while the Gricean pragmatic approach to conditionals has been neglected. By the same token, pragmatists tend to assume that whatever they feel capable of accounting for is automatically pragmatic, on the ground that pragmatic explanations are more general, albeit vaguer. A more principled and generally accepted division of labour between semantics and pragmatics will involve more collaborative work. The recent development of formal pragmatics (Stalnaker 1999; Kadmon 2001; Blutner & Zeevat 2003; Asher & Lascarides 2003) is to be welcomed in this context.

2 Three approaches to pragmatics

The approaches to pragmatics we will consider here all accept as foundational two ideas defended by Grice (Grice 1989, chapters 1-7; 14; 18) (for representative collections, see Davis 1991; Kasher 1998; Horn & Ward 2004). The first is that sentence meaning is a vehicle for conveying a SPEAKER'S MEANING, and that a speaker's meaning is an overtly expressed intention which is fulfilled by being recognised.[1] In developing this idea, Grice opened the way for an inferential alternative to the classical code model of communication. According to the classical view, utterances are signals encoding the messages that speakers intend to convey, and comprehension is achieved by decoding the signals to obtain the associated messages. On the inferential view, utterances are not signals but pieces of evidence about the speaker's meaning, and comprehension is achieved by inferring this meaning from evidence provided not only by the utterance but also by the context. An utterance is, of course, a linguistically coded piece of evidence, so that comprehension involves an element of decoding. How far does linguistic decoding take the hearer towards an interpretation of the speaker's meaning? Implicitly for Grice and explicitly for John Searle (1969: 43), the output of decoding is normally a sense that is close to being fully propositional, so that only reference assignment is needed to determine what is said, and the main role of inference in comprehension is to recover what is implicated. Following Recanati (2004a), we will call this a LITERALIST approach to semantics. However, a major development in pragmatics over the past thirty years (going much further than Grice envisaged) has been to show that the explicit content of an utterance, like the implicit content, is largely underdetermined by the linguistically encoded meaning, and its recovery involves a substantial element of pragmatic inference. Following Recanati (2004a), we will call this a CONTEXTUALIST approach.

The second foundational idea defended by Grice is that, in inferring the speaker's meaning, the hearer is guided by the expectation that utterances should meet some specific standards. The standards Grice proposed were based on the assumption that conversation is a rational, cooperative activity. In formulating their utterances, speakers are expected to follow a Cooperative Principle, backed by maxims of Quantity (informativeness), Quality (truthfulness), Relation (relevance) and Manner (clarity) which are such that "in paradigmatic cases, their observance

[1] In Grice's original formulation, "'[Speaker] meant something by x' is (roughly) equivalent to '[Speaker] intended the utterance of x to produce some effect in an audience by means of the recognition of this intention'" (Grice 1957/89: 220). For discussion and reformulation, see Strawson (1964); Searle (1969, 1983); Schiffer (1972); Recanati (1986, 1987); Grice (1982); Sperber & Wilson (1986/95); Bach (1987); Neale (1992).

promotes and their violation dispromotes conversational rationality" (Grice 1989: 370):

Cooperative Principle (Grice 1967/1989: 26-27)
Make your contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged.

Quantity maxims
1. Make your contribution as informative as is required (for the current purposes of the exchange).
2. Do not make your contribution more informative than is required.

Quality maxims
Supermaxim: Try to make your contribution one that is true.
1. Do not say what you believe to be false.
2. Do not say that for which you lack adequate evidence.

Maxim of Relation
Be relevant.

Manner maxims
Supermaxim: Be perspicuous
1. Avoid obscurity of expression.
2. Avoid ambiguity.
3. Be brief (avoid unnecessary prolixity)[2]
4. Be orderly.

When an utterance has several linguistically possible interpretations, the best hypothesis for the hearer to choose is the one that best satisfies the Cooperative Principle and maxims. Sometimes, in order to explain why a maxim has been (genuinely or apparently) violated, the hearer has to assume that the speaker believes, and was trying to communicate, more than was explicitly said. Such implicitly communicated propositions, or implicatures, are widely seen (along with presuppositions and illocutionary force) as the main subject matter of pragmatics.[3]

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[2] The wording of this maxim (and perhaps of the supermaxim of Manner) is a nice illustration of Grice's playfulness.

[3] In this chapter, we will focus on the recovery of explicit truth-conditional content and implicatures; for brief comments on the treatment of presupposition and illocutionary force, see section 6 and footnote 15.

Most current pragmatic theories share Grice's view that inferential comprehension is governed by expectations about the behaviour of speakers, but differ as to what these expectations are. Neo-Griceans such as Atlas (2005), Gazdar (1979), Horn (1984, 1989, 1992, 2000, 2004, 2005) and Levinson (1983, 1987, 2000) stay relatively close to Grice's maxims. For instance, Levinson (2000) proposes the following principles, based on Grice's Quantity and Manner maxims (and given here in abridged form):

Q-Principle (Levinson 2000: 76)
Do not provide a statement that is informationally weaker than your knowledge of the world allows.

I-Principle (Levinson 2000: 114)
Produce the minimal linguistic information sufficient to achieve your communicational ends.

M-Principle (Levinson 2000: 136)
Indicate an abnormal, nonstereotypical situation by using marked expressions that contrast with those you would use to describe the corresponding normal, stereotypical situations.

Each principle has a corollary for the audience (e.g. 'Take it that the speaker made the strongest statement consistent with what he knows') which provides a heuristic for hearers to use in identifying the speaker's meaning.

For many philosophers and linguists, an attraction of the neo-Gricean programme is its attempt to combine an inferential account of communication with a view of language strongly influenced by formal semantics and generative grammar. The aim is to solve specifically linguistic problems by modelling pragmatics as closely as possible on formal semantics, assigning interpretations to sentence-context pairs without worrying too much about the psychological mechanisms involved. The following comment from Gazdar (1979: 49) gives a flavour of this approach:

> The tactic adopted here is to examine some of the data that would, or should, be covered by Grice's quantity maxim and then propose a relatively simple formal solution to the problem of describing the behaviour of that data. This solution may be seen as a special case of Grice's quantity maxim, or as an alternative to it, or as merely a conventional rule for assigning one class of conversational meanings to one class of utterances.

Accordingly, neo-Griceans have tended to focus on GENERALISED conversational implicatures, which are "normally (in the absence of special circumstances)" carried by use of a certain form of words (Grice 1967/89: 37), and are therefore codifiable to some degree. For example, the utterance in (1a) would normally convey a generalised implicature of the form in (1b):[4]

(1) a. Some of my friends are philosophers.
b. Not all of my friends are philosophers.

Levinson (2000) treats generalised implicatures as assigned by default to all utterances of this type, and contextually cancelled only in special circumstances. PARTICULARISED implicatures, by contrast, depend on "special features of the context" (Grice 1967/1989: 37), and cannot be assigned by default. For example, the speaker of (2a) would not normally implicate (2b), but this implicature might be conveyed if (2a) were uttered (in England) in response to the question "Are the pubs open?":

(2) a. It's midnight.
b. The pubs are closed.

Neo-Griceans, and formal pragmatists in general, have little to say about particularised implicatures.[5] The result is a significant narrowing in the domain of pragmatic research, which has yielded valuable descriptions of data from this domain, but is driven largely by methodological considerations.

Relevance theory (Sperber & Wilson 1986/95; Carston 2002; Wilson & Sperber 2002, 2004), while still based on Grice's two foundational ideas, departs from his framework in two important respects. First, while Grice was mainly concerned with the role of pragmatic inference in implicit communication, relevance theorists have consistently argued that the explicit side of communication is just as inferential and worthy of pragmatic attention as the implicit side (Wilson & Sperber 1981). This has implications not only for the nature of explicit communication but also for semantics. As noted above, Grice and others (e.g. Searle and Lewis) who have contributed to the development of an inferential approach to communication have

[4] On generalised implicatures and the neo-Gricean approach, see Horn (1984, 1992, 2004, 2005); Levinson (1983, 1987, 2000); Hirschberg (1991); Carston (1995, 1998); Green (1995); Matsumoto (1995); Sperber & Wilson (1995).

