

## Lexical Pragmatics: Relevance Theory and Generalized Conversational Implicatures

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### 1 Introduction

Communication is traditionally defined as the transfer of information from a sender to a receiver by means of a (linguistic) code. This classical definition belongs to what Sperber & Wilson (1986) call *the code model*. Specifically, this model presupposes that the hearer's retrieval of a codified meaning 'packed up' in a linguistic string is such that the speaker and the hearer will share *exactly the same thought* once the process of decoding is completed. The aim of pragmatics since the 1960s is to show that at the discourse level—and recently at the lexical level—there is no one-to-one mapping between linguistic meaning and utterance meaning. In other words, there is a gap between semantically-underspecified meaning and speaker meaning that can only be bridged by pragmatic inference. Consider:

- (1) a: Did you?  
b: Hey, who wouldn't? (based on Yule 1996).
- (2) a. Where is the chicken?  
b. Where is the kitchen?
- (3) Mother to child: 'If you do that again...' (Wilson *UCL notes*).

In spite of the underspecification of (1a) and (1b), it is not hard to imagine a context in which communicators recover a complete propositional form and can arrive at the intended interpretation. The same is true of the case of a slip of the tongue in (2). This is not only done by linguistic decoding, but by forming hypotheses about what the speakers could have meant. We are even good at understanding what could happen to the child in (3) if she goes on misbehaving.

Along with Speech Act Theory (Austin 1962, Searle 1969), Grice's work on the *Cooperative Principle* (CP henceforth) initiated the current interest in pragmatics and led to its development as a privileged discipline within linguistics. For Grice, linguistic meaning can be partly explained in terms of intention-recognition, the key concept in inferential communication:

'[S] meant something by x' is roughly equivalent to '[S] intended the utterance of x to produce some effect on the audience by means of the recognition of this intention' (Grice 1971: 58).

For Wilson (2000), Grice pioneered the belief in utterance interpretation as a variety of inferential *mindreading*, derived from a general metapsychological human-evolved ability to recognise intentions behind actions. Interpreters arrive at the speaker's meaning following a non-monotonic reasoning process of non-demonstrative inference which involves hypothesis formation and evaluation. The CP and conversational maxims select the best hypothesis about the intended interpretation.

(4) *The Cooperative Principle and conversational maxims*

**The Cooperative Principle**

'Make your contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged'.

**The Maxim of Quality**

'Try to make your contribution one that is true' specifically:

'Do not say what you believe to be false'

'Do not say that for which you lack adequate evidence'.

**The Maxim of Relation (Relevance)**

'Be relevant'

**The Maxim of Quantity**

'Make your contribution as informative as is required (for the current purposes of the exchange)'

'Do not make your contribution more informative than is required'

**The Maxim of Manner**

'Avoid obscurity of expression'

'Avoid ambiguity'

'Be brief (avoid unnecessary prolixity)'

'Be orderly' (Grice 1989: 26-7)

In (5) we assume that A would have no problem in inferring the meaning that B is tired enough not to go out for dinner even though s/he does not answer literally A's question. Rather than treating B's move as uncooperative, A assumes that an appropriate meaning is there to be inferred. The question is how this implicit meaning is generated and how can B assume that A will understand the intended meaning. In Grice's terms, the maxim of Quantity ('Make your contribution as informative as is required') has been flouted. Only under the expectation that the speaker is being cooperative can the hearer restore the conversational equilibrium by assuming that an implicature has been generated.

(5) A: Do you want to go out for dinner?

B: I'm tired

Recent developments in Relevance Theory (Carston 2002, 2003; Sperber & Wilson 2002, Wilson & Sperber 2002, Wilson 2000, 2002, *forthcoming*) lay great stress on the minimum (but much-needed) interaction between Gricean pragmatics and psychological literature on theory of mind. They argue in favour of an evolved, specialized, 'dedicated' submodule, within a general theory-of-mind module, responsible for the comprehension of linguistic utterances. Pressure in human evolution towards cognitive efficiency and the exploitation of this tendency in communication favoured, Sperber & Wilson argue, the emergence of a relevance-based module, which is put forward as an explicit procedure for the interpretation of ostensive stimuli.

## 2 Relevance Theory and Generalized Conversational Implicature

Grice's inferential model, CP and conversational maxims are basic tenets in pragmatics, yet their interpretation is often controversial, leading to much debate still in a constant state of flux. In this section, we aim to contrast two radically opposing theories stemming from the Gricean paradigm: Relevance theory (Sperber & Wilson 1986/1995) and the theory of Generalized Conversational Implicature (GCI henceforth) (Levinson 1983, 2000). The former departs substantially from Grice by proposing a pragmatic theory deeply rooted in cognitive psychology. The latter, within the neo-Gricean drift, revises exhaustively the scope of the Gricean paradigm, but preserving the original framework.

### 2.1 The principles and the maxims

Grice himself admits that the vagueness in the characterization of the CP and maxims reduces the explanatory force of his system, which is seen by some scholars as an unsurmountable flaw of the Gricean paradigm. For Sperber & Wilson (2002), Grice is rather "non-committal" about the source and the nature of the CP and maxims, and they wonder whether some other principles could be generated *ad hoc* when communicators opt out of the CP (for example, a politeness principle à la Leech 1983, conceived as a *necessary* complement of Grice's principle). Moreover, post- and neo-Gricean agree that the scope of the theory is too restrictive. Whereas there is an essential connection between the CP and the generation of implicatures, there is sufficient evidence for the use of pragmatics in explicit communication (i.e. in determining 'what is said'). This is what Levinson (2000: 186) calls *the Grice's circle*.

On the Gricean side, Davies (2000: 1) argues that the criticism of the CP and maxims misses the point, since a close study of Grice's writings shows the concept of cooperation to be "peripheral to his thought". The aim of Grice (1975), Davies argues, is to undermine the formalists' argument for the imperfections of natural language by showing, on the one hand, that there is a *logic* to the operations of conversations and, on the other hand, that the language of philosophy and science is too simple to account for the wide range of shades of meaning that only natural language can transmit. Therefore, the driving force that triggers the implicature process is the concept of *rationality*:

I am enough of a rationalist to want to find a basis that underlies these facts, undeniable though they may be; I would like to be able to think of the standard type of conversational practice not merely as something that all or most do IN FACT follow but as something that it is REASONABLE for us to follow, that we SHOULD NOT abandon (Grice 1989b: 29).

So for Davies (2000: 18):

Hearers assume that an utterance addressed to them is intended to be meaningful, therefore if the utterance does not have an appropriate conventional meaning, they will look for a *more useful* (and non-conventional) interpretation. As far as the hearer is concerned, the speaker providing an uninterpretable (meaningless) utterance would be pointless, and therefore irrational (my emphasis, SM).

