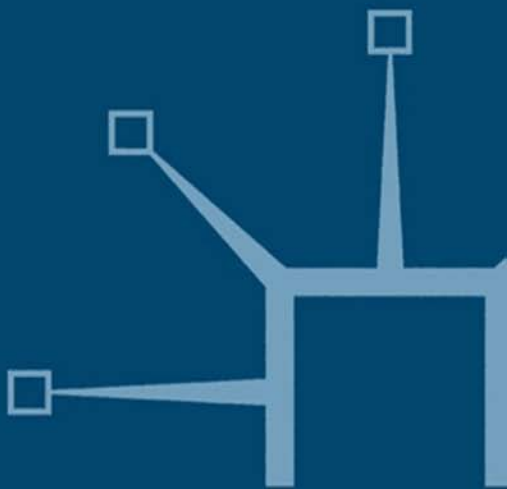# Explicit Communication

Robyn Carston's Pragmatics

Belén Soria

Esther Romero

Palgrave Studies in Pragmatics, Language and Cognition

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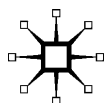The Pragmatics of Discourse Type

Explicit Communication

Robyn Carston's Pragmatics

Edited by

Belén Soria and Esther Romero
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Most of the authors of this volume first presented their work as part of the workshop that was held in the University of Granada (Spain). Exceptions are François Recanati, who wrote a totally different chapter to the one he presented then, and Begoña Vicente Cruz, who kindly agreed to join in the volume at our request after her forceful participation in the debates. The other exceptions are, as can be supposed, our introduction and the final chapter by Robyn Carston herself, which is a really excellent and thorough response to all the chapters in the book, woven into a very interesting and in many ways novel 'position statement' on Carston's part. We would like to thank all the contributors for their cooperation and understanding, and all the attendants and participants at the workshop. More particularly, we would like to thank Luis Carlos Baptista and Stephen Neale, whose participation in the debates helped to improve the quality of the contributions.

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We would like to finish these Acknowledgements with a clarification about the order of appearance of our surnames in this edition. In our

previous publications together, we have followed the alphabetical criterion. This criterion has the disagreeable consequence that one of us is doomed always to get the second place, which sometimes is associated with the idea, totally unjustified in our case, that her contribution to work is lower. We sign this edited volume as Soria and Romero to avoid this. Although our contributions included in the book are in alphabetical order, as usual, nothing about the quality or quantity of the contribution made by each of us should be inferred from this.

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1

Introduction: Explicit Communication and Relevance Theory Pragmatics

Esther Romero and Belén Soria

This volume of papers has its origin in a workshop on 'Explicit Communication' held in Granada, Spain, in early June 2006. The invited speaker was Robyn Carston, and the other participants gave presentations that focused on one aspect or another of her work on explicit communication and comprehension, in particular as presented in her 2002 book *Thoughts and Utterances* but also in a series of papers, both preceding and following the book. In the relevance-theoretic (RT) framework, within which Carston's work on pragmatics is set, explicit communication concerns those propositions that are communicatively intended by the speaker and are derived by the hearer through a combination of linguistic decoding and pragmatic inference. These are known as the 'explicatures' of the utterance and are distinct from those propositions, known as 'implicatures', which are implicitly communicated and derived wholly by inferential pragmatic processes. Together, the explicatures and implicatures of an utterance make up the speaker's meaning or communicated content.

In her study of explicit communication, Carston (2002) clarifies and extends the relevance-theoretic notion of explicature first developed by Dan Sperber and Deirdre Wilson (1986a/95). In her view, the hearer's recovery of this type of proposition is always dependent on pragmatic inference, as entailed by the semantic underdeterminacy thesis, according to which the linguistically encoded meaning of an utterance inevitably underdetermines its explicitly communicated propositional content.[1] The decoded 'semantic' representation associated with the sentence uttered, its logical form, is claimed to be seldom, if ever, fully propositional, and the basic explicature is often equated with the

1

propositional (truth-conditional) content of the utterance, that is, the basis on which the utterance is evaluated as true or false. According to Carston, this underdeterminacy is not resolved merely by determining intended referents and intended senses of ambiguous expressions until a propositional form is reached, as a Gricean might argue, but usually also requires further processes of pragmatic enrichment: the supplying of linguistically unarticulated constituents and/or the adjusting of encoded conceptual content. These are 'free' pragmatic processes inasmuch as they are not mandated or controlled by elements in the decoded linguistic meaning. In this respect, the relevance-theoretic position (at least as presented by Carston, Sperber, and Wilson) falls into the broad camp known as radical contextualism (for discussion, see Recanati 2004).

A distinctive characteristic of work in relevance theory from its inception has been its focus on a range of loose uses of language and its inclusion of certain figurative uses, in particular metaphor, in this class of cases. In Carston's view (1996, 2000, 2002), the comprehension of loose and metaphorical uses should be construed as involving the same kind of free pragmatic process as cases of content enrichment and thus as playing a role in shaping the explicit content communicated by the speaker. This idea marked an important departure from the early work of Sperber and Wilson on loose use and metaphor (1986a/95, 1986b), according to which the proposition expressed by the utterance was not communicated, but served as just a vehicle for the communication of a range of implicatures. The symmetric account of narrowing/enrichment and broadening/loosening has now become established within the mainstream of relevance theory, in particular within the domain of 'lexical pragmatics' (see Wilson and Sperber 2004; Wilson and Carston 2006, 2007). In the remainder of this short introductory chapter, we take a closer look at these developments within relevance theory over the past 25 years, focusing on Carston's contributions, and then briefly outline the contents of the individual chapters in this volume, all of them geared, one way or another, to an examination of the way in which linguistic meaning (logical form) and pragmatic processes interact in the derivation of explicitly communicated utterance content.

1   Relevance theory, explicature and implicature

Verbal communication is achieved through the use of a code (a linguistic system which maps sounds to meanings) together with a highly context-sensitive capacity for pragmatic inference. Building on the

insights of Paul Grice (1975/89) concerning the inferential nature of human communication, Sperber and Wilson (1986a/95) developed an account of how a communicator, in producing an utterance, makes it mutually manifest to audience and communicator that she has a particular informative intention. The explanatory power of Sperber and Wilson's approach rests on giving shape to the notion of relevance, which they characterise as a property of inputs (stimuli or assumptions) to cognitive processes, by means of which it is possible to account for how information is mentally represented and how it is inferentially processed. Utterances (and other ostensive stimuli) are a special kind of input in that they come with a presumption of their own relevance.

Quite generally, the relevance of any input is a positive function of its contextual (or cognitive) effects and a negative function of the processing effort expended in deriving them. There are at least three types of effects that a new input can have on a context (consisting of existing mentally represented assumptions): (i) the derivation of new assumptions as contextual implications, that is, as conclusions derivable from the new information and the context together but from neither alone; (ii) the strengthening of existing assumptions; and (iii) the contradiction and elimination of existing assumptions. Other things being equal, the greater the cognitive effects and the smaller the effort required to derive them, the greater the relevance of the input to the individual at that time. The special nature of utterances (and other acts of ostensive communication) is such that they automatically raise particular expectations of relevance in their addressees. The most general of these expectations is that they will achieve a level of 'optimal relevance', that is, that they will yield at least enough cognitive effects to justify the processing effort they require. This is captured by the Communicative Principle of Relevance (CPR), which is discussed in detail in Sperber and Wilson (1986a/95), and summarised here:

> every act of overt communication conveys a presumption of its own optimal relevance. To be optimally relevant, an utterance (or other act of overt communication) must be at least relevant enough to be worth processing, and moreover the most relevant one compatible with the communicator's abilities and preferences. (Wilson and Carston 2006: 407–8)

To determine the content of the speaker's informative intention, the hearer employs the comprehension strategy licensed by the CPR: he follows a path of least effort in accessing and testing interpretive

hypotheses and stops when his expectations of relevance are satisfied. The assumptions/thoughts inferred by the addressee in accordance with this relevance-driven comprehension procedure constitute the interpretation of the utterance.

There are two kinds of communicated assumptions/thoughts, *explicatures* and *implicatures*, distinguished primarily by the way in which they are derived. Here we will briefly survey how these constructs and the relation between them have evolved over the lifetime of relevance theory, making a broad division between early and current RT. Sperber and Wilson define *explicitness* as follows: 'an assumption communicated by an utterance U is *explicit* [hence is an 'explicature'] if and only if it is a development of a logical form encoded by U' (1986a/95: 182), adding that any other communicated assumption is conveyed implicitly (so is an 'implicature'). An explicitly communicated propositional form is a combination of linguistically encoded and contextually inferred conceptual components. The inferential processes not only complete the logical form (rendering it propositional) but further elaborate and adjust it so as to identify the intended (speaker-meant) explicit content of the utterance.

Consider the following example, from Carston (1988):

(1)   [Bob asks Sue how Jane is feeling after her first year at university and Sue utters:] She didn't get enough units and can't continue.

Let us assume, as seems plausible, that the following two thoughts/propositions fall within the informative intention that Sue makes mutually manifest to Bob and herself (which she communicates):[2]

(2)   a.   [JANE$_I$ DIDN'T PASS ENOUGH UNIVERSITY COURSE UNITS TO QUALIFY FOR ADMISSION TO SECOND YEAR STUDY]$_P$ & AS A RESULT OF P JANE$_I$ CANNOT CONTINUE WITH UNIVERSITY STUDY

       b.   JANE$_I$ IS NOT FEELING HAPPY

Of course, neither of these constitutes the encoded (standing) meaning of the sentence that Sue used, although it appears to be the skeletal framework on the basis of which the proposition in (2a) has been constructed. The proposition in (2b) is an uncontroversial case of a conversational implicature (an indirect answer to the question asked), inferentially derived from (2a) and other accessible contextual assumptions about the likely feelings of someone who has failed their university courses.

What is of primary interest here is the range of pragmatic tasks required in the derivation of (2a), taking the encoded linguistic content

(the logical form) of the sentence Sue used as the basis. It includes the following:

i.   Fixing the referent of 'she'
ii. Disambiguating (or narrowing down) the meaning of 'get'
iii. Completing the content of 'enough units' (enough for what?)
iv. Narrowing down (specifying) the very general nominal 'units'
v.   Providing an object of the verb 'continue'
vi. Imputing a cause–consequence relation between the states of affairs described in the two conjuncts

The central drive of Carston's earliest work in relevance theory was to establish the role of 'free' pragmatic processes, that is, processes that go beyond establishing minimal propositionality or just responding to linguistically encoded variables or parameters which indicate the necessity for a contextual contribution (hence a pragmatic 'saturation' operation), as in the case of 'she' or 'enough' in (1). 'Free' pragmatic processes are free from linguistic mandate or trigger, so they are, as it were, doubly pragmatic: it is not only that a pragmatic process supplies a component of truth-conditional content (as it does in saturation cases) but that the process is also entirely pragmatically motivated (or 'top-down'); that is, it is prompted by the search for an optimally relevant interpretation.

One of Carston's strongest cases for free pragmatic enrichment is the pragmatically inferred causal connection in 'and'-conjunctions, as also illustrated above in (1), which, unlike the temporal sequence relation, also often taken to hold between conjuncts, cannot be reduced to a case of saturation (see Carston 1988). One of the sources of evidence she gave in support of her position and against the Gricean account of this connection as a case of generalised conversational implicature concerned the truth-conditional contribution such conjunctions make when embedded in the scope of logical operators, such as conditionals, negation, and disjunction. For example, when (3a) is embedded as the antecedent of a conditional, as in (3b), the intuitive consensus is that the cause–consequence relation contributes to the truth-conditional content of the conditional:

(3) a. Ann insulted Jim and Jim resigned.
     b. If Ann insulted Jim and Jim resigned then Ann is in trouble.
     c. If Jim resigned and Ann insulted him then Ann is in trouble.

Ordinary, unreflective native speaker intuitions agree that (3b) and (3c) can differ in truth value, that is, that Ann's being in trouble depends not only on the truth of the two discrete conjuncts (the 'insulting' event and the 'resigning' event) but also on the latter having been a consequence of the former. From this (and other considerations), Carston concluded that the cause–consequence connection is an instance of 'free' pragmatic enrichment: it is a pragmatic contribution to explicature (truth-conditional content) which is inferred on wholly pragmatic grounds. It is not required in order to derive a minimal truth-conditional content (a conjoining by '&' of the two propositions expressed by the conjuncts is sufficient for that), and there is no parameter or variable in the linguistic form triggering the pragmatic inference. Her wholly pragmatic account hinged on the low cost and prevalence of such causal inferences in human cognition coupled with their often rich yield of cognitive implications (see, in particular, Carston 2002: chapter 3).

The cause–consequence component of meaning in the explicature of the 'and'-conjunctions in (3a), (3b), and Sue's utterance in (1) is what is known as an 'unarticulated constituent' (UC) of content; that is, not only is it phonologically unrealised in the sentence used but it is not articulated in the linguistic logical form as any kind of invisible/inaudible covert element either (as compared with, say, PRO or any other syntactically evidenced empty linguistic categories). The existence of such elements is controversial and much disfavoured by semanticists who take it as fundamental to the enterprise of formulating a systematic account of how native speaker/hearers grasp truth-conditional content that there should be a one-to-one isomorphism between linguistic elements and contributions to truth conditions (see, for instance, King and Stanley 2005; and discussion of this kind of objection in Carston 2002, this volume). For Carston, though, there is another kind of free enrichment, one which does not require the postulation of UCs. This is known as lexical adjustment or meaning modulation, and what it does is take an encoded concept and modify it in some way such that the resulting denotation is distinct from, but overlaps with, that of the original lexical concept. A possible example of this in (1) above is the narrowing of the meaning of 'unit' to a more specific concept paraphrasable as 'university course unit', which picks out a small subset of the denotation of the very general lexical concept UNIT. This kind of free enrichment is favoured by Carston because it preserves the sentence-proposition isomorphism, so it becomes an interesting question to what extent alleged cases of UCs can be reconstrued as cases of such concept adjustment. Carston (2000) has pointed out that, whatever the ultimate

answer to this question, the essence of free pragmatic enrichment is that the process is triggered by the search for a pragmatically satisfactory interpretation rather than by a linguistic parameter, and this is preserved in her conception of free enrichment as lexical adjustment. This kind of free enrichment is central to Carston's account of loose use and we will return to it when we discuss loose use in the next section.

In their early work on explicature, Wilson and Sperber (1993) pointed out that, as well as the developments of logical form that result in the truth-conditional content of the utterance, there are other, 'higher-level', explicatures that may also be communicated. Typically, these involve embedding of the proposition expressed in the scope of a speech act or propositional attitude description, as in (4), where Mary's utterance in (4a) could communicate not only the basic explicature in (4b) but also the higher-level ones in (4c) and (4d):

(4) a. [Mary:] He's the best.
    b. TONY IS THE BEST APPLICANT FOR THE JOB
    c. MARY BELIEVES THAT TONY IS THE BEST APPLICANT FOR THE JOB
    d. MARY IS SAYING THAT TONY IS THE BEST APPLICANT FOR THE JOB

Certain utterances may not communicate any explicature except for the speech act type, exemplified in (4d). For instance, if Mary's utterance in (4a) is ironic she won't communicate either (4b) or (4c), and if she had asked a question ('Is he the best?') the only explicature would be: MARY IS ASKING WHETHER TONY IS THE BEST APPLICANT FOR THE JOB.

Carston (2002: 120–25) further observed that there can be 'lower-level' or embedded explicatures, as in utterances of the following:

(5) a. Mary worked on her paper and Bill watched a video.
    b. Kim shouldn't pass the module because, frankly, she hasn't done any work.

Her claim is that a (non-ironic) utterance of (5a) communicates not only the conjunctive proposition (once properly pragmatically developed) but also the two constituent propositions expressed by the individual conjuncts and that these are 'explicit' (hence not implicatures). Similarly, the explicatures communicated by an utterance of (5b) include the following (once suitably enriched, which is not attempted here):

(6) a. KIM SHOULDN'T PASS THE MODULE BECAUSE SHE HASN'T DONE ANY WORK
    b. KIM SHOULDN'T PASS THE MODULE

  c. Kᴉᴍ ʜᴀsɴ'ᴛ ᴅᴏɴᴇ ᴀɴʏ ᴡᴏʀᴋ
  d. Tʜᴇ sᴘᴇᴀᴋᴇʀ ɪs sᴀʏɪɴɢ ғʀᴀɴᴋʟʏ ᴛʜᴀᴛ Kᴉᴍ ʜᴀsɴ'ᴛ ᴅᴏɴᴇ ᴀɴʏ ᴡᴏʀᴋ

Carston goes on to point out that the intuition of explicitness is not confined to communicated entailments, as might seem to be the case from the examples so far, but extends to the embedded proposition in cases such as the following:

(7) a. I'm telling you that it's not possible.
  b. I assure you that Jane will complete her thesis on time.

What this range of cases indicates is that the definition of 'explicature' needs to be amended to accommodate multi-clausal utterances in which the speaker clearly endorses the embedded proposition(s), that is, utterances in which embedded proposition fall within the set of assumptions that she communicates. Carston suggests the following amended definition, while recognising that there might be technically better ways of formulating it:

> An assumption (proposition) communicated by an utterance is an 'explicature' of the utterance if and only if it is a development of (a) a linguistically encoded logical form of the utterance, or of (b) a sentential subpart of a logical form. (2002: 124)

An interesting consequence of this refinement of the notion of explicature is that, while certain communicated entailments of the basic explicature are themselves explicatures, it seems that others are not. Carston discusses cases, like the following, where, she claims, an entailment is an implicature rather than an explicature:

(8) [A asks B whether she has invited any men to the meeting and B utters:] I've invited my brother, Simon.

 Explicature: B ʜᴀs ɪɴᴠɪᴛᴇᴅ B's ʙʀᴏᴛʜᴇʀ Sɪᴍᴏɴ ᴛᴏ ᴛʜᴇ ᴍᴇᴇᴛɪɴɢ

 Implicature: B ʜᴀs ɪɴᴠɪᴛᴇᴅ ᴀᴛ ʟᴇᴀsᴛ ᴏɴᴇ ᴍᴀɴ ᴛᴏ ᴛʜᴇ ᴍᴇᴇᴛɪɴɢ

The second communicated assumption here does not meet the definition of explicature: it is not a development of any logical form (or sentential subpart) encoded by the linguistic form that B has used, so it must be an implicature. As Carston (2002: 140–1) points out, this analysis is based on a particular view of word meaning: that monomorphemic words encode atomic concepts, so 'brother' maps onto the unstructured concept ʙʀᴏᴛʜᴇʀ, and the move from

BROTHER to MAN is mediated by an inference rule (or meaning postulate). Lexical decompositionalists may object and insist that since 'brother' is decomposable (definable, in fact) this proposition is really part of the explicit content. However, as well as defending the atomic stance on lexical meaning, Carston maintains that there is a clear intuitive difference between the communicated entailments in (6) and those in (8): the former are communicated directly and are perceptually available in the sentence uttered in (5b), while in (8) there is a degree of indirectness in B's answer to A's question (she could have responded more directly by uttering 'Yes' or 'I've invited one man'), which is typical of implicated propositions. Furthermore, while the explicated entailments by (5) and (7) cannot but be communicated (given communication of the complex proposition of which they are a part), whether an entailment such as the one in (8) is communicated is an occasion-specific matter (in (8) it follows from the presumption that the relevance of B's utterance turns on its being a response to A's question). These ideas about the way in which the explicature/implicature distinction cross-cuts the class of entailments have been little remarked on and remain to be further developed.[3]

In the next section, we focus on loose use (including certain kinds of figurative use, such as hyperbole and metaphor) and its effect on the explicature/implicature interplay. This is an area of language use where Carston's work has played a major role in a revision to part of the relevance-theoretic framework.

2.   Relevance theory and loose use

Consider an utterance of the following sentence:

(9)   It's freezing.

This could be meant and understood literally (suppose the location involved is a refrigerated storehouse in which meat is kept), approximately (suppose the 'it' refers to very cold water which may not, however, be at freezing point), hyperbolically (said of a room which is much cooler than the speaker expected, although far from actually freezing, in order to communicate the urgent requirement of some heating), or metaphorically (for instance, given as a response to a query about the current state of a deteriorating relationship between two people). According to Sperber and Wilson (1986a/95: 231–7, 1986b), the last three possibilities are all cases of loose use, which they characterise

in the following way: a speaker produces an utterance whose propositional form is in a relation of non-identical resemblance with the propositional form of a thought (or thoughts) that she wants to communicate, where interpretive resemblance between propositional forms is a matter of sharing logical and contextual implications. So, for instance, in the case of an approximating use of (9), the speaker's thought might share with the proposition expressed by the utterance such implications as that the water is very cold, is painful to the touch, cannot be used for bathing or washing, and so on. However, her thought does not entail that the temperature of the water is 0°C/32°F (or lower), or that it has solidified into ice, both of which are implications of the proposition expressed by the utterance. A similar account can be given of the hyperbolic and metaphorical cases, for which the set of shared implications (and hence the interpretive resemblance) will be somewhat different and will not include all of the implications of the approximating use.

The formative idea here is that quite often a speaker should not and does not produce an utterance whose propositional form is identical to that of a thought she intends to communicate (that is, has exactly the same set of logical and contextual implications) because it is not optimally relevant to do so. Rather, the communicative situation is such that the hearer will be able to recover the intended cognitive implications more economically (with less processing cost) from an utterance which is a non-literal interpretation of the speaker's thought than from one that is a literal interpretation. In the approximation case, it might be that a fully literal utterance would be somewhat circumlocutionary ('not far off freezing', 'if not actually freezing, close to it') and require unnecessary decoding and inferential work on the part of the hearer. In the metaphorical case, there might simply be no word or phrase whose literal encoded meaning would capture the state of tension, strain, and disconnection the speaker wants to communicate about the relationship under discussion, and so a non-literal use of 'freezing' is the best vehicle for the job. The hearer computes implications in order of their accessibility, which in turn depends on the accessibility of contextual (encyclopaedic) assumptions, until the presumption of optimal relevance is satisfied. Unintended implications are either never processed (because insufficiently accessible) or, if accessed, discarded as patently not speaker-meant. This view, then, is consonant with Sperber and Wilson's fundamental claim that utterance interpretation is constrained by a general presumption of optimal relevance and not by any maxim or presumption of literal truthfulness.

This account was one of the first to tackle the pragmatics of loose use as a general phenomenon, and it offered a completely new approach to certain figurative uses, in particular metaphor. Metaphorical use is claimed to be on a continuum with other cases of loose use, and thus its comprehension requires no special interpretive abilities or procedures but exploits the same relevance-oriented pragmatic capacity for recognising intended implications as is employed in the understanding of both literal uses and other cases of loose use.[4]

Nevertheless, the account remained, in one key respect, quite Gricean in its outlook. Recall that, in Grice's treatment of figurative uses and of floutings of his first maxim of truthfulness more generally, the speaker does not 'say' anything but merely 'makes as if to say' the proposition her utterance expresses. Within relevance theory, the proposition expressed by an utterance differs from Grice's notion of what is said in being considerably more pragmatically enriched, but, on this early account of loose uses and metaphor, it shared with the Gricean notion the significant property of not being communicated (not being speaker-meant). That is, it was not an explicature. The only explicature of such utterances was the one concerning the speaker's speech act: she has said that the room/water/relationship is freezing. All the communicated or speaker-meant content of the utterance is taken to be (conversationally) implicated, with the explicitly expressed proposition functioning merely as a vehicle on the basis of which the hearer can infer the intended implications.

As Carston (1996, 2002) pointed out, this makes for an asymmetry in the account, since cases of strengthening or enriching the linguistically encoded meaning are taken to contribute to explicit content while cases of relaxing or broadening it are not. She found this asymmetry questionable, since the two kinds of interpretive effects appear simply to reflect the two directions in which a lexically encoded concept may be pragmatically adjusted, and hence to be, in a sense, the same process. Furthermore, it is difficult to see why a hearer would undertake processes of pragmatic enrichment in order to derive a proposition that he does not take to be part of the speaker's communicated content. But, of course, if we were to abandon that aspect of the account and assume that enrichments, like loosenings, emerge only at the level of implicature, we would be returning to a view of explicit utterance content as minimally propositional, semantically oriented, and often not communicated/meant: that is, the very view that relevance theory had rejected.

These concerns led Carston to consider whether loosened content should not also be construed as contributing to explicature. She

argues (1996, 2002) that both enrichment and broadening depart from strict literality, albeit in opposite directions, and that it is fully in keeping with the pragmatic (rather than semantic) nature of explicature that both kinds of effect should be understood as making constitutive contributions to it, although both, of course, mark departures from sentence semantics. Looked at in this way, narrowing and broadening (and combinations of the two) are simply different outcomes of a single pragmatic process of meaning modulation or lexical concept adjustment. This coheres well with the relevance-theoretic view of the explicature/implicature distinction according to which implicatures are derived by a global inferential process whereas explicatures are derived by local inferential developments of subcomponents of the logical form (decoded linguistic content). Loose use is typically a local affair, just as much as enrichment is. Furthermore, this move makes it possible to dispense with the unsatisfactory situation of having two levels of uncommunicated meaning: the linguistically encoded logical form and the proposition expressed. On Carston's account, there is a single representational entity which functions as the vehicle by means of which, together with contextual assumptions, intended content is communicated: that is, linguistically encoded meaning.

   Let us compare narrowing and loosening by looking at examples (10) and (11), focusing on the use of the word 'bachelor' in each case:

(10) [Ann wants to settle down and have children but all the men she has met recently are already married. Against this background, Ann utters:] I want to meet some bachelors.

(11) [Jane is Ken's wife of many years. In this background, Jane utters:] Ken is a bachelor and he always will be.

In the case of (10), it is mutually manifest to speaker and hearer that Ann doesn't want to meet just anyone who falls in the category of unmarried men (which includes celibate priests, homosexual men, and so on); rather, she wants to meet unmarried men who are eligible for and inclined towards marriage. So the explicature she communicates here does not contain the lexically encoded concept BACHELOR but a narrower *ad hoc* (pragmatically inferred) concept BACHELOR*, whose denotation is a subset of the denotation of the lexical concept.[5] In the case of (11), it is mutually manifest to speaker and hearer that Ken is technically married and that what concerns his wife is his behaviour and attitudes, so, again, what is communicated is not the encoded concept BACHELOR but an *ad hoc* concept BACHELOR**, whose denotation is

broader than that of the lexical concept in that it includes some married men, those who behave in a way that is associated with stereotypical bachelors (not taking on family responsibilities, uncommitted to their partner, and so on).

So we have here two uses of the word 'bachelor' where the concept it contributes to the explicitly communicated content is distinct from the concept it lexically encodes, although the encoded concept and its associated logical and encyclopaedic entries provide the essential basis for the relevance-driven process of concept modulation.[6] In the second case, a logical or definitional property of the concept BACHELOR has been dropped (NOT MARRIED), and this is typical of cases of loose use. While that would be unacceptable if we were dealing with natural language semantics, it is entirely at one with the nature of communicated/meant utterance content and, in fact, is inevitable once the machinery of pragmatic modulation and *ad hoc* concepts is taken on board. Carston points out that the concept communicated by the use of 'bachelor' in (11) most likely involves not only a loose use (a broadening of the set of entities denoted) but also a narrowing, since the denotation of the concept that Jane appears to have in mind would not include bachelors who do not exhibit the irresponsible, uncommitted behaviour and attitudes of a certain kind of stereotypical bachelor. This gives additional support to the position that loosening contributes to explicit content, since there is no principled reason to suppose that while the narrowed aspect of the concept BACHELOR figures at this level, the simultaneously achieved widening is registered only at the level of implicature.

Since metaphorical use is viewed within RT as being on a continuum with other cases of loose use (although more extreme in its broadening and usually also involving some narrowing), it follows from the symmetric account that metaphorical content must also contribute to explicature. Controversial though this has seemed to many, Carston argues that there is, in fact, evidence to support it, including the standardly local nature of metaphorical meaning (frequently it is just one constituent of the sentence uttered that is used metaphorically, and often just a single word) and strong intuitions that metaphorical content embeds in the scope of logical operators such as conditionals and negation (Carston 2002: 349–59). If we look back now to example (9) and the possible loose uses of 'freezing', the idea is that whether we end up with what pre-theoretic intuitions categorise as an approximation, a hyperbole, or a metaphor is simply a matter of the relevant implications on the particular occasion of use. In the process of on-line

comprehension, the encoded concept FREEZING is adjusted so that the explicature of the utterance (together with contextual assumptions) properly warrants those relevant implications, with the result that an *ad hoc* concept (FREEZING*, FREEZING**, or FREEZING***) is one of the constituents of explicit utterance content. Carston's proposal may seem a radical departure from long-standing assumptions in the pragmatics literature that consider loosening and, in particular, metaphor to communicate only conversational implicatures, but, according to her, it is the inevitable final move in developing a consistent notion of explicitly communicated content.

She points out a welcome consequence of the revised picture. Recall that, according to the earlier approach, the property of non-literalness was taken to reside in the relation between the thought(s) the speaker wanted to communicate and the proposition expressed by her utterance. This was the cause of some confusion among readers at the time since it is clearly specific linguistic expressions that are being used loosely (non-literally), for example 'freezing' and 'bachelor' in the examples above. The *ad hoc* concept account re-establishes this intuitive locus of non-literality: a speaker uses a word or phrase to communicate a concept that is different from the one encoded by that expression. It is *language* use that is literal or loose. This leaves the essence of the important Sperber/Wilson notion of interpretive resemblance untouched since, quite generally, propositional forms can resemble each other to a greater or lesser degree depending on the extent of overlap of their logical and contextual implications; this point has many applications in pragmatics, including in an account of indirect reports and other cases of attributing thoughts and utterances to others. For further discussion of the consequences of the move to a symmetric treatment of enrichment and loose use in terms of *ad hoc* concepts that contribute to explicature, see Carston (2002: 337–49).[7] These ideas have now been adopted into the mainstream of relevance theory and have motivated recent work aimed at developing a unitary account of how word meanings are adjusted in context (Carston 2005, 2007; Wilson and Carston 2007).

While supporting the loose use view of metaphor, Carston was critical of one further aspect of the existing RT account, a point which applied equally to the earlier 'no explicature' account and to the revised account in terms of explicitly communicated *ad hoc* concepts. In her view, the description of the process of deriving metaphorical meaning via a relevance-driven search through logical and encyclopaedic

entries did not give a sufficiently explanatory account of how that meaning was recovered for a range of standard cases of metaphor, in particular those that seem to involve a domain switch (from the physical to the psychological, from animals/machines to humans, and so on). The worry focused on what are known as 'emergent properties', that is, properties that are attributed to the metaphor's target but do not seem to have come from the metaphor vehicle. Consider, for example, the understanding of 'freeze over' and 'butcher' in the following two examples:

(12)   a. Their relationship froze over long ago.
       b. The eminent professor butchered his rival's theory.

We may understand (12a) as communicating that the relationship in question has for a long time been lacking in any sign of strong feeling or intimate contact between the two people and is devoid of empathy, reciprocity, and so on, and from (12b) we may take it that the professor was able, with a few incisive remarks, to show his rival's theory to be incoherent, poorly constructed, and so on. Both are, of course, open to somewhat different interpretations, depending on details of the wider context in which they occur. The point, though, is that the properties a hearer understands as intended by the speaker do not seem to be available either from the linguistic meaning of 'freeze over' or 'butcher' or from the encyclopaedic information associated with the concepts they lexically encode: FREEZE OVER and BUTCHER. These concern, respectively, a physical change that occurs when water is at a particular temperature and an action of killing an animal and/or cutting up its flesh for meat. No doubt, the information about these events stored in encyclopaedic entries is quite detailed and complex, but it does not include properties pertaining to human feelings/relationships or to arguing against and defeating ideas/theories. So Carston's question was: where do these properties, which are understood to be predicated of the relationship in (12a) and of the professor in (12b), come from?[8]

   This concern has led to further work both within RT and beyond. While some metaphor theorists think a fully adequate account must employ special (metaphor-specific) processes or mechanisms such as domain-mapping (Black 1954; Indurkhya 1986; Romero and Soria 2005, 2007), relevance theorists have continued to work towards an account given wholly in terms of standard relevance-driven pragmatic inference operating on properly rich encyclopaedic information, which can include components of imagistic and phenomenal representation

embedded in propositional content (see, for instance, Wilson and Carston 2006).

Finally, whether all cases of metaphorical use, including extended and/or highly creative/poetic instances, can be adequately treated in terms of loose use and *ad hoc* concepts remains an open issue (for discussion, see Carston 2002: 358–9).

3 Survey of the contributions to this volume

The chapters of this book are organised into three groups. The first set focuses on the notion of logical form in Carston's work, both its (alleged) non-propositionality and the nature of the lexically encoded meanings that make up its basic constituents (Chapters 2–6). The second group examines the central construct in her relevance-theoretic account of explicit communication, *explicature*, and compares it with other notions of primary (non-implicated) speaker meaning (Chapters 7–9). The third group tackles issues concerning the internal structure of explicature and the phenomena and processes claimed to contribute to it (Chapters 10–13).

In his chapter, 'Pragmatics and Logical Form', François Recanati looks at several different ways in which the notion of logical form has been conceived and their implications for the claim that there are 'free' pragmatic processes, that is, processes that contribute contextual meaning without any linguistic mandate. To make room for these processes, he argues, we need to distinguish the logical form of an utterance (lf), in the standard sense, and its *modified* logical form (lf*), affected by free pragmatic processes. This distinction can be interpreted in three different ways. In the first possible explanation, favoured by Gennaro Chierchia, lf is conceived as a conceptual representation in the language of thought strictly determined by the grammar, and when it is shaped by extra-linguistic factors we get lf*. But they are both complete propositions, that is, semantic objects. In the second, the relevance-theoretic view, lf is an incomplete conceptual representation resulting from linguistic decoding and lf* is a representation that results from the development of lf and is thus a syntactic object and not a semantic one. This view, Recanati says, is syntactic in the sense that lf* is a representation – a sentence in the language of thought. In the third, there are not two systems: the linguistic and the mental. The lf* is simply the bare logical form of another sentence, and both are within the same system, where thought is nothing but inner speech. Then, we can account for lf* without appealing to

a second system in addition to the language system. On one manifestation of this construal, which allows optional covert elements in logical form, there appear to be no free pragmatic processes since any pragmatically supplied content cannot but be linguistically mandated. However, Recanati concludes that what this really amounts to is simply another syntactic construal of free pragmatic enrichment.

Agustín Vicente and Fernando Martínez-Manrique argue, in their chapter, 'On Relevance Theory's Atomistic Commitments', that Carston's strong commitment to the linguistic underdeterminacy thesis is undermined by her support for an atomistic view of lexical concepts. They point out that a consequence of linguistic underdeterminacy is 'rampant polysemy' and that an atomistic lexical semantics faces considerable difficulty in accounting for polysemy. They suspect that Carston is aware of this issue and that this leads her to oscillate between the standard RT espousal of lexical atomism and a less orthodox position on which lexical meanings are concept schemas or pointers to conceptual addresses. However, Vicente and Martínez-Manrique argue that a better approach is to treat word meanings as decompositional. For them, words express variable complexes of concepts made out of a finite list of typically abstract primitives.

Begoña Vicente Cruz also supports a decompositional view of word meaning, but the main thrust of her chapter, 'The Role of Pragmatic Inferencing in Compositional Semantics', is to argue that the relevance theorists, including Carston, need to abandon the implicit assumption that all of the compositional structure supplied by the language system comes from syntax. She puts the case for a language-internal semantic component with combinatorial power that is syntax-independent, supporting her view with evidence from the resolution of anaphoric dependencies, lexical presupposition, ellipsis, and lexical coercion. An important consequence of this is that the language system supplies a much richer input to the inferential pragmatic system than is generally assumed in relevance theory. In particular, many, if not all, of the alleged instances of 'free' pragmatic enrichment can in fact be reanalysed as either linguistic semantic procedures or pragmatic processes responding to linguistic requirements.

In his chapter, 'Linguistic Meaning and Propositional Content', Manuel García-Carpintero agrees with Carston and other relevance theorists that logical forms are standardly non-propositional. However, he points out that they, nonetheless, determine (minimal) propositions and that these have logico-semantic properties (entailment, contradiction, and so on) that are part of native speakers' knowledge of their

language (their linguistic competence). Thus, although these 'character'-associated propositional forms may not play a role in the psychological processes of utterance comprehension, they are nonetheless psychologically real and must be accorded a place in a complete account of human linguistic abilities.

Barry Smith brings a different perspective to the linguistic under-determinacy thesis. In his chapter, 'Meaning, Context, and How Language can Surprise Us', he claims that there are instances where, contrary to appearances, there is no disparity between what the speaker says and what her words mean. The supporting data he calls on are cases involving two speakers who disagree about the truth of a statement made by an utterance using a predicate of taste, for example 'This wine is perfectly balanced'. Possible explanations are that one of them is wrong (at fault) or that they are not having a genuine dispute since they are predicating different properties of the wine. Smith rejects both of these solutions, maintaining that neither of the speakers is at fault and they are both saying the same thing of the wine. Rather, he claims, this is a situation in which the two speakers are selectively attending to just one of the various ways in which the truth conditions of the sentence (what it says) can be met, so the disparity lies with a difference between what the speakers think they are asserting and what they are actually asserting (that is, the truth-conditional content of the sentence).

We move now to the chapters that focus on explicature and its relation to other notions of explicitness or primary speaker meaning. In his chapter, 'Explicature, What Is Said and Gricean Factorisation Criteria', José E. Chaves compares explicature with the Gricean notion of what is said. He identifies and specifies the criteria that Grice employed in making his saying/implicating distinction and points out the ways in which they differ from the commitments motivating the explicature/implicature distinction in relevance theory. He concludes that, given these differences, there is no incompatibility between the philosophical notion of saying and the cognitively oriented concept of explicature, and the two can usefully coexist in an overall account of semantics and communication.

In his chapter, 'Impliciture *vs* Explicature: What's the Difference?', Kent Bach compares Carston's notion of explicature with his own notion of impliciture. He concedes that they are very similar (and not only from an extensional point of view): the central properties of both notions are that they are speaker-meant (communicatively intended) and that they are built on the encoded linguistic content but go well

beyond it (via an array of pragmatic processes). However, he argues that some deeper differences emerge when the two notions are situated in their respective theoretical frameworks (relevance-theoretic versus Gricean) with their somewhat different conceptions of what is involved in linguistic communication.

Noel Burton-Roberts discusses in some detail the criterion of cancellability, originally put forward by Grice as a characteristic of conversational implicatures. In his chapter, 'Cancellation and Intention', he takes issue with Carston's claim that some elements of explicatures (those that are pragmatically inferred) are cancellable. He finds the possibility of cancelling explicatures logically questionable and presents some specific data to illustrate that it is, in fact, empirically incorrect. He goes on to raise some questions about the very idea of cancelling communicatively intended content, whether explicatures or implicatures, and concludes that the only possibly cancellable components of communicated meaning are generalised conversational implicatures.

The final set of chapters home in on the way in which pragmatic processes, in particular *ad hoc* concept construction, are claimed to contribute to explicature. In 'Metaphor Comprehension: Some Questions for Current Accounts in Relevance Theory', Adrian Pilkington criticises some aspects of the relevance-theoretic account of metaphorical use in terms of *ad hoc* concepts constructed through a process of parallel mutual adjustment of explicature and implicature. In his view, this kind of account cannot capture the 'emergent properties' typical of metaphor, in particular its apparently non-propositional sensory and affective effects. He explores some ideas for complementing the propositional account with analogue representations, including mental imagery and phenomenal concepts, concluding that it may simply not be possible to provide a fully explanatory naturalistic account of all aspects of verbal communication.

In his chapter, '*Ad Hoc* Concepts and Metaphor', Manuel Hernández Iglesias also discusses Carston's view that metaphorical meaning is a case of lexical pragmatic adjustment (crucially involving broadening) and results in an *ad hoc* concept that contributes to explicit content. He argues that this kind of account faces two related difficulties: (i) it entails a too-radical difference between corresponding similes and metaphors, and (ii) while it may provide a good explanation for conventional metaphors, it seems less well suited to capturing the effects of creative metaphors. He concludes by pointing out a sense in which

Carston's account is surprisingly close to a stance of scepticism about metaphorical meanings.

The general aim of our chapter, 'Phrasal Pragmatics in Robyn Carston's Programme', is to explore a subfield of pragmatics that we call 'phrasal pragmatics'. We claim that sometimes complex concepts (typically expressed by phrases) must be pragmatically derived in order to determine their contribution to truth-conditional content (explicature) and that this task cannot be achieved by means of Carston's lexical pragmatics, in which only the pragmatics of atomic concepts is considered. We look at cases of complex (hence compositional) concept adjustment (for example, for some metaphorically used definite descriptions), as well as at cases where the recovery of unarticulated constituents occurs at the phrasal level (for example, in the interpretation of incomplete definite descriptions and referential metonymies). Phrasal pragmatics can account for some pragmatic effects on explicatures that lexical pragmatics cannot elucidate: a clear case is metonymy.

The chapter 'Uttering Sentences Made Up of Words and Gestures', by Philippe De Brabanter, looks at the rich variety of non-linguistic resources speakers exploit in their face-to-face acts of verbal communication, including facial, vocal, and other bodily gestures. These can make a crucial contribution to the utterance's truth-conditional content (explicature), and there are interesting questions about the way in which such constituents of an explicature are mentally represented (conceptually or perceptually). However, De Brabanter's main concern is to argue that sometimes some of these non-verbal elements of an utterance actually play a linguistic role. That is possible because language use is highly structured and, if a given utterance displays enough linguistic structure, a non-linguistic 'demonstration' can be incorporated as part of that structure in much the same way as cases of quotation can be. He points out that, while the relevance-theoretic stance on explicature as a linguistic–pragmatic hybrid can account for this, the relevance-theoretic view of these cases as multi-modal utterances would not allow attribution of a linguistic role to non-verbal stimuli and that this all-out non-linguistic approach has at least the undesirable consequence that it has nothing to say about the essential connection between non-verbal demonstration and quotation.

In the final chapter of the volume, 'Explicit Communication and "Free" Pragmatic Enrichment', Robyn Carston presents a sustained case in support of the primary role of pragmatic inference (by no means always linguistically triggered) in the determination of explicitly

communicated content. In the process, she responds to many of the comments and criticisms on her work presented in the preceding chapters, focusing in particular on alternative accounts of apparently linguistically unarticulated constituents of explicit content and on issues concerning the pragmatic adjustment of linguistically encoded concepts. She argues that, as far as the on-line processes of utterance interpretation are concerned, a wholly pragmatic account of certain contributions to explicature is preferable to one that posits optional covert linguistic elements. Although she continues to advance the idea of *ad hoc* concept construction as contributing to explicature, she points out that there are some important questions yet to be tackled, concerning both the nature of these concepts and the extent to which this sort of construct is fully satisfactory in explaining the effects of the metaphorical use of language. Finally, she suggests that, although the relevance-theoretic approach to verbal communication is broadly at one with contextualist approaches to semantics in the philosophy of language, there are some important differences of emphasis and orientation that need to be recognised.

Notes

1. This underdeterminacy is at the core of Carston's work, and it is in the search for solutions to the problems it raises that her main contribution arises. There are two other linguistic underdeterminacy theses, which are much less controversial (Carston 2002: 19): (i) linguistic meaning underdetermines what is meant, and (ii) what is said (explicit utterance content) underdetermines what is meant. In this introduction, we will use the term 'underdeterminacy' in the more restricted sense of linguistic or semantic underdeterminacy of what is said (or explicature). This is the way in which Carston (2002) uses it.

2. We follow the notational convention established in the relevance-theoretic literature of representing thoughts/propositions (and conceptual representations generally) in small capital letters, while the linguistic expressions uttered are in lower case.

3. This proposal, nevertheless, would involve a radical change in the Gricean notion of implicature. According to Grice (1961: 127, 130 and 131), the notion of implicature has the property of 'the possibility of falsity': the utterance that communicates the implicature might be true even if the implicature

were false. If some implicatures were entailments, this essential feature of implicatures would drop out.

4. A further important and novel aspect of Sperber and Wilson's account was the idea that intended implications (implicatures) can be communicated more or less strongly and that the evocative or poetic impact of certain metaphors (and other figurative uses) can be explained in terms of their having a wide range of weak implicatures rather than a few strong ones (see Sperber and Wilson 1986a/95: 221–2, 235–7).

5. The notion of an *ad hoc* concept or category comes from Barsalou (1983) and has been adopted into the more recent account of explicature in relevance theory. The pragmatic tasks discussed in early RT as involved in deriving the proposition expressed were disambiguation, saturation, and enrichment (or specification of content), while the revised version recognises the additional task of pragmatically constructing *ad hoc* concepts as part of explicature derivation (see Carston 2002; Wilson and Sperber 2004; Wilson and Carston 2006). We follow the recently established RT convention of using asterisks to indicate that a concept is *ad hoc* (pragmatically inferred) rather than simply lexically decoded.

6. In RT, concepts are psychological objects and each consists of a label or address. The mentally stored information that is directly accessible to/from a particular conceptual address falls into three distinct types: logical, encyclopaedic, and lexical. While the encyclopaedic entry consists of all of an individual's stored knowledge about and experience of the property or entities that fall within the extension of the concept, the logical entry consists of a set of deductive rules (or meaning postulates) which apply to logical forms of which that concept is a constituent. For more detail, see Sperber and Wilson (1986a/95: chapter 2).

7. Many of the examples of loose use discussed in the early relevance-theoretic literature involved numbers, times, distances, and locations (for example, 'I earn 1000 euros a month', 'The meeting ended at 2 p.m.', 'She lives in Oxford'), where all the intended implications follow from the strictly false proposition expressed which requires less processing effort than the strictly true one would have done (for example, 'I earn 1017 euros', 'It ended at 1.57 p.m.', 'She lives in a village very close to Oxford'). It has not yet been made clear whether, on the more recent symmetrified account of narrowing and broadening, these cases are taken to succumb to the mechanism of *ad hoc* concept formation (1000* euros, OXFORD*) or are better understood as involving an unarticulated constituent such as 'approximately' or 'in the close vicinity of', and so on.

8. The relevance-theoretic proposal that metaphor involves a process of loosening is and has always been for us a part of the metaphorical mechanism. It is the starting point to account for the kind of transfer needed in metaphor interpretation. Nevertheless, in order to solve the 'emergent property' issue, metaphor has to be seen as a means to create emergent properties in a way that non-metaphorical utterances do not. Metaphor cannot be explained merely through loosening (see, for more details, Romero and Soria 2007; Recanati 2007).

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2
Pragmatics and Logical Form

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1 Truth-conditional pragmatics

Robyn Carston and I, along with many others, share a general methodological position which I call 'Truth-Conditional Pragmatics' (TCP). TCP is the view that the effects of context on truth-conditional content need not be traceable to the linguistic material in the uttered sentence. Some effects of context on truth-conditional content come from the linguistic material (for example, from context-sensitive words or morphemes which trigger the search for contextual values), but others result from 'top-down' pragmatic processes that take place not because the linguistic material demands it, but because the utterance's content is not faithfully or wholly encoded in the sentence spoken, the meaning of which requires adjustment or elaboration in order to determine an admissible content for the utterance.

The extra step required to get from conventional meaning to admissible content is usually treated as external to truth-conditional content proper, because the latter is supposed to be unaffected by pragmatic considerations *unless* these are forced upon the interpreter by the linguistic material itself. Now we can perhaps characterise a notion of literal content such that it is, *by definition*, independent of pragmatic considerations (unless these are imposed by the linguistic material itself), but when it comes to the *intuitive* truth conditions of an utterance, TCP holds that they result, in part, from pragmatic processes that are not triggered by the linguistic material. Assuming that semantics is to account for the intuitive truth conditions of utterances, it must make room for 'free' (pragmatically controlled) pragmatic processes, just as it does for linguistically controlled pragmatic processes in order to secure contextual values for the context-sensitive elements in the sentence.

Free pragmatic processes take as input the meaning which is the semantic interpretation of some expression and yield as output the modulated meaning that will undergo semantic composition with the meanings of the other expressions in the sentence. In other words, the composition rules determine the value of a complex expression on the basis of the *pragmatically modulated* values of the parts, according to formula (F):

(F) $I\,(a{\char`\^}b) = f(g_1(I(a)), g_2(I(b)))$

In this formula '*I*' stands for the interpretation function, 'a^b' represents a complex expression formed from the parts 'a' and 'b', and the '*g*'s are free higher-order variables ranging over available pragmatic functions (including identity, which gives us the 'literal' case).[1] The formula says that the semantic value of a complex phrase, 'a^b', is a function of the pragmatic values of the parts, where the 'pragmatic values' in question are what we get when we subject the literal semantic values of the parts to pragmatic modulation. The latter covers optional processes such as free enrichment, loosening, metonymic transfer, and so on: processes which (arguably) affect the intuitive truth conditions but which take place for pragmatic reasons, without being triggered by the linguistic material in an obligatory manner.[2]

One way of understanding the formula is to say that *semantic composition itself is a context-dependent process*: in the course of deriving the semantic value of a complex expression, one optionally modulates the semantic values of the parts, and it is the context which determines which pragmatic function, if any, comes into play and yields the modulated value that undergoes semantic composition. This corresponds to the view which, in my book *Literal Meaning*, I called 'Pragmatic Composition' (Recanati 2004: 138–40).[3] Another, even more radical way of understanding the formula corresponds to a view put forward by Gennaro Chierchia (2004) in connection with scalar implicatures. In Chierchia's picture, the interpretation 'function' is no longer a function but a relation. Adapting his idea, we could say that each expression denotes a set of admissible values: the same linguistic form receives an indefinite number of distinct, alternative denotations, depending on which optional pragmatic processes (which '*g*'s distinct from identity) come into play. Thus 'tiger', in the right context, comes to mean 'representation of tiger', 'straight' comes to mean 'approximating straightness', and so on. Those modulated meanings are the building blocks out of which the meaning of complex phrases like 'stone lion' or 'pretty

straight' are built. A stone lion is not a (real) lion, and something that is pretty straight is not (really) straight. This suggests that in those phrases, the words 'lion' and 'straight' get a modulated value, distinct from their standard semantic value.

Whichever construal we favour, it is important to realise that the variables over pragmatic functions that occur in formula (F) are there only in the theorist's metalanguage. They are not supposed to be present at any level of syntactic structure in the object-language. This is, indeed, what defines free pragmatic processes: they are not triggered by a variable in the syntax, or anything of the sort, but take place for purely pragmatic reasons – in order to adjust the conventional meaning of the words to the situation at hand. Even though they have an impact on truth-conditional content, they are a matter of *use*, not a matter of conventional meaning.

The claim which TCP makes regarding the role of free pragmatic processes in the determination of intuitive truth-conditional content is an empirical conjecture about natural language. Other philosophers of language (Stanley 2000; Szabó 2000; King and Stanley 2005) have made the opposite conjecture, more in line with traditional ways of thinking about meaning and truth conditions. Since it gives up those traditional assumptions, TCP sounds revolutionary, and there are theorists (for example, Predelli 2005) who are suspicious of it because they take it to threaten the very enterprise of semantics. This seems to me grossly exaggerated. TCP may complicate the task of semantics, but certainly does not make it impossible. Be that as it may, I will assume TCP in what follows, and will be concerned only with issues concerning its proper interpretation. What exactly does TCP say? How are we to understand free pragmatic processes? One particular answer, favoured by Carston, is that which has been provided by Dan Sperber and Deirdre Wilson (1986) and constitutes a central tenet of RT. In this chapter, I will not directly argue for or against that answer; rather, I will place it among other possible answers so as to structure the theoretical space and make further discussion possible.

2   Free pragmatic processes: two interpretations

Although variables for pragmatic functions are confined to the metalanguage and are not syntactically projected, still there are two possible ways of looking at the role played by free pragmatic processes. One construal is 'syntactic' and the other is 'semantic' (Recanati 2002: 339–42; Stanley 2005: 237). Relevance theorists opt for the syntactic construal,

but it will be convenient to start with the other, semantic, construal, which I have taken for granted so far in my presentation of TCP.

A representation is a syntactic object – a sequence of symbols in some representational system (possibly the 'language of thought' if the representation at issue is a mental one). On the semantic construal, corresponding to formula (F) above, the output of free pragmatic processes is not a representation but a 'proposition', that is, a semantic object. If the word 'proposition' sounds too representational, we can simply talk of the utterance's (intuitive) *truth conditions* as being the output of semantico-pragmatic processing along the lines of formula (F). However we phrase it, the output in question is the (intuitive) interpretation of the utterance, and it depends upon two things in addition to the semantic rules of the language: the *logical form* of the sentence serves as input to the interpretation process, while the *pragmatic context* determines both the semantic values of context-sensitive expressions in logical form and the pragmatic functions which optionally come into play in deriving the semantic value of the whole from the (possibly modulated) semantic values of the parts.

In contemporary generative linguistics, the logical form of a sentence, or LF, is standardly construed as a level of syntactic representation that is the proper input to semantic interpretation. At that level, important logical properties of the sentence such as the relative scope of quantifiers and anaphoric dependencies are formally displayed in such a way that that level of syntactic representation can be systematically mapped to logical formulae which capture the inferential potential of the sentence (hence the name 'logical form' for that level of syntactic representation). The coexistence of syntactic structures of a certain sort and the logical representations associated with them under the heading 'logical form' creates a potential ambiguity, which Gennaro Chierchia and Sally McConnell-Ginet (1990) propose to avoid by distinguishing the logical form qua syntactic structure (LF) from the logical formula to which it maps (*lf*).

Now the proposition which is the output of semantico-pragmatic processing itself determines a 'logical form' for the utterance, that is, a certain inferential profile: what the utterance entails and what it is entailed by, by virtue of the proposition it expresses. That 'logical form', too, can be represented as a formula in a logical calculus – possibly the same calculus as that from which *lf*s are drawn. To bring out the analogy, I will use '*lf**' as an abbreviation for the modified logical form that results from semantico-pragmatic processing and corresponds to the utterance's intuitive truth conditions (as opposed to its minimal or

literal truth conditions, that is, what we get if we submit LF to semantic interpretation without any recourse to free pragmatic processes).

On the semantic construal, the modified logical form *lf** is only a perspicuous representation, in a well-behaved logical language, of the utterance's intuitive truth conditions, which result from interpreting the utterance's LF in accordance with formula (F). I call this construal 'semantic' rather than 'syntactic' because free pragmatic processes come into play purely as a matter of interpretation. They do not give rise to a further level of representation in addition to the syntactic representations (LFs) which serve as input to the interpretation process. In particular, *lf**s are not 'semantic representations' in the object-language. In the tradition of referential semantics (as opposed to translational semantics), interpretation proceeds by mapping representations (for example LFs) to worldly entities or complexes of these, not by mapping them to further representations.

I now turn to the 'syntactic' interpretation, favoured by relevance theorists and most researchers in pragmatics. The starting point is the same: there is a level of syntactic representation – LF – that incorporates 'whatever features of sentences structure (1) enter directly into the semantic interpretation of sentences, and (2) are strictly determined by properties of sentence grammar' (Chomsky 1976: 305). What distinguishes the syntactic from the semantic construal is the following claim, also made by Noam Chomsky: Representations at LF are mapped to *more elaborate representations* 'which may involve belief, expectations and so on in addition to properties of LF determined by grammatical rule' (Chomsky 1976: 305). These additional representations are the modified logical forms (*lf**s) on the syntactic construal. Thus relevance theorists take pragmatic processing to operate on representations, *and to output further representations*. The representation operated on is the utterance's 'logical form', as delivered by the linguistic module. The representation which results from pragmatic processing is the modified logical form (*lf**), syntactically construed. Sperber and Wilson call it the utterance's 'propositional form'.

Is the syntactic construal consistent with referential semantics or does it necessarily go together with a translational approach to semantics? This is an interesting and tricky issue. Carston suggests that relevance theory is inconsistent with truth-conditional semantics but thinks this is acceptable since:

> [w]ork in other frameworks [...] shows that giving an account
> of natural-language semantics in terms of [...] [conceptual]

representations is very much a live option (see Katz 1972; Jackendoff 1983, 1990). (2002: 89–90)

Like Sperber and Wilson, she opts for a translational approach, in which semantics maps syntactic representations to conceptual representations (which can then be modified or 'developed' through pragmatic processing). I will discuss the relevance-theoretic view in some detail below (in Section 3), but for now I want to defend the following claim: that the syntactic construal of TCP, by itself, is *not* inconsistent with the project of giving a truth-theoretic (= referential) semantics for natural language.

Following the majority view in semantics, let us assume that semantic interpretation is referential rather than translational: it maps representations to *what they represent*, rather than to further representations. This is in contrast to the 'translational' or 'cognitive' view, according to which semantics maps syntactic representations to 'semantic representations' construed as partial or schematic mental representations. Still, *nothing prevents a truth-conditional semanticist from bringing mental representations into the picture*. Indeed, the 'logical forms' which undergo semantic interpretation in the truth-theoretic framework can *themselves* be construed as mental representations. As Chierchia writes:

> The hypothesis of a logical form onto which [surface] syntactic structure is mapped fits well with the idea that we are endowed with a language of thought, as our main medium for storing and retrieving information, reasoning, and so on. The reason why this is so is fairly apparent. Empirical features of languages lead linguists to detect the existence of a covert level of representation with the properties that the proponents of the language of thought hypothesis have argued for on the basis of independent considerations. It is highly tempting to speculate that logical form actually *is* the language of thought. (1999: c–ci)

In this view, which has the merit of simplicity, logical forms are conceptual representations, yet ones that are strictly determined by the grammar (and as such belong to the language system). They belong both to the linguistic system and to the conceptual system, and serve as an interface between the two. This view is consistent with mainstream referential semantics because such representations are construed as the *input to* semantic interpretation, in the truth-theoretic sense, rather

than its output, as in translational/cognitive semantics (where semantics is said to map syntactic structures to conceptual representations).

In this framework pragmatic processing may be allowed to 'elaborate' the logical forms, qua conceptual representations, into further conceptual representations. Indeed, *lf**s can be construed as mental representations resulting from pragmatic operations on *lf*s. This is the syntactic construal of free pragmatic processes: they are seen as mapping the mental representations associated with sentences by virtue of their grammatical properties onto further mental representations resulting in part from pragmatic processing.

3   Logical form in relevance theory

Relevance theorists think the project of giving a truth-conditional semantics to natural language is doomed to failure, and they assume a translational semantics in the mode of Jerry Katz. Semantic interpretation is viewed as (part of) a 'decoding' process, through which syntactic representations are systematically mapped to semantic ones. Those semantic representations, resulting from decoding, are what Sperber and Wilson call 'logical forms'. They are conceptual structures with logical properties (hence they can undergo logical operations), but they are distinct from thoughts in that they are not 'complete' and truth-evaluable. The logical forms that are associated with sentences as their meanings are partial (gappy) mental representations. They are comparable to (and can be represented by means of) predicate calculus formulae containing free variables (and instructions on how to fill the variables).[4]

According to relevance theory, pragmatic processing takes us from the gappy mental representations associated with sentences by virtue of the semantic rules of the language to full-fledged mental representations, namely the thoughts which the contextualised utterances express. Those thoughts are semantically complete – truth-evaluable – and constitute the 'propositional forms' of the utterances which express them. Free pragmatic processes operate along the way: in the course of what Sperber and Wilson call the 'development' of the logical form, values are assigned to variables in the logical form, but enrichment or loosening takes place as well. The whole process is syntactic in the following sense: it operates on representations and yields further ones. But only the input representation is 'linguistic'. The output representation is a *mental* one, corresponding to the contextual interpretation of the utterance. It is a sentence, but a sentence in the language of thought.

In the RT view, logical forms, the output of linguistic decoding, belong to the language system (they are the 'semantic representations' of translational semantics) but are also conceptual: they are partial or schematic conceptual representations. So logical form is the interface between the language system and the thought system, in this view, as it is in Chierchia's. What, then, is the difference between Chierchia's view and the relevance-theoretic view?

One superficial difference is that Sperber and Wilson take logical forms to be the output of semantic interpretation (in the translational sense), while Chierchia takes them to be the input to semantic interpretation (in the truth-theoretic sense). I call this a 'superficial' difference because there is no real conflict here, since two different notions of semantic interpretation are at stake. Nothing prevents a theorist from holding that logical forms are both the output of semantic interpretation in a first sense, and the input to semantic interpretation in a second sense. Carston has sketched such an ecumenical view:

> This position has been expressed often in the relevance-theoretic literature in talk of 'two types of semantics': (1) a translational linguistic semantics, which could be described in statements of the form '*abc*' *means (= encodes)* '*ijk*', where 'abc' is a public-language form and 'ijk' is a Mentalese form (most likely an incomplete, schematic Mentalese form); (2) a 'real' semantics, which explicates the relation between our mental representations and that which they represent (so it must be 'disquotational') (2002: 58).

But there is a deeper difference, and it concerns the proper input to 'real' semantics. In Chierchia's picture, as in mainstream generative linguistics more generally, the logical forms are a level of syntactic representation *which is semantically interpretable* (in the sense of real, truth-theoretic semantics). Logical forms are both syntactic representations delivered by the language system *and* conceptual ones that can be semantically evaluated (modulo saturation). They are representations endowed with 'a logical syntax appropriate for recursively stating the truth-conditions of a sentence' (Hornstein 1995: 5). Now this is something which relevance theorists do not accept. For relevance theorists, the linguistic representations which the linguistic module delivers are too indeterminate to be the input to semantic evaluation procedures. They must first be elaborated pragmatically. In other words, the two aspects which go together in the mainstream notion of logical form (being determined by grammar, and being semantically evaluable) are

disjoined in relevance theory: what the grammar delivers (the logical form in the sense of relevance theory) is not (yet) semantically evaluable. Apparently, Jerry Fodor holds the same view. He insists that what gets compositionally interpreted by means of recursive truth-theoretic procedures is not what is determined strictly by the grammar but is instead the modified logical form which is a syntactic representation in the language of thought, and which is affected by pragmatic processes and world knowledge (Fodor 2001: 12–13).

At this point, one might think that even this 'deeper' difference is terminological. Neither referential values nor truth-values can be assigned to linguistic forms independent of context. That much is (or should be) granted by everybody. So logical forms, qua properties of sentence-types, are not truth-evaluable. They are incomplete and 'gappy'. If that is what relevance theorists mean when they say that logical forms cannot be given a 'real' semantics (and this is clearly *part* of what they mean), *then* there is no conflict with the truth-conditional view, contrary to what they assume. From the standpoint of truth-conditional semantics, logical forms are semantically interpretable only in the following sense: they can be assigned truth conditions *relative to particular assignments of values to their context-sensitive elements*. But they cannot be assigned absolute truth conditions (independent of context). So, there is a sense in which they are not semantically interpretable, but there is also a (weaker) sense in which they are.

Still, the disagreement between truth-conditional semantics and relevance theory is not merely terminological. Relevance theorists (like other TCP theorists such as Kent Bach) deny that logical forms are semantically interpretable *even in the weak sense*. What they call semantic underdeterminacy goes beyond indexicality. For them, logical properties like quantifier scope and anaphoric dependencies are not fixed at the level of logical form (qua delivered by the grammar), but only at the further conceptual level of 'propositional form'. Ruth Kempson concludes that:

> natural languages are not directly semantically (i.e. truth-theoretically) interpreted. Natural language expressions are provided an interpretation by processes of grammar only in the sense that they are associated with some construct in a system of representations which is said to constitute the language of thought. [...] This system of representations onto which natural language objects are mapped is itself a semantically transparent system, with a recursively definable truth-theoretic semantics for all expressions of the system, a principle of

compositionality applying strictly to determine the semantic properties of all complex constituents on the basis of their parts. It is in this language-of-thought system that inference is definable, not in any natural-language grammar. (1993: 72–3)

Kempson sometimes makes this point by saying that LF (as traditionally conceived) is not a natural language structure but a language-of-thought structure. The mapping from (surface) syntactic structures to LF is therefore not part of the grammar – although it is constrained by it. All LF-building processes, she says, must be construed as filters on the pragmatic process of constructing a fully specified propositional representation (a pragmatic process that may well involve free pragmatic processes as subcomponents).

4   How many systems, and how different?

Since they are not strictly determined by the grammar, modified logical forms do not belong to the language system, but to a different 'system of representation', as Chomsky puts it: the conceptual system (Fodor's 'language of thought'). Now Ray Jackendoff emphasises the *heterogeneity* between the two systems of representation. According to Jackendoff, the language system and the conceptual system do not intersect in the way suggested by the mainstream 'logical form' idea. Rather, the two are disjoint, and additional 'rules of correspondence' are needed to bridge the gap between the syntactic structures of language and syntactic representations in the language of thought (Jackendoff 1993: 31). So there is no reason why we should expect any level of linguistic representation to display the logical properties (like quantifier scope) which characterise conceptual representations (see Jackendoff 2002: 270).