[5] Grice himself does not seem to have seen the distinction between generalised and particularised implicatures as theoretically significant. For discussion, see Carston (1995, 1998, 2002); Sperber & Wilson (1995); for experimental evidence on default inference, see Noveck (2001); Chierchia et al. (2001); Bezuidenhout & Morris (2004); Papafragou & Musolino (2003); Breheny, Katsos & Williams (2004); Sperber & Noveck (2004).

tended to minimise the gap between sentence meaning and speaker's meaning. They treat sentences as encoding something as close as possible to full propositions, and explicit communication as governed by a maxim or convention of truthfulness, so that the inference from sentence meaning to speaker's meaning is simply a matter of assigning referents to referring expressions, and perhaps of deriving implicatures. Relevance theorists have argued that relevance-oriented inferential processes are efficient enough to allow for a much greater slack between sentence meaning and speaker's meaning, with sentence meaning typically being quite fragmentary and incomplete, and speaker's explicit meaning going well beyond the minimal proposition arrived at by disambiguation and reference assignment.

Relevance theory also departs substantially from Grice's account of the expectations that guide the comprehension process. For Griceans and neo-Griceans, these expectations derive from principles and maxims: that is, rules of behaviour that speakers are expected to obey but may, on occasion, violate (e.g. because of a clash of maxims, or in order to indicate an implicature, as in Grice's account of tropes). For relevance theorists, the very act of communicating raises precise and predictable expectations of relevance, which are enough on their own to guide the hearer towards the speaker's meaning. Speakers may fail to be relevant, but they can not, if they are genuinely communicating (as opposed, say, to rehearsing a speech), produce utterances that do not convey a presumption of their own relevance.

Relevance theory starts from a detailed account of relevance and its role in cognition. RELEVANCE is defined as a property of inputs to cognitive processes (whether external stimuli, which can be perceived and attended to, or internal representations, which can be stored, recalled, or used as premises in inference). An input is relevant to an individual when it connects with available contextual assumptions to yield POSITIVE COGNITIVE EFFECTS: for example, true contextual implications, or warranted strengthenings or revisions of existing assumptions. Everything else being equal, the greater the positive cognitive effects achieved, and the smaller the mental effort required (to represent the input, access a context and derive these cognitive effects), the greater the relevance of the input to the individual at that time.

Relevance theory is based on two general claims about the role of relevance in cognition and communication:

Cognitive Principle of Relevance:
Human cognition tends to be geared to the maximisation of relevance.

Communicative Principle of Relevance:
Every act of overt communication conveys a presumption of its own optimal relevance.

As noted above, these principles are descriptive rather than normative. The first, or Cognitive, Principle of Relevance yields a variety of predictions about human cognitive processes. It predicts that our perceptual mechanisms tend spontaneously to pick out potentially relevant stimuli, our retrieval mechanisms tend spontaneously to activate potentially relevant assumptions, and our inferential mechanisms tend spontaneously to process them in the most productive way. This principle has essential implications for human communication. In order to communicate, the communicator needs her audience's attention. If attention tends automatically to go to what is most relevant at the time, then the success of communication depends on the audience taking the utterance to be relevant enough to be worthy of attention. Wanting her communication to succeed, the communicator, by the very act of communicating, indicates that she wants the audience to see her utterance as relevant, and this is what the Communicative Principle of Relevance states.

According to relevance theory, the PRESUMPTION OF OPTIMAL RELEVANCE conveyed by every utterance is precise enough to ground a specific comprehension heuristic that hearers may use in interpreting the speaker's meaning:

Presumption of optimal relevance
(a) The utterance is relevant enough to be worth processing.
(b) It is the most relevant one compatible with the communicator's abilities and preferences.

Relevance-guided comprehension heuristic
(a) Follow a path of least effort in constructing an interpretation of the utterance (and in particular in resolving ambiguities and referential indeterminacies, in going beyond linguistic meaning, in supplying contextual assumptions, computing implicatures, etc.).
(b) Stop when your expectations of relevance are satisfied.

A hearer using the relevance-theoretic comprehension heuristic during online comprehension should proceed in the following way. The aim is to find an interpretation of the speaker's meaning that satisfies the presumption of optimal relevance. To achieve this aim, the hearer must enrich the decoded sentence meaning at the explicit level, and complement it at the implicit level by supplying contextual assumptions which will combine with it to yield enough conclusions (or other cognitive effects) to make the utterance relevant in the expected way. What route should he follow in disambiguating, assigning reference, constructing a context, deriving conclusions, etc.? According to the relevance-theoretic comprehension heuristic, he should follow a path of least effort, and stop at the first overall interpretation that satisfies his expectations of relevance. This is the key to relevance-theoretic pragmatics.

The Gricean, neo-Gricean and relevance-theoretic approaches are not the only theoretical approaches to pragmatics (even in the restricted sense of 'pragmatics' we are using here). Important contributors to pragmatic theorising with original points of view include Anscombre & Ducrot (1983); Asher & Lascarides (1995, 1998, 2003); Bach (1987, 1994, 1999, 2001, 2004); Bach & Harnish (1979); Blutner & Zeevat (2003); Clark (1977, 1993, 1996); Dascal (1981); Ducrot (1984); Fauconnier (1975, 1985, 1997); Harnish (1976, 1994); Hobbs (1979, 1985, 2004); Hobbs *et al.* (1993); Kasher (1976, 1982, 1984, 1998); Katz (1977); Lewis (1979, 1983); Neale (1990, 1992, 2004, forthcoming); Recanati (1987, 1995, 2002, 2004a); Searle (1969, 1975, 1979); Stalnaker (1974, 1999); Sweetser (1990); Travis (1975, 2001); van der Auwera (1981, 1985, 1997); van Rooy (1999); Vanderveken (1990-91). However, the approaches outlined above are arguably the dominant ones.

In the rest of this chapter, we will briefly consider four main issues of current interest to linguists and philosophers of language: literalism versus contextualism in semantics (section 3), the nature of explicit truth-conditional content and the borderline between explicit and implicit communication (section 4), lexical pragmatics and the analysis of metaphor, approximation and narrowing (section 5), and the communication of illocutionary force and other non-truth-conditional aspects of meaning (section 6). We will end with some comments on the prospects for future collaboration between philosophy and pragmatics.

3 Literalism and contextualism in semantics

Grice's distinction between saying and implicating is a natural starting point for examining the semantics-pragmatics distinction.[6] One of Grice's aims was to show that his notion of speaker's meaning could be used to ground traditional semantic notions such as sentence meaning and word meaning (Grice 1967/89: chapter 6). In

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[6] On the saying-implicating distinction, see Carston (2002: chapter 2.2); Wilson & Sperber (2002: section 7); Recanati (2004a: chapter 1). For representative collections on the semantics-pragmatics distinction, see Turner (1999); Szabo (2005).

his framework, a speaker's meaning is made up of what is said and (optionally) what is implicated, and Grice sees sentence meaning as contributing to both. What a speaker *says* is determined by truth-conditional aspects of linguistic meaning, plus disambiguation, plus reference assignment. Thus, identifying what the speaker of (3) has said would involve decoding the truth-conditional meaning of the sentence uttered, disambiguating the ambiguous word 'pupil' and assigning reference to the indexicals 'I' and 'now':

(3) *I* have two *pupils now*.

The resulting proposition is sometimes called the LITERAL MEANING of the utterance, or the PROPOSITION EXPRESSED. Grice saw the truth-value of a declarative utterance like (3) as depending on whether this proposition is true or false. By contrast, the meanings of non-truth-conditional expressions such as 'but', 'moreover' or 'so' are seen as contributing to what is CONVENTIONALLY IMPLICATED rather than what is said; in Grice's terms, conventional implicatures involve the performance of "higher-order" speech acts such as contrasting, adding and explaining, which are parasitic on the "central, basic" speech act of saying (Grice 1989: 359-368).[7] For Grice, the semantics-pragmatics distinction therefore cross-cuts the saying-implicating distinction, with semantics contributing both to what is said and to what is implicated.