What transpires from the vagueness of the italicised words is that rationality and a notion of relevance (either in the Gricean or in the Sperber-Wilson sense) go hand in hand. However, as with cooperation, if rationality is key to the fact that utterances raise some expectations on interpreters, it has to provide an explicit procedure to account for how (a) speakers make particular choices at the utterance level and (b) hearers select

the intended interpretation among the range of possible ones (that satisfy the CP) they are weighing up. The sort of complex, *rational*, conscious reasoning process that Grice provides to *calculate* conversational implicatures runs contrary to the psychological evidence that shows that children are involved in inferential communication in pre-verbal stages.

Relevance theory locates the source of inferential communication not in a socially-acquired principle of cooperation or a series of maxims that rational communicators must uphold, but in a non-representational property of *relevance* they do not need to be aware of to follow (let alone violate). Relevance is not a rule or instruction that needs to be known, but it is derived from 'an exceptionless generalisation' about human psychology: human cognition tends to allocate our perceptual and inferential systems to the most relevant information available. One obvious advantage of this psychological approach is that cases of metaphor, hyperbole, irony, loose use and other tropes used aesthetically are not derived from not speaking maxim-wise, but follow quite straightforwardly from considerations of relevance.<sup>1</sup> Therefore, Sperber & Wilson's *non-maxim-based* approach is centred on one mega-principle: the principle of relevance:

(6) *Cognitive Principle of Relevance*

Human cognition tends to be geared to the maximisation of relevance (Sperber & Wilson 1995: 260).

One further advantage is that this model is more explicit than the one based on cooperation and rationality as regards how expectations are created. Human orientation towards cognitive efficiency allows us to metarepresent the mental states of others and act accordingly. This tendency is exploited in communication by covertly and overtly invoking specific thoughts on the hearer, knowing that the hearer has exactly this expectation. Ostensive attempts at communicating—by deliberately providing evidence of one's *intention* to lead the audience towards a certain conclusion—create *expectations of relevance*, which guarantee that the hearer will spend the effort needed in comprehension because the linguistic stimulus automatically impinges on attention and triggers, at the same time, a process of interpretation. These ideas are gathered in a specific principle for ostensive communication:

(7) *Communicative Principle of Relevance*

Every act of ostensive communication communicates the presumption of its own optimal relevance (Sperber & Wilson 1995: 260).

The fact that an utterance creates some expectations of relevance sheds light on how hearers may identify the intended interpretation, given that mutual expectations can serve to limit the search space. Specifically, Sperber & Wilson put forward an explicit procedure, based on their criterion of relevance, which, they argue, is powerful enough to exclude all but one interpretation, allowing no possibility for co-occurrence. The hearer assumes that the first interpretation tested and found consistent with this criterion is the intended interpretation, and stops processing. This is guaranteed by the *Relevance-theoretic Comprehension Procedure* and the *Presumption of Optimal Relevance*:

(8) *Relevance-theoretic Comprehension Procedure*

Follow a path of least effort in computing cognitive effects

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<sup>1</sup> For a general overview of the relevance-theoretic approach to figurative uses, see Levinson (1983) [the Gricean approach], Carston (2000, 2002), Sperber & Wilson (1981; 1986/1995, chapter 4, sections 7, 9), Wilson & Sperber (1992), Wilson (2000). For questions raised by the relevance-theoretic account, see Hamamoto (1998), Seto (1998) and Yamanashi (1998). For a reply, see Sperber & Wilson (1998a).

- (a) Consider possible interpretations in order of accessibility
- (b) Stop when your expectations of relevance are satisfied
- (9) *Presumption of Optimal Relevance*
  - (a) The ostensive stimulus is relevant enough to be worth the addressee's effort to process it
  - (b) The ostensive stimulus is the most relevant one compatible with the communicator's abilities and preferences (Sperber & Wilson 1995: 275).

Unlike Grice's reasoning process, this comprehension procedure is automatically and unconsciously applied, which fits quite straightforwardly with the fact that children are involved in inferential communication very early. As mentioned above, this is the basis of a pragmatic module evolved from a more general metarepresentational module responsible for the attribution of beliefs, intentions and desires (cf. Sperber 1996; 2000).

One way to solve the problem raised by the nature of the maxims is to think of them as *inferential heuristics*, rather than behavioural norms (Levinson 2000: 35). The purpose of such inferential heuristics (Levinson 2000: 28-ff, 34) is to get round the *articulatory bottleneck* of human communication created by the slow rate of human speech encoding and the high speed of the human mind to process linguistic messages. Given that physiological constraint of our articulatory system, humans have developed these heuristics to amplify the informational load of any coded message, thus overcoming the difficulties raised by the limitations of linguistic transmission. Levinson (2000: 4) argues that to explain the recovery of the speaker's intentions on the basis of what is said is implausible, and therefore the efforts of current theories of utterance interpretation (including his own) "are pretty much stabs in the dark". The *non-monotonicity* of inference systems prevents the reconstruction of the speaker's intention by simply working "backwards" from the conclusion to the premises (as Relevance theory assumes), since there may be an indefinite number of premises that may yield the same conclusion. Therefore, the heuristics give a set of *default* constraints (unless there are indications otherwise) that limit the search space of implicit premises and *only help* to resolve the logical problem of recovery of intention.

To account for the phenomenon of *Generalized Conversational Implicature* (henceforth GCI), which, Levinson argues, can determine what these rules of interpretation consist of, he puts forward a reduction of Grice's maxims to three (see *Figure 1*).<sup>2</sup>

**Q-Heuristic**

What isn't said, isn't

**I-Heuristic**

What is expressed simply, is stereotypically exemplified

**M-Heuristic**

What is said in an abnormal way, isn't normal

**Quantity 1**

Make your contribution as informative as is required

**Quantity 2**

Do not make your contribution *more* informative than is required

**Manner 1**

Avoid obscurity of expression

**Manner 4**

Avoid prolixity

*Figure 1: Levinson's heuristics and Grice's corresponding maxims*

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<sup>2</sup> Relevance theorists (see especially Carston 1990, 1995; Wilson & Sperber 2002) question the theoretical significance of GCIs as a constitutive part of a theory of meaning. For them, there is no need to invoke two distinct pragmatic processes: one for GCIs and another for particularized implicatures. On the relevance-theoretic comprehension procedure, relevance varies invariably with effort, and therefore the fact that an interpretation is easily accessible gives an initial degree of plausibility (Wilson & Sperber 2002).

The Q-heuristic ('What isn't said, isn't'), closely related to Grice's first maxim of quantity ('Make your contribution as informative as is required'), is characterized by establishing sets of salient contrasts which differ in informativity, grouped in what have been called 'Hornian scales' (e.g. <some, all>, <none, not all>, <since-p-q, if-p-q>, etc). According to this heuristic, speakers select the most informative alternate that is consistent with the facts:

- (10) Some of Jane's friends came to the party.  
*Q-implicates*: *Not all* of Jane's friends came to the party.
- (11) There are three bottles of red wine on the table.  
*Q-implicates*: There are *exactly* three bottles of wine on the table.

