The Heterogeneity of Procedural Meaning

Abstract

The distinction in Relevance Theory between two kinds of encoded meaning, conceptual and procedural, has evolved so that more and more components of encoded meaning, both linguistic and non-linguistic, are now taken to be procedural (non-conceptual). I trace these developments and assess the extent to which these diverse elements share properties that distinguish them from concept-expressing words. While the notion of procedural encoding has lost some of its original distinctiveness, it may make sense to think of all encoded meaning as procedural (including the meaning of concept-expressing words), but this necessitates the drawing of new clarifying distinctions among kinds of procedural meaning.

Key words: relevance theory, procedural meaning, concepts, meaning modulation, discourse connectives, expressives

1. Introduction

Within Relevance Theory, an important distinction between two kinds of encoded (or conventional) word meaning was initiated by Diane Blakemore in the 1980s: the distinction between words that encode concepts and words that encode procedures. At the time, it looked as if the distinction she had in mind would line up pretty much with the elements of linguistic meaning that contribute to truth-conditional content (the conceptual) and those that do not (the procedural). So it could be seen as a
recasting of the truth-conditional/non-truth-conditional semantic distinction in

cognitive terms, drawing on the basic distinction in cognitive science between

representations (descriptions of the world which are true or false) and computations

over representations (including inferential processes that relate representations to

one another in different ways, e.g. as premise and conclusion, as contradictory, as

collective evidence for another representation):

On the one hand, there is the essentially *conceptual* theory that deals with the

way in which elements of linguistic structure map onto concepts – that is, onto

constituents of propositional representations that undergo computations. On the

other, there is the essentially *procedural* theory that deals with the way in which

elements of linguistic structure map directly onto computations themselves –

that is, onto mental processes.

(Blakemore 1987: 144)

This broad alignment of conceptual encoding with mental representations in

the language of thought and of procedural encoding with mental processes has been

largely maintained in subsequent work on the distinction. However, the notion of

procedural meaning has been considerably extended since Blakemore’s early work

so as to encompass encoded constraints on a range of pragmatic processes; for

instance, it has been suggested that pronouns encode procedural meaning which

constrains the process of reference assignment, and that morphemes indicating

grammatical moods such as the indicative, the imperative, and the subjunctive, and

modal particles (e.g. in Japanese), encode procedural meaning that constrains the

pragmatic process of identifying the speaker’s attitude or degree of commitment to

the proposition she has expressed (Wilson & Sperber 1993; Wilson 2011). On this

basis, it might look as if the conceptual-procedural distinction more or less meshes

with the traditional distinction between the substantive lexicon (open class words
such as nouns, verbs and adjectives) and the functional lexicon (closed class words like determiners, pronouns and connectives).

However, the notion of procedural (nonconceptual) meaning has also been applied to an array of what might be called ‘expressive’ communicative devices, including interjections, expletives, manual and facial gestures of certain sorts, and emotional prosody (Wharton 2009, Wilson & Wharton 2006). This is a curious situation as we now have under the banner of ‘procedural meaning’ some of the deepest components of I-language, such as pronouns and indicators of tense, aspect, and mood, together with communicative devices such as ‘oops!’, ‘dammit!’, winking, shrugging, and emotion-indicating tones of voice, which would seem to fall well outside I-language. This is not to say that the claim is wrong but it does call for some closer investigation.

The paper consists of two main parts, structured by the distinction between conceptual encoding and procedural encoding. In section 2, I focus on the idea that many words (nouns, verbs, adjectives) encode a concept, raising some problems for this view and presenting some other ways of construing their linguistic meaning and its relation to the concept communicated on an occasion of use. This section is relatively short, as I have discussed my thoughts on this at length elsewhere (Carston 2012, 2013, forthcoming). In the longer section 3, I turn to the more innovative aspect of the relevance-theoretic view of lexical semantics, according to which certain closed-class words and other units of (ostensive) communication encode ‘procedural meaning’. As noted, the idea of procedural encoding now encompasses a vast range of items, linguistic and nonlinguistic. I try to assess whether they constitute a single category of meaning in any positive sense, other than just all being ‘non-conceptual’. Finally, in section 4, I consider whether there might be a case for treating all encoded meaning as procedural in a broad sense (much broader than Blakemore’s initial idea) and then making a range of important distinctions among different kinds of procedural meaning.
2. Conceptual meaning and concepts/senses expressed

This section provides an overview of current ideas about the meaning of substantive (open class) words, which are standardly taken to encode or at least express concepts. It is not intended to be comprehensive or to provide detailed argument, but to set out those features of the story that may need to be called on when discussing the main topic, procedural meaning, in the next section. A terminological clarification: I use ‘meaning’ for the encoded or standing meaning of a word and ‘sense’ or ‘concept’ for those contents that can be expressed or communicated by the use of the word. In principle, at least, it could be that the sense/concept communicated on some occasion is in fact the (standing) meaning of the word.

2.1 The standard relevance-theoretic (RT) account

According to the RT view of linguistic communication, many substantive words (nouns, verbs, adjectives) encode an unstructured (atomic) concept,¹ which has an externalist semantics (what it denotes in the world) and various kinds of internalist informational connections, of which the key one here is its associated ‘encyclopaedic entry’, a repository of general knowledge (in the form of conceptual representations) about the object/property/activity in the world it denotes. To take a simple example, the word ‘child’ encodes an atomic concept CHILD which denotes or refers to a certain category of human beings. It also comes with a stash of general knowledge/beliefs about that category of individuals, perhaps including that they are young, need to be nurtured and looked after by adults, cannot take full responsibility for their own

¹ Sperber & Wilson (1998) suggest that there are also numerous content words that do not encode a full-fledged concept but what might be called a ‘pro-concept’, e.g. ‘my’, ‘have’, ‘near’, ‘long’ (ibid: 185).
decisions and behaviour, are still developing physically and psychologically, and so on.

Understanding the sense or concept intended by the use of a word on a particular occasion of utterance typically requires some degree of modulation or adjustment of its encoded meaning. As discussed in relevance-theoretic work on ‘lexical pragmatics’, this involves an interaction among the lexically encoded concept, other concepts encoded by the utterance and contextual information, constrained by the hearer’s expectation of relevance (Wilson & 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 the particular occasion of use), which is marked with an asterisk (HAPPY*, CHILD*, OPEN*, etc.) to distinguish it from the context-independent lexical concept (HAPPY, CHILD, OPEN, etc.). 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 the concepts that might be communicated by the following uses of the word ‘child’/‘children’:

1. a. A father is shouting at his 10-year-old son who has been misbehaving.
   Mother: ‘You’re too hard on him. He’s still a child.’

   b. Woman (speaking of her middle-aged husband): ‘Boris is a child.’

   c. ‘Our priority is to move the women and children to safety.’

   d. ‘My children don’t visit much anymore – they are terribly busy and live on the other side of London.’