However, although he allows for semantic contributions to implicit content, and although his Quality maxims ('Do not say what you believe to be false', 'Have adequate evidence for what you say') are presented as applying at the level of what is said, Grice seems not to have noticed, or at least not to have pursued the idea, that pragmatic inference might contribute to explicit content apart (perhaps) from helping with disambiguation or reference assignment. It therefore seemed quite feasible to many (apparently including Grice himself) to combine a literalist approach to semantics with a Gricean approach to pragmatics.[8] The result was a division of labour in which pragmatists concentrated on implicatures, semanticists concentrated on literal meaning, and neither paid sufficient attention to potential pragmatic contributions to the proposition expressed.

As noted above, literalist approaches to semantics treat sentences as encoding something close to full propositions. Extreme forms of literalism, found in early

[7] Karttunen & Peters (1979) extend Grice's notion to other non-truth-conditional items such as 'even'. Blakemore (1987, 2002) and Bach (1999) criticise the notion of conventional implicature and offer alternative accounts; on non-truth-conditional meaning, see section 6.

[8] Hedges are necessary because Grice does occasionally suggest that what is said may go beyond the literal meaning. See his comments on "dictiveness without formality" in Grice (1989: 361).

versions of formal semantics, were adopted by neo-Griceans such as Gazdar (1979), whose slogan *Pragmatics = meaning minus truth conditions* was very influential. On an extreme literalist approach, the sense and reference of (3) are seen as determined by purely linguistic rules or conventions, whose output would generally coincide with the intended sense and reference, but might override them in the case of a clash. More moderate literalists see the output of semantics as a logical form with variables for indexicals and other referential expressions, needing only reference assignment to yield a fully propositional form.

On a contextualist approach to semantics, by contrast, sentence meaning is seen as typically quite fragmentary and incomplete, and as falling far short of determining a complete proposition even after disambiguation and reference assignment have taken place. A considerable body of work in semantics and pragmatics over the last thirty years suggests strongly that the gap between sentence meaning and proposition expressed is considerably wider than Grice thought, and is unlikely to be bridged simply by assigning values to referential expressions. Thus, consider (4a-b):

(4) a. The sea is *too cold*.
b. That book is *difficult*.

Even after disambiguation and reference assignment, sentences (4a) and (4b) are semantically incomplete: in order to derive a complete, truth-evaluable proposition, the hearer of (4a) must decide what the speaker is claiming the sea is too cold for, and the hearer of (4b) must decide whether the speaker is describing the book as difficult to read, understand, write, review, sell, find, etc., and by comparison to what. It is quite implausible that these aspects of truth-conditional content are determined by purely linguistic rules or conventions, and fairly implausible that they are determined merely by assigning values to linguistically-specified variables. Given an inferential system rich enough to disambiguate, assign reference and compute implicatures, it is more natural (and parsimonious) to treat the output of semantics as a highly schematic logical form, which is fleshed out into fully propositional form by pragmatic inferences that go well beyond what is envisaged on a literalist approach. The result is a division of labour in which semanticists deal with decoded meaning, pragmatists deal with inferred meaning, and pragmatic inference makes a substantial contribution to truth-conditional content.

In fact, the contribution of pragmatic inference to the truth-conditional content of utterances goes much further than examples (3)-(4) would suggest. Consider (5a-c):

(5) a. I'll bring a *bottle* to the party.
b. I'm *going to* sneeze.
c. If you leave your window open and a burglar *gets in*, you have no right to *compensation*.

Whereas in (4a-b) inferential enrichment is needed to complete a fragmentary sentence meaning into a fully propositional form, in (5a-c), inferential enrichment of a fully propositional form is needed to yield a truth-conditional content that satisfies pragmatic expectations (e.g. the Presumption of Optimal Relevance from section 2). Thus, the speaker of (5a) would normally be understood as asserting not merely that she will bring some bottle or other, but that she will bring a *full* bottle of *alcohol*; the speaker of (5b) would normally be understood as asserting not merely that she is going to sneeze at some time in the future, but that she is going to sneeze *very soon*; and the speaker of (5c) would normally be understood as asserting that if a burglar gets in *through the window as a result of* its being left open by the hearer, the hearer has no right to compensation *for any consequent loss*. Enrichments of this type are surely driven by pragmatic rather than semantic considerations. They argue for a contextualist approach to semantics, combined with an inferential pragmatics which makes a substantial contribution to the proposition expressed.

From a radical literalist perspective, on which the semantics-pragmatics borderline should coincide with the borderline between saying and implicating, examples such as (4)-(5) show unexpected "intrusions" of pragmatic inference into the domain of semantics. As Levinson (2000: 195) puts it, "there is no consistent way of cutting up the semiotic pie such that 'what is said' excludes 'what is implicated'". Literalists see this as a problem. Levinson's solution is to abandon Grice's view that saying and implicating are mutually exclusive. From a contextualist perspective, on which the semantics-pragmatics distinction coincides with the borderline between decoding and inference, examples such as (4)-(5) come as no surprise. An obvious way of handling these cases is to analyse the assignment of truth conditions to utterances in two phases. In one phase of analysis, natural-language sentences would be seen as decoded into schematic logical forms, which are inferentially elaborated into fully propositional forms by pragmatic processes geared to the identification of speakers' meanings.[9] These propositional forms would be the primary bearers of truth conditions, and might themselves provide input, in a second phase of analysis, to a semantics of conceptual representations

[9] Decoding and inferential elaboration actually overlap in time as online comprehension proceeds, with components of the sentence providing input to elaboration as soon as they are decoded. Moreover, disambiguation, i.e. the selection of one of several decoding hypotheses, is typically affected by pragmatic elaboration.

(what Fodor calls "real semantics") which maps them onto the states of affairs they represent. On this approach, there is no pragmatic "intrusion" into a homogeneous truth-conditional semantics. Rather, there are two distinct types of semantics – linguistic semantics and the semantics of conceptual representations – of which the first, at least, is contextualist rather than literalist.[10]

4 Explicit and implicit communication

In much of contemporary philosophy of language and linguistics, the notions of saying and literal meaning are seen as doing double duty, characterising, on the one hand, the (minimally enriched) output of semantics, and, on the other, what is explicitly communicated by an utterance. We have already argued that the traditional notions of saying and literal meaning are inadequate for semantic purposes: sentence meaning is much more schematic than literalist approaches to semantics suggest. We now want to argue that they are also inadequate for pragmatic purposes: what is explicitly communicated by an utterance typically goes well beyond what is said or literally meant, and may be vaguer and less determinate than is generally assumed.

In analysing the notion of speaker's meaning, Grice introduced the terms 'implicate' and 'implicature' to refer to what is implicitly communicated, but rather than use the symmetrical 'explicate' and 'explicature', or just talk of what is explicitly communicated, he chose to contrast what is implicated with the ordinary-language notion 'what is said'. This terminological choice reflected both a presupposition and a goal. The presupposition was that 'what is said' is an intuitively clear, common-sense notion. The goal was to argue against a view of meaning that ordinary-language philosophers were defending at the time. As noted in section 1, to achieve this goal, Grice wanted to show that what is said is best described by a relatively parsimonious semantics, while much of the complexity and subtlety of utterance interpretation should be seen as falling on the implicit side. We share Grice's desire to relieve the semantics of natural language of whatever can be best explained at the pragmatic level, but we take a rather different view of how this pragmatic explanation should go.