Q-implicatures have two essential characteristics: (1) they are metalinguistic in the sense that what is implicated refers to a set of contrasting expressions in opposition; (2) they are negative propositions: the chosen expression rules out the state of facts expressed by the rival expressions (i.e. the state of facts presumed by the implicature is not the case).

The I-heuristic ('What is expressed simply, is stereotypically exemplified'), related to Grice's second maxim of quantity ('Do not make your contribution *more* informative than is required'), allows hearers to provide a maximally-informative, most stereotypical interpretation of a minimal, unmarked description:

- (12) Peter opened the door and sat down in the sofa.  
*I-implicates*: Peter opened the door in a stereotypical way (say, with the key) and walked in and sat down in the sofa in a normal way.
- (13) John went into the room and he sat down.  
*I-implicates*: John went into the room and *John* sat down (preferred local coreference).

The I-heuristic, describing stereotypical exemplifications, needs to be complemented with another one: if an utterance is constructed using marked or prolix forms, this signals that what is described is unusual or has special properties. This is what the M-heuristic says: 'What is said in an abnormal way, isn't normal', related to Grice's M1 ('Avoid obscurity of expression') and M4 ('Avoid prolixity'). Consider:

- (14) Peter pushed the door and dragged himself to the sofa.  
*M-implicates*: Peter opened the door in an unusual way and sat down in the sofa non-stereotypically.
- (15) John went into the room and the man sat down.  
*M-implicates*: John≠the man (disjoint local coreference).

Bearing in mind the complementarity of the instructions given by the I- and the M-principles or heuristics, one can assume that the use of simple, unmarked forms gives rise to stereotypical interpretations, whereas the use of marked or prolix linguistic expressions license hearers to search for alternative interpretations. This contrast is exemplified in the pairs (12-14) and (13-15), respectively.

For Levinson, these powerful heuristics give us preferred interpretations regardless of speakers' intentions, particular contexts of utterance or metarepresentation of others' mental processes. In contrast to *Particularized Conversational Implicatures* (henceforth PCI), which crucially depend on particular contexts of utterances, these GCIs are intimately tied to, and dependent on, the linguistic content:

### **Generalized Conversational Implicature**

An implicature *i* is generalized iff (an utterance) *U* implicates *i* unless there are unusual specific contextual assumptions that defeat it.

### ***Particularized Conversational Implicature***

An implicature *i* from an utterance *U* is particularized iff *U* implicates *i* only by virtue of specific contextual assumptions that would not invariably or normally obtain (Levinson 2000: 16, adapted).

Then, GCIs are part of a third level of analysis that neo-Griceans deem necessary in a theory of meaning, midway between the semantic *sentence meaning* (codified, more abstract) and the pragmatic *speaker meaning* or *utterance-token meaning*. This third level is called *utterance-type meaning* and refers to “matters of preferred interpretations [...] carried by the structure of utterances, and not by virtue of particular contexts of utterance” (Levinson 2000: 3). Semantically, this level is characterized for being partly codified—which would explain our *default* interpretation of some linguistic elements—and, pragmatically, it shares with PCIs the condition of cancellability of implicatures, as shown in the second part of (16):

- (16) A: How many students took the exam?  
B: Some did. Well, no, in fact all of them did.

The new framework of this theory of utterance-type meaning raises some questions concerning the role of the maxims of quality and relevance and the CP in the overall system. Levinson himself (2000: 74) says that the reason for leaving out truthfulness and relevance rests on the nature of GCIs as ‘default’ inferences. The maxim of quality is secondary in the generation of GCIs. The solution to *Grice’s circle* forces neo-Griceans to rethink the semantics-pragmatics distinction. The pragmatics module inferentially enriches the underdetermined aspects of the semantic representation on the basis of the default assumptions given by the heuristics/principles of the GCIs (Gricean pragmatics I). Then, the semantics module provides *semantic interpretations* that will determine truth-conditions, entailments and other classic semantic relations. Levinson dubs this new relationship between the semantic and pragmatic component *pragmatic intrusion* or *presemantic and postsemantic pragmatics*.

In this section we have outlined and contrasted the main tenets of Relevance Theory and the theory of GCI to show that these two competing paradigms coincide in the fact that the semantics/pragmatics distinction must be rethought by maximising the role of inference in determining either ‘what is said’ (in Gricean terms) or the ‘explicature’ (in the Sperber-Wilson sense). It also follows from this section (and we have tried to put the stress on it) that neo-Griceans seem to have moved towards a more cognitive approach based on inferential heuristics, thus leaving aside the social approach that characterised their earlier writings (cf. Brown & Levinson 1987 *Politeness Theory*). In the following section, we aim to apply both paradigms to solve some of the problems traditional lexical semantics has had to face in accounting for word meaning. In doing this, we also aim to gain insights into the possibility of expanding the semantics/pragmatics distinction to the level of concepts and words.

## **3 Lexical Semantics and Pragmatics**

### **3.1 Introduction**

One of the basic problems that lexical semantics has to tackle to account for word meaning is where the line between linguistic and encyclopaedic knowledge is to be drawn. On lexicographical grounds, it seems that such a distinction is quite arbitrary. The difficulty arises from the multiplicity of uses of a single word form due to its situational relations (Carston 2002; Cruse 1986; Sperber & Wilson 1995, 1998, 2000; Wilson & Sperber 2002a,b). The basic idea is that a single, very general sense can be adjusted in an unlimited number of ways, each context (linguistic or non-linguistic) making certain aspects of meaning vary in accessibility. Consider:

- (17) A: Oh! It's late. I'll miss my flight.  
B: Don't worry. John has a GOOD car (=fast).
- (18) A: Does Ann have a good salary?  
B: Well, she has a GOOD car (=expensive).
- (19) Paul (seeing Jane in trouble to cut a steak, ironically): This is a GOOD knife, isn't it? (=blunt).
- (20) John hit Paul in his MOUTH.
- (21) We saw the bear near the MOUTH of the cave.
- (22) John opened the bottle by sawing off its MOUTH.

In the examples (17)-(19) above, the polysemous adjective encoded by "good" works as an adnominal functor, that is its meaning depends on the nominal head it is pre-modifying<sup>3</sup>, as is also true in *good umbrella*, *good meal*, *good weather*, etc. In (20)-(22) the local senses of the concept MOUTH are determined by their participation in distinct conceptual fields: *mouth of a person*, *mouth of a cave*, *mouth of a bottle*. The problem with this strategy is that communicators need to create a new entry in their minds' lexicon for each novel sense they encounter. Some scholars (see for example Pustejovsky 1995) have argued against such a move because it does not account for any kind of systematicity, which threatens the allegedly non-negotiable principle of compositionality (see Fodor 2001).