Other theorists have denied the alleged heterogeneity. For Chierchia, as we have seen, logical forms are *already* representations in the language of thought – they are conceptual representations. Logical forms are conceptual representations that are strictly determined by the grammar (and as such belong to the language system), but as conceptual representations they can also be elaborated or modified through non-linguistic considerations. The bare logical form of a sentence is a conceptual representation that is determined strictly by the grammar, while the modified logical form is a conceptual representation which has been shaped, in part, by extra-linguistic factors such as world knowledge and contextual expectations.

The RT view seems to me intermediate between the two positions. Like Chierchia, relevance theorists view logical forms as the interface between language and thought: these forms are (partial) conceptual representations that are determined solely by the language system. But they are not endowed with the determinateness of full-fledged conceptual representations. They lack important logical properties that will be determined only at a further level of conceptual elaboration (the level of propositional forms) and, for that reason, they cannot be given a truth-theoretic interpretation.[5]

There is yet another position. So far I have assumed that there are two distinct systems: the language system and the conceptual system. According to some philosophers, however, there is a *single* one (for example Carruthers 1996; Ludlow 1999: 164–9). Thought is nothing but 'inner speech'; or, at least, it is underpinned by the linguistic system, which provides the structures for the articulation of thoughts. If that is so, then we can account for modified logical forms without appealing to a second system *in addition to* the language system. If a sentence is uttered and assigned, in context, a modified logical form resulting from the operation of free pragmatic processes, there are actually two sentences at play. What I have called the modified logical form is in fact the (bare) logical form of another sentence – that which runs through the speaker's and/or the interpreter's mind.

There are two possible versions of this view. One of them is rather familiar; it can be found in the writings of theorists such as Katz and Bach. The leading idea is this. Sentences have literal interpretations, but they can also be used to convey something different from (for example, more determinate than) their strictly literal interpretation. When that happens, pragmatic processing maps the sentence a person utters to some other sentence that was not uttered but might have been. Let us call the sentence that was actually uttered s_1, and the other s_2. The modified logical form of the utterance is the (bare) logical form of s_2.[6] This is how I understand Bach's notion of 'expansion' (Bach 1987: chapter 4, 1994). In Bach's view, the sentences one utters are often elliptical for more complex sentences one has in mind, in the non-linguistic, Sellarsian sense of 'elliptical'.[7] For example, I can say 'There is a lion in the middle of the piazza' and mean that there is a *statue representing a lion* in the middle of the piazza. This contextual interpretation determines the utterance's modified logical form, which is actually the logical form of a more complex sentence that was not uttered, but was running through my mind ('There is a statue representing a lion in the middle of the piazza'). In Bach's view, the free pragmatic process

of 'expansion' maps a natural language sentence s_1 to another natural language sentence s_2 by adding elements to s_1.

The other possible interpretation of this view is less familiar, but it has recently found advocates in the linguistic and philosophical community, and is as follows. In the relevant examples, there are, indeed, two sentences – s_1 and s_2 – where s_2 corresponds to the actual interpretation of the utterance; however it is a mistake to think that s_1 is uttered, while s_2 is only mentally tokened. What is uttered actually is … s_2! In this view the two sentences s_1 and s_2 are *phonetically undistinguishable*, because what differentiates them are only *covert* elements in the logical form of s_2, which are missing in the logical form of s_1. These covert elements manifest themselves in the semantic interpretation and reveal that the uttered sentence is s_2, not s_1. In this picture, the effects of so-called free pragmatic processes are nothing but the effects of semantically interpreting covert elements in logical forms. So, in a sense, there is no free pragmatic process. In another sense, however, there are such processes, but they must be redescribed and accounted for in terms of the free generation of pragmatic variables in the syntax.

Take the sentence 'There is a lion in the middle of the piazza' again, and assume that as a result of (what I take to be) an optional process of modulation, the word 'lion' here is understood as it is in the phrase 'stone lion'. Then, according to the view under discussion, what I take to be the modified logical form of the sentence *is* its logical form, and what I call its bare logical form is not its logical form at all: it is the logical form of the distinct, homophonous sentence 'There is a lion in the middle of the piazza', which means that there is a real lion in the middle of the piazza. What allegedly distinguishes the two sentences is the occurrence in the first one, but not in the second, of a covert, optional element, for example a covert metonymic operator (or whatever accounts for the modulation of 'lion' in this context). The element in question has the following properties:

i.   It is covert – that is why there is no superficial difference between the two sentences.
ii. It is optional, hence it is always possible for what looks superficially like the same sentence not to carry that covert element and therefore not to have the meaning that results from the addition of that element.

Elements that have those properties I call 'covert optionals'. By positing the existence of such elements in the language, one can account for the

effects of free pragmatic processes while claiming that they are not pragmatic processes at all, but regular processes of semantic interpretation applied to covert elements. Such a view has been put forward by Luisa Martí (2006), Josef Stern (2000, 2006), and Polly Jacobson (2005).[8]

As an example, take metaphor, as discussed by Stern. An expression is interpreted metaphorically, according to Stern, if and only if a covert 'Mthat'-operator applies to it – a context-sensitive operator for which Stern supplies a Kaplan-inspired semantics. The 'Mthat'-operator is optional: whenever it occurs, it is also possible to build a sentence indistinguishable from the metaphorical sentence but with a different meaning (since the alternative sentence does not carry the 'Mthat'-operator responsible for the metaphorical interpretation). Stern suggests that the same sort of account will work for metonymy. Similarly, Martí, in her discussion of my views, posits covert optionals to account for all the cases for which I appeal to free enrichment. Wherever I invoke a free pragmatic function that makes the meaning of an expression more specific, Martí posits a covert variable g which is assigned, in context, that very function as its semantic interpretation. In this picture the alleged difference between free enrichment and saturation is simply a difference between two types of covert elements: those which, like the g variable in question, are optional and can be omitted without making the sentence ungrammatical or otherwise deviant, and those which cannot be omitted. In 'John is short', a covert variable (for a comparison class or whatever serves as implicit parameter) is also involved but it is not optional: whenever what looks superficially like the sentence 'John is short' is uttered, the covert element has to be there. But the covert elements that account for metaphors, metonymies, free enrichment, and so on are characterised by their optionality. They may be generated in the syntax but they need not be.[9] As Martí writes:

> The crucial difference between the two proposals resides in what bears the responsibility for optionality. In Recanati's system, that is the responsibility of the pragmatics, of the properties of the context of utterance. In the system proposed here, the pragmatics has the same responsibility it has in the interpretation of pronouns, and only that. That is, given a variable in the syntax/at LF, there has to be a variable-assignment, which of course depends on the context of utterance, that provides values for this variable. But the pragmatics does not trigger anything in the sense of Recanati; there is no process of free enrichment. Whether [a] variable is generated in the syntax or not is left completely free [...]. The system tries out

different derivations, and only those that comply with all the principles of grammar, including Gricean principles, are successful. (2006: 149–50)

How are we to account for the difference between covert optionals and other covert elements lacking the optionality feature? Martí insists that there is only one sort of covert variable: the difference between the two types of case (alleged 'saturation' cases and alleged 'modulation' cases) is simply that something in the sentence imposes the presence of the covert variable in some cases (for example 'short' does) while in other cases the presence of the covert element is not imposed by anything in the sentence and could be omitted without ungrammaticality. In commenting on Martí's paper, Jacobson suggested that covert optionals are nothing but *covert adjuncts*. It is of the essence of adjuncts to be optional, she said, since their type is a/a.[10] In contrast, standard saturation variables fill an argument place and cannot be omitted without ungrammaticality (Martí 2006: 146–7).

Whatever we think of the line pursued by Martí, Jacobson, and Stern, I think it has to be counted as another – admittedly deflationary – syntactic construal of free pragmatic processes. The main difference with the other two syntactic accounts is that *everything is now done within the language system*: on this account, what I call 'pragmatic modulation' takes place through (i) the free generation of additional elements in the (covert) syntax, and (ii) the semantic interpretation of those elements along familiar lines. The resulting view sounds diametrically opposed to TCP, but appearances may be deceptive. As far as I can tell, the only substantial difference there is between that account and other syntactic accounts is that the level of syntactic representation to which the additional elements belong remains within the confines of the language system (rather than involving a shift to the conceptual system). What exactly this difference amounts to – what its consequences are – remains to be determined.[11]

Notes

1. I am indebted to Gennaro Chierchia for discussion of the overall picture which I am presenting here.
2. As Peter Pagin pointed out to me (personal communication), this formula is insufficiently general. The format must be that of recursion over modulated meaning: modulation (possibly empty) occurs at each node, giving the (combined) modulated meaning at that node. Thus, with M for semantic meaning,

Mod for modulated meaning, and *gi* and so on for particular modulation functions, Pagin suggests that we have:

Mod (e) = g_i (M(e)) for some g_i, in case e is simple

Mod (s(e_1,...,e_n)) = g_i (c(Mod(e_1),..., Mod(e_n))), for some *gi*

where s is the syntactic operation, and c the ordinary composition function.

3. See Jackendoff (1997: 47–67, 2002: 387–94) for a similar notion of 'enriched composition', and Pagin (2005) for a general discussion of context-dependence and compositionality.

4. See Carston (2002: 60) for an example.

5. Even within the mainstream generative tradition there are authors who think that certain logical properties relevant to semantic interpretation are not fixed by the syntax at LF and must therefore be dealt with at the 'conceptual' level. Thus the LF which May (1985) ascribes to a sentence like 'What did everyone bring?' 'is interpretively ambiguous with either quantifier capable of bearing wide scope' (Hornstein 1995: 20). This is noticeable, for it implies that 'May (1985) drops the requirement that sentences be disambiguated at LF' (Hornstein 1995: 20). So there is a continuum of positions: if we define LF as that level of grammatical representation that incorporates whatever features of sentence structure enter directly into the semantic interpretation of sentences, the question arises as to how much pragmatic/conceptual elaboration is needed to get to *lf*s, the logical formulae which are input to the truth-theoretic machinery which delivers truth conditions. One possible answer (favoured by researchers in the mainstream tradition) is none – LF directly maps to *lf*, without any pragmatic/conceptual processing. As we have just seen, someone like May has to admit that some pragmatic/conceptual processing is needed in some cases, for example to disambiguate the LF in order to get the pair-list reading for 'What did everyone bring?' Relevance theorists (and TCP-theorists more generally) think a lot of pragmatic/conceptual processing is needed. (For more on ambiguous or underspecified logical forms, see van Deemter and Peters 1996.)

6. As Katz puts it, 'the utterance meaning of a sentence S' can be expressed as the grammatical meaning of another sentence S' (Katz 1977: 19).

7. On the Sellarsian sense of 'elliptical', see Neale (2000: 286–7).

8. One may also interpret in this light the 'syntactic' analysis of scalar implicatures put forward by Fox (2005). On that analysis scalar implicatures result from the free insertion of a covert exhaustivity operator *Exh* with a meaning akin to that of 'only'. See Fox and Hackl (2006: 543).

9. When they are generated, they must be semantically interpreted and, if they are variables, must be assigned a contextual value. What is optional is their generation, not their interpretation.

10. In a related vein, Jacobson shows that quantifier domain restriction (a phenomenon which Bach (2000) treats as an instance of 'expansion') can be accounted for in terms of *covert relative clauses* freely adjoined to the nouns (Jacobson 2005). Thus 'every girl' can be either:

every [$_N$ girl]   (contextually unrestricted reading)

or:

every [$_N$ girl [RC PRO]]   (contextually restricted reading)

Contextual domain restriction on this account is a matter of contextually assigning a value to a silent variable 'PRO', standing for a relative clause. Different restrictions ('every girl in the room', 'every girl who's got an A' ...) correspond to different assignments of value to that variable, while the unrestricted reading corresponds to the case in which no variable is generated. As always with covert optionals, the assignment is obligatory; what is optional is the generation of the variable.

11. I am indebted to Philippe Schlenker for comments on a first draft.

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3
On Relevance Theory's Atomistic Commitments

Agustín Vicente and Fernando Martínez-Manrique

1   Introduction

Robyn Carston (2002) has argued for the thesis of Semantic Underdeterminacy (SU), which states, among other things, that the truth-conditional proposition expressed by a sentential utterance cannot be obtained by semantic means alone (that is, barring indexicals, using fixed lexical meanings plus rules of composition following syntactic structure information). Rather, the truth-conditional meaning of a sentential utterance depends to a considerable extent on contextual information. Yet, like other proponents of relevance theory (RT), she endorses atomism of the Fodorian style (Fodor 1998), which has it that 'lexical decoding is a straightforward one-to-one mapping from monomorphemic words to conceptual addresses' (Carston 2002: 141). That is, Carston (and RT in general: Sperber and Wilson 1986/95, 1998) seems committed to Jerry Fodor's *disquotational lexicon hypothesis* (DLH), the chief idea of which is that for most words there is a corresponding atomic concept in mind. This concept can be represented by disquoting the word and putting it in small capitals. Thus 'dog' corresponds to DOG, 'keep' to KEEP, and so on. On the other hand, this thesis leaves the door open for the possibility that words are related to more than one concept – a possibility exploited in RT by suggesting that the set of concepts is indeed much larger than the set of words. Except for words with merely procedural meanings (such as 'please'), each word has a corresponding encoded concept that can give rise to an indefinite number of different related concepts, constructed *ad hoc* – in a relevance-constrained manner – for the particular context of utterance.

In this chapter we will try to show that SU and the DLH are not easy to conciliate. We will argue that the phenomenon of underdeterminacy

can be interpreted as one of rampant polysemy, for which the DLH cannot account. We also think that the tension existing between SU and the DLH has not passed unnoticed by Carston, and it is the reason why she (2002) oscillates between more orthodox versions of RT[1] and a new one, where words are mapped not to concepts, but to 'concept schemas, or pointers to a conceptual space' (2002: 360). We can advance the reason why RT orthodoxy is not available to Carston. It is true that RT has from its inception defended the idea that most natural language sentences are semantically underdetermined: decoding a sentence does not give you a proposition, but a propositional template. However, such underdeterminacy is localised, for it is generated by the presence of indexicals, free variables, and other known context-sensitive expressions, such as gradable adjectives. Carston (2002) departs from this view, holding that underdeterminacy is more general, and can affect all referential expressions and all predicative terms. We think this departure has a price: rampant polysemy and the rejection of the DLH. Meanings, then, cannot be concepts, if these have to be atomic. This is why Carston ultimately proposes that they are less than conceptual.

From our point of view, this proposal is not advisable either. Instead, the option that we want to argue for is decompositionalism, that is, the thesis that words express variable complexes of concepts made out of a finite list of typically abstract primitives. A related thesis has already been proposed as an explanation of polysemy by Ray Jackendoff (2002) and James Pustejovsky (1995). We want to show that such a style of explanation can also account for the polysemy generated by extra-linguistic contextual effects. First we will present and defend Carston's views on semantic underdeterminacy and ineffability of thought at the sentential level. Then we will argue that they entail underdeterminacy at the level of words and the rejection of the DLH. After that, we will discuss whether, despite the loss of the DLH, atomism could still be viable: there we will deal with Carston's non-conceptualist view on linguistic meaning (a position she shares with Stephen Levinson). It will hopefully emerge from the discussion that decompositionalism is better suited to account for SU and polysemy.

2   Semantic underdeterminacy: from sentences to words

The thesis of semantic underdeterminacy that is at stake is primarily a thesis about sentences, for example, 'the meaning encoded in the linguistic expressions used [...] underdetermines the proposition expressed (what is said).' (Carston 2002: 19–20). In other words, the

truth-conditional content of sentential utterances is not determined by stable semantic values of their component expressions plus compositional (non-pragmatic) rules of language alone.[2] Semantic underdeterminacy is a thesis motivated by reflection on a variety of examples, ranging from 'John's car is empty' (Recanati 1995) to 'The kettle is black' or 'Those leaves are green' (Carston 2002; Travis 2000). The truth conditions of an utterance of 'John's car is empty' depends at least on what relation holds between John and the car, and also on the sense in which the car is said to be empty. An utterance of 'The kettle is black' may be true not only if the kettle is painted totally black but also if it is burned, dirty, or just partially painted black.[3]

A possible objection to SU is that even if this thesis were true about many sentential utterances, it does not necessarily apply to most sentences that one can *potentially* utter. The idea is that for any underdetermined sentential utterance it may be possible to find another sentence that explicitly, or literally (that is, without any contextual aid), expresses the same proposition as the former (contextually assisted) one does. For instance, the utterance of the underdetermined 'The kettle is black' would be translatable into 'The kettle is burned', and the latter would have as its literal meaning the propositional content of the (contextually assisted) former. It can be seen that this objection amounts to a defence of eternal sentences. In this respect, we simply endorse Carston and Recanati's rejection of the 'principle of effability':

> For every statement that can be made using a context-sensitive sentence in a given context, there is an eternal sentence that can be used to make the same statement in any context. (Recanati 1994: 157, quoted in Carston 2002: 34)[4]

We lack the space to develop a minimal defence of our claim, but we think that the burden of proof in the debate about effability is on the shoulders of the defenders of eternal sentences.[5] In what follows, we will focus on showing that sentential underdeterminacy can be extended to the level of component words: if SU is a widespread phenomenon, then Fodorian-style conceptual atomism will have trouble to account for lexical concepts. In fact, if there is hope for any atomistic theory, it will have to be without the DLH. We claim that the SU of sentential utterances puts in jeopardy the possibility that lexical items (words, for short) have atomic literal meanings themselves. In the mentalistic framework we are assuming, the literal meaning of a word will be understood as the context-independent mental representation

that it *encodes*. (There will typically be other concepts that the word *expresses*.)

As a preliminary, it is noteworthy that some of the typical examples about semantic underdeterminacy apply in a straightforward manner to words. For instance, the claim is that 'London has moved to the South Bank' (Chomsky 2000) is underdetermined between, for example, 'The fun in London is to be found on the South Bank' and 'The buildings of London have been physically moved to the South Bank (in a sci-fi scenario)', partly because 'London' itself is underdetermined. But doubts about the generalisability of this case arise more naturally for other words. In what follows, we are going to examine several possibilities in which the idea that words have literal meaning is fleshed out in a way that favours conceptual atomism, that is, possibilities in which the literal meaning of a word is understood as an *encoded atom* that corresponds one-to-one to the word. Our rejection of such possibilities will rely on a simple argument: if words' literal meanings are understood as encoded atoms, then it will normally be possible to construct eternal sentences, that is, sentences which fully encode a thought; but since we think, with Carston, that eternal sentences are suspect, so, too, are encoded atoms as literal meanings for words.

To begin with, it could be tempting to say that what SU shows is that the meaning of the whole (the sentence) cannot be fully determined from the meaning of the parts (the words) plus rules of composition, not that the words' meanings are underdetermined as well. In fact, François Recanati himself has defended an *accessibility-based* model of utterance processing that fits nicely with the idea of there being literal word meanings (Recanati 1995, 2004). In his model, the interpreter of an utterance initially recovers the literal values of constituents, but not a literal interpretation of the *whole*. Instead, the interpreter can reach a non-literal interpretation of the utterance first, provided that the elements of this interpretation are associatively derived, by spread of activation, from the literal constituents that were initially accessed.

This model might be attuned to make it compatible with conceptual atomism in the following way. First, in hearing 'The kettle is black', the interpreter accesses the encoded conceptual atoms corresponding to the words (for example, BLACK). Then, by a contextually constrained process of spread of activation, another concept (for example, BURNED, or perhaps a compound of concepts) is reached. Finally, all the concepts ultimately operative are subject to composition in order to obtain the thought that corresponds to the interpretation of the sentence. However, this atomistic model can run into trouble if it is conceded that (the

majority of) the operative atomic concepts have a word that encodes them, for instance, if BURNED were the concept encoded by 'burned'. This entails that, in most cases, there would be a natural language sentence that translates literally the thought reached by the interpreter, that is, a natural language sentence formed by the words that encode each of the conceptual atoms. However, this amounts to defending the existence of eternal sentences. So, if there are reasons to reject them, there are reasons to distrust the model under consideration.

However, this does not make the eventual rejection of the DLH mandatory for it is possible to say that words are related to concepts in a one-to-one way, even though words can be used to express an open range of concepts, giving thus rise to underdeterminacy effects. The absence of literal propositional meanings for sentential utterances could be explained by holding that these various concepts that words can express are not lexicalised (that is, if an utterance of, say, 'angel' does not express the coded concept ANGEL, but a concept related to being kind and good, this second concept will not be lexicalised: thus, we avoid being finally committed to effability in the sense mentioned above). This is the position that we are going to examine.[6]

3 *Ad hoc concepts*

A way to flesh out this one-to-many relation between words and concepts comes from a variant of relevance theory that we will call (in order to distinguish it from the two-level account we will discuss later) 'conceptual relevance theory' (Sperber and Wilson 1998; Wilson 2003; Carston and Powell 2006). Its key idea is that words *encode* concepts in a one-to-one way, even though they can *express* an open range of them. Explaining how we go from the encoded concepts to the expressed ones is the task of the new field of 'lexical pragmatics' (Wilson 2003). Basically, lexical pragmatics has to explain core processes of narrowing and broadening, by means of which the denotation of a given encoded concept varies. Dan Sperber and Deirdre Wilson (1998) offer the following piece of a dialogue as an example:

> *Peter*: Do you want to go to the cinema?
> *Mary*: I'm tired.

Mary wants Peter to understand that she does not want to go to the cinema. To do so, Peter has to understand first that Mary is tired in a particular way – tired enough not to go to the cinema. So, Sperber and

Wilson (1998: 194) conclude that 'Mary thus communicates a notion more specific than the one encoded by the English word "tired". This notion is not lexicalised in English.'

According to conceptual RT, the expressed concepts are *ad hoc* concepts built on-line in order to meet the requirements of communicative relevance. However, these concepts would be just as atomic as encoded ones are. So rather than a construction of concepts what we have may be a search for and activation of concepts that fit the demands of relevance. There are, however, some problems with this account. First, notice that one must face a problem of ineffability for words, in the sense that it is not possible to give a verbal expression to the concept corresponding to an uttered word (except by uttering it again in the same context): it may be just any one within the range of concepts that the word can express. We prefer not to make much of this problem, because ineffability, as we see it, is a difficulty for any theory of concepts that embraces underdeterminacy.[7] Where we see some problems, however, is in the role assigned to *encoded* concepts, and their relation to *ad hoc* concepts, which, let us remember, are also atomic, not just complexes of encoded concepts.

A first problem is the following: RT's preferred explanation is that *ad hoc* concepts are obtained inferentially from encoded concepts. According to this account, the necessary steps for inference to take place would be, first, decodification of words into their encoded concepts, and, crucially, their composition into a representation. Some initial composition is needed if one wants the process to be genuinely *inferential*, rather than a mere activation of *ad hoc* concepts by encoded ones.[8] We grant that some of these representations could be propositional templates: this would be the case of representations corresponding to sentences with indexicals, free variables, gradable adjectives, and so on. However, we contend that many of them would be fully propositional. For example, it seems that the conceptual representation corresponding to, for instance, 'Some leaves are green' would putatively be (at this first stage) SOME LEAVES ARE GREEN, once it is allowed that each of the words encodes an atomic concept and that an initial composition of these atoms is needed for the inferential process to start. But such a representation would in effect constitute the truth-conditional non-contextual meaning of the sentence, and this is exactly what SU denies.

Put in other words: that sentences do not encode propositions, but propositional templates, that is, that there is no literal propositional meaning at the level of sentences, is one of the most basic tenets of RT. It is precisely this feature of RT that distinguishes it from minimalist

options such as Emma Borg's (2004), where the pragmatics module (in this case, the central processor) takes as its input a propositionally interpreted logical form. Yet, whenever you have a *full* composition of encoded concepts (that is, a composition of the concepts encoded by all the constituents of a well-formed sentence) you must have a proposition. It would be odd to insist that it is possible to compose SOME, LEAVES, ARE, and GREEN, following the syntactic structure of the sentence, but without obtaining a proposition. Hence, barring indexical expressions and the saturation of free variables, literalism (or, in any case, the DLH) at the level of the lexicon brings in its wake a kind of minimalism, namely, the existence of propositions in a first stage of processing. Besides resurrecting effability at the sentence level, this is problematic when we take into account Charles Travis's cases such as 'The ink is blue' or 'The leaves are green'. Which one of the several propositions expressible by utterances of these sentences is *the* encoded one?

Second, commitment to *ad hoc* concepts has trouble with what we can call 'encoded polysemy'. Think of 'window' in 'He crawled through the window', 'The window is broken', 'The window is rotten', and 'The window is the most important part of a bedroom' (Pustejovsky 1995). There are two atomistic possibilities to explain this variability in the meaning of 'window': either there is just one concept WINDOW, which is 'window''s literal meaning, or there are at least four atomic concepts corresponding to it: WINDOW*, WINDOW**, and so on. Now, RT cannot explain how we would go from WINDOW to any of its variations, since in this case it does not depend on any pragmatic processing. So RT would rather say that 'window' encodes not one, but various concepts (hence the label 'encoded polysemy'), thus departing from the DLH. However, it would still be difficult for RT to explain why 'The window is broken' activates WINDOW**, instead of any of the other three concepts. Its defenders could try to say that this specific activation is due to the activation of BREAK, such that there is a sort of co-composition (Pustejovsky 1995) in the decodification process. But then, how does this co-composition take place? It is easy to explain co-composition if you are a decompositionalist, for you can say that BREAK activates GLASS (or a glass-related concept), as a part of the complex concept WINDOW. But we cannot see how the story would go for an atomist.

Now, these may be seen as problems derived from the inferentialist commitments of RT. A non-inferentialist model, such as Recanati's, seems free of them. In this model, the interpreter of an utterance recovers initially the literal values of constituents, but not a composition of

them. What the hearer composes are not literal meanings or encoded concepts, but concepts already modified by linguistic and extra-linguistic contextual information. Thus, it is possible to avoid not only the commitment to non-contextual truth conditions (minimal propositions) but also the problem derived from encoded polysemy.

The trouble with this model is the uncertain role played by the first concepts. If they are intermediate stations, which do not become part of the interpretation, then it is unclear whether they are playing any semantic role after all. On the other hand, it is not easy to get a clear idea as to how modulation processes go either in this model or in conceptual RT. According to RT, atomic concepts are nodes in memory that give access to three kinds of information: lexical properties, encyclopaedic knowledge, and a logical entry which captures its analytic entailments. As a brief example, if, speaking of a friend, we say 'Anne is an angel', the hearer will search her encyclopaedic information associated to ANGEL, and widen up its extension so as to meet her expectations of relevance. This will be done when she takes into account some particular properties angels are supposed to have, such as being kind or being good, and excludes others, such as having wings but no well-established sex. In the process, parts of the logical entry will also be dropped. Then, according to RT, the hearer comes to entertain the concept of ANGEL*, a new, *ad hoc*, concept with a wider extension and different associated encyclopaedic and logical information.

Now, we find this picture appealing and promising, except for one point, related to our concerns here: how are *ad hoc* or, in general, modulated atomic concepts construed or reached? It seems to us that the explanation would be simpler and more intelligible if *ad hoc* concepts were complexes made up of atomic concepts. The new node for the *ad hoc* concept, from our point of view, seems exhausted by a composition of the nodes for KIND, GOOD, and several others. Thus, the concept ANGEL*, the extension of the entry, seems to be given by the composition of the extensions of KIND, GOOD, and the other concepts, while its encyclopaedic information would equally consist of the similar composition of that pertaining to KIND, GOOD, and so on. Of course, this turns ANGEL* into an effable concept. We acknowledge that it may be difficult, perhaps impossible, to give an adequate characterisation of the concept. Surely, it is not exhausted by KIND and GOOD, but, as a matter of metaphysical fact, we can say that there is such a characterisation. Still, we think that the best way to make sense of modulations in general is by explaining them as concept compositions. Leaving to one side the problem of the implications of this for the SU thesis

(it contradicts the thesis of ineffability), the point is that the atomist owes an explanation of modulation processes consistent with her atomism.

Given that decompositionalism offers, we think, a simpler view of *ad hoc* concepts, one may wonder why relevance theorists insist on espousing an atomistic version. We think that this commitment is grounded on several classical reasons for atomism put forward by Fodor (1998). Very roughly and highly compressed, they can be summed up in the idea that only atomism can explain some features of concepts such as (i) the inexistence of definitions for them, (ii) their intersubjective shareability, (iii) the compositionality of thought, and (iv) the denotational determination of natural kind concepts. However, we contend that these might be good reasons for having atomic *encoded* concepts, not atomic *ad hoc* ones. First, *ad hoc* concepts are not supposed to be intersubjectively shared or even shareable. However, even if they were, this would not demand that they be atomic in themselves, as long as they could be made up of atomic concepts. Second, there is no problem of definitions for *ad hoc* concepts. As we said, it is possible that we cannot come up with a definition of ANGEL*, but this would not mean that there is no such definition, which, in any case, would be context-dependent. Third, if, as we propose, ANGEL* is composed of atomic concepts, there would be no problem of compositionality: the thought ANNE IS AN ANGEL* would be given by the composition of the singular concept ANNE, and the concepts of BEING KIND, BEING GOOD, and so on. Finally, the problems of ignorance and error, which haunt decompositionalist accounts of concepts when applied to natural kinds, seem misplaced when the topic is *ad hoc* concepts. Could we be wrong about the extension of an *ad hoc* category, construed on-line for the purposes of understanding? We cannot see how. The extension of LION does not depend on its stereotype or a definition such as FEROCIOUS BIG CAT-LIKE PREDATOR, but LION* (the *ad hoc* concept triggered by 'My man is a real lion') is not a natural kind concept, and so its extension is under our control, so to speak. For instance, it could be well determined by the concepts RESOLUTE and FEROCIOUS.

Hence we see no deep reasons to consider that *ad hoc* concepts must be atomic, just like encoded concepts. Moreover, if there are no such reasons, then our view that they have a complex structure should be the default hypothesis, given that the resulting picture is more parsimonious. The remaining problem, as explained above, is that according to this view *ad hoc* concepts are in principle lexicalisable, which endangers the idea of ineffability.

To close this section, we want to remark that even if one thinks that semantic underdeterminacy is not so widespread as many pragmaticians hold, the phenomenon is still general enough so as to undermine the plausibility of Fodorian conceptual atomism, which actually predicts widespread literalism. Nevertheless, this variety of atomism relies on the existence of a single level – the conceptual level – to capture the meaning of words. If one differentiated semantic from conceptual affairs, it might be possible to offer an atomistic model without the burden of the DLH. The idea, in a nutshell, is to posit the existence of semantic non-conceptual entities that encode word meanings, while leaving the solution of semantic underdeterminacies in the hands of the conceptual, pragmatically driven device. It is to this idea that we turn now.

4   Two-level theories

A two-level theory accounts for the relation between word meanings and concepts by means of two different processing levels: semantic and conceptual. Levinson (1997, 2003) has presented a number of different reasons in support of this distinction. The key idea is that language is necessarily too general to be able to encode the specific thoughts we entertain. In consequence, representations of linguistic meaning have to be different from representations that actually appear in thought, that is, semantic and conceptual representations must be kept on separate mental levels. There are partial mappings from one level onto the other, but the respective representations are not isomorphic. Carston's (2002) defence of relevance theory can be regarded as another version of a two-level theory. We mentioned above that it is possible to distinguish two different trends in RT, a conceptual version and a two-level one. Both trends are present in Carston's work (for example, Carston and Powell 2006 for the first), but here we will focus on the second of these.

As we said above, Carston considers the possibility that word meanings are not coded as full-fledged concepts, but as schemas, pointers, or addresses in memory. There is an obvious motivation for holding such a position, and this is her resolute defence of massive underdeterminacy. On her account, logical forms underspecify the meaning of utterances in all possible ways, including, as we pointed out above, both referential and predicative terms. If this is so, then probably what a given word encodes is just a clue to search for a concept depending on contextual information, much in the way that indexical terms do. Therefore, in

this regard Carston would be sharing Levinson's rationale for his distinction of levels: to repeat, that language is of necessity too general to encode our thoughts.

Now, one may provide a further reason for Carston and Levinson (although see also Powell 2000) to defend a two-level view: given the underdeterminacy thesis, the compositionality of the semantics of language may seem to demand such a distinction. The underdeterminacy thesis has it that the decoding of a natural language sentence typically either does not convey a full proposition or conveys a proposition different from the one intended. Now – so the argument would go – our understanding of natural language is productive and systematic, in a way that can be explained only by assuming that it has a compositional semantics. And, given the underdeterminacy thesis, this means that the units that are composed when a sentence is decoded cannot be concepts. If they were, whenever there is a sentence that demands a full composition (in the sense, explained above of composing all the elements present in the sentence), one would have a thought, that is, a truth-valuable structured whole. So, there is good reason to distinguish semantic and conceptual levels in linguistic processing: natural language sentences are semantically compositional, but they do not express thoughts literally (by decoding). So the semantic units that are composed cannot be concepts.

We think that this argument arises not from a compositionality principle but from a demand imposed by the view that all linguistic processing other than decoding is inferential in nature. In relevance theory, the only heuristics involved in language understanding is the principle of relevance. According to this principle, understanding an utterance relies on inferential processes, and these must take structured 'wholes' as input. Inference cannot work in disarrayed collections of parts because inference, as opposed to mere activation, is structure-sensitive. Now, the phenomenon of underdeterminacy shows that this structured input cannot be a fully truth-conditional thought. So if one endorses SU and inferentialism, one is compelled to posit a different, non-conceptual level where semantic composition takes place, so as to provide a starting 'whole' that (i) is structured enough for inferential processes to begin their job, but (ii) falls short of providing propositional thought. Now we can see that once you drop the demand that all pragmatic processing is inferential, you are not necessarily committed to the mental reification of such a distinct semantic level. In other words, whatever semantic elements are involved in understanding an utterance, they can make their contribution together with pragmatic constraints, and not prior to them.

Yet, one might insist that the starting point of our linguistic understanding are non-conceptual semantic units, even if we do not compose them at early stages of processing. They simply give access to the concepts that ultimately figure in the expressed thought. In our view, there are more general grounds to resist this distinction of levels. The problem for the proponent of such a two-level distinction is to offer a reasonable characterisation of it, saying (i) what the semantic elements are, and (ii) how they give rise to concepts. With respect to the first question, there are two different kinds of answer: either they are regarded as representational structures, or they are not. For instance, Levinson opts for the representational approach while Carston seems to hesitate between both answers in saying that they are 'concept schemas' (arguably a representational solution) or 'pointers to conceptual space' (arguably a non-representational one).

In fact, typical discussions regarding the semantic/conceptual divide tend to pose the question in representationalist terms. The issue is which elements of the mental lexicon need to be represented in a separate semantic lexicon (for example, the proprietary body of information of a putative semantic module: Borg 2004), and which belong to a (more general) conceptual structure. Offering a detailed analysis of the problem goes beyond the purposes of this chapter (for a review of positions on that issue, Murphy 2003: chapter 3). Still, there are a few considerations that undermine the possibility of using a distinction between levels to sustain atomism.

The chief problem is how to account for the relation between semantic and conceptual representations. To begin with, one has to do so in a way that avoids duplication of elements in the mind. Levinson (2003) seems to make this mistake when he talks about certain of concepts that are closer to the semantic realm: these would be the concepts onto which semantic representations immediately map. However, these concepts serve the same purposes as the semantic representations were meant to serve, so it is unclear why the latter should be posited in the first place. So, one must suppose that semantic units are different from conceptual elements in the way they function, and this is what a characterisation of semantic elements in terms of concept templates, pro-concepts, and the like is meant to convey. But the characterisation is still too vague, and it is not easy to see how to clarify it. A possible way could be to hold that semantic units are something like characters, that is, functions from contextual elements to contents. It is true that accounts like this are usually semantic-conservative in a way that Carston and Levinson are definitely not, but perhaps one could work out a version of

their strategy of indexicalisation palatable to them and to atomists. The idea would be that most terms would work much as indexicals, so the function would not yield a constant content-value across all contexts. Then perhaps there would be a way to say not only what semantic units are – they are characters – but also how they give rise to concepts – just as characters give rise to semantic values. Unfortunately, it is doubtful that such a strategy could do the work the atomists want it to do.

Remember that the atomist has to explain, among other things, how words like 'Sampras', 'tired', or 'angel' may stand for a variety of concepts. The present attempt consists in saying that they contain rules of use much like the characters of indexical expressions that point to concepts. The question is: what kind of character could link, following Wilson's (2003) example 'Federer is the new Sampras', the term 'Sampras' to the concept, for instance, of COMPLETE PLAYER WHO DOMINATES AN AGE? In our view, the complexity of the required link makes it unlikely that characters could be non-conceptual simple, unstructured entities.

5   Conclusion

We can now summarise what we have been defending. We took as our starting point the claim of those who, like Carston and others, hold that most, if not all, sentential utterances are semantically underdetermined. We have suggested that this claim implies that thoughts, or propositions, are not in general effable, that is, encodable by sentences alone. Then, we have argued, especially contra conceptual RT, that the responsibility for the underdeterminacy of sentential utterances must rest on the words that constitute them. The consequence is that the DLH is false: meanings cannot be atomic concepts, and they cannot be related one-to-one to words. Last, we have examined the atomist assertion that distinguishes two levels in linguistic meaning – the semantic and the conceptual – concluding that it is a proposal that, at the present stage, seems unwarranted and unclear in important respects. From all this we would like to conclude finally that Fodorian-style atomism should be rejected, especially by those committed to claims of underdeterminacy or ineffability. We think decompositionalism is in a better position to account for such putative facts, so it should be reconsidered by students of linguistic meaning.[9]

Notes

1. This view is more explicit in Carston and Powell: 'The model of lexical semantics that we assume essentially follows Fodor (1998): lexical forms map to

mentally-represented concepts, that is, elements of a conceptual representation system or "language of thought" (leaving aside indexicals to which this does not obviously apply). These concepts constitute the meanings of words as expression-types in a linguistic system, so that words can be thought of as inheriting the denotational semantics of the Mentalese concept that they encode.' (2006: 345).

2. We will assume, along with common wisdom, that such rules are determined by syntactic information.

3. It may be claimed that these utterances have a literal meaning, a meaning that is constant across contexts. However, we take it that this kind of meaning would be of a very general nature, so it cannot be said to capture the truth conditions of the utterance. (In the case of 'John's car is empty', this meaning could be 'a thing that is said to be a car that is in some close relationship to someone presumably called John is relevantly empty'). We would not want to discard that this meaning is not even propositional (Martínez-Manrique and Vicente 2004, Vicente and Martínez-Manrique 2005).

4. Another recent, more moderate version of this claim can be found in Bach (2005: 28): 'for every sentence we do utter, there is a more elaborate, qualified version we could utter that would make what we mean more explicit.' The 'elaborate version' is closer to what is literally meant, but it is unclear whether he conceives of it as a version that is always perfectible (in which case there would not be eternal sentences as such).

5. For recent ammunition against eternal sentences, specifically against eternal reference, see Culicover and Jackendoff (2005).

6. It is also possible to argue that the SU of the wholes is due to the rules of composition. We lack the space to discuss that option, but we think that rule-indeterminacy is best accounted for by decompositionalism. The explanation would go like this: It might seem plausible to say that 'The ink is blue' (Travis 2000) is underdetermined (the ink may be blue in its writing, or in its external appearance) because it is not specified how 'blue' is supposed to modify 'ink'. That is, there is no underdeterminacy in the meanings of 'blue' or 'ink': 'blue' means BLUE and 'ink' means INK. What makes the sentence underdetermined is the indeterminacy of the composition rule. Sometimes an adjective such as 'blue' modifies its head by being applied to its referent considered as a stuff of a certain kind, while other times its modification is applied to what its referent typically does. Now, the best explanation for the variation in the composition rules is that meanings are complexes, such that, for example, an adjective may be applied to different parts of the complex. That is, if composition rules worked as suggested, then it seems that concepts ought to have a certain inner structure. There must be information within the concept about what the things that fall under it are for, or even what kind of thing they are. Roughly speaking, if PEN is decomposable into at least PHYSICAL OBJECT, and, for example, USED FOR WRITING, then it is possible to explain that there are at least two rules of composition that can be applied to RED PEN. In contrast, it seems difficult to explain how the atomic RED can be applied in various ways to the atomic PEN: if RED applies to PEN, it seems all that you can possibly have is the complex RED PEN, whose denotation is the intersection of red things and pens.

7. Fodor (1998) poses a problem of ineffability to decompositionalism of the sort we want to defend. Basically, he suggests that a putative primitive such

as CAUSE is as polysemous as the complex KEEP (=CAUSE [ENDURANCE OF STATE X]), unless the concept CAUSE is not the concept encoded by the word 'cause'. But if this is so, he argues, the concept CAUSE is ineffable, something which, according to his view, is problematic on its own. However, if ineffability is a consequence of underdeterminacy, this would not be a problem for the decompositionalist, but would for any contextualist, perhaps including Fodor (2001).

8. Recanati (2002) raises in a different way the question of whether this initial stage of processing (what he calls 'primary pragmatic processes') is inferential. Our point is that *if* it is an inferential process, then it requires something more elaborate than an atomic concept on which to operate. Inferential processes, however one conceives of them, are structure-sensitive processes, and atomic concepts have no structure.

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4
The Role of Pragmatic Inferencing in Compositional Semantics

Begoña Vicente Cruz

1 Introduction

In her book *Thoughts and Utterances*, Robyn Carston has the following to say on compositionality:

> There just is no escaping the fact that the propositions that may be expressed by sentences in use are a function, not only of linguistic meaning, but also of pragmatic inference. Perhaps this marks the demise of an *interesting* principle of semantic compositionality, or perhaps it points to the possible development of a different sort of compositionality principle, one that can accommodate an interaction of decoded and pragmatically inferred meaning in the determination of the proposition expressed (a principle of semantic/ pragmatic compositionality). (2002: 73, italics in the original)

Carston (2002: 92 n 35) assumes that sentence-type meaning is compositionally determined from the meaning of the words in the sentence and the syntactic relations holding among them. The view in relevance theory is that as a result of this kind of composition process, the grammar outputs a context-independent, conceptually incomplete logical form which is structurally parallel to the sentence uttered, crucially in need of development in a number of respects, and typically not the proposition intended by the speaker. The latter depends on linguistically directed saturation processes of gaps in logical structure, as well as non-compositional processes of free enrichment taking place outside the language system and controlled by the principle of relevance. Two crucial assumptions in what Peter Culicover and Ray Jackendoff

(2005) call 'mainstream generative grammar' are tacitly preserved in the theory: i) syntax is the source of all combinatorial complexity – the semantic component of the grammar does not have the independent capacity to generate structure or determine how its constituents are to be combined – ii) the meanings of lexical items are unstructured wholes which contribute the analytical implications of the associated concepts to the content of the logical forms in which they appear, but play no role in determining how the atomic concepts they express are combined in the logical form. These two assumptions, I will argue, are behind proposals in relevance theory to analyse a number of interpretation phenomena in terms of a linguistically unconstrained non-compositional pragmatic process of enrichment. In this chapter I would like to show that (i) and (ii) are untenable and that without them these proposals stand in need of revision. In Section 2, evidence from the resolution of anaphoric dependencies, lexical presupposition, and ellipsis, broadly construed, will be used to argue that the rules that compose the meanings of utterances operate directly on logical/ conceptual representations, rather than language strings. This is problematic for assumption (i) because it points in the direction of independent constraints at the logical/conceptual level of representation which need to be stated somewhere. In Section 3, evidence from aspectual coercion will show that information internal to the lexical item has systematic effects on the compositional content of the utterance, challenging both assumptions (i) and (ii). This evidence shows that the language system makes available more structural information than can be traced to the syntax of the sentence, narrowly construed,[1] and that the addition of pragmatic material corresponding to no constituent of the sequence provides no automatic guarantee that the pragmatic system is operating freely. In Section 4 it will be argued that the case for free enrichment in relevance theory is built on a failure to take this possibility on board. I will conclude that the principle of semantic/ pragmatic compositionality that Carston hints at in the quote above requires that the semantic component take on greater responsibility in the generation of propositional content.

2   Anaphoric dependencies, presupposition, and ellipsis

I will start by making the reasonable assumption that interpreting linguistic forms successfully involves an audience forming thoughts that they can attribute to the overt intentions of the speaker. How do they

do this? Does syntax provide all the structural information they need to construct those thoughts? Below are a couple of examples from Ruth Kempson (1988) that seem to suggest a negative answer:

(1)   a. **Every actor** thinks that **he**'s ugly.
      b. **He** thinks that **every actor** is ugly.

(2)   a. **Every singer** complained that **the accompanist** played too loudly.
      b. **The accompanist** complained that **every singer** sang too loudly.
      c. Every singer had an accompanist.

Kempson (1988: 147) argues that (1b) does not receive a bound-variable interpretation because unlike (1a) it does not satisfy the configurational restrictions imposed by the grammar on this kind of dependency (the pronoun is not dominated by its antecedent in the phrase structure tree corresponding to the sentence). Now, if the rule responsible for the contrasting behaviour found in (1a) and (1b) is a syntactic one, she argues, so should the one responsible for impeding the bound-variable interpretation in (2b) be. But:

> in (2a), whose configuration allows the bound-variable reading (in which the accompanist is each singer's accompanist), the dependency between the expression *the accompanist* and the expression *every singer* is not made by identity between accompanist and singer, but rather, by the additional premise [in (2c)] (1988: 147).

And so

> the type of dependency argued to be the provenance of grammar has to involve sensitivity to the addition of encyclopaedic knowledge which is not itself specified by any rule of grammar (1988: 147–8).

Another interesting example she uses involves predictions of meaning relatedness between sentences. The examples below are identical but for the change in proper name in the if-clause. Interestingly, only (3a) carries the presupposition in (3c):

(3)   a. If the President invites George Wallace to the White House, he'll regret having invited a black militant to the White House.
      b. If the President invites Angela Davis to the White House, he'll regret having invited a black militant to the White House.

    c. The President has invited a black militant to the White House.
    d. Angela Davis is a black militant.

This is explained because the name 'Angela Davis' makes accessible the general knowledge assumption in (3d), thus blocking the presupposition in (3c) arising from the matrix clause (3b), which is thereby not inherited by the complex sentence as a whole. Kempson argues that if the presuppositional relation between (3a) and (3c) arising, as it does, from the presence of the lexical item 'regret' has to be characterised by rules of the grammar, so must the absence of such a relation in (3b), but in this case:

> the required predictions of relatedness between sentences seem to have to be sensitive not merely to information contained in the grammar, but also to real world knowledge of a type manipulated in bridging cross-reference (1988: 145).

This example shows that syntactically identical strings receive different truth-conditional content, without the change in meaning being due to the presence of any indexicals in the sentence. And, as with the examples in (2a)–(2b), the question arises as to what the *compositionally determined sentence-type meaning* of (3a)–(3b) is.

    There is certainly no shortage in the pragmatic literature of examples that illustrate the dependence of the truth of utterances on pragmatic processes of different kinds. The examples in (1)–(3) are especially interesting in discussing compositionality, however, because they seem to sit in the middle: their interpretation depends on pragmatically inferred content and not just sentence meaning, which would seemingly place them outside the computations of the language system, but at the same time, the grammar appears to be operating on the results of those inferences, and so it seems that we have to count them in. In the example in (2) the puzzle dissolves if we allow the rule binding the definite NP to its antecedent to operate on a logical/conceptual representation which includes content whose origin is pragmatic, but which has been generated under pressure from configurational restrictions on the operation of that rule. This means that it is the grammar that triggers the search for additional content, although it is the job of the pragmatic module to supply the specific addition. It is important to emphasise, though, that it would not be accurate to say that the recovery of (2c) – or (3d), for that matter – was purely pragmatically constrained.

Consider now the following example of bare argument ellipsis (BAE) construal from Culicover and Jackendoff (2005):

(4) A: Let's get a pizza.
     B: OK – pepperoni?
     a. *Let's get pepperoni pizza? [Syntactically parallel to A's sentence]
     b. OK, should we get pepperoni pizza? [Actual interpretation]

The authors provide a whole host of examples of BAE and related phenomena in which the syntactic relation between the antecedent and the response varies from the easily reconstructable, in syntactic terms, to the remote, as in (4). It seems clear that in this case no copying operation will take us from the syntactic structure of the antecedent to that of the reply in (4a). Culicover and Jackendoff argue that the latter cases present no problem for interpretation because, contrary to what is assumed in mainstream generative grammar, neither the assumption that 'meaning maps transparently into syntactic structure', nor the assumption that 'apparently defective or misordered structure is regular in underlying structure' are supported by the linguistic facts (2005: 6–7). They argue that the structure missing in B's reply in (4) is not derived via reconstruction of any missing syntactic constituents but from the semantic/pragmatic structure of A's sentence, with 'the degree of syntactic parallelism to the antecedent [as] a negotiable secondary factor'. What matters, they claim, is the 'semantic/pragmatic plausibility as a response' (2005: 9). If they are right, the interpretation of BAE requires the addition of structure to the resulting representation which is neither part of the sequence used, nor syntactically reconstructable from the antecedent. However, in this type of case it is arguably less clear what the source of the missing structure is, and whether pragmatic processes are solely responsible for the derivation of the complete interpretation of the fragment, as Robert Stainton (1994) and Carston (2002) have argued for sub-sentential utterances, or whether the interpretation process is more structurally constrained, as Marjolein Groefsema (1992), Kempson et al. (2001), Jackendoff (2002), and Culicover and Jackendoff (2005) have argued.

The examples in this section show that in the process of interpreting language strings the grammar is sensitive to contextual information which is not represented in the sentence, and that the rules that compose the complex meanings operate on hybrid semantic/pragmatic representations that are not necessarily structurally parallel to the syntactic organisation of the sentence. It seems clear then that as Brian McElree et al. (2001: 18) put it, simply 'combining lexical representations

according to their positions in syntactic structure' will not take the hearer from surface forms to the thoughts communicated, in defiance of assumption (a) in the introduction.

3   Lexical coercion

Another set of examples that present problems for what Jackendoff (1997) calls 'syntactically transparent semantic composition' concern the role that the internal structure of individual word meanings plays in determining phrasal and sentential combination. Consider the superficially identical sentences below:

(5)   The girl slept until dawn.

(6)   The girl jumped until dawn.

As Jackendoff (2002: 390) explains, the eventuality described in (5) is a single continuous process, whereas that in (6) involves repeated jumping. Temporal adverbials like 'until dawn' or 'for an hour' have the effect of placing a temporal limit on the activities which they characteristically modify. The iterative reading in (6) arises from the pressure that the adverbial puts on the interpretation of the predicate 'jump', which denotes a type of eventuality that lacks duration and is, therefore, aspectually incompatible with it. This phenomenon is called 'aspectual coercion' and is interesting for compositionality for a number of reasons. First, because (6) is evidence that the composition of the meaning of the sentence has access to aspects of meaning which are internal to the lexical unit, here features such as [-duration], [+dynamic], and [+telic]. Second, because as a result of pressure to obtain an interpretation for the sentence, additional content is generated. Third, the mechanism of coercion is productive – so an explanation of the phenomenon in terms of polysemy or semantic underdeterminacy of the predicate would leave us without an interesting generalisation that applies to this type of predicate in the presence of temporal adverbials like 'until ...' (see Escandell and Leonetti 2002, 2005). Coerced interpretations are therefore semantically constrained, rather than purely pragmatically controlled. As Victoria Escandell and Manuel Leonetti (2002: 164) convincingly show, coercion requires a grammatical trigger that has to meet two conditions: i) it has to contain a requirement for a constituent of a specific kind (of a semantic or a categorial nature: for instance, a head can select for a phrase with the feature [+telic] or for a VP), and ii) the trigger must have scope over the other element: a head over its complement, or an adjunct with respect to its adjunction domain (Escadell

and Leonetti 2002: 165). They also point out that coercion is an asymmetrical operation: it is the requirements of the coercer – usually a grammatical element – that have to be satisfied; the coercee – usually a conceptual element – type-shifts to meet those requirements.

Examples of different interpretation phenomena involving coercion can be multiplied. In Spanish, for example, adjectives that denote permanent states are reinterpreted as temporary states if they appear with the predicate 'estar' rather than 'ser' – their uncoerced option. This requires the addition of a temporal variable to the semantic representation of the sentence (see Escandell and Leonetti 2002). Other cases involve the resolution of conflicts affecting tense, mood, or argument structure (see Escandell and Leonetti 2005). Once again, we are in the presence of interpretation processes which require the supplying of structural content to the proposition expressed for combinatorial semantic reasons which escape simple composition but which this time depend systematically on meaning specifications internal to the lexical item, rather than on purely pragmatic processes of mutual adjustment of conceptual content. It seems then that assumptions (a) and (b) in the introduction have to be dropped.

In the next section I look at some instances of free pragmatic enrichment that Carston and Deirdre Wilson and Dan Sperber have proposed, and argue that they fall, in fact, in the same category of semantically constrained phenomena as the examples that we have seen in the previous sections.

4   Free enrichment under scrutiny

Since her influential 1988 paper, one of the main foci of Carston's work within relevance theory has been the role of pragmatic inference in propositional content. Elaborating on Sperber and Wilson's (1986/95) view of human communication, she has highlighted that linguistic meaning is underdeterminate, and that in explicit communication additional content is recovered without any kind of linguistic trigger setting off the process. The examples that we have seen in the previous sections provide evidence in another direction: they show that the pragmatic system generates additional content that does not correspond to constituents of the sentence uttered, but this is in response to computational pressure arising from the semantic component of the language, and so this type of content can be seen to fall under the constraints of the language system rather than operate freely. This is not incompatible – in principle – with the relevance theoretic assumption

that some pragmatic content may be recovered and incorporated into the proposition expressed on purely pragmatic grounds. Rather than arguing against this possibility, in this section I would like to take a critical look at how the case for exclusively pragmatically controlled constituents of the proposition expressed has been handled in relevance theory.

Carston (2002: 202) considers different sets of cases in which the truth conditions of an utterance depend on aspects of the context. The cases that interest us here are those in which the linguistic form used contains no obvious element corresponding to a bit of content which is, arguably, explicitly communicated. She concentrates on what she takes to be incontrovertible examples of purely pragmatic determinants of explicit content like those in (7)–(12) below:

(7) Jack and Jill went up the hill [*together*].

(8) Mary left Paul and [*as a consequence*] he became clinically depressed.

(9) She took out the gun, she went into the garden and she killed her father [*with the gun*] [*in the garden*].

(10) I'll give you $10 if [*and only if*] you mow the lawn.

(11) John has [*exactly*] four children.

(12) Louise has always been a great lecturer [*since she's been a lecturer*].

The common element in the optional elements in square brackets is that they are part of the truth-conditional content of the utterance, but not part of the linguistic meaning of the sentence, and so are not compositionally derived. Carston says about these examples that 'it's extremely difficult to see how one might argue for a hidden variable (or implicit argument), or why one would want to.' (2002: 202)

There is no disputing the fact that (7)–(12) are perfectly grammatical and semantically complete – once reference assignment has been resolved – without the additions in square brackets, and also that the propositions they are used to express are often conceptually richer. However, the semantic/conceptual analysis of the lexical material in brackets is far from obvious: 'together' in (7) does not seem to correspond to any basic logical type /conceptual category and so it is difficult to see how it could be a constituent in logical form in any case; it more probably corresponds to an independent assumption that Jack and Jill had agreed to coordinate their action. A similar line of argument could be given for the quantified NP in (11), which she presents as a case of pragmatic strengthening. In (10), and possibly (8), another example of

pragmatic strengthening, a different logical, more restrictive, operation on the two independent propositions explicated by the utterance is at stake. With the exception of (12), which will be discussed later, none of these cases seems to involve propositional constituency as the lexical material in brackets might suggest. I agree with Carston that these are aspects of the explicit content of the corresponding utterances, but I am not so sure that one could not mount an account in terms of implicature for at least some of them, as Levinson, in fact, has done. Carston may argue here that she is only interested in showing that in these cases the pragmatic system can be set in motion without the language system directing its operations, rather than in defending an analysis in terms of unarticulated constituents for these examples. But in so far as she includes these examples in her discussion of the 'hidden variable issue', it is as well to separate the issues. I will therefore concentrate on (9) and the examples involving the recovery of implicit arguments and optional modifiers that she includes at the end of her section on the explicit/implicit distinction. I'll start with the former.

Carston closes her *Postscript* on hidden indexicals with the following example from Wilson and Sperber (2000):

(13) Alan: Do you want to join us for supper?
      Jill: No thanks, I've eaten.

Assuming Jill's utterance in (13) is understood as in (14a), the question is whether the logical form decoded from it is (14b), including a variable for the object argument and the time span, or simply (14c). Wilson and Sperber go on to argue that (14b) is *ad hoc*: those two variables are there simply because the corresponding instantiations in the proposition expressed in (14a) have turned out to be relevant for the utterance:

(14) a. Jill has eaten supper this evening.
      b. I have eaten x at t.
      c. I have eaten.
      d. I've eaten [x] [in manner y] [at location l] [within time span t].

They argue that tracing every constituent of the proposition expressed in context to a variable in logical form would force sentences to include 'a host of hidden constituents', as in (14d) basically getting in the way when they are not relevant for the utterance. They propose an alternative in terms of an entirely pragmatic process of narrowing down 'eating' to 'eating supper', and 'the time span indicated by the perfect, to the evening of the utterance.' (Wilson and Sperber 2000: 238). Carston adds for her part that if the slots in (14d) corresponded to hidden indexicals

in logical form they would call for contextual specification, even in situations in which they would be irrelevant. In such cases, it will not do, she argues, to assign default values to the variables as in (14e):

(14)   e. I've eaten supper in some manner at some location this evening.

because, on the one hand, (14e) does not mean the same thing as (14d).[2] And then, these variables do not behave like the covert counterparts to pronouns they are supposed to be, since pronouns have to be supplied with specific values in context when they are not bound.[3] Thus, if the covert indexicals in (14d) behaved like their overt counterparts, (14e) could not be a proposition that (13) might express.[4]

We see then that in Wilson and Sperber's proposal, the word 'eat' maps onto the concept [EAT], from which the processor gains access to lexical, logical, and encyclopaedic information, including no structural information other than that derived from the syntax of the sequence. A pragmatic process of free enrichment narrowing down the meaning of the verb 'eat' then takes the hearer from a logical form containing the concept [EAT] to a proposition containing the *ad hoc* concepts [EAT-SUPPER], [EAT-IN-THE-KITCHEN], [EAT-WITH-STICKS], or perhaps [EAT-SUPPER-WITH-STICKS-IN-THE-KITCHEN] as the case might be, on considerations of relevance. Carston admits that the issue is far from settled, but concludes:

> One of the nice features of the free enrichment account is that it is not straitjacketed in this way; by definition, only the relevant constituents are recovered. (2002: 204)

Like Carston and Wilson and Sperber, François Recanati (2004: 98) thinks that these variables have no business in logical form. He also reasons that because they do not behave like genuine indexicals requiring definite instantiation there is no linguistic convention demanding that they be present in the logical form of the sentence, not even the temporal variable corresponding to the past perfect, for which there is, after all, an element in the sentence – perfect tense morphology – to which the slot could be tied. The justification is, again, that perfect tenses are not strictly referential and therefore do not need to be supplied with specific values for the sentence to be understood. But I see no reason why the variable might not range over an interval before and up to the time of utterance.[5] As for the object argument of a verb like 'eat', because it can be interpreted as in (15) when it is used intransitively, it too fails the *indexicality test* and is therefore barred from the logical

form. This is in contrast to the definite null complement (DNC) verbs in (16a), which cannot be interpreted as in (16b):

(15)   I have eaten something or other.

(16)   a.   I noticed/heard/finished.
       b.   I heard/noticed/finished something or other.

He takes this as evidence that whereas DNCs behave like true indexicals, and so a variable for them would be justified in logical form, indefinite null complement (INC) verbs like 'eat' remain semantically monadic. I would like to take issue with the idea that (14d) is an *ad hoc* logical form for (13) and that the variables it contains would just sit idly in logical form when no specific values are salient in context.

   The variables in (14d) stand for argument roles, optional modifiers of the predicate, and time specifications for tense. There does not seem to be any logical/conceptual reason why the values which these variables end up with should be definite rather than indefinite for the semantic representation of the sentence to be well formed. Accepting that these variables do not correspond to covert indexicals in the sentence may be used to undermine Jason Stanley's syntactic proposal, in which 'the only truth-conditional role of context is the resolution of indexicality, broadly construed' (2000: 401), but does not win the argument that they are not part of the semantic representation of the sentence. Before we conclude that the variable for the object argument is not part of the meaning of the verb, we should make sure that it has no compositional effects on how the verb is used. Consider the necessary inference from the sentence in (13)–(15). Both Recanati (2004: 108) and Carston (2002: 203) think that these inferences correspond to general, language-independent kinds of inference. But then, how does the addressee go from 'I've eaten' to the pragmatically enriched 'I've eaten supper'? Recanati is more specific on how the free enrichment process might operate in these cases. He argues that *intransitivisation* for verbs like 'eat' can be analysed as a 'recessive' variadic function which suppresses the semantic argument corresponding to the direct object of the verb. When an object argument role is salient in context, the addition of this constituent to the proposition expressed is the result of the pragmatic system operating on its own, that is, the semantic representation of the verb is not the source of the argument. On the whole, I find this account implausible from a psychological perspective. As Groefsema (2006) points out, there is no telling how the addressee might decide which of the two verbs 'eat' is intended if the object argument can be inferred from both. And then, why would the hearer go to the trouble

of performing the recessive operation suppressing the object argument role if 'it cannot be entirely dissociated from [the predicate]' (Recanati 2004: 108), anyway, only to add a contextual object argument for it? Groefsema also shows that there are a number of aspects of the grammaticality and interpretability of sentences with the intransitive 'eat' that are difficult to reconcile with a purely pragmatic account of the recovery of the contextual argument. Consider the following sentences that she gives:

(17)   a. John brought the sandwiches and Anne ate.
       b. *John brought the sandwiches but Anne didn't eat – she ate the cakes instead.

(17a) cannot be understood to mean that Anne ate the sandwiches, in spite of the fact that they form a salient candidate for the pragmatic enrichment of the predicate.[6] The ungrammaticality in (17b) is not easily explained either. Why does the availability of 'the sandwiches' in the first clause not stop the second clause being interpreted as 'anything'? In other words, why is 'eat' not enriched to 'eat the sandwiches' in (17b) or (17a)? Finally, Groefsema quotes experimental evidence that shows that a gap is always postulated after INC verbs, even when they are intransitively used and no specific value for them is salient in context (see Nicol 1988). It seems we can conclude that the simplest explanation for the data is to assume that the variable for the object argument is present in logical form from the start, allowing both the entailments of the sentence to be derived and the relevant contextual enrichments to take place.

This leaves us with the manner and place slots in (14d) or the adjuncts in (9), at the beginning of the section, all of which are both syntactically and semantically optional. Why do they have to be included in the logical form, calling for completion as Carston says, even in situations in which no relevance for the utterance is attached to them? The answer is one of principle: once we accept that structural information on how to construct conceptual representations from linguistic form is necessary, and that syntax cannot do the job on its own, the next step is to assume that information concerning both obligatory and optional combinatorial specifications for well-formedness in conceptual structure has to be registered somewhere. One proposal in this direction comes from Groefsema (1992) who proposes that the logical entry in conceptual addresses is the place for this kind of information. Optional constituents do not necessarily *call for* specification and need not be a burden on processing, though. By making a suitably constrained

notion of accessibility apply to conceptual slots in logical hypotheses, Groefsema can account for why they are not activated when they are irrelevant, but become highly accessible:

> either when the addressee recovers a concept of the same type which cannot be inserted into a non-optional slot, or they become accessible because they are activated by something in the context. (2006: 6)

This is in contrast to mandatory constituents, which are automatically and obligatorily recovered.

Can we speak of a purely pragmatic process operating here? Not *purely*. These constituents in (14d) and (9) may be optional, but they are not totally unconstrained. Optional modification, like mandatory combinations for concepts, is idiosyncratic: no conceptual category can optionally modify every other, as is reflected in the modifiers that different classes of predicate take in the sentence:

(18)   #John jumped over the cliff for two hours.

(19)   #He knew Chris in five years.

(20)   #They reached the building for half an hour.

(21)   #He remains at three o'clock.

