CHAPTER 12 CONTEXTUAL ADJUSTMENT OF MEANING

ABSTRACT

This chapter focuses on the pragmatic adjustment (or modulation) of word meanings in context, a process which is often required in order to recover the concept that a speaker intends to communicate on a particular occasion of use of a word. According to the relevance-theoretic account, which is outlined here, the interpretation process involves the construction of an *ad hoc* concept whose denotation differs from that of the encoded meaning of the word. Different positions on encoded word meaning, whether it is fully conceptual or semantically underspecified, are also reviewed. The discussion inevitably involves assessment of 'minimalist' versus 'contextualist' positions on truth-conditional semantics, as well as the more communication-based view labelled 'pragmaticism'.

1. INTRODUCTION: SENTENCE MEANING AND SPEAKER MEANING

It is generally much easier to say what a speaker means when she utters a particular sentence in the course of a communicative exchange than it is to say what the sentence itself means in the abstract (or what any of the specific words or phrases within it mean). Consider the following exchange between two university lecturers, focusing on what Amy means (or communicates) by her utterance:

 Bill: Did the staff-student meeting go well? Amy: We gave up – the students wouldn't engage.

Clearly, what Bill takes Amy to be communicating depends on a rich background of assumptions that Amy assumes are accessible to him, but we all have access to some of these assumptions (based on general and cultural knowledge) and can surmise that she has communicated at least the following two propositions (or very similar ones):

- 2. a. Amy and the other staff members at the meeting *gave up* on their attempt to discuss certain issues with the students who were at the meeting because those *students would not engage* with these issues.
 - b. The meeting did not go well (from the point of view of Amy).

The key point is that there is a pretty massive gap between what is communicated here and the meaning of the two sentences employed for the purpose, 'We gave up', and 'The students wouldn't engage', both of which could be used, whether singly or together, in other conversational exchanges to communicate vastly different information. What about the meaning of the sentences themselves, abstracted from any particular use or context? The range of communicative possibilities achievable with these sentences goes hand in hand with their having a quite meagre meaning or semantic character in and of themselves. I won't attempt to specify here what that is in any detail, but whatever it is, it has to accommodate the fact that, for instance, 'we' is used to refer to a salient group of individuals which includes the current speaker, whoever that may be, and 'engage' can be used to convey a wide range of quite distinct meanings as in 'engage with a problem', 'engage an audience', 'engage a plumber', 'engage the gears of a car', 'get engaged to someone', etc.

This considerable gap between sentence meaning and speaker meaning is a perfectly general phenomenon. The nature of this gap and how we bridge it constitutes the domain of a pragmatic theory, a theory concerned with how it is that hearers are able to recover rich specific messages on the basis of utterances of linguistic expressions that radically underdetermine those messages. There are many different manifestations of this linguistic underdetermination of what the speaker meant (or communicatively intended): ambiguities (lexical and structural), referential indeterminacies such as 'we' and 'the students' in Amy's utterance above, unspecified quantifier domains as in '*Everyone* left early', incomplete expressions as in 'The students didn't *engage*' or 'Mary is *ready*', vague expressions like 'He is *young*' or 'They live *nearby*,' implicit clausal connections like the causal relation between the two parts of Amy's utterance above, approximations like 'He has a *square* face', non-literal uses as in metaphorical and/or ironical uses of 'Susan is a *saint*', and illocutionary indeterminacies as in 'You will meet Bill tomorrow', which could be a prediction, a promise, a request, or a bet.

The focus of this chapter is cases where the meaning provided by a lexical item has to be adjusted in context in order to recover the concept the speaker intended, as in the cases of 'engage', 'square' and 'saint' just mentioned. Before directly addressing this issue, however, it is worth setting out some relevant background, so in the next section, I provide a brief review of two pairs of terms: semantics and pragmatics; explicature and implicature. In section 3, some different kinds of pragmatic enrichment are described: saturation, 'free' pragmatic enrichment, unarticulated constituents. Then, with these parts of the bigger picture in place, we move, in section 4, to the main topic of how it is that hearers are able to grasp the intended occasion-specific meanings of words, and, in section 5, to an overview of the debate about exactly what lexical meanings are (whether full-fledged concepts or something more schematic and semantically underspecified). The chapter ends with a brief conclusion in which these views on word meaning are related to the overarching theoretical positions of minimalism, contextualism and pragmaticism.

2. LINGUISTIC COMMUNICATION: SEMANTICS AND PRAGMATICS

2.1 Semantics: truth conditions and/or encoded linguistic meaning?

According to long tradition, the core notion of semantics is the notion of 'truth conditions'. Philosophers of language take a fundamental property of language to be its 'aboutness', that is, its capacity to represent, or say things about, the external world. The conditions that make a sentence a true representation are what connect linguistic

representations to the external world. On this basis, we can be said to have semantic knowledge of a language to the extent that we grasp the truth conditions of the sentences it generates. However, coming from a more recent cognitive scientific perspective, there is another way of construing the semantic component of a language: as the meaning that is encoded in the linguistic system, that is, the stable context-independent meaning of the basic elements (morphemes or words) together with the meaning relations determined by its syntactic structures. An interesting question concerns the extent to which these two conceptions of semantics – as truth-conditional content and as encoded meaning – coincide.

It is obvious that there is not a perfect coincidence as there are words in every natural language (as opposed to human-made logical languages) which are intrinsically context-dependent. These are the familiar pronouns and demonstratives (or 'indexicals'), e.g. the encoded context-independent meaning of the word 'that' is something very minimal (and difficult to specify) which enables it to be used to mean (or 'refer to') an indefinite range of individuals, properties or situations. Thus, the sentence 'That's good' does not have a fully specifiable set of truth conditions unless it is relativized to a particular context of use. The question is whether context-dependence is confined to a small set of words of this sort (as 'semantic minimalists' maintain) or is a much more widespread feature of language (as 'semantic contextualists' maintain). The truthconditional semantics programme for natural language sentences can accommodate some limited context-dependence especially if it can be handled by a determinate set of contextual parameters like the speaker, the hearer, the day, time and place of utterance, which allow for a direct rule-based mapping from context-dependent word (e.g. 'I', 'you', 'today', 'now') to entity referred to ('semantic value', as it is sometimes put).