As an alternative to this *sense enumeration view* (Pustejovsky 1995), some researchers (see Blutner 1998, 2002; Carston 2002: 360-ff; Pustejovsky 1995: 43-ff) argue that the retrieval of the speaker's meaning starts from an underspecified (non-ambiguous) lexical (semantic) representation that could be further enriched either by the linguistic context or by pragmatic effects in the situation in which it is used. For Carston (2002: 360), the idea that *some* concepts are not really full-fledged but rather concept 'schemas' is compatible with the Relevance Theory view that logical forms are abstract 'semantic' representations which may be inferentially enriched before they are fully propositional. Such a level of abstraction, Carston argues, is also true at the lexical level.<sup>4</sup>

Intuitively at least, both the semantic and the pragmatic solutions are not exempt of difficulties. First, in seeing how, for example, the concept GOOD modifies in a specific phrase it remains to be cashed out how to discriminate between world knowledge and knowledge of meaning derived from the *semantics* of the noun being modified. In such cases, Pustejovsky (1995: 43) argues that "deploying commonsense inference seems unnecessary and heavy-handed". However, it remains for lexical semantics to explain how this abstract, very general sense features in composition. Second, from a purely pragmatic point of view, it is not clear whether communicators actually have thoughts in which a very general concept features as a constituent, or indeed what the properties of such a concept are as opposed to more specific ones:

But when we try to think about the general concept OPEN and 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 "open one's mouth", "open the window", "open a can", "open a discussion", etc., the experience is an odd one, as we seem to have no definite thought at all." (Carston 2002: 361).

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<sup>3</sup> This idea could be further extended to gradable adjectives such as *tall*, *short*, *long*, etc., whose meaning also vary depending on the class of object to which they are applied.

<sup>4</sup> In a similar vein, Blutner (2002: 7) says that underspecified lexical representations are represented in a formal semantic language by means of free variables which have the status of place holders. A proper account of contextual enrichment would explain how the free variables are instantiated (in fact 'generated') in the appropriate way. For arguments against this view, see the following sections.



Odd as such an experience certainly is, we think there has to be a concept that features in thought, at least if we intend to preserve compositionality. There is of course an encoded concept OPEN, perhaps a scalar one, that has a very general sense and gives access to a wide range of encyclopaedic assumptions about opening windows, opening wounds, opening curtains, etc., all of them leading to certain implications and consequences. These more specific concepts are somewhat stored in memory (probably under the encyclopaedic entry of OPEN), and it is perhaps necessary in some situations to finetune the concept, as it were, to meet certain implications, some of which may have been triggered by the context.

The idea of an abstract, single or superordinate sense captures quite well the sense correlation of the various realizations of an ambiguous form, thus avoiding the computational undesirability of sense enumeration. However, leaving aside the difficulty of finding a paraphrase of the supposed superordinate sense [the language of thought is abstruse], this idea of sense 'generation' may be ruled out by the zeugmatic nature of instances such as (23) and (24), adapted from Cruse (1986):

- (23) The ice-cream entered John's mouth at the same time that the bear entered that of the cave.  
(24) John and his driving licence expired last Thursday.

The oddity of these sentences lies in the fact that independent senses are antagonistic to one another; they cannot be brought into play simultaneously. This raises the question of whether it is possible that independent senses are stored in the mind's lexicon in separate entries, since it is difficult to see how pragmatic processes (either by default inference or contextual relevance) can rule out the semantic anomaly of such examples.

Another of the phenomena widely treated in the literature on lexical semantics is that of *logical metonymy* (Lascares & Copestake 1998; *logical polysemy* Pustejovsky 1995), exemplified in (25) and (26) below.

- (25) (a) Most of our students enjoyed the book.  
(b) Most of our students enjoyed reading the book.  
(26) (a) I began a new novel last night.  
(b) I began reading a new novel last night.  
(c) I began writing a new novel last night.

For the Generative Lexicon view (Pustejovsky 1995), the correct interpretation of (25a) and (26a) must be derived co-compositionally and it is constrained by the combinatorial peculiarities of the semantics of the verb and the noun. The idea is that the interpretation is calculable on semantic grounds by means of a system of operators (the qualia structure) that affects the semantic content of noun phrases. Thus, by a semantic operator of *type coercion*, the 'reading' interpretation in (26b) depends on the telicity of the noun *novel*, whereas the 'writing' enrichment depends on the agentive role. However, since this analysis rests on semantic (non-defeasible) lexical information (see Blutner 1998), the inferential step from 'enjoyed the book' to 'enjoyed reading the book' is seen as a necessary entailment. It is not difficult, however, to come across instances in which the restrictiveness of the coercion mechanisms make the wrong predictions as regards co-composition<sup>5</sup>:

- (27) John began a telephone directory

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<sup>5</sup> There are also serious challenges to a pragmatic account based on generalized or default implicatures, since it is difficult to see how the hearer chooses between the interpretations (26b) and (26c) without the aid of contextual factors.

(28) Susan wants a dictionary

Some alternative semantic-pragmatic analyses coincide in that the interface between the lexicon and pragmatics is via a partially-defeasible (semantically underspecified) logical form, where the interaction with real world knowledge can override the defaults that are proposed lexically (Lascares & Copestake 1998) or inferentially by means of maxims or heuristics (Grice 1989; Levinson 2000). Blutner (2002) follows Relevance Theory in arguing in favour of an inferential (non-compositional) mechanism of contextual enrichment controlled by non-representational means such as salience and relevance (for example, it may be the privileged status of *writing* and *reading* with regard to *novel* in a given context that gives the appropriate enrichments). However, he believes that such cost factors are best explained by means of default inferences without giving (sounding) reasons for abandoning the Sperber & Wilson model.<sup>6</sup>

For Relevance Theory (see Carston 1996, 1998, 2000, 2002; Sperber & Wilson 2000; Wilson & Sperber 2002a,b; Wilson 1997, *forthcoming*) the semantics-pragmatics distinction can also be thought of at the lexical level. Thus, not only can the linguistically codified concept give rise to certain implicatures, but it can also be pragmatically enriched at the explicit level. The role of semantics is to provide a schematic logical form which is pragmatically enriched (or broadened) by the relevance-theoretic comprehension module. Since literal meaning needs not be first retrieved, defaults are seen as unnecessary and computationally undesirable.

In this section we have sketched some of the difficulties that purely lexical semantics approaches have in discriminating semantic from pragmatic knowledge in word meaning. Pustejovsky's generative lexicon provides a series of operators that are designed to determine the scope of semantics and its capacity of generating meaning. However, we have seen that such mechanisms are not general and systematic enough, nor can they be separated from the intentions of speakers. In the following section, we aim to describe some lexico-pragmatic processes put forward by Relevance Theory and contrast them with GCIs to see whether pragmatic intrusions in semantic content are best explained by a default implicature or a once-off inference.