This constitutes semantic information that is part of our linguistic knowledge and has to be represented somewhere. In addition, that optional constituents are not exclusively pragmatic would also explain why they pass Stanley's *binding criterion* for hidden indexicality, which was in fact devised to help identify mandatory constituents of logical form not realised in the sentence. Recanati (2004: 106) finds that by this criterion, a sentence like (22) would have to correspond to the logical form in (22a), because we can say things like (23), which require a variable for the quantified expression to bind, as represented in (23a):

(22)   The policeman stopped the car.
       a. The policeman stopped the car in manner *m*.

(23)   However he did it, the policeman stopped the car.
       a. For some manner of stopping *m*, the policeman stopped the car in manner *m*.

This possibility he finds absurd and so he concludes that the binding criterion is no safe guide to logical form constituency. There is, ironically, another possible understanding of what is going on here: these optional constituents can be bound by a quantifier, as (23)–(23a)

illustrate, precisely because they are available in logical form and are activated if needed. In this respect they can be said to be articulated – *as optional*. Perhaps, optional constituency should not be equated with unarticulation.

At the bottom of the free enrichment view of the role of pragmatics in propositional content lies the relevance theoretic conception of the meanings of words as internally unstructured wholes and the assumption that narrow syntax is the only source of structural information. That is why the line of reasoning that is followed is that if an object argument appears in the sentence, the logical form has a constituent for it; if no argument is expressed, no argument role appears in the logical form. When the context makes the presence of an argument required, we are told that the meaning of the verb is narrowed down to include the argument. The same goes for optional modification. A similar strategy is followed in a number of other cases. In the case of fragments, for example, a corresponding fragment of a logical form is assigned as the output of decoding (Carston 2002: 152–7). In the case of adjective-noun modification, we are told (Carston 2002: 328) that 'fast car' is interpreted by pragmatically adjusting the meanings of the adjective and the noun, just as we would for a combination like 'big car'. Because 'fast' and 'big' are both gradable adjectives, it is assumed that a variable for the term of comparison, something like 'fast for an x', must be included in the logical form.[7] No other semantic constraint appears to guide the inferential process. However, in spite of the superficial syntactic similarity of the two NPs, our interpretating 'fast car' as 'car that goes fast' is mediated by a semantic restriction in the adjective to the effect that it is processes that are fast. This means that we need to make room for a constituent of this kind in the logical form, which will then be enriched with information from the encyclopaedic entry of the noun being modified or from the extra-linguistic context. Rather than a purely pragmatic operation of mutual adjustment of conceptual content, what we have here is a directional process of interpretation in which the modifier imposes conditions on the type of semantic head with which it can combine, and this sends the inferential system off in search of relevant content that can satisfy the instruction.

This kind of strict adherence to sentence form when making decisions about the logical forms of utterances is not the only possibility the theory allows. In relevance theory the hearer integrates incoming linguistic information into an evolving conceptual representation – the logical form – by means of logical hypotheses that allow the processor to anticipate the type of content that is likely to follow.[8] Given the

evidence that these hypotheses about the overall structure of the conceptual representation cannot be built on syntactic information alone, it seems unavoidable that the semantic component takes on greater responsibility in shaping the propositions expressed by utterances.

5   Conclusion

Is it possible to develop a compositionality principle that can accommodate the interaction of the language and the inferential systems, as Carston suggests? One view gaining ground postulates that the composition rules operate on the pragmatically modulated contents of simple expressions. Is this enough? It depends on what those rules that compose the resulting pragmatic values are. For if, as Carston seems to assume, they are parasitic on syntactic rules operating over language strings, those contextually modulated values would have to be translated back into syntactic form before composition can take place. The evidence presented in the previous sections – that pragmatic content feeds computational processes – points in the direction of a far greater responsibility of the semantic/conceptual component in the derivation of propositional content. This is the reason it is not enough, either, to drop assumption (b) in the introduction, and simply add to the grammar the sort of lexical information needed to account for coercion phenomena and so on. An adequate contextualist position should acknowledge that semantic composition rules drive the composition process.

Jackendoff has been complaining for some time that syntactocentrism just will not explain the facts and that semantics has to be a generative component of the language system in its own right. Kempson et al. (2001) give such criticism another turn by proposing that the structural properties of natural language expressions are not defined over the surface sequence of words, but *directly* over propositional representations enriched by contextual information and built incrementally on the instructions that the linguistic input encodes. Either way, pragmatic processes at the explicit level are seen to operate under constraints which go beyond the syntax of the sentence-type.

Wilson and Sperber and Carston worry that the role of pragmatics may be reduced to that of filling in slots for linguistically determined gaps, against the claim they have been pressing that pragmatic needs create content, and not just at the implicit level. The evidence presented here was intended to show that the inferential system does indeed generate content corresponding to no constituent of the sentence, but that its operation is nevertheless structurally constrained. Notice, though,

that both the underdeterminacy of the language system and the ubiquitous role of pragmatic inference in propositional content – two crucial assumptions in relevance theory, – remain in place. The worry may therefore be misplaced.

Notes

1   That is, the organisation of sentences in terms of grammatical categories such as NP, VP, and so on.
2. This is questionable. For one thing, she is not comparing like with like: taken as a possible utterance, (14e) is markedly uninformative and would have contextual effects that are simply not applicable to (14d), even if the decoded meaning of (14e) would seem to be all but identical to (14d).
3. That is why 'Someone or other came' cannot be the proposition expressed by an utterance of 'He came'.
4. She briefly considers the possibility that (13) may have 'a variety of logical forms, each with an array of variables, differing in number and type [...] marking different possible contextual conditions' (Carston 2002: 204), but this option multiplies the number of logical forms, so it is not much of an improvement on the multiple slots account.
5. This was in fact the analysis Recanati (1993) proposed.
6. Only the interpretation 'She ate of them' is possible here.
7. Gradable adjectives, along with relational terms (such as 'local' and 'friend') constitute one of the very few cases in which a variable corresponding to no constituent of the sentence is allowed in the logical form. See Carston (2002: 328).
8. This they see as crucial 'to hold down the costs of disambiguation and reference assignment.' (Sperber and Wilson 1986/95: 204). They also use it to account for focus/presupposition and stylistic effects.

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5
Linguistic Meaning and Propositional Content

Manuel García-Carpintero

1 Introduction

One of the liveliest philosophical debates in recent years concerns the nature of the semantics/pragmatics divide. Some writers have expressed worries that it might be merely terminological, but I think it ultimately concerns an issue with empirical implications: the scope and limits of a serious scientific undertaking, formal semantics. Richard Montague (1973), the inaugurator of that research tradition who showed that tools developed in mathematical logic can be helpfully deployed to explain features of natural languages, paradoxically thought of semantics as a branch of mathematics. However, most of his contemporary followers are as convinced as their colleagues in other fields in linguistics that their theoretical proposals must eventually be integrated with results in cognitive neuroscience.[1] It is whether or not there is an explanatorily interesting subject matter at all for this research undertaking roughly within the contours envisaged by its practitioners – a subject matter for a theoretical account with such empirical consequences – that in my view the debate ultimately concerns.

On the relevance-theoretic conception of linguistic semantics that Robyn Carston advocates:

> [t]he distinction between linguistic semantics and pragmatics is seen in performance terms, as closely tied to a distinction between two types of processes involved in understanding utterances: linguistic decoding and pragmatic inference [...] [T]he semantic representation, or logical form [the output of the decoding process] [...] is seldom, if ever, fully propositional. It is a kind of template or schema for a range of possible propositions, rather than itself a particular

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proposition. As a 'schema', it is a formula that contains slots to be filled; what may go into a given slot may be partially constrained by a procedure which specifies how to go about filling it. Such a formula necessarily requires the second type of cognitive process, pragmatic inference, to develop it into the proposition the speaker intended to express. (2002: 56–7)

A little later she considers for illustrative purposes the sentence 'She hasn't called', and says:

the sentence form itself encodes something much less specific [than the proposition it is understood as expressing on any normal occasion of use], a non-propositional (non-truth-evaluable) logico-conceptual structure, an 'assumption schema', which functions as a template for the construction of fully propositional (truth-evaluable) logico-conceptual structures.[...]

[T]he encoded linguistic meaning, or character, of the pronoun 'she' does not enter into the logical form as a conceptual constituent but is instead a procedural indication to the pragmatic processor of the sort of entity being referred to [...] [T]his distinction between procedural and conceptual encoding is a cognitive processing correlate of the character/content distinction made by Kaplan [...] [T]he semantic representation envisaged as a result of the linguistic encoding [...] is not a truth-conditional entity. It is fully propositional conceptual representations, rather than sentences, or even utterances of sentences, that are the primary bearers of truth conditions. (2002: 59–60)

My own views on the semantics/pragmatics divide are rather close to those presented and illustrated here (García-Carpintero 2001, 2004); in particular, I agree that the propositional content which is most intuitively conveyed with utterances of sentences including demonstratives such as 'she' is determined partially through pragmatic mechanisms, not dissimilar from those relied upon to determine prototypical cases of pragmatically conveyed meanings such as conversational implicatures. However, I have a small discrepancy from her views on linguistic or semantic content, which I find worth presenting for discussion, regarding linguistic or semantic content. While I also agree that this is not propositional in nature, I do think that there are propositions that this semantic content determines, which are sometimes expressed. Additionally, I hope that getting

clear about semantic meaning will allow us to appreciate the explanatory power of formal semantics.

In Section 2 I provide a sketchy characterisation of what I take theories in formal semantics to be about. I rely on Kent Bach's work to distinguish two notions of *what is said*, one answering to Paul Grice's views, which I take to be a pragmatic speech act notion, and another which is closer to what characterises the subject-matter of formal semantics; I also classify the different views on the market about the semantics/pragmatics divide relative to that distinction. In Section 3 I consider an argument against the relevance of propositions like the ones which my conception of what semantics is about acknowledges, to be found in Jeffrey King and Jason Stanley (2005); then in the Section 4 I will discuss a short argument by Carston to a similar effect.

2   The nature of linguistic theories in general and semantic theories in particular

All participants to the debate accept that there are clear-cut cases of Gricean conversational implicatures, which should be accounted for roughly along the lines indicated by Grice, and that pragmatics paradigmatically has to do with such matters. These cases are paradigm examples of Grice's 'speaker meaning' – a rational, intentional activity of a peculiar sort whose distinctiveness lies in something along the lines that Grice purported to capture in terms of what Peter Strawson later labelled 'communicative intentions'. The non-negotiable concern guiding the proposal I will eventually make regarding what semantics is about is that natural languages must essentially consist of a relatively fixed syntactic and semantic compositional structure, independent of the vagaries of the specific intentions and arbitrary decisions of particular speakers in particular speech situations, which constrains what those specific intentions and decisions can achieve. The point, and its justification, was clearly articulated by Gottlob Frege and Ludwig Wittgenstein; several decades after Frege and Wittgenstein's remarks, Noam Chomsky built on the basis of the need to account for that phenomenon a successful empirically oriented research undertaking, of which most contemporary practitioners of formal semantics take their discipline to be a fundamental part. I will call this phenomenon, borrowing a term from Jerry Fodor, 'systematicity'.

From a recent presentation of his views (Hauser, Chomsky, and Fitch 2002), the Chomskian suggested explanation involves positing a psychologically real system at the core of the subject-matter that grammarians

in general and formal semanticists in particular purport to characterise, abstracting from the details of the neurological configurations or even the procedural algorithms implementing the system in particular occasions of language perception and production. This system is thought of as a specifically dedicated and biologically constituted 'module' or 'faculty' which, at its narrow core, features a recursive computational mechanism accounting for systematicity. In addition to the recursive module, the system is also understood to feature other components, including a 'conceptual-intentional system'.

The debate about the semantics/pragmatics divide is usually articulated around the notion of *what is said*. Grice introduced this notion to the present dispute, in his struggle to isolate a 'region of signification which has special claims to centrality' (as he reports in his 1987 'Retrospective Epilogue', Grice 1989: 359). Retrospectively, he identifies two features:

> which I shall call respectively 'formality' and 'dictiveness,' with seemingly equally strong claims to provide for us a rationally reconstructed interpretation of the initially hazy feature of centrality. (1989: 359–60)

The first is saliently present in cases:

> in which the items or situations signified are picked out as such by their falling under the conventional meaning of the signifying expression rather than by some more informal or indirect relationship to the signifying expression. (1989: 360)

In contrast the second is so in:

> those instances of signification in which what is signified either is, or forms part of, or is specially and appropriately connected with what the signifying expression (or its user) *says* as distinct from implies, suggests, hints, or in some other less than fully direct manner conveys. (1989: 360)

His earlier proposals about *what is said* purported to combine the two features. On the one hand, he explicitly had appealed to formality:

> In the sense in which I am using the word *say*, I intend what someone has said to be closely related to the conventional meaning of the words (the sentence) he has uttered. (1989: 25)

On the other hand, he had indicated (1989: 30, 34) that in cases of irony or metaphor the speaker merely 'makes as if to say' the semantic content of the sentence he utters. Following Bach (1994), I assume this is a tacit appeal to dictiveness; Grice is assuming that it would be intuitively wrong to think of the speaker in those cases as directly committing himself to that content.

A proper understanding of what is said, and its link with the deliverances of semantic theories, should in my view take into account Bach's insistence that Grice's two criteria, formality and dictiveness, point to different notions. Bach thinks that they can be usefully explicated by appealing to:

> Austin's distinction between locutionary and illocutionary acts. Austin, it may be recalled, defined the locutionary act [...] as using certain 'vocables with a certain sense and reference' [...] That sounds a lot like Grice's notion of saying, except that for Grice saying something entails meaning it: the verb 'say', as Grice uses it, does not mark a level distinct from that marked by such illocutionary verbs as 'state' and tell', but rather functions as a generic illocutionary verb that describes any constative act whose content is made explicit (1994: 143).

Bach proposes to amend Grice, avoiding some intuitively odd aspects of his views:

> There was one respect in which Grice's favored sense of 'say' was a bit stipulative. For him saying something entails meaning it. This is why he used the locution 'making as if to say' to describe irony, metaphor, etc., since in these cases one does not mean what one appears to be saying. Here he seems to have conflated saying with stating. It is most natural to describe these as cases of saying one thing and meaning something else instead [...] Besides non-literality, there are two other reasons for denying that saying something entails meaning it. A speaker can mean one thing but unintentionally say something else, owing to a slip of the tongue, a misuse of a word, or otherwise misspeaking. Also, one can say something without meaning anything at all, as in cases of translating, reciting [...]
>
> So we can replace Grice's idiosyncratic distinction between saying and merely making as if to say with the distinction (in indicative cases) between explicitly stating and saying (in Austin's locutionary sense). (2001: 17)

Bach's notion of saying, explicated in terms of Austin's notion of the locutionary act, is of course closely related to Grice's *formality* feature, while his illocutionary notion (properly restricted to indicative cases) of explicitly stating is closely related to *dictiveness*; in order not to prejudice present issues, I will call them 'what is said$_L$' and 'what is said$_I$', and cognates.[2]

The tension between the two Gricean criteria for what is said is not manifested merely in Grice's contortions concerning saying vs merely making as if to say; Grice had also noticed the problem posed by his 'conventional implicatures', which, according to the formality criterion, make it to what is said, while according to the dictiveness criterion they do not. The point is that, while conventional implicatures do not belong in *what is said$_I$*, they do belong in *what is said$_L$*. Stephen Barker (2003) uses this view to object to theories of meaning that seek to reduce linguistic meaning to truth conditions. He wants to argue, with Grice, that while (i) is what is said by (1), and thus what determines its truth-condition, not just (i), but (ii), too, is part of (1)'s *semantic content* 'the content it possesses by virtue of linguistic rules and context, and upon which logical particles may potentially operate' (2003: 2):

(1) Even John could prove the Completeness Theorem.

    (i) John could prove the Completeness Theorem.

    (ii) It is comparatively improbable that John could prove the Completeness Theorem.

Barker provides convincing evidence for the latter claim: the semantic embeddability of what is indicated, or conventionally implicated, as part of the content to which some operators are sensitive (2003: 8–13). In previous work (García-Carpintero 2000) I myself have argued that, while referential expressions such as indexicals and proper names contribute their referents to the content asserted in utterances of simple subject-predicate declarative sentences where they occur – as direct-reference theorists contend – some reference-fixing descriptive material is conveyed as *conventional* implicatures, and thus belongs in semantic content, against the most radical tenets of those theorists. Part of my argument was the traditional Fregean one that those contents can be semantically embedded under indirect discourse operators.

The case of conventional implicatures thus shows that we need a notion of what is said$_L$ distinct from the truth-conditional or properly propositional notion of what is said$_I$, and, on the assumption that semantic theories should give us the constitutive meaning properties

of natural languages, it is clear that what is said$_L$ is a semantic notion.[3] Indexicals can be used to make the point, as I indicated above, but they can also be used to make the opposite claim, that what is said$_I$ goes typically beyond what a semantic theory should care to provide. We could also use to that effect some of the many examples highlighted by contextualists, such as 'It is raining' or 'I am ready'.

Writers of a contextualist persuasion distinguish, on different theoretical grounds, what François Recanati (2004) calls 'saturation' from what he terms 'modulation'. Saturation provides values to parameters in a linguistically controlled and mandated way (2004: 7–10): *mandated* in that it is allegedly necessary in order to get a truth evaluable proposition. Thus, 'It is raining' does not express a proposition that can be evaluated as true or false. We at least need to saturate tense, which is normally provided as the time of utterance. It is usually held that a location needs to be provided as well; if a location value is required, then adding one is also an example of saturation. If a location value is not required, and none is provided, then an utterance of 'It is raining' at a time t expresses that it is raining somewhere at t, which is true or false. If a location value is optional, as Recanati holds, then providing a location value is an example of what he calls 'free enrichment' (2004: 10). Free enrichment is not mandated for reaching a truth-evaluable proposition, but pragmatically added. Another process which is not linguistically mandated is exemplified by cases of modulation such as 'The ATM swallowed my credit card'. The range of admissible arguments for the verb 'to swallow' has been modified, with a corresponding change in meaning.

Relevance theorists thus reject views such as Herman Cappelen and Ernest Lepore's (1997, 2005: chapter 13) that there is no theoretically significant undertaking seeking to relate with clausal items *what is said* by means of them; this theoretically privileged notion of what is said should be one corresponding as closely as possible to Grice's two criteria of formality and dictiveness. In what in my view is the most illuminating way of classifying opposing views on the semantics/pragmatics divide, this rejection represents the common assumption on one of the two confronting sides. Apart from this, there are important differences among writers on this side in the debate. Writers called 'minimalists' mostly agree on the classification of signified items as resulting from linguistically controlled or linguistically uncontrolled processes, but differ from Recanati and relevance theorists in taking as their theoretically privileged notion of what is said only the one determined by saturation-like processes. On the other hand, writers following the lead

of Stanley (2000) agree with minimalists about the latter, but disagree with them, and hence with relevance theorists, that most if not all of the alleged examples of items resulting from modulation-like processes are in fact linguistically controlled.[4]

In Bach's terms, these writers share the assumption that semantics focuses on what is said$_L$. Perhaps they are motivated by considerations such as those of Mark Richard (1998) in his defence against Cappelen and Lepore's (1997) scepticism of the 'received view', that *an adequate semantic theory T for a language L should assign p as the semantic content of a sentence S in L in a literal utterance u iff u says p*. Richard argues that:

> uttering sentences conveys information; semantic theory tells us how information is conventionally assigned to sentence utterances [...] Since bits of information are what we convey by assertively uttering sentences, semantic theory tells us what we say when we speak literally (1998: 605).

Now, in my view we should reject this argument on the basis of our previous considerations for semantics to focus rather on what is said$_L$. First, by assertively uttering sentences we do more than just convey bits of information; we may also, for instance, conventionally convey some assumptions that we assume we share with our audience, and there is no good reason why semantic theories should abstain from telling us how we systematically do this. Second, semantic theory is in no position to give us all the information that we convey when we speak literally; it can only give us the systematic constraints on that.

Famously, for the case of indexicals, David Kaplan (1989) distinguished two levels of meaning: *character* and *content*. Let me follow Stephen Schiffer's (2003) strategy and use instead 'character*' and 'content*', assuming that these correspond to Kaplan's distinction when matters are sufficiently straightforward, such as in the case of 'I' or 'yesterday'.[5] Borrowing Kaplan's distinction, thus modified, we could label the two primarily opposed views about the semantics/pragmatics divide that I am distinguishing 'content*-semantics', or 'c-semantics' for short, and 'character*-semantics', 'ch-semantics', henceforth. Minimalists such as Cappelen and Lepore (2005) and indexicalists such as King and Stanley (2005) share with Recanati the view that semantics is c-semantics, in spite of their important differences; in contrast, the ch-semanticist takes it that it is rather what is said$_L$ that semantic theories purport to characterise in a systematic way. In these terms, ch-semantics is the

subject-matter famously advocated by David Lewis for a semantic theory, which in his view should be:

> one suited to play a certain role in a systematic restatement of our common knowledge about language [...] the detailed and parochial part – the part that would be different [...] if we were Japanese. (1980: 23–4)

Lewis goes on to disparage more ambitious goals, such as:

> that a good grammar should be suited to fit into a psycholinguistic theory that goes beyond our common knowledge and explains the inner mechanisms that make our practice possible. (1980: 23–4)

It should be clear from the preceding remarks that I strongly disagree with him about this.

3   Arguments against character-semantics

I just imagined, and rejected, a possible argument for the common assumption of theorists of many different stripes that semantics is about what is said$_I$. King and Stanley (2005) offer another argument for c-semantics that (unsurprisingly, given what I take to be their deep agreement beyond their important superficial differences) is very close to the main argument by Carston and other theorists such as Recanati against the form of minimalism that a defender of ch-semantics such as myself would espouse. I will firstly discuss King and Stanley's argument; my reasons for this are dialectical: they make the points more bluntly, and are thus easier and clearer targets for my criticisms. The discussion will also help me to elaborate further on the proposal I have made about what semantics is.

King and Stanley (2005: 121–16) distinguish three different conceptions of the deliverances of ch-semantics, and they rightly reject two of them. I will put what I take to be the main common consideration against those two first interpretations as follows. A semantic theory takes linguistic intuitions as its initial evidence, in particular those manifesting *systematicity*. To account for this, it compositionally ascribes semantic features to complex expressions (sentences, in particular), on the basis of features of lexical units and syntactic modes of combining them. Now, if we pay attention to relevant linguistic intuitions, we will see that in most common cases it is the *content* of lexical items

that is directly involved in the compositional building up of complex semantic features; the two conceptions that King and Stanley initially consider wrongly ignore this.

To illustrate, there is an obvious intuitive semantic difference between 'John loves Mary' and 'Mary loves John'. In the present view, the character*/content* distinction applies to 'John', 'Mary' and even 'loves'. Now, if we consider particular utterances, it may well be that the contents of 'John' and 'Mary' are the same, and also that 'loves' signifies the very same 'neutral relation' in both cases (Fine 2000). From what I take to be the most plausible explanation of the difference (which is not Fine's), syntactic features of the NPs result in different (proto-)thematic roles, *agent* and *theme*, being associated with them (Dowty 1991). Now, these roles are in fact relational properties that the NP-*contents* have vis-à-vis the VP-*content*. The semantic value of the complex expression (the sentence) appears thus to result from semantic features of the mode of combination (the relevant syntactic features – *being the subject* and *being the direct object*) applied to the *contents** of the lexical units, not to their characters*.[6] Notice that I am not appealing here to intuitions about how meanings are composed in 'real time', but only about the most plausible explanation of intuitions about meanings of complex expressions.

Now, as King and Stanley (2005: 126–7) acknowledge, this point is compatible with the Lewisian view that semantic theories are fundamentally intended to account for systematicity by delivering characters*. As an illustration, they consider the sentence 'I am here', which they regiment as 'Located(I, Here)', and, writing 'C(*e*)' for the character* of expression *e* and suppressing detail, suggest this as a character* for it:

(2) C('Located(*i*, *p*)') for '*i*' an individual term and '*p*' a position term = *f* such that for any context *c*, $f(c) = \langle C('i')(c), C('p')(c) \rangle\rangle$

They still have two objections to this, most plausible, version of the view about the semantics/pragmatics divide which I am embracing here. The first is an undisguised appeal to non-existent (speaking for my own case), or at least non-authoritative, linguistic intuitions; I will not discuss it here. The second argument is methodological:

> both a semantics that assigns characters to simple expressions and recursively assigns characters to complex expressions *and* a semantics that assigns characters to only simple expressions allow for an assignment of the same contents in contexts to simple and complex expressions. So unless the functional characters of complex expressions

have some *additional* job to do, they are unnecessary. But there seems
to be no such additional job. (King and Stanley 2005: 128)

The first, and most important, thing to notice in reply is this: on the
assumption that the semantics assigns characters* to the lexical units
and modes of composition, it *already* thereby assigns characters* to
the phrases and other compounds which these modes of composition
determine. It did not take long and difficult empirical study for King
and Stanley to come up with characters* for complex expressions such
as the one that (2) illustrates; it only required some logical ingenuity –
or, better put, some familiarity with the technicalities of the relevant
framework. The point is that theories that correctly ascribe their seman-
tic significance to lexical units and modes of combination, *already* logi-
cally entail ascriptions of semantic values to the complex expressions
they help to build. They must, because, if properly devised, in ascribing
their semantic significance to modes of composition they are *already
built* so as to have those consequences.

The second point I want to make in reply is a bit more controver-
sial; to wit, that there in fact *are* 'additional' jobs for characters for
sentences to do. Lewis (1980) claims that there is no significant differ-
ence between the style of semantics he advocates, in which the theory
ascribes 'constant, but complex' meanings to sentences, and the one
advocated by Kaplan (1989) and Robert Stalnaker (1978), in which the
theory rather ascribes them 'variable, but simpler' contents; to all theo-
retical purposes, they are mere notational variants. This is one of the
places where my differences with Lewis, noticed before, about whether
psychological facts about linguistic competence matter for linguistic
theorising, make a difference: I would not be so cavalier about the dif-
ferences between those theories. However, for present purposes Lewis's
point stands. Stalnaker and Kaplan both grant a crucial place in their
theories to contents (as I myself would do, even if I do not think it is
the task of semantics proper to deliver them, and even if semantics
proper in my view goes beyond them), just as King and Stanley would.
Nonetheless, their full accounts all include characters*, and characters*
for whole sentences among them.

Take Stalnaker's (1978) view; he would ascribe to sentences what
he calls 'propositional concepts', represented by well-known two-
dimensional matrices. They are needed, according to him, because the
matrices include propositions *additional* to those constituting the, as it
were, official contents of sentences, which he calls 'diagonal' contents
(on account of their location in those representations). These contents

are both 'what is said' in some cases (ordinary assertions of identity statements, say), and the semantic value of some embedded sentences (in some ascriptions of propositional attitudes). Like ordinary contents, these are typically pragmatically enriched, too, by means of extra-linguistic information from context, but they have a purely linguistic core: as I mentioned before, the conventional implicatures that are constitutive of the characters* of some sentences can become straight-forward content-constituents when they are embedded under some operators. Kaplan (1989) would claim that characters* for sentences are needed to provide a 'logic for demonstratives'; they are, roughly, the contents whose truth is preserved in some inferences to whose validity the intuitions of ordinary speakers are sensitive. I have argued (García-Carpintero 2007) that such characters are similarly needed to account for our intuitions about the truth conditions of vague, or more in general indeterminate, statements; they are, roughly, 'what is said', as this is reconstructed in supervaluationist settings.

These points require much more elaboration than I can provide here, but they at least suggest that King and Stanley's challenge can be answered in their own terms; characters* for sentences are needed in both the sense that a complete semantic theory should not just *entail* them (as I insisted before, a semantic theory already includes them, if it includes the characters* that King and Stanley are prepared to grant) but also *refer to* or *quantify over* them, and in the related sense that some relevant linguistic intuitions of speakers are directly sensitive to them (strictly speaking, to contents determined by them).

4　Carston's argument

I have been insisting that there is a very important distinction between what is said, in the privileged sense that authors such as Carston (her 'explicatures') or Recanati give to that term, and conversational implica-tures. Saturated and enriched contents of declarative sentences, unlike those conversationally (or conventionally, for that matter) implicated, have the *dictiveness* feature that Grice correctly isolated; as I have been emphasising, they are the 'values' of those 'functions' by means of which we are abstractly representing the meanings of those sentences for present purposes. However, it is precisely the fact that we have at our disposal such an explanatory notion, *characters**, that we are in a posi-tion to make the distinction properly.

Let us consider now an argument that Carston deploys against a view of what semantics is about like the one which I have espoused in the

previous two sections. Considering views such as Stalnaker's or Perry's, on which I have based my proposal, she points out that, in characterising abstract entities such as Stalnaker's (1978) diagonal propositions:

> no distinction is made between conceptual aspects of sentence meaning, which enter into the proposition expressed, and procedural constraints, that do not. (Carston 2002: 90)

This is entirely correct; however, as I suggested in the previous section, the relevant propositions could be defined inside the framework of a more elaborated formal semantics theory, which did make distinctions corresponding to the relevance theoretic one between 'procedural' and 'conceptual', for instance the one which I said I myself would favour between merely presupposed contents (that the referent is female and that it is salient or otherwise demonstrated when the token of 'she' is uttered) and proper contents*-determinants. Carston then goes on to acknowledge, '[t]his extraction of a very general proposition can obviously be done, and may be useful for certain purposes' (2002: 90). Perhaps at the risk of sounding a little fussy, I should point out that this acknowledgement takes off a little bit of the sting of radical claims like those I quoted at the beginning, that 'the semantic representation envisaged as a result of the linguistic encoding [...] is not a truthconditional entity', because what is acknowledged here is that, for every semantic representation resulting from the linguistic encoding, there is a properly truth-conditional entity, which might even have a use.

Here are Carston's reservations about what she otherwise acknowledges:

> However, it [a diagonal proposition] is clearly not the sort of representation of linguistic meaning which can function as input to the pragmatic process of figuring out what proposition has been expressed, because it erases the distinction between two kinds of linguistic meaning, a distinction which plays an essential role in guiding those processes. (2002: 90)

About the premise in this argument, concerning the erasing of the procedure/concept distinction, I have already indicated that it is not a mandatory aspect of the view, but be that as it may, I am prepared to grant that the conclusion derived from it might well be independently true. It might well be, for instance, that the propositions derivable from the characters* that the present proposal takes to be the linguistic

meanings of sentences do not function as input in the process of 'figuring out' the content* of particular utterances of that sentence; this is for psychologists to establish. However, this does not entail that characters*, and the associated propositions, do not play the fundamental role in determining contents* (and in thus distinguishing what is said$_l$ from what is conversationally implicated) that the present view ascribes them. We need not go as far as rejecting the psychological reality of linguistic theories, and semantic theories in particular, to reject the entailment, as I emphasised in Section 2; we only need to pay attention to the competence/performance distinction (Saul 2002).

Lexical units and modes of combination constitute natural languages, and have fixed meanings, independently of the vagaries of the particular intentions of individual speakers in particular speech situations; this is why Humpty Dumpty was wrong, and you cannot mean whatever you intend to with them.[7] And this is why sentences have meanings, even though individual speakers in actual speech situations do not use them to convey those meanings (as perhaps with '1257 is odd and 1257 is not odd' or 'He is not himself today', to give obvious examples). Those meanings even determine contents that might rise to the conscious attention of speakers, which they can assert or even refer to when ascribing propositional attitudes; there are good reasons for this, deriving from the normative aspects of language understanding. Relevance theorists like Carston do not deny any of this, strictly speaking, but I feel that they belittle its theoretical importance. Their claims about the non-truth-conditional nature of what I have proposed here to consider properly semantic contents, or about their methodological irrelevance, manifest this.

Carston's ultimate worry might perhaps be different from the one she articulates in the little argument I have discussed. If one is focusing on examples like 'This moves' or 'He is ready', it is easy to complain that characters* and the 'reflexive' contents that they determine are very meagre indeed and of very little interest in comparison with their saturated and enriched contents in context. Well, *interesting* is interest-relative. I suggested above a sketchy proposal regarding the contribution to characters of syntactic features such as *being the subject* and *being the object*. Now, if one has a look at recent linguistically informed discussions of these matters (see Baker 1997, for illustration), one will see how complicated and 'interesting' the issues actually are, especially in that they obviously relate to empirical issues (issues regarding the comparison between different natural languages – whether or not 'ergative' languages such as Basque and 'accusative' languages such as English

or Spanish ultimately signify proto-thematic roles in the same way is immediately relevant here, issues concerning the acquisition and evolution of language, and so on). Toy examples like 'This moves' and toy representations of characters* such as (2) above perhaps hide from attention the otherwise obvious fact that any empirically accurate account of the semantic data, systematicity in particular, is going to be very complicated and 'interesting'.

But once again, these remarks should not be understood as suggesting any fundamental discrepancy; in fact, this is one more thing to which, I should acknowledge, Carston is very much sensitive; as she sharply puts it:

> There just is no escaping the fact that the propositions that may be expressed by sentences in use are a function, not only of linguistic meaning, but of pragmatic inference. Perhaps this marks the demise of an *interesting* principle of semantic compositionality, or perhaps it points to the possible development of a different sort of compositionality principle, one that can accommodate an interaction of decoded and pragmatically inferred meaning in the determination of the proposition expressed (a principle of semantic/pragmatic compositionality). (2002: 73)

Needless to say, I would opt for the second alternative; I refer the interested reader again to Peter Pagin (2005) for a stab in the direction of an articulation of such a principle.

Notes

1. Heim and Kratzer (1998) and Larson and Segal (1996) are two representative textbooks of this tradition, otherwise presupposing different theoretical frameworks.
2. Salmon (1991) and Ziff (1972) have related distinctions. As will become clear, the proposal I will outline, although along these lines, differs in its details from them and from what Recanati (2004: 51–4) calls 'the syncretic view'.
3. García-Carpintero (2004) invokes to the same effect the fact that moods conventionally signify aspects of illocutionary force.

4. I do not have any reservations about 'hidden variables' in the syntax/semantics interface. My reasons against indexicalism are mainly the ones concerning the proper strategy to trace the semantics/pragmatics distinction and, ultimately, to account properly for systematicity.

5. It should be clear, from what I said before about conventional implicatures and presuppositions being part of what is said$_L$, that is, of what semantics delivers, and from my suggestion that a 'multi-propositional' view of the semantics of those phenomena along the lines of Bach's is on the right track, that I take characters to be too coarse for an adequate characterisation of the semantic features of utterances.

6. Usual presentations of the concept of compositionality are non-committal on whether the modes of combination themselves might contribute semantic features, and even more so on whether they could be context-dependent with respect to those semantic features. See Pagin (2005) for a precise, detailed, and interesting discussion.

7. This is the obvious (but no less forceful because of that) main anti-contextualist point that Cappelen and Lepore (2005) and Stanley (2005) rightly emphasise.

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6
Meaning, Context, and How Language can Surprise Us

Barry C. Smith

1 Introduction

In uttering a sentence, we are often taken to assert more than its literal meaning; though we sometimes assert less. For example, when someone utters 'I haven't had breakfast' it is seldom, if ever, taken to express the improbable claim that the speaker has never eaten breakfast. Robyn Carston and others take this phenomenon to show that what is said or asserted by a speaker on an occasion is usually a contextually enriched version of the semantic content of the uttered sentence. I shall argue that we can resist this conclusion if we recognise that what we think we are asserting, and take others to be asserting, involves selective attention to one of the ways the uttered sentence could be true while neglecting others. Most of the time people converge in their selective attention and so communication is not impaired, though in the case of sentences involving predicates of taste, people's selective attention to different aspect of a sentence's truth conditions can lead to seemingly intractable disputes. I will propose a treatment of such cases on which speakers can mean the same thing by a sentence, assert no more than its semantic content, and yet hold conflicting opinions as to its truth-value and both be right.

2 Semantics and pragmatics

In *Linguistic Meaning, Communicated Meaning and Cognitive Pragmatics* (2002a), Carston distinguishes between a philosophical and a cognitive science perspective on linguistic communication. Philosophers of language mostly concentrate on semantic issues and regard pragmatics as concerned with the problems left over by a completed semantics.

Cognitive scientists, on the other hand, see pragmatics as concerned with the mental processes that yield interpretations of people's utterances in a context. The two approaches seem to pass each other by: philosophers of language concentrate on the semantic properties of *expression types*, and cognitive scientists concentrate on how speakers and listeners communicate by means of *utterances*. This division of labour understates the potential consequences cognitive pragmatics has for philosophy of language. For if pragmatic processes must be invoked in order to fix something propositional – the explicitly communicated proposition – then the standard view of semantics as accounting for the way declarative sentences express propositions falls by the wayside.

Recently, philosophers of language have begun to see the potential impact on their subject of accepting the conclusions of cognitive pragmatics and have started fighting a rearguard action (see, in particular, Cappelen and Lepore 2005). Such defenses often trade on the distinction that Carston draws between semantic theories being about what *words* and *sentences* mean, and theories in pragmatics being about what *speakers* mean and *how* they communicate. Philosophers of language try to rescue the mission of semantics by making it the study of either minimal propositions (whatever they are)[1] or the sub-propositional contents[2] literally expressed by sentences, neither of which looks very much like the contents the folk think their sentences literally express. In response, advocates of cognitive pragmatics suggest that what *we* mean in *using* a sentence is almost never what the *sentence* means; instead we rely on a great deal of non-linguistic inference to figure out what is said when a sentence is uttered in a given context. However, the ordinary speaker's intuition is that what someone says in uttering a sentence is closely tied to the words they used to say it. 'I took him at his word,' we say, and, 'He may have meant something else but this is what he said.' I think there's something to the ordinary speaker's intuition but in order to respect it one must reject the view that the literal meaning of an uttered sentence is either the proposition the semantic minimalist points to, or the incomplete proposition determined by the meaning of the sentence's syntactic constituents and the way they are put together. A more sympathetic construal of the (naive) intuition – that what you said is tied to the words you used to say it – requires a re-working of the notion of *literal meaning* in order to connect it more closely with the thought typically, or most often, communicated by the use of a sentence. Nevertheless, a distinction exists between what we *take* ourselves

to be saying in our use of words, and what we *actually* say by means of them. And neither the philosopher of language nor the cognitive scientist in Carston's picture has the relation between these two things exactly right.

The problem is the use made of the notion of *proposition* and *truth condition* in both semantic and pragmatic theorising. The notion of proposition and truth condition are assumed to go together, on the one side, but to diverge from what is explicitly expressed by a sentence, on the other. I shall reject this assumption by offering an account involving what we say, what we think we say, and what we communicate. But before doing so, I want to examine the cognitive pragmatic view of the distance between the literal meaning of sentences and expressions and what we explicitly communicate by uttering them.

3   The context sensitivity of 'what is said'

The key claim about context sensitivity is that a sentence uttered, in different contexts of use, or by different people in the same context, can be understood differently, even though the sentence itself is not lexically or syntactically ambiguous. Examples include utterances such as:

(1)   The leaves are green.

(2)   John's car is red.

(3)   It is raining.

(4)   The wine is beautifully balanced.

In each of these cases, a speaker may mean something different by his or her utterance of the sentence in different contexts, and different speakers may mean different things by utterance of the same sentence in the same contexts. In (2) speakers may be talking about the car owned by John, stolen by John, or the car John bet on. In (3) what is said depends on the time and place of the utterance. What should we conclude from such cases? They clearly point to context sensitivity in the *use* and *understanding* of the sentences concerned. But what, if anything, should we conclude about the *semantic content* of the sentences themselves? The temptation has been to think that variability in how *utterances* of these sentences are understood across contexts means variability in what those *sentences* can express in those contexts. But the conclusion is hasty. A more guarded claim is that when a sentence is uttered in different contexts, different *utterance contents*, or *speech*

act contents are expressed, despite the sentence expressing the same *semantic content* on each occasion. As it is often put, the utterance or speech act content goes beyond the semantic content of the sentence uttered.

What then explains the variability in utterance or speech act content? Relevance theorists like Carston assume that since the semantic content of a sentence typically fails, by itself, to determine the thought-content communicated by an utterance of the sentence, as in (2), cognitive processes are needed to get at the precise thought-content conveyed. In fact, pragmatic processes are (almost) always involved in the interpretation of speech, according to Carston, since the sentence uttered (almost) always underdetermines the content communicated by speaker to hearer. As she puts it:

> The semantics of the linguistic expression type employed in an utterance, while clearly crucial to comprehension, is seen as having just an evidential, rather than a fully determining, role in the identification of what a speaker has explicitly communicated ('what is said'). (2002a: 130)

The pragmatic processes work to make up the shortfall between what is made available to the listener by the linguistically encoded content of the uttered sentence, and the thought content conveyed to the listener by its utterance:

> The linguistically encoded element of an utterance is not generally geared towards achieving as high a degree of explicitness as possible, but rather towards keeping processing effort down. (2002a: 130)

I agree. But what should we conclude? Do speakers intend to convey more than their words alone succeed in expressing? Carston certainly thinks so:

> the linguistic contribution [of the uttered sentence] is not propositional, it is not a complete semantic entity, not truth-evaluable. (2002a: 134)

The linguistic material produced fails to fix a truth-evaluable content;[3] nevertheless, a propositional thought is communicated, so it is the task of cognitive pragmatics to say how this is achieved.

There are several things to note about Carston's view. First, it assumes that what gets communicated or conveyed is a truth-evaluable proposition:

> what is communicated, that is, the output of the pragmatic processor, is usually a set of fully propositional thoughts or assumptions, which are either true or false of an external state of affairs in the world. (2002a: 134)

There may be more than one proposition recovered in cases where there are explicitly *and* implicitly communicated propositions. But I shall concentrate on the explicitly communicated propositions since these are 'in some sense, built out of [upon] the semantic template contributed by the linguistic expression used' (2002a: 134).

Second, the picture assumes that the proposition communicated is seldom, if ever, entirely fixed by the linguistic meaning of the sentence uttered:

> linguistically decoded information is usually very incomplete and [...] pragmatic inference plays an essential role in the derivation of the proposition explicitly communicated. (2002a: 133)

Not only does the sentence uttered fail to provide evidence of precisely *which* proposition the speaker intends to convey, but it also supposedly fails to *express* a proposition at all. (On this point Carston and radical minimalists like Kent Bach agree.) A successful linguistic act results in the recovery by a hearer of a proposition conveyed by a speaker. So pragmatics needs to explain the means by which the hearer derives the proposition explicitly communicated.

This view has potentially worrying consequences for the semanticist because if it is propositions that have truth conditions, and pragmatic processes are needed to arrive at propositions, then pragmatic processes will be required to derive anything truth conditional. Hence, for anyone who thinks truth conditions belong in the domain of semantics, there would appear to be no clear boundary between semantics and pragmatics, no boundary between what is fixed by the semantic properties of expressions and what is fixed by the cognitive processing of those expressions in context. To maintain a firm boundary between semantics and pragmatics one would have to show how an uttered sentence could so much as express a proposition, or else settle for the conclusion that sentences expressed only incomplete propositional functions

from which hearers somehow figured out the proposition the speaker intended to communicate.

Paul Grice, of course, had a story about how we get from the proposition expressed by an uttered sentence ('what is said') to a (further) proposition conveyed by its utterance ('what is meant'). But he was over-sanguine about being able to find a single or complete proposition determined by the semantic constituents of the sentence and the way they are syntactically put together. That's why semantic minimalists work so hard to show that the constituents and structure of sentences *do* determine truth-evaluable propositions.

Contextualists and relevance theorists, if they are prepared to acknowledge the existence of such theoretically motivated minimal propositions, can argue that they play no role in the processes by which a hearer arrives at the proposition communicated by a speaker. Pragmatics begins with processes that adjust the meanings of expressions used, and enrich the sentence structure in the light of certain features of the context to reach relevant interpretations of utterances in context. No use is made at any stage of the literal meaning of the sentence-type.[4] Radical minimalists, like Bach, do take sentence meanings to contribute to interpretation, but the hearer must augment these incomplete propositions to reach the communicated content of the utterance.

4   Maintaining semantics

So we appear to face the following three options: (i) the pragmatic processing of utterances, rather than the literal meaning of sentences, enables hearers to grasp the truth-evaluable propositions utterances convey; (ii) the literal semantic content of a sentence is a minimal proposition that plays no role in the interpretation of the utterance, but may be asserted alongside the propositional content(s) explicitly communicated and pragmatically retrieved by the hearer; *or* (iii) uttered sentences express something less than a proposition that must be augmented in order to understand what is communicated.

All of these options assume that speakers assert more than, or diverge from, the literal meaning of the sentences they utter. Contextualists and relevance theorists claim that *what is said* or asserted by a speaker on an occasion is a contextually enriched or modified version of the semantic contents of the expressions used. Semantic minimalists concede that what is said or asserted is not the proposition understood in context (and may not even be a proposition). For the philosopher

of language, the crucial assumption behind both of these approaches is that we need something *more* than the meaningful and grammatically arranged constituents of a sentence to arrive at the truth-conditional content of its utterance: the proposition communicated.[5] The search for the propositional content conveyed drives contextualists and relevance theorists to depart from the literal meaning of the sentence uttered and drives semantic minimalists to embrace a linguistically determined but dismally thin proposition bearing no resemblance to the contents speakers and hearers recognise at play in their exchanges.

But need we accept either of these views? No. There is another option overlooked by all parties to the debate: namely, that given what a sentence means there is more than one way for it to be true; and in context, users of a sentence usually entertain only one of these ways for it to be true. We regularly take particular sentences to express only one of the things they could be taken to express, given their meaning. We could call such contents their *intuitively understood literal meanings*. Of course, a less intuitive and highly theoretical notion of *what is literally expressed* can be constructed to bring out aspects of a sentence's meaning that were previously unnoticed. It is these other, highly unusual, ways of taking a sentence to be true that lead some to suppose that the same sentence can express different propositions in different contexts. However, all a sentence's meaning does is constrain the way things have to be in the world in order for that sentence to be true, and this will encompass more ways of being true than we usually consider. When thinking of what a sentence says we selectively attend to just one of the ways the world could be to make the sentence true. Take (1) for example:

(1)   The leaves are green.

Most people contemplating a tree in a garden would, when hearing an utterance of (1) suppose the leaves to be naturally green. It's the normal thing to think given our usual understanding of (1). However, Charles Travis (1997) exploits this example by citing cases where Pia has painted the russet leaves on her tree green. Is (1) true here? Travis concludes that since the first way of taking the sentence to be true is not the same as the second, (1) expresses (means) different things on different occasions; that (1) can be used to assert different truths. On some occasions, what (1) says would be true, on other occasions it would be false. Travis concludes that sentences have at most occasion-sensitive meanings, and only in context can they express something capable of being true or false.

But that's not the only way to react to such examples. We could say that the sentence is true under both conditions since, for all it says, there simply have to be leaves that are green for it to be true. Both occasions provide ways of making (1) true, even though the second way to take (1) is highly unusual. According to this view, the meaning of the sentence places no qualification on the way in which the leaves are green. The natural way for leaves to be green is just one way of fitting what the sentence says. In using (1), we express something about reality that could be actualised in many more ways than we at first recognise. Nevertheless, we often manage to get across something more specific than is actually said. Our use of language is not as explicit as we think it is. Nonetheless, we succeed in communicating with others when they, like us, selectively attend to the most usual or natural way of taking what is expressed to be true: when they focus on the same salient or relevant circumstances.

We can be surprised to discover there are other ways for reality to fit what a sentence says. As ordinary speakers, we mostly consider only the intuitive understanding of a sentence's literal meaning. The more precise and demanding notion of literal meaning is typically overlooked by all save Asperger's syndrome subjects for whom the non-obvious situations may be equally accessible.[6] We take (1) to express the claim that the leaves are naturally green. This is what we think makes (1) true. But this is not to say, with Travis, that in one context (1) would be true, and in another, it would be false: (1) is true on both occasions. Of course, it is misleading to say (1) when the leaves have been painted green, given what we ordinarily think (1) says, but given what it actually means, the unusual situation still provides a way of making the sentence true. There is more than one way for reality to conform to what a sentence says.

We can now see that part of the trouble is due to the conception of *literal meaning*, *truth condition*, and *proposition* in semantic and pragmatic theorising. The intuitive notion of what *speakers* literally mean by their utterances coincides with what they intuitively take their sentences to mean, where this is just one, selective way of taking those sentences to be true. In pragmatic theories, truth conditions enter only at the level of utterance interpretation, coinciding with the explicitly communicated proposition retrieved by pragmatic processing. But that's a mistake. The sentence uttered was true (or false) all along, even under conditions that may surprise us. A sentence's truth conditions can cover circumstances not thought of by speakers and hearers who use the sentence. We can come to appreciate that a sentence could be true in circumstances

previously unconsidered, when we recognise those circumstances to have been compatible all along with what the sentence says.

Thus it is a mistake to suppose that truth conditions only appear when we construct the proposition normally communicated. Certainly, the natural way of taking a sentence to be true pairs it with our intuitive understanding of what is said in uttering that sentence, and this coincides with certain pragmatic interpretations. However, when we come to see what else could make the sentence true, consistent with what the sentence means, we recognise something that our understanding *already* allowed for. The sentence's wider application gives us its explicit meaning. This is not a new meaning we confer on it to extend its application: it is recognition of something previously overlooked. So what is explicitly expressed by a sentence is fixed by the syntactic arrangement of its meaningful constituents, and this coincides with its broad truth conditions but diverges from its intuitive meaning: the proposition speakers communicate. A sentence's truth conditions cannot be construed as narrowly as the unique set of circumstances typically considered when producing or comprehending the sentence. To construe truth conditions this narrowly – in line with the proposition communicated – leads to trouble, since these are not uniquely fixed by the spoken sentence's meaning. When we realise that a sentence could be true under previously unforeseen circumstances, we realise that those circumstances were always covered by the meaning of the sentence, that they were always encompassed by its truth conditions.

5   Truth conditions, selective attention, and proposition communicated

In cognitive pragmatics, the notions of *truth condition* and *proposition communicated* are aligned, forcing us to divorce them from what is *strictly expressed* by the sentence uttered. The ordinary notion of what (1) literally says coincides with the proposition we typically communicate by uttering it. But in failing to anticipate all the ways (1) could be true in the world, ordinary understanding diverges from the actual truth conditions of the sentence. One could institute a special notion of *intuitive truth conditions* for a sentence, aligned with the notion of proposition communicated, but that would not be the only relevant notion of truth for the sentence, or the only thing we could recognise as compatible with its meaning. Many states of affairs could conform to what a sentence says, though we may only think of some of them. But since we could be brought to see that the meaning of the sentence uttered did

not rule out or limit us to just one particular way the world had to be to make the sentence true, we must recognise more to a sentence's meaning and truth conditions than cognitive pragmatics allows. The 'more' here can be brought to light by contemplating unusual circumstances, which help us to recognise the compatibility of what we said with more states of affairs than we first realised. For example, beside the alarm button in the lifts at Stockholm University is written: 'Press the alarm button if the lift stops between two floors.' For all the sentence says, when we travel from floor five to seven, we could comply with the instruction by pressing the button when the lift stops at floor six.[7] Most people would take the instruction to mean that we should press the button only if the lift stops between two adjacent floors. But the sentence allows for more than this way of complying with it. Thus even if we don't use sentences in accordance with their full range of linguistically permissible applications, we can confirm their other rather surprising applications just by reflecting on the meaning we attach to these sentences. Language can surprise us. This doesn't mean that communication is bound to fail, or that on every occasion elaborate pragmatic inferences are required to figure out what people are saying. Not all options are live, and besides, so long as others focus on the same selective condition for making a sentence true that we do, things will go well. Special contexts may call for special inferences but given our selective attention, shared needs, perceptions and interests, special inferences are not always operative, or needed in the normal situation. Hearing a sentence one way rather than another – focusing on a restricted way that the world could be to make that sentence is true – helps to explain why we do not usually find ourselves at odds in understanding one another. No appeal to unconscious computations of others' intentions is needed to explain the immediate and effortless way we arrive at an intuitive understanding of what is said. Most of us start out with the same selective attention.[8]

6   Thoughts and utterances

Carston (2002b) is right to consider our use of language to concern the relation between thoughts and utterances, but in stressing the role contextual inference plays in arriving at the thoughts conveyed she downplays the everyday aspects of linguistic sentence meaning and the role it plays in securing regular communication of our thoughts to one another. By focusing on the strict, and hard to access, theoretical notion of what is literally expressed, which diverges from our ordinary, intuitive understanding of sentences, she is able to secure a premise for an

argument designed to show that truth and truth conditions enter only at the level of the pragmatically derived proposition communicated.

By contrast, the intuitive notion of what is literally said focuses on the restricted application we make of sentences on a selective understanding of their truth conditions. We cannot make every bit of our thinking explicit, but we do say enough to direct one another's thinking, in context, to what we are talking about, provided we remain (unlike Asperger's subjects) unaware of the rather surprising things our utterance could rightly be taken to mean. There is considerable slack between thought and language. Focused thoughts are not uniquely captured in the words chosen to express them, though speakers are largely unaware of this fact. The meaning of the sentence constrains the ways the world has to be in order for what we say in uttering it to be true but does not select one definite way of it being true. However, our perceiving or thinking – and other people's perceiving and thinking – selectively illuminates a small number (perhaps one) set of possibilities compatible with what our words say. Thus it is not propositions – either minimally expressed or arrived at by enrichment – that we should be searching for in order to get at the truth of our utterances, so much as our selective take on the truth conditions of the sentences we utter. Room is always left for a distinction between all that is actually claimed by the uttered sentence, and what we typically take ourselves to be claiming in uttering it. Cognitive pragmatics and relevance theory can help at this point to explain our tendency to focus on only one understanding of what we actually say. Meanwhile, intelligible links can be maintained between the words people use to express themselves and what they intuitively understand themselves to be saying. This is the ordinary and intuitive notion of what is literally said. The more theoretical notion of what a sentence literally expresses is hard at first to recognise, and accessing it can be a considerable achievement.[9]

7   Predicates of taste and what we express

Does this way of thinking help us to address other linguistic phenomena? I think it does, as we can see if we look at sentences involving predicates of taste.[10] Assessments of the truth or falsity of such sentences often lead to intractable disputes with no clear way to resolve them. No further facts can be brought to light, and neither party to the dispute has overlooked anything. The intractability leads some to suppose that there is simple no fact of the matter concerning judgements of taste.

However, we should not so easily surrender the idea that these sentences are truth-evaluable, especially when a skilled wine taster utters:

(4)   The wine is beautifully balanced.

Surely, such pronouncements aim to get something right, and if they succeed, they do justice to the wine in question. We suppose that two experienced wine critics, contemplating a bottle of 2003 Chateau Pavie, disagree about the truth of (4). A is convinced the wine is beautifully balanced and B is equally convinced it isn't.[11] What are we to make of their disagreement? Can we (or they) settle for the view that there is a fact of the matter, forever likely to elude both of them? Such a view is surely unpalatable for matters concerning how something tastes. It would be equally hard to settle for the view that there is *no* fact of the matter. Balance in a wine is a substantial achievement which wine makers aim for and do not always achieve in every vintage. Still, there will be those who doubt there can be objective disagreements on judgements involving taste, and will deny sentences like (4) an objective truth-value. However, wine critics are doing more than just reporting their subjective experiences; they aim to describe properties the wine has, not just their subjective experience. So how should we understand an intractable dispute between the two experts over the truth of (4)? Do they simply disagree about the meaning of (4), in which case there is no dispute? Or, is there a sense in which they are both right and we have to embrace some form of relativism? None of the options seem very plausible. Can we do better?

According to critic A an utterance of (4) would be true, and according to critic B it would be false. Should we say it is true according to A, false according to the B? To make sense of this we need to make appeal to an extra parameter of evaluation:

(5)   The wine is beautifully balanced (from A's perspective).
(6)   The wine is not beautifully balanced (from B's perspective).

Described in this way, A and B no longer seem to be in conflict since (5) and (6) are not incompatible. The difficulty is to understand the appeal to perspectives, and what it means for a claim to be true *relative to a perspective*. To assess truth according to A or B invites the subjectivism we were trying to avoid. But in assessing (4) we are not assessing the truth of 'The wine is beautifully balanced according to A' or 'The wine is beautifully balanced according to B'. Anyone can recognise the truth of these claims from any standpoint. No relativism obtrudes here. And

(4) says neither of these things. If it did, there would be no genuine disagreement between A and B. It would be akin to contesting the truth of (3): 'It's raining' with respect to different places, and this provides no ground for a disagreement.

Either A and B are in good positions to judge or they are not, and if they are, shouldn't we say they are both right? If A is in good health, he has not just brushed his teeth, sucked a lemon, or eaten chocolate, for example – then he will be judging under ideal circumstances for him, and what he says by uttering (4) will be true. But the same goes for B. And how can the semantic content of (4) be true when said by one person and false when said by another? Either (4) expresses a proposition that lacks a truth-value, or, if one believes that propositions must be true or false, it fails to express a proposition, and needs some completion in context in order to do so.

But the example calls for neither of these options. We can argue that the sentence expresses a content with a truth condition but that there is more than one way to realise that condition and different tasters will focus on just one of the ways for the sentence to be true: one way for the wine to be balanced. Let me explain.

Given A's palate and his threshold sensitivities to alcohol, acid, sugar, and tannin, 'This wine is balanced' is true. But given B's palate, and very different threshold sensitivities to these elements, there is another, quite different – but unactualised – point at which the complex of the wine's constituents would be in balance and would make it true for her that the wine was balanced. Had the wine maker picked less ripe grapes and extracted rather less tannin from the skins, there could have been a different ratio of elements, on which B would have correctly judged (4) to be true. Each taster would be right because each of these conditions of the wine would constitute a different way of making sentence (4) true. In the circumstances in which B's palate is involved, the second way of wine making would make the sentence true but not the first. In the circumstance in which A's palate is involved it is the first way, not the second, that would make it true. According to which taster or critic we ask, could we get a different answer to the question of whether a wine was balanced due to the different circumstances with respect to which this could be true?

A will say under circumstance C1 that the wine is beautifully balanced. So for him sentence (4) will be true. B will demur, and according to her, it is false. But there are other circumstances C2 under which the wine could have had lower alcohol, greater grip, less use of oak, less extraction, and according to her, in those circumstances, the sentence

would have been true. Both A and B are right about their own verdicts, but wrong to criticise each other's. The wine would be balanced in both conditions, but is only recognisable as balanced for A in circumstances C1 and only recognisable as balanced for B in circumstances C2.[12] Is truth relative to the context of judgement, or from a perspective? No. But our viewpoint on truth is, very likely, relativised in just this way.

The truth of (4) is not sensitive to aspects of the context of assessment. Its truth-value does not vary from one circumstance to another. Nor does (4) need to be contextually enriched in order to determine the proposition expressed by A or B. Instead (4) simply leaves things open as to how the world could be when (4) is true. There can be more than one point at which a wine could be balanced, and judged so by different tasters (or populations of tasters); the sentence simply does not pick out any of them in particular. Different tasters will think of the conditions for (4)'s truth that they can access, and think of these conditions as *the* way for (4) to be true. They will selectively attend to just those conditions: the others being out of reach given their palates and threshold sensitivities.

When judging different samples of the same wine, critics may disagree with each other on when it is true to say the wine is balanced. They may each be right in what they would judge balanced but wrong to discount the other's judgement. (4) is not, as they think, false with respect to those other circumstances, or only true in their favoured conditions, it is simply that each critic has no way of grasping the truth when confirmed by another critic with a different palate.

Is the sentence or the truth condition it imposes somehow vague or indeterminate? No. We can all agree that for a wine to be balanced all its parts must be in harmony and no single taste must dominate the others. This is what we are saying in uttering (4), and agree that we are saying, whenever we say a wine is beautifully balanced. But what makes it true according to me, may not be what makes it true according to you. Nevertheless, under these very different conditions we may both have a way of recognising the truth of the proposition expressed by sentence (4) – just as we do with (1).

What conclusions are there for belief and action on this view of linguistic meaning? What should I conclude from someone's saying that a given wine is beautifully balanced? The answer is that it depends on who said it. If it was someone in *my* population of tasters, it is true for me (as the relativists like to say). I assess the truth of what is said with respect to the sayer, and whether I buy a case of this wine depends on the reported sentence having been true according to a critic who judges

as I do. Thus *endorsing* the truth of (4) is relative to who says it, and assessor relative to which sort of palate and sensibilities one has as a taster. But of course it is only the *endorsement* or *taking something to be true* that is assessor relative, not truth itself. There are other ways for the sentence to be true. But they are not ways that count *for me*.

8   Conclusion

Language doesn't do everything we think it does. It seldom achieves a precise encapsulation of our thoughts, though we may be blind to this fact as speakers because we imagine we are expressing ourselves perfectly. Sometimes it does more than we think. Unlike logic, there are surprises in language. We need to distinguish between how *we* apply a sentence – the conditions under which *we* assert or assess it – and the various ways that the world could be that would make the sentence true. Failure to note this distinction makes for quick though flawed argument about what is (or isn't) expressed by a sentence, and what is required to engage in explicit communication, and these conclusions are taken to have considerable significance for the semantics-pragmatics distinction. There may be more room for a truth-conditional semantics than cognitive pragmatics currently acknowledges, though cognitive pragmatics will still have the central role to play in explaining how we make selective use of what our linguistic capacities make available.[13]

Notes

1. See Cappelen and Lepore's notion of a minimal proposition in their 2005.
2. See Bach's notion of a propositional radical in Bach (1994, 2001).
3. I won't discuss here those who, like John MacFarlane (2007), assume propositions can lack truth values but still be true or false relative to contexts of assessment.
4. Examples like 'I haven't had breakfast', 'Don't eat between meals' are almost never recognised as expressing what they literally state, but are usually interpreted as augmented or modified as follows: 'I haven't had breakfast [this morning]', 'Don't eat between {each meal you normally eat}'.
5. Even less than the utterance of a sentence will do if Stainton (2005, 2006) is right and non-sentential utterances, like 'Nice dress' can also convey propositional contents.
6. Reported cases include a child who became distressed when told by the teacher: 'Stick your coat over there' because he could find no glue (see Frith and Happé 1996).
7. I owe this nice example to Peter Pagin.
8. For an account of the immediacy of linguistic understanding, see Smith (2009, 2010).

9. This achievement is more readily available to high functioning autistic subjects, who for reasons of executive function disorder cannot so easily attend selectively to salient features of a situation. However, they still use words with the same meanings we do.

10. The semantic problems raised by predicates of personal taste are brought out well in Lasersohn (2005). The underlying philosophical issues are clearly addressed in Wright (2006). A variant treatment of such disagreements can be found in Smith (2005).

11. Here I am adapting a real case involving Robert Parker and Jancis Robinson over the quality of the 2003 Ch. Pavie.

12. For a defence of the claim that there are objective properties of taste that tasters can fail to recognise subjectively, see Smith (2007).

13. A version of this chapter was given at a conference on Explicit Communication in Granada in honour of Robyn Carston. I am grateful to members of that audience, especially Kent Bach, Stephen Neale and François Recanati. For further responses I am grateful to Belen Soria, Esther Romero, Robyn Carston, Peter Pagin and members of the Philosophy of Language and Linguistics Seminar at the University of London. I am also grateful to Ophelia Deroy for helpful comments on an earlier draft.

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7
Explicature, What is Said, and Gricean Factorisation Criteria

José E. Chaves

1   Introduction

Speaker's meaning, following Paul Grice, consists of *what is said* and *what is implicated*. In recent decades these two notions have been the object of an intense debate in fields such as philosophy, psychology, and linguistics. Broadly speaking, there are two opposing views in the ongoing debate: minimalism and contextualism.

On the minimalist side, the notion of *what is said* is more or less determined by the meaning of the sentence uttered. Moreover, minimalists claim that there are two types of conversational implicature: generalised and particularised. Advocates of the contextualist outlook avoid the notion of *generalised conversational implicature* (GCI) and defend a notion of *what is said* with fewer semantic constraints. I will take Grice as being representative of minimalism and relevance theory (RT), which talks about explicature instead of what is said, as being representative of contextualism.

This terminological change responds to a continuous criticism of the notion of *what is said* and to a rejection of notions strictly determined by linguistic meaning. In this field Robyn Carston's work stands out as the most important effort to clarify what explicit communication is – what the proposition expressed by an utterance is. In order to do this, she expanded the notions of *explicature* and *implicature* in early RT (Sperber and Wilson 1986/95) and compared them to analogous minimalist notions.