However, if context-dependence extends to descriptive words like nouns, verbs and adjectives, the programme looks less promising. Even more problematic, if sentence meanings are not fully propositional, even once the context-particular values of indexical words (pronouns, demonstratives) have been determined, then truth conditions cannot be given for natural language sentences but only for the propositions (or thoughts) they are used to communicate on a specific occasion of use. On the basis of cases like those discussed in section 1, this does seem to be the case: while the occasion-specific thought(s) communicated by 'We gave up' or 'The students wouldn't engage' or 'Mary is ready' or 'Everyone left early' are fully truth-conditional, it is far from obvious (and has proved difficult to establish) that the sentences themselves have a propositional content. According to the position known as 'contextualist semantics', it is not sentences types or even tokens of sentences (relativized to a narrow set of contextual parameters) but speech acts or utterances that have truth-conditional contents, and those contents are, to a greater or lesser extent, a matter of the context in which they are used, where the context involved is broad, encompassing general and cultural background knowledge as well as the immediate situation of utterance.

If contextualism is right and the semantic minimalist account of sentence meaning in truth-conditional terms cannot be sustained, what is to be said about sentence semantics? It seems that the linguistic semantic enterprise becomes, not the provision of truth conditions, but a specification of the kind of meaning-relevant information provided

by (encoded by) linguistic expressions as abstracted from any contextual specifics. In the case of lexical items, this might include concepts (perhaps the lexical form 'dog', for instance, maps to a mental concept DOG, which provides a repository for our accumulated knowledge about dogs) and procedures or processing constraints (perhaps the word 'but', for instance, tells us something about how we are to relate the sentence that follows it to the one that preceded it); in the case of syntactic structures and an array of functional words and morphemes (e.g. certain prepositions, case marking, inflectional affixes) the account would have to specify the relationships and connections they contribute to the meaning of utterances in which they appear. The output of this linguistic semantics is not a propositional entity (a thought) but a rich set of conceptual, structural and other clues that constrain and guide the processes of recovering the thoughts that constitute the communicated content of speakers' linguistic utterances. On this sort of picture, then, there are two rather distinct semantic enterprises: there is a 'translational' semantics, which explicates the mapping of natural language expressions into mental representations that play the evidential role just described, and there is what some see as 'real' semantics, which relates representations to the aspects of the external world that they represent, a truth-conditional semantics of thoughts (or sentences in Mentalese (the language of thought) (Fodor 1975, 1990)). For further discussion of linguistic underdeterminacy and of the two kinds of semantics, see Carston (2002: 48- 64)).

2.2 Pragmatics: implicature and explicature

The role of pragmatics is to take the output of the translational linguistic semantics as just described and use it, together with contextual assumptions, to infer the speaker's meaning. These pragmatic inferential processes are constrained and guided by principles that are specific to utterance interpretation based on the presumed rationality of the communicative process (that is, that speakers meet particular standards of informativeness, relevance and orderliness (Grice 1975, Wilson and Sperber 2004)).

As noted in the discussion of Amy's utterance in (1) above, it seems natural to think of speakers as communicating two kinds of propositions or thoughts, one that takes the encoded linguistic meaning as a kind of template (see (2a) above) and the other whose content seems to be quite separate from the linguistic meaning (see (2b) above). This latter component of communicated meaning is pretty universally known as 'conversational implicature', but the first component, a fleshing out of the skeletal linguistic meaning, has been given a number of different labels: 'what is said (pragmatic)' or 'what is said (intuitive)', as distinct from semantic construals of what is said; primary speaker meaning; 'impliciture', which captures the fact that some of its content is only 'implicit' in what is said (semantically construed); 'explicature', which highlights the distinction with 'implicature' while allowing for a range of pragmatic contributions (hence varying degrees of explicitness). In what follows, I will use the term 'explicature' which has been defined as follows within the relevance-theoretic pragmatic framework: An assumption/proposition which is communicated (speaker meant) and is developed out of one of the encoded logical forms (semantic representations) of the sentence uttered (Sperber and Wilson 1986/95: 182). Any other assumptions (or propositions) that are communicated (speaker meant) are implicatures.

An important constraint on utterance interpretation is that the derivation process should be inferentially sound, which entails that any implicated conclusions should follow logically from the explicature (and contextual assumptions). Recall again the implicature of Amy's utterance above: 'The staff-student meeting didn't go well'. This clearly does not follow from the schematic linguistic meaning of the sentences she uttered: 'We gave up', 'The students didn't engage', not even after the referents of 'we' and 'the students' have been provided. Further processes of pragmatic enrichment of the decoded meaning are necessary, as indicated in the representation of the explicature in (2a). The different kinds of pragmatic enrichment that may be involved in developing a decoded linguistic meaning into an explicature are discussed in the next section.

3. PRAGMATIC ENRICHMENT

Consider again the two sentences from the conversation in (1), repeated here for convenience:

3. We gave up. The students wouldn't engage.

When either or both of these are uttered, recovery of the speaker's explicature requires a variety of pragmatic enrichments. Some of these are overtly required by the linguistic form used and others are not. When the pragmatic process of supplying a specific contextual content or value is linguistically indicated, it is known as a process of 'saturation', and when it is not, it is known as 'free' enrichment (Recanati 1993). The contrast is between pragmatic processes that are linguistically controlled or mandated, and so obligatory (they must take place in all contexts of use), and those that are 'free', that is, not linguistically controlled, hence optional (they need not take place in all contexts). When these linguistically 'free' processes occur it is entirely a matter of pragmatics, that is, of recovering an interpretation that meets prevailing presumptions about the relevance (or informativeness) of intentional communicative behaviour.