The use of ‘child’ in (1a) seems to be literal, but it is very likely a narrowing of the encoded concept CHILD to something paraphraseable as young person who cannot
be held fully responsible for his behaviour and has yet to acquire some social skills (implicating that the boy should not be too strongly reprimanded); this occasion-specific sense may exclude some individuals who fall in the denotation of the encoded concept CHILD, those who always behave well and have precocious social know-how. In (1b), on the other hand, we clearly have a broadening of the encoded concept so that it can include in its denotation a 45-year old man, who has certain qualities that a child typically has.

When a lexical concept is decoded, the encyclopaedic information associated with it is activated. Some elements of it are more highly activated than others (as there are multiple sources of spreading activation, including other concepts encoded in the utterance and conceptual representations derived from the wider discourse situation). The most highly activated items of conceptually represented information are accessed and deployed as contextual assumptions in deriving contextual implications, which form an initial interpretive hypothesis about the utterance. Then, via a mechanism of mutual parallel adjustment of explicit utterance content, contextual assumptions and contextual implications, concepts in the decoded meaning string (the logical form of the utterance) are adjusted by backwards inference, so that only implications that are ultimately grounded in the explicature are confirmed. The overall interpretation is accepted provided it meets the addressee’s expectation of relevance. So, in the case of (1b) ‘Boris is a child’, depending on the wider discourse situation, contextual implications such as Boris doesn’t earn his keep, expects others to look after him, is irresponsible, etc. may be inferred, based on assumptions accessed from the encyclopaedic entry for CHILD, which, by backwards inference, lead to a particular ad hoc concept CHILD*. In another utterance situation, different items of encyclopaedic information about children might be more highly activated, making most accessible such implications as that Boris is sweet and innocent, untouched by life experience, naïve, etc. resulting in a distinct ad hoc concept CHILD** in the explicature. And there are many other possibilities.
The two uses of ‘children’ in (1c) and (1d) are interesting in that, although they are clearly related, the sense of the first entails ‘not adult’, while the second does not, entailing rather a certain relationship with the speaker, that of being her offspring. These are both pretty conventional senses of ‘child/children’, which is thereby a case of a polysemous word, a lexical vehicle for a family of related senses (Carston 2013, forthcoming). I take it that all substantive words are polysemous or potentially so, and that polysemy is fundamentally a matter of pragmatics (see Falkum 2015) with a subsequent process of conventionalisation (of course, the vast majority of pragmatically derived senses/concepts are ephemeral and so don’t become established senses of a word). The polysemy of substantive words plays a central role in the discussion to follow on different construals of a substantive word’s standing meaning and will also be considered in section 3 as a property that may distinguish conceptual meaning from procedural meaning.

Note that in the RT lexical pragmatic account of word meaning modulation just sketched, all the heavy lifting is done by the encyclopaedic entry of the encoded concept. This is the RT equivalent of what Fodor (2008: 94) talks of as the informational memos stored inside the file whose name or label is the lexical concept (e.g. CHILD, BLUE, TEACH). The role of the atomic concept itself (the address or file name) in this pragmatic process is just to provide a gateway or link, a means of access to the information that is used in constructing the ad hoc concept.

2.2 Semantic underspecification views of word meaning

According to the RT account given above, the encoded or standing meaning of the words discussed is a full-fledged concept, that is, a semantic entity, which can contribute directly to truth-conditional content. As Fodor (1998: 24) puts it, applications of lexical concepts are susceptible of ‘semantic evaluation’, that is, the concept CAT is correctly applied to Felix the cat but incorrectly applied to Dumbo the
elephant; equivalently, ‘Felix is a cat’ is true while ‘Dumbo is a cat’ is false. Intuitive though this may be, it is worth pausing here and considering whether the lexical concept CHILD is correctly or incorrectly applied in the examples in (1) above, and from there, what exactly that concept is. In previous work, I have argued against the view that there is one particular concept that constitutes the encoded or standing meaning of a word (Carston 2013).

According to a range of other views, a word’s meaning is semantically underspecified: it does not specify a concept/sense which can contribute directly to truth conditions, but is either too rich or too meagre and has to be transformed in some way before it can contribute a specific semantic content. Recanati (2004) calls these ‘wrong format’ positions, that is, they are positions on which word meaning per se is the wrong kind of thing to figure as a component of content. Consideration of the phenomenon of polysemy plays a major role in motivating these accounts, both at the level of theoretical argument (e.g. Bosch 2007, Carston 2013) and of empirical results from testing the processing of polysemous words (e.g. Frisson 2009). I will not reiterate the details of either of these lines of argument and evidence here. Suffice it to say that the ‘Underspecification hypothesis’ concerning standing word meaning is currently in quite a strong position and meshes well with the kind of pragmatic account of communicated senses/concepts advocated by relevance theory, according to which: ‘…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’ (Sperber & Wilson 1998: 185). In other words, the (alleged) lexical concept is never simply decoded and taken to be the concept communicated.

There are, however, some difficult issues to be resolved before we could take on either of the two different manifestations of the underspecification view. I look at these in some detail in Carston (forthcoming), so will simply summarise briefly some problems with each view. According to the overly rich (semantic underspecification)
position, a standing word meaning consists of information from which a selection has
to be made in grasping the concept/sense a speaker intends to convey by her use of
a word on any given occasion. Pustejovsky’s (1995) ‘generative lexicon’ is a well-
known case in point and, more recently, Vicente (2015) has advocated another such
rich view. He suggests that the standing meaning of words used to denote kinds (e.g.
‘horse’, ‘leaf’, ‘gold’) should include information about the essence (the intrinsic
properties) of the kind and about its superficial perceptible properties (which can be
altered). In that way, the now famous case of variable truth conditions for utterances
of the sentence ‘The leaves are green’ can be explained as involving different
selections from this information-rich standing meaning of the word ‘leaf’ making for a
different concept/sense expressed on different occasions of use.

The obvious question here concerns the grounds for singling out certain
elements of our general knowledge about objects in the world and claiming that they
constitute lexical meaning. This question arises equally for the general knowledge
included in Pustejovsky’s (1995) ‘qualia structures’, e.g. for the noun ‘book’: books
come into being via a writing process; the purpose of a book is to be read. On both
accounts, there is a degree of arbitrariness in the real world knowledge invoked.
Certainly, that knowledge does play a role in accounting for the derivation of some
common (‘default’) senses associated with the words, but that is equally well
accounted for by the relevance-theoretic pragmatic account on which the key
information is not duplicated in the lexicon but maintained as components of the
encyclopaedic entry. The pragmatic account is needed anyway for explaining other
(non-default) senses/concepts communicated by a word and so provides a unitary
account of all cases, while maintaining a clear principled distinction between standing
word meaning (an atomic concept) and knowledge about the entities denoted by that
encoded concept.