But, as Carston (2002) recognises, comparisons of this kind are neither straightforward nor very promising. Along these lines, Jennifer Saul (2002) claims that the relevance theoretic criticism of a Gricean or minimalist notion of *saying* does not hold because the notions involved

in the debate, namely *saying* and *explicature*, pertain to the domain of different projects; Grice and his followers are interested in a rational reconstruction of speaker's meaning, whereas relevance theorists are engaged in a cognitive account of communication. Carston (2005) seems to agree with Saul's diagnosis, as we see in her discussion with Laurence Horn (2005), in which she distinguishes three projects: the Gricean, the relevantist, and the Neo-Gricean.

However, advocates both of minimalism and contextualism keep joining in the debate without considering each other's specific motivations.

My aim in this work is to clarify why comparisons between *explicature* and *what is said*, if made at the same level, are inappropriate. Thus, I will show not only the differences between the respective goals of the proponents of these notions but also the differences between these notions as explained by Carston (2002) and Grice (1989). There is nothing really new in this; several authors have pointed out these differences (Saul 2002; Carston 2005; Horn 2005). But, as far I know, nothing has been said about what the implications of these theoretical differences are. I will explore these consequences here.

2   Theories of interpretation: compatibility and factorisation

As communication is a very complex phenomenon, its explanation requires and involves several notions and perspectives. We need to clarify at least three issues: the role of conventional devices, a speaker's use of conventional devices, and how the hearer recovers what someone is trying to communicate. Both the complexity of communication and the several perspectives involved in it call for a distinction between various sub-projects along with a general theory of utterance interpretation.

Here, I will focus only on a sub-project and its relationship with a general theory. I am interested in the sub-project which takes the speaker's perspective and which is the most akin to the Gricean or minimalist approach. Obviously, I will consider RT as the general theory interested in the hearer's perspective.

In this section, I will deal with one of the roles that, according to Stephen Neale, philosophers have, namely:

> [I] will attempt to articulate clearly the nature of the project (distinguishing it carefully from various other projects with which it may be confused), distinguish clearly the various sub-projects, and

distinguish and analyse the central concepts or at least the relation between them (for example, meaning, saying, implying, referring, and intending). (Neale 2005: 176)

Now, I want to distinguish two features that the different theories regarding utterance interpretation should have. These are compatibility and factorisation.[1]

2.1 Compatibility

As we have just seen, there is a general theory of interpretation which focuses on the cognitive aspects and processes of verbal understanding, and there are various sub-projects which focus on specific questions. The feature which I call compatibility states, broadly speaking, that the notions of the sub-projects may not be rejected by the general theory, even though they are not used by it. That is, the notions proposed by a sub-project will be autonomous but compatible with respect both to other (sub-)projects and to the general theory. In any case, the notions of different projects must have an obvious parallelism with each other in the sense that, given certain ideal conditions, the content of the notions must coincide.

It would sound very odd to claim that if something is a notion of a sub-project, there is no reason why it must belong to the general theory or project. But let us consider the project associated from the perspectives of both hearers and speakers. Following Neale, there is a clear asymmetry between the two perspectives which compels us:

to separate the *metaphysical* question concerning what *determines* (or fixes) what A means and the *epistemological* question concerning what is used by others to *identify* what A means. (2005: 180, italics in original)

2.2 Factorisation

Speaker's meaning or what is communicated may be factored into a range of layers. Traditionally, there are two factors of meaning: what is said and what is implicated. But this is just one possibility. Another project may have different criteria for formulating this factorisation and may therefore identify different factors. Nevertheless, the compatibility feature mentioned above tells us that, when all goes well, the different factorisations must coincide.

Although this feature is only explicitly recognised by Neale (2005), its implicit use shows that it is widely accepted as natural and necessary. However, despite this seemingly tacit agreement, it is not clear why we need any factorisation of meaning at all.

3   Gricean factorisation criteria and RT

Grice factorised speaker's meaning into what is said and what is implicated.[2] Nowadays, however, there are several new approaches to factorisation. For instance, Kent Bach (2001) divides decomposition into three factors: saying, impliciture, and implicature[3] whereas François Recanati (2001) and Charles Travis (1997) retain a dual decomposition, but modify the scope and content of the factors involved. Finally RT introduces the explicature/implicature factorisation instead of the saying/implicating one (see, for example, Carston 2002, 2004).

Tacitly, these different decompositions share the assumption that speaker's meaning has a range of levels or layers – layers which are always related to the dichotomy introduced by Grice.[4]

However, when Grice introduced the factorisation of meaning, this assumption was far from being obvious. For Grice, there are several reasons that may motivate this kind of decomposition of meaning. My suggestion is that these reasons may be useful in proposing criteria that constrain the factors of meaning, I will call them the *Gricean factorisation criteria*, and they can be used to evaluate the different approaches to the subject.

In this section, I will apply the Gricean factorisation criteria to the notions developed in RT. My aim in doing so is not to reject RT, but just to show that the factorisation criteria of the cognitive perspective of RT are different from the Gricean criteria that fit in some kind of minimalism. This simple fact will allow me to clarify the divergences between the two theoretical perspectives and to see their implications in the current debate.

3.1   Two different approaches

In view of the goals of this work, it seems reasonable to present a brief characterisation of both the cognitive perspective of RT and the Gricean minimalist perspective.

I will work with a general Gricean framework (GGF) which, I think, is compatible with different minimalist specifications. In GGF, the notion of *what is said* should be constrained by the well-known quote from Grice 'I intend what someone has said to be closely related to

the conventional meaning of the words (the sentence) he has uttered' (Grice 1989: 25). There are, at least, two points that need to be clarified. First, what is said is always meant by the speaker and it is propositional. Thus, GGF avoids the minimalist approaches in which what is said is not considered to be meant by the speaker, nor is it necessarily a truth-functional entity. Second, the fact that the meaning of a sentence is closely related to it does not imply, as Carston (2002: 172–3) argues, that what is said must be reduced to the conventional meaning. Indeed, as a consequence of both the propositional character of what is said and the underdeterminacy thesis, the conventional meaning of the sentence could be insufficient to recover what is said, and some kind of development of encoded meaning may be necessary. In any case, this development should be kept as near to the conventional meaning as possible.[5]

In my presentation of RT, I will use the (re-)formulation of the theory carried out by Carston in *Thoughts and Utterances*. According to Carston, the notions of *explicature* and *implicature* are defined as follows:

> (II)   An assumption communicated by U which is not explicit is implicit [hence an 'implicature']. (2002: 116)
>
> (III) An assumption (proposition) communicated by an utterance is an 'explicature' of the utterance if and only if it is a development of (a) a linguistically encoded logical form of the utterance, or of (b) a sentential subpart of a logical form. (2002: 124)

To make sense of these definitions we need to consider the general framework of RT. In RT, explicatures and implicatures are the result of inferential processes. The cognitive system, according to them, takes the logical form of the sentence uttered as input and makes the interpretive hypotheses concerning both types of assumptions communicated 'rapidly, on-line, "locally" and in parallel' (Carston 2002: 143), that is, the explicatures and implicatures are processed in parallel and following the same pattern. Moreover, the cognitive system works by a mechanism of mutual parallel adjustment between explicatures and implicatures.

3.2   The factorisation criteria in minimalism

Now, I will propose four criteria which can be identified along with the reasons to factorise meaning in Grice's works. I do not intend the list to be exhaustive; these are merely four criteria that can be uncovered

in Grice and which, I hope, every minimalist will find uncontroversial. The criteria are as follows:

  i. *Pre-theoretic Intuitions Criterion*: the factorisation of speaker's meaning must be able to explain that in the utterance of a sentence we can pre-theoretically distinguish different contents. We can see Grice's uses of this criterion in particular examples and in claims like:

  I shall, for the time being at least, have to assume to a considerable extent an intuitive understanding of the meaning of *say* in such contexts, and an ability to recognize particular verbs as members of the family with which *implicate* is associated. (Grice 1989: 24–5)

 ii. *Semantic/pragmatic Criterion*: In his 'Retrospective Epilogue', Grice recapitulates the reasons for introducing the distinction between what is said and what is implicated. According to him:

  [w]e need to ask whether there is a feature, albeit initially hazy, which we may label 'centrality,' which can plausibly be regarded as marking off primary ranges to signification from non primary ranges. (1989: 359)

  He considers two ways of specifying a primary range. The first candidate that he considers is semantic, which he called *formality*, that is, all features of an utterance which fall under the conventional meaning, leaving to pragmatics the aspects of speaker's meaning which are not directly related to a linguistic code. Although this aspect of centrality may be construed in quite a lot of ways, my intention is not to prejudge the subject.[6] For this reason, I will just take as a criterion the idea that the saying/implicating distinction must allow us to clarify the semantics/pragmatics divide, even if the two distinctions do not coincide.[7]

iii. *Normativity Criterion*: We have seen that the first candidate for centrality is *formality*, but this is neither the only one nor the most important to our discussion. The second candidate is what Grice called *dictiveness*. For Grice, we need to distinguish the contributions that are inappropriate because they fail to correspond to the world from those that are inappropriate for other reasons (Grice 1989: 4). This motivation is introduced in the 'Prolegomena' as an important part of Grice's strategy against A-philosophers, that is,

against authors who, in a Wittgensteinian line, confuse meaning with use and use with meaning. As Carston (2002: 102) points out, it seems that what it is at issue here is the nature of the proposition to which the speaker is firmly committed.[8] That is why certain contents of speaker's meaning are cancellable and why the truth-value of the implicatures is independent of the truth of what is said.[9]

iv. *Factorial Interdependence Criterion*: Since Grice intends to identify both those components of speaker's meaning which are central and those that, in one way or another, are derived from former, the factorisation of meaning must reflect this fact. So, factorisation must explain how factors are related to each other and how we can recover the derived meaning through the central one.

These reasons give sufficient support to any Gricean outlook, even though each has obvious problems with other issues.

But what happens with the explicature/implicature distinction of RT?

3.3 Explicature and factorisation criteria

The *Pre-theoretic Intuitions Criterion* is a feature that RT explicitly supports. Moreover, this feature is so general that it is hardly conceivable that any current perspective on communication would dare to ignore or avoid it.[10] With respect to the other criteria, the position of RT is not clear enough.

The semantics/pragmatics distinction is still an open question today. In this respect, RT maintains a very consistent stance, in which semantics deals with all those features of meaning that belong to a linguistic code while pragmatics deals with inferred meaning by means of both the relevance principle and contextual parameters. In this theoretical context, the notion of *explicature,* as we have seen, is defined as a development of the formal and semantic features of the sentence uttered (the logical form). Hence, it would seem that RT's factorisation of meaning abides by this criterion. However, this is only a partial commitment.

Part of the Gricean motivation was the reconstruction of the formal or semantic features of the utterance of a sentence from speaker's meaning and its decomposition into what is said and what is implicated. This kind of reconstruction is not possible for RT because the logical form – equivalent to Grice's formal or semantic features – is something given regardless of explicature. Some could reply that this is not a problem because we can depart from what is communicated and remove all those components, explicit or implicit, which are obtained

by inference. By way of this technique, we would obtain the logical form of the sentence uttered. The trouble is that, in a relevance-theoretic framework, we cannot identify which inferential components of meaning to remove unless we previously have the logical form. This is so because, as Carston maintains, the explicit content comes in degrees and because the same utterance can have several explicatures. Let us look at this in detail.

(1)   a. Mary Jones put the book by Chomsky on the table in the downstairs sitting-room.
      b. Mary put the book on the table.
      c. She put it here.
      d. On the table

Sentences (1a)–(1d) show how explicature varies in degrees. The four sentences can be uttered to communicate explicitly the proposition that Mary Jones put the book by Chomsky on the table in the downstairs sitting-room, even though its explicit import is different in each: (1a) makes the point more explicitly than (1b), and so on. If so, how can we reconstruct the logical form by means of what is communicated?

Another related problem is generated by higher level explicatures. Consider example (2) and the explicatures, given in (3), which have Mary's answer:

(2)   a. Bill: Did your son visit you at the weekend?
      b. Mary (visibly happy): He did.

(3)   a. Mary's son visited her at the weekend.
      b. Mary says that her son visited her at the weekend.
      c. Mary believes that her son visited her at the weekend.
      d. Mary is happy that her son visited her at the weekend.

(3a)–(3d) are explicatures,[11] at different levels, of the same utterance, but not all of them can allow us to extract or reconstruct the logical form of the utterance by means of what is communicated.

The third criterion, the normativity one, is perhaps the strongest motivation in the Gricean system and also the one most ignored by his followers and critics. As I said, what is at issue is to distinguish those propositions to which the speaker is firmly committed to from those which are just suggested. Hence, we should understand this criterion as a requirement on the speaker, that is, both what is said and what is implicated are things the speaker does rather than characteristics of the proposition communicated (Neale 2005: 182). This fact suggests an

important difference between the notion of *explicature* and the notion of *saying*. In RT both explicatures and implicatures are features of communicated assumptions and nothing to do with speaker's actions. For this reason, RT can reject that the supposition that the cancellation test is a useful theoretical device for factorising in the theory of meaning. Some explicatures – like implicatures – are cancellable. Explicatures are cancellable because they are simply developments of the logical form which the speaker communicated, but not a commitment that the speaker makes.

Finally, it seems that RT observes the *Factorial Interdependence Criterion*, because the explicatures work as premises in the recovery of the implicatures. However, as both explicatures and implicatures are processed in parallel and as there is mutual adjustment between them, there is no need to factorise what is communicated. In RT, we just have assumptions communicated which are related to each other to obtain optimal relevance.

If the above remarks are correct, the factorisation realised by RT is entirely adjusted only to the *Pre-theoretic Intuitions Criterion*. Its failure to comply with the remaining criteria has allowed us to introduce some differences between the two factorisations which I will set out below:

 i The distinction between explicature and implicature is applied to assumptions communicated, while the saying/implicating distinction is applied to things that the speakers do.
 ii The RT factorisation is gradual and the Gricean one is absolute.
iii The same utterance may communicate several explicatures at the same time in RT, while there is only one proposition said in Grice.

It is not surprising to find out that the notions of *explicature* and *saying* respond to heterogeneous criteria since they have a very different character and role. There is nothing new in the above claim. Still, I find it interesting because it makes the differences between these two notions explicit and allows an explanation of why these differences arise.

4 Compatibility, implicit and explicit import

So far we have seen that relevance theoretic notions and the Gricean ones differ in many ways. This disparity corresponds to the role of the notions in the two approaches. If the objects of the approaches were the same, the factorisation criteria would also be the same and they would

apply uniformly. However, as Saul (2002) says, they are two different projects.

In a Gricean line the main focus is speaker's meaning and how the speaker can endow his acts with meaning. For that reason, the factorisation is about what the speaker does, and the constraints imposed by the criteria are on the agent of action. In contrast, RT's main concern is successful communication, that is, it is interested in how hearers manage to identify what speakers are seeking to communicate.

Nevertheless, there seems to be a tacit agreement about the impossibility of the coexistence and compatibility of the two different projects.[12] If the theoretical projects are related, as I claim (if one is a sub-theory of the other), we must see what the meeting point between them is. To do this, we should bear in mind that the notions proposed by the sub-theory may be neither incompatible nor rejected by the general theory. In this section, I will neutralise Carston's criticism against Gricean outlooks and, as a result, propose a way of reconciling the two projects.

Actually, I will neutralise what I consider to be Carston's main criticism of the minimalist notions of *what is said*, namely, that these notions are psychologically implausible. But before this, I will suggest that the rest of her criticisms of the different notions of *what is said* concur with, or are reduced to, that main criticism. Then, I will see if the compatibility I have mentioned has any effect on ongoing debates; in particular, I will examine the plausibility of the notion of *generalised conversational implicature*.

Carston considers five criteria which delimit what is said.[13] Two of them, the Linguistic Direction Principle and the Minimal Truth-Evaluability Principle, are minimalist. The others, argued in contextualism, are the Availability Principle due to Recanati and the Functional Independence Principle and the Scope Principle used by RT.

I will first go through the contextualist criteria. By checking Carston's reasons to avoid them, we can consolidate the features of explicature mentioned above and thus see how certain type of minimalism can be reconciled with RT. For reasons of space, I will confine myself to some naive considerations concerning contextualist principles.

The Availability Principle states that in making a decision concerning what is said, we should always try to preserve our pre-theoretic intuitions on the matter (Recanati 2001: 70–80). Carston rejects this for three reasons. First, she thinks that our pre-theoretical intuitions are not useful in controversial cases (2002: 168). Second, the principle supposes that there is only one proposition which can be said in an

utterance. But, as we have seen, RT maintains that 'there may be more than a single "what is said"' (2002: 169). Third, according to Carston (2002: 169), the principle presupposes that we have no conscious access to logical form. But, this is wrong from the perspective of defenders of RT because, for them, the logical form is the point of departure of the cognitive system and it is previously given by a modular linguistic decoding system to the communication process.

With respect to the Functional Independence Principle and the Scope Principle, I only want to point out that Carston rejects them, even though she considers them a useful heuristic device, because they have quite a few counter-examples (more details in Carston 2002: 189–97). Thus, Carston maintains that there is no clear condition besides the Communicative Principle of Relevance itself, to decide whether an assumption is an explicature or an implicature. In her words:

> I was (and am still) of the view that the communicative principle of relevance itself or, more particularly, the comprehension strategy that follows from it, effects a sorting of pragmatic inferences into contributions to the proposition expressed (explicature) and implicatures. (Carston 2002: 191)

With respect to the Linguistic Direction Principle, Carston considers only Bach's version in detail. Bach's use of this principle makes what is said non-propositional as for him what is said does not belong to speaker's meaning. In this sense, Bach's approach differs from Gricean minimalism and criticisms directed to the non-propositional character of what is said do not apply. Nonetheless, we need to be mindful of the common ground of these criticisms, that is, that 'there appears to be no role for a level of "what is said" to play in an account of the representations and processes required in the interpretation of utterances.' (Carston 2002: 181)

The Minimal Truth-Evaluability Principle is the target of a very similar criticism. According to this principle, a pragmatically determined aspect of speaker's meaning belongs to what is said when it is required to arrive at a complete proposition. The problem is that, with this principle, we sometimes obtain propositions which are either trivially true or blatantly false. In these cases, the proposition obtained does not interact in a productive way with the hearer's assumptions and so it does not have cognitive import. In the end, the problem with the minimalist principles, says Carston, is that they are not appropriate for a psychological theory of interpretation. The notions proposed

from minimalist approaches have no role to play in the information processing.

As we have seen, in RT there is no clear condition to distinguish between explicatures and implicatures; it is the Communicative Principle of Relevance (CPR) itself that does the work. Keeping this in mind, I will try to refute Carston's argumentation against minimalism. According to the CPR, when a hearer interprets an utterance he evaluates the possible outcomes suggested by the logical form and the context until he obtains optimal relevance. This is the relevance theoretic comprehension strategy which Carston sets up as relevance-theoretic comprehension strategy:

(a) Consider interpretations (disambiguations, referent assignments, enrichments, contextual assumptions, etc.) in order of accessibility (i.e. follow a path of least effort in computing cognitive effects).

(b) Stop when the expected level of relevance is reached. (2002: 143)

As we can see, the first step of the strategy computes all the possible interpretations according to logical form. The contents postulated by minimalist tendencies are possible interpretations which must be rejected, according to RT, by the cognitive system. But, even so, they are considered by the cognitive system to be rejected and, at least in this sense, they have a psychological role to play in the interpretation of verbal understanding. It is true, as Carston said, that they do not work out as inputs or outputs of the process – they do not turn into explicatures – but they are phases of it.

Let us see this in the case of Minimal Truth-Evaluability Principle. The problem with it is that we sometimes obtain propositions which are either trivially true or blatantly false. So, (4) is used to say the trivially true proposition that there has been some occurrence or other. Meanwhile, according to RT, we need some local process of strengthening to recover the explicature of (4) illustrated in (5).

(4)   Something's happened.

(5)   Something of an untoward sort has happened [on the motorway].

My point is that in order to reject the minimal and trivially true proposition as irrelevant the cognitive system needs to consider it. That is, how can we decide if a proposition is not relevant if we do not compute

it? For that reason, I think a minimalist notion of *what is said* is real enough from a psychological point of view to be used as a notion by the sub-project interested in the speaker's perspective.

We have seen so far that there is a way to defend minimalist views from Carston's main criticism. Now, I want to recover the feature of compatibility. The idea will be to reconcile RT, and its motivation, with a previous motivation which allows us to explain what the logical form is.[14]

If I am right about the relationship between these two projects, RT, as a general theory of the processing of communicated information, is different from, but compatible with, a sub-project interested in a theory of speaker's meaning. This entails that the factorisation made by RT and that made by the sub-project do not coincide unless certain ideal conditions are given. When these ideal conditions fail, we have a gap between the parallel notions of each factorisation which must be explained in some way. The general willingness is to eliminate the gap. In this vein, Carston argues against the notion of GCI. But if, as I claimed, we can defend a minimal notion of *what is said*, there would be a place for the notion of GCI. Obviously, that does not mean that this notion is cognitively real enough to play a distinguishable role in the hearer's mental life; that is, the generalised conversational implicature will not be a notion of RT. To this theory, every GCI will be an explicature.

This sounds odd unless we have in mind that the two factorisations apply to different things: explicature is a characteristic of the assumptions communicated while what is said is a feature of the kind of act that the speakers perform. Now, I am in a position to defend the proposal that there can be a place for GCI because the term 'implicature' is applied to different things, too.

As we have seen, the notion of *explicature* does not individuate a single proposition but the same utterance may have several explicatures and they may vary in degree. Keeping this in mind, I want to propose, for the sake of argument, a minor terminological change in RT in which we would abandon any analogy with the Gricean terminology. This modification is not an invention of my own – Carston uses it on some occasions, mainly when she does not want to prejudge the issue. Thus, she talks of *implicit import* or *implicit content* and of *explicit import* or *explicit content* of an assumption communicated.

Using this way of talking, we can see how the two tendencies may coexist (Figure 7.1). From a perspective which takes as a priority speaker's meaning and the question of how the speaker can endow his acts with meaning, we have a factorisation in terms of what is said and both

Factors of the speaker's act:

What is said	*GCI*	*PCI*

Features of assumptions communicated:

+   *Explicit Import*   –

←- →

←- →

–   *Implicit Import*   +
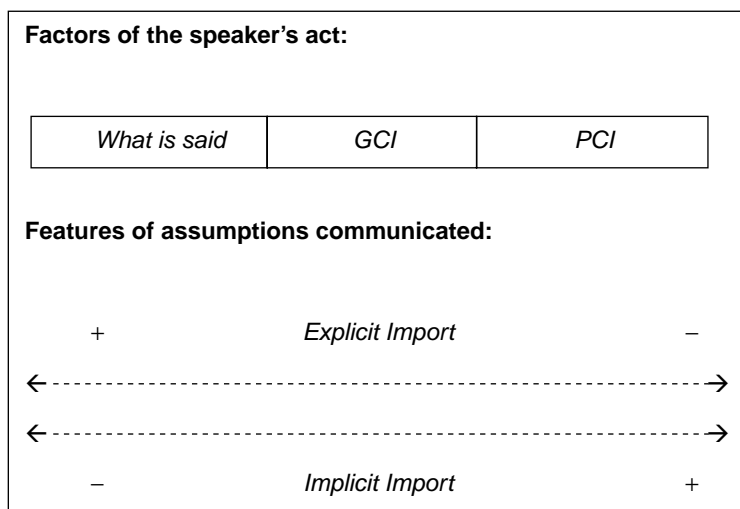
Figure 7.1

generalised conversational and particularised implicatures. On the other hand, if we take a perspective of successful communication as a priority, and the question of how hearers manage to identify what speakers are seeking to communicate as central, then our factorisation is applied to communicated assumptions and will be obtained in agreement with the degree of explicit and implicit import that the assumption considered has.

In this way, the notion of *implicature* in RT reveals itself as different from the Gricean one and, hence, there is no reason to reject the notion of *generalised conversational implicature*. The only thing to mention is that the degree of explicit import or content that generalised implicatures have is greater than the degree of the most of the particularised ones.

5   Conclusion

In this chapter, I have claimed that minimalism and contextualism belong to different but related theoretical projects. The former, the Gricean or minimalist one, corresponds to an account of speaker's meaning. The latter, which I limited to RT, corresponds to an account of

successful communication. Despite this dichotomy, these two positions can be compatible.

Starting from the Gricean factorisation criteria, I unravelled the following differences between the notion of *what is said* and the notion of *explicature*: (i) they apply to different things, (ii) the RT factorisation is gradual and the Gricean one is absolute, and (iii) in RT the same utterance may communicate several explicatures at the same time while in the Gricean approach only a single proposition can be said.

In an attempt to reconcile RT with the Gricean approach, I have stated that Carston's main criticism of minimalist notions of *what is said*, namely the psychological implausibility of the notions, does not hold because saying is not a feature of communicated assumptions but of speaker's acts. For that reason, the requirement of psychological reality is not the same in the two notions. For what is said, I have claimed, it is sufficient for there to be a stage in the cognitive processing of information, and this is something that the relevance comprehension strategy establishes. In the last part, and perhaps the most controversial one, I have defended the possibility of a notion of GCI by stipulating a terminological change in RT which makes the differences between the commitments and features of both views clear.

Whether the terminological changes introduced are useful beyond the current discussion is something I want to leave open.

Notes

1. These features are due to Neale (2005) where he presents a general picture of utterance interpretation and its theories. By 'theory of utterance interpretation' he means any 'theory that aims to explain how hearers manage to identify what speakers are seeking to communicate' (2005: 175). Although some of the characteristics he points out in this general overview may be controversial, I will focus on compatibility and factorisation which can be considered as platitudes. Actually, compatibility is not one of the characteristics identified by Neale. It is a label that I use to unify some of the features he points out in the general outline and some of the characteristics that he listed.

2. Within what is implicated, we should distinguish between what is conventionally implicated from what is conversationally implicated. I will ignore the conventional implicatures for the sake of the argument taking into account that this omission does not introduce any change in the general argumentation.

3. Strictly speaking, Bach's factorisation of speaker's meaning only involves implicT and implicature and is therefore a dual factorisation. But, if we identify speaker's meaning with what is communicated, as I am doing in this section, Bach's factorisation has three factors because for Bach what is said is communicated, even though it is not part of speaker's meaning.

4. This assumption is clearly stated in the following quote from Carston, '[…] the various notions of explicitness found in the semantic and pragmatic literature, including 'saying' and 'what is said', 'making as if to say', 'proposition expressed', 'propositional form of the utterance', 'truth-conditional content', 'explicature' and, unlikely though it may sound in a discussion of explicitness, 'implicature'. All of these lie on one side of a divide, on the other side of which is 'implicature', the standard term for the implicit content of an utterance.' (2002: 20)

5. The theoretical approach that best fits this GGF is the minimalism defined by what Carston called 'Minimal Truth-Evaluability Principle' (Carston 2002: 185).

6. The most usual way of doing this is to compare the semantics/pragmatics distinction with the saying/implicating distinction. For more alternatives, see Carston (2002: 9–11).

7. As I said when I outlined the GGF, we cannot reduce what is said to sentence meaning. This is far from being the usual reading of Grice, but some authors have expressed their sympathies with this view (Neale 1992; Carston 2002; Wharton 2002).

8. 'In the end the question that concerns Grice (I think) is: what statement(s) can the philosopher who has uttered that sentence, as part of his thesis or proof or exposition of a problem, be held to be making?' (Carston 2002: 102). Although the scope of this quote is the commitments of philosophers, I think we can apply it to the speaker in general without loss of generality.

9. The kind of normativity I am speaking about has nothing to do with the normativity of what is said that Saul and Bach hold. For them, saying is normative because it is independent of speaker's intention. My point is that the normativity is the responsibility of the speaker and it is he who has the last word about what he said.

10. In Carston's words: '[s]ome distinction or other of this sort is made by virtually everyone working in pragmatics and its reality is confirmed by our daily experience as speakers and hearers.' (2002: 15)

11. This is an important difference between RT and Grice's theory. For Grice, (3b) and (3c) are not part of speaker's meaning unless we have a very specific context in which, for example, Bill is asking Mary if she believes that her son visited her at the weekend. This is so because in Grice these assumptions are something that the speaker communicates in a natural way.

12. Saul (2002) also considers the possibility of the co-existence of the two theoretical frameworks, the Gricean and the Relevantist, but she tells us nothing of how this can happen.

13. These five criteria 'seem to guide philosophers [or theoreticians] in distinguishing pragmatic contributions to the proposition expressed (what is said) from implicated meaning' (2002: 185).

14. I am not asserting that this reconciliation is easy and that there is no problem to solve. For instance, in her response to Horn, Carston states that

'It would be odd, though not impossible, to find that there is one set of such principles [conversational/communicative principles] that are useful for making an analytical semantics/pragmatics distinction, [...], and yet another that guides the hearer's processes of utterance comprehension.' (2005: 307). Nevertheless, I have the intuition that this problem may be solved if we consider that the relevance principle is a heuristic principle used by our cognitive systems and that we can demonstrate some link between the principles that justifies this.

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8
Impliciture vs Explicature: What's the Difference?

Kent Bach

1   Introduction

I am often asked to explain the difference between my notion of impliciture (Bach 1994) and the relevance theorists' notion of explicature (Sperber and Wilson 1986; Carston 2002). Despite the differences between the theoretical frameworks within which they operate, the two notions seem very similar. Relevance theorists describe explicatures as 'developments of logical forms', whereas I think of implicitures as 'expansions' or 'completions' of semantic contents (depending on whether or not the sentence's semantic content amounts to a proposition). That is not much of a difference. We agree that implicitures/explicatures go beyond what is said (in a strict sense) and yet fall short of being implicatures. So, what *is* the difference, or is it just terminological? As we will see, the real differences emerge when the two notions are situated in their respective theoretical frameworks with their contrasting conceptions of what is involved in linguistic communication.

Before going into these differences, I want to enumerate some basic issues on which there seems to be agreement, specifically between Robyn Carston and me, and to identify some issues on which we disagree (for the details of our respective views, see the works cited).

2   Points of agreement

i. We agree that speakers can communicate things that are neither fully determined by the semantics of the uttered sentence nor merely conversationally implicated. We may not agree on what this involves or how it is accomplished, and we may disagree on what constitutes

sentence semantics, but clearly we agree that there is an intermediate phenomenon.

ii. We agree that various cases of what are commonly thought to be instances of generalised conversational implicature are actually instances of this intermediate phenomenon, whether we call it 'impliciture'; 'explicature'; or, to be neutral, 'enrichment'. Here are a few standard examples, with the implicit material in brackets:

Jack and Jill are married [to each other].
Bill insulted his boss and [as a result] got fired.
You'll get promoted if [and only if] you work hard.
Ralph is ready [to go to work].
Nina has had enough [pasta to eat].

Mistaking these for cases of implicature has consequences. For example, it leads Stephen Levinson to suppose that there are certain pragmatically 'intrusive constructions' (2000: 198–217) – constructions that are, as Carston aptly puts it, 'pragmatically penetrable' (Carston 2004a: 81). In my view, most of Levinson's examples are cases of standardisation. That makes them 'generalised' in Paul Grice's sense – they are pragmatic regularities – but they are generalised conversational implic-*i*-tures, not implic-*a*-tures.

iii. We both oppose what might be called 'hidden indexicalism'. According to this view, influential in some circles, sentences whose semantic contents appear not to be full-fledged propositions actually contain hidden indexicals (or implicit, bindable variables), whose interpretations relative to a given context of utterance yield propositional contents after all. On this view, the semantic contents of such sentences vary with context, but they are still propositional – provided the hidden indexical acquires a reference (or the variable is assigned a value or is bound). Carston and I both find it gratuitous to posit hidden indexicals (or bindable variables) just for the sake of avoiding semantic incompleteness (Carston 2000: 842). We endorse Stephen Neale's advice to anyone tempted by hidden indexicalism not to 'get hooked on aphonics' (2004: 83).

iv. We agree that so-called unarticulated constituents, being neither phonologically nor even syntactically realised, are not part of the semantic interpretation of a sentence. If such an element is neither a referent of an indexical nor a value of a variable, it cannot belong to the sentence's semantic content, even if it is a constituent of the primary proposition that the speaker is trying to convey in uttering the sentence.

v. We agree that speakers' referential intentions are not part of context, certainly not in the narrow sense of being a parameter that determines the semantic value of an expression used in referring (Carston 2004b: 638).

vi. We agree that the primary bearers of truth-values are not sentences. And, although we disagree on what *are* the primary bearers of truth-values – Carston thinks mental representations while I think propositions – we agree that linguistic meaning is ultimately a matter of psychology (Carston 2000: 843).

vii. We agree that there is no good use for the category of what is said, at least as Grice conceived of it. Grice defined what is said as what a speaker *means* that is 'closely related to the conventional meaning of the sentence uttered' (1967/89: 25). Not only does this conception force Grice to describe non-literal utterances as cases of 'making as if to say' something rather than as saying one thing and meaning something else – but it implicitly assumes that the semantic content of a sentence must amount to a proposition (Carston 2004b: 649).

viii. Finally, Carston and I agree that understanding literal utterances involves processes of the same sort (and is explained in the same sort of way) as those involved in understanding non-literal utterances and implicatures (Carston 2004b: 653). However, our reasons for thinking this are rather different. Carston, and evidently relevance theorists generally, think that very few sentences, if any, express propositions – the 'logical forms' of sentences have to be 'developed' before a proposition is determined and expressed. My reason is that even if a speaker is being completely literal and means exactly what he says, *that* he means exactly what he says still has to be inferred. It takes more than decoding a sentence to figure out that a speaker is using it in a completely literal way. That is why it is a mistake, common though it is, to think that pragmatics kicks in where literal meaning leaves off.

3   Points of disagreement

i. Although Carston and I agree that a great many sentences do not have propositions as their semantic contents, not even relative to contexts, I am unaware of any good reason (I am aware of various bad ones) for insisting that the semantic contents of sentences are virtually never propositional. For example (contrary to Carston 2002: 30–42), the fact that our most fundamental thoughts about things in the world are essentially indexical and therefore expressible only by using indexical

sentences does not keep the contents of these sentences from being propositional, albeit relative to contexts.

My main reason for thinking that at least some sentences express propositions is very simple. If none did, then none of our thoughts would be explicitly expressible. Indeed, it is arguable that all of our thoughts are explicitly expressible, in which case for every thought there is at least one sentence whose utterance would express it explicitly.

The best explanation I can think of for why some people think that very few if any sentences express propositions is that they focus on the relatively short sentences we use in everyday conversation. They do not take into account the much longer and more cumbersome sentences that would make what we mean fully explicit. In everyday life we generally speak loosely, omitting the qualifications and disclaimers that would give more precise expression to our thoughts. To be sure, I am not suggesting here that we would generally find it easy to make our thoughts fully explicit.

My point here is that the influential view, which sometimes goes by the name of 'contextualism', that sentences generally fail to express propositions, leads to the implausible view that thoughts are generally not explicitly expressible. More plausible is the view that many if not most of the sentences we commonly use fail to express propositions.

Although we disagree on whether most sentences are semantically incomplete, I do not think this disagreement is all that important as far as the theory of utterance processing is concerned. For when a hearer is figuring out what a speaker means, it does not matter all that much whether a sentence expresses a 'minimal' proposition or no proposition at all. Either way, what the speaker means is obviously some sort of enrichment of the semantic content of the sentence he is uttering, and the processes involved in figuring out which proposition that is are essentially the same.

ii. We do disagree about what drives these reasoning processes. Carston endorses the relevance theoretic story, whereas I endorse a Gricean picture. Leaving aside the various differences between the Cognitive and Communicative Principles of Relevance and the Principle of Optimal Relevance on the one hand and the Gricean maxims on the other, the main difference seems to be this. According to relevance theory, the process of understanding an utterance is driven by a kind of comprehension procedure based on accessibility:

> Check interpretive hypotheses in order of their accessibility – that
> is, follow a path of least effort until an interpretation that satisfies

the expectation of relevance is found; then stop. (Carston 2000: 822)

This formulation can be refined in various ways, for example, to take into account differences in speakers, in circumstances, and hence in what counts as relevant, but the basic idea is to evaluate hypotheses about what the speaker means in the order in which you think of them until you arrive at one that is relevant enough. However, calling this is a 'procedure' is, I think, a bit of an exaggeration. What it amounts to, really, is to consider hypotheses about what the speaker means in the order in which they occur to you – how else? – and to stop as soon as a sufficiently plausible one comes to mind. Given normal time constraints, especially if the speaker goes on to utter another sentence without much of a pause, one had better hit on a plausible hypothesis in a hurry.

I agree with the basic idea here, having described what goes on as an 'inference to the first plausible explanation' (Bach and Harnish 1979: 92). What makes my approach Gricean is essentially this: in figuring out what a speaker means an addressee presumes that the speaker intends him to do so. This is a kind of game of coordination (Schelling 1960), involving strategic interaction, not an ordinary cognitive process.

Moreover, contrary to what Dan Sperber and Deirdre Wilson suggest (1986: 256–7), there is nothing circular or regressive about Grice's (1957/89) idea that a hearer is to recognise the speaker's communicative intention partly on the basis of taking himself to be intended to do so. It is one thing to know *that* one is intended to do this and quite another to know specifically *what* it is that one is intended to do.

iii. We also disagree on the role of the conversational maxims or, as I prefer to think of them, presumptions (about what speakers mean when they say what they say). Carston supposes that for Grice they come into play in connection with figuring out conversational implicatures but not when a speaker means what he says and nothing more (Carston 2002: 100). Now, it is certainly true that Grice (1967/89) introduced the maxims in the course of stating his theory of conversational implicature, but nothing he says there or anywhere else implicates, or even suggests, that their role is limited to this. To be sure, he does not explicitly address this question, but, to anyone who understands the rationale of his account, the answer is obvious.

The maxims or presumptions of conversation play essentially the same role in determining what a speaker means, whether he implicates something; means just what he says; or, for that matter, is trying to convey an implicture. Implicatures (and implicitures) arise only when one

or another maxim is flouted or violated (the difference here depends partly on how the maxim is formulated – Grice's formulations in terms of saying, together with his notion of saying as entailing meaning, can confuse the issue). So, it would seem, when no maxim is flouted or violated, one can infer that the speaker means what he says. That is, there is nothing to trigger the sort of inference that Grice sketches out for when there is an apparent breach of a maxim. But this does not mean that the maxims play no role at all. It means only that they do not contribute to figuring out *what* the speaker means when this is not distinct from what he says. When what the speaker says and the fact that he says it fully comport with the maxims, this is enough to enable the hearer to figure out that what the speaker says exhausts what he means.

So my view on Grice here is consistent with the last point of agreement (viii) between Carston and me mentioned above – that understanding literal utterances involves processes of the same sort and is explained in the same sort of way as understanding non-literal utterances and implicatures. It is just that she thinks that this is true only from the standpoint of relevance theory and not from a Gricean perspective. But even from a Gricean perspective, understanding an utterance is never just a matter of decoding (Bach and Harnish 1979: chapter 1). Figuring out what a speaker means is always a matter of inference.

4 Differences between impliciture and explicature

According to relevance theorists, the 'explicature', or 'explicit content', of the utterance of a sentence is a 'development' of the sentence's 'logical form'. In my view, an impliciture is something that is built from what the speaker says in uttering the sentence. These conceptions sound similar enough, so how do they differ?

i. What relevance theorists call *explicit* content is what I would rather call *directly* conveyed content. What they regard as explicit is, in general, not fully explicit but partly implicit. Indeed, this is suggested by their term 'explicature', which is a cognate of 'explicate', not 'explicit'. To explicate something is to spell it out, and to spell out the explicature of an utterance would be to make fully explicit what has in fact been left partly implicit. That is why I call this partly implicit content an 'impliciture' (the term should not suggest that all of an impliciture is implicit).

An impliciture is conveyed directly, not indirectly like an implicature. That is because it is the thing that the speaker means (assuming he

is using all the constituents of the sentence literally) that is most closely connected to the semantic content of the sentence he is uttering. In implicating something, a speaker means one thing and conveys something else in addition. To implicate something is not to say it – not even partially. To 'implicite' something (if I may coin a term) is to say it, but only partially, since one is leaving part of what one means implicit.

Anyway, it seems to me that when relevance theorists characterise an explicature as the 'explicit' content of an utterance but allow that explicitness is a matter of degree, what they really mean is that it is content that is *directly* conveyed, whether fully explicitly or partly implicitly.

ii. Carston finds two virtues in the word 'explicature': i) that it is 'aurally and graphologically more clearly distinguishable from "implicature" than is "impliciture"', and ii) that it is derived from the verb 'explicate' (Carston 2002: 171). Unfortunately, these virtues are offset by the vice of it being highly misleading. As already mentioned, 'explicature' is derived not from 'explicit' but from 'explicate', and to call an explicature the 'explicit' content of an utterance obscures the fact that this content is partly implicit. Besides, 'explicate' is the wrong verb for what the speaker does in leaving something implicit. I grant that 'implicite', being a made-up verb, is not wonderful either – but better a neologism than a solecism.

iii. I distinguish two kinds of impliciture, depending on whether getting from what is said to the impliciture involves completion or expansion. Completion is required when the uttered sentence is semantically incomplete and fails to express a proposition, even relative to the context. Expansion occurs when the sentence does express a proposition, but what the speaker means is, to put it roughly, a more specific or elaborate proposition. Relevance theorists do not bother much with this distinction, mainly because they tend to think that sentences in general are semantically incomplete. I do not put all that much weight on it myself, since there does not seem to be much difference in what is required to understand implicitures of either sort. Even though completion is in some sense mandatory, assuming that what a speaker means must be a proposition, and expansion is not mandatory in that sense, in either case what the speaker means is obviously something more elaborate than what he says. The process of figuring out what that is is essentially the same either way.

iv. Although the definitions of explicature that I have seen seem to require that an explicature be a proposition (or 'assumption', in the jargon of relevance theory) that the speaker means (intends to

communicate), relevance theorists sometimes extend the notion. In particular, they speak of 'higher-level' explicatures (Carston 2002: 119). For example, if you assert that tigers are striped, the proposition that you said that tigers are striped and the proposition that you believe that tigers are striped count as further explicatures. Of course, it is readily inferable that you said this and that you believe this, but that does not show that you *meant* either of those things. And presumably you did not. So I would not count them as implicitures.

Implicitures, like implicatures, are things that speakers mean, not other things inferable from their saying what they say or from what they mean in saying it.

v. I accept a version of John Austin's (1962) distinction between locutionary, illocutionary, and perlocutionary acts (Bach and Harnish 1979: chapter 1). What a speaker says is the content of his locutionary act, what a speaker means is the content(s) of his illocutionary act(s), and both are distinct from his acts of (intentionally) producing further (perlocutionary) effects on his audience. However, this basic distinction seems to play no role in relevance theory. By neglecting it, relevance theorists tend to include more in the categories of explicature and implicature than belongs there. To be sure, they describe explicatures and implicatures as things speakers communicate (or at least intend to communicate), but what they count as communicated is not very constrained. Moreover, by not distinguishing what the audience takes to be the attitudes the speaker is expressing from whatever beliefs and other attitudes the speaker intends the audience to form, they blur the distinction between understanding an utterance and the (perlocutionary) effects, actual or intended, of understanding it.

It would take considerable effort to work out how to incorporate the distinction between locutionary, illocutionary, and perlocutionary acts into relevance theory. Part of the challenge would be figure out how relevance theory, which is intended primarily as an approach to utterance comprehension, could be applied from the speaker's standpoint. Any broadly Gricean approach treats the speaker and hearer's perspectives as complementary. Communication is a kind of game of coordination, in which the speaker utters something with an intention that the hearer is to recognise, partly on the basis that he is intended to do so.

vi. The above distinction, which includes the notion of a locutionary act, is relevant to the ongoing controversy about 'what is said'. Carston and others have argued that a strict, semantics-driven conception of what is said, in so far as it is distinct from the notion of literal meaning, has no useful role to play in an account of utterance comprehension.

That is debatable. For one thing, it is not just the literal meaning of the sentence that matters, but the fact that the speaker uttered that sentence with that meaning.

The main criticism – that a Gricean account implausibly requires that the hearer determine what is said before determining what the speaker implicates or otherwise means (see, for example, Carston 2002: 100) – neglects the distinction between what goes on in a cognitive process with what information is available to that process (see, for example, my 2001: 24–5). Besides, this criticism does not address the conception of what is said as the content of a locutionary act, which is performed by the speaker and not the hearer.

What is said in the locutionary sense is not, in general, the content of the illocutionary act the speaker is performing. Of course, the phrase 'what is said' is often used to mean what the speaker states or asserts, but stating and asserting are illocutionary acts. What is said in the locutionary sense is independent of the content of whatever illocutionary act the speaker is performing. It is something that is the same whether or not the speaker means what he says, or even means anything at all; whether or not he fully understands the meaning of his words; whether he is being sincere or insincere; whether he is speaking literally or nonliterally; and whether he is speaking directly or indirectly. So far as I know, none of these reasons for this strict notion of what is said has been seriously addressed in the literature.

'What is said' is correlative with 'say' in the locutionary sense. To my knowledge, nobody who objects to the importance of the notion expressed by this phrase has even mentioned, much less given reasons to avoid using, the notion of a locutionary act (but see Searle (1968), who objects to the notion of locutionary act, and, in reply, Bach and Harnish (1979: 288–9)). People who complain about, for example, the psychological irrelevance of what is said need to offer an account of what a speaker does in uttering a given sentence that is independent of and logically prior to what he means in uttering it.

Carston makes the astute observation that the above notion of what is said does not apply to non-elliptical sub-sentential utterances (Carston 2002: 153, 173–4). She is right, for these are not cases of saying-that simpliciter. I would argue that they are cases of saying-of-something-that, that is, saying something of some topic. In these cases what one is saying something of is a pragmatic matter, but one is still performing the locutionary act of saying something of it. Anyway, one thing is clear about sub-sentential as opposed to sentential utterances: what the

speaker means is *less* explicit and *more* implicit. So I do not see how they can help the cause of explicature theory.

vii. An impliciture is on a par with an implicature, in that both are things that speakers mean in saying what they say. In contrast, an explicature is a property of an utterance. I have a problem with that, since I think that only sentences (and their constituents) and speakers mean things (although not in the same sense of 'mean'). I do not think there is any need for an independent notion of utterance meaning. Indeed, phrases like 'truth conditions of an utterance' just lead to confusion if they pertain to anything other than the semantic content of a sentence or what a speaker says or means in uttering it.

viii. Carston apparently would count as an explicature any case of narrowing, loosening, or otherwise modulating the encoded meaning of an expression (Carston 2002: chapter 5). I think the different kinds of case should be classified differently. If the expression in question is being used figuratively, the utterance should be classified as non-literal, not as an impliciture (or explicature). Cases in which the expression in question is to be taken as if it were modified in a certain way, for example 'three' as 'exactly three' or 'hexagonal' as 'roughly hexagonal', do count as implicitures, since they involve expansion or completion, depending on whether or not the sentence expresses a proposition. Finally, cases of lexical underdetermination, where the expression in question does not express a determinate property or relation ('put', 'get', 'in', and 'to' are common examples), involve completion, since a sentence in which the expression occurs (unless suitably elaborated) does not express a proposition.

I doubt that anything important hinges on how we decide which cases do and which do not count as impliciture/explicature. That is because I do not think these subtle differences indicate much of a difference in the processes underlying either the production or comprehension of utterances of these different sorts.

5 Postscript on relevance theory

I have tried to compare and contrast impliciture and explicature without getting caught up in a debate on the merits of relevance theory. However, it may be of interest to mention what I regard as its most serious difficulties – most of which are fairly well known. Never mind relevance theorists' highly idiosyncratic and misleading use of the term 'relevance'. As they use it, they do not mean relevance in the

ordinary sense of the term but, rather, as the ratio of quantity of cognitive effects to the degree of processing effort. Here are the more serious problems.

i. The most obvious problem is that of how to quantify and measure degrees of cognitive effects and degrees of processing effort. The formulations I have seen of relevance-theoretic concepts and principles are too vague to be of much help in this regard.

ii. Then there is the uniqueness problem: since relevance is a function of two variables (however they are measured), in particular a ratio, there is no unique way to maximise relevance or, indeed, to achieve any specific degree of it. Any increase or decrease in processing effort can be offset by a corresponding increase or decrease in cognitive effects, and vice versa. So there is no unique answer to the question of what is the most relevant interpretation of a given utterance.

iii. Accordingly, it is not clear what predictive or explanatory value can be attributed to the Cognitive and Communicative Principles of Relevance and to the Principle of Optimal Relevance. Moreover, it would seem that these principles falsely predict that trivial, stupid, boring, or repetitious utterances are much harder to understand than they really are.

iv. Then there is the problem of individual differences. Since a given utterance is likely to have different cognitive effects on, and require different degrees of cognitive effort by, different people, it is not clear that relevance theory can explain how a speaker can successfully communicate with different people at the same time.

v. Finally, as mentioned earlier, relevance theory does not do justice to Grice's insight that communication is a kind of game of coordination: the speaker intends the hearer to figure out what he means partly on the basis that he is intended to do so, and the hearer, in figuring out what a speaker means, presumes that the speaker intends him to do so. Instead, relevance theory requires that speakers be applied relevance theorists: to succeed in making their communicative intentions evident they must be able to predict which interpretation of a given utterance best satisfies relevance principles, since that is the one that relevance theory predicts (assuming it were informative and precise enough to make a prediction) will be the first that occurs to the hearer that satisfies the expectation of relevance.

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9
Cancellation and Intention

Noel Burton-Roberts

Robyn Carston (2002) has claimed that explicatures can be cancelled. I argue that *cancellation* of explicature is logically impossible and empirically incorrect. Instead, it should be thought of as *clarification* of speaker's intended explicature.

However – even in respect of implicatures – it may be asked: what exactly is cancellation? Is 'cancellation', as distinct from clarification, actually possible?

While Carston aligns cancellability with what is pragmatically derived, I argue that speaker's intention is the crucial feature. Cancellation of intention – be it an intention-to-explicate or an intention-to-implicate – is impossible. What was intended *was intended*. 'Cancellation' must then mean 'cancellation without contradiction of intention', of which Paul Grice's 'cancellation without contradiction of what is said' is a special case (since what was said must have been intended).

Implicature-cancellation is viable, then, only if we can accept that implicatures can arise independently of speaker's intentions. This is impossible if – as for Grice – implicature involves intention and recognition of intention. However, I suggest that Grice's distinction between generalised and particularised implicature (GCI vs PCI) is relevant here – especially as treated by Gerald Gazdar (1979) and Stephen Levinson (2000). In the light of my more general (intention-based) notion of cancellation, I argue that GCIs are indeed cancellable, but that PCIs are not. Cancellation then does not provide a test for the explicature/implicature distinction, but this is for different reasons from those advanced by Carston (2002).[1]

1 The Pragmatic Cancellation Principle

In *Thoughts and Utterances*, Carston articulates a general principle: 'it is pragmatic inference quite generally that is cancellable/defeasible' (2002: 138). I'll call this 'The Pragmatic Cancellability Principle' (PCP).

It might seem that Carston is simply rearticulating an uncontroversial basic principle of pragmatic theory here. Well, it is certainly uncontroversial within Gricean pragmatics. Gricean pragmatics is about – indeed all about – the derivation of implicatures (conversational implicatures; I ignore conventional implicature here). As such, it is about what is implicitly communicated. In Gricean terms, *semantics vs pragmatics* is isomorphic with *saying vs implicating* and with *explicit vs implicit*. Since the relation of implicatures to what is said is a non-truth-conditional relation, implicatures are by definition cancellable – that is, cancellable without contradiction of what is said. Hence, for Grice, cancellability is a (if not the) hallmark of pragmatic inference. This is the Gricean PCP.

However, Carston is articulating the PCP in the post-Gricean context of relevance theory. In that context, she is absolutely right when she writes (2002: 138) that it 'alters the terms of the discussion completely.' In that context, it has dramatically different implications, which are – or should be – controversial. What I want to do first is to show that, in respect of relevance theory's notion of explicature, continued adherence to the PCP is logically questionable and empirically incorrect. Then I will raise some questions about the very idea of cancellation. I will suggest that, even within a Gricean framework, the very idea of 'cancellation' is problematic, and here I focus on implicature.

2 The problem of cancellable explicature

Relevance theory (RT) – among other pragmatic frameworks – has shown that pragmatic inference by the hearer is as much involved in his recovery of what is explicitly communicated by the utterance of a linguistic expression as in his recovery of what is implicitly communicated by it. Constitutive aspects of what is explicitly said (in some important sense of 'said') are not linguistically encoded, but have to be pragmatically inferred. In RT terms, 'explicatures' as much as implicatures have to be pragmatically inferred. An extreme, although commonplace, illustration of this is Bill's response to Ann in (1):

(1) Ann: Have you returned that copy of *The Minimalist Program* book to the library?
     Bill: Yes.

Clearly, Bill has explicitly communicated ('said', 'explicated') that he has returned the given copy to the given library. Equally clearly, this is not encoded by *yes* but has to be pragmatically inferred in the context of his utterance – the context constituted by Ann's question.

Since pragmatic inference is involved in the recovery of both the explicit content of utterances (explicatures) and their implicit content (implicatures), we cannot appeal to the Gricean isomorphisms to sort out – either intuitively or by test – what is explicit (explicated) and what implicit (implicated). So, if the explicit/implicit distinction has theoretical significance, it is important that some new criterion for the distinction be offered – some definition of what it is to be explicated rather than implicated.

Carston offers the following:

> An assumption (proposition) communicated by an utterance is an 'explicature' of the utterance if and only if it is a *development* of (a) a linguistically encoded logical form of the utterance, or of (b) a sentential sub-part of a logical form. (2002: 124, my emphasis)

The problem with this and other definitions of 'explicature' that depend on the notion of 'development' is that no definition of 'development' is anywhere given. In Burton-Roberts (2005) I tried interpreting 'development' in terms of entailment – a line of enquiry suggested by Carston (1988).[2] I will not pursue that here because it yields inconsistent results and poses other problems (see Burton-Roberts (2005)). So I will ignore 'development' in what follows. In trying to pinpoint what an 'explicature' is, I will rely on Carston's informal, intuitive remarks about it.

Carston – and RT in general – avoid Grice's term 'what is said' for the very good reason that it is so slippery. In ordinary parlance, there are two distinct senses of 'saying' which Grice fails to distinguish.[3] In explaining the problem in my teaching, I refer to these as **'A-saying'** and **'B-saying'**. To report what someone has 'A-said' we must quote their very utterance: in respect of (1) above, for example, we will report Bill as having (A-)said 'Yes'. Here we report on a **[saying-of-'E']**, where E is some expression. By contrast, reporting what Bill has thereby 'B-said' involves an assessment of the thought he intended to communicate explicitly. Here we report on a **[saying-*that*-P]** and will report Bill as having said that he had returned that copy of *The Minimalist Program* to the given library. (See Lewis (1980/98: 41) for a comparable distinction.)

'Explicature' seems to reconstruct 'What is B-said'. This is indicated by Carston's discussion of 'explicating' in terms of 'expressing [...] commitment' (2002: 123) and her gloss of 'communicating [...] the proposition expressed' (that is, explicating) as 'overtly endorsing' it (2002: 124). This captures what Bill is doing in (1) with regard to the thought that he has returned that copy to that library.[4]

Understood in this way (as what is B-said), 'explicature' is a improvement on Grice's 'what is said'; it at least pins down one sense of 'what is said'. I am not suggesting that any of this provides a definition of explicature, since it depends on notions which, while intuitive enough, are not formally defined. I am merely trying to get at the intuitive idea behind 'explicature'.

Here is the problem with the PCP, then. Explicatures are not linguistically encoded, but have to be pragmatically inferred. So, according to the PCP, they should be cancellable. Carston (2002: 138) explicitly argues that they are cancellable. I shall deal first with a problem of principle in this connection and then with some empirical (or at least intuitively manifest) facts.

The problem of principle is this. Cancellation, as noted, is generally taken to be *cancellation without contradiction of what is said*. The question is, which sense of 'said' is involved in 'cancellation without contradiction of what is said' – A-said or B-said? I do not see that it can be either.

It cannot be A-saying because 'what is A-said' amounts to 'what is linguistically encoded', and RT insists that what is linguistically encoded does not yield a truth-evaluable proposition. Pragmatic processes – disambiguation, reference assignment, and the supplying of elliptical or otherwise unarticulated constituents – are required for a truth-evaluable proposition to be derived. So, since what is linguistically encoded is not a truth-evaluable proposition, nothing could possibly contradict what is A-said. Contradiction is a truth-theoretic (logical) relation holding between truth-evaluable propositions.

So 'without contradiction of what is said' must mean 'without contradiction of what is B-said'. But if 'cancellation' is 'cancellation without contradiction of what is B-said' – and if 'explicature' reconstructs 'what is B-said' – then cancellation of explicature is clearly impossible as well. To allow that explicatures are cancellable would be to allow that an explicature can be cancelled without contradicting that explicature (that is, that what is B-said can be cancelled without contradicting what is B-said). This looks straightforwardly contradictory. Furthermore, assuming a normal understanding of what it is to be 'committed' to

a proposition and what it is to 'overtly endorse' and 'express commitment' to it (Carston's informal accounts of what it is to explicate), it is clearly impossible for a speaker to cancel what she has explicated without contradicting herself.

In illustration, consider a putative explicature-cancellation that Carston (2002: 138) offers:

(2)   She's ready – but Karen isn't ready to leave for the airport.

It is true that (2) is not contradictory. But it couldn't possibly be: *She's ready* and *Karen isn't ready to leave for the airport* are merely (non-propositional) linguistic encodings. Consider also (3).

(3)   She's ready but she's not ready.

This cannot be assessed for contradiction until we have ascertained the intended reference of each occurrence of *she*, made good what is not articulated in each clause (ready for what?), and decided what concept of 'readiness' the speaker has in mind. Someone can be ready to leave for the airport in their having bags packed and coat on (say, READY$_{[213]}$), yet not ready in the sense of being mentally prepared to leave (say, READY$_{[218]}$). The song *Leaving on a jet plane* offers a clear example.

In short, contradiction can be assessed only in respect of propositions, and thus at the level of explicature. So, let us assume that the explicature of the utterance of the second clause of (2) is (4).

(4)   KAREN$_{[k]}$ IS NOT READY$_{[218]}$ AT TIME$_{[u]}$ TO LEAVE FOR THE AIRPORT$_{[a]}$.

Clearly, in order to know whether (4), as the explicature of the second clause in (2), is cancelling the explicature of the utterance of *She's ready* in (2), we need to know what the explicature of that utterance of *She's ready* was. Here are four possible candidates:

(5)   a.   PAT$_{[P]}$ IS READY$_{[213]}$ AT TIME$_{[u]}$ TO LEAVE FOR THE AIRPORT$_{[A]}$.
      b.   KAREN$_{[k]}$ IS READY$_{[319]}$ AT TIME$_{[u]}$ FOR BREAKFAST.
      c.   KAREN$_{[k]}$ IS READY$_{[213]}$ AT TIME$_{[u]}$ TO LEAVE FOR THE AIRPORT$_{[A]}$.
      d.   KAREN$_{[k]}$ IS READY$_{[218]}$ AT TIME$_{[u]}$ TO LEAVE FOR THE AIRPORT$_{[A]}$.

(4) contradicts none of (5a)–(5c). However, it does not cancel them either. The only candidate explicature that could be regarded as cancelled by (4) is (5d). But it is precisely (5d) that is contradicted by (4). In conclusion: either (5d) *was* the explicature of the utterance of the first clause of (2) but is *not cancellable* without contradiction, or it was *not the explicature* in the first place.

Take another example discussed in my (2005):

(6)   Ann-i: That fellow's playing is lamentable.
      Bill: Too right. Cruelty to cellos, I call it.
      Ann-ii: Not the cellist – the trombonist!

To derive the explicature of Ann's first utterance we need to assign reference to Ann's 'that fellow'. This reference must be pragmatically inferred by Bill. According to the PCP, then, the reference, and thus the explicature, of Ann's first utterance should be cancellable. But is this really how we are to analyse what Ann is doing by her second utterance – cancelling the explicature of her first utterance? This seems just wrong. It requires us to assume that Ann *was* in fact explicating that the cellist's playing was lamentable. You cannot cancel an explicature unless there *was* an explicature to cancel in the first place. But she clearly was not explicating any such thing. Her second utterance makes it abundantly clear that she was explicating it was the *trombonist's* playing that was lamentable.

The assumption that Ann's second utterance is an explicature-cancellation would require us to accept that what a speaker explicates is entirely in the hearer's (in this case, Bill's) gift – his decision and only his. That it is the hearer who determines the explicature is suggested by saying that explicature is 'pragmatically determined'. But, although it is true that a hearer has to engage in pragmatic inference in 'determining' reference and thus explicature – 'determining' here means 'ascertaining'. In another more relevant sense of 'determine', reference and thus explicature are not determined pragmatically or by the hearer. They are determined by speakers and their intentions. The hearer and his pragmatic inferences are involved only in his attempt to ascertain the speaker's intention.[5] Deirdre Wilson and Dan Sperber themselves acknowledge (2004) that for RT – as for Grice – pragmatics is all about intention (that is, *speaker's* intention) and recognition of intention. Recognition of speakers' intention may be successful or, as in the case of (6) above, unsuccessful. Similarly with ambiguity, as in (7), where Ann's second utterance is surely not a case of explicature-cancellation.

(7)   Ann-i: I suggested to Jim that he turn it down.
      Bill: Well, he's taken no notice. It's as loud as it ever was.
      Ann-ii: That job offer! I suggested he decline it.

Generally, an intention actually executed in the act of utterance – particularly an intention-to-explicate (or B-say) so executed – cannot

be cancelled. As we all know to our cost, what has been said cannot be unsaid.

In the most obvious and uncontroversial cases of pragmatically inferred explicature – cases involving disambiguation, reference assignment, and the supplying of elliptical or otherwise unarticulated constituents, as in (2), (6), and (7) – it seems clear to me that what is going on is not *cancellation*, but *clarification*, of the speaker's (necessarily intended) explicature, given the hearer's failure to identify it.

Treating the relevant phenomenon as clarification rather than cancellation seems an obvious solution to an otherwise serious problem of principle with explicature. If we allow that explicatures can be cancelled, we are going to have to abandon Carston's intuitive account of explicature in terms of expressing commitment to and endorsement of a proposition. This would leave us without even an intuitive, pre-theoretical account of what explicature is.

Insisting that explicature can only be clarified, not cancelled, means abandoning the PCP, the principle that anything pragmatically inferred is cancellable. This seems to me both inevitable and entirely unproblematic. Although it is possibly coherent in Gricean terms – or possibly not, see below – the PCP makes little sense in a post-Gricean context.

Furthermore, abandoning the PCP is anyway indicated on empirical grounds. Take Kent Bach's (1994) famous example, (8a).

(8)   a.   Ann: You won't die! (said to little Billy, who's just cut his finger).
      b-i. Billy won't die FROM THAT CUT.
      b-ii. Billy is immortal.
      c.   !You won't die – but you will/might die from that cut.

It is intuitively manifest that, in uttering (8a), Ann has said – B-said, explicitly expressed, and endorsed (explicated) – what is represented in (8b-i), not (8b-ii). This explicature has to be pragmatically inferred. But it has not been generally noticed that it is not cancellable without contradiction. (8c), in which the pragmatically derived aspect of the explicature is cancelled, is clearly contradictory. Similarly for another famous example, (9a), the pragmatically derived aspect of the explicature (9b) is not cancellable without contradiction, as (9c) clearly shows.

(9)   a. I haven't had breakfast.
      b. I haven't had breakfast TODAY.
      c. !I haven't had breakfast – but I have had breakfast today.

Furthermore – should it be thought that uncancellability of pragmatically inferred explicature arises only with negative examples – it clearly goes for example (1) above as well:

(1) Ann: Have you returned that copy of *The Minimalist Program* book to the library?
Bill: ! Yes. But I didn't return it.

3 Cancellation – the very idea

The idea of clarification renders an appeal to 'cancellation' unnecessary. In respect of the examples considered so far, I see no reason why Carston should not simply agree with this conclusion. However, a problem remains, for RT at least. As is well known, RT (and Carston) analyses at least some (all?) of Grice's GCIs as explicatures. Since we independently know that GCIs are cancellable, RT is empirically committed to the cancellation of explicature:

(10) a. He shrugged and left.
  b. He shrugged and THEN left.
  c. He shrugged and left – but not in that order.

(11) a. He has three kids.
  b. He has EXACTLY three kids.
  c. He has three kids – and in fact he has four.

If I am right in claiming that explicature is not cancellable but may be subject to clarification, it might seem we have a simple choice here.