3.1 Saturation

The most obvious case of saturation in (3) is the assigning of a referent to the pronoun 'we', which overtly sets up a slot or variable to be contextually filled. Arguably, however, there are slots which are not marked by such audible or visible linguistic forms, that is, they are cases of covert indexicals/variables or implicit arguments. The following are plausible cases involving saturation of a linguistically present but imperceptible constituent, such that the contextually supplied content answers the bracketed question:

4.	a.	Paracetamol is better.	[than what?]
	b.	It's the same.	[as what?]

c.	He is too young.	[for what?]
d.	It's hot enough.	[for what?]
e.	The winners each get £1,000.	[winners of what?]

These are all, arguably, semantically incomplete (subpropositional) until the constituent is contextually supplied. In each case, there's a lexical item which, as a matter of its meaning, requires completion: *better*, *same*, *too x*, *x enough*, *winner*. This may also be the case for components of the sentences in (3): the delimitation of the group of students or the activities which are taken to be the objects of 'give up' and 'engage'. If these are cases of saturation, then there must be some linguistic indication or other that the pragmatic process is required: in the case of the verb forms, it might be that their lexical entries specify an obligatory object; for the definite description 'the students', it might be some formal indication on the definite article or on the predicate 'students' or the phrase as a whole (see Stanley 2002 for discussion of these options).

3.2 Unarticulated constituents

There are instances of pragmatic enrichment that seem to be 'free' in the sense outlined above: they do not seem to be indicated by anything in the linguistic form employed by the speaker and they are not required to ensure minimal propositionality. Consider the following:

- 5. a. It'll take time for your knee to heal.
 - b. She has a brain.
 - c. Something has happened.

Once reference is assigned (to 'your' and 'she' and to any temporal variables), these examples are semantically complete (propositional) but, without further pragmatic adjustment, they are banal obvious truths (any process takes place over a span of time, all human beings have a brain as part of their physical makeup, etc.). In virtually no instance would a speaker of these sentences intend to express that uninformative, irrelevant proposition; rather, she would intend an enriched or elaborated proposition which is relevant, that is, which interacts fruitfully with the addressee's accessible contextual assumptions.

It has been argued that these are cases where a pragmatic process supplies an unarticulated constituent of content to the explicature. Let's be clear what is meant by this notion since the pragmatically supplied constituents of content in (4) above are also 'unarticulated' in one sense of this expression: they have not been given phonetic expression by the speaker. But the concept of unarticulated constituent (UC) at issue here is a more restrictive one according to which absence of linguistic articulation means absence of any formal indication at all, hence neither any overt audible/visible linguistic expression not any covert (phonetically unrealised) linguistic element in the logical form of a sentence. It is only when this is the case that we have 'free' pragmatic enrichment. This sort of linguistically unmandated enrichment, arguably, applies to a much wider range of cases than the banal truisms above in (5). The following are plausible cases:

- 6. a. Jack and Jill went up the hill [together].
 - b. Sue got a PhD and [*then*] became a lecturer.
 - c. Mary left Paul and [*as a consequence*] he became clinically depressed
 - d. She took out her gun, went into the garden and killed her father [*with the gun, in the garden*].
 - e. I'll give you £10 if [*and only if*] you mow the lawn.
 - f. Louise has always been a great lecturer [*since she's been a lecturer*]

Without the bracketed material, each of these is fully propositional (truth-evaluable) and is not an obvious truth, but in a great many contexts it is the propositional form enriched with the bracketed constituent that is the one communicated. It is this enriched proposition that is taken by addressees to be the content of what is asserted, that is, the basis upon which the speaker is judged to have spoken truly or not and the content that serves as a key premise in the inferential derivation of implicatures. Without these developments of the logical form (in addition to disambiguation and saturation), in many contexts the interpretation of the utterance would not meet the presumed pragmatic standard of sufficient informativeness or relevance. Such 'free' enrichment processes are like implicatures in that both are linguistically unarticulated and whether they are derived or not is entirely a pragmatic matter: they are supplied only if they are needed to reach an inferentially sound interpretation that satisfies pragmatic constraints. For further discussion of free enrichment and examples of unarticulated constituents, see Carston 2002, Hall 2008, and Recanati 2002, 2012.

It is sometimes not clear whether we are dealing with a case of an unarticulated constituent or saturation of a covert indexical/variable element and arguments are needed to establish which is in operation. Among the contended cases are the following, where the constituent in brackets is not pronounced in the utterance:

- 7. a Everyone [at such and such a party] left early
 - b. It's raining [in Oslo]
 - c. We've eaten [dinner]

While 'pragmaticist' advocates of free enrichment would argue that the constituents given in italics are entirely pragmatically motivated (Carston 2002, Recanati 2002), 'sematicists' maintain that these components of explicature content are underwritten by a covert linguistic element (Stanley 2000, Stanley and Szabo 2000, Marti 2006). This debate remains unresolved with a lack of definitive arguments one way or the other and with both sides facing an issue of potential overgeneration: the pragmaticist has to show that free enrichment is adequately constrained by pragmatics alone (Hall in press) and the semanticist has to convince us that the (many) imperceptible elements he posits are really there. While this particular debate may seem both arcane and intractable, it has important implications and needs to be resolved. For the semanticist, unarticulated constituents are a particularly unappealing prospect as they cause problems for any orthodox principle of semantic compositionality, which aims to provide an algorithm for composing the meaning of any sentence out of its basic components and their combinatorics. For the pragmaticist, unarticulated constituents are a manifestation of the power of pragmatics in utterance interpretation, making it not just an optional add-on to linguistic decoding but an independent determinant of the speaker's explicitly communicated meaning.

There is another kind of pragmatic enrichment or adjustment that occurs in developing the encoded sentence meaning into the explicature. This is the process of modulating or adjusting literal (encoded) word meanings, as in, for instance, adjusting the meaning of the verb 'engage' in (3) above in determining the specific concept the speaker intended (paraphraseable as 'give focused attention and thought [to an issue or problem]'). An interesting question is whether this is a linguistically controlled pragmatic process or a 'free' pragmatic process. It appears strikingly different from the process of indexical saturation, but whether it qualifies as free rather than linguistically controlled (in some way or other), so whether it is an optional pragmatic process rather than an obligatory one, depends entirely on the nature of encoded lexical meanings. If lexical meanings are fully conceptual (hence can contribute directly to truth-conditional content, thus to explicature) then contextual adjustments of word meaning are optional and the pragmatic process is in this sense free, but if they are some more schematic kind of mental entity (hence semantically underspecified), the process of word meaning adjustment is one of specifying the concept expressed and is obligatory. I return to this issue in section 5 where views on the nature of encoded word meaning are discussed. In the next section, we will look at the pragmatic processes of word meaning modulation.