On the other underspecification view the standing word meaning is too
meagre to play the role of a concept (a semantic content), so in any instance of
grasping the sense/concept communicated by a speaker on an occasion of
utterance, the addressee must flesh out or enrich the decoded lexical meaning.
Prima facie, this seems an attractive position, answering to a strong intuition that the
various senses associated with a word must share a common core and any new
uses must be constrained by this. However, reflection on the pragmatics of ad hoc
concept construction indicates that this is not the case. Cases of narrowing or
meaning precisification, such as the much discussed uses of verbs like ‘open’, ‘cut’
and ‘bear’ (Ruhl 1989, Carston 2012, Pritchard forthcoming) might seem to support a
schematic meaning view, but there are just as many cases of broadening,
narrowing/broadening combinations and metonymic use which typically require the
dropping of some component of the alleged skeletal constraining meaning. As Bosch
(2007: 7) puts it: ‘there are arbitrarily many parameters with respect to which
contextual concepts [i.e. occasion-specific senses] can differ from one another.’ So
any attempt to maintain a thin core lexical meaning requires that it be further
attenuated in the face of these acceptable new uses, some of which will become
conventionalised, thus adding to the polysemy of the word. In other words, the
alleged schematic meaning does not restrict the senses/concepts that can be
communicated, but must itself be adjusted in order to accommodate those uses if it is
to represent the common core meaning.

Furthermore, it is striking in the work of advocates of this view that attempts to
articulate any one of these schematic meanings are either inadequate or completely
absent. Ruhl (1989) justifies this on the grounds that the schematic meaning is
something unconscious and subpersonal: ‘… concrete meanings [senses] become
pragmatic specifications of the abstract meaning, which is the meaning of the word.
Such a meaning may seem nearly empty … General abstract meanings elude
consciousness’ (ibid: 51).

Finally, there is the even greater ‘idle wheel’ problem: even if these abstract
non-semantic lexical meanings could be elucidated, it is entirely unclear what role
they would play in the account of language meaning and use. On the relevance-based pragmatic account of how ad hoc concepts/senses are contextually constructed in the process of utterance interpretation, the real work is done by the encyclopaedic information associated with a concept (a semantic entity) and there is no further constraining or guiding role to be played by a schematic meaning. Nor does the schema appear to play any role in a child’s acquisition of word meaning; in fact, the child’s first ‘meanings’ for a word are the (fully semantic) concepts/senses grasped in communication, so the abstract (non-semantic) meaning could only be acquired subsequently by some process of induction. Even supposing we could give an account of how this is done, what would be missing is an explanation for why it would be done, what purpose it would serve.

I have argued in more detail against these two ‘underspecification’ accounts of word meaning in Carston (forthcoming) and tried there to make a start on developing a quite different account. This requires making a distinction between the kind of lexicon that features in a narrowly construed I-language, with its focus on syntactic computations and constraints, and the lexicon of the broader public language system, which is a repository of communicative devices whose conceptual contents are what the inferential pragmatic system operates on. In the narrow I-lexicon, the words (or roots) listed have no meaning, conceptual or schematic, while in the C-lexicon of the broader communicational language system, words are stored with their polysemy complexes (bundles of senses/concepts that have become conventionally associated with a word and perhaps others that are not yet fully established as stable senses). The account, as I conceive it, is fully compatible with the relevance-theoretic account of lexical adjustment/modulation in utterance understanding without requiring that a word has an encoded meaning which consists of a single concept/sense from which all context-specific uses are derived. Attempting to spell that story out here would take up too much space and is not necessary for the reflections on procedural meaning that take up the next section and are the main focus of this paper.
In what follows, I will continue to talk of ‘conceptual meaning’ or ‘conceptual encoding’ in order to keep congruent with the way in which the conceptual/procedural meaning distinction is usually discussed. However, I hope it’s clear from the discussion just given that the position I am taking on substantive words is not that their lexical meaning is a full-fledged concept, but that they are typically used to express concepts (some of which become conventionally associated with them).

3. Procedural meaning (linguistic and nonlinguistic)

3.1 The ever increasing domain of procedural meaning/encoding

In her first major work on procedural meaning, ‘Semantic Constraints on Relevance’, Blakemore (1987) introduced the idea that there is a class of words, ‘discourse connectives’, whose function is not to contribute to the propositional content of an utterance but rather to constrain and guide the inferential phase of accessing the intended contextual assumptions and implications (that is, the implicatures of the utterance). These words do not encode concepts but provide a directive or instruction on how the propositional contents that they connect are to be deployed within the inferential process of deriving implicatures, e.g. as a premise in the cases of ‘moreover’ and ‘after all’, as a conclusion in the case of ‘so’, as a means of blocking or eliminating some other assumption in the cases of ‘but’ and ‘however’.

Blakemore’s focus then was on a fairly circumscribed small set of lexical items, which coincided quite closely with those cases of conventional (encoded) meaning which is non-truth-conditional, discussed by Grice under the label ‘conventional implicature’ (Grice 1989), although it was obviously framed in much more cognitive-scientific terms. Let’s call this Stage I in the history of procedural meaning.
Blakemore’s idea caught on and was subsequently applied to a range of other linguistic elements whose meaning seems to be similarly non-truth-conditional and inference-guiding, for instance, various so-called discourse particles, which function as clues to the speaker’s propositional attitude or speech act rather than providing a component of propositional (truth-conditional) content, e.g. ‘please’, ‘huh’, and ‘alas’ in English, or the evidential particles ‘yo’ and ‘kana’ in Japanese which indicate a speaker’s degree of certainty about the proposition expressed. These elements are all in some sense appended to sentences, not integrated into phrasal structure, but occurring before or after the propositional vehicle. However, it was soon noted that other linguistic devices that are fully integrated into the sentential syntax might also be best thought of as encoding procedural meaning. For instance, Wilson & Sperber (1993) discuss the syntactic elements that encode declarative or imperative mood and interrogative word order as illocutionary force indicators that constrain the pragmatic inferential process of determining the speaker’s propositional attitude or speech act; e.g. the imperative might indicate the desirability (and potentiality) of the state of affairs described by the proposition expressed and this could be pragmatically interpreted as a case of requesting or ordering (hence as desirable to the speaker) or as a case of advising, warning, or permitting (hence as desirable to the hearer), depending on the context of use.

Other elements at the very heart of verb phrase grammar (e.g. inflections marking tense and aspect, modal verbs) have been analysed as cases of procedural encoding (see Escandell-Vidal et al. (2011a) for details and references). This marks another development too, which is that procedural meaning is no longer confined to attitudes toward, or inferences performed on, propositional contents, but is taken to play a role in the expression of the propositional content itself. A major move in this direction was made by Wilson & Sperber (1993) with their procedural account of the linguistic meaning of pronouns. As often noted, on any occasion of their communicative (deictic) use, the encoded meaning of pronouns like ‘I’ or ‘she’
functions merely as a constraint or guide in ascertaining the intended referent and then drops out of the picture; it is the individual concept of the referent (e.g. the concept that uniquely picks out the person speaking in the case of 'I') which is the ‘semantic value’ of the pronoun on that occasion and which enters into the proposition expressed. The idea has been naturally extended to other referential devices which work in a very similar way, e.g. demonstratives (Scott 2011, 2013). This period of extending the application of procedural (nonconceptual) encoding well beyond the initial domain of discourse connectives is Stage II in its history.