### 3.2 Lexico-pragmatic processes

It follows from the previous sections that the contribution of semantics to the overall interpretation of an utterance is more restricted than it was originally thought. This idea leads to the interesting conclusion that it is also possible to think of a lexical pragmatics, whose function is to endow a word with meaning in a particular utterance or communicative situation. In fact, lexical pragmatics is a rapidly growing research field that tries to account for pragmatic phenomena that are connected with the semantic underspecification of lexical items. The latest developments of Relevance Theory (Carston 2002; Sperber & Wilson 2000; Wilson & Sperber 2002a,b; Wilson *forthcoming*) have enormously contributed to the development of the field and their proposals have aroused great interest, especially as regards the lexico-pragmatic processes that impinge on explicit communication. For Relevance Theory, then, the semantics-pragmatics distinction is also true at the lexical level. Thus, the linguistically codified concept not only gives rise to certain implicatures, but it can also be pragmatically enriched in order to get a full-fledged propositional form (or *explicature*).

Grice pioneered the belief that "not all facts about word use give direct insight into word meaning". However, his strict distinction between *what is said* (semantics) and *what is implicated* (pragmatics) does not take account of pragmatic processes in determining *what is said* and, consequently, of a lexical pragmatics affecting explicit

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<sup>6</sup> In fact, Blutner (1998) acknowledges in a quotation that his rejection is based on *Levinson's belief* that Relevance Theory is inadequate to explain *Generalized Conversational Implicatures*.

communication. For Levinson (2000), as we have seen (section 2), GCIs are the best candidates for pragmatic intrusion into semantic content, since they are triggered by linguistic information. However, Levinson warns about the fact that the generalized character of implicatures is dubious at the lexical level. Notwithstanding that, he puts forward the following as examples of GCIs impinging on the lexical level:

- (29) Her **house** is on the corner  
*I-communicates*: Her house, of the normal variety, is on the corner.
- (30) Her **residence** is on the corner  
*I-communicates*: Her inmodest, pretentious house is on the corner  
(Levinson 2000: 138).
- (31) He lectures on **Wednesdays**  
*I-implicates*: As far as the speaker knows, he does not lecture on Thursday  
(Levinson 2000: 101).

Pons-Bordería (2001) argues that the difference in informativeness between *house* and *residence* in (29) and (30) is determined by semantics, not by a generalized implicature. And in fact it is hard to see a GCI arising in all cases in which communicators use these concepts. Such is also the case in (31). Levinson states that the use of a term on a scale implicates the inapplicability of another term on the same scale due to the Q-principle (the speaker cannot be more informative than that). It is not hard to find examples in which the Q-principle would make the wrong predictions if unconstrained by the speaker's intentions. Consider:

- (32) A: I'll buy Jane some flowers for her birthday.  
B: That will be nice. FLOWERS make acceptable presents (based on Cruse 1986)  
*Predicted scalar implicature*: Roses / dandelions do not make acceptable presents.

In (32), whereas the generalized implicature correctly predicts the inapplicability of the hyponym concept DANDELIONS (since they do not make acceptable presents), such prediction is incorrect, at least intuitively, in the case of the concept ROSES. What prevents the quantity implicature from arising in the latter case is that even though the speaker could have made a stronger statement, the informationally-weaker statement is sufficiently relevant (Carston 1998: 190). Some may nonetheless argue that (32) could be considered a case of a genuine I-implicature and that the hearer must amplify the informational content of the speaker's utterance, finding a more specific interpretation "up to what he judges to be the speaker's m-intended point" (Levinson 1987a: 68). We can envisage two problems with such a move. First, the speaker's m-intended point is, in Levinson's paradigm, only available at the level of implicature, since it is part of the secondary pragmatic process. Second, this model obviates the fact that sometimes speakers are unwilling to be cooperative or more relevant, as in (33) below:

- (33) I just saw a HORRID ANIMAL in the larder (Levinson 2000: 101)
- (34) Where is the CHICKEN?  
Where is the KITCHEN?
- (35) a. It's too LIGHT for me to lift  
b. It's too HEAVY for me to lift.

Following the I-heuristic, (33) implicates that the speaker does not know the name of the animal, otherwise she would have said. However, this account obviates that speakers sometimes are unwilling to be more specific. This is a tendency much exploited in the flow of ordinary conversation. In particular, the speaker of (33) may be

using the superordinate due to its expressive (euphemistic) character to avoid the potential face threat of some possible tabooized hyponyms. Therefore, I agree with Pons-Bordería (2002) that it is dubious to claim that the superordinate is less informative than the hyponym, because of a social, stylistic or affective sense that is absent in the hyponym. It is also difficult to see how hearers can follow an enrichment rule to interpret (34a) and (35a) correctly as (34b) and (35b), typical cases of a slip of the tongue, regardless of the speaker's intentions and contextual relevance.

### 3.2.1 Concept Narrowing

Narrowing is a process whereby a word is used to convey a more specific sense than the encoded one by restricting its linguistically-specified denotation (Wilson *forthcoming*). As stated in previous sections, some approaches within lexical semantics maintain that the different senses of a polysemous word can be restricted by means of semantic operators (type coercion, co-compositionality, selective binding, etc) sensitive to the *linguistic* context, without falling back on pragmatics. Thus, it is sometimes the combinatorial peculiarities of the semantics of the verb and the noun that grant the stereotypical interpretations in (36) and (37), which can also be triggered by a GCI:

- (36) *Mary (to John): OPEN the bottle*  
*Stereotypical interpretation: Uncork the bottle*
- (37) *John WALKED towards the door a minute ago.*  
*Stereotypical interpretation: He did it in a normal, stereotypical way.*

However, we have also seen that the literal uses of these verbs may communicate quite distinct concepts in particular situations, the linguistic context being simply insufficient to account for the wide range of possible interpretations. Consider:

- (38) *Mary (giving John a hammer): OPEN the bottle*  
*Intended interpretation: Open the bottle by hitting its neck.*
- (39) *Mary is looking for John, who is knocking back booze: Have you seen John?*  
*Peter: John WALKED towards the door a minute ago.*  
*(Possible) intended interpretation: John STAGGERED towards the door a minute ago.*

For Relevance Theory, the pragmatic process of narrowing for (38) and (39) may proceed along the following lines. Having accessed the lexical concepts OPEN and WALK in the given context, which makes available their logical and encyclopaedic information, the hearer uses a subset of this information to construct the more specific (*ad hoc*) concepts OPEN\* and WALK\*, in a relevance-rendering manner, in the search for cognitive effects. The extension of the concept pragmatically constructed is a subset of the extension of the lexical concept from which it has been derived and it may include assumptions about opening bottles by hitting their necks and ways of walking when one is drunk, respectively. The fact that the intended concept can be part of the propositional content (by means of a parallel process of mutual adjustment of explicit and implicit content; see Wilson & Sperber 2002 for details) has some important consequences. In the first place, given the context, it is probable that the assumptions "opening the bottle by hitting its neck" and "staggering towards the door" will be more highly activated/accessible than the prototypical ones (and, consequently, retrieved in the first place), which at least casts some doubts, as regards the desirability of extra-cost factors, on the fact that the linguistic content triggers a GCI firstly that may be later ruled out by the context. Following the principle of relevance, the hearer adds the lexical entry of this newly-built concept to the propositional form and its encyclopaedic entry to the context and starts deriving cognitive effects. Provided that these assumptions give rise to a satisfactory range of cognitive effects, the narrowed concept

is attributed as the intended one and the process should stop. In the second place, whereas in the Gricean approach these assumptions have the status of implicatures, for relevance-theorists narrowing contributes to the explicit level of communication and, therefore, to the truth-conditional content.