4. OCCASION-SPECIFIC WORD MEANINGS

4.1 Lexical adjustment and *ad hoc* concepts

Several accounts of word meaning adjustment in context have been developed in recent years by pragmatic theorists who take different approaches to the process. Two prominent accounts are that of Francois Recanati (2004) and relevance theorists (e.g. Wilson and Carston 2007). There is considerable overlap of outlook: both agree that a word may contribute to the explicature of an utterance a constituent of content that is different from its literal encoded meaning. However, their views on the actual processes responsible for these meaning adjustments diverge markedly (for discussion, see Carston 2007, Recanati 2007). On Recanati's contextualist approach, 'the interpretation that eventually emerges ... results from a blind, mechanical process. ... 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). The relevance-theoretic account, on the other hand, is fully inferential and the hearer's interpretive process is guided by the assumption that the speaker is a rational communicator (that is, that her utterances meet a

standard of optimal relevance to her addressee). Here, I outline the relevance-theoretic account of word meaning adjustment in terms of a pragmatic inferential process of *ad hoc* concept construction.

Consider the following examples, taking them to be utterances about a man in his forties, Boris, who has been married for many years:

- 8. a. Boris is a man.
 - b. Boris is a child.
 - c. Boris is a bachelor.

In (8a), the linguistically encoded content is a trivial truth, hence uninformative, insufficiently relevant. The addressee's process of trying to grasp the speaker's meaning, a process guided by his expectation of relevance, leads to the encoded concept MAN being narrowed down so as to encompass just men of some kind. Depending on the specifics of the context, it could be narrowed down to 'typical man' or 'ideal man' and, of course, what constitutes a typical man or an ideal man will itself vary from context to context. The outcome of this process is an occasion-specific sense (or 'ad hoc' concept) MAN*, whose denotation is a proper subset of the set of individuals that fall under the original encoded concept MAN. In (8b), we have the opposite phenomenon: the encoded concept CHILD is adjusted so as to mean roughly 'person who behaves in certain childish (or child-like) ways', and the result is a concept CHILD* which is broader than the lexically encoded concept – as well as children, it includes some adults. Then, if we take (8c) as an utterance by Boris's wife, who has long endured his affairs with other women and general lack of commitment, the concept BACHELOR* which is communicated is, arguably, both a broadening of the lexical concept BACHELOR (it includes married men who behave in certain ways) and a narrowing of it (it excludes unmarried men who don't behave in this stereotypic way).

These *ad hoc* concepts, which are marked by an asterisk to distinguish them from lexically encoded concepts, are composed into the explicature and play a key role in warranting implicatures of the utterance. So, for (8c), for instance, the interpretation ultimately derived looks something like the following:

9.	Explicature:	BORIS _X IS A BACHELOR *
	Implicatures:	BORISX DISLIKES EMOTIONAL COMMITMENT
		BORIS _X PREFERS TO AVOID DOMESTIC RESPONSIBILITIES
		Boris_X enjoys going out with his friends and meeting
		NEW WOMEN

Without going into the details of the cognitive and communicative principles proposed in relevance theory (see Wilson and Sperber 2004), I will briefly outline the account given within this framework of how a hearer reaches this interpretation of (8c). Let us assume, in line with the theory, that a hearer follows a path of least effort in accessing interpretations and accepts the first one that meets a certain level of relevance, that is, yields a satisfactory array of implications (or other cognitive effects) while requiring no gratuitous processing

effort from him. When the lexical form /bachelor/ is recognized, it activates a lexical concept BACHELOR along with a range of associated encyclopedic information about bachelors, including bundles of assumptions that make up stereotypes of certain kinds of bachelors, one for the carefree, fast living, undomesticated sort, another for the elderly fussy, woman-averse sort. In the context, which includes the fact that it is Boris's wife who is the speaker, it is likely that the first of these bundles of stereotypic information is more highly activated than the second and that the definitional information that bachelors are unmarried men is either very low in activation or, if initially highly activated, is rapidly suppressed, given its inconsistency with Boris's married status. On this basis, perhaps together with further contextual assumptions about Boris, the hearer forms hypotheses about the speaker's meaning, which may well include propositions such as those given above as implicatures of the utterance: Boris is uncommitted, irresponsible, etc. The claim is that the explicature (developed out of the decoded linguistic meaning) and the implicatures are derived in parallel and there are processes of mutual adjustment between them that go on until the interpretation settles into a sound inference pattern and meets the presumption of relevance. What that entails in this case is the adjustment of the encoded concept BACHELOR to yield the concept BACHELOR* which warrants the hypothesized implications and no others.

There are two further points to note here. First, the idea is not that there are distinct processes of narrowing and broadening of word meaning but rather that there is a single process of word meaning adjustment which takes place as part of the bid for an interpretation (explicature and implicatures) that meets the dual requirements of being inferentially sound and satisfying the criterion of optimal relevance. Second, the process of mutual parallel adjustment of explicatures and implicatures does not apply only to the adjustment of encoded word meaning but to all the pragmatic contributions to explicature including the recovery of unarticulated constituents, the various saturation processes discussed above and disambiguation (see Wilson and Sperber 2004).