We suggested in section 3 that the intuitive truth-conditional content of an utterance – what the speaker would normally be taken to assert – may go well beyond the minimal proposition obtained by decoding, disambiguation and reference assignment. We will develop this claim in more detail by considering an

[10] For accounts along these lines, see Sperber & Wilson (1986/95, 1998a); Carston (1988, 2002); Recanati (1989, 2004a); Wilson & Sperber (2002); Neale (2004, forthcoming). Alternative, more literalist accounts, have been defended in Stanley (2000, 2002); Stanley & Szabó (2000).

example in which Lisa drops by her neighbours, the Joneses, one evening as they are sitting down to supper, and the following exchange takes place:

(6) a. *Alan Jones*: Do you want to join us for supper?
b. *Lisa:* No thanks. I've eaten.

On a standard Gricean account, what Lisa has said in uttering (6b) is that she has eaten something or other at some time or other. However, what she would normally be understood as asserting is something stronger: namely, that she has eaten *supper* on the *evening of utterance*. Inferential elaborations of this type, which seem to be performed automatically and unconsciously during comprehension, are ruled out by Grice's account of what is said.

The term 'explicature' was introduced into relevance theory, on the model of Grice's 'implicature', to characterise the speaker's explicit meaning in a way that allows for richer elaboration than Grice's notion of 'what is said':

Explicature (Sperber & Wilson 1986/95: 182)
A proposition communicated by an utterance is an EXPLICATURE if and only if it is a development of a logical form encoded by the utterance.

The process of DEVELOPING a logical form may involve not only reference assignment but other types of pragmatic enrichment illustrated in (4)-(6). The implicatures of an utterance are all the other propositions that make up the speaker's meaning:

Implicature (Sperber & Wilson 1986/95: 182)
A proposition communicated by an utterance, but not explicitly, is an IMPLICATURE.

Thus, Lisa's meaning in (6b) might include the explicature that she has eaten supper on the evening of utterance[11] and the implicature that she doesn't want to eat with the Joneses because she's already had supper that evening.

Explicatures are recovered by a combination of decoding and inference. Different utterances may convey the same explicature in different ways, with different proportions of decoding and inference involved. Compare Lisa's answer in (6b) (repeated below) with the three alternative versions in (6c-6e):

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[11] We are considering here only what we call basic or first-level explicatures. We also claim that there are higher-level explicatures incorporating speech-act or propositional-attitude information; for comments, see section 6.

(6) a. *Alan*: Do you want to join us for supper?
b. *Lisa*: No thanks. I’ve eaten.
c. *Lisa*: No, thanks. I've already eaten supper.
d. *Lisa*: No, thanks. I've already eaten tonight.
e. *Lisa*: No, thanks. I've already eaten supper tonight.

All four answers communicate not only the same overall meaning but also the same explicature and implicatures. If this is not immediately obvious, there is a standard test for deciding whether some part of the speaker’s meaning is part of the explicit truth-conditional content of the utterance or merely an implicature. The test involves checking whether the item falls within the scope of logical operators when embedded into a negative or conditional sentence: explicit truth-conditional content falls within the scope of negation and other logical operators, while implicatures do not (Carston 2002: chapter 2.6.3). Thus, consider the hypothesis that the explicature of (6b) is simply the trivial truth that Lisa has eaten something at some point before the time of utterance, and that she is merely *implicating* that she has eaten that evening. The standard embedding test suggests that this hypothesis is false. If Lisa had replied ‘I haven't eaten’, she would clearly not have been asserting that she has never eaten in her life, but merely denying that she has eaten supper that very evening. So in replying ‘I've eaten,’ Lisa is explicitly communicating that she has eaten supper that very evening.

Although all four answers in (6b-e) convey the same explicature, there is a clear sense in which Lisa’s meaning is least explicit in (6b) and most explicit in (6e), with (6c) and (6d) falling in between. These differences in DEGREE OF EXPLICITNESS are analysable in terms of the relative proportions of decoding and inference involved:

Degrees of explicitness (Sperber & Wilson 1986/95: 182)
The greater the relative contribution of decoding, and the smaller the relative contribution of pragmatic inference, the more explicit an explicature will be (and inversely).

When the speaker’s meaning is quite explicit, as in (6e), and in particular when each word in an utterance is used to convey one of its encoded meanings, what we are calling the explicature is close to what might be commonsensically described as the explicit content, or what is said, or the literal meaning of the utterance. The less explicit the meaning, the more responsibility the hearer must take for the interpretation he constructs: in relevance-theoretic terms, explicatures may be STRONGER or WEAKER, depending on the degree of indeterminacy introduced by the inferential aspect of comprehension. Whether the explicature is strong or weak, the notion of explicature applies straightforwardly. However, the same is not true of the notions of literal meaning and what is said. When asked what Lisa has *said* by uttering (6b) ('I've eaten') with a relatively weak explicature, people's intuitions typically waver. The weaker the explicature, the harder it is to paraphrase what the speaker was saying except by transposing it into an indirect quotation ('She said she had eaten'), which is always possible but does not really help to specify the content of what was communicated. In such cases, the notions of explicature and degrees of explicitness have clear advantages over the traditional notions of literal meaning and what is said.[12]

According to our account, the recovery of both explicit and implicit content may involve a substantial element of pragmatic inference. This raises questions about how explicatures and implicatures are identified, and where the borderline between them is drawn. We have argued that the linguistically-encoded meaning of an utterance gives no more than a schematic indication of the speaker's meaning. The hearer's task is to use this indication, together with background knowledge, to construct an interpretation of the speaker's meaning, guided by expectations of relevance raised by the utterance itself. This overall task can be broken down into a number of sub-tasks:

Sub-tasks in the overall comprehension process

(a) Constructing an appropriate hypothesis about explicatures by developing the linguistically-encoded logical form.
(b) Constructing an appropriate hypothesis about the intended contextual assumptions (IMPLICATED PREMISES).
(c) Constructing an appropriate hypothesis about the intended contextual implications (IMPLICATED CONCLUSIONS).

These sub-tasks should not be thought of as sequentially ordered. The hearer does not *first* decode the sentence meaning, *then* construct an explicature and identify an appropriate context, and *then* derive a range of implicated conclusions. Comprehension is an on-line process, and hypotheses about explicatures, implicated premises and implicated conclusions are developed in parallel, against a background of expectations which may be revised or elaborated as the utterance

[12] For discussion of the relevance-theoretic account of explicatures and alternative views on the explicit-implicit distinction, see Bach (1994, 2004); Levinson (2000: 186-98); Horn (2004, 2005); Stanley (2000, 2002); see also Carston (2002: chapter 2.5); Recanati (2004a). Bach introduces a notion of 'impliciture', distinct from implicature, to cover those aspects of what is said that are not linguistically encoded. He rejects the notion of explicature on the ground that pragmatic inferences are cancellable and nothing cancellable can be explicit. By this criterion (on which the explicit-implicit distinction essentially reduces to the coding-inference or semantics-pragmatics distinction), not even disambiguation and reference assignment can contribute to explicit content, and the resulting notion falls well short of Grice's notion of what is said.

unfolds. In particular, the hearer may bring to the comprehension process not only a general presumption of relevance, but more specific expectations about how the utterance will be relevant to him (what implicated conclusions he is intended to derive), and these may contribute, via backwards inference, to the identification of explicatures and implicated premises. The overall process is guided by the relevance-theoretic comprehension heuristic presented in section 2 ('Follow a path of least effort in constructing an interpretation that satisfies your expectations of relevance').

A crucial point about the relation between explicatures and implicatures is that implicated conclusions must be deducible from explicatures together with an appropriate set of contextual assumptions. A hearer using the relevance-theoretic comprehension heuristic is therefore entitled to follow a path of least effort in developing the encoded schematic sentence meaning to a point where it combines with available contextual assumptions to warrant the derivation of enough conclusions to make the utterance relevant in the expected way. This is what happens in Lisa's utterance (6b) (repeated below):

(6) a. *Alan Jones:* Do you want to join us for supper?
b. *Lisa:* No thanks. I've eaten.