Either (i): allow that (10b)/(11b) indeed *are explicated* by utterances of (10a)/(11a) and thus insist that what is going in (10c)/(11c) is not cancellation but *clarification* (of intended explicature).
Or (ii): accept that that (10c)/(11c) are genuine cases of *cancellation* and thus insist that (10b)/(11b) are *not explicated* – but implicated – by the utterance of (10a)/(11a).

As regards option (i), I find it difficult, intuitively, to think of what is going in (10c)/(11c) as clarification (of explicature) rather than as a genuine cancellation – and thus as cancellation *of implicature*. So, for me, option (ii) is indicated. But there is a problem with option (ii). This brings me to the point of the chapter.

I have been assuming that we know what cancellation is – or at least know enough about it to know that clarification and cancellation are

distinct. But is there in fact any distinction between clarification and cancellation? Could it be that what we have been calling 'cancellation' was in fact clarification all along– that 'cancellation' *generally* (not just cancellation of explicature) does not pick out a real phenomenon but is a misnomer?

In respect of explicature, I have rejected cancellation in favour of clarification because, in part, an explicature must have been *intended*, and an intention actually implemented in an act of utterance cannot be undone (cancelled). On this showing alone – leaving aside questions of commitment/endorsement in connection with explicature – I suggest it is, more generally, *implemented intentions* that cannot be cancelled or undone.

But pragmatic theory's concern with intention and its recognition is not limited to explicature. Implicature, as much as explicature, is intended. An implicature is, by definition, a communicated assumption that is intended as such by the speaker and recognised as being thus intended by the hearer.

How then is it possible even for an *implicature* to be cancelled? As with explicature so with implicature: EITHER the speaker intended by her utterance to implicate that P – and therefore did implicate that P – in which case she cannot undo (or 'cancel') it, OR she did not so intend, in which case there is no implicature to cancel in the first place.

My point is very simple. For Grice at least, there is no such thing as an *unintended* implicature and from this it should follow that there is no such thing as *cancellation* of implicature.

4 Intention, cancellation, and the GCI/PCI distinction

If we want to maintain cancellation as a coherent notion – and I do – then cancellation cannot just be 'cancellation without contradiction of what is said'. It must, more generally, be 'CANCELLATION WITHOUT CONTRADICTION OF WHAT IS INTENDED'. Cancellation-without-contradiction-of-what-is-said is just a special case of cancellation-without-contradiction-of-what-is-intended, since what was said must have been *intended* to be said.

In the light of this, if we want to allow that implicature-cancellation is a real phenomenon – and I do in respect of (10) and (11), for example – we are going to have to entertain the idea that an 'implicature' (in some sense) can 'arise' (in some sense) independently of speakers' intentions.

Let me stress here that I am not defending a notion of 'unintended implicature'. The idea of an *actual* implicature being *unintended* is more

or less a contradiction in terms. In defending the idea that *implicatures can arise independently of speakers' intentions,* then, we need a more modal notion both of 'implicature' and of 'arise'. I do not deny that this is still contrary to Gricean intention-based pragmatic theory, but so also, surely, is the very idea of 'cancellation' (the notion I seek to defend).

How to resolve this paradox? In connection with the more modal notion of 'implicature' and 'arise' that I have in mind (as needed to support the very idea of implicature-cancellation), I am going to appeal to Grice's own distinction between generalised and particularised conversational implicature (GCI vs PCI). Sperber and Wilson (1987: 748) have suggested 'there is no evidence that [Grice] saw the distinction as theoretically significant'. Against this, Grice (1981: 185) wrote that GCIs – in contradistinction to PCIs – 'are the ones that seem to me more controversial and at the same time more valuable for philosophical purposes'. This suggests he did attach importance to the distinction. Julia Hirschberg has claimed the distinction 'is a false one, an artefact of the inventiveness of analysts' (1985: 42, quoted by Levinson (2000: 380)). But there is a clear distinction between them. Both GCIs and PCIs are context-dependent in that they are – or are supposed to be – cancellable in, and by, the context of utterance. The crucial difference between them lies in the fact that GCIs are context-dependent only in that (negative) respect. PCIs, by contrast, are context-dependent in the further (positive) respect that they depend on a particular context to arise in the first place. In other words: with GCIs, context plays only a destructive (filtering and cancelling) role whereas, with PCIs, the particular context also plays a constructive role. That is what makes them 'particularised'. Outside any context of utterance, PCIs simply do not arise. By contrast, even when – in fact, especially when – an utterance giving rise to a GCI is de-contextualised, the GCI does still 'arise', in some intuitive sense.

In the light of this, if we want to defend a notion of intention-independent implicature, I suggest that GCI – in contradistinction to PCI – is the place to look. I suggest that the distinction between GCI and PCI is no mere 'artefact' but correlates non-accidentally with a distinction between (i) and (ii):

(i) implicatures that can arise *independently* of any intention of the speaker (GCI),
(ii) implicatures that arise only *in virtue of* the speaker's intention to implicate (PCI).

In the light of my contention that 'cancellation' must, at its most general, be 'intention-based' rather than (more specifically) 'saying-based' – by which I mean construed as 'cancellation without contradiction of intention' – I want to show that only GCIs, not PCIs, are cancellable. There are two ideas to be defended here: (i) GCI as implicature that can arise independently of intention (and hence cancellable), and (ii) PCI as uncancellable implicature.

4.1 GCI as an intention-independent implicature

This is not such a new idea, in fact, but a new slant on ones already available. Neither Gazdar (1979) nor Levinson (2000) actually discuss intention or the lack of it in their treatments of GCI, as against PCI. Nevertheless, intention (and the lack of it) correlates well with their treatments of GCI as against PCI.

Gazdar highlights what I am calling the 'modal' character of GCI. Recall that, in modelling GCI, he posited 'potential implicatures' ('im-dash-plicatures'). 'Potential implicatures' are assigned – generatively and thus *automatically* – to linguistic expressions, purely on the basis of their semantic representation. 'Automatically' can be construed as 'independently of any intention-to-implicate'. These 'potential implicatures' only become actual implicatures – that is, they are actually implicated by a speaker – when the relevant expressions are uttered, and then only if consistent with the context of utterance. If, and only if, they are not consistent, they are cancelled. Presumably, inconsistency with the context of utterance – and thus cancellation – means they cannot have been intended. A 'potential implicature', then, is an implicature that arises independently of speaker-intention. If not intended, it is cancelled. That is, it becomes an actual implicature only through not being cancelled. Assuming that the speaker has as good a representation of the context of utterance as the hearer does (more strongly, that the context of utterance is mutually manifest), the hearer's best evidence that the (potential) implicature was *not* intended is its inconsistency with the context of utterance.

Comparable ideas are developed in Levinson's (2000) account of GCI as a *default* inference and as arising from 'utterance types' rather than 'utterance tokens'. This, too, can be cashed out in terms of intention and the lack of it. GCIs are 'default' inferences in the sense that they will be assumed to be intended in default of evidence that they are not. Evidence that they are not intended – that is, any mutually manifest inconsistency with the context of utterance – cancels them. They 'arise'

(in the relevant modal sense) from 'utterance types' rather than from 'utterance tokens'. Since an 'utterance type' is not an act, it can have no particular context. By contrast, an 'utterance token' – that is, an actual utterance – by definition does have a particular context. Utterance types have – and, as types, can *only* have – what Gazdar called 'potential implicatures'. In short, Gazdar's 'potential implicatures' and Levinson's 'utterance-type implicatures' – that is, generalised conversational implicatures – are implicatures that arise independently of the intentions of the speaker.

In the relevant modal sense, then, the existence of a generalised implicature is ontologically prior to the issue of intention. The speaker's intention – her responsibility for the implicature – engages only in the act of utterance and only in the matter of whether an antecedently assigned (potential) 'implicature' is intended or not. At that point, it is a matter wholly of (as it were, post hoc) cancellation.

If this antecedently assigned (potential, utterance type) 'implicature' *is* intended, there is nothing further the speaker need do: the implicature will be communicated. If it is *not* intended, and if the existing context anyway makes manifest that it is not intended, the existing context will of itself cancel the implicature – that is, the potential implicature will fail to become an actual implicature. Again, there is nothing for the speaker to do. In these two cases, (non-)cancellation is a matter of logical/contextual *fact* (assuming the context is mutually manifest). It is not an *act*.[6,7]

Cancellation as an *act* occurs when the potential implicature is not intended, but the existing context does *not* make manifest that it is not intended. In that case, the speaker herself must take steps (that is, act) to *get* it cancelled – by contributing to the context an assumption inconsistent with the (potential) implicature. This is what would be going on in (10c)/(11c) above.

(10)   c. He shrugged and left – but not in that order.

(11)   c. He has three kids – and in fact he has four.

In thus cancelling the implicature, the speaker herself intentionally makes manifest that it was not intended – in other words, she makes manifest that the (potential) implicature assigned (independently of her intention) to the *expression* she uttered is not to be assigned to her *utterance* of that expression.

I suggest that it is only in respect of such modal (potential) implicatures – and thus generalised implicature – that the notion of can-

cellation can be made consistent with the Gricean idea that an *actual* implicature must be *intended*.

At this point it might be objected that the speaker's very choice of expression – *some* (*vs all*), *P&Q* (*vs Q&P*), *three* (*vs four*) and so on – commits her to implicating in fact the potential implicature (which should not be cancellable, therefore). While there is some justice for this, it has to be squared with the general agreement that assumptions thus communicated are cancellable. It is worth noting, incidentally, that the scalar implicature from *three* is much more easily cancelled in (12) than in (13).

(12)   Ann: Do you have three children?
       Bill: Yes – and in fact I have four.

(13)   Ann: How many children do you have?
       Bill: Three –?and in fact I have four.

In (12) Bill's utterance trades on another speaker's use of *three*, and the potential implicature arises from the need to give a positive answer to Ann's question and thus independently of Bill's own intentions. In (13) by contrast, having himself chosen to utter *three*, Bill is more clearly committed to having implicated 'not more than three' and the implicature is much less readily cancelled.

Compare also when *P&Q* reports a single occasion (with a single sequence of events), as in (14), with when it reports what is habitually the case (with no single habitual sequence), as in (15).

(14)   Ann: What did you do before 7.00 am today?
       Bill: I had coffee and got dressed –?but not in that order.

(15)   Ann: What do you generally do before 7.00am?
       Bill: I have coffee and get dressed – but not always in that order.

In (15) Bill had no choice but to utter the conjunction in one order or the other, despite the fact that no single utterance order corresponds to what is habitually the case. Here the potential implicature arises independently of any intention to (actually) implicate an order of reported events and so is readily cancellable. In (14) by contrast, only one of the utterance orders does correspond to the order of reported events. Since it was open to Bill to choose that order – and thereby actually implicate the potential implicature – this is not so readily cancellable.

The intuitive data in (12)–(15) are consistent with my general contention that GCIs can arise independently of the intentions of speakers and are cancellable for that reason. Perhaps, though, we need to modify

the contention and say that *to the extent* that they arise independently of the intentions of the speaker, *to that extent* they are cancellable (for that reason).

4.2 PCI as uncancellable implicature

Gazdar's treatment of implicature was only intended to – and could only – apply to GCIs, not PCIs. His is a model of the *filtering* of that species of implicature (modally) assignable independently of intentional acts of utterance and their contexts. PCI has no such predictability-in-principle. It is not a modal phenomenon in the way the GCI is. It arises only from actual utterances in their actual contexts (Levinson's 'utterance tokens'). There is no question, with PCI, of the implicature in any sense 'arising' independently of the speaker's intention. In short, a PCI is only ever an *actual* implicature.

My claim is, then, that PCIs (as *actual*) must be interpreted as *intended* and so cannot be cancelled. That is – in the more general sense of cancellability that I have argued is necessary – they cannot be cancelled without contradiction of what is intended. This correlates with an obvious intuition: the more manifest a speaker's *intention* to implicate, the less cancellable the implicature will be. Given the character of PCI – as against GCI – the *intention* to implicate is (and must be) manifest to an extent incompatible with PCIs being cancellable.

Consider an example from Wilson and Sperber (1981):

(16)   Max: Do you ever speak to Charles?
       Ann: I never speak to plagiarists.

Assuming Ann's utterance is intended as a response to Max's question, it implicates that Charles is a plagiarist (and, taking what was said and what was implicated as premises, we deductively conclude that she never speaks to Charles). Now, if 'cancellation' means what it is generally taken to mean – 'cancellation without contradiction of what is said' – Ann's implicature should be cancellable. But how should she cancel it? Having responded as she did, could she add 'I am not suggesting that Charles is a plagiarist, mind you'?

This is not possible, surely. Despite her added protestation, nothing could be more evident than her suggestion that Charles is a plagiarist. What would be the point of responding in that way except to implicate exactly that? Having chosen to respond to the question in that way, how could she not be *committed* to having implicated that Charles was a plagiarist? Since the implicature arises from, and only from, her actual

utterance in that context – that is, it is a PCI – she has sole responsibility for it and must have intended it. And the one thing that is not cancellable, I am suggesting, is an intention manifestly executed in and by the act of utterance. Consider also:

(17)   A: There's no milk!
       B: The milkman's ill.
       PCI: There is no milk because the milkman is ill.
       !!The milkman is ill. There's no milk because his milk-float is in for repairs.

(18)   A: I'm out of petrol.
       B: There's a garage round the corner.
       PCI: You can get petrol at the garage round the corner.
       !!There's a garage round the corner – unfortunately, it closed down last year.

When I present the plagiarist example to students, they often object that it is not cancellable. My response has been to explain, again, the Gricean notion of 'cancellation' – namely 'cancellation without contradiction of what is said'. This, I now believe, is an inadequate response. If the notion of cancellation is to be coherent, we need a notion of 'cancellation without contradiction of what is intended' (of which 'cancellation without contradiction of what is said' is a special case). In that sense PCIs are uncancellable.

5   Conclusion

I have suggested that cancellation of explicatures is inconsistent with both the general (intention-based) and specific (said-based) notions of cancellation. Here, clarification rather than cancellation is indicated. Cancellation of actual/intended implicature is also impossible. Since PCI is only ever actual and thus (by definition) intended, PCI-cancellation is impossible. If cancellation is possible at all, it is possible only with GCI; it is only with GCI that it might make sense to talk of potential (and thus potentially non-actual) implicature, arising independently of any intention to implicate.

It follows from this revised picture that cancellability cannot be used as a test of the distinction between the explicit (/explicature) and the implicit (/implicature). A communicated assumption may be uncancellable either because it is an explicature or because it is a PCI. Carston, too, argues that cancellability provides no such test – but on radically

different grounds: (a) because, she claims, explicatures can be cancelled, and (b) because certain implicatures cannot be cancelled. As regards (a), I have rejected this. As regards (b), Carston proposes to treat the utterance of (19a) as implicating – rather than explicating – (19b).

(19)　a. I've invited my father.
　　　b. I've invited a man.

Now if (19b) is an implicature of (19a), it is clearly an uncancellable implicature. I questioned this proposal in Burton-Roberts (2005). The GCI/PCI distinction gives us a further reason for questioning the proposal. If (19b) is an implicature of (19a), it is surely a GCI, and thus should be cancellable. However, Carston (1988, 2002) has sought to disband the very idea of GCI. So, as an implicature of (19a), (19b) would have to be what (outside of RT) is regarded as a *particularised* implicature. This seems obviously wrong. We do not need to know anything about the context of utterance of (19a) to know that it implies (19b). It is uncancellable, I suggest, not because it is a PCI, but because it is – and, for all the reasons presented in my (2005), must be – an explicature of (19a).

Notes

1. I am grateful for responses from audiences at the Granada Workshop on Explicit Communication and the Newcastle 2006 LAGB conference, particularly Luiz Carlos Baptista, Robyn Carston, Thorstein Fretheim, and Begoña Vicente Cruz.
2. Recall that there Carston analysed most of Grice's Generalised Conversational Implicatures (GCIs) as *entailing* what is linguistically encoded (mistakenly, I believe – see Recanati (1989: n 11)) and on that basis argued that they could/ should not be analysed as implicated. Now, if Gricean GCIs are communicated but not implicated – and if explicature vs implicature is a mutually exclusive and exhaustive division of communicated assumptions (as in RT, where an implicature is a communicated assumption that is not explicated) – it follows that a communicated assumption that entails what is linguistically encoded must be an explicature. It is this that suggested 'development' might be cashed out in terms of entailment.
3. But see Grice (1989: 25, 118) for passing comments that effectively acknowledge the distinction.
4. Although this identification of 'explicating' with 'B-saying' works for Carston's informal account of 'explicature', RT's positing of 'higher-level explicatures' does rather obscure the picture.
5. This (speaker/hearer) ambiguity of 'determine' correlates with a (speaker/ hearer) ambiguity of 'what is said'. For the speaker, 'what is said' is a free relative clause ('That which is said'). For the hearer, by contrast, it is an

interrogative clause ('What (on earth) was said?'). Inference is used in 'determining' the answer to that interrogative but it does not thereby determine 'That which is said'. See Burton-Roberts (1994).

6. Examples of cancellation in this sense would be:
    (i) *Kim and Phil went up the hill* and met at the top.
    (ii) With Kim's help, *Phil can shift that table for us.*

I assume that the italicised clause in each case carries a potential/generalised implicature: in (i), that they went up *together*; and in (ii), that Phil is capable of shifting it *by himself*. Clearly, though, an utterer of (i) or (ii) is not implicating either of these. So the implicature is cancelled, but I do not think it right to say that the speaker has engaged in an act of cancellation. Other acts (uttering 'and met at the top'/'With Kim's help…') have had the effect of cancelling the implicature.

7. Gazdar's model encounters a problem in (i):
    (i) Some of the boys came and some didn't come.

Each clause in (i) has the content of the other clause as a potential implicature. Since the potential implicature of each clause is *consistent* with (equivalent to) the context constituted by the other, neither will be cancelled. So both will become actual implicatures. But the content of each clause has been *said*. So the utterer of (i) is modelled as having both said and implicated (i). This can be avoided by reference to intention-based (as against saying-based) cancellation. An intention-to-*say*-that-P is inconsistent with an intention-to-*implicate*-that-P (since what is implicated is not said, and vice versa). It seems reasonable, then, that an executed intention to *say* that P cancels any potential implicature that P. Someone actually *saying* that P is clearly not intending to *implicate* that P.

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10
Metaphor Comprehension: Some Questions for Current Accounts in Relevance Theory

Adrian Pilkington

1   Introduction

The development of the notion of *ad hoc* concept formation in relation to concept loosening, particularly in those cases where the denotations of a decoded lexical concept and its corresponding communicated concept do not intersect (as is the case in the interpretation of many metaphor vehicles), is currently a matter of intense debate in relevance theory. Robyn Carston (2002: 349–359) illustrates and examines the main issues and problems to which the notion gives rise, raises many interesting questions, and suggests promising directions for further research. This chapter responds to some of these questions and suggestions, focusing on the problem of emergent properties in metaphor comprehension and on how vehicles in subject-predicate metaphors communicate concepts having properties not derived directly from the encyclopaedic entries attached to their decoded conceptual addresses.[1] First I present the background to the issues of *ad hoc* concepts and emergent properties, with reference to a few familiar examples discussed in Carston (2002) and Rosa Vega Moreno (2005, 2007). I then discuss and express various concerns with the solution to the emergent property problem offered by Vega Moreno (2005) and with the relevance theory account of metaphor interpretation more generally. Finally I discuss and develop suggestions in Carston (2002) which concern the possible role of *sui generis* phenomenal state representations in metaphor comprehension.

2 Metaphor comprehension: the emergent property issue

In their early account of metaphor Dan Sperber and Deirdre Wilson (1986/95: 231–237) argue that assumptions are taken from the encyclopaedic entry attached to the conceptual address of the metaphor vehicle (in the case of subject-predicate metaphors) and used to predicate properties of the metaphor topic. This process follows the standard procedure for the interpretation of any utterance in expanding the context made available by encyclopaedic entries until an interpretation consistent with the communicative principle of relevance is achieved (one that provides a satisfactory range of cognitive effects given the effort expended). This account requires no costly metaphor-specific interpretation principles and has the further advantage of being able to account for stylistic variation, using the notion of *weak implicature*. Standard metaphors 'give access to an encyclopaedic schema with one or two dominant and highly accessible assumptions' (Sperber and Wilson 1986/95: 236); the interpretation of creative, or poetic, metaphors, on the other hand, requires a more extensive search through context, giving rise to a wider range of relatively weak implicatures:

> in general, the wider the range of potential implicatures and the greater the hearer's responsibility for constructing them, the more poetic the effect, the more creative the metaphor. (Sperber and Wilson 1986/95: 236)

In such cases the range of weak implicatures is indeterminate in that the speaker does not clearly endorse any particular implicature but encourages the hearer to take responsibility for exploring within the wide range of activated assumptions. Successful communication might lead to a range of different ways of interpreting the speaker's intention. The account of metaphor interpretation in Sperber and Wilson (1986/95), while diverging radically – in many respects – from the Gricean account, follows Paul Grice in assuming that the proposition expressed by the metaphorical utterance is not itself communicated, but is only used as a step in a process leading to the communication of implicatures.

The current relevance theory view argues that concepts (decoded from metaphor vehicles) undergo a process of inferential loosening before contributing to an explicature. Metaphorical utterances communicate explicatures containing loosened *ad hoc* concepts in addition

to an indeterminate range of weak implicatures. Carston concludes that:

> given the view that the hearer constructs an *ad hoc* concept that replaces the encoded concept in the explicitly communicated propositional form, the characteristic of indeterminacy must carry over from the implicatures of many metaphorical utterances to their explicatures. (Carston 2002: 358)

The indeterminate *ad hoc* concept, it is argued, is formed by backwards inference in a process of mutual parallel adjustment of explicature and implicatures, an idea to which I will turn in Section 3. To illustrate the notion of concept indeterminacy, consider example (1).

(1)   Robert is a bulldozer.

Here the concept communicated might be BULLDOZER*****, BULLDOZER ******, or BULLDOZER*******, and so on. As Carston notes: 'No specific one is strongly communicated and the hearer's construction of any one of them is good enough for the communication to have succeeded.' (2002: 358).

   A key issue that has come to the fore recently is that of 'emergent properties'. The earlier relevance theory discussion of (1) argued that interpretation:

> involves bringing together the encyclopaedic entries for *Robert* and *bulldozer*, which do not normally come together in a subject-predicate relationship [...] there is no single strong implicature that automatically comes to mind, but rather a slightly weaker, less determinate range having to do with Robert's persistence, obstinacy, insensitivity and refusal to be deflected. (Sperber and Wilson 1986/95: 236)

As Carston (2002: 350) points out, however, bulldozers are not persistent, obstinate, insensitive, and so on in the way that humans can be. The psychological properties that we attribute to Robert in (1) *emerge* in the process of inferential communication. The question is: how do they emerge? They cannot be obtained directly from the encyclopaedic entry attached to BULLDOZER, even after extending the context via concepts contained in assumptions that are readily accessible. A solution is needed that explains the derivation of BULLDOZER***** (or BULLDOZER******, and so on) in inferential terms and is, at the same time, sensitive to the issue of processing effort.

Before moving on, I would like to consider several other examples of metaphors where the denotation of the lexical concept appears, as in (1) above, not to intersect with the denotation of the communicated concept. (All of these examples are widely discussed in the relevance theory literature; examples (2)–(5), for example, receive detailed discussion and analysis in Vega Moreno (2005).)

(2)   My lawyer is a shark.

(3)   Jane's husband is a teddy bear.

(4)   Sally is a block of ice.

(5)   That surgeon is a butcher.

For (2), it might be argued that exploration of the encyclopaedic entry attached to SHARK would provide the assumption 'sharks are aggressive', which could be used as a contextual assumption in inferring the implicature 'my lawyer is aggressive'. But lawyers, and human beings in general, are not aggressive in the way that sharks are. Sharks (perhaps) are AGGRESSIVE*, whereas human beings (perhaps) are AGGRESSIVE** or AGGRESSIVE***, and so on. The particular AGGRESSIVE that we need to characterise 'my lawyer', or in creating the *ad hoc* concept SHARK*, emerges in the process of interpretation. For (3), in constructing TEDDY BEAR* a character trait SOFT* is needed rather than a tactile SOFT**. For (4), a temperament COLD* is needed rather than a temperature COLD**. Similar arguments can be made for (5), which is discussed in greater detail in Section 3. In all of these examples the denotation of the *ad hoc* communicated concept does not intersect with that of the lexical concept. In all of these examples properties belonging to the indeterminate communicated concept emerge in the process of interpretation.

3   Mutual parallel adjustment: an answer to the emergent properties issue?

In this section I focus on the detailed analysis and discussion of (5) in Vega Moreno (2005). The analysis is designed to show how a hearer constructs the concept BUTCHER* – a concept which denotes people:

> who make incisions in a way that falls far short of the levels of precision, delicacy, foresight and planning to avoid risk required in a competent surgeon doing his job, cause damage to someone in their care, and are grossly incompetent. (2005: 123)

This is done through a series of inferential steps, working backwards and forwards between contextual assumptions, the *ad hoc* concept, and implicatures. Although I refer here to 'steps', as does Vega Moreno, she notes that she is:

> not claiming here that this is the sequence in which comprehension occurs. According to Relevance Theory, mutual adjustment takes place in parallel, rather than in sequence (2005: 121).

To some extent I am raising questions about aspects of the analysis of this example that I believe require further explanation; to some extent I am using this analysis to raise more serious questions about the general account of metaphor in relevance theory.

The first question concerns whether this is a good example for illustrating the construction of an *ad hoc* concept within the full range of subject-predicate metaphors. This metaphor is sufficiently standardised for the following definition of *butcher* to find a place in Cassell's *Dictionary of Slang*: 'a surgeon, a doctor, esp. an inefficient surgeon' (Green 2000: 181).[2] This definition provides a loose idea of what the *ad hoc* concept BUTCHER* denotes, but suggests that it may be directly encoded for many people. In Vega Moreno's analysis, an utterance prior to the metaphorical utterance is required to kick-start the inferential process. It is claimed that the utterance in (5) achieves relevance in the context of the utterance 'I want that surgeon out of the hospital' (2005: 118). Given this context, it is argued, 'the first assumption to occur to H which, together with other appropriate premises', might work towards the achievement of relevance is: 'the fact that a surgeon has operated in a grossly incompetent way is a good reason for wanting him dismissed' (2005: 121–2). Assuming that for some people a context such as that given above is required to kick-start an inferential process that leads to, or allows, the construction of the *ad hoc* concept, the particular step suggested might still be questioned. The 'first assumption to occur' to H (the hearer) mentioned here is clearly a reasonable assumption to make (or conclusion to draw) *ex post facto*, but it is not clear how this particular assumption can be shown to 'occur' first, either as a contextual assumption or as the result of a deductive process dependent on elimination rules.

The first assumption accessed from the concept SURGEON, it is claimed, would be: 'a competent surgeon makes incisions in order to preserve life, using high levels of precision, delicacy, foresight and planning to avoid risks' (Vega Moreno 2005: 122). This makes perfect sense as

an assumption that would be readily accessible, as both SURGEON and BUTCHER denote people who use knives (of some kind) in their work to cut flesh/meat. It also highlights information to do with the manner in which a surgeon cuts flesh, her reason for doing so, and her attitude to what she does. A similar step is required whereby assumptions are accessed from the encyclopaedic entry of BUTCHER – stating that a butcher cuts meat and including the manner and reasons for doing so. Vega Moreno (2005: 122) suggests that the following assumption is obtained from the concept BUTCHER: 'a butcher cuts dead meat in a way that falls far short of the high levels of precision, delicacy, foresight and planning to avoid risk required in a competent surgeon'. A comparison and judgement have been made here with respect to the manner of cutting, which presumably result from a series of steps following from the accessing of the assumptions concerning manners of cutting. That one accesses this assumption is highly plausible, but it is difficult to explain how this judgement is arrived at in terms of bottom-up inferential processing. Again, the actual step-by-step inferential processes are difficult to demonstrate.

Another question concerns the information included in the denotation of the *ad hoc* concept, which is almost identical to the information presented in the form of implicatures. The summary of what BUTCHER* denotes at an early stage in the mutual parallel adjustment process is as follows:

> BUTCHER* denotes people who make incisions in a way that falls far short of the levels of precision, delicacy, foresight and planning to avoid risk required in a competent surgeon. (Vega Moreno 2005: 122)

An early implicature is derived by 'combining' this *ad hoc* concept with the assumption that 'a butcher cuts dead meat in a way that falls far short of the high level of precision, delicacy, foresight and planning to avoid risk required in a competent surgeon' (Vega Moreno 2005: 122). From this it seems that it is not so much an inferential process that works between the adjustment of the concept contributing to the explicature and the derivation of implicatures, but rather a copying of information from one to the other, with the implicatures becoming the assumptions stored at the encyclopaedic entry of the *ad hoc* concept. But if the idea (generally – not just in relation to this example) is that the encyclopaedic entry of the *ad hoc* concept simply contains the information communicated by the implicatures, which determines

its denotation, then one should speak of backward *transfer* rather than backward *inferencing*.

The issue of processing effort also becomes a concern. The length and complexity of the process outlined in the analysis discussed is considerable – and, as suggested above, there are steps in this analysis that are left out or that summarise a series of inferences that are assumed to have taken place. We have come a long way from the early relevance theory position which argued that assumptions were taken in a relatively straightforward manner from the encyclopaedic entry of one concept and applied to another. It becomes very difficult to make comparisons that balance effort and effects of the kind often made in the relevance theory literature (for example to explain the effects achieved by instances of epizeuxis[3] or indirect questions).

In this section I have focused on one analysis of one example. I stress again my intention to raise questions for any similar attempt to show how an *ad hoc* concept is constructed in subject-predicate metaphors.[4]

4 What is communicated by metaphor: the role of implicatures

In addition to the concerns already expressed about the nature of the inferential process involved in mutual parallel adjustment and its costliness is the question of whether such a purely cognitive account fully characterises *what* is communicated.

Consider again example (1). The implicatures suggested by Sperber and Wilson (1986/95: 236), with a couple of additional implicatures from later discussion, are included in (6):

(6) a. Robert is insensitive.
     b. Robert is persistent.
     c. Robert is obstinate.
     d. Robert refuses to be deflected.
     e. Robert doesn't listen to other people's views.
     f. Robert is ruthless in pursuing his own interests.

One interesting question is whether what is implicated is that Robert is INSENSITIVE*, PERSISTENT*, OBSTINATE*, rather than simply INSENSITIVE, PERSISTENT, and OBSTINATE. If we accept 'Robert is persistent' as one of the implicatures (a suggestion made in most analyses of this example in the literature), we might want to go further and say that he is persistent in a certain *negative* way. The concept would be adjusted differently – more *positively* – in the context of Robert being dedicated to his training for the

marathon, and slightly differently again if his aim in running the marathon was to raise money for charity. Vega Moreno implicitly makes the same point. When she points out that, in the case of (3), we might have rather different concepts SHARK* and SHARK**, depending on whether or not we think the lawyer is working in our best interests, she also points out that we would use correspondingly different concepts – AGGRESSIVE* and AGGRESSIVE** – in the inferential process leading to the construction of the two *ad hoc* SHARK concepts. According to Vega Moreno:

> the concept AGGRESSIVE as applied to sharks may be adjusted to denote a kind of (positive) aggressiveness that involves energy and courage. However, processing the metaphor in a different situation, say, where the speaker is afraid of his lawyer's tactics, the concept AGGRESSIVE would be adjusted to denote a kind and level of (negative) aggressiveness which involves intentional emotional damage to others.' (2005: 128)

If it is *ad hockery* all the way down, then the degree of conceptual adjustment taking place in the interpretation of a single utterance creates an even greater concern for processing effort than that already mentioned.

A further problem is that there is a considerable overlap in meaning. Anyone who is ruthless in pursuing his own interests is likely to be insensitive, persistent, obstinate, and so on (and especially INSENSITIVE*, PERSISTENT*, OBSTINATE*, and so on). A degree of redundancy is present in such lists, especially after conceptual adjustment. Perhaps this similarity is not crucial, although range is generally emphasised in relevance theory analyses of cases which require greater processing effort. Perhaps the refinement of the *ad hoc* concept, creating *le concept juste* – subtly distinguished from related encoded concepts, is more important. It may simply be that the concept sought is difficult to eff, and that such lists of implicatures are, in any case, approximate. In addition to meaning overlap, such lists are always necessarily incomplete, especially so in the case of poetic metaphors, because there is scope for different addressees to develop different interpretations. But any list (even for a particular individual on a particular occasion) would find it difficult to include everything that is communicated simply in terms of such a set of implicatures. 'Robert is a bulldozer' (a not so creative metaphor) seems to be communicating more than the list of implicatures suggested in (6) and, perhaps, something other than could in principle be captured by such a list.

5   Phenomenal state representations and metaphor interpretation

The main issue I want to address in this section is the role that phenomenal states play in metaphor comprehension. I do this through discussing and expanding upon a couple of suggestions in Carston (2002). First, I consider the idea that analogue information, in the form of both sensory imagery and affective state representations, is stored in encyclopaedic entries. Second, I look at the role that phenomenal concepts play in thought and the evocation of phenomenal states in utterance interpretation. Third, I consider the view that analogue information stored in encyclopaedic entries may play a role in the process of metaphor comprehension and contribute to what is communicated by metaphorical utterances. Finally, I draw what I take to be some of the consequences for pragmatic theory of accepting this view.

5.1   On encyclopaedic entries and what they contain

In her discussion of conceptual addresses, Carston suggests that certain kinds of non-propositional information can be stored in encyclopaedic entries:

> The encyclopaedic entry comprises a wide array of different kinds of knowledge, including commonplace assumptions, scientific information, culture-specific beliefs and personal, idiosyncratic observations and experiences. Some of this information may be stored as discrete propositional representations, some of it may be in the form of integrated scripts or scenarios [...] and some may be represented in an analogue (as opposed to digital) format, perhaps as mental images of some sort. (2002: 321)

This characterisation of encyclopaedic entries goes beyond that in Sperber and Wilson (1986/95: 88), which refers to 'assumptions and assumption schemas', and opens up new ways of approaching metaphor comprehension (and utterance comprehension more generally). If information in analogue format is available in encyclopaedic entries, then 'mental images of some sort' could play a role in the process of interpretation. If they do, and if they contribute to *what* is communicated, then different ways of responding to the concerns discussed in the previous sections are suggested.

If mental images are included in encyclopaedic entries then other sensory images and representations of affective states could be included.

This view is argued by Antonio Damasio. He discusses the concept VIO-LIN as an example in the context of a discussion about what a concept might be or consist of:

> The presentation of a line drawing of a violin, or presentation of the word 'violin' (aurally or orthographically) generates a set of time-locked activations of sensory and motor representations. The activations are generally pertinent to manipulable man-made objects, more specifically pertinent to musical instruments of the string variety, and even more narrowly so to the class of violins. (1989: 26)

This analysis includes information that relevance theory would assign to the logical entry – a musical instrument of a certain kind (of the string variety) – but goes on to include, under what might be an encyclopaedic entry, a host of phenomenal representations of various kinds: 'representations of shape, motion, color and texture', 'numerous somatosensory representations [...] relative to the pressure the instrument will have exerted in the perceiver's body', 'auditory representations', 'motor programs', and 'a range of somatic states appropriate to one's experience of a violin, e.g. like or dislike, pleasurable or painful sensation'.

5.2   Phenomenal concepts and evocation

If a word like 'violin' decodes a concept to which is attached information about phenomenal states, what occurs in the case of words that refer directly to phenomenal states (such as *happy, depressed,* and *tired*)? It seems that they do not necessarily, or even normally, evoke the states they characterise when used in utterances, even though the concepts for which they serve as labels may represent and evoke phenomenal states when used as constituents of thoughts. Sperber and Wilson (1998: 92–6) discuss the following example:

(7)   Peter: Do you want to go to the cinema?
      Mary: I'm tired.

Mary implicates here that she does not want to go to the cinema. (There is a sufficient range of further implicatures to offset the extra processing caused by her indirect answer to Peter's question.) The main point of this example, however, is to show that the lexically decoded concept TIRED has to be adjusted in parallel with the set of implicatures: 'expectations of relevance warrant the derivation of specific implicatures, for which the explicit content must be adequately enriched' (Sperber and

Wilson 1998: 194). Mary is not saying that she is TIRED; she is saying that she is TIRED*, that is, tired to the degree that she would not enjoy an outing to the cinema. Peter could respond, 'Come on, you're not *that* tired!' and in so doing concede that she was perhaps TIRED**, but not that she was TIRED*. The account of how Mary's utterance communicates what it does is carried out without the need to appeal to an evoked phenomenal state of tiredness.

When we introspect about our phenomenal states we characteristically evoke such states; we have thoughts with phenomenal concept constituents, as David Papineau (2004) suggests. His discussion makes reference to Frank Jackson's (1982) thought experiment about a colour expert, Mary, who is confined to a colourless room and general environment, but who later, on leaving the room, sees a red rose. In Jackson's terms, Mary comes to *know* something that she did not previously know about colour; she comes to know *what it is like to see red*. Papineau's interpretation of this thought experiment is that Mary comes to have a different kind of concept – a phenomenal concept. His examples of the kind of thought that Mary might come to have are illustrated in (8) (from Papineau 2004: 59).

(8)   a.   People looking at ripe tomatoes experience *this*.
       b.   *This* is what people experience when they look at ripe tomatoes.

Having later been shown a piece of red paper, Mary may have the thought expressed in (9) (from Papineau 2004: 62).

(9)   I'll have *this* experience again before the day is out.

The '*this*'-es, it might be argued, stand for spaces in truth-evaluable thoughts that need to be filled with a phenomenal state representation (a visual image in the case of (8) and (9)). Other examples, with other types of phenomenal states, are illustrated in (10).

(10)   a.   I felt *this* last week.
        b.   I hope I don't feel *this* again next week.

The '*this*' here refers to an affective state and/or a bodily sensation. Although the thought in (10) may be clear to the thinker, it may be difficult to express. There may, or may not, be lexicalised concepts for '*this*', but even where there are, they are likely to be approximate. As Papineau notes: 'it is not automatic that someone who possesses a phenomenal concept will be able to communicate its content publicly' (Papineau 2004: 103). One reason why effing '*this*' is not easy is

because the 'handy, classificatory, affective predicates' (Pugmire 1998: 91) which we have at our disposal are too coarse-grained to character-ise, express, or communicate the precise nature of the feelings we have. David Pugmire's term for this is 'nuance ineffability'. Another reason, in addition to that of reference and 'capturing the fluid nuances of feeling', has to do with evocation. When phenomenal concepts are deployed in thoughts about current phenomenal states, as in (10), phenomenal experience is typically evoked. Words such as *happy* or *depressed*, when used in the communication of thoughts, typically refer to phenomenal states without evoking them. Unlike Papineau's Mary's thought about *redness*, Sperber and Wilson's Mary's use of *tired* does not evoke tiredness – and does not need to. A doctor can discuss depression – the state of being depressed – with a patient without having experi-enced that state herself or without it evoking any sense of *what it is like to be depressed* for her. The doctor might even be an expert on depres-sion, with her knowledge of the physiology of depression, its signs and symptoms, the chemical and other cures and how they are supposed to function, being equivalent to Mary's expert knowledge of colour before she leaves her colourless room and experiences *what it is like to see red* for the first time.

The following example from the relevance theory literature can be used to give an idea of the distinction between referring and evok-ing. (11a), an example of epizeuxis, is analysed in the context of a set of examples involving the immediate repetition of a word or phrase (Sperber and Wilson 1986/95: 219–22):

(11) a. My childhood days are gone, gone.
      b. My childhood days are gone.

(11a) is analysed as differing from the truth-conditionally equivalent (11b), which lacks the repetition of the word 'gone', in that it com-municates a wider range of relatively weak implicatures. The extra processing effort encourages a wider exploration of the encyclopaedic entry attached to CHILDHOOD, and so, in the context of the utterance as a whole, of what it means for the speaker to no longer have the experience of childhood. Presumably there are a number of culturally established assumption schemas stored under CHILDHOOD, with *child-hood as a time of innocence* (as in *The Coral Island*) and *childhood as nasty and brutish* (as in *Lord of the Flies*) being the most prominent. In this context a version of the former is used in the interpretation of (11a). A feeling is clearly communicated here – a variety of (senti-mental) sadness, which is not experienced in the case of (11b) or in

the interpretation of utterances such as 'Thinking about my childhood being gone makes me feel sad'.

In their discussion of (11a) Sperber and Wilson argue that:

> what look like non-propositional effects associated with the expression of attitudes, feelings and states of mind can be approached in terms of the notion of weak implicature. (1986/95: 222)

They go on to argue that 'if you look at these affective effects through the microscope of relevance theory, you see a wide array of minute cognitive effects' (Sperber and Wilson 1986/95: 224). This idea that 'affective effects' can be reduced to 'cognitive effects' runs counter to the idea that phenomenal state representations can be a distinctive part of the information stored in encyclopaedic entries and constituents of thoughts. Damasio (2003) has argued that neuroscientific research favours the view that feelings are 'functionally distinctive' and not reducible to thoughts. This view, he argues:

> is not compatible with the view that the essence of feelings […] is a collection of thoughts with certain themes consonant with a certain feeling label, such as thoughts of situations of loss in the case of sadness. I believe the latter view empties the concept of feeling hopelessly. If feelings were merely clusters of thoughts with certain themes, how would they retain the functional individuality that justifies their status as a special mind process? (Damasio 2003: 86)

An argument for the distinctive nature of mental imagery is made in Colin McGinn (2004). He argues that images are, *sui generis*, not an amalgam of percepts and thoughts. This is, he claims, an argument against the empiricist theory that identified concepts with sensory images (*ideas* with *impressions*, in the former parlance) and current 'cognitivist' theory that argues that images can be reduced to concepts. Imagery is 'a distinctive type of mental category, which needs to be acknowledged in its own right' (2004: 39). Images cannot be reduced to concepts because 'the concept theory cannot do justice to the sensory character of the image' (2004: 39) and because images and concepts have a different relationship to percepts (2004: 37–9).

If we accept that encyclopaedic entries contain non-propositional information 'represented in analogue format', perhaps as distinctive 'mental images of some sort' and affective states, then we have to accept that they may be used in the interpretation process. Carston asks the

following question with respect to example (5):

> could it be that we derive conceptual representations ('that surgeon was rough/brutal/behaved without appropriate care and skill', etc.) through scrutinising the internal image, rather as we might form thoughts through looking at an external picture? If so, this would provide a ready explanation for the open-endedness and variability of metaphor interpretations. (2002: 356)

This would also explain why the lists of implicatures provided in analyses seem repetitive and incomplete and why they fail to explain the phenomenal impact that metaphors can have. Metaphors may, in the more creative cases, offer a way not only of evoking imagery and feeling but also of communicating more fine-grained phenomenal state representations than could be captured by standard phenomenal concept terms.

5.3   Scrutinising the internal image: another look at BUTCHERS*, BULLDOZERS*, and TEDDY BEARS*

I return now to three of the earlier examples, in particular to example (5). In a relevance theory analysis the concepts SURGEON and BUTCHER both give access to information about using knives of some kind (scalpel/meat cleaver) to cut flesh/meat, and this information is more highly activated because it comes from two different sources. It provides the information that is used first as context in the interpretation process. I raised numerous concerns with the analysis of the inferential process leading to BUTCHER*, concluding with the point that the new concept and/or implicatures are not sufficient to convey the full force of the metaphor. If imagery is used, that is, if imagination can insert itself into the content of belief, 'in the phenomenon of *metaphorical* belief' (McGinn 2004: 134), then it is possible to claim that an image of a surgeon as a butcher is communicated together with a set of implicatures, which are derived 'through scrutinising the internal image'. The manner of cutting, in particular, would be represented as an image/phenomenal concept within a proposition. This would have the benefits referred to above (open-endedness, variability, evocative force, and so on) and it would also provide an explanation of the sense of inadequacy and insufficiency that one has with the results of describing the mental image and the accompanying affective state in propositional terms. The image of surgeon *as* butcher would also evoke a sense of a very particular sense of horror, which is difficult to express verbally (nuance effability) but is communicated as a feeling.

For (1), what are suggested as implicatures ('Robert is insensitive', and so on) could be seen as descriptive interpretations of phenomenal representations that refer rather than evoke. In imagining Robert *as* a bulldozer it is possible to read off the 'emergent' properties in terms of concepts such as INSENSITIVE, PERSISTENT, OBSTINATE, and so on, again accepting that these properties inevitably fail to capture the full force of what the image provides. For (3), it is not so much a visual image as a feeling that is communicated. Teddy bears are sources of a special quality of psychological comfort in early childhood. Certain affective state representations are part of the encyclopaedic entry attached to TEDDY BEAR. We have access to that feeling, to some extent, whether or not we ever possessed a teddy bear, or whatever our attitude is to that feeling. The emergent properties that are arguably part of TEDDY BEAR* – for example, SOFT* (referring to the character trait), COMFORTING*, or SUPPORTIVE* – can be seen as contributing to descriptive interpretations of the representation of that feeling state.

6   Conclusion

In response to a number of worries about pragmatic explicature/implicature accounts of metaphor comprehension in general, and multiple parallel adjustment as a solution to the emergent property issue in particular, I have followed up and discussed a couple of suggestions in Carston (2002) concerning not only the possibility that analogue information stored in encyclopaedic entries can be used in metaphor interpretation to explain better the 'open-endedness and variability' of such interpretation but also the evocative force of what is communicated by metaphors. (This actually carries over to other instances of utterance comprehension, as seen in the epizeuxis example (11).) Creative manipulation of images – seeing one thing (metaphor topic) as another (metaphor vehicle) – allows visual images and accompanying affective states of sufficient richness for 'emergent' properties, otherwise difficult to obtain via a purely conceptual/inferential route, to be obtained via descriptive interpretations of such states. Image Robert-bulldozers can more readily be understood as INSENSITIVE*.

The weak implicature account is an account that explains indeterminacy. With weak implicatures affecting the adjustment of the *ad hoc* concept in the explicature, this means that the explicature is also indeterminate. But the indeterminacy can be just as well explained if we assume that analogue information/phenomenal state representations are used in the process of metaphor comprehension and contribute to what

is communicated by it. Describing a visual image can be done in a variety of ways, none of which is completely satisfactory; describing a feeling is never satisfactory, and to the extent that it is, refers without evoking.

The suggestion that *sui generis* phenomenal states play a role in metaphor (and other) utterance interpretation cannot form part of an explanatory account. If this suggestion has any validity it presents a real challenge to relevance theory, which regards non-propositional effects as merely apparent; an explanatory naturalistic theory must restrict itself to inferential processes operating over logical and propositional forms. Allowing imagery and affective states a role in the account would muddy the waters – or worse. The argument presented in the opening pages of Carston (2002) considers whether a genuine theory of verbal communication is possible. The question boils down to whether a purely cognitive account is convincing for all areas of utterance comprehension, including the examples of metaphor comprehension discussed in this chapter. Alternatively, should, in McGinn's terms 'reductive and naturalistic tendencies' be resisted (McGinn 2004: 157) in the interests of 'doing justice to the phenomena under investigation'? Should a role be given to the 'imaginative faculty', which uses processes that cannot – and perhaps can never be – brought within theoretical bounds?

Notes

1. This restriction to subject-predicate metaphors, ignoring syntactic complexity, may result in a failure to offer a comprehensive theory of metaphor, as Guttenplan (2005: 157–78) argues.
2. This definition is given as originating in the mid-nineteenth century in the US. A note following this and other definitions adds that 'the image is of hacking meat to pieces'.
3. An example of epizeuxis where such a comparison is made (example 11) can be found below in Section 5.2.
4. I have focused on this example because of the detail and rigour of its analysis in Vega Moreno (2005), which are exactly of the kind that are needed to advance the debate about metaphor comprehension.

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11
Ad Hoc Concepts and Metaphor

Manuel Hernández Iglesias

1   Introduction

In this chapter I discuss the account of metaphor proposed by Robyn Carston in chapter 5 of her book *Thoughts and Utterances: The Pragmatics of Explicit Communication* (2002). This account is based on two theses:

T1: The processes of broadening and narrowing are complementary and their effects contribute to the determination of the content of the proposition expressed; they take part in the explicature.

T2: Metaphor is a kind of loose use and requires the loosening or broadening of aspects of encoded conceptual content.

T1 departs from standard relevance-theoretic accounts. Standard accounts take the process of narrowing to work at the level of explicature and the process of loosening at the level of implicature (Sperber and Wilson 1986/95). In Carston's theoretical proposal, the effects of both processes take part in the explicature. T1 and T2 entail, then, that metaphorical meanings or concepts are part of what the utterance explicitly communicates.

Carston's accounts of both narrowing and broadening appeal to what she calls '*ad hoc* concepts'. The term:

> is used to refer to concepts that are constructed pragmatically by a hearer in the process of utterance comprehension. [...] The description of such concepts as '*ad hoc*' reflects the fact that they are not linguistically given, but are constructed on-line (on the fly) in response to specific expectations of relevance raised in specific contexts. (2002: 322)

Following T1 and T2, Carston defends the notion that in the metaphorical use of language:

> an *ad hoc* concept, formed from the encoded one, contributes to the explicit content of the utterance, and that the denotation of the new concept includes, or at least overlaps with, the denotation of the encoded concept. (2002: 349)

In addition to T1 and T2, there is a thesis (let's call it 'T0') that Carston takes for granted:

T0: Metaphors are the vehicle of a propositional content.

In what follows, I will grant T1, which I take to be Carston's more controversial thesis, and not only for the sake of the argument but because I find her arguments in favour of the symmetry between the processes of narrowing and broadening compelling. My discussion will focus on T0, considering that Carston's account on metaphor faces two related difficulties. It entails too radical a difference between similes and metaphors, and it seems better suited to conventional than for creative metaphors. In addition, I will try to show that Carston's account, although apparently antithetic to it, does give some support to scepticism regarding metaphorical meanings or contents.

2   Similes and metaphors

Before addressing metaphor, I will make a *détour* and examine what Carston says about similes. One of the virtues she attributes to her account of metaphor is that it gives an explanation of the differences between metaphors and similes. This is true, but it is also true that the account draws too radical a difference between metaphors and similes and fails to account for what they have in common.

Comparing some pairs of mutually corresponding similes and metaphors, Carston says that '[t]here are clearly great similarities in how the members of each of these pairs are understood and in the result of the interpretation process', but that 'their overall impact is not identical, the metaphor usually being experienced as somehow more direct and forceful than the simile.' (2002: 357) So far, so good. The problem is that, although, as Carston says, 'the implicatures are probably the same', the explicatures are absolutely different. And this is a *prima facie*

a counterintuitive result. The differences between (1) and (2):

(1)   Mary is like a bulldozer.
(2)   Mary is a bulldozer.

certainly exist, but it is implausible that what goes on in their inter-
pretations is so radically different as it would be according to Carston's
accounts.

   According to Carston, what is explicitly communicated by (2) is that:

(3)   MARY IS A BULLDOZER*.

where BULLDOZER* is an *ad hoc* concept constructed from the encoded
concept BULLDOZER through a process of broadening. In (1), no process of
broadening or *ad hoc* concept construction takes place. In similes, then,
what is explicitly communicated is just the encoded proposition.[1] What
the interpreter is supposed to grasp in order to understand the simile is
implicated. In (1), the speaker explicitly says that Mary and bulldozers
have some property in common (an obvious truth) and implicates that
Mary is obstinate, single-minded, insensitive to other people's feelings,
and so on.

   As I said above, I find such a divergence between similes and metaphors
implausible. Moreover, the view that all comparisons are trivially true
(and their negations trivially false) sounds rather arbitrary. Why should
the interpretation of what is explicitly communicated in any compari-
son (whether literal of figurative) not involve a process of determination
of the relevant kind of likeness? I find that this discriminatory treatment
of comparisons is at odds with Carston's general vindication of the role
of pragmatic processes in the explicature. It is also at odds with her vin-
dication of 'psychological investigations of the general human capacities
for making analogies' (2002: 354) as one of the lines of thought worth
considering in the study of the move from lexically encoded to *ad hoc*
concepts. Obviously, these human capacities for making analogies are
the very capacities that operate in literal and figurative comparisons.

   How could comparisons be handled in Carston's theoretical frame-
work? I think that the option that better coheres with the spirit of her
proposal would be to explain comparisons in a way similar to meta-
phors. Carston suggests the possibility that:

> longer stretches of the encoded conceptual structure, phrases or the
> whole logical form, are to be taken as used loosely (metaphorically)
> and a complex (structured) *ad hoc* concept pragmatically constructed.
> (2002: 359)

Following this suggestion, the proposition expressed by (1) would be (4):

(4)   Mary is [like a bulldozer]*.

Where [like a bulldozer]* is an *ad hoc* concept meaning obstinate, single-minded, insensitive to other people's feelings, and so on. The process of this *ad hoc* concept construction would be essentially the same as the process of the construction of the *ad hoc* concept bulldozer* in the case of (2).[2]

3   The literal and the figurative

I can now turn to a second difficulty of Carston's view of similes – that it is reductionist, that is, it reduces similes to literal comparisons. The difference between, for instance (5) and (6):

(5)   Dogs are like wolves.

(6)   Humans are like wolves.

is not accounted for. (5) is a literal comparison, while (6) is a simile, that is, a figurative comparison. A non-reductionist view would claim that, like metaphors, similes are comparisons (typically) false when taken literally and (typically) true when taken figuratively, just like metaphors.

The distinction between literal and figurative comparisons need not be radical. It can (and I think it should) be viewed as a matter of degree. But, even viewed as a difference in degree, it must be preserved (the alternative is the abandonment of the very notion of simile). In literal comparisons the speaker relies on ordinary standards of similarity, while in similes she departs from them by saying that two objects that are dissimilar according to standard patterns are similar. Of course, what standards are at stake depends on context in both cases; there is no context-free ordinary standard, but this does not erase the distinction.

A good way to see the difference is the following. Literal comparisons can be very useful in giving information about some object by saying that it is similar to a familiar one. This would be the case if somebody asked what an alligator is, or what alligators look like, and was told that alligators are like crocodiles. Assuming that this person already knows what a crocodile is, or how it looks, she would get the requested information, even if she knew nothing about alligators. This is not the case with similes. The point of similes is the opposite – to call attention to an unnoticed similarity. In this case, only somebody familiar with the objects compared can understand the simile. If I say that humans

are like crocodiles, I must presuppose in the audience knowledge about both humans and crocodiles if its members are to grasp the simile.[3]

This difficulty, reductionism, is also present in the account of metaphors. Here we face a difficulty common to all attempts to explain metaphor by positing metaphorical meanings or concepts: the failure to give a satisfactory explanation of creative non-conventional metaphors. This is a serious objection, for it is creative non-conventional metaphorical utterances that are metaphors par excellence.

I will return later to this point. Let us now assume, for the sake of the argument, that accounts appealing to *ad hoc* concepts can work for creative metaphors. The result is then that both similes (if something like the account sketched above is accepted) and creative metaphors are literal. And this is a prima facie paradoxical consequence. In Carston's proposal, the place of the literal meaning is occupied by the metaphorical meaning. As she says:

> on the symmetrical account, the distinction between utterances that are literal and those that are not literal (or 'less-than-literal' as it is standardly put) interpretations of the speaker's thought seems to have collapsed. (2002: 340)

This would be an extreme reductionism: the figurative would reduce not only to the conventional, but also to the literal.

Carston's response is that:

> the proper location of any distinction between the literal and non-literal interpretation of a thought is in the relation between the encoded linguistic meaning and the proposition expressed, rather than between the proposition expressed and the thought (which no longer differ in the crucial respect). [...] The use is a literal one if the logical/definitional properties of the linguistic encoding are preserved; it is non-literal if they are not. (2002: 340)

But this response does not eliminate the paradox. It is true that the content expressed departs from something more 'literal' – the logical form. But this is also the case of almost every utterance. Moreover, this does not allow us to say that conventional metaphorical *ad hoc* concepts are more figurative or less literal than, for instance, *ad hoc* concepts resulting from a process of narrowing. If the literal meaning is the logical form, then what happens is that the notion of a literal meaning – as opposed to figurative or metaphorical meaning – goes by the board.

The appeal to the non-preservation of logical/definitional properties is no help. Besides its *ad hoc* flavour, it excludes from the realm of the non-literal all metaphors in which logical/definitional properties are preserved. Take (7) and (8):

(7)   Ken is a (real) bachelor [where Ken is technically married].

(8)   Ken is a (real) bachelor [where Ken is technically a bachelor, and this is mutual knowledge of speaker and audience].

In (8), the proposition expressed would be:

(9)   KEN IS A BACHELOR*.

where BACHELORS* are bachelors behaving like bachelors of a certain kind. It seems obvious that both (7) and (8) are metaphorical. But in the interpretation of (8) the interpreter needs not suppress any logical/ definitional properties of 'bachelor'. If we follow Carston's account, we must claim that (8) requires a process of narrowing for its interpretation, and, therefore, is not metaphorical, but literal. And this I find highly counterintuitive.

4   Carston and scepticism

Most theorists support, or take for granted, T0, that is, the claim that metaphors are the vehicle of a propositional content. The best-known exception is Donald Davidson. In his famous essay 'What Metaphors Mean', he rejected metaphorical meanings and, in general, the idea that metaphors communicate something true or false.

At first sight, Carston's approach to metaphor is in the other theoretical extreme to Davidson's scepticism towards metaphorical meanings. First, Carston says that metaphors have a propositional content, and this content is explained appealing to metaphorical *ad hoc* concepts. Second, this content is explicitly communicated, not implicated, much less intimated, suggested, or merely caused. But, on the other side, and this was the point of the issues discussed in previous sections, there is a bigger convergence than one could think between Carston's account of metaphorical meanings and Davidson's radical scepticism towards them.

A first point of convergence is that, in a sense, Carston, like Davidson, is a literalist.[4] Davidson defends the notion that metaphors only have one meaning, their ordinary meaning. There is no metaphorical meaning that departs from ordinary meaning. For Carston, too, there is

only one meaning, the ordinary meaning explicitly communicated, that is, the meaning that results from standard ordinary interpretation processes of narrowing or loosening. We do not find in her account an ordinary meaning (typically a patent falsehood) and then a second figurative meaning that departs from the former. The output of the interpretation processes is only one meaning.

This may sound like a tricky move. Both Carston and the sceptic claim that only one meaning is explicitly communicated; however this unique meaning for Carston is the metaphorical meaning, while for the sceptic it is the literal meaning. But I do not think it is tricky for two reasons. The first is that, as I have just argued, Carston's metaphorical meanings are non-literal relative to a merely stipulatory definition of literality that does not capture our intuitive distinction between the literal and the figurative. This intuition involves a departure from a literal meaning, and, in Carston's analysis, there is no literal meaning from which to depart, only logical form, but this is also the case of most non-metaphorical utterances.

The second reason is that when Carston and the sceptic say and deny, respectively, that there are metaphorical concepts, they are talking about different things. The most uncontroversial metaphorical concepts correspond to conventional or dead metaphors. Moreover, sceptics like Davidson do not deny that these metaphors have a meaning or communicate a propositional content. What they do deny is that they are, properly speaking, metaphors and that they have a special meaning that departs from their ordinary meaning. As we just saw, this is what happens according to Carston's account. Davidson and Carston differ in what they consider the ordinary meaning, but they coincide in claiming that the ordinary meanings of metaphors are the only meanings metaphors have.

Let us focus on creative metaphors. Standard accounts posit two meanings, the literal and the metaphorical, both of which have a propositional content. Carston and Davidson reject this picture: for them there is only one meaning. But here there is a genuine disagreement. For Davidson this meaning (literal meaning) is what the speaker explicitly says, but is not what she wants to communicate. For Carston, too, this meaning is what the speaker explicitly says, but it is also what she wants to communicate.

Two issues are at stake here. The first is whether, in the case of creative metaphors, literal meaning can be dispensed with. The second is whether the appeal to *ad hoc* concept construction is genuinely

explanatory in the case of creative metaphors. I think that the right answer to both questions is no.

The concept BLOCK OF ICE can play a role in the accounts of linguists or philosophers without being part of any proposition explicitly said by the speaker or understood by the hearer. Both can be seen, as Carston advocates, as getting to BLOCK OF ICE* directly. But this cannot be the case in truly creative metaphors. The long-term effortful and open-ended interpretations and the discussions about the meaning of 'The fog comes on little cat feet' require the processing of THE FOG COMES ON LITTLE CAT FEET. The 'direct' processing of the *ad hoc* concepts is possible when we have the help of conventions and shared stereotypes. In their absence, which is the case with creative metaphors, the literal meaning based on the non-*ad hoc* concepts is a necessary intermediary. Moreover, in the case of literary criticism and the discussions on alternative interpretations of metaphorical texts, they are an essential part of the evidence supporting conflicting or simply different interpretations.

Regarding the second question – the explanatory usefulness of *ad hoc* concepts in the case of creative metaphors – Carston is, of course, aware of the problem, and this is her response:

> It might be supposed that these literary metaphors are of a very different nature from the conventional cases […]. While this seems a valid distinction (though perhaps better viewed as a continuum), I see no reason to suppose that different interpretive mechanisms are involved […]. The process is not different in kind from that involved in understanding the quite ordinary cases of the bulldozer and the block of ice. (2002: 352)

I will not discuss these claims. I just want to point out that this shows that *ad hoc* concepts, when applied to creative metaphors, are, at best, of little help. In any case, this discussion shows that the account of metaphor based on *ad hoc* concepts is genuinely explanatory only in the case of conventional metaphors, that is, those that are less metaphorical. When a metaphorical concept is lexicalised, conventional, or easily derived from stereotypes, the analysis based on *ad hoc* concepts construction works smoothly and supplies a natural explanation. In creative metaphors, analysis positing *ad hoc* concepts fails to supply such explanation. In these cases, the feeling is that, as Davidson says, ideas like metaphorical or figurative meanings 'don't explain metaphor, metaphor explains them' (Davidson 1978: 247). Another way of putting this is that *ad hoc* concepts are explanatory in the case of conventional

metaphors because they are not very *ad hoc*, while in the case of creative metaphors they are very *ad hoc* and, hence, not very explanatory.

5   Conclusion

Is Carston a sceptic regarding metaphorical meanings? Or, better, does her account of metaphor give scepticism regarding metaphorical meanings some theoretical support? I think it does, although it takes the opposite path to open sceptics like Davidson. Carston's views lead to the rejection of the standard distinction between two meanings – the literal and the metaphorical. Only the latter remains. But, in the case of conventional metaphors, this 'metaphorical' meaning is not properly metaphorical. It is non-literal only in a technical sense that does not correspond to the sense of 'non-literal' or 'figurative'. In the case of creative metaphors, Carston's hope is that the kind of analysis she illustrates with conventional ones can be extended to the former. My position is that ordinary meanings cannot be dispensed with in these cases, and that it is doubtful that what is understood or grasped by the interpreter that goes beyond this ordinary meaning can be called a meaning if by a meaning we understand a propositional content that can be analysed in terms of a web of *ad hoc* concepts.

A sceptic towards metaphorical meanings or concepts could accept Carston's views on loosened *ad hoc* concepts, but still claim that the utterances she accounts for with their help are not genuine metaphors. Or, more moderately, but equally damagingly, the sceptic could claim that all metaphors are metaphors, but that some metaphors are more metaphorical than others, and that the less metaphorical an utterance is, the better *ad hoc* concepts based accounts work, and vice versa.

This scepticism about metaphorical meanings or propositional contents entails no scepticism about the cognitive usefulness or value of metaphors in any kind of communication. It would entail scepticism only in addition to the hidden premise that only utterances explicitly asserting or implicating a proposition can be cognitively useful, but not if, as I believe, this premise is a prejudice.[5]

Notes

1. This is true of similes only qua similes, of course.
2. An additional support for this approach to comparisons is the existence of words like 'bulldozer-like' or 'bulldozeroid'.
3. On this point, see Tversky (1977); Fogelin (1988); and Hernández Iglesias (2003: 69–98).

4. I use 'literalism' in the sense of Fogelin (1988), that is, as the view that expressions used metaphorically have only one meaning (their literal meaning).