4.2 Metaphor and other non-literal uses of words

An interesting further proposal made within the relevance-theoretic approach to lexical pragmatics is that exactly the same process of *ad hoc* concept construction as outlined in the previous subsection applies in the comprehension of metaphorically used words (Wilson and Carston 2007, 2008; Sperber and Wilson 2008). So, for example, in figuring out what the speaker means by an utterance of the sentence 'Boris is a chameleon', the interpretive process would be one of accessing highly activated components of information associated with the concept CHAMELEON. Given contextual constraints, including that the subject, Boris, is an adult male human being, the information accessed would include the assumptions that chameleons change their appearance and behaviour according to the environment they are in, that they are thereby able to evade detection, etc. (and would exclude the information that they are lizards, brightly coloured, with rapidly darting tongues, etc.). This readily accessible information is used in forming a hypothesis about the intended implications of the utterance and adjusting the lexical concept to the *ad hoc* concept CHAMELEON* so as to warrant just those implications.

Underlying this account is the assumption that metaphorical uses are simply one kind of loose use of language and lie on a continuum with other varieties of loose use, including approximations, category extensions and hyperbolic uses. Although the *ad hoc* concept derived in the case of a metaphorical use is likely to involve a more radical broadening of the encoded literal meaning than these other cases of loose use, there is no difference in kind and nothing special about the mechanism involved in metaphor interpretation. Consider, for instance, the following uses of the word 'marathon':

- 10. a. Mary ran the London marathon this year.
 - b. I'm going to run a marathon for charity.
 - c. My morning jog is a marathon.
 - d. The presidential election campaign is a marathon.

While (10a) is a strictly literal case (that is, the running event referred to is 26 miles and 385 yards), (10b) may be an approximation where the use of 'marathon' could include runs that are somewhat less than 26 miles but which are still considered long and demanding. Then, with regard to (10c), let's suppose it is uttered by a rather unfit person who has only recently embarked on the activity of jogging round her small local park; this would be a case of hyperbolic use and the information associated with the encoded concept MARATHON that it would activate would be to do with the physical effort expended by the runner, the resulting fatigue, etc. and not to do with the run being of considerable length. Finally, (10d) seems a clear case of metaphorical use, where the information about physical distance and physical running would not be accessed while that concerning the psychological and emotional stamina required would be. The idea, then, is that, for each of these uses, a different subset of the mass of information associated with the lexical concept MARATHON is the most highly activated one and plays an instrumental role in determining which particular *ad hoc* concept the speaker intended.

There are some challenges to this very 'deflationary' view of metaphor. First, although the on-line *ad hoc* concept construction process seems to work fine for these simple lexical cases, which are typical of spontaneous face-to-face conversation, one might wonder how adequate it is to capture more creative, complex or extended cases of metaphor, especially those that occur in poetry and seem to require sustained reflective processing (see Carston 2010). Second, even within the domain of cases which are, arguably, adequately handled by the *ad hoc* concept account, there is a strong intuition that the loose uses variously labelled approximations, category extensions, hyperboles, and metaphors each have some distinctive properties that are not captured by this account, which therefore needs to be made more fine-grained (see Carston and Wearing 2011). Third, for many theorists, metaphor, even though a pervasive use of language, is not to be assimilated to a more general class of loose uses of language but employs its own distinctive processing mechanism. A view held by many cognitive linguists is that metaphor is first and foremost a cognitive (rather than a communicative) phenomenon and humans manipulate a wide range of conceptual metaphors which effect mappings between disparate cognitive domains, so, for example, there is a conceptual metaphor <HUMANS ARE ANIMALS> which provides mental mappings from the domain of animals to the

domain of human characteristics and behaviour. This would underlie the utterance of 'Boris is a chameleon' discussed above and the many other metaphorical uses of animal terms ('pig', 'dog', 'cow', 'bear', 'wolf', 'fox', etc.). The leading proponent of the conceptual metaphor view is George Lakoff (1993). One possibility is that conceptual metaphors, if they exist, are one of the sources of encyclopaedic information used in the relevance-theoretic account of *ad hoc* concept formation (Tendahl and Gibbs 2008).

Another kind of non-literal use that is widely agreed to contribute to explicature is metonymy, exemplified here:

- (11) a. The eggs florentine is calling for his bill.
 - b. Downing Street refuse(s) to comment.
 - c. I'm parked out back.

Intuitively, it seems that 'the eggs florentine' is understood as 'the person who ordered the eggs florentine' and the question is which (if any) of the kinds of pragmatic enrichment discussed so far could account for this: variable saturation, free enrichment (supplying of an unarticulated constituent) or word/phrase meaning modulation (resulting in a phrasal ad hoc concept THE-EGGS-FLORENTINE* which refers to a particular human individual). There is no evidence for any covert variable here (as agreed by even staunch advocates of the covert indexical approach (see, e.g., Stanley 2005), but which, if either, of the other two options does the job is very unclear. Some theorists speak of metonymy as involving a kind of 'meaning transfer' (Nunberg 1995). As Recanati (2004: 26) says: 'In transfer the output is neither an enriched nor an impoverished version of the concept literally expressed by the input expression. It's a different concept altogether, bearing a systematic relation to it.' For example, it is not the case that the move from the concept EGGS FLORENTINE to the concept PERSON WHO ORDERED EGGS FLORENTINE or from DOWNING STREET (the place) to GOVERNMENT SPOKESPERSON (AT DOWNING STREET) can be thought of in terms of a narrowing and/or broadening of the encoded concept. Thus, how metonymy works remains an unresolved issue in relevance theory (see Wilson and Carston 2007: 253-54).

4.3 Ad hoc concepts - open issues

The work on *ad hoc* concepts is relatively recent and there are many questions raised by the notion. The first is whether these entities are to be thought of as internally structured (decompositional) or unstructured (atomic). *Prima facie* they seem to present a strong case for being internally structured: doesn't the *ad hoc* concept BACHELOR* expressed by the use of 'bachelor' in (8c) above consist of a combination of other concepts along the lines of: MAN WHO IS IRRESPONSIBLE, UNCOMMITTED, PROMISCUOUS, etc? However, many relevance theorists are committed to an atomistic view of lexical concepts and would like this to carry over to the *ad hoc* concepts derived from them; the idea would be that, for this use of 'bachelor', the highly activated concepts IRRESPONSIBLE, UNCOMMITTED, PROMISCUOUS, etc. would trigger an atomic concept BACHELOR* which functions as a basic component in thought (a 'word' in Mentalese).