Lisa's utterance 'No thanks' should raise a doubt in Alan's mind about why she is refusing his invitation, and he can reasonably expect the next part of her utterance to settle this doubt by offering an explanation of her refusal. From encyclopaedic information associated with the concept EATING, he should find it relatively easy to supply the contextual assumptions in (7):

(7) a. People don't normally want to eat supper twice in one evening.
b. The fact that one has already eaten supper on a given evening is a good reason for refusing an invitation to supper that evening.

These would suggest an explanation of Lisa's refusal, provided that the encoded meaning of her utterance is enriched to yield an explicature along the lines in (8):

(8) Lisa has already eaten supper on the evening of utterance.

By combining (7) and (8), Alan can derive the implicated conclusion that Lisa is refusing his invitation because she has already had supper that evening (which may in turn lead on to further implications), thus satisfying his expectations of relevance. On this approach, explicatures and implicatures are constructed by mutually adjusting tentative hypotheses about explicatures, implicated premises and implicated conclusions in order to satisfy the expectations of relevance raised by the utterance itself.[13]

The mutual adjustment process suggests an account of how implicated premises may be "accommodated" in the course of comprehension (Lewis 1979). Consider the exchange in (9):

(9) a. *Bill*: I hear you've moved from Manhattan to Brooklyn.
b. *Sue*: The rent is lower.

In interpreting Sue's utterance in (9b), Bill will expect it to be relevant to his preceding remark, for instance by disputing it, elaborating on it, or answering a question it raises (e.g. 'Why did you move?'). In ordinary circumstances, the easiest way to arrive at a sufficiently relevant interpretation (and hence at the interpretation favoured by the relevance-theoretic comprehension heuristic) would involve interpreting 'the rent' to mean *the rent in Brooklyn*, and 'cheaper' to mean *cheaper than in Manhattan*.[14] (9b), so understood and combined with an assumption such as (10), provides the answer to an implicit question raised by Bill:

(10) A lower rent is a reason to move.

Of course, not everyone would be prepared to move in order to get a lower rent, and Bill may not have known in advance whether Sue would or not; in Lewis's terms, in interpreting her utterance he may have to ACCOMMODATE an assumption such as (10). In the relevance-theoretic framework, what Lewis calls accommodation involves adding a new (i.e. previously unevidenced or under-evidenced) premise to the context in the course of the mutual adjustment process geared to satisfying the hearer's expectations of relevance. Which premises are added will depend on the order in which they can be constructed, via a combination of backward inference from expected conclusions and forward inference from information available in memory. By encouraging the hearer to supply some such premises in the search for relevance, the speaker takes some responsibility for their truth.[15]

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[13] On the explicit-implicit distinction in relevance theory, see Sperber & Wilson (1986/95: chapter 4.2, 4.4); Carston (2002: chapter 2.3); Wilson & Sperber (2004). For a more detailed analysis of the mutual adjustment process for (6b), see Wilson & Sperber (2002, Table 1).

[14] Definite descriptions such as 'the rent' in (9b) have been treated in the pragmatic literature as cases of 'bridging implicature' (Clark 1977) and analysed using relevance theory by Matsui (2000), Wilson & Matsui (2000); Sperber & Noveck (2004).

[15] To the extent that pragmatic 'presuppositions' can be analysed as implicated (or accommodated) premises (cf. Grice 1981; Atlas 2004), the mutual adjustment process also sheds

Implicatures, like explicatures, may be stronger or weaker, depending on the degree of indeterminacy introduced by the inferential element of comprehension. When the hearer's expectations of relevance can be satisfied by deriving any one of a range of roughly similar conclusions, at roughly comparable cost, from a range of roughly similar premises, the hearer also has to take some responsibility for the particular premises he supplies and the conclusions he derives from them. In interpreting Sue's utterance in (9b), for example, Bill might have supplied any of the premises in (11) or many others of a similar tenor:

(11) a. A substantially lower rent for an otherwise comparable residence is a good reason to move.
b. Sue could not afford her Manhattan rent.
c. Sue would rather spend as little as possible on rent.
d. The relative benefit of living in Manhattan rather than Brooklyn was not worth the high rent Sue was paying.

The implicated conclusion that Bill will derive from Sue's utterance depends on the particular implicated premise he supplies. Still, it is clearly part of Sue's intention that Bill should provide some such premise and derive some such conclusion. In other words, Sue's overall meaning has a clear gist, but not an exact paraphrase. The greater the range of alternatives, the WEAKER the implicatures, and the more responsibility the hearer has to take for the particular choices he makes. Much of human communication is weak in this sense, a fact that a pragmatic theory should explain rather than idealise away.

Grice (1967/1989: 39-40) comments in passing on the indeterminacy of implicatures:

> Since to calculate a conversational implicature is to calculate what has to be supposed in order to preserve the supposition that the Cooperative Principle is being observed, and since there may be various possible specific explanations, a list of which may be open, the conversational implicatum [implicature] in such cases will be a disjunction of such specific explanations; and if the list of these is open, the implicatum will have just the kind of indeterminacy that many actual implicata [implicatures] do in fact seem to possess.

However, he did not pursue the idea, or suggest how the indeterminacy of implicatures might be compatible with their calculability, which he also regarded as

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light on their derivation. On other types of 'presuppositional' effect, see Sperber & Wilson (1986/95: chapter 4, section 5) and section 6 below.

an essential feature. In the Gricean and neo-Gricean literature, this problem is generally idealised away:

> Because indeterminacy is hard to handle formally, I shall mostly ignore it in the discussion that follows. A fuller treatment of implicatures would not be guilty of this omission, which is really only defensible on formal grounds. (Gazdar 1979: 40)

Relevance theory argues that indeterminacy is quite pervasive at both explicit and implicit levels, and provides an analysis that fits well with Grice's intuitive description.

5 Lexical pragmatics: metaphor, approximation and narrowing

The claim that an utterance does not encode the speaker's meaning but is merely a piece of evidence for it has implications at the lexical level. Metaphors and other tropes are the most obvious cases where the meaning conveyed by use of a word goes beyond the linguistically encoded sense. Relevance theory gives a quite different account of these lexical pragmatic phenomena from the standard Gricean one. Gricean pragmatics is often seen as having shed new light on the distinction between literal and figurative meaning. The distinction goes back to classical rhetoric, where it was assumed that (in modern terms):

(a) Linguistic expressions have a literal meaning.
(b) They are normally used to convey this literal meaning.
(c) Literal meanings are primary; figurative meanings are produced by systematic departures from literal meaning along dimensions such as similarity (in the case of metaphor), part-whole relationships (in the case of synecdoche), contradiction (in the case of irony) and so on.
(d) Figurative meanings are paraphrasable in literal terms, and can therefore be literally conveyed.
(e) When a meaning is conveyed figuratively rather than literally, it is in order to please or impress the audience.

Much of contemporary philosophy of language shares these assumptions, from which it follows that only literal meaning matters to the study of meaning. Metaphor, irony, and other tropes are seen as more relevant to aesthetics and the study of literature than to philosophy of language.

The classical view of figurative meaning was challenged by the Romantics. Against the view of figures as mere ornaments, they claimed that tropes have no literal paraphrases and that language is figurative through and through. The Romantic rejection of the literal-figurative distinction has had more influence on literary studies and continental philosophy than on analytic philosophy. However, recent work in cognitive psychology and pragmatics (e.g. Lakoff 1987; Gibbs 1994; Glucksberg 2001) also challenges the classical view in a variety of ways, some of which should have philosophical relevance.

Grice's account of tropes is closer to the classical than the Romantic approach. Suppose that the speaker of (12) or (13) manifestly could not have intended to commit herself to the truth of the propositions literally expressed: it is common knowledge that she knows that John is not a computer, or that she thinks it is bad weather:

(12) John is a computer
(13) It's lovely weather.