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12
Phrasal Pragmatics in Robyn Carston's Programme

Esther Romero and Belén Soria

1 Introduction

In this chapter, we argue that phrasal pragmatics is needed in Robyn Carston's programme on explicit communication. The accurate understanding of this proposal requires attention drawing to the linguistic unit phrase and its contribution to conceptual material – a conceptual material that may have a complex nature, as Carston explicitly says:

> There are atomic concepts and there are complex concepts; atomic concepts are simple unstructured entities and complex concepts are structured strings of atomic concepts. [...] If a complex concept (i.e. a structured conceptual string) is linguistically encoded, the linguistic form involved is standardly a phrase and the concept is determined (at least in part) compositionally. (Carston 2002: 321)

The general aim of this paper is to explore a field of pragmatics that we will call 'phrasal pragmatics' in order to study the behaviour of phrases and their meanings and how these meanings must often be pragmatically adjusted to determine the truth conditions with which they contribute to what is said by means of the utterances of the sentences that include them.

This task, we will argue, cannot be made by means of Carston's lexical pragmatics in which only the pragmatics of atomic concepts is taken into account.[1] When we consider relevance-theoretic lexical pragmatics, we detect several problems related to metaphor and metonymy. These problems could be solved in relevance-theoretic terms, but not without considering transfer by mapping as the result

of an adjustment process required in the pragmatics of atomic concepts and, thus, risking the objective of a unitary account on *ad hoc* concepts,[2] and not without considering phrase meanings (and not only word meanings) as inputs of the conceptual processes of adjustment. Both a pragmatic task of mapping and phrase meanings as inputs of inferential processes are needed if we want to determine the truth conditions of some utterances. There is another aspect of the truth conditions of some utterances that lexical pragmatics cannot specify: the missing constituents. Although in order to explain examples of the latter, the pragmatic process required involves the adding of conceptual material, we want to argue that sometimes the addition of conceptual material takes place at phrase level and not at sentence level. The problems and limits of relevance-theoretic lexical pragmatics show that an area such as phrasal pragmatics has its own scope of study. Phrasal pragmatics, unlike lexical pragmatics, studies pragmatically derived complex concepts rather than pragmatically derived atomic concepts.

This area of pragmatics launches a collection of possible solutions to some of the current debates about the correct interpretation of some metaphorical definite descriptions (complete or not), metonymies, incomplete definite descriptions, and other phrases that encode second order concepts. Obviously, we will not try to unravel them all in this chapter; we just intend to raise the idea that this part of pragmatics can take account of some pragmatic tasks that cannot be elucidated in the other sections of the discipline.

In what follows, in Section 2, we first expound lexical pragmatics in relevance theory and pose some problems and limits of this approach. To overcome these problems and limits, in Section 3, we propose that not only *ad hoc* concepts construction for complex concepts but also enrichment of unarticulated constituents of concepts are needed. Both tasks are better studied from phrasal pragmatics – a field of pragmatics that focuses on the behaviour of phrases and their meanings.

2　Lexical pragmatics in relevance theory

Lexical pragmatics is currently a central point of interest in the different theories of underdeterminacy.[3] In Relevance Theory (RT), it is a rather new perspective. In the standard relevance theory, the pragmatic tasks in deriving the proposition(s) expressed by an utterance are

disambiguation, reference assignment,[4] and enrichment (Sperber and Wilson 1986/95: 185). Now, a fourth pragmatic task is considered, as we can see in the following quote from Carston:

> In chapter 5, I will suggest that there is a fourth pragmatic task involved in deriving the proposition expressed, that of *ad hoc* concept construction, which raises a host of new issues. (Carston 2002: 220 n 54)

The central aim of lexical pragmatics in RT is to account for *ad hoc* concept construction, that is, to account for how lexicalised atomic concepts can, through pragmatic derivation, yield *ad hoc* atomic concepts. Relevance-theoretic lexical pragmatics is concerned with the pragmatic sub-tasks involved in constructing *ad hoc* concepts. In particular, it is concerned with narrowing, broadening and a combination of the two. Carston aims:

> to give a unitary account of how word meanings are adjusted in context, such that the outcome of that adjustment process may be a narrowing, a broadening, or a combination of the two. (Carston 2005)

One example of the type of adjustment that results in a narrowing is produced in utterance (1):

(1) [Ann had made it clear that she wanted to settle down and have children and Mary utters:] Ann wants to meet a *bachelor*.

In (1), the denotation of the communicated concept BACHELOR* is a subset of the set of unmarried men – that of those who are prone to marriage. The other, putatively opposite, process of loosening or broadening of a lexicalised concept can be exemplified by utterance (2). In (2):

(2) [the speaker watched a disturbing movie and although it did not make him want to vomit, he utters:] That movie made me *sick*.

The denotation of the communicated concept, SICK*, is the result of adjusting SICK to convey that a particular movie made him feel physically ill, although he did not want to vomit. An adjustment of meaning is required so that the denotation of 'sick' becomes wider. Metaphor, hyperbole, loose uses of lexical items, and so on are explained, from relevance-theoretic lexical pragmatics, as cases of broadening. Finally,

an example of a combination of narrowing and broadening appears in utterance (3):

(3) [A, who knows Caroline of Monaco well, utters:] Caroline is our *princess*.

in which A, the speaker, is concerned about Caroline's properties such as her haughty, spoilt ways, rather than about her status in a royal family (logical property of princesses). These properties reduce the denotation of the PRINCESS concept to a particular subset of the set of princesses: those who have haughty and spoilt ways. As her status in a royal family is irrelevant, the PRINCESS* concept does not include the logical property of PRINCESS – being a female member of a royal family. Thus, its denotation is not only narrowed but also broadened to a set that includes female persons who are not members of a royal house and have haughty and spoilt ways.

To interpret (1)–(3), derived *ad hoc* atomic concepts (marked with asterisks) for the italicised words (*bachelor, sick*, and *princess*) are needed. The adjustment processes that result in narrowing and broadening are distinguished because they work in opposite directions, but the adjustments that they produce in the conceptual fine-tuning – the *ad hoc* atomic concepts – contribute to the explicature (the truth-conditional content) of the utterance (they are not merely implicated).[5] In this way, lexical pragmatics focuses on the study of the pragmatic concepts that are of use in explaining all the examples in which the atomic communicated concept that takes a morphophonemic word as input and the lexicalised concept that codifies it do not coincide.[6]

2.1 Problems in relevance-theoretic lexical pragmatics

The first problem for relevance-theoretic lexical pragmatics is how to explain the posibility of a complete change in the denotation of a lexicalised concept. This problem can be shown with examples of metaphor such as a normal utterance of (4):

(4) Mary is a *bulldozer*.

in which the communicated concept, BULLDOZER*, does not apply to bulldozers. BULLDOZER* is not the result of adjusting BULLDOZER after the loss of some of its logical features because there are no encyclopaedic properties of bulldozers that can be literally applied to Mary. BULLDOZER* acquires some properties instead and its denotation does not include bulldozers. Carston (2002) is aware of this problem, and calls it 'the emergent properties issue'.

Although we agree with relevance-theoretic lexical pragmatics in considering that metaphor needs for its interpretation the production of *ad hoc* concepts, we do not agree with appealing merely to the process of broadening to explain it. Our solution to the emergent properties issue depends on demonstrating, against relevance theorists, that metaphor is not a type of phenomenon that requires an inferential process of broadening for its interpretation (Romero and Soria 2005a, 2007). In metaphor, the metaphorical properties emerge from the properties that characterise the source domain – in this case, the bulldozer domain. Metaphor must be explained as a case of transfer of meaning by a mapping from the source domain to the target domain (Black 1954; Indurkhya 1986, 1992; Gineste et al. 2000; Romero and Soria 2005a). It should characteristically be described as a process by means of which the metaphorical concept does not only lose its logical properties but also its encyclopaedic properties; in the metaphorical concept only those properties that can change in such a way that can be applied to the objects we are talking about remain. The new properties are so different that the denotation of the concept changes completely. Lexical pragmatics should include the pragmatic task of transfer by mapping in the account of *ad hoc* concept construction to solve the problem of the emergent properties issue.[7] But then the unified theory would be at risk.

The second problem is related to metaphor, too. If metaphor is a trope and thus affects only atomic lexicalised concepts, explained as cases of transfer (for us) or as cases of broadening (for Carston), how can we interpret (5) and (6)?

(5) [An American academic, Morris, goes to a British institution as a visiting professor and A says about him]: In all modesty Morris imagined he must be the *biggest fish in this backwater*. (example taken from David Lodge's *Changing Places*)

(6) [In a department meeting, somebody who is a shy retiring person, goes out and Peter says:] Thank goodness, *the wilting violet* has finally left the room. (Adapted from example (21b) in Carston 1996)

The input of a trope is an atomic lexicalised concept. Nevertheless, the metaphorical interpretations of (5) and of (6) have a complex concept as input. The BIGGEST FISH IN THIS BACKWATER in (5) and WILTING VIOLET in (6) are the complex concepts that must be metaphorically adjusted to form the propositions expressed by utterances (5) and (6). Their metaphorical adjustments result in [BIGGEST FISH IN THIS BACKWATER]* for

the interpretation of (5) and in [WILTING VIOLET]* for the interpretation of (6).

Our hypothesis is that in order to understand these examples we have to widen the scope over which certain inferential processes operate. If we understand that the processes of narrowing and/or broadening and transfer by mapping can be applied to complex concepts expressed by means of phrases and not only to atomic concepts expressed by (mono-morphemic) lexical items, there are phenomena that can be better explained from what we call 'phrasal pragmatics'. The input of processes of narrowing, broadening, and transfer by mapping are concepts in general and not just atomic concepts.[8]

The third problem appears if we consider cases of referential metonymies. Metonymy, which is also traditionally considered as a trope, cannot be explained as a case of broadening either. Examples of metonymy such as (7):

(7)   [Looking at the ham sandwich customer, a waitress tells another:]
      The ham sandwich is waiting for his check.

remain unexplained in RT. The denotation of the HAM SANDWICH concept is not broadened to denote both ham sandwiches and customers because there are no encyclopaedic properties of ham sandwiches that, if applied to both, result in a relevant interpretation of the utterance.

Our solution, in these cases, is to argue that metonymy is not a trope but a case of missing constituents (Romero and Soria 2005b). The concept expressed by the first noun phrase included in (7), THE HAM SANDWICH, must be completed as, for example, in THE HAM SANDWICH CUSTOMER. In phrase fragments we need the addition of the unarticulated conceptual constituent to get the complex concepts. In (7), the unarticulated constituent is CUSTOMER, with which we get the pragmatically derived complex concept: THE HAM SANDWICH CUSTOMER. [HAM-SANDWICH]* is not involved in the relevant interpretation of (7).

2.2   Limits in relevance-theoretic lexical pragmatics

Examples (1)–(3) require a pragmatic process by means of which linguistically encoded concepts are adjusted. Carston also recognises that they differ from other examples in which, although encoded linguistic meaning also underdetermines the proposition expressed by the speaker, the pragmatic process required for interpreting them seems to involve the adding of conceptual constituents. Utterances (8)–(10):

(8)   [A realises that B, when making his breakfast, is looking for the marmalade and A says:] On the top shelf. [THE MARMALADE IS]

(9)   [A asks B what the weather is like today and B asnwers:] It is raining. [HERE]

(10)   [A, in the middle of an unexpected traffic jam, says:] Something has happened today. [SOMETHING BAD][9]

show that some pragmatic process of adding conceptual material (in bold) is needed in order to arrive at what the speaker intended to express. The utterance of a phrase such as (8) is an obvious case (Carston 2002: 17 and 22), in which the speaker, A, explicitly communicates that the marmalade is on the top shelf. However, there are sentential utterances whose encoded meanings do not determine a fully propositional representation even after all the necessary reference assignments and disambiguations have taken place. Utterance (9) requires us to know where it is raining before it can be judged as true or false of a state of affairs. This information is not guided by a linguistic pointer but is realised by means of a pragmatic process that can supply constituents to the explicature. Other sentential utterances seem to determine fully propositional representations, but they need contextual supplementation in order to identify the proposition expressed. In utterance (10), some pragmatic enrichment – or adding of conceptual material – is needed in order to arrive at what the speaker intended to express: SOMETHING BAD HAS HAPPENED ON THE DAY OF UTTERANCE. The normal utterances, (8)–(10), are examples of missing contituents which cannot be explained with *ad hoc* atomic concepts.

The addition of a conceptual constituent is explained in relevance theory by appealing to the Principle of Relevance. But at what level does the addition of conceptual material take place? Our hypothesis is that the adding of missing constituents takes place either at phrase level (as in (10)) or at sentence level (as in (8)–(9)), and this means that lexical pragmatics, which takes place at the level of word, is not the area of pragmatics in which this type of enrichment can be explained. When the adding of missing constituents takes place at the level of phrase, we need what we have called 'phrasal pragmatics'.

3   Phrasal pragmatics

Although we agree with the need for pragmatic tasks that operate at the level of lexical items, it is our contention here to argue for the fact that

an intermediary level of pragmatic adjustment is required between the pragmatics needed to convey intended propositions and the pragmatics needed to convey *ad hoc* atomic concepts. Propositions have a complex nature – a compositional character. They are structured strings and have concepts (complex or not) as their constituents. Just the fact that complex concepts are complex and thus, at least in part, compositionally determined, entails that they are *ad hoc* (except in fossilised expressions). But in Carston's account, we want to argue, derived complex concepts could also arise out of the pragmatic process of enrichment, both in its version of addition of conceptual material and in the sense of concept strengthening or *ad hoc* concept construction.

With this picture in mind, we want to raise the idea that the pragmatic tasks needed in phrasal pragmatics to get communicated complex concepts are: (i) *ad hoc* concepts construction for complex concepts, and (ii) the adding of missing (or unarticulated) constituents of concepts. The concepts obtained by these tasks are the constituents of the thoughts expressed by the utterances in which the phrases appear.

3.1   *Ad hoc* concepts construction for complex concepts

As we said in Section 2.1, metaphorical uses of lexical items and phrases need for their interpretation the elaboration of *ad hoc* concepts. They are the results of transfer based on mapping. Sometimes, a complex concept is the point of departure for an *ad hoc* metaphorical concept. In (5):

(5)   [An American academic, Morris, goes to a British institution as a visiting professor and A says about him]: In all modesty Morris imagined he must be the *biggest fish in this backwater*.

'biggest fish in this backwater' needs fine-tuning as a whole, that is, the input of the pragmatic process involved in the metaphorical interpretation of (5) is the *ad hoc* concept BIGGEST FISH IN THIS BACKWATER. This is very different from considering FISH as an independent input of this pragmatic process. It is different in the sense that the result of this interpretation is the *ad hoc* concept, FISH*. FISH* would have some properties that can be applied to academics but these properties are irrelevant to understanding the utterance. To interpret (5), the relevant metaphorical *ad hoc* concept is [BIGGEST FISH IN THIS BACKWATER]*. This concept has cognitive effects that verify the presumption of optimal relevance of the utterance and that cannot be achieved by means of FISH*. We are not interested in the general properties of FISH, but in the particular properties of BIGGEST FISH IN THIS BACKWATER. The particular properties

of BIGGEST FISH IN THIS BACKWATER, such as 'eating smaller fishes', when applied metaphorically to Morris permit knowledge of how he is feeling. Only [BIGGEST FISH IN THIS BACKWATER]* allows understanding of how Morris is, to wit, the person who conceives himself as the most powerful academic in this British institution, while FISH* doesn't.

Similarly, the processes of broadening and narrowing typically applied to atomic concepts can also be applied to complex ones. Carston is conscious of this issue. Indeed she says:

> Another possibility is that longer stretches of the encoded conceptual structure, phrases or the whole logical form, are to be taken loosely (metaphorically) and a complex (structured) *ad hoc* concept pragmatically constructed on that basis. [...] This is clearly an issue that needs a lot more thought. (Carston 2002: 359)

That is what we have done: putting some thought to the part of this issue that has to do with complex *ad hoc* concepts conveyed by phrases. Obviously, then, the point of disagreement between us is not the fact that phrases as a whole can be the input of *ad hoc* concept construction, but the way in which metaphor interpretation should be explained (see Romero and Soria 2007). What we want to do now is to focus on the second type of process that we propose from phrasal pragmatics.

3.2   Enrichment of unarticulated constituents of concepts

We think that our proposal on enrichment of unarticulated constituents of concepts can be made totally coherent with Carston's picture of missing constituents. Our approach can be a way out for a problem not yet solved in Relevance theory: that of metonymy.

As we can convey a complete thought by means of an utterance of a sentence fragment (a non-sentence) such as (8) (see Stainton 1994) or a complete but not sufficiently explicit sentence such as (9) (see Bach 1994; Recanati 2004), we can also convey a complete complex concept by means of a fragment of a phrase such as 'something' in (10). In the first two cases, a pragmatic task is needed to add one or more constituents of the intended thought. Similarly, a pragmatic task is needed to add one or more conceptual constituents of a complex concept. We can distinguish between:

(i)   the cases in which the missing constituent is a constituent of a thought, like the ones intended in (8)–(9), and

(ii) those in which the missing constituent is a constituent of a complex concept, like the one intended when uttering the NP included in (10).

In RT, enrichment, and its capability of adding missing constituents, is one of the pragmatic tasks needed to go from the expression to the complete thought expressed by its utterance. In RT, missing conceptual constituents have been normally treated as missing constituents at the level of thought, since the result of simply decoding the uttered expression would not result in a complete intended proposition. That is correct, but we believe that there is a qualitative difference between the types of cases exemplified in (i) and (ii). The former are directly incomplete while the latter are incomplete in an indirect way. The latter are incomplete only because one of the concepts is.

Propositions can be conveyed by means of a sentence fragment, and RT can predict when this is more appropriate, as we can see in the following quote:

> The theory [RT] predicts that, in many contexts, a subsentential utterance will be more appropriate than a sentential one. (Carston 2002: 154)

Similarly, it can be said that RT can predict that, in many contexts, when one of the constituents of an explicature is a complex concept, it can be more appropriately conveyed by a fragment of the complex concept, that is, by encoding one or more of the atomic concepts which are constituents of the complex nesting structure.

We can distinguish two cases of fragments of complex concepts. In some cases, the incomplete concept is represented by an incomplete structure. In examples such as (11) and (12):

(11)   This is one of the oldest buildings in town, if not the oldest. [THE OLDEST BUILDING IN TOWN]

(12)   [In a hairdresser's, a hairdresser tells another:] The fair-haired is waiting for her check [THE FAIR-HAIRED CUSTOMER]

at least the head, the obligatory element, of the NP is missing. In order to interpret the examples, we will have to add conceptual material (BUILDING IN TOWN and CUSTOMER). There are missing elements in the concept encoded by the phrase fragment – specific elements that can be easily understood by the interlocutor in context (linguistic and extra-linguistic) and, thus, can be pragmatically recovered.

In other cases, the incomplete concept is represented by a complete structure that codifies a concept not intended by the speaker in isolation but included in the intended concept. It is especially in these cases that we have to appeal to a pragmatic task to complete the complete concept so that the thought is effectively communicated. Examples (7), (10), and (13):

(7)   [Looking at the ham sandwich customer, a waitress tells another:] The ham sandwich is waiting for his check. [THE HAM SANDWICH CUSTOMER]

(10)   [A, in the middle of an unexpected traffic jam, says:] Something has happened today. [SOMETHING BAD]

(13)   [Peter has cleaned Mary's room and, when she is looking for her handout, she asks him where it is and he says:] When I cleaned your room, I did not touch the table. [THE ONLY TABLE IN MARY'S ROOM]

show we need phrasal pragmatics for the cases in which we have to add unarticulated conceptual constituents at the level of phrases. We have to decode the concepts linguistically specified by the phrase fragments and to relate these concepts to those unarticulated concepts that enrich the sub-propositional structures – concepts that if linguistically expressed by words would be part of the phrase. The pragmatic enrichment of the concepts expressed by phrase fragments allows the recovery of these unarticulated constituents so that we get the complex concepts: THE HAM SANDWICH CUSTOMER, SOMETHING BAD, and THE ONLY TABLE IN MARY'S ROOM respectively. But HAM-SANDWICH*, SOMETHING*, and TABLE* are not involved in the relevant interpretation of the utterances of these sentences.

These examples represent phenomena which are widely studied by linguists and philosophers. (7) is a case of metonymy, (10) is a case that involves a quantifier, and (13) involves an incomplete definite description. Our proposal is that these examples could be better explained if they were understood as cases in which there were unarticulated constituents of concepts, although there are different types of these. An explanation of the different types of missing constituents of concepts is needed, as we will see, to account for how the pragmatic task of enrichment is applied in each case. This explanation, in our opinion, fits nicely into the relevance-theoretic account.

The questions now are: how we can recognise that (7), (10), and (13) need the adding of constituents of a complex concept and how the missing conceptual constituents are recovered. Let us analyse (7) – a case of

metonymy. For us (Romero and Soria 2005b), the metonymic interpretation is triggered because metonymic utterances are identified when both a contextual abnormality and some unarticulated restricted conceptual material are demanded to be inserted in the intended nesting complex concept. In general, the contextual abnormality that we refer to here must be understood as the use of an expression in an unusual linguistic or extra-linguistic context. In (7), the abnormality entails a breach of a semantic restriction, such as the need to have a subject with the features [+HUMAN] if we consider the predicate, since the subject has to be an entity that can be waiting for the check. In addition, to identify a metonymy, we also have to detect some unarticulated restricted conceptual material; the concept expressed by the NP used abnormally, THE HAM SANDWICH, is identified as the restrictive conceptual modifier of an unarticulated restricted concept that is pragmatically mandated. Given the context of (7), there is no doubt that the waitress is talking about a type of entity that can be waiting for the bill, about a customer. THE HAM SANDWICH concept is recognised as the conceptual modifier restricting the concept CUSTOMER. Now that we can get a metonymic interpretation of (7), we can reconstruct the intended complex concept, THE HAM SANDWICH CUSTOMER, in which one pragmatically mandated and unarticulated concept has enriched the concept encoded. CUSTOMER is pragmatically mandated as it is the notional head of the intended higher order concept and is unarticulated because it is part of the given information for the interlocutors in that context. In addition, we can determine what is explicated with utterance (7) – that THE HAM SANDWICH CUSTOMER IS WAITING FOR HIS CHECK. This proposition produces the positive cognitive effects to verify the optimal relevance since from this utterance the waitress will know to which customer she has to give the check. The unarticulated conceptual constituents added can be taken to arise from a relevance-driven inference based on general knowledge about, for example, the kind of entities that can be waiting for the bill. Thus, our proposal of metonymy as a case of adding mandated unarticulated constituents of concepts at a phrasal level is compatible with the relevance-theoretic account (see Romero and Soria 2010).

Now, let us consider (13) – an example that includes an incomplete definite description. In (13), if we consider the predicate concept TOUCH, we know that the NP 'the table' must be a singular term that refers to an entity that can be touched, that is, that the NP is a singular term (definite description). As it is quite obvious that there is no object that uniquely satisfies the noun phrase 'the table', the speaker of (13) cannot refer to an object with just this expression. We are faced with an

incomplete definite description and thus, something unarticulated is needed. To interpret an incomplete definite description, we have to add the unarticulated conceptual material which isolates the unique entity intended by the speaker and which usually contains some referential component sensitive in the context (see Neale 1990: 93–102). There is an enrichment of the encoded concept, THE TABLE. The unarticulated conceptual constituents are recoverable from a relevance-driven inference based on the accessibility of information. Given the context of (13), we have to add ONLY … IN MARY'S ROOM. When we recover the unarticulated constituents, we reconstruct the intended complex concept, THE ONLY TABLE IN MARY'S ROOM, and we also determine what is explicated with the utterance (13): WHEN PETER CLEANED MARY'S ROOM, PETER DID NOT TOUCH THE ONLY TABLE IN MARY'S ROOM. This proposition produces the positive cognitive effects to verify the optimal relevance, since from this utterance the hearer knows that Peter did not touch the unique table in Mary's room.[10]

Finally, let us consider (10), where there is an incomplete noun phrase in which only a quantifier appears. The adding of an unarticulated element of a concept is required for its interpretation. In this sense, we agree with Carston's (2002: 26) explanation of this as a case of addition of conceptual material rather than with her analysis (2002: 324) in which she argues that it is a case of conceptual narrowing.

In our opinion, the second order concept encoded by 'something' in (10) has an implicit or hidden variable in its linguistic form. There is a need for saturation of the variable with a concept of a certain kind because of its interaction with the predicate. As the predicate 'has happened' encodes a concept that has events as its denotation, the variable must be saturated with the concept EVENT. The hearer recognises not only this but also an incompleteness of the saturated concept. The denotation of the concept codified by 'has happened' is never empty, and since the concept SOME EVENT predicates of that concept merely that it is not empty, the proposition expressed cannot produce any positive cognitive effects to verify optimal relevance of utterance (10). Thus, the concept SOME EVENT must be incomplete. If, in addition, we take into account that something', 'nothing', 'someone', 'anyone', 'anything', and 'no-one' are pronouns that differ from other pronouns in the fact that they can take modifications (see Burton-Roberts 1986: 156), it can be argued that what is needed is the adding of the unarticulated conceptual material that enriches the concept decoded. If it were represented, the unarticulated conceptual material would be a modifier to determine the kind of event intended. The concept SOME EVENT would be freely

enriched to get a certain kind of EVENT. At this point, the element to be added is given by the context which leads the hearer to think that the event we are talking about is bad and that it caused the traffic jam. The intended complex concept is: SOME BAD EVENT. The context allows us to add the concept that is involved in the intended complex concept and thus to determine what is explicated with utterance (10): SOME BAD EVENT HAS HAPPENED ON THE DAY OF UTTERANCE. Cognitive effects are possible.

In sum, phrasal pragmatics is needed in Carston's programme both for the fine-tuning of certain phrasal units and for the adding of constituents of complex concepts. In her work, we have found evidence for a possible agreement with the first case, but we would like to draw attention to the second. In the latter, comprehension is, as she says although applied at the propositional level, 'a pragmatic mind-reading exercise *par excellence*' (Carston 2002: 365).

4   Conclusion

The recognition of phrases as intermediary units between lexical items and sentences allows an account of the pragmatic processes needed to derive the complex concepts communicated by phrases. If we recognise complex concepts as a conceptual unit, we have the possibility of applying processes of broadening, narrowing, or transfer to this unit as a whole, and of conveying complex concepts without articulating part of them linguistically. Phrasal pragmatics supplements lexical pragmatics in the general task of shaping the notion of explicature.

Phrasal pragmatics is an area from which to explore possible solutions for recalcitrant topics in the theory of truth-conditional pragmatics which cannot be solved from the recent discipline of lexical pragmatics. A clear example of this is metonymy. Nevertheless, a lot more work is needed to test and develop the ideas that we have proposed.

Notes

1. Other approaches leave the task focused in phrasal pragmatics unexplained. The modulation presented by Recanati (2004), for example, cannot explain

the inferential task required to determine the contribution that phrases make to the truth conditions of an utterance, although it can serve to determine the contribution that words make to them. In Recanati (2004: 136–7), enrichment, loosening, and transfer are the cases of modulation that affect words. In these cases, enrichment must be understood as specifisation when the interpretation of an expression is involved. Enrichment is also the process involved in the recovery of unarticulated constituents, but the provision of unarticulated constituents is supposed to be a case of free enrichment in which it is the interpretation of the sentence that is enriched (Recanati 2004: 24–5). The intermediary position of phrase is not considered.

2. The term '*ad hoc* concept' was first used by Barsalou (1983), although there are important differences in the way Carston uses the term. For more information about these differences, see Carston (2002: 367).

3. Blutner (1998) uses the term 'underspecification' instead.

4. 'Saturation' in Carston (2002: 205).

5. Nevertheless, in the original proposal of lexical pragmatics by Blutner (1998), the conceptual adjustments contribute to conversational implicature, and they are explained with a straightforward formulation of conversational implicature.

6. Disambiguation and saturation are not involved in *ad hoc* atomic concepts production, no matter whether these pragmatic tasks take place at level of word, phrase, or sentence.

7. In relation to this, Recanati (2007: 163) says: 'The extraction of generic structure is a form of loosening, but the apparition of emergent features is a form of enrichment, and the imaginary mixing of features from both the source and the target is the most characteristic property of metaphor. That property is, indeed, irreducible to loosening.'

8. This hypothesis – the extension of the scope of application of the processes of narrowing and/or broadening and transfer by mapping – is inspired in an alleged structural analogy between sentences and propositions. If we take into account that the meaning of lexemes can be adapted pragmatically and that sentences have as their immediate constituents phrases rather than simply lexemes, it is sensible to argue that complex concepts (expressed through phrases) can be pragmatically adjusted as well. The adjustment of lexicalised concepts to the context, explained by lexical pragmatics, may be needed for the composition of concepts expressed by phrases, and these more complex concepts as a whole may also need adjustment to the context to fix their contribution to the explicit proposition. What we want to argue is that although the input of the processes studied in lexical pragmatics is always a concept, it does not always have to be an atomic concept.

9. See Carston (2002: 26). By contrast, in Carston (2002: 324), this example is considered a case of *ad hoc* concept construction that has as its result the narrowed concept SOMETHING*.

10. The conceptual restriction of decoded concepts by incomplete definite descriptions cannot be understood as a case of narrowing of lexical items because in the former the structure of the concept changes. Rather than having a conceptual change by means of additional descriptive material in an atomic concept, we have an extension of the conceptual structure by

relating the decoded concept (atomic or not) with other concepts which typically are themselves, or contain, some referential components sensitive to the context.

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13
Uttering Sentences Made Up of Words and Gestures

Philippe De Brabanter

1   Setting the scene

In several places, Robyn Carston warns the student of utterance inter-pretation against neglect of the 'fact that most verbal utterances are a complex of linguistic, paralinguistic, facial and vocal gestures, which appear to function as a signal receiving a unified interpretation', a fact which, she writes, remains 'rather under-explored' (2000: 824). Such neglect is unjustified because, she writes:

> the domain of pragmatics is a natural class of environmental phe-nomena, that of ostensive (=communicative) stimuli; verbal utter-ances are the central case, but not the only one, and they themselves are frequently accompanied by other ostensive gestures of the face, hands, voice, etc, all of which have to be interpreted together if one is to correctly infer what is being communicated. (2002: 129)

This position rests on the assumption that there is a single 'pragmatic system' at work in the interpretation of 'ostensive stimuli'. When it comes to interpreting verbal stimuli, the same mechanisms and resources are used as when it comes to processing non-verbal ones. If there is no distinct 'linguistic pragmatic system', then the scholar who studies communication should not favour the verbal at the expense of the non-verbal.

   In a more radical vein, Herb Clark (1996, 1997, passim) contends that theories of 'language use' – in which he includes most pragmat-ics originating in Paul Grice – are essentially misguided in their focus on linguistic *symbols* (conventional signs) and neglect of *indices* (signs causally related to their object) and *icons* (signs related to their object

in virtue of some shared quality). Ignorance of the prevalence of *composite signals* makes standard pictures of utterance interpretation fundamentally incomplete: 'Ignoring nonlinguistic methods has distorted people's picture of language use, and it is important to put that picture right' (1996: 156).

One may have reservations about Clark's use of the term 'language use', and Carston has pointed out that Clark's terminological choice is potentially misleading as it refers to phenomena that 'include many non-linguistic behaviours and exclude many (non-communicative) employments of linguistic forms' (Carston 1999: 167). But, as the quotations in the first paragraph testify, Carston agrees with Clark that human communication is usually multi-modal.

This observation, however, does not prevent and semanticists and pragmaticists alike from usually giving verbal aspects of communication preferential treatment. As a result, the non-verbal aspects of an act of communication are cut off from the verbal ones and treated *as if* they were not underlain by communicative intentions. They are in fact relegated to the context of utterance, on a par with other aspects of the context that can be useful in interpreting the utterance (location, time, perceptible objects and events, shared background, and so on). It is true that, once processed, an ostensive stimulus becomes part of the context against which a subsequent act of communication will be interpreted. But in that respect gesturing is no different from the use of words: after it has been processed *qua* communicative stimulus a verbal utterance can be treated as an element of the context of utterance.[1] This communicative role of non-verbal stimuli, especially icons (see Clark 1996: 188), is often passed over in the semantics and pragmatics literature. In this chapter, I try to make up for this situation, though on a very limited scale: I focus on the interpretation of a variety of multi-modal signals comprising conventional signs (words) and icons.

2   The data

My data consist of a special subset of multi-modal signals – ostensive stimuli that mix the verbal with the non-verbal in such a way that a gesture, posture, or facial expression (or a combination thereof) seems to stand in for a linguistic constituent which remains unrealised. Here is a real-life example, translated from French (the speaker is a fretting but relieved regular customer addressing an assistant in

a fashion shop):

(1)　I didn't see the [IMITATION OF FRIGHTENING GRUMPINESS] woman today; will she be back this week?

The square-bracketed string in small capitals is an interpretation of the facial expressions and gestures performed in the conversational setting. This imitation of grumpiness is a *demonstration* in Clark and Gerrig's sense (1990), that is, an act of 'illustration by exemplification'.[2] In (1), this demonstration plays a similar role to an Adjective Phrase. It is a more entertaining, livelier, way of conveying the same piece of information as could have been communicated by uttering 'frighteningly grumpy' or some similar phrase. The argument I develop in later sections is that the non-verbal stimulus in (1) is embedded into a broader linguistic structure – an NP[3] and, ultimately, a sentence – and that it performs a genuine linguistic function.

The relevant data for this paper have to be distinguished from two related sets of examples: (i) spoken utterances of complete sentences which, as is usual, are accompanied by some gesturing, and (ii) non-verbal communicative stimuli that do not appear to stand in for an unrealised linguistic constituent, either because they do not co-occur with words or because the words they co-occur with do not add up to a sentential structure.

I want to leave the (i) cases aside. This is not because I assume that the gesturing usually accompanying speech does not contribute to communicated content. It most probably does in at least some cases (Wilson 2000: 431f; see also Section 3). But this gesturing does not play a *linguistic* part; it does not fulfil a syntactic function.

As for the (ii) cases, there are many illustrations in the literature. Take Dan Sperber and Deirdre Wilson's example of the person sniffing ostensively to signal the presence of gas (1986/95: 55) – a situation in which no words are uttered.[4] Or take this other example, in which a little boy draws the attention of his adult friend:

(2)　Herb! [points to Eve] + [puts an imaginary camera to his eyes and clicks the shutter]. (from Clark and Gerrig 1990: 765)

The child means to inform Herb that Eve is taking a photograph. This he achieves by producing various types of stimuli – both linguistic and non-linguistic. The second non-linguistic one (the manipulation of an imaginary camera) is a demonstration, whereas the first is an *indication* (an indexical gesture). Here, there is no embedding of the gesturing into a linguistic structure, as was arguably the case in (1). Hence, there is no

point in analysing the gestures in (2) in linguistic terms, as opposed to the analysis I advocate with respect to (1).

3   Acts of ostensive communication?

My analysis starts from the assumption that (certain) co-verbal gestures are ostensive stimuli. Thus, I believe the demonstrations and indications represented in (1) and (2) to be underlain by a communicative intention, just as much as the verbal part of the signals is. Some caution is in order, however. For instance, Clark has an example in which placing a candy wrapper in a litter basket is taken to *indicate* that it is waste (2003: 257). Surely this can be done conspicuously, with a communicative intention. However, it need not be: most of the time when I dispose of a candy wrapper, I do not intend to communicate that I am treating it as waste. Therefore, any claims to the effect that most gestures (iconic or indicative) 'are genuine signals by which speakers mean things' (Clark 1996: 177) are to be taken with caution.

In a study whose main goal is to show that at least *some* iconic gestures are communicative stimuli, Alissa Melinger and William Levelt (2004) devote some time to reviewing the literature on gestures and communicative intentions. They point out that, whereas it is widely agreed that 'co-verbal' indexical gestures are often communicative, 'few studies have explicitly addressed whether iconic gestures form part of the speaker's communicative intention' (2004: 121). Apparently, many prior studies exhibited flaws in their methodology – the few examples discussed by Melinger and Levelt indeed prove to be less than perfect. Their conclusion is that, up until their own paper, it was not at all well established that co-verbal iconic gestures are (sometimes) communicative.

So, what of the iconic gestures that occur in my data? How can it be shown that their communicative status is above suspicion? My chief argument is that the demonstrations involved are what Clark (1996: 178) calls *component gestures*, as opposed to *concurrent* ones. More precisely, they fall into one of the three categories of component gestures distinguished by Clark, namely, those cases in which all that there is (at a certain point in a signal) is the iconic gesture. In the examples examined in Sections 7 and 8 below (examples 10, 11, 13, 14, and 15), the demonstrations clearly fill 'informative gaps'; they are part and parcel of the explicit content of the utterance. If they are not processed, the speaker's informative intention is not satisfied. This proves less evident in (1), because the demonstration occurs as part of a referential NP that contributes an individual rather than a description to the proposition

expressed. Thus, the content of the demonstration does not end up in the propositional content. However, the demonstration helps (and is, I believe, *meant* to help) the shop assistant to figure out the referent of the definite description 'the…woman'. I have to admit, still, that this may fall short of establishing the communicative status of the demonstration in (1).

The final bit of evidence I wish to adduce in support of the communicative status of the demonstrations in my data is based on the fact that, if the gesturing is not interpreted as being communicative, it will in most cases feel extremely odd. Take (1) again: absent a communicative intention, the mimicry would have to be seen as some reflex contraction of the speaker's face and would therefore feel like a sudden incomprehensible intrusion if it was not grasped as depicting a property of 'the woman'. In the examples examined in Sections 7 and 8, the situation is the same: if it were not recognised as contributing to the communicated content, the gesturing would appear as a sudden voluntary and rude disruption of communication, whereas in reality communication continues smoothly as the speaker goes from words to non-verbal stimuli.

4 Non-sentential speech acts?

The discussion so far falls short of establishing that example (1) is well and truly a sentence, albeit one made up of verbal and non-verbal elements. Before bringing further arguments in favour of that claim, I want to get one alternative account out of the way. For some time now, there has been a heated debate within the semantics/pragmatics community as to whether there are such things as non-sentential (or sub-sentential) speech acts. The stakes are high: their existence would threaten a popular version of how the compositionality thesis can be articulated with semantic theory. On this view, as expounded, for instance, by Jason Stanley, 'all effects of extra-linguistic context on the truth-conditions of assertions are traceable to logical form' and 'composition rules do not vary as a function of extra-linguistic context' (2000: 392, 395). If non-sentential speech (especially assertions) exists, either some truth-conditional determinants are *not* found in logical form or some composition rules *do* vary across contexts.

In the debate about non-sentential speech, two main positions can be distinguished: on the one hand, there are those like Robert Stainton, Reinaldo Elugardo, and Robyn Carston who hold that '[s]peakers can make assertions by uttering ordinary, unembedded, words or phrases'

(Stainton 1995: 281).[5] Here is an illustration offered by Carston:

> [I]t's breakfast time and, coming into the kitchen, I see my companion searching around in the lower reaches of a cupboard; knowing his breakfast habits, I guess that he's looking for a jar of marmalade and I utter:

[(3)] On the top shelf. (2002: 130)

On a Stainton-like analysis, this utterance of (3) is a bona fide speech act; it has a rather definite propositional content and an assertive illocutionary force. If someone were to ask what the utterer has said, one could answer that she has said that the marmalade is on the top shelf. In other words, it is an assertion that has truth conditions and that can be reported indirectly. If the jar turned out not to be on the top shelf, the speaker would be judged to have spoken falsely.

In this case, opponents of Stainton's position, like Stanley, Peter Ludlow, or Jason Merchant (2004) would agree that (3) is uttered to perform a genuine illocutionary act. But they would argue that (3) does not show its whole syntactic structure. In other words, they would argue that (3) is an instance of syntactic ellipsis.[6]

I am not certain who is right: is (3) a genuine non-sentential assertion? Mikhail Kissine (personal communication) tells me that a similar phrase in Russian would occur in the ablative, and that this ablative would be assigned by a 'location' verb (in other cases, for example with verbs like 'put', the same phrase would occur in the accusative). If it turns out that case must be assigned by a hierarchically superior constituent, then one obvious way of accounting for (3) is to say that it involves syntactic ellipsis (of a case-assigning verb). However, this debate is a very complex one and it goes well beyond the objectives of this chapter. For the time being, my main concern is to show that Stainton's analysis – which I believe to be correct in *some* cases – cannot apply to the data I am concerned with here.

First, note that, in the situation described, (3) is not accompanied by any particular non-verbal communicative stimuli. It is self-sufficient as an utterance. Granted, for (3) to make sense some assumptions must be mutually manifest to speaker and hearer (for instance, that the hearer wants marmalade for breakfast). In particular, there must be an object in the context to which the property literally expressed by (3) can be anchored. Although this may make a difference to an opponent of non-sentential speech, who may find something here to support the ellipsis account, it makes none to me: what matters is that (3) requires

no demonstration or indication, that is, no communicative gesturing, to be fully understood. This, I believe makes it substantially different from my example (1). Second, from a syntactic point of view, Stainton (2005: 384) argues that examples like (3) have the structure of a lexically headed phrase (the head here is Prep) rather than of an inflectional phrase, that is, in traditional terms, a clause. This, once again, is different from (1), where the presence of the verb phrase 'didn't see' means that we have a clausal structure headed by an inflectional element. Most of the examples I look at in Sections 7 and 8 are like (1) in this respect.

I therefore conclude that Stainton's analysis does not apply to the core data of this chapter. Yet, there is a potential lesson from Stainton's study of non-sentential speech that I wish to highlight. This is that if it is correct in at least some cases, his analysis pre-empts two tempting arguments for anyone trying to establish that utterances like (1) are genuine sentences. Neither the fact that (1) has truth conditions nor the fact that it can be reported using indirect speech is proof that it is a sentence: utterances of structures other than sentences exhibit these characteristics, too.

5   Quotations and demonstrations

I now turn to an outline of the theory that should enable me to establish that utterances like (1) can be said to be genuine sentences. I will start by showing that it is legitimate to analyse the sort of non-verbal 'intrusion' occurring in (1) in the same way that we analyse quotations. The central idea is that quotations are a variety of demonstration (Clark and Gerrig 1990) – an idea revived and fleshed out by François Recanati not long ago (2000, 2001). Direct speech offers a good illustration of what it means to treat quotations as demonstrations. When I quote – for instance Keith's words – obviously I cannot produce those very tokens that were uttered by Keith: they were one-time occurrences. What I do instead is produce an utterance token that instantiates the same utterance type as the original words. In other words, I exemplify that type. Take:

(4)   Keith said, 'I think tha''s all a pile of roobish'.

In (4), the words in quotation marks are displayed; that is, the addressee's attention is drawn to them, but only inasmuch as they exemplify (the same type as) Keith's earlier utterance.

Actually, the displayed token in (4) is likely to instantiate several different types or clusters of properties,[7] only one of which is the *utterance* type. Among the instantiated types, only some are targets of the depiction, and these depicted targets need not even include the utterance type. Assuming that I have uttered (4) aloud, my deviant pronunciation of 'rubbish' and omission of a final '-t' may indicate that I intended to demonstrate other properties exemplified by the words in quotes. For instance, I may have wished to demonstrate Keith's way of talking (his accent), or more broadly, the pronunciation characteristic of the dialect spoken by Keith, say working-class northern English. Or perhaps I wanted to demonstrate Keith's bad manners, or what have you. It is the target that the quoter has in mind which determines which aspects of a demonstration are 'depictive'. But, in the end, all it takes for a successful demonstration is that, in the context of utterance, some link be recoverable between the quoted words and the property demonstrated. In other words, all it takes is that, contextually, the quoted words be an exemplification of the relevant type.

6   Closed and open quotations

In addition to illustrating linguistic demonstrations, example (4) exhibits another important characteristic: the quotation in it functions as a nominal constituent. This nominal constituent is a singular term that refers to a linguistic entity, namely, a piece of discourse. But not all quotations behave like that. Not all quotations are *referential NPs*. Consider:

(5)   Gerald said he would 'consider running for the Presidency'.

(6)   The girl showed the soldier 'her' house in Jaffa.

Using the terminology first put forward by Quine in his *Mathematical Logic*, we can say that the quoted sequence in each of the above is *used* at the same time as it is *mentioned*. It is mentioned because it is envisaged qua *linguistic entity* (as indicated by the quotation marks), and it is used because it plays its ordinary syntactic and semantic role in the embedding sentence. This means, notably, that the sentence does not break down grammatically and semantically if the demonstration is removed.

Now try doing the same with (4). What you get is:

(4_1)   Keith said, I think tha''s all a pile of roobish.

(4_1) is not just (4) without quotation marks. (4_1) is to be read as no longer including any direct quotation. The fact that this proves a difficult exercise is certainly grist to the mill of those who assume (4) to be essentially different from (5) and (6). If (4_1) is grammatical and interpretable at all, its meaning is only remotely related to that of (4). For instance, in the absence of the quotation, 'I' no longer refers to Keith but to the utterer of (4) and the judgment expressed by the *that*-clause must be ascribed to that utterer, too.

Recanati calls (4) a *closed* quotation, while (5) and (6) illustrate varieties of *open* quotation.[8] The difference between closed and open quotations is a matter of *linguistic recruitment*: in (4), says Recanati, the demonstration (that is, the *act* of illustrating by exemplification) is recruited to fulfil the syntactic function of direct object. I cannot insist enough upon the idea that it is *the act* that is recruited, not the quoted words, and this is definitely one of Recanati's key insights into quotation. It is this idea that I will be exploiting in the next two sections.

7   Closed demonstrations

In 'closed environments', there is no clear boundary between verbal and non-verbal demonstrations. The reason is that the token displayed in the demonstration plays no syntactic or semantic role in the embedding utterance.[9] Thus, not only (4) is licensed, but also the following:

(7)   Galileo said, 'E pur si muove'.

(8)   'Tropstical' doesn't mean a thing.

(9)   And the Martian guy shouted, 'fgey cvjrv=§:/b"ç"çà"=+:/ à)à)à)à)) àva'.

Although these sentences seemingly contain foreign words (7), pseudo-words (8), and strings never encountered in any known language (9), they are perfectly well formed English sentences. That is simply because all we find in the syntactic trees for these sentences are demonstrations recruited as NPs (in positions that require the presence of NPs). Figure 13.1 is a very simplified syntactic representation of (7). At the risk of looking like I am quibbling, I insist that the sequence ' "E pur si muove" ' is not actually part of the syntactic structure: it is the demonstration that is:. $[Dem]_{NP}$ is a terminal node, just like *Galileo* and *said*. ' "E pur si muove" ' just happens to be the 'vehicle' of the demonstration (the token used to perform the demonstration). I have chosen to represent this link by means of a dotted line. Had I

Figure 13.1[10]

been rigorous, the displayed token should not have been featured in Figure 13.1 at all.

The proposed account is quite economical; all it requires is the addition of one rewrite rule to the phrase-structure component of the grammar:

NP $\Rightarrow$ [Dem]$_{NP}$

As a matter of fact, one is not restricted to quoting linguistic material. There seems to be no principled difference between the above examples and the following:

(10)   John went
(11)   Piano student plays passage in manner μ
        Teacher: It's not [plays passage in manner μ] –it's [plays passage in manner μ']. (Horn 1989: 564; quoted in Recanati 2001: 648–9)

Although both examples explicitly involve a non-verbal demonstration, a minor difference can be observed. In (10), we have an ordinary instance of mimicry. The sound produced by John is not a camel belch, although it is meant to be close enough for the intended demonstratum to be identifiable. Most cases of non-linguistic demonstrations

occurring in discourse actually tend to be like (10): demonstrations of birdsong, doors closing, water dripping from the ceiling, objects crashing into each other, and so on. But some are like (11), which is distinctive in that there is no difference in kind between the displayed token and the demonstratum.[11]

In the light of the examples provided in this section, I believe it would be arbitrary to draw a boundary between 'genuine' (that is, entirely verbal) quotations and non-verbal demonstrations (see Clark and Gerrig 1990: 782; Clark 1996: 178). For instance, is the demonstration of a pseudo-word (8) or of some Martian utterance entirely verbal? Is it more deserving of the label *quotation* than the demonstrations in (10) and (11)? Note in passing that these could be replaced by onomatopoeia (that is, something more word-like) without their import being altered.

If the previous point is granted, then the next step to take is to propose an account of (10) and (11) in terms of linguistic recruitment. This is easily done for (11): the demonstration of how to play the piano passage is incorporated into the sentence as an NP. In (10), things are slightly less straightforward. After the reporting verb 'to go', we have an adjunct rather than an NP. In Recanati (2001), all recruited demonstrations are recruited as NPs. Recanati, however, makes allowances for recruitment in other syntactic capacities, notably as a common noun (2001: 649 n). Barbara Abbott has shown that recruitment indeed needed to be extended to at least the Adjective Phrase and the Noun positions (2005: 15). In (10), we will say that the demonstration is recruited as an Adjunct to 'went'. Figure 13.2 shows the relevant part of the tree diagram for (10).

The same remarks apply here as in the case of (10). The phrase-structure component of the grammar need only be increased by one rule:

AdvP $\Rightarrow$ [Dem]$_{AdvP}$

Figure 13.2
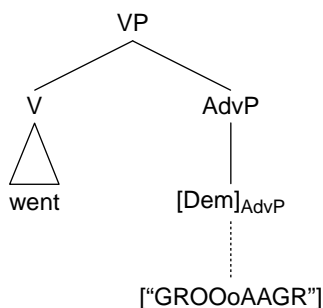
Other recruited demonstrations will require enrichment of the grammar by a very restricted set of rules like the following:

AdjP $\Rightarrow$ [Dem]$_{\text{AdjP}}$

PP $\Rightarrow$ [Dem]$_{\text{PP}}$

VP $\Rightarrow$ [Dem]$_{\text{VP}}$

      ...

It is clear that the recruitment account assumes that demonstrations can be recruited only as constituents: in other words, they should not be found to occupy the same position as strings of words that are *not* constituents. This would necessitate empirical support of a kind that I cannot supply at the moment: first, a corpus of examples should be developed, which is no small undertaking. Second, given the partly non-verbal nature of the examples, it might not be easy to make absolutely sure whether a given demonstration stands for a constituent or not. Space limitations prevent me from going any further into this issue here.

The analysis in Figure 13.2 is supported by the fact that 'to go' is used indifferently to report speech or non-linguistic sounds. Take:

(12)   And then Sheila went 'I think Mike is a better guitarist than Rob'.

It is easy to accept that the complement of 'to go' is a direct speech report (as it would be after 'to say'). Moreover, there is no good reason to contend that we are dealing with a hybrid quotation, namely, that the sequence in quotation marks is used at the same time as being quoted: it does no other job than demonstrating (some aspects of) a previous utterance of Sheila's. Both this unambiguous semantic function and the grammatical similarities with 'to say' point to the fact that the quotation must have been recruited syntactically, albeit as an adjunct. There is every reason to extend this analysis to the imitation of the camel belch: this bit of mimicry, too, is a demonstration, and intended as a depiction of a genuine camel belch. Therefore, it must also be a recruited demonstration.

On the theory I advocate, there is no non-verbal counterpart to hybrid quotations. This is not surprising if one bears in mind that the hybrid quotations we have been looking at involve the simultaneous use and mention of a segment and if one further realises that no non-linguistic segment can ever be *used* linguistically in any meaningful sense. A

difficulty therefore arises for the analogy I have drawn between quotations and non-verbal demonstrations. I grant that quotations are not 'just demonstrations': there is something special about them. But what makes them special is precisely the fact that they are *linguistic* demonstrations, a property which automatically endows them with the ability to be *used* in a linguistic environment. I believe that this basically accounts for the difference with non-verbal demonstrations pointed out above. I also believe that the analogy between quotations and non-verbal demonstrations is not threatened by this difference.

8   Some more illustrations, some more problems

My corpus of clear-cut examples of recruited non-verbal demonstrations has been very limited so far. Here are a few more examples that may be amenable to the treatment advocated above:

(13)   Of course he made a point of looking very .

(14)   And then he .

(15)   I got out of the car, and I just [DEMONSTRATION OF TURNING AROUND AND BUMPING HIS HEAD ON AN INVISIBLE TELEPHONE POLE]. (from Clark and Gerrig 1990: 782)[12]

It is easy to see how (13) can be lumped together with (1), (10), and (11): the demonstration does the same job that an adjective (for example, 'serious') would do, and it does so within a recognisable sentential framework. As regards (14) and (15), there is an additional difficulty: there is no clear sentential pattern, so that it is less safe to claim that the structures in (14) and (15) are headed by an inflectional element.

However, we are still dealing with very different examples from Stainton's. All of his examples can, at least at first sight, be identified as structures headed by a lexical category, whereas in (14) and (15) the structure is 'waiting for an inflectional head', to be provided by the non-linguistic demonstration. Moreover, Carston's 'on the shelf' and

most of Stainton's examples are self-sufficient in a way that (14) and (15) are not: 'Nice dress', 'Dinner for seven', 'From Brazil', and 'Chunks of strawberries' are all complete phrases (NPs, PPs) which, given a context of utterance, can be produced to perform a speech act. In (14) and (15), however, we have structures that are incomplete and cannot serve to perform a communicative act unless they are supplemented with non-verbal communication. Therefore, we are not dealing with Stainton-like cases. Still, I admit that (14) and (15) would be amenable to a different analysis from the one I have suggested; it could be said that they are not utterances of *sentences* containing a recruited demonstration but rather just multi-modal messages combining verbal and non-verbal stimuli. Note that the latter analysis cannot fail, and that a further drawback may be that it does not throw any light on the similarities between, on the one hand, (14) and (15) and, on the other, (1), (10), (11), (13), and the clearly quotational cases.

9   Ellipsis revisited

In this section, I want to show that the recruitment-based account does not place me in the Stanley camp.

First, I regard my examples, like Stainton's, as genuine speech acts with a recognisable propositional content and illocutionary force. Second, there is every reason *not* to account for them in terms of ellipsis.[13] I begin with my central cases, in which sentential structure is identifiable (or so I argue). It is tempting to say that some syntactic constituent is missing but can be recovered. For example, in (1), it could be argued that the AdjP 'frighteningly grumpy' has been ellipted. The first problem with this suggestion is that several other AdjPs could be supplied with equal success, provided that they expressed a close enough meaning, for example, 'very grumpy', 'terrifyingly ill-tempered', and so on. Such freedom is not standard in ordinary cases of ellipsis, where a *precise* constituent is usually retrievable. However, a putative proponent of the ellipsis account could retort that the demonstration raised a certain word or phrase to salience, and that this provided a linguistic antecedent which made syntactic ellipsis possible. Be that as it may, there is a stronger argument: on the analysis advocated here, the claim is that *nothing is missing*! We have a full linguistic structure because a non-verbal communicative act is part of the ostensive stimulus and therefore is syntactically recruitable. Once recruited, it occupies a position that *could* have been (but is not) occupied by a linguistic constituent, so there is no place left to be occupied by an ellipted segment!

As regards my less central examples, like (14) and (15) they are clearly not elliptical: too much would have to be conjured out of the magician's hat for an ellipsis account to be tenable. Still, someone who frontally opposed the idea of syntactic recruitment could argue like Stanley that they cannot be used to perform a genuine speech act. I am not sure I can counter this objection. Moreover, I am not sure that I must absolutely. After all, (14) and (15) are borderline cases.

10   Some tentative conclusions

In this chapter, I have outlined an extension of the 'demonstration' theory of quotation by exploiting Recanati's notion of linguistic recruitment. The notion does an excellent job when applied to closed quotations. I think it does, too, when applied to non-verbal demonstrations. At any rate, it does much better than possible rival accounts in terms of non-sentential speech acts or of syntactic ellipsis.

Yet there remains one major difficulty: there is no obvious cut-off point between the cases that should be accounted for in terms of recruitment and those that should not. I have drawn on a fairly intuitive notion of linguistic structure: if a given utterance displays enough linguistic structure, then many non-linguistic 'things' can be incorporated as part of that structure. Yet, how much is 'enough'? At this stage, I have to be content with saying that there must be at least a VP (or an IP). But that may not be saying much.

In spite of this patent weakness, my account is a sensible one. The starting-point seems to me to be sound: there is no principled difference between fully verbal closed quotations and 'non-verbal closed quotations' (see Section 7). Therefore, one cannot but admit that the demonstrations in (10) and (11) are recruited. Now, the fact is that these non-verbal demonstrations (which are analogues of closed quotations) do not function differently from those that occur in positions where one might expect *hybrid* quotations, as in (1) and (13). The reason is that hybrid quotations do not have a non-verbal counterpart: gesturing cannot be *used* in the Quinean sense, simply because it is not linguistic. Therefore, it seems entirely justified to account for (1) and (13), too, in terms of linguistic recruitment.

Problems arise when we turn to cases like (14) and (15), which display less syntactic structure. It is tempting to analyse examples like these *not as sentences*, but just as multi-modal *utterances* or *stimuli*. This, for instance, is the approach that Sperber (personal communication) would favour. Sperber's position has the advantage of being perfectly

straightforward: if you want to avoid giving precedence to linguistic aspects of multi-modal signals, it is safest not to attribute a linguistic role to non-verbal stimuli.

Still, although I wholeheartedly endorse the view that the study of human communicative acts should not be linguistically biased, I think the all-out non-linguistic approach has at least one undesirable consequence: it has nothing to say about the connection between non-verbal demonstrations and quotations. Yet, this connection exists. We are back to square one: (some) non-verbal demonstrations just *are* quotations. How do we account for that without appealing to recruitment?

Notes

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1. I give a somewhat more detailed discussion of this issue in De Brabanter (2005).
2. In this chapter, I use 'demonstration' in this iconic sense, which is not to be confused with the more widespread use of 'demonstration' to designate an act of using a demonstrative (that is, an indexical sign).
3. I use this symbol for what many would gladly call a *Determiner Phrase* or *DP*.
4. An excellent discussion of instances of entirely non-verbal communication can be found in Sperber and Wilson (1986/95: 48–56).
5. The debate gives pride of place to *assertions*. However, several writers explicitly assume their arguments to 'generalize to other speech acts' (Stanley 2000: 392; see also Ludlow 2005).
6. With respect to *some* of Stainton's alleged instances of non-sentential speech, Stanley adopts a different strategy: he argues that they are simply not 'linguistic speech acts'.
7. For more detail on how Recanati articulates types with properties, see his (2001: 640f).
8. Actually, this term has a wider application than I show here. To avoid misusing Recanati's terminology, I shall use the term *hybrid quotation* to refer to the phenomena illustrated by (5) and (6).
9. The latter insight goes back at least to Davidson (1979: 37).
10. The symbol '[Dem]$_{NP}$' is Recanati's notation for a demonstration recruited as an NP.
11. I initially thought that this meant that *all* the aspects of the demonstration were depictive. But that is not necessarily the case, as Neftali Villanueva (personal communication) has pointed out to me: the fingers with which particular notes are played may be depictive aspects or not, the sound

volume might be or not (the teacher might be annoyed and play too loud), and so on.

12. Levinson (2004: 101) has two examples of utterances in which an *indexical* gesture 'replaces a linguistic expression'. More can be found in Clark and Gerrig (1990: 781f).

13. I do not know if ellipsis theorists would be tempted to analyse my examples in terms of ellipsis. But, lest there be misunderstandings, I prefer to explicitate the reasons why an ellipsis-based account would not be satisfactory.

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14
Explicit Communication and 'Free' Pragmatic Enrichment

Robyn Carston

1   Introduction: commitments and issues

In this chapter, I set out to develop some ideas about the way in which pragmatics contributes to explicit communication and, in the process, respond to a range of comments and criticisms on my earlier work in this area. In this introductory section, I briefly lay out the assumptions with which I am working and then indicate the issues that will be addressed in the chapter.

First, I take it that understanding an utterance is a matter of forming a confirmed hypothesis about the speaker's meaning. Following Paul Grice, this is a matter of (non-demonstrative) inference directed at the goal of identifying the speaker's communicative intention on the particular occasion of utterance. Second, although the approach is informed by relevant philosophical ideas and distinctions, the kind of account pursued here is set squarely within cognitive science. So it is responsive to research on human cognitive architecture and on the nature of particular mental systems, in particular our language processing (parsing) faculty and our capacity to recognise certain of each other's mental states (including beliefs and intentions).

On this basis, I assume that the mind is modular, to at least the extent that Jerry Fodor (1983) has proposed and defended – the language processing system being a primary case of such a dedicated encapsulated system – but probably considerably more so. Arguments from evolutionary psychology suggest that the mind is massively modular, in the sense that a great many distinct dedicated procedures and processes have evolved to solve specific cognitive problems (Cosmides and Tooby 1994; Sperber 2002). Another fruitful and well-supported development in thinking about human cognition is the idea that, for many

of our decisions and solutions to a wide variety of everyday problems, we employ 'fast and frugal heuristics' rather than foolproof algorithms or lengthy explicit reasoning processes (Gigerenzer et al. 1999). The heuristics are 'fast and frugal' in that they carry out limited computations and consult just a small salient subset of all the available information, rather than working through myriad possibilities and comparing candidate solutions. A process of this sort can achieve a high degree of accuracy only in a particular domain to whose regularities it is specifically tailored or adapted.

The relevance-theoretic approach to communication situates pragmatics within this sort of cognitive framework, that is, one which consists of largely domain-specific capacities, each with the function of solving a specific pressing problem in human mental life and employing quick, relatively cheap computations to do so (Sperber and Wilson 2002; Allott 2008). The human pragmatic capacity is such a dedicated system whose domain is ostensive stimuli (utterances and other acts of ostensive communication), and the comprehension procedure it employs is a fast and frugal heuristic: in recovering a speaker's meaning we follow a path of least effort until we reach an interpretation which meets a particular expected level of cognitive relevance (for the technical details, see Wilson and Sperber 2004).

The issues I discuss in this chapter all turn on the idea that grasping the proposition that a speaker explicitly communicates (the explicature) is a matter for pragmatics, and that what the linguistic system provides is a template or set of constraints, which is sufficient to ensure that swift and effort-minimal pragmatic processes recover the intended content, but which seldom, if ever, provides all that content itself. Most controversial in this context is the claim that there are 'free' pragmatic processes that can affect this level of content, where 'free' is understood as not required or directed by any element of the linguistic expression used. The term '*free* pragmatic enrichment' was coined by François Recanati, who has made a clear and useful distinction between two kinds of contributions pragmatics can make to explicature: linguistically controlled, bottom-up, obligatory processes (such as disambiguation and the saturation of indexicals); and linguistically uncontrolled (that is, 'free'), top-down, optional processes (Recanati 1993, 2004). The existence of the latter is hotly contended, even among some relevance theorists, and it is this putative kind of pragmatic effect on explicit speaker-meant content which I will be focusing on in this chapter.

There are, arguably, two kinds of 'free' enrichment process: one which effects modulations or adjustments of linguistically encoded meanings and another which recovers components of content which are not linguistically indicated in any way (and so are known as 'unarticulated constituents' of utterance content). Both kinds are discussed below, although different sorts of questions are broached for the two cases. With regard to the latter, the issue is one of existence – of whether any such entirely pragmatically motivated process of inferring components of content takes place. I will look, in particular, at the doubts about this recently expressed by Luisa Martí (2006), who finds free pragmatic enrichment an unacceptably informal notion, and proposes instead that the grammar supplies all the meaning-bearing constituents that make up an explicature, although many of these are not only covert but also optional. With regard to the former kind of enrichment, meaning modulation, there has been (so far at least) less of an issue made about its existence, and the main questions concern the nature of the meanings – the *ad hoc* concepts – to which it gives rise, how extensive a process it is (for instance, whether or not it accounts for the understanding of certain metaphorical or other figurative uses, as suggested within relevance theory), and the way in which the process of concept adjustment actually works.

The chapter is structured as follows. In Section 2, I discuss some issues concerning the move from the Gricean saying/implicating distinction to the relevance-theoretic explicature/implicature distinction. In Section 3, the focus is on the viability and explanatoriness of a process of 'free' pragmatic enrichment giving rise to unarticulated constituents. The claim that optional hidden linguistic structure is a better explanation of the key data is considered. In Section 4, some of the questions raised by recent work within relevance theory on lexical pragmatics, *ad hoc* concepts, and meaning modulation (including metaphor understanding) are explored. The discussion in both of these central sections points to the difficult underlying issue of which aspects of utterance meaning come from the linguistic code and which are pragmatically inferred. There are a number of sub-questions here, including the long-standing one of whether the semantics of lexical forms is complex (decompositional) or atomic (unstructured). In Section 5, some specific instances of this huge 'division of labour' issue are considered. Then, in Section 6, I discuss the 'contextualist' position on sentence/utterance semantics, a position which embraces the kind of free pragmatic processes focused on here and with which relevance theory (RT) has

been closely associated. I suggest that the cognitive-scientific basis of the relevance-theoretic account of communication and comprehension distinguishes it in some ways from the more philosophically oriented concerns of contextualist semantics.[1]

2   Explicature, what is said, conventional/encoded meaning, and cancellability

The point of departure for the relevance-theoretic concept of explicature is Grice's notion of 'what is said' (contrasted with 'what is implicated'). As he construed it, 'what is said' has the following two properties: (i) it is speaker-meant ('m-intended') content, and (ii) it is 'closely related to the conventional meaning of the words (the sentence) […] uttered', although grasping it might also require a hearer to choose between several senses and to identify indexical reference (Grice 1975: 44). It is widely recognised now that these two requirements pull in different directions and that it is not generally possible to sustain both in a single entity.[2]

With regard to the property of being speaker-meant (and distinct from implicature), a number of theorists have converged in delineating a much more pragmatically rich level of utterance content, variously called 'explicature' (Sperber and Wilson 1986/95), intuitive or enriched 'what is said' (Recanati 2001), or 'implicature' (Bach 1994), and one of the upshots of this has been that many cases of what Grice discussed as generalised conversational implicatures – as well as certain cases of non-literal (figurative) meaning, including hyperbole, metaphor, and metonymy – are now quite widely thought to contribute to this level of directly communicated speaker meaning.