Neo-Griceans (see Atlas & Levinson 1981; Gazdar 1998; Horn 1989/1998; Levinson 1989, 2000) often analyse narrowing as a case of a default inference whereby generic, maximal expressions are specified to stereotypical interpretations by means of the I-heuristic. The basic idea is that it is a tendency commonly exploited in communication that speakers produce the minimal information sufficient to achieve their communicational ends. Such being the case, then, and given the peculiarities of the context in (38) and (39), it is not necessary for the speaker to state what is obvious, that is the non-stereotypical interpretation, since hearers are able to amplify the informational content of the speaker's utterance—after the process of semantic decoding—by finding the most specific interpretation “up to what [they] judge to be the speaker's m-intended point” (Atlas & Levinson 1981: 36; Levinson 2000: 114). For neo-Griceans, this is one advantage over the allegedly unconstrained pragmatic inference of relevance-theorists: The nature of semantic compositionality remains intact because the ‘default meaning’ provided by the GCI allows the process of interpretation to proceed step by step, and, Levinson argues, there is no need to postulate lexico-semantic templates or abstract semantic representations that are enriched by a psychologically implausible process of backwards inference.<sup>7</sup> The correct interpretation is guaranteed because generalized implicatures can be overridden by contextual relevance.<sup>8</sup>

Deirdre Wilson (pc, *forthcoming*) argues that Levinson's approach leaves many aspects of the narrowing process unexplained. On the one hand, there may be several possible degrees or directions of narrowing as in (40) below, where *happy* may be narrowed to *ecstatic* or to *the particular emotional state caused by finding a well-paid job*, etc, or (41), where *bird* is narrowed in different ways in different contexts.

- (40) Lucy is HAPPY.  
(41) a. As I worked in the garden, a BIRD perched on my spade.  
      b. BIRDS wheeled above the waves.  
      c. At Christmas, the BIRD was delicious (Carston 2002, adapted)

For Wilson such concepts are not linguistically given, nor the result of a GCI, but are constructed on-line in response to specific expectations of relevance raised in specific contexts. Experimental evidence from psychology (see Barsalou 1987, 1992, 1993) has shown that even stereotypical narrowing can vary across individuals and cultures. For example, in different cultures the concept BIRD is conceptualized as having the stereotypical property ‘fly’, whereas in others (e.g. Eskimos) this property is demoted in importance. Furthermore, frequency of exposure to certain items in a category will affect prototypical judgements: for example, the more you are exposed to sparrows as instances of birds, the more you will think of sparrows as typical birds. However, from the Chinese point of view swans and peacocks are ranked as the most typical members.<sup>9</sup>

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<sup>7</sup> For Levinson (2000: 30), the *non-monotonicity* of inference systems prevents the reconstruction of the speaker's intention by simply working ‘backwards’ from the conclusion to the premises, since there may be an indefinite number of premises that may yield the same conclusion. This is what Levinson calls *the logical problem*. For him, there have to be a set of default constraints (heuristics) that limit the search space of implicit premises.

<sup>8</sup> I will postpone the problem of the scope of semantics compositionality for the concluding section.

<sup>9</sup> For a review of a prototypical view of word meaning see Smith & Medin 1981; Osherson & Smith 1981; Lakoff 1987; Margolis & Lawrence 1998. For arguments against see Fodor 1981;

On the other hand, following the Enrichment Rule granted by the I-Principle (Levinson 2000: 114), interpreters should use the appropriate degree or direction of narrowing by finding the most specific interpretation up to what they judge to be the speaker's meaning (i.e. the speaker's m-intended point), a judgement that remains unexplained and that inherits the vague character of the Gricean CP and conversational maxims<sup>10</sup>. As one can gather from the examples (36)-(41) above, the fact that semantics and pragmatics can be combined at the explicit level of communication suggests that some of the assumptions of the CM of communication must also be rethought lexically. Since it is inconceivable to have a one-to-one mapping between words and concepts, the idea that the speaker's intended concept can be replicated in the hearer's mind is simply untenable. The following examples argue in favour of the latter and against the idea of a stereotypical narrowing:

- (42) *Mother*: Did you win the race?  
*Child*: I'm quite FAST.
- (43) *Mother*: Have you finished your homework?  
*Child*: I'm quite FAST.

In both cases the child is expressing two different propositions, not only because the context is different but also because she communicates two different concepts of 'fast'. In (42), the mother, given her expectations of relevance, narrows the denotation of the linguistically-specified concept FAST, constructing on the fly a new, *ad hoc* concept FAST\* that may be paraphrased (bearing in mind that a language of thought is abstruse) as "fast enough so as to have won the race". This pragmatic enrichment is guaranteed by the necessity of deriving from the child's utterance an implicated answer to the mother's question. In (42) it can be safely assumed that there is a high degree of resemblance between the concept that the child communicates and the one retrieved by the mother and that the implication that the child is quite fast so as to have won the race is quite straightforward. In (43) the child's intended concept has nonetheless a certain degree of indeterminacy, as we can see in (44):

- (44) FAST\*\*
- Enough to have already finished her homework?
  - Enough to start doing it after watching TV?
  - Enough to finish it the following morning before class?
  - Enough to finish it before going to bed?

Which of these assumptions, or others that may be accessible at the time, the mother will select to construct and *ad hoc* concept FAST\*\* that she could attribute to her child? It is highly improbable that the mother will capture all of her child's preferences in retrieving the intended interpretation, so probably the concept TIRED\*\* is quite far away from the one the child has in mind. This means that the degree of indeterminacy that characterises certain implicatures can also be true in the process of constructing an *ad hoc* concept that contributes to explicit communication, being greater the responsibility on the hearer's part. It is difficult to see how the direction of narrowing would proceed to stereotypical interpretations in such cases regardless of the speaker's intentions. And this is also further evidence for the fact that "where the borderline between semantics and pragmatics is falls in individual cases is not always

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Barsalou 1987, 1992; Sperber & Wilson 1986, chapter 2. See also Wilson *UCL notes* for a relevance-theoretic account of prototype semantics.