She is therefore overtly violating Grice's first maxim of Quality ('Do not say what you believe to be false'). According to Grice, such overt violation or FLOUTING of a maxim indicates a speaker's intention: the speaker intends the hearer to retrieve an implicature which brings the full interpretation of the utterance (i.e. what is said plus what is implicated) as close as possible to satisfying the Cooperative Principle and maxims. In the case of tropes, the required implicature is related to what is said in one of several possible ways, each characteristic of a different trope. With metaphor, the implicature is a simile based on what is said; with irony, it is the opposite of what is said; with hyperbole, it is a weaker proposition, and with understatement, a stronger one.[16] Thus, Grice might analyse (12) as implicating (14) below, and (13) as implicating (15):

(14) John processes information like a computer.
(15) The weather is bad.

As in the classical rhetorical approach, literal meanings are primary, and figurative meanings are associated with literal meanings in simple and systematic ways. What Grice adds is the idea that figurative meanings are derived in the pragmatic process of utterance comprehension and that this derivation is triggered by the fact the literal interpretation is an overt departure from conversational maxims.

However, there is a problem with explaining the interpretation of tropes in terms of standard Gricean implicatures. In general, the recovery of an implicature is

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[16] Here we will consider metaphor and related phenomena. For analyses of irony and understatement, see Sperber & Wilson (1981, 1986: Chapter 4.7, 4.9, 1990; 1998b); Wilson & Sperber (1992).

meant to restore the assumption that the maxims have been observed, or that their violation was justified in the circumstances (as when a speaker is justified by her ignorance in providing less information than required)(Grice 1989: 370). In the case of tropes, the first maxim of Quality seems to be irretrievably violated, and the implicature provides no circumstantial justification whatsoever: what justification could there be for implicitly conveying something true by saying something blatantly false, when one could have spoken truthfully in the first place? In fact, there is some textual evidence to suggest that Grice had in mind a slightly different treatment, on which the speaker in metaphor or irony does not actually *say*, but merely "makes as if to say" what the sentence she utters literally means (Grice 1967/89: 34). But in that case, since nothing is genuinely said, the first Quality maxim is not violated at all, and an account in terms of overt violation does not go through.

A Gricean way to go (although Grice himself did not take this route) would be to argue that what is violated is not the first maxim of Quality but the first maxim of Quantity ('Make your contribution as informative as is required'), since if nothing is said, no information is provided. The implicature could then be seen as part of an overall interpretation that satisfies this maxim. However, this creates a further problem, since the resulting interpretations of figurative utterances would irretrievably violate the Manner maxims. In classical rhetoric, where a metaphor such as (12) or an irony such as (13) is merely an indirect and decorative way of communicating the propositions in (14) or (15), this ornamental value might help to explain the use of tropes (in so far as classical rhetoricians were interested in explanation at all). Quite sensibly, Grice does not appeal to ornamental value. His supermaxim of Manner is not 'Be fancy' but 'Be perspicuous.' However, he does assume, in accordance with classical rhetoric, that figurative meanings, like literal meanings, are fully propositional, and paraphrasable in literal terms. Which raises the following question: isn't a direct and literal expression of what you mean *always* more perspicuous (and in particular less obscure and less ambiguous, cf. the first and second Manner maxims) than an indirect figurative expression?

There are deeper problems with any attempt (either classical or Gricean) to treat language use as governed by a norm of literalness, and figurative utterances as overt departures from the norm. Apart from creative literary metaphors and aggressive forms of irony, which are indeed meant to be noticed, ordinary language use is full of tropes that are understood without attracting any more attention than strictly literal utterances. This familiar observation has now been experimentally confirmed: reaction-time studies show that most metaphors take no longer to understand than their literal counterparts (Gibbs 1994; Glucksberg 2001; see also Noveck *et al.* 2001). This does not square with the view that the hearer of a metaphor first considers its literal interpretation, then rejects it as blatantly false or incongruous, and then constructs a figurative interpretation.

Moreover, while there is room for argument about which metaphors are noticed as such and which are not, ordinary discourse is full of utterances which would violate the first maxim of Quality if literally understood, but are not perceived as violations by ordinary language users. We are thinking here of approximations and loose uses of language such as those in (16)-(19) (discussed in greater detail in Wilson & Sperber 2002):

(16) The lecture starts *at five o'clock*.
(17) Holland is *flat*.
(18) *Sue:* I must *run* to the bank before it closes.
(19) *Jane:* I have a terrible cold. I need a *Kleenex*.

If the italicised expressions in (16)–(19) are literally understood, these utterances are not strictly true: lectures rarely start at exactly the appointed time, Holland is not a plane surface, Sue must hurry to the bank but not necessarily run there, and other brands of disposable tissue would do just as well for Jane. Despite the fact that hearers do not normally perceive them as literally false, such loose uses of language are not misleading. This raises a serious issue for any philosophy of language based on a maxim or convention of truthfulness. In some cases, it could be argued that the words are in fact ambiguous, with a strict sense and a more general sense, both known to competent language users. For instance, the word 'Kleenex', originally a brand name, may also have come to mean, more generally, a disposable tissue. However, such ambiguities ultimately derive from repeated instances in which the original brand name is loosely used. If 'Kleenex' now has TISSUE as one of its lexical senses, it is because the word was often loosely used to convey this broader meaning before it became lexicalised.

Approximations such as (16) and (17) are generally treated in philosophy of language under the heading of VAGUENESS. Vagueness can itself be analysed in semantic or pragmatic terms. There are certainly words with vague linguistic senses – 'old' or 'ovoid', for instance – and vagueness is therefore at least partly a semantic phenomenon. With other expressions, such as 'five o'clock,' 'hexagonal' or 'flat,' it seems more appropriate to assign a precise semantics and propose a pragmatic explanation of why they are frequently understood as approximations. David Lewis argues that in such cases, 'the standards of precision in force are different from one conversation to another, and may change in the course of a single conversation. Austin's "France is hexagonal" is a good example of a sentence that is true enough for many contexts but not true enough for many others' (1979: 245).

Both standard semantic and pragmatic treatments of vagueness presuppose that there is a continuum or a fine-grained series of cases between narrower and broader interpretations. This may indeed be true of semantically vague terms such as 'old' or 'ovoid,' and of terms such as 'flat,' 'hexagonal,' or 'five o'clock,' which are often understood as approximations (Gross 2001). However, with 'run' in (18) and 'Kleenex' in (19), no such continuum exists. There is a sharp discontinuity, for instance, between running (where both feet leave the ground at each step) and walking (where there is always at least one foot on the ground). Typically (though not necessarily), running is faster than walking, so that 'run' may be loosely used, as in (18), to indicate the activity of going on foot (whether walking or running) at a speed more typical of running. But walking at different speeds is not equivalent to running relative to different standards of precision. 'Run,' 'Kleenex' and many other words have sharp conceptual boundaries, frequent loose interpretations, and no ordered series of successively broader extensions which might be picked out by raising or lowering some standard of precision. Such cases of loose use seem to call for a special kind of pragmatic treatment, since they are non-literal, but neither the Gricean account of figurative interpretation nor the standard pragmatic treatment of vagueness applies to them.

Do we need four different kinds of analysis for literal, vague, loose, and figurative meanings? Relevance theory is unique in proposing a unified account of all these cases. From the general claim that an utterance is a piece of evidence about the speaker's meaning, it follows, at the lexical level, that the function of words in an utterance is not to encode but merely to indicate the concepts that are constituents of the speaker's meaning. We are not denying that words do encode concepts (or at least semantic features), and that they are (at least partly) decoded during the comprehension process; however, we are claiming that the output of decoding is merely a point of departure for identifying the concepts intended by the speaker. The presence in an utterance of an expression with a given sense licenses a variety of (typically non-demonstrative) inferences. Some of these inferences contribute to satisfying the hearer's expectations of relevance, and are therefore drawn. Others don't, and aren't. In the process, there is a mutual adjustment between explicatures and implicatures. The decoded content helps to identify the inferences that make the utterance relevant as expected, and is readjusted so as to warrant just those inferences that contribute to the relevance of the utterance as a whole. In particular, the constituent concepts of the explicature are constructed ad hoc, starting from the linguistically encoded concepts, but quite often departing from them so as to optimise the relevance of the overall interpretation (Carston 1997, 2002: chapter 5; Sperber & Wilson 1998a; Wilson & Sperber 2002; Wilson 2003).