Although the reach of procedural meaning was considerably increased during this stage (from being only syntactically peripheral to also being syntactically integral, from being only non-truth-conditional to also being truth-conditional), there is a unifying characterisation of the role of all these kinds of procedural encoding: what they all do is constrain and guide pragmatic processes which are essential in deriving the intended interpretation (processes of reference assignment, identification of propositional attitude and/or speech act, and implicature derivation). Given the widely accepted underdetermination of communicated content by linguistically encoded meaning and thus the necessity of pragmatic processes to bridge the gap, procedural meaning can be seen as a natural complement to encoded conceptual meaning in that what it does is ‘constrain the inferential phase of comprehension by reducing the hypothesis space that has to be searched in arriving at the intended interpretation’ (Wilson & Sperber 1993: 21).

Subsequently, however, procedural meaning has been extended considerably more and in two quite different ways. First, it has been applied to a range of expressive devices, including interjections (e.g. ‘ouch’, ‘oops’), expletives (e.g. ‘damn’, ‘that bastard Bloggs’), prosody (both linguistic and ‘natural’) and inherently communicative facial gestures (e.g. smiles, frowns) (Wharton 2003, 2009; Wilson & Wharton 2006; Blakemore 2011). Call that Stage III. Second, it has been suggested that all concept-expressing words (e.g. ‘red’, ‘book’, ‘love’, ‘dance’) might also encode
a procedure that initiates a process of ad hoc concept construction (Wilson 2011).

Call this Stage IV. These two developments are considered in sections 3.2 and 3.3 respectively. I think they are so substantial as to require some major rethinking about what procedural meaning is and whether there is anything interesting in common between, say, the kind of meaning encoded by the pronoun ‘I’ and the kind of meaning encoded by the interjection ‘ugh’.

To end this section, I will mention some of the tests and probes for distinguishing between conceptual and procedural meaning that have been proposed, with a view to considering their adequacy, especially when applied to the expansions of the category of procedural meaning discussed in the next two sections. I simply list them here with a brief discussion of how each applies to the first two stages of the conceptual/procedural meaning distinction. Each heading gives a property that procedural meaning has been suggested to have (and which distinguishes it from conceptual meaning):

1. **Introspective inaccessibility**

The basic idea here is that while we can consciously access the meaning of conceptual words like ‘chair’, ‘bachelor’, ‘teach’, ‘murder’, ‘intelligent’, ‘nasty’, and provide at least a rough paraphrase of them, it is much harder, perhaps impossible, to do this for words with procedural meaning. In discussing discourse connectives like ‘however’, ‘furthermore’, ‘anyway’, and ‘well’, Wilson & Sperber (1993: 16) point out how difficult it is to describe their meaning and explain this in the following way:

‘Conceptual representations can be brought to consciousness; procedures cannot. We have direct access neither to grammatical computations nor to the inferential computations used in comprehension.’ It has also been suggested that discourse connectives and particles are more difficult to translate into other languages than conceptual words and more difficult for L2 learners to grasp (the latter is certainly attested in the essay-writing of students whose non-native English is excellent except
for their use of such elements). These would be natural consequences of being ‘relatively inaccessible to consciousness and resistant to conceptualisation’ (Wilson 2011: 11-12).

However, this property of inaccessibility to our conscious descriptive capacities does not serve to separate out all the cases of putative procedural meaning discussed so far from cases of conceptual meaning. No-one finds much difficulty in mentally accessing and giving a description of what the pronouns ‘I’ and ‘she’ mean – in fact, this seems a lot easier than paraphrasing the meaning of the quite common conceptual words ‘meaning’, ‘standard’, ‘mention’, ‘direct’ (to pick out a few from the book page currently in front of me). I’ll return to this property in the next section, on expressives, to which the rather similar property of ‘descriptive ineffability’ has been ascribed.

2. Non-compositionality

Compositionality is usually taken as a fundamental property of language and thought, and in both cases the basic compositional unit is taken to be the lexical concept. It is quite hard to conceive of what compositionality of procedures could amount to, given their characterisation in Stages I and II above as instructions or constraints on inferential pragmatic processes. Occasionally two discourse connectives or particles may occur together in a single utterance, but when they do it seems that they each apply to a distinct component of the discourse and are applied in sequence rather than composing with each other. For instance, in the following, which is slightly odd but could perhaps arise, ‘Moreover, anyway, she has four children to look after’, the ‘moreover’ procedure indicates that the sentence that follows provides another piece of evidence strengthening some salient conclusion (e.g. She’s unlikely to be able to come out for dinner), while the ‘anyway’ procedure indicates that some consideration previously raised (e.g. ‘We don’t have her phone number to call and invite her for
dinner’) is of low relevance compared with the following information (i.e. that she has four children to look after).

Discourse connectives and particles fall outside the proposition-conveying sentence; they are prosodically and semantically sealed off from it, like parentheticals, which might seem to be what accounts for their noncompositionality. However, the point is that they don’t compose phrasally in the way that concept-expressing words situated parenthetically outside the proposition-conveying sentence do. For instance, when used sententially, as a comment on a proposition, adverbials like ‘frankly’, ‘seriously’, ‘regrettably’, which are arguably conceptual, can be semantically composed into a more complex phrase: ‘To put it rather frankly but without malice, he is not up to the job’ (Wilson & Sperber 1993: 18). So there seems to be something right about this diagnostic for distinguishing procedural and conceptual meaning, and it carries over to the illocutionary devices claimed above to encode procedural meaning (e.g. ‘huh’, ‘alas’, indicative mood and interrogative word order). Again, though, it is less clear that it supports a procedural analysis of pronouns and demonstratives, which seem able to enter into phrasal compositions, e.g. ‘we lucky people’, ‘she alone of all my friends’, ‘you three lovely ladies who just came in’, etc.