At the same time, some theorists, in particular Kent Bach (1994), Laurence Horn, (2006), and Manuel García-Carpintero (2007 and Chapter 5 of this volume), have argued the case (on varying grounds) for a minimal 'semantic' notion of 'what is said' which answers to the second of Grice's requirements – that of close correlation with sentence-type meaning. Note that if this were found to be a viable notion, it would be additional to, not instead of, the conception of explicit content favoured by relevance theorists and other contextualists (that is, explicature). This essentially follows from the fact that the minimalist 'what is said', unlike explicature, need not be, and frequently is not, speaker-meant (in RT terms, it does not fall under the speaker's communicative intention); this is a point made with particular clarity and strong endorsement by Bach (1994: 143–4). A couple of examples should

suffice here to demonstrate this minimalist notion of 'saying without meaning':

(1)   Mother (*to child crying over a cut on his knee*):
       You're not going to die.   (example due to Bach 1994)

(2)   Jim: Would you like to stay for supper?
       Sue: I've eaten.

In (1), what the mother means (m-intends, in Gricean terms) is that the child is not going to die from the cut on his knee, but what she says (without m-intending it) is that he is not going to die *tout court*. In (2), what Sue means (the explicature of her utterance, in RT terms) is that she has eaten supper that evening, but what she says (on this minimalist semantic construal) is just that she has eaten (something, at some time). Furthermore, on the Bach/Horn minimalist construal, what is said need not be fully propositional: sentences such as 'He is ready', 'She is too tall', 'I've had enough', although syntactically complete, are generally thought to be semantically incomplete, so when a speaker utters one of these, the content of what she says, in the favoured minimal sense, is just a propositional radical and, therefore, cannot fall within the propositional content meant or communicated by the speaker.

   I have argued elsewhere, at some length, that neither Bach's very minimalist 'what is said'[3] nor any other minimalist 'proposition semantically expressed', such as that advocated by Herman Cappelen and Ernie Lepore (2005), has any role to play in an account of utterance interpretation (Carston 2002: 177–81, 2006). I will not repeat those points here.[4] An interesting question arising now, though, is whether this (wholly or largely) pragmatically unaffected (context-insensitive) 'what is said' might have a role to play in some other kind of theory about language or language use, distinct from, perhaps complementary to, the concerns of a theory of utterance comprehension. García-Carpintero (2007 and Chapter 5 of this volume) answers this question affirmatively. Like Bach, he endorses the view that there are two notions of 'saying' and hence of 'what is said': the pragmatic speech act notion (explicature or implicature) and a semantic notion, according to which 'saying is just conveying [or expressing] conventionally encoded information' (García-Carpintero 2007: 172). If I understand him correctly, his idea is that the standing linguistic meaning of a sentence-type (its 'character', in Kaplan's terms), although not itself propositional, may determine a propositional content which answers to certain native speaker intuitions concerning logical properties of, and logical relations between,

natural language sentences. For instance, language users have the intuition that the inference from 'He is hungry' to 'Some male is hungry' is valid, and that the inference from 'That planet causes perturbations in Mercury's orbit, if it exists' to 'There exists a planet which causes perturbations in Mercury's orbit' is not valid, reflecting their grasp of the linguistic meaning (character) of pronouns and demonstratives.[5] These logico-semantic intuitions reflect an important part of our knowledge of language, our semantic competence, and are on a par with our intuitions about grammatical well/ill-formedness, which reflect our syntactic competence.

I have no quarrel with this (as discussion along somewhat similar lines in Carston 2002, chapter 1, indicates), nor with García-Carpintero's wider concern to account for the 'systematicity' of our semantic competence, including our knowledge of the meaning of words like 'but', 'moreover', and 'anyway', which tend to be ignored by truth-conditional semantic theories. Clearly, without the systematicity (and relative stability) of encoded linguistic meaning, or 'character-semantics', as García-Carpintero calls it, the linguistic evidence that an utterance provides the hearer with would be considerably less reliable and useful as a basis for inferring the speaker's meaning. The enterprise of detailing our knowledge of our languages, specifically of their semantic/logical properties, both complements and informs the attempt to account for how verbal communication works (we seem to have here an instance of the good old competence/performance distinction). I am not sure, though, that anything is gained by using the label 'what is said' in this essentially formal semantic endeavour, but that may just be a matter of terminological preference (for me, it is speakers, not linguistic expressions, who do the saying, referring, predicating, implicating, and so on).

Setting aside now issues around (various conceptions of) a minimal or semantic 'what is said', it seems that all the theorists discussed here (García-Carpintero, Recanati, Bach, Horn, and relevance theorists) agree on a distinction between two kinds of speaker meaning or communicated propositions: conversational implicatures, on the one hand, and the more linguistically based, more directly communicated proposition (explicature or impliciture, or intuitive 'what is said'), on the other. Despite significant differences in their theoretical frameworks, Bach, Recanati, and relevance theorists also essentially converge on the nature of this 'primary' speaker meaning or communicated content (intended here as a theory-neutral term). A particularly important point of agreement is that this can incorporate meaning whose recovery is wholly

pragmatically motivated, that is, not driven either by propositional incompleteness or by linguistically articulated elements (whether overt or covert) which call for occasion-specific contextual values.

As Bach (Chapter 8 of this volume) explains, such differences as there are between his 'impliciture' and relevance theory's 'explicature' spring from deeper differences between his Gricean framework and that of relevance theory. There are some substantive issues here which deserve attention, but they lie beyond the scope of this chapter and I will pick up on just one of the points of divergence that he mentions. The relevance-theoretic category of explicature is broader than the category of impliciture, since it includes what are known as 'higher-level' explicatures, which are propositions that are explicitly communicated over and above the basic explicature (see Wilson and Sperber 1993, 2004; Ifantidou 2001). Instances of these are given in (3b)–(3c), where (3a) is taken to be the basic explicature (Bach's impliciture):

(3)   Jo utters: 'I'll finish by Tuesday'
     a. JO WILL FINISH HER ESSAY BY TUESDAY.
     b. JO IS SAYING THAT SHE WILL FINISH HER ESSAY BY TUESDAY.
     c. JO BELIEVES SHE WILL FINISH HER ESSAY BY TUESDAY.

A higher-level explicature is one for which the pragmatic development of the logical form of the utterance includes embedding it under a speech act description or a propositional attitude description. I will focus here on the propositional attitude case.

The first thing to note is that while this sort of proposition falls within what is communicated, given the relevance-theoretic definition of ostensive communication (Sperber and Wilson 1986/95: 50–64), it might not be speaker-meant, in Grice's (and Bach's) terms. However, there *are* instances where it would be not only RT-communicated but also Gricean-meant and would, in fact, be the main point of the utterance. For instance, suppose someone I do not recognise comes up to me and says the following:

(4)   You're Robyn Carston.

The basic proposition expressed here is clearly uninformative and irrelevant to me; it looks very much as if what the speaker means and what could be relevant and informative to me is that *she knows or believes that* I am Robyn Carston. In an appropriate context – for example, at a large academic conference – this utterance might also communicate implicatures along the following lines: the speaker recognises me, we may have met before, we probably have common intellectual interests, and so on;

these are implicatures whose derivation is warranted (at least in part) by the explicature that she knows that I am Robyn Carston.

In a brief discussion, Grice acknowledged that there was a question concerning how speaker-meant propositional attitude cases (specifically, the 'speaker believes' case) should be thought of within his system:

> On my account, it will not be true that when I say that *p*, I conversationally implicate that I believe that *p* [...] it is not a natural use of language to describe one who has said that *p* as having, for example, "implied", "indicated", or "suggested" that he believes that *p*; the natural thing to say is that he has expressed (or at least purported to express) the belief that *p*. (Grice 1978: 114)

It remains unclear, then, what place this particular component of speaker meaning could occupy within Grice's taxonomy, although he goes on, later in the same passage, to say that while the speaker's commitment to the proposition that he believes that *p* is not a case of saying, 'it is bound up, in a special way, with saying that *p*' and that the way in which it is bound up with what is said concerns the role of the indicative mood (ibid.: 114).

As noted already, Bach's more expansive framework offers the further category of 'implicitures', which are completions/enrichments/developments of what is said, as distinct from implicatures, which are additional propositions external to what is said (Bach 1994: 141). But he seems unwilling to extend this category to cover the propositional attitude cases, and the reason he gives for this is: '[i]mplicitures, like implicatures, are things that speakers mean, not other things inferable from their saying what they say or from what they mean in saying it' (Bach Chapter 8 of this volume). However, the propositional attitude case is, at least on occasion, something that the speaker means, as in example (4) above and others yet to be discussed. When this is the case, it seems that Bach, unlike Grice, would opt for treating them as conversational implicatures 'since they are cases of meaning one thing by way of meaning something else' (Bach personal communication).

Let me briefly indicate a couple of advantages of an explicature account over a conversational implicature account (in addition to its meshing better with Grice's observations). In what we might think of as the standard case of conversational implicature derivation, the basic explicature plays a key role as premise, together with certain contextual assumptions, in the inferential process (for myriad examples, see Carston 2002; Wilson and Sperber 2002, 2004; Recanati 2004). As

suggested above in connection with example (4), the higher-level proposition expressing the speaker's belief in the lower-level proposition has the same sort of role. That was perhaps a somewhat unusual case, so let us consider a more ordinary communicative exchange – one where the basic explicature is not patently uninformative or irrelevant to the addressee. Suppose that Ann and Beth are old friends, who regularly tell each other the ins and outs of their lives. For some months, Ann has been listening to Beth's complaints about her 'vile' colleague Jane, but more recently Beth has mentioned instances of kind and helpful behaviour by Jane:

(5) Ann: So have you changed your views about Jane?
    Beth: She is basically a nice person.

Beth's response seems to conversationally implicate that she has indeed changed her views about Jane. The question here is on what this conversational inference is based. Ann has ready access to a contextual assumption that Beth has held the belief that Jane is a vile person and what is needed for the conclusion that Beth has changed her view (opinion/belief) is not the proposition that Jane *is* a nice person but the higher-level proposition that Beth (now) *believes* that Jane is a nice person (together with assumptions about what is involved in having a change of view about someone/thing). So what is playing the crucial premise role in the derivation of the implicature here is the higher-level explicature concerning Beth's propositional attitude. On the relevance-theoretic account, then, an implicature of an utterance quite generally rests on (is warranted by) an explicature of the utterance, rather than sometimes by an explicature/impliciture and sometimes by some other unspecified inferred entity. Other things being equal, I take it that this unified view is preferable.

Moving on now to utterances of non-declaratives (specifically imperatives and interrogatives) and the question of what they can be used to communicate as the primary speaker meaning. Consider the following exchange between Ann (tutor) and Bob (student) concerning the deadline for Bob's essay, where (6a) and (6b) are alternative utterances of Ann's, to which Bob replies as in (6c):

(6) a. Ann: Will you finish by Tuesday?
    b. Ann: Finish by Tuesday!
    c. Bob: I will finish by Tuesday

In the two possible utterances by Ann, there is no basic explicature since, although the logical form is pragmatically completed/enriched

in certain ways (for instance, the constituent BOB'S ESSAY is supplied), the propositional form thereby derived is not communicated. But, as pointed out by Deirdre Wilson and Dan Sperber (2004: 623), there is a very strong intuition that neither of these possible utterances by Ann is any less explicit than Bob's in (6c), which does communicate the explicature BOB WILL FINISH HIS ESSAY BY TUESDAY. All three surely communicate a primary speaker meaning built out of much the same elements of linguistic meaning, with the main difference being that the imperative and interrogative moods indicate that the speaker is not putting that content forward as something she endorses. According to RT, Ann's interrogative utterance communicates the higher-order proposition in (7a) and probably also the one in (7b), and her imperative utterance communicates the higher-order proposition in (8a) and probably also (8b):

(7) a. ANN WANTS BOB TO TELL HER WHETHER HE WILL FINISH HIS ESSAY BY TUESDAY.
     b. ANN WANTS TO KNOW WHETHER BOB WILL FINISH HIS ESSAY BY TUESDAY.

(8) a. ANN IS TELLING BOB TO FINISH HIS ESSAY BY TUESDAY.
     b. ANN WANTS BOB TO FINISH HIS ESSAY BY TUESDAY.

Any of these might well warrant certain conversational implicatures. For instance, suppose that Bob is already well overdue with his essay and has just enquired of Ann whether she is still willing to read and assess the essay, then her utterance of the imperative (6b) might well implicate that she is still willing to mark it provided he satisfies her communicated desire in (8b) – that it is finished by Tuesday.

Summing up, there are several reasons for favouring this account of propositional attitude cases as instances of (higher-level) explicature: (a) like basic explicatures, they are (pragmatic) developments of the encoded linguistic meaning (logical form); (b) like basic explicatures, they can play the role of an essential premise (together with intended contextual assumptions) in the derivation of implicatures; and (c) they answer to the strong intuition that non-declarative utterances, no less than corresponding declaratives, communicate a primary non-implicated proposition (explicature or impliciture). However, while this kind of unity in the account is appealing, it is probably not enough to establish the case for higher-level explicatures against its critics and more work is needed, both in teasing out the ramifications of this construct and in looking at how pragmatic frameworks that eschew it account for

the same range of communicative phenomena.[6, 7] Higher-level explicatures will not come up again in this chapter, so from now on whenever I mention explicature I will mean the basic-level directly communicated proposition (essentially the same as Bach's 'impliciture' or Recanati's intuitive 'what is said').

Finally in this section, I would like to look at the issue of the 'cancellability' of aspects of utterance meaning and how this applies to explicature. In an early presentation of his views on 'impliciture', Bach made the following statement more or less in passing, apparently taking it as pretty much self-evident: 'Implicatures are, as Grice observed, cancellable and can be vague or indeterminate, but the same is true of implicitures' (1994: 140). I would endorse this, albeit substituting 'explicatures' for 'implicitures', which in this instance makes no difference to the point being made. A slightly more precise statement would be that the *pragmatically derived* elements of the content of an explicature (or impliciture) are cancellable. This, therefore, includes pragmatic enrichments of all sorts, as well as instances of pragmatic saturation and even the results of disambiguation. However, according to Noel Burton-Roberts (Chapter 9 of this volume) '... *cancellation* of explicature is logically impossible and empirically incorrect.' There are two claims here, each of which I will look at briefly, despite the oddness of their conjunction (one might expect logical impossibility to wipe the issue of empirical (in)correctness off the agenda). First, though, let us go back to Grice's original discussion of the property of cancellability – this was the starting-point for my application of the term to explicature (Carston 2002: 138–40), which in turn is the focus of Burton-Roberts's criticism.

For Grice, cancellability is one of several diagnostics that can be used to help decide whether or not a particular aspect of utterance meaning constitutes a conversational implicature:

> a putative conversational implicature that *p* is explicitly cancellable if, to the form of words the utterance of which putatively implicates that *p*, it is admissible to add *but not p*, or *I do not mean to imply that p*, and it is contextually cancellable if one can find situations in which the utterance of the form of words would simply not carry the implicature. (Grice 1978: 115–16)

What he meant by an explicit cancellation being 'admissible' is spelled out a little more in Grice (1981: 186), where he talks of the possibility of attaching a cancelling clause 'without logical absurdity' or

'linguistic offense'.[8] Leaving aside *contextual* cancellability for the moment (although this instantly secures the case for the cancellability of explicature), let us take a look at some applications of the explicit cancellation procedure since Burton-Roberts is solely concerned with this.

Consider the following, where *P* is an aspect of utterance meaning and *Canc* is a conjunction of the original utterance and a cancelling clause:

(9) A: Does Bill have a girlfriend these days?
　　 B: He flies to New York every weekend.
　　 P: Bill has a girlfriend (in New York).
　　 Canc: He flies to New York every weekend but he doesn't have a girlfriend (there).

(10) Utterance: John killed the hedgehog.
　　 P: The hedgehog died.
　　 Canc: John killed the hedgehog but it didn't die.

(11) Utterance: He took off his trousers and got into bed.
　　 P: The trousers' removal preceded the getting into bed.
　　 Canc: He took off his trousers and got into bed, but not in that order.

(12) Utterance: Mary is intelligent but she is moody.
　　 P: There is some sort of contrast between Mary's being intelligent and her being moody.
　　 Canc: Mary is intelligent but she is moody and I don't mean to imply that there is any sort of contrast between her being intelligent and her being moody.

The first two cases of applying the 'cancellability *test*', as Grice tellingly calls it, give clear results: in (9) the implication in question is clearly cancellable without causing any linguistic anomaly while in (10) it is not (the result is clearly contradictory). Hence the status of the implication in (9) as a conversational implicature is, to this extent at least, confirmed, while that in (10) seems clearly disconfirmed. The outcomes of the test are not as starkly distinct in the cases of (11) and (12) but still clear enough, I think. The application in (11) is taken directly from Grice (1981) who suggests (as tentatively as ever) that there is no 'linguistic offense' here, which is an indication that 'what one has here is a conversational implicature, and that the original suggestion of temporal succession was *not part of the conventional meaning*

of the sentence' (ibid.: 186 [my italics, RC]). In (12), on the other hand, (discussed very briefly in Grice 1961),[9] there does seem to be a linguistic offence of some sort, if not the clear contradiction that there is in (10), indicating that the implication of contrast (or unexpectedness) is not conversationally induced but is a matter of conventional meaning (of the word 'but').

Several points emerge from Grice's various brief discussions of cancellability (Grice 1961, 1975, 1978, 1981):

(i) He sees it as a test or diagnostic tool whose results provide *some evidence* or indication that what one is dealing with is a conversational implicature. He does not think that the cancellability test is decisive (Grice 1978: 116) and maintains that what is required to establish definitively the presence of a conversational implicature is an account of how it could be inferred (Grice 1981: 187).

(ii) As already indicated in the italicised part of the quotation above, what the test is for is to distinguish between cases of 'conventional meaning of expressions' and cases of utterance meaning that depend on the observation of the conversational maxims or at least the Cooperative Principle (Grice 1975: 56–8). The immediate context of Grice's discussion was his distinction between generalised conversational implicature and conventional implicature (for example, (11) and (12) above), which can be quite hard to tell apart and for which cancellability and various other Gricean diagnostics can, therefore, play a useful role (while the status of occasion-specific conversational implicatures, such as (9) above, is not usually a matter of contention).

(iii) Given that the key distinction is between the conventional and the conversational (or, in RT's terms, the linguistically encoded and the pragmatically inferred), it would seem to follow that such context-dependent aspects of what is said as the results of disambiguation and reference assignment should also be cancellable without linguistic offence. Although Grice himself did not mention this, it was pointed out quite early on (by Sadock 1978 and others) that one of the shortcomings of admissible cancellability as a diagnostic for conversational implicature is that the test gives a positive result for cases of clear ambiguity (as in (13)).

(13)   a. John ran to his coach but he didn't run to any vehicle.
       b. John ran to his coach but he didn't run to an instructor of any
          sort.

In other words, one tentative disambiguation can be cancelled in favour of the other without linguistic upset, which is as we would expect if cancellability were a property of any and all pragmatic inference.

(iv) It is significant that Grice's own applications of the various tests, in particular cancellability and (non)detachability, were largely pitched at the lexical level, for example, at putative strong senses of connectives such as 'and', 'or', and 'if'; operators like 'some', 'a', and 'the'; and other words for which some ordinary language philosophers had proposed rich senses, including 'know', 'voluntary', and 'try' (Grice 1967: lectures 1–3). Given this focus, he was happy to run the cancellability test on quite schematic sentence forms such as 'A tried to x and he succeeded admirably' (thereby cancelling any postulated implication carried by 'A tried to x' that A failed to x). [The relevance of this point will be more apparent shortly when we look at applications of the test to explicature.]

(v) As briefly mentioned before, in all of his discussions of cancellability, Grice gives as much weight to 'contextual' cancellability as to explicit cancellability, although commentators have tended to focus on the latter. As he put it:

> a putative conversational implicature that *p* is [...] contextually cancellable if one can find situations in which the utterance of the form of words would simply not carry the implicature (Grice 1978: 115–16) [10]

The possibility of contextual cancellability makes it crystal clear that any and all pragmatically derived elements of utterance meaning are cancellable: the meaning that an ambiguous linguistic form has in one particular context can change when the form occurs in a different context; ditto for the meaning (the referent) of a pronoun; ditto for the completion of 'She is ready' and for the location supplied for 'It is raining', and so on.

For the sake of the argument, let us set aside contextual cancellability, which Burton-Roberts does not consider, and look at his two claims concerning the inapplicability of explicit cancellability (as in Grice) to explicature: (i) it is logically impossible to cancel an explicature, and (ii) applying the test gives empirically incorrect results. To ease our way into the first point, consider two of the examples he discusses, (14) and (15):

(14) She's ready but Karen isn't ready to leave for the airport.

(15) She's ready but she's not ready.

It seems to me (and to every student whom I have tried it out on) that there is a clear difference between (14) and (15): while the former is not contradictory or in any other way *linguistically* anomalous, the latter is; in fact, (15) is judged by most people to be a clear contradiction. But, says Burton-Roberts, neither of them can even be assessed for contradictoriness (they fall outside the domain of eligible entities) because contradiction is a logical relation that holds only between truth-evaluable propositions and, on the relevance-theoretic view, these two examples are not fully propositional as they stand, but merely templates or schemas which require pragmatic processing (specifically, reference assignment and completion of 'ready') in order to attain propositionality.

It is true that relevance theorists are committed to the view that, by and large, sentences per se do not encode propositions and various pragmatic tasks have to be performed in order to derive the explicature of an utterance. In effect, Grice took the same view with regard to 'what is said', although the pragmatic tasks he envisaged were fewer: in many instances, no truth-evaluable proposition can be grasped prior to disambiguation and/or reference fixing. But the point is: people can and do, quite confidently, assess (14) and (15) for contradictoriness and they find (14) non-contradictory and (15) contradictory. On that basis, I take the explicature of a particular utterance of 'She's ready' (for example, KAREN IS READY TO LEAVE FOR THE AIRPORT) to be cancellable, as in (14). Similarly, as mentioned above in point (iv), Grice used quite schematic (arguably, non-propositional) forms (for example, 'A tried to x and he succeeded in x-ing') when running the test and was satisfied with the resulting judgements of (non)contradictoriness and/or linguistic (in)felicity.

What needs explaining here, then, is why/how people so readily make these judgements even when they are well aware of the context-sensitivity of 'she' and the need for context-specific completions of 'ready'. Of course, if one were to utter (15) in such a way as to render the two occurrences of 'ready' (or of 'she') non-homophonous – perhaps by giving them distinguishing prosody (stress and intonation) – thereby effectively indicating that they are to be given different semantic values, (15) would be much less likely to be judged contradictory. So do we simply forget about, or abstract away from, context-sensitivity when presented (out of context) with an apparently perfectly homophonous 'S but not S'? I do not know, but two considerations seem relevant to me in understanding what is going on here. First, recall García-Carpintero's point discussed above that, although encoded sentence meaning is usually not propositional it can determine a propositional content and

this propositional content seems to inform native speakers' (reflective, off-line) intuitions about the logical properties/relations of natural language sentences. In fact, we can propositionalise virtually any element of meaning, including something clearly sub-sentential like 'On the table', if we need to do so for some purpose. The second point concerns the nature of the propositional form we construct and it seems that the default move (the *least effort* move, probably) is to assume sameness of semantic value for sameness of form. Just how far this goes I am not sure, but it might well extend even to such obviously context-sensitive terms as indexicals and demonstratives, and perhaps also to ambiguous forms like 'bank'. Consider 'She's here and she's not in Paris' vs 'She's here and she's not here' (with no distinguishing prosody on the two occurrences of 'here'). I think many people would say that while the first one is not contradictory the second one is, and that is because they take this sentence, decontextualised as it is, to express something like: *a* is at location *b* and *a* is not at location *b*.[11]

So I am unmoved by the claim that explicature cancellation is logically impossible on the grounds that sentences do not encode propositions (although I agree that, generally, they do not) and, therefore, cannot be assessed for contradictoriness (or other logical properties). The point is that native speakers can and DO make judgements about whether conjoined sentences, such as those in (14) and (15), are contradictory or not and this is a reflection of their knowledge of the semantic properties of their language (specifically of the context-invariant conventional or encoded meaning of words in their language). Naturally, the pragmatically inferred elements of an explicature can be explicitly cancelled without contradicting the encoded content of the utterance.

Let us move now to the 'empirical incorrectness' claim. Here are some key examples:

(16)   a.   Utterance: I haven't eaten breakfast.
     b.   *EXPLICATURE*: I HAVEN'T EATEN BREAKFAST TODAY
     c.   *Canc*:   I haven't eaten breakfast – but I have eaten breakfast today.

(17)   a.   Utterance: Everyone left early.
     b.   *EXPLICATURE*: EVERYONE AT PROFESSOR DRONE'S LECTURE LEFT EARLY.
     c.   *Canc*:   Everyone left early, but not everyone at Professor Drone's lecture left early.

Both of the attempted cancellations here give rise to something pretty anomalous, even contradictory, so it might seem that these particular

explicatures are not cancellable and that, therefore, the claim that explicatures are cancellable is, after all, wrong. I do not draw this conclusion. Rather, what these examples demonstrate to me is that there are a few cases to which it is difficult to apply the *explicit* version of the test – and it is pretty clear what is causing the difficulty here. As is well known, pragmatic enrichment, unlike implicature derivation, is a *local* process, that is, it effects modifications at a lexical or phrasal level (see Recanati 2004; Hall 2008a, 2008b). A consequence of the localness of the pragmatic effect is that sometimes, as in these examples, it may fall within the scope of operators (quantifiers, negation, propositional attitudes, and so on), with the result in some cases (depending on the semantic properties of the particular operator) that entailment relations are reversed. Focusing on (16), while the positive sentence 'I've eaten breakfast today' (arguably) entails 'I've eaten breakfast' and so the more specific meaning can be cancelled without contradicting the more general meaning, negation reverses the entailment relation and makes a comparable cancellation inadmissible. This means that the test has to be applied with some care, making appropriate allowances for certain embedded enrichments, perhaps by running it on the disembedded counterpart when that seems feasible (as it clearly is for (16), but less obviously so for (17)).

But there is really no need to go to all this trouble since we are not confined to the *explicit* version of the cancellability test. As noted earlier, for Grice (and so also for relevance theorists), the cancellability of some element of utterance meaning can be established *contextually.* It seems quite clear that the pragmatically inferred elements in (16b) and (17b) are contextually cancellable – they simply will not show up in certain other contexts (for example, an utterance of (16a) in the context of a group therapy session in which individuals are disclosing their long-term idiosyncratic eating habits). In short, the alleged empirical shortcomings of applying the Gricean cancellability test to explicatures are easily surmounted.

However, Burton-Roberts extends his criticism of the applicability of cancellability even further. He denies that *any* speaker meaning is cancellable, on the grounds that speaker meaning is, by definition, meaning that is intended (m-intended, in fact) by the speaker and '[c]ancellation of intention – be it an intention-to-explicate or an intention-to-implicate – is impossible. What was intended *was intended*' (Burton-Roberts Chapter 9 of this volume). What Grice and others have been presenting as explicit cancellation clauses should, he says, be viewed instead as attempts by a speaker to *clarify* (rather than *cancel*)

her intended meaning (when, for instance, a hearer seems not to have grasped it). Thus, the charge of non-cancellability, originally aimed just at explicatures, is extended to Gricean conversational implicatures and Grice's conviction that 'all conversational implicatures are cancellable' (Grice 1978: 116) must simply be wrong.[12]

But there is a world of difference between Grice's (and my) employment of a cancellability *test*, that is, a tool or diagnostic for theorists to use in aid of their semantic/pragmatic analyses, and the quite different notion of 'speaker cancellation' discussed by Burton-Roberts, which places the process in an actual on-line communicative situation and which, as he says, amounts to a speaker clarifying her intended meaning for the hearer. Recall, yet again, that Gricean admissible cancellability may be shown by placing the words uttered in a different context, which is a clear indication that in carrying out the test we are not tied to any particular communicative intentions.[13] In the hurly-burly of actual communicative interactions, a speaker may carry out any of a variety of acts of clarifying, self-correcting, repairing, or rewording of aspects of her utterance. The cancellability (or not) of aspects of utterance meaning is a different matter entirely; it is a means of distinguishing between two sources of meaning: linguistic conventions (the code) and non-demonstrative (hence defeasible) pragmatic inference. A speaker may seek to clarify virtually any aspect of her utterance, whether it was originally linguistically encoded or left to pragmatic inference, but only pragmatically inferred aspects of utterance meaning (whether conversationally implicated or components of explicature) can admissibly be cancelled, in Grice's sense.[14, 15]

In Section 3, I focus on what has become one of the most contentious issues in current semantics/pragmatics: whether or not there are components of explicit utterance content which are not only recovered by pragmatic inference, but whose existence is entirely *motivated* by pragmatic considerations, specifically by the goal of finding an optimally relevant interpretation.

3   Optional pragmatic processes or optional covert linguistic structure?

Among the cases of possible unarticulated constituents of an explicature (equated by many with the truth-conditional content of the utterance) that have been discussed in the literature are the following, where the bracketed constituent has not been overtly expressed:

(18)   a. It is raining.   [in Granada]
        b. I have eaten.   [supper]

    c.   Every bottle is empty.   [in the fridge]
    d.   Jill reported Jack for misconduct and he was fired.   [as a result]

Certain semanticists have taken the view that either there *is* some linguistic articulation of the pragmatically contributed element or, if not and the pragmatic process is a free one, the result is a conversational implicature, and so a non-truth-conditional aspect of utterance meaning (see, in particular, Stanley 2000; King and Stanley 2005). With regard to the first three cases, the view would be that there is a covert indexical element in the linguistic logical form: a location variable in (18a), an object argument in (18b), and a domain variable in (18c), while the cause-consequence relation in (18d) would be an implicature. I do not intend to review the by now fairly extensively discussed arguments for and against this sort of proposal. Instead, I will focus on a single respect in which the analysis in terms of hidden elements has been found wanting by people on both sides of the debate, namely, that these alleged covert indexicals seem to behave differently from overt indexicals (see Carston 2000; Recanati 2002; Martí 2006).

In order to grasp fully the proposition explicitly communicated by an utterance containing an overt indexical, a hearer has to find the intended occasion-specific value for the variable. In other words, linguistic forms like 'she', 'it', 'this', 'that', 'here', 'there', and so on, must be assigned a specific value rather than be merely existentially closed. A hearer of 'She's happy' who retrieves just the proposition SOME FEMALE PERSON IS HAPPY has not fully grasped the proposition expressed. The pragmatic process of assigning a referent to 'she' is obligatory. This does not seem to be the case for at least some of the alleged covert indexicals. For instance, there are some occurrences of (18b) for which there is no need to supply a particular object value (for example, 'After I'd eaten this morning I felt quite sick'), and, arguably, so also for some utterances of (18a) (for example, 'What happens in the atmosphere when *it rains*?' and see Recanati's 2002, 2007 'weatherman' example). In other words, it is not always the case that correctly grasping the proposition explicitly communicated requires saturation of the (alleged) linguistic variable; an existentially closed interpretation is quite sufficient in some contexts. This upsets the idea that the elements proposed by Jason Stanley are simply covert counterparts of overt indexicals; rather, they appear to be a new and unknown category of linguistic element (for which there is scant evidence). Many theorists see this as an unattractive feature of Stanley's account, among them Martí (2006), who is

otherwise totally at one with the former's dictum that all and any extra-linguistic contextual effects on truth-conditional content (explicature) can be traced to linguistic logical form.

Martí's solution is to posit *optional* covert variables, such that if and when they do occur they must be assigned a specific contextual value, just as in the case of overt indexicals.[16] The pragmatic process involved is the apparently semantically safe process of obligatory saturation (which straightforwardly maintains semantic compositionality). So, for the case of an utterance of 'It is raining', which is the primary focus of her discussion, there are several possible logical forms, including one with a covert location variable and one without, and when the sentence uttered has the first kind of logical form, the variable is always saturated by a specific value for the location (or it is bound by a quantifier), just as for overt indexicals. She sees this proposal as a fleshed-out version of a possibility I briefly considered when discussing the problem posed by the existential closure interpretation of some of Stanley's hidden indexicals (Martí 2006: 151 n 7):

> Another way out might be to propose that the sentence 'I have eaten' (and innumerable others) has a variety of logical forms, each with an array of variables, differing in number and type (including one with none), marking possible contextual completions. In the case of a sentence with four variables for different constituents, that means sixteen linguistically provided logical forms.

In Carston (2002: 204) I dismissed this as a non-starter, because the considerable proliferation of logical forms for a single surface form seemed to me (and still does) both wildly counter-intuitive and excessively computationally burdensome. Martí explicitly accepts the latter point but maintains that this is a general problem for all standard semantic treatments of indexicals, whether overt or covert. And anyway, she says, it is far less pernicious than positing the non-standard and mysterious process of free pragmatic enrichment, whose defendants do not have a leg to stand on since they have not 'provided a coherent and detailed algorithm that explicates the operation of the process of free enrichment' (Martí 2006: 151–2).

In his chapter in this volume, Recanati, one of the great advocates of free pragmatic enrichment, sees Martí's account as simply 'another – admittedly deflationary – syntactic construal of free pragmatic processes.' He seems to be taking the view that there is not much difference between Martí's approach in terms of optional covert variables and one

such as that pursued within relevance theory in which free pragmatic enrichment is a matter of augmenting or adjusting conceptual representations in the process of inferential comprehension, a 'syntactic' process in his terms.[17] He says that the only possibly substantive difference between the optional covert linguistic structure account and the optional pragmatic enrichment account 'is that the level of syntactic representation to which the additional elements belong remains within the confines of the language system (rather than involving a shift to the conceptual system)' (Recanati Chapter 2 of this volume). In what follows, I will suggest that this *is* a consequential difference, at least if what we are interested in is an account of utterance comprehension, and that the processing consequences weigh against the optional covert indexical view.

According to Martí's account, on any occasion of utterance comprehension, any number, possibly all, of the various logical forms that could underlie the surface structure are derived and the correct one is selected pragmatically. For instance, for any utterance of 'It is raining', including those for which the proposition the speaker expresses does not incorporate either a specific location of raining or any binding of a location variable by a quantifier, a structure containing a location variable may nevertheless be derived. As she puts it: 'the system tries out different derivations, and only those that comply with all the principles of grammar, including Gricean principles, are successful' (Martí 2006: 150). She gives five possible derivations for an occurrence of 'it is raining', three of which involve covert location variables. What the optionality claim seems to amount to is that the variable-containing structures generated may be eliminated as the derivation process proceeds. It is not totally clear to me whether she assumes that all possible derivations are tried out in every instance (perhaps in parallel) or envisages a sequential process of trying out derivations. Since this 'derivation' process includes pragmatics (conformity with Gricean principles), it should be that, in cases of satisfactory communication, at most one of the possibilities is ultimately successful for any given utterance. So, if derivations are tried out one by one (there being some basis for the order in which they are accessed), it may well be that, at least on some occasions, the successful solution is found before all possibilities are generated. Either way, though, the computational burden is heavy, as she acknowledges, and it frequently involves the generation of logical forms which turn out to be wrong for the utterance being interpreted.

Free pragmatic enrichment, on the other hand, is truly optional: it occurs only when pragmatically motivated, that is, only when it is

required for the interpretation of the utterance to meet the usual standards of rational communicative behaviour (for example, the Gricean maxims or the criterion of optimal relevance). So for any given utterance of the unembedded string 'It is raining', a single logical form (without a location variable) is derived – the same in every instance – and, only if pragmatically warranted, the relevant location of raining is inferred. Martí's claim (ibid.: 151) that the two accounts are equally costly in terms of the number of different representations required to be generated is simply wrong. On any occasion of utterance, the free enrichment account involves a single logical form and, assuming successful communication, a single (pragmatically enriched) basic explicature. The optional covert structure account, on the other hand, can involve the generation of multiple logical forms and, even on the most minimal derivation possible within this system, an interpretation of 'It is raining' as referring to a specific location requires a mediating logical form containing a location variable.

Setting aside considerations of computational/representational economy and going along for now with the idea that multiple logical forms are generated for 'It is raining' or 'I have eaten', let us consider how the interpretation process works. There are clearly two obligatory pragmatic tasks involved: selection of the correct logical form (a kind of structural disambiguation) and, in the case where the form chosen includes a covert indexical, provision of a context-specific value for this (a process of saturation). Both processes require the accessing of information from a wide extra-linguistic context, constrained by pragmatic principles (and so are bound to be heuristic and defeasible, rather than algorithmic). Consider an example:

(19)   Ann and Ben are in their London flat and Ann has just got off the phone after talking to her parents in Christchurch, New Zealand.

Ben: How are they?
Ann: Mum's a bit fed up. It's raining so she can't get out into her garden.

I take it that the explicitly communicated (truth-conditional) content of Ann's utterance of 'It's raining' is: it is raining in Christchurch New Zealand. On Martí's account, this has to be a case of saturation of a location variable occurring in the logical form of the utterance. In comprehending Ann's utterance (grasping her meaning), Ben's linguistic system may derive (access or construct) two logical forms, one with a covert location constituent, and one without. What is the basis for choosing

the first of these? The answer, fairly obviously, is that the selection of the form containing the covert indexical follows from the contextual presence of the propositional constituent CHRISTCHURCH NEW ZEALAND, which is readily available to the hearer given his knowledge that Ann is reporting on the situation where her mother lives. The proposition that it is raining in Christchurch New Zealand is both highly accessible to Ben and is the overwhelmingly likely speaker meaning (given its low cost and high relevance).

The logical form thereby selected then requires the further pragmatic process of giving a specific contextual value to the location variable it contains (saturation). But now we see clearly that something has gone awry: there is no need for any such variable-saturation process since the relevant value (CHRISTCHURCH NEW ZEALAND) is already in place. This odd state of affairs has arisen because the pragmatic basis for selecting the right logical form has relied on a prior identification of the correct propositional content.

It is worth noting that the ambiguity created by this 'optional covert indexical' account, that is, the multiplicity of logical forms, is quite unlike familiar instances of structural ambiguity, such as 'She saw the spy with binoculars' or 'Visiting relatives can be fun'. In these uncontroversial cases, the ambiguity is not just a matter of two distinct syntactic structures (differing only in that one has an additional adjunct category) but of two distinct meanings or conceptual contents – for example, SEE WITH BINOCULARS and SPY WITH BINOCULARS – and the role of pragmatics is to choose the more relevant one on the particular occasion of use. With respect to the two (let us assume) logical forms at issue on an optional covert elements account, we have a single content (for example, IT'S RAINING), which is present in both of them, and an additional element in one of them indicating that another constituent of content is to be supplied. Here the task for pragmatics is not to decide between two senses or contents but to answer the question: are we or are we not required to supply further constituents of content in this context, specifically, a constituent specifying location? My point is that, in this sort of case, it is the high accessibility and relevance of the context-specific component of content itself (for example, CHRISTCHURCH NEW ZEALAND) that provides the answer to the question and tells us which of the two logical forms is the right one. But the only point in deriving the logical form of an utterance is for the role it plays as input to the pragmatic processes responsible for recovering the intended propositional content. If we already have that propositional content (derived pragmatically on the basis of the decoded linguistic meaning IT'S RAINING,

which is the common contentful core of all the alleged logical forms), no purpose is served by recovering any other logical form. In other words, on the optional covert indexical account, the processes appear to be back to front and constructing a variable-containing logical form is unnecessary and computationally wasteful. This outcome could reasonably be taken to indicate that there just are no optional covert linguistic elements.[18, 19]

Contrary to Recanati (Chapter 2 of this volume), Martí rejects any suggestion that her account amounts to a version of free enrichment and is adamant that she stands with Stanley against any position that allows strong pragmatic effects on truth-conditional content. I think Recanati is right about the similarity of the optionality positions if one takes an abstract, god's-eye view of the various component pieces required in the move from the overt linguistic form to the truth-conditional content or explicature (one way or another, you optionally wind up with more constituents than are visibly or audibly present in the entity with which you start). However, what I have tried to show above is that, when we look at the actual on-line processes of comprehension, there are important differences between the two positions. There can be no saturation without a variable to saturate, but uncovering the evidence needed to establish the presence of the variable-containing logical form seems to involve the prior recovery of content which is indistinguishable from what a free pragmatic enrichment process would deliver. Thus any process of variable saturation is pre-empted and the variable-containing logical form is superfluous.[20]

Martí repeatedly emphasises that her approach uses only well-established syntactic and semantic machinery (unlike the free enrichment account) and rests on standard linguistic assumptions. However, I would question the semantic assumption that seems to underlie her whole approach, namely that the grammar, specifically the semantic component of the grammar, delivers the truth-conditional content of an utterance, where this truth-conditional content is non-minimal and seems to equate with what the speaker has said (explicature). By non-minimal, I mean that it is considerably richer than the minimal propositional semantics of, say, Emma Borg (2004), who excludes all pragmatic processes (defeasible inferences) from semantics, or even of Cappelen and Lepore (2005), who confine the role of pragmatics in semantics to the fixing of values for the small set of overt indexicals. Unlike their approaches (or those of relevance theorists or Bach, for whom semantics need not deliver anything fully propositional), Martí takes the domain of semantics to be *intuitive truth-conditional content*. That this is intended

to be identical with what is explicitly communicated (said and meant by the speaker) is backed up by statements such as the following: 'the derivation for a sentence with an overt pronoun crashes if there is no referent for the pronoun in the context' (ibid.: 143), 'the system tries out different derivations, and only those that comply with all the principles of grammar, including Gricean principles, are successful' (ibid.: 150), and 'a simple string such as *He left* has an infinite number of derivations in the system' (ibid.: 151).

Although this view of the nature of semantics certainly has a history, it is far from well established and uncontroversial nowadays – it has, for instance, been dubbed 'the Mistaken Assumption' by Cappelen and Lepore (1997, 2005), who have mounted an array of tests designed to show that much of what we intuitively take to contribute to what the speaker has said does not fall within semantics. For those who take a modular view of language, such as Chomsky, Fodor, Borg, and most relevance theorists (for example, Sperber, Wilson, Carston, and Hall), the output of linguistic processing falls well short of answering to ordinary speaker-hearer intuitions about the truth-conditional content of utterances. In criticising Recanati's 'truth-conditional pragmatics', Martí strongly implies that she herself sees semantics as a module separate from pragmatics (ibid.: 139). I do not know what to make of this since, on any characterisation of modularity that I know of, the essence of a modular system is that it operates in accordance with its own dedicated (domain-specific) system of rules or procedures, and, on the widely accepted Fodorian definition, the language system is encapsulated from extra-linguistic context, including perceptually available information and beliefs about speaker intentions. However, Martí's semantic module includes Gricean principles which perform tasks such as disambiguation and the assigning of contextually relevant referents to pronouns, both of which require penetration of the system by a non-pre-specified range of contextual information. So these tasks are not algorithmic, hence not formally tractable, as Borg (2007) says in forcefully arguing against reference assignment being a semantic process. And the pragmatic principles or heuristics which guide these tasks must also be at work in a distinct system responsible for deriving conversational implicatures, so there is certainly no clear-cut semantics/pragmatics distinction here. In short, the assumptions on which Martí's account is founded are far from being standard or widely accepted and need their own defence.[21]

The focus in this section has been on the free pragmatic process of supplying linguistically unarticulated constituents of content. In Section 4, I move to the other kind of free pragmatic enrichment, that

which effects modulations or adjustments of linguistically encoded (articulated) meanings. An issue I will not directly address in this chapter but which is worth bearing in mind is whether we are right to be thinking in terms of two distinct processes. Perhaps the one can be recast in terms of the other and, even if this is not generally the case, there is a question about the right analysis of specific cases (for instance, it might be that some of the examples just discussed would be better construed as cases of modulation of encoded linguistic meaning).

4   Lexical pragmatics, *ad hoc* concepts, and metaphor

Understanding the intended meaning of a word on a particular occasion of utterance typically requires some degree of modulation or adjustment of its encoded meaning. As discussed in recent relevance-theoretic work, this involves an interaction among the lexically encoded concept, other concepts encoded by the utterance, and contextual information, which is constrained by the hearer's expectation of relevance (see, for example, Wilson and Carston 2007). The outcome of this process is what is known as an *ad hoc* concept ('ad hoc' in that it has to be inferentially derived on, and for, the particular occasion of use) and it is marked with an asterisk (HAPPY*, MAN*, OPEN*, and so on) to distinguish it from the context-independent lexical concept (HAPPY, MAN, OPEN, and so on). The pragmatically derived concept may be more specific or more general than the encoded concept; that is, its denotation may be either a proper subset or a superset of the denotation of the linguistically encoded concept, or it may be a combination, both extending the lexical denotation and excluding some part of it. Consider a very simple example:

(20)   Let's dance.

It is not too difficult to think of a range of scenarios in each of which 'dance' would be understood somewhat differently: suppose speaker and addressee are (i) at a ball where the orchestra has just started playing a waltz, (ii) at a Scottish céilidh where a six-person round is about to begin, (iii) at a party where people are moving about individualistically apparently in response to blaring rock music, or (iv) suppose the speaker is Rudolf Nureyev addressing Margot Fonteyn. Although the word 'dance' is used literally in all these cases, the particular concept expressed is likely to be distinct in the four situations, each one of which is a more specific (narrower) concept than the lexically encoded concept DANCE. Suppose next that the interlocutors are, in fact, already dancing but in a somewhat unenergetic, lacklustre way when one of

them, inspired by a change in the music, utters (20), thereby communicating a concept that might be roughly paraphrased as 'dance in an intense, focused, lively way', or 'do our flamboyant party piece' – hence further narrowings of the lexical concept. Equally, the opposite sort of concept adjustment, loosening or broadening, could result in any of a range of concepts, from those that involve extensions to the range of bodily movements included in the denotation, for instance, what might be roughly paraphrased as 'walk together in a light, rhythmic way, keeping in step with each other', through to those of a more clearly metaphorical nature, like 'spend our life harmoniously together, attuned and responsive to one another, never moving far apart'. Further variations in the 'dance' concept expressed will come with a change of subject: consider, for instance, 'Bees dance to tell their conspecifics where nectar is located' or 'See how the daffodils dance in the breeze'. In short, the unambiguous verb 'dance' might be used to communicate any of an indefinite range of related concepts (DANCE*, DANCE**, DANCE***, ...). See Carston (2002) and Wilson and Carston (2006, 2007) for more examples and more detailed analysis and explanation.

This is a 'free' pragmatic process, in that nothing in the linguistic form indicates that it must be carried out; it is therefore optional, that is, there are contexts where the encoded lexical concept would suffice (an utterance of 'Children in most cultures dance spontaneously' might be an example where the encoded concept DANCE is communicated). The consensus is that these pragmatic adjustments contribute to explicature (hence to the truth-conditional content of the utterance) rather than merely being implicated (for arguments supporting this point, see the references immediately above). This kind of free pragmatic process has not drawn the barrage of fire that the possibility of unarticulated constituents of content has – probably for the following two reasons. First, although it is not a linguistically mandated pragmatic process, it appears to involve working with a lexically encoded concept and so to be constrained by the information made accessible by that encoded meaning (in fact, on the RT account, as we will see shortly, the strictly linguistic contribution is very minimal). Second, it does not seem as directly threatening to a principle of semantic (truth-conditional) compositionality as do constituents of content which are wholly unarticulated within the linguistic form of the utterance.

Although contextualist philosophers of language have for quite some time been pressing the point that word meaning is irremediably context-sensitive and occasion-specific (see, in particular, Travis 1985, 1997), the attempt to give a cognitive account of the mechanisms

and processes involved is quite recent. Thus there are many intriguing questions yet to be pursued, in particular concerning the nature of *ad hoc* concepts in the mind, how they are 'constructed' or accessed in the course of utterance comprehension, how they can be progressively conventionalised and lose their 'ad hoc' status, and so on. Here, I will take up two central issues (or sets of issues) which are raised by a number of contributors to this volume. The first concerns the nature of the linguistic semantic input to the pragmatic modulation processes, specifically whether or not lexically encoded concepts are atomic or structured/decompositional, a question which then arises in turn for the output, that is, the derived *ad hoc* concepts themselves. The second array of issues concerns certain figurative uses of words (and phrases), including metaphor, simile, and metonymy. Each of these gets a different treatment within relevance theory: metaphor is claimed to be a case of loose use (on a continuum with approximations, category extensions, and hyperboles) and so is accounted for by the same inferential mechanism of concept adjustment as the cases just discussed; similes have received little attention, but it has generally been assumed that they are not subject to the kind of conceptual adjustment, in particular broadening, that their corresponding metaphors undergo; and metonymic uses present an interesting challenge since they seem to result in an *ad hoc* concept which contributes to explicature (truth-conditional content) but they are not instances of narrowing or broadening of the encoded lexical concept.

Starting with the first set of issues, let us consider the relevance-theoretic stance on lexical meaning. The first thing to say is that, as regards their encoded semantics, words are taken to be a heterogeneous lot: some of them encode full-fledged concepts; some encode 'proconcepts' or conceptually incomplete information (for discussion and examples, see Sperber and Wilson 1998: 185), while others encode procedural meaning (constraints on pragmatic inference), and this category is itself very heterogeneous, allegedly including pronouns, discourse connectives, tense, aspect and mood indicators, particles, and interjections. Here we will confine our attention to those words that, arguably, encode full-fledged concepts.[22] The central claim about these is that they encode *atomic concepts* rather than molecular (structured) ones. Abstracting from the important formal linguistic information (phonological and syntactic) stored in lexical entries, what this means is that there is a simple mapping from lexical form to mental concept; the concept is completely unstructured and the lexical entry does not specify any further information about its content or semantic behaviour. In

short, the position is essentially the same as that of Fodor's 'disquotational lexicon': the word 'house' means HOUSE, 'miserable' means MISERABLE, 'keep' means KEEP, and so on (see Fodor 1998; Fodor and Lepore 1998, 2002). (However, for an important difference between RT and Fodor on conceptual content, see note 24 below). Given the heterogeneity point above, it follows that the conceptual atomism claim applies to only a subset of the vocabulary, albeit a sizable one, consisting of many of those lexical items that fall into what are informally termed 'open word classes'– specifically nouns, verbs, and adjectives.

Since the opposite view, that lexical meanings are decompositional, is widely supported (including by some contributors to this volume), some brief discussion is in order. It seems to me that the Fodorian arguments against *definitional* lexical decomposition are unassailable (see, for instance, Fodor et al. 1975, Fodor et al 1980; Fodor 1998). The most compelling of these, perhaps, is that no-one has been able, despite centuries of trying, to give adequate definitions for any but a tiny group of words (for example, 'bachelor', 'mother', and their ilk). There seem to be principled reasons why, for instance, natural kind terms cannot be analysed beyond the observation that a whole bunch of them entail ANIMAL, COLOUR, PLANT or METAL: what concept is to be added to COLOUR in order to give us RED, other than RED itself; what concept(s) are to be composed together with ANIMAL to give us HORSE, and so on? Furthermore, children's conceptual acquisition seems to proceed from the allegedly more conceptually complex concept (MOTHER, RED, HORSE) to the allegedly more basic or primitive one (PARENT, COLOUR, ANIMAL). I will not rehearse the arguments in any more detail here. Most advocates of complex lexical meanings nowadays favour some kind of *non-definitional* form of decomposition (for example, Pustejovsky 1995; Jackendoff 2002: chapter 11; Vicente and Martínez-Manrique (Chapter 3 of this volume); and Vicente Cruz (Chapter 4 of this volume)). I touch on some of the problems with this seemingly more reasonable decompositional position below.

On the relevance-theoretic view, what the encoded atomic concept amounts to is an address in memory or, viewed from a different perspective, a basic element of the language of thought (a monomorphemic 'word' in Mentalese). The content or semantics of this entity is its denotation – what it refers to in the world – and the lexical form that encodes it, in effect, inherits its denotational semantics. This conceptual address (or file name)[23] gives access to a repository of mentally represented information about the concept's denotation, some of which is general and some of which, such as stereotypes, applies only to particular subsets

of the denotation. This information includes conceptually represented assumptions and beliefs, held with varying degrees of strength, and also, in some cases at least, imagistic and/or sensory-perceptual representations. A distinction is standardly made in the theory between this kind of information, which is stored in the 'encyclopaedic entry' associated with the concept, and the 'logical entry' for the concept. Logical entries consist of inference rules (rather than propositional representations) which are, crucially, taken to be content-constitutive (Sperber and Wilson 1986/95; Horsey 2006). This logical/encyclopaedic distinction is rather controversial and needs a lot more consideration than I can give it here.[24]

Returning to our 'dance' example in (20), the idea would be that the decoded atomic concept DANCE gives access to a range of knowledge and beliefs about the activity of dancing, including general information (conceptual and imagistic) about the kinds of bodily movements it involves and about its expressive and social functions, information about specific kinds of dancing, and more idiosyncratic information (episodic memories) based on one's own observations and experiences of particular instances of the activity. When Tom and Mary, a couple of long standing, are walking along a busy town street, feeling happy and relaxed, and Mary, in romantic mood, says 'Let's dance', she is most likely not suggesting that they break into an unaccompanied waltz or tango, or perform a balletic pas-de-deux, but rather that they walk in a more mutually attuned way, closer together, taking lighter steps, rhythmically, in time with each other, and so on. The denotation of the concept expressed, DANCE*, is certainly broader than that of the encoded DANCE and possibly also narrower (it might exclude very elaborate dance movements that require years of training). On the relevance-theoretic account of how this kind of word meaning adjustment takes place in on-line utterance interpretation, it is simply one case of a more general process of *mutual parallel adjustment* in which tentative hypotheses about contextual assumptions, explicatures, and contextual implications are incrementally modified so as to yield an overall interpretation which is both inferentially sound and satisfies the hearer's expectations of relevance. So, in the example under discussion, the explicature LET'S DANCE* is, at least partially, the result of backwards inference processes responsive to Tom's on-line hypotheses about the relevance (the intended contextual implications) of Mary's utterance – implications along the lines of 'we are in special harmony with each other tonight, let's enhance further this feeling of closeness and mutual accord, we can walk together in a more coordinated and graceful way despite all

the people around us, and so on'. These play a shaping role in the derivation of the non-lexicalised, probably ineffable, *ad hoc* concept DANCE*. For much more fully realised accounts of the way in which the lexical adjustment process works, see Wilson and Sperber (2002), Rosa Vega Moreno (2005, 2007), and Wilson and Carston (2006, 2007).[25]

Agustín Vicente and Fernando Martínez-Manrique (2007 and Chapter 3 of this volume) take the position that the kind of 'rampant polysemy' entailed by the free pragmatic process of *ad hoc* concept formation just outlined is incompatible with the view that lexically encoded concepts are atomic (or, as they put it, the lexicon is 'disquotational'), and they advocate a decompositional view of lexical concepts. I have been unable to find any argument supporting the alleged incompatibility and can only assume that the thinking is that, if a word's standing meaning can be adjusted/modified so that different meanings/senses are communicated on different occasions of use, there has to be an array of meaning components that can be played about with, highlighted, backgrounded, dropped, or otherwise rearranged. An unstructured monolithic atom does not provide us with the distinct parts needed for the job. But, if this is the thinking, it is quite wide of the mark since the account of *ad hoc* concept formation is not semantic and not internal to the linguistic system, but wholly pragmatic; that is, the kind of information that does the work is, for the most part, general encyclopaedic knowledge/beliefs about the world (including, in particular, information about the entities and/or properties denoted by the lexical concept). So, even if word meanings were decompositional, the component features or subconcepts would seldom, if ever, be sufficient on their own to account for the (more or less indefinite) range of concepts that can be communicated by the use of a particular word form on different occasions of utterance.[26] As described above, *ad hoc* concepts are an outcome of the process of finding the interpretation of an utterance that meets one's expectations of (optimal) relevance, that is, the interpretation which has a satisfactory range of cognitive implications and requires no gratuitous processing effort. A requirement here is that these implications are properly inferentially warranted, and a major source of premises for deriving such implications is the logical and encyclopaedic information activated by the decoded lexical concept. In short, the lexical decompositional issue is really not relevant at the (conceptual) level at which this is going on.

One of the decompositionalist approaches that Vicente and Martínez-Manrique favour is James Pustejovsky's generative lexicon hypothesis. According to this view, the lexicon consists of quite complex lexical

entries; for instance, the entries for nouns like 'potato', 'cake', 'book', and 'knife' include information about both the origin (natural or arte-factual) and the purpose (the telic role) of the entities in their deno-tations. The problems with this approach are legion (see Fodor and Lepore 1998, 2002; Blutner 2002; de Almeida 2004; Bosch 2007; Lossius Falkum 2007; de Almeida and Dwivedi 2008). Here are two of them: (i) the lexical entries posited include an arbitrary subset of general world knowledge (for example, that books are written for the purpose of being read, that windows consist of a frame (often made of wood) and a pane of glass, that cakes come into existence through human action, that knives are for cutting, and so on), and (ii) the approach can account for only a very restricted range of cases of meaning modulation (not just in practice, but in principle!), leaving the vast bulk of context-specific senses to be explained by a pragmatic account, which, once provided, will, of course, also apply to the few that are allegedly resolved by intra-lexical means.

Another kind of decompositional account mentioned approvingly by Vicente and Martínez-Manrique is Ray Jackendoff's (2002) non-definitional approach. Jackendoff points out that all the standard argu-ments against decomposition assume that it involves other lexicalised concepts (words) and suggests that a more reasonable hypothesis is that the ingredients that make up a word's meaning are some other kind of element altogether which cannot be captured by using natural lan-guage forms. He makes an analogy with the physical decomposition of substances like oxygen and sulphur into elementary particles that are different in kind, such as electrons, protons, neutrons, and so on. While the general point seems sound, it is not clear that the particular analogy holds, given the special property that both words and concepts (linguistic and mental representations generally) have and which dis-tinguishes them from other things in the world, that is, their intention-ality or aboutness. Also, as things stand, there is very little in the way of concrete proposals regarding the nature of the (non-definitional) suba-tomic components that might make up lexical meaning. Jackendoff's conceptual decompositions employ features like CAUSE, PATH, OBJECT, EVENT, and STATE, which may, but more often do not, mean the same as the apparently corresponding English words, so it is nigh on impossible to assess the content of the proposed analyses.[27] For some consideration of Jackendoff's generative linguistic semantic component more gener-ally, see Section 5 below.

The questions in the domain of relevance-theoretic lexical pragmatics that strike me as most interesting and most in need of some long hard

thought concern the nature of *ad hoc* concepts. Are *ad hoc* concepts the same kind of entity as lexical concepts (apart from not being lexicalised)? Are they atomic or decompositional (perhaps even definitional)? Do they have logical and/or encyclopaedic entries? What do they look like as mental representations (that is, what lies behind the stand-in asterisked notations, TIRED*, DANCE*, and so on)? How stable and/or long lasting are they as components of our thinking apparatus? This is a research programme with most of the work yet to be done and I do not have much to offer here but a few hunches, hopes, and intuitions.

Let's consider the question of whether these pragmatically derived concepts are atomic or complex (decompositional). In line with their decompositional stance on lexical meaning, Vicente and Martínez-Manrique (Chapter 3 of this volume) also advocate a decompositional view of *ad hoc* concepts, so that, for instance, ANGEL* (as in 'My girlfriend is an angel') is made up of KIND, GOOD, and a few other atomic concepts. They claim that this is 'simpler and more intelligible' than an atomistic view. I can see the intuitive appeal of the view (component elements get removed or added in), but the lack of evidence for the initial lexical input having the required internal structure drastically undermines the apparent simplicity and intelligibility. On the basis of the paraphrases often provided in the RT literature for *ad hoc* concepts, it might look as if they are being construed as decompositional; for example, DRINK* has been glossed as 'drink (a lot of) alcohol', TIRED* as 'tired to the extent that one does not want to go out', RAW* as 'so grossly undercooked as to be virtually inedible', and so on. But, of course, the idea is that *ad hoc* concepts are, generally, ineffable, in the sense that, in addition to their not being lexicalised, there is not a linguistic phrase that fully encodes them either, and the paraphrases are intended as just a rough indication to aid readers in understanding what we have in mind in particular cases.

A decompositional view might also seem to have been implied by my talk (Carston 2002: 239) of the dropping of logical properties (in the case of loose uses) and the promoting of encyclopaedic properties (in the case of narrowing), although this does not strictly follow, since these properties are clearly not internal components of the lexical concepts themselves and need not be taken that way for *ad hoc* concepts either. In fact, it was my aim then, as now, to maintain a consistently atomic view of concepts if at all possible. Before going on, it is perhaps useful to remind ourselves here what is meant by 'narrowing' and 'broadening' in the theory (as so far developed): these are descriptions of the outcomes of pragmatic adjustment processes rather than of the

processes themselves. The *denotation* of the pragmatically inferred concept is narrower or broader (or both) than the denotation of the lexical concept which provided the evidential input to its derivation. The idea is not that there are two distinct processes – of making narrower and making broader – but rather a single overall pragmatic adjustment/modulation process with these various possible results. The perspective is essentially an externalist semantic one. There are important questions about the internal processes and representations involved in the shift from (atomic) lexical concept to (atomic) *ad hoc* concept – what they are and how exactly they work – and these remain to be answered. Accepting that this is the case, let me try to give a little more substance to the claim that the *ad hoc* concepts that result from the lexical concept adjustment process are themselves atomic.

As indicated above, I take it that Fodor has successfully dispatched the old empiricist idea that lexical concepts are complexes built out of a relatively small set of primitive atomic concepts (whether just sensory, or sensory ones plus a few others like CAUSE, EVENT, PATH, and so on). The next reasonable assumption to make is that in our thinking we are employing, as well as lexicalised atomic concepts, a range of atomic concepts that are not encoded in our particular linguistic systems (Carston 1996; Sperber and Wilson 1998). Given the unequivocal differences among languages with regard to the concepts that are lexicalised in them (the different ways they carve up 'semantic space', as it is sometimes put), this seems pretty uncontroversial. (Cases of cross-linguistic lexical differences are familiar enough not to need extensive exemplification – think of 'aunt or uncle', which is lexicalised in some languages but not in English; 'grandmother or grandfather', which is lexicalised in English but not in Serbian; and so on). That our atomic concepts (far) exceed our lexicalised concepts is also supported by (i) the view that we are born with at least some innate concepts (not lexicalised at that stage), (ii) the view that children's word learning often involves matching a piece of linguistic form to a concept (antecedently acquired) and (iii) the idea that at least some animals have some concepts (but no lexical items).[28] So, although, for example, there is a range of English words describing states of tiredness ('tired', 'weary', 'sleepy', 'bored', 'exhausted', and so on) it seems likely that the concepts featuring in the thoughts of even the monoglot English speaker concerning such states come in a much finer grain (that is, there are lots more concepts than words in this domain). The same goes, too, for our 'happy' words and our HAPPY concepts, for our 'upset' words and our UPSET concepts, and for most of the open class vocabulary. I see no reason to suppose

that these stable concepts, regularly employed in our thinking, are not essentially the same in kind as lexical concepts; that is, they are atomic and just as likely to come with logical and encyclopaedic entries as are lexical concepts.