A second question that has been raised is the extent to which these 'ad hoc' components of communicated meaning are really novel or occasion-specific; after all, at least some of them are quite familiar, even standardised, uses of the words concerned, e.g. the application of 'chameleon' to an unreliable, fickle person, or 'child' to an adult who is behaving in an immature way. This is undeniably right; these contextually conditioned word meanings may already be active components of the hearer's cognitive repertoire so, as used here, 'ad hoc' cannot be taken to mean new or one-off. What it means is that the concept is *pragmatically derived* as opposed to lexically encoded and even here there may be differences across individuals – for someone who has only been exposed to the use of 'chameleon' for a certain kind of human behaviour and is ignorant of the lizard species, this human-applicable concept might be the one it encodes. One of the strengths of this pragmatic account of how we can communicate a wide range of distinct concepts across contexts is that it allows for considerable individual differences in lexical knowledge.

Thirdly, the question arises whether, in cases of genuine novelty, the *ad hoc* meaning derived is always a fully-fledged concept or something less determinate. Consider in this regard the following attested example, focussing on the novel use here of the word 'topspin':

 (12) Theatre critic discussing a new play on in London:
 'The gold standard performance comes from McDiarmid. Vocally, he is spellbinding, giving lines dextrous topspin and unexpected bursts of power.' Sunday Times (04/09/11) Culture section, p.23

With some fairly minimal knowledge of the nature and effects of hitting a ball with topspin in games like cricket and tennis, one can grasp enough implications of the critic's description of McDiarmid's vocal performance to be able see the relevance of the utterance. Plausible implicatures are the following:

(13) McDiarmid speaks his lines in a way that compels attention His changes of pitch and rhythm are unusual and remarkable The other actors may find it hard to match his verbal skill

But what about the novel 'concept' communicated here, the *ad hoc* component of meaning that would replace the literal encoded concept TOPSPIN in the explicature of the utterance? This use of the word 'topspin' may have been entirely new for many readers, as it was for me, and it may well be that we would not be able to employ it with any confidence ourselves, even though it clearly supports implications such as those in (13) and so does the job quite adequately in this particular instance. The thought here, then, is that a reader, who has essentially understood this utterance, may nevertheless not have formed a complete concept TOPSPIN* (which is locked to a property in the world) but rather just a metarepresentational mental entity "TOPSPIN"*, marked as not fully understood, something which may or may not become fully conceptualised at a later date. For discussion of the three issues just sketched, see Carston (2010) and Hall (2011).

A final point of interest here is whether the account of pragmatic contributions to explicature (or the truth-conditional content of the utterance, as it is sometimes described) really needs both word meaning modulation (resulting in *ad hoc* concepts that replace encoded lexical concepts) and unarticulated constituents (UCs), as discussed in section 3.2. It seems that quite a number of the cases discussed in the literature on UCs might be better thought of as cases of word meaning modulation. Consider again some of the examples given earlier as involving UCs:

- a. She has a [good] brain.
 b. Jack and Jill went up the hill [together].
 c. She took out her gun, went into the garden and killed her father [with the gun, in the garden].
 - d. I'll give you £10 if [*and only if*] you mow the lawn.
 - e. It's raining [*in Oslo*].

Some of these seem easily conceptualised as cases of deriving an enriched or narrowed *ad hoc* concept, e.g. 'good brain' as a narrowing down of 'brain' or 'kill with a gun' as a manner specification of 'kill'. Perhaps, then, these are really lexical adjustments that would appear in the explicature as the atomic concepts BRAIN* and KILL*. Whether this can be extended to all cases of putative UCs (such as the location phrases in (14c) and (14e)) is another open question. It might not seem to matter much one way or the other but, as with the debate about UCs and covert indexicals mentioned in section 3.2, it is interesting for its impact on 'semantic compositionality'. Either way some kind of enriched construal of compositionality is needed, but in the case of UCs this is much more problematic because a new component of structure appears to be derived without any linguistic basis, while in the case of lexical adjustments the *ad hoc* concept simply occupies the structural position of the linguistically encoded concept.

In this section, we have been assuming that words encode concepts, so the pragmatic process of lexical modulation takes one concept as its input and delivers another as its output. This assumption is questioned in the next section.

5. ENCODED WORD MEANINGS: CONCEPTS OR SEMANTICALLY UNDERSPECIFIED?

5.1 Lexical concepts

It is widely held by philosophers, psychologists, linguists and pragmaticists that descriptive words (nouns, verbs, adjectives) encode concepts, that is, mental symbols that (i) function as components of thoughts and (ii) denote entities, properties or situations in the world, hence are fully semantic entities in the truth-conditional sense. There has been a long debate about whether these lexical concepts are internally structured (hence composed of more basic components) or are themselves the primitives of the representational system (hence are atomic or unstructured). Most relevance theorists have adopted the view of Jerry Fodor that they are atomic, that is, that 'cat' means CAT, 'green' means GREEN, 'open' means OPEN, and so on (for detailed arguments in favour of concept atomism, see Fodor 1998). Whether the atomistic view of encoded lexical concepts or a decompositional position ultimately turns out to be correct, the relevant point here is that these encoded (standing) word meanings are the kind of entity that can be speaker meant and so can be a constituent of explicatures. It follows that, even though word meanings are typically pragmatically adjusted in context, this is an optional (free) process and the encoded concept may, on occasion, be the very concept the speaker intends to communicate.