3. Rigidity

Escandell-Vidal & Leonetti (2011) provide another diagnostic for whether some component of meaning is conceptual or procedural, based on the ‘rigidity’ of procedural meaning as opposed to the flexibility of conceptual meaning. They show that when there is a mismatch between an element of procedural meaning, on the one hand, and a contextual assumption or an element of conceptual meaning, on the other hand, it is procedural meaning that always prevails, such that the context must accommodate (by adding an assumption) or the conceptual meaning is ‘coerced’ into compliance with the procedural meaning. For instance, they discuss a clash between
a conceptual predicate 'to be silly', which is stative, and the procedural instruction
coded by progressive aspect, 'be + -ing', which indicates that the event is to be
viewed as an incomplete action in progress at the time of utterance, as in 'John is
being silly'. It is the former that gives way to the latter, so that the property or state of
being silly is represented as an action in progress, hence a dynamic situation; there
is no possibility of reinterpreting the procedural 'be + -ing' as stative. They provide a
range of other examples which demonstrate the rigidity of the meaning of tense and
grammatical aspect morphemes in the face of mismatches with conceptual meaning,
which inevitably adjusts to conform to their procedural meaning. Somewhat similarly,
discourse connectives force the retrieval of contextual assumptions that may be at
odds with other strongly manifest assumptions, e.g. 'Max was a millionaire but he
had a lot of money'; in this case, we find no contrast between the two conjuncts as
we assume that anyone who is a millionaire has a lot of money, but the presence of
'but' forces us to search for a context in which these two facts could be at odds with
each other, perhaps a context in which millionaires are deemed poor relative to some
other group (trillionaires), and/or we might pragmatically adjust the conceptual
content of 'a lot of money' so it does contrast with being a millionaire.

Again, it's worth bearing in mind that all the cases of putative procedural
meaning that Escandell-Vidal & Leonetti consider fall within stages I and II of the
history of procedural meaning, so it remains to be seen how well this criterion stands
up to the later extensions of the notion to expressives (e.g. interjections and
expletives) and to typical conceptual words.

The next two proposed characteristics of procedural meaning are doubtless
consequences of this general property of inflexibility, but I'll separate them out here,
so as to draw on them individually in the following subsections of the paper.

4. Non-susceptibility to nonliteral use
For my purpose here, I distinguish two broad families of nonliteral use, the one typified by metaphorical use (which is essentially a descriptive use of language, geared to conveying an observation about the world or our experience of it) and the other typified by irony (which is metapresentational, echoing a thought or utterance and expressing a dissociative attitude to it). It seems reasonably clear that discourse connectives, illocutionary force indicators (the syntactic moods, particles like ‘huh’, ‘please’, and evidential markers like ‘yo’ and ‘kana’), tense and aspect morphemes, and determiners (‘a’, ‘the’) cannot be used metaphorically nor modulated more generally (narrowed or broadened) as concepts can be; they are not denotational and so don’t come with associated encyclopaedic information which plays the key role in metaphor understanding and meaning modulation quite generally. Similarly, although these procedure-encoding words might occur within a representation that is being treated ironically, they themselves are not the target of the ironical attitude, e.g. when mockingly echoing someone’s earlier utterance of ‘Moreover, the conditions are perfect for viewing the comet’ after it turns out to be a very cloudy night making it impossible to see anything in the sky, the irony is directed just at the sentential content of the utterance.

Again one might wonder about pronouns, whether they are all incapable of being used metaphorically; consider, for instance, the use of ‘she’ to refer to one’s car, or ‘we’ to refer to oneself and one’s laptop (e.g. patting the laptop and saying ‘We are not doing any more work today’) might be some kind of metaphorical extension. Equally, ironical uses of pronouns may be possible, although they are perhaps better thought of as components of the closely related phenomenon of parody, e.g. ‘We are proud of our achievements; we have made Britain strong; we …’, echoing Mrs Thatcher’s use of the royal ‘we’, or ‘She still sounds like a man to me’, said of a transgender woman and dissociatively echoing others’ use of the pronoun ‘she’. Whether expressives can be used metaphorically or ironically is discussed in the next section.
5. Not polysemous

The phenomenon of polysemy is ubiquitous for concept-expressing words (nouns, verbs, adjectives); they are all, potentially at least, associated with families of related concepts. As discussed in section 2, polysemy is the conventionalisation of senses/concepts that were originally derived by online pragmatic processes of concept adjustment (meaning modulation). It is quite hard to conceive of procedural meaning as being modulated in any comparable sense; that is, used to convey a procedure, a constraint on pragmatic processing, which is more specific or more general than the one it encodes. It should follow, then, that words that encode procedural meaning are not polysemous (or 'polyprocedural'), that is, are not associated with a family of related uses. Whether this is, in fact, the case is somewhat hard to assess: the word 'but' and its counterpart in other languages has often been claimed to have two or more related uses (Blakemore 1989, 2002); the array of (related) speech acts associated with the imperative mood (order, request, advice, permission) could be thought of as a case of polysemy, and so also for the other mood indicators. Whatever is the right way to think about these multiple related uses and how they arise, it seems safe to say that the words being discussed here as procedural are much less susceptible to developing new uses than the standard concept-expressing words.

I draw two conclusions from this brief survey of diagnostics for procedural meaning. First, it looks unlikely that there is any watertight test for telling whether some element of encoded meaning is conceptual or procedural. The most we can hope for is trending evidence: if it can't be pragmatically adjusted in online comprehension, there's a high likelihood that it is procedural; if when in conflict with some clearly conceptual component it forces an adjustment to that component, it's probably procedural; if it's difficult to translate and otherwise competent non-native speakers
tend to get it wrong, then it may well be procedural, and so on. Second, it is striking how variable the profiles of the various expressions proposed during Stage II of the history of procedural meaning are with regard to this list of properties or diagnostics; pronouns, in particular, seem to be out on their own. This heterogeneity of (alleged) cases of procedural meaning becomes all the more evident in the following sections.

3.2 Expressives and procedural meaning/encoding

The topic of expressives and the distinction between expressive meaning and descriptive meaning was brought to prominence by Kaplan’s important formal semantic work on expressions such as ‘ouch’, ‘oops’ and ‘That bastard Bloggs’ (Kaplan 1997). I will sidestep a lot of interesting issues here in order to focus as squarely as possible on the work within relevance theory that maintains that a substantial subset of expressives encode procedural meaning. These include interjections and certain facial signals (Wharton 2003, 2009), tones of voice and other kinds of emotional prosody (Wharton & Wilson 2006), expletives, diminutives and NP epithets like ‘the bastard’, ‘the poppet’ (Blakemore 2011, 2015).2 One of the issues I will set aside is the extent to which the cases included here count as properly linguistic or not: some clearly do (e.g. the various NPs cited above), others clearly do not (e.g. facial signals and other expressive vocal and bodily signals), and the status of others is somewhat unclear (e.g. interjections; see Wharton (2003)). For a serviceable working conception of ‘expressive’ meaning, we can follow Potts (2007) in characterising it as a dimension of meaning that is distinct from the dimension of descriptive truth-conditional meaning in that it does not impact on the truth/falsity of an utterance and is not put forth for the endorsement or denial of an

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2 As Blakemore points out, there are a range of other communicative devices that seem to fall under the label ‘expressive’ which do not involve procedural meaning. In this regard, she discusses the expressive effects of certain kinds of repetition (e.g. ‘My childhood days are gone, gone’) (Blakemore 2011) and the special properties of the socio-politically charged case of slurs (Blakemore 2015).
interlocutor. It has some quite other kind of purpose and impact, which can be
roughly thought of as the expression or communication of an emotive attitude to
some component of the context (a person, object, action or situation). This is rough,
but will do for the current purpose of looking at the attribution of procedural meaning
to these sorts of expressions.