The implication of this for the pragmatic process of inferring *ad hoc* concepts in utterance interpretation is that it may result in a tokening of one of these stable, albeit non-lexicalised, concepts, which has already been established in the hearer's conceptual system. But, of course, others may be quite new or, at least, have made such an infrequent appearance in the hearer's thinking repertoire that there is no established conceptual address for them, and hence no logical or encyclopaedic entry (or, to put it another way, no mental file has yet been opened for them). Strictly speaking, these new, possibly one-off, *ad hoc* entities are not concepts, although they have the potential to become concepts, that is, stable, enduring components of Mentalese. Nevertheless, they are making a contribution to structured propositional states, specifically explicatures, alongside fully fledged concepts (whether lexical or *ad hoc*) and, although effectively pre-conceptual, they are playing a role in warranting certain implications of the utterance. Perhaps they are best thought of as metarepresentational or interpretive, where what is metarepresented or interpreted is the lexically encoded concept, and their conceptual potential is partially grasped in so far as they are taken to contribute to the grounding of intended implications of the utterance. Consider the following example: suppose you and I have been discussing a particularly problematic student, Eloise, who insists on being given a lot of one-to-one time and attention from her lecturers and who usually ends these sessions by truculently declaring herself more confused than when she arrived. Knowing that you have just had a couple of hours across the desk with Eloise, I ask you how it went and you reply:

(21)   She was her usual self – asked questions frantically and promptly buried all my answers.

I interpret you as meaning (implicating) that Eloise did not think about the answers you gave, did not try to understand them, did not really seem to want there to be answers to her questions, but rather was intent on venting her frustration, and so on. But your use here of the verb 'bury' is new to me; the *ad hoc* component of the explicature which I form, based on the encoded concept BURY, is not a concept already knocking about in my conceptual system. It is "BURY"*, which is both *ad hoc* and metarepresentational (hence the quotation marks). What

I grasp about it is that when it is used to describe someone's reaction to another person's attempts to answer his/her questions or provide helpful advice, it seems to imply dismissing, ignoring, or refusing to process those responses, with perhaps some more evocative elements that arise from the mental image of a literal burial (of once-animate but now-dead things placed under a weight of earth). Although the 'concept' is new to me and I might have to think a bit before trying to employ it myself, it does the job quite adequately in this particular one-off communicative exchange where the intended implications are plain enough.[29]

I realise that not everyone may find this example convincing. For instance, you could object that many of us already employ in our thinking an atomic concept BURY*, which is expressed by an utterance such as 'The government tried to bury such and such a piece of news [which would put them in a bad light] by focusing on problems elsewhere in the world', and this is surely very similar to what is expressed by 'bury' in (21). While they are clearly related, perhaps quite closely related, they seem to me to be nonetheless different and, arguably, one is established and the other is not. If you remain unconvinced, you might like to try replacing 'buried' in (21) with 'cremated', 'nuked', 'smothered', 'guttered', or 'binned' and, even if none of those quite work for you as communicating something new, which is not an already established concept in your repertoire, hopefully, you nevertheless get the general idea at which I am driving. No doubt, there are more creative, new uses which would be more convincing as genuinely distinct from existing concepts. Because they will be less closely related to any concept already established in one's Mentalese repertoire, they are, presumably, harder for a speaker to come up with and for a hearer to grasp, and are more likely to be found in carefully crafted literary texts.

The overall picture, then, is one of pragmatically inferred (constructed or retrieved) *ad hoc* concepts that range from those that already have a firm presence in the hearer's cognitive system and so, in that sense, are not 'ad hoc' to those that are entirely *ad hoc* (new, occasion-specific) but do not qualify (yet) as full 'concepts', with probably various intermediate cases (involving degrees of *ad hoc*ness and/or degrees of conceptualness). Thus, it is worth being aware that we are using each of the lexical constituents of the phrase '*ad hoc* concept' somewhat loosely!

The phenomenon of pragmatically adjusting linguistically encoded concepts in utterance comprehension is usually discussed under the label 'lexical' pragmatics but, as pointed out by Romero and Soria (Chapter 12 of this volume), there seem to be instances where the input

to the process is phrasal rather than lexical. Possible examples are the following, where the (alleged) phrasal input is italicised:

(22)   a.   Jane is a *working mother.*
       b.   That guy isn't a *complete human being.*
       c.   Sally was everyone's favourite, a joyful child, a *shooting star.*
       d.   Morris considered himself *the biggest fish in this backwater.*

The first two of these are cases where the concept communicated involves a narrowing of the phrasal concept which has been derived by semantic composition of the decoded word meanings and the other two involve loosening of a compositionally derived linguistic phrasal concept. So, for instance, the communicated concept [WORKING MOTHER]* will generally be understood as having a narrower denotation than all women who have had children and who do some kind of work (for example, a 60-year-old woman whose children are grown up and who does voluntary work at the local Oxfam store would not be included). On the other hand, the denotation of [SHOOTING STAR]* would include not only actual shooting stars but other things in the world that we find similarly rare and wonderful, including certain human beings. In fact, however, the situation is not at all straightforward and clear examples of decoded phrasal inputs to *ad hoc* concept formation do not seem to be particularly easy to come by, or so I have found (it might be argued, for instance, that both 'working mother' and 'shooting star' are single lexical items). Romero and Soria themselves give no examples involving narrowing and the two examples they do give are both cases of metaphor, which they claim requires a process of 'transfer' (or domain-mapping), as distinct from the kind of concept adjustment process (eventuating in a broadening and/or a narrowing) that I have been discussing. Furthermore, it is not entirely clear to me that their examples do involve a phrasal input, so, for instance, (22d), which is one of theirs and which they say eventuates in the *ad hoc* concept [THE BIGGEST FISH IN THIS BACKWATER]*, could be argued to be just as readily understood as THE BIGGEST FISH* IN THIS BACKWATER*, that is, as involving two instances of lexical adjustment/transfer. At the very least, the case remains to be made for a phrasal adjustment.[30]

However, even supposing that they are right and there are decoded phrases which undergo conceptual adjustment as a whole, this would not call for any particular addition to pragmatic theory because the mechanism involved is the same as the mechanism in the lexical cases, that is, it is a process of *ad hoc* concept derivation, based on information made available by the linguistically encoded concept(s)

and shaped by the search for an explicature which meets the hearer's expectation of relevance. What was new and exciting about the development of 'lexical' pragmatics was precisely the idea that there is such a process of *ad hoc* concept construction in utterance comprehension (distinct from processes of disambiguation, variable saturation, recovery of unarticulated constituents, and implicatures) and that these unencoded concepts can contribute to explicit utterance content. This may extend to the comprehension of some phrasal constituents but it will not thereby entail any new kind of pragmatic process or interpretive outcome.[31]

The second set of issues that falls within this general area of a free pragmatic process of *ad hoc* concept formation concerns whether and how this construct plays a role in an account of how we understand certain figurative uses of language such as hyperbole, metaphor, simile, metonymy, synecdoche, and epizeuxis (immediate word repetitions). Here I will focus on metaphorical uses, with some consideration of corresponding similes. As is well known, within current relevance theory, comprehension of a metaphorical use is a case of *ad hoc* concept formation where, crucially, the concept inferred is much broader in its denotation than the lexical concept from which it was derived.[32] Corresponding similes, on the other hand, are assumed to work rather differently and it is the literal lexical concept, rather than the broadened *ad hoc* concept, that appears in their explicature, as in (23d), communicated by the simile in (23c):

(23)   a. John is a mouse.
       b. John is a mouse*.
       c. John is like a mouse.
       d. John is like a mouse.

The reason for this seems clear enough: it would make little sense to say of someone who is a member of a certain category (here MOUSE*) that he is (merely) *like* things in that category; that would be comparable to saying that an apple is (merely) like a fruit or a robin is (merely) like a bird (Carston 2002: 357–8).

Nevertheless, one might feel there is something amiss here in that what is communicated by (23a) and (23c) is surely very similar, if not identical (perhaps just differing in directness or force), and yet the key concept in the explicature in each case is quite different: the denotation of MOUSE* has a radically broader denotation than MOUSE since, as well as actual mice, it includes some human beings and perhaps other animals with the right characteristics (such as being quiet,

unobtrusive, and so on). The apparent closeness in the meaning of metaphors and corresponding similes has been captured in other theories in various ways; for instance, by treating metaphors as ellipsed similes or by treating similes as hedged metaphors.[33] A different solution is proposed by Hernández Iglesias (Chapter 11 of this volume), who finds the metaphor/simile divergence shown in (23) implausible and suggests that this treatment of similes is at odds with my general advocacy of pragmatic effects on explicature. He proposes that similes should also be understood as involving the formation of an *ad hoc* concept which contributes to the utterance's explicature, along the following lines:

(24) a. John is like a mouse.
     b. JOHN IS [LIKE A MOUSE]*

My difficulty with this is that I just don't know what [LIKE A MOUSE]* amounts to and Hernández Iglesias says very little to elucidate this. Is it meant to be a broadening of [LIKE A MOUSE]? It seems that it would be hard to get much broader than that very weak encoded phrasal meaning, since, strictly literally, everything is 'like' everything else. Is it a narrowing, so that the denotation picked out by [LIKE A MOUSE]* is a subset of that picked out by [LIKE A MOUSE]? This seems more likely, given the wide range of ways in which something could be like a mouse. But what we need to know first is what the encoded phrase [LIKE A MOUSE] picks out, including the function of the 'LIKE' here. Is it just the same as it is in non-figurative comparisons (for example, 'A lime is like a lemon') or does it have some other kind of interpretation? Does it simply provide an explicit version of the corresponding metaphor and is the reason that it packs less of a punch than the metaphor (as people generally feel to be the case) that it tells a hearer more directly what to do ('look for ways in which John resembles a mouse'), whereas the hearer of a metaphor has to work that out for himself? Until these sorts of questions are answered, or at least tackled, it is hard to see what substance the suggested analysis in (24b) has. I should add, too, that the thinking lying behind the account in (23) is not that the key concept in the simile is never in any way pragmatically modulated – I agree that would be at odds with my general view of explicature – but just that it does not undergo the radical broadening that the corresponding metaphorically used concept does, for the reason given above.

Focusing now on metaphor alone, in recent years the *ad hoc* concept account has been developed in some detail (Carston 2002; Vega Moreno

2005, 2007; Wilson and Carston 2006, 2008; Sperber and Wilson 2008) and has led to new questions and, of course, criticisms. One interesting question concerns how emergent properties are to be accounted for, that is, properties that hearers derive as communicated attributes of the metaphor topic but which are not derivable directly from the metaphor vehicle. For example, understanding 'Robert is a bulldozer' might well include deriving the implication that Robert is insensitive, but INSENSITIVE is not likely to occur in the hearer's encyclopaedic entry for bulldozing machines. In Chapter 10 of this volume, Adrian Pilkington considers this question and criticises some existing accounts that try to explain property emergence in wholly conceptual inferential terms. He argues that mental imagery (across a range of sensory modalities) plays a central role in accounting for emergent properties in metaphor comprehension and, following Colin McGinn (2004), he insists that imagery is a distinctive type of mental category which is not reducible to the conceptual. Taking the case of 'Robert is a bulldozer', the way properties emerge is through imagining or (mentally) seeing Robert *as* a bulldozer and then, by internal scrutiny of that mental image, 'reading off' properties which can be represented conceptually as INSENSITIVE, OVERBEARING, or UNSWERVING (or as related non-lexicalised concepts, such as UNSWERVING*). I agree with the general direction of these remarks and believe that future work on the pragmatics of various kinds of 'figurative' language use, including metaphor, should look more closely at the role of imagistic representation.[34]

A second question, one that has interested me for some time, concerns just how far we should or can take the *ad hoc* concept approach, what range of cases it applies. While it provides a neat and convincing account of how we understand spontaneous conversational (often somewhat conventionalised) cases of metaphor, such as 'John is a *mouse*', 'That surgeon is a *butcher*', 'She *bulldozed* the entire committee into acquiescence', and so on, it is not obvious that it carries over to more innovative cases or to those that are extended and developed over a stretch of discourse/text (perhaps a whole poem). Hernández Iglesias (Chapter 11 of this volume) expresses similar doubts about the adequacy of the *ad hoc* concept account in capturing what goes on in the understanding of highly creative metaphors, for which he claims literal meaning cannot be dispensed with as it can be in the more conventional cases or those easily derivable from stereotypes. I think we share pretty much the same qualms here, although his emphasis is more on the novel/creative, while mine is more on the extended/sustained.

Consider the following familiar example (truncated in the interests of space):

(25)   All the world's a stage,
       And all the men and women merely players:
       They have their exits and their entrances;
       And one man in his time plays many parts,
(Shakespeare: *As You Like It*, II vii 139–142)

In this developed metaphor (or metaphorical 'conceit'), it seems unlikely to me that comprehension involves the formation of a series of (radically broadened) *ad hoc* concepts (STAGE*, PLAYERS*, EXITS*, ENTRANCES*, PARTS*, and so on). Rather, what seems to go on is that a literal interpretation is maintained and is metarepresented as a whole, so that what we have is a representation of an imaginary state of affairs in which human life takes place on a large theatre stage, and the phases of each person's life and the activities in which he or she takes part are a matter of acting out a pre-existing script. Our mental representations of this non-actual, imagined world are compartmentalised and sealed off from our beliefs (our representations of the actual world), as with games of make-believe or pretence and other surreal or fantastical conceptions that we recognise as such. Processing of the (strictly false) literal interpretation within the metarepresentation will yield a range of implications and other effects, some of which will be judged to apply to the actual world, that is, to be true (for instance, 'The course of human life is largely predetermined', 'We are powerless against the passing of time', 'Most of our activities and concerns are of only momentary significance', and so on). The hearer/interpreter may disembed these from the metarepresentational frame and carry them over into his descriptive mental representation of the actual world.

This, clearly, is a very different sort of interpretive process from the lexical pragmatic mechanism of *ad hoc* concept construction, so it might look as if I am claiming there are two kinds of metaphor (the lexical and the extended). Rather, I see it as a matter of processing load or threshold: there is a point up to which interpreters can and do adjust or modulate the literal encoded meaning (that is, construct *ad hoc* concepts to fit the world as they know it) and beyond which they do not/cannot. When this point is reached, the literal meaning is maintained but, given that it is clearly not speaker-meant, it is metarepresented and held, as it were, for further processing. There may be individual differences as regards the tipping-point for moving from the one mode of processing to the other. Clearly, a lot more needs to be said about how this second

kind of interpretation works, the kind of effort it requires, the effects it achieves, and whether the processes involved are to be thought of as more controlled and reflective than the fast, automatic pragmatic processes engaged in the comprehension of ordinary conversational lexical metaphors. For a bit more detail, see Carston (forthcoming).[35]

5   Linguistic evidence, gestural evidence, and pragmatic inference

In Sections 3 and 4, I have looked at two ways in which pragmatics may contribute to explicit utterance content in the absence of any direction from the encoded linguistic form that it should do so: (i) by supplying a linguistically unarticulated constituent, and (ii) by constructing an *ad hoc* concept which replaces the linguistically encoded concept from which it was derived. If there are such 'free' pragmatic processes, they have important implications for the widespread view that the explicature of the utterance (its truth-conditional content, some would say) is semantically compositional, that is, composed from the meanings of the basic parts of the uttered sentence (lexical items) and the way in which they are syntactically put together. It seems that the composition of the truth-conditional content must be achieved via rules or processes that determine the value of complex expressions on the basis of the pragmatically affected values of their parts. (For more detailed discussion of such a pragmatics-sensitive compositional process, see Recanati 2009 and Chapter 2 of this volume.)

Of course, as we have already seen in Section 3, it is far from universally agreed that free pragmatic processes (as opposed to mere pragmatic 'saturation' of linguistically given variables) can affect truth conditions. In Chapter 4 of this volume, Begoña Vicente Cruz claims that relevance theorists overlook an important and rich source of meaning that comes from the linguistic system itself – specifically the semantic component of the language faculty – and she suggests that, once proper account is taken of this, there may be no role for free pragmatic processes affecting explicature. While the covert indexicalists (Stanley and Martí) argue for various kinds of hidden linguistic structure (syntax), Vicente Cruz supports the view that there is an internalist linguistic semantics whose combinatorial operations can supply meaning structure which is independent of the syntax of the linguistic expressions uttered. Here she is following work by Peter Culicover and Ray Jackendoff (2005), who take the position that linguistic semantics is a distinct generative system within language, that is, its rules and processes are not constrained by

a one-for-one hook-up (homomorphism) with rules of syntax, contrary to what many linguistic theories have assumed. There is not space in this chapter to do this position justice, but I am flagging it here because it points to an important issue for relevance theory and other contextualist/pragmaticist theories: the need to get the language/pragmatics balance right. We do not want to find ourselves, in our pragmaticist enthusiasm, overstating our case and failing to give the language system its due.

The idea, then, is that the semantic component can generate meaning that has no syntactic counterpart in the sentence uttered. This entirely semantically generated meaning figures in the logico-conceptual form which is the output of the language system and it may be that this form (together with linguistically mandated pragmatic processes of indexical saturation) exhausts what is involved in deriving the explicature of an utterance. The key cases involve a phenomenon known as 'coercion': in the process of combining two constituents of linguistic meaning into a more complex meaning one of the constituents forces a shift in (often an expansion of) the meaning of the other. Vicente Cruz discusses examples such as the following from Jackendoff (2002: 390):

(26) a. The girl slept until dawn.
      b. * The girl died until dawn.
      c. The girl jumped until dawn.

The claim is that temporal adverbials like 'until dawn' and 'for an hour' encode a temporal bound as coming at the end of a uniform ongoing process and, while this is fully compatible with the usually continuous process of sleeping, it is not compatible with the inherently bounded event of dying, and it is only compatible with the action of jumping if that is understood as an ongoing process, and hence as a sequence of discrete jumps. So the idea is that certain temporal adverbials coerce a 'repeated action' interpretation of some verbs, including 'jump', 'hit', 'cough', or 'flash (a light)', and this, it is claimed, is a function of a semantic composition operation internal to the linguistic system.[36]

However, without further argument, there does not seems to be any reason to prefer this account of the phenomenon to an alternative non-linguistic (pragmatic) account based on our ordinary encyclopaedic knowledge about the activities denoted by the verbs 'sleep' (people regularly sleep for several or more hours at a time) and 'jump' (a single jump takes only a moment or two and ends when the person lands; people can perform lots of jumps one after the other). This sort of knowledge is activated via the lexical concepts SLEEP and JUMP and is used in

the process of arriving at an optimally relevant interpretation of the sentence uttered. Both accounts agree that we are not dealing here with cases of encoded polysemy (of 'jump' or 'cough') and both wind up with much the same conceptual structure (in the one case, a phrasal concept, JUMPED REPEATEDLY; in the other case, an atomic concept JUMPED*, which can be paraphrased as 'jumped repeatedly'), but differ with regard to the system taken to be doing the work.

Consider a few more examples:

(27) a. John sang until the bell rang.
      b. John sang the scale until the bell rang.
      c. John sang the aria until the bell rang.
      d. John sang the protesters' slogan until the bell rang.
      e. John sang Handel's *Messiah* until the bell rang.

Jackendoff (2002: 391) discusses (27a), which has the single continuous activity interpretation, and (27b), which has the repeated activity interpretation, as providing evidence against any kind of lexical encoding account of the single versus repeated action meanings. I see this as pointing all the more strongly in the direction of a pragmatic account rather than linguistic semantic account, especially when we add more examples, involving the singing of compositions of varying length (single line lyrics, ditties, chants, operas, and so on). The interpretation swings one way or the other, entirely depending on one's general knowledge: (27c) is probably taken as continuous (but perhaps not if it is a very short aria), (27d) as repeated (most protest slogans are a single line which is sung or shouted over and over), and (27e) as one continuous activity, given that we know Handel's *Messiah* is a very long work (surely this is not lexically encoded information!) and people are unlikely to sing it several times over as a single event.

The familiar case of metonymically used noun phrases such as 'the ham sandwich', which have been widely discussed as a matter of pragmatics, are seen by Culicover and Jackendoff (2005: 227–30) as another instance of lexical coercion:

(28) [One waitress says to another:]
      The ham sandwich over in the corner wants another coffee.
      [= The *person contextually associated with a* ham sandwich wants another *cup of* coffee]

They claim that the processes responsible for the non-syntactically realised meaning structure, shown here in italics, are cases of language-internal semantic coercion rather than pragmatics: a semantic restriction

on the subject argument of the verb 'want' coerces the first structural change shown and a [count] feature on the determiner 'another' triggers the second one. These are conventionalised linguistic processes, according to Culicover and Jackendoff, yet some parts of their discussion make them sound rather pragmatic:

> [a coercion] is a piece of meaning that can be left overtly unexpressed, leaving it up to the listener to reconstruct it [...] it is an extra piece of meaning that can be optionally inserted into the interpretation in order to help it make sense. (ibid.: 228)

and indeed they acknowledge a 'sense in which it [coercion] is pragmatic'. Note also that a speaker could use the sentence 'The ham sandwich is disgusting' to express the proposition that the guy who ordered the ham sandwich is disgusting and, in that case, there can be no question of a linguistic coercion process being at work. But, then, whatever pragmatic process accounts for this case would account equally well for (28). The reason that Culicover and Jackendoff give for not favouring an all-out pragmatic account of coercion processes is that 'they contribute material that makes the *sentence* semantically well-formed and that plays a role in the *sentence's* truth-conditions' (ibid.: 228, my emphasis). This presupposes that there is a distinct 'sentence' semantics (in addition to lexical meanings, syntactic constraints, and pragmatics) and that sentences have truth conditions. I would disagree on both counts and have argued against the latter in detail (Carston 2002). One thing seems fairly clear, though: the specific view one has on these sorts of cases is almost entirely informed by one's basic theoretical commitments. Any final resolution of the question will require examination of whole theories along with considerations of theoretical economy (can it all be done by syntax and pragmatics alone or do we need a meaning-enriching semantic component as well?), offset, as ever, by a concern for psychological plausibility (how well does it mesh with intuitions, with people's real-time on-line processing, with human memory capacities, and so on?).[37]

My preliminary response to Vicente Cruz's interesting points, then, is twofold. First, supposing for the moment that the interpretive data she cites do indicate a semantic component at work in the language faculty (partially independent of the syntactic component), this would not wipe out any role for free pragmatic processes in the derivation of explicature. Semantic coercion does not seem to bear on many of the central cases of free pragmatic processes, such as the *ad hoc* concept

cases discussed in Section 4 or even some of the unarticulated constituent cases discussed in Section 3 (for example, the location constituent often provided for 'it was dark/hot/raining' or the causal enrichment of 'and'-conjunctions). Second, it remains doubtful to me that, given the resources of a relevance-based pragmatics together with familiar formal grammatical constraints (binding, control, and so on), there is any need for a linguistic semantic component. For instance, the performance-oriented Dynamic Syntax account of Ruth Kempson and colleagues provides for an intimate interaction of linguistic and pragmatic constraints during the incremental on-line process of constructing an utterance interpretation, without any need for an intervening structure-building semantic component (see Cann et al. 2005: chapter 9; Kempson et al. forthcoming).

While the issue of giving the language code its due is important and linguists are right to urge pragmaticists to take proper heed, there is another kind of evidence, that is, non-verbal communicative gestures, which speakers often provide to point their hearers in the right interpretive direction, and this is largely ignored by philosophers and linguists alike. The most extensive study of non-verbal communication within RT is by Tim Wharton (2009), who discusses a wide range of cases, both those that are entirely non-verbal and those where paralinguistic, vocal, and facial/bodily gestures accompany a linguistic expression to form a composite ostensive stimulus. Focusing just on the latter here, these can be used by a speaker to communicate an attitude or feeling, but they can also have an effect on the explicitly communicated content (explicature). Consider the following (based on examples from Wharton 2009) and assume a face-to-face speaker-hearer interaction in each case:

(29) a. Speaker [*with a frowning taut facial expression, an aggressive tone of voice and emphatic gesticulation*]: You're late again!
      b. Speaker [*overtly faking a smile*]: How kind and thoughtful Sally is!
      c. Speaker [*shivering ostensively*]: I'm cold.

In (29a), the speaker's non-verbal gestures will affect the degree of anger she is taken to be communicating; I take it that she is strongly *implicating* that she is extremely angry with the addressee. In (29b), the overtly fake smile provides a clue that the speaker does not endorse the proposition expressed in which kindness and thoughtfulness are attributed to Sally. Together with accessible contextual information (perhaps including the fact that Sally has just treated the speaker very shabbily),

the facial gesture may indicate an attitude of dissociation towards the proposition expressed, thereby communicating a higher-level explicature along the lines of (30a), as is typical in cases of irony. On that basis, the proposition expressed is not communicated (is not an explicature), but there may be one or more implicitly communicated propositions (implicatures), including most clearly the thought that Sally is not a kind person. In the case of (29c), by recruiting her natural behaviour of shivering into her communicative act, the speaker indicates to the hearer the degree (quite high) and nature (an uncomfortable bodily sensation) of her coldness, providing evidence which he can use in recovering the *ad hoc* concept she communicates as a component of her basic explicature, as shown in (30b):

(30)   a. S DOES NOT BELIEVE THAT SALLY IS A KIND AND THOUGHTFUL PERSON.
      b. S IS COLD*

In Chapter 13 of this volume, Philippe De Brabanter looks at a rather different range of non-verbal gestures interacting with uttered linguistic expressions and suggests that not only can they have effects on the content communicated but they can also be thought of as having a linguistic function. While Wharton is primarily interested in the way that natural behaviours like frowns, smiles, and shivers can be used communicatively, De Brabanter's examples involve utterances in which acts of mimicry and miming are produced in a temporal sequence with linguistic expressions. For instance, in his example given in (31a), he takes it that the speaker's act of mimicry described in the brackets (a combination of facial and vocal gestures) can contribute a constituent of content to the definite description, making it something like THE FRIGHTENINGLY GRUMPY WOMAN, or perhaps THE WOMAN* (where WOMAN* denotes a particular kind of grumpy woman).

(31)   a. I didn't see the [*imitation of frightening grumpiness*] woman today.
      b. You don't want to end up [*demonstration of bumping one's head and collapsing*].

I take it that something similar applies to (31b), which is an adaptation of another example De Brabanter mentions briefly. It is not clear, though, whether we should think of the intended explicature as wholly conceptual, so that, in this example, something like the conceptual content BUMPING YOUR HEAD AND COLLAPSING is inferred from the demonstration, or whether there is meant rather to be an element of iconic (imagistic) representation incorporated into the explicature. Either way, these

would seem to be instances of linguistically unarticulated constituents of explicitly communicated content, that is, components of explicature that are recovered by pragmatic inference aided by the strong gestural evidence provided.

The immediate intuitive view, I think, is that these are multi-modal ostensive stimuli which combine linguistic and non-linguistic elements, both of which provide vital evidence on the basis of which the hearer/receiver pragmatically infers the explicature. But De Brabanter takes a different, more radical, position; he argues that these demonstrated vocal and/or bodily gestures play the role of *linguistic* constituents – phrasal or lexical – that is, they are linguistically recruited into the sentence uttered. According to him, the grammar includes rules like 'AdjP ➔ [Dem]$_{\text{AdjP}}$' where the Dem element in (31a) is instantiated by an act of imitating some sort of bad-temperedness. This is an intriguing idea, for which De Brabanter makes an interesting case, although he is well aware that much more remains to be said before the issue is settled. I make just two observations here. First, the way in which the components (verbal and non-verbal) are combined and produced in the examples appears to be regulated by grammatical constraints (in (31a), the imitation of frightening grumpiness precedes the noun 'woman', as required by English grammar), so the linguistic system does seem to be exerting some control over the non-verbal element. On the other hand, though, it does not seem that producing the imitative gesture *after* uttering the word 'woman' would result in *ungrammaticality* or cause any interpretive difficulty. Second, from a wider theoretical perspective, whether one favours the linguistic or multi-modal account will depend on the weight one gives to sentential meaning and to sentences as the crucial vehicle of verbal communication. From a communication-oriented perspective, what matters are propositional forms – they are the kind of thing that speakers intend to communicate and that hearers try to recover from utterances – so word meanings and grammatical constraints seem to be all that is needed from the linguistic side. On a dynamic, incremental account of on-line interpretation (for instance, Cann et al. 2005), there seems to be little, if any, role for a notion of sentence meaning, and it is to be expected that utterances could consist of linguistic expressions (words and phrases) and non-verbal gestures, appropriately put together by the speaker to ensure the hearer's ease of access of the intended propositional content. It may end up that some cases (for instance, (31a)) are shown to go the sentential way, while others (for instance, (31b)) are multi-modal. The issue remains wide open.

6   Concluding thoughts: contextualism or pragmaticism?

The final question on which I would like to touch concerns the right way to construe a theory like relevance theory that acknowledges free pragmatic processes such as those discussed in this chapter, that is, pragmatic processes that contribute to what a speaker is taken to have explicitly communicated but which are not triggered or required by any linguistic property or feature of the utterance. Such theories are generally taken to fall under the label of '(radical) contextualism', an approach to natural language semantics according to which virtually any (open class) element of the language is context-sensitive. Semantic minimalists like Borg (2004) and Cappelen and Lepore (2005) place relevance theory squarely in the radical contextualist semantic camp and, given the usual stark opposition between minimalism and con-textualism, this seems right. But, upon reflection, I am not so sure that it is the best way to characterise RT nor that this distinction between *semantic* theories is central to what RT is all about. Relevance theory is first and foremost a theory of communication and inter-pretation, and its advocacy of the free pragmatic processes at issue is entirely motivated by the aim of providing an account of how it is that speakers can succeed in communicating contents that diverge in a range of ways from the meaning encoded in the linguistic expres-sions they employ. In what follows, I will suggest that the theory is, strictly speaking, neither 'contextualist' nor 'semantic' (although it may well be 'radical').

On the RT view, virtually any expression can be used by a speaker and understood by a hearer to express (to explicitly/directly commu-nicate) a meaning that is different from that which the expression (type) encodes. So a speaker can use the word 'butterfly' to communi-cate a concept whose denotation includes certain human beings, or the word 'bachelor' to communicate a concept whose denotation includes some married men and excludes some unmarried men. This seems to be a rather different phenomenon, involving a different property of the words concerned, from the context-sensitivity of indexical words, which arguably do not encode a concept to start with but rather a varia-ble with certain indications about the kind of value that variable should receive. Cappelen and Lepore have some quite effective tests for distin-guishing this latter class of linguistic expressions from the rest and it comes as no surprise that there are such discriminatory tests: there are strong pre-theoretic intuitions that indexicals are special and quite dif-ferent from words like 'butterfly' or 'bachelor'.

One way of responding to these facts is to say, as some contextual-ists have done (for instance, Bezuidenhout 2006), that there are various kinds of context-sensitivity, with indexicality being just one of these kinds. Another, and to me preferable, sort of response is to make a dis-tinction between inherent context-sensitivity, on the one hand (and agree that it is confined to pretty much the cases that Cappelen and Lepore cite and which pass their various tests), and what could be called '*pragmatic susceptibility*' (or perhaps 'pragmatic amenability'), on the other hand. What I mean by this is that virtually every linguistic ele-ment can be used by us to express/communicate meaning that departs in certain ways from the meaning that it encodes (its expression type meaning) and this is because of our pragmatic interpretive capacities (which include an acute sensitivity to relevant contextual factors). Linguistic expressions are tools with certain inherent properties (pho-nological, syntactic, and semantic) that we, as normally functioning adult humans, can employ very flexibly for our communicative pur-poses by virtue of certain characteristics of our psychological makeup (specifically, our 'theory of mind' capacities, and, in particular, our attunement to each other's communicative intentions and our expecta-tions of each other as rational speakers and hearers). Thus, while there is a limited degree of context-sensitivity built into linguistic systems, pragmatic susceptibility is a pervasive feature of language as employed by us in ostensive communication.

This is one respect in which I find 'radical *pragmaticism*' a better description of relevance theory than 'radical *contextualism*': it is us, the users of language, who are sensitive to context, and, as rational commu-nicating/interpreting agents, we are able, by exploiting this sensitivity in each other, to get linguistic expressions to do a lot more than simply express their standing linguistic meaning.[38] This is perhaps more a dif-ference of emphasis and orientation than of essential substance, but I do think that the shift of perspective makes for a clearer and more accurate view of the kind of theory that RT is.

There is another way in which a contextualist and a pragmaticist orien-tation might be contrasted with regard to the role of context. Recall that while Grice's account of the derivation of conversational implicatures employed a hefty component of theory-of-mind type reasoning, when it came to the pragmatic processes required for a full identification of what a speaker has said (explicitly communicated) he spoke of 'context as a criterion'. It seems that he thought of disambiguation and indexi-cal reference assignment as a matter of contextual best fit, rather than as involving conversational maxims or processes of reasoning geared

to the recovery of what the speaker m-intended (see Grice 1989b: 25, 222). In this regard, Recanati, although a strong advocate of free pragmatic processes of enrichment and modulation in recovering what a speaker has said, is a true Gricean. For him, while the 'secondary' pragmatic processes of conversational implicature derivation are construed as maxim-guided, reflective reasoning, including premises concerning speakers' mental states (beliefs and intentions), the 'primary' pragmatic processes that contribute to the recovery of explicature (or the enriched 'what is said', in his terms) are not. Rather, these are a function of an automatic, dumb (non-inferential) cognitive mechanism responsive to differential degrees of activation of candidate interpretations, such that the most highly activated one wins out. It is context (both linguistic and extra-linguistic) that does the work here and contextual coherence that provides the criterion of correctness (Recanati 2004: chapters 2 and 3). To take a very simple case: which of the various candidate meanings for 'bank' (the two encoded meanings and various unencoded *'ad hoc'* possibilities) is the most highly accessible depends on the spread of activation from concepts that have already been decoded or otherwise accessed in the on-line course of utterance comprehension and from conceptual representations of broader aspects of the utterance situation and topic (we need money, the economy is close to collapse, we want to sit in the sun, we are going to feed the ducks, and so on).

In this regard, Recanati's contextualism is quite different from RT's pragmaticism. On his account:

> the interpretation that eventually emerges […] 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. (Recanati 2004: 32)

According to relevance theory, on the other hand, the whole utterance interpretation process is a matter of (non-demonstrative) inference, and taking account of the speaker's mental capacities (including her epistemic states) and preferences (her desires, intentions, and interests) may be required for carrying out any of the pragmatic tasks involved (including lexical concept adjustments, disambiguation, fixing of indexical reference, and so on). Along with the propositions communicated (explicatures and implicatures), the context for the interpretation falls under the speaker's communicative intention and the hearer selects it (in the form of a set of conceptual representations) as part of his search

for an interpretation that satisfies his expectations of relevance.[39] For discussion and some assessment of the two accounts (contextualist and pragmaticist) of the pragmatic processes that contribute to explicature derivation, see Carston (2007).

Just as central to the contextualist stance as the view that most, if not all, words are context-sensitive is the position that it is not sentences but utterances (or speech acts) that have truth conditions. As Recanati says:

> Natural language sentences *per se* don't have truth-conditions, they only have conventional meanings in virtue of which they can be *used* to say things that are true or false. What has content primarily is the speech act (or the thought act) (2006: 69).

This is where the talk of contextualism as a *semantic* theory comes into the picture: 'semantic' content here is synonymous with 'truth-conditional' content and it is what speakers say by their utterances/ speech acts that has this important property. In trying to position RT appropriately here, there are two points to consider: one concerning the meaning/semantics of sentences (as linguistic expression types), and the other concerning the status of explicature as a semantic entity. The contextualist view that natural language sentences do not encode propositions (truth-conditional contents) is held by most relevance theorists: we think of encoded sentence meaning as merely providing a schema or template for the pragmatic construction of propositions and, like Recanati, take it to be a category mistake to think of sentences as bearers of truth conditions. But suppose it were to turn out that we are wrong about this, and that actually many sentences do encode propositions, as Borg (2004) maintains, would that be a devastating blow to the central tenets of RT? I do not think so. The propositions concerned would usually be very weak/general or absurdly strong, often either truisms or obvious falsehoods (think for instance, of the proposition that might be encoded by 'He is ready', or by 'Every bottle is empty'). As the minimalists recognise, these propositions would almost never be the sort of contents that speakers want to communicate, so the central pragmaticist aim of RT – to account for how rich speaker meanings are communicated on the basis of quite impoverished linguistic meanings – and most of the existing concrete details of the account, would remain in place.[40]

In Chapter 6 of this volume, Barry C. Smith resists the contextualist stance that a sentence can have a different truth-conditional content

(hence different semantics) in different contexts (thinking here of such well known cases as 'The leaves are green' as discussed by Travis 1997). The semantics of the sentence does not change, says Smith: rather, what goes on is that speakers and hearers focus on (selectively attend to) just one of the ways in which it can be made true and ignore others. Whether or not we accept his view of sentence semantics as truth-conditional, I think he is right that whatever content is given by the semantics of the *sentence* remains invariant across contexts. However, moving from issues of sentence semantics to matters of verbal communication, the proposition that comprises the content that is explicitly/directly communicated by a speaker (the explicature) and grasped as such by the hearer can, and frequently does, differ from context to context. In uttering the sentence 'The leaves are green', sometimes a speaker communicates that the leaves are naturally green (GREEN*), while at another time she might communicate that the leaves are painted green (GREEN**), or at yet another that the leaves (by nature russet) are GREEN***, which is, let us suppose, a sickly shade of green brought about by the incursion of a swarm of aphids, and so on. Call this 'selective focusing' on one or another way in which leaves can be green, if you like, but from the communicative standpoint (the pragmaticist stance) what matters is which of the 'green' concepts the speaker intended to make manifest to the hearer. Subsequent thoughts of the speaker and hearer about those leaves, aspects of their ongoing discussion about them, inferences they may draw concerning them, or possible actions they may take with regard to them (buying paint-remover or aphid-annihilator) depend on what they take to be (and mentally represent and store as) the content of the speaker's claim about the leaves. In most cases, this will not be that they have the very general property denoted by the encoded concept GREEN, but that they have one or another of the more specific properties picked out by GREEN*, GREEN** or GREEN***. So, while Smith's linguistic semantic point seems right, what is said/asserted by a speaker and recovered as such by the hearer just is the enriched content which pragmatics enables them, in his terms, to converge on selectively attending to.

According to the contextualist stance, the explicature of an utterance, which, unlike the sentence uttered, has truth-conditional content, is the semantics of the utterance of the sentence in a particular context. Perhaps there is no harm in this way of talking, but I cannot see much use in it either. For some time now, it has seemed clear that there are two kinds of semantics, captured for some by the Kaplanian character/content distinction and for others by a distinction between encoded

meaning (whether meaning conventions, concepts, pro-concepts, procedures, or rules for use) and truth-conditional content (which comprises a claim about the world, on the basis of which it can be judged true or false). Linguistic expressions clearly have the first kind of semantics and thoughts clearly have the second kind. Thus *communicated thoughts* have the second kind of semantics, that is, both explicatures and implicatures have truth-conditional content (like any other propositional entity). So, from the pragmaticist point of view that I am taking, there does not seem to be anything much to gain from thinking of the explicature of an utterance as its semantics rather than as – simply – its explicature, with whatever properties explicatures have that distinguish them from implicatures (of which having truth-conditional content is not one). We get saddled with this rather dubious notion of 'utterance semantics' only if we accept the minimalists' terms of engagement, that is, that in describing linguistic meaning we *must* deal in truth-conditional content, so that, if it is not sentences that have this property, then it must be some plumped-up version of them.

Summing up, the radical pragmaticist stance of relevance theory has the following characteristics which, I claim, distinguish it from radical contextualism: (i) while only a few words in the language are inherently context-sensitive, the vast majority of words are susceptible to the pragmatics of the speaker-hearer interaction such that they can be used to communicate an indefinite range of different concepts; (ii) it is not context acting on language that is somehow doing the work of determining explicature content, but, just as for implicatures, it is the exercise of rational speaker-hearer mutual mind-reading capacities; and (iii) the primary speaker meaning (explicature) is not in any useful sense a semantic content of anything (a sentence, a sentence token in a context, or an utterance). It has truth conditions (as do implicatures, thoughts, and propositional entities generally) but it is not the truth-conditional content *of* anything.

Notes

1. Many of the authors in this volume address problems, advance criticisms, or raise new points concerning work on lexical semantics/pragmatics and free enrichment within relevance theory (both mine and that of others). I endeavour to respond to them where the issues they raise clearly mesh with the themes of the chapter. Inevitably, but regrettably, several do not receive here the attention they deserve.

2. Another way of putting it is to say that Grice's 'what is said' was intended to meet two distinct criteria for centrality of signification which he discussed in his *Retrospective Epilogue* (Grice 1989a: 359–68): 'dictiveness' and 'formality' (for relevant discussion of how these criteria can pull in opposing directions, see García-Carpintero Chapter 5 of this volume).

3. Bach (Chapter 8 of this volume) reiterates the point that his semantic notion of 'what is said' is equivalent to the content of a 'locutionary' act, in the terms of J.L. Austin (as opposed to the 'illocutionary' or 'perlocutionary' acts). I find this confusing, since it seems pretty clear that Austin intended the content of the locutionary act to include occasion-specific sense and reference, both of which involve consideration of speaker intentions and wide context (that is, full-blooded, non-algorithmic pragmatic processes) – not just the fixing of values of pure indexicals, allegedly achieved via narrow semantic context, which is all that Bach wants to allow (Bach 1997, 2001). If anything, Austin's locutionary content matches up better with the Gricean minimal proposition view of 'what is said' (as expressed in Grice 1975: 44).

4. Chaves (Chapter 7 of this volume) argues that a Gricean minimal 'what is said' *must* play a role in the relevance theoretic account and so be psychologically real, since 'The [relevance theoretic comprehension] strategy computes all possible interpretations according to logical form. The contents postulated by minimalist tendencies are possible interpretations which must be rejected, according to RT, by the cognitive system.' This is a misconception: in fact, it would run directly contrary to the way the theory has been formulated if all (or, in fact, more than one or two) possible interpretations had to be computed (see Sperber and Wilson 1986/95: 163–70); not only is this unnecessary, but it would defeat the fundamental tenet of the theory that processing effort is to be kept to a minimum (other things being equal, relevance decreases as processing effort increases). A minimal proposition is not computed, except in the relatively infrequent instance in which it happens to be identical to the explicature of the utterance.

5. García-Carpintero gave these examples in his 2006 presentation in Granada, on which his chapter in this volume is based. Putting it a bit more technically, what we have here are 'diagonal propositions' in Stalnaker's (1978) sense – propositions that are directly determined by semantic character rather than

by 'content', as usually construed (see Kaplan 1989). García-Carpintero's discussion reminds me of some helpful clarifying exposition in Predelli (2005), who emphasises the distinctness of two kinds of language-centred projects: (i) the provision of an account of verbal communication, in which 'utterances' and 'contexts' (occasion-specific entities with a dynamic temporal dimension) play a central role, and (ii) the formal enterprise of investigating the logical properties of linguistic entities (for example, demonstratives), in which it is 'clauses' and 'indices' (static timeless entities) that are central.

6. This is particularly pressing in the case of those higher-order propositions which involve a speech act description ('S is telling A to P', 'S is asking A to tell her whether P'). Together with Mike Harnish, Bach has developed a very detailed account of different illocutionary acts, both conventional ones and communicated ones (the relevant category here), although how their category of communicated illocutionary acts relates (if it does) to the (later introduced) notion of impliciture is unclear to me (see Bach and Harnish 1979).

7. The thoughts on higher-level explicature presented in this section have been developed in discussion with Deirdre Wilson (see Wilson 2000; Wilson and Sperber 2004: 623).

8. Neale, always meticulous in his interpretation of Grice, takes an admissible cancellation to be one that goes through 'without literal contradiction, or at least without linguistic transgression' (Neale 1990: 77).

9. Here is what Grice says about this case in that early paper: 'There is a sense in which we may say that it [the implication of a contrast] is non-cancellable; if someone were to say "she is poor but she is honest, though of course I do not mean to imply that there is any contrast between poverty and honesty", this would seem a puzzling and eccentric thing to have said' (1961: 136). Levinson, in his textbook introduction of the diagnostics for conversational implicatures, takes it as obvious that conventional implicatures are not cancellable 'because they do not rely on defeasible assumptions about the nature of the context' (Levinson 1983: 128–9). See also Neale (1990: 107 n 20).

10. He makes the point again in very much the same terms in Grice (1981: 187) and there gives an example where the existential implication standardly carried by negated definite descriptions does not arise because of contextual assumptions shared by the speaker and hearer (*the loyalty examiner* case).

11. What is going on here looks very much like a form of what is known as 'semantic blindness' in the contextualism literature, where it presents particular problems for a contextualist account of attributions and denials of knowledge (see, for instance, DeRose 2006).

12. Capone, who agrees with Burton-Roberts that explicatures cannot be cancelled, has some qualms about taking this further step: 'It is amazing, to say the least, that Grice who seemed happy about coupling his notion of conversational implicature with his notion of intentionality did not notice the impasse that the two notions [speaker intention and cancellation] were leading to' (Capone 2009: 60). Yes, amazing and, in my view, just not credible. There is no impasse once one drops the peculiar idea that the cancellability test is something carried out by speakers as part of their communicative endeavour.

13. Another test or diagnostic in Grice's tool-bag is that of the (non-) detachability of an aspect of meaning (1975: 58), with conventional implicatures being detachable and conversational implicatures being non-detachable. This test requires a consideration of other utterances which 'say' the same thing as the original and provides a procedure that theorists can use to discern whether some element of utterance meaning (outside of what is said) can be detached or not. Clearly, it makes no sense to attribute any such practice to individuals in their role as speakers or communicators. Thus the term '(non-)detachability' does not lend itself to the kind of sliding from one sense to another that 'cancellability' apparently does.

14. I have sought here to engage with Burton-Roberts on his own terms and so to address (and counter) his arguments against the applicability of the cancellability test to explicature. However, my position is that, for reasons not discussed here, passing the test is neither necessary nor sufficient to establish that an element of utterance meaning is pragmatic rather than semantic and it should probably be abandoned (see Carston 2002: 138–40).

15. Chaves (Chapter 7 of this volume) supports the view that explicatures (unlike the Gricean 'what is said') are cancellable and suggests that this follows from a fundamental difference between the relevance-theoretic and Gricean projects: while the speaker's action of saying that P carries with it firm commitment (lacking in the case of implicated propositions), this is not the case with explicatures (which are 'simply developments of the logical form'). While I do not think this is quite right, it does raise some interesting issues concerning speaker commitment and its relation to pragmatically inferred versus linguistically encoded content. Recall that, in his *Retrospective Epilogue* (1989a), Grice allowed for dictiveness (which appears to amount to a high degree of speaker support for a thought he is expressing (ibid.: 367)) without formality (that is, without conventional linguistic meaning). His key example was of an utterance of 'He's just an evangelist' where the speaker means/endorses 'He is a sanctimonious, hypocritical, racist, reactionary, money-grubber.' There are two ways of interpreting this category of 'dictiveness without formality': as instances of conversational implicature(s) which carry high speaker commitment, or as a move on Grice's part towards a pragmatically enriched notion of 'what is said' (an explicature). Either way, then, it is not obvious that the grounds for the cancellability of implicatures (or explicatures) are simply low speaker commitment. Nor would this mesh well with the apparent *non*-cancellability of conventional implicatures. Nevertheless, the issue of speaker commitment and its relation to the explicature/implicature distinction is certainly something which calls for further thought.

16. In the last sections of her paper, Martí appears to reject the need for optional covert variables, at least for the two examples she discusses: 'It is raining' and 'I have eaten'. She concludes that the covert location variable in the former case is obligatory and that intransitive 'eats' always gets the existentially closed interpretation, so there is no variable. I agree with Recanati that, although a location of raining is recovered in most contexts because of its generally high relevance, there are cases (such as those mentioned above) where it is not obligatory. And a possible case where there is an unarticulated object constituent for intransitive 'eat' is the following: a frustrated

mother has just placed a plate of food in front of her fussy child and says to him 'Eat!'. Whatever the final decision on these particular cases, Martí has presented and defended a novel position on the unarticulated constituent issue – one which I assume she would seek to apply to any case which the pragmaticist presents as involving free pragmatic enrichment, so it is worth considering the arguments for it and its consequences.

17. There are broadly two construals (or varieties) of free enrichment – a semantic one and a syntactic one (see Recanati 2002: 339–42 and Chapter 2 of this volume). On the semantic construal, the output of free pragmatic processes is a proposition, truth condition, or state of affairs, that is, a semantic object, rather than a representation. On the syntactic construal, the output is a mental representation – a structured string of symbols. For relevance theorists, importantly, it is a conceptual representation, that is, a sentence of Mentalese (the representational medium in which we think and store our beliefs), as distinct from those syntactic representations which are specific to our linguistic systems (our I-languages, in Chomsky's terms). If we suppose, surely quite reasonably, that hearers process utterances so as to recover the speaker's meaning (her explicatures and implicatures), which they go on to integrate with their existing assumptions (representations) about the world, then the so-called 'syntactic' (or representational) construal seems inescapable.

18. The arguments here apply, *a fortiori*, to a position on which metaphorical or metonymic interpretations – also viewed by many nowadays as contributing to the propositional content of utterances – are claimed to be underpinned by an optional covert operator in the linguistic form (for example, Stern 2000). Such covert operators are in an even worse evidential position than Martí's optional covert indexicals in that they do not have overt counterparts in the linguistic system.

19. Discussions with Alison Hall have played an important role in shaping my arguments here. For a more detailed critique of the 'optional covert structure' view, see her PhD dissertation, Hall (2008b). In forthcoming work, we will attempt to provide a more fully worked out version of the processing argument against optional covert linguistic elements, paying closer attention to current models of online parsing and its interface with pragmatic processes (Carston and Hall (in preparation)).

   For another account of syntactically/semantically optional constituents (adjuncts), which, like Martí's, sees them as inevitably present in logical form, but is more sensitive to the pragmatic issues, see Vicente Cruz (Chapter 4 of this volume), who cites the work of Groefsema (2006).

20. In the discussion of Martí's account, I have assumed that natural language and the language of thought (conceptual representation) are distinct systems. In his survey of positions, Recanati (Chapter 2 of this volume) considers the possibility that they are not distinct, that thought is nothing but 'inner speech'. I very much doubt this (but will not review the arguments, many of which were given by Jerry Fodor in his original work on the language of thought (Fodor 1975)), and Martí herself (personal communication) believes that, while the linguistic system and the conceptual system interface, they are distinct representational domains. However, even on the view that our thinking *is* conducted in natural language sentences, the

redundancy argument given above against optional covert variables seems to hold: the derivation would proceed from the natural language sentence uttered, for example, 'It is raining', via pragmatic processes, to another natural language sentence, for instance, 'It is raining in Granada', without the need for any mediating linguistic form containing a covert location variable.

21. In a recent paper, Neale makes the following interesting observation about those he describes as 'heavy-handed semanticists': (i) they claim that 'heavy-handed pragmatics invokes magic [while they] invoke only well-understood semantic mechanisms' (Neale 2007: 79), but (ii) contrary to this rhetoric, every semanticist, no matter how much syntactic/semantic complexity he or she goes in for, appeals to 'pragmatic magic' in determining the propositions that speakers express (Neale ibid.: 80, 126–7).

22. Elsewhere I have speculated that encoded word meaning might be better construed as, quite generally, not a matter of full-fledged concepts but something much more schematic and abstract, and so not a component of thought as concepts are (Carston 2002: 359–64). Clearly, any such position would have significant ramifications for pragmatics – for instance, the process of *ad hoc* concept formation would become perfectly general and obligatory in comprehending words in context, and it would not be a 'free' pragmatic process because it would no longer be entirely pragmatically motivated. I set the idea aside for the purposes of this chapter, but it has a great deal going for it, in my view, and seems to be gaining ground, albeit in various guises (see, for instance, Bosch 2007; Pietroski 2008; Pritchard 2009).

23. Fodor (2008) adopts the metaphor of mental 'files', which seems to be pretty much equivalent to relevance theorists' talk of conceptual addresses, which give access to various kinds of information. For instance, he says: 'When you are introduced to John [...] you assign him a Mentalese name and you open a mental file, and the same Mentalese expression (M(John)) *serves both as John's Mentalese name and as the name of the file that contains your information about John*; [...] according to this story, *we think in file names*; tokens of file names serve both as the constituents of our thoughts and as the Mentalese expressions that we use to refer to things we think about.' (Fodor 2008: 94–5, emphasis in the original)

24. It is on this point that RT and Fodor part company. Although early Fodor (as in Fodor 1975, J.D. Fodor et al. 1975, and Fodor et al. 1980) advocated conceptual inference rules (or meaning postulates) for capturing the validity of arguments such as 'X kill Y ➔ Y die' and 'X red ➔ X coloured'; later Fodor (since at least the early 1990s) renounced these, along with any other kind of conceptual/inferential role semantics (see, in particular, Fodor 1998: 108–12). On this later view, content is constituted wholly by nomological relations between mental symbols and the world (entities or properties) and, as shown by Quine, there is no principled analytic/synthetic distinction. Within relevance theory, on the other hand, the logical/encyclopaedic distinction has been robustly defended by Horsey (2006), using both evolutionary considerations and developmental work on concept acquisition (following ideas set out by Sperber 1994, 1997). Thus, this is a psychological distinction and does not coincide with the (probably untenable) philosophical analytic/synthetic distinction.

That our mental apparatus must contain *some* inference rules is clear (they are what make it tick), but whether these have to be construed as content-constitutive is less clear (although Horsey argues that they must). If we do away with any substantive logical/encyclopaedic (content/belief) distinction and treat all information associated with concepts as mental representations of belief/knowledge, the question then becomes what inference rules are there, that is, what provides the engine for the system (just modus ponens or modus ponens and a few/many others). It is not clear what the answer is, or even how to go about finding an answer, but this is essentially an engineering question without too much theoretical weight. For interesting discussion of other issues raised by the logical/encyclopaedic distinction, in particular of how it impacts on the notion of explicature content, see Groefsema (2007).

25. Using a quite different framework, Bosch (2007) outlines a rather similar picture involving lexical concepts and what he calls 'contextual concepts'. He explicitly aligns his lexical concepts with the very meagre contents of Fodor's 'disquotational' lexicon and talks of processes of reasoning at the conceptual (non-linguistic) level as giving rise to the many different, albeit related, context-specific concepts that can be communicated on different occasions by the use of one and the same lexical concept. He calls the process of computing phrasal, and ultimately propositional, meaning 'compositional pragmatics'.

26. It is perhaps worth pointing out that there are two distinct but related notions of 'polysemy' (that is, the word 'polysemy' is itself polysemous – in one sense or the other). As Vicente and Martínez-Manrique use the term, within the context of a discussion of my view that semantic underdeterminacy (context-sensitivity) is quite general, 'polysemy' has to be understood as a pragmatic phenomenon and that phenomenon is not at odds with lexical atomism (the disquotational lexicon hypothesis, DLH). However, there is a perhaps more common use of the term 'polysemy', where it is taken to mean the linguistic *encoding* of several related senses of a word (semantic polysemy), which is often envisaged as occurring within, or generated by, a single (hence complex) lexical entry. This is more of an issue for the DLH, as in Fodor and Lepore's (1998, 2002) discussion of the two senses of 'bake' ('bake a potato' versus 'bake a cake') – it looks as if the 'solution' to this is to treat any apparent cases of encoded polysemy as really being no different from instances of homonymy (for example, 'bank', 'coach', or 'bug'), and hence as involving multiple distinct lexical entries, each of which is atomic and disquotational (with a distinguishing mark of some sort: BAKE-1, BAKE-2). I can see reasons for not being totally happy with this move, although I doubt that it is a major problem (if need be, there are any number of technical solutions for marking a difference between polysemies and homonymies); interestingly, however, a raft of experiments reported by Klein and Murphy (2001) suggest that there are, in fact, few, if any, representational differences between homonymy and encoded polysemy. In any case, encoded polysemy is not the issue here – *ad hoc* concept formation, which underlies the polysemy phenomena under discussion, is a pragmatic process of meaning *construction*, not a matter of simply selecting between concepts stored in the lexicon.

27. Obviously, Jackendoff's view deserves much more sustained scrutiny than is possible here. There are two points, in particular, that shed further light on the sort of position he is developing. (i) He denies the intentionality of language and thought, and defends a view of semantics as on a par, in this respect, with phonology and syntax, that is, as a purely internalist system of (non-intentional) representations: 'Semantic/conceptual structure does not *have* a semantics, it *is* the semantics for language' (Jackendoff 2002: 279). (ii) Although not definitional, lexical meanings are fully (de)compositional in that their necessary but not sufficient conceptual components are 'completed' by abstract image structures, so, for instance, while 'red' would share the component concept COLOUR with all other colour terms, it would be distinguished from them by its own particular imagistic component (ibid.: 345–50). This proposal is certainly interesting but, as with Pustejovsky's (1995) proposed *qualia* structures for lexical items, it could be reinterpreted in RT terms as providing formulations of some of the material to be found in the encyclopaedic entries of lexicalised atomic concepts.

28. Fodor himself does not seem to make explicit this point about concepts in thought outstripping those encoded in language, and Sperber and Wilson (1998) attribute to him the view that that there is a *bidirectional* one-to-one mapping between lexical items and atomic concepts. But, given his support for each of the points just made (that is, innate concepts, and concept possession by prelinguistic humans and certain non-human animals) and his more recent espousal of a strong form of the linguistic semantic underdeterminacy thesis (Fodor 2001), it seems that he must see the mapping as *unidirectional* only (that is, each natural language word maps to a single atomic concept, but not vice versa).

29. The metarepresentational *ad hoc* proto-concepts that I am positing here are likely to be similar, in at least some respects, to Sperber's (1997) 'reflective' concepts, which (as distinct from 'intuitive' concepts) also depend on the human metarepresentational ability.

30. It is noticeable that the phenomenon most apt to draw one in the direction of phrasal *ad hoc* concepts is extended metaphor. Carston (2002: 359) mentioned this possibility briefly and Vega Moreno (2007: 179–82) discusses some interesting examples (for instance, 'I'll work hard to sell the new product but I'm not *cleaning anybody's shoes*'). Other (non-metaphorical) cases of loose use do not seem to have the same propensity to project beyond the lexical level. In Carston (forthcoming), I consider metaphors that extend over not just phrases or sentences but whole stretches of discourse/text and suggest that understanding these may not be a matter of forming *ad hoc* concepts but a different kind of pragmatic process altogether.

31. The role of phrases in *ad hoc* concept formation is just one half of Romero and Soria's advocacy of 'phrasal pragmatics'. The other half concerns cases of unarticulated constituents which are required at a phrasal level, for example, a definite description such as 'the table' might require a completion along the line of 'the table in Mary's room'. There are, of course, a number of different accounts of how 'incomplete' descriptions (and quantifiers more generally) are understood, of which the 'free' pragmatic process of recovering an unarticulated domain constituent is but one. Assuming for the moment that it is correct, again it does not follow that there is any

need for a specifically 'phrasal' pragmatics. As far as I can see, this sort of case does not entail any new phrase-level mechanism or construct, but rather proceeds in the same way as clause-level enrichments (for example, the causal enrichment of 'and'-conjunctions or the provision of a location constituent for 'It's raining').

32. A further distinctive RT claim is that while metaphorical use involves a quite radical broadening of denotation, it is on a continuum with other cases of loose use, including approximations and hyperbolic uses, and there are no sharp cut-off points between these uses of language (consider 'Her husband is a saint' – is it hyperbolic, metaphoric, or both?). Thus metaphors are not to be thought of as a natural kind or as having any special distinctive properties. This continuity view is distinct from the idea that metaphorical use involves *ad hoc* concept construction, and it is quite possible to advocate either one of them without the other. Unlike the relatively recent *ad hoc* concept account of metaphor, the continuity view has been around since the early days of RT in the 1980s; for a recent vigorous defence of the claim, see Sperber and Wilson (2008). Since it is not central to the concerns of this chapter, I leave it aside here but look at it more closely in Carston (forthcoming).

33. In fact, contrary to the intuition being entertained here, there is empirical evidence that people interpret metaphors and similes rather differently. Glucksberg and Haught (2006) found that experimental participants made different judgements about the acceptability/aptness of corresponding metaphors and similes and that their interpretations of metaphors were more likely to involve emergent properties (that is, properties that are not directly associated with either the metaphor topic or vehicle) than their interpretations of the corresponding similes. O'Donoghue (2009) points out that there are instances of similes which simply have no direct metaphorical counterpart (and vice versa), and she makes a persuasive case for there being certain contexts in which similes are a more effective communicative device than their corresponding metaphors. Both of these studies support accounts, such as the RT one, which take the concept explicitly communicated by metaphors and similes to be different. Finally, it is worth noting that autistic people who find metaphorical uses difficult to understand seem to be much less troubled by similes (see Happe 1993), although exactly what they understand as communicated by the simile cases is something that needs closer investigation.

34. Pilkington takes the emergent property question to be closely tied to another issue with which he has been grappling for some time (see Pilkington 2000), which is how such a cognitively oriented approach as RT can account for the evocation of phenomenal states (sensory and/or affective) by certain uses of language, including metaphor. He has long taken issue with the RT claim that affective effects of language can be reduced to cognitive effects, that is, that the apparently non-propositional mental effects associated with the expression of attitudes and feelings can be explained in terms of weakly communicated implicatures (see Sperber and Wilson 1986/95: 222–4). He seems to think that mental imagery lies at the heart of the answer to this second question, too, but, while this might be right, I doubt that it provides a full explanation, since the image of Robert as a bulldozer or my

maths teacher as a dragon does not seem to evoke much in the way of feeling (or 'phenomenal impact'). The metaphor has to have some further characteristic(s) of being creative, novel, apt, and/or poetic (whatever these amount to).

35. Metonymic uses of language raise new issues since they are plainly not cases of lexical/phrasal narrowing or broadening (for example, '*The twinset and pearls* seems to be offended', 'No comment from *Buckingham Palace*', or 'She married *a free ticket to the opera*'). There seems to be a fairly regular pragmatic process of using a highly salient characteristic of a person or persons as an abbreviatory means of referring to them. Many of these are familiar and routine ('Downing Street', 'The White House', 'The *Guardian*', and so on), but other, more novel, cases can have a range of more or less striking effects. Exactly how (and even whether) they are to be analysed within the general lexical pragmatic approach remains to be seen. Romero and Soria (Chapter 12 of this volume) advocate an account of metonymy in terms of 'adding mandated unarticulated constituents of concepts at a phrasal level' – an 'enrichment' process triggered by the semantic or contextual anomaly of the literal meaning. This would be a very unorthodox case of an unarticulated constituent since, rather than the usual process of modifying a linguistically articulated head constituent (for instance, providing the relevant domain for a definite description, as in 'The table is broken'), the postulated process would be supplying the head constituent for a modifier that has been linguistically articulated, for instance, 'The ham sandwich *customer*', as they put it, in the case of 'The ham sandwich is waiting for his check'.

36. Unsurprisingly, this kind of 'lexical coercion' analysis tends to go hand-in-hand with a decompositionalist account of lexical meaning. Vicente Cruz attributes the particular case of 'aspectual coercion' discussed here to meaning features internal to the lexical items involved, such as [-duration], [+dynamic], [+telic], and so on. It seems unlikely that there are cases of allegedly language-internal coerced semantic structure building that do not depend on assuming some sort of complexity in lexical entries.

37. The classic work on lexical coercion and its role in semantic compositionality is by Barbara Partee, as in, for instance, Partee (1995, 2007). For very interesting discussion on the interplay of linguistic coercion and pragmatic modulation, see Recanati (forthcoming).

    Note that, because coercion is standardly invoked as a mechanism for ensuring the 'semantic well-formedness' of sentences (as in the quotation from Culicover and Jackendoff in the text), on those grounds, a great many cases of metaphorical use could be thought to involve linguistic coercion, yet almost no-one advocates this. (See Recanati's discussion of 'The city is asleep' in the reference just given.)

38. I have opted for the term 'pragmaticism' rather than 'pragmatism', since the latter is very well established as the name of a philosophical movement whose concerns are quite distinct from the communicative issues being discussed here and some of whose tenets – anti-realism and instrumentalism – are at odds with the philosophical leanings and cognitive underpinnings of relevance theory. In accordance with this decision, I have referred throughout the chapter to practitioners of radical pragmatics as 'pragmaticists' rather than 'pragmatists'.

39. As Bach (2005: 36–8) nicely puts it, there is no 'context *ex machina*' which somehow determines what is said or meant; what a speaker means and what a hearer takes her to mean are a matter of the workings of their internal pragmatic capacities, whose alertness to relevant contextual factors makes for strong constraints that greatly facilitate successful communication.

40. See Borg (2004, 2007), who makes, in my view, the strongest case for the semantic output of the language faculty being propositional (truth-conditional). Since both she and the other minimalists agree that this semantically expressed proposition is seldom among the communicated contents of an utterance, it is hard to see what (other than long tradition) is motivating their trenchant allegiance to a propositional semantics for natural language sentences. For further discussion, see Carston (2006, 2008).

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