Sperber and Wilson (1998) maintain that some words do not encode a full-fledged concept but what they call a 'pro-concept', that is, a meaning or character that functions as a constraint on the kind of concept that it can be used to express. What that concept is on any occasion of use has to be pragmatically inferred using relevant contextual information. They suggest 'my', 'have', 'near', and 'long' as likely instances of words that encode proconcepts, and say that 'while each of these examples may be contentious, the existence of the general category should not be' (Sperber & Wilson 1998: 185). Most interestingly, they go on to say: '... quite commonly, all words behave as if they encoded pro-concepts: that is, whether or not a word encodes a full concept, the concept it is used to convey in a given utterance has to be contextually worked out'. One of the examples they discuss in this regard is the verb 'open', noting the widely acknowledged fact that it can be used to express a range of different but related concepts, depending on both linguistic and extralinguistic context (e.g. 'open the door', 'open a book', 'open a bottle', 'open one's eyes', 'open one's mouth', 'open a shop', 'open a conference', and so on). As they say, 'A verb like 'open' acts as a pointer to indefinitely many notions or concepts ...' (1998: 197). However, they also maintain that the pragmatic process of inferring the intended concept in context is optional because 'it may so happen that the intended concept is the very one encoded by the word,' (1998: 197). So Sperber and Wilson presuppose that many words encode concepts as their standing meaning and may, on occasion, contribute the concept they encode directly, without any pragmatic adjustment, to explicatures. The point of primary interest here is that, according to this account, the linguistic 'evidence' or 'clue' to the speaker's *intended concept* which is provided by the encoded meaning of the word and is input to the pragmatic adjustment process described in the previous section, is itself a concept, a full-fledged semantic entity.

There is reason to wonder whether this is the right view of encoded (or 'standing') word meaning. First, note that it is very difficult to get any purchase on the nature of the alleged lexical concept OPEN and on what it is to have a thought in which such a general concept features, as opposed to any of the more specific concepts that we grasp in understanding the phrases 'open one's mouth', 'open the window', 'open a shop', etc. The question is whether there is any definite thought at all or whether any thought about opening must contain one of the more specific concepts (Carston 2012, 2013).

Second, this point is not confined to a few verbs that happen to have multiple uses like 'open', 'stop', 'pass', 'cut', 'run', 'rest', 'turn'. Rather, it applies to virtually all descriptive words, given that, as Wilson and Carston (2007: 231) maintain: '... lexical narrowing and broadening (or a combination of the two) are the outcomes of a single

interpretive process which fine-tunes the interpretation of *almost every word*.' A similar view is taken by the computational linguist Bosch (2007) who, working in a different framework, observes that the lexical meaning of many words is underspecified and must be developed at a conceptual/pragmatic level in order for its expressed meaning to be recovered by a hearer. The noun 'novel', for example, which he discusses at length, can have the following senses: a complex of ideas/thoughts (when the author is working on it), a text (when it is completed), a publication (e.g. when we talk of an author's most recent novel), a physical object (e.g. when we talk of a suitcase full of novels), and certain combinations, e.g. 'Peter is reading the novel he found at the bus-stop' (text and physical object). No particular one of these senses is obviously the encoded meaning or is sufficiently all-encompassing to provide the basis for pragmatically inferring the other senses. As Bosch says, 'If we want to maintain just one lexical entry for novel it must remain underspecified in many respects ...' (2007: 68). He discusses a number of other words of various lexical categories (e.g. 'work', 'rain', 'run', 'cut', 'open', 'fast') whose susceptibility to being used to express different concepts, which he calls 'contextual concepts', points to the same conclusion: 'the lexical semantics should be left underspecified in these cases.' However, like the relevance theorists, Bosch also talks of 'lexical *concepts*' and likens his position to that of Fodor and Lepore's (1998) 'disquotational' view of the lexicon, that is, lexical forms map directly to atomic concepts, which constitute their standing meaning (ibid: 13).

The question here is: if words quite generally behave as if they don't encode concepts (as if they encode pro-concepts), why maintain that they do encode concepts? There are other possibilities for what encoded word meanings might consist of: (a) they may be schematic underspecified entities (which, while not conceptual themselves, function as constraints on the array of concepts they can be used to express), (b) they may be rich and overspecified (so that some of their meaning features have to be filtered out on any occasion of use), or, the most radical position, (c) there may be no encoded word meanings at all, but only an accumulation of memory traces of previous uses of a word which provide the input to pragmatic processes of occasion-specific word meaning determination. All of these positions have their advocates (see Recanati 2004), but I will focus, in the next section, on the view that word meanings are underspecified because there is some recent empirical evidence, based on the processing of polysemous words, that makes it look highly plausible.

5.2 Polysemy and underspecified word meanings

Polysemy is the phenomenon of a lexical form that has multiple related meanings (where that relatedness is apparent to users of the word). There seem to be at least two ways of viewing the phenomenon of 'polysemy', a pragmatic way and a semantic way. The various examples discussed in preceding sections, including the nouns 'child', 'man', 'bachelor', 'chameleon', 'marathon', 'novel', 'boiling', 'open', and so on, have been shown to express different related meanings on different occasions of use. With regard to the processes of utterance comprehension, this is arguably an 'output' phenomenon, the result of pragmatic processes of interpretation (hence *pragmatic* polysemy). There is

another, probably more common, way of thinking about polysemy, which is as an 'input' phenomenon and so as applicable only to those instances where the distinct but related senses are fully conventionalised (hence *semantic* polysemy). Examples often cited are the animal/meat alternations for words like 'lamb', 'chicken' and 'rabbit', cases like 'book', 'novel', 'film', 'dvd' which are regularly understood as either the physical object or the representational content, and numerous others where a metaphorical meaning has become very common and alternates with a literal meaning, e.g. adjectives like 'cold', 'warm', 'hard', 'soft', 'rigid', 'flexible', 'bright', 'dull', and so on.

Pragmatic polysemy is surely the forerunner and source of semantic polysemy; while many cases of pragmatic polysemy will not become cases of semantic polysemy (many *ad hoc* concepts are one-off or at least too infrequent to become established senses), all cases of semantic polysemy must have arisen pragmatically (even if in some instances we are unsure which sense came first). Thus understood, all (descriptive) words are polysemous or at least potentially so.