In her discussion of linguistic expressives (expletives and NP epithets),
Blakemore (2011) suggests that: ‘Like discourse markers, these expressions
correspond to procedures for interpretation. However, in contrast with discourse
markers, they activate procedures for retrieving representations of emotional states.’
So this is a different role for procedural meaning from that of the Stage II
classification of it as ‘facilitating the identification of the speaker’s meaning by
narrowing the search space for pragmatic inferential comprehension’, where this was
a matter of recovering the intended propositional content (explicatures and
implicatures). Rather, what is going on here is the activation or triggering of
something non-propositional, something with a distinctively emotive evaluative
content.

The big move for the notion of procedural meaning/encoding is its application
beyond the clearly linguistic to other kinds of codes, natural and conventional, as
developed by Tim Wharton. For the case of interjections (e.g. ‘ugh’, ‘wow’, ‘oops’,
‘aha’), Wharton (2003) argues against accounts that have offered rich conceptual
analyses (e.g. Wierzbicka 1992) and in favour of encoded procedures which ‘…
activate various attitudinal concepts or types of concepts. Under such an account
\textit{wow} would not encode a concept that a hearer translates as ‘X is delighted’. Instead,
\textit{wow} activates a range of attitudinal descriptions which involve delight, surprise,
excitement etc. In the case of \textit{yuk}, the attitude will be one of disgust; in the case of
\textit{aha} it will be an attitude of surprise, etc.’ (ibid: 60). Of course, the attitudinal and
emotional descriptions triggered by the interjection will be modulated by other
components of the ostensive stimulus, including decoded concepts (e.g. ‘Wow, I’m
crazy about your new dress’), other expressive devices (emotional prosody, facial expressions), and the wider context. In Wharton’s view, most interjections are best viewed as originating from something akin to Goffman’s (1981) ‘response cries’, that is, spontaneous natural expressions of feeling, that have become coded devices available for ostensive communication.

As he notes, this marks a departure from the way in which procedural meaning/encoding had often been characterised up to that point, especially with regard to the Stage I discussion of discourse connectives as ‘computational instructions to the hearer’. He suggests a broader construal of procedural meaning ‘as simply activating certain types of representations, or contextual assumptions, or expectations about cognitive effects. Thus, a pronoun might activate a certain class of candidate referents from which the hearer must choose ... mood indicators [can be seen] as activating certain propositional-attitude descriptions’ (ibid: 59). And the procedural meaning of discourse connectives can be viewed along the same lines: ‘For what discourse connectives, mood indicators and pronouns have in common is that rather than translating into the constituents of conceptual representations they activate something. What is actually activated may be computational deductive rules, or contextual assumptions, or simply expectations about cognitive effects.’ (ibid: 60).

This broader construal of procedural meaning as activating or triggering kinds of representations or computations provides a unitary characterisation of all the cases discussed so far (discourse connectives and particles, illocutionary indicating devices, pronouns and interjections), but at the cost of losing the sharp distinction between conceptual and procedural encoding in Blakemore’s original work.

There is a final step in this incorporation of a range of expressives into the class of procedural encoding and that is the inclusion of certain natural facial gestures like smiling, frowning, shrugging, and (perhaps) nose-wrinkling and lip-curling, and certain natural prosodic gestures like affective tones of voice. These are components of what Wharton calls natural codes, that is, they are ‘signals’, natural
behaviours which have evolved for the purpose of conveying information to others. These too fall under the characterisation of procedural encoding as activating or triggering mental states of one sort or another; in these cases, it seems that, as with interjections, what is activated is a representation of something non-propositional (not evaluable as true or false), an attitudinal or emotional state. Wilson & Wharton (2006) further elaborate on this way of thinking about communicative devices that encode procedural meaning: ‘such expressions might be described as encoding meta-procedures, which manage the accessibility or activation levels of the regular relevance-oriented procedures for perception, memory retrieval or inference …’ (ibid: 1570-71).

The question that needs to be revisited at this stage concerns the distinction between procedural encoding and conceptual encoding. It might seem that this broader construal of procedural meaning is so inclusive that it draws in concept-expressing words, in that they too can be thought of as encoding (meta)procedures, procedures which activate a cluster of related concepts (with their encyclopaedic entries), thereby giving the pragmatic system a strong steer towards the speaker’s intended meaning. However, this is not the intended idea and a distinction is retained. Wharton (2009) maintains that a word with conceptual meaning activates a concept via translational encoding while procedural meaning activates concepts via non-translational encoding (ibid: 60). Wilson (2011) makes the distinction in a somewhat similar way, saying that conceptual expressions (e.g. ‘dog’, ‘jump’, ‘happy’) ‘are systematically linked to concepts, which are constituents of a language of thought’ while procedural expressions ‘are systematically linked to states of language users’ (ibid: 10). Both are assuming that concept-expressing words like ‘dog’, ‘jump’, and ‘happy’ encode a single concept (a constituent of the language of

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3 Wharton (2003, 2009) makes an important distinction between these natural coded ‘signals’, which have evolved for the purpose of conveying information, and natural signs from which information may be derived but which have not evolved for that purpose and do not encode that information (e.g. shivering).
thought) as their standing lexical meaning. As noted at the end of section 2, I’ve tried
660 to argue for a different position on concept-expressing words (Carston 2013,
forthcoming), a view whose implications for the conceptual/procedural distinction I’ll
664 briefly consider in the conclusion (section 4).

The heterogeneity of communicative devices (linguistic and nonlinguistic)
665 claimed to encode procedural meaning is greatly increased by the inclusion of the
666 expressive items discussed in this section: it now runs from ‘but’ and ‘she’ through to
668 ‘yuk’, a smile and an angry tone of voice.

Let’s briefly run through some of the diagnostics for distinguishing procedural
669 meaning from conceptual meaning given in the previous section, to see how the
670 expressives fare and whether they line up in this respect with any of the procedural
672 expressions previously discussed. Potts (2007) and Blakemore (2011) have ascribed
673 the property of descriptive ineffability to expressives: speakers are unable to
674 satisfactorily paraphrase expressive content using descriptive (conceptual) terms.
675 This property is somewhat similar to, but weaker than, the property of introspective
676 inaccessibility discussed in the previous section, so any element that has this latter
677 property (e.g. discourse connectives and particles) will have the former property;
678 pronouns seem to have neither, as it is pretty easy to describe their meaning in
679 conceptual terms. Most theorists seem to agree that expressives like ‘blimmin heck’,
680 ‘crikey’, ‘that bastard X’ are descriptively ineffable (see Potts 2007, Geurts 2007,
681 Blakemore 2011, Drożdżowicz forthcoming) and Wharton’s (2003) critique of
682 attempts to provide adequate conceptual meanings for interjections would indicate
683 that they too have this property. As for affective facial expressions and tones of
684 voice, Wilson & Wharton (2006) point out that they tend to create ‘diffuse impressions
685 … involving marginal alterations in the strength or salience of a wide array of
686 conclusions rather than providing strong support for a single, determinate conclusion’
687 (ibid: 1566), indicating that they too are unlikely to be satisfactorily captured in
688 descriptive (conceptual) terms. The problem with this diagnostic, though, as with
‘introspective inaccessibility’, is that it applies to plenty of concept-expressing words too; as Geurts (2007: 210) puts it: ‘…“descriptive ineffability” is not the prerogative of expressives. As a matter of fact, it is all over the lexicon, as witness such disparate items as the, at, because, languid, green, pretty, and so forth.'