Suppose, for instance, you have a lecture one afternoon, but don't know exactly when it is due to start. You are told, 'The lecture starts at five o'clock.' From this utterance, and in particular from the phrase 'at five o'clock', together with contextual premises, you can draw a number of inferences that make the utterance relevant to you: that you will not be free to do other things between five and seven o'clock, that you should leave the library no later than 4.45, that it will be too late to go shopping after the lecture, and so on. None of these inferences depends on 'five o' clock' being strictly understood. There are inferences that depend on a strict interpretation (for instance, that the lecture will have begun by 5.01), but they don't contribute to the relevance of the utterance, and you don't draw them. According to the relevance-theoretic approach, you then take the speaker to be committed to the truth of a proposition that warrants just the implications you did derive, a proposition which might be paraphrased, say, as 'The lecture starts between five o'clock and ten past,' but which you, the hearer, would have no need to try and formulate exactly in your mind. Note that if the speaker had uttered the more accurate 'between five o'clock and ten past' instead of the approximation 'at five o'clock,' the overall effort required for comprehension would have been increased rather than reduced, since you would have had to process a longer sentence and a more complex meaning without any saving on the inferential level. Note, too, that we cannot explain how this approximation is understood by assuming that the standard of precision in force allows for, say, a variation of ten minutes around the stated time. If the lecture might start ten minutes *earlier* than five o'clock, then the inferences worth drawing would not be the same.

This process of ad hoc concept construction via mutual adjustment of explicatures and implicatures is quite general. It works in the same way with metaphors. Consider the metaphor 'John is a computer' in two different exchanges:

(20) a. *Peter*: Is John a good accountant?
b. *Mary*: John is a computer.
(21) a. *Peter*: How good a friend is John?
b. *Mary*: John is a computer.

In each case, the encoded sense of 'computer' draws the hearer's attention to some features of computers that they may share with some human beings. Like the best accountants, computers can process large amounts of numerical information and never make mistakes, and so on. Unlike good friends, computers lack emotions, and so on. In each case, Peter builds an ad hoc concept indicated, though not encoded, by the word 'computer', such that John's falling under this concept has implications that answer the question in (20a) or (21a). Note that Mary need not have in mind the precise implications that Peter will derive, as long as her utterance encourages him to derive the kind of implications that answer his question along the intended lines. So the Romantics were right to argue that the figurative meaning of a live metaphor cannot be properly paraphrased. However, this is not because the meaning is some non-truth-conditional set of associations or 'connotations'. It is because it consists of an ad hoc concept that is characterised by its inferential role and not by a definition, and moreover this inferential role, to a much greater extent than in the case of mere approximations, is left to the hearer to elaborate. Metaphorical communication is relatively weak communication.

In the case of approximations or metaphors, concept construction results in a broadening of the encoded concept; in other cases, as in (5a) ('I'll bring a bottle') and (6b) above, it results in a narrowing. Recall that in (6), Lisa has dropped by her neighbours, the Joneses, who have just sat down to supper:

(6) a. *Alan Jones*: Do you want to join us for supper?
b. *Lisa*: No, thanks. I've eaten.

As noted above, in order to produce a relevant interpretation of Lisa's answer 'I've eaten', some enrichment of the encoded sentence meaning must take place. In particular, the time span indicated by the perfect 'have eaten' must be narrowed down to the evening of utterance, and 'eaten' must be understood as conveying the ad hoc concept EAT SUPPER. If Lisa has eaten supper on the previous day, or eaten an olive that evening, she would literally *have eaten*, but not in a relevant sense. In still other cases, the result of the same process of meaning construction is that the concept indicated by use of the word 'eaten' as a constituent of the intended meaning is the very one it encodes. If Lisa is supposed to follow a religious fast and says 'I've eaten', then the concept EAT that is part of her meaning is just the linguistically-encoded one: a single olive is enough to break a fast.

The comprehension process itself does not involve classifying interpretations as *literal*, *approximate, loose, metaphorical*, and so on. These classifications belong to linguistic theories, including folk and philosophical theories, and play a role in metalinguistic arguments. However, a pragmatic approach suggests that these notions may denote regions on a continuum rather than sharply distinct categories, and may play no role in a proper theory of language use.

6 Procedural meaning: speech acts, presuppositions and indexicals

We have tried to show that a contextualist approach to semantics combined with a relevance-oriented approach to pragmatics can yield appropriate accounts of speaker's meaning. Starting with the strongest candidates for literalist treatment – constructions which are plausibly analysed as encoding concepts that contribute to explicit truth-conditional content – we have argued that even with these strongest candidates the case for literalism does not go through. Many aspects of explicit truth-conditional content are not encoded at all, and utterances do not always communicate the concepts they encode. Moreover, a wide range of linguistic constructions contribute to other aspects of speaker's meaning than explicit truth-conditional content, or encode aspects of meaning that are not plausibly analysed in conceptual terms. Examples include illocutionary force indicators, presupposition triggers, indexicals and demonstratives, focusing devices, parentheticals, discourse connectives, argumentative operators, prosody, interjections, and so on. Because these constructions fall outside the scope of standard literalist approaches, their linguistic meaning is sometimes characterised as 'pragmatic' rather than semantic (although the proposed analyses have rarely shown much concern for how they might contribute to a properly inferential pragmatics). We see these items as providing strong evidence for a contextualist approach to semantics combined with a relevance-oriented pragmatics, and will end by briefly considering how they might be approached within the framework we have outlined.

Speech-act theorists such as Austin, Searle, Katz and Bach & Harnish underlined the fact that a speaker's meaning should be seen not merely as a set of (asserted) propositions, but as a set of propositions each with a recommended propositional attitude or illocutionary force. The treatment of illocutionary and attitudinal meaning has developed in parallel to the treatment of explicit truth-conditional content, with early literalist accounts replaced by more contextualist accounts in which the role of speakers' intentions and pragmatic inference is increasingly recognised.[17] In relevance theory, these non-truth-conditional aspects of speaker's meaning are analysed as HIGHER-LEVEL explicatures constructed (like the basic explicatures considered in section 4) by development of encoded schematic sentence meanings. In uttering (22), for example, Mary might convey not only the basic explicature in (23a), which constitutes the explicit truth-conditional content of her utterance, but a range of higher-level explicatures such as (23b-d) (any of which might contribute to overall relevance):

(22) Confidentially, I didn't enjoy the meal.
(23) a. Mary didn't enjoy the meal.
b. Mary is telling Peter confidentially that she didn't enjoy the meal.
c. Mary is admitting confidentially to Peter that she didn't enjoy the meal.
d. Mary believes she didn't enjoy the meal.

As this example shows, higher-level explicatures, like basic explicatures, are recovered through a combination of decoding and inference, and may be more or less explicit. Thus, Mary could have made her meaning more explicit by uttering (24), and left it less explicit by merely indicating through her behaviour or tone of voice that she was speaking to Peter in confidence:

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[17] See e.g. Strawson (1964); Searle (1969, 1975); Katz (1977); Recanati (1987); Tsohatzidis (1994); Sadock (2004).

(24) I tell you confidentially, I didn't enjoy the meal.

Speech-act theorists distinguish DESCRIBING from INDICATING. Descriptive expressions may be seen as encoding concepts in the regular way (although we have argued that the encoded concept gives no more than a schematic indication of the speaker's meaning). Indicators are seen as carrying other types of information, which contribute to speaker's meaning in other ways than by encoding regular concepts. As illustrated by (22)-(24)('Confidentially, I didn't enjoy the meal', 'I tell you confidentially, I didn't enjoy the meal'), higher-level explicatures may be conveyed by a mixture of describing and indicating. While illocutionary adverbials and parentheticals such as 'confidentially', 'I tell you confidentially', 'I tell you in total and utter confidence' clearly have descriptive content, mood indicators such as declarative or interrogative word order, imperative, indicative or subjunctive verb morphology and exclamatory or interrogative intonation fall on the indicating side. How is their encoded meaning to be analysed, if not in conceptual terms? We would like to suggest that their semantic function is to guide the hearer in the inferential construction of higher-level explicatures by narrowing the search space, increasing the salience of certain candidates, and diminishing the salience of others. In some cases, the search space may be reduced to a single plausible candidate, while in others, there may be several, so that the resulting explicatures may be stronger or weaker. As expected, conceptual encoding leads to stronger communication than linguistic indication (Wilson & Sperber 1988, 1993; Sperber & Wilson 1986/95: chapter 4.10; Ifantidou 2001).