<sup>10</sup> Levinson (1989) argues that the principle of relevance and the notions of cognitive effects and processing effort are not empirically measurable and, therefore, they have no theoretical significance. It is curious to see how the same criticism can also be applied to his inferential heuristics.

clear, and it may be drawn in different ways in the mind of different individuals” (Wilson *forthcoming*). Does this mean, against our intuitions, that understanding would not take place, as predicted by the CM? For Sperber & Wilson (1998a: 198), the principle of relevance guarantees a semantic-pragmatic interoperability between both concepts that grants understanding:

...the fact that a public word exists, and is successfully used in communication, does not make it safe to assume that it encodes the same concept for all successful users; and in any case, the concept communicated will only occasionally be the same as the encoded [...] it does not much matter whether a word linguistically encode a full-fledged concept, and, if so, whether it encodes the same concept for the speaker and the hearer. *Even if it does, comprehension is not guaranteed. Even if it does not, communication need not be impaired* (my emphasis, SM).

In conclusion, the fact that there is no direct correspondence between public words and concepts (a drawback of the CM that Levinson seems to assume) makes difficult to think of a generalized implicature arising in all cases leaving aside (a cognitive principle or a conversational maxim of) relevance. For Relevance Theory, the stock of concepts is much greater than the stock of words, which is not only remarkable in cases of polysemy. Flexibility and creativity of the human mind allow the creation of new, on-line, *ad hoc* concepts whose dependence on situational factors prevents their meanings from becoming stabilised in the language and in the mind’s lexicon. In the next section, we will look at another lexico-pragmatic process that appears to be just a strong tendency as narrowing, but that is not seen as giving rise to a default implicature by neo-Griceans: concept broadening. The idea is that an approach based on the I-principle cannot generalise to concept broadening simply because they are blatant violations of the maxim of truthfulness.

### 3.2.2 Concept Broadening

The aim of this section is to see how the same relevance-theoretic inferential process of *ad hoc* concept construction works for loose, imprecise or figurative uses of language. We have seen that in cases of concept narrowing the defining properties in the logical entry of the concept are retained during the whole process, the variation taking place in the extension (the encyclopaedic entry) of the linguistically-specified concept. In the cases of concept broadening, as we will see, at least one of these inferential rules (or meaning postulates) must be dropped to apply the concept to objects or referents not falling under its linguistically-specified denotation. Consider the following examples:

- (45) Ronaldinho is a BEAST (metaphorical use).  
*Implicates*: ‘his talent for playing football is extraordinary’
- (46) A: How was work today?  
B: I’m DEAD! (hyperbolic use).  
*Implicates*: ‘B is exhausted’
- (47) Go out of the bus station and turn left. Go along the street until you see a huge ROUND fountain.
- (48) (Dentist to patient): This injection will be PAINLESS (Wilson *UCL notes*).

For Grice<sup>11</sup> the maxim of quality guarantees a *minimal* distance between linguistic/semantic meaning ('what is said') and the propositional content ('what is implicated'), since a rational and cooperative communicator must not say what she believes to be strictly speaking false. Therefore, the first hypotheses that the interpreter of (45) and (46) must consider is that the linguistically-codified concept and the intended concept are *identical*. Consequently, if he assumes that the maxim of quality is operating, he believes that Ronaldinho is literally a beast or that B is literally dead, which clearly goes against our intuitions as communicators engaged in everyday conversation. In these cases of figurative use, the hearer must abandon these initial hypotheses and assume that the speaker is intentionally flouting the maxim of quality to convey a true implicature that complies with the overarching CP. In the case of the metaphorical use in (45), such an implicature is a simile based on what is said, whereas in (46) what is implicated is a weaker proposition as regards informativeness (that B is exhausted).

Relevance Theory has pointed out that the loose (or broad) and non-figurative use of concepts, such as those in (47) and (48), is so common in the flow of everyday discourse that communicators do not perceive them as violations of a maxim of truthfulness, which casts serious doubts on its existence. This type of examples, not treated by Grice, pose a problem for a maxim-based approach. The reason is that, even though they do not correspond to any of the typified cases of violation of the maxim of quality (i.e. metaphor, irony, hyperbole, etc), if we assume, given our knowledge of the world and of the particular situation, that the concepts ROUND (in its mathematical sense) and PAINLESS express their literal meanings, then these utterances are strictly speaking false.

For Sperber & Wilson, loose use, metaphor and hyperbole do not result from maxim violation but are alternative routes that the speaker puts at the hearer's disposal in the search for optimal relevance and, therefore, they are only derived from this principle (extra effort guarantees the gain of extra cognitive effects). What distinguishes loose use from metaphor or hyperbole is the degree of resemblance between the linguistically-specified meaning and the one intended. Relevance Theory assumes that the concepts *encoded* by BEAST, DEAD, ROUND and PAINLESS are *literal*, but the concepts *communicated* are constructed *ad hoc* following the same process we have described for concept narrowing. The fundamental difference between narrowing and broadening is, as we have pointed out at the beginning of this section, that in the former the defining features in the logical entry of the concept are maintained, whereas in the latter at least one of such features is dropped. For example, in (46), the inferential rule in (49) below that restricts the inclusion in the encyclopaedic entry of this concept of features attributed to 'people alive' and 'people alive and extremely tired' is dropped, its new extension being denoted by the concept DEAD\*.

(49) X – DEAD => X – NOT ALIVE

Those readers who are quite familiar with the theses of Relevance Theory will have noticed that the use of *ad hoc* concepts to account for loose use, outlined by Sperber & Wilson and Robyn Carston in their most recent writings (see Carston 2000, 2002; Sperber & Wilson 2000; 2002; Wilson & Sperber 2002), implies a substantial change of the earlier model. The difference is that, in the former paradigm, the speaker expressed a literal proposition that she abandoned (and didn't communicate): it was just the

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<sup>11</sup> Up to this point I will no longer refer to the neo-Gricean framework put forward by Levinson (2000). The reason for this is that he assumes that the Q, M and I heuristics only work at a primary (and pre-semantic) pragmatic level that only gives rise to stereotypical interpretations by enriching maximal expressions. As it can be gathered from the Levinsonian paradigm, Levinson uses, following Grice, 'secondary' pragmatic processes to account for indirectness, irony, metaphor, hyperbole, etc., they are regarded as cases of implicature.



starting point retrieving weak implicatures. In the new account, the speaker *communicates* a proposition which is a long way off literal meaning (by means of the inclusion in that proposition of the newly-built *ad hoc* concept) and sticks to that proposition (and its implicatures). This treatment produces better results:

- a. The fact that the hearer does not compute first the hypothesis of a literal interpretation means that processing effort is substantially reduced, which fits quite nicely with the presumption of optimal relevance.
- b. It explains how the construction of and *ad hoc* concept to account for loose and figurative uses impinges on the determination of the explicit content and contributes to the truth conditions of the utterance.
- c. It explains why the instances of loose use arise unconsciously and spontaneously, which renders a quality maxim totally unnecessary.