Consider next the property of non-compositionality with regard to the expressives under discussion. It seems to me to do pretty well – not only is expressive content largely independent of descriptive content so unable to compose with it (see Potts 2007), but expressive items do not compose with each other in anything like the phrasal manner of descriptive/conceptual content. They are, of course, highly interactive: the expressive content of an utterance of ‘wow’ or ‘you bastard’ will be modulated by an accompanying facial expression (a smile, an eyebrow raise) and/or an affective tone of voice (affectionate, dismissive), but this is more a matter of blending into a single emotive attitude than of composing meaning constituents into more complex structures.

Whether expressives evince the kind of rigidity, overruling descriptive/conceptual content, that Escandell-Vidal & Leonetti (2011) attribute to procedural meaning (as discussed in the previous section) is an interesting question. It does seem that tones of voice and natural signals like smiles and frowns hold sway when they are at odds with the conceptual content of an utterance, e.g. ‘I’m not angry – don’t imagine you have that sort of power over me’ delivered in a tone of voice that indicates fury bordering on hysteria, or ‘Yuck, that smells delicious’ where the interjection seems to force an ironical or otherwise dissociative interpretation of the conceptual content of ‘delicious’. As for the possibility of using expressives non-literally, at least some seem amenable to metaphorical use, e.g. ‘Ouch’ as a response to some minor bad news (e.g. a parking fine), involving a transfer from the

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4 See Drożdżowicz (forthcoming) for a nuanced discussion of the notion of descriptive ineffability, in which she argues against its utility as a criterion for distinguishing different types of meaning, such as expressive vs descriptive or procedural vs conceptual.
domain of physical discomfort to psychological annoyance; ‘That bastard computer has crashed again’, involving a personifying use of the epithet ‘bastard’. However, it is difficult to imagine a metaphorical use of most expletives (‘Damn!’, ‘Bugger!’) or of facial expressions (smiles, frowns), or tones of voice.

Ironical, echoic and other non-serious uses are certainly possible for many interjections, and for NP epithets, e.g. ironical uses of ‘wow’, ‘oops’, ‘yuck’, are easy to concoct (an exercise for the reader) and ‘I see that bastard Boris has rescued you again’ could be understood as irony directed at the addressee’s earlier use of the epithet ‘bastard’ with regard to Boris or perhaps at her generally negative complaining attitude toward Boris. With regard to the diagnostic of non-polysemy, Geurts (2007) maintains that at least some expressive terms have multiple related contents/use, discussing in particular the NP epithet ‘bastard’. By and large, though, the kind of wide-spread ever-evolving polysemy that is typical of concept-expressing words does not seem to be in evidence across the broad class of expressives.

Again we have a very mixed profile of properties for the various communicative devices now included under the ‘procedural encoding’ umbrella and it is worth considering whether this now much broader, more abstract construal of procedural meaning is providing any interesting insight into the many different kinds of cases it subsumes, beyond merely indicating that they are all different, in one way or another, from conceptual encoding. In the next section, we move to Stage IV in the history of procedural meaning, the final stage, where it is proposed that all concept-encoding words also encode procedural meaning.

3.3 Concept-expressing words and procedural meaning

In a major assessment of the conceptual-procedural distinction (‘past, present and future’), Deirdre Wilson (2011) has given increased significance to the role of procedural meaning in lexical semantics and has, in effect, suggested that all words
encode a procedural component of meaning while some (the open classes) also encode a concept. She attributes to Dan Sperber the idea that all words with a conceptual meaning may also encode ‘an instruction to inferentially construct an ad hoc concept using the encoded conceptual content as a starting point’. She endorses this suggestion and elaborates it as follows:

‘On this approach, most words would encode some procedural content. Some would also encode conceptual content, whereas others (e.g. however) would not. Among words with both procedural and conceptual content, some (e.g. giraffe) would automatically trigger a procedure for constructing an ad hoc concept on the basis of the encoded concept, whereas others (e.g. unless) might encode a more specific procedure of the type familiar from Blakemore’s work.’ (ibid: 17)

She goes on to mention some advantages of this account over the standard RT position according to which most substantive words encode just a concept. One is that it would make sense of the recurrent claim, arising from work in lexical pragmatics, that words function as ‘pointers to’ or ‘pieces of evidence about’ the speaker’s meaning. Another is that it would dissolve a certain tension in the RT account of metaphorical and other nonliteral uses of words. The account has always rejected the Gricean treatment of nonliteral uses in terms of a flouting of a maxim of truthfulness and has maintained that it is not the case that the literal meaning (the encoded concept) is always the first to be considered as the correct interpretation and is only discarded in favour of another interpretation if it doesn’t meet certain pragmatic standards (of informativeness, relevance, etc). However, the worry is that, given that the relevance-based comprehension heuristic explicitly licenses hearers to
follow a path of least effort in accessing and testing interpretations for relevance,\textsuperscript{5} it seems natural to suppose that the encoded concept, which is made instantly available by the word form, would be tried first and only pragmatically adjusted if it didn't meet the required standards of relevance. The suggested move to incorporate into the meaning of content words a procedural component which requires that a relevance-driven process of concept construction is undertaken ensures that, although the encoded concept is activated by the word uttered, it is not necessarily the first one to be composed into the interpretation. Rather, the concept expressed by a loose or metaphorical use of a word can be the first one that a hearer following this procedure recovers and tests for relevance.

This new conception of the meaning of open-class words as both conceptual and procedural raises a number of questions. First, it is difficult to see why a word that encodes a concept (a semantic entity with a ‘linguistically specified denotation’) would also encode a procedure that makes it obligatory for a hearer to build an ad hoc concept from the encoded one, especially when the encoded concept can, on occasion, be the concept communicated (Sperber & Wilson 1998). Second, the procedure involved would be identical across all words which are taken to encode a concept, that is, the words ‘giraffe’, ‘milk’, ‘run’, ‘speak’, ‘raw’, ‘red’, and every other open-class word would come with the same component of procedural meaning, namely, ‘Construct an ad hoc concept based on the encoded concept’, which seems odd since, by and large, the lexical meanings of words are distinct from each other and this goes as much for procedural meaning as for conceptual meaning, e.g. the procedural meaning of the pronouns ‘he’, ‘she’, ‘we’, ‘they’ is plainly distinct for each one, and linguists working on the procedural meaning of such closely related discourse connectives as ‘but’, ‘however’, ‘nevertheless’ and ‘although’ have put a lot

\footnotesize{\textsuperscript{5} In brief, the relevance-based comprehension heuristic says: (a) Follow a path of least effort in constructing an interpretation of the utterance; (b) Stop when your expectations of relevance are satisfied. For more detail, see Wilson & Sperber 2004, 2012.}
of effort into pinpointing the fine differences in the inferential procedures they encode
or activate (see Blakemore 2000, 2002).