As noted at the beginning of this section, languages have a rich variety of indicators, which contribute to other aspects of speaker's meaning than illocutionary force; in the framework we have outlined, these would be analysed on similar lines to mood indicators, as contributing to relevance by guiding the hearer towards the intended explicit content, context or conclusions. Consider, for instance, the contribution of the indexical or demonstrative 'here' to the explicit truth-conditional content of (25):

(25) I have been *here* for two hours.

The semantic function of 'here' is simultaneously to indicate that a referent is required and to restrict the search space to a certain class of candidates, some of which may be made more salient by gesture, direction of gaze or discourse context (and will therefore be more accessible to the relevance-theoretic comprehension heuristic). Even when all these clues are taken into account, they may not determine a unique interpretation. For example, (25) may be true (and relevant) if 'here' is understood to mean 'in this library', but false if understood to mean 'in this room' or 'on this spot'. The encoded meaning of 'here' is only a clue to the speaker's meaning, which is recovered, as always, by mutual adjustment of explicatures and implicatures in the search for optimal relevance.

Finally, a range of items such as 'even', 'still', 'but', 'indeed', 'also' and 'after all', which have been seen as encoding information about 'presuppositions', conventional implicatures or argumentative orientation instead of (or as well as) descriptive information,[18] may be analysed as restricting the search space for implicated premises and conclusions, or as indicating what type of inferential process the hearer is intended to go through in establishing relevance. To give just one illustration, compare (26a) and (26b):

(26) a. John is a philosopher and he enjoys detective stories.
b. John is a philosopher but he enjoys detective stories.

As these examples show, although 'and' and 'but' are descriptively equivalent, they orient the hearer towards different types of interpretation (Ducrot 1984; Blakemore 1987, 2002; Hall 2004). The use of 'and' in (26a), for example, is compatible with an interpretation in which the fact that John enjoys detective stories is unsurprising given that he is a philosopher, while the use of 'but' in (26b) suggests an interpretation in which the fact that John is a philosopher makes it surprising that he enjoys detective stories. The effect of 'but' is to narrow the search space for inferential comprehension by facilitating access to certain types of context or conclusion: it may therefore be seen, like mood indicators and indexicals, as indicating a rather abstract property of the speaker's meaning: the direction in which relevance is to be sought.[19]

The few attempts that have been made to provide a unified account of indicators have been based on the speech act distinction between conditions on USE and conditions on TRUTH (Recanati 2004b). However, as noted above, not all indicators are analysable in speech-act terms, and the distinction between conditions on truth and conditions on use runs the risk of becoming trivial or non-explanatory when removed from the speech-act framework. While it is clear why certain acts have felicity conditions (e.g. only someone with the appropriate authority can give an order, perform a baptism, and so on), it is not clear why linguistic expressions such as 'it' and 'that', or 'even' and 'also', which have no obvious analysis in speech-act terms, should have conditions on their appropriate use. By contrast, if the function of indicators is to contribute to inferential comprehension by guiding the hearer

[18] See for example Stalnaker (1974); Wilson (1975); Gazdar (1979); Karttunen & Peters (1979); Grice (1981); Anscombre & Ducrot (1983), Sperber & Wilson (1986/95: chapter 4.5); Blakemore (1987, 2002); Wilson & Sperber (1993); Bruxelles, Ducrot & Raccah (1995); Horn (1996); Kadmon (2001); Atlas (2004); Hall (2004); Iten (forthcoming).

[19] For an account of interjections within this framework, see Wharton 2003.

towards the speaker's meaning, the conditions on their use fall out as a natural consequence. More generally, from a radical literalist perspective, it is surprising to find any items at all that contribute to meaning without encoding concepts. From the perspective outlined in this chapter, there is no presumption that all linguistic meaning should be either conceptual or truth-conditional: the only requirement on linguistic meaning is that it guide the hearer towards the speaker's meaning by indicating the direction in which relevance is to be sought.

7 Conclusion

When pragmatics emerged as a distinct discipline at the end of the 1960s, analytic philosophy was dominated by philosophy of language, and the cognitive sciences were still in their infancy. Since then, as the cognitive sciences have matured and expanded, priority in philosophy has shifted from philosophy of language to philosophy of mind. The development of pragmatics reflects this shift. Part of Grice's originality was to approach meaning as a primarily psychological phenomenon and only derivatively a linguistic one. By underlining the gap between sentence meaning and speaker's meaning, he made it possible, of course, for ideal language philosophers to ignore many context-dependent features of speaker's meaning that ordinary language philosophers had used as evidence against formal approaches. However, far from claiming that linguistic meaning was the only type of meaning amenable to scientific treatment and worthy of philosophical attention, he suggested that speaker's meaning was relevant to philosophy and could be properly studied in its own right. As pragmatics has developed, it has become increasingly clear that the gap between sentence meaning and speaker's meaning is wider than Grice himself thought, and that pragmatic inference contributes not only to implicit content but also to truth-conditional aspects of explicit content. While the effect may be to remove from linguistic semantics more phenomena than some semanticists might be willing to relinquish, it does not make the field any less challenging: in fact, the semantics-pragmatics interface becomes an interesting interdisciplinary area of research in its own right. However, as the gap between sentence meaning and speaker's meaning widens, it increasingly brings into question a basic assumption of much philosophy of language, that the semantics of sentences provides straightforward, direct access to the structure of human thoughts. We have argued that linguistic meanings are mental representations that play a role at an intermediate stage in the comprehension process. Unlike speaker's meanings (which they resemble in the way a skeleton resembles a body), linguistic meanings are not consciously entertained. In other words, whereas speakers' meanings are salient objects in personal psychology, linguistic meanings only play a role in sub-personal cognition.

Within pragmatics itself, there is a tension between more linguistically-oriented and more cognitively-oriented approaches. By idealising away from properties of the context that are hard to formalise, and focusing on aspects of interpretation (e.g. ‘presuppositions’ or 'generalised implicatures') which exhibit a kind of code-like regularity, it is possible to extend the methods of formal semantics to a sub-part of the pragmatic domain (assuming that these phenomena are genuinely pragmatic, which is in some cases contentious) (Kadmon 2001; Blutner & Zeevat 2003). Good or bad, the resulting analyses are unlikely to generalise to the whole domain of pragmatics. The cognitive approach, and in particular relevance theory (on which we have focused here), approaches verbal comprehension as a psychological process. The challenge is precisely to explain how the closed formal system of language provides effective pieces of evidence which, combined with further evidence from an open and dynamic context, enable hearers to infer speakers' meanings. The methods to be used are those of cognitive psychology, including modelling of cognitive processes, experimental tests, studies of communication pathologies (e.g. autism), and evolutionary insights. Pragmatics so conceived is relevant to linguistics because of the light it throws on the semantics-pragmatics interface. Its main relevance is to cognitive psychology, and in particular to the study of mind-reading and inference mechanisms. Its implications for the philosophy of language are largely cautionary and deflationary, amounting mainly to downplaying the philosophical significance of linguistic meanings. Its main philosophical relevance is to philosophy of mind. In particular, by describing comprehension, a very common, easy, everyday process, as a form of richly context-dependent inference, pragmatics provides an illustration of how to approach central cognitive processes, which, precisely because of their context-dependence, have been treated by Fodor as a major mystery for cognitive psychology and philosophy of mind.

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