Then for Relevance Theory our inferential abilities play a much greater role, and the meaning encoded by a concept is just a clue to the intended meaning. How these clues work is what still remains to be cashed out. What the hearer expects is not an identity relation between the encoded meaning and the intended meaning, but a relation of resemblance (in the sense that both share *part of* their logical and encyclopaedic entries). The exploitation of resemblance plays a fundamental role in verbal and non-verbal communication: I can use a cigarette box, a lighter and an ashtray that happens to be on the table at the moment to *represent* a car crash. Often, original and representation share certain properties but nobody expects them to be identical. The same is true of verbal communication:

...what you are entitled to infer is that some of the properties of the representation are shared by the original, but not necessarily all. This is how clues work: by putting you on the right track (Deirdre Wilson *Issues in Pragmatics lectures*, UCL notes 2001).

If for Grice the hearer starts from the literal meaning to retrieve a less-than-literal interpretation if the initial hypothesis yields counter-productive results, for Relevance Theory the strategy is the other way round: the expectations of relevance are normally satisfied with a less-than-literal interpretation, and the hearer arrives at a literal interpretation if the amount of cognitive effects do not satisfy the presumption of optimal relevance. (48) above illustrates the construction of an *ad hoc* concept to account for loose use, and explains the different hypotheses that the hearer may test to retrieve the intended meaning in the search for optimal relevance<sup>12</sup>:

- (49) a. I will feel no pain at all.  
b. I will experience some discomfort when the needle goes in.  
c. I will have to brace myself when the needle goes in.  
d. I will groan when the needle goes in.  
e. I may lose my dignity by screaming, etc.

If we assume that the dentist is abiding by the maxim of quality, then the most accessible interpretation must be the strictly literal one in (49a) codified by PAINLESS. This interpretation would be relevant enough and then (49b-e) would be discarded. However, our particular knowledge of the situation (part of which is derived from our previous experience with dentists and needles) allows us to add the fact that a dentist tends to speak loosely in such cases, so not all of (49b-e) would be discarded. It is not

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<sup>12</sup> I owe this example to Deirdre Wilson's *Issues in Pragmatics* lectures, held at University College London during the first term of the academic year 2001-2002. For the present purposes, some modifications have been made.

much effort for the hearer to construct an *ad hoc* concept PAINLESS\* in which the assumption (49b) is optimally relevant, and stop processing. Assuming a greater degree of looseness (which requires, in its turn, greater processing effort), the patient may also include (49c) in the *ad hoc* concept if the amount of cognitive effects are worth the effort. The greater the distance between the encoded concept PAINLESS and the concept PAINLESS\*, the greater the effort and, consequently, the fewer the cognitive effects, until the concept communicated is relevant at all, since the dentists may have used the concept PAINFUL instead. This would happen if the expectations of relevance were satisfied by (49d-e).

### 3.3 Implications

The use of *ad hoc* concepts to account for the contribution of the principle of relevance to explicit communication has two straightforward consequences. In the first place, it helps to explain how loose use, metaphor, hyperbole or irony arise unconsciously and spontaneously without needing to acquire or learn social maxims or norms. In the second place, the fact that such uses contribute to explicit communication is favoured by the use of a single pragmatic principle, cognitive in nature, that explains all cases. There is no need to postulate two different pragmatic processes to account, respectively, for literal and figurative meaning. Truth conditions are subsumed by the principle of relevance. Consider the following examples adapted from Spanish:

- (50) Doctor: Tómese **algo de** paracetamol  
(*Doctor: Take some paracetamol*)
- (51) (en la declaración de Hacienda) Ingresos: 12.000€, **euro arriba euro abajo**  
(*filling in the income tax return form*) *Income: 12.000€, more or less*
- (52) A: ¿Cuánto dinero ganas al mes?  
B: (que gana exactamente 897,13) **900€**  
(*A: How much is your salary?*  
*B: [who earns exactly 897,13] 900€*).

In a medical prescription such as that in (50) or filling in an income tax return such as that in (51) going loosely (by means of indefinite expressions such as *algo de* or *euro arriba, euro abajo*) is utterly irrelevant, differently from (52), where it is fully justified. The reason for sticking to literalness in some cases and not in others is not a maxim of truthfulness. In medical or legal contexts, the minimal difference in a dose or in yearly income are relevant enough to be worth mentioning, that is why higher literalness is required: because a change in the content of the utterance can make the implications vary in substantially.

### 4 Conclusion

In this new approach in which pragmatic theory comes down to the semantic arena, Relevance Theory seems to extend the characterisation of *pro concepts*, whose content is determined inferentially in a particular context, to most of the linguistically-specified concepts. The problem with this strategy is that linguistic semantics does not play any significant role in determining the propositional content. Its role is restricted to supply logical forms or incomplete semantic representations derived algorithmically from syntactic information. This is what Levinson (2000: 190) calls the *semantic retreat* and implies a reconsideration of traditional semantics, since most of the processes studied in it lie outside relevance-theoretic semantics.

However, the flexibility and generality of the relevance-theoretic model helps to explain those cases where a concept is used either attributively/metarepresentationally

or in a defective way (i.e. without a full descriptive content). A child constantly listens to utterances containing unknown words, some of which correspond to concepts she has not yet acquired. Despite this, the child is able to retrieve some of the logical and contextual implications of such concepts, constructing a defective *ad hoc* concept to refer attributively to the full-fledged concepts used, for example, by her parents. Adults also possess this ability:

- (53) Juan padece una ENCEFALITIS MIÁLGICA  
(*John suffers from sleeping sickness*)
- (54) Se enfrenta a un juicio por           AGRAVIO  
  FALTAS  
  DOLO  
(*He is facing a trial for*            GRIEVANCE  
  DEFAULT  
  FRAUD)

(53) is in Spanish an example of a technical concept that is used deferentially. Even though it may not be completely unknown for a given speaker that the concept ENCEFALITIS MIÁLGICA refers to the sleeping sickness syndrome, we are surely not able to diagnose a case, and we have to defer to the knowledge of experts, who have a full-fledged concept. In the case of (54), as communicators we know that the concepts AGRAVIO, FALTAS y DOLO are used to refer to illegal acts, but most of us cannot say which illegal acts they denote.

In conclusion, the relevance-theoretic model of lexical pragmatics has implications for (and opens some yet-to-be-explored directions of research in) the acquisition of concepts, lexico-semantic change, the attributive use and conventionalisation/grammaticalisation of meaning, the latter thought to be best explained, Hopper & Traugott (1993) argue, by generalised implicatures.

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