More important, it is entirely unnecessary on the relevance-theoretic account
of utterance interpretation to issue instructions to the pragmatic system to construct
ad hoc concepts. The goal of utterance interpretation is to recover a speaker’s
meaning, that is, the thought or thoughts she intends to communicate, where
thoughts are structured arrays of concepts. On the account suggested, the words at
issue encode concepts, so it is already evident that these words are contributors of
concepts to the interpretation. The general relevance-based comprehension heuristic
takes care of the rest, that is, it ensures that the concepts recovered as speaker-
meant are those that contribute to an optimally relevant interpretation, which may
entail that the concept encoded is pragmatically adjusted (narrowed, broadened, or
both), as discussed in section 2.1. So, the idea that, in addition to all this, every
open-class word comes with (or triggers) an instruction to build an ad hoc concept
seems otiose.\(^6\)

Furthermore, there is a way of capturing the desirable aspects of the proposal
while avoiding these problems and that is to construe the meaning of concept-
expressing words along the lines I discussed in section 2, that is, as not encoding a
particular concept (a potential component of a thought or truth-conditional content),
but something more minimal, something essentially non-semantic (‘wrong format’ in
Recanati’s (2004) terms), which merely makes the occasion-specific communicated
concept accessible to the addressee. In Carston (2013) I discussed the hypothesis
that so-called ‘content’ words have a semantically underspecified schematic lexical
meaning, that is, they encode a concept schema or blueprint which constrains the
concept they can be used to communicate. However, as discussed in section 2.2
above, there is a range of problems with this idea: it seems nigh impossible to spell

\(^6\) See Curco (2011) for independent arguments against treating ad hoc concept construction as a
matter of procedural encoding.
out what these ‘thin meanings’ amount to; given the pragmatic processes that underpin the formation of families of senses, schematic meanings don’t seem to play any role in comprehension; they are forced to become more and more attenuated in response to new uses/senses of the word. So it may be that we need to move to an apparently even more extreme position according to which lexical ‘meaning’ consists in nothing more than a pointer, a connection or gateway to a space of conceptual information from which the addressee is to access or construct the relevant (intended) concept. As the work in lexical pragmatics indicates, all we want from the stable substantive lexicon is a means of interfacing with the conceptual system so as to access thoughts that bear an appropriately close relationship with those the speaker has in mind. On such an account, each word comes with its own distinct pointer or interfacing component, which constrains the general pragmatic process of accessing or constructing a concept, a process which is wholly motivated by the goal of the pragmatic system which is to deliver speaker meaning. As the lexical ‘meaning’ is not conceptual (not semantic), but is merely a means of locating an area of conceptual space (which may include a cluster of concepts comprising the polysemy complex associated with a word), concept construction is an obligatory pragmatic process.

This sort of account, assuming it can be properly worked out, is not prey to the problems I mentioned above for the concept-plus-procedure account: it does not entail an obligatory process that is, paradoxically, sometimes unnecessary (when the encoded concept is the concept communicated), it doesn’t entail a component of lexical meaning that is the same for thousands of words (that is, the instruction to build an ad hoc concept) and it doesn’t formulate within the lexical semantics of a language a process (concept construction) that is entirely a matter of pragmatics. Furthermore, the advantages that Wilson discusses for the concept-plus-procedure account, are equally carried by this alternative ‘gateway’ account: it makes perfect sense of the idea that all words are merely pointers to, or evidence for, a speaker’s
meaning, and, since there is no encoded concept, it allows for any one of a range of
correlates to be the first one accessed or constructed, as determined by
considerations of relevance.

4. Final remarks: Is all encoded meaning procedural (in a sense)?

In discussing the processes involved in utterance interpretation, relevance theorists
have long made one major distinction, that between linguistic decoding and
pragmatic inference, both of which are inevitably involved in linguistic communication
(that is, comprehending an utterance is never simply a matter of linguistic decoding).
The conceptual/procedural distinction has been conceived as two kinds of linguistic
meaning, two different sorts of information that can be linguistically encoded, but
perhaps all linguistic encoding is fundamentally procedural in a certain sense, a
much broader sense than that originally envisaged. Building on the discussions in
Wharton (2009), Blakemore (2011) and Wilson (2011), we might wonder whether
what happens when, as addressees, we ‘decode’ any component of an ostensive
stimulus (whether linguistic or non-linguistic) is the triggering or activating of certain
information structures (for want of a better term) in our minds: these may be
conceptual, inferential (‘procedural’, in the original Stage I sense), attitudinal or
affective (perhaps even sensori-perceptual). In the case of interjections, expletives
and expressive prosody, what is activated is information about attitudinal and
emotional states, while what is activated in the case of discourse connectives is
information about how to inferentially relate propositional representations formed in
understanding the utterance. As for the case of substantive words (typical nouns,
verbs, and adjectives), which have been standardly assumed in RT to encode a
single lexical concept, perhaps they too are procedural in this broadened sense. It’s
not that they encode an instruction to construct or access an ad hoc concept, but that
they activate or trigger a polysemy complex, a bundle of related concepts (perhaps not all conventionalised to the same degree), with their accompanying encyclopaedic information. From there on the standard RT pragmatic account kicks in, ‘homing in’ on the specific concept intended, possibly involving an adjustment/modulation of one of the activated concepts in the polysemy cluster.

This would really amount to a reconstrual of what ‘decoding’ is, one that applies to all basic units of communicative codes (linguistic and nonlinguistic). When, as addressees, we identify a word or some other conventional unit of communication, some information structure (conceptual, computational or affective/attitudinal) is triggered or activated in our minds as part of that identification process. Within this very broad unifying construal of procedural meaning as having a triggering/activating role, there would obviously be important distinctions to be made and subcategories to be investigated, so the focus would shift from trying to understand the conceptual/procedural distinction to trying to understand different categories of procedural meaning.

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Dedication: This paper is a meagre token of affection and esteem for my friend and colleague, Diane Blakemore, whose sensitivity to linguistic and contextual nuance coupled with analytical and theoretical rigour has inspired and illuminated
me over several decades. Diane is also one of the most widely read people I know and has a fund of brilliant and lively examples of every conceivable use of language, from air-blueing expletives to highly poetic metaphors. Looking forward to more!

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