The question often asked about polysemy (in the semantic sense) is whether or not all the established senses of a word are listed in the lexicon, as is necessarily the case for instances of homonymy (accidental ambiguity), e.g. the several *unrelated* meanings of such lexical forms as 'bank', 'bug', and 'coach'. Polysemy might work quite differently, perhaps with only one basic or core sense listed and the others derived by some semiproductive rule (e.g. a rule that generates a meat sense from an animal sense) or by pragmatics. In a series of experiments, Steven Frisson and colleagues set out to find out whether the senses conventionally associated with polysemous words are processed differently from those associated with homonyms. Using eye tracking techniques, they tested people's on-line processing of examples such as the following (the first a case of metonymy, the second a case of metaphor):

- 13. a. The worried mother rang the *school*.
 - b. He got on his bike and *flew* down the road.

What they found, in brief, was that, in contrast with homonyms, polysemous words are not processed in ranked parallel fashion, that is, the different senses are not all activated at the same time with the strength of activation dependent on sense frequency followed by rapid selection on the basis of frequency or context. Rather, no immediate semantic commitment is made (as it is with homonyms), that is, language users do not immediately select one or other of the senses (Frisson 2009). For instance, when processing the word 'flew' in (13b), people do not first access the two senses (the literal one which is the dominant (more frequent) sense and the non-literal subordinate one), and then rapidly select the latter on the basis of the context (riding a bicycle). Rather, the experimental evidence indicates that a single general meaning is accessed and this subsequently evolves into one or other of the more specific senses. On the basis of these findings (across a fair number of experiments testing different categories of words), Frisson and colleagues propose their 'Underspecification hypothesis': 'Rather than activating one or more specific senses, readers initially activate a single, semantically underspecified, meaning. This abstract meaning is the same for all established senses of a word, that is, the same

underspecified meaning encompasses all semantically related interpretations of a word that are known to a reader.' (Frisson 2009: 116). Once this underspecified meaning has been accessed, it can be followed by what they term a 'homing-in' stage in which context (pragmatics) is used to arrive at one or other of the specific senses (see Frisson and Pickering 2001: 149; Frisson 2009: 117).

So the evidence from tracking people's on-line language processing provides support for the position that polysemous words (that is, all descriptive words) have a single underspecified abstract meaning representation which is distinct from any of the senses (or concepts) they can be used to express. This empirical evidence together with theoretical linguistic arguments for a single schematic meaning (Ruhl 1989, Bosch 2009, Carston 2012, in press/2013) makes for a pretty good case in favour of the position that encoded word meanings are semantically underspecified. However, the difficulty is to give a plausible and usable account of what these schematic meanings or constraints are like and how they are employed by the pragmatic interpretive processes that rapidly recover a fully conceptual component of speaker meant content. This is a topic of ongoing research.

Recall the question raised at the end of section 3, whether the pragmatic process of modulating word meanings is obligatory or optional. If encoded word meanings are not fully conceptual but are instead semantically underspecified, as suggested here, the pragmatic process is obligatory: guided by the schema or constraints provided by encoded lexical meaning, this process of recovering the concept the speaker expressed must take place across all contexts of use. If this is right, it may turn out that there are, after all, no 'free' pragmatic processes involved in the recovery of the speaker's explicature.

6. CONCLUSION: CONTEXTUAL ADJUSTMENT OF MEANING AND PRAGMATICISM

There is little doubt that the level of explicitly communicated content (the explicature or 'intuitive' truth-conditional content of an utterance) often receives considerable pragmatic input in additional to the meaning that comes directly from the linguistic system. This chapter has reviewed a range of kinds of pragmatic enrichment – saturation, unarticulated constituents and word meaning modulation. The question yet to be resolved is whether all of these processes are required and, in particular, whether there really are free (hence optional) pragmatic processes at this level (implicature derivation being, of course, an unequivocally 'free' pragmatic process) or, instead, all pragmatic contributions to explicature are linguistically mandated (hence obligatory).

To finish, I would like to return to the opposing stances on truth-conditional content: semantic minimalism and semantic contextualism. The main difference between them is their view of natural language semantics, specifically, whether or not sentences are propositional, hence truth-conditional. It's worth nothing that minimalists, as much as contextualists, recognise the explicature/implicature distinction, that is, the distinction between two kinds of speaker meaning (or intentionally communicated content) and both agree that explicature (or 'what is said' by a speaker) requires considerable pragmatic

input (see the minimalists Borg (2004) and Cappelen & Lepore (2005) on this point). What interests both parties is truth-conditional content ('real' semantics): for minimalists, this starts with sentences in a language system, for contextualists it only comes into play with utterances of sentences in specific contexts. The implication of this for the level of word meaning is that minimalists have to maintain that encoded or standing word meanings are conceptual, that is, fully semantic entities, which can contribute directly (without pragmatic mediation) to truth conditions (Borg 2012), whereas contextualism is compatible with the entire range of positions, from fully semantic word meanings, through semantically underspecified meanings, to meaning eliminativism (Recanati 2004).

A third position is pragmaticism, represented by the relevance-theoretic approach discussed in this chapter. It tends to share with contextualism the view that sentence meaning is schematic, not fully truth-conditional, and that pragmatic input is essential in order to determine a fully propositional entity, but this is not the essence of the position because it is first and foremost a theory of communication rather than a semantic theory. Thus, the focus is on the contents or thoughts that speakers communicate by their linguistic utterances and, in particular, on the processes by which hearers are able to recover these. In this respect, pragmaticism tends to eschew contextualist talk of word meanings being *fixed in or by context* and to focus on the communicative intention of the speaker and the pragmatic principles that guide the hearer in reaching a warranted conclusion about the content of that intention. Accordingly, despite the title of this chapter, it is more appropriate to talk of 'pragmatic adjustment' of meaning than 'contextual adjustment' of meaning. Contexts, as such, are powerless, or, as Bach (2005) aptly puts it, there is no 'context ex machina'. What makes it possible to use a word to communicate a concept that is different from its encoded meaning is the coordinated interaction of two human minds, speaker and hearer.

If it were to turn out that semantic minimalists are right and encoded sentence meanings are propositional (fully truth-conditional), that would be bad news for the contextualist, but it would be no great blow to pragmaticism. Semantic minimalism and the pragmaticist theory of communication/interpretation could work happily together. For more on how the two semantic theories, minimalism and contextualism, relate to pragmaticism, see Carston (2009).

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